Agenda
City Commission Regular Meeting
Monday, March 23, 2026 - 7:00 PM
151 Martin Street, Birmingham, MI
City Commission Room 205

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1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Clinton Baller, Mayor

2. ROLL CALL

Alexandria Bingham, City Clerk

3. PROCLAMATIONS, CONGRATULATORY RESOLUTIONS, AWARDS, APPOINTMENTS, RESIGNATIONS AND CONFIRMATIONS, ADMINISTRATION OF OATHS, INTRODUCTION OF GUESTS AND ANNOUNCEMENTS.

ANNOUNCEMENTS

A. Happy Birthday Mayor Baller!

APPOINTMENTS

A. Planning Board
   1. Janelle Boyce

   To appoint _____ as a regular member to the Planning Board to serve a three-year term to expire March 28, 2029.

4. OPEN TO THE PUBLIC FOR MATTERS NOT ON THE AGENDA

The City of Birmingham welcomes public comment which may be limited to a certain number of minutes per person speaking, announced at the Mayor's discretion at the beginning of the public comment portion of the agenda, on items or discussions that do not appear anywhere else in the printed agenda. The Commission will not participate in a question and answer session and will take no action on any item not appearing on the posted agenda. The public can also speak to agenda items as they occur when the presiding officer opens the floor to the public. When recognized by the presiding officer, please state your name for the record, and direct all comments or questions to the presiding officer.

5. CONSENT AGENDA

All items listed on the consent agenda are considered to be routine and will be enacted by one motion and approved by a roll call vote. There will be no separate discussion of the items unless a Commissioner or citizen so requests, in which event the item will be removed from the general order of business and considered under the last item of new business.

A. Resolution to approve the City Commission workshop meeting minutes of March 9, 2026.

B. Resolution to approve the City Commission regular meeting minutes of March 9, 2026.

C. Resolution to approve the warrant list, including Automated Clearing House payments dated March 11, 2026, in the amount of $5,393,399.61.

D. Resolution to approve the warrant list, including Automated Clearing House payments dated March 18, 2026, in the amount of $843,554.19.

E. Resolution to set a public hearing date of April 13, 2026 to consider the Special Land Use Permit, Final Site Plan & Design Review application for 211 Hamilton Row - No 28.

F. Resolution to approve the City's emergency operations plan promulgation document. Further, to direct the Mayor, City Manager, and Fire Chief to sign the document on behalf of the City.

G. Resolution to accept the resignation of Mayor Pro Tem Anthony Long from the City Commission effective on April 13, 2026 at the end portion of the City Commission meeting, to thank him for his service and to direct the City Clerk to begin the process of filling the vacancy.

6. CITY MANAGER'S REPORT

The City Manager's Report regularly occurs on the second City Commission meeting of the month. Additionally, reports from prior months can be viewed on the City's website.

A. March 2026 City Manager's Report

7. UNFINISHED BUSINESS

A. Resolution approving the draft community survey questions and authorizing the distribution of the survey to the public.

8. NEW BUSINESS

A. Public Hearing for Confirmation of the Roll - 2026 Cape Seal Program Confirmation of the Roll for Cape Seal Special Assessment District Roll 917

WHEREAS, Special Assessment Roll, designated Roll No. 917, has been heretofore prepared for Collection; and

WHEREAS, notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property to be assessed; and

WHEREAS, the Commission has deemed it practicable to cause payment of the cost thereof to be made after the time of construction; and

WHEREAS, the Commission Resolution 02-035-26 provided it would meet this 23rd day of March, 2026 for the sole purpose of reviewing the assessment roll; and

WHEREAS, at said hearing held this March 23, 2026, all those property owners or their representatives present have been given an opportunity to be heard specifically concerning costs appearing in said special assessment roll;

NOW, THEREFORE, BE IT RESOLVED, that Special Assessment Roll No. 917 be in all things ratified and confirmed, and that the City Clerk be and is hereby instructed to endorse said roll, showing the date of confirmation thereof, and to certify said assessment roll to the City Treasurer for collection at or near the time of construction of the improvement.

BE IT FURTHER RESOLVED, that the special assessment shall be payable in five (5) payments as provided in Section 94-10 of the Code of the City of Birmingham, with an annual interest rate of seven and three-quarters percent (7.75%) on all unpaid installments.

Sidwell Number	Street Address	Cape Seal Assessment
19-25-151-037	692 Oak Ave	$ 1,429.18
19-25-151-139	680 Oak Ave	$ 1,275.03
19-25-151-140	670 Oak Ave	$ 1,275.03
19-25-151-039	640 Oak Ave	$ 1,020.84
19-25-151-040	608 Oak Ave	$ 1,531.26
19-25-151-137	556 Oak Ave	$ 2,143.77
19-25-151-138	520 Oak Ave	$ 1,633.35
19-25-151-127	450 Oak Ave #100	$ 235.20
19-25-151-130	450 Oak Ave #101	$ 235.20
19-25-151-129	450 Oak Ave #102	$ 235.20
19-25-151-128	450 Oak Ave #103	$ 235.20
19-25-151-133	450 Oak Ave #201	$ 235.20
19-25-151-132	450 Oak Ave #202	$ 235.20
19-25-151-131	450 Oak Ave #203	$ 235.20
19-25-151-136	450 Oak Ave #301	$ 235.20
19-25-151-135	450 Oak Ave #302	$ 235.20
19-25-151-134	450 Oak Ave #303	$ 235.20
19-25-326-023	885 N Old Woodward Ave Unit 1	$ 141.07
19-25-326-024	885 N Old Woodward Ave Unit 2	$ 141.07
19-25-326-025	885 N Old Woodward Ave Unit 3	$ 141.07
19-25-326-026	885 N Old Woodward Ave Unit 4	$ 141.07
19-25-326-027	885 N Old Woodward Ave Unit 5	$ 141.07
19-25-326-028	885 N Old Woodward Ave Unit 6	$ 141.07
19-25-326-029	885 N Old Woodward Ave Unit 7	$ 141.07
19-25-326-030	885 N Old Woodward Ave Unit 8	$ 141.07
19-25-326-031	885 N Old Woodward Ave Unit 9	$ 141.07
19-25-326-032	885 N Old Woodward Ave Unit 10	$ 141.07
19-25-326-033	885 N Old Woodward Ave Unit 11	$ 141.07
19-25-326-034	885 N Old Woodward Ave Unit 12	$ 141.07

19-25-326-035	885 N Old Woodward Ave Unit 13	$ 141.07
19-25-326-036	885 N Old Woodward Ave Unit 14	$ 141.07
19-25-326-037	885 N Old Woodward Ave Unit 15	$ 141.07
19-25-326-038	885 N Old Woodward Ave Unit 16	$ 141.07
19-25-326-003	533 Oak Ave	$ 939.17
19-25-326-002	551 Oak Ave	$ 939.17
19-25-326-001	858 Woodland St	$ 939.17
19-25-303-007	607 Oak Ave	$ 1,020.84
19-25-303-006	615 Oak Ave	$ 1,020.84
19-25-303-005	635 Oak Ave	$ 1,020.84
19-25-303-004	651 Oak Ave	$ 1,020.84
19-25-303-003	667 Oak Ave	$ 1,020.84
19-25-303-002	679 Oak Ave	$ 1,020.84
13-25-303-001	850 Greenwood St	$ 1,082.09
19-26-427-001	890 Lakeside Dr	$ 1,355.68
19-26-427-002	840 Lakeside Dr	$ 3,634.34
19-26-427-003	790 Lakeside Dr	$ 3,540.28
19-26-427-004	774 Lakeside Dr	$ 3,526.39
19-26-427-005	752 Lakeside Dr	$ 3,540.28
19-26-427-006	726 Lakeside Dr	$ 3,539.93
19-26-427-039	700 Lakeside Dr	$ 2,478.19
19-26-427-040	660 Lakeside Dr	$ 2,478.19
19-26-427-008	640 Lakeside Dr	$ 2,460.15
19-26-427-009	620 Lakeside Dr	$ 2,295.28
19-26-427-010	592 Lakeside Dr	$ 2,572.95
19-26-427-041	568 Lakeside Dr	$ 3,978.30
19-26-427-042	532 Lakeside Dr	$ 4,446.87
19-26-478-014	490 Lakeside Dr	$ 2,977.30
19-26-478-015	470 Lakeside Dr	$ 2,741.98
19-26-478-012	440 Lakeside Dr	$ 3,990.10
19-26-478-013	430 Lakeside Dr	$ 1,908.97
19-26-478-007	412 Lakeside Dr	$ 2,499.02
19-26-476-008	392 Lakeside Dr	$ 2,499.02
19-26-476-009	370 Lakeside Dr	$ 2,499.02
19-26-476-010	350 Lakeside Dr	$ 2,990.84
19-26-476-011	320 Lakeside Dr	$ 1,245.43
19-26-237-012	871 N Glenhurst Dr	$ 2,429.60
19-26-237-013	825 N Glenhurst Dr	$ 2,429.60
19-26-237-014	781 N Glenhurst Dr	$ 2,429.60
19-26-237-015	755 N Glenhurst Dr	$ 2,429.60

19-26-237-016	717 N Glenhurst Dr	$ 2,429.60
19-26-237-017	693 N Glenhurst Dr	$ 2,074.88
19-26-237-018	655 N Glenhurst Dr	$ 2,074.88
19-26-237-019	639 N Glenhurst Dr	$ 2,429.60
19-26-237-020	617 N Glenhurst Dr	$ 2,429.60
19-26-237-021	587 N Glenhurst Dr	$ 2,429.60
19-26-237-022	559 N Glenhurst Dr	$ 2,429.60
19-26-237-023	535 N Glenhurst Dr	$ 2,429.60
19-26-237-024	515 N Glenhurst Dr	$ 2,041.91
19-26-328-011	520 N Glenhurst Dr	$ 1,776.04
19-26-328-010	534 N Glenhurst Dr	$ 2,429.60
19-26-328-009	550 N Glenhurst Dr	$ 2,429.60
19-26-328-008	584 N Glenhurst Dr	$ 2,429.60
19-26-328-007	612 N Glenhurst Dr	$ 2,429.60
19-26-328-006	634 N Glenhurst Dr	$ 2,429.60
19-26-328-005	650 N Glenhurst Dr	$ 2,028.72
19-26-328-004	690 N Glenhurst Dr	$ 2,028.72
19-26-328-003	736 N Glenhurst Dr	$ 3,817.95
19-26-328-002	770 N Glenhurst Dr	$ 3,817.95
19-26-328-001	Birmingham School District	$ 1,429.18
19-35-426-019	1390 Northlawn Blvd	$ 3,182.08
19-35-426-018	1360 Northlawn Blvd	$ 2,776.69
19-35-426-017	1330 Norhtlawn Blvd	$ 2,776.69
19-35-426-016	1300 Northlawn Blvd	$ 2,776.69
19-35-428-012	1393 Latham St	$ 3,868.48
19-35-428-013	1132 Northlawn Blvd	$ 2,984.94
19-35-428-014	1112 Northlawn Blvd	$ 2,221.35
19-35-428-015	1098 Northlawn Blvd	$ 2,082.52
19-35-428-016	1076 Norhtlawn Blvd	$ 1,735.43
19-35-428-017	1052 Northlawn Blvd	$ 1,735.43
19-35-428-018	1034 Northlawn Blvd	$ 1,735.43
19-35-428-019	1000 Northlawn Blvd	$ 1,735.43
19-35-428-020	988 Northlawn Blvd	$ 1,735.43
19-35-428-021	972 Northlawn Blvd	$ 1,735.43
19-35-428-022	956 Northlawn Blvd	$ 1,735.43
19-35-428-011	1308 Southfield Rd	$ 3,817.95
19-35-430-010	1400 Southfield Rd	$ 3,817.95
19-35-430-009	955 Northlawn Blvd	$ 3,123.77
19-35-430-008	979 Northlawn Blvd	$ 1,735.43
19-35-430-007	1005 Northlawn Blvd	$ 1,735.43
19-35-430-006	1049 Northlawn Blvd	$ 1,735.43
19-35-430-005	1061 Northlawn Blvd	$ 2,603.15
19-35-430-004	1083 Northlawn Blvd	$ 2,603.15
19-35-430-003	1121 Northlawn Blvd	$ 2,429.60

19-35-430-002	1155 Northlawn Blvd	$ 2,429.60
19-35-430-001	1187 Northlawn Blvd	$ 2,188.72
19-35-429-023	1225 Northlawn Blvd	$ 1,541.06
19-35-429-022	1231 Northlawn Blvd	$ 1,735.43
19-35-429-004	1301 Northlawn Blvd	$ 2,637.85
19-35-429-003	1323 Northlawn Blvd	$ 3,436.15
19-35-429-027	1355 Norhlawn Blvd	$ 2,603.15
19-35-429-026	1371 Northlawn Blvd	$ 1,735.43
19-35-429-025	1385 Northlawn Blvd	$ 1,735.43
19-35-429-024	1395 Northlawn Blvd	$ 1,735.43
		$ 225,872.58

B. Public Hearing for Confirmation of the Roll - Bird Phase 1B Project Confirmation of the Roll for Special Assessment District Roll 918

WHEREAS, Special Assessment Roll, designated Roll No. 918, has been heretofore prepared for Collection; and

WHEREAS, notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property to be assessed; and

WHEREAS, the Commission has deemed it practicable to cause payment of the cost thereof to be made after the time of construction; and

WHEREAS, the Commission Resolution 03-051-26 provided it would meet this 23rd day of March, 2026 for the sole purpose of reviewing the assessment roll; and

WHEREAS, at said hearing held this March 23, 2026, all those property owners or their representatives present have been given an opportunity to be heard specifically concerning costs appearing in said special assessment roll;

NOW, THEREFORE, BE IT RESOLVED, that Special Assessment Roll No. 918 be in all things ratified and confirmed, and that the City Clerk be and is hereby instructed to endorse said roll, showing the date of confirmation thereof, and to certify said assessment roll to the City Treasurer for collection at or near the time of construction of the improvement.

BE IT FURTHER RESOLVED, that the special assessment shall be payable in five (5) payments as provided in Section 94-10 of the Code of the City of Birmingham, with an annual interest rate of seven and three-quarters percent (7.75%) on all unpaid installments.

Sidwell Number	Street Address	Estimated Water SAD Costs	Estimated Sewer SAD Costs
1936482001	616 Bird Ave	$ -	$ -
1936480026	623 Bird Ave	$ -	$ -

1936480027	631 Bird Ave	$ -	$ -
1936482002	638 Bird Ave	$ -	$ -
1936482003	644 Bird Ave	$ -	$ -
1936480060	655 Bird Ave	$ -	$ -
1936482004	668 Bird Ave	$ -	$ 2,912.00
1936480061	671 Bird Ave	$ -	$ -
1936482005	684 Bird Ave	$ 954.00	$ 2,912.00
1936480030	695 Bird Ave	$ 1,749.00	$ 2,912.00
1936480031	711 Bird Ave	$ 1,749.00	$ 2,912.00
1936482006	716 Bird Ave	$ -	$ 2,800.00
1936482007	730 Bird Ave	$ 954.00	$ 2,800.00
1936480066	731 Bird Ave	$ -	$ -
1936482008	740 Bird Ave	$ -	$ -
1936480067	747 Bird Ave	$ -	$ 2,912.00
1936482009	768 Bird Ave	$ -	$ -
1936480033	771 Bird Ave	$ -	$ -
1936482010	784 Bird Ave	$ -	$ -
1936482063	808 Bird Ave	$ -	$ -
1936480034	811 Bird Ave	$ -	$ -
1936480064	831 Bird Ave	$ -	$ -
1936482064	832 Bird Ave	$ -	$ -
1936482061	852 Bird Ave	$ -	$ -
1936480065	855 Bird Ave	$ -	$ -
1936482062	860 Bird Ave	$ -	$ -
1936480059	871 Bird Ave	$ -	$ -
1936482047	888 Bird Ave	$ -	$ -
1936480038	891 Bird Ave	$ 1,749.00	$ 2,912.00
1936482048	900 Bird Ave	$ -	$ 2,800.00
1936480039	907 Bird Ave	$ 1,749.00	$ 2,912.00
1936480062	925 Bird Ave	$ -	$ -
1936482015	926 Bird Ave	$ -	$ -
1936482016	954 Bird Ave	$ -	$ 2,800.00
1936480063	955 Bird Ave	$ -	$ 2,912.00
1936480042	963 Bird Ave	$ -	$ -
1936482017	976 Bird Ave	$ -	$ 2,800.00
1936482018	990 Bird Ave	$ 954.00	$ -
1936480043	993 Bird Ave	$ 1,749.00	$ 2,912.00
1936482019	1016 Bird Ave	$ 954.00	$ 2,800.00
1936480044	1019 Bird Ave	$ -	$ -
1936482020	1038 Bird Ave	$ -	$ 2,800.00
1936480045	1039 Bird Ave	$ -	$ -
1936480046	1063 Bird Ave	$ 1,749.00	$ 2,912.00
1936482021	1080 Bird Ave	$ -	$ -
1936480047	1087 Bird Ave	$ -	$ 2,912.00

1936482022	1092 Bird Ave	$ -	$ -
		$ 14,310.00	$ 51,632.00

C. Public Hearing for Resolution to approve the Special Land Use Permit Amendment, Final Site Plan & Design Review for 600 N. Old Woodward Suites 101 & 203 — Old World Pizzeria — to permit a new food and drink establishment to open in the O2 Zoning District

1. Resolution to approve the Special Land Use Permit for 600 N. Old Woodward Suites 101 & 203, to permit a new food and drink establishment -- Old World Pizzeria -- to open in the O2 zoning district.

D. Resolution to award the Bird Phase 1B Project #7-26 (W) to F.D.M. Contracting, Inc. in the amount of $1,298,186.82 plus a 10% construction contingency for a total of $1,428,005.50. In addition, to authorize the Mayor and Clerk to sign the agreement on behalf of the City contingent upon execution of the agreement and meeting all the insurance and bond requirements by F.D.M. Contracting, Inc. Funding for this project has been budgeted in the following accounts:

Fund Account	Fund ID Number	Project Award	10% Contingencies	Total
Local Street Fund	203.0-449.001-981.0100	$502,545.99	$50,254.60	$668,474.95
Sewer Fund	590.0-537.000-981.0100	$400,213.49	$40,021.35	$691,371.45
Water Fund	591.0-544.000-981.0100	$395,427.34	$39,542.73	$483,413.70
Total Construction Costs		$1,298,186.82	$129,818.68	$1,428,005.50

E. Ordinance to amend Chapters 82 and 110 of the Birmingham Code of Ordinances to move and update the enabling language for the Multi-Modal Transportation Board.

F. Resolution to meet in closed session pursuant to MCL § 15.268, Sec.8(1)(d) of the Open Meetings Act to consider the purchase or lease of real property up to the time an option to purchase or lease that real property is obtained.

(A roll call vote is required, and the vote must be approved by a 2/3 majority of the commission. The commission will adjourn to closed session after all other business has been addressed in open session and reconvene to open session after the closed session, for purposes of taking formal action resulting from the closed session and for purposes of adjourning the meeting.)

G. Commission Items for Future Discussion. A motion is required to bring up the item for future discussion at the next reasonable agenda, no discussion on the topic will happen tonight.

H. Commission discussion on items from a prior meeting.

1. City Procedure Regarding Builders' Bonds and Road Repair

2. Birmingham Police Department's Position on Immigration Enforcement

9. REMOVED FROM CONSENT AGENDA

10. COMMUNICATIONS

A. Communications regarding ICE

11. REPORTS

A. Commissioner Reports

1. Notice of Intention to Appoint to the Board of Building Trades Appeals
2. Notice of Intention to Appoint to the Brownfield Redevelopment Authority
3. Notice of Intention to Appoint to the Birmingham City Commission
4. Notice of Intention to Appoint to the Parks and Recreation Board

B. Commissioner Comments

C. Advisory Boards, Committees, Commissions' Report

D. Legislation

E. City Staff

1. Planning Department Annual Report 2025-2026

F. Information Only

12. ADJOURN

City boards and committees meet in person, and most have a virtual option available to the public. Members of the public may attend the City Commission meeting in person at Birmingham City Hall or attend virtually.

Link to Access Virtual Meeting: https://zoom.us/j/655079760
Telephone Meeting Access: 877 853 5247 US Toll-free
Meeting ID Code: 655 079 760

City Hall is open to the public during regular business hours, Monday through Friday from 8 a.m. – 5 p.m. The Police Department lobby entrance on the east side of City Hall on Pierce Street operates as the after-hours public entrance.

Individuals requiring assistance to enter the building should request aid via the intercom system at the parking lot entrance gate on Henrietta Street.

Persons who require mobility, visual, hearing, or other assistance for effective participation in this public meeting should contact the City Clerk's Office at (248) 530-1880, or (248) 644-3405 (TDD) at least one day before the meeting to request help.

Las personas con incapacidad que requieren algún tipo de ayuda para la participación en esta sesión pública deben ponerse en contacto con la oficina del escribano de la ciudad en el número (248) 530-1800 o al (248) 644-3405 (para las personas con incapacidad auditiva) por lo menos un dia antes de la reunión para solicitar ayuda a la movilidad, visual, auditiva, o de otras asistencias. (Title VI of the Civil Rights Act of 1964)

BIRMINGHAM

NOTICE OF INTENTION TO APPOINT TO THE PLANNING BOARD

At the regular meeting of Monday, March 23, 2026, the Birmingham City Commission intends to appoint the following positions to the Planning Board:

- Two regular members to serve three-year terms to expire March 28, 2029

Interested citizens may submit an application available at the City Clerk's office or online at www.bhamgov.org/boardopportunities. Applications must be submitted to the City Clerk's office on or before noon on Wednesday, March 18, 2026. These documents will appear in the public agenda for the regular meeting at which time the City Commission may make nominations and vote on appointments.

Duties

The Planning Board consists of seven regular and two alternate members who serve three-year terms without compensation. The board meets at 7:30 P.M. on the second and fourth Wednesday of each month to hear design reviews, zoning ordinance text amendments and any other matters which bear relation to the physical development or growth of the City.

Specifically, the duties of the Planning Board are as follows:

- Long range planning
- Zoning ordinance amendments
- Recommend action to the City Commission regarding special land use permits
- Site plan/design review for non-historic properties
- Joint site plan/design review for non-residential historic properties
- Rezoning requests
- Soil filling permit requests
- Requests for opening, closing or altering a street or alley

Applicant(s) Presented for City Commission Consideration:

Applicant Name	Criteria/Qualifications
	Members must consist of an architect duly registered in this state, a building owner in the Central Business or Shain Park Historic District, and the remaining members shall represent, insofar as possible, different occupations and professions such as, but not limited to, the legal profession, the financial or real estate professions, and the planning or design professions and must be residents of the City of Birmingham.

Janelle Boyce	32-year resident and licensed builder who currently serves on the board.

SUGGESTED COMMISSION ACTION:

To appoint _____ as a regular member to the Planning Board to serve a three-year term to expire March 28, 2029.

NOTE: All members of boards and commissions are subject to the provisions of City of Birmingham City Code Chapter 2, Article IX, Ethics and the filing of the Affidavit and Disclosure Statement.

BIRMINGHAM
A WALKABLE CITY

Mya Brown <mbrown@bhamgov.org>

FromClerksOffice- APPLICATION FOR CITY BOARD OR COMMITTEE [#118]

1 message

'Wufoo' via Clerks Office <ClerksOffice@bhamgov.org> Tue, Feb 3, 2026 at 12:56 PM
Reply-To: no-reply@wufoo.com
To: clerksOffice@bhamgov.org

Board/Committee of Interest	Planning
Specific Category/Vacancy on Board (see below)	Designer/Builder
Name	Janelle Boyce
Residential Address	348 George St. Birmingham, MI 48009 United States
Business Address	348 George St. Birmingham, MI 48009 United States
Phone Number *	(248) 321-3207
Email **By providing your email to the City, you agree to receive news and notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.**	jlwboyce@gmail.com
Length of Residence	32 years
Occupation	Licensed Builder and Interior Designer
Reason for Interest: Explain how your background and skills will enhance the board to which you have applied.	I have been a Planning Board member since 2007. My board participation in the creation of many city wide plans. My experience as a builder while evaluating architectural and site plans. My understanding of the Zoning Ordinance.
List your related employment experience	In my profession I work with zoning codes regularly. Having that knowledge is essential when evaluating the site plans brought before our board. As a builder I am a fluent in reading blueprints, and well versed in architectural materials.
List your related community activities	Birmingham School District. Baldwin Public Library.
List your related educational experience	I have a bachelors degree in Interior Design from Michigan State University. I have been a Michigan Licensed Residential Builder since 2008.
To the best of your knowledge, do you or a member of your immediate family have any direct financial or business relationships	No.

with any supplier, service provider or contractor of the City of Birmingham from which you or they derive direct compensation or financial benefit? If yes, please explain.	
Do you currently have a relative serving on the board/committee to which you have applied?	No.
Are you an elector (registered voter) in the City of Birmingham? *	Yes.

PLANNING BOARD

Chapter 82 – Section 82-27 – Seven Members
Job Requirements: An architect duly registered in this state, a building owner in the Central Business or Shain Park Historic District, and remaining members, must represent, insofar as possible, different occupations and professions such as, but not limited to, the legal profession, the financial or real estate professions, and the planning or design professions.
Terms: Three Years
Appointment by City Commission
Meeting Schedule: Second and Fourth Wednesday of the month at 7:30 PM.

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Boyce 348 George St.	**Janelle**	(248) 321-3207 *jlwboyce@hotmail.com*	12/10/2007 Design profession	3/28/2026
Boyle 840 Wimbleton	**Robin**	(248) 961-1514 *r.boyle@wayne.edu*	4/19/2004 Planning professor	3/28/2028
Clein 1556 Yosemite	**Scott**	(313) 330-0217 *s.clein@comcast.net*	3/22/2010 Civil engineer/urban design	3/28/2028
Currie 579 Ridgedale Ave	**Duncan**	(248)9215544 *duncan.o.currie@gmail.com*	Alternate/Mechanical Engineer	3/28/2027
Jeffares 1381 Birmingham Blvd	**Stuart**	(248) 321-2120 *stuartjeffares@gmail.com*	12/14/2015 Real estate profession	3/28/2027

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Koseck 2441 Dorchester	**Bert**	(248) 302-4018 *bkoseck@comcast.net*	10/12/2009 Architect	3/28/2026
Ramin 1701 Maryland	**Nasseem**	(248) 765-9446 *nramin@dykema.com*	11/20/2017 Alternate/attorney	3/28/2027
Share 1040 Gordon Lane	**Daniel**	(248) 642-7340 *dshare@bsdd.com*	11/24/2014 Building owner	3/28/2027
Williams 1628 Latham St.	**J. Bryan**	(248) 420-3522 (248) 433-7289 *jwilliams@dickinsonwright.com*	4/16/2007 Attorney	3/28/2027

Name of Board: PLANNING BOARD **Year:** 2024

Members Required for Quorum: 4

MEMBER NAME																				Total Mtgs. Att.	Total Absent	Percent Attended Available
REGULAR MEMBERS	1/10	1/24	2/28	3/13	3/27	5/8	5/22	6/26	7/10	7/24	8/14	8/28	9/11	9/25	10/9	11/13	12/11					
Janelle Boyce	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P				16	1	94%
Robin Boyle	P	A	P	A	A	P	P	A	P	P	P	P	P	A	P	P	P				12	5	71%
Scott Clein	A	P	P	P	A	P	P	P	P	P	P	P	P	P	P	A	P				14	3	82%
Stuart Jeffares	P	A	P	P	P	P	P	P	P	P	P	P	A	A	A	P	P				13	4	76%
Bert Koseck	P	P	A	P	A	P	P	P	A	P	P	P	P	A	P	P	P				13	4	76%
Daniel Share	P	P	P	P	P	P	A	P	P	A	P	P	P	P	A	P	P				14	3	82%
J. Bryan Williams	A	P	P	P	P	P	P	P	P	A	P	P	A	P	P	P	P				14	3	82%
ALTERNATES																							
Naseem Ramin	P	P	A	A	P	A	A	P	A	A	P	A	A	A	P	A	A				6	11	35%
Jason Emerine	P	A	A	A	A	A	P	P	P	A	P	P	P	P	P	P	P				11	6	65%
																					0	0	#DIV/0!
																					0	0	#DIV/0!
TOTAL	**6**	**6**	**6**	**6**	**5**	**7**	**7**	**8**	**7**	**5**	**9**	**8**	**6**	**5**	**7**	**7**	**8**	0	0	0			

KEY:

A = Member absent
P = Member present or available
CP = Member available, but meeting canceled for lack of quorum
CA = Member not available and meeting was canceled for lack of quorum
NA = Member not appointed at that time
NM = No meeting scheduled that month
CM = Meeting canceled for lack of business items

Planning Board ATTENDANCE RECORD

Name of Board: Planning Board **Year:** 2025

Members Required for Quorum: 4

MEMBER NAME	1/8	1/22	2/12	2/26	3/12	3/26	4/9	4/23	5/14	5/28	6/11	6/25	7/9	7/23	8/13	8/27	9/10	10/22	11/12	12/10	SPEC MTG 4/30	Total Mtgs. Att.	Total Absent	Percent Attended Available
REGULAR MEMBERS																								
JANELLE WHIPPLE-BOYCE	CM	A	P	P	CM	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	16	3	84%
ROBIN BOYLE	CM	P	P	P	CM	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	18	1	95%
SCOTT CLEIN	CM	P	P	P	CM	A	A	P	P	P	P	P	P	P	P	P	P	P	A	A	P	15	4	79%
STUART JEFFARIES	CM	P	P	P	CM	A	P	A	P	A	P	A	P	P	P	A	A	A	A	P	P	11	8	58%
BERT KOSECK	CM	A	A	A	CM	P	P	A	P	A	P	P	A	P	P	P	P	P	A	A	P	11	8	58%
DANIEL SHARE	CM	P	P	P	CM	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	A	17	2	89%
BRYAN WILLIAMS	CM	P	P	P	CM	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	A	17	2	89%
ALTERNATES																								
DUNCAN CURRIE	CM	NA	NA	NA	CM	P	P	A	A	P	P	P	P	P	P	P	P	P	P	P	A	13	3	81%
NASSEEM RAMIN	CM	P	P	P	CM	P	A	P	A	P	P	A	P	A	P	A	A	P	P	P	A	12	7	63%
STUDENTS																								
CARTER ANDERSON	NA	NA	P	P	CM	A	P	A	P	P	A	P	A	A	A	P	A	A	A	A	A	7	11	39%
OLIVIA BETANZOS	NA	NA	P	A	CM	A	P	A	P	P	A	A	A	A	A	A	A	A	A	A	A	4	14	22%
Present or Available	0	**6**	**7**	**7**	0	**7**	**7**	**5**	**7**	**7**	**9**	**6**	**8**	**7**	**9**	**7**	**6**	**7**	**6**	**7**	**5**			

KEY:
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- **NM** = **No meeting scheduled that month**
- **CM** = **Meeting canceled for lack of business items**

Department Head Signature

Planning Board ATTENDANCE RECORD

Name of Board: Planning Board **Year:** 2026

Members Required for Quorum: 4

MEMBER NAME	1/14	1/28	2/11	2/25	3/11	3/25															SPEC MTG	Total Mtgs. Att.	Total Absent	Percent Attended Available
REGULAR MEMBERS																								
JANELLE WHIPPLE-BOYCE	CM	P	CM	CM	P																	2	0	100%
ROBIN BOYLE	CM	P	CM	CM	A																	1	1	50%
SCOTT CLEIN	CM	P	CM	CM	A																	1	1	50%
STUART JEFFARIES	CM	P	CM	CM	A																	1	1	50%
BERT KOSECK	CM	A	CM	CM	A																	0	2	0%
DANIEL SHARE	CM	P	CM	CM	P																	2	0	100%
BRYAN WILLIAMS	CM	P	CM	CM	P																	2	0	100%
ALTERNATES																								
DUNCAN CURRIE	CM	P	CM	CM	P																	2	0	100%
NASSEEM RAMIN	CM	A	CM	CM	P																	1	1	50%
STUDENTS																								
-																						0	0	#DIV/0!
-																						0	0	#DIV/0!
Present or Available	0	**7**	0	0	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

KEY:
- **A** = Member absent
- **P** = Member present or available
- **CP** = Member available, but meeting canceled for lack of quorum
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- **CM** = Meeting canceled for lack of business items

Department Head Signature

ARTICLE II. PLANNING BOARD[1]

Sec. 82-26. Created.

There is hereby created a planning board for the city. The planning board is a locally organized board and is not established under the Municipal Planning Commission Act, Act No. 285 of the Public Acts of Michigan of 1931 (MCL 125.31 et seq.), as amended.

(Code 1963, § 5.401)

Sec. 82-27. Composition.

(a) The planning board shall consist of seven regular members whose residences are located in the city.

(b) One member of the planning board shall be an architect duly registered in this state, if such person is available. The other members shall represent, insofar as possible, different occupations and professions such as, but not limited to, the legal profession, the financial or real estate professions, and the planning or design professions. One of the members of the planning board shall be a building owner in the central business district or Shain Park Historic District.

(c) The city manager, city engineer and city planner, or the authorized representatives of any of them, and the student representative, shall be members ex officio of the planning board and shall have all rights of membership thereon, except the right to vote.

(d) The city commission may also appoint not more than two alternate members for the same term as regular members of the planning board. The alternate member may be called on a rotating basis to sit as a regular member of the planning board in the absence of a regular member. An alternate member may also be called to service in the place of a regular member for the purpose of reaching a decision on a case in which the regular member has abstained for reasons of conflict of interest. The alternate member having been appointed shall serve in the case until a final decision has been made. The alternate member shall have the same voting rights as a regular member of the planning board.

(Code 1963, § 5.401; Ord. No. 1811, 7-28-03; Ord. No. 2147, 10-27-14)

Sec. 82-28. Terms.

Members of the planning board shall be appointed by the city commission for terms of office of three years; except that two members of the first board shall be appointed to serve for a term of one year, two for terms of two years, and three for terms of three years. All members shall hold office until their successors are appointed. A vacancy occurring in the membership of the planning board for any cause shall be filled by a person appointed by the city commission for the duration of the unexpired term.

(Code 1963, § 5.401)

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[1]Cross reference(s)—Boards and commissions, § 2-171 et seq.

Sec. 82-29. Removal of members.

(a) Members of the planning board may, after a public hearing, be removed for cause.

(1) As used in this section, the term "cause" is defined as a determination by the city commission that a sufficient reason exists, as determined and defined by the city commission in its sole discretion, for the removal of a member of the planning board. The decision by the city commission to remove a member of the planning board shall be final and binding upon such member of the planning board and no appeal shall arise therefrom.

(2) As used in this section, the term "public hearing" is designed as an open meeting at which the determination is made by the city commission, in its sole discretion, that cause exists for the removal of a member of the planning board. For purposes of an orderly presentation, the city attorney shall serve as chairperson of the public hearing, and the city manager, or his/her designee, may present information to the city commission with respect to the potential removal of a member of the planning board. The city manager or his/her designee will be afforded the opportunity to address the city commission with respect to such information for a period not to exceed 30 minutes. The affected member of the planning board or his/her designated representative will be afforded the opportunity to address the city commission with respect to such information for a period not to exceed 30 minutes. The presentation of information by the city manager or his/her designee and the presentation of information by the affected member or his/her designated representative may, in accordance with applicable law, be conducted in a closed session. This Section shall not be construed as creating a right to a due process or evidentiary hearing.

(b) This section shall not be construed as creating or bestowing upon a member of the planning board any employment status, property interest or any vested interest or right to continued membership on the planning board.

(Code 1963, § 5.402; Ord. No. 1817, 1-5-04)

Sec. 82-30. Compensation.

The members of the planning board shall serve as such without compensation.

(Code 1963, § 5.401)

Sec. 82-31. Organization and meetings.

(a) The planning board shall, from its appointed members, elect a chairman and vice-chairman whose terms of office shall be fixed by the planning board. The chairman shall preside over the planning board and shall have the right to vote. The vice-chairman shall, in the case of absence or disability of the chairman, perform the duties of the chairman. The city planner or his authorized representative shall act as secretary of the planning board and shall keep a record of all of its proceedings.

(b) At least four members of the planning board shall constitute a quorum for the transaction of its business.

(c) The planning board shall:

(1) Adopt rules for the transaction of its business, which provide for the time and place of holding regular meetings.

(2) Provide for the calling of special meetings by the chairman or by at least two members of the planning board.

(3) Keep a full and complete record of its resolutions, transactions, findings and determinations, which record shall be available to the city commission and to the public upon request.

(d) All meetings of the planning board shall be open to the public, and any person or his duly constituted representative shall be entitled to appear and be heard on any matter applicable to the business at hand before the planning board makes its decision.

(e) The concurring affirmative vote of four members of the planning board shall be required for approval of plans before it for review or for the adoption of any resolution, motion or other action by the planning board.

(Code 1963, § 5.403)

Sec. 82-32. Assistance.

The planning board may call upon the city manager for such services and data from the various departments as it may require. The planning board may recommend to the city commission the securing of such professional and consulting services as it may require; however, no expenditures of funds shall be made or contracts entered into for providing such professional or consulting services unless the same shall first be approved and authorized by the city commission.

(Code 1963, § 5.404)

Sec. 82-33. Duties.

(a) It shall be the function and duty of the planning board to advise the city commission in regard to the proper development of the city. The planning board is specifically charged with carrying out the goals, objectives and intent of the city's adopted master plan and urban design plan and other development-oriented plans which may subsequently be adopted. The planning board is authorized to consult and cooperate with the planning, historic district and legislative bodies of other governmental units in any area outside the boundaries of the city. The planning board is authorized to prepare a recommendation for the physical development of the city, either in its entirety, or in part. Such recommendation, together with accompanying maps, plats, charts and descriptive matter, shall illustrate the planning board suggestions for the development of such territory.

(b) The planning board is authorized to consider and act upon applications for soil filling permits under the provisions of section 50-126 et seq.

(c) The planning board is authorized to recommend for the guidance of the city commission amendments to this Code relating to the control and development of lands within the city's historic districts. The planning board may, from time to time, amend, extend or add to such recommendations; and the same shall be made with the general purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the municipality and its environs. The planning board may hold such public meetings and/or hearings from time to time, as it may deem advisable or necessary in connection with the proper performance of its functions under this article.

(d) Not later than April 1 of each year, the planning board shall prepare and submit to the city manager a tentative outline of its program for the ensuing year. Joint meetings of the city commission and of the planning board shall be held at least semi-annually, at a time designated by the mayor. It shall be the duty of the mayor to call such meeting in accordance with the provisions of this section.

(Code 1963, § 5.405; Ord. No. 1777, 1-28-02; Ord. No. 1838, 6-28-04; Ord. No. 1858, 3-7-05)

Sec. 82-34. Review and recommendations.

(a) The planning board shall have the responsibility for site plan and design review for nonhistoric properties and joint site plan review of historic properties with the design review board as outlined in chapter 127 of this Code. It shall be the function of the planning board to pass upon all matters referred to it by the city commission and to give to the city commission the benefit of its judgment with relation to such matters so referred. Matters so referred may include but not necessarily be restricted to:

(1) Requests for changes to the zoning map;

(2) Requests for amendments to the zoning ordinance text;

(3) Requests for closing, opening or altering a street or an alley;

(4) Requests for issuing building permits;

(5) Requests for special land use permits; and

(6) Any other matters which bear relation to the physical development or growth of the municipality.

(b) When any recommendation has been made by the planning board, the same shall be referred to the city commission or other appropriate city boards.

(Code 1963, § 5.406; Ord. No. 1882, 7-24-06)

Secs. 82-35—82-55. Reserved.

City Commission Workshop Minutes
Monday, March 9, 2026 - 5:30 p.m.
151 Martin Street, Birmingham
City Commission Room 205
Vimeo Link: https://vimeo.com/1171900638

This will be considered a workshop session of the City Commission. No formal actions will be taken. The purpose of this workshop is to discuss the Capital Improvement Master Plan.

1. Call To Order
Clinton Baller, Mayor

2. Roll Call
City Clerk Bingham called the roll.

Present:	Mayor Clinton Baller Mayor Pro Tem Anthony Long Commissioner Brad Host Commissioner Kevin Kozlowski Commissioner William Kolb Commissioner Therese Longe
Absent:	Commissioner Andrew Haig
Staff:	City Manager Ecker; City Clerk Bingham, City Engineer Coatta, Assistant City Manager Clemence, Assistant City Manager Fairbairn, City Attorney Gaudenzi, City Attorney Kucharek

3. Presentation and Commission Discussion

CE Coatta and CM Ecker presented the item and answered questions.

Commissioners discussed the following regarding the item:

- Approximately 38% of the City's water mains and 38% of the City's sewers are over 100 years old.
- It may be sufficient to have staff prepare a Capital Improvement Master Plan rather than using a consultant, since the City is already working off of an infrastructure scoring matrix. It may be helpful to extend the infrastructure scoring matrix dates out ten years instead of the present five.
- Birmingham residents fall into a few different categories regarding infrastructure repairs. There are residents who have paid for work on their streets and residents who have not yet

paid for work on their streets and are facing meaningfully higher costs than residents who previously paid for road work. Residents' opinions on whether road improvements funding should remain as-is or be changed will be informed by which category they occupy.

- Residents who have already paid for work on their street would have to pay again if a bond is used to fund road work. At the same time, these residents would generally have paid less than residents who are presently facing road repairs and improvements.
- Pavement Surface Evaluation and Rating (PASER) ratings are useful, and count equally in the City's infrastructure scoring matrix with sewer and water rankings. At the same time, the City must also consider how each street fits into the wider context of the water and sewer systems, and how repairing any one street will affect the whole system.
- Using a consultant to determine how each project best fits into the wider water-sewer system context might be beneficial.
- While staff noted that they are considering the order in which the water and sewer system segments need to be repaired, that information is applied subsequent to the infrastructure scoring matrix. This may result in the road repair selection process being somewhat unclear to the general public.
- There are other criteria that could also be considered within the infrastructure ranking process, including local and major streets, traffic counts, existence of sewers beneath a street, and City Engineer judgment. This could also be accessible to the public online. It could be beneficial to integrate these or other criteria into the infrastructure rating process, and a consultant or a large language model may be able to assist with this.
- The two highest priority issues likely regard the amount of funding needed to adequately stay on top of necessary infrastructure repairs, and the outcomes if that level of investment cannot be achieved.
- Resident education regarding the state of infrastructure within the City is necessary.
- It would be helpful to better understand Ann Arbor's infrastructure funding and expenditure process.
- It might be appropriate to create a complete inventory of the necessary upcoming infrastructure projects.
- The City Engineering department does not have the bandwidth to create these kinds of systems and inventories at this time.
- The City must determine how water and sewer improvements might be best funded. It is unlikely that user fees will fund the scale of necessary water and sewer improvements.
- Determining what funding increases would be required to repair two miles of infrastructure a year is appropriate. The increase that might be required might burden certain residents. This is one of the reasons that considering alternative funding options will be important.
- There is not enough funding to do the water and sewer improvements at the necessary scale or speed, since the City is not permitted to draw from the General Fund for these repairs. Determining how these improvements might be funded more quickly is one of the questions a consultant might be able to address.
- The City must also clarify how it will approach other necessary non-infrastructure projects.
- Creating more flexibility for developments in the Triangle District might be one way of generating further revenue that could be used for these improvements.
- Gaining clarity from staff on the implications of the lawsuit that caused the City to

discontinue its use of General Funds for water and sewer improvements would be helpful.

- A consultant would be able to offer unique insight from doing this type of work regularly, and would help assure residents that the City is undertaking this process as transparently, economically, and rationally as possible. It will be necessary to define the scope of a potential consultant's work and determine what information might be gained elsewhere.
- It is necessary to review the City's special assessment district funding process. It may be more appropriate to review streets on a case-by-case basis.
- While it is unlikely that the City will reach a point where all present infrastructure is less than 100 years old, it is necessary to pursue that outcome as much as possible.
- It would be beneficial to consider how the City might increase its related RFP responses in order to procure competitive rates.
- Staff is likely able to determine what tasks might best be included in a potential RFP.
- Improving communication about projects between the Engineering Department, residents, and the Commission could be beneficial. Improvements around project timing could also be beneficial. A consultant may be able to assist with either.
- While the Commission often closely studies requests for new full time employee positions, one or more new full time employees might be appropriate to address some of the items being raised. This could allow for longer timelines and lead times on projects, and more information being available earlier in the process.

4. Public Comment

David Bloom commented regarding the infrastructure prioritization process, whether to prioritize repairing water and sewer or entire roads, potential bond options, potential RFP options, and potential information gathering options.

Paul Reagan commented that the goal should be improvement of these processes, and that creating an inventory might create public expectations the City cannot meet.

5. Adjourn

The Commission motioned to adjourn at 6:48 p.m.

Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

City Commission Minutes
Monday, March 9, 2026 - 7:00 p.m.
151 Martin Street, Birmingham
City Commission Room 205
Vimeo Link: https://vimeo.com/1171900638

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1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Clinton Baller, Mayor, opened the meeting with the Pledge of Allegiance.

2. ROLL CALL

City Clerk Bingham called the roll.

Present: Mayor Clinton Baller
Mayor Pro Tem Anthony Long
Commissioner Brad Host
Commissioner Kevin Kozlowski
Commissioner William Kolb
Commissioner Therese Longe

Absent: Commissioner Andrew Haig

Staff: City Manager Ecker; City Clerk Bingham, Finance Director Chavez, Assistant City Manager Clemence, Assistant City Manager Fairbairn, City Engineer Coatta, Planning Director Dupuis, City Attorney Gaudenzi, Police Chief Grewe, Deputy Treasurer Katz, City Attorney Kucharek, Police Captain Simpson, Department of Public Services Director Zielinski

3. PROCLAMATIONS, CONGRATULATORY RESOLUTIONS, AWARDS, APPOINTMENTS, RESIGNATIONS AND CONFIRMATIONS, ADMINISTRATION OF OATHS, INTRODUCTION OF GUESTS AND ANNOUNCEMENTS.

ANNOUNCEMENTS

Birmingham Public Portal

APPOINTMENTS

03-042-26 Parks and Recreation Board

In Mr. Wrobel's absence, it was noted this would be a re-appointment.

MOTION: Motion by Longe:
To appoint Joe Wrobel as an alternate member to the Parks and Recreation Board to serve a three-year term to expire March 13, 2029.

VOICE VOTE
Ayes: Long, Host, Longe, Baller, Kozlowski, Kolb
Nays: None
Recused: None

03-043-26 Parks and Recreation Board

Narlu Castellano was interviewed for the appointment.

MOTION: Motion by Host:
To appoint Narlu Castellano as a regular member to the Parks and Recreation Board to serve a three-year term to expire March 13, 2029.

VOICE VOTE
Ayes: Long, Host, Longe, Baller, Kozlowski, Kolb
Nays: None
Recused: None

03-044-26 Parks and Recreation Board

In Ms. Kupczyk's absence, it was noted this would be a re-appointment.

MOTION: Motion by Kozlowski:
To appoint Sarah Kupczyk as a regular member to the Parks and Recreation Board to serve a three-year term to expire March 13, 2029.

VOICE VOTE
Ayes: Long, Host, Longe, Baller, Kozlowski, Kolb
Nays: None
Recused: None

03-045-26 Board of Zoning Appeals

Victoria Policicchio was interviewed for the appointment.

MOTION: Motion by Long:
To appoint Victoria Policicchio as an alternate member to the Board of Zoning Appeals to serve the remainder of a three-year term to expire February 18, 2029.

VOICE VOTE

Ayes: Long, Host, Longe, Baller, Kozlowski, Kolb
Nays: None
Recused: None

03-046-26 Martha Baldwin Park Board

David Krivan was interviewed for the appointment.

MOTION: Motion by Long:
To appoint David Krivan as a regular member to the Martha Baldwin Park Board to serve the remainder of a four-year term to expire May 1, 2028.

VOICE VOTE
Ayes: Long, Host, Longe, Baller, Kozlowski, Kolb
Nays: None
Recused: None

CC Bingham swore in the present appointees.

4. OPEN TO THE PUBLIC FOR MATTERS NOT ON THE AGENDA

Michelle Areeda commented regarding traffic safety on Oak.

Nathan Miller commented regarding his recently opened flight academy in Troy, Michigan.

John Deplanche commented regarding the road surface of Oak between Greenwood Cemetery and Old Woodward and the possibility of redirecting traffic that presently takes Oak.

5. CONSENT AGENDA

03-047-26 Consent Agenda

MOTION: Motion by Long, seconded by Host:
To move the consent agenda in the packet tonight including Items A through G.

ROLL CALL VOTE
Ayes: Longe, Baller, Host, Kozlowski, Kolb, Long
Nays: None
Recused: None

A. Resolution to approve the regular City Commission meeting minutes of March 9, 2026.

B. Resolution to approve the warrant list, including Automated Clearing House payments, dated February 25, 2026, in the amount of $5,750,049.30.

C. Resolution to approve the warrant list, including Automated Clearing House payments, dated March 04, 2026, in the amount of $958,828.99.

D. Resolution approving the budget amendment for emergency water main repair across Woodward Ave, performed by D'Angelo Brothers Inc., 30836 West 8 Mile Road, Farmington Hills, MI 48336, in the amount of $139,385.00, to be charged to Water Supply System Fund account #591.0-544.000-811.0000

AND

Make a motion adopting a resolution to approve the appropriation and amendment of the FY 2025/2026 budget as follows:

Water Supply System Fund

Revenues:		
Draw from Fund Balance	591.0-000.000-400.0000	$139,385.00
Expenditures:		
Other Contractual Services	591.0-544.000-811.0000	$139,385.00

E. Resolution to approve the FY 2025 Emergency Management Performance Grants (EMPG) Agreement and approve the awarded funds totaling $9,283.00. Further, to direct the Mayor to sign the agreement on behalf of the City and any required quarterly reports or surveys associated with the EMPG grant, and to authorize the Fire Chief as the sub-recipient authorized representative in order to sign any related EMPG documents on the City's behalf.

F. Resolution to adopt an ordinance to amend Part II, Chapter 26. – Businesses, Article IV.-Peddlers, Commercial Vendors and Solicitors, Sec. 26-117 – Requirements for All Applications.

G. Resolution to set a public hearing date of April 13, 2026 to consider the Special Land Use Permit Amendment and Final Site Plan & Design Review application for 298 S. Old Woodward, to permit the modification of the existing required off-street loading facility to make room for new in-house laundry facilities and a new trash compactor.

6. CITY MANAGER'S REPORT

None.

7. UNFINISHED BUSINESS

None.

8. NEW BUSINESS

03-048-26 Public Hearing for Outstanding Liquor Licenses for the 2025 Review Period

The Mayor opened the public hearing at 7:19 p.m.

PC Simpson presented the item. Zaid Elia and Steven Simon spoke on behalf of 220 Merrill and Sidecar/Slice/Shift, respectively.

Stuart Raider commented regarding the number of disturbances he has experienced as a resident living above Sidecar, his attempts to engage the restaurant ownership, and his request that these issues be considered as part of the liquor license renewal process.

Seeing no further public comment, the Mayor closed the public hearing at 7:36 p.m.

Staff answered questions and Commissioners discussed the following regarding the item:

- The Commission would like Mr. Simon to work with Mr. Raider to better address Mr. Raider's concerns. This could include moving speakers inside the restaurant so as to reduce the sound of the bass travelling through the restaurant's ceiling into Mr. Raider's floor.
- The volume of the music could also stand to be reduced within Sidecar/Slice/Shift.
- Sidecar/Slice/Shift has an influx of guests around midnight due to other businesses closing around that time, per Sidecar/Slice/Shift staff.

MOTION: Motion by Longe, seconded by Long:
To approve the renewal of liquor licenses for the 2025 licensing period for the following restaurants which hold a Class C Liquor License and are in compliance with Chapter 10, Alcoholic Liquors of the City Code:

- 220 Restaurant
- Sidecar/Slice/Shift

Commissioners discussed the following regarding the motion:

- This process worked exactly as it should, giving the businesses and the Police Department the opportunity to connect and establish a good working relationship.
- Both proprietors were brought back before the Commission because the Police Department stated that they had uncooperative encounters with the restaurants' staff. The Commission expects full cooperation between establishments' staff and the City's police.

ROLL CALL VOTE
Ayes: Long, Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: None

03-049-26 Public Hearing for Confirmation of the Roll - 2026 Cape Seal Program Confirmation of the Roll for Cape Seal Special Assessment District Roll 917

The Mayor opened the public hearing at 7:40 p.m.

DT Katz, CM Ecker, and CA Kucharek presented the item.

Ms. Areeda, 450 Oak #201, commented regarding the need for simple explanations of the assessments and the proposed assessment amounts for 450 Oak and 885 N. Old Woodward.

Seeing no further public comment, the Mayor closed the public hearing at 7:52 p.m.

Staff answered questions and Commissioners discussed the following regarding the item:

- Most of the changes to the amounts for the ten properties in question were within the range of $20. The largest change was $90. Many of them were to the benefit of the property owner.
- 450 Oak and 885 Woodward residents will be paying 25% for their improvements, since their longest frontage is on Oak. Anyone who was previously paying at the 85-15% split had that amount lowered to a 50-50% split as of the last Commission meeting.

MOTION: Motion by Longe, seconded by Host:
To nullify the SAD Roll 917 for the 2026 Cape Seal program to direct the City Manager to create and confirm a new SAD Roll 917 for the 2026 Cape Seal program using the same process and procedures as previously, and to postpone to the date certain of March 23, 2026.

ROLL CALL VOTE
Ayes: Long, Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: None

03-050-26 Award the 2026 Cape Seal Program #5-26 (P) to Highway Maintenance & Construction Co.

CE Coatta presented the item.

MOTION: Motion by Long, seconded by Kolb:
To make a motion adopting a resolution to award the 2026 Cape Seal Program #5-26 (P) to Highway Maintenance & Construction Co. in the amount of $417,727.25 and a 10% construction contingency for a total of $459,499.98. In addition, to authorize the Mayor and the City Clerk to sign the agreement on behalf of the City contingent upon execution of the agreement and meeting all insurance and bond requirements by Highway Maintenance & Construction Co. Funding for this project has been budgeted in the following accounts – Fund Account, Fund ID Number, Project Award, 10% Contingencies, and Total Amount as set forth in Section 8C on page 213 of today's packet,

AND

To install the advanced intersection signage at the southeast corner of Oak and Lakeside for Lakeview, as shown in Fleis and Vandenbrink Report.

ROLL CALL VOTE
Ayes: Long, Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: None

03-051-26 Public Hearing of Necessity for Water and Sewer Lateral Special Assessment District - Bird Phase 1B Project

The Mayor opened the public hearing at 7:58 p.m.

CE Coatta presented the item.

Seeing no further public comment, the Mayor closed the public hearing at 8:04 p.m.

Staff answered questions.

MOTION: Motion by Long, seconded by Longe:
WHEREAS, Notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property and lots to be assessed, by first class mail, and by publication in a newspaper generally circulated in the City; and

WHEREAS, The City Commission has conducted a public hearing and has determined it is necessary to proceed with the project replacing sewer services 50 years of age or older or constructed of material that is not acceptable for City standards and replacing water services that are 60 years or older or less than 1 inch in diameter on Bird Street from Grant Street to Cummings Avenue; and

WHEREAS, The City has previously established a policy requiring replacement of sewer services 50 years of age or older or constructed of materials that are not acceptable for City standards and water services less than 1 inch in diameter and the City street is open for repairs or reconstruction; and

WHEREAS, The City Commission, after the public hearing, has determined that the Bird Phase 1B Project, the replacement of sewer services that are 50 years of age or older or of material that is not acceptable for City standards, the replacement of water services that are 60 years or older or less than 1 inch in diameter, is a necessity and is in the best interest of the City; and

WHEREAS, The Commission has approved the detailed plans and estimates of cost prepared by the City Engineer; and

WHEREAS, Formal bids have been received and the actual cost of sewer service and water service replacement has been determined; and

WHEREAS, The City Engineer has determined the boundaries of sewer service lateral and water service laterals located within the limits of the following streets shall be installed as part of the Bird 1B Project (Contract #7-26(W)):

Bird Avenue – Grant Street to Cummings Avenue

WHEREAS, The formula used in making the assessment is 100% of the contractor's charge for replacing the lateral service that is 50 years of age or older or constructed of materials that are not acceptable and water service that is 60 years of age or older or less than 1 inch in diameter within the public right-of-way between the utility and the property line (calculated at the rate of $112.00 per foot of 6" diameter sewer service pipe, $53.00 per foot of 1-inch water service pipe).

THEREFORE LET IT BE RESOLVED, The City Commission has determined that the scope of the public improvement as described is in the best interest of the City and will benefit the properties listed in the assessment roll and is a necessity, and the City Commission directs the Manager to prepare a Special Assessment Roll and present the same to the City Commission for confirmation and further set a Public Hearing of Confirmation on March 23, 2026 and give notice of same, and this applies to the sewer and water laterals under Sidwell number, street address, estimated sewer SAD costs and estimated water SAD costs that are located in Section 8D of tonight's agenda packet on pages 378, 379, and 380.

ROLL CALL VOTE
Ayes: Long, Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: None

03-052-26 Playground Layout Design for Pembroke Park and Purchase of Equipment through Landscape Structures, Inc

DPSD Zielinski presented the item.

Commissioners discussed the following regarding the item:

- Staff succeeded in integrating both playground design best practices and resident feedback into this proposal.
- Penchura representative Lance Shipman surveyed the existing playground equipment to see what could be retained, which included two extant swings and two extant sandboxes.
- There was valuable discussion about the performance and cost benefit ratio of the various surfacing materials, and the placement of the sidewalk in relation to the parking and extant sidewalks. Some future planning occurred as well.
- This project was comprehensively considered.
- The comments on the survey were addressed in the making of these designs as well.
- This is the Parks and Recreation bond doing what it was intended to do. This project is being paid for primarily by this bond, which the Commission supported, and which the residents of Birmingham passed with approximately 70% in favor.
- Smaller parks' playground equipment is being updated with this bond to make them more safe and more engaging.

MOTION: Motion by Longe, seconded by Kolb:

To approve the playground layout design for Pembroke Park and purchase of equipment through Landscape Structures, Inc with Sourcewell cooperative purchase pricing in the amount of $222,554.94, and the installation of the playground equipment, shade structure, and site amenities by Penchura, LLC in the amount of $443,381.55 for a total purchase price of $665,936.49.

In addition, to appropriate and amend the 2025-2026 budget as follows:

Park System Construction Fund

Revenues		
Draw from Fund balance	408.0-000.000-400.0000	$35,936.49
Expenditures		
Land Improvements	408.2-901.751-979.0000	$35,936.49

ROLL CALL VOTE
Ayes: Long, Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: None

03-053-26 Retaining Walls along Brookside Avenue, Ravine Road, and Park Street

CE Coatta, CM Ecker, DPSD Zielinski, and CA Kucharek presented the item and answered questions.

Commissioners discussed the following regarding the item:

- The proposed design, which will look like a landscape wall, may not be in line aesthetically with the more historic context of this area.
- It is likely that the wall on private property will need to be shored up during the repair process.
- Residents in this area seem to be largely supportive of the proposed plans. They also value the existence of sidewalks in the neighborhood.
- It may not be necessary to continue discussing the minutia of this project since the Commission is a policy board.
- No residents that attended the resident meeting on this project raised concerns about the aesthetics of the retaining wall.
- There should be a consistent approach to special assessments in the City.
- While the appropriate split is not clear, it is challenging to understand why the City would not assess the affected homes at least in part for these repairs, since other homes throughout the City are assessed for similar repairs.
- If this project is not going to have a cost split between residents and the City, it might be most appropriate to only fix the most essential areas and to leave the rest be.
- It is possible to assess for this wall since its building was originally funded by special assessment before the adoption of the City Charter.
- These repairs benefit the homeowners because it prevents their homes from potentially shifting, they benefit the City because they allow a public sidewalk, and they benefit the City by helping to maintain the neighborhood character of little San Francisco.
- In the letter from the City Attorney in 1949 included in the agenda item, it indicated that

residents' approval of the City Charter did not intend to assume financial responsibility for every improvement made before the Charter's adoption.

- Residents living on an improved road can still be assessed for sidewalk repairs. It is likely at least appropriate to assess for the sidewalk repairs in this project.
- It is likely not possible to remove the wall and grade the hill in the majority of this area.
- Given that costs could increase if this project does not proceed, it may be appropriate to determine whether the project can occur and the cost split could be resolved at a later date.

MOTION: Motion by Long, seconded by Kolb:
To temporarily table this item.

VOICE VOTE
Ayes: Long, Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: None

03-054-26 Closed Session Pursuant to MCL § 15.268, Sec.8(1)(e) of the Open Meetings Act

MOTION: Motion by Kozlowski, seconded by Longe:
To meet in closed session pursuant to MCL § 15.268, Sec.8(1)(e) of the Open Meetings Act to discuss pending litigation entitled The City of Birmingham v The Community House Association, Birmingham, Michigan, Oakland County Circuit/Business Court Case No.: 2025-219218 CB Honorable Michael Warren.

ROLL CALL VOTE
Ayes: Host, Kolb, Long, Kozlowski, Baller, Longe
Nays: None
Recused: None

03-055-26 Closed Session Pursuant to MCL § 15.268, Sec.8(1)(d) of the Open Meetings Act

MOTION: Motion by Kolb, seconded by Long:
To meet in closed session pursuant to MCL § 15.268, Sec.8(1)(d) of the Open Meetings Act to consider the purchase or lease of real property up to the time an option to purchase or lease that real property is obtained.

ROLL CALL VOTE
Ayes: Host, Kolb, Long, Kozlowski, Baller, Longe
Nays: None
Recused: None

The Commission entered into closed session at 10:06 p.m. and returned from closed session at 10:57 p.m.

03-059-26 Retaining Walls along Brookside Avenue, Ravine Road, and Park Street (CONT'D)

CA Kucharek presented the continuation of the item and answered questions.

Commissioners discussed the following:

- Given the City Attorney's reading of the relevant ordinance, City administration should clarify whether Motion 03-049-26 is in compliance.
- Since the prices of oil and crude have increased recently, prices for construction projects are likely to increase as well. This project should not be re-bid as a result.
- This is an example of some of the challenges of the City's present project approval process. The Commission was provided little information about this project prior to this meeting's agenda packet, and has little room to disapprove of this project because of the potentially cascading effects on other City projects.
- The Commission is not able to carry out its deliberative role, to conduct appropriate due diligence, and/or to raise and address issues when information on major projects is provided with relatively short notice.
- This is why increasing the City's capacity to spread this process out would be beneficial.
- This project was raised with the Commission during the City's 2025 Long Range Planning meeting. It was not broken out in either that fiscal year's budget or the following one. The Commission and the staff can work together to improve this process.
- The Engineering Department did an excellent job pulling historic resources together, creating the presentation and designs, and answering Commission questions.
- The engineering elements of this project raised no concerns. Since residents seemed satisfied with the wall design, that should raise less of a concern as well.
- Moving forward, the Commission should be provided with any materials provided to residents during residents' meetings at the time those meetings occur.

MOTION: Motion by Host, seconded by Kozlowski:
To make a motion adopting a resolution to proceed with the replacement of the existing retaining walls along Brookside Avenue, Ravine Road, and Park Street as part of the 2025 and 2026 Asphalt Resurfacing Program; and

Make a motion adopting a resolution to set the Public Hearing Date of Necessity for the replacement of staircases in the retaining wall meeting the requirements of assessments for all properties within the project area on Park Street, Brookside Avenue, and Ravine Road on April 13, 2026, at 7:00 p.m.; and

If necessity is determined on April 13, to meet on Monday, April 27, 2026, at 7:00 p.m., for the purpose of conducting the Public Hearing to Confirm the Assessment Roll for the replacement of staircases meeting the requirements for the assessments, for all properties with the project area within the project area of Park Street, Brookside Avenue, and Ravine Road.

Commissioners made the following comment regarding the motion:

- While concern for the aesthetics of the neighborhood was appreciated, residents were comfortable with the proposed designs.
- The City needs to come into compliance with the ADA for the grade of the sidewalk.

ROLL CALL VOTE
Ayes: Long, Host, Kolb, Kozlowski, Longe
Nays: Baller
Recused: None

Commission Items for Future Discussion

03-056-26 Short Term Rentals

MOTION: Motion by Host, seconded by Kolb:
To put on the agenda short term residential rentals in our neighborhoods.

Commissioners discussed the following regarding the motion:

- The motion may not be sufficiently specific for other Commissioners to understand the proposed topic.
- The Commission has thoroughly discussed the City's legal authority vis-a-vis short term rentals in the past.
- Short term rentals are addressed under the City's current ordinances.
- Some feel that short term rentals negatively impact the neighborhood and community experience and might negatively affect property values.
- If new information regarding short term rentals had arisen, there might be more support for this motion.
- It might be helpful in the future if Commissioners spoke individually with other Commissioners before raising an item in order to clarify the intent and gain support.

VOICE VOTE
Ayes: Host, Kolb
Nays: Long, Kozlowski, Baller, Longe
Recused: None

Commission discussion on items from a prior meeting

03-057-26 Discussion on Immigration Enforcement Actions

The Mayor said he wanted a presentation on 287G agreements.

MOTION: Motion by Baller, seconded by Longe:
To make this a full agenda item.

Public Comment
Danielle Mallon supported the motion, and supported following the law which would prohibit Immigration and Customs Enforcement (ICE) officials from being allowed in City property without a judicial warrant.

Stacy Schreiber concurred with Ms. Mallon and commented that other residents sent in emails about the matter.

Commissioners discussed the following regarding the motion:

- A 287G agreement is an agreement between a Police Department and ICE that a Police Department will report potential candidates for deportation to ICE when such candidates are encountered during routine policing activity.
- It would be up to the Police Department to agree or not agree to enter into a 287G agreement.
- The City does not presently have a 287G agreement.
- The City of Ferndale may have just passed a relevant resolution recently. This could be included in the presentation.

VOICE VOTE
Ayes: Host, Kolb
Nays: Long, Kozlowski, Baller, Longe
Recused: None

03-058-26 Birmingham Country Club Variances

MOTION: Motion by Baller, seconded by Long:
To make a motion to direct the City Manager to draft and pass a letter to Bloomfield Township's Supervisor as well as Bloomfield Township's Planning Director stating that the Birmingham Country Club variances will disrupt the peace and quiet of the residential neighbors.

Commissioners discussed the following regarding the motion:

- Commissioner Host offered to hand deliver the letter at the next meeting on the variances.
- It was unclear if Commissioner Host hand delivering the letter would be appropriate. Staff should be able to ensure that the letter is received by the intended recipients.

VOICE VOTE
Ayes: Host, Kolb, Long, Kozlowski, Baller, Longe
Nays: None
Recused: None

9. REMOVED FROM CONSENT AGENDA

10. COMMUNICATIONS

A. Communication regarding ICE
B. Communications regarding the cape seal program
C. Communication regarding trees
D. Communication regarding street conditions and maintenance

11. REPORTS

A. Commissioner Reports

1. Notice of Intention to Appoint to the Housing Board of Appeals

B. Commissioner Comments

MPT Long noted recent resident issues with the Birmingham Post Office and asked whether the City could communicate with the Birmingham Postmaster to express concerns on behalf of residents.

C. Advisory Boards, Committees, Commissions' Report
D. Legislation
E. City Staff
F. Information Only

12. ADJOURN

The Commission motioned to adjourn at 11:22 p.m.



Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

City of Birmingham
Warrant List Dated 03/11/2026

Check Number	Early Release	Vendor #	Vendor	Amount
PAPER CHECK				
308213	*	005430	21ST CENTURY MEDIA- MICHIGAN	1,626.98
308214		009440	ALLIANCE ENTERTAINMENT, LLC	1,491.40
308215		BDREFUND	ALLIED SIGNS INC	300.00
308216		009813	ALMA TIRE SERVICE INC	50.00
308217		006324	ALTA CONSTRUCTION EQUIPMENT LLC	1,109.45
308218		BDREFUND	ANJALI SHAH	2,400.00
308219		009202	AQUARIUM DESIGN INC	245.00
308220		BDREFUND	ASPEN CONSTRUCTION INC	200.00
308221		009911	AXES & IRONS	800.90
308222		BDREFUND	BEST SIGNS	100.00
308223		009535	BIRMINGHAM PAPERS	624.00
308224	*	010203	BRANDON RYAN	175.00
308225	*	003904	CAPITAL ONE BANK	14,355.19
308227		004269	CENTER POINT LARGE PRINT	174.82
308228	*	008243	CHARTER TOWNSHIP OF BLOOMFIELD	206.40
308229	*	TAXMISC	CONSTANCE R FOSS	7,697.61
308230		008512	COOL THREADS EMBROIDERY	815.94
308231	*	TAXMISC	COTALITY	7,951.81
308232		007822	REBEKAH CRAFT	348.22
308233	*	009145	CREATIVE COLLABORATIONS	3,800.00
308234	*	009815	CULLIGAN OF ANN ARBOR/DETROIT	11.00
308235		004386	CYNERGY PRODUCTS	376.00
308236		BDREFUND	DRESKE, MARYANN	100.00
308237	*	000179	DTE ENERGY	19.46
308238	*	000179	DTE ENERGY	74.04
308239	*	000179	DTE ENERGY	31.89
308240	*	000179	DTE ENERGY	2,735.20
308241	*	000179	DTE ENERGY	94.83
308242	*	000179	DTE ENERGY	214.97
308243	*	000179	DTE ENERGY	2,650.18
308244	*	000179	DTE ENERGY	394.90
308245	*	000179	DTE ENERGY	1,255.99
308246	*	000179	DTE ENERGY	510.90
308247	*	000179	DTE ENERGY	51.46
308248	*	000179	DTE ENERGY	240.94
308249	*	000179	DTE ENERGY	196.08
308250	*	000179	DTE ENERGY	101.70
308251	*	000179	DTE ENERGY	205.69
308252	*	000179	DTE ENERGY	21.58
308253	*	000179	DTE ENERGY	19.48
308254	*	000179	DTE ENERGY	131.67
308255	*	000180	DTE ENERGY	53,924.55

City of Birmingham
Warrant List Dated 03/11/2026

Check Number	Early Release	Vendor #	Vendor	Amount
308256		008139	ENVISIONWARE INC.	797.85
308257	*	003253	ESRI, INC	5,058.75
308258		001495	ETNA SUPPLY	2,310.00
308259		007415	EZ GOLF CART CO. INC	2,052.00
308260		BDREFUND	FAST SIGNS OF BIRMINGHAM	300.00
308261		006654	FLEETPRIDE INC	247.98
308262		010156	FOLLETT CONTENT SOLUTIONS LLC	118.15
308263	*	010073	FRESCO COMMERICAL CLEANING	720.00
308264		007016	FRIENDS OF BIRMINGHAM MUSEUM	134.42
308265		BDREFUND	GARDNER SIGNS INC	300.00
308266	*	TAXMISC	GARY SAKWA	21,686.43
308267		BDREFUND	GLOBAL SIGNS & AWNING	100.00
308268		BDREFUND	GLOBAL SIGNS & AWNINGS	200.00
308269	*	009343	GOVPILOT, LLC	6,695.00
308270	*	000726	GUARDIAN ALARM	100.00
308271		BDREFUND	HAMAMDJIAN, EMILY	1,000.00
308272		010006	HJP LEGAL	2,649.60
308273	*	001956	HOME DEPOT CREDIT SERVICES	2,101.48
308274		BDREFUND	HUGHES BUILDING LLC	5,000.00
308275		BDREFUND	I SIGNS	200.00
308276	*	TAXMISC	IDC INDUSTRIES INC	4,131.78
308277	*	009551	INTERMEDIA. NET INC	774.07
308278		010198	IAFCI	95.00
308279		000342	INTERSTATE BATTERIES OF SE MICH	543.20
308280	*	008457	ITALIA CONSTRUCTION INC	55,819.32
308281		BDREFUND	J.P. CRAIG INC.	2,500.00
308282		MISC	JAMES ADAMS	265.00
308283		BDREFUND	JANELLE LYNN WHIPPLE-BOYCE	200.00
308284		010031	JOHN J KENNEDY	896.00
308285	*	TAXMISC	JOHN STAPLETON	4,006.37
308286		BDREFUND	KEATING CONTRACTING LLC	500.00
308287		BDREFUND	KELLY BUILDING & DEVELOPMENT CO LLC	1,200.00
308288		BDREFUND	KLEIN, JEFFREY	300.00
308289		004904	KONICA MINOLTA BUSINESS SOLUTIONS	2,346.45
308290	*	009963	LAW OFFICE OF ROBERT J MORAD PLLC	384.00
308291		009533	LIBRARY IDEAS, LLC	199.59
308292		BDREFUND	LIVE WELL CUSTOM HOMES LLC	2,000.00
308293		BDREFUND	MAIN, CARTER	1,000.00
308294		009351	MERRITT CIESLAK DESIGN PLC	8,000.00
308295		BDREFUND	METRO DETROIT SIGNS INC	300.00
308296	*	TAXMISC	MICHIGAN INVESTMENT TITLE INC	641.92
308297	*	001677	STATE OF MICHIGAN-ELEVATOR	180.25
308298	*	006461	MID AMERICA RINK SERVICES	1,344.00

City of Birmingham
Warrant List Dated 03/11/2026

Check Number	Early Release	Vendor #	Vendor	Amount
308299		000230	MIKE SAVOIE CHEVROLET INC	260.19
308300	*	000668	NATIONAL TIME & SIGNAL CORP	950.00
308301	*	000477	OAKLAND COUNTY	1,146,042.54
308302	*	000919	OAKLAND COUNTY TREASURER	28.41
308303		BDREFUND	OFFER & ASSOCIATES INC	200.00
308304		BDREFUND	OSKUI, BEHROUZ	2,000.00
308305		MISC	PERE MARQUETTE DISTRICT LIBRARY	14.99
308306		009951	PRINTMASTERS	56.00
308307		BDREFUND	PRM CUSTOM BUILDERS LLC	2,900.00
308308		BDREFUND	RE-BATH	200.00
308309		BDREFUND	RENOVATIONS BY DESIGN	625.00
308310	*	009949	SMALL LAW PLLC	524.80
308311		MISC	ROBERT STRATTON	104.43
308312		007054	MICHAEL ROMANOWSKI	175.89
308313		000218	ROYAL OAK P.D.Q. LLC	592.15
308313	*	000218	ROYAL OAK P.D.Q. LLC	56.00
308314		BDREFUND	SALCICCIOLI, NICOLAS	200.00
308315	*	002806	SAM'S CLUB/SYNCHRONY BANK	89.04
308316	*	010132	AMIRAS HENNA LLC	245.00
308317		007142	SHERWIN-WILLIAMS COMPANY	156.41
308318		BDREFUND	SIGN-A-RAMA	400.00
308319		000260	SPARTAN DISTRIBUTORS INC	1,361.05
308320	*	TAXMISC	SUNBELT RENTALS & SRE	44.90
308321	*	001076	TAYLOR FREEZER OF MICH INC	325.00
308322	*	009384	THE EDITH BLAKNEY LAW FIRM, PLLC	384.00
308323		005481	TRI-COUNTY INTL TRUCKS, INC.	1,900.71
308324	*	000158	VERIZON WIRELESS	149.85
308325	*	000158	VERIZON WIRELESS	1,066.83
308326	*	000158	VERIZON WIRELESS	983.70
308327		001262	WICKLANDER-ZULAWSKI & ASSOC.	2,310.00
308328		000306	WOLVERINE CONTRACTORS INC	615.00
308329		009463	ZOOBEAN	1,595.00
			SUBTOTAL PAPER CHECK	$1,413,790.73
ACH TRANSACTION				
15406	*	003946	ARAMARK	319.83
15407		009609	BALIAN LEGAL, PLC	2,470.40
15408	*	008840	BIRMINGHAM PUBLIC SCHOOLS-TAXES	2,397,743.18
15409	*	000542	BLUE WATER INDUSTRIAL PRODUCTS INC	118.50
15410	*	008983	BRENNA SANDLES	1,102.50
15411	*	009122	CLAIRE CHUNG	593.75
15412	*	007835	SARAH CHUNG	893.75
15413		000605	CINTAS CORPORATION	272.98
15414		000605	CINTAS CORPORATION	46.33

City of Birmingham
Warrant List Dated 03/11/2026

Check Number	Early Release	Vendor #	Vendor	Amount
15415	*	000605	CINTAS CORPORATION	198.36
15416	*	008044	CLUB PROPHET	594.00
15417	*	007538	EGANIX, INC.	960.00
15418		000196	EJ USA, INC.	889.28
15419		007684	ELITE TRAUMA CLEAN-UP INC.	70.00
15420		009916	FASTFIELD, INC.	100.74
15421		001230	FIRE SYSTEMS OF MICHIGAN LLC	564.40
15422	*	009387	FRAIBERG & PERNIE PLLC	5,422.55
15423	*	010153	FRAIBERG, MATTHEW	768.00
15424	*	000243	GRAINGER	12.59
15425		007099	GRANICUS LLC	17,922.38
15426		000331	HUBBELL ROTH & CLARK INC	16,814.95
15427		000948	HYDROCORP	11,393.00
15428		009910	IDI	152.00
15429	*	003458	JOE'S AUTO PARTS, INC.	1,006.73
15430	*	009386	LAW OFFICE OF BRIAN P. FENECH	2,931.20
15431	*	005550	LEE & ASSOCIATES CO., INC.	1,639.80
15432		000795	LIBRARY DESIGN ASSOCIATES, INC.	8,692.00
15433	*	003527	LOWER HURON SUPPLY CO INC	438.90
15434		009663	MACQUEEN EQUIPMENT, LLC	382.02
15435	*	009398	MARCIA C ROSS PC	1,536.00
15436	*	010019	NARGIZ NESIMOVA, PLLC	1,446.40
15437		001194	NELSON BROTHERS SEWER	155.00
15438		001864	NOWAK & FRAUS ENGINEERS	3,210.00
15439	*	006359	NYE UNIFORM COMPANY	2,378.50
15440	*	008843	OAKLAND COUNTY TREASURER- TAX PYMNT	1,154,955.38
15441	*	009395	ORLANDO LAW PRACTICE PC	1,152.00
15442	*	009827	PARKER TECHNOLOGY, LLC	4,332.74
15443	*	001753	PEPSI COLA	438.83
15444		000486	PLANTE & MORAN PLLC	6,922.50
15445		009820	PLUNKETT COONEY	8,105.00
15446	*	008875	JESSICA RAK	6.52
15447	*	003554	RKA PETROLEUM	8,655.69
15448	*	001181	ROSE PEST SOLUTIONS	48.00
15449		000757	SCHOLASTIC INC	1,040.00
15450	*	003785	SIGNS-N-DESIGNS INC	210.00
15451		000254	SOCRRA	91,020.00
15451	*	000254	SOCRRA	333.18
15452	*	001097	SOCWA	203,170.50
15453		005787	SOUTHEASTERN EQUIPMENT CO. INC	5,731.08
15454	*	004887	TRUCK & TRAILER SPECIALTIES INC	2,845.38
15455	*	005806	ULINE	4,442.14
15456		000666	NATIONAL LADDER & SCAFFOLD	693.02

City of Birmingham
Warrant List Dated 03/11/2026

Check Number	Early Release	Vendor #	Vendor	Amount
15457	*	007278	WHITLOCK BUSINESS SYSTEMS, INC.	2,212.44
15458		009128	WITMER PUBLIC SAFETY GROUP INC	54.46
			SUBTOTAL ACH TRANSACTION	$3,979,608.88
			GRAND TOTAL	$5,393,399.61

All bills, invoices and other evidences of claim have been audited and approved for payment.



Mary Chavez
Finance Director/ Treasurer

*-Indicates checks released in advance and prior to commission approval in order to avoid penalty or to meet contractual agreement/obligation.

City of Birmingham
Warrant List Dated 03/18/2026

Check Number	Early Release	Vendor #	Vendor	Amount
PAPER CHECK				
308330		005430	21ST CENTURY MEDIA- MICHIGAN	822.01
308331	*	000855	48TH DISTRICT COURT	500.00
308332		006638	ACTION MAT & TOWEL RENTAL, INC	35.36
308333	*	007266	AETNA BEHAVIORAL HEALTH LLC	579.09
308334	*	MISC	ALAN RUTTER	245.10
308335	*	000161	ALPHA PSYCHOLOGICAL SERVICES PC	2,750.00
308336		MISC	ANNE MARIE AMINE	5.40
308337	*	009589	ALL AMERICAN VENTILATION	530.00
308338		BDREFUND	ARMANDO GIUSEPPE INC	6,400.00
308339	*	006759	AT&T	467.26
308340	*	006759	AT&T	134.78
308341	*	006759	AT&T	210.85
308342	*	009294	AUDACY OPERATIONS, INC.	1,756.89
308343		001122	BOB BARKER CO INC	551.12
308344	*	007129	BELFOR PROPERTY RESTORATION	1,501.00
308345		002231	BILLINGS LAWN EQUIPMENT INC.	259.53
308346		003526	BOUND TREE MEDICAL, LLC	507.98
308347		003907	CADILLAC ASPHALT, LLC	6,301.00
308348	*	010169	CANTU-MILLER VENTURES LLC	3,700.00
308349	*	000444	CDW GOVERNMENT INC	1,357.31
308350	*	010213	CITY OF BIRMINGHAM #273	25,378.99
308351	*	010204	CONIFER INSURANCE SERVICES LLC	1,800.00
308352	*	000627	CONSUMERS ENERGY	1,181.24
308353	*	005320	COSTCO MEMBERSHIP	65.00
308354	*	000180	DTE ENERGY	10,777.77
308355		007505	EAGLE LANDSCAPING & SUPPLY	284.00
308356		001495	ETNA SUPPLY	4,683.13
308357		BLREFUND	EVERLIV HEALTH, PLLC	100.00
308358	*	009690	FAIRYTALE ENTERAINMENT PARTYS INC	1,528.00
308359		000585	FARMINGTON COMM. LIBRARY	8,973.73
308360	*	001223	FAST SIGNS	385.66
308361		007212	FOSTER BLUE WATER OIL	276.01
308362		010086	FOSTER, SWIFT, COLLINS & SMITH PC	1,335.00
308363	*	001233	GCSAA	530.00
308364	*	008489	PAUL GILLIN	33.25
308365	*	000726	GUARDIAN ALARM	250.00
308366		001531	GUNNERS METER & PARTS INC	1,053.00
308367		BDREFUND	HANSONS GROUP LLC	500.00
308368		003132	HASTINGS AIR-ENERGY CONTROL INC	245.00
308369	*	001956	HOME DEPOT CREDIT SERVICES	920.90
308370		009563	HOWIES HOCKEY INC	239.54
308371		BDREFUND	HPS INVESTMENT LLC	2,500.00

City of Birmingham
Warrant List Dated 03/18/2026

Check Number	Early Release	Vendor #	Vendor	Amount
308372	*	009259	IHEART MEDIA	870.00
308373	*	010155	IMPERIAL DADE	1,596.86
308374		001090	INGRAM LIBRARY SERVICES	20,405.48
308379	*	008457	ITALIA CONSTRUCTION INC	109,349.32
308380		BDREFUND	KASTLER CONSTRUCTION INC	300.00
308381		BDREFUND	KELLY BUILDING & DEVELOPMENT CO LLC	1,200.00
308382	*	009133	KIMBERLY FENCE & SUPPLY INC	1,243.16
308383		004904	KONICA MINOLTA BUSINESS SOLUTIONS	1,437.50
308384	*	000362	KROGER COMPANY	151.40
308385		003620	LANGUAGE LINE SERVICES INC	35.50
308386		MISC	LAURA BLUM	8.99
308387		009533	LIBRARY IDEAS, LLC	679.65
308388	*	009451	LIFESTYLE PUBLICATIONS LLC	1,250.00
308389	*	007910	MACALLISTER RENTALS	1,259.70
308390		001669	MACP	100.00
308391	*	004855	MAMC	100.00
308392		BDREFUND	MARK J KASSION	200.00
308393		006461	MID AMERICA RINK SERVICES	228.70
308394		000230	MIKE SAVOIE CHEVROLET INC	1,153.82
308395	*	000649	MML WORKERS' COMP FUND	37,591.00
308396		007163	MOBILE HEALTH RESOURCES	2,056.02
308397		BDREFUND	N A MANS SONS INC	300.00
308398	*	004827	NICK'S MAINTENANCE SERVICE	10,700.00
308399		BDREFUND	NOONAN ELECTRICAL SERVICES	15.00
308400		008250	OAKLAND COUNTY TACTICAL	3,050.00
308401	*	001484	OAKLAND COUNTY EQUALIZATION	87,187.22
308402	*	004370	OCCUPATIONAL HEALTH CENTERS OF MI	2,199.00
308403	*	009478	ODP BUSINESS SOLUTIONS, LLC	95.87
308404	*	006231	OGLETREE, DEAKINS, NASH, SMOAK &	480.00
308405		010206	ONEFACE LLC	998.00
308406		006785	OVERDRIVE, INC.	22,147.93
308407	*	001883	PIONEER DOOR COMPANY INC	12,300.00
308408		009612	PLAYAWAY PRODUCTS LLC	1,079.32
308409	*	008342	RAIN MASTER CONTROL SYSTEMS	38.85
308410	*	001314	REDFORD TWP UNICYCLE CLUB INC	400.00
308411		010079	RELIANT FIRE APPARATUS OF MICHIGAN	12,926.02
308412	*	MISC	ROBERT REESE	70.00
308413		BDREFUND	SEBOLD, DANIEL J	300.00
308414	*	009282	SEEN MEDIA GROUP	1,000.00
308415		MISC	SIMSUSHARE.COM	2,350.00
308416	*	009964	STAGE2 DATA INC.	856.80
308417	*	001005	STATE OF MICHIGAN	400.00
308418		009819	SUCCESS 911, LLC	845.00

City of Birmingham
Warrant List Dated 03/18/2026

Check Number	Early Release	Vendor #	Vendor	Amount
308419		007408	T-MOBILE	800.94
308420		BDREFUND	THE WATSON COMPANY INC	200.00
308421	*	009552	TRAFFIC & SAFETY CONTROL SYSTEMS	370.00
308422		010172	VERTICAL SUPPLY GROUP INC	583.98
308423	*	010021	UNIQUE PONY RIDES	100.00
308424	*	008941	UPTOWN MARKET OF BIRMINGHAM	137.64
308425	*	009863	US BANK EQUIPMENT FINANCE	79.07
308426		BDREFUND	VERIZON WIRELESS	200.00
308427	*	000158	VERIZON WIRELESS	149.85
308428	*	000158	VERIZON WIRELESS	76.02
308429	*	000158	VERIZON WIRELESS	152.57
308430	*	009806	VFP FIRE SYSTEMS	38,040.00
308431		MISC	WASHTENAW COUNTY FOC	500.00
308432		009976	WEBLINX, INC.	145.00
308433		009026	WELLS FARGO VENDOR FIN SERV	57.52
308434	*	007620	WJE-WISS, JANNEY, ELSTNER ASSOC.INC	2,325.00
308435	*	005360	WORRY FREE INC	7,732.80
			SUBTOTAL PAPER CHECK	$484,261.40
ACH TRANSACTION				
15459		003708	AIRGAS USA, LLC	483.00
15460	*	001797	ALLEGRA MARKETING, PRINT, MAIL	493.22
15461		010119	ARGENT INSTITUTIONAL TRUST COMPANY	16,700.00
15462		010119	ARGENT INSTITUTIONAL TRUST COMPANY	180,911.25
15463	*	009358	BEASLEY MEDIA GROUP, LLC	2,089.97
15464	*	000517	BEIER HOWLETT PC	42,055.60
15465	*	007345	BEVERLY HILLS ACE	14.92
15466		000902	CENGAGE LEARNING INC	139.93
15467	*	009352	CHRISTINA WOODS	14.34
15468	*	007835	SARAH CHUNG	600.00
15469		000605	CINTAS CORPORATION	378.99
15470		000605	CINTAS CORPORATION	292.92
15471		000605	CINTAS CORPORATION	46.33
15472		000605	CINTAS CORPORATION	17.30
15473		000605	CINTAS CORPORATION	396.74
15474		009840	THOMAS S. KLISE COMPANY, INC	408.16
15475	*	009557	ZECO, LLC	330.00
15476	*	007314	FLEIS AND VANDENBRINK ENG. INC	386.00
15477	*	004604	GORDON FOOD	242.31
15478	*	000243	GRAINGER	649.85
15479	*	003824	THOMAS I. HUGHES	157.93
15480	*	008851	INSIGHT INVESTMENT	8,717.33
15481		000261	J.H. HART URBAN FORESTRY	29,969.83
15482		000186	JACK DOHENY COMPANIES INC	1,668.06

City of Birmingham
Warrant List Dated 03/18/2026

Check Number	Early Release	Vendor #	Vendor	Amount
15483	*	002576	JAX KAR WASH	257.00
15484		009249	JCC CREATIVE LLC	400.00
15484	*	009249	JCC CREATIVE LLC	250.00
15485	*	003458	JOE'S AUTO PARTS, INC.	637.81
15486	*	005465	RYAN KEARNEY	120.72
15487	*	004085	KONE INC	10,256.45
15488	*	004362	LEATHERS & ASSOCIATES INC	2,699.03
15489	*	005550	LEE & ASSOCIATES CO., INC.	3,770.38
15490		009663	MACQUEEN EQUIPMENT, LLC	2,700.95
15491		000377	MICHIGAN MUNICIPAL LEAGUE	3,500.00
15492		002013	MIDWEST TAPE	1,209.25
15493	*	009844	MYA BROWN	17.96
15494	*	010019	NARGIZ NESIMOVA, PLLC	883.20
15495		001194	NELSON BROTHERS SEWER	1,971.00
15495	*	001194	NELSON BROTHERS SEWER	237.00
15496		001864	NOWAK & FRAUS ENGINEERS	37,465.00
15497	*	006359	NYE UNIFORM COMPANY	625.00
15498	*	001181	ROSE PEST SOLUTIONS	498.00
15499		005787	SOUTHEASTERN EQUIPMENT CO. INC	3,633.41
15500		004379	TURNER SANITATION, INC	340.00
15501		009128	WITMER PUBLIC SAFETY GROUP INC	656.65
			SUBTOTAL ACH TRANSACTION	$359,292.79
			GRAND TOTAL	$843,554.19

All bills, invoices and other evidences of claim have been audited and approved for payment.



Mary Chavez
Finance Director/ Treasurer

*-Indicates checks released in advance and prior to commission approval in order to avoid penalty or to meet contractual agreement/obligation.

MEMORANDUM

Planning Department

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Leah Blizinski, City Planner
Nick Dupuis, Planning Director

SUBJECT: Set Public Hearing for 211 Hamilton Row – No 28 – Special Land Use Permit, Final Site Plan & Design Review

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INTRODUCTION:

The applicant has submitted a Special Land Use Permit application, Final Site Plan & Design Review application for a food or drink establishment in the B4 (Business Residential) and D4 (Downtown Overlay) zoning districts at the north end of Downtown Birmingham. The space is currently a vacant first floor tenant space within an existing 5-story commercial building. The applicant is proposing a new restaurant serving alcoholic beverages for on premise consumption, which includes extensive interior renovation, and the addition of a new outdoor dining patio.

The new proposed restaurant, "No 28", is described as a small, intimate setting with food prepared and provided through the adjacent kitchen of Terra Kitchen & Cocktails. The proposed hours of operation are indicated as Wednesday – Sunday until 2:00AM and Monday and Tuesday are reserved for private events. The liquor license being used in the space is an existing full Class C - Regular license owned by the property owner that exists within the City and is currently in escrow. Due to this, the restaurant is not considered a bistro and need not meet the specific bistro requirements.

Chapter 10, Section 10-42 of the Birmingham Code of Ordinances states that any and all transfers of a license for consumption of intoxicating liquor on premises require the approval of the City Commission of any kind including, but not limited to: ownership of the license; stock in a corporation that owns a license; interest in a license through any entity; or location of the licensed premises. The licensee must comply with all provisions of the contract and Special Land Use Permit, and any amendments thereto as a condition of granting of a requested transfer. Accordingly, the applicant must obtain a recommendation from the Planning Board on the Special Land Use and Final Site Plan/Design Review application, which is then reviewed for final consideration by the City Commission.

BACKGROUND:

On August 27, 2025 (Agenda - Video), the Planning Board moved to recommend approval to

the City Commission of the Special Land Use Permit, Final Site Plan & Design Review application for 211 Hamilton Row – No 28 — subject to the following conditions:

1. The applicant must comply with the requests of all City Departments;
2. The applicant provide table service to the outdoor dining during all hours of operation;
3. The applicant operate an establishment that is primarily a restaurant and not primarily a bar or tavern;
4. That no curtain be installed at the front window as shown on the plans; and
5. That the City's investigation of the applicant's liquor license status confirms all representations and compliance with all statutory and regulatory requirements.

As of March 5, 2026, the applicant has provided updated site plans and satisfied all conditions.

LEGAL REVIEW:
The City Attorney has reviewed this request and has no objections as to form and content.

FISCAL IMPACT:
There are no expected direct impacts to City finances.

SUSTAINABILITY:
There are no direct sustainability considerations as a part of this Special Land Use Permit.

DESIGN CONSIDERATIONS:
The applicant is proposing a 12-seat, 200 sq. ft. outdoor dining patio directly in front of the tenant space. The patio is proposed to be contiguous, but will exist on both public and private property. The applicant will be expected to apply for an Outdoor Dining Permit annually, and enter into a lease agreement with the City for the use of public property as a part of that permit. There are no other exterior changes proposed. There is no signage being approved as a part of this application.

PUBLIC COMMUNICATIONS:
As required for Special Land Use Permit Reviews, a legal ad was placed in a newspaper of local circulation to advertise the public hearing at the Planning Board on August 27, 2025. In addition, postcards were sent out to property owners and occupants within 300 feet of the subject site. Similar notices will be sent out in advance of the public hearing at the City Commission on April 13, 2026.

SUMMARY:
The Planning Department requests that the City Commission set a public hearing date of April 13, 2026 to consider the Special Land Use Permit, Final Site Plan & Design Review application for 211 Hamilton Row - No 28.

ATTACHMENTS:
1. No 28 - Special Land Use Permit Resolution
2. No 28 - Special Land Use Permit Contract
3. No 28 - Site/Design Plans

4. No 28 - August 27, 2025 Planning Board Report

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to set a public hearing date of April 13, 2026 to consider the Special Land Use Permit, Final Site Plan & Design Review application for 211 Hamilton Row - No 28.

No 28
211 Hamilton Row
Special Land Use Permit 2026

WHEREAS, A Special Land Use Permit application was filed in August 2025 for "No 28" a new food and drink establishment serving alcoholic liquors for on premise consumption at 211 Hamilton Row;

WHEREAS, The land for which the Special Land Use Permit is sought is located on the north side of Hamilton Row between N. Old Woodward and Ferndale;

WHEREAS, The land is zoned B4 (Business-Residential) and D4 (Downtown Overlay), which permits alcoholic beverage sales for on premise consumption with a Special Land Use Permit;

WHEREAS, Article 7, section 7.34 of Chapter 126, Zoning requires a Special Land Use Permit to be considered and acted upon by the Birmingham City Commission, after receiving recommendations on the site plan and design from the Planning Board for the proposed Special Land Use;

WHEREAS, The Birmingham Planning Board on August 27, 2025 reviewed the application for Special Land Use Permit, Final Site Plan & Design Review and moved to adopt the findings of the Planning Department in the report dated August 27, 2025 related to the approval criteria outlined in Article 7, Sections 7.27 and 7.36 of the Zoning Ordinance and to recommend approval to the City Commission for the new food and drink establishment in the B4/D4 zoning district—subject to the following conditions:

1. The applicant must comply with the requests of all City Departments;
2. The applicant provide table service to the outdoor dining during all hours of operation;
3. The applicant operate an establishment that is primarily a restaurant and not primarily a bar or tavern;
4. That no curtain be installed at the front window as shown on the plans; and
5. That the City's investigation of the applicant's liquor license status confirms all representations and compliance with all statutory and regulatory requirements;

WHEREAS, As of March 5, 2026 the applicant has provided updated site plans and satisfied all conditions;

WHEREAS, The Birmingham City Commission has conducted a public hearing on April 13, 2026 and has reviewed No 28's Special Land Use Permit application and the standards for such review as set forth in Article 7, section 7.36 of Chapter 126, Zoning, of the City Code.

THEREFORE, BE IT RESOLVED, The Birmingham City Commission adopts the findings of Planning Board and finds the standards imposed in Article 7, Sections 7.27 and 7.36 of the Zoning Ordinance and other applicable standards in the City Code have been met, and that No 28's Bistro application for a Special Land Use Permit, Final Site Plan & Design Review at 211 Hamilton Row is hereby approved;

BE IT FURTHER RESOLVED, That the City Commission determines that to ensure continued compliance with Code standards and to protect public health, safety, and welfare, this Special Land Use Permit is granted subject to the following conditions:

1. No 28 shall abide by all provisions of the Birmingham City Code;
2. No 28 shall comply with the approved site and design plans and any amendments thereto; and
3. The Special Land Use Permit may be canceled by the City Commission upon finding after proper notice and a hearing that the continued use is not in the public interest.

BE IT FURTHER RESOLVED, That failure to comply with any of the above conditions shall result in termination of the Special Land Use Permit.

BE IT FURTHER RESOLVED, Except as herein specifically provided, No 28 and its heirs, successors, and assigns shall be bound by all ordinances of the City of Birmingham in effect at the time of the issuance of this permit, and as they may be subsequently amended. Failure of No 28 to comply with all the ordinances of the City may result in the Commission revoking this Special Land Use Permit.

BE IT FURTHER RESOLVED that No 28 is recommended for approval of a new food and drink establishment in the B4 and D4 zoning districts at 211 Hamilton Row, subject to final inspection.

I, Alexandria Bingham, City Clerk of the City of Birmingham, Michigan, do hereby certify that the foregoing is a true and correct copy of the resolution adopted by the Birmingham City Commission at its regular meeting held on April 18, 2026.

_____

Alexandria Bingham
City Clerk

CONTRACT FOR A SPECIAL LAND USE PERMIT
211 HAMILTON ROW – NO 28

This Contract is entered into this____day of_____, 2026 by and between **BIRMINGHAM 28, LLC**, whose address is 4036 Telegraph Road, Suite 201, Bloomfield Hills, MI 48302 (hereinafter referred to as "No 28"), **THE PALLADIUM OF BIRMINGHAM, LLC**, whose address is 4036 Telegraph Rd, Suite 201, Bloomfield Hills, MI 48302 ("Property Owner"), and the **CITY OF BIRMINGHAM**, a Michigan Municipal Corporation, whose address is 151 Martin Street, Birmingham, Michigan 48009 ("City").

R E C I T A L S:

WHEREAS, A Special Land Use Permit application was filed in August 2025 for "No 28" new food and drink establishment serving alcoholic liquors for on premise consumption at 211 Hamilton Row;

WHEREAS, The land for which the Special Land Use Permit is sought is located on the north side of Hamilton Row between N. Old Woodward and Ferndale;

WHEREAS, The land is zoned B4 (Business-Residential) and D4 (Downtown Overlay), which permits alcoholic beverage sales for on premise consumption with a Special Land Use Permit;

WHEREAS, Article 7, section 7.34 of Chapter 126, Zoning requires a Special Land Use Permit to be considered and acted upon by the Birmingham City Commission, after receiving recommendations on the site plan and design from the Planning Board for the proposed Special Land Use;

WHEREAS, The Birmingham Planning Board on August 27, 2025 reviewed the application for Special Land Use Permit, Final Site Plan & Design Review and moved to adopt the findings of the Planning Department in the report dated August 27, 2025 related to the approval criteria outlined in Article 7, Sections 7.27 and 7.36 of the Zoning Ordinance and recommend approval to the City Commission for the new food and drink establishment in the B4/D4 zoning district—subject to the following conditions:

1. The applicant must comply with the requests of all City Departments;
2. The applicant provide table service to the outdoor dining during all hours of operation;
3. The applicant operate an establishment that is primarily a restaurant and not primarily a bar or tavern;
4. That no curtain be installed at the front window as shown on the plans; and
5. That the City's investigation of the applicant's liquor license status confirms all representations and compliance with all statutory and regulatory requirements;

WHEREAS, As of March 5, 2026 the applicant has provided updated site plans and satisfied all conditions;

WHEREAS, The Birmingham City Commission has conducted a public hearing on April

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13, 2026 and has reviewed No 28's Special Land Use Permit application and the standards for such review as set forth in Article 7, section 7.36 of Chapter 126, Zoning, of the City Code.

NOW, THEREFORE, the parties agree as follows:

1. No 28 will utilize a state issued liquor license for use solely at the Property. Any transfer of the aforementioned license from the Property to any other location in the City of Birmingham shall require the approval of the Birmingham City Commission in accordance with Section 10-83 of the City of Birmingham Code of Ordinances. In addition, any expansion of the Property shall also require the approval of the Birmingham City Commission.

2. No 28 further acknowledges that it must maintain a Special Land Use Permit for the sale of alcoholic liquors for on premise consumption as required by the Birmingham City Code of Ordinances. It is agreed that No 28 shall comply with all provisions of the Special Land Use Permit, or any amendments thereto, as a condition of this contract. No 28 further acknowledges and agrees that a violation of any provision of the Special Land Use Permit or the Michigan Liquor Control Code is a violation of the terms of this contract entitling the City to exercise any or all of the remedies provided herein.

3. No 28 acknowledges that no modifications to the site plan, floor plan, elevations or operation of the establishment may be made unless approved by the City Commission through a Special Land Use Permit Amendment as required in the Zoning Ordinance. Modifications include, but are not limited to, name changes, ownership changes, remodeling, changes in the number of interior or exterior seats, etc.

4. No 28 agrees that it shall not apply or seek from the Michigan Liquor Control Commission any permit endorsements to its liquor license whether available in the current Michigan Liquor Control Code or in future Michigan Liquor Control Codes, or amendments thereto, without the prior approval of the Birmingham City Commission.

5. No 28 further agrees that it shall not seek any change in its license status/class whether such changes are available now in the current Michigan Liquor Control Code or in future Michigan Liquor Control Codes, or amendments thereto, without prior approval of the Birmingham City Commission.

6. No 28 agrees that it shall adhere to all Federal, State and Local ordinances currently in effect or as subsequently amended or enacted.

7. No 28 agrees that its failure to follow any of the provisions herein may be grounds for the Michigan Liquor Control Commission to suspend, revoke or not renew its liquor license and/or for the Birmingham City Commission to revoke the Special Land Use Permit, either of which would prohibit No 28 from operating the establishment. No 28 agrees that in addition to the City of Birmingham's right to seek suspension, revocation or non-renewal of its liquor license and/or revocation of the Special Land Use Permit, the City retains any and all rights to enforce this Contract that may be available to it in law or in equity. No 28 further agrees that it shall reimburse the City all of its costs and actual attorney fees incurred by the City in seeking the suspension, revocation or non-renewal of its liquor license and revocation of the Special Land Use Permit, as well as enforcing such other rights as may be available at law and/or in equity.

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8. To the fullest extent permitted by law, No 28 and any entity or person for whom No 28 is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City, its elected and appointed officials, employees and volunteers and others working on behalf of the City against any and all claims, demands, suits, or loss, including all costs connected therewith, including all costs and actual attorney fees, and for any damages which may be asserted, claimed or recovered against or from the City, its elected and appointed officials, employees, volunteers or others working on behalf of the City, by reason of personal injury, including bodily injury, death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with No 28's operation of an establishment at the Property. No 28 is not liable if the act or omission is the City's.

9. In the event No 28 fails to reimburse the City the costs and/or attorney fees as required herein, or any part thereof, then said amount could be transferred to the tax roll in accordance with Section 1-14 of the Birmingham City Code as acknowledged by the Property Owner.

10. Any disputes arising under this Contract, not within the jurisdiction of the Michigan Liquor Control Commission, shall be settled either by commencement of a suit in Oakland County Circuit Court or by compulsory arbitration, at the election of the City. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds $1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL §600.5001 et seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suit in a federal or state court with jurisdiction over Oakland County, Michigan.

11. This contract shall be governed by and performed, interpreted and enforced in accordance with the laws of the State of Michigan.

12. If any provision of this contract is declared invalid, illegal or unenforceable, such provision shall be severed from this contract and all other provisions shall remain in full force and effect.

13. The City determines that to ensure continued compliance with Code standards and to protect public health, safety, and welfare, this Special Land Use Permit Amendment is granted subject to the following conditions:

1. No 28 shall abide by all provisions of the Birmingham City Code;
2. No 28 shall comply with the approved site and design plans and any amendments thereto; and
3. The Special Land Use Permit may be canceled by the City Commission upon finding after proper notice and a hearing that the continued use is not in the public interest.

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14. Failure to comply with any of the above conditions may result in termination of the Special Land Use Permit after No 28 has been given notice and a hearing.

15. Except as herein specifically provided, No 28 and its heirs, successors, and assigns shall be bound by all ordinances of the City of Birmingham in effect at the time of the issuance of this permit, and as they may be subsequently amended. Failure of No 28 to comply with all the ordinances of the City may result in the Commission revoking this Special Land Use Permit, after notice and a hearing.

16. No 28 is recommended for the operation of an establishment serving alcoholic beverages for on premise consumption, above all others, subject to final inspection.

17. This Contract shall be binding upon and apply and inure to the benefit of the parties hereto and their respective successors or assigns. The covenants, conditions, and the agreements herein contained are hereby declared binding on the City and No 28. It is further agreed that there shall be no change, modification, or alteration hereof, except in writing, signed by all of the parties hereto. Neither party shall assign any of the rights under this contract without prior approval, in writing, of the other. Any attempt at assignment without prior written consent shall be void and of no effect.

DRAFT

(This Space Intentionally Left Blank)

IN WITNESS WHEREOF, the parties hereby have executed this Contract as of the date set forth above.

BIRMINGHAM 28, LLC (No 28)

By: _____

Its: _____

Date: _____

STATE OF MICHIGAN)
) ss:
COUNTY OF OAKLAND)

On this _____day of _____, 2026, before me personally appeared _____who acknowledged that with authority on behalf **BIRMINGHAM 28, LLC** to do so signed this Agreement.

_____
Notary Public
_____County, Michigan
Acting in _____ County, Michigan
My commission expires: _____

WILLITS RETAIL, LLC (Property Owner)
(as to paragraph 10 only)

By: _____

Its: _____

STATE OF MICHIGAN)
) ss:
COUNTY OF OAKLAND)

On this _____day of _____, 2026, before me personally appeared _____, who acknowledged that with authority on behalf of **THE PALLADIUM OF BIRMINGHAM, LLC** to do so signed this Agreement.

_____
Notary Public
_____County, Michigan
Acting in _____ County, Michigan
My commission expires: _____

DRAFT

CITY OF BIRMINGHAM

By: _____
Clinton Baller, Mayor

By: _____
Alexandria D. Bingham, City Clerk

APPROVED:

_____
Jana L. Ecker, City Manager
(Approved as to substance)

_____
Nicholas J. Dupuis, Planning Director
(Approved as to substance)

_____
Mary M. Kucharek, City Attorney
(Approved as to form)

DRAFT

PROPOSED BUILDING RENOVATION FOR:

Nº 28

PROJECT LOCATION:

211 HAMILTON ROW,
BIRMINGHAM, MI 48009

ZONED: D-4 OVERLAY

APPLICANT INFORMATION

RANDY FOUMIA
260 N. OLD WOODWARD AVA
BIRMINGHAM MI 48072

T. 248-444-5820
E. RANDYFOUMIA@GMAIL.COM

GENERAL CONTRACTOR:

TOWER CONSTRUCTION
3883 TELEGRAPH RD., SUITE 200 .
BLOOMFIELD TWP., MI 48302

P. 248.287.8200
F. 248.287.8203

SHEET INDEX:

T.101	TITLE SHEET
SP.001	EXISTING CONDITIONS
A.101	FLOOR PLAN
A.201	EXTERIOR ELEVATION
A.301	INTERIOR PERSPECTIVES
A.302	INTERIOR PERSPECTIVES

FIRE SUPPRESSION NOTE:

THE BUILDING IS PROVIDED WITH A FULLY AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM INSTALLED (FIRE SUPPRESSION SYSTEM) - WORK WILL BE DESIGNED TO MEET M.B.C. REQUIREMENTS AND CITY OF BIRMINGHAM INSPECTION & PERMIT APPROVAL. FACTORY MUTUAL STANDARDS AND SPECIFICATIONS SHALL ALSO BE USED WHERE NOT OTHERWISE IN CONFLICT WITH LOCAL STANDARDS. SPRINKLER CONTRACTOR SHALL BE FULLY LICENSED AND BE RESPONSIBLE FOR PREPARATION OF ENGINEERED DRAWINGS, SUBMISSION OF DRAWINGS TO ALL LOCAL AND STATE AGENCIES FOR APPROVAL AND FOR COORDINATION OF REQUIREMENTS WITH OWNERS AND TENANTS INSURANCE CARRIER.

FIRE EXTINGUISHER NOTE:

TYPE 2A FIRE EXTINGUISHERS SHALL BE PROVIDED AND SPACED A MAX. OF 75' APART PER SECTION 906.1 OF THE 2013 INTERNATIONAL FIRE CODE AND / OR BY THE DIRECTION OF THE FIRE MARSHAL.



NORTH

ZONING MAP

SCALE: NOT TO SCALE



NORTH

LOCATION MAP

SCALE: NOT TO SCALE

BIDDISON
ARCHITECTURE

320 MARTIN ST. LL 10 BIRMINGHAM MI 48009
248.554.9500
CONTACT KEVIN BIDDISON
KB@BIDDISON-AD.COM

Consultants

Project data

GOVERNING CODES:
2015 MICHIGAN BUILDING CODE
2015 MICHIGAN PLUMBING CODE
2015 MICHIGAN MECHANICAL CODE
2015 MICHIGAN REHABILITATION CODE
2015 INTERNATIONAL FUEL GAS CODE
MICHIGAN ELECTRICAL CODE, 2017 N.E.C. W/ PART 8 STATE AMENDMENTS
ICC/ANSI A117.1-2015 AND MICHIGAN BARRIER FREE DESIGN LAW OF PUBLIC ACT 1 OF 1966 AS AMENDED.
MICHIGAN UNIFORM ENERGY CODE RULES PART 10 WITH ANSI/ASHRAE/IESNA STANDARD 90.1-2015
2015 INTERNATIONAL FIRE CODE
NFPA 13 - 2010
NFPA 72 - 2010

TENANT AREA: 1,194.5 SQFT + 192 SQFT (PATIO)

BUILDING USE: A-2 RESTAURANT

TYPE OF CONSTRUCTION:

2012 MBC: TYPE IIA (PROTECTED)
NFPA 220: TYPE II-000

Issued for

SPECIAL LAND USE PERMIT 03.04.26

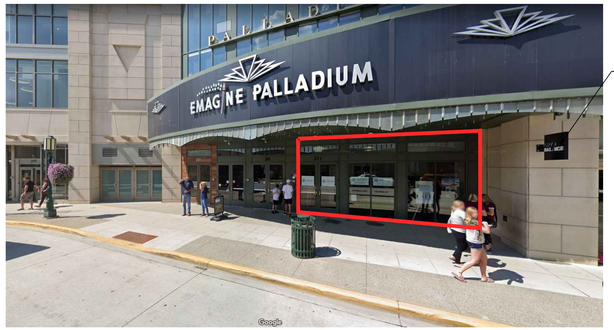


Project no.

NO 28 2057.20

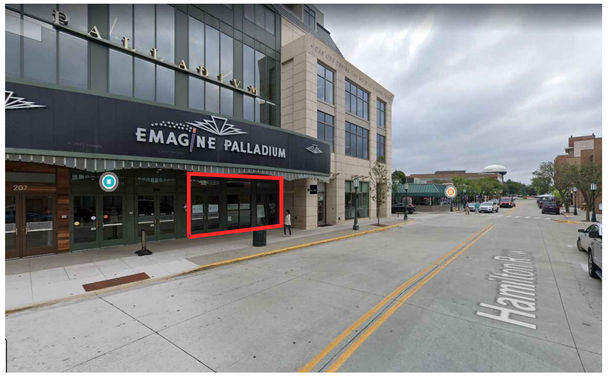
Sheet no.

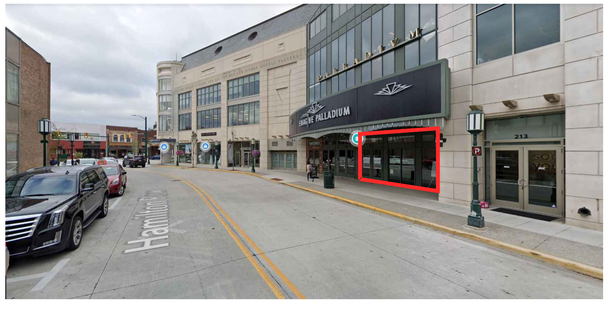
T.101



EXISTING BLADE SIGH TO BE REMOVED

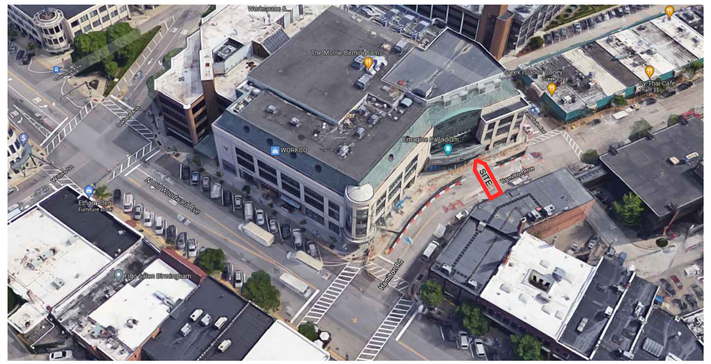


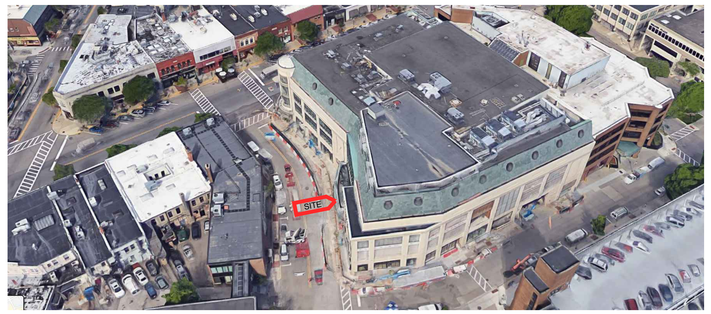


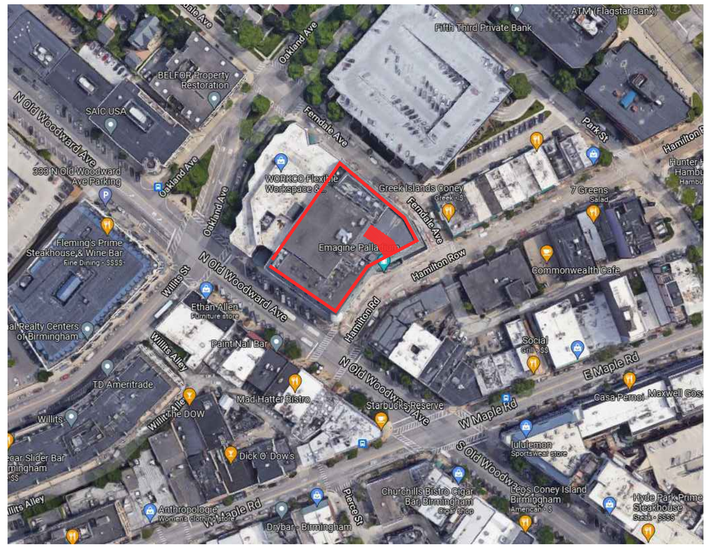


EXIST. SITE CONDITIONS - STREETSIDE VIEWS

NO SCALE







EXIST. SITE CONDITIONS - AERIAL VIEWS

NO SCALE

BIDDISON
ARCHITECTURE
320 MARTIN ST. LL 10 BIRMINGHAM MI 48009
248.554.9500

Consultants

Project title

PROPOSED BUILDING RENOVATION FOR:

No 28

211 Hamilton Row
Birmingham, MI 48009

Issued dr/ch

SLUP	03.04.26

Sheet title

EXISITING CONDITIONS

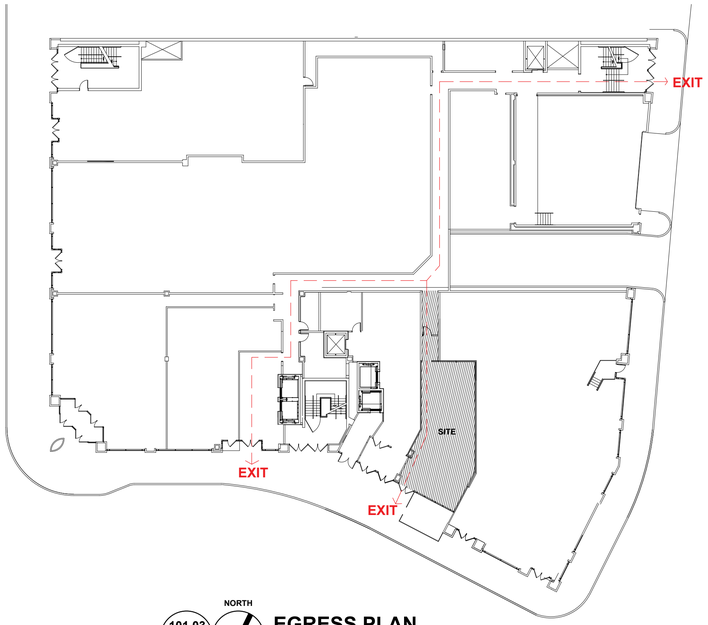
STATE OF MICHIGAN
KEVIN L BIDDISON
ARCHITECT
LICENSED ARCHITECT

Project no.

2057-20

Sheet no.

SP.001



NORTH

101.03 / A.101

EGRESS PLAN

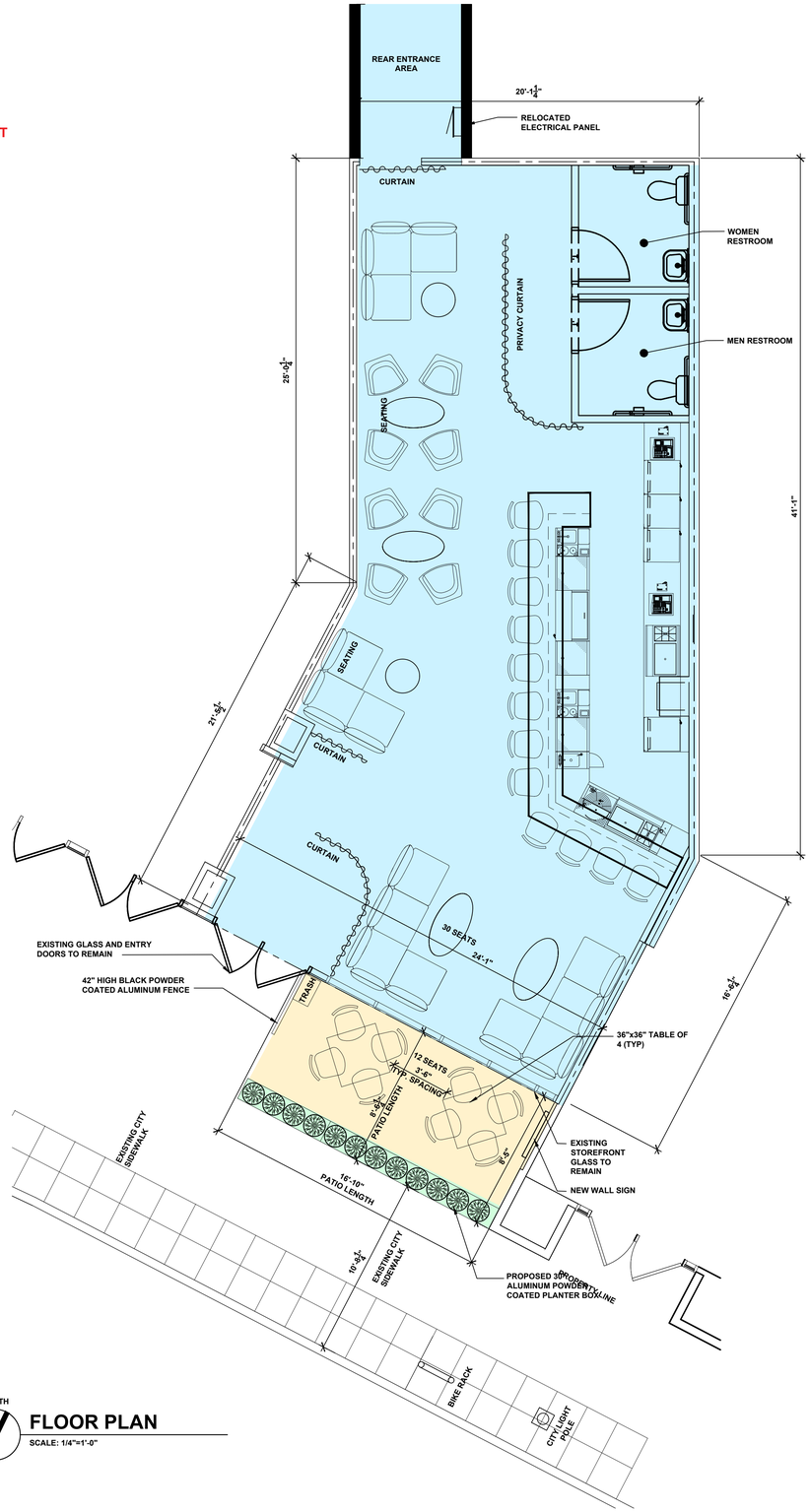
SCALE: NOT TO SCALE



101.02 / A.101

PROPOSED METAL PATIO CHAIRS AND TABLE-TYP.

SCALE: NOT TO SCALE



NORTH

101.01 / A.101

FLOOR PLAN

SCALE: 1/4"=1'-0"

BIDDISON
ARCHITECTURE
320 MARTIN ST. LL 10 BIRMINGHAM MI 48009
248.554.9500

Consultants

Project title

PROPOSED BUILDING RENOVATION FOR:

No 28

211 Hamilton Row
Birmingham, MI 48009

Issued dr/ch

SLUP	03.04.26

Sheet title

FLOOR PLAN

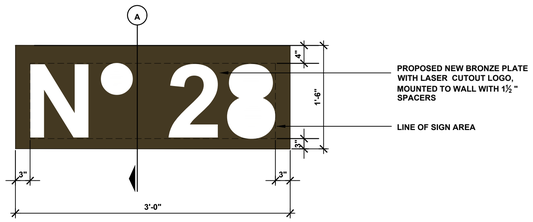
STATE OF MICHIGAN
KEVIN L BIDDISON
ARCHITECT
No. 1101
REGISTERED ARCHITECT

Project no.

2057-20

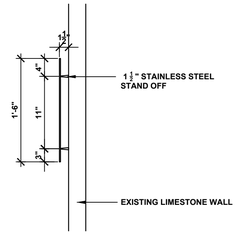
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A.101

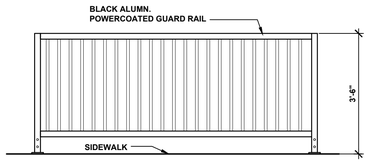


SIGN DETAIL "A"

SCALE: NTS



SECTION DETAIL "A"



GUARD RAIL PATIO ELEVATION

SCALE: NTS



PROPOSED PLANTERS

SCALE: NOT TO SCALE



PROPOSED FENCE

SCALE: NOT TO SCALE



PROPOSED EXTERIOR ELEVATION

NOT TO SCALE

BIDDISON
ARCHITECTURE
320 MARTIN ST. LL 10 BIRMINGHAM MI 48009
248.554.9500

Consultants

Project title

PROPOSED BUILDING RENOVATION FOR:

No 28

211 Hamilton Row
Birmingham, MI 48009

Issued dr/ch

SLUP	03.04.26

Sheet title

EXTERIOR ELEVATION



Project no.

2057-20

Sheet no.

A.201

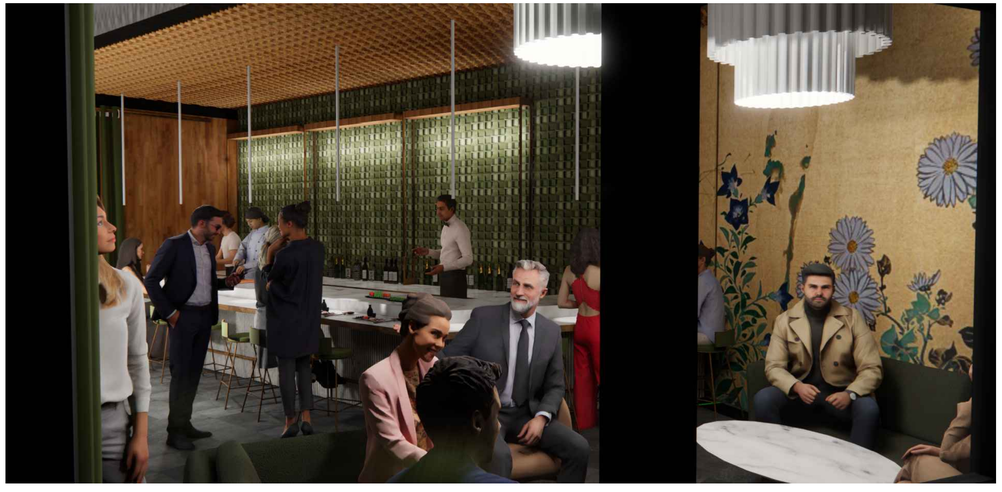
BIDDISON
ARCHITECTURE
320 MARTIN ST. LL 10 BIRMINGHAM MI 48009
248.554.9500

Consultants



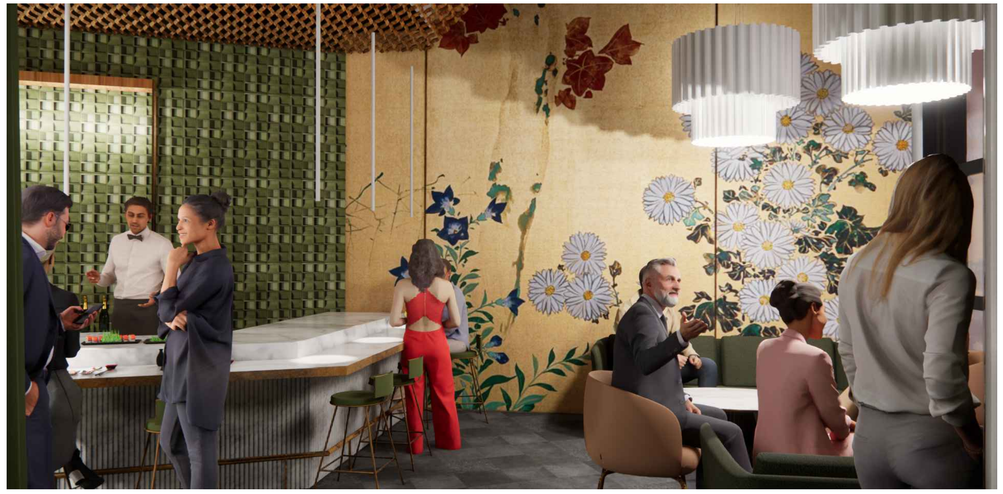
EXTERIOR PERSPECTIVE

FOR REFERENCE NOT TO SCALE



EXTERIOR PERSPECTIVE

FOR REFERENCE NOT TO SCALE



INTERIOR PERSPECTIVE

FOR REFERENCE NOT TO SCALE



INTERIOR PERSPECTIVE

FOR REFERENCE NOT TO SCALE

Project title

PROPOSED BUILDING RENOVATION FOR:

No 28

211 Hamilton Row
Birmingham, MI 48009

Issued dr/ch

SLUP	03.04.26

Sheet title

INTERIOR
PERSPECTIVE
IMAGE

STATE OF MICHIGAN
KEVIN L
BIDDISON
ARCHITECT
No.
LICENSED ARCHITECT

Project no.

2057-20

Sheet no.

A.301

BIDDISON
ARCHITECTURE
320 MARTIN ST. LL 10 BIRMINGHAM MI 48009
248.554.9500

Consultants



INTERIOR PERSPECTIVE

FOR REFERENCE NOT TO SCALE



INTERIOR PERSPECTIVE

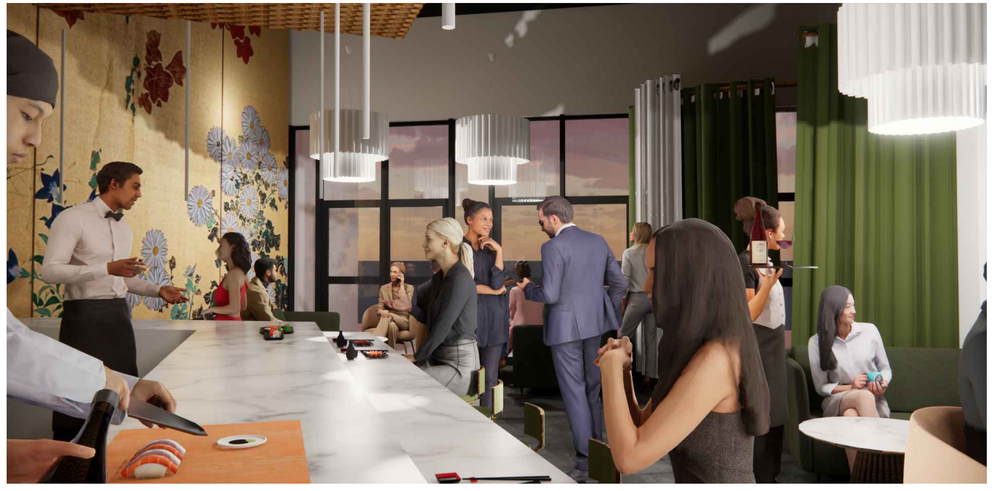
FOR REFERENCE NOT TO SCALE

Project title

PROPOSED BUILDING RENOVATION FOR:

No 28

211 Hamilton Row
Birmingham, MI 48009



INTERIOR PERSPECTIVE

FOR REFERENCE NOT TO SCALE



INTERIOR PERSPECTIVE

FOR REFERENCE NOT TO SCALE

Issued dr/ch

SLUP	03.04.26

Sheet title

PERSPECTIVE
IMAGE



Project no.

2057-20

Sheet no.

A.302

MEMORANDUM

Planning Department

DATE: August 22, 2025

TO: Planning Board Members

FROM: Leah Blizinski, City Planner

SUBJECT: 211 Hamilton Row – No 28 – Special Land Use Permit, Final Site Plan & Design Review

---

The subject site is located on the north side of Hamilton Row between N. Old Woodward and Ferndale. It is currently a vacant 1st floor tenant space within an existing 5-story commercial building. The applicant has submitted a Special Land Use and Final Site Plan and Design Review application proposing a new restaurant serving alcoholic beverages for on premise consumption, which includes extensive interior renovation, and the addition of a new outdoor dining patio.

The new proposed restaurant, "No 28" is described as a small, intimate indoor setting with food prepared and provided through the adjacent kitchen of Terra Kitchen & Cocktails. The proposed hours of operation are indicated as Wednesday – Sunday until 2:00AM and Monday and Tuesday reserved for private events.

Chapter 10, Section 10-42 of the Birmingham Code of Ordinances states that any and all transfers of a license for consumption of intoxicating liquor on premises require the approval of the city commission of any kind including, but not limited to: ownership of the license; stock in a corporation that owns a license; interest in a license through any entity; or location of the licensed premises. The licensee must comply with all provisions of the contract and Special Land Use Permit, and any amendments thereto as a condition of granting of a requested transfer. Accordingly, the applicant must obtain a recommendation from the Planning Board on the Special Land Use and Final Site Plan/Design Review application, which is then reviewed for final consideration by the City Commission.

(This space intentionally left blank)

1.0 Land Use and Zoning

1.1 Existing Land Use – 5-story commercial building

1.2 Zoning – B4 (Business-Residential) & D4 (Downtown Overlay)

1.3 Summary of Adjacent Land Use and Zoning –

	North	South	East	West
Existing Land Use	Commercial	Commercial	Commercial/Parking	Commercial
Existing Zoning District	B4 (Business Residential)	B4 (Business Residential)	B4 (Business Residential) & PP (Public Property)	B4 (Business Residential)
Overlay Zoning District	D4	D4	D4 & P	D4

2.0 Setback and Height Requirements

As the applicant is moving into an existing tenant space with no changes to the building, there are currently no issues with bulk, height or placement with the Special Land Use Permit, Final Site Plan/Design Review application submitted.

3.0 Screening and Landscaping

3.1 Dumpster Screening – There are no changes proposed to the dumpster or screening on site. Although the applicant has not indicated as such, the Palladium contains an interior trash facility that may be used by the applicant.

3.2 Parking Lot Screening – There are no changes proposed to the parking conditions on site.

3.3 Mechanical Equipment Screening – There are no changes proposed to the mechanical equipment or screening on site.

3.4 Landscaping – There are no changes proposed to landscaping on site.

3.5 Streetscape – There are no changes proposed to the existing streetscape on site.

4.0 Parking, Loading and Circulation

4.1 Parking – There are no changes to the parking requirements on site.

4.2 Loading – There are no changes proposed to the loading requirements.

4.3 Vehicular Circulation and Access – There are no changes proposed to vehicular circulation and access to the site.

4.4 Pedestrian Circulation and Access – There are no changes proposed to pedestrian circulation and access to the site.

5.0 Lighting

The applicant is not proposing any new light fixtures as a part of this Special Land Use Permit, Final Side Plan and Design Review application.

6.0 Departmental Reports

6.1 Engineering Division – There are no comments from engineering at this time.

6.2 Department of Public Services – The Department of Public Services indicated that the installation of the proposed outdoor dining patio may require the relocation of a city trash can and bike rack.

6.3 Fire Department – There are no comments from the Fire Department at this time.

6.4 Police Department – The Police Department has no concerns at this time.

6.5 Building Division – There are no comments from the Building Division at this time.

6.6 Parking Division – The Parking Division has no concerns at this time.

7.0 Design Review

As the applicant is not proposing any changes to the exterior of the building, the Design Review will be limited to the outdoor dining patio and signage.

Outdoor Dining

The applicant is proposing a 12-seat, 200 sq. ft. outdoor dining patio directly in front of the tenant space. The patio is proposed to be contiguous, but will exist on both public and private property. The applicant will be expected to apply for an Outdoor Dining Permit annually, and enter into a lease agreement with the City for the use of public property as a part of that permit.

To define the space, the applicant is proposing a 42 in. black powder coated aluminum fence around all sides with a small opening on the west side, and an aluminum powder coated planter box along Hamilton Row. They are proposing white metal tables and chairs, a photo of which is included with the plans.

The applicant has also provided a dimension indicating that a 6 ft. 8 in. clear path will be maintained from the curb along Hamilton Row to the front of the planter boxes. **However, the plans do not include a city trash can and bicycle rack that**

appear to impede the 5' clear pedestrian path. This area is also comprised of predominantly exposed aggregate, and will force pedestrians to take an awkward route around the outdoor dining patio. The Planning Division recommends that the Planning Board discuss the potential to reduce the size of the patio and redesign/relocate the planters to a different area to reduce the impact of the dining patio on pedestrian traffic.

Signage

The applicant indicated in the application that a new 5.5 sq. ft. bronze plate with laser cutout logo will be mounted to the wall. The sign doesn't appear to meet the sign ordinance as it is located below the sign band. However, they also note that the sign will replace an existing sign, of which there is none. The building has an existing bracket for a projecting sign, which should be addressed as a part of this review. The applicant should provide sign designs that clarify the type of sign and its attachments as well as meets the standards of the sign ordinance. Article 2, Section 2.02(A)(2) of the Sign Ordinance states that the City Commission shall hear and deny, approve, or approve with conditions, those signs for special land uses, after receiving the recommendation of the Planning Board.

8.0 Required Attachments

	Submitted	Not Submitted	Not Required
Existing Conditions Plan	☐	☐	☒
Detailed and Scaled Site Plan	☒	☐	☐
Certified Land Survey	☐	☐	☒
Interior Floor Plans	☒	☐	☐
Landscape Plan	☐	☐	☒
Photometric Plan	☐	☐	☒
Colored Elevations	☒	☐	☐
Material Specification Sheets	☐	☐	☒
Material Samples	☐	☐	☒
Site & Aerial Photographs	☒	☐	☐

9.0 Approval Criteria

In accordance with Article 7, section 7.27 of the Zoning Ordinance, the proposed plans for development must meet the following conditions:

1. *The location, size and height of the building, walls and fences shall be such that there is adequate landscaped open space so as to provide light, air and access to the persons occupying the structure.*

    - The proposed outdoor dining patio will not affect the open space requirements of the site, as there are no open space requirements of this site.

2. *The location, size and height of the building, walls and fences shall be such that there will be no interference with adequate light, air and access to adjacent lands and buildings.*

    - There are no buildings proposed as a part of the Final Site Plan & Design Review application submitted.

3. *The location, size and height of the building, walls and fences shall be such that they will not hinder the reasonable development of adjoining property nor diminish the value thereof.*

    - There are no buildings proposed as a part of the Final Site Plan & Design Review application submitted. The proposed fence around the outdoor dining patio will not hinder the reasonable development of any adjoining property nor diminish the value thereof.

4. *The site plan, and its relation to streets, driveways and sidewalks, shall be such as to not interfere with or be hazardous to vehicular and pedestrian traffic.*

    - The proposed site plan does not indicate any changes to streets or driveways. The outdoor dining patio could potentially interfere with pedestrian traffic. The applicant will need to demonstrate more clearly how the outdoor patio will not impede the 5' clear pedestrian path.

5. *The proposed development will be compatible with other uses and buildings in the neighborhood and will not be contrary to the spirit and purpose of this chapter.*

    - There are no buildings proposed as a part of the Final Site Plan & Design Review application submitted. Generally speaking, though, outdoor dining facilities are compatible with Downtown Birmingham and promote the spirit and purpose of the Zoning Ordinance.

6. *The location, shape and size of required landscaped open space is such as to provide adequate open space for the benefit of the inhabitants of the building and the surrounding neighborhood.*

    - There is no required landscaped open space as a part of this project.

In addition, Article 7, Section 7.36 requires applications for a Special Land Use Permit to meet the following criteria:

(1) The use is consistent with and will promote the intent and purpose of this Zoning Ordinance.

a. The proposed restaurant is consistent with and will promote the intent and purpose of this Zoning Ordinance by encouraging a vibrant downtown and active streetscape.

(2) The use will be compatible with adjacent uses of land, the natural environment, and the capabilities of public services and facilities affected by the land use.

a. Generally, in Birmingham's Downtown, this use is compatible with adjacent uses of land and the natural environment of the area. This use will not affect the capabilities of public services and facilities.

(3) The use is consistent with the public health, safety and welfare of the city.

a. This use is consistent with the public health, safety and welfare of the city. Similar to the previous standard, restaurants and sidewalk adjacent outdoor dining have been long established in Birmingham's Downtown and other commercial areas in the City and are expected to continue.

(4) The use is in compliance with all other requirements of this Zoning Ordinance.

a. The building uses proposed are compatible with the related zoning districts, there are no changes to the footprint of the building or to the parking requirements.

(5) The use will not be injurious to the surrounding neighborhood.

a. The proposed use is not expected to be injurious to the surrounding Downtown neighborhood.

(6) The use is in compliance with state and federal statutes.

a. Top the best of our knowledge, the uses proposed are in compliance with state and federal statutes at this time.

10.0 Recommendation

Based on a review of the site plan submitted and the approval criteria of Article 7, Sections 7.27 and 7.36, the Planning Department recommends that the Planning Board recommend that the City Commission **APPROVE** the Special Land Use Permit, Final Site Plan & Design Review application for 211 Hamilton Row -- subject to the following conditions:

1. The applicant must submit revised plans detailing a clear and unobstructed 5' pedestrian path and;
2. The applicant must provide clear sign designs for signage that meet the Zoning Ordinance
3. The applicant must comply with the requests of all City Departments.

11.0 Sample Motion Language for Special Land Use Permit

Motion to adopt the findings of the Planning Department in the report dated July 23, 2025 related to the approval criteria outlined in Article 7, Section 7.36 of the Zoning Motion to adopt the findings of the Planning Department in the report dated August 22, 2025 related to the approval criteria outlined in Article 7, Section 7.36 of the Zoning Ordinance and **APPROVE** the Special Land Use Permit application for 211 Hamilton Row – No 28 – subject to the following conditions:

1. The applicant must submit revised plans detailing a clear and unobstructed 5' pedestrian path and;
2. The applicant must provide clear sign designs for signage that meet the Zoning Ordinance
3. The applicant must comply with the requests of all City Departments.
4. _____
5. _____

OR

Ordinance and recommend that the City Commission **DENY** the Special Land Use Permit application for 211 Hamilton Row – No 28 – for the following reasons:

1. _____
2. _____
3. _____

OR

Motion to **POSTPONE** the Special Land Use Permit application for 211 Hamilton Row – No 28 – pending receipt of the following:

1. _____
2. _____
3. _____

12.0 Sample Motion Language for Final Site Plan & Design Review

Motion to adopt the findings of the Planning Department in the report dated August 22, 2025 related to the approval criteria outlined in Article 7, Section 7.27 of the Zoning Ordinance and **APPROVE** the Final Site Plan & Design Review application for 211 Hamilton Row – No 28– subject to the following conditions:

1. The applicant must submit revised plans detailing a clear and unobstructed 5' pedestrian path and;
2. The applicant must provide clear sign designs for signage that meet the Zoning Ordinance
3. The applicant must comply with the requests of all City Departments.

OR

Motion to adopt the findings of the Planning Department in the report dated August 22, 2025 related to the approval criteria outlined in Article 7, Section 7.27 of the Zoning Ordinance and recommend that the City Commission **DENY** the Final Site Plan & Design Review application for 211 Hamilton Row – No 28 – for the following reasons:

1. _____
2. _____
3. _____

OR

Motion to **POSTPONE** the Final Site Plan & Design Review application for 211 Hamilton Row – No 28 – pending receipt of the following:

1. _____
2. _____
3. _____

MEMORANDUM

Fire Department

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Matt Bartalino, Fire Chief

SUBJECT: City of Birmingham Emergency Operations Plan (EOP) Promulgation Document

INTRODUCTION:

The City of Birmingham operates an emergency management program. An emergency operations plan (EOP) is the primary document that explains how an organization will prepare for, respond to, and recover from emergencies or disasters. The main purpose is to provide a clear, organized framework for managing emergencies so responders and decision-makers know exactly what to do.

In Michigan, the requirements for reviewing and approving a local emergency operations plan (EOP) come primarily from the Michigan Emergency Management Act (Public Act 390 of 1976) and the Michigan Administrative Code administered by the Michigan State Police Emergency Management and Homeland Security Division (MSP-EMHSD). Michigan law requires the EOP to be continuously maintained. The chief executive (Mayor) promulgation document must be updated at least every 4 years or whenever the chief executive changes. This document is signed by the Mayor, City Manager, and Emergency Management Coordinator (Fire Chief).

The EOP has been reviewed, updated, and will be submitted to the state for approval before its expiration date in December 2026.

BACKGROUND:

The City of Birmingham is unique in that it has an emergency management program separate from Oakland County, one of only five cities in the county that operates its own program. This program falls under the Michigan Emergency Management Act 390 of 1976. The advantage of Birmingham having its own program is that the City has direct contact with state and federal agencies. This allows the city to recoup funds directly, provides for more training opportunities, and allows us direct control over all emergency responses. The City has the support of the Oakland County Emergency Management Division and maintains regular training with the county and state.

The Fire Chief serves as the emergency manager for the City of Birmingham and is tasked with continuously maintaining the EOP, which includes fifteen emergency support function (ESF) sections and various addenda to each ESF.

LEGAL REVIEW:
The promulgation document has been reviewed by the City Attorney without objection.

FISCAL IMPACT:
Emergency Management Performance Grant awards and other federal grants would not be provided without having a current emergency operations plan, which includes a current and signed promulgation document.

SUSTAINABILITY:
N/A

DESIGN CONSIDERATIONS:
N/A

PUBLIC COMMUNICATIONS:
Publication is included in this City Commission agenda packet.

SUMMARY:
It is recommended that the City Commission approve the Mayor, City Manager, and Fire Chief to sign the promulgation document on behalf of the City so that the updated emergency operations plan can be submitted to the State of Michigan before its expiration in December 2026.

ATTACHMENTS:
1. Promulgation Document

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to approve the City's emergency operations plan promulgation document. Further, to direct the Mayor, City Manager, and Fire Chief to sign the document on behalf of the City.

PROMULGATION DOCUMENT

This EOP has been developed by **City of Birmingham officials** in conjunction with stakeholders across the whole community to enhance their capability to prevent, protect, mitigate against, respond to, and recover from the impacts of all hazards.

The plan and its provisions become official when signed and dated below.

_____ _____

Mayor Date
City of Birmingham

_____ _____

City Manager Date
City of Birmingham

_____ _____

Emergency Management Coordinator Date
City of Birmingham

MEMORANDUM

City Clerk's Office

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Mya Brown, Deputy City Clerk

SUBJECT: City Commission Member Resignation

INTRODUCTION/BACKGROUND:
The City Commission Mayor Pro Tem Anthony Long submitted his resignation from the City Commission effective April 13, 2026 at the end portion of the City Commission meeting.

On March 17, 2026, the City distributed an e-blast (bhamgov.org/commissionvacancy) to residents with the following application information:

Completed applications must be submitted to the City Clerk's Office on or before noon on Wednesday, April 8, 2026. These applications will appear in the public agenda for the City Commission workshop on Monday, April 13, 2026 at 5:30 p.m. During the workshop, the City Commission will conduct interviews of the applicants. At the end of the regular City Commission meeting immediately following the workshop, the City Commission will make nominations and vote for a candidate. The selected candidate will be sworn in at the conclusion of the regular City Commission meeting, and will begin serving as an acting City Commissioner during the City's Budget Hearing on Saturday, April 25, 2026.

LEGAL REVIEW:
Pursuant to the Birmingham City Charter, Chapter III:

Section 26. - [Vacancies.] In addition to other provisions herein contained, a vacancy shall exist in any elective office when an elected officer fails to qualify as in this Charter provided, dies, resigns, is removed from office, removes from the city, or is convicted of a felony.

Section 27. - [Vacancies filled.] A vacancy in any elective office shall within thirty days after such vacancy occurs be filled by appointment by a majority of the members of the commission, or of the remaining members of the commission when the vacancy is in the commission, except that library board vacancies shall be filled by appointment of the library board as elsewhere herein provided. Such appointee shall hold office until the next regular municipal election at which election a successor shall be elected for the unexpired term of the person in whose office the vacancy occurs. When a vacancy occurs in any office to which a person has been appointed for a definite term, such vacancy shall within thirty days be filled for the unexpired term, by appointment made in the manner provided for full term appointment to such office. (Amend. of 4-4-60)

Therefore, the appointment must occur by May 13, 2026, to be in compliance with the City Charter. The process outlined herein comports with required actions, and the City Attorney supports the suggested commission action.

FISCAL IMPACT:
None.

SUSTAINABILITY:
None.

PUBLIC COMMUNICATIONS:
The City Clerk's office will publish a notice of intention to appoint to this position, post the vacancy on the "board and committee opportunities" portion of the City's website and include it in the City's digital news vehicles as publication schedules permit.

SUMMARY:
The City Commission is being asked to accept the resignation of Mayor Pro Tem Anthony Long from the City Commission effective on April 13, 2026 when he declares the vacancy, to thank him for his service and to direct the City Clerk to continue the process of filling the vacancy.

ATTACHMENTS:
1. Anthony Long - Resignation Letter - 3-13-26

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to accept the resignation of Mayor Pro Tem Anthony Long from the City Commission effective on April 13, 2026 towards the end of the regular City Commission meeting, to thank him for his service and to direct the City Clerk to continue the process of filling the vacancy.

Anthony J. Long
1323 Bennaville Ave.,
Birmingham, Michigan 48009

March 13, 2026

Ms. Jana L. Ecker
City Manager
151 Martin Street
Birmingham, MI 48009

Via Email

RE: Resignation

Dear Jana,

Please allow this letter to serve as my notice of resignation as City Commissioner/Mayor Pro Tem effective April 13, 2026. To allow for a smooth transition and replacement of my seat, my last City Commission meeting will be on April 13, 2026.

Needless to say, this was not an easy decision. After residing in Birmingham for thirty-one (31) years, I am moving out of the City, something that I never thought would occur. I love the city, its residents, stores, restaurants, and everything else that makes it such a wonderful place to live. Life, however, sometimes takes you in a direction that you never anticipated, and I am excited for my upcoming move and next chapter.

It has been both an honor and a privilege to serve as City Commissioner and Mayor Pro Tem and to work with you and your amazing staff, as well as my fellow Commissioners, all of whom volunteer many hours with the same goal in mind, to make the city the amazing place it is. I will miss working with you all.

While I will no longer reside in Birmingham, I plan to continue to visit and enjoy the city.

Sincerely,

Anthony J. Long

Anthony J. Long

cc: Mayor Clinton Baller (via email)
Mary Kucharek, Esq., City Attorney (via email)

BIRMINGHAM
A WALKABLE CITY

March 2026 City Manager's Report

Baldwin Public Library

Library Board

The Library Board met on Monday, March 16 at 7:30 p.m. for its regular meeting and FY 2026-2027 Budget Hearing. Download the agenda packet here.

Staff Development Day

The library will be closed on Friday, March 27, 2026 for Staff Development Day. Staff will spend the day training on and reviewing both existing and new policies and resources. Over the course of the day, we will do some peer-to-peer training, and have a safety review with the Birmingham Police Department. In addition to department meetings—this is the only time each year when everyone in the building can attend simultaneously because no one has to cover a desk—we will have sessions highlighting:

- Safety reviews
- Updates on our newer collections
- Building tours and supply/storage reviews for new or less-frequently scheduled staff
- AI discernment
- Conflict resolution, and how to support your coworkers
- Tips for best customer service

We will also have a couple of opportunities to hear from our coworkers with quick presentations about things on which they are well-versed or passionate about and via an all-day human scavenger hunt. These mini-slideshows will not only hopefully connect people with similar interests, but inspire potential programming or event ideas, while bringing a little levity to the learning. Last, but not least, we will spend a few minutes honoring our 19 coworkers celebrating milestone anniversaries this year, ranging from 5 to 30 years.

The library will reopen for regular hours on Saturday, March 28 at 9:30 a.m.

Stipends Awarded to Staff for Continuing Education

Five Baldwin staff members have received $1,800 grants totaling $9,000 to attend conferences this spring. They include:

- Elisabeth Phou - Michigan Library Association Spring Institute in Grand Rapids, Michigan
- Alyssa Mandell - American Library Association Annual conference in Chicago, Illinois
- Jen Adams - Computers in Libraries conference in Arlington, Virginia
- Austin Dewalt - Computers in Libraries conference in Arlington, Virginia
- Patricia Henricks - Public Library Association conference in Minneapolis, Minnesota

Library Tours

If you'd like to learn even more about the library, join Director Rebekah Craft for a Behind the Scenes Tour. You'll visit staff areas, learn how items are added to the collection, and hear about new programs and services. The next tour will meet in the library's atrium on Thursday, April 9 at 4 p.m.

Idea Lab: The Grand Tour

Have you always wondered what the Idea Lab is all about, but were afraid to ask? On Wednesday, April 1 at 7 p.m., Jeff will take you on a tour of the Idea Lab, including a quick demo of our exciting equipment. Registration required.

Upcoming events of interest

Oscars Trivia
Thursday, March 26, 2026, 7-8 p.m.
And the Oscar goes to…? Test your knowledge of Academy Award winning films throughout history up until today. Sign up as an individual or a group. Snacks will be provided and prizes will be awarded to the winning team. Teens and adults welcome. Registration required.

Creature Feature Show: All Ages
Monday, March 30, 2026, 10:30 - 11:30 a.m.
Join us for a live animal show featuring one of our favorite presenters, Dan the Creature Man. Registration required.

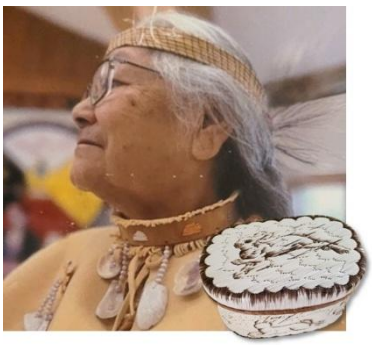
Let's Go Birding
Monday, April 6, 2026, 7-8 p.m.
"Let's Go Birding" is a follow-up to Greg Bodker's well received Birdwatching vs Birding program. The "Let's Go Birding" program uses different photos, videos, and stories to prepare the audience to go on a birding adventure in the field.

After-Hours Hide & Seek for Teens Grades 7-12
Friday, April 10, 2026, 7-9 p.m.
Play different versions of hide and seek throughout the library after we close to the public. Pizza will be served. Registration and permission form required.

Matrix Planting for Home Gardeners
Saturday, April 14, 2026, 7-8 p.m.
"Matrix Planting" has been one of the hottest design trends over the past few years. Join landscape designer and educator, Deborah Chud, for her engaging lecture as she explains this naturalist concept of incorporating perennials and grasses to imitate meadows. Deborah will demystify the complexities of this garden design concept and will give home gardeners a starting point for creating a personal version of matrix planting of their own.

Learn more about these events and other programs coming to Baldwin at baldwinlib.org/calendar.

Birmingham Museum



A special focus of the Birmingham Museum for America's 250th anniversary is our local Indigenous heritage and the Anishinaabe peoples who preceded European settlement here. To bring some of that history back to Birmingham, we are excited to announce that renowned Michigan quillwork artist Yvonne Walker Keshick will be coming to town for two special events we're cosponsoring with the Southfield Historical Museum. This is a rare opportunity to meet Yvonne and her daughter Odeimin Walker Keshick, who both work in the unique porcupine quill and birch bark artistry handed down through generations in their family. Described by Michigan State University Museum as "one of the finest quill work artists in North America," Yvonne will first present a free public lecture at Southfield Public Library on Wednesday, April 8 at 6 p.m., featuring her exquisite quillwork boxes and sharing the Odawa storytelling traditions behind the art. Register at the Southfield Public Library's online calendar.



On Thursday, April 9, Yvonne will teach an immersive day-long workshop from 10 a.m. to 4 p.m. at the Birmingham Museum. Participants will learn the traditional art of

quillwork as they create a personal medallion or ornament with Yvonne's personal guidance and storytelling. The fee for the workshop is $180 and registration is very limited. Contact Birmingham Museum Director Leslie Pielack at (248) 530-1682 for more information.

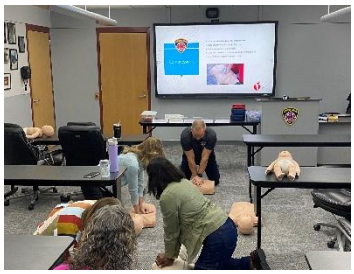
Birmingham Shopping District

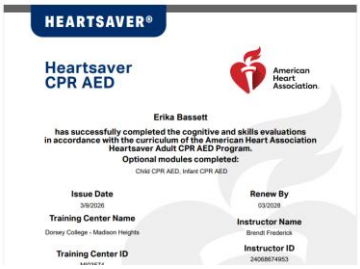
BSD Staff Completes CPR Certification and Other Training:

The Birmingham Shopping District (BSD) is proud to announce that all of its staff members have participated in the following training to ensure the team is prepared for all situations, including emergencies, should they arise.

- March 2, 2026: Active Assailant Training with the Birmingham Police Department
- March 4, 2026: Providing Excellent Customer Service
- March 9, 2026: American Heart Association Heartsaver CPR AED Certification Training with the Birmingham Fire Department







Upcoming Special Events:

The Birmingham Shopping District's Special Events Committee and staff team are busy planning and coordinating a full line-up of spring and summer events! View all upcoming events by visiting the BSD's Event Calendar. Registration is now open for the Spring Stroll event on April 11, 2026.







Volunteer Opportunities:

For those looking for a fun way to give back to the community or complete volunteer service hours, the BSD offers a variety of opportunities for ages 14+ at our events throughout the year. Volunteer shifts and duties vary, offering flexible options to fit a variety of schedules and interests. Learn more at downtownbirmingham.com/volunteer or visit our table at the Baldwin Public Library's Care Fair event on Saturday, April 11, 2026 from 11 a.m. – 1 p.m.

Building Department

Board of Zoning Appeals

There were three cases for the agenda for the March 10, 2026 Board of Zoning Appeals regular meeting.

1. 1070 Lincoln Court: The property owner has requested variances from the rear yard and the combined front and rear yard setback to construct a new home with an attached garage. The variances were approved 6/0.

2. 504 Willits: The property owner has requested three variances on the maximum height of the structure and eave to construct a new home with an attached garage. The variances were approved 4/2. There was an additional variance requested to construct a rear deck on the home. This variance was denied 6/0.

3. 1711 Latham: The property owner requested variances from the rear yard, and the combined front and rear yard setback to reconstruct a sunroom. The variances were approved 6/0.

Code Enforcement
City of Birmingham Code Enforcement Officers are responsible for ensuring residents and businesses follow the City's ordinances pertaining to zoning regulations and building codes to protect the community's safety and property values. They investigate violations, inspect properties and enforce compliance regarding property maintenance, safety hazards and nuisance complaints. We received an inquiry about how the City enforces its ordinances, including whether violation notices and tickets are issued. The chart below outlines the number of code violation notices and tickets issued in recent years.

Year	Code Violation Notices and Tickets Issued
2023	852
2024	775
2025	1,096
2026	506 (as of March 1, 2026)

Online Permit Applications
In the month of February, we processed 272 permits online bringing this year's total permits processed electronically to 508.

Monthly Report
The Building Department's monthly report shows the previous month's permit activity, along with charts showing the building permit activity trend over the past year.

City Clerk's Office

Elections:

Upcoming elections will be held on August 4, 2026 for the State Primary, and November 3, 2026 for the General Election.

In 2025, Birmingham consolidated its precincts from nine locations to five. Follow this link to view a map of the official polling locations.

As always, we are happy to see Birmingham voters at the polls on Election Day! However, if you will be going out of town or wish to obtain an absent voter ballot, one can be requested online at mi.gov/vote. Voters interested in receiving a ballot in advance of every election moving forward can request to join the permanent ballot list at any time at mi.gov/vote.

Official ballots received by mail can also be voted in person at your assigned Birmingham polling location on Election Day or at the early voting sites during the nine days of early voting. Find more information about early voting here.

The Clerk's Office has installed a new ballot box on the front counter in City Hall. This collection box is for election materials only and will be closed outside of election cycles. Official ballot drop boxes can also be found at the southeast corner and at the back entrance of City Hall (151 Martin Street). An additional official ballot box has been mounted on the outside west wall at Fire Station 1 (572 S. Adams Road) for collecting election materials 40 days leading up to an election.



August 4, 2026 **State Primary**	**Important Election Deadlines**	**November 3, 2026** **General Election**
Thursday, June 25, 2026	Absentee Ballots available & Permanent Absentee Voter Ballots are mailed	Thursday, September 19, 2026
Tuesday, July 21, 2026 through Election Day	Same-day voter registration with your local clerk, proof of residency required	Tuesday, October 20, 2026 through Election Day
Friday, July 24, 2026	5 p.m. deadline for electors to submit a written request to spoil their absent voter ballot and receive a new absent voter ballot by mail. And, deadline for electors who have returned their absent voter ballot to submit a written request in person to spoil their absent voter ballot and receive a new absent voter ballot in the City Clerk's Office.	Friday, October 23, 2026
Saturday, July 25, 2026 through Sunday, August 2, 2025	Early Voting	Saturday, October 24, 2026 through Sunday, November 1, 2026
Friday, July 31, 2025	5 p.m. deadline for clerks to send an absent voter ballot via First Class mail.	Friday, October 30, 2026
Monday, August 3, 2026	4 p.m. deadline for electors who have lost their absentee ballot or not yet received their ballot in the mail to submit a written request to spoil their absent voter ballot and receive a new absent voter ballot in the City Clerk's Office. And, deadline for a registered voter to apply for an AV ballot in person at	Monday, November 2, 2026

	the City Clerk's Office.	
Tuesday, August 4, 2026	**7:00 a.m. - 8:00 p.m.** **Election Day**	**Tuesday, November 3, 2026**
Friday, August 7, 2026	5 p.m. deadline for voter to cure the signature on AV ballot return envelope, allowing an otherwise valid ballot to be accepted for tabulation	Friday, November 6, 2026
Monday, August 10, 2026	Deadline for a ballot submitted by a MOVE voter and postmarked on or before Election Day to be deemed timely received and counted.	Tuesday, November 10, 2026
Tuesday, August 11, 2026	Deadline for county clerks to notify precinct delegates elected at August Primary; certify delegate names and addresses to chairpersons of county committees.	N/A

Important News:

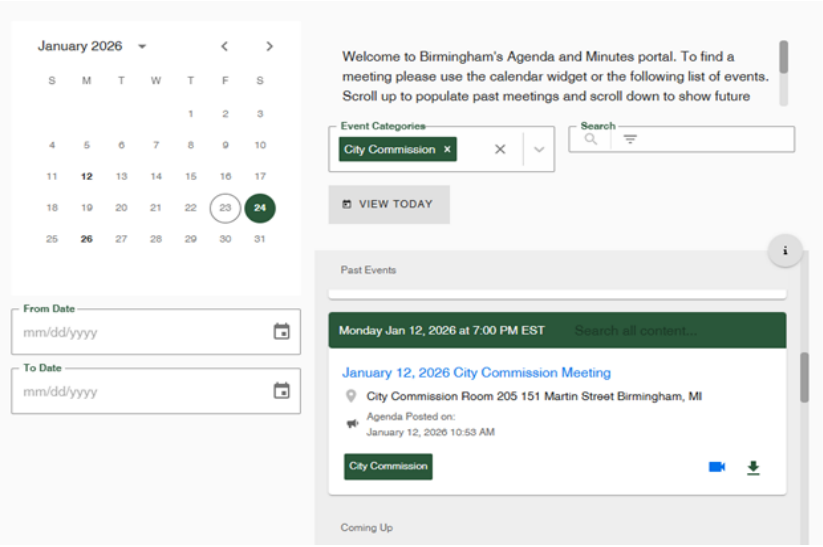
A new U.S. Postal Service (USPS) rule took effect on December 24, 2025, which states "the presence of a postmark on a mailpiece confirms that the Postal Service was in possession of the mailpiece on the date of the postmark's inscription; the postmark date does not inherently or necessarily align with the date on which the Postal Service first accepted possession of the mailpiece" (Postal Service 39 CFR Part 111).

The Clerk's Office would like to highlight this point for any citizens who rely on postmarks for various reasons. The drive-up drop boxes located at the southeast corner of City Hall are open year-round for the collection of City documents. No postage is required when using the drop box.

For domestic military and overseas voters, please be especially mindful of this as you return election materials. Be sure to return your election mail as early as possible to account for physical transportation delays as well as the possibility of a delayed postmark.

Viewing Meeting Materials Online:

The City Clerk's Office has rolled out a new platform for City Commission and most City board agendas and minutes hosted by CivicPlus. If you are familiar with the bhamgov.org/commission webpage, then you are likely familiar with the rows of City Commission meeting dates and accompanying information. While all of this information will still be available to you, the user interface is changing (sample below):



Access a guide to using the new portal here.

Parade:

The Celebrate Birmingham Hometown Parade & Party brings our community together each year and we would love for you to be part of it!

Whether your organization joins the parade, hosts a hands-on activity during the party in Shain Park, or becomes an official sponsor, every contribution helps make this event fun, inclusive and unforgettable for Birmingham families.

🎈 Want to Participate in the Parade, Party, or both?

Registration to participate in the parade and party in Shain Park is free! Simply provide a child-friendly craft or interactive activity in Shain Park during the event, or sign up your group to walk in the parade.

✸ Sponsorship Opportunities Available!

Packages range from $100–$3,500 and offer varying levels of recognition from website and printed materials to event-day visibility in Shain Park. Presenting sponsors enjoy premium recognition plus on-site space and branding opportunities.

🎉 Join us in celebrating Birmingham and helping create a hometown tradition our community loves! For more information and registration head to bhamgov.org/parade today!

Greenwood Cemetery & the Greenwood Cemetery Advisory Board (GCAB)

DPS will begin a cleanup of the cemetery, including removing grave blankets on Tuesday, March 24 (weather permitting). In advance of this, City staff will post signs asking residents to please remove items they would like to save. The City will also utilize the City's website, eblast, social media, and other available communication platforms to inform the public.

The next meeting for the GCAB is scheduled for May 1, 2026. To view Greenwood Cemetery Advisory Board agendas and minutes visit bhamgov.org/GCAB.

Also note that for those visiting the cemetery and placing decorations for loved ones, it is important to be aware of the Greenwood Cemetery Operational Procedures, Conditions & Regulations, specifically sections II, III, and V.

Board of Ethics

Stay tuned for announcements regarding the next scheduled Board of Ethics meeting. At this time there are no opinion requests or complaints to be processed. To view the Ethics Board agendas and minutes visit bhamgov.org/ethics.

Board Appointments

The City of Birmingham is looking for dedicated individuals who want to give back to their community by serving on one of our many boards or committees, which make recommendations that shape the City's future. It's a great way to get involved in your community, meet new people and make a positive impact. Visit bhamgov.org/boardopportunities to view all available openings and apply at bhamgov.org/boardapplication.

City Manager's Office

Update regarding Next, 400 E. Lincoln and the YMCA

When the City purchased the building at 400 E. Lincoln in 2023, it was for the purpose of providing Next with a permanent home after June 2027, at which time Birmingham Public Schools was in need of the full space at Midvale currently occupied in part by Next. Also in 2023, Birmingham voters approved a senior millage to fund the anticipated repairs, renovations, upgrades and cosmetic enhancements for the building to allow Next to establish a permanent home at 400 E. Lincoln and to continue to provide senior services to our residents.

In January 2026, the City Commission approved the hiring of Neumann Smith to proceed with design plans for the renovation of the existing building for use by Next, to be funded by the senior millage approved in November 2023. Given the level of funding from the senior millage, approximately $3.4 to $3.6 million, it was determined that this would only provide sufficient funding to update the first floor of the building. Accordingly, Next agreed to lease only the first floor of the building to provide a new home for Next in alignment with the City's budgetary constraints. The proposed renovations will include ADA compliance, access improvements, code updates as required, updated paint and other aesthetic improvements. Minimal changes to the floor plan are also proposed to subdivide the current fitness space into several multipurpose rooms, and other such changes which may be recommended by Neumann Smith during the final design process later this spring/summer. After design plans are approved by the City Commission, the City will go out to bid for construction, which is expected to commence on or after September 1, 2026, and to be completed by May 2027.

On February 23, 2026, a lease agreement between the City and Next was approved by the City Commission. The lease has a term of 30 years, and the rent to be charged to Next is $1/year as outlined in the prior Memorandum of Understanding between the City and Next. The lease further provides that Next will pay all utility and operating costs for their leased area, and the City will maintain the core and shell of the building, including the grounds. To provide equity for Birmingham residents, the lease also states that all Birmingham residents will receive a free membership to Next. All non-resident members will continue to pay membership fees to Next.

The original agreement between the City and Next also contemplated that the YMCA would maintain a presence in approximately 25% of the building (with no pool). As the YMCA recently announced, the Birmingham branch of the YMCA will be closed at the end of April 2026, however the City Commission approved an extension of the YMCA's three-year lease through August 31, 2026, to allow for the provision of YMCA summer day camps for children this summer. The YMCA does not plan to use any space in the existing building after August 31, 2026.

While many residents are disappointed in the closure of the Birmingham YMCA and the indoor swimming pool, the fact of the matter is that the YMCA was no longer able to financially operate the building at 400 E. Lincoln. The YMCA sold the building to the City for this reason. The City and the YMCA have continued to work

diligently over the past several years to develop a financially viable plan that would allow the YMCA to remain in Birmingham in some capacity. Unfortunately, while many options were explored, the YMCA was not able to financially support a reduced size branch with minimal programming. The City and the YMCA will continue to work collaboratively to identify creative solutions to maintaining YMCA programming in Birmingham.

Communications

AI Voice update
We continue to leverage technology to better serve the community. Following the smooth launch of the AI-enabled chatbot on our website, we are preparing for a soft launch of VoiceAI at the end of March. The goal of VoiceAI is to provide callers with instant answers and seamlessly direct them to the appropriate department and/or text callers with requested information. During the soft launch period, staff will monitor prompts and VoiceAI responses to test and improve the system before officially launching and publicizing the service this spring.

Spring Birmingham Beat newsletter
The spring edition of the Birmingham Beat newsletter will reach mailboxes by April 1. This edition features information about America250 special activities, summer concerts in Shain Park, outdoor movie nights, the Birmingham Ice Show, Junior Golf Program, new playgrounds, a new Birmingham Rain Garden Program, opportunities for involvement in the zoning ordinance update and more. Follow this link to view the newsletter.

April Around Town e-newsletter
The communications team is working on the April edition of the Around Town e-newsletter, which will include information about the new Peter Cotton Trail event, the start of yard waste collection, golf course updates, new businesses and more. Follow this link to view the March edition.

Receive updates from Birmingham
Receive the latest news from Birmingham by signing up to receive our newsletter and alerts at bhamgov.org/enews. Subscribers receive important information specific to their neighborhood, emergency alerts and our newsletter featuring upcoming events, meetings, City projects, developments and more. Also follow us on Facebook and Instagram @BhamGov, and visit bhamgov.org/communications to view all City communication tools.

Department of Public Services

Water Main Break Count
As of March 3, 2026, the Streets Sewer and Water staff have repaired 23 water main breaks. Birmingham had 30 water main breaks during the entire 2025 calendar year.

Pothole Season
The Streets Department has been working hard this spring to keep up with pothole season. The City has already placed over 50 tons of cold patch and counting!

St. James & Kenning Park Designs
The Parks Department is beginning engagement with residents for St. James and Kenning Park designs at our Peter Cotton Trail event on March 28 at Booth park from 12-2 p.m. Additionally, a public input engagement event will be held at the DPS building prior to the Parks & Recreation Board meeting on April 14, time TBD.

Crestview Park Playground Planning
The Parks Department will be reaching out to community members around Crestview Park to seek opinions on new playground equipment coming soon as part of our parks bond projects. A public engagement session is tentatively set for the May 5, 2026 Parks and Recreation Board Meeting.

Maple Syrup Tapping
DPS staff took the initiative to help celebrate America's 250th anniversary with maple syrup tapping. They tapped seven maple trees in Derby Park in late February-early March while the weather cooperated and the trees were still dormant. The new program provides the public with information about the history of and other interesting details about the maple syrup tapping process.

There are more than 5,000 maple trees on public property in the City of Birmingham, and approximately 1 billion maple trees in the state of Michigan alone. In late winter to early spring, maple sap begins to circulate up and down inside the trees with freezing and thawing weather. If done properly, the small holes created for tapping will not harm the tree. The tree must be mature enough (more than 10" diameter) and healthy enough to compartmentalize the small 5/16" wound.

DPS staff partnered with Oakland County Parks to help begin processing the sap collected with their existing evaporator equipment on March 4 at Independence Oaks, successfully turning approximately 45 gallons of sap into 15 gallons of concentrate in less than 5 hours. DPS staff will continue boiling the concentrated sap down to syrup, and then have a pancake breakfast for the team to celebrate a successful project! Please visit the city's webpage for more information on the maple syrup tapping program.

Birmingham Rotary Presentation
The Parks Department was invited to present the Poppleton Park playground project at the April 20, 2026 Birmingham Rotary Meeting. The Birmingham Rotary Club generously contributed $50,000 toward the upcoming development of the City's first all-abilities playground at Poppleton Park.

Engineering Department

City Construction Projects:

Bird Phase 1B Project
The contractor plans to begin construction on this project at the beginning of April, weather permitting. Residents will receive letters with information about the project's start at the end of this month.

Wimbleton Phase 2 Project
The Engineering Department will host a resident meeting on Thursday, April 16, 2026, from 5:30 - 6:30 p.m. at City Hall. Property owners will receive a letter with information about this meeting. Residents are encouraged to attend to learn about the special assessment district process, estimated costs, etc.

Lead Service Replacement Program
The City issued letters in November 2025 for EGLE's yearly notice requirements. Those who would like to sign up for lead service replacement at no cost should contact the Engineering Department at 248-530-1840.

Consumers Energy Project
Consumers Energy has two projects to replace the gas main in the west part of the City. They have notified residents about these projects. To learn more, reach out to Consumers Energy:
- General construction – Gas Construction Operations: 517-768-3640
- Relight pilot lights after gas service interruption: 1-800-477-5050
- Landscaping, grass, road, and sidewalks: 1-844-660-3477

If you have any questions about these projects or programs, please contact the Engineering Department at (248) 530-1840.

Willits/Bates/Chester Project - Award
The Willits/Bates/Chester Project received the American Public Works Association (APWA) Metro Detroit Branch 2025 Project of the Year for Transportation Less than $1 million on Thursday, March 19, 2026.

For more information, please contact the Engineering Department at 248-530-1840.

Fire Department

With the promotion of Battalion Chief Tom Hughes to Assistant Fire Chief in December, the Fire Department was left with an open budgeted firefighter/paramedic position that needed to be filled. We received 72 applications for the position by the closing of the application period. The Birmingham Fire Department held candidate interviews in late February. The 6-person panel selected Evan Holland as the top overall candidate. Evan has accepted the position, pending the successful completion of a physical, background check and psych evaluation. Evan comes to the Birmingham Fire Department with experience as a firefighter/paramedic with the City of Rochester. Evan is also a military veteran, having served as a United States Marine Corps for six years. Evan will have our standard one-year probationary period, and we look forward to training him to become another quality firefighter/paramedic for the City of Birmingham. His start date is tentatively set for March 30, 2026. Please join us in welcoming Evan to the team.

Human Resources

New Hires

The City of Birmingham extends warm congratulations to our newly hired employees as of March 12, 2026. Their skills, expertise and enthusiasm are a valuable addition to our team. We welcome them to the City of Birmingham!

Department	Name	Position	Type
Building	Robert Reese	Electrical Inspector	FT (AFSCME)
Treasury	Elizabeth Hewelt	Clerical Assistant	PT (AFSCME)
DPS	Diane Guenther	Golf Maintenance/Service	Seasonal

Promotions

Fire Department	Trevor Baker	Fire Lieutenant	FT (BFFA)
DPS	John Pierce	Assistant Golf Manager	Seasonal

March Hiring Anniversaries

The City of Birmingham celebrated the hiring anniversaries of several employees. We extend our heartfelt appreciation for their exceptional service and unwavering dedication. Their contributions are deeply valued and recognized.

Years Of Service	Employee		Department	Position
1	Gary	Kashouty	Police	Parking Enforcement
2	Nancy	McIntyre	Police	Crossing Guard
2	Wendy	Abdoo	Parking	Parking Admin
2	Zoe	Lusk	Library	Library Page

2	Keegan	Sulecki	Library	Substitute Librarian
3	Ryan	Ballard	DPS	Streets, Sewer, Water Foreman
3	Stuart	Sturton	Library	Librarian
6	Alexandria	Bingham	City Clerk	City Clerk
7	Julie	Beckwell	Library	Library Assistant
8	Steven	Lemiere-Bozynski	Police	Police Dispatch Manager
10	Joseph	Misiak	Police	Police Dispatcher
10	Trevor	Baker	Fire	Fire Lt/EMT
10	Susan	Kalisky	Library	Substitute Librarian
11	Steffanie	Rhymes	Parking	Parking Facilities
13	Michael	Simpson	Police	Police Captain
14	Christopher	Deman	Fire	Battalion Chief
20	Lisa	Christie	Library	Library Assistant
21	Elisabeth	Phou	Library	Librarian
22	Scot	Pounders	DPS	Streets, Sewer, Water Foreman Technician
26	Melinda	Comerford	BSD	BSD Assistant

March Hiring Status

The City is seeking candidates for the following positions. Below is the current status of each opening. To apply or for more information, visit bhamgov.org/jobs.

Department	Position	Type	Status
DPS	Streets, Sewer, Water Laborer	Part Time	Accepting applications until 3/27/2026
DPS	Parks Laborer	Part Time	Accepting applications until 3/27/2026
DPS	Golf Course/Ice Arena Operator	Full Time (Teamsters)	Accepting applications until 3/31/2026
Golf	Seasonal Clubhouse Service	Seasonal	Open until filled
Golf	Seasonal Maintenance Laborer	Seasonal	Open until filled
Police	Dispatcher	Full Time (BPOA)	Reviewing applicants

Fire	Firefighter	Full Time (BFFA)	Onboarding
Police	Police Officer	Full Time (BPOA)	Onboarding
Engineering	Civil Engineer	Full Time	Onboarding
Golf	Operations Manager	Full Time	Onboarding
Building	Plans Examiner	Full Time (AFSCME)	Onboarding

Planning Department

Planning Board

Zoning Ordinance Update Project

The Planning Department has continued working with Houseal Lavigne on the strategy and rollout of the first few phases of their scope of work, which include project initiation and kickoff meetings. At this time, the project team has scheduled April 22 and 23 as the public kickoff to the project, which will include focus groups, tours, and the launch of the project webpage. The Zoning Ordinance Update project is expected to be discussed at the following upcoming meetings of the Planning Board:

- March 25, 2026
- April 22, 2026

Regular Business

The Planning Board has received a number of new site plan requests. A tentative list of scheduled items is provided below:

1. 34592 Woodward & 690 E. Maple – Request for Community Impact Study and Preliminary Site Plan Review for new 9-story mixed-use building (3/25/26)
2. 2425 E. 14 Mile – Clover Hill Park Cemetery – Request for Final Site Plan & Design Review for new addition to existing administration building (3/25/26)
3. 126 S. Old Woodward – Snap Taco – Request for Special Land Use Permit, Final Site Plan & Design Review for new bistro and associated outdoor dining facility (3/25/26)

Historic District Commission (HDC) & Design Review Board (DRB)

The Historic District Commission is continuing its work on the Historic Preservation Master Plan (HPMP) with the study of a potential demolition delay ordinance to be considered by the City Commission. The HPMP is expected to dominate the HDC's agenda over the coming years, with some Design Reviews expected to come at the usual pace.

A list of recently completed items at the HDC and DRB is provided below:

1. 725 S. Adams – Adams Square – Request for Design Review for exterior renovations to existing building (3/18/26)
2. 151 Martin St. – Birmingham City Hall – Request for Design Review for new sally port addition to rear of building (3/18/26)
3. Demolition Delay Ordinance Study (3/18/26)
4. National Historic Preservation Month Programming (3/18/26)

Environmental Sustainability Committee (ESC)

The ESC held its most recent meeting on March 23, 2026. Several new items are being introduced at the ESC, but several more will also be coming to the City Commission in the near future for approval.

A tentative list of scheduled and/or recently completed items at the Environmental Sustainability is provided below:

1. **WS-2** – Adopt a residential rain garden program (3/23/26)
2. **BF-1** – Develop a plan to incentivize or require the transition from natural gas to electric in residential renovation and construction (3/23/26)
3. **W-1** – Develop a City-wide food waste composting program (4/27/26)
4. **WS-1** – Study the hydrology and topography of the City and produce recommendations toward targeting stormwater infrastructure improvements in areas that have the largest impact in reducing the negative effects of stormwater (4/27/26)

In addition, the Planning Department has added a new section to the City's Sustainability and Climate Action webpage outlining all of the past or ongoing Regional Collaboration that the City engages in to further the goals of the Birmingham Green: Healthy Climate Plan.

Police Department

Women in Law Enforcement

The Birmingham Police Department is extremely proud of our female officers and the work that they do. They are an essential part of our police department and our mission. They bring strength, compassion, professionalism and a deep commitment to justice to our agency.



Several of our female officers attended a two-day conference where they heard dynamic speakers and law enforcement professionals share their expertise, insights and stories of Courage & Compassion in policing. Presentations to inspire, educate and empower women in all law enforcement capacities covered four key tracks:

- **Courageous Conversations & Change -** exploring difficult but necessary dialogues that drive progress
- **Community & Trust -** focusing on building stronger, more inclusive relationships with the public
- **Wellness & Empowerment -** addressing mental, physical and emotional well-being in a demanding profession
- **Leadership & Resilience -** highlighting strategies for career advancement, overcoming adversity and leading with integrity.

Office of Highway Safety Planning (OHSP) Traffic Enforcement Strategies Training

The most frequent complaint received by the Police Department is regarding traffic violations. Complaints are received regarding residential streets, commercial districts, both on major and local streets. Our department places a strong emphasis on traffic enforcement and continues to look for new and better ways to address traffic complaints.

On March, 10 and 11, Capt. Ryan Kearney, who oversees the patrol division, attended Traffic Enforcement Strategies Training. Training topics included:

- Distracted Driving
- Health and Wellness
- Car Seat Basics
- Traffic Crash Reconstruction
- Speed
- Commercial Motor Vehicles
- Accident Reports
- Accountability

Automated Parking Tickets

The Birmingham Police Department, in cooperation with the Parking Department, partnered with Municipal Parking Services (MPS) to install automated parking ticket-issuing devices to address areas with frequent violations. Drivers parking in the roadway on Peabody just north of Brown has been a persistent problem.



It is illegal to stop, stand or park in the roadway, and despite the presence of a "No Parking" sign, drivers still park there, blocking traffic. Parking enforcement manpower to address this issue is overwhelmed by the high frequency of violations.

As a result, the police and parking department discussed alternatives and tested two types of automated ticketing devices. After the testing period, a contract was signed with MPS for enforcement. Two areas were selected for the first rollout of these devices. The first area, pictured above, is the aforementioned problem area on Peabody just north of Brown. The second area is on Brown, just east of Old Woodward, in the 15-minute loading and unloading zone. This is another area where frequent violations are observed, and enforcement is difficult.

The MPS device is the short silver post located in front of the light pole pictured above. Tickets issued by these devices are first reviewed by the Police Department's administration for accuracy. Once approved, they are mailed to the vehicle's registered owner.

Parking Systems Update

Advisory Parking Committee – Parking Rate Increase Discussion

The Parking Department presented a revised proposal to the Advisory Parking Committee (APC) at their March 2026 meeting. This proposal shifts from the more aggressive original proposal presented in January, toward a strategic, performance-based rollout. Under this refined plan, monthly permit increases are tied directly to the completion of major facility repairs—such as new lighting, paint and signage—to ensure users see tangible improvements before rates rise. The Chester Garage is slated as the first to see an increase, from $70.00 to $80.00 in July 2026, following its recent repairs. Other transient changes proposed for July 2026 include a new $12.00 rate for stays of seven hours or more and an increase in the lost ticket fee from $10.00 to $15.00.

Despite these adjustments, members from the Birmingham Shopping District (BSD) expressed opposition to any rate increases, citing concerns that higher costs make it more difficult for businesses to operate due to the financial burden on staff. The APC also voiced significant concern regarding the rate hikes and the use of the Automobile Parking System (APS) to support sustainability initiatives. Committee members are particularly concerned that utilizing parking funds for the Sustainability and Climate Action Special Revenue Fund might set a precedent, potentially allowing other non-parking interests to access the parking fund in the future. Consequently, the APC elected not to approve any rate increases at this time and wishes to continue the discussion in future meetings.

Proposed Evening Parking Pass Changes

The City's Parking Department presented a proposal to the APC that included significant "pro-user" enhancements to the Evening Monthly Parking Program, designed to improve affordability and accessibility for downtown employees and patrons. A key feature of the update is a shift in the program's start time from 4 p.m. to 3 p.m. to better accommodate staff whose shifts begin earlier in the afternoon. Additionally, the current flat $20.00 discount would be replaced by a robust 40% discount off regular monthly rates.

Under this new model, monthly costs for evening parkers would be reduced to $60.00 at Pierce, $54.00 at Park, Peabody, and N. Old Woodward, and $42.00 at the Chester Garage. These updates are intended to transform the program into a highly affordable tool for those who drive the downtown evening economy. The APC expressed that they were very happy with these proposed changes and recommended that staff seek formal approval from the City Commission to maximize program participation and support for the downtown community.

Parking Reports

Download the monthly parking report to view data regarding meter revenue, parking garage revenue, monthly parking permits sold, garage occupancy rates and more.

Upcoming agenda items

Future Workshop Topics

Monday, April 13, 2026 – City Commission Interviews at 5:30 p.m.
Potential upcoming workshop topics: Mayor Selection Process, City Hall improvements.

MEMORANDUM

City Manager's Office

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Melissa Fairbairn, Assistant City Manager

SUBJECT: Community Survey Updated Draft

INTRODUCTION:

The City Commission has engaged Cobalt Community Research to conduct a community survey to assess residents' perceptions of the City's services, amenities, and infrastructure. A work group of Commissioners, community members, and staff collaborated with Cobalt to draft the survey. The community survey will be distributed by mail to a statistically valid random sample of residents to gather reliable input for future decision-making.

BACKGROUND:

At its September 15, 2025 regular meeting, the City Commission approved an agreement with Cobalt Community Research to conduct a community survey. The purpose of the survey is to collect reliable data to inform future policy and budget decisions and to ensure that resident perspectives are incorporated into the City's priorities and resource allocation.

On January 26, 2026, the Commission reviewed a draft of the survey that was prepared by Cobalt Community Research with input from a City work group including two City Commissioners, two community members, and several City department heads. Members include Commissioners Andrew Haig and Bill Kolb; community members Debra Horner and Andrew McMecham; and staff members Mary Chavez, Mark Clemence, Melissa Coatta, Nick Dupuis, Melissa Fairbairn, and Marianne Gamboa.

The Commission provided comments during the January 26 meeting and via email afterward. These comments were shared with Cobalt to inform a revised draft. On February 24, 2026, the work group met with William SaintAmour of Cobalt to review the updated draft and identify areas requiring further refinement. Staff continued to work with the consultant and work group to refine language related to unimproved road funding.

The draft survey includes questions designed to measure residents' satisfaction with City services, amenities, and infrastructure. Many of these questions are structured to allow for reuse in future surveys, enabling the City to track changes in resident sentiment over time. The survey also includes questions intended to identify residents' service priorities within the City's budget, as well as their views on funding for unimproved roads.

Upon Commission approval of the survey questions, Cobalt will finalize the survey, ensuring the design, layout, grammar, and spelling are complete and polished. Cobalt will then print and mail the survey to a random sample of 2,000 Birmingham residents, with delivery expected to begin in April 2026. All residents will also be invited to participate through an online version of the survey, which will be available several weeks after the print distribution. Responses from the random sample and the open online survey will be analyzed separately.

Survey results will be presented to the City Commission in late spring 2026. The data collected will be used to support long-range capital planning, establish priorities during the budget process, identify areas of strength and areas needing improvement, and evaluate the effectiveness of City communications. The Commission may also choose to conduct future community surveys to measure changes in community sentiment over time.

LEGAL REVIEW:
This item does not require legal review.

FISCAL IMPACT:
At the September 15, 2025 regular meeting, the City Commission approved a contract with Cobalt Community Research in the amount of $21,435.00 for the community survey.

SUSTAINABILITY:
There is no sustainability impact for this item.

DESIGN CONSIDERATIONS:
Following the Commission's approval of the draft survey questions, Cobalt will finalize the survey, ensuring the design, layout, grammar, and spelling are accurate and polished.

PUBLIC COMMUNICATIONS:
The survey will be mailed to a 2,000 person random sample of Birmingham residents. Additionally, all residents will be invited to participate in an online version of the survey via e-blasts, social media posts, and the Around Town e-newsletter. The two sets of survey response data will be analyzed separately.

SUMMARY:
The Commission is requested to review the revised draft community survey prepared by Cobalt Community Research and provide direction to proceed with the distribution of the survey to the public.

ATTACHMENTS:
1. City of Birmingham Resident Study DRAFT 9
2. Feedback from Mayor Baller
3. Feedback Commissioner Haig
4. Feedback from Commissioner Host
5. Feedback from Commissioner Kolb
6. Feedback from Commissioner Kozlowski

SUGGESTED COMMISSION ACTION:

Make a motion adopting a resolution approving the draft community survey questions and authorizing the distribution of the survey to the public.

Birmingham Resident Study -- DRAFT 9

Thank you for your participation in this study. All answers will remain confidential - your name will not be shared or linked with the results without your permission.

1. Please list up to three things you like most about the City of Birmingham:

2. Briefly, what would you like the City to stop doing?

3. Briefly, what would you like the City to start doing?

Your Experiences in Birmingham in the Past Year

4. Do you generally feel safe in Birmingham?

☐ *Yes* ☐ *No* ☐ *Don't know*

5. Police, Fire, and Emergency Medical Services (EMS) are some of the core services provided by the City of Birmingham. Please briefly share suggestions or concerns you have about any of these three public safety services:

6. Please rate the ***transportation infrastructure*** in Birmingham on the following attributes:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't know*
Current quality of the City's roads	☐	☐	☐	☐	☐	☐	☐
Overall quality of the City's road maintenance	☐	☐	☐	☐	☐	☐	☐
Freedom from traffic congestion	☐	☐	☐	☐	☐	☐	☐
Safety of bicycle/scooter traffic	☐	☐	☐	☐	☐	☐	☐
Safety for pedestrians	☐	☐	☐	☐	☐	☐	☐
Sidewalk conditions	☐	☐	☐	☐	☐	☐	☐
Safety of pedestrian crossing Woodward Avenue	☐	☐	☐	☐	☐	☐	☐
Effectiveness of noise reduction measures on Woodward	☐	☐	☐	☐	☐	☐	☐

7. Do you live on one of Birmingham's improved roads (asphalt or concrete with curbs and gutters) or on an unimproved road (cape seal usually without curbs and gutters)?

☐ *Improved road* ☐ *Unimproved road* ☐ *Don't know*

8. Typically, Michigan local governments use general tax dollars to pay for the maintenance of roads. Updating roads from unimproved to improved requires an additional funding source. Past improvements in the City of Birmingham were funded by special assessments paid only by residents of the improved streets.

Future improvements could be funded similarly or through a tax (a millage or bond sale), where all residents (including those who have already paid special assessments for their own road improvements) cover the costs of all the remaining unimproved roads to be improved. Currently, about 30% of Birmingham's roads are unimproved. How would you like the City to fund future improvements to these roads?

- ☐ *Continue the special assessment approach paid by residents on unimproved roads on a street-by-street basis*
- ☐ *Ask voters to pass either a City-wide millage or the approval of a bond sale to pay for all remaining unimproved roads*
- ☐ *Leave unimproved roads as they are*
- ☐ *Don't know*

9. Please rate the adequacy of ***parking*** in Birmingham and rate it on the following attributes:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't know*
Availability of on-street metered parking	☐	☐	☐	☐	☐	☐	☐
Availability of residential street parking near my home	☐	☐	☐	☐	☐	☐	☐
Availability of parking garage parking	☐	☐	☐	☐	☐	☐	☐

10. How can transportation/parking infrastructure be improved?

11. Rate the ***utility services*** (water, garbage, etc.) that you use:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't know*
Drinking water reliability	☐	☐	☐	☐	☐	☐	☐
Waste service (trash collection, recycling, yard waste collection)	☐	☐	☐	☐	☐	☐	☐
Effectiveness of storm sewers	☐	☐	☐	☐	☐	☐	☐

12. How frequently do you use the ***parks and recreation*** facilities and programs?

☐ *Daily* ☐ *Weekly* ☐ *Monthly* ☐ *Few times per year* ☐ *Never*

13. Please rate Birmingham's ***parks and recreational*** facilities and programs on the following attributes:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't know*
Facilities that meet your needs	☐	☐	☐	☐	☐	☐	☐
Park cleanliness and grounds care	☐	☐	☐	☐	☐	☐	☐
Quality of recreational opportunities	☐	☐	☐	☐	☐	☐	☐
Variety of recreational opportunities	☐	☐	☐	☐	☐	☐	☐
Playgrounds that meet the needs of children of all ages and abilities	☐	☐	☐	☐	☐	☐	☐
Programs that meet the needs of tweens and teens	☐	☐	☐	☐	☐	☐	☐

14. Please rate the ***community events*** in Birmingham on the following:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't know*
Range and variety of offerings	☐	☐	☐	☐	☐	☐	☐
Events that appeal to me and my household	☐	☐	☐	☐	☐	☐	☐

15. Briefly share suggestions or concerns you have about events, park facilities, and recreational programs.

16. How have you contacted a City elected official in the past 12 months? **(Mark all that apply.)**

- ☐ *I have not contacted a City official in the past 12 months*
- ☐ *Attended and/or spoke at a City Commission meeting*
- ☐ *In-person conversation*
- ☐ *Telephone*
- ☐ *Email*
- ☐ *Social media*

17. Rate the ***City of Birmingham elected officials*** on the following:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't know*
Communication with the community	☐	☐	☐	☐	☐	☐	☐
Spending dollars wisely	☐	☐	☐	☐	☐	☐	☐
Being open to resident ideas and involvement	☐	☐	☐	☐	☐	☐	☐

18. How have you contacted a City employee in the past 12 months? **(Mark all that apply.)**

- ☐ *I have not contacted a City employee in the past 12 months*
- ☐ *In-person conversation*
- ☐ *Telephone*
- ☐ *Email*
- ☐ *Social media*
- ☐ *GovAlert (phone app)*
- ☐ *Website form*

19. Consider all of your interactions with the City of Birmingham's ***employees*** in the last 12 months and rate each item below.

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't know*
Appreciation of resident questions and concerns	☐	☐	☐	☐	☐	☐	☐
Employees are well-trained	☐	☐	☐	☐	☐	☐	☐
Communication with the community	☐	☐	☐	☐	☐	☐	☐
Level of professionalism	☐	☐	☐	☐	☐	☐	☐
Effectiveness in meeting your needs	☐	☐	☐	☐	☐	☐	☐
Responsiveness/follow up	☐	☐	☐	☐	☐	☐	☐
Quality of digital services	☐	☐	☐	☐	☐	☐	☐
Overall customer service	☐	☐	☐	☐	☐	☐	☐

20. Briefly share suggestions or concerns you have about City of Birmingham employees and elected officials.

21. Consider all of your interactions with the City of Birmingham's ***processes/services*** in the last 12 months and rate the ease of using each item below.

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't know*
Building permitting process	☐	☐	☐	☐	☐	☐	☐
Billing and payment processes	☐	☐	☐	☐	☐	☐	☐
City website	☐	☐	☐	☐	☐	☐	☐
Election administration	☐	☐	☐	☐	☐	☐	☐
Code enforcement	☐	☐	☐	☐	☐	☐	☐
Accessibility of City services for those with impairments	☐	☐	☐	☐	☐	☐	☐

22. Do you see yourself remaining in Birmingham for the foreseeable future?

- ☐ *No*
- ☐ *Yes*
- ☐ *Don't know*

23. Consider your overall experiences in the last year with the City of Birmingham. Rate your satisfaction using a 6-point scale, where 1 means ***"Very Dissatisfied"*** and 6 means ***"Very Satisfied."***

Very dissatisfied= 1	*2*	*3*	*4*	*5*	*Very satisfied= 6*	*Don't know*
☐	☐	☐	☐	☐	☐	☐

24. Based on all your answers overall, which single improvement would have the biggest benefit to you?

Planning and Future Considerations

Like any household or business, the City must operate within its budget. The questions below will help us understand your priorities for funding and development. For your reference, the image below shows how each of the tax dollars you pay is allocated.

WHERE DO YOUR TAX DOLLARS GO?



$.31 City of Birmingham

$.30 Birmingham Public Schools

$.25 Oakland County

$.14 State of Michigan

25. As you consider the City's focus in the coming year, which five services/programs other than core services (public safety, street repair, etc.) are the biggest priorities for the people living in your household? **(Mark up to 5.)**

- ☐ *Attracting and supporting local businesses*
- ☐ *Bicycle lanes and paths*
- ☐ *Birmingham Museum*
- ☐ *Building inspection/permitting*
- ☐ *Community activities*
- ☐ *City communications with residents*
- ☐ *City park improvements (playgrounds, trails, restrooms, etc.)*
- ☐ *Modernizing municipal facilities*
- ☐ *Natural resource and sustainability initiatives*
- ☐ *Recreation programs and classes for adults*
- ☐ *Recreation programs and classes for children 12 and younger*
- ☐ *Recreation programs and classes for teens*
- ☐ *Response to code complaints*
- ☐ *Senior activities, social events, etc.*
- ☐ *Sidewalk improvements*
- ☐ *Street lighting improvements*
- ☐ *Tree maintenance/replacement*
- ☐ *Yard waste collection*

26. If you want to improve the areas you selected above, how much are you willing to pay?

- ☐ *None, I do not want to pay more*
- ☐ *Up to $50 per month*
- ☐ *$50-$100 per month*
- ☐ *More than $100 per month*

Communication Preference

27. How do you prefer to receive information from the City (events, programs, updates, etc.)? (*Mark all that apply.*)

- ☐ *Newspaper*
- ☐ *Email*
- ☐ *City website*
- ☐ *The Around Town e-newsletter*
- ☐ *Birmingham Beat print newsletter*
- ☐ *Utility bill insert*
- ☐ *City social media @bhamgov (Facebook and Instagram)*
- ☐ *City YouTube channel*
- ☐ *City Vimeo channel*
- ☐ *U.S. mail*
- ☐ *Text message*
- ☐ *Public Cable Channel*

The following questions are for analysis only and will not be used in any way to identify you

How long have you been living in this community?	☐ *1-5 years*	☐ *6-10 years*	☐ *10 years+*	
In what type of property do you reside?	☐ *Single family*	☐ *Multifamily with 4 units or fewer*	☐ *Multifamily with more than 4 units*	
Is your place of employment located in Birmingham?	☐ *Yes*	☐ *I am a remote worker*	☐ *No, a different community*	☐ *Not currently employed* ☐ *I am retired*
What is your age group?	☐ *18 to 24*	☐ *35 to 44*	☐ *55 to 64*	
	☐ *25 to 34*	☐ *45 to 54*	☐ *65+*	
Mark the boxes that describe the people living in your house (other than yourself and/or a spouse). (Mark all that apply.)	☐ *Child(ren) age 12 or under*	☐ *Child(ren) over age 12*	☐ *Parent age 65 or older*	☐ *None of these*
What is your gender?	☐ *Female*	☐ *Male*	☐ *Other*	☐ *Prefer not to say*
In which City quadrant do you live?	☐ *North of Maple, West of Woodward*	☐ *South of Maple, West of Woodward*	☐ *North of Maple, East of Woodward*	☐ *South of Maple, East of Woodward*

Thank you for your time. Please return this assessment in the postage-paid envelope provided.

BIRMINGHAM
A WALKABLE CITY

Melissa Fairbairn <mfairbairn@bhamgov.org>

Fwd: Review of City Draft Survey thoughts

Clinton Baller <clinton@baller4bham.com> Mon, Feb 16, 2026 at 1:03 PM
To: Melissa Fairbairn <mfairbairn@bhamgov.org>

Hope you are OK with copy/paste into this email:

Melissa,

Here are my comments on the survey.

In the first section, my notes were made as I took the survey. I was not thinking about how I would write a survey or whether the questions are appropriate or what other questions might be asked.

So here goes…

I hate the title. Please can we come up with something more creative and inviting?

Re: confidentiality. It says my name won't be shared or linked with results, but survey never asks my name.

Question 3. Comes AFTER question 4. Out of order.

Why does the police question ask me to "rate," but this question asks me to "think about?"

4. I think people really care about speeding and Woodward road noise. You could pull those two things out of the traffic enforcement question. Do police enforce speed laws adequately? Are we doing enough to cut down Woodward noise?

Also, you ask me to rate my confidence in fire operations, not their actual performance. Whereas with police you ask to rate the police, not my confidence. Is there a reason for this difference?

Question 6. Had to think about how to answer about traffic congestion; what is excellent congestion?

Question 7: The whole thing about parking is a little confusing. What are we trying to determine? Whether I think there is enough of each? Or whether I like using the meters? Do I like that permit parking in neighborhoods exists? Or do I think we have enough or not enough parking in residential areas? Same for garages. And I really don't get the Parking Use by business employees part. What are you asking? If I'm an employee, is it good for me? I'm not an employee. Or as a resident, am I happy that on Sundays downtown employees take up all the street spots. Question is unclear and needs work.

14: Consider in question saying what you are referring to: 22 parks (or however many), rouge trail, playgrounds, ice arena, two golf courses, dog park, tennis bubble, tennis courts, pickleball courts, wednesday concerts in the park, etc. Also that it does NOT include schools, YMCA, art center, or any non-city-owned/operated stuff. What about library? NOTHING in survey about library.

15: did you intend to limit only to "facilities," or are programs included?

28. As taker of survey, this seems to me to be asking What Do I Want City to Spend More On? That's the only way I can understand why it says: "As you consider the city's existing budget," because really, what does that mean? I mean, people have no idea what our budget is, or how it is all allocated. They only know (or think) we should spend more on this or that. Bright idea: Why don't we ask them what we should CUT BACK on? Hmmm. Bottom line: The question needs to be clarified.

30. You ask "Develop unimproved roads…" Do you mean "Improve unimproved roads…? "

The Increase residential space question absolutely must specify WHERE? We allow 9 stories in triangle district already.

The Develop a new police station gives no background. PPL are not going to be able to make that call.

The PPP question absolutely must be worded differently. By saying "on public land" you are making it sound like we are

going to put commercial buildings on parks. I recommend: "…Engage in public/private partnerships that include significant public benefit."

Consider asking if person lives in a residential area, downtown, triangle or rail district, and whether in single-, multi-family home.

Analytics: Please don't tell people to look at a map elsewhere to determine voting precinct.

So now, some more comments in general:

As a commissioner, I supported doing this survey because I thought it would help answer some questions about whether the commission's priorities right now align with the community's. And that it may uncover priorities that are not on our radar right now.

I kind of define priorities as:
• What we are spending $$ on.
• Whether we are spending the right amount, too much or too little.
• Whether folks are willing to spend more to pay for things they want.

As far as what we are spending $$ on, the broad categories are

1. Infrastructure
 — Streets
 — Water/Sewer
2. Next and redoing the Y or replacing it
3. Saving the Community House
4. Exploring PPPs
5. Updating City Hall
5. Possibly looking at a new police station
6. All while maintaining AAA bond rating and keeping taxes level.

I could be missing some things here, but essentially what I would like to know is: Do taxpayers agree with these priorities? Are they willing to spend more to get more? And where might they be willing to see cuts?

I am ESPECIALLY interested in knowing whether a roads millage has any support.

A lot of the other stuff feels like mission creep. And if that's what is intended, and everybody is ok with it, or the survey team can justify it, OK.

On police and fire, for an example of what I'm thinking: We do a great job, and I think anyone who has had contact with police and fire is going to agree. People who haven't had contact may be oblivious. Asking these questions isn't going to help the commission set priorities. And the questions don't even seem to ask how respondents prioritized police and fire. They just ask about satisfaction. Bottom line: We are going to spend what we spend on police/fire, and this survey isn't going to change that. Or at least the questions we ask aren't going to change it.

Another thing: At one point it says something like: Thinking about the city's current budget… Do we really think people have any idea what our budget is, and how it is all allocated?

Consider telling them we tell them we have a $1XX million budget, and x% goes to police, y% to fire, z to road maintenance, etc., etc., etc. Break it down till you are at less than 5% for each piece of the pie. Even use a pie chart.

Then ask questions about the various pieces of the pie, letting them know that we don't have much choice about things like pensions and retiree health benefits.

On transportation: We know our roads are a mess. Why do we ask about congestion? Are we planning to do anything to people who say there's too much traffic?

And as I've said, for some of these issues, they need to be educated. Roads are simple. They drive on them every day, and they don't need to be educated. There isn't much to say about water and sewers either, other than that they are old, getting older, and frequently fail.

But some of the other areas beg for a sentence or two explaining the last time city hall was renovated, or how incredibly squeezed and spread out the police department is, or how our fire department has a 3-4 minute response time, or where the value might be in a PPP.

[Quoted text hidden]

2026 City of Birmingham Engagement and Priority Assessment -- DRAFT 4

Thank you for your participation in this Resident Engagement and Priority Assessment. All answers will remain confidential - your name will not be shared or linked with the results without your permission.

1. Please list up to three things you like most about the City of Birmingham?

1

2. Please list up to three things that you would like the City to improve in the next few years?

Your Experiences in Birmingham in the Past Year

4. Please rate the ***City of Birmingham's Police Department*** on the following attributes using a scale from 1 to 6, where 1 means ***"Poor"*** and 6 means ***"Excellent."*** If you are not sure or have no opinion, please mark ***"Don't Know."***

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Respectful treatment of community members	☐	☐	☐	☐	☐	☐	☐
Traffic enforcement (speed, red lights, etc.)	☐	☐	☐	☐	☐	☐	☐
Community presence and visibility	☐	☐	☐	☐	☐	☐	☐
Response time to emergencies	☐	☐	☐	☐	☐	☐	☐
Your confidence about the Police Department's skills and abilities	☐	☐	☐	☐	☐	☐	☐

2

3. Please think about ***Birmingham's fire and emergency medical services*** on the following attributes:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Fire coverage for the community	☐	☐	☐	☐	☐	☐	☐
Fire prevention education	☐	☐	☐	☐	☐	☐	☐
Your confidence about response time to fires/medical emergencies	☐	☐	☐	☐	☐	☐	☐
Your confidence about the Fi… Department's skills and abilities	☐	☐	☐	☐	☐	☐	☐

3

5. The City of Birmingham's public safety staff are focused on continuing to strengthen the services provided to the City. Please share suggestions or concerns you have about public safety services:

4

Summary of Comments on (2025077) City of Birmingham Resident Study - Questionnaire

Page: 1

Number: 1 Author: Haig Subject: Sticky Note Date: 1/28/2026 10:15:44 AM -05'00'

Do we want to look at this by using several questions like the review process of:
- Stop
- Start
- Change

and have these questions in addition? Negative but constructive feedback is sometimes more enlightening than praise.

Number: 2 Author: Haig Subject: Sticky Note Date: 1/28/2026 10:20:08 AM -05'00'

If Police has a capital letter, why do Fire & EMS not?

Number: 3 Author: Haig Subject: Sticky Note Date: 1/28/2026 9:46:32 AM -05'00'

Fire & EMS

Number: 4 Author: Haig Subject: Sticky Note Date: 1/28/2026 9:46:07 AM -05'00'

Any way to ask for differentiation between Woodward specific and the rest of the City?

6. Please rate the ***transportation infrastructure*** in Birmingham and rate it on the following attributes:

	Poor= 1	2	3	4	5	Excellent= 6	Don't Know
Street maintenance/repair [1]	☐	☐	☐	☐	☐	☐	☐
Traffic congestion on the roads	☐	☐	☐	☐	☐	☐	☐
Accommodation for bicycle traffic	☐	☐	☐	☐	☐	☐	☐
Safety of bicycle/scooter traffic	☐	☐	☐	☐	☐	☐	☐
Safety for pedestrians	☐	☐	☐	☐	☐	☐	☐
Sidewalk conditions	☐	☐	☐	☐	☐	☐	☐

7. Please rate the ***parking infrastructure*** in Birmingham and rate it on the following attributes:

	Poor= 1	2	3	4	5	Excellent= 6	Don't Know
On-street metered parking [2]	☐	☐	☐	☐	☐	☐	☐
Residential street parking	☐	☐	☐	☐	☐	☐	☐
Parking garages	☐	☐	☐	☐	☐	☐	☐
Parking use by business employees [3]	☐	☐	☐	☐	☐	☐	☐

8. How can transportation/parking infrastructure be improved?

9. Next, rate the ***utility services*** (water, garbage, etc.) that you use:

	Poor= 1	2	3	4	5	Excellent= 6	Don't Know
Drinking water reliability/pressure	☐	☐	☐	☐	☐	☐	☐
Residential garbage collection service	☐	☐	☐	☐	☐	☐	☐
Recycling service	☐	☐	☐	☐	☐	☐	☐
Yard waste collection	☐	☐	☐	☐	☐	☐	☐
Effectiveness of storm sewers	☐	☐	☐	☐	☐	☐	☐

10. Briefly share suggestions or concerns you have about the utility services: [4]

11. Rate the ***community events*** in Birmingham on the following:

	Poor= 1	2	3	4	5	Excellent= 6	Don't Know
Range and variety of offerings	☐	☐	☐	☐	☐	☐	☐
Arts and cultural events	☐	☐	☐	☐	☐	☐	☐
Events that appeal to me and my household	☐	☐	☐	☐	☐	☐	☐

12. Which types of events/activities would you like to see more of in the City of Birmingham?

13. How frequently do you use the ***parks and recreation*** facilities and programs?

☐ *Never* ☐ *Fewer than 6 times a year* ☐ *6-12 times a year* ☐ *More than 12 times a year* ☐ *Almost daily*

Page: 2

Number: 1 Author: Haig Subject: Sticky Note Date: 1/28/2026 9:45:55 AM -05'00'
Local streets (Not Woodward)

Number: 2 Author: Haig Subject: Sticky Note Date: 1/28/2026 10:12:45 AM -05'00'
Maybe break this into neighborhoods and adjacent to Downtown? But this might be too granular

Number: 3 Author: Haig Subject: Sticky Note Date: 1/28/2026 9:45:45 AM -05'00'
This was discussed, but I like it to remain open as there are concerns from residents about street parking use & no enforcement of parking restrictions etc.

Number: 4 Author: Haig Subject: Sticky Note Date: 1/28/2026 9:48:38 AM -05'00'
Can we limit it to exclude DTE & Consumers comments? Or are they of value for feedback at the Municipal level to these providers - who have a record of less than stellar Public Relations.

14. Please rate Birmingham's ***parks and recreation*** facilities and programs on the following attributes:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Facilities that meet your needs	☐	☐	☐	☐	☐	☐	☐
Park cleanliness and grounds care	☐	☐	☐	☐	☐	☐	☐
Quality of recreational opportunities	☐	☐	☐	☐	☐	☐	☐
Variety of recreational opportunities	☐	☐	☐	☐	☐	☐	☐
Park restrooms	☐	☐	☐	☐	☐	☐	☐
Playgrounds for children of all ages and abilities	☐	☐	☐	☐	☐	☐	☐

15. Briefly share suggestions or concerns you have about parks and recreational facilities.

16. Rate Birmingham's ***natural resources, environmental, and sustainability initiatives***:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Use of native plants	☐	☐	☐	☐	☐	☐	☐
Management of public trees	☐	☐	☐	☐	☐	☐	☐
Installation of green stormwater infrastructure	☐	☐	☐	☐	☐	☐	☐
Stewardship of Rouge River and Quarton Lake	☐	☐	☐	☐	☐	☐	☐
Preservation of public open space	☐	☐	☐	☐	☐	☐	☐
Greenhouse gas reduction	☐	☐	☐	☐	☐	☐	☐
Educational opportunities about our natural resources, environmental and sustainability initiatives	☐	☐	☐	☐	☐	☐	☐

17. Briefly share suggestions or concerns you have about natural resources in the City and sustainability:

18. How have you contacted a City elected official in the past 12 months? **(Mark all that apply.)**

☐ *I have not contacted a City official in the past 12 months*
☐ *In-person conversation*
☐ *Telephone*
☐ *Email*
☐ *Social media*

19. Rate the ***City of Birmingham elected officials*** on the following:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Trustworthiness of elected leaders	☐	☐	☐	☐	☐	☐	☐
Communication with the community	☐	☐	☐	☐	☐	☐	☐
Spending dollars wisely	☐	☐	☐	☐	☐	☐	☐
Being open to resident ideas and involvement	☐	☐	☐	☐	☐	☐	☐

20. How have you contacted a City employee in the past 12 months? **(Mark all that apply.)**

☐ *I have not contacted a City employee in the past 12 months*
☐ *In-person conversation*
☐ *Telephone*
☐ *Email*
☐ *Social media*
☐ *GovAlert (phone app)*
☐ *Website form*

Page: 3

Number: 1 Author: Haig Subject: Sticky Note Date: 1/28/2026 9:50:02 AM -05'00'

Does it have to just be playgrounds? Tweens and Teens do not generally use playgrounds, but need recreational facilities, it might need a different naming here?

21. Consider all of your interactions with the City of Birmingham's ***employees and staff*** in the last 12 months and rate each item below.

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Appreciation of resident questions and concerns	☐	☐	☐	☐	☐	☐	☐
Employees are well-trained	☐	☐	☐	☐	☐	☐	☐
Communication with the community	☐	☐	☐	☐	☐	☐	☐
Level of professionalism	☐	☐	☐	☐	☐	☐	☐
Effectiveness in meeting your needs	☐	☐	☐	☐	☐	☐	☐
Overall customer service [1]	☐	☐	☐	☐	☐	☐	☐

22. Briefly share suggestions or concerns you have about City leadership or staff.

23. Consider all of your interactions with the City of Birmingham's ***processes/services*** in the last 12 months and rate each item below.

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Building permitting process	☐	☐	☐	☐	☐	☐	☐
Billing and payment processes	☐	☐	☐	☐	☐	☐	☐
City website	☐	☐	☐	☐	☐	☐	☐
Election administration	☐	☐	☐	☐	☐	☐	☐
Code enforcement	☐	☐	☐	☐	☐	☐	☐

24. Consider your overall experiences in the last year with the City of Birmingham. Rate your satisfaction using a 6-point scale, where 1 means ***"Very Dissatisfied"*** and 6 means ***"Very Satisfied."***

Very Dissatisfied= 1	*2*	*3*	*4*	*5*	*Very Satisfied= 6*
☐	☐	☐	☐	☐	☐

25. On a scale where 1 means ***"Not Likely"*** and 6 means ***"Very Likely,"*** how likely are you to take the following actions?

	Not Likely= 1	*2*	*3*	*4*	*5*	*Very Likely=6*	*Don't Know*
Recommend the community as a place to live	☐	☐	☐	☐	☐	☐	☐
Remain living here ***five*** years from now [2]	☐	☐	☐	☐	☐	☐	☐
Be a community volunteer	☐	☐	☐	☐	☐	☐	☐

26. Overall, what improvements would have the biggest impact on you and your family based on your experience in recent years?

27. Overall, what are good things you would like to recognize and encourage based on your experience in recent years?

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Number: 1 Author: Haig Subject: Sticky Note Date: 1/28/2026 9:52:23 AM -05'00'
Maybe responsiveness as well? This has been an observation we received.

Number: 2 Author: Haig Subject: Sticky Note Date: 1/28/2026 10:18:33 AM -05'00'
Additional question(s) that might replace or supplement #25:
Do you see yourself remaining in Birmimgham for the foreseeable future?
- Yes / No checkboxes
- Freeform box for quantification details.

Some residents view Birmingham as a transitional home.

Planning and Future Budget Considerations

28. As you consider the City's existing budget, which *six services/programs* below are the biggest priorities for the people living in your household? (Mark up to 6.)

- ☐ *Bicycle lanes and paths*
- ☐ *Building inspection/permitting*
- ☐ *Community activities*
- ☐ *City communications with residents*
- ☐ *City park improvements (playgrounds, trails, restrooms, etc.)*
- ☐ *Curbside recycling*
- ☐ *Attracting and supporting local businesses*
- ☐ *Fire/ambulance service*
- ☐ *Garbage collection*
- ☐ *Yard waste collection*
- ☐ *Natural resource and sustainability initiatives*
- ☐ *Police services*
- ☐ *Recreation programs and classes*
- ☐ *Responsiveness to code complaints*
- ☐ *Senior activities, social events, etc.* 1
- ☐ *Sidewalk improvements*
- ☐ *Stormwater management*
- ☐ *Street lighting improvements*
- ☐ *Street maintenance improvements*
- ☐ *Tree maintenance/ replacement*

29. If you want to improve the areas you selected above, how should the City pay for the improvements? (Mark up to 2.)

- ☐ *City should fund by shifting dollars in existing budget*
- ☐ *I'm willing to provide additional dollars to see the improvements* 2

30. The City hears a diverse range of ideas and suggestions from residents. Your insights to guide planning efforts is helpful. Please review the statements below and rate your level of agreement where 1 is ***"Strongly Disagree"*** and 6 is ***"Strongly Agree."***

	Strongly Disagree= 1	*2*	*3*	*4*	*5*	*Strongly Agree= 6*	*Don't Know*
Redevelop 400 E. Lincoln to provide a senior center	☐	☐	☐	☐	☐	☐	☐
Redevelop 400 E. Lincoln to provide a community center	☐	☐	☐	☐	☐	☐	☐
Accelerate funding for improved and unimproved roads by creating a separate, dedicated portion of property taxes (millage)	☐	☐	☐	☐	☐	☐	☐
Develop unimproved (such as cape seal) roads through City-wide, dedicated portion of property taxes (millage)	☐	☐	☐	☐	☐	☐	☐
Update/renovate City Hall to improve efficiency and address functional and environmental concerns	☐	☐	☐	☐	☐	☐	☐
Increase residential space by allowing buildings taller than five stories	☐	☐	☐	☐	☐	☐	☐
Improve the walkability and safety of crossing Woodward Avenue	☐	☐	☐	☐	☐	☐	☐
Develop a new police station 3	☐	☐	☐	☐	☐	☐	☐
Engage in public/private partnerships on public land 4	☐	☐	☐	☐	☐	☐	☐

31. If you disagree with one or more of the proposals above, briefly tell us more about your opinions to help us better understand your perspective.

Page: 5

Number: 1 Author: Haig Subject: Sticky Note Date: 1/28/2026 10:03:22 AM -05'00'
Maybe ask about development of Teen and younger activities too, it is not really fully covered by Community activities.

Number: 2 Author: Haig Subject: Sticky Note Date: 1/28/2026 9:59:25 AM -05'00'
Do we want a question about understanding the breakdown of where taxes go - City, Schools, State so that we can learn more about peoples perception of where their money goes? Maybe with a short quantifier of the distribution (the dollar graphic from Finance Director?)

Number: 3 Author: Haig Subject: Sticky Note Date: 1/28/2026 9:54:46 AM -05'00'
We discussed adding more quantifiers why this is needed - like the ones for City Hall.

Number: 4 Author: Haig Subject: Sticky Note Date: 1/28/2026 9:55:34 AM -05'00'
Do we need to explain a little what this is, as i is getting into more subject matter knowledge than most residents will have.

Communication Preference

32. How do you prefer to receive information from the City (events, programs, updates, etc.)? (*Mark all that apply.*)

- ☐ *Newspaper*
- ☐ *Email*
- ☐ *City website*
- ☐ *The Around Town e-newsletter*
- ☐ *Birmingham Beat print newsletter*
- ☐ *Utility bill insert*
- ☐ *City social media @bhamgov (Facebook and Instagram)*
- ☐ *City YouTube channel*
- ☐ *City Vimeo channel*
- ☐ *U.S. mail*
- ☐ *Text message*
- ☐ *Public Cable Channel*

33. Which social media do you use? (*Mark all that apply.*)

- ☐ *Facebook*
- ☐ *Instagram*
- ☐ *LinkedIn*
- ☐ *Pinterest*
- ☐ *Snapchat*
- ☐ *Reddit*
- ☐ *TikTok*
- ☐ *X (Twitter)*
- ☐ *YouTube*
- ☐ *Vimeo*
- ☐ *Other*
- ☐ *None*

The following questions are for analysis only and will not be used in any way to identify you

How long have you been living in this community?
☐ *1-5 years* ☐ *6-10 years* ☐ *10 years+*

Do you own or rent/lease your residence?
☐ *Own* ☐ *Rent/Lease*

Is your place of employment located in Birmingham?
☐ *Yes* ☐ *I am a remote worker* ☐ *No, a different community* ☐ *Not currently employed* ☐ *I am retired*

What is your age group?
☐ *18 to 24* ☐ *25 to 34* ☐ *35 to 44* ☐ *45 to 54* ☐ *55 to 64* ☐ *65+*

Mark the boxes that describe the people living in your house (other than yourself and/or a spouse). (Mark all that apply.)
☐ *Child(ren) age 12 or under* ☐ *Child(ren) over age 12* ☐ *Parent age 65 or older* ☐ *None of these*

What is your gender?
☐ *Female* ☐ *Male* ☐ *Other* ☐ *Prefer not to answer*

To which racial or ethnic group(s) do you belong? (Mark all that apply.)
☐ *Asian* ☐ *Black/African American* ☐ *Indigenous American* ☐ *Prefer not to answer*
☐ *White/Caucasian* ☐ *Hispanic/Latinx* ☐ *Other*

Which languages are commonly used in your home?
☐ *English* ☐ *Spanish* ☐ *Other*

In which City precinct do you live? A map is available for your reference at bhamgov.org/precincts
☐ *1* ☐ *3* ☐ *5*
☐ *2* ☐ *4* ☐ *Don't know*

Do you currently serve on any City boards or committees?
☐ *Yes* ☐ *No*

Thank you for your time. Please return this assessment in the postage-paid envelope provided.

BIRMINGHAM
A WALKABLE CITY

Melissa Fairbairn <mfairbairn@bhamgov.org>

Draft Community Survey Review

Brad Host <bhost@bhamgov.org> Wed, Feb 4, 2026 at 10:07 AM
To: Melissa Fairbairn <mfairbairn@bhamgov.org>

Dear Melissa,
Upon review, I applaud Commissioner Haig for incepting this survey and DEFER to our consultants for their expertise.
Best safe wishes,
Brad

On Tue, Jan 27, 2026 at 4:56 PM Melissa Fairbairn <mfairbairn@bhamgov.org> wrote:
[Quoted text hidden]

BIRMINGHAM
A WALKABLE CITY

Melissa Fairbairn <mfairbairn@bhamgov.org>

Draft Community Survey Review

Bill Kolb <bkolb@bhamgov.org> Wed, Feb 4, 2026 at 11:46 AM
To: Melissa Fairbairn <mfairbairn@bhamgov.org>

February 4, 2026

Assistant City Manager
City of Birmingham
151 Martin Street

Dear Mellissa:

Thank you for the opportunity to review Draft 4 of the 2026 City of Birmingham Resident Engagement and Priority Assessment. As a new commissioner, I am impressed by the comprehensive scope of this survey and the City's commitment to gathering systematic input from our residents. This kind of data-driven approach to strategic planning is essential for effective governance.

I have carefully reviewed the current draft and conducted some research on best practices from similarly-sized municipalities across the country. While the survey demonstrates many strengths, I believe a few refinements would enhance the clarity, specificity, and actionability of the results. These improvements will better position the City Commission and administration to make data-informed decisions that truly reflect resident priorities.

Key Strengths of the Current Survey
The current draft effectively covers core municipal services and demonstrates thoughtful design in several areas:
● Comprehensive coverage of public safety, infrastructure, utilities, parks, and environmental initiatives
● Appropriate use of 6-point rating scales with Don't Know options to avoid forced responses
● Good balance of quantitative ratings and qualitative open-ended questions
● Forward-looking questions that connect to budgeting and strategic planning

Recommended Improvements
Based on my review and comparative research, I recommend the following improvements to enhance the survey's effectiveness. I have attached a detailed analysis document that provides comprehensive rationale and specific language suggestions for each recommendation.
1. Survey Length and Completion Rates
The current 33-question format may impact completion rates, particularly given our residents busy schedules. Research from the National Research Center and ICMA indicates that surveys exceeding 20-25 minutes see significantly lower completion. I recommend consolidating to 25-28 questions through strategic combinations, such as merging Questions 1-2 into a single prompt about preservation priorities and desired improvements.

2. Priority-Setting Methodology

Question 28 and 39's approach of asking residents to select 6 priorities from 20 options tends to produce scattered results that are difficult to act upon. Best practices from comparable communities suggest reducing the list to 15 well-defined categories and asking for Top 5 priorities. This approach tends to yield clearer direction for resource allocation. Additionally, Question 29's funding question would benefit from more specific options that reflect realistic budget mechanisms, such as dedicated millages, user fees, or public-private partnerships.

3. Increased Specificity for Actionable Results
Several questions could be refined to generate more actionable insights. For example, transportation questions should address specific pain points like major intersection safety and neighborhood connectivity. Environmental questions should clarify whether residents want

more, less, or different types of public open space. The business district and downtown vitality are notably absent from the survey despite their importance to our community's character and economic health.

4. Missing Topic Areas
Comparative research reveals several important topics that should be included:
● Business district vitality: Quality of retail, dining options, evening activity, and support for local businesses. Some of this data can be pulled from the BSD research conducted and we should see if our agency can incorporate that data into the final analysis for the Commissions review. It is very helpful data and could also identify inconsistency between residents and business which could prove helpful!!
● Housing diversity: Given Birmingham's high housing costs, resident perspectives on housing variety and affordability are important for long-term planning
● Diversity, equity, and inclusion: Questions about Birmingham as a welcoming community and accessibility of city services
● Technology and transparency: Quality of digital services and city government transparency

5. Enhanced Context for Planning Questions
Question 30&39's policy proposals would benefit from brief context boxes explaining the current situation and what each proposal would accomplish. For example, the building height question could specify "Allow buildings up to 7-8 stories in designated areas" rather than the vague "than five stories". Think about this in the context of 479 building and residents not understanding floor heights have changed.

I also question 4 could be valuable to get a ranking of a residents priority of the items in addition to"quality" questions.

This kind of specificity helps residents provide more informed input.

Implementation Approach
I recognize that implementing all recommendations may not be feasible for this survey cycle.

I propose prioritizing the following critical improvements for Draft 5:

● Reduce survey length to 25-28 questions
● Revise priority-setting questions for clearer, more actionable results
● Add business district vitality and housing diversity questions - again, using the BSD survey could fulfil this but need to make sure our agency will use the data and do the comparative analysis required.
● Include context boxes for Question 30 policy proposals

Additional refinements around question specificity and demographic data could be implemented as capacity allows or incorporated into future survey cycles.

Looking Ahead
Beyond the survey instrument itself, I encourage us to think strategically about:

● Survey administration: Supplementing mail surveys with online options and targeted outreach to ensure we hear from diverse voices, including renters, younger residents, and underrepresented communities
● Results communication: Committing to transparent reporting and a clear action plan within 90 days of survey completion which should be included with the survey itself so we set resident expectations.
● Benchmarking: we should ask our agency to get national benchmarks for all data collected as part of their reporting.
● Regular cycles: Establishing a biennial survey schedule to track trends and measure progress over time and commit this to the residents.

Our residents have high expectations for government professionalism and responsiveness. A well-designed survey that produces actionable insights, followed by transparent communication and demonstrable action, will strengthen trust in city government and provide a solid foundation for strategic decision-making.

I am completing a detailed analysis document that provides comprehensive recommendations with specific language suggestions, comparative data from similar municipalities, and best practices for survey administration and results communication. I would welcome the opportunity to discuss these recommendations with you and the survey development team when convenient and appropriate.

Thank you for your leadership on this important initiative. I look forward to working together to ensure this survey provides the high-quality data our community deserves.

Respectfully,
Bill Kolb
Commissioner
City of Birmingham
[Quoted text hidden]

2026 City of Birmingham Engagement and Priority Assessment -- DRAFT 4

Thank you for your participation in this Resident Engagement and Priority Assessment. All answers will remain confidential - your name will not be shared or linked with the results without your permission.

1. Please list up to three things you like most about the City of Birmingham?

2. Please list up to three things that you would like the City to improve in the next few years?

Your Experiences in Birmingham in the Past Year

4. Please rate the ***City of Birmingham's Police Department*** on the following attributes using a scale from 1 to 6, where 1 means ***"Poor"*** and 6 means ***"Excellent."*** If you are not sure or have no opinion, please mark ***"Don't Know."***

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Respectful treatment of community members	☐	☐	☐	☐	☐	☐	☐
Traffic enforcement (speed, red lights, etc.)	☐	☐	☐	☐	☐	☐	☐
Community presence and visibility	☐	☐	☐	☐	☐	☐	☐
Response time to emergencies	☐	☐	☐	☐	☐	☐	☐
Your confidence about the Police Department's skills and abilities	☐	☐	☐	☐	☐	☐	☐

3. Please think about ***Birmingham's fire and emergency medical services*** on the following attributes:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Fire coverage for the community	☐	☐	☐	☐	☐	☐	☐
Fire prevention education	☐	☐	☐	☐	☐	☐	☐
Your confidence about response time to fires/medical emergencies	☐	☐	☐	☐	☐	☐	☐
Your confidence about the Fire Department's skills and abilities	☐	☐	☐	☐	☐	☐	☐

5. The City of Birmingham's public safety staff are focused on continuing to strengthen the services provided to the City. Please share suggestions or concerns you have about public safety services:

6. Please rate the ***transportation infrastructure*** in Birmingham and rate it on the following attributes:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Street maintenance/repair	☐	☐	☐	☐	☐	☐	☐
Traffic congestion on the roads	☐	☐	☐	☐	☐	☐	☐
Accommodation for bicycle traffic	☐	☐	☐	☐	☐	☐	☐
Safety of bicycle/scooter traffic	☐	☐	☐	☐	☐	☐	☐
Safety for pedestrians	☐	☐	☐	☐	☐	☐	☐
Sidewalk conditions	☐	☐	☐	☐	☐	☐	☐

7. Please rate the ***parking infrastructure*** in Birmingham and rate it on the following attributes:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
On-street metered parking	☐	☐	☐	☐	☐	☐	☐
Residential street parking	☐	☐	☐	☐	☐	☐	☐
Parking garages	☐	☐	☐	☐	☐	☐	☐
Parking use by business employees	☐	☐	☐	☐	☐	☐	☐

8. How can transportation/parking infrastructure be improved?

9. Next, rate the ***utility services*** (water, garbage, etc.) that you use:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Drinking water reliability/pressure	☐	☐	☐	☐	☐	☐	☐
Residential garbage collection service	☐	☐	☐	☐	☐	☐	☐
Recycling service	☐	☐	☐	☐	☐	☐	☐
Yard waste collection	☐	☐	☐	☐	☐	☐	☐
Effectiveness of storm sewers	☐	☐	☐	☐	☐	☐	☐

10. Briefly share suggestions or concerns you have about the utility services:

11. Rate the ***community events*** in Birmingham on the following:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Range and variety of offerings	☐	☐	☐	☐	☐	☐	☐
Arts and cultural events	☐	☐	☐	☐	☐	☐	☐
Events that appeal to me and my household	☐	☐	☐	☐	☐	☐	☐

12. Which types of events/activities would you like to see more of in the City of Birmingham?

13. How frequently do you use the ***parks and recreation*** facilities and programs?

☐ *Never* ☐ *6-12 times a year* ☐ *More than 12 times a year* ☐ *Almost daily*
☐ *Fewer than 6 times a year*

Summary of Comments on (2025077) City of Birmingham Resident Study - Questionnaire

Page: 2

Number: 1 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:33:18 AM -05'00'
Not really sure how to act on a low score here beyond gathering more traffic data, which we should probably look into doing anyway.

Number: 2 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:30:11 AM -05'00'
We do almost no accommodation for bicycle traffic. Is a low score here accommodation is good and we are failing or accommodation is bad and we should avoid it?

Number: 3 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:31:02 AM -05'00'
Not sure exactly what safety vs. accommodation is for bicycles. Is the scooter traffic thing a question about the safety of scooter users or about pedestrian safety?

Number: 4 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:34:22 AM -05'00'
Are we really asking about infrastructure here or parking experience/problems generally? There are lots of parameters people could be upset with here.

Number: 5 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:34:53 AM -05'00'
Is this question really "Are too many people parking on your street?"

Number: 6 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:35:33 AM -05'00'
Is this question for business employees (monthly passes or something?) I'm not sure what this question is getting at.

Number: 7 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:36:19 AM -05'00'
Is this about the storm drains in the streets or the whole system?

Number: 8 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:37:59 AM -05'00'
This doesn't really follow the pattern of the question. Each of these should be an attribute of the events (like variety, timing, appeal, etc.). Is this asking to say how good the arts and cultural events in particular, or how good the cultural elements of other events are?

14. Please rate Birmingham's ***parks and recreation*** facilities and programs on the following attributes:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Facilities that meet your needs	☐	☐	☐	☐	☐	☐	☐
Park cleanliness and grounds care	☐	☐	☐	☐	☐	☐	☐
Quality of recreational opportunities	☐	☐	☐	☐	☐	☐	☐
Variety of recreational opportunities	☐	☐	☐	☐	☐	☐	☐
Park restrooms	☐	☐	☐	☐	☐	☐	☐
Playgrounds for children of all ages and abilities	☐	☐	☐	☐	☐	☐	☐

15. Briefly share suggestions or concerns you have about parks and recreational facilities.

16. Rate Birmingham's ***natural resources, environmental, and sustainability initiatives***:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Use of native plants	☐	☐	☐	☐	☐	☐	☐
Management of public trees	☐	☐	☐	☐	☐	☐	☐
Installation of green stormwater infrastructure	☐	☐	☐	☐	☐	☐	☐
Stewardship of Rouge River and Quarton Lake	☐	☐	☐	☐	☐	☐	☐
Preservation of public open space	☐	☐	☐	☐	☐	☐	☐
Greenhouse gas reduction	☐	☐	☐	☐	☐	☐	☐
Educational opportunities about our natural resources, environmental and sustainability initiatives	☐	☐	☐	☐	☐	☐	☐

17. Briefly share suggestions or concerns you have about natural resources in the City and sustainability:

18. How have you contacted a City elected official in the past 12 months? **(Mark all that apply.)**

☐ *I have not contacted a City official in the past 12 months* ☐ *In-person conversation* ☐ *Telephone* ☐ *Email* ☐ *Social media*

19. Rate the ***City of Birmingham elected officials*** on the following:

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Trustworthiness of elected leaders	☐	☐	☐	☐	☐	☐	☐
Communication with the community	☐	☐	☐	☐	☐	☐	☐
Spending dollars wisely	☐	☐	☐	☐	☐	☐	☐
Being open to resident ideas and involvement	☐	☐	☐	☐	☐	☐	☐

20. How have you contacted a City employee in the past 12 months? **(Mark all that apply.)**

☐ *I have not contacted a City employee in the past 12 months* ☐ *In-person conversation* ☐ *Email* ☐ *GovAlert (phone app)* ☐ *Telephone* ☐ *Social media* ☐ *Website form*

Page: 3

Number: 1 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:40:22 AM -05'00'
With all these, it's hard to tell if a low score means these are good ideas that we aren't implementing well or these are bad ideas we should not attempt to implement.

Number: 2 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:39:23 AM -05'00'
Not sure what this means. Parks? Vacant lots?

21. Consider all of your interactions with the City of Birmingham's ***employees and staff*** in the last 12 months and rate each item below.

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Appreciation of resident questions and concerns	☐	☐	☐	☐	☐	☐	☐
Employees are well-trained	☐	☐	☐	☐	☐	☐	☐
Communication with the community	☐	☐	☐	☐	☐	☐	☐
Level of professionalism	☐	☐	☐	☐	☐	☐	☐
Effectiveness in meeting your needs	☐	☐	☐	☐	☐	☐	☐
Overall customer service	☐	☐	☐	☐	☐	☐	☐

22. Briefly share suggestions or concerns you have about City leadership or staff.

23. Consider all of your interactions with the City of Birmingham's ***processes/services*** in the last 12 months and rate each item below.

	Poor= 1	*2*	*3*	*4*	*5*	*Excellent= 6*	*Don't Know*
Building permitting process	☐	☐	☐	☐	☐	☐	☐
Billing and payment processes	☐	☐	☐	☐	☐	☐	☐
City website	☐	☐	☐	☐	☐	☐	☐
Election administration	☐	☐	☐	☐	☐	☐	☐
Code enforcement	☐	☐	☐	☐	☐	☐	☐

24. Consider your overall experiences in the last year with the City of Birmingham. Rate your satisfaction using a 6-point scale, where 1 means ***"Very Dissatisfied"*** and 6 means ***"Very Satisfied."***

Very Dissatisfied= 1	*2*	*3*	*4*	*5*	*Very Satisfied= 6*
☐	☐	☐	☐	☐	☐

25. On a scale where 1 means ***"Not Likely"*** and 6 means ***"Very Likely,"*** how likely are you to take the following actions?

	Not Likely= 1	*2*	*3*	*4*	*5*	*Very Likely=6*	*Don't Know*
Recommend the community as a place to live	☐	☐	☐	☐	☐	☐	☐
Remain living here ***five*** years from now	☐	☐	☐	☐	☐	☐	☐
Be a community volunteer	☐	☐	☐	☐	☐	☐	☐

26. Overall, what improvements would have the biggest impact on you and your family based on your experience in recent years?

27. Overall, what are good things you would like to recognize and encourage based on your experience in recent years?

Page: 4

Number: 1 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:47:53 AM -05'00'
DH: Could use a "Did not use" or "Not Applicable" choice

Number: 2 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:48:02 AM -05'00'
DH: Reorder this and Q24

Number: 3 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:48:21 AM -05'00'
DH: Very much like Q2. Maybe change to a single improvement?

Number: 4 Author: Kevin Subject: Comment on Text Date: 2/3/2026 10:48:51 AM -05'00'
DH: Probably don't need this since it's very much like Q1.

Planning and Future Budget Considerations

28. As you consider the City's existing budget, which *six services/programs* below are the biggest priorities for the people living in your household? (Mark up to 6.)

- ☐ *Bicycle lanes and paths*
- ☐ *Building inspection/permitting*
- ☐ *Community activities*
- ☐ *City communications with residents*
- ☐ *City park improvements (playgrounds, trails, restrooms, etc.)*
- ☐ *Curbside recycling*
- ☐ *Attracting and supporting local businesses*
- ☐ *Fire/ambulance service*
- ☐ *Garbage collection*
- ☐ *Yard waste collection*
- ☐ *Natural resource and sustainability initiatives*
- ☐ *Police services*
- ☐ *Recreation programs and classes*
- ☐ *Responsiveness to code complaints*
- ☐ *Senior activities, social events, etc.*
- ☐ *Sidewalk improvements*
- ☐ *Stormwater management*
- ☐ *Street lighting improvements*
- ☐ *Street maintenance improvements*
- ☐ *Tree maintenance/ replacement*

29. If you want to improve the areas you selected above, how should the City pay for the improvements? (Mark up to 2.)

- ☐ *City should fund by shifting dollars in existing budget*
- ☐ *I'm willing to provide additional dollars to see the improvements*

30. The City hears a diverse range of ideas and suggestions from residents. Your insights to guide planning efforts is helpful. Please review the statements below and rate your level of agreement where 1 is ***"Strongly Disagree"*** and 6 is ***"Strongly Agree."***

	Strongly Disagree= 1	*2*	*3*	*4*	*5*	*Strongly Agree= 6*	*Don't Know*
Redevelop 400 E. Lincoln to provide a senior center	☐	☐	☐	☐	☐	☐	☐
Redevelop 400 E. Lincoln to provide a community center	☐	☐	☐	☐	☐	☐	☐
Accelerate funding for improved and unimproved roads by creating a separate, dedicated portion of property taxes (millage)	☐	☐	☐	☐	☐	☐	☐
Develop unimproved (such as cape seal) roads through City-wide, dedicated portion of property taxes (millage)	☐	☐	☐	☐	☐	☐	☐
Update/renovate City Hall to improve efficiency and address functional and environmental concerns	☐	☐	☐	☐	☐	☐	☐
Increase residential space by allowing buildings taller than five stories	☐	☐	☐	☐	☐	☐	☐
Improve the walkability and safety of crossing Woodward Avenue	☐	☐	☐	☐	☐	☐	☐
Develop a new police station	☐	☐	☐	☐	☐	☐	☐
Engage in public/private partnerships on public land	☐	☐	☐	☐	☐	☐	☐

31. If you disagree with one or more of the proposals above, briefly tell us more about your opinions to help us better understand your perspective.

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Number: 1 Author: Kevin Subject: Comment on Text Date: 2/3/2026 11:02:00 AM -05'00'

DH/me: I would remove All the essentials from here: Building inspection, recycling, fire, garbage, police, stormwater management, and street maintenance. I would then ask for 3 things and for each I would ask about willingness to pay with choices like:
None, I would not be willing to pay more than I already do | Less than $10/month | Between $10-$20 a month | More than $20/month | Don't know

Number: 2 Author: Kevin Subject: Comment on Text Date: 2/3/2026 11:21:03 AM -05'00'

I feel that most of these suffer from some combination of insufficient context and items being too dependent on price vs. benefit. Something might be a good idea for $20M but a bad one for $30M. Also the public/private partnerships thing depends entirely on the project so I would just remove it.

In its place, I would like to see a couple questions about willingness to pay for essentials. Would people be willing to pay more in taxes to fix roads faster? Would they be willing to pay more in taxes to fix water/storm faster? Roughly how much more?

Communication Preference

32. How do you prefer to receive information from the City (events, programs, updates, etc.)? (*Mark all that apply.*)

- ☐ *Newspaper*
- ☐ *Email*
- ☐ *City website*
- ☐ *The Around Town e-newsletter*
- ☐ *Birmingham Beat print newsletter*
- ☐ *Utility bill insert*
- ☐ *City social media @bhamgov (Facebook and Instagram)*
- ☐ *City YouTube channel*
- ☐ *City Vimeo channel*
- ☐ *U.S. mail*
- ☐ *Text message*
- ☐ *Public Cable Channel*

33. Which social media do you use? (*Mark all that apply.*)

- ☐ *Facebook*
- ☐ *Instagram*
- ☐ *LinkedIn*
- ☐ *Pinterest*
- ☐ *Snapchat*
- ☐ *Reddit*
- ☐ *TikTok*
- ☐ *X (Twitter)*
- ☐ *YouTube*
- ☐ *Vimeo*
- ☐ *Other*
- ☐ *None*

The following questions are for analysis only and will not be used in any way to identify you

How long have you been living in this community?	☐ *1-5 years*	☐ *6-10 years*	☐ *10 years+*								
Do you own or rent/lease your residence?	☐ *Own*	☐ *Rent/Lease*									
Is your place of employment located in Birmingham?	☐ *Yes*	☐ *I am a remote worker*	☐ *No, a different community*	☐ *Not currently employed*	☐ *I am retired*						
What is your age group?	☐ *18 to 24*	☐ *25 to 34*	☐ *35 to 44*	☐ *45 to 54*	☐ *55 to 64*	☐ *65+*					
Mark the boxes that describe the people living in your house (other than yourself and/or a spouse). (Mark all that apply.)	☐ *Child(ren) age 12 or under*	☐ *Child(ren) over age 12*	☐ *Parent age 65 or older*	☐ *None of these*							
What is your gender?	☐ *Female*	☐ *Male*	☐ *Other*	☐ *Prefer not to answer*							
To which racial or ethnic group(s) do you belong? (Mark all that apply.)	☐ *Asian*	☐ *Black/African American*	☐ *Indigenous American*	☐ *Prefer not to answer*							
	☐ *White/Caucasian*	☐ *Hispanic/Latinx*	☐ *Other*								
Which languages are commonly used in your home?	☐ *English*	☐ *Spanish*	☐ *Other*								
In which City precinct do you live? A map is available for your reference at bhamgov.org/precincts	☐ *1*	☐ *3*	☐ *5*								
	☐ *2*	☐ *4*	☐ *Don't know*								
Do you currently serve on any City boards or committees?	☐ *Yes*	☐ *No*									

Thank you for your time. Please return this assessment in the postage-paid envelope provided.

MEMORANDUM

Treasurer's Office

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Ryan Katz, Deputy Treasurer
Mary Chavez, Finance Director

SUBJECT: Confirmation of SAD Roll 917 2026 Cape Seal Program

INTRODUCTION:

A Public Hearing of Confirmation of the Special Assessment Roll for the 2026 Cape Seal Program is being held on March 23, 2026. The special assessment will reimburse the City for improvements made. If the City Commission approves the roll, the property owners who benefit from these improvements will be billed for the cost of the improvements.

Comments during the hearing of confirmation are limited to those questions specifically addressing the assessment roll pursuant to Section 94-9 of the City Code.

BACKGROUND:

At the City Commission meeting on February 23, 2026, the City Commission determined the necessity of the 2026 Cape Seal Program and a Hearing of Confirmation of the Special Assessment Roll was set for March 9, 2026. Prior to the Hearing of Confirmation on March 9, 2026, it was discovered that the assessments for residents at the Oak Avenue Units were not calculated correctly. They were initially calculated using a method based on each apartment's area divided by the total apartment complex area, applied to the frontage along the complex. However, historically, the assessments for these units have been divided equally among residents so that each unit pays an equal share of the total assessment. This correction was made during the Hearing of Confirmation and the calculation resulted in a change to the assessment for residents at the 455 Oak Avenue units. After discussion, the City Commission nullified the roll and directed the City Manager to create and confirm a new SAD Roll 917 for the 2026 Cape Seal Program and postpone the Hearing of Confirmation to the date certain of March 23, 2026.

LEGAL REVIEW:

The City Attorney has reviewed the suggested resolution for compliance with City Code. The purpose of this hearing is to review and hear any objections to the Special Assessment Roll. The Special Assessment Roll is a listing of all of the properties to be assessed for the improvements to the property. Pursuant to the City Code at section 94-9, whenever a Special Assessment Roll shall be confirmed by the City Commission, it shall be final and conclusive.

FISCAL IMPACT:
If confirmed, the preliminary assessment roll would be $225,872.58. Once the project is completed and final costs are known, the roll will be adjusted to actual costs as provided by City Code. Property owners have five (5) years to pay the special assessment.

SUSTAINABILITY:
Completing cape seal treatment on roads will enhance the road surface and reduce maintenance.

DESIGN CONSIDERATIONS:
Sidewalk ramps that currently do not meet ADA standards will be removed and installed per the current ADA standards.

PUBLIC COMMUNICATIONS:
Property owners were notified by mail of the public hearing dates. If the City Commission confirms the Special Assessment Roll, the Treasurer's office will notify the property owners in the Special Assessment District of the confirmation and the lien on their property.

SUMMARY:
The Treasurer's office recommends that the City Commission conduct the Hearing of Confirmation of Special Assessment District 917 and further to confirm the roll as attached to this report.

ATTACHMENTS:
1. Memorandum: Hearing of Necessity for 2026 Cape Seal Program

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution confirming Special Assessment Roll 917 as follows:

WHEREAS, Special Assessment Roll, designated Roll No. 917, has been heretofore prepared for Collection; and

WHEREAS, notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property to be assessed; and

WHEREAS, the Commission has deemed it practicable to cause payment of the cost thereof to be made after the time of construction; and

WHEREAS, the Commission Resolution 02-035-26 provided it would meet this 23rd day of March, 2026 for the sole purpose of reviewing the assessment roll; and

WHEREAS, at said hearing held this March 23, 2026, all those property owners or their representatives present have been given an opportunity to be heard specifically concerning costs appearing in said special assessment roll;

NOW, THEREFORE, BE IT RESOLVED, that Special Assessment Roll No. 917 be in all things ratified and confirmed, and that the City Clerk be and is hereby instructed to endorse said roll, showing the date of confirmation thereof, and to certify said assessment roll to the City Treasurer for collection at or near the time of construction of the improvement.

BE IT FURTHER RESOLVED, that the special assessment shall be payable in five (5) payments as provided in Section 94-10 of the Code of the City of Birmingham, with an annual interest rate of seven and three-quarters percent (7.75%) on all unpaid installments.

Sidwell Number	Street Address	Cape Seal Assessment
19-25-151-037	692 Oak Ave	$ 1,429.18
19-25-151-139	680 Oak Ave	$ 1,275.03
19-25-151-140	670 Oak Ave	$ 1,275.03
19-25-151-039	640 Oak Ave	$ 1,020.84
19-25-151-040	608 Oak Ave	$ 1,531.26
19-25-151-137	556 Oak Ave	$ 2,143.77
19-25-151-138	520 Oak Ave	$ 1,633.35
19-25-151-127	450 Oak Ave #100	$ 235.20
19-25-151-130	450 Oak Ave #101	$ 235.20
19-25-151-129	450 Oak Ave #102	$ 235.20
19-25-151-128	450 Oak Ave #103	$ 235.20
19-25-151-133	450 Oak Ave #201	$ 235.20
19-25-151-132	450 Oak Ave #202	$ 235.20
19-25-151-131	450 Oak Ave #203	$ 235.20
19-25-151-136	450 Oak Ave #301	$ 235.20
19-25-151-135	450 Oak Ave #302	$ 235.20
19-25-151-134	450 Oak Ave #303	$ 235.20
19-25-326-023	885 N Old Woodward Ave Unit 1	$ 141.07
19-25-326-024	885 N Old Woodward Ave Unit 2	$ 141.07
19-25-326-025	885 N Old Woodward Ave Unit 3	$ 141.07
19-25-326-026	885 N Old Woodward Ave Unit 4	$ 141.07
19-25-326-027	885 N Old Woodward Ave Unit 5	$ 141.07
19-25-326-028	885 N Old Woodward Ave Unit 6	$ 141.07
19-25-326-029	885 N Old Woodward Ave Unit 7	$ 141.07
19-25-326-030	885 N Old Woodward Ave Unit 8	$ 141.07

19-25-326-031	885 N Old Woodward Ave Unit 9	$ 141.07
19-25-326-032	885 N Old Woodward Ave Unit 10	$ 141.07
19-25-326-033	885 N Old Woodward Ave Unit 11	$ 141.07
19-25-326-034	885 N Old Woodward Ave Unit 12	$ 141.07
19-25-326-035	885 N Old Woodward Ave Unit 13	$ 141.07
19-25-326-036	885 N Old Woodward Ave Unit 14	$ 141.07
19-25-326-037	885 N Old Woodward Ave Unit 15	$ 141.07
19-25-326-038	885 N Old Woodward Ave Unit 16	$ 141.07
19-25-326-003	533 Oak Ave	$ 939.17
19-25-326-002	551 Oak Ave	$ 939.17
19-25-326-001	858 Woodland St	$ 939.17
19-25-303-007	607 Oak Ave	$ 1,020.84
19-25-303-006	615 Oak Ave	$ 1,020.84
19-25-303-005	635 Oak Ave	$ 1,020.84
19-25-303-004	651 Oak Ave	$ 1,020.84
19-25-303-003	667 Oak Ave	$ 1,020.84
19-25-303-002	679 Oak Ave	$ 1,020.84
13-25-303-001	850 Greenwood St	$ 1,082.09
19-26-427-001	890 Lakeside Dr	$ 1,355.68
19-26-427-002	840 Lakeside Dr	$ 3,634.34
19-26-427-003	790 Lakeside Dr	$ 3,540.28
19-26-427-004	774 Lakeside Dr	$ 3,526.39
19-26-427-005	752 Lakeside Dr	$ 3,540.28
19-26-427-006	726 Lakeside Dr	$ 3,539.93
19-26-427-039	700 Lakeside Dr	$ 2,478.19
19-26-427-040	660 Lakeside Dr	$ 2,478.19
19-26-427-008	640 Lakeside Dr	$ 2,460.15
19-26-427-009	620 Lakeside Dr	$ 2,295.28
19-26-427-010	592 Lakeside Dr	$ 2,572.95
19-26-427-041	568 Lakeside Dr	$ 3,978.30
19-26-427-042	532 Lakeside Dr	$ 4,446.87
19-26-478-014	490 Lakeside Dr	$ 2,977.30
19-26-478-015	470 Lakeside Dr	$ 2,741.98

19-26-478-012	440 Lakeside Dr	$ 3,990.10
19-26-478-013	430 Lakeside Dr	$ 1,908.97
19-26-478-007	412 Lakeside Dr	$ 2,499.02
19-26-476-008	392 Lakeside Dr	$ 2,499.02
19-26-476-009	370 Lakeside Dr	$ 2,499.02
19-26-476-010	350 Lakeside Dr	$ 2,990.84
19-26-476-011	320 Lakeside Dr	$ 1,245.43
19-26-237-012	871 N Glenhurst Dr	$ 2,429.60
19-26-237-013	825 N Glenhurst Dr	$ 2,429.60
19-26-237-014	781 N Glenhurst Dr	$ 2,429.60
19-26-237-015	755 N Glenhurst Dr	$ 2,429.60
19-26-237-016	717 N Glenhurst Dr	$ 2,429.60
19-26-237-017	693 N Glenhurst Dr	$ 2,074.88
19-26-237-018	655 N Glenhurst Dr	$ 2,074.88
19-26-237-019	639 N Glenhurst Dr	$ 2,429.60
19-26-237-020	617 N Glenhurst Dr	$ 2,429.60
19-26-237-021	587 N Glenhurst Dr	$ 2,429.60
19-26-237-022	559 N Glenhurst Dr	$ 2,429.60
19-26-237-023	535 N Glenhurst Dr	$ 2,429.60
19-26-237-024	515 N Glenhurst Dr	$ 2,041.91
19-26-328-011	520 N Glenhurst Dr	$ 1,776.04
19-26-328-010	534 N Glenhurst Dr	$ 2,429.60
19-26-328-009	550 N Glenhurst Dr	$ 2,429.60
19-26-328-008	584 N Glenhurst Dr	$ 2,429.60
19-26-328-007	612 N Glenhurst Dr	$ 2,429.60
19-26-328-006	634 N Glenhurst Dr	$ 2,429.60
19-26-328-005	650 N Glenhurst Dr	$ 2,028.72
19-26-328-004	690 N Glenhurst Dr	$ 2,028.72
19-26-328-003	736 N Glenhurst Dr	$ 3,817.95
19-26-328-002	770 N Glenhurst Dr	$ 3,817.95
19-26-328-001	Birmingham School District	$ 1,429.18
19-35-426-019	1390 Northlawn Blvd	$ 3,182.08
19-35-426-018	1360 Northlawn Blvd	$ 2,776.69
19-35-426-017	1330 Norhtlawn Blvd	$ 2,776.69
19-35-426-016	1300 Northlawn Blvd	$ 2,776.69
19-35-428-012	1393 Latham St	$ 3,868.48
19-35-428-013	1132 Northlawn Blvd	$ 2,984.94
19-35-428-014	1112 Northlawn Blvd	$ 2,221.35
19-35-428-015	1098 Northlawn Blvd	$ 2,082.52
19-35-428-016	1076 Norhtlawn Blvd	$ 1,735.43

19-35-428-017	1052 Northlawn Blvd	$ 1,735.43
19-35-428-018	1034 Northlawn Blvd	$ 1,735.43
19-35-428-019	1000 Northlawn Blvd	$ 1,735.43
19-35-428-020	988 Northlawn Blvd	$ 1,735.43
19-35-428-021	972 Northlawn Blvd	$ 1,735.43
19-35-428-022	956 Northlawn Blvd	$ 1,735.43
19-35-428-011	1308 Southfield Rd	$ 3,817.95
19-35-430-010	1400 Southfield Rd	$ 3,817.95
19-35-430-009	955 Northlawn Blvd	$ 3,123.77
19-35-430-008	979 Northlawn Blvd	$ 1,735.43
19-35-430-007	1005 Northlawn Blvd	$ 1,735.43
19-35-430-006	1049 Northlawn Blvd	$ 1,735.43
19-35-430-005	1061 Northlawn Blvd	$ 2,603.15
19-35-430-004	1083 Northlawn Blvd	$ 2,603.15
19-35-430-003	1121 Northlawn Blvd	$ 2,429.60
19-35-430-002	1155 Northlawn Blvd	$ 2,429.60
19-35-430-001	1187 Northlawn Blvd	$ 2,188.72
19-35-429-023	1225 Northlawn Blvd	$ 1,541.06
19-35-429-022	1231 Northlawn Blvd	$ 1,735.43
19-35-429-004	1301 Northlawn Blvd	$ 2,637.85
19-35-429-003	1323 Northlawn Blvd	$ 3,436.15
19-35-429-027	1355 Norhlawn Blvd	$ 2,603.15
19-35-429-026	1371 Northlawn Blvd	$ 1,735.43
19-35-429-025	1385 Northlawn Blvd	$ 1,735.43
19-35-429-024	1395 Northlawn Blvd	$ 1,735.43
		$ 225,872.58

MEMORANDUM

Engineering Department

DATE: February 23, 2026

TO: Jana Ecker, City Manager

FROM: Melissa Coatta, City Engineer

SUBJECT: 2026 Cape Seal Program
Hearing of Necessity for Cape Seal Special Assessment District (SAD)

INTRODUCTION:
Design and bidding have been completed for the 2026 cape seal program. This year's program includes streets located between Oak Avenue and Maple Road, west of Old Woodward Avenue, as well as Northlawn Boulevard between the Rouge River and Southfield Road. The existing unimproved road surfaces will be restored with a new cape seal treatment as part of the unimproved street maintenance program.

BACKGROUND:
Since the 1940s, cape seal treatments have been applied to unimproved streets to enhance their stability and eliminate dust associated with the original gravel roads. The expected service life of cape seal is approximately 7–10 years. The streets included in this project were last treated in 2008, 2010, or 2014. Construction of the proposed project is anticipated in Spring 2026.

Consistent with longstanding City policy, the costs of cape seal treatments on unimproved streets are defrayed by creating a Special Assessment District (SAD) consisting of the properties that are benefiting from this treatment.

The parcels within the project zone that are subject to the Cape Seal Assessment are highlighted on the attached maps. Appended to this report is also a list of properties that the department plans to include in the assessment district, along with estimated construction costs.

LEGAL REVIEW:
Chapter 94 – Special Assessments of the Birmingham City Code outlines the process by which a special assessment is conducted in the City of Birmingham. This project will follow the prescribed City Code procedures. Legal has reviewed and has no objection as to form or content.

FISCAL IMPACT:
Revenue generated from the Cape Seal Special Assessment District for the 2026 Cape Seal

Program will defray the costs incurred by the City for the construction of these improvements. Consistent with previous projects of this nature, the City's policy is as follows:

- 85% of the front-foot costs for improvement are assessed on all properties fronting on the improvement.
- 25% of the side-foot costs for improvement are assessed on all residential properties siding on the improvement.
- 85% of the side-foot costs for improvement are assessed on improved business properties siding on the improvement.
- 25% of the side-foot costs for improvement are assessed on vacant business properties siding on the improvement.

The City pays for the balance of the costs, 15% and 75% front footage and side footage, respectively.

Properties located on streets that will be pulverized, cement stabilization, and then receive a cape sealed surface will be assessed at the rate of is $40.83 per foot.

SUSTAINABILITY:
Completing cape seal treatment on roads will enhance the road surface and reduce maintenance.

DESIGN CONSIDERATIONS:
Sidewalk ramps that currently do not meet ADA standards will be removed and installed per the current ADA standards.

PUBLIC COMMUNICATIONS:
Notice for the Public Hearings of Necessity and Confirmation of Roll were distributed by the Clerk's Office. An informative resident meeting was held at City Hall on Thursday, February 12, 2026. Property owners affected by the work will also be notified in advance through the use of door-hangers and the City's Constant Contact targeted e-blasts.

SUMMARY:
The Engineering Department recommends that the City Commission declare necessity and approve a Special Assessment District for the 2026 Cape Seal Program. Should the Commission approve the Special Assessment District, a public hearing for confirmation of the roll will be held at the City Commission meeting on March 9, 2026.

ATTACHMENTS:
1. Maps of the proposed 2026 Cape Seal Special Assessment District
2. Spreadsheet with estimated costs
3. Clerk's Confirmation of Public Hearing Notice
4. Presentation
5. 20260223 Oak Cape Seal - M. Seneski
6. 20260223 Northlawn Cape Seal - J. Shell
7. 20260223 Oak Cape Seal - M. Areeda
8. 20260223 Northlawn Cape Seal - G. & M. Oudersluys

9. 20260223 Oak Cape Seal - A & S Stein
10. 20260223 Northlawn - P & S Schmaltz

SUGGESTED COMMISSION ACTION:
WHEREAS, Notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property and lots to be assessed, by first class mail, and by publication in a newspaper generally circulated in the City; and

WHEREAS, The City Commission has conducted a public hearing and has determined it is necessary to proceed with the project of resurfacing unimproved roads by method of pulverizing, cement stabilization, spray patching, and capeseal surface, and replacement of City sidewalk ramps; and

WHEREAS, The City has previously established a policy to defray the costs of Cape Seal treatments on unimproved streets by creating a Special Assessment District (SAD) consisting of the properties that are benefiting from this treatment; and

WHEREAS, The City Commission, after the public hearing, has determined that the 2026 Cape Seal Program is a necessity and is in the best interest of the City and will specially benefit the properties included in the Special Assessment District; and

WHEREAS, The Commission has approved the detailed plans and estimates of cost prepared by the City Engineer; and

WHEREAS, Proposed costs by change order have been received and the costs of the unimproved roads resurfacing have been determined; and

WHEREAS, The City Engineer has determined the boundaries of the road resurfacing and sidewalk ramp replacement located within the limits of the following streets shall be installed as part of the 2026 Cape Seal Program (Contract #5-26(P)):

Oak Avenue – Greenwood to Old Woodward; and
Lakeside Drive – Oak to Millrace; and
N Glenhurst Drive– Oak to Pine; and
Northlawn Boulevard – Rouge River to Southfield Road; and

WHEREAS, The formula used in making the assessment is 85% of the front-foot costs for improvement are assessed on all properties fronting on the improvement, 25% of the side-foot costs for improvement are assessed on all residential properties siding on the improvement, 85% of the side-foot costs for improvement are assessed on improved business properties siding on the improvement, and 25% of the side-foot costs for improvement are assessed on vacant business properties siding on the improvement for resurfacing of the unimproved roads and replacement of sidewalk ramps to meet ADA compliance (calculated at the rate of $40.83 per foot for properties on streets that will be pulverized, cement stabilization, and cape seal resurfaced).

THEREFORE LET IT BE RESOLVED, The City Commission has determined that the scope of the public improvement as described is in the best interest of the City and will benefit the

properties listed in the assessment roll is a necessity, and the City Commission directs the Manager to prepare a Special Assessment Roll and present the same to the City Commission for confirmation and further set a public hearing for confirmation of the Roll on March 9, 2026 and give notice for same.

Street Pulverizing / Cement Stabilization / Cape Seal Resurfacing

Sidwell Number	Street Address	Cape Seal Assessment
19-25-151-037	692 Oak Ave	$2,429.60
19-25-151-139	680 Oak Ave	$2,167.55
19-25-151-140	670 Oak Ave	$2,167.55
19-25-151-039	640 Oak Ave	$1,735.43
19-25-151-040	608 Oak Ave	$2,603.15
19-25-151-137	556 Oak Ave	$3,644.40
19-25-151-138	520 Oak Ave	$2,776.69
19-25-151-127	450 Oak Ave #100	$235.20
19-25-151-130	450 Oak Ave #101	$235.20
19-25-151-129	450 Oak Ave #102	$235.20
19-25-151-128	450 Oak Ave #103	$235.20
19-25-151-133	450 Oak Ave #201	$235.20
19-25-151-132	450 Oak Ave #202	$235.20
19-25-151-131	450 Oak Ave #203	$235.20
19-25-151-136	450 Oak Ave #301	$235.20
19-25-151-135	450 Oak Ave #302	$235.20
19-25-151-134	450 Oak Ave #303	$235.20
19-25-326-023	885 N Old Woodward Ave Unit 1	$141.07
19-25-326-024	885 N Old Woodward Ave Unit 2	$141.07
19-25-326-025	885 N Old Woodward Ave Unit 3	$141.07
19-25-326-026	885 N Old Woodward Ave Unit 4	$141.07
19-25-326-027	885 N Old Woodward Ave Unit 5	$141.07
19-25-326-028	885 N Old Woodward Ave Unit 6	$141.07
19-25-326-029	885 N Old Woodward Ave Unit 7	$141.07
19-25-326-030	885 N Old Woodward Ave Unit 8	$141.07
19-25-326-031	885 N Old Woodward Ave Unit 9	$141.07
19-25-326-032	885 N Old Woodward Ave Unit 10	$141.07
19-25-326-033	885 N Old Woodward Ave Unit 11	$141.07
19-25-326-034	885 N Old Woodward Ave Unit 12	$141.07
19-25-326-035	885 N Old Woodward Ave Unit 13	$141.07
19-25-326-036	885 N Old Woodward Ave Unit 14	$141.07

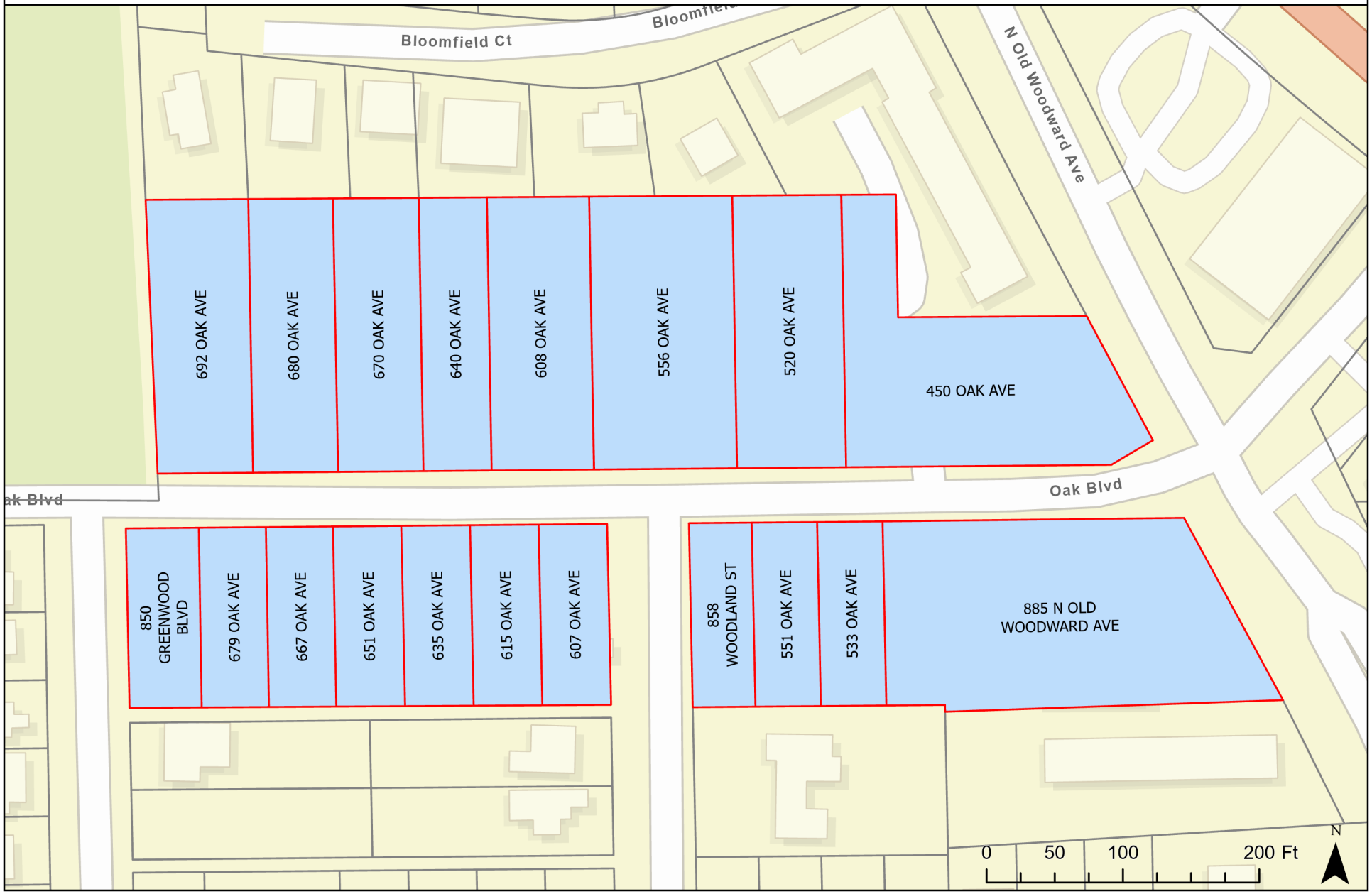
19-25-326-037	885 N Old Woodward Ave Unit 15	$141.07
19-25-326-038	885 N Old Woodward Ave Unit 16	$141.07
19-25-326-003	533 Oak Ave	$1,596.60
19-25-326-002	551 Oak Ave	$1,596.60
19-25-326-001	858 Woodland St	$1,596.60
19-25-303-007	607 Oak Ave	$1,735.43
19-25-303-006	615 Oak Ave	$1,735.43
19-25-303-005	635 Oak Ave	$1,735.43
19-25-303-004	651 Oak Ave	$1,735.43
19-25-303-003	667 Oak Ave	$1,735.43
19-25-303-002	679 Oak Ave	$1,735.43
13-25-303-001	850 Greenwood St	$1,839.56
19-26-427-001	890 Lakeside Dr	$1,355.68
19-26-427-002	840 Lakeside Dr	$3,634.34
19-26-427-003	790 Lakeside Dr	$3,540.28
19-26-427-004	774 Lakeside Dr	$3,526.39
19-26-427-005	752 Lakeside Dr	$3,540.28
19-26-427-006	726 Lakeside Dr	$3,539.93
19-26-427-039	700 Lakeside Dr	$2,478.19
19-26-427-040	660 Lakeside Dr	$2,478.19
19-26-427-008	640 Lakeside Dr	$2,460.15
19-26-427-009	620 Lakeside Dr	$2,295.28
19-26-427-010	592 Lakeside Dr	$2,572.95
19-26-427-041	568 Lakeside Dr	$3,978.30
19-26-427-042	532 Lakeside Dr	$4,446.87
19-26-478-014	490 Lakeside Dr	$2,977.30
19-26-478-015	470 Lakeside Dr	$2,741.98
19-26-478-012	440 Lakeside Dr	$3,990.10
19-26-478-013	430 Lakeside Dr	$1,908.97
19-26-478-007	412 Lakeside Dr	$2,499.02
19-26-476-008	392 Lakeside Dr	$2,499.02
19-26-476-009	370 Lakeside Dr	$2,499.02
19-26-476-010	350 Lakeside Dr	$2,990.84
19-26-476-011	320 Lakeside Dr	$1,245.43
19-26-237-012	871 N Glenhurst Dr	$2,429.60
19-26-237-013	825 N Glenhurst Dr	$2,429.60
19-26-237-014	781 N Glenhurst Dr	$2,429.60
19-26-237-015	755 N Glenhurst Dr	$2,429.60
19-26-237-016	717 N Glenhurst Dr	$2,429.60
19-26-237-017	693 N Glenhurst Dr	$2,074.88

19-26-237-018	655 N Glenhurst Dr	$2,074.88
19-26-237-019	639 N Glenhurst Dr	$2,429.60
19-26-237-020	617 N Glenhurst Dr	$2,429.60
19-26-237-021	587 N Glenhurst Dr	$2,429.60
19-26-237-022	559 N Glenhurst Dr	$2,429.60
19-26-237-023	535 N Glenhurst Dr	$2,429.60
19-26-237-024	515 N Glenhurst Dr	$2,041.91
19-26-328-011	520 N Glenhurst Dr	$1,776.04
19-26-328-010	534 N Glenhurst Dr	$2,429.60
19-26-328-009	550 N Glenhurst Dr	$2,429.60
19-26-328-008	584 N Glenhurst Dr	$2,429.60
19-26-328-007	612 N Glenhurst Dr	$2,429.60
19-26-328-006	634 N Glenhurst Dr	$2,429.60
19-26-328-005	650 N Glenhurst Dr	$2,028.72
19-26-328-004	690 N Glenhurst Dr	$2,028.72
19-26-328-003	736 N Glenhurst Dr	$3,817.95
19-26-328-002	770 N Glenhurst Dr	$3,817.95
19-26-328-001	Birmingham School District	$1,429.18
19-35-426-019	1390 Northlawn Blvd	$3,182.08
19-35-426-018	1360 Northlawn Blvd	$2,776.69
19-35-426-017	1330 Norhtlawn Blvd	$2,776.69
19-35-426-016	1300 Northlawn Blvd	$2,776.69
19-35-428-012	1393 Latham St	$3,868.48
19-35-428-013	1132 Northlawn Blvd	$2,984.94
19-35-428-014	1112 Northlawn Blvd	$2,221.35
19-35-428-015	1098 Northlawn Blvd	$2,082.52
19-35-428-016	1076 Norhtlawn Blvd	$1,735.43
19-35-428-017	1052 Northlawn Blvd	$1,735.43
19-35-428-018	1034 Northlawn Blvd	$1,735.43
19-35-428-019	1000 Northlawn Blvd	$1,735.43
19-35-428-020	988 Northlawn Blvd	$1,735.43
19-35-428-021	972 Northlawn Blvd	$1,735.43
19-35-428-022	956 Northlawn Blvd	$1,735.43
19-35-428-011	1308 Southfield Rd	$3,817.95
19-35-430-010	1400 Southfield Rd	$3,817.95
19-35-430-009	955 Northlawn Blvd	$3,123.77
19-35-430-008	979 Northlawn Blvd	$1,735.43
19-35-430-007	1005 Northlawn Blvd	$1,735.43
19-35-430-006	1049 Northlawn Blvd	$1,735.43
19-35-430-005	1061 Northlawn Blvd	$2,603.15

19-35-430-004	1083 Northlawn Blvd	$2,603.15
19-35-430-003	1121 Northlawn Blvd	$2,429.60
19-35-430-002	1155 Northlawn Blvd	$2,429.60
19-35-430-001	1187 Northlawn Blvd	$2,188.72
19-35-429-023	1225 Northlawn Blvd	$1,541.06
19-35-429-022	1231 Northlawn Blvd	$1,735.43
19-35-429-004	1301 Northlawn Blvd	$2,637.85
19-35-429-003	1323 Northlawn Blvd	$3,436.15
19-35-429-027	1355 Norhlawn Blvd	$2,603.15
19-35-429-026	1371 Northlawn Blvd	$1,735.43
19-35-429-025	1385 Northlawn Blvd	$1,735.43
19-35-429-024	1395 Northlawn Blvd	$1,735.43

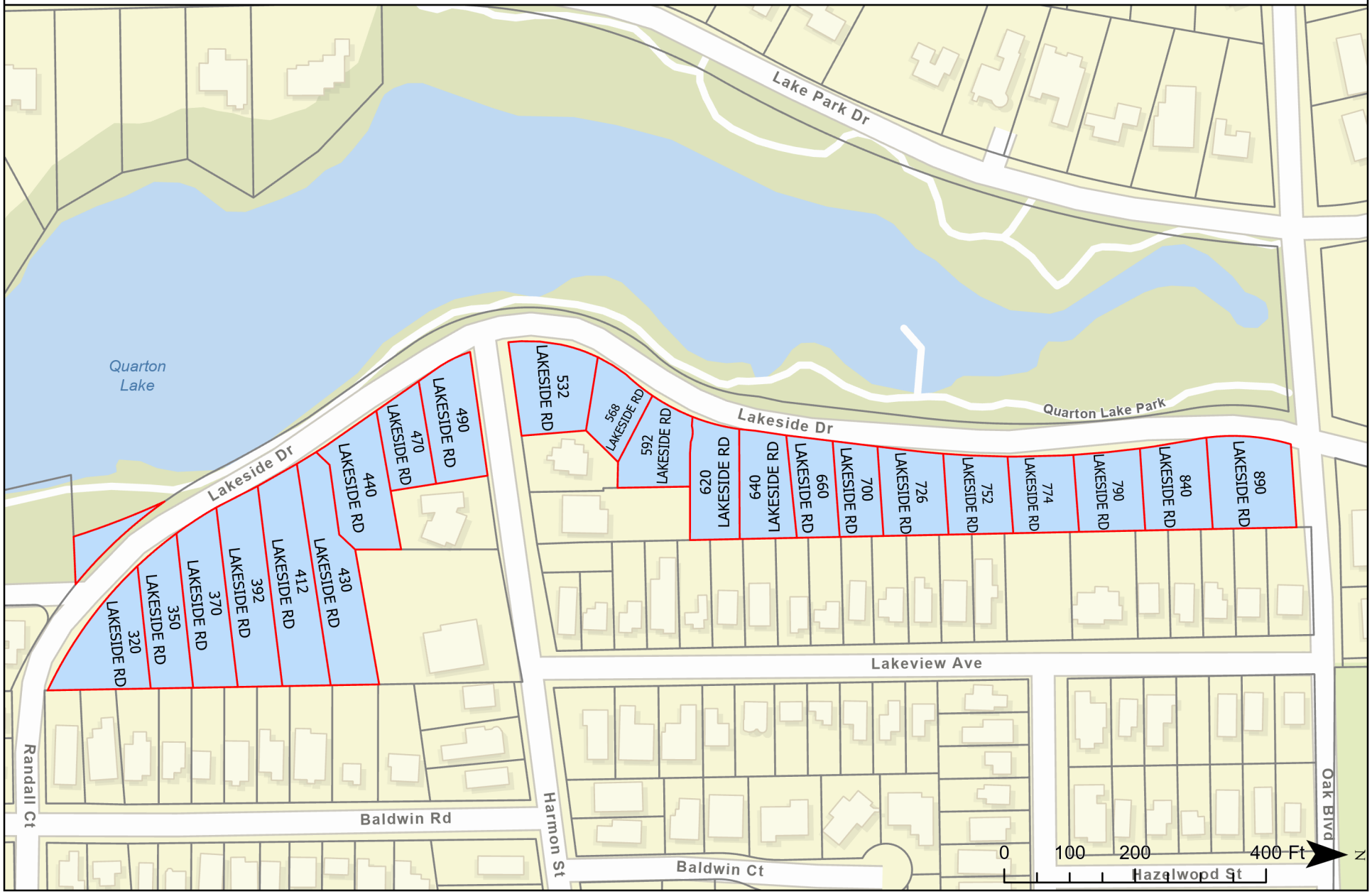
Oak Boulevard

Greenwood to N Old Woodward



Lakeside Drive

Oak to Randall



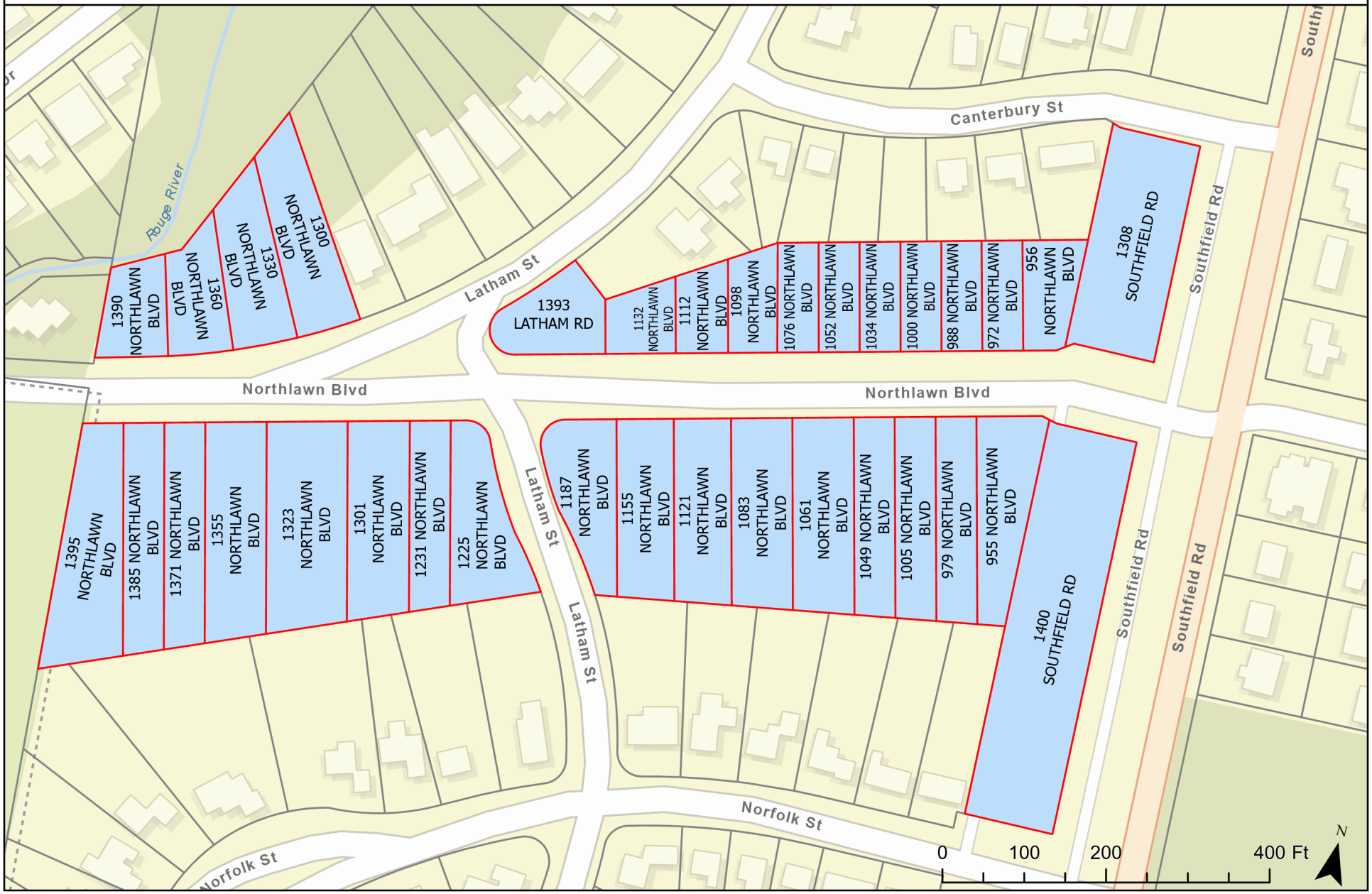
Glenhurst Drive

Oak to Pine



Northlawn Boulevard

Golf Course to Southfield



2026 Cape Seal Program

		Sidwell Number	Street Address	Commercial	Short Length (LFT)	Long Length (LFT)	Cape-Seal Assessment
Oak Ave	Greenwood St to Old Woodward Ave	19-25-151-037	692 Oak Ave		70.00		$ 2,429.60
		19-25-151-139	680 Oak Ave		62.45		$ 2,167.55
		19-25-151-140	670 Oak Ave		62.45		$ 2,167.55
		19-25-151-039	640 Oak Ave		50.00		$ 1,735.43
		19-25-151-040	608 Oak Ave		75.00		$ 2,603.15
		19-25-151-137	556 Oak Ave		105.00		$ 3,644.40
		19-25-151-138	520 Oak Ave		80.00		$ 2,776.69
		19-25-151-127	450 Oak Ave #100			12.53	$ 127.95
		19-25-151-130	450 Oak Ave #101			25.00	$ 255.19
		19-25-151-129	450 Oak Ave #102			20.78	$ 212.15
		19-25-151-128	450 Oak Ave #103			26.84	$ 274.01
		19-25-151-133	450 Oak Ave #201			25.00	$ 255.19
		19-25-151-132	450 Oak Ave #202			20.78	$ 212.15
		19-25-151-131	450 Oak Ave #203			26.84	$ 274.01
		19-25-151-136	450 Oak Ave #301			25.00	$ 255.19
		19-25-151-135	450 Oak Ave #302			20.78	$ 212.15
		19-25-151-134	450 Oak Ave #303			26.84	$ 274.01
		19-25-326-023	885 N Old Woodward Ave Unit 1			13.82	$ 141.07
		19-25-326-024	885 N Old Woodward Ave Unit 2			13.82	$ 141.07
		19-25-326-025	885 N Old Woodward Ave Unit 3			13.82	$ 141.07
		19-25-326-026	885 N Old Woodward Ave Unit 4			13.82	$ 141.07
		19-25-326-027	885 N Old Woodward Ave Unit 5			13.82	$ 141.07
		19-25-326-028	885 N Old Woodward Ave Unit 6			13.82	$ 141.07
		19-25-326-029	885 N Old Woodward Ave Unit 7			13.82	$ 141.07
		19-25-326-030	885 N Old Woodward Ave Unit 8			13.82	$ 141.07
		19-25-326-031	885 N Old Woodward Ave Unit 9			13.82	$ 141.07
		19-25-326-032	885 N Old Woodward Ave Unit 10			13.82	$ 141.07
		19-25-326-033	885 N Old Woodward Ave Unit 11			13.82	$ 141.07
		19-25-326-034	885 N Old Woodward Ave Unit 12			13.82	$ 141.07
		19-25-326-035	885 N Old Woodward Ave Unit 13			13.82	$ 141.07
		19-25-326-036	885 N Old Woodward Ave Unit 14			13.82	$ 141.07
		19-25-326-037	885 N Old Woodward Ave Unit 15			13.82	$ 141.07
		19-25-326-038	885 N Old Woodward Ave Unit 16			13.82	$ 141.07
		19-25-326-003	533 Oak Ave		46.00		$ 1,596.60
		19-25-326-002	551 Oak Ave		46.00		$ 1,596.60
		19-25-326-001	858 Woodland St		46.00		$ 1,596.60
		19-25-303-007	607 Oak Ave		50.00		$ 1,735.43
		19-25-303-006	615 Oak Ave		50.00		$ 1,735.43
		19-25-303-005	635 Oak Ave		50.00		$ 1,735.43
		19-25-303-004	651 Oak Ave		50.00		$ 1,735.43
		19-25-303-003	667 Oak Ave		50.00		$ 1,735.43
		19-25-303-002	679 Oak Ave		50.00		$ 1,735.43
		13-25-303-001	850 Greenwood St		53.00		$ 1,839.56
		19-26-427-001	890 Lakeside Dr			132.80	$ 1,355.68
		19-26-427-002	840 Lakeside Dr		104.71		$ 3,634.34
		19-26-427-003	790 Lakeside Dr		102.00		$ 3,540.28
		19-26-427-004	774 Lakeside Dr		101.60		$ 3,526.39
		19-26-427-005	752 Lakeside Dr		102.00		$ 3,540.28
		19-26-427-006	726 Lakeside Dr		101.99		$ 3,539.93
		19-26-427-039	700 Lakeside Dr		71.40		$ 2,478.19

		Sidwell Number	Street Address	Commercial	Short Length (LFT)	Long Length (LFT)	Cape-Seal Assessment
Lakeside Dr	Oak Ave to Randall Ct	19-26-427-040	660 Lakeside Dr		71.40		$ 2,478.19
		19-26-427-008	640 Lakeside Dr		70.88		$ 2,460.15
		19-26-427-009	620 Lakeside Dr		66.13		$ 2,295.28
		19-26-427-010	592 Lakeside Dr		74.13		$ 2,572.95
		19-26-427-041	568 Lakeside Dr		114.62		$ 3,978.30
		19-26-427-042	532 Lakeside Dr		128.12		$ 4,446.87
		19-26-478-014	490 Lakeside Dr		85.78		$ 2,977.30
		19-26-478-015	470 Lakeside Dr		79.00		$ 2,741.98
		19-26-478-012	440 Lakeside Dr		114.96		$ 3,990.10
		19-26-478-013	430 Lakeside Dr		55.00		$ 1,908.97
		19-26-478-007	412 Lakeside Dr		72.00		$ 2,499.02
		19-26-476-008	392 Lakeside Dr		72.00		$ 2,499.02
		19-26-476-009	370 Lakeside Dr		72.00		$ 2,499.02
		19-26-476-010	350 Lakeside Dr		86.17		$ 2,990.84
		19-26-476-011	320 Lakeside Dr			122.00	$ 1,245.43
		19-26-477-001	City Parcel/Quarton Lake			1838.80	$ -
		19-35-228-002	City Parcel			186.50	$ -
N. Glenhurst Dr	Oak Ave to Pine St	19-26-237-012	871 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-237-013	825 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-237-014	781 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-237-015	755 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-237-016	717 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-237-017	693 N Glenhurst Dr		59.78		$ 2,074.88
		19-26-237-018	655 N Glenhurst Dr		59.78		$ 2,074.88
		19-26-237-019	639 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-237-020	617 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-237-021	587 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-237-022	559 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-237-023	535 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-237-024	515 N Glenhurst Dr		58.83		$ 2,041.91
		19-26-328-011	520 N Glenhurst Dr		51.17		$ 1,776.04
		19-26-328-010	534 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-328-009	550 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-328-008	584 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-328-007	612 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-328-006	634 N Glenhurst Dr		70.00		$ 2,429.60
		19-26-328-005	650 N Glenhurst Dr		58.45		$ 2,028.72
		19-26-328-004	690 N Glenhurst Dr		58.45		$ 2,028.72
		19-26-328-003	736 N Glenhurst Dr		110.00		$ 3,817.95
		19-26-328-002	770 N Glenhurst Dr		110.00		$ 3,817.95
		19-26-328-001	Birmingham School District			140.00	$ 1,429.18
		19-35-426-019	1390 Northlawn Blvd		91.68		$ 3,182.08
		19-35-426-018	1360 Northlawn Blvd		80.00		$ 2,776.69
		19-35-426-017	1330 Norhtlawn Blvd		80.00		$ 2,776.69
		19-35-426-016	1300 Northlawn Blvd		80.00		$ 2,776.69
		19-35-428-012	1393 Latham St		78.70	111.37	$ 3,868.48
		19-35-428-013	1132 Northlawn Blvd		86.00		$ 2,984.94
		19-35-428-014	1112 Northlawn Blvd		64.00		$ 2,221.35
		19-35-428-015	1098 Northlawn Blvd		60.00		$ 2,082.52
		19-35-428-016	1076 Norhtlawn Blvd		50.00		$ 1,735.43
		19-35-428-017	1052 Northlawn Blvd		50.00		$ 1,735.43
		19-35-428-018	1034 Northlawn Blvd		50.00		$ 1,735.43

		Sidwell Number	Street Address	Commercial	Short Length (LFT)	Long Length (LFT)	Cape-Seal Assessment
Northlawn Blvd	Latham St to Southfield Rd	19-35-428-019	1000 Northlawn Blvd		50.00		$ 1,735.43
		19-35-428-020	988 Northlawn Blvd		50.00		$ 1,735.43
		19-35-428-021	972 Northlawn Blvd		50.00		$ 1,735.43
		19-35-428-022	956 Northlawn Blvd		50.00		$ 1,735.43
		19-35-428-011	1308 Southfield Rd		110.00		$ 3,817.95
		19-35-430-010	1400 Southfield Rd		110.00		$ 3,817.95
		19-35-430-009	955 Northlawn Blvd		90.00		$ 3,123.77
		19-35-430-008	979 Northlawn Blvd		50.00		$ 1,735.43
		19-35-430-007	1005 Northlawn Blvd		50.00		$ 1,735.43
		19-35-430-006	1049 Northlawn Blvd		50.00		$ 1,735.43
		19-35-430-005	1061 Northlawn Blvd		75.00		$ 2,603.15
		19-35-430-004	1083 Northlawn Blvd		75.00		$ 2,603.15
		19-35-430-003	1121 Northlawn Blvd		70.00		$ 2,429.60
		19-35-430-002	1155 Northlawn Blvd		70.00		$ 2,429.60
		19-35-430-001	1187 Northlawn Blvd		63.06		$ 2,188.72
		19-35-429-023	1225 Northlawn Blvd		44.40		$ 1,541.06
		19-35-429-022	1231 Northlawn Blvd		50.00		$ 1,735.43
		19-35-429-004	1301 Northlawn Blvd		76.00		$ 2,637.85
		19-35-429-003	1323 Northlawn Blvd		99.00		$ 3,436.15
		19-35-429-027	1355 Norhlawn Blvd		75.00		$ 2,603.15
		19-35-429-026	1371 Northlawn Blvd		50.00		$ 1,735.43
		19-35-429-025	1385 Northlawn Blvd		50.00		$ 1,735.43
		19-35-429-024	1395 Northlawn Blvd		50.00		$ 1,735.43

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

City Clerk's Office

DATE: February 11, 2026

TO: Melissa Coatta, City Engineer

FROM: Mya Brown, Deputy City Clerk

SUBJECT: Clerk's Confirmation of Public Hearing Notice: 2026 Cape Seal Program

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INTRODUCTION:
The public hearing notice process has been completed for 2026 Cape Seal Program Special Assessment District (SAD). Please see attachments for further confirmation.

PUBLIC COMMUNICATIONS:
Mailing Date: 1/27/2026
Test Mail Return Date: 1/30/2026
Publishing Dates in the Oakland Press: 2/8/2026 & 2/22/2026
Posted in www.bhamgov/publicnotices

ATTACHMENTS:

1. Public Hearing Notice
2. Addresses
3. Mailing Letter
4. Mail Machine Counter Repot
5. Proof of Publishing

NOTICE OF PUBLIC HEARING

BIRMINGHAM CITY COMMISSION

PUBLIC HEARING OF NECESSITY &
PUBLIC HEARING FOR CONFIRMATION OF THE ROLL

Meeting Date, Time, Location:	HEARING OF NECESSITY FOR SPECIAL ASSESSMENT DISTRICT Monday, February 23, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, March 9, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009

Project Location:

Oak Boulevard (Greenwood to N Old Woodward)	**Lakeside Drive** (Oak to Randall)	**Glenhurst Drive** (Oak to Pine)	**Northlawn Boulevard** (Gold Course to Southfield)
692 Oak Ave	890 Lakeside Dr	515 N Glenhurst Dr	1300 Northlawn Blvd
680 Oak Ave	840 Lakeside Dr	535 N Glenhurst Dr	1330 Northlawn Blvd
670 Oak Ave	790 Lakeside Dr	559 N Glenhurst Dr	1360 Northlawn Blvd
640 Oak Ave	774 Lakeside Dr	587 N Glenhurst Dr	1390 Northlawn Blvd
608 Oak Ave	752 Lakeside Dr	617 N Glenhurst Dr	1395 Northlawn Blvd
556 Oak Ave	726 Lakeside Dr	639 N Glenhurst Dr	1385 Northlawn Blvd
520 Oak Ave	700 Lakeside Dr	655 N Glenhurst Dr	1371 Northlawn Blvd
450 Oak Ave	660 Lakeside Dr	693 N Glenhurst Dr	1355 Northlawn Blvd
533 Oak Ave	640 Lakeside Dr	717 N Glenhurst Dr	1323 Northlawn Blvd
511 Oak Ave	620 Lakeside Dr	755 N Glenhurst Dr	1301 Northlawn Blvd
607 Oak Ave	592 Lakeside Dr	781 N Glenhurst Dr	1231 Northlawn Blvd
615 Oak Ave	568 Lakeside Dr	825 N Glenhurst Dr	1225 Northlawn Blvd
635 Oak Ave	532 Lakeside Dr	871 N Glenhurst Dr	1187 Northlawn Blvd
651 Oka Ave	490 Lakeside Dr	520 N Glenhurst Dr	1155 Northlawn Blvd
667 Oak Ave	470 Lakeside Dr	534 N Glenhurst Dr	1121 Northlawn Blvd
679 Oak Ave	440 Lakeside Dr	550 N Glenhurst Dr	1083 Northlawn Blvd
850 Greenwood Blvd	430 Lakeside Dr	584 N Glenhurst Dr	1061 Northlawn Blvd
969 Woodland St	412 Lakeside Dr	612 N Glenhurst Dr	1049 Northlawn Blvd
885 N Old Woodward	932 Lakeside Dr	634 N Glenhurst Dr	1005 Northlawn Blvd
	790 Lakeside Dr	650 N Glenhurst Dr	979 Northlawn Blvd
	350 Lakeside Dr	690 N Glenhurst Dr	995 Northlawn Blvd
	320 Lakeside Dr	736 N Glenhurst Dr	1400 Southfield Rd
		770 N Glenhurst Dr	1308 Southfield Rd
		19-26-328-001	956 Northlawn Blvd
			972 Northlawn Blvd
			988 Northlawn Blvd
			1000 Northlawn Blvd
			1034 Northlawn Blvd
			1052 Northlawn Blvd
			1076 Northlawn Blvd
			1098 Northlawn Blvd
			1112 Northlawn Blvd
			1132 Northlawn Blvd
			1393 Latham Rd

Nature of Improvement:	This work will include routine cape seal treatment along unimproved roadways.
City Staff Contact:	Melissa Coatta, City Engineer mcoatta@bhamgov.org, (248)530-1839
Notice Requirements:	Newspaper Notice and First Class Mail to affected property owners 10 days prior. Publish 2/8/2026 & 2/22/2026

Approved minutes may be reviewed at:	City Clerk's Office or www.bhamgov.org/commissionagendas

Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760 Meeting ID: 655 079 760**

You or your agent may appear at the hearings to express your views; however, if you fail to protest either in person or by letter received on or before the date of the hearing, you cannot appeal the amount of the special assessment to the Michigan Tax Tribunal. Mail any correspondence to: City Clerk, P.O. Box 3001, Birmingham, MI 48012.

The property owner may file a written appeal of the special assessment with the State Tax Tribunal within 30 days after the confirmation of the special assessment roll if that special assessment was protested at the hearing held for the purpose of confirming the roll.

All special assessments, including installment payments, shall, from the date of the confirmation thereof, constitute a lien on the respective lots or parcels assessed, and until paid shall be charged against the respective owners of the lots or parcels assessed.

Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk's Office at 248.530.1880 (voice) or 248.644.3405 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance.

Parcel Identification Number	First Owner Name	Postal Address	POSTALCITY	POSTAL STATE	POSTAL ZIP	PNUM	Postal City Postal State Postal Zip 5
1925151040	MICHAEL SENESKI	608 OAK AVE	BIRMINGHAM	MI	48009	08-19-25-151-040	BIRMINGHAM, MI 48009
1925151139	CHRISTOPER L FULLERTON	680 OAK AVE	BIRMINGHAM	MI	48009	08-19-25-151-139	BIRMINGHAM, MI 48009
1925151137	MICHAEL L STEIN LVNG TRUST	556 OAK AVE	BIRMINGHAM	MI	48009	08-19-25-151-137	BIRMINGHAM, MI 48009
1925151140	670 OAK LLC	6755 TELEGRAPH RD STE 200	BLOOMFIELD HILLS	MI	48301	08-19-25-151-140	BLOOMFIELD HILLS, MI 48301
1925303007	ROBERT H SNIPES	607 OAK AVE	BIRMINGHAM	MI	48009	08-19-25-303-007	BIRMINGHAM, MI 48009
1925151127	SARAH JUDD	450 OAK AVE # 100	BIRMINGHAM	MI	48009	08-19-25-151-127	BIRMINGHAM, MI 48009
1925151129	BINJAMIN DROR	450 OAK AVE # 102	BIRMINGHAM	MI	48009	08-19-25-151-129	BIRMINGHAM, MI 48009
1925151128	JORGE L MANZANO	450 OAK AVE # 103	BIRMINGHAM	MI	48009	08-19-25-151-128	BIRMINGHAM, MI 48009
1925151130	DOUGLAS GAIL STRATTON	450 OAK AVE # 101	BIRMINGHAM	MI	48009	08-19-25-151-130	BIRMINGHAM, MI 48009
1925151133	MICHELLE E AREEDA LVNG TRUST	450 OAK AVE # 201	BIRMINGHAM	MI	48009	08-19-25-151-133	BIRMINGHAM, MI 48009
1925151132	JOHN DEPLANCHE	PO BOX 875	BIRMINGHAM	MI	48012	08-19-25-151-132	BIRMINGHAM, MI 48012
1925151134	NOAH B MILLER	PO BOX 551	BIRMINGHAM	MI	48012	08-19-25-151-134	BIRMINGHAM, MI 48012
1925151135	EVA VON VOSS LIVING TRUST	450 OAK AVE # 302	BIRMINGHAM	MI	48009	08-19-25-151-135	BIRMINGHAM, MI 48009
1925151131	ANNETTE L SAYLOR TRUST	450 OAK AVE # 203	BIRMINGHAM	MI	48009	08-19-25-151-131	BIRMINGHAM, MI 48009
1925151136	BINJAMIN DROR	450 OAK AVE # 301	BIRMINGHAM	MI	48009	08-19-25-151-136	BIRMINGHAM, MI 48009
1925151154	450 OAK CONDOMINIUM ASSOCIATION	22725 GREATER MACK AVE STE A100	SAINT CLAIR SHORES	MI	48080	08-19-25-151-154	SAINT CLAIR SHORES, MI 48080
1925151037	EDWARD POLLAK	692 OAK AVE	BIRMINGHAM	MI	48009	08-19-25-151-037	BIRMINGHAM, MI 48009
1925303001	CHRISTOPHER GRANGER	850 GREENWOOD BLVD	BIRMINGHAM	MI	48009	08-19-25-303-001	BIRMINGHAM, MI 48009
1925151039	JACQUELINE PICEU	640 OAK AVE	BIRMINGHAM	MI	48009	08-19-25-151-039	BIRMINGHAM, MI 48009
1925151138	MICHAEL BERGER	520 OAK AVE	BIRMINGHAM	MI	48009	08-19-25-151-138	BIRMINGHAM, MI 48009
1925326024	KEVIN CUNNINGHAM	885 N OLD WOODWARD AVE UNIT 2	BIRMINGHAM	MI	48009	08-19-25-326-024	BIRMINGHAM, MI 48009
1925326023	DEEMA HANNAN	3762 THATCHER DR	ROCHESTER HILLS	MI	48309	08-19-25-326-023	ROCHESTER HILLS, MI 48309
1925326025	885 N OLD WOODWARD LLC	433 BONNIE BRIAR ST	BIRMINGHAM	MI	48009	08-19-25-326-025	BIRMINGHAM, MI 48009
1925326026	PHIL J AIELLO	885 N OLD WOODWARD AVE UNIT 4	BIRMINGHAM	MI	48009	08-19-25-326-026	BIRMINGHAM, MI 48009
1925326027	KAREN CIRINO LIVING TRUST	885 N OLD WOODWARD AVE UNIT 5	BIRMINGHAM	MI	48009	08-19-25-326-027	BIRMINGHAM, MI 48009
1925326029	CAMERON VALADE	824 THREE MILE DR	GROSSE POINTE	MI	48230	08-19-25-326-029	GROSSE POINTE, MI 48230
1925326028	AMBER LYNN MICHALCZAK	885 N OLD WOODWARD AVE UNIT 6	BIRMINGHAM	MI	48009	08-19-25-326-028	BIRMINGHAM, MI 48009
1925326030	SOLOMON GEDELA	885 N OLD WOODWARD AVE UNIT 8	BIRMINGHAM	MI	48009	08-19-25-326-030	BIRMINGHAM, MI 48009
1925326031	C MICHAEL KOJAIAN	601 ORCHARD RIDGE RD	BLOOMFIELD HILLS	MI	48304	08-19-25-326-031	BLOOMFIELD HILLS, MI 48304
1925326032	CAROL LYONS TRUSTEE	885 N OLD WOODWARD AVE UNIT 10	BIRMINGHAM	MI	48009	08-19-25-326-032	BIRMINGHAM, MI 48009
1925326033	VIRGINIA STINE	885 N OLD WOODWARD AVE UNIT 11	BIRMINGHAM	MI	48009	08-19-25-326-033	BIRMINGHAM, MI 48009
1925326034	NICOLE L FINK	885 N OLD WOODWARD AVE UNIT 12	BIRMINGHAM	MI	48009	08-19-25-326-034	BIRMINGHAM, MI 48009
1925326036	PARKER RICH	885 N OLD WOODWARD AVE UNIT 14	BIRMINGHAM	MI	48009	08-19-25-326-036	BIRMINGHAM, MI 48009
1925326035	CAROL L MARSH LVNG TRUST	885 N OLD WOODWARD AVE UNIT 13	BIRMINGHAM	MI	48009	08-19-25-326-035	BIRMINGHAM, MI 48009
1925326037	NUSRAT JAVAID	801 PEACH TREE LN	ROCHESTER HILLS	MI	48306	08-19-25-326-037	ROCHESTER HILLS, MI 48306
1925326038	ALANA SILVER	885 N OLD WOODWARD AVE UNIT 16	BIRMINGHAM	MI	48009	08-19-25-326-038	BIRMINGHAM, MI 48009
1925303005	ROSS J KAPLAN	635 OAK AVE	BIRMINGHAM	MI	48009	08-19-25-303-005	BIRMINGHAM, MI 48009
1925303002	679 OAK LLC	1680 NORFOLK ST	BIRMINGHAM	MI	48009	08-19-25-303-002	BIRMINGHAM, MI 48009
1925326003	JUNE V TAPERT TRUST	1644 BREWSTER RD	ROCHESTER HILLS	MI	48306	08-19-25-326-003	ROCHESTER HILLS, MI 48306
1925303004	ELIZABETH DENISON TRUST	1202 HOWARD ST	PETOSKEY	MI	49770	08-19-25-303-004	PETOSKEY, MI 49770
1925326001	FRANCINE LYNN GREENBERG	858 WOODLAND ST	BIRMINGHAM	MI	48009	08-19-25-326-001	BIRMINGHAM, MI 48009
1925303003	PACIFIC COAST LEASING OF MICHIGAN LLC	12225 JACOBY	MILFORD	MI	48380	08-19-25-303-003	MILFORD, MI 48380
1925303006	ALISON R OLESHANSKY LVNG TRUST	615 OAK AVE	BIRMINGHAM	MI	48009	08-19-25-303-006	BIRMINGHAM, MI 48009
1925326002	JUNE V TAPERT TRUST	1644 BREWSTER RD	ROCHESTER	MI	48306	08-19-25-326-002	ROCHESTER HILLS, MI 48306
1926478011	ERIC M NIEMISTO	320 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-478-011	BIRMINGHAM, MI 48009
1926427001	JOANNE DANTO	890 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-427-001	BIRMINGHAM, MI 48009
1926478013	BONNIE KOSKELA	430 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-478-013	BIRMINGHAM, MI 48009
1926478007	TIFFANY DANYAL	412 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-478-007	BIRMINGHAM, MI 48009
1926478008	JOHN V MORREALE	392 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-478-008	BIRMINGHAM, MI 48009
1926478015	SAMER OBEID AND SANDY GHORRA LVNG TRUST	470 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-478-015	BIRMINGHAM, MI 48009
1926478012	AMY BETH FOLBE TRUST	290 LAKE PARK DR	BIRMINGHAM	MI	48009	08-19-26-478-012	BIRMINGHAM, MI 48009
1926427002	HERBERT LAWSON	840 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-427-002	BIRMINGHAM, MI 48009
1926427003	DEBRA F CONROY TRUST	790 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-427-003	BIRMINGHAM, MI 48009
1926427004	PHILIP D FRACASSA	4705 BARNSLEIGH DR	AKRON	OH	44333	08-19-26-427-004	AKRON, OH 44333
1926427005	CHAD O'SHELL	752 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-427-005	BIRMINGHAM, MI 48009

1926427006	GUY T DIPLACIDO	726 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-427-006	BIRMINGHAM, MI 48009
1926427039	SAMUEL HABERMAN	700 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-427-039	BIRMINGHAM, MI 48009
1926427040	MATTHEW J RIZIK	2950 W SQUARE LAKE RD STE 200	TROY	MI	48098	08-19-26-427-040	TROY, MI 48098
1926427008	640 LAKESIDE LLC	PO BOX 7008	BLOOMFIELD HILLS	MI	48302	08-19-26-427-008	BLOOMFIELD HILLS, MI 48302
1926478009	JEREMY D WOLFE	370 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-478-009	BIRMINGHAM, MI 48009
1926478010	JEREMY D WOLFE	370 LAKESIDE DR	BIRMINGHAM	MI	48009	08-19-26-478-010	BIRMINGHAM, MI 48009
1926427011	JANET VALLEE	532 LAKESIDE DR	BIRMINGHAM	MI	48009	08-19-26-427-011	BIRMINGHAM, MI 48009
1926427012	JANET VALLEE TRUST	532 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-427-012	BIRMINGHAM, MI 48009
1926478014	ARYA AFRAKHTEH	490 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-478-014	BIRMINGHAM, MI 48009
1926427009	CALVIN R FORD	620 LAKESIDE RD	BIRMINGHAM	MI	48009	08-19-26-427-009	BIRMINGHAM, MI 48009
1926427010	592 LAKESIDE DR LLC	1393 WHEATON DR STE 700	TROY	MI	48083	08-19-26-427-010	TROY, MI 48083
1926327021	MARC K LAHIRI	587 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-021	BIRMINGHAM, MI 48009
1926327022	TODD KARRY	33717 WOODWARD AVE # 600	BIRMINGHAM	MI	48009	08-19-26-327-022	BIRMINGHAM, MI 48009
1926328008	CRAIG R BUSH	584 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-328-008	BIRMINGHAM, MI 48009
1926327012	BRETT D ALTMAN	871 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-012	BIRMINGHAM, MI 48009
1926327013	ROBERT T GEORGE JR	825 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-013	BIRMINGHAM, MI 48009
1926328001	BIRMINGHAM SCHOOL DISTRICT	31301 EVERGREEN RD	BEVERLY HILLS	MI	48025	08-19-26-328-001	BEVERLY HILLS, MI 48025
1926327015	RICHARD M WALLACE	755 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-015	BIRMINGHAM, MI 48009
1926328002	ANDREW C CHAPMAN	552 W JEFFERSON ST	PETOSKEY	MI	49770	08-19-26-328-002	PETOSKEY, MI 49770
1926327014	ROBERT A BEEBE	781 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-014	BIRMINGHAM, MI 48009
1926328003	TIMOTHY WITTLINGER	736 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-328-003	BIRMINGHAM, MI 48009
1926327018	PAUL NIGLAS	655 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-018	BIRMINGHAM, MI 48009
1926327016	KAITLIN ANNE OLYNNGER	717 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-016	BIRMINGHAM, MI 48009
1926328010	MILES NEUMANN	534 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-328-010	BIRMINGHAM, MI 48009
1926327024	TIMOTHY R WARD	515 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-024	BIRMINGHAM, MI 48009
1926328009	CRIS LINDSTROM	550 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-328-009	BIRMINGHAM, MI 48009
1926327019	THOMAS A BOUTROUS	639 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-019	BIRMINGHAM, MI 48009
1926328004	ALLAN P ROTHFEDER	690 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-328-004	BIRMINGHAM, MI 48009
1926328005	KATHERINE A NYBERG TRUST	650 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-328-005	BIRMINGHAM, MI 48009
1926328006	MICHAEL K MARGOLIS	634 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-328-006	BIRMINGHAM, MI 48009
1926327020	JOHN STREET	617 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-020	BIRMINGHAM, MI 48009
1926328007	PAUL MILLENBACH	612 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-328-007	BIRMINGHAM, MI 48009
1926327023	STEVE KIM	535 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-023	BIRMINGHAM, MI 48009
1926328011	BRIAN SOLOMON	520 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-328-011	BIRMINGHAM, MI 48009
1926327017	MATTHEW LACASSE	693 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-017	BIRMINGHAM, MI 48009
1926327021	MARC K LAHIRI	587 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-021	BIRMINGHAM, MI 48009
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1926328007	PAUL MILLENBACH	612 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-328-007	BIRMINGHAM, MI 48009

1926327023	STEVE KIM	535 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-023	BIRMINGHAM, MI 48009
1926328011	BRIAN SOLOMON	520 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-328-011	BIRMINGHAM, MI 48009
1926327017	MATTHEW LACASSE	693 N GLENHURST DR	BIRMINGHAM	MI	48009	08-19-26-327-017	BIRMINGHAM, MI 48009
1935429024	JENNIFER R SOLCZ	2085 PONTIAC DR	SYLVAN LAKE	MI	48320	08-19-35-429-024	SYLVAN LAKE, MI 48320
1935429025	ANURAG NEWATIA	1385 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-429-025	BIRMINGHAM, MI 48009
1935429026	DHRUMIL B PARIKH	1371 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-429-026	BIRMINGHAM, MI 48009
1935429027	JEFFREY S WIGGINTON	1355 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-429-027	BIRMINGHAM, MI 48009
1935428019	LABIB GILLES DEBIANE	2324 YORKSHIRE RD	BIRMINGHAM	MI	48009	08-19-35-428-019	BIRMINGHAM, MI 48009
1935428011	PRUDENTIAL PROPERTIES LLC	30100 TELEGRAPH RD STE 366	BINGHAM FARMS	MI	48025	08-19-35-428-011	BINGHAM FARMS, MI 48025
1935428020	MEHUL MEHTA	988 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-428-020	BIRMINGHAM, MI 48009
1935428017	STEVEN DAVID KNOBLOCK	1052 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-428-017	BIRMINGHAM, MI 48009
1935428018	CHISTOPHER TACHOIR	1034 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-428-018	BIRMINGHAM, MI 48009
1935428014	FREDERICK J LEONE	1112 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-428-014	BIRMINGHAM, MI 48009
1935428013	JOHN E ESSAD	1132 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-428-013	BIRMINGHAM, MI 48009
1935428012	CRAIG D SILVERTON	1393 LATHAM RD	BIRMINGHAM	MI	48009	08-19-35-428-012	BIRMINGHAM, MI 48009
1935430009	GARY J OUDERSLUYS	955 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-430-009	BIRMINGHAM, MI 48009
1935426017	NIKOLAOS MAMATAS	1330 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-426-017	BIRMINGHAM, MI 48009
1935428015	SCOTT L CIEMNIECKI	1098 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-428-015	BIRMINGHAM, MI 48009
1935428016	NICHOLAS HERDZIK	1076 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-428-016	BIRMINGHAM, MI 48009
1935428022	JOSHUA WEGENER	981 ANN ST	BIRMINGHAM	MI	48009	08-19-35-428-022	BIRMINGHAM, MI 48009
1935428021	GENE R FRANCIS	972 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-428-021	BIRMINGHAM, MI 48009
1935430010	PRUDENTIAL PROPERTIES LLC	30100 TELEGRAPH RD STE 366	BINGHAM FARMS	MI	48025	08-19-35-430-010	BINGHAM FARMS, MI 48025
1935430008	PAUL J SCHMALTZ	979 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-430-008	BIRMINGHAM, MI 48009
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1935426018	SMK PROTECTION TRUST	1360 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-426-018	BIRMINGHAM, MI 48009
1935430006	J TIMOTHY ESPER TRUST	1049 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-430-006	BIRMINGHAM, MI 48009
1935430007	KIMBERLY A WEINER TRUST	1005 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-430-007	BIRMINGHAM, MI 48009
1935430004	MARK G PIERRET	1083 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-430-004	BIRMINGHAM, MI 48009
1935430002	TIMOTHY PALMER	1155 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-430-002	BIRMINGHAM, MI 48009
1935426019	THOMAS R PEDECINE	1390 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-426-019	BIRMINGHAM, MI 48009
1935430001	ANDREAS BERGESEN	1187 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-430-001	BIRMINGHAM, MI 48009
1935429004	KURT R GERBER	1301 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-429-004	BIRMINGHAM, MI 48009
1935430003	JAY R SHELL	1121 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-430-003	BIRMINGHAM, MI 48009
1935426016	JAMES C STRAITH	1300 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-426-016	BIRMINGHAM, MI 48009
1935429022	JONATHAN MARVIN SCHREIBER	1231 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-429-022	BIRMINGHAM, MI 48009
1935429023	DAVID MOUSER	1225 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-429-023	BIRMINGHAM, MI 48009
1935429003	THOMAS PETER HILDITCH	1323 NORTHLAWN BLVD	BIRMINGHAM	MI	48009	08-19-35-429-003	BIRMINGHAM, MI 48009
	City of Birmingham - Clerk's Office	151 Martin Street	Birmingham	MI	48009		Birmingham MI 48009

BIRMINGHAM
A WALKABLE CITY

Monday, January 26, 2026

TO: «Parcel»
«Name_1»
«Address»
«City», «State» «Zip»

RE: 2026 Cape Seal Program
Cape Seal Maintenance Treatment Special Assessment District

The City regularly reviews its unimproved roadways to coordinate routine cape seal treatment. Your street has been identified for inclusion in the 2026 Cape Seal Program. A location map of the project areas is attached. Construction is anticipated to start in spring 2026.

You are receiving this letter because the dates for the Public Hearing of Necessity and Hearing of Confirmation have been amended.

This letter serves as a notification for two public hearings regarding this project:

- The Public Hearing of Necessity to form a Special Assessment District for cape seal maintenance treatment on unimproved road surfaces within the project area. The hearing will be held **Monday, February 23, 2026**, at the regularly scheduled City Commission meeting at 7:00 p.m. in City Hall at 151 Martin Street.
- If necessity is determined at the February 23 hearing, a Public Hearing of Confirmation to confirm the Special Assessment District will be held on **Monday, March 9, 2026**, at the regularly scheduled City Commission meeting at 7:00 p.m. in City Hall at 151 Martin Street.

Typical work items included in the cape seal program are:

- Pulverizing existing road surface and regrading as necessary, and/or spot patching deteriorated areas.
- Applying a cape seal treatment over the entire road surface consisting of a double layer of chip seal and a slurry coat.
- Reconstructing sidewalk ramps in the project area to meet ADA requirements, where needed.

Consistent with past projects of this type, it has been the City's assessment policy is as follows:

- 85% of the front-foot improvement costs are assessed to all properties fronting on the improvement.
- 25% of the side-foot improvement costs are assessed to all residential properties siding on the improvement.
- 85% of the side-foot improvement costs are assessed on improved business properties siding on the improvement.
- 25% of the side-foot improvement costs are assessed on vacant business properties siding on the improvement.

The City pays the remaining portion of the costs, which are 15% of the front-foot costs and 85% of the side-foot costs.

The assessment for each property is calculated using the average cost for the proposed work on each street in the cape seal program, multiplied by the linear foot measurement of the property line fronting the street, and/or the side property line for corner lots. The resulting amount is then reduced by multiplying again by 85% for the front footage measurement, and/or 25% or 85% for the side footage measurement.

Upon completion of the project, the City will bill each property for the full amount of the assessment. Payment will be due within 30 days of receipt. If full payment cannot be made at that time, the assessment can be paid in as many as five annual payments. Interest will be charged annually on the remaining balance at a rate to be determined. The City plans to present an estimate of costs associated with this SAD at the Public Hearing of Necessity to be held on February 9, 2026.

Resident Meeting:
The Engineering Department will host a resident meeting to discuss the upcoming project on **Thursday, February 12, 2026, from 5:30 – 6:30 p.m.** at City Hall, 151 Martin Street, in the City Commission Room. The meeting will include a presentation of the scope of work to be performed, assessment costs, and an opportunity to answer any questions.

If you have any questions or concerns, please contact the Engineering Office at (248) 530-1850. You may also address the City Commission directly at the Public Hearing of Necessity on February 9, 2026.

Sincerely,



Melissa A. Coatta, P.E.
City Engineer

Funds Report				
	Available:	$4,692.26	PBP Account Number:	35884980
	Used:	$117,093.74	Indicia Number:	0008029208
	Total Pieces:	153966	Meter Number:	8029208
	Control Sum:	$121,786.00	Meter Name:	
	Resettable Piece Count:	149	Printed:	JAN 27 2026 12:20 PM
	Piece Count Value:	$110.26		

Clerk's Office

Clerk's Office

BIRMINGHAM

A WALKABLE CITY

151 Martin Street • P.O. Box 3001
Birmingham, Michigan 48012-3001

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0008029208 JAN 27 2026

CLERK'S OFFICE

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JAN 30 2026
4:50 PM

Monday, January 26, 2026

City of Birmingham - Clerk's Office
151 Martin Street
Birmingham MI 48009

CAVE SEAL

48009-336851

FISHING

From Page 1

ice fishing, but to the knowledge and confidence needed to do it safely and responsibly.

"Our Ice to Table — Ice Fishing event is part of a multi-part fishing and aquatic conservation curriculum," said Paige Wigren, vice president of outdoor experience. "Most fishing programs focus on the 'try-it' aspect only. We wanted to take our events a few steps further."

The program was offered in partnership with the U.S. Fish & Wildlife Service — Detroit River International Wildlife Refuge in Trenton and supported by the Great Lakes Restoration Initiative through the Detroit River Youth Fishing Team grant. For nearly four years, the collaboration has worked to remove barriers that often keep families from outdoor recreation, particularly the cost of equipment and access to instruction.



Paige Wigren, Girl Scouts of Southeastern Michigan's vice president of outdoor experience, demonstrates how to fillet a fish as part of the Scouts' Ice to Table — Ice Fishing program. **PHOTO COURTESY OF GIRL SCOUTS OF SOUTHEASTERN MICHIGAN**

Each participant began the day with a detailed ice safety demonstration. Girl Scouts were fitted with mandatory ice picks and taught what to do if they fell through the ice, emphasizing the importance of staying calm. They also learned how to "spud" their path forward using an ice spud to test ice thickness before stepping ahead.

"It is best to assume that no ice is 100% safe," Wigren said. "Becoming too confident during high-risk activities can lead to mistakes and accidents. Safety is at the forefront of everything we do."

For many participants, the safety lessons were among the most valuable takeaways.

"I learned it's important to not panic if you fall through the ice, to never go on the ice alone, and to carry safety picks in case you need to pull yourself out," said Ayla DeLuca, an eighth grader from West Bloomfield.

Cassidy Holmes, a sixth grader from Waterford, said she learned "how to judge if the ice on a lake is safe, and how to use ice picks in an emergency."

Violet Lira, a first grader from Canton, said she was surprised that ice fishing was actually on the ice.

"I've only been regular fishing, like when it's warm. Walking right on the ice surprised me! I thought we would walk next to the ice," she said. "I learned that no ice is safe ice, and you have to check first and be really careful before you walk on it. You check how the ice feels and what color it is to see if it's OK to go on."

After safety fundamentals were covered, participants moved on to fishing skills. Each Girl Scout was assigned a pre-drilled ice hole and a five-gallon bucket stocked with bait, hooks, jigs, hemostats and a depth finder clip. Instructors demonstrated how to operate an ice fishing pole, bait a hook with a wax worm, gently "jig" the line, and safely remove a fish from the hook.

"They learn how to drill an ice fishing hole, scoop ice shards so they don't cut their line, measure water depth, set the hook, reel in their catch," Wigren explained. "And if the fish is legal and they're interested, we teach them how to fillet and pan fry it."

That final step, the transition from ice to table, proved especially memorable for many participants.

"I liked watching Ms. Paige filet the fish, even though it was a little gross," Holmes said. "I had never seen that before, and it was a good learning experience."

Lilly Brinn, a 10th grader from Troy, agreed. "I liked the fish filleting part. It was really interesting to see the knife work."

For DeLuca, the highlight was tasting the final product. "I liked eating the fish," she said. "Ms. Paige is very good at cooking it. Best fried fish I've ever had. It probably helps that it was so fresh."

The program followed a "challenge by choice" philosophy, allowing participants to decide how involved they wanted to be in preparing their catch.

"First and foremost, we focus on the comfort level of the child," Wigren said. "Some kids are excited to learn how to filet a fish. Others prefer just the catching part, and that's OK."

Even those who didn't catch a fish found the experience rewarding.

"Even though I didn't catch anything today, it was still interesting to learn and great to be out in nature on a sunny day," Holmes said. "It was peaceful on the frozen lake."

Brinn echoed that sentiment. "I didn't catch anything, unfortunately, but I enjoyed learning how to prep fish. The hour on the ice felt more like ten minutes."

Several participants were surprised by how quickly conditions changed on the ice.

"I was most surprised that the water in the open hole freezes so fast," DeLuca said.

"I'd never gone before, and I was surprised how fast the ice froze," Brinn added. "Seriously, it's crazy."

Winter programming comes with logistical challenges, from unpredictable weather to managing cold exposure. The Scouts addressed those risks with heated pop-up shanties, access to warming stations, and continuous monitoring of participant comfort.

While the program was first planned in 2022, inconsistent ice conditions delayed its launch. The 2025 season marked the first year it could be hosted safely, and this year's event proved equally successful.

Despite the complexity, Wigren said the impact makes it worthwhile.

"When kids directly connect with nature in their own communities, it leads to a better understanding of conservation and sustainability," she said. "It breaks a big concept down into something tangible."

For many Girl Scouts, the experience sparked interest in future outdoor adventures.

"I would love to do this again," DeLuca said. "I love fishing, and I want to try again and actually catch something."

Holmes agreed. "It was fun, I got to see my friend, and I learned a lot."

Wigren hopes participants walked away with more than just fishing skills.

"These events teach Girl Scouts that they can do anything they put their minds to," she said. "They can do hard things."

For more information on GSSEM's Outdoor Experience Department programs, visit gssem.org/go.

WEALTH

From Page 1

PREPARE BEFORE THE INHERITANCE

Receiving large sums of money and losing a loved one are both things that can throw you for a loop, emotionally and practically.

"Grief can lead to rushed decisions," says Scott Bishop, a CFP and co-founder of Presidio Wealth Partners in Houston.

Establishing goals, understanding inheritance terms and researching tax implications can put you in a better place to make smart choices, he says.

In other words, laying the groundwork now prepares you for the hard work later.

"Emotionally, I often see people swing to extremes — either refusing to spend any money because it feels like 'blood money,' or spending too quickly because they don't feel deserving of it," says Mitchell Kraus, a CFP with Capital Intelligence Associates in Santa Monica, California.

No matter what emotion you feel at the time, it's probably normal, whether it's happiness, sadness or general overwhelm.

"I've seen stress, I've seen excitement," Fardous says. Many clients have never had this kind of money before, she says, and they don't know what to do with it.

AVOID COMMON INHERITANCE MISTAKES

All those feelings can make it hard to act thoughtfully on your newfound wealth, particularly if it's a life-changing amount. One thing you shouldn't do, Fardous says, is start mentally spending the cash.

"Whenever I see someone who's received a windfall, they think of this wish list they've had," Fardous says. "And this money is getting spent in their head before it's even hitting their bank account."

That can derail long-term security before the inheritance has even fully settled.

"Don't bank on an inheritance until you have it," Kraus says.

Other people seek professional advice (good!) but end up with financial pros who try to sell them lots of high-commission products (not ideal!).

If you consult with a professional, consider looking for a fiduciary, which means they're legally bound to do what's best for the client, Fardous says. Be sure you understand the difference between a fee-based financial planner, who receives commissions for recommending products, and a fee-only planner, who is paid only by clients.

People sometimes respond to pressure from friends and family by taking hasty action before they've had time to really think about it.

Kraus recommends telling people you're taking a "90-day decision-free zone" — a period where you don't make any irreversible financial moves.

"It gives you a chance to reset, to think about what's going on and how it's happening, and that takes a lot of the pressure off," Kraus says.

HAVE THE HARD CONVERSATIONS EARLY

It's helpful to know what's coming your way so you can prepare for taxation and distribution. If you're inheriting an IRA, there are rules about when and how you must take distributions from the account. There may be taxes due on what you're receiving.

If you have the kind of relationship with your loved one where you could discuss what you might be inheriting, do it, Kraus says.

"I can't tell you how many families I see where the parents are going to leave a lot of money for their kids, but their kids are so worried about the parents not being able to get by, they're saving money in case their parents need help," Kraus says. "So having those conversations ahead of time can help."

Consider asking what you might be inheriting — money, property, investments — and whether there are any restrictions on the assets, Kraus says.

MAKE A PLAN FOR INHERITED WEALTH

After taking some time to absorb the situation and your emotions, experts say, there are a few priorities to consider.

Consulting a professional about your tax liabilities should be one of your first steps, Bishop says. After that, think about emergency savings and debt.

"We don't want to allocate anything toward anything else without you having an emergency fund — three to six months in high-yield savings — then making sure you don't have any high-interest debt," Fardous says.

Then consider your goals. Do you want to put money toward your children's college education, buy a house, bump up your retirement nest egg?

"The first thing you don't want to do is go out and buy three Ferraris," Bishop says.

Think about what's important to you, what this money means for you, he says. Where do you want to go? Does this inheritance mean you can retire early? Would you want to retire early?

"Think of it as an opportunity to reset your life," Bishop says. "Big checks invite big mistakes. It's important to slow down, have a plan and then execute."

NOTICE OF A PUBLIC HEARING WATERFORD TOWNSHIP PLANNING COMMISSION

Notice is hereby given of a public hearing to be held by the Waterford Township Planning Commission on **Tuesday, February 24, 2026 at 6:00 p.m.**
Members of the public will only be able to speak during the public comment period(s) provided during the meeting, unless otherwise permitted by the Chairperson. Public comments will be limited to three minutes per speaker.

To provide for orderly public participation, a person wishing to speak must first state their name and request to be recognized by the Chairperson of the meeting. The Chairperson will recognize all persons wishing to speak during a public hearing and the public comment period. Prior to the meeting, members of the public may contact the members of the Planning Commission to provide input or ask questions by email or mail to the Township employee/official and at the addresses listed below. **Public comments must be submitted seven days prior to the date of the meeting and include your name and address.** Persons with disabilities in need of accommodations to be able to participate in the meeting should provide at least 24-hour advance notice to the listed Township employee by phone, email, or mail and an attempt will be made to provide reasonable accommodations.

Jeffrey M. Polkowski, AICP
Director of Development Services
Charter Township of Waterford
5200 Civic Center Drive, Waterford, Michigan 48329

planning@waterfordmi.gov

Phone: (248) 674-6238

The Planning Commission will consider the following:

1. Rezoning Case No. PRSA 25-10-01, Rezoning from M-2, General Industrial/C-4, Extensive Business with an OV-SP, Summit Place Overlay to M-1, Light Industrial – PUBLIC HEARING
Parcel I.D. No. 13-25-200-041; *T3N, R9E, SEC 25 PART NE 1/4 BEG AT PT DIST N 00-32-10 W 60 FT & N 90-00-00 W 50 FT & N 00-32-10 W 1397.53 FT FROM E 1/4 COR, TH S 89-27-50 W 1822.52 FT, TH N 00-31-40 W 490 FT, TH N 89-27-50 E 1822.45 FT, TH S 00-32-10 E 490 FT TO BEG 20.50 A 9-10-25 FR 040*
Requesting: To rezone the subject property from M-2, General Industrial/C-4, Extensive Business with an OV-SP, Summit Place Overlay to M-1, Light Industrial
Property Location: **375 N Telegraph Rd**
Property Zoned: R-M2, Multiple-Family Residential
Applicant: Joe Lunghamer Chevrolet

2. Special Approval Case No. PRSA 25-12-01 (PCR 25-031), Cass Elizabeth Rd Short-Term Dwelling – PUBLIC HEARING
Parcel I.D. No. 13-34-251-012; *T3N, R9E, SEC 34 SUPERVISOR'S PLAT NO 46 LOT 2*
Requesting: To operate a short-term dwelling in a unit of an existing single-family attached residential building.
Property Location: **4290 Cass Elizabeth Apt 1**
Property Zoned: R-1E, Single-Family Attached Residential
Applicant: TJA Investment, LLC

3. Special Approval Case No. PRSA 26-01-02 (PCR 26-001), Cass Elizabeth Rd Short-Term Dwelling – PUBLIC HEARING
Parcel I.D. No. 13-34-251-012; *T3N, R9E, SEC 34 SUPERVISOR'S PLAT NO 46 LOT 2*
Requesting: Requesting: To operate a short-term dwelling in a unit of an existing single-family attached residential building.
Property Location: **4290 Cass Elizabeth Apt 5**
Property Zoned: R-1E, Single-Family Attached Residential
Applicant: ATJA Investment, LLC

4. Text Amendment Case No. PRSA 26-01-03, Data Center Moratorium – PUBLIC HEARING
Requesting: Requesting: Text amendment to define, and place a moratorium on, Data Centers.
Impacted Districts: **all zoning districts**
Applicant: Waterford Township

5. Special Approval Case No. PRSA 26-02-01 (PSP 26-1533), Plaza Garibaldi Expansion & Outdoor Dining Patio – PUBLIC HEARING
Parcel I.D. No. 13-13-176-029; *T3N, R9E, SEC 13 SUPERVISOR'S PLAT NO 14 LOTS 24 & 25 9-29-25 FR 002 & 003*
Requesting: To build an addition and outdoor dining patio onto an existing restaurant.
Property Location: **2675 Dixie Hwy**
Property Zoned: C-2, Small Business/C-3, General Business
Applicant: Plaza Garibaldi Real Estate, LLC

In conformance with the Americans with Disabilities Act (ADA), accommodations are available (large print agendas and meeting minutes etc.) upon request. Please contact the Development Services Department for more detail (248) 618-7427.

Grant Smith, Planning Commission Secretary
Charter Township of Waterford
Oakland County, Michigan

NOTICE OF PUBLIC HEARING
BIRMINGHAM CITY COMMISSION
PUBLIC HEARING OF NECESSITY & PUBLIC HEARING FOR CONFIRMATION OF THE ROLL

Meeting Date, Time, Location:	HEARING OF NECESSITY FOR SPECIAL ASSESSMENT DISTRICT Monday, February 23, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, March 9, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	**Oak Boulevard** (Greenwood to N Old Woodward) 692 Oak Ave 680 Oak Ave 670 Oak Ave 640 Oak Ave 608 Oak Ave 556 Oak Ave 520 Oak Ave 450 Oak Ave 533 Oak Ave 511 Oak Ave 607 Oak Ave 615 Oak Ave 635 Oak Ave 651 Oka Ave 667 Oak Ave 679 Oak Ave 850 Greenwood Blvd 969 Woodland St 885 N Old Woodward **Lakeside Drive** (Oak to Randall) 890 Lakeside Dr 840 Lakeside Dr 790 Lakeside Dr 774 Lakeside Dr 752 Lakeside Dr 726 Lakeside Dr 700 Lakeside Dr 660 Lakeside Dr 640 Lakeside Dr 620 Lakeside Dr 592 Lakeside Dr 568 Lakeside Dr 532 Lakeside Dr 490 Lakeside Dr 470 Lakeside Dr 440 Lakeside Dr 430 Lakeside Dr 412 Lakeside Dr 932 Lakeside Dr 790 Lakeside Dr 350 Lakeside Dr 320 Lakeside Dr **Glenhurst Drive** (Oak to Pine) 515 N Glenhurst Dr 535 N Glenhurst Dr 559 N Glenhurst Dr 587 N Glenhurst Dr 617 N Glenhurst Dr 639 N Glenhurst Dr 655 N Glenhurst Dr 693 N Glenhurst Dr 717 N Glenhurst Dr 755 N Glenhurst Dr 781 N Glenhurst Dr 825 N Glenhurst Dr 871 N Glenhurst Dr 520 N Glenhurst Dr 534 N Glenhurst Dr 550 N Glenhurst Dr 584 N Glenhurst Dr 612 N Glenhurst Dr 634 N Glenhurst Dr 650 N Glenhurst Dr 690 N Glenhurst Dr 736 N Glenhurst Dr 770 N Glenhurst Dr 19-26-328-001 **Northlawn Boulevard** (Gold Course to Southfield) 1300 Northlawn Blvd 1330 Northlawn Blvd 1360 Northlawn Blvd 1390 Northlawn Blvd 1395 Northlawn Blvd 1385 Northlawn Blvd 1371 Northlawn Blvd 1355 Northlawn Blvd 1323 Northlawn Blvd 1301 Northlawn Blvd 1231 Northlawn Blvd 1225 Northlawn Blvd 1187 Northlawn Blvd 1155 Northlawn Blvd 1121 Northlawn Blvd 1083 Northlawn Blvd 1061 Northlawn Blvd 1049 Northlawn Blvd 1005 Northlawn Blvd 979 Northlawn Blvd 995 Northlawn Blvd 1400 Southfield Rd 1308 Southfield Rd 956 Northlawn Blvd 972 Northlawn Blvd 988 Northlawn Blvd 1000 Northlawn Blvd 1034 Northlawn Blvd 1052 Northlawn Blvd 1076 Northlawn Blvd 1098 Northlawn Blvd 1112 Northlawn Blvd 1132 Northlawn Blvd 1393 Latham Rd
Nature of Improvement:	This work will include routine cape seal treatment along unimproved roadways.
City Staff Contact:	Melissa Coatta, City Engineer mcoatta@bhamgov.org, (248)530-1839
Notice Requirements:	Newspaper Notice and First Class Mail to affected property owners 10 days prior. Publish 2/8/2026 & 2/22/2026
Approved minutes may be reviewed at:	City Clerk's Office or www.bhamgov.org/commissionagendas

Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760 Meeting ID: 655 079 760**

You or your agent may appear at the hearings to express your views; however, if you fail to protest either in person or by letter received on or before the date of the hearing, you cannot appeal the amount of the special assessment to the Michigan Tax Tribunal. Mail any correspondence to: City Clerk, P.O. Box 3001, Birmingham, MI 48012.
The property owner may file a written appeal of the special assessment with the State Tax Tribunal within 30 days after the confirmation of the special assessment roll if that special assessment was protested at the hearing held for the purpose of confirming the roll.
All special assessments, including installment payments, shall, from the date of the confirmation thereof, constitute a lien on the respective lots or parcels assessed, and until paid shall be charged against the respective owners of the lots or parcels assessed.

Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk's Office at 248.530.1880 (voice) or 248.644.3405 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance.

NOTICE OF MEETING

In compliance with the provisions of Act No. 266 of the Public Acts of 1976, the open meeting act, Act 206, 1893, as amended, the Michigan General Property Tax Law, and Chapter IV of the Rochester Hills City Charter, located at 1000 Rochester Hills Drive, Rochester Hills, Michigan, the Board of Review will hear assessment appeals on the following dates:.

Organizational Meeting, Tuesday March 3, 2026 - 3:00 pm – 5:00 pm

Monday, March 9, 2026 - 1:30 pm - 4:30 pm & 6:00 pm - 9:00 pm

Tuesday, March 10, 2026 - 1:30 pm - 4:30 pm & 6:00 pm - 9:00 pm

Wednesday, March 11, 2026 - 9:30 am - 12:30 pm & 2:00 pm - 5:00 pm

The 2026 Tentative Ratio for all classes of property is 50.00 percent, with corresponding estimated multipliers of 1.00.

If you wish to appear before the Board of Review, an application to appeal must be completed in the Assessing Department no later than Wednesday, March 11, 2026, at 4:00 pm. A docket number, date and time for appeal will be assigned as soon as the application is completed. Please reference your parcel identification number so your records can be quickly located. It is advisable to discuss any assessment questions with the Assessing Department prior to appearing before the Board of Review.

Laurie A Taylor, Director of Assessing
Secretary to Board of Review

02/8/2026 POSTED AT: City of Rochester Hills Municipal Building, 1000 Rochester Hills Drive, Rochester Hills, MI

LAT/has

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2026 Cape Seal Program Project

Hearing of Necessity for Cape Seal Special Assessment District (SAD)

Engineering Department

Date: February 23, 2026

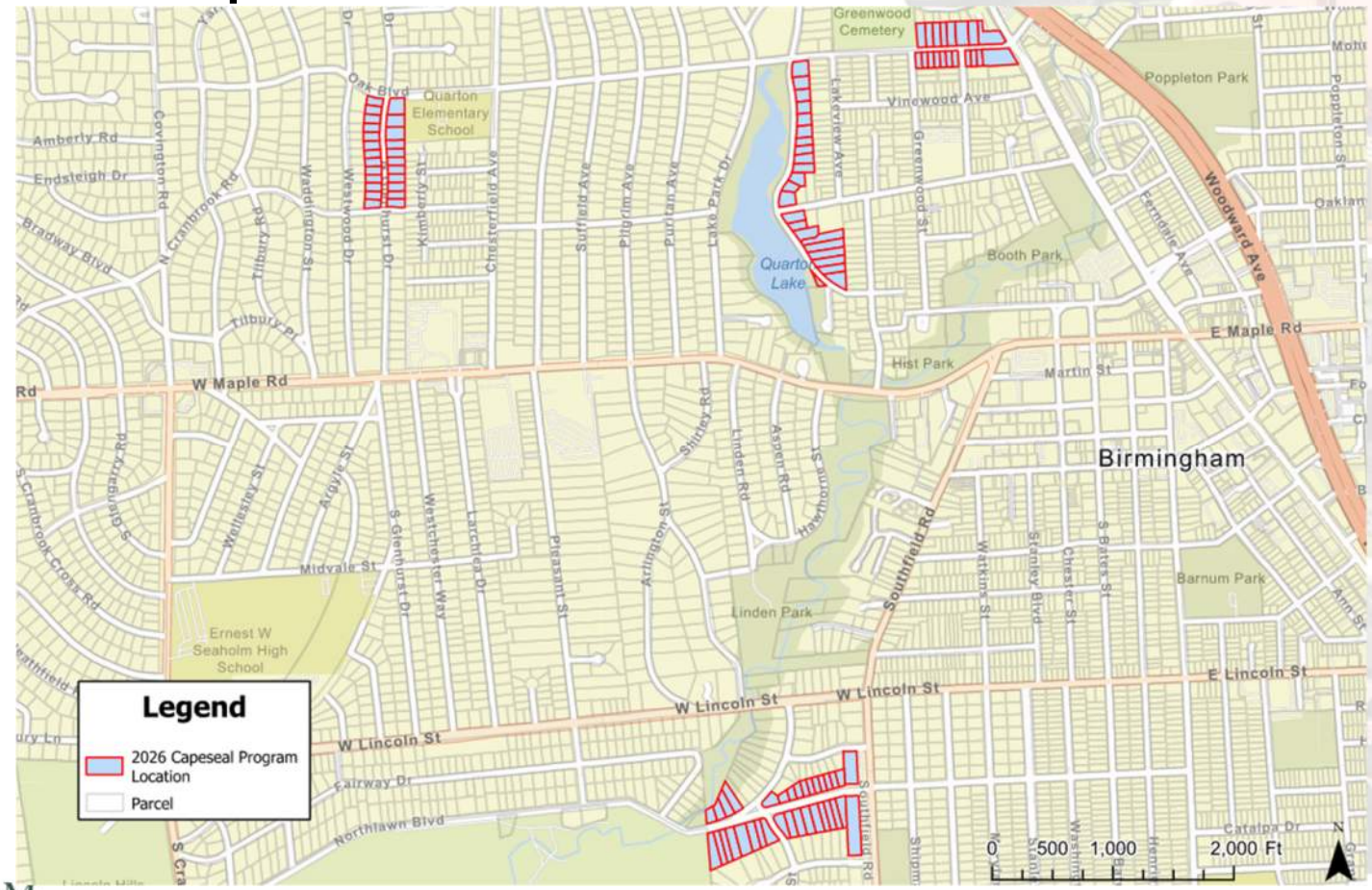
2026 Cape Seal Program
Cape Seal Special Assessment District

➢Overview

- Cape seal existing unimproved streets:
  - N Glenhurst Drive: Oak to Pine
  - Lakeside Drive: Oak to Randall
  - Northlawn Blvd: Birmingham Country Club to Southfield
  - Oak Blvd: Greenwood to N Old Woodward
- Special Assessment District (SAD) for Cape Seal will defray the costs incurred by the City for construction of these improvements.

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2026 Cape Seal Program
Cape Seal Special Assessment District



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2026 Cape Seal Program
Cape Seal Special Assessment District

➢History

Previous Cape Seal Treatment:

Street Name	Limits	Previous Year Cape Sealed	Daily Traffic Count (Year)
Oak Ave	Greenwood to N Old Woodward	2014	4,897 (2025)
Lakeside Dr	Oak to Randall	2010	736 (2019)
N Glenhurst Dr	Oak to Pine	2008	421 (2019)
Northlawn Blvd	Rouge River to Southfield	2010	2,280 (2025)

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2026 Cape Seal Program
Cape Seal Special Assessment District

➢City Policy

- Maintenance on Unimproved Roads
  - First Special Assessment District for "dustproofing": 1948
  - 85% of short-foot costs for all property fronting the improvement;
  - 25% of long-foot costs for all residential property siding the improvement;
  - 85% of long-foot costs for all improved business property siding the improvement and;
  - 25% of long-foot costs for all unimproved business property siding the improvement.

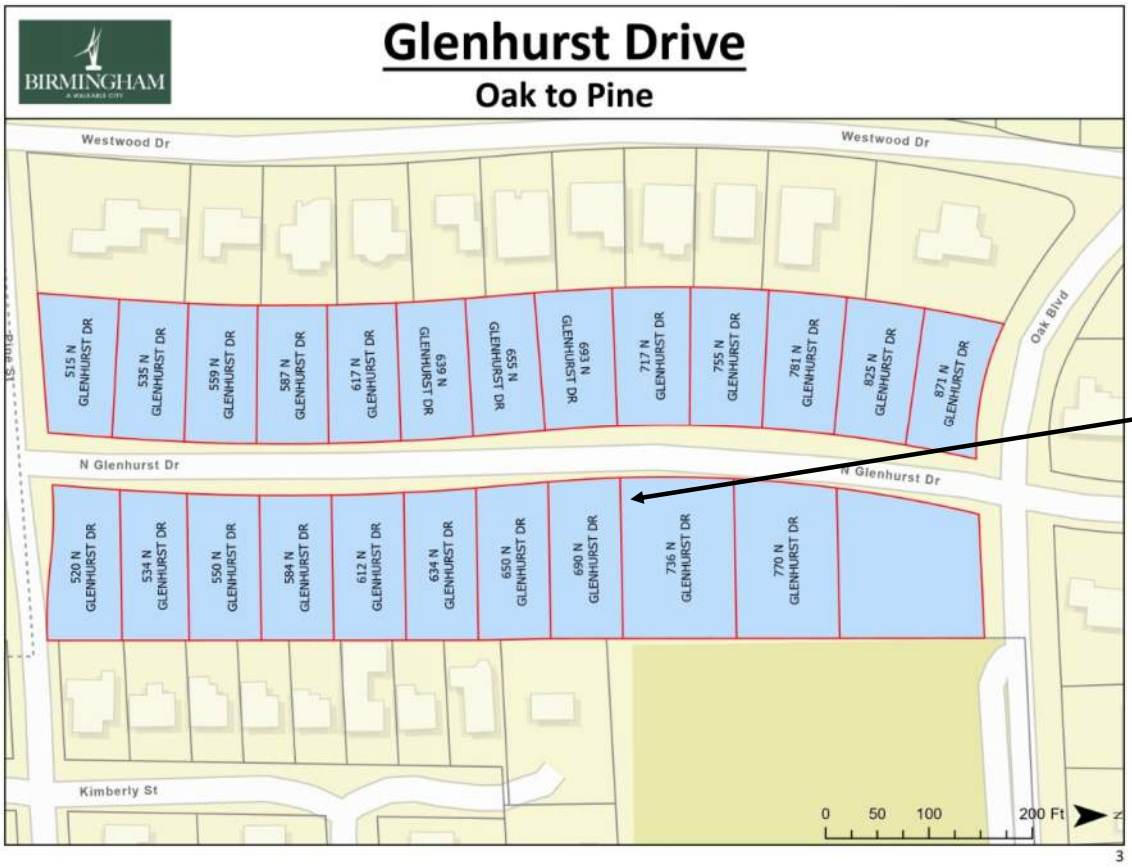
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2026 Cape Seal Program
Cape Seal Special Assessment District

- Project Costs
  - Overall Estimated Project Costs: $397,309.00
  - Scope: Pulverize, double chip and slurry
  - Total Footage Along Project: 9,729.94 feet
  - Assessable Footage Along Project: 7,933.11 feet
  - Cost per Foot: $40.83

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2026 Cape Seal Program
Cape Seal Special Assessment District



Properties included in proposed Cape Seal Treatment Special Assessment District

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2026 Cape Seal Program
Cape Seal Special Assessment District





Existing Conditions – Glenhurst

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2026 Cape Seal Program
Cape Seal Special Assessment District



Properties included in proposed Cape Seal Treatment Special Assessment District

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2026 Cape Seal Program
Cape Seal Special Assessment District

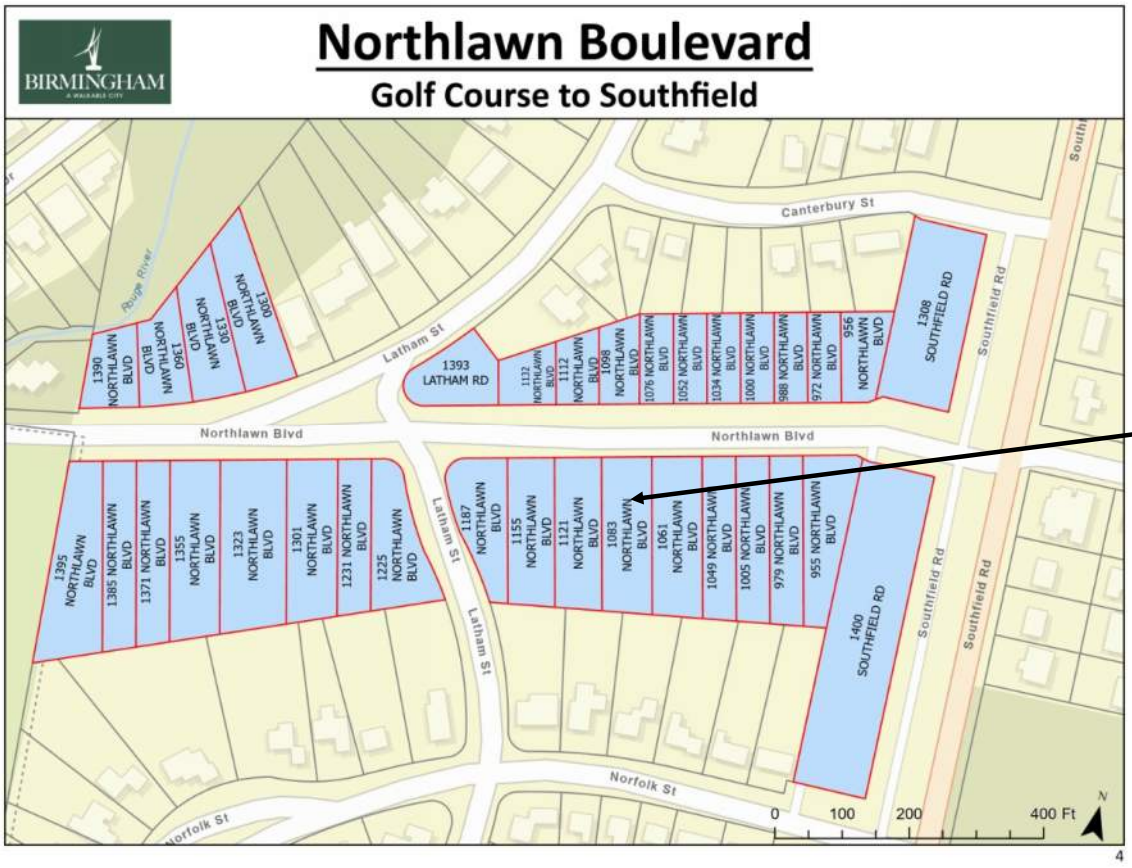




Existing Conditions – Lakeside

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2026 Cape Seal Program
Cape Seal Special Assessment District



Properties included in proposed Cape Seal Treatment Special Assessment District

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2026 Cape Seal Program
Cape Seal Special Assessment District

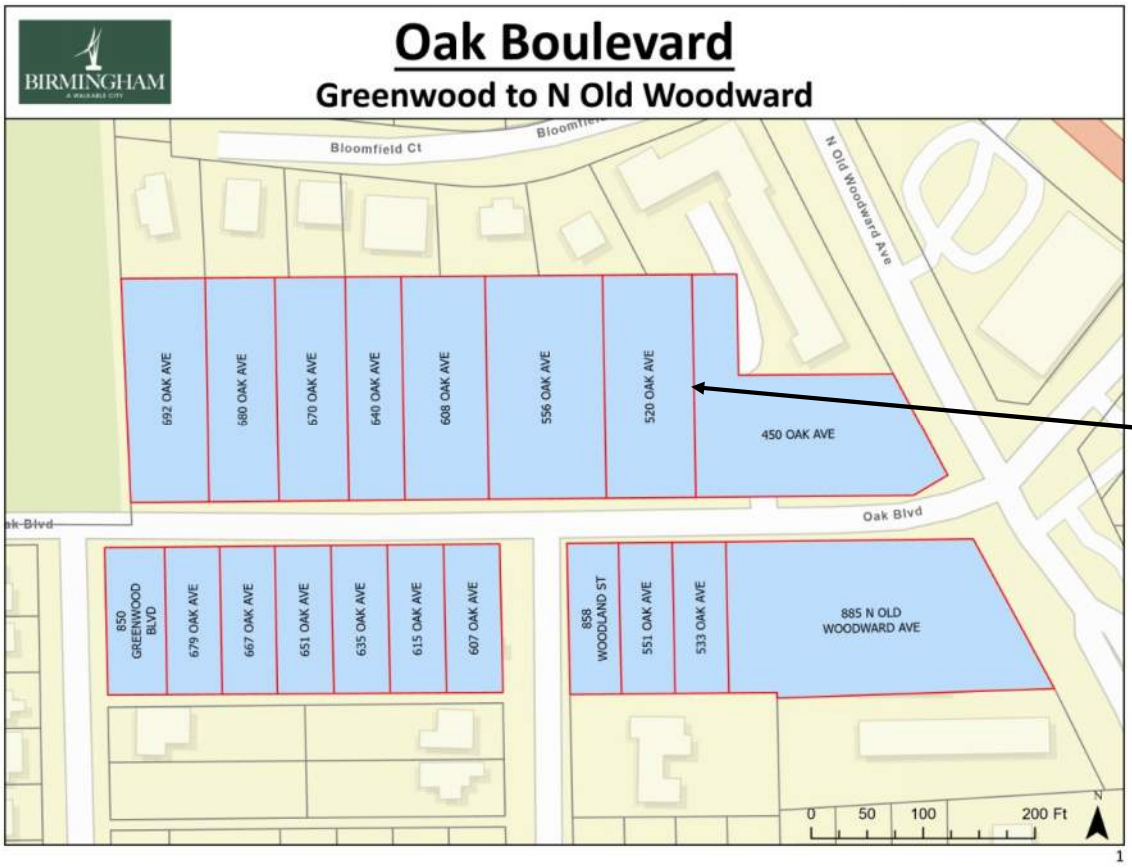




Existing Conditions – Northlawn

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2026 Cape Seal Program
Cape Seal Special Assessment District



Properties included in proposed Cape Seal Treatment Special Assessment District

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2026 Cape Seal Program
Cape Seal Special Assessment District





Existing Conditions – Oak

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2026 Cape Seal Program
Cape Seal Special Assessment District

➢Summary

- The Engineering Department recommends City Commission declare a necessity and approve the SAD for 2026 Cape Seal Program for cape seal treatment.
- Should the Commission approve the SAD, a public hearing for confirmation of the roll will be held on March 9, 2026.

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Mya Brown <mbrown@bhamgov.org>

Oak Cape Seal

Michael Seneski <mseneski@gmail.com> Mon, Feb 16, 2026 at 10:54 AM
To: city-commission@bhamgov.org

I'm sorry...It hit before I could finish..!!
Birmingham City Commissioners:

I would like to lodge my opposition to the proposed Cape Seal program.

First and foremost, I wholeheartedly believe that the City's approach to infrastructure is 100% incorrect. Streets/sidewalks need to be the City's responsibility, and should be included in our tax base. The quality of our streets is horrible -- and to put the maintenance/development of each street on the back of the residents, on top of some of the highest property taxes in the State is just not right. **I propose that the City includes a ballot measure to include the infrastructure costs. AND, because I do not believe in "just adding"** (I have spent my career as a CFO -- including 30 years at Ford as CFO of Ford Credit and head of Strategy for Ford Motor Co), **I would like the City to propose a potential set of offsets that we, the citizens, can decide on.** For example, cutting the XMas lights by 30%, cutting the plantings/flowers by 30%, potential of 1 fire/EMT station, etc...(this is just a list, I'm sure you could develop a far more robust set of potential tradeoffs).

Second, I do not believe that your proposed treatment of Oak is responsible.
We asked the Engineering department to have the Police conduct traffic studies for all of the streets proposed in the Cape Seal program (in addition to other "normal" side streets. If the SEMCOG study done in 2013 is correct, then there could be over 8800/cars per day traversing Oak. Oak is the major east-west thoroughfare, and, during the Maple reconstruction, the City actually diverted all of the traffic onto Oak (further stressing the street). Since my first proposal will not be done in time to fix the problem on Oak that is mostly due to the City, I propose the following
- **Immediately, and permanently, restrict all trucks from Oak. Like Lincoln, all truck traffic should use Maple or Quarton**
- **For the Cape Seal program, like Wimbledon, we should only be charged 50% of the total. Wimbledon and Oak are considered Major Streets. They receive Act 51 funds, and the residents should not be 85% responsible.** How you can do 50% on Wimbledon, and then propose 85% to us seems duplicitous.

I am unable to be in town on Feb 23, so please use this letter as my input.
Sincerely,
Michael Seneski and Amy Geller
608 Oak Ave
248-515-7739

On Mon, Feb 16, 2026 at 10:49 AM Michael Seneski <mseneski@gmail.com> wrote:

> Birmingham City Commissioners:
>
> I would like to lodge my opposition to the proposed Cape Seal program.
>
> First and foremost, I wholeheartedly believe that the City's approach to infrastructure is 100% incorrect. Streets/sidewalks need to be the City's responsibility, and should be included in our tax base. The quality of our streets is horrible -- and to put the maintenance/development of each street on the back of the residents, on top of some of the highest property taxes in the State is just not right. **I propose that the City includes a ballot measure to include the infrastructure costs. AND, because I do not believe in "just adding"** (I have spent my career as a CFO -- including 30 years at Ford as CFO of Ford Credit and head of Strategy for Ford Motor Co), **I would like the City to propose a potential set of offsets that we, the citizens, can decide on.** For example, cutting the XMas lights by 30%, cutting the plantings/flowers by 30%, potential of 1 fire/EMT station, etc...(this is just a list, I'm sure you could develop a far more robust set of potential tradeoffs).
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> --
> Michael Seneski
> mseneski@gmail.com
> 248-515-7739

--
Michael Seneski
mseneski@gmail.com
248-515-7739

--
You received this message because you are subscribed to the Google Groups "City Commission" group.
To unsubscribe from this group and stop receiving emails from it, send an email to city-commission+unsubscribe@bhamgov.org.
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/CAKarKL5D6At6B9R_JmGLX-zK5EzwZCtOVTSQgYS8MPWE%2B3ygRA%40mail.gmail.com.

16 February 2026

Dear City of Birmingham Commissioners,

As the residents of Northlawn Boulevard in Birmingham, Michigan understand from attending the Engineering Department meeting held Thursday, February 12, 2026 to discuss the upcoming cape seal program, the city of Birmingham defines Northlawn as an unimproved road. However, we request financial relief from the city's plans to assess residents of Northlawn the customary unimproved road 85% of the cape seal project cost for the following reasons:

1) Unlike the typical city of Birmingham unimproved road (Canterbury for example) Northlawn Boulevard would "appear" as an improved road which consistently encourages non-resident traffic to utilize the road adding to its wear and tear
    a. 38 feet wide
    b. concreate curbs and driveway approaches
    c. gutters with rainwater sewer catches
    d. snowplowed and salted regularly
2) We understand that Northlawn Boulevard is defined as an important emergency route to facilitate fire and rescue access to the broader Birmingham community which would incline that the maintenance / condition of Northlawn is important to EVERY resident of Birmingham and not just those who live on Northlawn, therefore, it is unfair for the majority of the maintenance cost (85%) to be the liability of the Northlawn residents alone and instead the costs should be shared by ALL residents of Birmingham.
3) Since the last cape seal project was completed there has been approximately 13 homes completely demolished/reconstructed on Norhtlawn Boulvevard between Southfield and Cranbrook roads. The crews and heavy trucks can only enter from Southfield or Cranbrook roads and together with the invasive trenching of the street (and repatching) to connect up plumbing and water services to the newly constructed homes along with the weight of 13 homes demolition debris being hauled away and new construction materials being delivered there has clearly been an accelerated deterioration in the street surface attributable to home construction. The incumbent residents of Northlawn should not be fully responsible for the accelerated deterioration of the road surface due to new home construction. We think that the city of Birmingham should secure from home demolition/reconstruction permits additional funding to set aside for what we know will be a faster deterioration of the street surrounding the project resulting in a sooner than what would normally be expected resurfacing project. In addition, it is believed that these new homes constructed are providing a significant boost in property taxes collected by the City as compared to the demolished homes they replace.

We appreciate your consideration and recognition that Northlawn Boulevard is a very unique "unimproved" road. I think the police department can attest to the tremendous amount of non-Northlawn residents who travel this road on a daily basis.

Regards,
Jay & Kimberly Shell
1121 Northlawn Boulevard

CLERK'S OFFICE
RECEIVED
FEB 17 2026
11:25 AM

BIRMINGHAM
A WALKABLE CITY

Mya Brown <mbrown@bhamgov.org>

Fwd: City's Proposed Cape Seal Project on OAK AVE.

Jana Ecker <Jecker@bhamgov.org> Wed, Feb 18, 2026 at 10:53 AM
To: Mya Brown <mbrown@bhamgov.org>

Jana L. Ecker
City Manager
Birmingham, MI
(248) 530-1811

On Wed, Feb 18, 2026 at 10:02 AM Clinton Baller <cmballer@avidpays.com> wrote:

---------- Forwarded message ---------
From: **michelle areeda** <michelleareeda@gmail.com>
Date: Wed, Feb 18, 2026 at 9:33 AM
Subject: City's Proposed Cape Seal Project on OAK AVE.
To: Brad Host <bhost@bhamgov.org>, <cballer@bhamgov.org>, <along@bhamgov.org>, <ahaig@bhamgov.org>, <bkolb@bhamgov.org>, <kkozlowski@bhamgov.og>, <tlong@bhamgov.org>

My name is Michelle Areeda. I reside at 450 Oak Ave. Unit 201. I am writing this email on behalf of myself, Eva Von Voss, Unit 302 and Noah Miller, Unit 303. We will attend the meeting on February 23rd but do not expect that there will be time to discuss our concerns in full as so many other will wish to speak. As such we would like this letter in the record and addressed by the Council accordingly.

We counted numerous new home built on Oak, Lakeside and Pilgrim since 2020. The square footage of those homes range from 4,500 square feet to over 8,000- 9,000 square feet. The materials necessary to build those home are transported along Oak Ave on a daily basis during the height of the building season. The construction occurs after the equipment necessary for demolition and removal of concrete, and structural materials has been moved in and out. The work is done by vehicles owned by companies who are presumably required to comply with Birmingham's weight and axle maximums but seemingly without enforcement by the City. As a result Oak Ave. has been destroyed and made dangerous.

In its letter to residents, the City references a "traditional" 85-15 split for cost of cape sealing projects. However that split is not appropriate for Oak Ave. as the other city streets have not been treated as construction site thoroughfares and do not endure the constant use by overweight vehicles. With the city taking retainers from home owners or builders and accepting funding from the State for city streets it is illogical that the City now asks the residents to contribute to the work that needs to be done.

The City should take action to repair Oak and place the proper surface at its own expense. Also, going forward "no truck" signs should be posted on Oak Ave. at Woodward and Cranbrook as they are on Lincoln, Southfield at Maple, and Eaton at Lincoln. Also weight limits for all vehicles should be posted as like the one on Cranbrook at Maple and enforced.
Finally, the City should require trucks to enter from Maple Road or Big Beaver onto the streets upon which they are performing their work and have them exit the same way.

The goal is to keep Oak in good repair open to emergency vehicles and safe for pedestrians and drivers.

--
Michelle E. Areeda
Birmingham, MI
(248) 321-6165
Reply to: michelleareeda@gmail.com

This electronic message contains information from Michelle E. Areeda, which may be private and or privileged. The information is intended to be for the use of the addressee only. If you are not the addressee, note that any disclosure, copy, distribution or use of the contents of this message is prohibited.

BIRMINGHAM
A WALKABLE CITY

Mya Brown <mbrown@bhamgov.org>

Re: Northlawn Cape Seal

Clinton Baller <cmballer@avidpays.com> Wed, Feb 18, 2026 at 3:21 PM
To: Gary Oudersluys <socioking@hotmail.com>, Alex Bingham <abingham@bhamgov.org>, City Commission <city-commission@bhamgov.org>

Gary, Melissa,

Thanks for writing. We received the same letter (word-for-word, I believe) from Scott & Shawn Ciemniecki. I will try to see that it gets into our packet for Monday night.

Clinton Baller
Mayor

On Wed, Feb 18, 2026 at 12:56 PM Gary Oudersluys <socioking@hotmail.com> wrote:

18 February 2026

Dear City of Birmingham Commissioners,

As the residents of Northlawn Boulevard in Birmingham, Michigan understand from attending the Engineering Department meeting held Thursday, February 12, 2026 to discuss the upcoming cape seal program, the city of Birmingham defines Northlawn as an unimproved road. However, we request financial relief from the city's plans to assess residents of Northlawn the customary unimproved road 85% of the cape seal project cost for the following reasons:

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    2. concreate curbs and driveway approaches
    3. gutters with rainwater sewer catches
    4. snowplowed and salted regularly
2. We understand that Northlawn Boulevard is defined as an important emergency route to facilitate fire and rescue access to the broader Birmingham community which would incline that the maintenance / condition of Northlawn is important to EVERY resident of Birmingham and not just those who live on Northlawn, therefore, it is unfair for the majority of the maintenance cost (85%) to be the liability of the Northlawn residents alone and instead the costs should be shared by ALL residents of Birmingham.

3. Since the last cape seal project was completed there has been approximately 13 homes completely demolished/reconstructed on Norhtlawn Boulvevard between Southfield and Cranbrook roads. The crews and heavy trucks can only enter from Southfield or Cranbrook roads and together with the invasive trenching of the street (and repatching) to connect up plumbing and water services to the newly constructed homes along with the weight of 13 homes demolition debris being hauled away and new construction materials being delivered there has clearly been an accelerated deterioration in the street surface attributable to home construction. The incumbent residents of Northlawn should not be fully responsible for the accelerated deterioration of the road surface due to new home construction. We think that the city of Birmingham should secure from home demolition/reconstruction permits additional funding to set aside for what we know will be a faster deterioration of the street surrounding the project resulting in a sooner than what would normally be expected resurfacing project. In addition, it is believed that these new homes constructed are providing a significant boost in property taxes collected by the City as compared to the demolished homes they replace.

We appreciate your consideration and recognition that Northlawn Boulevard is a very unique “unimproved” road. I think the police department can attest to the tremendous amount of non-Northlawn residents who travel this road on a daily basis.

Regards,
Gary & Melissa Oudersluys
955 Northlawn Boulevard

--
You received this message because you are subscribed to the Google Groups "City Commission" group.
To unsubscribe from this group and stop receiving emails from it, send an email to city-commission+unsubscribe@bhamgov.org.
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/CAG8Vh9HTfpQX%2Bab4Ao%2Bgujq0vSpLDoBEcNekJoVSOHqDo4XO-A%40mail.gmail.com.

BIRMINGHAM
A WALKABLE CITY

Mya Brown <mbrown@bhamgov.org>

Fwd: Oak Cape Seal

1 message

Jana Ecker <Jecker@bhamgov.org> Thu, Feb 19, 2026 at 10:02 AM
To: Mya Brown <mbrown@bhamgov.org>

For CC agenda packet

Jana L. Ecker
City Manager
Birmingham, MI
(248) 530-1811

---------- Forwarded message ---------
From: **Andrew Stein** <stein.andrew3@gmail.com>
Date: Thu, Feb 19, 2026 at 7:54 AM
Subject: Re: Oak Cape Seal
To: Jana Ecker <Jecker@bhamgov.org>
Cc: Alex Bingham <abingham@bhamgov.org>, Brad Host <bhost@bhamgov.org>

Yes please include it!

Thank you
-Andrew

On Tue, Feb 17, 2026 at 9:01 AM Jana Ecker <Jecker@bhamgov.org> wrote:

> Mr. Stein,
>
> Thank you for your email to Commissioner Host. Any emails sent to specific commissioners are not included in the City Commission agenda packet. If you wish to send it to the City Commission for inclusion in the agenda packet, please send it to all City Commissioners and/or the City Clerk's Office. For this email, we can include it in the agenda packet if you provide your request for the City to do so in response to this email (the City Clerk is copied).
>
> Thank you!
>
> **Jana L. Ecker**
> **City Manager**
> **Birmingham, MI**
> **(248) 530-1811**
>
> On Mon, Feb 16, 2026 at 3:30 PM Brad Host <bhost@bhamgov.org> wrote:
>
> > Dear Ladies,
> > Please see all Commissioners get a copy of Andrew's letter and it is included in our 2/23 Agenda.
> > Thanks in advance,
> > Brad
> > Sent from my iPhone
> >
> > Begin forwarded message:
> >
> > **From:** Andrew Stein <stein.andrew3@gmail.com>
> > **Date:** February 16, 2026 at 2:48:42 PM EST
> > **To:** bhost@bhamgov.org

Subject: Oak Cape Seal

Dear Commissioner Brad,

I am writing to express my opposition to the proposed cap seal program for Oak Avenue, particularly the financial burden being placed on its residents.

First, it is concerning that Oak Avenue residents are being asked to cover 85% of the project cost, while residents on Wimbledon were responsible for only 50% of a similar project. This discrepancy raises serious questions about fairness and equitable treatment. Oak Avenue also carries significantly heavier traffic than Wimbledon, serving as a primary route for many non-resident drivers. Given the greater public use of Oak, its residents should not be required to bear any cost share without clear and compelling justification.

As noted above, Oak Avenue is a heavily traveled main road that serves far more than just its residents. It is used daily by a substantial volume of traffic, including families commuting to nearby schools such as Holy Name and Quarton Elementary. Because of this level of public use, and the fact that Oak functions as a major thoroughfare, we do not believe Oak Avenue residents should be responsible for any portion of this cost. The City should assume full financial responsibility for this improvement.

Finally, I would like to highlight the impact Oak Avenue's status as a main road has already had on property values. From 2023 to 2025, we attempted to sell our family home even dropping it below market value but were unable to do so. Multiple prospective buyers expressed concerns specifically because Oak is a busy main road. Homeowners on Oak already face challenges due to traffic volume and reduced market appeal, and a special assessment would only add to that burden.

For these reasons, we respectfully urge you to reconsider the cost allocation for this project and pursue a solution in which the City covers the full cost of the work on Oak Avenue.

Thank you for your time and consideration.

Sincerely,
Andrew and Samantha Stein
556 Oak Ave
Birmingham, MI 48009
248-722-3499

Dear City of Birmingham Commissioners,

As the residents of Northlawn Boulevard in Birmingham, Michigan understand from attending the Engineering Department meeting held Thursday, February 12, 2026, to discuss the upcoming cape seal program, the city of Birmingham defines Northlawn as an unimproved road. However, we request financial relief from the city's plans to assess residents of Northlawn for the customary unimproved road 85% of the cape seal project cost for the following reasons:

1) Unlike the typical city of Birmingham unimproved road (Canterbury for example) Northlawn Boulevard would "appear" as an improved road which consistently encourages non-resident traffic to utilize the road adding to its wear and tear
    a. 38 feet wide
    b. concreate curbs and driveway approaches
    c. gutters with rainwater sewer catches
    d. snowplowed and salted regularly
2) We understand that Northlawn Boulevard is defined as an important emergency route to facilitate fire and rescue access to the broader Birmingham community which would incline that the maintenance / condition of Northlawn is important to EVERY resident of Birmingham and not just those who live on Northlawn, therefore, it is unfair for the majority of the maintenance cost (85%) to be the liability of the Northlawn residents alone and instead the costs should be shared by ALL residents of Birmingham.
3) Since the last cape seal project was completed there has been approximately 13 homes completely demolished/reconstructed on Norhtlawn Boulevard between Southfield and Cranbrook roads. The crews and heavy trucks can only enter from Southfield or Cranbrook roads and together with the invasive trenching of the street (and repatching) to connect up plumbing and water services to the newly constructed homes along with the weight of 13 homes demolition debris being hauled away and new construction materials being delivered there has clearly been an accelerated deterioration in the street surface attributable to home construction. The incumbent residents of Northlawn should not be fully responsible for the accelerated deterioration of the road surface due to new home construction. We think that the city of Birmingham should secure from home demolition/reconstruction permits additional funding to set aside for what we know will be a faster deterioration of the street surrounding the project resulting in a sooner than what would normally be expected resurfacing project. In addition, it is believed that these new homes constructed are providing a significant boost in property taxes collected by the City as compared to the demolished homes they replace.

We appreciate your consideration and recognition that Northlawn Boulevard is a unique "unimproved" road. I think the police department can attest to the tremendous amount of non-Northlawn residents who travel on this road daily.

Regards,
Paul and Shannon Schmaltz
979 Northlawn Blvd
Birmingham, Mi 48009

MEMORANDUM

Treasurer's Office

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Ryan Katz, Deputy Treasurer
Mary Chavez, Finance Director

SUBJECT: Confirmation of SAD Roll 918 Bird Phase 1B Project - Water and Sewer Laterals

---

INTRODUCTION:

A Public Hearing of Confirmation of the Special Assessment Roll for the Bird Phase 1B Project is being held on March 23, 2026. The special assessment will reimburse the City for improvements made. If the City Commission approves the roll, the property owners who benefit from these improvements will be billed for the cost of the improvements.

Comments during the hearing of confirmation are limited to those questions specifically addressing the assessment roll pursuant to Section 94-9 of the City Code.

BACKGROUND:

At the City Commission meeting on March 9, 2026, the City Commission determined the necessity of the Bird Phase 1B Project and a Hearing of Confirmation of the Special Assessment Roll was set for March 23, 2026.

LEGAL REVIEW:

The City Attorney has reviewed the suggested resolution for compliance with City Code. The purpose of this hearing is to review and hear any objections to the Special Assessment Roll. The Special Assessment Roll is a listing of all of the properties to be assessed for the improvements to the property. Pursuant to the City Code at section 94-9, whenever a Special Assessment Roll shall be confirmed by the City Commission, it shall be final and conclusive.

FISCAL IMPACT:

If confirmed, the preliminary assessment roll would be $65,942.00. Once the project is completed and final costs are known, the roll will be adjusted to actual costs as provided by City Code. Property owners have five (5) years to pay the special assessment.

SUSTAINABILITY:

Replacing sewer and water laterals that do not meet City standards during construction helps preserve the integrity of the new roadway by avoiding future excavation for lateral replacement.

DESIGN CONSIDERATIONS:
The design will incorporate ADA standards.

PUBLIC COMMUNICATIONS:
Property owners were notified by mail of the public hearing dates. If the City Commission confirms the Special Assessment Roll, the Treasurer's office will notify the property owners in the Special Assessment District of the confirmation and the lien on their property.

SUMMARY:
The Treasurer's office recommends that the City Commission conduct the Hearing of Confirmation of Special Assessment District 918 and further to confirm the roll as attached to this report.

ATTACHMENTS:
1. Bird Phase 1B SAD Hearing of Necessity - Water and Sewer Laterals

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution confirming Special Assessment Roll 918 as follows:

WHEREAS, Special Assessment Roll, designated Roll No. 918, has been heretofore prepared for Collection; and

WHEREAS, notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property to be assessed; and

WHEREAS, the Commission has deemed it practicable to cause payment of the cost thereof to be made after the time of construction; and

WHEREAS, the Commission Resolution 03-051-26 provided it would meet this 23rd day of March, 2026 for the sole purpose of reviewing the assessment roll; and

WHEREAS, at said hearing held this March 23, 2026, all those property owners or their representatives present have been given an opportunity to be heard specifically concerning costs appearing in said special assessment roll;

NOW, THEREFORE, BE IT RESOLVED, that Special Assessment Roll No. 918 be in all things ratified and confirmed, and that the City Clerk be and is hereby instructed to endorse said roll, showing the date of confirmation thereof, and to certify said assessment roll to the City Treasurer for collection at or near the time of construction of the improvement.

BE IT FURTHER RESOLVED, that the special assessment shall be payable in five (5) payments as provided in Section 94-10 of the Code of the City of Birmingham, with an annual interest rate of seven and three-quarters percent (7.75%) on all unpaid installments.

Sidwell Number	Street Address	Estimated Water SAD Costs	Estimated Sewer SAD Costs
1936482001	616 Bird Ave	$ -	$ -
1936480026	623 Bird Ave	$ -	$ -
1936480027	631 Bird Ave	$ -	$ -
1936482002	638 Bird Ave	$ -	$ -
1936482003	644 Bird Ave	$ -	$ -
1936480060	655 Bird Ave	$ -	$ -
1936482004	668 Bird Ave	$ -	$ 2,912.00
1936480061	671 Bird Ave	$ -	$ -
1936482005	684 Bird Ave	$ 954.00	$ 2,912.00
1936480030	695 Bird Ave	$ 1,749.00	$ 2,912.00
1936480031	711 Bird Ave	$ 1,749.00	$ 2,912.00
1936482006	716 Bird Ave	$ -	$ 2,800.00
1936482007	730 Bird Ave	$ 954.00	$ 2,800.00
1936480066	731 Bird Ave	$ -	$ -
1936482008	740 Bird Ave	$ -	$ -
1936480067	747 Bird Ave	$ -	$ 2,912.00
1936482009	768 Bird Ave	$ -	$ -
1936480033	771 Bird Ave	$ -	$ -
1936482010	784 Bird Ave	$ -	$ -
1936482063	808 Bird Ave	$ -	$ -
1936480034	811 Bird Ave	$ -	$ -
1936480064	831 Bird Ave	$ -	$ -
1936482064	832 Bird Ave	$ -	$ -
1936482061	852 Bird Ave	$ -	$ -
1936480065	855 Bird Ave	$ -	$ -
1936482062	860 Bird Ave	$ -	$ -
1936480059	871 Bird Ave	$ -	$ -
1936482047	888 Bird Ave	$ -	$ -
1936480038	891 Bird Ave	$ 1,749.00	$ 2,912.00
1936482048	900 Bird Ave	$ -	$ 2,800.00
1936480039	907 Bird Ave	$ 1,749.00	$ 2,912.00
1936480062	925 Bird Ave	$ -	$ -
1936482015	926 Bird Ave	$ -	$ -
1936482016	954 Bird Ave	$ -	$ 2,800.00
1936480063	955 Bird Ave	$ -	$ 2,912.00
1936480042	963 Bird Ave	$ -	$ -

1936482017	976 Bird Ave	$	-	$	2,800.00
1936482018	990 Bird Ave	$	954.00	$	-
1936480043	993 Bird Ave	$	1,749.00	$	2,912.00
1936482019	1016 Bird Ave	$	954.00	$	2,800.00
1936480044	1019 Bird Ave	$	-	$	-
1936482020	1038 Bird Ave	$	-	$	2,800.00
1936480045	1039 Bird Ave	$	-	$	-
1936480046	1063 Bird Ave	$	1,749.00	$	2,912.00
1936482021	1080 Bird Ave	$	-	$	-
1936480047	1087 Bird Ave	$	-	$	2,912.00
1936482022	1092 Bird Ave	$	-	$	-
		$	14,310.00	$	51,632.00

MEMORANDUM

Engineering Department

DATE: March 9, 2026

TO: Jana Ecker, City Manager

FROM: Melissa Coatta, City Engineer

SUBJECT: Bird Phase 1B Project, Contract #7-26(W)
Public Hearing of Necessity for Sewer and Water Lateral Special Assessment District (SAD)

INTRODUCTION:

As part of the City's 2025-2026 Capital Improvement Plan, Bird Avenue from Grant Street to Cummings Avenue will receive water main replacement, sewer improvements, and the installation of a new concrete road. The City intends to replace private sewer and water laterals that do not meet "useful life" criteria in the right-of-way in an effort to protect the public investments being made with this project. The City will establish a Special Assessment District to collect the costs associated with the replacement of private sewer and water laterals from affected property owners.

BACKGROUND:

The City will replace the existing 4-inch water main on Bird Avenue, originally installed in 1921, with an 8-inch water main. The existing sewer ranges in size from 8 inches to 15 inches and will be replaced or lined depending on its condition. In addition, a new storm sewer will be installed as part of the project.

Consistent with City policy established to protect the public investment in capital improvement projects, the City intends to replace all sewer laterals that are 50 years of age or older, are less than 6 inches in diameter, or are constructed of an unsuitable material. Water services that are 60 years of age or older, are less than 1 inch in diameter or are constructed of an unsuitable material will also be replaced as part of the project. All unsuitable sewer laterals will be replaced with 6-inch schedule 40 PVC, and water services will be replaced with either a new 1 inch diameter service or matched to the existing diameter service if it is larger than 1 inch. Only the lengths of sewer and/or water lateral within the road right-of-way will be replaced and assessed as part of the project.

The parcels within the project zone that are subject to sewer and water lateral special assessment are highlighted on the attached map. Appended to this report is a list of properties that are included in the Assessment District, along with the estimated construction costs to be assessed.

LEGAL REVIEW:
Chapter 94 – Special Assessments of the Birmingham City Code outlines the process by which a special assessment is conducted in the City of Birmingham. This project will follow the prescribed City Code procedures. The City Attorney has no objections.

FISCAL IMPACT:
Revenue generated from the Sewer and Water Lateral SAD for the Bird Phase 1B project will defray the costs incurred by the City for the construction of these improvements. One hundred percent of the costs for laterals within the ROW will be paid by the property owners. Property owners may pay their assessment in full or in installments over a period of up to five years with interest. The interest rate will be established at the Confirmation of Roll Hearing.

SUSTAINABILITY:
Replacing sewer and water laterals that do not meet City standards during construction helps preserve the integrity of the new roadway by avoiding future excavation for lateral replacement.

DESIGN CONSIDERATIONS:
The design will incorporate ADA standards.

PUBLIC COMMUNICATIONS:
The Notice of the Hearing of Necessity and Confirmation of the Roll was distributed by the Clerk's Office. The Engineering Department held a property owners' meeting on Tuesday, February 24, 2026 from 5:30 p.m. to 6:30 p.m. to explain the associated work, the proposed assessment cost, and to answer questions from residents.

SUMMARY:
The Engineering Department recommends that the City Commission declare necessity and approve a special assessment district for sewer and water laterals as part of the Bird Phase 1B Project. Should the Commission approve the special assessment district, a public hearing for Confirmation of the Roll should be set for the City Commission meeting on March 23, 2026.

ATTACHMENTS:
1. Map of proposed special assessment district of sewer and water lateral replacement
2. Bird Phase 1B project plans
3. Spreadsheet with estimated cost of lateral replacement
4. Clerk’s confirmation of the public hearing notice
5. Presentation

SUGGESTED COMMISSION ACTION:
WHEREAS, Notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property and lots to be assessed, by first class mail, and by publication in a newspaper generally circulated in the City; and

WHEREAS, The City Commission has conducted a public hearing and has determined it is necessary to proceed with the project replacing sewer services 50 years of age or older or

constructed of material that is not acceptable for City standards and replacing water services that are 60 years or older or less than 1 inch in diameter on Bird Street from Grant Street to Cummings Avenue; and

WHEREAS, The City has previously established a policy requiring replacement of sewer services 50 years of age or older or constructed of materials that are not acceptable for City standards and water services less than 1 inch in diameter and the City street is open for repairs or reconstruction; and

WHEREAS, The City Commission, after the public hearing, has determined that the Bird Phase 1B Project, the replacement of sewer services that are 50 years of age or older or of material that is not acceptable for City standards, the replacement of water services that are 60 years or older or less than 1 inch in diameter, is a necessity and is in the best interest of the City; and

WHEREAS, The Commission has approved the detailed plans and estimates of cost prepared by the City Engineer; and

WHEREAS, Formal bids have been received and the actual cost of sewer service and water service replacement has been determined; and

WHEREAS, The City Engineer has determined the boundaries of sewer service lateral and water service laterals located within the limits of the following streets shall be installed as part of the Bird 1B Project (Contract #7-26(W)):

Bird Avenue – Grant Street to Cummings Avenue

WHEREAS, The formula used in making the assessment is 100% of the contractor's charge for replacing the lateral service that is 50 years of age or older or constructed of materials that are not acceptable and water service that is 60 years of age or older or less than 1 inch in diameter within the public right-of-way between the utility and the property line (calculated at the rate of $112.00 per foot of 6" diameter sewer service pipe, $53.00 per foot of 1-inch water service pipe).

THEREFORE LET IT BE RESOLVED, The City Commission has determined that the scope of the public improvement as described is in the best interest of the City and will benefit the properties listed in the assessment roll and is a necessity, and the City Commission directs the Manager to prepare a Special Assessment Roll and present the same to the City Commission for confirmation and further set a Public Hearing of Confirmation on March 23, 2026 and give notice of same.

Sewer and/or Water Lateral

Sidwell Number	Street Address	Estimated Sewer SAD Costs	Estimated Water SAD Costs
1936482001	616 Bird Ave	-	-
1936480026	623 Bird Ave	-	-

1936480027	631 Bird Ave	-	-
1936482002	638 Bird Ave	-	-
1936482003	644 Bird Ave	-	-
1936480060	655 Bird Ave	-	-
1936482004	668 Bird Ave	$2,912.00	-
1936480061	671 Bird Ave	-	-
1936482005	684 Bird Ave	$2,912.00	$954.00
1936480030	695 Bird Ave	$2,912.00	$1,749.00
1936480031	711 Bird Ave	$2,912.00	$1,749.00
1936482006	716 Bird Ave	$2,800.00	-
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1936480066	731 Bird Ave	-	-
1936482008	740 Bird Ave	-	-
1936480067	747 Bird Ave	$2,912.00	-
1936482009	768 Bird Ave	-	-
1936480033	771 Bird Ave	-	-
1936482010	784 Bird Ave	-	-
1936482063	808 Bird Ave	-	-
1936480034	811 Bird Ave	-	-
1936480064	831 Bird Ave	-	-
1936482064	832 Bird Ave	-	-
1936482061	852 Bird Ave	-	-
1936480065	855 Bird Ave	-	-
1936482062	860 Bird Ave	-	-
1936480059	871 Bird Ave	-	-
1936482047	888 Bird Ave	-	-
1936480038	891 Bird Ave	$2,912.00	$1,749.00
1936482048	900 Bird Ave	$2,800.00	-
1936480039	907 Bird Ave	$2,912.00	$1,749.00
1936480062	925 Bird Ave	-	-
1936482015	926 Bird Ave	-	-
1936482016	954 Bird Ave	$2,800.00	-
1936480063	955 Bird Ave	$2,912.00	-
1936480042	963 Bird Ave	-	-
1936482017	976 Bird Ave	$2,800.00	-
1936482018	990 Bird Ave	-	$954.00
1936480043	993 Bird Ave	$2,912.00	$1,749.00
1936482019	1016 Bird Ave	$2,800.00	$954.00
1936480044	1019 Bird Ave	-	-
1936482020	1038 Bird Ave	$2,800.00	-

1936480045	1039 Bird Ave	-	-
1936480046	1063 Bird Ave	$2,912.00	$1,749.00
1936482021	1080 Bird Ave	-	-
1936480047	1087 Bird Ave	$2,912.00	-
1936482022	1092 Bird Ave	-	-

BIRD PHASE 1B PROJECT AREA



Limits of Project

Properties within Water Lateral SAD

Properties within Sewer Lateral SAD

Properties within Sewer and Water Lateral SAD

BIRD PHASE 1B PROJECT AREA



Limits of Project

Properties within Water Lateral SAD

Properties within Sewer Lateral SAD

Properties within Sewer and Water Lateral SAD

BIRD PHASE 1B PROJECT AREA



Limits of Project

Properties within Water Lateral SAD

Properties within Sewer Lateral SAD

Properties within Sewer and Water Lateral SAD

BIRMINGHAM

A WALKABLE CITY

ENGINEERING DEPARTMENT

BIRD AVENUE PHASE 1B PROJECT
CONTRACT #7-26W

SHEET INDEX

C00 Cover Sheet
C01 Utility Plan Sta. P.O.B. to 4+00
C02 Utility Plan Sta. 4+00 to 8+00
C03 Utility Plan Sta. 8+00 to P.O.E.
C04 Storm Sewer Profile Plan
C05 Utility Service Plan Sta. P.O.B. to 8+00
C06 Utility Service Plan Sta. 8+00 to P.O.E.
C07 Paving & Grading Plan Sta. P.O.B. to 4+00
C08 Paving & Grading Plan Sta. 4+00 to 8+00
C09 Paving & Grading Plan Sta. 8+00 to P.O.E.
C10 Bird Avenue - N. Side Walk & Driveway Grading Detail
C11 Notes and Details
C12 SESC Plan
C13 Advanced Warning Signage (AWS) Traffic Diagram
Q1 Quantities

City of Birmingham - Water Main Standard Notes & Details - 1 of 2
City of Birmingham - Water Main Standard Notes & Details - 2 of 2
City of Birmingham - Sanitary & Combined Sewer Standard Notes & Details - 1 of 2
City of Birmingham - Sanitary & Combined Sewer Standard Notes & Details - 2 of 2
City of Birmingham - Storm Drain Sewer Standard Notes & Details - 1 of 1
City of Birmingham - Paving Standard Notes & Details - 1 of 1

WATER / SEWER SERVICE NOTE

ALL WATER AND SEWER SERVICE LATERAL INFORMATION IS SHOWN PER RECORD, WITHIN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL COORDINATE WITH CITY FOR ALL PRIVATE-SIDE WATER AND SEWER LATERAL INFORMATION, AS REQUIRED, TO CONSTRUCT THE PROJECT (ING.).

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

811 Know what's **below** **Call** before you dig.

BENCHMARK NOTE

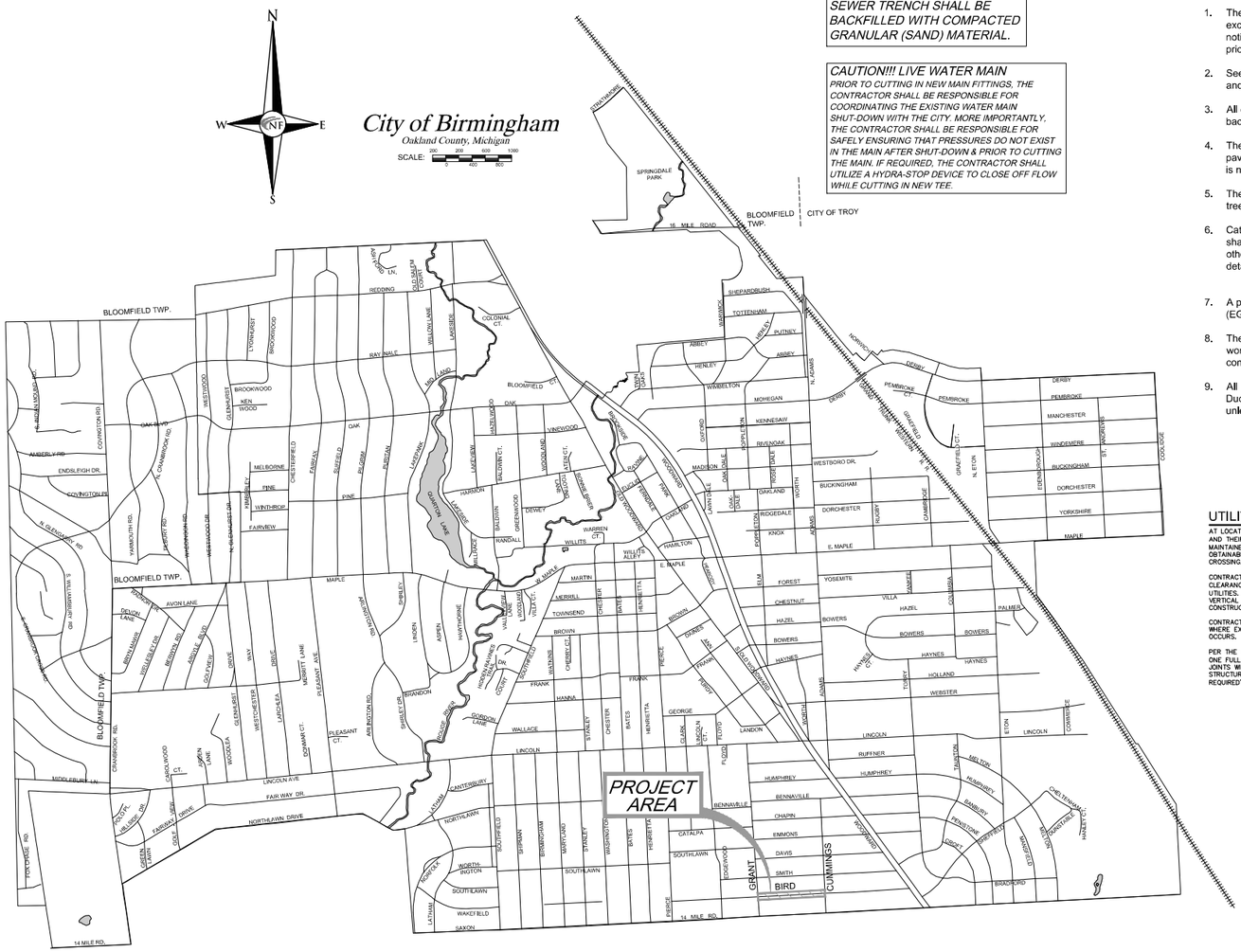
BENCHMARKS SET AND SHOWN PER SHEET WERE ESTABLISHED OFF OF THE CITY OF BIRMINGHAM BENCHMARK DATUM.

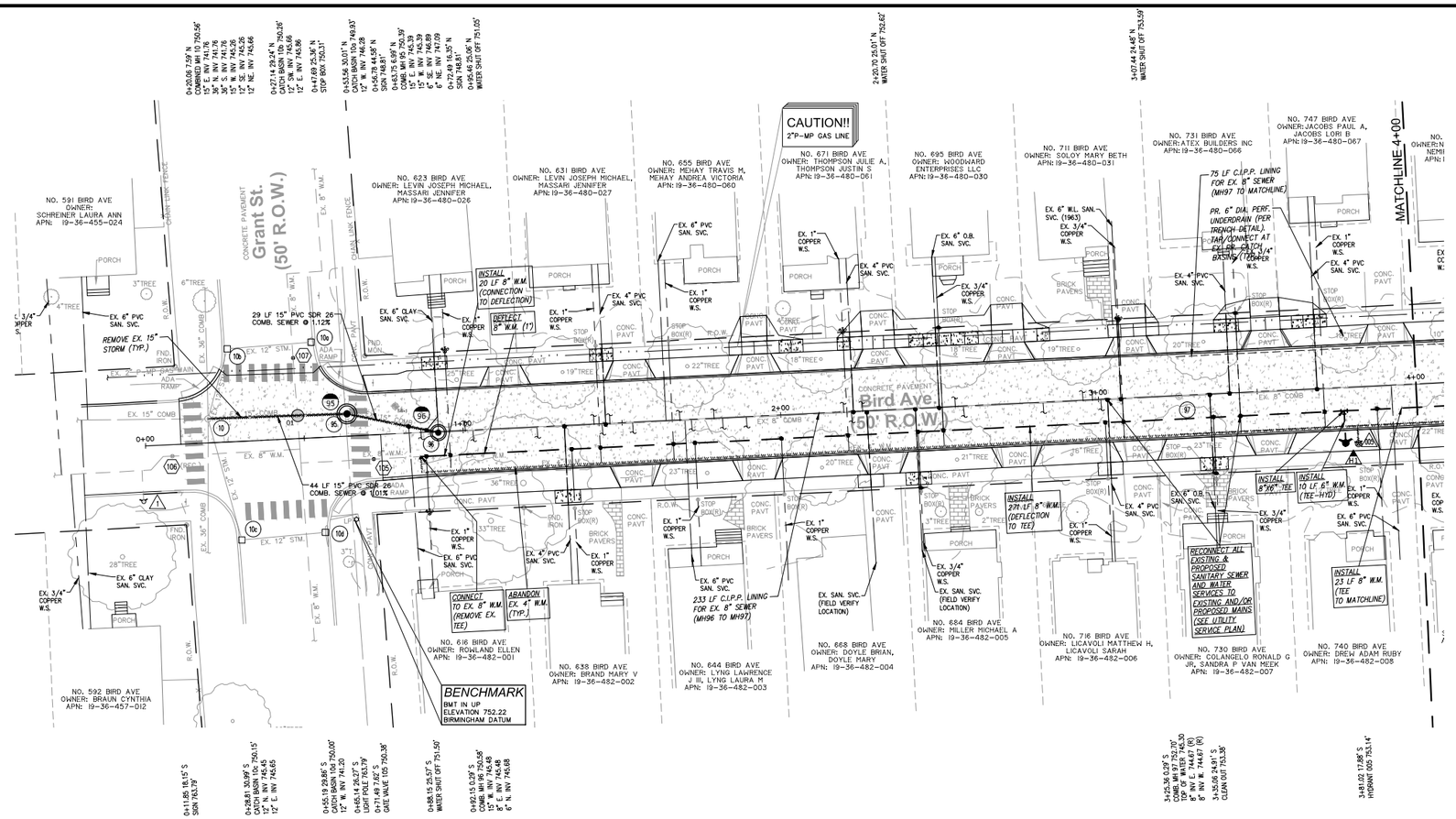
N W NF E S

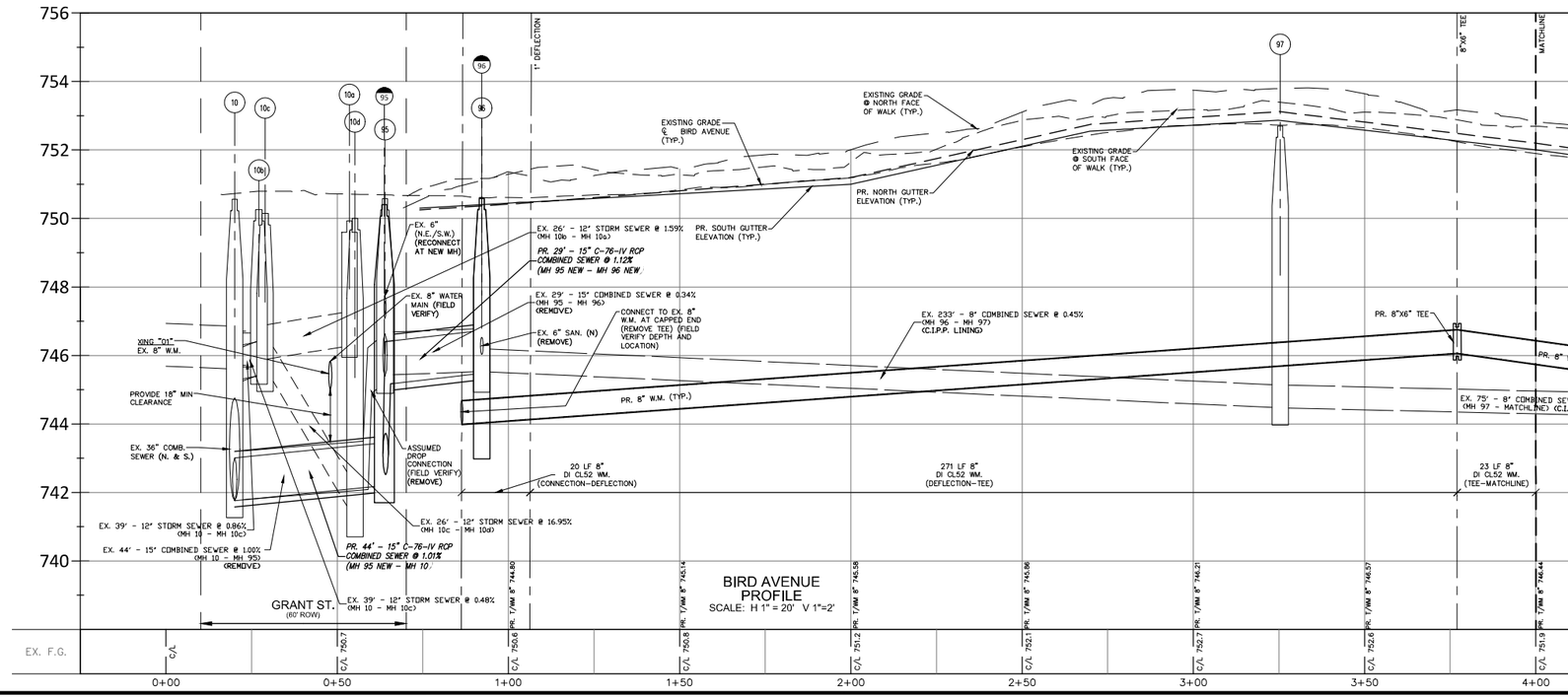
City of Birmingham
Oakland County, Michigan
SCALE: 200 0 200 400 600 1000

ALL WATER MAIN, STORM AND SEWER TRENCH SHALL BE BACKFILLED WITH COMPACTED GRANULAR (SAND) MATERIAL.

CAUTION!!! LIVE WATER MAIN
PRIOR TO CUTTING IN NEW MAIN FITTINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE EXISTING WATER MAIN SHUT-DOWN WITH THE CITY. MORE IMPORTANTLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFELY ENSURING THAT PRESSURES DO NOT EXIST IN THE MAIN AFTER SHUT-DOWN & PRIOR TO CUTTING THE MAIN. IF REQUIRED, THE CONTRACTOR SHALL UTILIZE A HYDRA-STOP DEVICE TO CLOSE OFF FLOW WHILE CUTTING IN NEW TEE.


BLOOMFIELD TWP.
CITY OF TROY
16 MILE ROAD
SPRINGDALE PARK
PROVENCE
SHEPARDBUSH
TOTTENHAM
WARWICK
ABBEY
HENLEY
WIMBLETON
MOHEGAN
KENNESAW
RIVENOAK
WESTBORO DR.
BUCKINGHAM
DORCHESTER
RIDGEDALE
KNOX
E. MAPLE
DERBY
PEMBROKE
MANCHESTER
WINDEMERE
BUCKINGHAM
DORCHESTER
YORKSHIRE
MAPLE
ST. ANDREWS
EDINBOROUGH
COOLIDGE
GREENFIELD CT.
ALETON
OXFORD
MADISON
OAKLAND
OAK GROVE
FOREST
YOSEMITE
VILLA
HAZEL
PALMER
BOWERS
HAYNES
HOLLAND
WEBSTER
LINCOLN
CORNELL
ELM
CHESTNUT
TOWNSEND
MERRILL
MARTIN
HENRIETTA
BATES
CHESTER
BENNAVILLE
HUMPHREY
RUFFNER
LINCOLN
EATON
CORNELL
TAUNTON
MILTON
BANBURY
PENSHORE
LEGACY
CHELTENHAM
HANLEY CT.
BRADFORD
NORTHAMPTON
PROJECT AREA
GRANT
BIRD
CUMMINS
WOODWARD
ADAMS
WOODWARD AVE.
BLOOMFIELD TWP.
BLOOMFIELD HILLS
BLOOMFIELD TWP.
BLOOMFIELD TWP.
OAK
BLOOMFIELD CT.
COLONIAL CT.
BAY INLET
MEADOWLAND
REDDING
OLD DAIRY COURT
WILLOW LANE
LAKESIDE
LAKEVIEW
LAKEWOOD
LAKEPARK
LAKEFIELD
LAKEFOREST





UTILITY CROSSING SCHEDULE

01 EX. 8" WM @/P 745.03 (V.I.F.)
PR. 15" STM T/P 743.48
VERTICAL CLEARANCE: 1.55'

EX. STORM STRUCTURE SCHEDULE

10b MAINTAIN
0+27.14 29.24'N
CATCH BASIN 10b
RIM 750.26
12" INV SW 745.66
12" INV E 745.86

10c MAINTAIN
0+28.81 30.99'S
CATCH BASIN 10c
RIM 750.15
12" INV N 745.45
12" INV E 745.65

10a MAINTAIN
0+53.56 30.01'N
CATCH BASIN 10a
RIM 749.93
12" INV N 746.28

10d MAINTAIN
0+55.19 29.86'S
CATCH BASIN 10d
RIM 750.00
12" INV W 741.20

EX. SEWER STRUCTURE SCHEDULE

10 TAP, ADJUST, REMOVE/REPLACE COVER
0+20.06 7.59'N
COMB. MH 10
RIM 750.56
PR. RIM 750.55
15" INV E 741.76 (REMOVE)
36" INV N 741.76 (MAINTAIN)
36" INV S 741.76 (MAINTAIN)
15" INV W 745.26 (MAINTAIN)
12" INV SE 745.26 (MAINTAIN)
12" INV NE 745.66 (MAINTAIN)
PR. 15" INV 741.76 (TAP)

95 REMOVE
0+36.76 6.99'N
COMB. MH 95
RIM 750.39
15" INV E 745.39 (REMOVE)
15" INV N 745.39 (REMOVE)
6" INV SE 746.89
(INVESTIGATE/RE-CONNECT IF REQ.)
6" INV NE 747.09
(INVESTIGATE/RE-CONNECT IF REQ.)

96 REMOVE
0+92.15 0.29'S
COMB. MH 10
RIM 750.58
15" INV W 745.48 (REMOVE)
8" INV E 745.48 (RECONNECT & C.I.P.P LINING)
6" INV N 745.68 (REPLACE PER SVC. SCHEDULE)

97 ADJUST – REMOVE/REPLACE COVER
3+25.36 0.29'S
COMB. MH 97
RIM 752.70
PR. RIM 753.30
TOP/WATER 745.30
8" INV E. 744.67 (R) (C.I.P.P. LINING)
8" INV W. 744.67 (R) (C.I.P.P. LINING)

WATER MAIN SCHEDULE

105 MAINTAIN
0+71.49 7.62'S
STOP BOX 105
RIM 750.38

105 REMOVE
3+81.021 17.88'S
HYDRANT 005 753.14'

111 HYDRANT & ASSEMBLY
PR. STA. 3+77.02 17.50'S
FG 752.75
PR. T/PIPE 746.76

Combined Structure Schedule

Structure Name	Structure Details
#95 NEW PR. 5' DIA. COMBINED STRUCTURE W/ 12" INT. DROP (INV @ 743.20)	PR. RIM 750.40 PR. 15" W. INV. 742.20 PR. 15" E. INV. 745.15
#96 NEW PR. 4' DIA. COMB. MANHOLE (CONSTRUCT ONLINE EX. 8" COMB. EAST INV. @ 745.53 ± (FIELD VERIFY))	PR. RIM 750.60 PR. 15" W. INV. 745.48

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX PAVERS
- PR. 7" CONC. PAVT. W/ INT. CURB
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (5" MIN ON 6" 21AA)
- PR. 18" MD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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SEAL
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER
NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

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A WALKABLE CITY
The City of Birmingham
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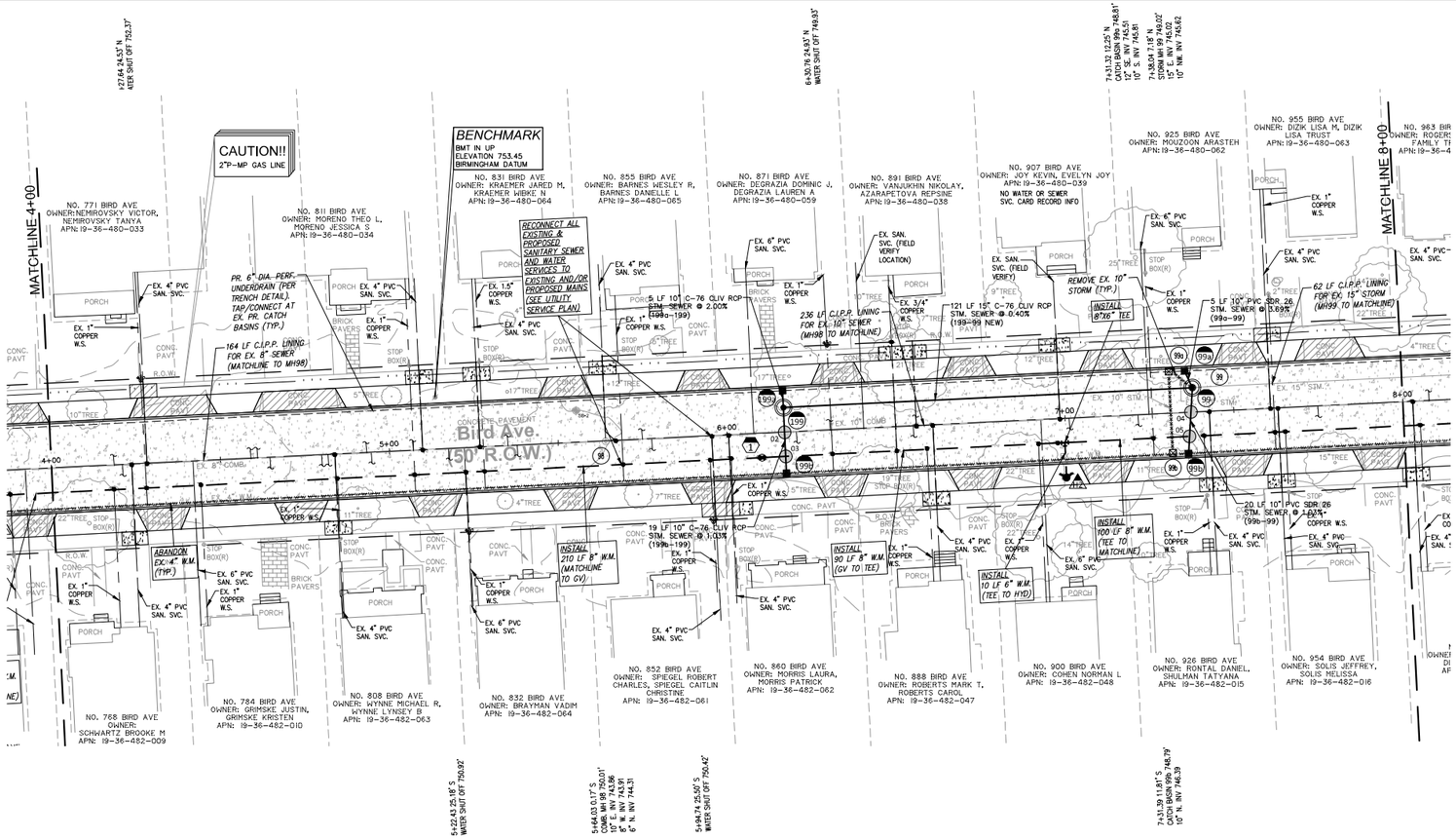
PROJECT LOCATION
Part of the S.E. ¼ of Section 36, T. 2N, R.10E
City of Birmingham, Oakland County, Michigan

SHEET
Utility Plan Sta. P.O.B. To 4+00

Know what's below Call before you dig.

DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS
02-09-2026	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: 1" = 20' / 1"=2'
NFE JOB NO. O947
SHEET NO. C01



UTILITY CROSSING SCHEDULE

02 PR. 10" STM B/P 745.95
EX. 10" COMB T/P 744.45
VERTICAL CLEARANCE: 1.50'

03 PR. 10" STM B/P 746.03
PR. 8" WM T/P 743.49
VERTICAL CLEARANCE: 2.54'

04 PR. 10" STM B/P 745.40
EX. 10" COMB T/P 743.72
VERTICAL CLEARANCE: 1.68'

05 PR. 10" STM B/P 745.48
PR. 8" W.M. 743.50
VERTICAL CLEARANCE: 1.98'

Storm Drainage Structure Schedule

Structure Name	Structure Details
#99 NEW PR. 4' DIA. STM MANHOLE W/ 2' SUMP (CONSTRUCT ONLINE EX. 15" E. 745.02, FIELD VERIFY)	PR. RIM 749.26 PR. 15" W. INV. 745.02 PR. 10" NW. INV. 745.35 PR. 10" S. INV. 745.35
#99a NEW PR. 2' DIA. STM INLET	PR. RIM 749.17 PR. 10" SE. INV. 745.55
#99b NEW PR. 2' DIA. STM INLET	PR. RIM 748.97 PR. 10" N. INV. 745.55
#199 PR. 4' DIA. STM MANHOLE W/ 2' SUMP	PR. RIM 749.85 PR. 15" E. INV. 745.50 PR. 10" N. INV. 745.60 PR. 10" S. INV. 745.90
#199a PR. 2' DIA. STM INLET	PR. RIM 749.76 PR. 10" S. INV. 745.50
#199b PR. 2' DIA. STM INLET	PR. RIM 749.56 PR. 10" N. INV. 746.10

EX. SEWER STRUCTURE SCHEDULE

(98) ADJUST – REMOVE & REPLACE COVER
5+64.03 0.17'S
COMB. MH 98
RIM 750.01
PR. RIM 750.25
10" INV E 743.86 (C.I.P.P. LINING)
8" INV W 743.91 (C.I.P.P. LINING)
6" INV N. 744.31
(SEE SAN. SVC. SCHEDULE & BULKHEAD STRUCTURE)

EX. STORM STRUCTURE SCHEDULE

(99b) REMOVE
7+31.39 11.81'S
CATCH BASIN 99b
RIM 748.79
10" INV N 746.39

(99a) REMOVE
7+31.32 12.25'N
CATCH BASIN 99a
RIM 948.81
12" INV SE 745.51
10" INV S 745.81

(99) REMOVE
7+38.04 7.18'N
STORM MH 99
RIM 749.02
15" INV E 745.02
(MAINTAIN-RECONNECT AT NEW MH 99)
10" INV NW 745.62 (REMOVE)

WATER MAIN SCHEDULE

HYDRANT & ASSEMBLY
PR. STA. 6+99.62 17.29'S
FG 749.75
PR. T/PIPE 743.54

8" GATE VALVE IN WELL
RIM 749.60
PR. T/PIPE 743.51

LEGEND

EXISTING SAN/COMB SEWER
EXISTING WATER MAIN
EXISTING STORM SEWER
EXISTING BURIED CABLES
EXISTING GAS MAIN
OVERHEAD LINES
(RECORD) CURB STOP LOCATION (APPROX.)
LANDSCAPE BED
EX. SOIL BORING
PUBLIC PHONE
WELL
PUMP
SIGN
POST/BOLLARD
PARKING METER
MAIL BOX
ROCK/BOULDER
SPRINKLER VALVE BOX
SPRINKLER HEAD
FOUND PROPERTY MARKER
GROUND ELEVATION
EX. PAVERS
PR. 7" CONC. PAVT. W/ REI. CURB
PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
PR. 4" CONC. SIDEWALK
PR. FULL-DEPTH ASPH. (5" HMA ON 6" 21AA)
PR. 15" WD. CONC. CURB & GUTTER
SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

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151 Martin Street
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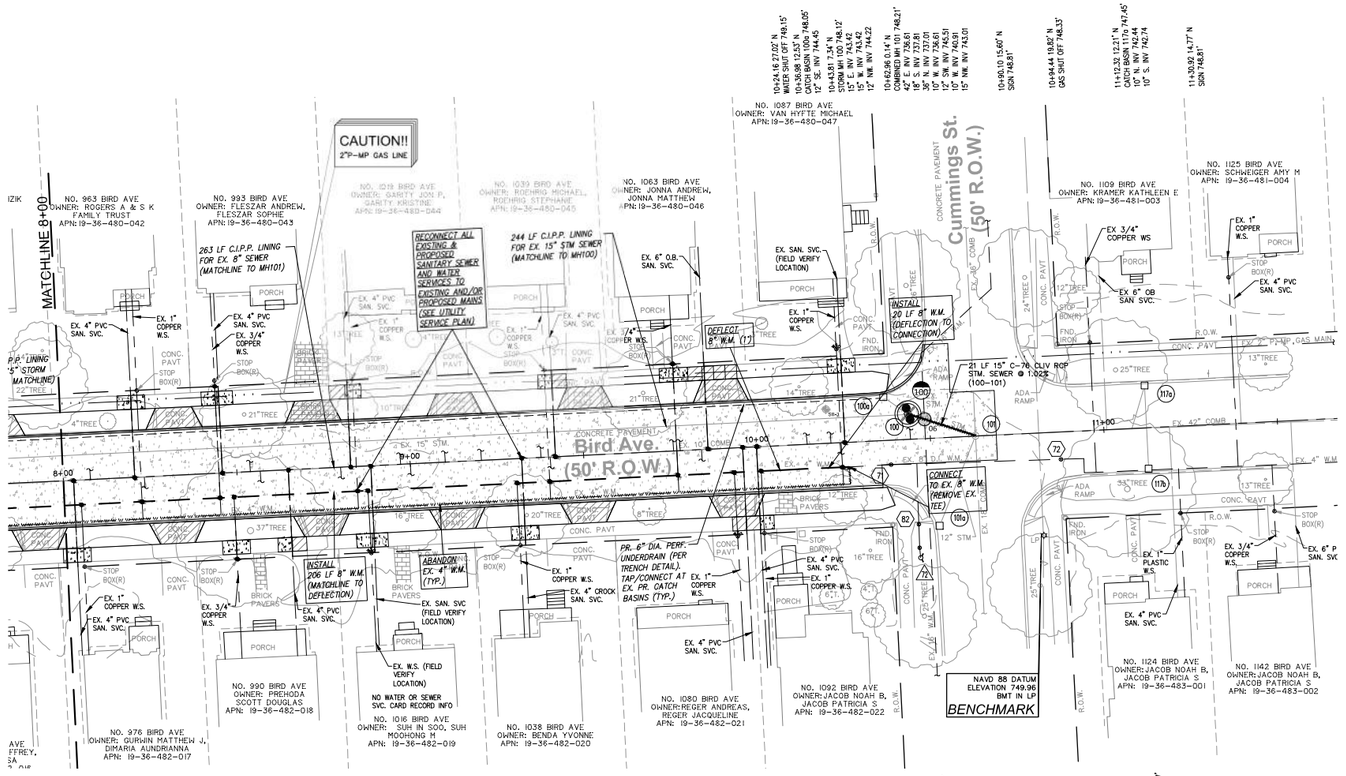
SHEET
Utility Plan Sta. 4+00 To 8+00

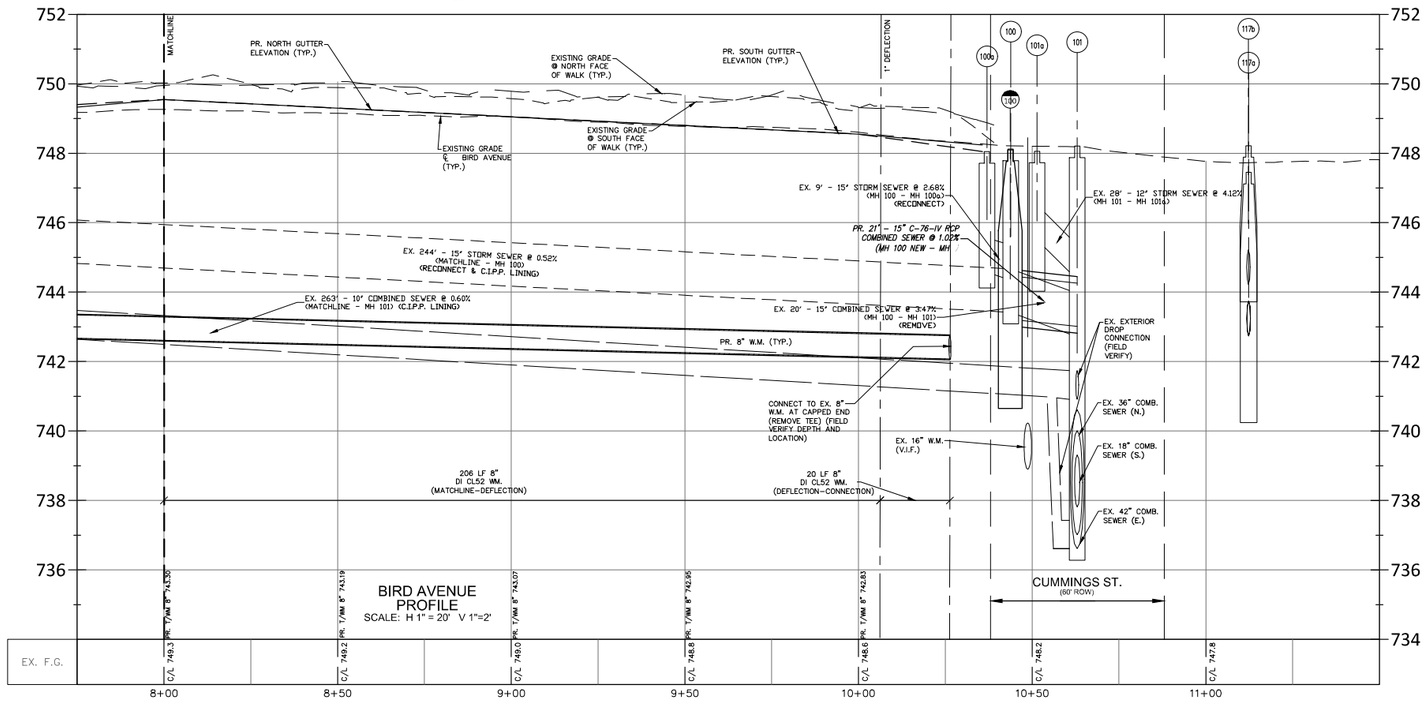
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS
02-09-2026	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O947
SHEET NO. C02





BIRD AVENUE PROFILE
SCALE: H 1" = 20' V 1"=2'

UTILITY CROSSING SCHEDULE

06 PR. 15" STM. B/P 742.97
EX. 16" W.M. T/P 740.15 (V.I.F.)
VERTICAL CLEARANCE: 2.82'

Storm Drainage Structure Schedule	
Structure Name	Structure Details
#100 NEW PR. 6' OUTLET CONTROL W/ WEIR WALL & GAS TRAP TOP OF WEIR @ 746.35 (CONSTRUCT ONLINE OF EX. 12" STM. NW. INV @ 743.22 ± & EX. 15" STM. W. INV @ 743.42 ± (FIELD VERIFY))	PR. RIM 748.10 PR. 15" E. INV. 743.22

EX. SEWER STRUCTURE SCHEDULE

(101) TAP
10+62.96 0.14'N
COMB. MH 101
RIM 748.21
42" INV E 736.61 (MAINTAIN)
18" INV S 737.81 (MAINTAIN)
36" INV N 737.01 (MAINTAIN)
10" INV W 736.61 (C.I.P.P. LINING)
12" INV SW 745.51(MAINTAIN)
10" INV W 740.91 (C.I.P.P. LINING)
15" INV NW 743.01 (REMOVE)
PR. 15" NW INV 743.01 (TAP)

EX. STORM STRUCTURE SCHEDULE

(100a) MAINTAIN
10+36.98 12.53'N
CATCH BASIN 100a
RIM 748.05
12" INV SE 744.45

(101a) MAINTAIN
10+51.40 25.27'S
CATCH BASIN 101a
RIM 748.06
12" INV NE 744.36

(117b) MAINTAIN
11+12.29 11.80'S
CATCH BASIN 117b
RIM 747.57
10" INV N 744.22

(117a) MAINTAIN
11+12.32 12.21'N
CATCH BASIN 117a
RIM 747.45
10" INV N 742.44
10" INV S 742.74

(100) REMOVE
10+43.81 7.34'N
STORM. MH 100
RIM 748.12
15" INV E 743.42 (REMOVE)
15" INV W 743.42 (RECONNECT & C.I.P.P. LINING)
12" INV NW 744.22 (RECONNECT & C.I.P.P. LINING)

WATER MAIN SCHEDULE

(71) MAINTAIN
10+38.29 7.02'S
STOP BOX 71 748.17'

(82) MAINTAIN
10+45.42 21.56'S
STOP BOX 82 748.34

(72) MAINTAIN
10+87.23 7.86'S
STOP BOX 72 747.84'

(72a) MAINTAIN
10+45.51 34.20'S
HYDRANT 72 748.81'

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION
- EX PAVERS
- PR. 7" CONC. PAVT. W/ MIL CURB
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (5" HMA ON 6" 21AA)
- PR. 18" MD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

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City of Birmingham, Oakland County, Michigan

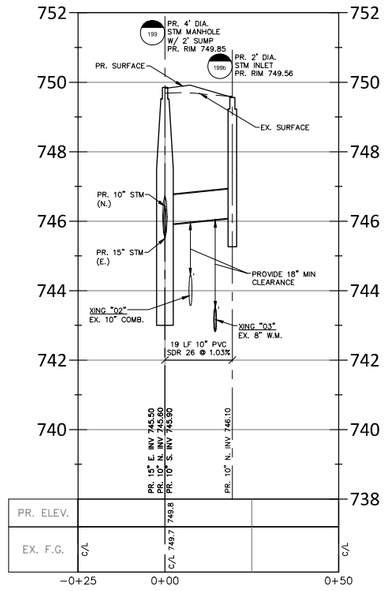
SHEET
Utility Plan Sta. 8+00 To P.O.E.

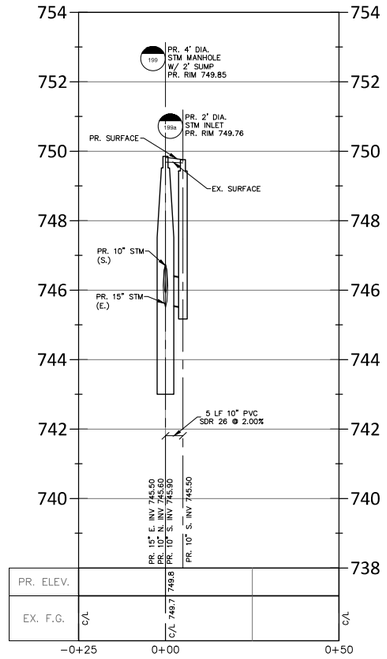
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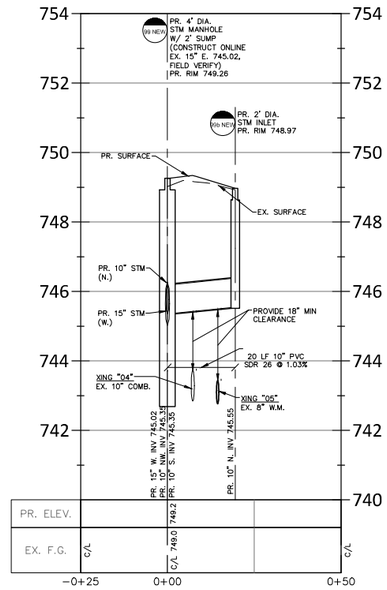
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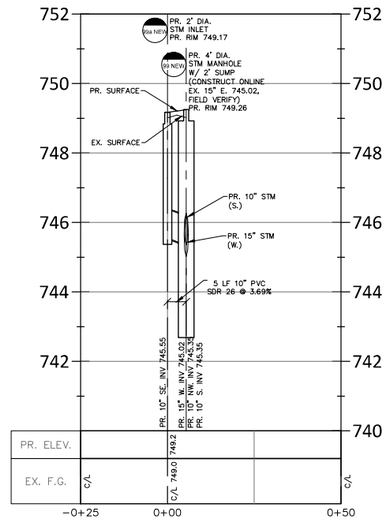
DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O947
SHEET NO. C03









UTILITY CROSSING SCHEDULE

02 PR. 10" STM B/P 745.95
EX. 10" COMB T/P 744.45
VERTICAL CLEARANCE: 1.50'

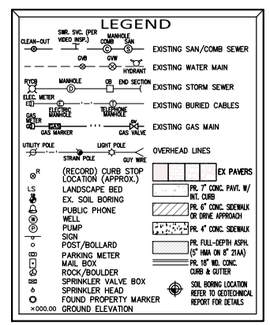
03 PR. 10" STM B/P 746.03
PR. 8" WM T/P 743.49
VERTICAL CLEARANCE: 2.54'

04 PR. 10" STM B/P 745.40
EX. 10" COMB T/P 743.72
VERTICAL CLEARANCE: 1.68'

05 PR. 10" STM B/P 745.79
EX. 10" COMB 743.50
VERTICAL CLEARANCE: 1.98'

Storm Drainage Structure Schedule

Structure Name	Structure Details
#99 NEW PR. 4' DIA. STM MANHOLE W/ 2' SUMP (CONSTRUCT ONLINE EX. 15" E. 745.02, FIELD VERIFY)	PR. RIM 749.26 PR. 15" W. INV. 745.02 PR. 10" NW. INV. 745.35 PR. 10" S. INV. 745.35
#99a NEW PR. 2' DIA. STM INLET	PR. RIM 749.17 PR. 10" SE. INV. 745.55
#99b NEW PR. 2' DIA. STM INLET	PR. RIM 748.97 PR. 10" N. INV. 745.55
#199 PR. 4' DIA. STM MANHOLE W/ 2' SUMP	PR. RIM 749.85 PR. 15" E. INV. 745.50 PR. 10" N. INV. 745.60 PR. 10" S. INV. 745.90
#199a PR. 2' DIA. STM INLET	PR. RIM 749.76 PR. 10" S. INV. 745.50
#199b PR. 2' DIA. STM INLET	PR. RIM 749.56 PR. 10" N. INV. 746.10



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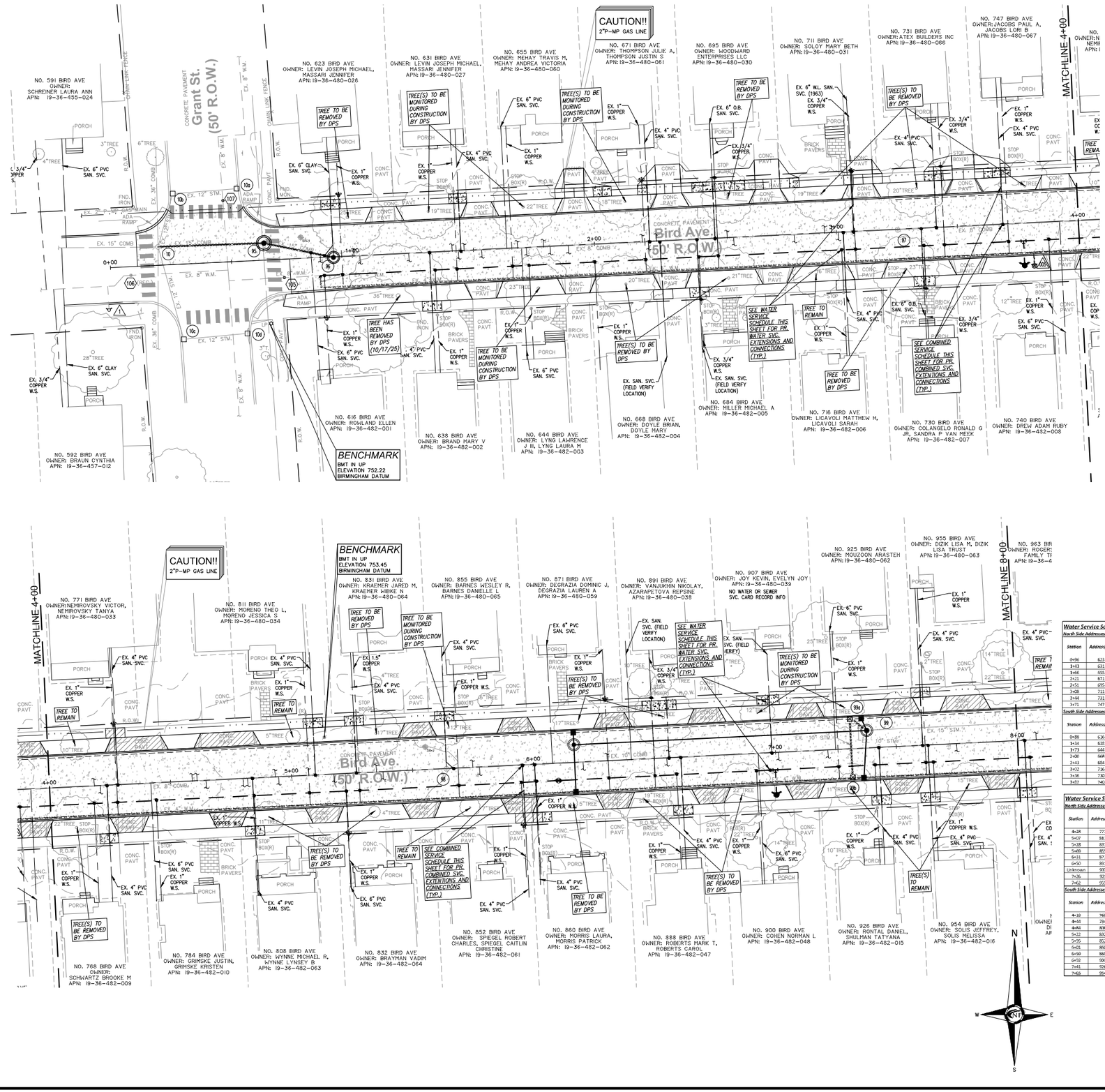
SHEET
Storm Sewer Profile Plan

811
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01-22-2026	BIDS
02-09-2026	ADDENDUM 1

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P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
October 25, 2024
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O947
SHEET NO. C04



Combined Sewer Service Schedule - Bird Avenue Sta. P.O.B. to 4+00

Existing MH95 to MH98

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
0+83	626 Bird Ave	15" Comb.	South	6"	PVC	Active	Lg to New 15" Main	N/A
0+42	616 Bird Ave	15" Comb.	South	6"	PVC	Likely Active	Investigate - To be New 15" Main if Req.	N/A

Existing MH96 to MH97

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
0+92	623 Bird Ave	8" Comb.	North	6"	Clay/D.B.	Active	Replace - Bond & Tap to New 12" Main	26/6"
1+03	615 Bird Ave	8" Comb.	South	6"	Unknown	Capped	None	N/A
1+23	638 Bird Ave	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
1+32	638 Bird Ave	8" Comb.	South	4"	PVC	Active	Replace - Tap to Ex. Main	26/6"
1+41	631 Bird Ave	8" Comb.	North	6"	Unknown	Capped	None	N/A
1+44	628 Bird Ave	8" Comb.	South	6"	Unknown	Capped	None	N/A
1+45	631 Bird Ave	8" Comb.	North	4"	PVC	Active	Replace - Tap to Ex. Main	26/6"
1+46	632 Bird Ave	8" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
1+53	628 Bird Ave	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
1+64	638 Bird Ave	8" Comb.	North	6"	PVC	Active	None - Main to be C.I.P.P. Lined	N/A
1+68	655 Bird Ave	8" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
1+70	644 Bird Ave	8" Comb.	South	4"	PVC	Active	None - Main to be C.I.P.P. Lined	N/A
1+73	644 Bird Ave	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
1+79	655 Bird Ave	8" Comb.	North	6"	Unknown	Capped	None	N/A
1+82	644 Bird Ave	8" Comb.	South	6"	Unknown	Capped	None	N/A
1+89	644 Bird Ave	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
2+00	671 Bird Ave	8" Comb.	North	6"	Unknown	Capped	None	N/A
2+22	671 Bird Ave	8" Comb.	North	6"	Unknown	Capped	None	N/A
2+23	671 Bird Ave	8" Comb.	North	4"	PVC	Active	Replace - Tap to Ex. Main	26/6"
2+26	671 Bird Ave	8" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
2+27	668 Bird Ave	8" Comb.	South	6"	Unknown	Active	Investigate - Rep ace & Tap at Ex. Main as Req	26/6"
2+42	684 Bird Ave	8" Comb.	South	6"	Unknown	Active	Investigate - Rep ace & Tap at Ex. Main as Req	26/6"
2+50	695 Bird Ave	8" Comb.	North	6"	D.B.	Active	Replace - Tap to Ex. Main	26/6"
2+55	695 Bird Ave	8" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
2+68	684 Bird Ave	8" Comb.	South	6"	Unknown	Capped	None	N/A
2+83	718 Bird Ave	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
2+96	711 Bird Ave	8" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
2+98	711 Bird Ave	8" Comb.	North	6"	Unknown	Capped	None	N/A
3+01	718 Bird Ave	8" Comb.	South	6"	PVC	Capped	None	N/A
3+03	716 Bird Ave	8" Comb.	South	4"	PVC	Active	Replace - Tap to Ex. Main	25/6"
3+07	711 Bird Ave	8" Comb.	North	6"	W.L. 1963	Active	Replace - Tap to Ex. Main	26/6"

Existing MH97 to MH98

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
3+35	730 Bird Ave	8" Comb.	South	6"	D.B.	Active	Replace - Tap to Ex. Main	25/6"
3+41	731 Bird Ave	8" Comb.	North	4"	PVC	Active	Replace - Tap to Ex. Main	26/6"
3+60	747 Bird Ave	8" Comb.	North	4"	PVC	Active	Replace - Tap to Ex. Main	26/6"
3+92	740 Bird Ave	8" Comb.	South	6"	PVC	Active	None - Main to be C.I.P.P. Lined	N/A

Combined Sewer Service Schedule - Bird Avenue Sta. 4+00 to 8+00

Existing MH97 to MH98

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
4+19	771 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
4+21	768 Bird Avenue	8" Comb.	South	6"	Unknown	Capped	None	N/A
4+24	768 Bird Avenue	8" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
4+28	771 Bird Avenue	8" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
4+42	784 Bird Avenue	8" Comb.	South	6"	P.V.C.	Active	None - Main to be C.I.P.P. Lined	N/A
4+59	811 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
4+61	811 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
4+65	784 Bird Avenue	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
4+80	808 Bird Avenue	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
4+82	808 Bird Avenue	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
4+84	808 Bird Avenue	8" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
4+93	811 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
4+95	808 Bird Avenue	8" Comb.	South	4"	Unknown	Capped	None	N/A
5+07	811 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
5+12	811 Bird Avenue	8" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
5+18	832 Bird Avenue	8" Comb.	South	6"	Unknown	Active	None - Main to be C.I.P.P. Lined	N/A
5+22	832 Bird Avenue	8" Comb.	South	6"	P.V.C.	Active	None - Main to be C.I.P.P. Lined	N/A
5+27	831 Bird Avenue	8" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
5+35	831 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
5+38	832 Bird Avenue	8" Comb.	South	6"	Unknown	Capped	None	N/A
5+64	855 Bird Avenue	8" Comb.	North	4"	P.V.C.	Active	Replace - Bond & Tap to Ex. Main	27/6"

Existing MH98 to MH102

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
5+75	855 Bird Avenue	10" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
5+78	852 Bird Avenue	10" Comb.	South	6"	Unknown	Capped	None	N/A
5+95	852 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
6+02	880 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
6+08	871 Bird Avenue	10" Comb.	North	6"	P.V.C.	Active	None - Main to be C.I.P.P. Lined	N/A
6+20	880 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
6+31	871 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
6+42	891 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
6+55	888 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
6+58	891 Bird Avenue	10" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
6+61	888 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
6+93	930 Bird Avenue	10" Comb.	South	6"	P.V.C.	Active	None - Main to be C.I.P.P. Lined	N/A
6+99	907 Bird Avenue	10" Comb.	North	6"	Unknown	Active	Investigate - Replace & Tap to Ex. Main	26/6"
7+01	930 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
7+22	926 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
7+25	925 Bird Avenue	10" Comb.	North	6"	P.V.C.	Active	None - Main to be C.I.P.P. Lined	N/A
7+43	926 Bird Avenue	10" Comb.	South	4"	Unknown	Active	Replace - Tap to Ex. Main	25/6"
7+61	955 Bird Avenue	10" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
7+63	954 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
7+75	954 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A

Water Service Schedule - Bird Avenue Sta. P.O.B. to 4+00

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
0+96	623 Bird Ave	1" Copper	N/A	1"	N
1+33	631 Bird Ave	1" Copper	N/A	1"	N
1+46	655 Bird Ave	1" Copper	N/A	1"	N
2+21	671 Bird Ave	1" Copper	N/A	1"	N
2+51	695 Bird Ave	3/4" Copper	33/1"	1"	Y
3+08	711 Bird Ave	3/4" Copper	33/1"	1"	Y
3+44	731 Bird Ave	3/4" Copper	33/1"	1"	Y
3+73	747 Bird Ave	1" Copper	N/A	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
0+88	626 Bird Ave	1" Copper	5/1"	1"	N
1+34	628 Bird Ave	1" Copper	5/1"	1"	N
1+73	644 Bird Ave	1" Copper	5/1"	1"	N
2+00	668 Bird Ave	1" Copper	5/1"	1"	N
2+43	684 Bird Ave	3/4" Copper	18/1"	1"	Y
3+02	736 Bird Ave	1" Copper	5/1"	1"	N
3+36	730 Bird Ave	3/4" Copper	18/1"	1"	Y
3+87	740 Bird Ave	1" Copper	5/1"	1"	N

Water Service Schedule - Bird Avenue Sta. 4+00 to 8+00

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
4+28	771 Bird Ave	1" Copper	N/A	1"	N
5+07	811 Bird Ave	1" Copper	N/A	1"	N
5+28	831 Bird Ave	1.5" Copper	N/A	1.5"	N
5+69	855 Bird Ave	1" Copper	N/A	1"	N
6+31	871 Bird Ave	1" Copper	N/A	1"	N
6+50	891 Bird Ave	3/4" Copper	33/1"	1"	Y
Unknown	937 Bird Ave	Unknown from Sta.Water	T.B.D (33/1")	1"	Y
7+26	929 Bird Ave	1" Copper	N/A	1"	N
7+62	955 Bird Ave	1" Copper	N/A	1"	N

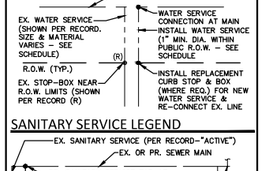
South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
4+18	768 Bird Ave	1" Copper	5/1"	1"	N
4+44	784 Bird Ave	1" Copper	5/1"	1"	N
4+84	808 Bird Ave	1" Copper	5/1"	1"	N
5+22	832 Bird Ave	1" Copper	5/1"	1"	N
5+95	852 Bird Ave	1" Copper	5/1"	1"	N
6+01	860 Bird Ave	1" Copper	5/1"	1"	N
6+59	888 Bird Ave	1" Copper	5/1"	1"	N
6+92	900 Bird Ave	1" Copper	5/1"	1"	N
7+41	926 Bird Ave	1" Copper	5/1"	1"	N
7+65	954 Bird Ave	1" Copper	5/1"	1"	N

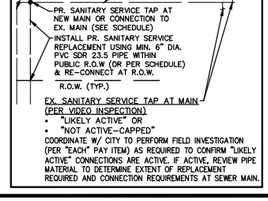
UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

WATER SERVICE LEGEND



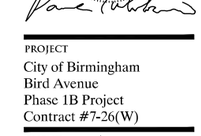
SANITARY SERVICE LEGEND



NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL



PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼ of Section 36, T. 2N, R.10E City of Birmingham, Oakland County, Michigan

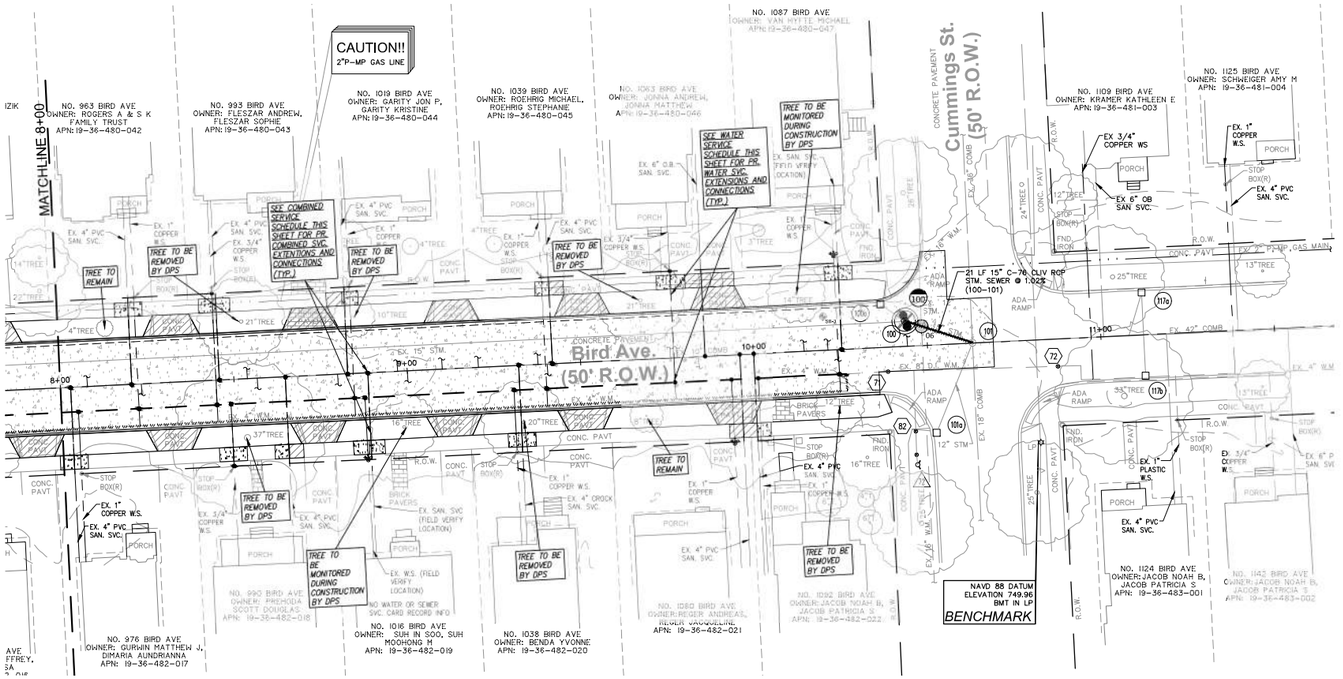
SHEET
Utility Service Plan Sta. P.O.B. To 8+00

Know what's below Call before you dig.

DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS
02-09-2026	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. O947
SHEET NO. C05



Water Service Schedule -Bird Avenue Sta. 8+00 to P.O.E.

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
8+22	963 Bird Ave	1" Copper	N/A	1"	N
8+45	993 Bird Ave	3/4" Copper	33/1"	1"	Y
8+84	1019 Bird Ave	1" Copper	N/A	1"	N
9+40	1039 Bird Ave	1" Copper	N/A	1"	N
9+77	1063 Bird Ave	3/4" Copper	33/1"	1"	Y
10+24	1087 Bird Ave	1" Copper	N/A	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
8+05	976 Bird Ave	1" Copper	5/1"	1"	N
8+49	990 Bird Ave	3/4" Copper	18/1"	1"	Y
8+87	1016 Bird Ave	Unknown (Verify Size/Material)	T.B.D. (5/1")	1"	N
9+30	1038 Bird Ave	1" Copper	5/1"	1"	N
9+93	1060 Bird Ave	1" Copper	5/1"	1"	N
10+01	1062 Bird Ave	1" Copper	5/1"	1"	N

Combined Sewer Service Schedule - Bird Aveenue Sta. 8+00 to P.O.E.

Existing MH98 to MH101

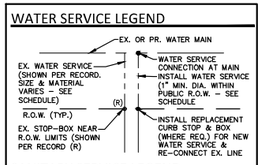
Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
8+03	976 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
8+08	963 Bird Avenue	10" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
8+21	963 Bird Avenue	10" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
8+23	976 Bird Avenue	10" Comb.	South	6"	Unknown	Capped	None	N/A
8+46	993 Bird Avenue	10" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
8+54	993 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
8+57	990 Bird Avenue	10" Comb.	South	6"	Unknown	Capped	None	N/A
8+65	990 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
8+80	1016 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
8+83	1019 Bird Avenue	10" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
8+89	1016 Bird Avenue	10" Comb.	South	6"	Unknown	Active	Investigate - Replace & Tap to Ex. Main	25/6"
8+97	1019 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
9+00	1016 Bird Avenue	10" Comb.	South	6"	Unknown	Capped	None	N/A
9+10	1019 Bird Avenue	10" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
9+21	1039 Bird Avenue	10" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
9+32	1038 Bird Avenue	10" Comb.	North	4"	Crock	Active	Replace - Tap to Ex. Main	25/6"
9+37	1039 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
9+40	1038 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
9+42	1039 Bird Avenue	10" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
9+76	1063 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
9+78	1063 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
9+84	1080 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
9+86	1063 Bird Avenue	10" Comb.	South	6"	O.B.	Active	Replace - Tap to Ex. Main	26/6"
9+96	1080 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
10+00	1062 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
10+14	1087 Bird Avenue	10" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
10+21	1087 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
10+24	1092 Bird Avenue	10" Comb.	South	6"	Unknown	Capped	None	N/A
10+25	1087 Bird Avenue	10" Comb.	North	6"	Unknown	Active	Investigate - Replace & Tap to Ex. Main	26/6"
10+44	1087 Bird Avenue	10" Comb.	North	6"	Unknown	Active	None - Main to be C.I.P.P. Lined	N/A

UTILITY NOTE

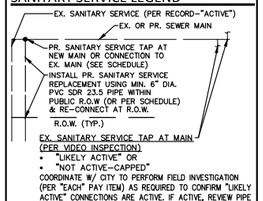
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WATER SERVICE LEGEND



SANITARY SERVICE LEGEND



NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER
NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼
of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

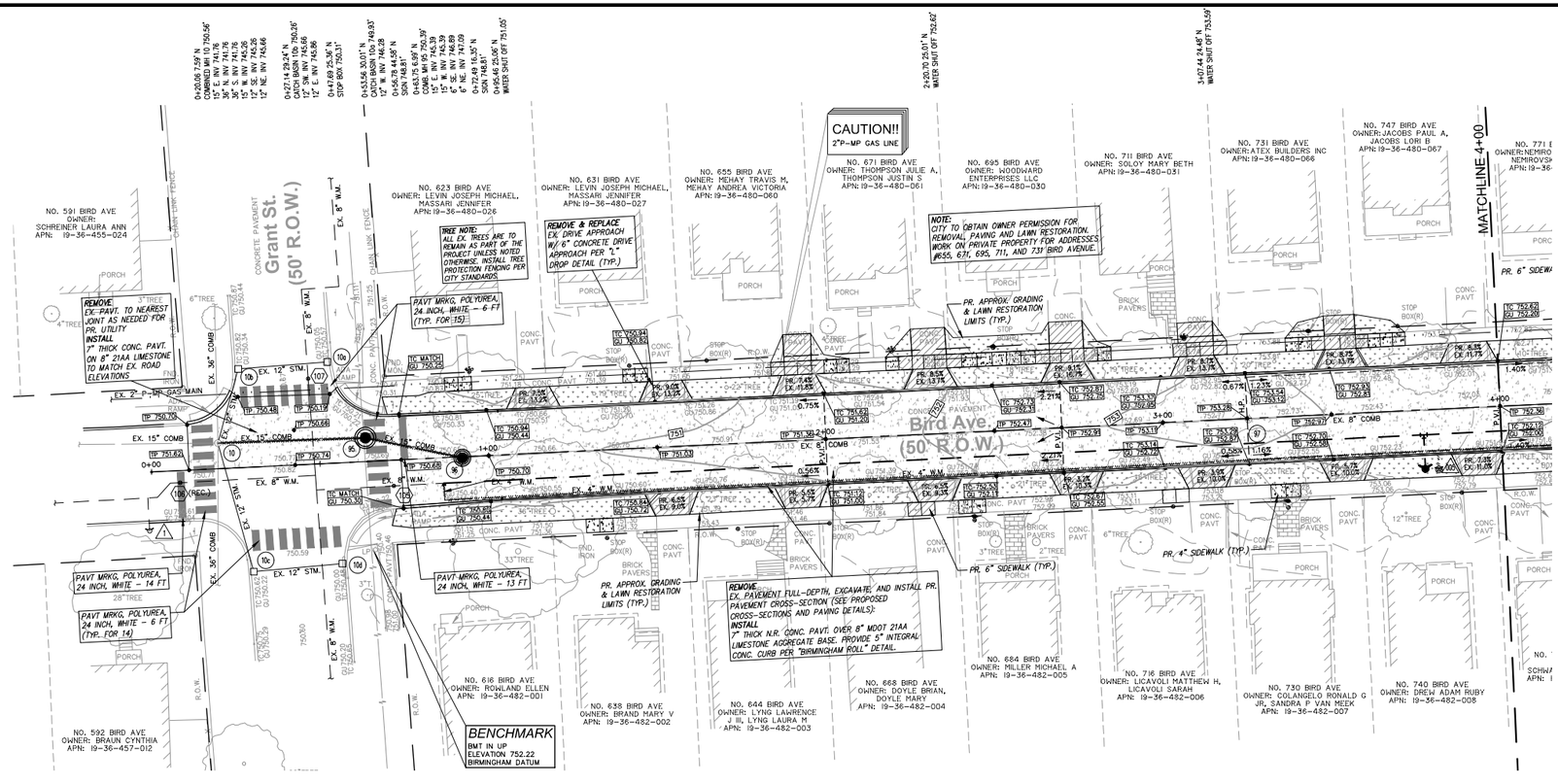
SHEET
Utility Service Plan Sta.
8+00 To P.O.E.

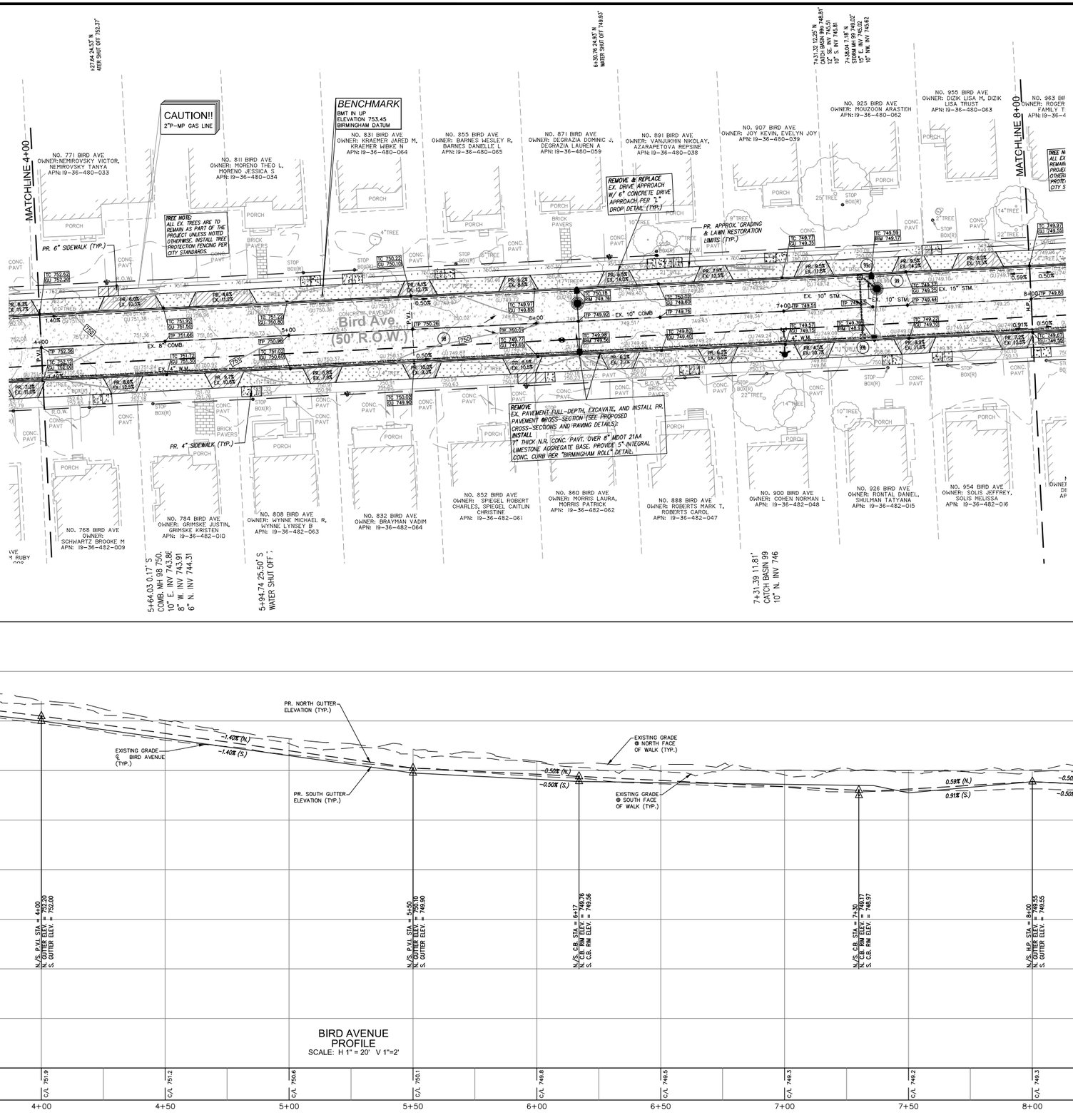
811
Know what's below
Call before you dig.

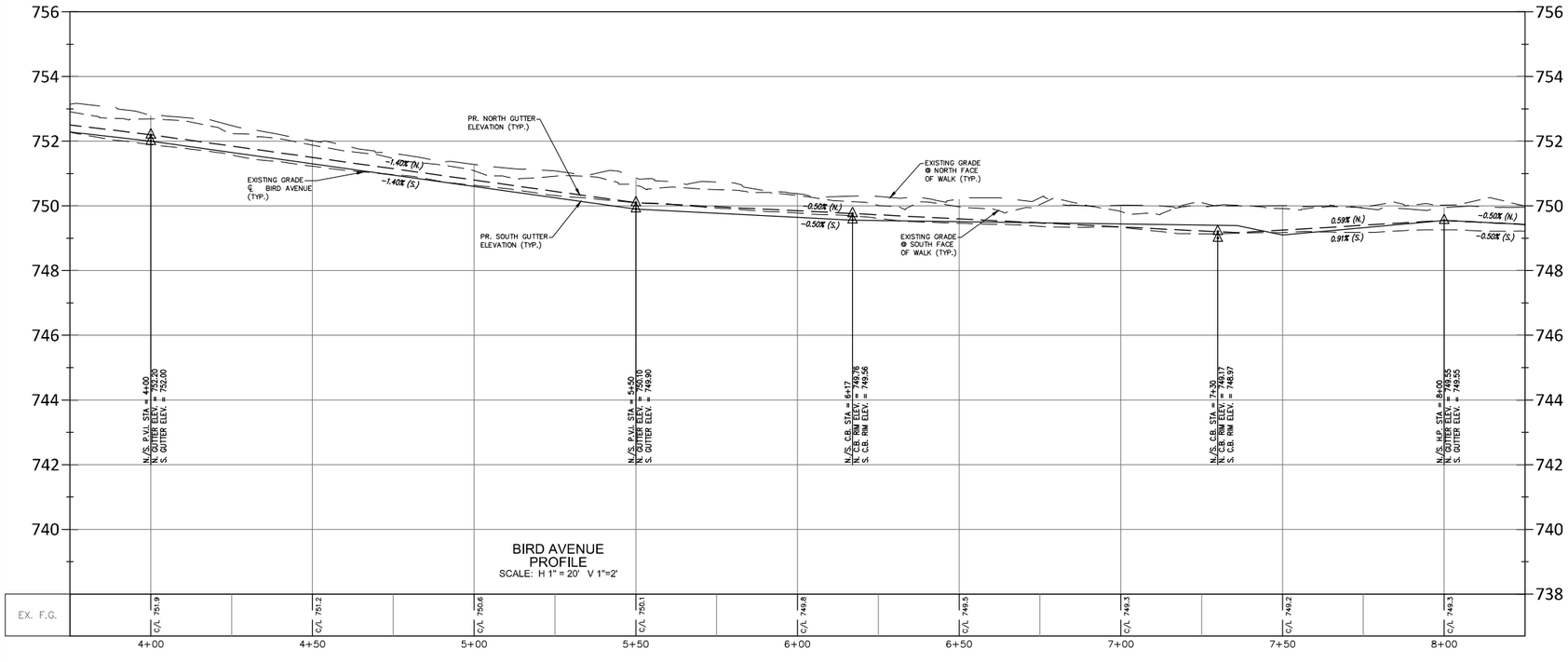
DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS
02-09-2026	ADDENDUM 1

DRAWN BY:
K. Withrow
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
October 25, 2024
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. O947
SHEET NO. C06


0+20.08 7.59' N
CLEANOUT RIM 750.56'
15" E. INV 741.76
36" N. INV 741.76
36" S. INV 741.35
15" W. INV 745.26
12" SE INV 745.26
12" NE. INV 743.66
0+27.14 29.24' N
CATCH BASIN TOP 750.25'
12" SW INV 742.66
12" S. INV 742.66
0+47.69 35.36' N
STOP BOX 750.31'
0+53.56 30.01' N
CATCH BASIN TOP 749.93'
12" N. INV 742.28
0+56.78 44.58' N
SIGN 748.81'
0+63.75 6.89' N
CLEANOUT RIM 750.39'
15" E. INV 745.39
15" W. INV 745.39
6" NE. INV 747.09
0+72.49 16.35' N
SIGN 748.81'
0+95.46 23.06' N
WATER SHUT OFF 751.05'
2+20.70 25.01' N
WATER SHUT OFF 752.62'
3+07.44 34.46' N
WATER SHUT OFF 753.59'
CAUTION!!
2"P-MP GAS LINE
NO. 591 BIRD AVE
OWNER:
SCHREINER LAURA ANN
APN: 19-36-455-024
NO. 623 BIRD AVE
OWNER: LEVIN JOSEPH MICHAEL,
MASSARI JENNIFER
APN: 19-36-480-026
NO. 631 BIRD AVE
OWNER: LEVIN JOSEPH MICHAEL,
MASSARI JENNIFER
APN: 19-36-480-027
NO. 655 BIRD AVE
OWNER: MEHAY TRAVIS M,
MEHAY ANDREA VICTORIA
APN: 19-36-480-060
NO. 671 BIRD AVE
OWNER: THOMPSON JULIE A,
THOMPSON JUSTIN S
APN: 19-36-480-061
NO. 695 BIRD AVE
OWNER: WOODWARD
ENTERPRISES LLC
APN: 19-36-480-030
NO. 711 BIRD AVE
OWNER: SOLOY MARY BETH
APN: 19-36-480-031
NO. 731 BIRD AVE
OWNER: ATEX BUILDERS INC
APN: 19-36-480-066
NO. 747 BIRD AVE
OWNER: JACOBS PAUL A,
JACOBS LORI B
APN: 19-36-480-067
NO. 771 E
OWNER: NEMIRO
NEMROVSK
APN: 19-36-
MATCHLINE 4+00
Grant St.
(50' R.O.W.)
Bird Ave.
(50' R.O.W.)
REMOVE:
EX. PAVT. TO NEAREST
JOINT AS NEEDED FOR
PR. UTILITY.
INSTALL
7" THICK CONC. PAVT.
ON 8" 21AA LIMESTONE
TO MATCH EX. ROAD
ELEVATIONS.
TREE NOTE:
ALL EX. TREES ARE TO
REMAIN AS PART OF THE
PROJECT UNLESS NOTED
OTHERWISE. INSTALL TREE
PROTECTION FENCING PER
CITY STANDARDS.
REMOVE & REPLACE
EX. DRIVE APPROACH
W/ 6" CONCRETE DRIVE
APPROACH PER "L"
DROP DETAIL (TYP.)
NOTE:
CITY TO OBTAIN OWNER PERMISSION FOR
REMOVAL, PAVING AND LAWN RESTORATION,
WORK ON PRIVATE PROPERTY FOR ADDRESSES
#655, 671, 695, 711, AND 731 BIRD AVENUE.
PAVT MRKG, POLYUREA,
24 INCH, WHITE - 6 FT
(TYP. FOR 15)
PR. APPROX. GRADING
& LAWN RESTORATION
LIMITS (TYP.)
PR. 6" SIDEWALK
PR. 4" SIDEWALK (TYP.)
PAVT MRKG, POLYUREA,
24 INCH, WHITE - 14 FT
PAVT MRKG, POLYUREA,
24 INCH, WHITE - 6 FT
(TYP. FOR 14)
PAVT MRKG, POLYUREA,
24 INCH, WHITE - 13 FT
PR. APPROX. GRADING
& LAWN RESTORATION
LIMITS (TYP.)
REMOVE:
EX. PAVEMENT FULL-DEPTH, EXCAVATE, AND INSTALL PR.
PAVEMENT CROSS-SECTION (SEE PROPOSED
CROSS-SECTIONS AND PAVING DETAILS).
INSTALL
7" THICK N.R. CONC. PAVT. OVER 8" MDOT 21AA
LIMESTONE AGGREGATE BASE. PROVIDE 5" INTEGRAL
CONC. CURB PER "BIRMINGHAM ROLL" DETAIL.
BENCHMARK
BMT IN UP
ELEVATION 752.22
BIRMINGHAM DATUM
NO. 592 BIRD AVE
OWNER: BRAUN CYNTHIA
APN: 19-36-457-012
NO. 616 BIRD AVE
OWNER: ROWLAND ELLEN
APN: 19-36-482-001
NO. 638 BIRD AVE
OWNER: BRAND MARY V
APN: 19-36-482-002
NO. 644 BIRD AVE
OWNER: LYNG LAWRENCE
J III, LYNG LAURA M
APN: 19-36-482-003
NO. 668 BIRD AVE
OWNER: DOYLE BRIAN,
DOYLE MARY
APN: 19-36-482-004
NO. 684 BIRD AVE
OWNER: MILLER MICHAEL A
APN: 19-36-482-005
NO. 716 BIRD AVE
OWNER: LICAVOLI MATTHEW H,
LICAVOLI SARAH
APN: 19-36-482-006
NO. 730 BIRD AVE
OWNER: COLANGELO RONALD G
JR, SANDRA P VAN MEEK
APN: 19-36-482-007
NO. 740 BIRD AVE
OWNER: DREW ADAM RUBY
APN: 19-36-482-008
N
W
E
S
NF
EX. 8" W.M.
EX. 36" COMB
EX. 12" STM.
EX. 2"-P-MP GAS MAIN
EX. 15" COMB
EX. 4" W.M.
EX. 8" COMB
EX. 6" W.M.
EX. 24" STM.
EX. 18" STM.
EX. 10" W.M.
EX. 8" W.M.
EX. 6" W.M.
EX. 4" W.M.
EX. 8" COMB
PR. 6" SIDEWALK
PR. 4" SIDEWALK
PR. 8.5% EX. 13.7%
PR. 8.0% EX. 13.7%
PR. 8.5% EX. 11.7%
PR. 8.0% EX. 11.6%
PR. 8.5% EX. 11.7%
PR. 6.0% EX. 9.0%
PR. 6.5% EX. 9.0%
PR. 5.0% EX. 5.7%
PR. 6.0% EX. 10.3%
PR. 6.7% EX. 10.0%
PR. 6.7% EX. 11.0%
PR. 6.7% EX. 11.2%
PR. 6.7% EX. 11.3%
PR. 6.7% EX. 11.4%
PR. 6.7% EX. 11.5%
PR. 6.7% EX. 11.6%
PR. 6.7% EX. 11.7%
PR. 6.7% EX. 11.8%
PR. 6.7% EX. 11.9%
PR. 6.7% EX. 12.0%
PR. 6.7% EX. 12.1%
PR. 6.7% EX.







LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- +000.00 GROUND ELEVATION
- EX PAVERS
- PR. 7" CONC. PAVT. W/ INT. CURB
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (5" MIN. ON 6" 21AA)
- PR. 18" MD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- TC 600.00 PR. TOP OF CURB ELEVATION
- GU 600.00 PR. GUTTER ELEVATION
- TW 600.00 PR. TOP OF WALK ELEVATION
- TP 600.00 PR. TOP OF PVMT. ELEVATION
- FG 600.00 FINISH GRADE ELEVATION
- WT 600.00 WB 600.00 WALL TOP/BOTTOM ELEVATION

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LAND SURVEYORS
LAND PLANNERS

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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼
of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

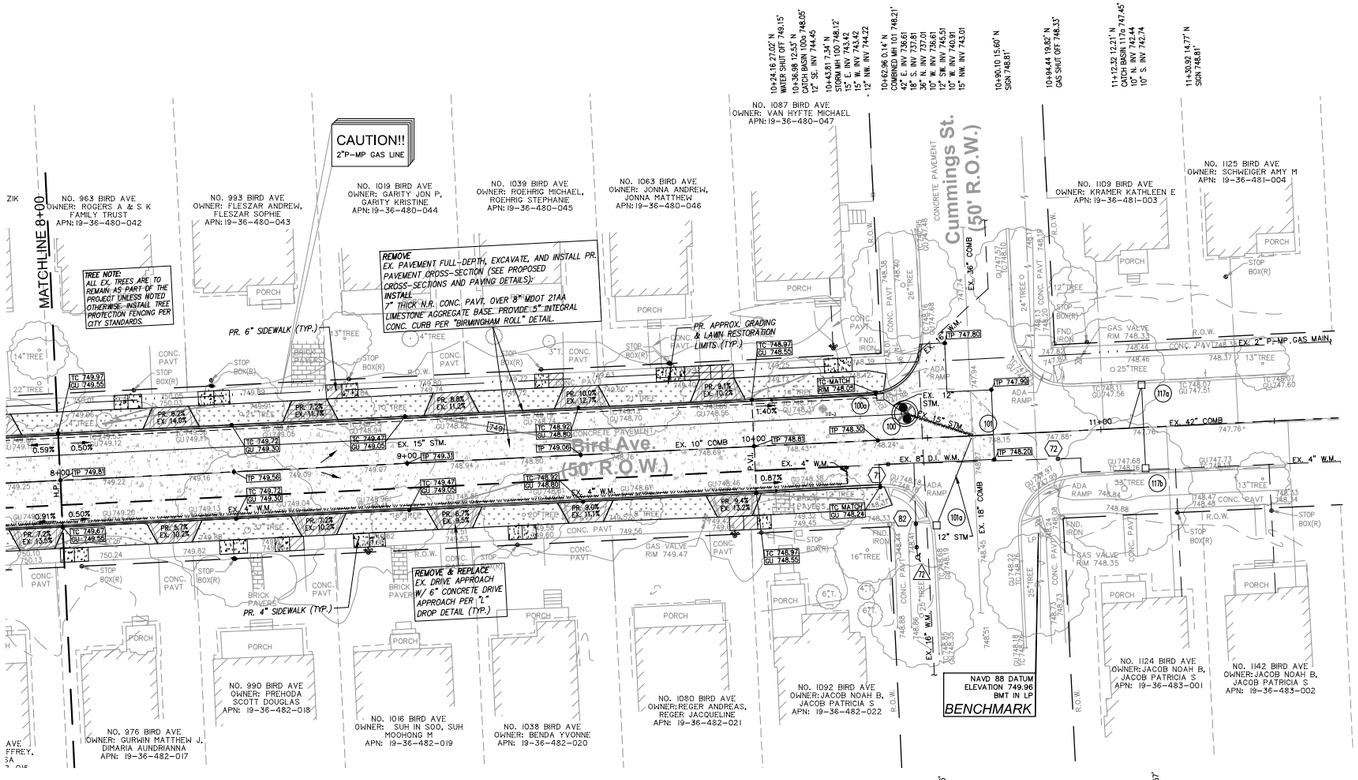
SHEET
Paving & Grading Plan
Sta. 4+00 To 8+00

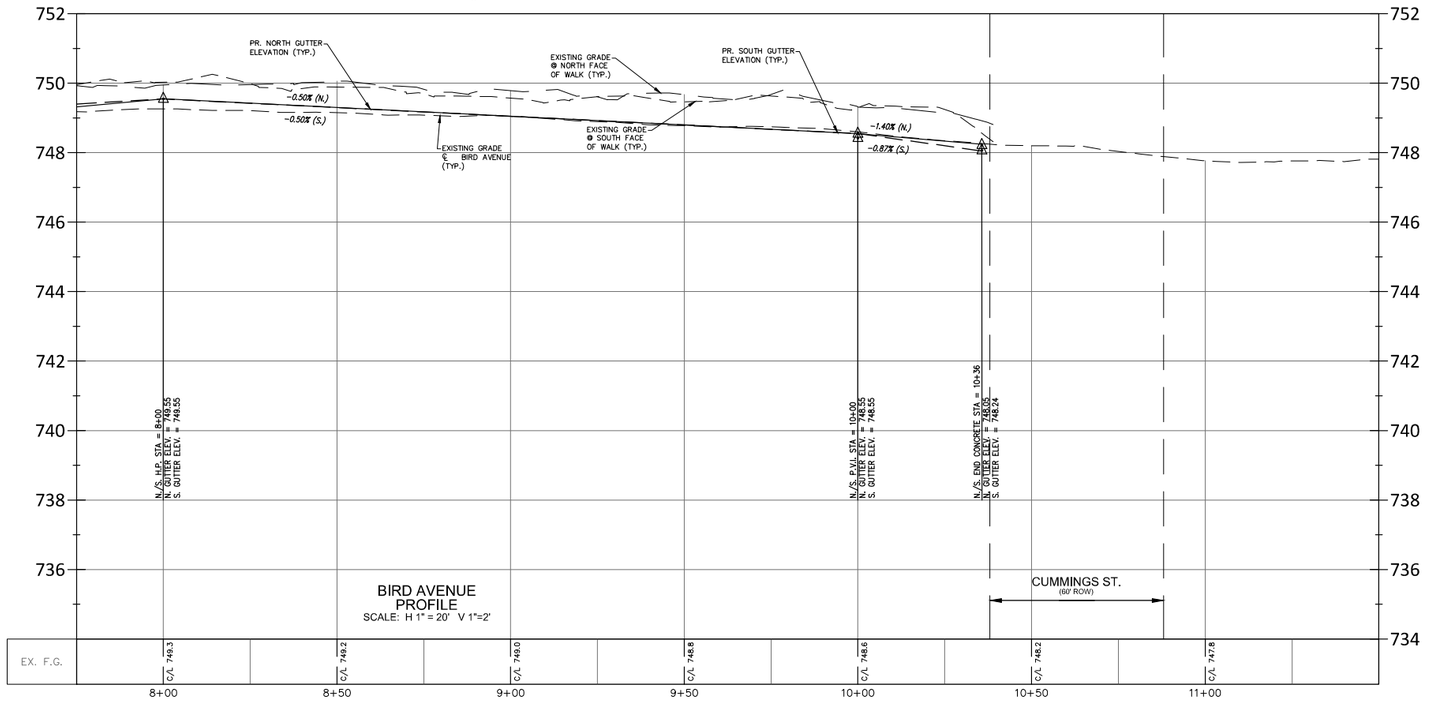
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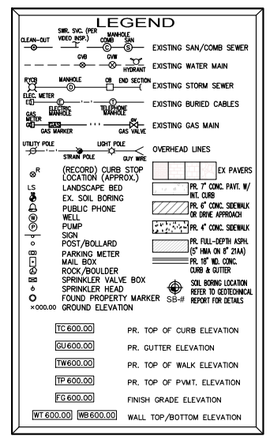
DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O947
SHEET NO. C08







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LAND SURVEYORS
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PAUL TULIKANGAS
ENGINEER
NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
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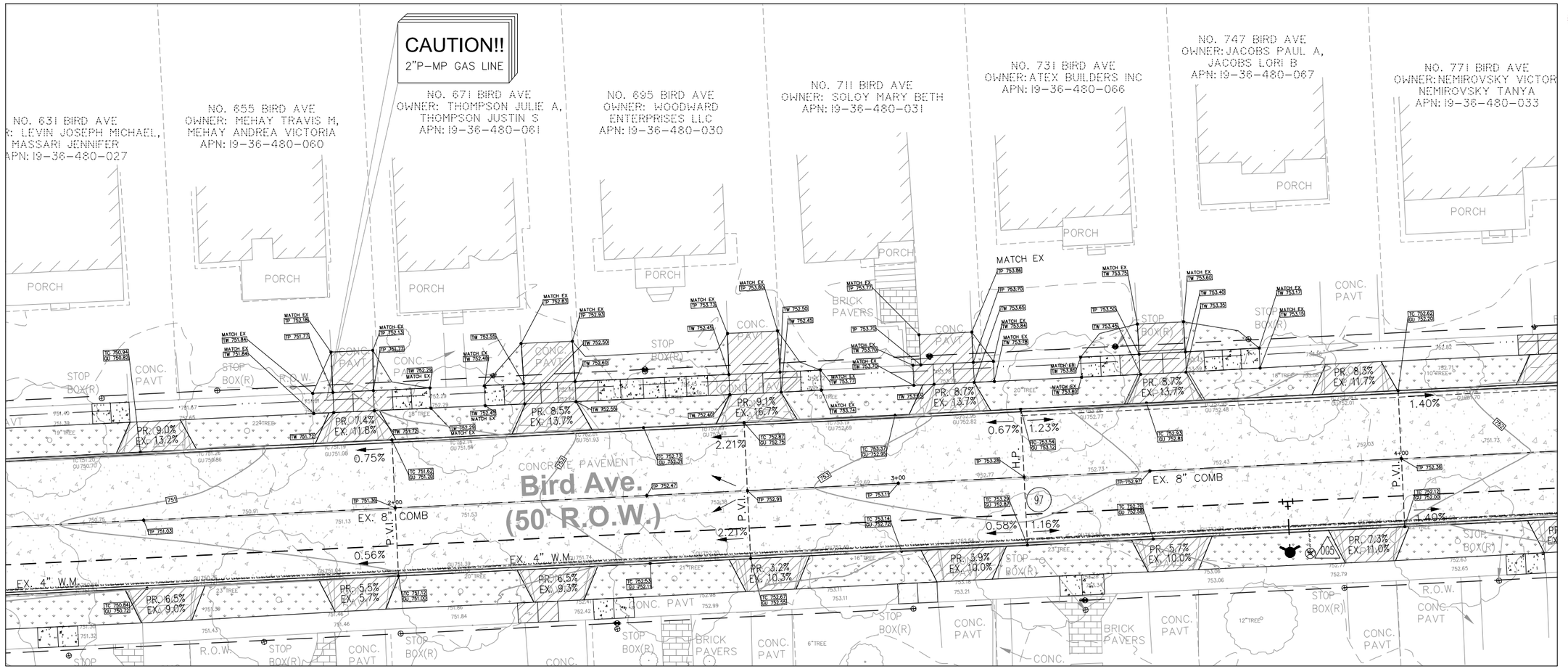
SHEET
Paving & Grading Plan
Sta. 8+00 To P.O.E.

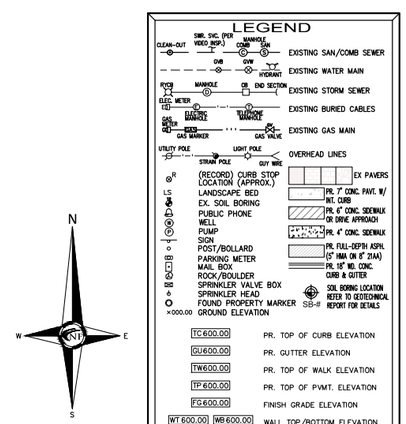
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DATE	ISSUED/REVISED
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01-22-2026	BIDS
03-09-2026	ADDENDUM 1

DRAWN BY:
K. Withrow
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
October 25, 2024
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O947
SHEET NO. C09





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SEAL

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ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
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A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼
of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Bird Avenue - N. Side
Walk & Driveway Grading
Detail

811
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DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS

DRAWN BY:
K. Withrow

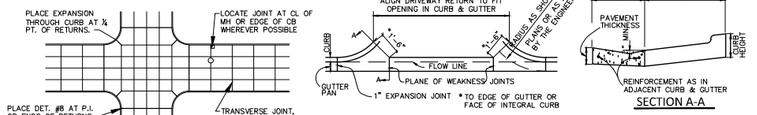
DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

DATE:
October 25, 2024

SCALE: 1" = 10'
10 5 0 5 10 15

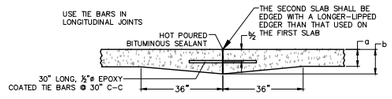
NFE JOB NO. **O947**
SHEET NO. **C10**



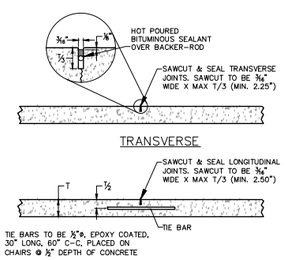
TYPICAL JOINT LAYOUT

MDOT DRIVEWAY OPENING DETAIL 'M'
N.T.S.

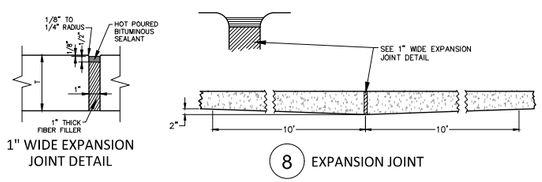
SLAB DESIGNATION	"a"	"b"
6"	6"	8"
7"	7"	9"
7-½"	7-½"	10"
8"	8"	11"
9"	9"	12"



5 CONSTRUCTION JOINT

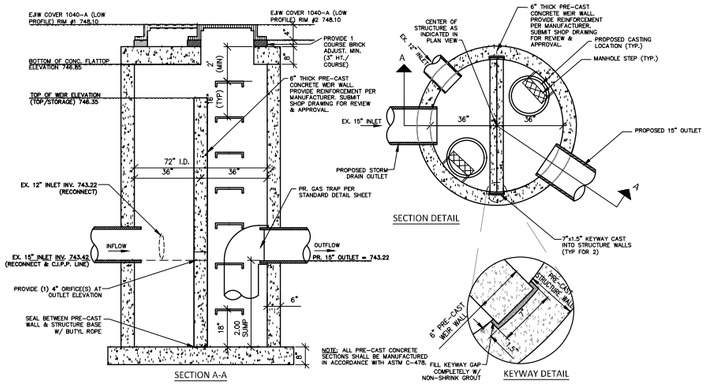


6 CONTRACTION JOINT



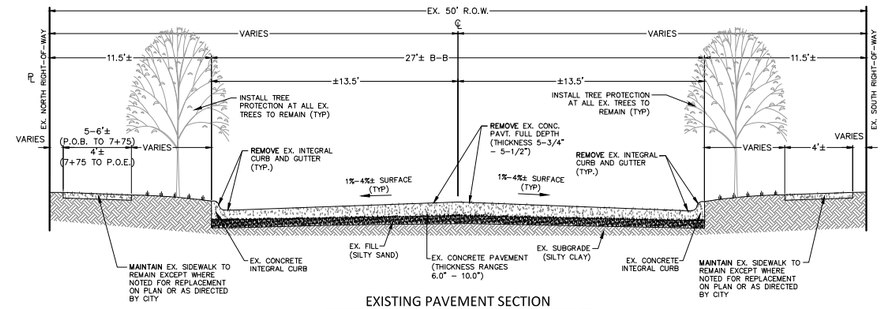
1" WIDE EXPANSION JOINT DETAIL

8 EXPANSION JOINT



100 6' DIAMETER OUTLET CONTROL MANHOLE (SCHEMATIC DETAIL)
N.T.S.

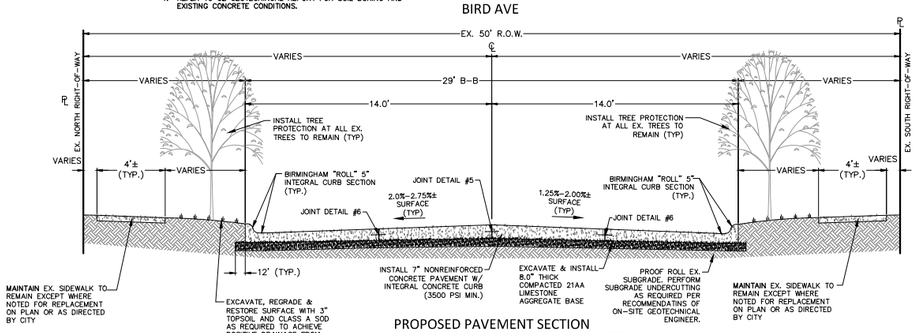
NOTE: OUTLET CONTROL STRUCTURE SHOWN IS SCHEMATIC. CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS SHOWING SITE SPECIFIC PIPE ORIENTATION, WSIR WALL ORIENTATION, INLET/OUTLET PIPE SIZES, RIM ELEVATIONS, ETC. FOR REVIEW AND APPROVAL.



EXISTING PAVEMENT SECTION
N.T.S.

NOTES:
1. REFER TO G2 GEOTECHNICAL REPORT FOR SOIL BORING AND EXISTING CONCRETE CONDITIONS.

BIRD AVE



PROPOSED PAVEMENT SECTION
N.T.S.
BIRD AVE
P.O.B. TO P.O.E.

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LAND SURVEYORS
LAND PLANNERS

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NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼
of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

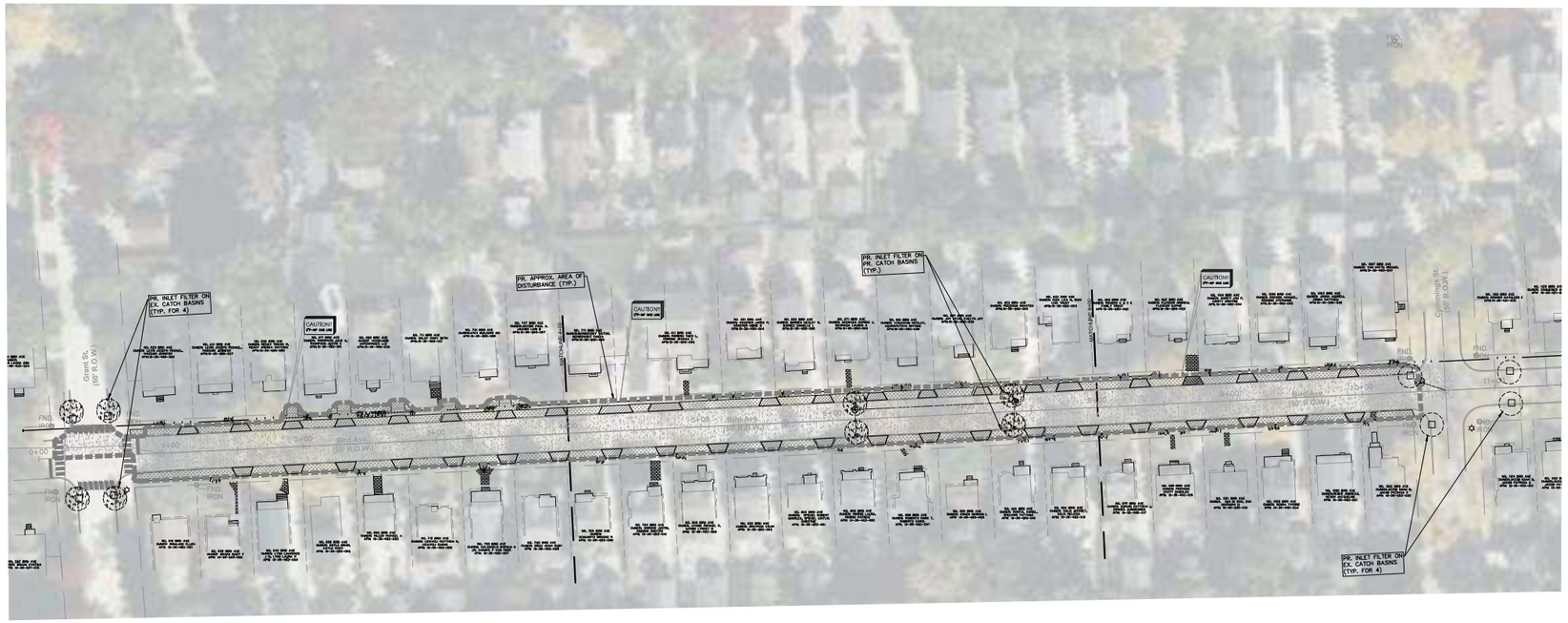
SHEET
Notes and Details

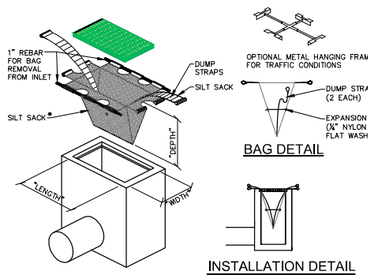
811
Know what's below
Call before you dig.

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12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS
02-09-2026	ADDENDUM 1

DRAWN BY:
K. Withrow
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
October 25, 2024
SCALE: N.T.S.

NFE JOB NO. O947
SHEET NO. C11





SILT SACK FILTER DETAIL

LEGEND

- INDICATES APPROXIMATE LIMITS OF EARTH DISTRUPTION
- INDICATES INLET FILTER AND/OR INLET SEDIMENT PIT ON PROPOSED CATCH BASIN (IN ACCORDANCE WITH CITY SPECIFICATIONS AND O.C.W.R.C. DETAILS)

CONSTRUCTION SEQUENCE / TIMING SCHEDULE

1.	INSTALL SOIL EROSION MEASURES	1ST MONTH
2.	COMMENCE UNDERGROUND CONSTRUCTION	2ND MONTH
3.	COMPLETE ROAD CONSTRUCTION	3RD MONTH
4.	COMPLETE LANDSCAPE RESTORATION	4TH MONTH
5.	REMOVE SOIL EROSION MEASURES	5TH MONTH

NOTES

A DISTANCE OF APPROXIMATELY 1.3 MI TO THE NEAREST BODY OF WATER (QUARTON LAKE).

THE APPROXIMATE TOTAL AREA OF EARTH DISRUPTION IS APPROXIMATELY 1.0 ACRES.

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY CONTRACTOR

A SOIL EROSION PERMIT IS REQUIRED FROM THE CITY OF BIRMINGHAM.

SOIL DATA

THIS SITE CONSISTS OF 60B (SHEBEON–URBAN LAND COMPLEX, 0 TO 4 PERCENT SLOPES) BASED ON DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE.

SOIL EROSION CONTROL NOTES

CUTTING, FILLING AND GRADING SHALL BE MINIMIZED AND THE NATURAL TOPOGRAPHY OF THE SITE SHALL BE PRESERVED TO THE MAXIMUM POSSIBLE EXTENT, EXCEPT WHERE SPECIFIC FINDINGS DEMONSTRATE THAT MAJOR ALTERATIONS WILL STILL MEET THE PURPOSES AND REQUIREMENTS OF THIS ORDINANCE.

DEVELOPMENT SHALL BE STAGED TO KEEP THE EXPOSED AREAS OF SOIL AS SMALL AS PRACTICABLE.

SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED BETWEEN THE DISTURBED AREA AND ANY WATERCOURSES, INCLUDING RIVERS, STREAMS, CREEKS, LAKES, PONDS AND OTHER WATERCOURSES; WETLANDS; OR ROADWAYS ON OR NEAR THE SITE.

SEDIMENT RESULTING FROM ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE THAT WATER LEAVES THE SITE.

TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR AWAY FROM THE SITE SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON–EROSIVE VELOCITY.

TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AFTER PERMANENT SOIL EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED. ALL SITES SHALL BE STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES.

IF LAKES, PONDS, CREEKS, STREAMS, OR WETLANDS ARE LOCATED ON OR NEAR THE SITE, EROSION CONTROL MEASURES WHICH DIVERT RUNOFF AND TRAP SEDIMENT MUST BE PROVIDED AT STRATEGIC LOCATIONS. STRAW BALE BERMS MAY BE USED AS TEMPORARY STORMWATER DIVERSION STRUCTURES, BUT WILL NOT BE CONSIDERED SUFFICIENT FOR TRAPPING SEDIMENT. THE USE OF SEDIMENT BASINS, FILTER FABRIC, VEGETATED BUFFER STRIPS, AND ROCK FILTERS IN LIEU OF STRAW BALE BERMS SHALL BE STRONGLY ENCOURAGED. OTHER MEASURES MAY BE REQUIRED IF REASONABLY DETERMINED TO BE NECESSARY TO PROTECT A WATERCOURSE OR WETLAND.

WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED.

PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 15 (FIFTEEN) CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.

VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.

ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.

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PROJECT
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Bird Avenue
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Contract #7-26(W)

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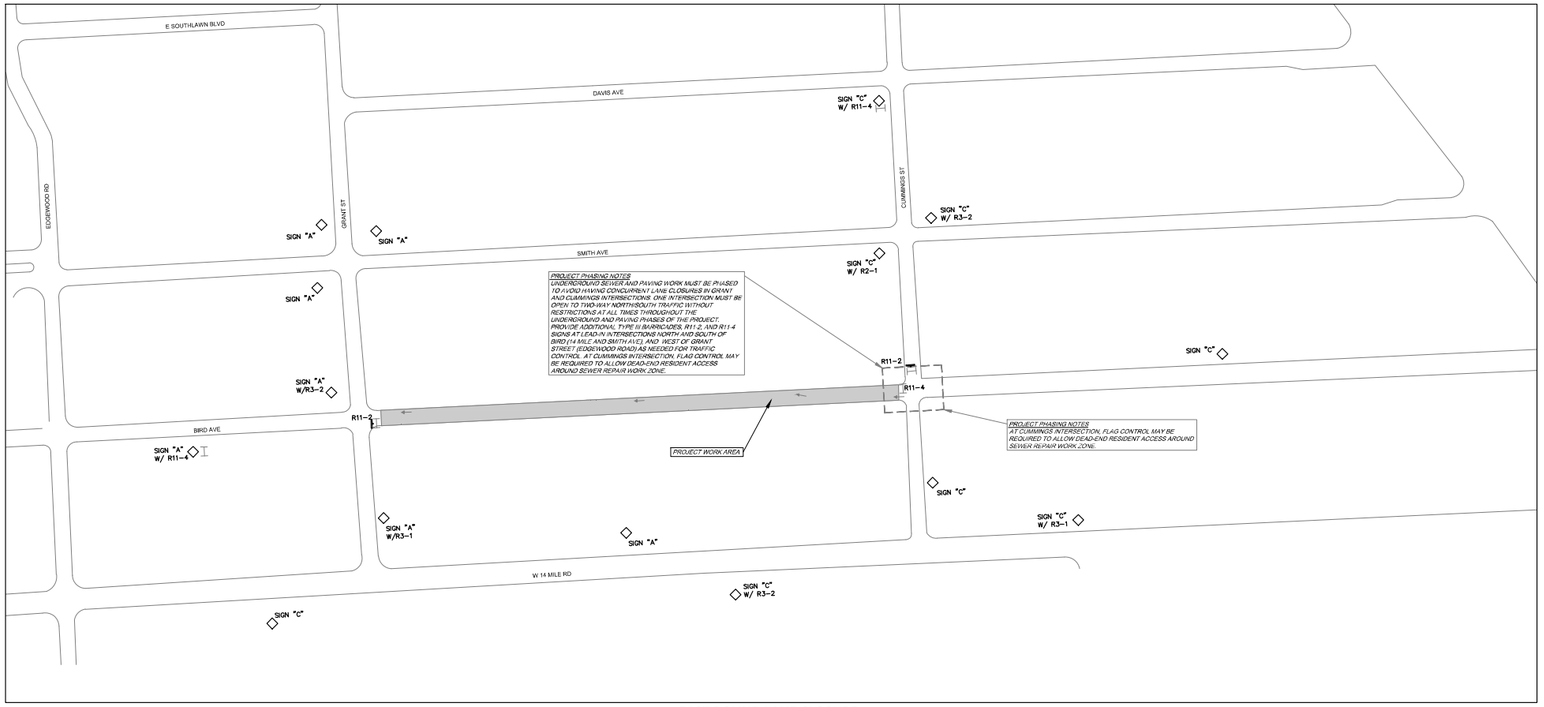
SHEET
SESC Plan

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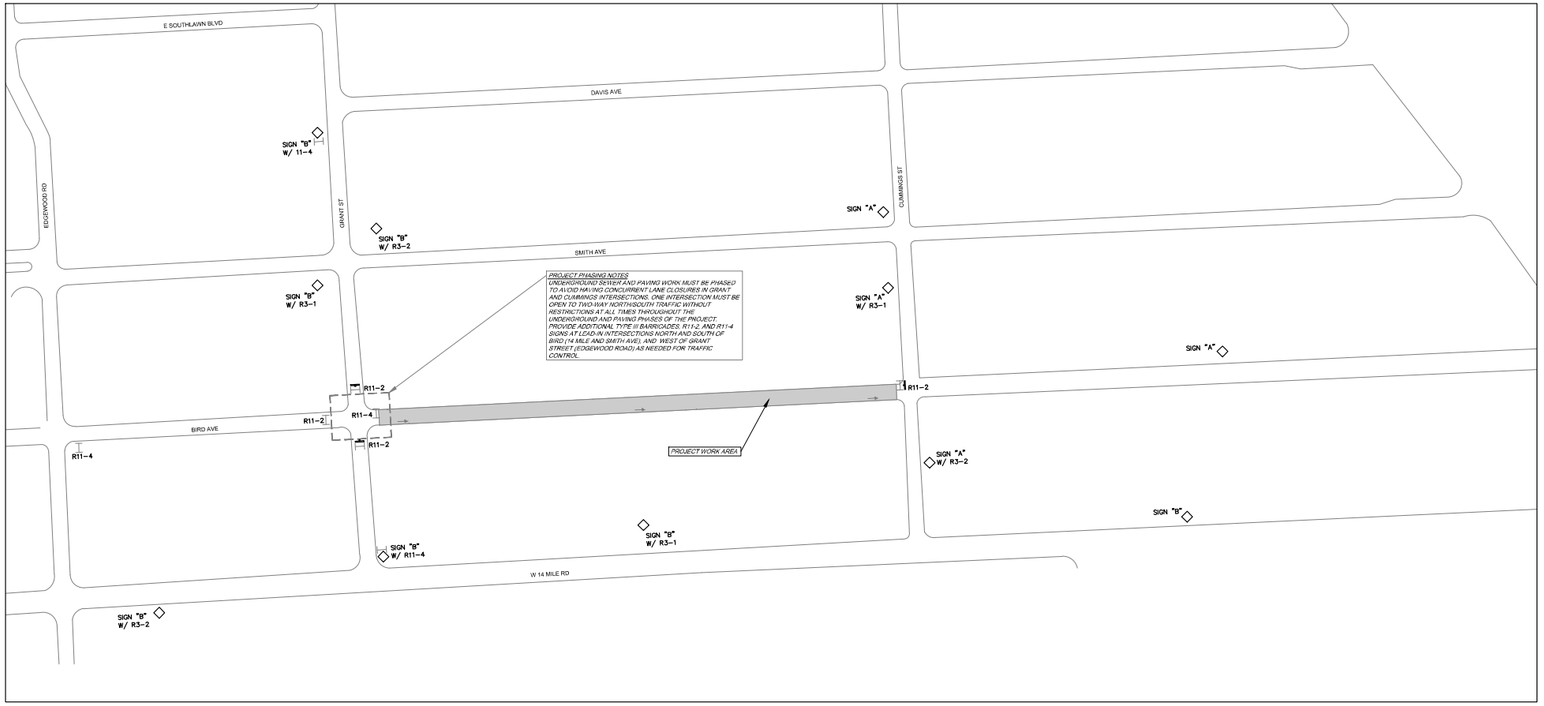
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DRAWN BY: K. Withrow
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SCALE: 1" = 50'

NFE JOB NO. O947
SHEET NO. C12



EAST BOUND LANE CLOSURE



WEST BOUND LANE CLOSURE

BIRD AVE. CLOSED TO THRU TRAFFIC (GRANT TO CUMMINGS) SEEK ALT. ROUTE

36"x72" ADVANCE WARNING SIGN "A"
BLACK LEGEND ON ORANGE BACKGROUND

GRANT CLOSED AT BIRD SEEK ALT. ROUTE

36"x72" ADVANCE WARNING SIGN "B"
BLACK LEGEND ON ORANGE BACKGROUND

CUMMINGS CLOSED AT BIRD SEEK ALT. ROUTE

36"x72" ADVANCE WARNING SIGN "C"
BLACK LEGEND ON ORANGE BACKGROUND



R3-1



R3-2

SYMBOL KEY

- TYPE III BARRICADES
- ADVANCED WARNING SIGN
- DETOUR



ADVANCED WARNING SIGN QUANTITIES AS SHOWN

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
SIGN "A"	BIRD AVE CLOSED TO THRU TRAFFIC (GRANT TO CUMMINGS) SEEK ALT. ROUTE	60"x30"	11
SIGN "B"	GRANT CLOSED AT BIRD SEEK ALT. ROUTE	60"x30"	7
SIGN "C"	CUMMINGS CLOSED AT BIRD SEEK ALT. ROUTE	60"x30"	8
R11-4	ROAD CLOSED FOR THRU TRAFFIC	60"x30"	7
R11-2	ROAD CLOSED	60"x30"	6
R3-1	NO RIGHT TURN	24"x24"	6
R3-2	NO LEFT TURN	24"x24"	6

NOTES

1. PLACE TRAFFIC CONTROL DEVICES AS SPECIFIED, OR AS OTHERWISE DIRECTED BY THE CITY OF BIRMINGHAM, INCLUDING ADVANCE WARNING SIGNS AND BARRICADES NOT SPECIFIED ON THIS DIAGRAM. CONTRACTOR/INSPECTOR MUST ACCOMPANY SIGN SUBCONTRACTOR DURING PLACEMENT OF SIGNS THROUGHOUT VARIOUS TRAFFIC CONTROL CHANGES.
2. ALL SIGNS AND BARRICADING SHALL BE IN ACCORDANCE WITH CURRENT M.M.U.T.C.D. AND M.D.OT. SPECIFICATIONS AND TRAFFIC TYPICALS, INCLUDING PLACEMENT OF ADDITIONAL REQUIRED SIGNS/BARRICADES NOT DEPICTED ON THESE PLANS TO CONTROL TRAFFIC, LANE SHIFTS, ETC.
3. ADVANCE WARNING SIGNS AND BARRICADES SHALL REMAIN IN PLACE UNTIL THE NEW ROAD (OR A PORTION THEREOF) IS READY TO BE OPENED FOR TRAFFIC AS DETERMINED BY THE CITY.
4. MAINTAIN SIDEWALKS AND INSTALL & MAINTAIN FENCING & SIGNAGE AS NEEDED TO ENSURE PEDESTRIAN SAFETY. UTILIZE MAINTENANCE AGGREGATE AS REQUIRED.
5. ERECT, REMOVE, AND/OR MAINTAIN ALL ADVANCE WARNING/DETOUR SIGNAGE AS DIRECTED BY THE CITY.
6. TYPE III BARRICADES (LIGHTED) SHALL BE PLACED FOR ALL LANE CLOSURES, AND SHALL INCLUDE A R11-2 OR R11-4 SIGN ON EACH TYPE III BARRICADE WHERE NOTED.
7. ALL SIDEWALK CLOSURES WITHIN CITY LIMITS SHALL HAVE TYPE III BARRICADES AND INCLUDE A SIDEWALK CLOSED SIGN. IF SIDEWALK CLOSURES ARE REQUIRED WITHIN M.D.O.T. RIGHT-OF WAY ON WOODWARD AVENUE (M-1), TYPE II BARRICADES SHALL BE USED.
8. LOCAL RESIDENT TRAFFIC (1-WAY) SHALL TYPICALLY BE MAINTAINED DURING CONSTRUCTION.
9. CONTRACTOR SHALL PROVIDE ADDITIONAL ADVANCED WARNING SIGNAGE TO INDICATE WHEN FULL-WIDTH CLOSURES WILL BE REQUIRED IN ISOLATED WORK AREAS. PROVIDE ADDITIONAL TYPE III BARRICADES, R11-2, AND R11-4 SIGNS WHERE REQUIRED AS PART OF THE LUMP SUM PAY ITEM FOR TRAFFIC CONTROL.
10. CONTRACTOR SHALL PROVIDE FLAG CONTROL AS REQUIRED THROUGHOUT DURATION OF PROJECT.

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
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WWW.NOWAKFRAUS.COM

SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼
of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Advanced Warning Signage (AWS) Traffic Diagram

Know what's below Call before you dig.

DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS
02-09-2026	ADDENDUM 1

DRAWN BY:
K. Withrow

DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

DATE:
October 25, 2024

SCALE: N.T.S.

NFE JOB NO. O947

SHEET NO. C13

NO.	ITEM DESCRIPTION	PAY UNIT	SHEET C01 Utility Plan	SHEET C02 Utility Plan	SHEET C03 Utility Plan	SHEET C05 Utility Service Plan	SHEET C06 Utility Service Plan	SHEET C07 P&G Plan	SHEET C08 P&G Plan	SHEET C09 P&G Plan	TOTAL QUANTITY
	SEWER PAY ITEMS										
1	15" Combined Sewer, PVC, SDR 26, Trench A	LF	73								73
2	15" Storm Sewer, C76, CL-IV, Trench A	LF		142							142
3	10" Storm Sewer, PVC SDR 26, Trench A	LF		49							49
4	Pre-Lining Preparation, Cleaning & Video Inspection, 15-inch Storm Sewer	LF		62	244						306
5	Pre-Lining Preparation, Cleaning & Video Inspection, 10-inch Comb. Sewer	LF		236	263						499
6	Pre-Lining Preparation, Cleaning & Video Inspection, 8-inch Comb. Sewer	LF	308	164							472
7	Sewer Lining, Pre-Liner, 15" RIFI-CIPP, Storm Sewer	LF		62	244						306
8	Sewer Lining, Pre-Liner, 10" RIFI-CIPP, Comb. Sewer	LF		236	263						499
9	Sewer Lining, Pre-Liner, 8" RIFI-CIPP, Comb. Sewer	LF	308	164							472
10	Sewer Lining, 15" RIFI-CIPP, Storm Sewer	LF		62	244						306
11	Sewer Lining, 10" RIFI-CIPP, Comb. Sewer	LF		236	263						499
12	Sewer Lining, 8" RIFI-CIPP, Comb. Sewer	LF	308	164							472
13	Cut/Grind Protruding Sewer Leads, Any Material	EA									5
14	Cut/Grind Root Intrusion	EA									5
15	Cut/Grind Mineral Deposit	EA									5
16	Sewer Service, 6" PVC SDR 23.5	LF				667	305				972
17	New 5'-0" Diameter Combined Manhole w/ Interior Drop Connection	EA	1								1
18	New 4'-0" Diameter Combined Manhole (Construct Online)	EA	1								1
19	New 6'-0" Diameter Storm Manhole w/ 2' Sump, Weir Wall & Gas Trap, Construct Online (Per Detail)	EA			1						1
20	New 4'-0" Diameter Storm Manhole w/ 2' Sump, Construct Online	EA		1							1
21	New 4'-0" Diameter Storm Manhole w/ 2' Sump	EA		1							1
22	New 2'-0" Diameter Storm Inlet	EA		4							4
23	6" Perforated Pipe Underdrain (No sock)	LF	150	800	236						1,186
24	Sewer Investigation, Laterals	EA				5	2				7
25	Sewer Service Tap, 6"	EA				28	12				40
26	Sewer Tap, 15", Combined	EA	1		1						2
27	Sewer Tap, 6", Underdrain	EA			1						1
28	Reconstruct Manhole (if and where needed)	VF									10
29	Remove & Replace Structure Cover (as directed by City)	EA									5
30	Remove Ex. Sewer Manhole	EA	2	1	1						4
31	Remove Ex. Drainage Structure	EA		2							2
32	Remove Ex. 15" Combined Sewer	LF	69								69
33	Remove Ex. 15" Storm Sewer	LF		21							21
34	Remove Ex. 10" Storm Sewer	LF		30							30
35	Bulkhead Structure, 12" or Less	EA		1							1
36	Bulkhead Pipe, Larger than 8"	EA									3
37	CCTV Sewer Acceptance Inspection	LS									1
	SUBTOTAL SEWER PAY ITEMS										
	WATER MAIN PAY ITEMS										
38	Remove Hydrant	EA	1								1
39	Fire Hydrant Assembly, Complete	EA	1	1							2
40	8" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	314	400	226						940
41	6" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	10	10							20
42	8" Water Main Connection to Ex. 8" Water Main	EA	1		1						2
43	New Water Service, 1", Trench A, Copper	LF				281	109				390
44	Water Service Connection, 1.5"	EA				1					1
45	Water Service Connection, 1"	EA				34	12				46
46	Install Curb Stop & Box, 1"	EA				7	3				10
47	Hydra-Stop, Line-Stop, 8"	EA									1
48	Hydra-Stop, Line-Stop, 4"	EA									1
49	Abandon Existing Water Mains, Entire Project	LS									1
	SUBTOTAL WATER MAIN PAY ITEMS										
	PAVING PAY ITEMS										
50	Earth Excavation	CY						250	270	180	700
51	Subgrade Undercutting, 21AA Limestone	CY						25	27	18	70
52	Subgrade Undercutting, 1"x3" Limestone	CY						12	14	9	35
53	Subgrade Geogrid Fabric, Tensar Triax TX130S	SY									1,000
54	Remove and Salvage Brick Pavers	SF						25		110	135
55	Removing Concrete Drive Approach	SY						131	168	85	384
56	Removing Concrete Sidewalk & Ramp (sawcutting included)	SY						85	50	55	190
57	Removing Pavement Full Depth (Curb & Gutter included)	SY						1109	1200	800	3,109
58	Aggregate Base, MDOT 21AA Limestone, 8"	SY						1165	1260	840	3,265
59	Concrete Pavement, Non-reinforced, 7", Incl. integral 5" curb ("Birmingham Roll")	SY						1109	1200	800	3,109
60	Concrete Drive Approach, 6"	SY						174	190	90	454
61	Concrete Sidewalk, 6" (Includes Ramps)	SF						375	50	140	565
62	Concrete Sidewalk, 4"	SF						385	385	340	1,110
63	Adjust Structure Cover	EA									3
64	Maintenance Aggregate for Entire Project	LS									1
	SUBTOTAL PAVING PAY ITEMS										
	GENERAL PAY ITEMS										
65	Mobilization (Max. 5% of Bid)	LS									1
66	Traffic Maintenance & Control	LS									1
67	Inspector Crew Days	DAYS									-
68	Water and Sewer Allowance	LS									1
69	Audio-Video Route Survey	LS									1
70	Pavement Marking, Polyurea, 24 inch Stop Bar, White	LF									27
71	Pavement Marking, Polyurea, 24 inch Crosshatching, White	LF									168
72	Recessing Pavt Mkrg, Transv	SF									390
73	Salvage Existing Signs	LS									1
74	New Signs	SF									10
75	Sign Post, U-Channel	LF									24
76	Tree Protection, 3" Dia. Or Greater	EA									22
77	Mulch, 3"	SY									200
78	Topsoil, 3"	SY						330	420	220	970
79	Sod, Class A	SY						330	420	220	970
80	Inlet Filter, Silt Sack	EA									12
	SUBTOTAL GENERAL PAY ITEMS										

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PROJECT
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A WALKABLE CITY

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151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼
of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Quantities

811
Know what's **below**
Call before you dig.

DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS

DRAWN BY:
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DESIGNED BY:
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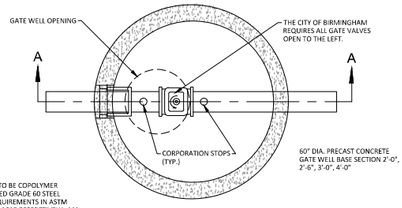
APPROVED BY:
B. Buchholz

DATE:
October 25, 2024

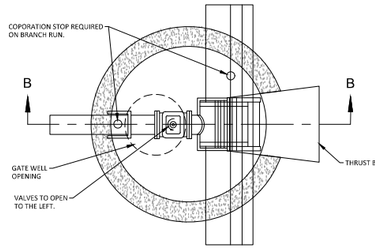
SCALE: N.T.S.

NFE JOB NO.
O947

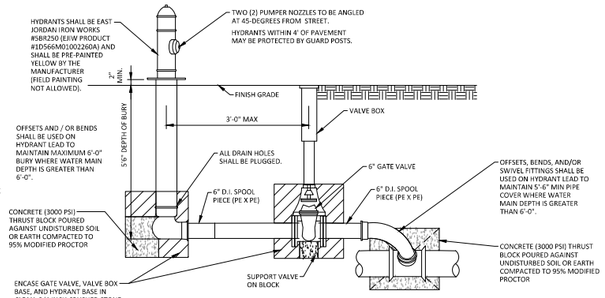
SHEET NO.
Q1



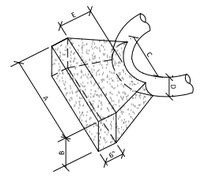
WATER MAIN GATE WELL (TYPICAL), PLAN



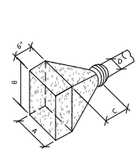
WATER MAIN TAPPING SLEEVE, VALVE & WELL (TYPICAL), PLAN



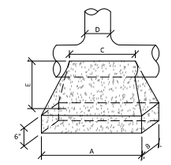
6" HYDRANT SIDE OUTLET



FOR 90° BENDS OR SMALLER				
D	A	B	C	E MIN.
20"	8'	6.5'	3.5'	2.5'
16"	6'	4'	2.5'	2'
12"	4'	3'	2'	1.75'
10"	3'	3'	2'	1.75'
8"	3'	2'	2'	1.5'
6"	2'	1.5'	2'	1.25'



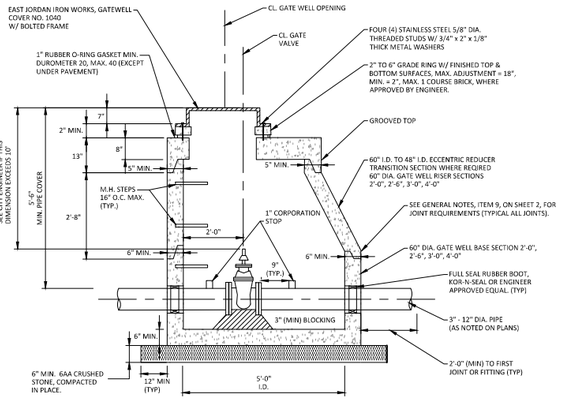
FOR PLUGS			
D	A	B	C MIN.
20"	7'	5'	2.5'
16"	4'-10"	4'-10"	2'
12"	4'-4"	3'	1'-9"
10"	3'	2'	1.5'
8"	2'-10"	2.5'	1.5'
6"	1.5'	2.5'	1.5'



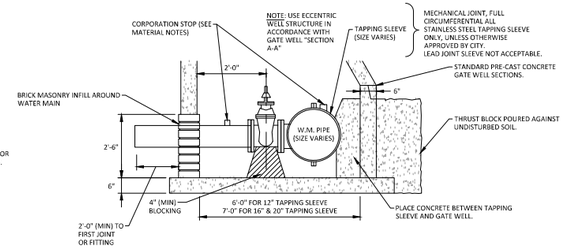
FOR TEES				
D	A	B	C	E MIN.
20"	6.5'	4.5'	3.5'	3'
16"	4'-8"	4'-8"	2.5'	2.75'
12"	4'	3'	2.5'	2.5'
10"	3'	2'	2'	2.25'
8"	2.5'	2'	2'	2.25'
6"	2'	2'	2'	2.25'

NOTE:
3000 PSA CONCRETE TO BE USED. THRUST BLOCK TO ABUT & REST AGAINST UNDISTURBED SOIL OR EARTH COMPACTED TO 95% MODIFIED PROCTER.

THRUST BLOCK DETAILS

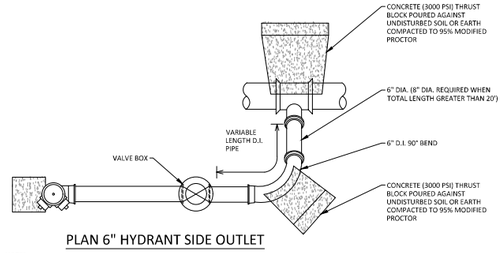


3" THRU 12" GATE WELL ("SECTION A-A")



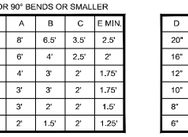
WATER MAIN TAPPING SLEEVE, VALVE & WELL ("SECTION B-B")

NOTES:
1. FOR PIPE SMALLER THAN 16" USE 1" CORPORATION STOP WITH BRONZE SADDLE, FOR 16" PIPE OR LARGER USE 2" CORPORATION STOP WITH BRONZE SADDLE.
2. THE CITY OF BIRMINGHAM DOES NOT ALLOW SIZE ON SIZE TAPPING.

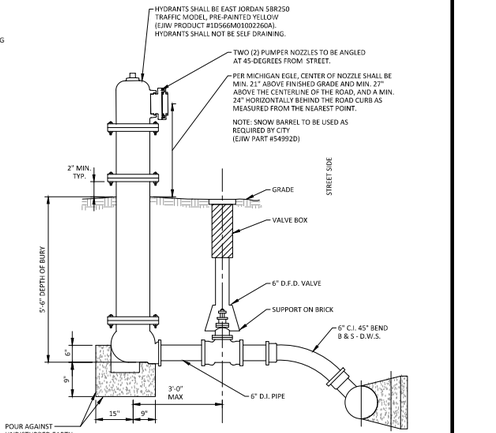


PLAN 6" HYDRANT SIDE OUTLET

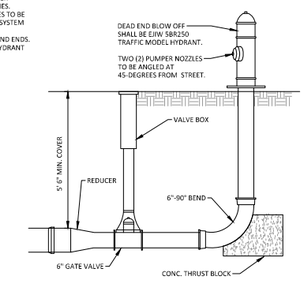
NOTES:
1. HYDRANT EXTENSIONS BETWEEN THE STANDPIPE LOWER SECTION & STANDPIPE UPPER ARE LIMITED TO 18 INCHES.
2. ALL HYDRANTS, COMPANION VALVES, BENDS, AND TEES TO BE FULLY RESTRAINED BY MECHANICAL JOINT RESTRAINT SYSTEM FITTINGS (MEGA-LUG).
3. THRUST BLOCKS ARE REQUIRED AT ALL TEES, BENDS, AND ENDS.
4. ALL HARDWARE (BOLTS, NUTS, WASHERS, ETC.) FOR HYDRANT ASSEMBLIES SHALL BE COR-BLUE.



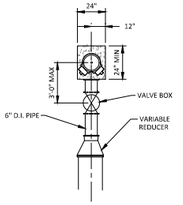
BOTTLE SLEEVE



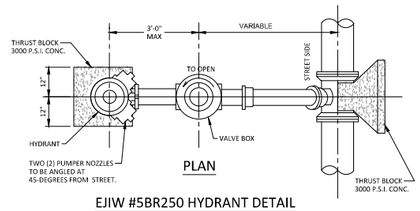
SECTION



DEAD END BLOWOFF CONNECTION

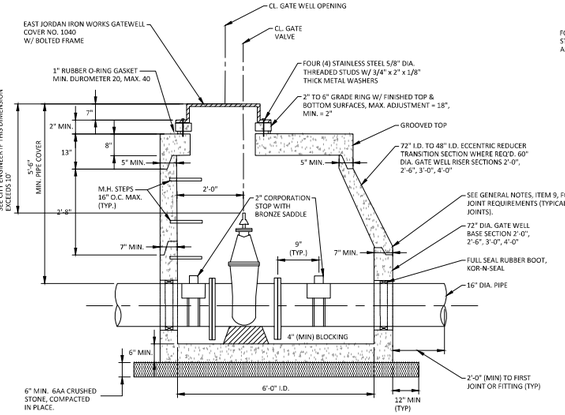


PLAN 6" HYDRANT WATER MAIN END

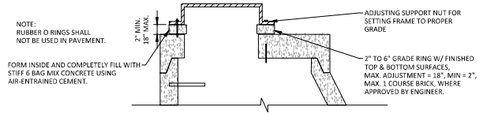


PLAN

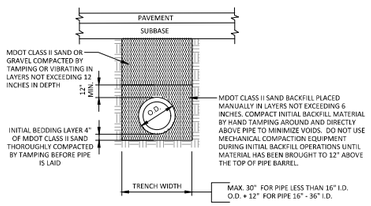
EJIW #5BR250 HYDRANT DETAIL



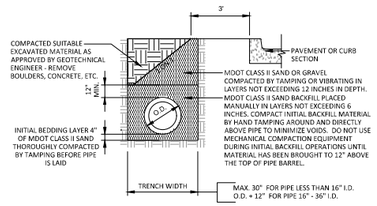
16" GATE WELL ("SECTION A-A")



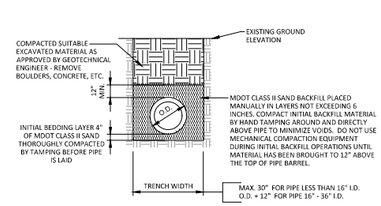
GATE WELL TOPS WITHIN PAVEMENT AREAS



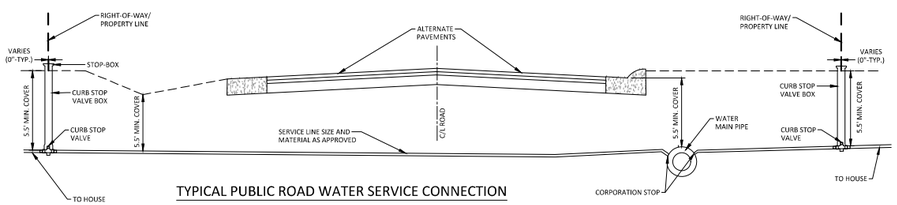
TRENCH DETAIL "A" WATER MAIN UNDER PAVEMENT



TRENCH DETAIL "A" WATER MAIN WITHIN INFLUENCE OF PAVEMENT

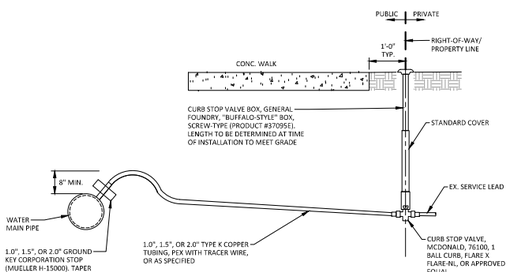


TRENCH DETAIL "B" WATER MAIN OUTSIDE INFLUENCE OF PAVEMENT

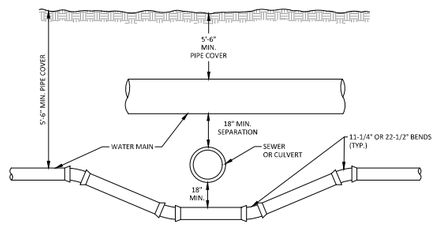


TYPICAL PUBLIC ROAD WATER SERVICE CONNECTION

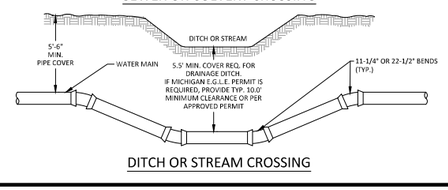
NOTES:
1) WATER SERVICE CURB STOP SHALL BE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY (R.O.W.), TYPICALLY DIRECTLY ON THE ON THE PROPERTY/ R.O.W. LINE.
2) FOR NEW RESIDENTIAL CONSTRUCTION, THE LATERAL LOCATION SHALL BE PER THE APPROVED PLAN.
3) FOR LATERAL LINE REPLACEMENT WITHIN THE PUBLIC R.O.W., THE LATERAL LOCATION WILL BE FIELD DETERMINED BASED ON THE CONNECTION LOCATION TO THE EXISTING SERVICE LINE AT THE R.O.W. LINE. THE ALIGNMENT OF THE SERVICE LINE MAY REQUIRE ADJUSTMENT TO AVOID TREES WITHIN THE R.O.W. TO THE MAXIMUM EXTENT PRACTICABLE, AS APPROVED BY THE CITY.
4) SERVICE TAP LOCATION AT THE WATER MAIN SHALL BE AT CLOCK POSITION 10:30 OR 1:30 UNLESS OTHERWISE NOTED PER APPROVED PLAN.



WATER SERVICE CONNECTION (TYPICAL)



SEWER OR CULVERT CROSSING



DITCH OR STREAM CROSSING

BIRMINGHAM
A WALKABLE CITY

City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Water Main Standard Notes & Details 1 of 2

ISSUE DATE:	SCALE:	SHEET NO.
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WATER MAIN GENERAL NOTES

1. ALL CONSTRUCTION PROCEDURES AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM.
2. A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION AND SHALL BE SCHEDULED BY THE LOCAL MUNICIPAL ENGINEER. THOSE IN ATTENDANCE SHALL INCLUDE: 1) CITY OF BIRMINGHAM ENGINEERING AND D.P.S DEPARTMENTS, 2) DESIGN ENGINEER, 3) OWNER / DEVELOPER, 4) OTHER PUBLIC AGENCIES HAVING JURISDICTION, AND 6) FRANCHISE UTILITY COMPANIES. CONTRACTOR SHALL PROVIDE MATERIALS LISTING FOR APPROVAL BY MUNICIPAL ENGINEER.
3. CONTRACTOR MUST CONTACT MISS DIG (1-800-482-7171) THREE WORKING DAYS BEFORE THE START OF CONSTRUCTION FOR UNDERGROUND UTILITY LOCATIONS. ALL UTILITIES SHALL BE STAKED BEFORE CONSTRUCTION STARTS.
4. CONTRACTOR SHALL COORDINATE ALL REQUIRED WATER MAIN SHUT-DOWNS WITH THE CITY OF BIRMINGHAM ENGINEERING AND D.P.S. DEPARTMENTS TO ALLOW SUFFICIENT TIME IN ADVANCE OF CONSTRUCTION TO ALLOW FOR RESIDENT AND/OR PROPERTY OWNER NOTIFICATIONS, AND FOR THE CITY TO DEVELOP A SHUT-DOWN PROTOCOL. CONTRACTOR COORDINATION IS REQUIRED TO ASSIST THE CITY IN THE DEVELOPMENT OF THE SHUT-DOWN PROTOCOL TO ENSURE IT ALIGNS WITH THE CONTRACTOR'S PROPOSED MEANS AND METHODS. ANY EXERCISING OF EXISTING VALVES THAT ARE REQUIRED TO PERFORM THE SHUT-DOWN SHALL BE COMPLETED BY THE CITY D.P.S. DEPARTMENT WITH A MINIMUM OF 24-HOUR ADVANCED NOTICE.
5. ALL NECESSARY EASEMENTS FOR WATER MAINS SHALL BE PROVIDED IN THE NAME OF THE OWNER OF THE WATER MAIN PRIOR TO CONSTRUCTION AND ACCEPTANCE OF THE WATER DISTRIBUTION SYSTEM FOR OPERATION.
6. ALL WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF FIVE AND ONE-HALF (5-1/2) FEET BELOW FINISHED GRADES INCLUDING OPEN DRAINAGE COURSES.
7. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, DRIVEWAYS, AND/OR SIDEWALKS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE (95% MAXIMUM UNIT DENSITY).
8. WHERE TWO UTILITIES CROSS, PROVIDE CLASS II BACKFILL MATERIAL IN TWELVE (12) INCH COMPACTED LAYERS TO THE UNDERSIDE OF THE HIGHER UTILITY.
9. WHERE WATER MAINS MUST DIP TO PASS OTHER UTILITIES, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH AND SHALL BE CONSTRUCTED WITH ELEVEN AND ONE-QUARTER (11-1/4) DEGREE VERTICAL BENDS, PROPERLY ANCHORED.
10. ALL PRECAST CONCRETE GATE WELL SECTIONS SHALL BE MANUFACTURED TO CONFORM WITH A.S.T.M. C478, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, AND SHALL BE AS SHOWN ON THESE DETAILS. ALL JOINTS FOR PRECAST CONCRETE GATE WELL SECTIONS SHALL BE "MODIFIED GROOVE TONGUE" WITH GASKET MANUFACTURED TO CONFORM WITH A.S.T.M. C 443, STANDARD SPECIFICATIONS FOR JOINTS FOR CIRCULAR CONCRETE SEWER AND CULVERT PIPE USING RUBBER GASKETS.
11. CONTRACTOR SHALL INSTALL VALVES, TAPPING SLEEVES AND GATE WELL STRUCTURES IN STRICT COMPLIANCE WITH MEASUREMENTS PROVIDED ON THE DETAIL SHEET (FOR EXAMPLE, PROVIDE 2'-0" BETWEEN GATE WELL WALL & CENTERLINE OF OPERATING NUT) TO ALLOW PROPER OPERATION OF VALVE THROUGH GATE WELL OPENING. FAILURE TO DO SO WILL REQUIRE CONTRACTOR TO CORRECT AT HIS OR HER EXPENSE.
12. ALL CROSS-CONNECTION CONTROL DEVICES SHALL BE INSTALLED AS REQUIRED BY THE LOCAL PLUMBING INSPECTOR AND IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF BIRMINGHAM, THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE), AND THE DIVISION OF DRINKING WATER AND ENVIRONMENTAL HEALTH.
13. ALL FITTINGS AND BENDS SHOULD BE BLOCKED IN ACCORDANCE WITH THRUST BLOCK DETAILS, UNLESS ALTERNATE THRUST RESTRAINT SYSTEM (AS INDICATED IN PLANS AND SPECIFICATIONS) IS APPROVED BY THE CITY OF BIRMINGHAM.
14. ALL STEEL AND IRON MATERIAL AND PRODUCTS FOR PERMANENT INCORPORATION INTO THE WORK SHALL MEET BUY AMERICA REQUIREMENT, FEDERAL CODE OF REGULATIONS SECTION 635.410.
15. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND OR GRAVEL TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

WATER MAIN MATERIALS NOTES

1. WATER SUPPLY SYSTEM PIPING (3-INCH OR LARGER) SHALL BE DUCTILE IRON UNLESS OTHERWISE APPROVED BY THE CITY OF BIRMINGHAM.
2. ALL FITTINGS AND MATERIALS TO BE LEAD FREE.
3. USE OF HDPE MAY BE ALLOWED IN SOME LIMITED CASES (AS APPROVED BY CITY.) TWO TRACER WIRES WILL BE REQUIRED. OCWRC STANDARDS AND DETAILS SHALL BE USED WHEN HDPE IS APPROVED FOR USE.
4. ALL WATER MAINS SHALL BE DESIGNED FOR 150 PSI MINIMUM WORKING PRESSURE.
5. DUCTILE IRON PIPE SHALL BE PRESSURE-CLASS CLASS 52 FOR SIZES THREE (3) INCH THROUGH EIGHTEEN (18) INCH, CLASS 55 FOR TWENTY (20) INCH, AND CLASS 56 FOR TWENTY-FOUR (24) INCH AND LARGER.
6. DUCTILE IRON PIPE TO BE FURNISHED AND DELIVERED UNDER THIS SPECIFICATION SHALL MEET ALL REQUIREMENTS OF THE CURRENT AWWA C151 (ANSI A21.5), LATEST REVISION, EXCEPT AS OTHERWISE SPECIFIED HEREIN. PIPE SHALL BE CEMENT MORTAR LINED AND BITUMINOUS SEAL-COATED, IN ACCORDANCE WITH AWWA C104 (ANSI A21.4), LATEST REVISION.
7. JOINTS SHALL BE MECHANICAL OR PUSH-ON JOINTS FOR DUCTILE IRON WATER MAIN AND SHALL BE IN ACCORDANCE WITH AWWA C111 (ANSI AS21.11), LATEST REVISION.
8. FLANGE JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE IN ACCORDANCE WITH AWWA C110 (ANSI A21.10).
9. FITTINGS FOR DUCTILE IRON PIPE SHALL BE DUCTILE IRON AND SHALL MEET REQUIREMENTS OF AWWA C110 (ANSI A21.10) OR AWWA C153 (ANSI A21.53). DUCTILE IRON FITTINGS SHALL BE RATED 350 PSI FOR PIPE SIZES TWENTY-FOUR (24) INCH DIAMETER AND LESS AND 250 PSI FOR PIPE SIZES OVER TWENTY-FOUR (24) INCH DIAMETER. DUCTILE IRON FLANGE FITTINGS SHALL BE RATED FOR 250 PSI FOR ALL PIPE DIAMETERS.
10. WHEN CONNECTING TO EXISTING WATER MAINS, OVERSIZED FITTINGS MAY BE REQUIRED TO MATCH THE OUTER DIAMETER OF THE OLDER WATER MAINS.
11. INSTALL BRASS WEDGES AT ALL PUSH-ON JOINTS IN DUCTILE IRON PIPE INSTALLATIONS. TWO (2) WEDGES PER JOINT FOR PIPES 12 INCH DIAMETER AND LESS, AND FOUR WEDGES PER JOINT FOR PIPES GREATER THAN 12 INCHES IN DIAMETER.
12. ALL BURIED BOLTS, NUTS, AND WASHERS SHALL BE AWWA CAAA LOW ALLOY STEEL COATED WITH COAL TAR AND POLY-WRAPPED WHEN SPECIFIED.
13. ALL BURIED BOLTS, NUTS, AND WASHERS FOR ALL FLANGED CONNECTIONS SHALL BE STAINLESS STEEL (ASTM A320, GRADE B8M) AND HAVE A NEVER-SEIZE TYPE COMPOUND APPLIED TO THE THREADS PRIOR TO INSTALLATION.
14. TEMPORARY CONNECTIONS, WHICH MAY BE MADE FOR CHLORINATING AND FLUSHING PURPOSES, SHALL INCLUDE A TESTABLE DOUBLE-CHECK VALVE BACKFLOW-PREVENTER WITH CURRENT CERTIFICATION.
15. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE ENCASED WITH POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA STANDARD C105/A21.5-10. POLYETHYLENE MATERIAL SHALL BE TYPE 1, CLASS A, GRADE E-1, AND HAVE A MINIMUM THICKNESS OF 0.008" (8-MILS). FLOW RATE SHALL BE 0.4 MAXIMUM, TENSILE STRENGTH SHALL BE 1200 PSI MINIMUM, AND ELONGATION SHALL BE 300%.

HYDRANT REQUIREMENTS

1. ALL HYDRANTS SHALL BE EAST JORDAN IRON WORKS 5BR250 TRAFFIC MODEL , TWO-WAY WITH TWO (2) 4-1/2" PUMPER NOZZLE FITTINGS. STANDARD BARREL (EJIW PART NUMBER 54948D) OR SNOW BARREL (EJIW PART NUMBER 54992D) TO BE USED AS REQUIRED BY CITY. ALL HYDRANTS SHALL BE CITY OF BIRMINGHAM STANDARD, AS DETAILED. SELF-DRAINING HYDRANTS SHALL NOT BE USED. HYDRANTS SHALL HAVE BREAKAWAY FLANGE. PER MANUFACTURER, "TRAFFIC-MODEL" HYDRANTS WITH WITH BREAKAWAY FLANGE SHALL BE INSTALLED WITH A 6" THICK CONCRETE COLLAR (2' WIDTH x 2' DEPTH), CENTERED AROUND THE FINISHED GRADE OF THE HYDRANT, WHERE HYDRANTS ARE INSTALLED IN SANDY SOILS OR CONNECTED TO PVC OR HDPE WATER MAINS.
2. HYDRANTS SHALL BE RATED FOR 250 PSI WORKING PRESSURE.
3. HYDRANTS SHALL HAVE A MINIMUM 5-1/4" VALVE OPENING.
4. THE OPERATING NUT SHALL BE A ONE-PIECE DESIGN, MANUFACTURED OF ASTM B-584 BRONZE. IT SHALL BE 1-1/8" PENTAGON - POINT TO FLAT IN SIZE/SHAPE.
5. THE DIRECTION OF OPENING SHALL BE LEFT. AN ARROW SHALL BE CAST ON THE TOP TO THE HYDRANT TO INDICATE THE OPENING DIRECTION.
6. HYDRANTS SHALL HAVE A DEPTH OF BURY OF 5'6", UNLESS OTHERWISE NOTED.
7. ALL HYDRANTS SHALL BE PAINTED YELLOW ABOVE GROUND AND BLACK BELOW GROUND WITH A FINISH COAT OF YELLOW PAINT AS FURNISHED FROM THE MANUFACTURER (FIELD PAINTING NOT ALLOWED). HYDRANT CAP SHALL BE PAINTED SAME COLOR AS THE HYDRANT.
8. ALL FIRE HYDRANT JOINTS SHALL BE TOTALLY RESTRAINED BY THE USE OF MEG-A-LUGS OR OTHER APPROVED RESTRAINED JOINT. THRUST BLOCKS ARE ALSO REQUIRED.
9. ALL HYDRANTS SHALL BE CONSTRUCTED WITH A SIX (6) INCH COMPANION GATE VALVE IN A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX, WHICH SHALL INCLUDE A FIVE AND ONE-QUARTER (5-1/4) INCH SCREW SHAFT. VALVE BOXES SHALL BE EJ VALVE BOX NO. 8560 OR APPROVED EQUAL, AND SHALL INCLUDE A VALVE BOX RISER (EJ NO. 8500) AND VALVE BOX DROP LID W/ TWO PICKHOLES (EJ NO. 6800) WITH "WATER" LETTERING.

VALVE AND SLEEVE NOTES

1. GATE VALVES, SIZES THREE (3) INCH THROUGH SIXTEEN (16) INCH AND TAPPING VALVES, SHALL BE RESILIENT SEAT WEDGE TYPE WITH MECHANICAL JOINTS AND NON-RISING STEM.
2. ALL GATE VALVES SHALL BE FURNISHED AND INSTALLED SUCH THAT THEY OPEN WHEN TURNED "LEFT" OR COUNTER-CLOCKWISE.
3. ALL IN LINE GATE VALVES THREE (3) INCH AND LARGER SHALL BE IN WELLS AS DETAILED.
4. ALL GATE WELL COVERS SHALL BE CITY OF BIRMINGHAM STANDARD AS DETAILED.
5. ALL GATE VALVES WITH OPERATING NUTS AT A DISTANCE GREATER THAN FIVE (5) FEET BELOW GROUND SURFACE SHALL BE PROVIDED WITH AN EXTENSION STEM. THE LENGTH OF THE EXTENSION STEM SHALL REACH WITHIN FIVE (5) FEET FROM THE GROUND SURFACE. WHEN AN EXTENSION STEM IS USED, IT SHALL BE HELD IN PLACE BY AN EXTENSION STEM GUIDE SUITABLY FASTENED TO THE WALL OF THE GATE WELL. THE EXTENSION STEM SHALL BE MECHANICALLY ATTACHED TO THE OPERATING NUT. DETAILS OF THE EXTENSION SYSTEM AND THE METHOD OF INSTALLATION SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
6. BUTTERFLY VALVES MAY BE USED FOR VALVES GREATER THAN 16-INCH DIAMETER AND SHALL BE MODEL 2F11 AS MANUFACTURED BY HENRY PRATT COMPANY OR APPROVED EQUAL.
7. TAPPING VALVES SHALL BE AWWA C515 FL X MJ AS MANUFACTURED BY EAST JORDAN IRON WORKS WITH RESILIENT SEATED GATE VALVES AS APPROVED BY THE CITY OF BIRMINGHAM.
8. TAPPING SLEEVES SHALL BE ALL STAINLESS STEEL (BODY, FLANGE AND HARDWARE), MANUFACTURED BY ROMAC INDUSTRIES; JCM 432; SMITH-BLAIR 663/665 OR APPROVED EQUAL.

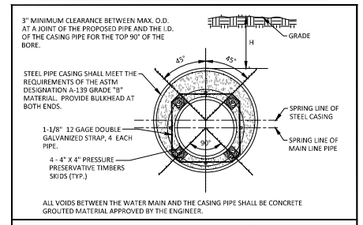
WATER SERVICE (DOMESTIC SUPPLY AND FIRE SUPPRESSION NOTES

14. FOR DOMESTIC SUPPLY AND FIRE SUPPRESSION BUILDING WATER SERVICES: A SINGLE TAP IS ALLOWED ON THE WATER MAIN, WHICH SHALL SPLIT INTO SEPARATE DOMESTIC AND FIRE SUPPRESSION LINES OUTSIDE OF THE BUILDING, SHALL BE USED UNLESS OTHERWISE APPROVED BY CITY.
16. VALVES TO BE INSTALLED ON EACH INDIVIDUAL LEAD ON THE EXTERIOR OF THE BUILDING.
17. EASEMENTS FOR WATER MAIN LEADS REQUIRED UP TO THE EXTERIOR SHUT OFF VALVE.
18. CORPORATION STOPS USED FOR INSERTION INTO MAINS SHALL BE MUELLER TYPE H-15000. ALL STOPS SHALL BE CONSTRUCTED OF HEAVY-DUTY BRASS COMPONENTS MEETING THE REQUIREMENT OF ASTM B62. ALL STOPS SHALL HAVE AN AWAA TAPER THREADED INLET WITH COPPER FLARE STRAIGHT CONNECTION OUTLET. CORPORATION STOPS SHALL BE MANUFACTURED AND TESTED IN ACCORDANCE WITH THE LATEST VERSION OF AWWA C800.
19. CURB STOP VALVES SHALL BE MCDONALD, TYPE 76100, 1 BALL CURB, FLARE x FLARE-NL. TYPICAL RESIDENTIAL CURB STOP VALVE BOXES SHALL BE BY GENERAL FOUNDRY, BUFFALO STYLE BOX, SCREW-TYPE (PRODUCT #37095E). WHERE CURB STOP VALVES WILL BE LOCATED WITHIN PAVEMENT, A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX SHALL BE FURNISHED AND INSTALLED TO PROVIDE A RIM ELEVATION FLUSH WITH THE SURROUNDING PAVEMENT. VALVE BOXES SHALL BE EJ VALVE BOX NO. 8560 OR APPROVED EQUAL, AND SHALL INCLUDE A VALVE BOX RISER (EJ NO. 8500) AND VALVE BOX DROP LID W/ TWO PICKHOLES (EJ NO. 6800) WITH "WATER" LETTERING.

ACCEPTANCE OF NEW WATER MAINS

1. PRIOR TO WATER MAIN ACCEPTANCE THE FOLLOWING CONDITIONS MUST BE MET:
   - 1.1) PRESSURE TESTING AND BACTERIA TESTING MUST BE COMPLETED IN ACCORDANCE WITH CITY OF BIRMINGHAM AND OAKLAND CUNTY REQUIREMENTS
   - 1.2) ALL EASEMENT AND RIGHT-OF-WAY ACQUISITION MUST BE ACCEPTED BY THE CITY OF BIRMINGHAM,
   - 1.3) THE CITY OF BIRMINGHAM MUST BE PROVIDED WITH THE BILL OF SALE.
   - 1.4) ALL "RECORD DRAWINGS" MUST BE ACCEPTED AND APPROVED BY THE CITY OF BIRMINGHAM.
   - 1.5) THE CITY OF BIRMINGHAM MUST WITNESS THE CONNECTION OF THE WATER MAIN TO THE EXISTING WATER MAIN, AFTER WHICH RESIDENTIAL AND COMMERCIAL TAPS WILL BE ALLOWED.
2. THE CONTRACTOR SHALL NOTIFY THE CITY OF BIRMINGHAM FOR NEW CONSTRUCTION TAP, PRESSURE TESTING, BACTERIOLOGICAL SAMPLING, CONNECTIONS TO EXISTING WATER MAIN, AND FINAL FIELD REVIEW. A SEVENTY-TWO (72) HOUR ADVANCE NOTICE IS REQUIRED.
3. THE CONTRACTOR SHALL DISINFECT AND PRESSURE TEST ALL NEW WATER MAIN CONSTRUCTION PURSUANT TO THE CURRENT STANDARDS SPECIFIED BY THE CITY OF BIRMINGHAM AND OAKLAND COUNTY.
4. THE WATER MAIN SHALL PASS A TEST OF 150 PSI FOR A TWO (2) HOUR PERIOD. WATER LOSS SHALL NOT EXCEED A RATE OF 11.65 U.S. GALLONS PER INCH DIAMETER, PER MILE OF WATERLINE IN TWENTY-FOUR (24) HOURS.
5. WHERE CONTRACTOR SUPPLIED GAUGES ARE REQUIRED, MINIMUM SIZE SHALL BE 3 1/2 INCH DIAMETER OR LARGER GRADUATED IN ONE (1) OR TWO (2) POUND INCREMENTS FROM 1 TO 160 P.S.I., OR HIGHER.
6. PRESSURE TESTING AND BACTERIA TESTING MUST BE SUCCESSFULLY COMPLETED PRIOR TO CONNECTION TO THE EXISTING WATER SUPPLY SYSTEM.

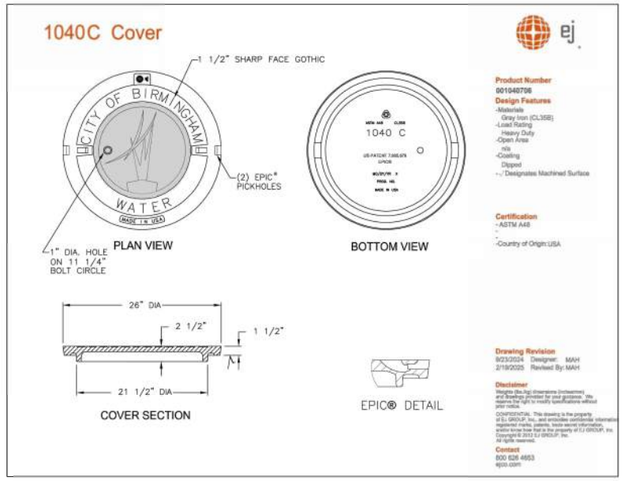
TYPICAL WATER MAIN TUNNEL CASING DETAIL



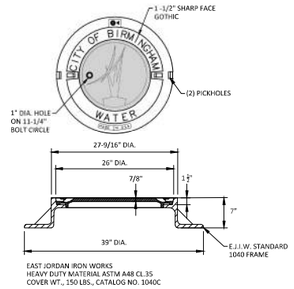
ALLOWABLE HEIGHT OF COVER (H) IN FEET, FOR STEEL CASING

WALL THICKNESS (IN.)		STEEL CASING OUTSIDE DIAMETER (IN.)									
FRACT.	DEC.	12	14	16	18	20	24	28	30	36	42
3/8	0.1875	39	30	24	21	19	17	16			
1/4	0.250	50	50	39	31	27	21	19	18	16	
5/16	0.3125			50	48	39	28	23	21	18	17
3/8	0.375				50	50	39	29	27	22	19
7/16	0.4375						50	39	34	26	21
1/2	0.500							50	44	31	25
9/16	0.5625								50	39	30
5/8	0.625									48	35

1. FOR 36" WATER MAIN PROVIDE A MIN. OF 60" DIA. CASING WITH 1" WALL THICKNESS.
2. CASING PIPE JOINTS TO BE FULLY WELDED AROUND THE CIRCUMFERENCE BY A CERTIFIED WELDER.



CITY OF BIRMINGHAM - GATE WELL COVER
(FURNISH & INSTALL W/ STANDARD EJIW 1040 FRAME)



CITY OF BIRMINGHAM GATE WELL
COVER & STANDARD FRAME

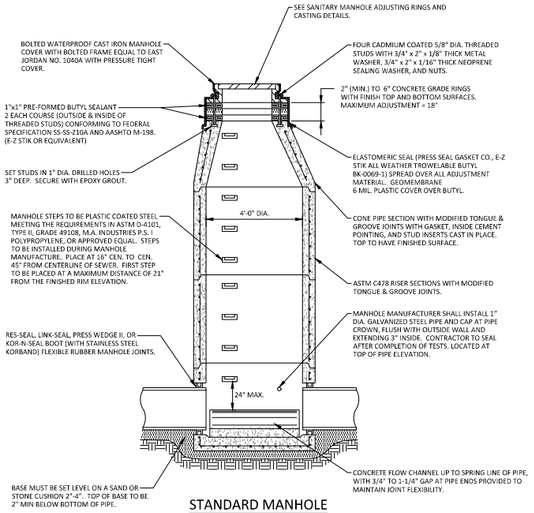
TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.

BIRMINGHAM
A WALKABLE CITY

City of Birmingham Engineering Department
151 Martin Street
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248-530-1800
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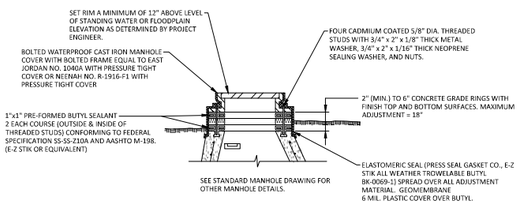
Water Main Standard Notes & Details
2 of 2

ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	WM-2

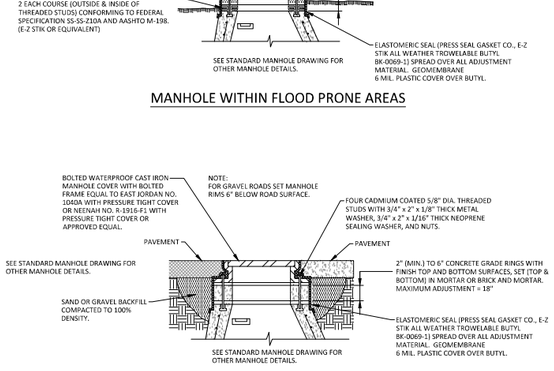


STANDARD MANHOLE

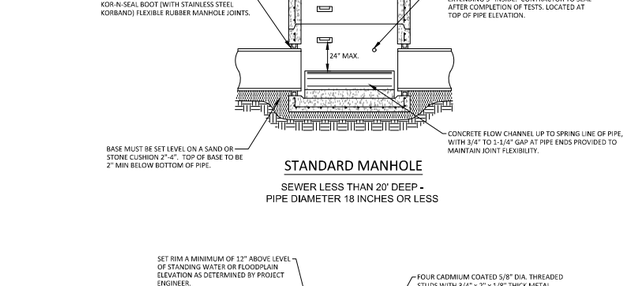
SEWER LESS THAN 20' DEEP -
PIPE DIAMETER 18 INCHES OR LESS



MANHOLE WITHIN FLOOD PRONE AREAS

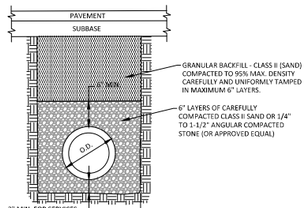


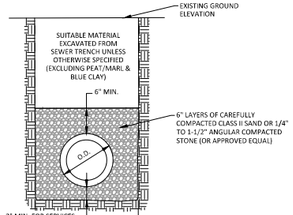
MANHOLE TOPS WITHIN PAVEMENT AREAS



TRENCH DETAIL "A"

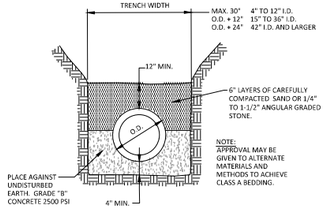
SEWER UNDER ROAD BED OR WITHIN
THE INFLUENCE OF ROAD BED



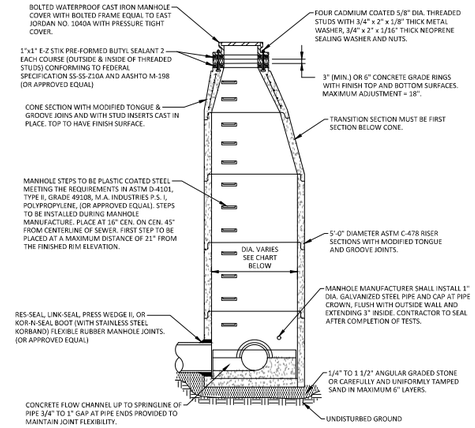


TRENCH DETAIL "B"

SEWER NOT UNDE ROAD BED



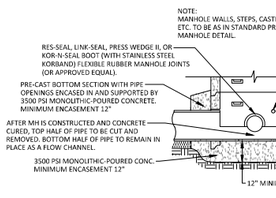
CONCRETE CRADLE



STANDARD OVERSIZED MANHOLE

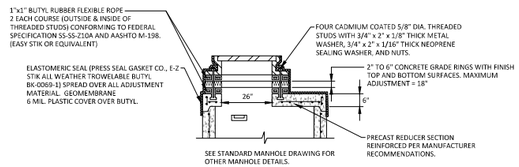
MANHOLE SIZING CHART

MANHOLE DIAMETER	MAX. PIPE SIZE FOR STRAIGHT THRU INST.	MAX. PIPE SIZE FOR RIGHT ANGLE INST.
5'	36"	24"
6'	42"	36"
7'	60"	42"

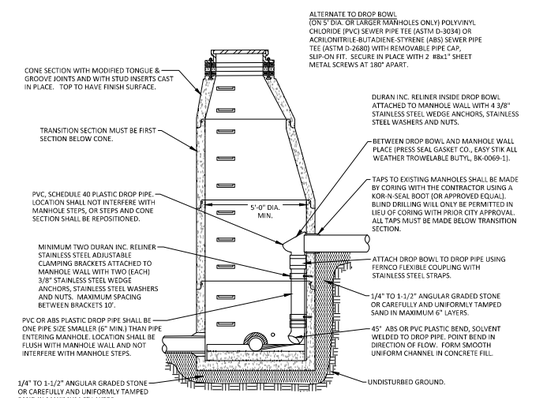


MANHOLE CONSTRUCTED OVER EXISTING SEWER

FOR LOCAL SANITARY SEWER EXTENSION CONNECTING
DIRECTLY OR INDIRECTLY TO OCWRC SYSTEMS

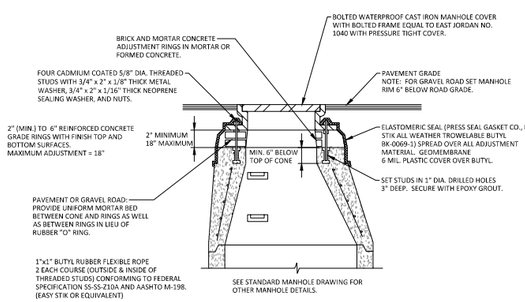


FLAT TOP MANHOLE

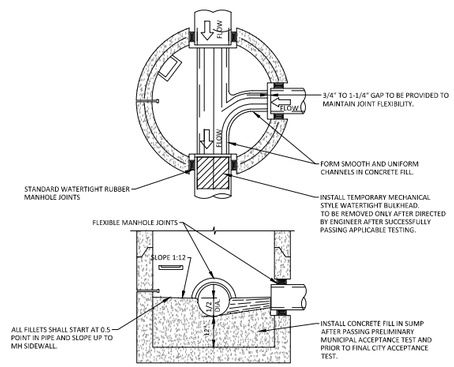


INTERIOR DROP CONNECTION

SEWER SIZE	DROP SIZE	MH SIZE
UP TO 10"	8"	5'
UP TO 18"	10"	5'



SANITARY MANHOLE ADJUSTING RINGS & CASTING DETAIL



SUMP MANHOLE FOR TESTING, CLEANING AND DEWATERING

BIRMINGHAM
A WALKABLE CITY
City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Sanitary & Combined Sewer
Standard Notes & Details 1 of 2

ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	SS-1

SANITARY & COMBINED SEWER CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM AND THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER (WRC). ALL SANITARY & COMBINED SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY A STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER PROVIDED BY, OR CAUSED TO BE PROVIDED BY, THE CITY OF BIRMINGHAM.

2. AT ALL CONNECTIONS AND BEFORE START OF CONSTRUCTION, THE CONTRACTORS MUST OBTAIN THE REQUIRED CITY OF BIRMINGHAM, WRC SEWER INSPECTION, AND MICHIGAN E.G.L.E. PART 41 PERMITS. THE CONTRACTOR SHALL NOTIFY THE CITY 48 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. FINAL ACCEPTANCE TESTS MUST BE WITNESSED BY CITY PERSONNEL AND MUST BE SCHEDULED IN ADVANCE.

3. NO SEWER INSTALLATION SHALL HAVE AN INFILTRATION EXCEEDING 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE IN A 24 HOUR PERIOD, AND NO SINGLE RUN OF SEWER BETWEEN MANHOLES SHALL EXCEED 100 GALLONS PER INCH DIAMETER PER MILE. AIR TESTS IN LIEU OF INFILTRATION TESTS SHALL BE AS SPECIFIED IN THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER (OCWRC) STANDARDS. ONLY PIPE AND PIPE JOINTS APPROVED BY THE CITY MAY BE USED FOR SANITARY & COMBINED SEWER CONSTRUCTION.

4. AT ALL CONNECTIONS TO AN EXISTING SEWER, OR EXTENSION THERETO, A WATERTIGHT BULKHEAD WITH A CAPPED ONE INCH DIAMETER PIPE TO PERMIT MEASURING INFILTRATION SHALL BE PROVIDED. A TEMPORARY 12-INCH DEEP SUMP SHALL ALSO BE PROVIDED IN THE FIRST MANHOLE ABOVE THE CONNECTION WHICH WILL BE FILLED IN AFTER SUCCESSFUL COMPLETION OF ANY ACCEPTANCE TEST UP TO THE STANDARD FILLET PROVIDED FOR THE FLOW CHANNEL.

5. AT ALL TIMES WHEN LAYING OF NEW PIPE IS NOT ACTUALLY IN PROGRESS, THE UPSTREAM OPEN END OF THE PIPE SHALL BE CLOSED BY TEMPORARY WATERTIGHT PLUGS OR BY OTHER APPROVED MEANS. IF WATER IS IN THE TRENCH WHEN WORK IS RESUMED, THE PLUG SHALL NOT BE REMOVED UNTIL THE DANGER OF WATER ENTERING THE PIPE HAS PASSED.

6. ALL SANITARY & COMBINED SEWER PIPE SIX (6) INCHES IN DIAMETER AND LARGER SHALL BE INSTALLED IN CONFORMANCE WITH CITY OF BIRMINGHAM TRENCH DETAILS CONTAINED HEREIN, TRENCH DETAIL "A" OR "B", INCLUDING BEDDING AND BACKFILL AT A MINIMUM OF 6 INCHES ABOVE THE TOP OF PIPE WITH NATURAL STONE CONFORMING TO M.D.O.T. 6A GRADATION REQUIREMENTS.

7. ALL SANITARY & COMBINED SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH TRENCH "A" DETAIL AT ALL LOCATIONS UNDERNEATH OR WITHIN THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

8. ALL SANITARY & COMBINED SEWER PIPE MAY BE INSTALLED IN ACCORDANCE WITH TRENCH DETAIL "B" IN LOCATIONS OUTSIDE THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS.

9. SANITARY AND COMBINED SEWER MAIN PIPE SHALL BE THE TYPE, CLASS, AND SIZE AS SHOWN ON THE APPROVED ENGINEERING PLANS, AND SHALL MEET THE FOLLOWING CRITERIA (ANY DEVIATIONS FROM THESE SPECIFICATIONS REQUIRE PRIOR APPROVAL BY THE CITY):

   A. REINFORCED CONCRETE PIPE (RCP): ASTM C-76, CLASS IV:
   - ALL REINFORCED CONCRETE PIPE SHALL HAVE MODIFIED GROOVED TONGUE JOINTS WITH O-RING TYPE RUBBER GASKET, PER A.S.T.M. SPECIFICATIONS C443.
   - THE INSIDE JOINTS OF PIPE SIZES OVER 27" DIAMETER SHALL BE POINTED UP WITH MORTAR UPON COMPLETION OF BACKFILLING OPERATIONS.

   B. POLYVINYL CHLORIDE PIPE (PVC):
   - PVC SDR 23.5 SEWER PIPE: PER ASTM D-3034 (6" DIA.)
   - PVC SDR 26 SEWER PIPE: PER ASTM D-3034 (8"-15" DIA.) AND ASTM F-679 (18" TO 24" DIA.)
   - PVC SCHEDULE 40 SEWER PIPE:ASTM D-1785 "STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE) (PVC) PLASTIC PIPE", SCHEDULES 40, 80, AND 120.
   - PVC COMPOUNDS TO MEET ASTM D-1784.

10. SANITARY AND COMBINED MANHOLE STRUCTURE REQUIREMENTS:
   - ALL NEW MANHOLES ARE TO BE MANUFACTURED TO ASTM C-478 SPECIFICATIONS.
   - ALL NEW MANHOLES SHALL HAVE CITY-APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS.
   - MANHOLES SHALL BE OF PRECAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS, PRE CAST MANHOLE CONE SECTIONS SHALL BE CITY-APPROVED MODIFIED ECCENTRIC CONE TYPE.
   - TAPS THROUGH MANHOLE JOINTS OR CONE SECTIONS ARE PROHIBITED UNLESS OTHERWISE APPROVED.
   - ALL MANHOLE STEPS TO BE PLASTIC COATED STEEL MEETING THE REQUIREMENTS IN ASTM D 2146 TYPE II, GRADE 49108, MA. INDUSTRIES P.S.I. POLYPROPYLENE, (OR APPROVED EQUAL). STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE AT 16" CENTERS 45° FROM CENTERLINE OF SEWER.
   - CONE SECTION WITH MODIFIED GROOVE TONGUE JOINTS AND WITH STUD INSERTS CAST IN PLACE. TOP TO HAVE FLUSH SURFACE.
   - ASTM C-478 RISER SECTION WITH MODIFIED GROOVE TONGUE JOINTS.
   - RES-SEAL, LINK-SEAL, PRESS WEDGE II, OR KOR-N-SEAL BOOT (WITH STAINLESS STEEL KORBAND) FLEXIBLE RUBBER MANHOLE JOINTS.
   - PRECAST CONCRETE BASE MUST BE SET LEVEL ON A SAND CUSHION OF NOT LESS THAN 2" OR MORE THAN 4". FOR MANHOLES, TOP OF BASE TO BE 2" MIN BELOW BOTTOM OF SEWER PIPE.
   - ON PRECAST MANHOLES BOTTOM SECTION SHALL BE ACCURATELY SET PLUMB.

11. SANITARY SEWER LEAD CONNECTIONS TO TAP INTO MAINLINE, NOT TAP AT MANHOLE. PIPE SHALL BE POLYVINYL CHLORIDE PIPE (PVC) - ASTM D-2241, SDR 23.5, 6" DIAMETER. PVC COMPOUNDS TO MEET ASTM D-1784.

12. SANITARY LEADS ARE PRIVATE, UP TO THE CONNECTION POINT TO THE MAINLINE PUBLIC SEWER, INCLUDING THE CONNECTION.

13. ALL NEW MANHOLES SHALL HAVE CITY APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS. MANHOLES SHALL BE OF PRE CAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. PRE- CAST MANHOLE CONE SECTIONS SHALL BE CITY APPROVED MODIFIED ECCENTRIC CONE TYPE. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS, AS INDICATED.

14. AT ALL CONNECTIONS TO MANHOLES, INTERIOR DROP CONNECTIONS WILL BE REQUIRED WHEN THE DIFFERENCE IN INVERT ELEVATIONS EXCEEDS 18 INCHES.

15. TAPS TO EXISTING MANHOLES SHALL BE MADE BY CORING. THE CONTRACTOR SHALL PLACE A KOR-N-SEAL BOOT (OR APPROVED EQUAL) AFTER CORING IS COMPLETED. BLIND DRILLING WILL NOT BE PERMITTED IN LIEU OF CORING.

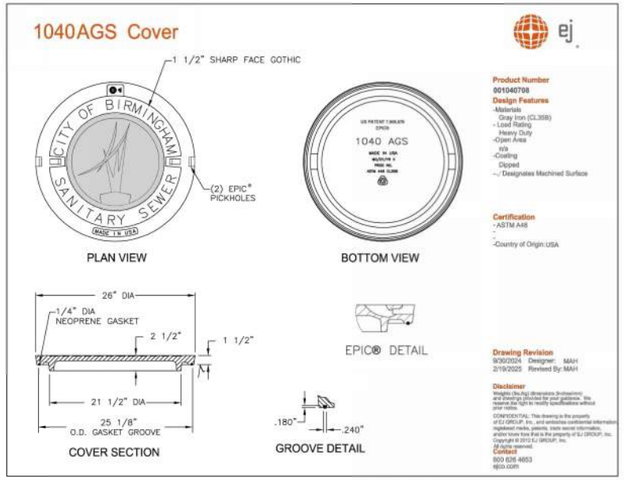
16. NEW MANHOLES CONSTRUCTED DIRECTLY ON CITY OR WRC SEWERS SHALL BE PROVIDED WITH APPROPRIATE LETTERED MANHOLE COVERS. NEW MANHOLES BUILT OVER AN EXISTING SANITARY SEWER SHALL HAVE MONOLITHIC POURED BOTTOMS.

17. NO GROUND WATER, STORM WATER, CONSTRUCTION WATER, DOWN SPOUT DRAINAGE OR WEEP TILE DRAINAGE SHALL BE ALLOWED TO ENTER ANY SANITARY SEWER INSTALLATION.

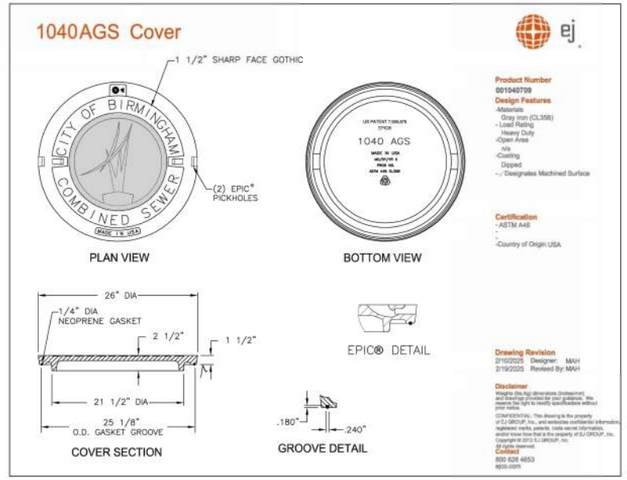
18. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL TELEPHONE MISS DIG FOR THE LOCATION OF UNDERGROUND PIPELINE AND CABLE FACILITIES AND SHALL ALSO NOTIFY REPRESENTATIVES OF OTHER UTILITIES LOCATED IN THE VICINITY OF THE WORK.

19. AN 18 INCH MINIMUM VERTICAL SEPARATION AND A 10 FOOT MINIMUM HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN SANITARY OR COMBINED SEWER AND WATER MAIN.

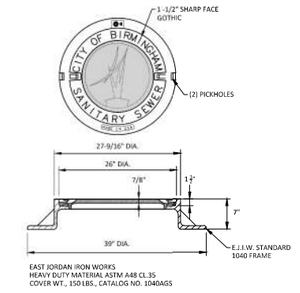
20. CLEANOUTS FOR SANITARY SEWER LEADS WITHIN PAVED SURFACE SHALL HAVE TRAFFIC RATED FRAME AND CASTING.



CITY OF BIRMINGHAM MANHOLE COVER - SANITARY SEWER



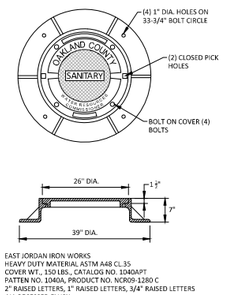
CITY OF BIRMINGHAM MANHOLE COVER - COMBINED SEWER



EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL.35
COVER WT., 150 LBS., CATALOG NO. 1040AGS

CITY OF BIRMINGHAM SANITARY SEWER MANHOLE COVER & STANDARD FRAME

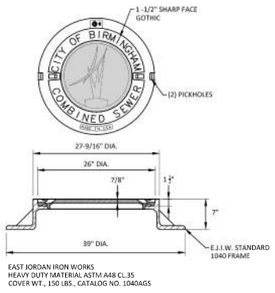
TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.



EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL.35
COVER WT., 150 LBS., CATALOG NO. 1040APT
PATTEN NO. 1040A, PRODUCT NO. NCR09-1280 C
2" RAISED LETTERS, 1" RAISED LETTERS, 3/4" RAISED LETTERS
ALL RECESSED FLUSH.

OAKLAND COUNTY WRC SANITARY SEWER MANHOLE COVER

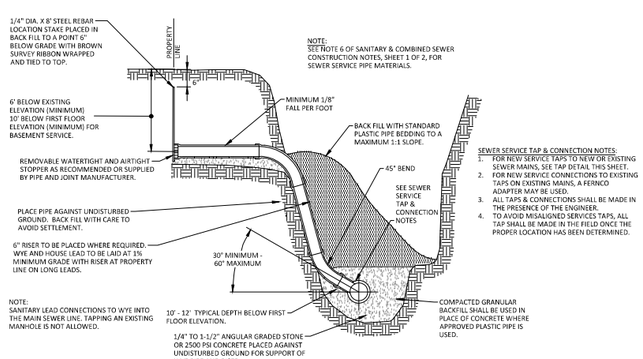
TO BE USED ON COUNTRY DESIGNATED SANITARY SEWER INTERCEPTOR MANHOLES



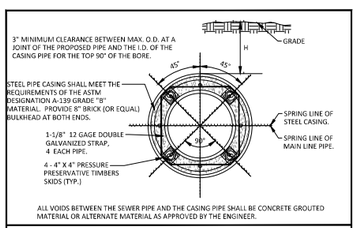
EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL.35
COVER WT., 150 LBS., CATALOG NO. 1040AGS

CITY OF BIRMINGHAM COMBINED SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.



TYPICAL HOUSE LEAD DETAIL

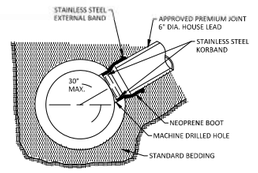


ALLOWABLE HEIGHT OF COVER (H) IN FEET, FOR STEEL CASING

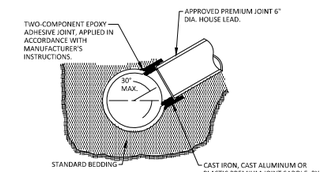
FRACT.	DEC.	WALL THICKNESS (IN.)	STEEL CASING OUTSIDE DIAMETER (IN.)									
			12	14	16	18	20	24	28	30	36	42
3/16	0.1875		39	30	24	21	19	17	16			
1/4	0.250		50	50	39	31	27	21	19	18	16	
5/16	0.3125				50	48	39	28	23	21	18	17
3/8	0.375					50	50	39	29	27	22	19
7/16	0.4375							50	39	34	26	21
1/2	0.500								50	44	31	25
9/16	0.5625									50	39	30
5/8	0.625										48	35

NOTE:1. FOR 36" SEWER PROVIDE A MIN. OF 60" DIA. CASING WITH 1" WALL THICKNESS.
2. CASING PIPE JOINTS TO BE FULLY WELDED AROUND THE CIRCUMFERENCE BY A CERTIFIED WELDER.

TYPICAL SEWER TUNNEL CASING DETAIL



SEWER TAP USING KOR-N-TEE
(ALLOWABLE FOR SEWER MAINS 10" DIA. OR LARGER)



NOTE: SURFACE OF MAIN SEWER SHALL BE CLEANED WITH AND ABRASIVE GRINDER PRIOR TO EPOXY APPLICATION. DUE TO VARIATION OF SET-UP TIME OF EPOXY ADHESIVE WITH TEMPERATURE, ANCHOR STRAPS SHALL BE USED TO SECURE SADDLE IN POSITION IN COLD WEATHER OR WHENEVER WORK IS TO PROCEED PRIOR TO COMPLETE CURE OF EPOXY.

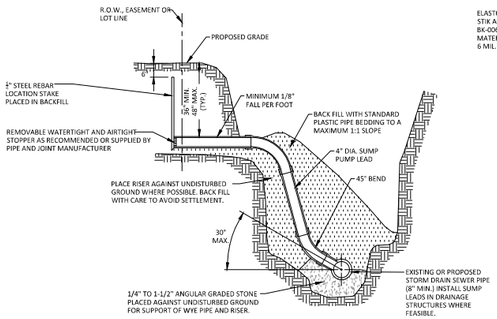
SEWER TAP USING TAPPING SADDLE
(ALLOWABLE FOR ALL SIZES OF MAIN SEWER PIPES

BIRMINGHAM
A WALKABLE CITY

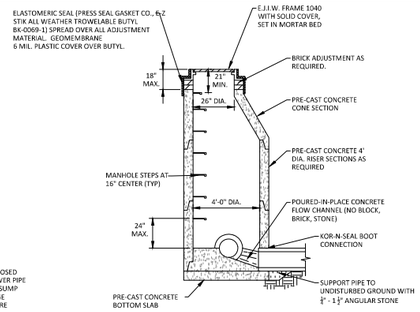
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Sanitary & Combined Sewer
Standard Notes & Details 2 of 2

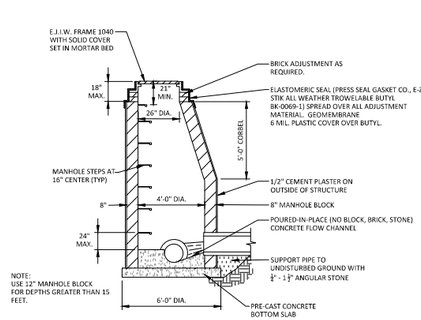
ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	SS-2



HOUSE LEAD DETAIL FOR 4" DIA. PLASTIC SUMP PUMP LEADS



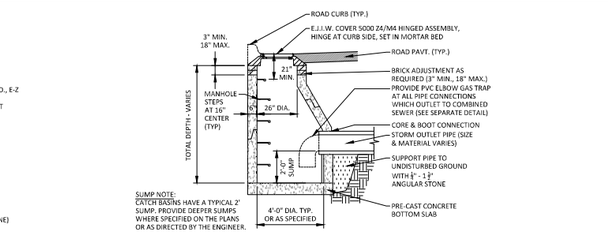
PRE-CAST MANHOLE



NOTE:
USE 12" MANHOLE BLOCK FOR DEPTHS GREATER THAN 15 FEET.

STANDARD MANHOLE DETAILS

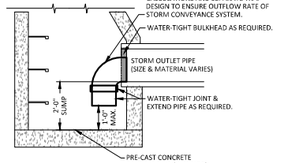
BLOCK MANHOLE



SUMP NOTE:
CATCH BASINS HAVE A TYPICAL 2' SUMP. PROVIDE DEEPER SUMPS WHERE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

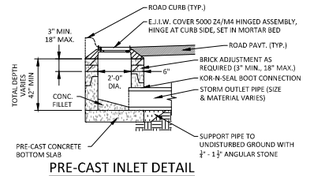
PRE-CAST CATCH BASIN DETAIL (IN ROAD CURB LINE)

SUMP NOTE:
STORM MANHOLES SHALL HAVE 2' SUMP WHERE CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER. WHERE SUMP IS SPECIFIED ON STORM MANHOLES, FLOW CHANNELS WILL NOT BE REQUIRED.



PVC ELBOW GAS TRAP

NOTE:
REQUIRED AT ALL STORM PIPE CONNECTIONS WHICH OUTLET TO COMBINED SEWER



PRE-CAST INLET DETAIL (IN ROAD CURB LINE)

STORM DRAIN SEWER CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM. ALL STORM SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY A STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER PROVIDED BY, OR CAUSED TO BE PROVIDED BY, THE CITY OF BIRMINGHAM.
2. ALL STORM DRAIN SEWER PIPE SIX (6) INCHES IN DIAMETER AND LARGER SHALL BE INSTALLED IN CONFORMANCE WITH CITY OF BIRMINGHAM TRENCH DETAILS CONTAINED HEREIN, TRENCH DETAIL "A" OR "B", INCLUDING BEDDING AND BACKFILL AT A MINIMUM OF 6 INCHES ABOVE THE TOP OF PIPE WITH NATURAL STONE CONFORMING TO M.D.O.T. 6A GRADATION REQUIREMENTS.
3. ALL STORM DRAIN SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH TRENCH "A" DETAIL AT ALL LOCATIONS UNDERNEATH OR WITHIN THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.
4. ALL STORM DRAIN SEWER PIPE MAY BE INSTALLED IN ACCORDANCE WITH TRENCH DETAIL "B" IN LOCATIONS OUTSIDE THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS.
5. STORM DRAIN SEWER DRAINAGE PIPE SHALL BE THE TYPE, CLASS, AND SIZE AS SHOWN ON THE APPROVED ENGINEERING PLANS, AND SHALL MEET THE FOLLOWING CRITERIA (ANY DEVIATIONS FROM THESE SPECIFICATIONS REQUIRE PRIOR APPROVAL BY THE CITY):

   A. REINFORCED CONCRETE PIPE (RCP): ASTM C-76, CLASS IV:
   - ALL REINFORCED CONCRETE PIPE SHALL HAVE MODIFIED GROOVED TONGUE JOINTS WITH O-RING TYPE RUBBER GASKET, PER A.S.T.M. SPECIFICATIONS C443.
   - THE INSIDE JOINTS OF PIPE SIZES OVER 27" DIAMETER SHALL BE POINTED UP WITH MORTAR UPON COMPLETION OF BACKFILLING OPERATIONS.

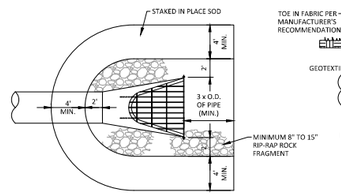
   B. POLYVINYL CHLORIDE PIPE (PVC):
   - PVC SDR 23.5 SEWER PIPE: PER ASTM D-3034 (6" DIA.)
   - PVC SDR 26 SEWER PIPE: PER ASTM D-3034 (8"-15" DIA.) AND ASTM F-679 (18" TO 24" DIA.
   - PVC SCHEDULE 40 SEWER PIPE:ASTM D-1785 "STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE (PVC) PLASTIC PIPE", SCHEDULES 40, 80, AND 120.
   - PVC COMPOUNDS TO MEET ASTM D-1784

   C. HIGH-DENSITY POLYETHYLENE PIPE (HDPE):
   - 4" OR 6" DIAMETER ALLOWABLE FOR PAVEMENT UNDERDRAIN APPLICATIONS.
   - SINGLE WALL, CORRUGATED , PERFORATED PIPE SUITABLE TO TRAFFIC LOADING APPLICATIONS.
   - PIPE SHALL MEET AASHTO M252, TYPE C OR CP
   - JOINTS SHALL MEET SOIL-TIGHT REQUIREMENTS PER AASHTO M252 OR M294

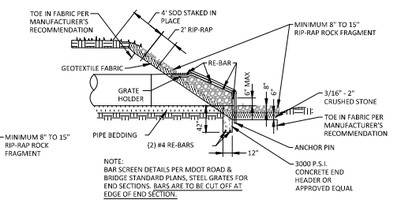
   D. CORRUGATED STEEL PIPE REQUIREMENTS (CSP) (ONLY ALLOWED FOR USE IN SMALL DIAMETER (15" DIA. OF LESS) DRAINAGE CULVERTS):
   - CORRUGATED STEEL PIPE SHALL BE PROVIDED CORRESPONDING TO THE DIAMETER OR ARCH SHAPE (RISE AND SPAN) AS SPECIFIED ON THE PLANS.
   - ALL CORRUGATED STEEL PIPE SHALL BE GALVANIZED AND COATED WITH BITUMINOUS ASPHALT TO RETARD CORROSION. AS AN ALTERNATE TO THIS REQUIREMENT, AN ALUMINIZED STEEL PIPE, OR APPROVED EQUAL, MAY BE SUBSTITUTED.
   - ALL CORRUGATED STEEL PIPE SHALL BE JOINED TOGETHER WITH A WATERTIGHT CIRCUMFERENTIALLY CORRUGATED STEEL COUPLING BAND FURNISHED WITH TWO (2) RUBBER GASKETS.
   - CORRUGATED STEEL PIPE SHALL HAVE WELDED SEAMS WITH HELICAL CORRUGATIONS. EACH END OF THE HELICAL CORRUGATED PIPE SHALL BE RE-ROLLED TO AN ANNULAR CONFIGURATION TO ACCOMMODATE THE WATERTIGHT COUPLING BAND DESCRIBED HEREIN. RIVETED OR LOCK SEAM PIPE IS UNACCEPTABLE.

6. STORM MANHOLE, CATCH BASIN, AND INLET STRUCTURE NOTES AND REQUIREMENTS:
   - ALL NEW CATCH BASINS, INLETS, AND MANHOLES ARE TO BE MANUFACTURED TO ASTM C-478 SPECIFICATIONS.
   - ALL NEW CATCH BASINS, INLETS, AND MANHOLES SHALL HAVE CITY-APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS.
   - MANHOLES SHALL BE OF PRECAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. PRE CAST MANHOLE CONE SECTIONS SHALL BE CITY-APPROVED MODIFIED ECCENTRIC CONE TYPE.
   - TAPS THROUGH MANHOLE JOINTS OR CONE SECTIONS ARE PROHIBITED UNLESS OTHERWISE APPROVED.
   - ALL MANHOLE, CATCH BASIN, OR INLET STRUCTURE STEPS TO BE PLASTIC COATED STEEL MEETING THE REQUIREMENTS IN ASTM D 2146 TYPE II, GRADE 49108, MA. INDUSTRIES P.S.I. POLYPROPYLENE, (OR APPROVED EQUAL). STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE AT 16" CENTERS 45° FROM CENTERLINE OF SEWER.
   - CONE SECTION WITH MODIFIED GROOVE TONGUE JOINTS AND WITH STUD INSERTS CAST IN PLACE. TOP TO HAVE FLUSH SURFACE.
   - ASTM C-478 RISER SECTION WITH MODIFIED GROOVE TONGUE JOINTS.
   - KOR-N-SEAL BOOT (WITH STAINLESS STEEL KORBAND) FLEXIBLE RUBBER MANHOLE JOINTS AT ALL PIPE CONNECTIONS.
   - PRECAST CONCRETE BASE MUST BE SET LEVEL ON A SAND CUSHION OF NOT LESS THAN 2" OR MORE THAN 4". FOR MANHOLES, TOP OF BASE TO BE 2" MIN BELOW BOTTOM OF SEWER PIPE.
   - ON PRECAST MANHOLES BOTTOM SECTION SHALL BE ACCURATELY SET PLUMB.

7. ALL END SECTIONS 18" AND LARGER SHALL BE PROVIDED WITH A GALVANIZED BAR SCREEN.
8. STANDARD RIP-RAP SHALL BE 8"-15" FRAGMENTED NATURAL ROCK. HEAVY RIP-RAP SHALL BE 16"-24" FRAGMENTED NATURAL ROCK. (NO BROKEN CONCRETE SHALL BE ALLOWED)
9. SUMP PUMP LEAD REQUIREMENTS:
   - SUMP PUMP LEADS CONNECTED TO A MANHOLE SHALL BE CORED AND BOOTED.
   - SUMP PUMP MAINS AND LEADS SHALL BE SDR 23.5, SCHEDULE 40, NON PERFORATED, SOLID WALL, ABS TRUSS, PVC TRUSS, ADS N-12 WT, OR APPROVED EQUAL, WITH PREMIUM JOINTS.
   - ENDS OF ALL 4" SUMP PUMP LEADS SHALL BE TEMPORARILY CAPPED AND THEIR LOCATION STAKED, WITNESSED AND RECORDED.
   - ALL SUMP PUMP LEADS TO BE TAKEN TO THE PROPERTY LINE, EASEMENT LINE OR AS INDICATED ON THE PLAN.
   - SUMP PUMP MAINS MUST HAVE A CLEANOUT WITH A MINIMUM INSIDE DIAMETER OF 24", CONSTRUCTED AT CHANGES OF ALIGNMENT, ENDS OF SUMP PUMP MAINS OR AS INDICATED ON THE PLAN.

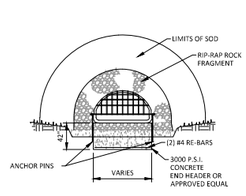


PLAN VIEW



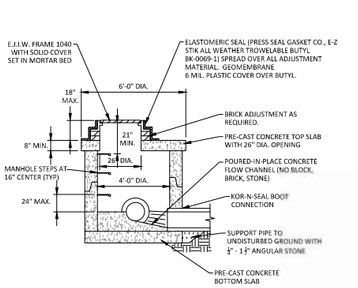
NOTE:
BAR SCREEN DETAILS PER MDOT ROAD & BRIDGE STANDARD PLANS, STEEL GRATES FOR END SECTIONS. BARS ARE TO BE CUT OFF AT EDGE OF END SECTION.

PROFILE VIEW

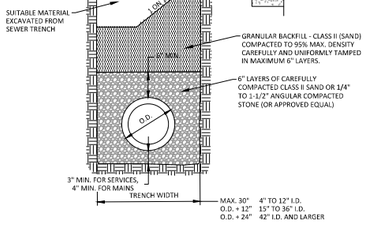


END VIEW

END SECTION AND BAR SCREEN DETAIL

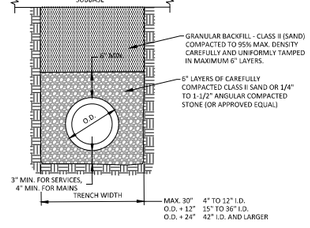


PRE-CAST LOW HEAD MANHOLE DETAIL



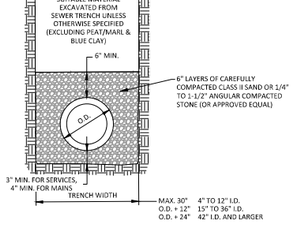
TRENCH DETAIL "A"

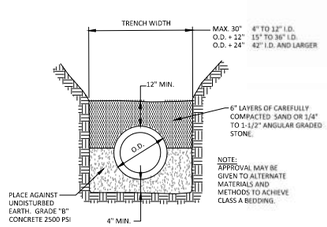
SEWER UNDER ROAD BED OR WITHIN THE INFLUENCE OF ROAD BED



TRENCH DETAIL "B"

SEWER NOT UNDE ROAD BED





CONCRETE CRADLE

PIPE SCHEDULE

WITHIN 1 ON 1 ZONE OF INFLUENCE OF ROADWAY MEASURED FROM BACK OF CURB.	< 3' COVER 3' - 10' COVER > 10' COVER	C76 - CL V C76 - CL IV C76 - CL V OR APPROVED EQUAL
OUTSIDE ZONE OF INFLUENCE OR ROADWAY, IN REAR YARD OR GREENBELT.	SMOOTH LINED CORRUGATED HDPE, CPVC A 2000, C-76 CL IV OR V, SCH. 40 PVC, SDR 23.5, SDR 26, CSP, OR APPROVED EQUAL	
DRIVE CULVERTS	C-76 CL IV OR CORRUGATED METAL PIPE (CMP)	

NOTES:
1. ALL PIPE TO BE INSTALLED PER MANUFACTURER RECOMMENDED STANDARDS AND AS SHOWN ON PLANS.
2. ALL PIPE SHALL BE FURNISHED WITH PREMIUM JOINTS.

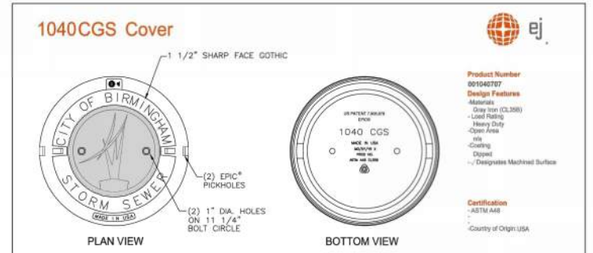
TYPICAL M.H. GRATES

APPLICATION	GRATE ID NUMBER
CURB AND GUTTER	EJIW 5000 Z4/M4 HINGED (SEE DETAIL THIS SHEET)
PAVEMENT	EJIW 1040-M1
GREEN BELT	EJIW 1040-N
DITCH	EJIW 6508 EJIW 6517

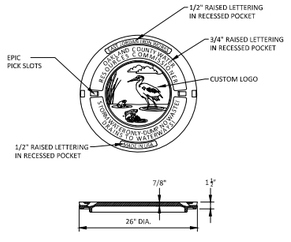
OR APPROVED EQUAL



CITY OF BIRMINGHAM CATCH BASIN & INLET FRAME & COVER - STORM SEWER



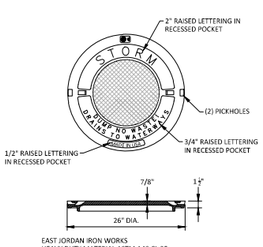
CITY OF BIRMINGHAM MANHOLE COVER - STORM SEWER



EAST JORDAN IRON WORKS OR APPROVED EQUAL HEAVY DUTY MATERIAL ASTM A48 CL 35B
CATALOG NO. 1040A PATTERN NO. 1040A, PRODUCT NO. 104718 OAKCOSTD. 2" HIGH RAISED LETTERS, 1" WIDE RAISED LETTERS ALL IN RECESSED POCKET.

OAKLAND COUNTY WRC STORM SEWER MANHOLE COVER

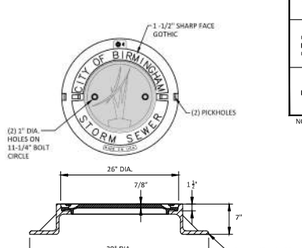
TO BE USED ONLY FOR MANHOLES ON DESIGNATED COUNTRY DRAINS



EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL 35
COVER WT., 150 LBS., CATALOG NO. 1040A
2" HIGH RAISED LETTERS, 3/4" WIDE RAISED LETTERS
ALL RECESSED FLUSH.

PRIVATE STORM SEWER MANHOLE COVER

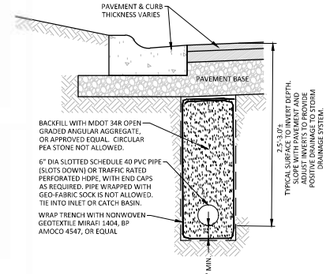
TO BE USED ON ALL STORM SEWER MANHOLES OTHER THAN COUNTY OR CITY DESIGNATED DRAINS.



EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL 35
COVER WT., 150 LBS., CATALOG NO. 1040CGS

CITY OF BIRMINGHAM STORM SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.



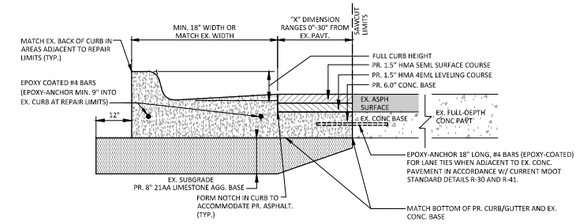
6" PERFORATED UNDERDRAIN TRENCH DETAIL

BIRMINGHAM
A WALKABLE CITY

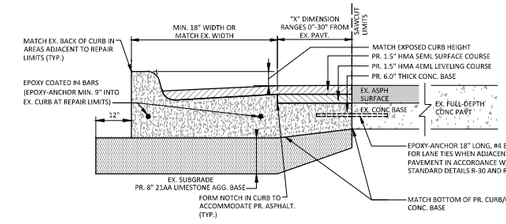
City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Storm Drain Sewer Standard Notes & Details 1 of 1

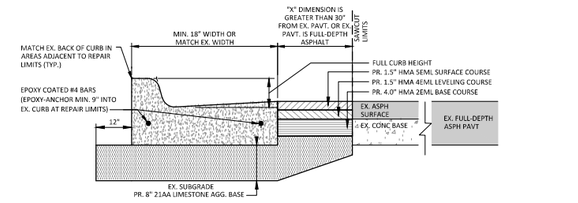
ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	SD-1



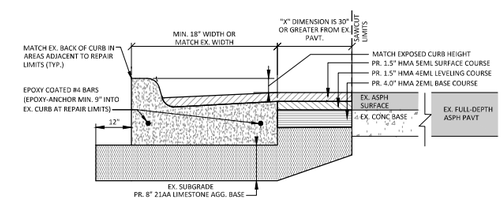
CONCRETE CURB & GUTTER INSTALLATION, TYPE 1 (EXPOSED GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH CONCRETE OR COMPOSITE PAVEMENT)



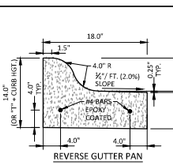
CONCRETE CURB & GUTTER INSTALLATION, TYPE 2 (OVERLAID GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH CONCRETE OR COMPOSITE PAVEMENT)



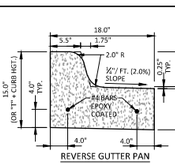
CONCRETE CURB & GUTTER INSTALLATION, TYPE 1 (EXPOSED GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH ASPHALT OR COMPOSITE PAVEMENT)



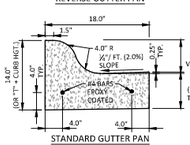
CONCRETE CURB & GUTTER INSTALLATION, TYPE 2 (OVERLAID GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH ASPHALT OR COMPOSITE PAVEMENT)



REVERSE GUTTER PAN

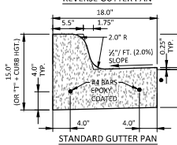


REVERSE GUTTER PAN



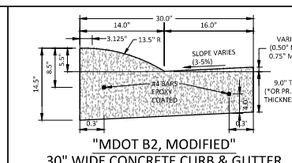
STANDARD GUTTER PAN

"BIRMINGHAM ROLL"
18" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL



STANDARD GUTTER PAN

"MDOT F2, MODIFIED"
18" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

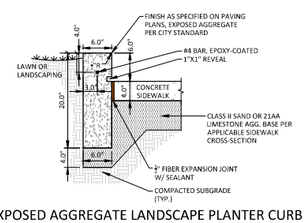


"MDOT B2, MODIFIED"
30" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

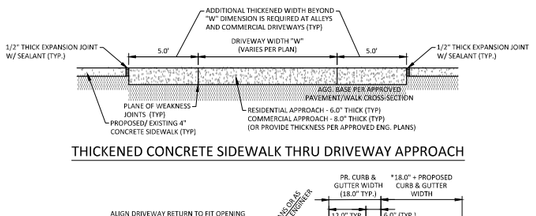
"MDOT D2, MODIFIED"
24" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

CONCRETE CURB & GUTTER NOTES

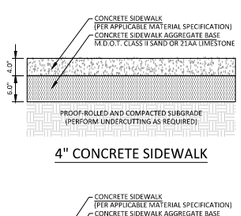
1. REFER TO M.D.O.T. STANDARD PLAN R-30 (CURRENT VERSION) FOR TYPICAL CURB AND GUTTER DETAILS, WHICH SHALL BE USED EXCEPT AS MODIFIED HEREIN, OR UPON DIRECTION BY THE ENGINEER.
2. PER M.D.O.T. STANDARD PLAN R-30, EPOXY-COATED #4 LANE TIES SHALL BE INSTALLED WHEN CONCRETE CURB & GUTTER IS INSTALLED ADJACENT TO EXISTING OR PROPOSED FULL-DEPTH CONCRETE PAVEMENT. LANE TIES MAY BE OMITTED WHEN CURB IS FORMED INTEGRAL TO A CONCRETE PAVEMENT CROSS-SECTION.
3. ALL CONCRETE CURB & GUTTER INSTALLED WITHIN M.D.O.T.- OR ROAD COMMISSION FOR OAKLAND COUNTY (R.C.O.C.) PUBLIC RIGHT-OF-WAYS SHALL ADHERE TO STANDARDS AND SPECIFICATIONS OF APPROVED PERMITS REQUIRED TO COMPLETE THE WORK'S THE GOVERNING AGENCIES.
4. ALL PROPOSED CONCRETE CURB & GUTTER SHALL PROVIDE THE TYPICAL CURB HEIGHTS FOR EACH TYPE OF CURB AS SHOWN IN THE DIMENSIONAL CROSS-SECTION DETAILS, EXCEPT AT LOCATIONS WHERE CURB & GUTTER IS REQUIRED TO MATCH EXISTING OR WHERE ALTERNATE CURB HEIGHTS ARE SPECIFIED ON THE PLANS.
5. PREPARE THE EXISTING AGGREGATE SUBBASE LAYER BELOW CURB AND GUTTER BY CONDITIONING, GRADING, AND/OR RE-SHAPING THE SUBBASE, AND FURNISHING, PLACING, AND COMPACTING SUPPLEMENTAL THICK 21AA AGGREGATE BASE TO ACHIEVE PROPOSED PLAN GRADE. ALL NECESSARY PREPARATION WORK SHALL BE INCLUDED IN APPLICABLE PAY ITEMS FOR CONCRETE CURB & GUTTER.
6. PER THE DIMENSIONAL CROSS-SECTION DETAILS, THE PROPOSED PAVEMENT THICKNESS, "T" IS EQUAL TO THE THICKNESS OF PROPOSED FULL-DEPTH CONCRETE PAVEMENT ADJACENT TO THE CURB & GUTTER, POURED SEPARATELY OR INTEGRAL. THE PROPOSED SLOPE WITHIN THE GUTTER PAN IS EQUAL TO THE CROSS-SLOPE OF THE CONCRETE PAVEMENT WHEN CURB & GUTTER IS POURED INTEGRAL TO THE PAVEMENT.
7. TYPICAL USE OF THE VARIOUS TYPES OF CONCRETE CURB AND GUTTER ARE AS FOLLOWS (OR IN ACCORDANCE WITH THE APPROVED PLANS OR PER DIRECTION BY THE ENGINEER):
   - 7.A. "BIRMINGHAM ROLL" DETAIL: LOCAL RESIDENTIAL STREETS
   - 7.B. "MDOT F2, MODIFIED" DETAIL: RESIDENTIAL, COMMERICAL & INDUSTRIAL COLLECTOR STREETS
   - 7.C. "MDOT D2, MODIFIED" DETAIL: MOUNTABLE CURB APPLICATIONS
   - 7.D. "MDOT B2, MODIFIED" DETAIL: DRIVEWAY OR ROADWAY MEDIANS



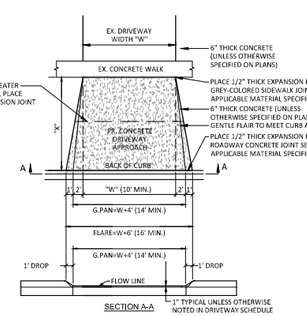
EXPOSED AGGREGATE LANDSCAPE PLANTER CURB



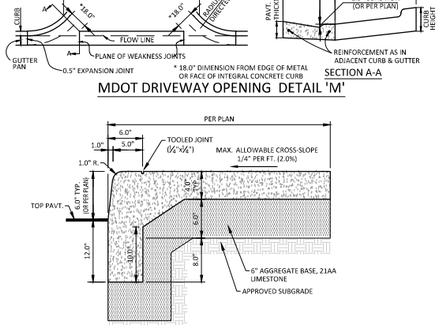
THICKENED CONCRETE SIDEWALK THRU DRIVEWAY APPROACH



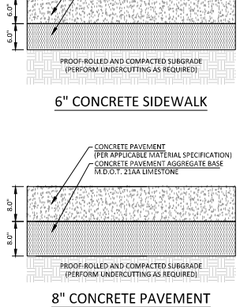
4" CONCRETE SIDEWALK



CONCRETE DRIVEWAY APPROACH - DETAIL 'L'



MDOT DRIVEWAY OPENING DETAIL 'M'



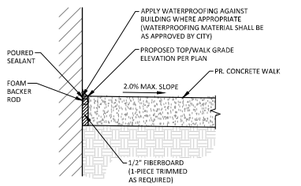
6" CONCRETE SIDEWALK

MONOLITHIC CURB AND WALK

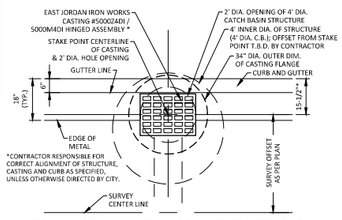
8" CONCRETE PAVEMENT

GENERAL PAVEMENT REMOVAL & CONSTRUCTION NOTES

1. PAVEMENTS SHALL BE OF THE TYPE, THICKNESS, AND CROSS-SECTIONS AS INDICATED HEREIN OR AS PROPOSED ON THE APPROVED ENGINEERING PLANS.
2. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM AND THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXCEPT WHERE MODIFIED OR SUPPLEMENTED HEREIN, OR ON THE APPROVED ENGINEERING PLANS.
3. ALL PAVING CONSTRUCTION OCCURRING WITHIN THE CITY OF BIRMINGHAM PUBLIC RIGHT-OF-WAY (R.O.W.) REQUIRES THAT THE DEVELOPER OR CONTRACTOR NOTIFY THE CITY ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE, SO THAT THE CITY MAY PROVIDE INSPECTION IF REQUIRED.
4. CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.
5. FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.
6. ALL PAVEMENTS CALLED FOR FULL-DEPTH REMOVAL AND REPLACEMENT SHALL BE SAWCUT FULL-DEPTH THROUGH THE PAVEMENT SECTION PRIOR TO REMOVAL.
7. BRICK PAVER WALKS OR DRIVEWAYS LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY (R.O.W.) SHALL BE REMOVED AS DIRECTED BY THE CITY. THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNER IN ADVANCE TO DETERMINE WHETHER THE REMOVED BRICK PAVER MATERIALS SHALL BE SALVAGED AND RETURNED TO THE OWNER OR DISPOSED OF.
8. IN ANY LOCATIONS WHERE ADJACENT PAVEMENTS ARE DAMAGED BEYOND THE PLANNED REMOVAL LIMITS, THE CONTRACTOR SHALL REPLACE THE PAVEMENTS "IN KIND" TO MATCH EXISTING MATERIAL(S), THICKNESS, UNDERLYING AGGREGATE BASE MATERIAL, AND OVERALL PAVEMENT CROSS-SECTION, AT NO ADDITIONAL COST TO THE CITY OR OWNER.
9. ALL TREES NOT INDICATED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION. WHERE NECESSARY, AND UPON REVIEW AND APPROVAL BY THE CITY, TREE ROOTS SHALL BE CUT CLEANLY. AT NO TIME WILL RIPPING OR TEARING OF TREE ROOTS BE ACCEPTABLE. CONTRACTORS SHALL COORDINATE WITH THE CITY DEPARTMENT OF PUBLIC SERVICES (DPS) IN ADVANCE OF CUTTING TREE ROOTS TO DETERMINE IF DPS REQUIRES PERSONNEL TO BE ON SITE TO WITNESS THE TREE CUTTING WORK.
10. SOILS, ROCKS, OR OTHER MISCELLANEOUS DEBRIS WHICH ARE REQUIRED TO BE REMOVED TO COMPLETE THE PROPOSED CONSTRUCTION, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE, AND LEGALLY DISPOSED OF, UNLESS DIRECTED OTHERWISE FROM THE CITY.
11. PAVEMENT SUBGRADE AND BASE MATERIALS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
12. EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS (INCLUDED IN PAVING WORK).
13. ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.
14. FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.



EXPANSION JOINT DETAIL AT BUILDING



CURB, CATCH BASIN & INLET ALIGNMENT DETAIL PLAN VIEW

AMERICANS WITH DISABILITIES ACT (A.D.A.) SIDEWALK, RAMP & LANDING COMPLIANCE NOTES

SIDEWALK FLAGS, RAMPS, AND LANDINGS SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS FOLLOWS:

SIDEWALK REQUIREMENTS:

1. THE RUNNING SLOPE OF CONSTRUCTED WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20 (5.0%).
2. THE CROSS-SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48 (2.0%).
3. CHANGES IN LEVEL OF 1/4 INCH (0.02 FEET) HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.
4. SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

RAMP REQUIREMENTS:

5. CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
6. RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.
7. THE CROSS-SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48 (2.0%).
8. THE LONGITUDINAL SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:12 (8.3%).
9. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10 (10.0%).
10. THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.
11. COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20 (5.0%). THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.
12. CURB RAMPS WITH A RUNNING SLOPE EQUAL OR LESS THAN 1:20 DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 1:48 PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL
13. CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
14. WHEN 60 INCH (5 FOOT) MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 48 INCHES (4 FEET) AND LANDINGS TO NOT LESS THAN 48" x 48" (4' x 4').
15. DIAGONAL OR CORNER TYPE CURB RAMPS WITH RETURNED CURBS OR OTHER WELL-DEFINED EDGES SHALL HAVE THE EDGES PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE A CLEAR SPACE 48 INCHES (4 FEET) MINIMUM OUTSIDE ACTIVE TRAFFIC LANES OF THE ROADWAY. DIAGONAL CURB RAMPS PROVIDED AT MARKED CROSSINGS SHALL PROVIDE THE 48 INCHES (4 FEET) MINIMUM CLEAR SPACE WITHIN THE MARKINGS. DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 24 INCHES (2 FEET) LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.
16. SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COURSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.
17. DETECTABLE WARNING SURFACE COVERAGE IS 24 INCHES (2 FEET) MINIMUM IN THE DIRECTION OF RAMP / PATH TRAVEL AND THE FULL WIDTH OF THE RAMP / PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2 INCHES MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.
18. DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND / OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.
19. RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. SEE BELOW FOR LANDING REQUIREMENTS.

LANDING / TURNING SPACE REQUIREMENTS:

20. LANDINGS SHALL BE REQUIRED AT TOP OF CURB RAMPS AND TOP AND BOTTOM OF CURB RAMPS AND OTHER SIDEWALK RAMPS (SIDEWALKS WITH LONGITUDINAL SLOPE OF 5.0% OR GREATER).
21. LANDINGS SHALL BE PROVIDED WITH SLOPES NOT STEEPER THAN 1:48 (2.0%) IN ALL DIRECTIONS.
22. THE LANDING CLEAR LENGTH SHALL BE 36 INCHES (3 FEET) MINIMUM. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE CURB RAMP, EXCLUDING FLARED SIDES, LEADING TO THE LANDING.
23. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING AREA WITH DIMENSIONS OF 60 INCHES (5 FEET) MINIMUM BY 60 INCHES (5 FEET) MINIMUM.
24. TURNING SPACES, SUCH AS KEY FLAGS WHERE TWO SEPARATE SIDEWALK DIRECTIONAL ALIGNMENTS INTERSECT, SHALL MEET THE SAME REQUIREMENTS AS LANDINGS AS DEFINED ABOVE.

PAVEMENT MATERIAL SPECIFICATIONS

AGGREGATE BASE:

1. ROAD PAVEMENTS, CURB & GUTTER, AND COMMERCIAL/INDUSTRIAL DRIVEWAYS
   - 1.A. PROVIDE CRUSHED LIMESTONE CONFORMING TO MDOT 21AA GRADATION REQUIREMENTS (MINIMUM 8.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.
2. RESIDENTIAL DRIVEWAYS
   - 2.A. PROVIDE CRUSHED LIMESTONE CONFORMING TO MDOT 21AA GRADATION REQUIREMENTS (MINIMUM 6.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.
3. CONCRETE SIDEWALKS
   - 3.A. PROVIDE CRUSHED LIMESTONE (MDOT 21AA GRADATION) OR MDOT CLASS II SAND (MINIMUM 6.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.

HOT MIX ASPHALT (H.M.A.) MIXTURES:

2. UNLESS OTHERWISE SPECIFIED ON THE APPROVED ENGINEERING PLANS, THE FOLLOWING HOT MIX ASPHALT (H.M.A.) MIXTURES SHALL BE USED FOR NEW ASPHALT PAVEMENT CONSTRUCTION AND ASPHALT ROAD REPAIRS:
   - 2.A. SURFACE COURSE: MDOT HMA MIXTURE NO. 5EML (MAX. APPLICATION RATE OF 220 LB/SYD.)
   - 2.B. LEVELING COURSE: MDOT HMA MIXTURE NO. 4EML (MAX. APPLICATION RATE OF 220 LB/SYD.)
   - 2.C. BASE COURSE: MDOT HMA MIXTURE NO. 3EML (MAX. APPLICATION RATE OF 330 LB/SYD.)
3. ALL MIX DESIGNATIONS SHALL MEET APPLICABLE MINIMUM REQUIREMENTS PER MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.
4. BINDER FROM RECYCLED ASPHALT PAVEMENT (RAP) MATERIALS SHALL BE LIMITED TO NOT MORE THAN 17 PERCENT OF THE TOTAL MIX BINDER CONTENT BY WEIGHT. FINAL BINDER FOR ALL MIXES SHALL MEET SPECIFICATION REQUIREMENTS FOR PERFORMANCE-GRADE PG64-28.
5. TACK/BOND COAT SHALL BE SS-1H WITH A MINIMUM APPLICATION RATE OF 0.10 GAL/SQUARE YARD.

STANDARD PORTLAND CEMENT CONCRETE (P.C.C.) MIXTURES:

1. CONCRETE PAVEMENT, CURB & GUTTER, AND COMMERCIAL/INDUSTRIAL DRIVEWAYS:
   - 1.A. CONCRETE GRADE 3500HP PER MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.
     - 1.A.A. ALL PCC MIXTURES REQUIRE:
       - 1.A.A.A. COARSE AGGREGATE MATERIAL MEETING "OPTIMIZED AGGREGATE GRADATION REQUIREMENTS" (IN ACCORDANCE WITH SECTION 10.04.03 OF THE MDOT 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION).
       - 1.A.A.B. FINE AGGREGATE MATERIAL MEETING MDOT SPECIAL PROVISION 20SP-1002A-01 REQUIREMENTS FOR ALKALI SILICA REACTIVITY.
     - 1.A.A.C. 25 TO 40 PERCENT REPLACEMENT OF THE PORTLAND CEMENT CONTENT IN THE PCC MIXTURE WITH A SUPPLEMENTARY CEMENTITIOUS MATERIAL (GROUND GRANULATED BLAST-FURNACE SLAG (GGBFS) OR OTHER APPROVED EQUAL).
     - 2.A.A.C. A MAXIMUM WATER CEMENT RATIO OF 0.43 TO REDUCE SCALING POTENTIAL.
   - 2.A.B. FOR NEW CONCRETE PAVEMENT AND/OR CURB INSTALLATIONS WHICH REQUIRE MORE THAN 10 CUBIC YARDS OF PCC REDI-MIX MATERIAL (APPROXIMATELY 1 TRUCKLOAD), THE PCC MIXTURE SHALL ALSO CONTAIN A VISCOSITY-MODIFYING ADMIXTURE INTENDED TO IMPROVE FINISHING CHARACTERISTICS AND REDUCE THE POTENTIAL FOR SURFACE SCALING.
   - 2.B. PORTLAND CEMENT: TYPE 1L W/ LOW ALKALI CONTENT

Bird Phase 1B Project
Water and Sewer Lateral Special Assessment District

Sidwell Number	Street Address	Water Lateral Length (ft)	Total Cost Water Lateral	Sewer Lateral Length (ft)	Total Cost Sewer Lateral	Total Costs
1936482001	616 Bird Ave	-	$ -	-	$ -	$ -
1936480026	623 Bird Ave	-	$ -	-	$ -	$ -
1936480027	631 Bird Ave	-	$ -	-	$ -	$ -
1936482002	638 Bird Ave	-	$ -	-	$ -	$ -
1936482003	644 Bird Ave	-	$ -	-	$ -	$ -
1936480060	655 Bird Ave	-	$ -	-	$ -	$ -
1936482004	668 Bird Ave	-	$ -	26	$ 2,912.00	$ 2,912.00
1936480061	671 Bird Ave	-	$ -	-	$ -	$ -
1936482005	684 Bird Ave	18	$ 954.00	26	$ 2,912.00	$ 3,866.00
1936480030	695 Bird Ave	33	$ 1,749.00	26	$ 2,912.00	$ 4,661.00
1936480031	711 Bird Ave	33	$ 1,749.00	26	$ 2,912.00	$ 4,661.00
1936482006	716 Bird Ave	-	$ -	25	$ 2,800.00	$ 2,800.00
1936482007	730 Bird Ave	18	$ 954.00	25	$ 2,800.00	$ 3,754.00
1936480066	731 Bird Ave	-	$ -	-	$ -	$ -
1936482008	740 Bird Ave	-	$ -	-	$ -	$ -
1936480067	747 Bird Ave	-	$ -	26	$ 2,912.00	$ 2,912.00
1936482009	768 Bird Ave	-	$ -	-	$ -	$ -
1936480033	771 Bird Ave	-	$ -	-	$ -	$ -
1936482010	784 Bird Ave	-	$ -	-	$ -	$ -
1936482063	808 Bird Ave	-	$ -	-	$ -	$ -
1936480034	811 Bird Ave	-	$ -	-	$ -	$ -
1936480064	831 Bird Ave	-	$ -	-	$ -	$ -
1936482064	832 Bird Ave	-	$ -	-	$ -	$ -
1936482061	852 Bird Ave	-	$ -	-	$ -	$ -
1936480065	855 Bird Ave	-	$ -	-	$ -	$ -
1936482062	860 Bird Ave	-	$ -	-	$ -	$ -
1936480059	871 Bird Ave	-	$ -	-	$ -	$ -
1936482047	888 Bird Ave	-	$ -	-	$ -	$ -
1936480038	891 Bird Ave	33	$ 1,749.00	26	$ 2,912.00	$ 4,661.00
1936482048	900 Bird Ave	-	$ -	25	$ 2,800.00	$ 2,800.00
1936480039	907 Bird Ave	33	$ 1,749.00	26	$ 2,912.00	$ 4,661.00
1936480062	925 Bird Ave	-	$ -	-	$ -	$ -
1936482015	926 Bird Ave	-	$ -	-	$ -	$ -
1936482016	954 Bird Ave	-	$ -	25	$ 2,800.00	$ 2,800.00
1936480063	955 Bird Ave	-	$ -	26	$ 2,912.00	$ 2,912.00
1936480042	963 Bird Ave	-	$ -	-	$ -	$ -
1936482017	976 Bird Ave	-	$ -	25	$ 2,800.00	$ 2,800.00
1936482018	990 Bird Ave	18	$ 954.00	-	$ -	$ 954.00
1936480043	993 Bird Ave	33	$ 1,749.00	26	$ 2,912.00	$ 4,661.00
1936482019	1016 Bird Ave	18	$ 954.00	25	$ 2,800.00	$ 3,754.00

Sidwell Number	Street Address	Water Lateral Length (ft)	Total Cost Water Lateral	Sewer Lateral Length (ft)	Total Cost Sewer Lateral	Total Costs
1936480044	1019 Bird Ave	-	$ -	-	$ -	$ -
1936482020	1038 Bird Ave	-	$ -	25	$ 2,800.00	$ 2,800.00
1936480045	1039 Bird Ave	-	$ -	-	$ -	$ -
1936480046	1063 Bird Ave	33	$ 1,749.00	26	$ 2,912.00	$ 4,661.00
1936482021	1080 Bird Ave	-	$ -	-	$ -	$ -
1936480047	1087 Bird Ave	-	$ -	26	$ 2,912.00	$ 2,912.00
1936482022	1092 Bird Ave	-	$ -	-	$ -	$ -

MEMORANDUM

City Clerk's Office

DATE: February 12, 2026

TO: Melissa Coatta, City Engineer

FROM: Mya Brown, Deputy City Clerk

SUBJECT: Clerk's Confirmation of Public Hearing Notice: Bird Phase 1B Project, Contract #7-25(W) - Sewer and Water Lateral Special Assessment District (SAD)

INTRODUCTION:
The public hearing notice process has been completed for Bird Phase 1B Project, Contract #7-25(W) - Sewer and Water Lateral Special Assessment District (SAD). Please see attachments for further confirmation.

PUBLIC COMMUNICATIONS:
Mailing Date: 2/12/2026
Test Mail Return Date: 2/17/2026
Publishing Dates in the Oakland Press: 2/22/2026 & 3/8/2026
Posted in www.bhamgov/publicnotices

ATTACHMENTS:

1. Public Hearing Notice
2. Addresses
3. Mailing Letter
4. Mail Machine Counter Repot
5. Proof of Publishing

NOTICE OF PUBLIC HEARING

BIRMINGHAM CITY COMMISSION

PUBLIC HEARING OF NECESSITY &
PUBLIC HEARING FOR CONFIRMATION OF THE ROLL

Meeting Date, Time, Location:	HEARING OF NECESSITY FOR SPECIAL ASSESSMENT DISTRICT Monday, March 9, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, March 23, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	Bird Avenue; below are the assessed addresses: 668 Bird Ave 684 Bird Ave 695 Bird Ave 711 Bird Ave 716 Bird Ave 730 Bird Ave 747 Bird Ave 891 Bird Ave 900 Bird Ave 907 Bird Ave 954 Bird Ave 955 Bird Ave 976 Bird Ave 990 Bird Ave 993 Bird Ave 1016 Bird Ave 1038 Bird Ave 1063 Bird Ave 1087 Bird Ave
Nature of Improvement:	The project includes the replacement of the water main, sewer, and the streets will receive concrete curb, gutter and new concrete road.
City Staff Contact:	Melissa Coatta, City Engineer mcoatta@bhamgov.org, (248)530-1839
Notice Requirements:	Newspaper Notice and First Class Mail to affected property owners 10 days prior. Publish 2/22/2026 & 3/8/2026
Approved minutes may be reviewed at:	City Clerk's Office or www.bhamgov.org/commissionagendas

Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760 Meeting ID: 655 079 760**

You or your agent may appear at the hearings to express your views; however, if you fail to protest either in person or by letter received on or before the date of the hearing, you cannot appeal the amount of the special assessment to the Michigan Tax Tribunal. Mail any correspondence to: City Clerk, P.O. Box 3001, Birmingham, MI 48012.

The property owner may file a written appeal of the special assessment with the State Tax Tribunal within 30 days after the confirmation of the special assessment roll if that special assessment was protested at the hearing held for the purpose of confirming the roll.

All special assessments, including installment payments, shall, from the date of the confirmation thereof, constitute a lien on the respective lots or parcels assessed, and until paid shall be charged against the respective owners of the lots or parcels assessed.

Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk's Office at 248.530.1880 (voice) or 248.644.3405 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance.

Parcel Identification Number	First Owner Name	Postal Address	POSTALCITY	POSTALZIP5	PNUM	Postal City Postal State Postal Zip 5
1936480030	WOODWARD ENTERPRISES LLC	671 BIRD AVE	BIRMINGHAM	48009	08-19-36-480-030	BIRMINGHAM, MI 48009
1936480038	NIKOLAY VANJUKHIN	891 BIRD AVE	BIRMINGHAM	48009	08-19-36-480-038	BIRMINGHAM, MI 48009
1936480031	MARY BETH SOLOY REVOC TRUST	711 BIRD AVE	BIRMINGHAM	48009	08-19-36-480-031	BIRMINGHAM, MI 48009
1936480067	PAUL A JACOBS	747 BIRD AVE	BIRMINGHAM	48009	08-19-36-480-067	BIRMINGHAM, MI 48009
1936480063	LISA M DIZIK	1778 ALEXANDER DR	BLOOMFIELD HILLS	48302	08-19-36-480-063	BLOOMFIELD HILLS, MI 48302
1936482016	JEFFREY SOLIS	954 BIRD AVE	BIRMINGHAM	48009	08-19-36-482-016	BIRMINGHAM, MI 48009
1936482048	NORMAN L COHEN LVNG TRUST	900 BIRD AVE	BIRMINGHAM	48009	08-19-36-482-048	BIRMINGHAM, MI 48009
1936482004	BRIAN DOYLE	668 BIRD AVE	BIRMINGHAM	48009	08-19-36-482-004	BIRMINGHAM, MI 48009
1936482018	SCOTT DOUGLAS PREHODA	990 BIRD AVE	BIRMINGHAM	48009	08-19-36-482-018	BIRMINGHAM, MI 48009
1936482019	IN SOO SUH	16195 MADOLINE ST	BEVERLY HILLS	48025	08-19-36-482-019	BEVERLY HILLS, MI 48025
1936480043	ANDREW FLESZAR	993 BIRD AVE	BIRMINGHAM	48009	08-19-36-480-043	BIRMINGHAM, MI 48009
1936480047	MICHAEL VAN HYFTE	1087 BIRD AVE	BIRMINGHAM	48009	08-19-36-480-047	BIRMINGHAM, MI 48009
1936480039	KEVIN JOY	907 BIRD AVE	BIRMINGHAM	48009	08-19-36-480-039	BIRMINGHAM, MI 48009
1936482007	RONALD G COLANGELO JR	730 BIRD AVE	BIRMINGHAM	48009	08-19-36-482-007	BIRMINGHAM, MI 48009
1936482006	MATTHEW H LICAVOLI	716 BIRD AVE	BIRMINGHAM	48009	08-19-36-482-006	BIRMINGHAM, MI 48009
1936480046	ANDREW JONNA	1063 BIRD AVE	BIRMINGHAM	48009	08-19-36-480-046	BIRMINGHAM, MI 48009
1936482020	YVONNE BENDA REVOC TRUST	1038 BIRD AVE	BIRMINGHAM	48009	08-19-36-482-020	BIRMINGHAM, MI 48009
1936482017	MATTHEW J GURWIN	976 BIRD AVE	BIRMINGHAM	48009	08-19-36-482-017	BIRMINGHAM, MI 48009
1936482005	MICHAEL A MILLER	684 BIRD AVE	BIRMINGHAM	48009	08-19-36-482-005	BIRMINGHAM, MI 48009
	City of Birmingham - Clerk's Office	151 Martin				BIRMINGHAM, MI 48009

BIRMINGHAM
A WALKABLE CITY

February 10, 2026

TO: parcel #
NAME
ADDRESS
CITY/STATE/ZIP

Re: Bird Phase 1B Project, Contract #7-25(W)
Sewer and Water Lateral Special Assessment District (SAD)

To whom it may concern,

The City of Birmingham Bird Phase 1B Project will start in the Spring 2026. The project includes the replacement of the water main, sewer, and the streets will receive concrete curb, gutter and new concrete road.

This project will include the replacement of the water main and sewer improvements. The City intends to replace private sewer and water laterals meeting certain "useful life" criteria in the right-of-way in an effort to protect the public investments being made with this project. This will include the replacement of all sewer laterals that are 50 years of age or older, less than 6 inch diameter, or an unsuitable material. Water services less than the City minimum size of 1 inch diameter, are 60 years of age or older, or an unsuitable material will also be replaced. All unsuitable sewer laterals will be replaced with 6" schedule 40 PVC, and unsuitable water services will be replaced with new 1 inch diameter pipe. The lengths of sewer and/or water laterals replacement will be within the City's right-of-way. Enclosed is a map of properties included in the Sewer and Water Lateral SAD.

With this letter, you are receiving notifications for two public hearings for the Sewer and Water Lateral Special Assessment District (SAD):

- The Public Hearing of the Necessity to form a Special Assessment District for the sewer and water laterals replacement meeting the requirements as part of the Bird Phase 1B Water and Sewer Laterals Project is **Monday, March 9, 2026**, at the regularly scheduled City Commission meeting at 7:00 p.m. in City Hall at 151 Martin St.

- If necessity is determined at the April 21 hearing, a Public Hearing of Confirmation to confirm the Special Assessment District will follow on **Monday, March 23, 2026**, at the regularly scheduled City Commission meeting at 7:00 p.m. in City Hall at 151 Martin St.

The Engineering Department will have a resident meeting on **Tuesday, February 24, 2026, from 5:30 p.m. – 6:30 p.m.** in City Hall at 151 Martin St. in the City Commission room to discuss the project and answer any questions about the SAD process and construction.

Consistent with previous projects of this nature, it has been the City's policy to assess 100% of the costs of replacing the portion of unsuitable water and sewer laterals within the right-of-way to the property owner.

After the work is completed, an invoice will be generated and sent to the property owner of record for the public improvements. Payment in full will be expected within 30 days of receipt. If you are not in a position to pay off the charge in one payment, it can be broken into as many as 10 annual payments. An annual interest charge on the remaining balance, currently about 8.50 percent, will apply. Official estimates of the water and sewer lateral replacements will be provided at the Hearing of Necessity.

If you have any questions or concerns, please contact the Engineering Office at (248) 530-1850. You will have the opportunity to ask questions and speak directly to the City Commission at the Public Hearing of Necessity and at the Confirmation of the Roll.

Sincerely,



Melissa A. Coatta, P.E.
City Engineer

BIRD PHASE 1B PROJECT AREA



Limits of Project

Properties within Water Lateral SAD

Properties within Sewer Lateral SAD

Properties within Sewer and Water Lateral SAD

BIRD PHASE 1B PROJECT AREA



Limits of Project

Properties within Water Lateral SAD

Properties within Sewer Lateral SAD

Properties within Sewer and Water Lateral SAD

BIRD PHASE 1B PROJECT AREA



Limits of Project

Properties within Water Lateral SAD

Properties within Sewer Lateral SAD

Properties within Sewer and Water Lateral SAD

Funds Report				
	Available:	$2,438.23	PBP Account Number:	35884980
	Used:	$119,347.77	Indicia Number:	0008029208
	Total Pieces:	157106	Meter Number:	8029208
	Control Sum:	$121,786.00	Meter Name:	
	Resettable Piece Count:	20	Printed:	FEB 12 2026 9:19 AM
	Piece Count Value:	$14.80		

Clerk's Office

BIRMINGHAM
A WALKABLE CITY

151 Martin Street • P.O. Box 3001
Birmingham, Michigan 48012-3001

FIRST-CLASS

US POSTAGE PITNEY BOWES
ZIP 48009 $ 000.74⁰
02 7W
0008029208 FEB 12 2026

CLERK'S OFFICE
RECEIVED
FEB 17 2026
1:46 PM

City of Birmingham - Clerk's Office
151 Martin
BIRMINGHAM, MI 48009

Bird Ave Phase 1 48009$3368 C037

Nation+World roundup

OPENAI WEIGHED ALERT TO POLICE LAST SUMMER

TORONTO — ChatGPT-maker OpenAI said Friday it considered last year alerting Canadian police about the activities of a person who months later committed one of the worst school shootings in the country's history.

OpenAI said last June the company identified the account of Jesse Van Rootselaar via abuse detection efforts for "furtherance of violent activities." The San Francisco tech company said it considered whether to refer the account the Royal Canadian Mounted Police but determined at the time that the account activity did not meet a threshold for referral to law enforcement. OpenAI banned the account in June 2025 for violating its usage policy.

The 18-year-old killed eight people in a remote part of British Columbia last week and died from a self-inflicted gun shot wound.
— The Associated Press

CUBA



Carolina Silva Matos, a cancer patient, rests in a hospital bed at the National Institute of Oncology and Radiology in Havana, Cuba. Cuba's debilitated health care system has been pushed to the brink of collapse by the U.S. blockading the country's oil supply. **RAMON ESPINOSA — THE ASSOCIATED PRESS**

RANSOMWARE ATTACK CLOSES CLINICS

JACKSON, Miss. — A ransomware attack forced the University of Mississippi Medical Center to close all of its roughly three dozen clinics around the state and cancel elective procedures for a second day, hobbling one of the state's largest health care providers.

University officials warned that the shutdown could continue for days as they try to evaluate the extent of the attack, including whether patients' sensitive information was compromised, and restore network systems they took down as a precaution.

Richard Bell, 55, drove three hours from his home in Oxford the medical center's main campus in Jackson on Friday only to learn that he wouldn't be able to get his bloodwork or chemotherapy treatment.

"It was all shut down," Bell said. "It gets pretty frustrating."
— The Associated Press

PRELIMINARY DEAL FOR WWII PHOTOS SIGNED

ATHENS, Greece — A Belgian collector, who put up for online auction a series of World War II photographs showing the final moments of 200 Greeks executed by a Nazi firing squad, signed a preliminary agreement with Greece to obtain the photos after declaring them part of country's heritage.

Culture Minister Lina Mendoni announced the preliminary agreement after experts visited the collector and verified that the photos were genuine.

Twelve pictures showing 200 political prisoners being led to their deaths on May 1, 1944 appeared for sale on eBay on Saturday.

They are the only photographic evidence that has come to light of an execution that was a seminal moment in Greece's World War II history.
— The Associated Press

COURT CLEARS TEN COMMANDMENTS LAW

A U.S. appeals court has cleared the way for a Louisiana law requiring poster-sized displays of the Ten Commandments in public school classrooms to take effect.

The 5th U.S. Circuit Court of Appeals voted 12-6 to lift a block that a lower court first placed on the law in 2024. The court said it was too early to make a judgment call on the constitutionality of the law. That's partly because it's not yet clear how prominently schools may display the religious text, if teachers will refer to the Ten Commandments during classes or if other texts like the Mayflower Compact or the Declaration of Independence will also be displayed, the majority opinion said. Without those sorts of details, the panel decided it did not have enough information to weigh any First Amendment issues that might arise from the law.
— The Associated Press

PACIFICORP TO PAY $575M OVER WILDFIRES

PORTLAND, Ore. — PacifiCorp has agreed to pay $575 million to resolve the federal government's claims for damages stemming from six wildfires in Oregon and California in 2020 and 2022 in the utility's latest multimillion-dollar payout related to the deadly blazes.

The settlement resolves the federal government's claims that PacifiCorp's electrical lines negligently started four fires in Oregon in 2020 and two fires in California in 2020 and 2022, the Justice Department said. The money will help restore some of the 290,000 acres of public land that burned. It will also help repay the government for the cost of fighting the fires, which the department said was "critical because the U.S. Forest Service now spends more than half of its budget on wildfire suppression annually."
— The Associated Press

POLICE INVESTIGATE RAMMED SUBSTATION

LAS VEGAS — Las Vegas police say they're investigating a car that rammed into a power substation as a "terrorism-related event."

There's no ongoing threat to the public, Las Vegas Metropolitan Police Department Sheriff Kevin McMahill said. Police received a call reporting a vehicle crash through a secured gate at the substation in Boulder City.

The driver of the vehicle was 23-year-old Dawson Maloney from Albany, New York, who was reported missing and died from a self-inflicted gunshot wound, McMahill said. The man had communicated with family before the crash, referencing self-harm, and said he was going to commit an act that would place him on the news. He referred to himself as a terrorist in a message sent to his mother, according to police.
— The Associated Press

MACRON VOWS TO TACKLE VIOLENT GROUPS

LYON, France — French President Emmanuel Macron called for calm ahead of marches organized by far-right groups, after a nationalist activist died from a beating in Lyon in an incident that highlighted a climate of deep political tensions ahead of next year's presidential vote.

Macron said he will launch a review of violent activist groups, and urged "everyone to remain calm" before Saturday's tributes to Quentin Deranque, a 23-year-old who died of brain injuries in a hospital last week. The demonstrations will take place under heavy police scrutiny.

"This is a moment of remembrance and respect for this young compatriot who was killed, for his family and loved ones. That must come first. And then it is a moment of firmness and responsibility," Macron said.
— The Associated Press

MIDEAST TENSIONS

Israeli airstrikes in eastern Lebanon kill 8 Hezbollah members, officials say

By Fadi Tawil and Bassem Mroue
THE ASSOCIATED PRESS

RAYAK, Lebanon — Israeli airstrikes on eastern Lebanon have killed eight members of the militant Hezbollah group, including several local officials, two officials with the group said Saturday.

The Lebanese Health Ministry put the death toll at 10, but did not distinguish between militants and civilians.

The Hezbollah officials told The Associated Press that the eight militants were killed in strikes near the village of Rayak in northeast Lebanon late Friday. They spoke on condition of anonymity because they were not authorized to speak to the media about such details.

An Associated Press team that visited the scene of the strike Saturday morning saw that the top floor of a three-story building was knocked out.

The Israeli military said Saturday that several members of Hezbollah's missile unit, in three different command centers in the Baalbek area in Lebanon, were "eliminated."

The Israeli army added that the Hezbollah members killed were identified "as operating to accelerate readiness and force build-up processes, while planning fire attacks toward Israel."

One of the Hezbollah officials said that three of the dead were local commanders and identified them as Ali al-Moussawi, Mohammed al-Moussawi and Hussein Yaghi.

Yaghi was the son of prominent Hezbollah official and one of its founders, Mohammed Yaghi, who died in 2023. Mohammed Yaghi was also a close aide to late Hezbollah leader Hassan Nasrallah who was killed in an Israeli airstrike in September 2024.

Lebanon's Health Ministry said Saturday that Israeli strikes on eastern Lebanon killed 10 people and wounded 24, including three children.

Ali Abdullah, executive director of Rayak Hospital, told the AP that the strike occurred after sunset, adding that they have received 10 bodies and 21 wounded. He added that the dead included two non-Lebanese — a Syrian man and an Ethiopian woman. The wounded included five Syrians and three Ethiopians.

Ethiopians often come to Lebanon as migrant domestic workers.

A funeral was held Saturday afternoon in the eastern village of Nabi Chit for two Hezbollah members who were killed in the strikes.

After the Oct. 7, 2023, Hamas-led attack on Israel triggered war in Gaza, Hezbollah began firing rockets from Lebanon into Israel in support of Hamas and the Palestinians.

Israel responded with airstrikes and shelling. The low-level conflict escalated into full-scale war in September 2024, later reined in but not fully stopped by a U.S.-brokered ceasefire two months later.

Since then, Israel has accused Hezbollah of trying to rebuild and has carried out near-daily strikes in Lebanon that it says target Hezbollah militants and facilities.



People gather near a building destroyed in an Israeli strike in the village of Bednayel in eastern Lebanon, Saturday, Feb. 21, 2026. **BILAL HUSSEIN - THE ASSOCIATED PRESS**

Hezbollah has claimed one strike against Israel since the ceasefire.

The death toll from Friday's strikes was unusually high and comes at a moment of intensified tensions in the region as the United States has threatened to strike Iran — a backer of both Hezbollah and Hamas — if negotiations over Tehran's nuclear program fail to produce a deal.

Mroue reported from Beirut.

NOTICE OF PUBLIC HEARING
BIRMINGHAM CITY COMMISSION
PUBLIC HEARING OF NECESSITY & PUBLIC HEARING FOR CONFIRMATION OF THE ROLL

Meeting Date, Time, Location:	HEARING OF NECESSITY FOR SPECIAL ASSESSMENT DISTRICT Monday, February 23, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, March 9, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	**Oak Boulevard** (Greenwood to N Old Woodward): 692 Oak Ave, 680 Oak Ave, 670 Oak Ave, 640 Oak Ave, 608 Oak Ave, 556 Oak Ave, 520 Oak Ave, 450 Oak Ave, 533 Oak Ave, 511 Oak Ave, 607 Oak Ave, 615 Oak Ave, 635 Oak Ave, 651 Oka Ave, 667 Oak Ave, 679 Oak Ave, 850 Greenwood Blvd, 969 Woodland St, 885 N Old Woodward **Lakeside Drive** (Oak to Randall): 890 Lakeside Dr, 840 Lakeside Dr, 790 Lakeside Dr, 774 Lakeside Dr, 752 Lakeside Dr, 726 Lakeside Dr, 700 Lakeside Dr, 660 Lakeside Dr, 640 Lakeside Dr, 620 Lakeside Dr, 592 Lakeside Dr, 568 Lakeside Dr, 532 Lakeside Dr, 490 Lakeside Dr, 470 Lakeside Dr, 440 Lakeside Dr, 430 Lakeside Dr, 412 Lakeside Dr, 932 Lakeside Dr, 790 Lakeside Dr, 350 Lakeside Dr, 320 Lakeside Dr **Glenhurst Drive** (Oak to Pine): 515 N Glenhurst Dr, 535 N Glenhurst Dr, 559 N Glenhurst Dr, 587 N Glenhurst Dr, 617 N Glenhurst Dr, 639 N Glenhurst Dr, 655 N Glenhurst Dr, 693 N Glenhurst Dr, 717 N Glenhurst Dr, 755 N Glenhurst Dr, 781 N Glenhurst Dr, 825 N Glenhurst Dr, 871 N Glenhurst Dr, 520 N Glenhurst Dr, 534 N Glenhurst Dr, 550 N Glenhurst Dr, 584 N Glenhurst Dr, 612 N Glenhurst Dr, 634 N Glenhurst Dr, 650 N Glenhurst Dr, 690 N Glenhurst Dr, 736 N Glenhurst Dr, 770 N Glenhurst Dr, 19-26-328-001 **Northlawn Boulevard** (Gold Course to Southfield): 1300 Northlawn Blvd, 1330 Northlawn Blvd, 1360 Northlawn Blvd, 1390 Northlawn Blvd, 1395 Northlawn Blvd, 1385 Northlawn Blvd, 1371 Northlawn Blvd, 1355 Northlawn Blvd, 1323 Northlawn Blvd, 1301 Northlawn Blvd, 1231 Northlawn Blvd, 1225 Northlawn Blvd, 1187 Northlawn Blvd, 1155 Northlawn Blvd, 1121 Northlawn Blvd, 1083 Northlawn Blvd, 1061 Northlawn Blvd, 1049 Northlawn Blvd, 1005 Northlawn Blvd, 979 Northlawn Blvd, 995 Northlawn Blvd, 1400 Southfield Rd, 1308 Southfield Rd, 956 Northlawn Blvd, 972 Northlawn Blvd, 988 Northlawn Blvd, 1000 Northlawn Blvd, 1034 Northlawn Blvd, 1052 Northlawn Blvd, 1076 Northlawn Blvd, 1098 Northlawn Blvd, 1112 Northlawn Blvd, 1132 Northlawn Blvd, 1393 Latham Rd
Nature of Improvement:	This work will include routine cape seal treatment along unimproved roadways.
City Staff Contact:	Melissa Coatta, City Engineer mcoatta@bhamgov.org, (248)530-1839
Notice Requirements:	Newspaper Notice and First Class Mail to affected property owners 10 days prior. Publish 2/8/2026 & 2/22/2026
Approved minutes may be reviewed at:	City Clerk's Office or www.bhamgov.org/commissionagendas

Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760 Meeting ID: 655 079 760**

You or your agent may appear at the hearings to express your views; however, if you fail to protest either in person or by letter received on or before the date of the hearing, you cannot appeal the amount of the special assessment to the Michigan Tax Tribunal. Mail any correspondence to: City Clerk, P.O. Box 3001, Birmingham, MI 48012.
The property owner may file a written appeal of the special assessment with the State Tax Tribunal within 30 days after the confirmation of the special assessment roll if that special assessment was protested at the hearing held for the purpose of confirming the roll.
All special assessments, including installment payments, shall, from the date of the confirmation thereof, constitute a lien on the respective lots or parcels assessed, and until paid shall be charged against the respective owners of the lots or parcels assessed.

Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk's Office at 248.530.1880 (voice) or 248.644.3405 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance.

NOTICE OF PUBLIC HEARING
BIRMINGHAM CITY COMMISSION
PUBLIC HEARING OF NECESSITY & PUBLIC HEARING FOR CONFIRMATION OF THE ROLL

Meeting Date, Time, Location:	HEARING OF NECESSITY FOR SPECIAL ASSESSMENT DISTRICT Monday, February 23, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, March 9, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	Park Street, Brookside Avenue and Ravine Road; below are the assessed parcels: • 547 Park St • 564 Brookside Ave • 552 Brookside Ave • 544 Brookside Ave • 243 Ravine Rd
Nature of Improvement:	This work will include the installation of new staircases as part of replacing the existing retaining wall along Ravine Road, Brookside Avenue, and Park Street.
City Staff Contact:	Melissa Coatta, City Engineer mcoatta@bhamgov.org, (248)530-1839
Notice Requirements:	Newspaper Notice and First Class Mail to affected property owners 10 days prior. Publish 2/8/2026 & 2/22/2026
Approved minutes may be reviewed at:	City Clerk's Office or www.bhamgov.org/commissionagendas

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NOTICE OF PUBLIC HEARING
BIRMINGHAM CITY COMMISSION
PUBLIC HEARING OF NECESSITY & PUBLIC HEARING FOR CONFIRMATION OF THE ROLL

Meeting Date, Time, Location:	HEARING OF NECESSITY FOR SPECIAL ASSESSMENT DISTRICT Monday, March 9, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, March 23, 2026, 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	Bird Avenue; below are the assessed addresses: 668 Bird Ave, 684 Bird Ave, 695 Bird Ave, 711 Bird Ave, 716 Bird Ave, 730 Bird Ave, 747 Bird Ave, 891 Bird Ave, 900 Bird Ave, 907 Bird Ave, 954 Bird Ave, 955 Bird Ave, 976 Bird Ave, 990 Bird Ave, 993 Bird Ave, 1016 Bird Ave, 1038 Bird Ave, 1063 Bird Ave, 1087 Bird Ave
Nature of Improvement:	The project includes the replacement of the water main, sewer, and the streets will receive concrete curb, gutter and new concrete road.
City Staff Contact:	Melissa Coatta, City Engineer mcoatta@bhamgov.org, (248)530-1839
Notice Requirements:	Newspaper Notice and First Class Mail to affected property owners 10 days prior. Publish 2/22/2026 & 3/8/2026
Approved minutes may be reviewed at:	City Clerk's Office or www.bhamgov.org/commissionagendas

Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760 Meeting ID: 655 079 760**

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The property owner may file a written appeal of the special assessment with the State Tax Tribunal within 30 days after the confirmation of the special assessment roll if that special assessment was protested at the hearing held for the purpose of confirming the roll.
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BIRMINGHAM
A WALKABLE CITY



Bird Phase 1B Project

Hearing of Necessity for Sewer and Water Laterals Special Assessment District (SAD)

Engineering Department

Date: March 9, 2026

Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District

➢Overview

- Limits of Bird Avenue from Grant Street to Cummings Avenue.
- Project includes:
  - New water main
  - Sewer improvements
  - New concrete pavement
- Special Assessment District (SAD) for Sewer and Water Laterals to be paid by the property owner at one hundred percent of the costs.

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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District

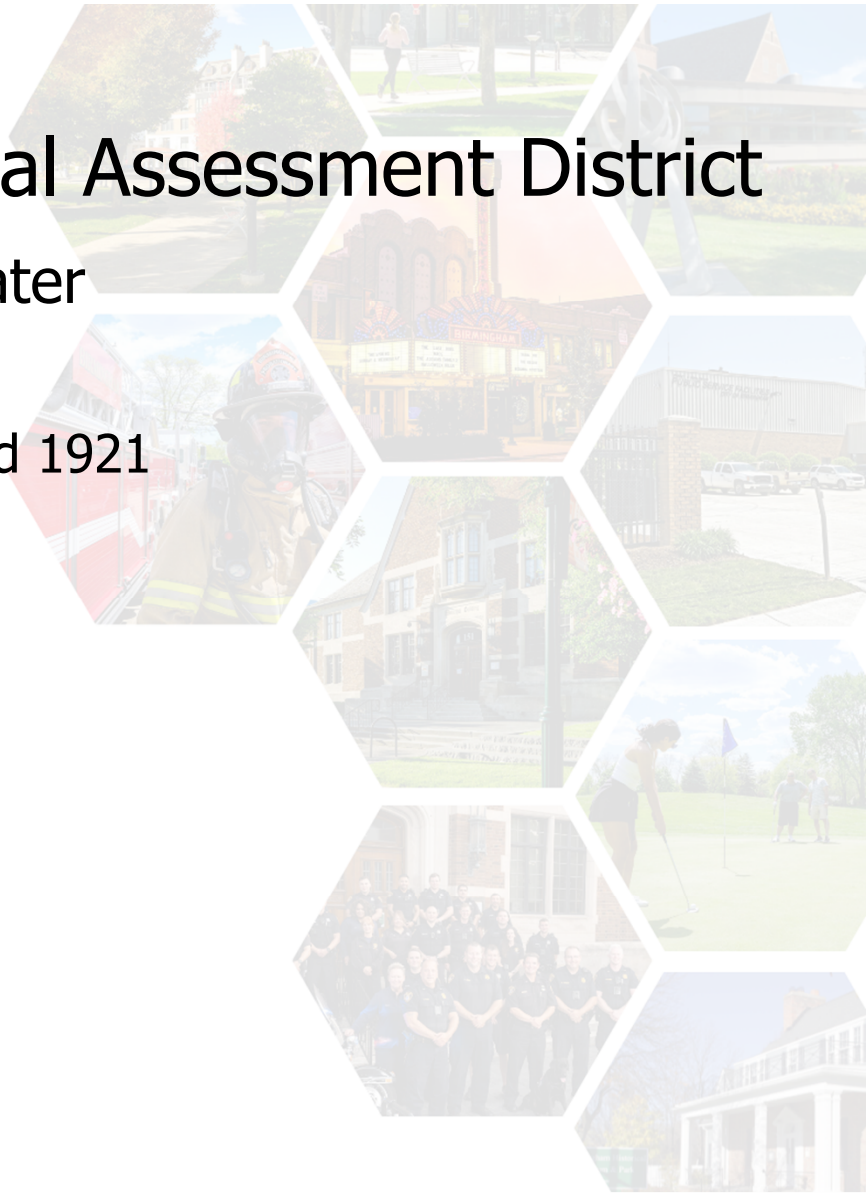
➢General Construction Information: Water

Water Main Size:

- Existing Water: 4” cast iron pipe, installed 1921
- Proposed Water: 8” ductile iron

Concerns:

- Nearly 100 years old
- Existing water main is 4”
- Has experienced water main breaks.



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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District



Existing 4” Water Main on Bird Phase 1A, Installed 1931

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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District

➢General Construction Information:

Existing Sewer:

- Existing Sewer: 8”-15” concrete, installed 1960-1970
- Proposed Sewer: 15” Storm sewer and 8”-15” Combined Sewer
- Some segments of existing sewer to be lined

Concerns:

- Sections of the sewer are in need of open cut replacement due to the condition of the pipe and not being a candidate for sewer lining
- Existing catch basins are in poor condition and need replacement
- Proposed storm sewer improvements will create a separated storm system on these streets

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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District





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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District





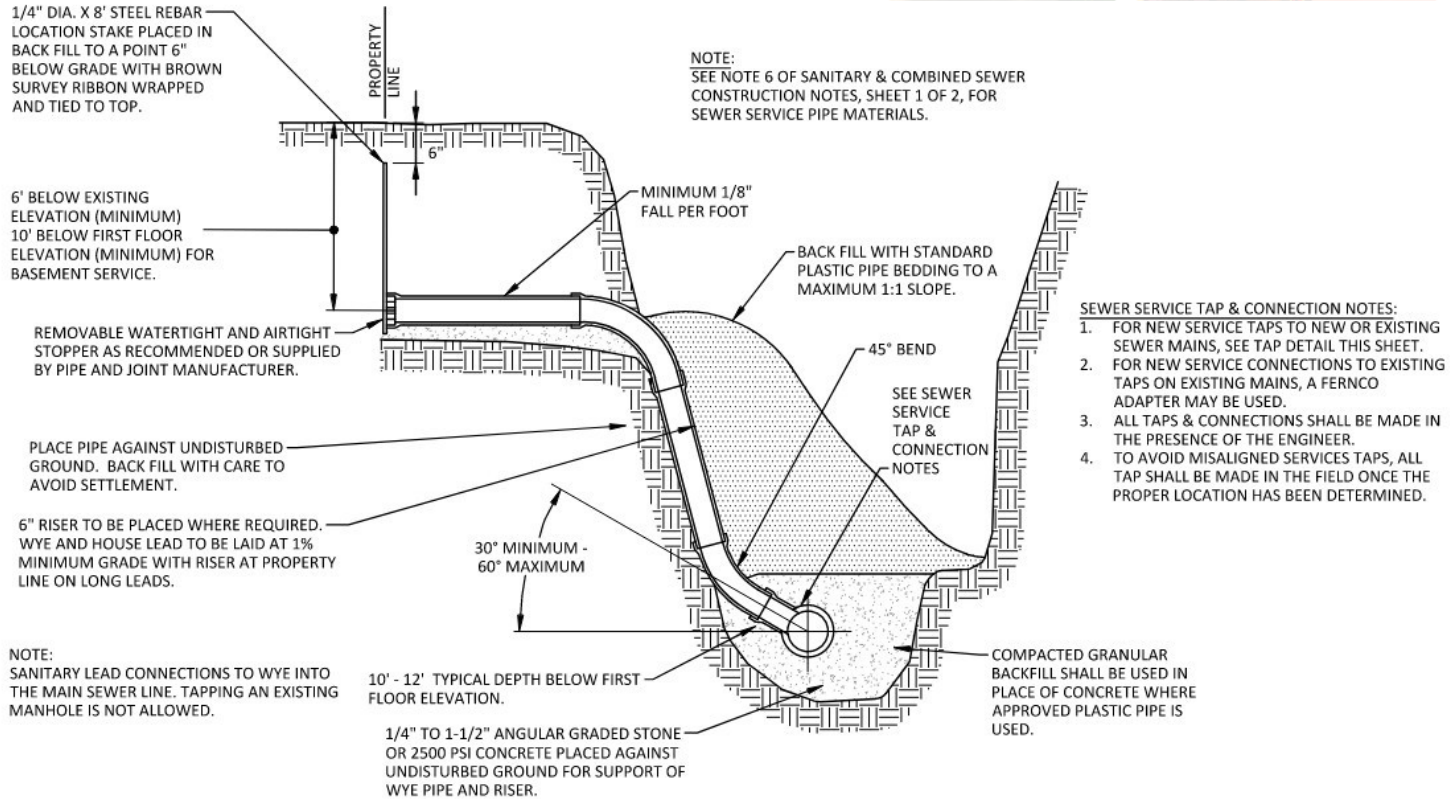
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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District

- City policy: To protect the public investment in capital improvement projects in public roadways
  - Water Laterals:
    - Replace all water services that are 60 years of age or older, are less than one inch in diameter, or are constructed of an unsuitable material.
    - All unsuitable water services will be replaced with a new 1” diameter service, or be replaced to match the existing diameter if greater than 1”
  - Sewer Laterals:
    - Replace all sewer laterals that are 50 years of age or older, are less than 6” in diameter, or are constructed of unsuitable material.
    - All unsuitable sewer laterals will be replaced with 6" schedule 40 PVC.

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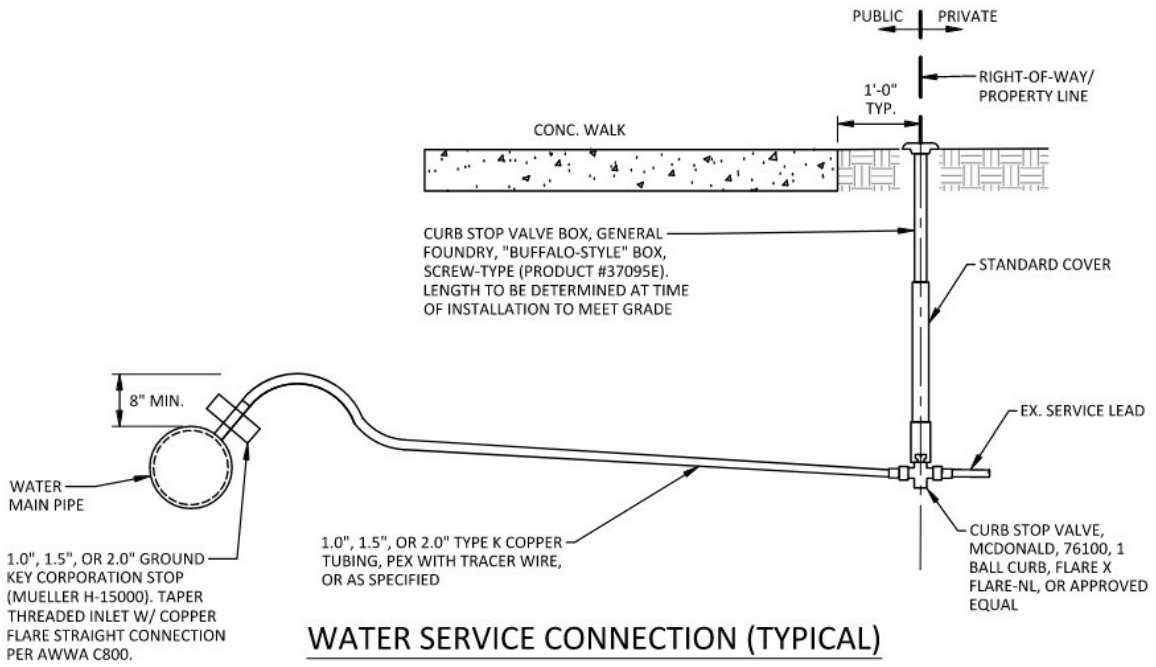
Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District



TYPICAL HOUSE LEAD DETAIL

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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District



WATER SERVICE CONNECTION (TYPICAL)

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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District

- SAD:
  - Water Lateral: 100% cost to the property owner
  - Sewer Lateral : 100% cost to the property owner
  - Cost: Property owners may pay in full or over a 5-year period with interest. The interest rate will be confirmed at the Confirmation of Roll.

BIRMINGHAM
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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District

- SAD:
  - Received Bids for Project on February 12, 2026
  - Water:
    - $53.00 per lineal foot for 1” diameter water service
  - Sewer:
    - $112.00 per lineal foot for 6” sewer pipe

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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District



Limits of Project

Properties within Water Lateral SAD

Properties within Sewer Lateral SAD

Properties within Sewer and Water Lateral SAD

Sewer and Water Lateral SAD Project Limits

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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District



Sewer and Water Lateral SAD Project Limits

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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District



Limits of Project

Properties within Water Lateral SAD

Properties within Sewer Lateral SAD

Properties within Sewer and Water Lateral SAD

Sewer and Water Lateral SAD Project Limits

BIRMINGHAM
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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District

➢PROPERTIES LOCATED IN WATER AND SEWER LATERAL SAD:

Sidwell Number	Street Address
1936482004	668 Bird Ave
1936482005	684 Bird Ave
1936480030	695 Bird Ave
1936480031	711 Bird Ave
1936482006	716 Bird Ave
1936482007	730 Bird Ave
1936480067	747 Bird Ave
1936480038	891 Bird Ave
1936482048	900 Bird Ave
1936480039	907 Bird Ave

Sidwell Number	Street Address
1936482016	954 Bird Ave
1936480063	955 Bird Ave
1936482017	976 Bird Ave
1936482018	990 Bird Ave
1936480043	993 Bird Ave
1936482019	1016 Bird Ave
1936482020	1038 Bird Ave
1936480046	1063 Bird Ave
1936480047	1087 Bird Ave

BIRMINGHAM
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Bird Phase 1B Project
Sewer and Water Lateral Special Assessment District

➢Summary

- The Engineering Department recommends that the City Commission declare necessity and approve the SAD for Bird Phase 1B Project for sewer and water laterals.
- Should the Commission approve the SAD, a public hearing for Confirmation of the Roll will be held on March 23, 2026.

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Planning Department

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Leah Blizinski, City Planner

SUBJECT: Public Hearing for 600 N. Old Woodward Suite 101 & 203 - Old World Pizzeria - Special Land Use Permit, Final Site Plan & Design Review

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INTRODUCTION:

The applicant has submitted a Special Land Use Permit application, Final Site Plan & Design Review application for a food or drink establishment in the O2 (Office Commercial) and D2 (Downtown Overlay) zoning districts at the north end of Downtown Birmingham. The necessity for a Special Land Use Permit is simple in that the O2 zoning district requires such for a food or drink establishment. There will be no liquor sales for on premise or off premise consumption at this juncture. The restaurant will have seating as well as carryout options.

In the recent past, the site was home to Café Succo, a food and drink establishment operating under a Special Land Use Permit since 2013. Café Succo was a sit down juice bar and coffee shop and also did not offer liquor sales for on premise or off premise consumption.

The proposed new restaurant, Old World Pizzeria, will serve pizza for takeout or eat-in with a modest amount of seating proposed. The proposal includes the kitchen in the basement, a kitchen and service counter on the first floor, seating for 8 (4 chairs and 4 tables, with seating for 4 on a bench along the front wall) in a dining area at the front of the first floor (N. Old Woodward side). There are no outdoor seats proposed at this time.

BACKGROUND:

On January 28, 2026 (Agenda - Video), the Planning Board moved to recommend approval to the City Commission of the Special Land Use Permit, Final Site Plan & Design Review application for 600 N. Old Woodward Suites 101 & 203 – Old World Pizzeria.

LEGAL REVIEW:

The City Attorney has reviewed this request and has no objections as to form and content.

FISCAL IMPACT:

There are no fiscal impacts related to the Special Land Use Permit and Final Site Plan & Design

Review request submitted.

SUSTAINABILITY:
There are no direct sustainability considerations as a part of this Special Land Use Permit.

DESIGN CONSIDERATIONS:
At this time the applicant has not proposed any changes to the exterior of the building. The outdoor dining adjacent to the site is a common space of the multi-tenant building, is not a part of this site plan and is not proposed to change. There is no signage being approved as a part of this application.

PUBLIC COMMUNICATIONS:
As required for Special Land Use Permit Reviews, a legal ad was placed in a newspaper of local circulation to advertise the public hearing at the City Commission meeting on March 23, 2026. In addition, postcards were sent out to property owners and occupants within 300 feet of the subject site.

SUMMARY:
The Planning Department requests that the City Commission consider the Special Land Use Permit for 600 N. Old Woodward Suites 101 & 203 for Old World Pizzeria, a new food and drink establishment in the O2 zoning district.

ATTACHMENTS:
1. Old World Pizzeria - Resolution
2. Old World Pizzeria - Special Land Use Permit Contract
3. Old World Pizzeria - Site/Design Plans
4. Old World Pizzeria - January 28, 2026 Planning Board Report

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to approve the Special Land Use Permit for 600 N. Old Woodward Suites 101 & 203, to permit a new food and drink establishment -- Old World Pizzeria -- to open in the O2 zoning district.

Old World Pizzeria
600 N. Old Woodward Suites 101 & 203
Special Land Use Permit 2026

WHEREAS, A Special Land Use Permit, Final Site Plan & Design Review application was filed in January 2026 seeking approval for a new food and drink establishment in the O2 Zoning District;

WHEREAS, The land for which the Special Land Use Permit is sought is located on the east side of N. Old Woodward, north of Harmon and adjacent to Lot 6 public parking;

WHEREAS, The land is zoned O2 (Office/Commercial) and D2 (Downtown Overlay), which permits food and drink establishments with a Special Land Use Permit;

WHEREAS, Article 7, section 7.34 of Chapter 126, Zoning requires a Special Land Use Permit to be considered and acted upon by the Birmingham City Commission, after receiving recommendations on the site plan and design from the Planning Board for the proposed Special Land Use;

WHEREAS, The Birmingham Planning Board on January 28, 2026 reviewed the application for Special Land Use Permit, Final Site Plan & Design Review and moved to adopt the findings of the Planning Department in the report dated January 28, 2026 related to the approval criteria outlined in Article 7, Sections 7.27 and 7.36 of the Zoning Ordinance and to recommend approval to the City Commission for the new food and drink establishment in the O2 zoning district;

WHEREAS, The Birmingham City Commission conducted a public hearing on March 23, 2026, and has reviewed the Special Land Use Permit, Final Site Plan & Design Review application and the standards for such review as set forth in Article 7, sections 7.27 and 7.36 of Chapter 126, Zoning, of the City Code;

THEREFORE, BE IT RESOLVED, The Birmingham City Commission adopts the findings of Planning Board and finds the standards imposed in Article 7, Sections 7.27 and 7.36 of the Zoning Ordinance and other applicable standards in the City Code have been met, and that Old World Pizzeria's Bistro application for a Special Land Use Permit, Final Site Plan & Design Review at 600 N. Old Woodward Suites 101 & 203 is hereby approved;

BE IT FURTHER RESOLVED, That the City Commission determines that to ensure continued compliance with Code standards and to protect public health, safety, and welfare, this Special Land Use Permit is granted subject to the following conditions:

1. Old World Pizzeria shall abide by all provisions of the Birmingham City Code;
2. Old World Pizzeria shall comply with the approved site and design plans and any amendments thereto; and
3. The Special Land Use Permit may be canceled by the City Commission upon finding after proper notice and a hearing that the continued use is not in the public interest.

BE IT FURTHER RESOLVED, That failure to comply with any of the above conditions shall

result in termination of the Special Land Use Permit.

BE IT FURTHER RESOLVED, Except as herein specifically provided, Old World Pizzeria and its heirs, successors, and assigns shall be bound by all ordinances of the City of Birmingham in effect at the time of the issuance of this permit, and as they may be subsequently amended. Failure of Old World Pizzeria to comply with all the ordinances of the City may result in the Commission revoking this Special Land Use Permit.

BE IT FURTHER RESOLVED that Old World Pizzeria is recommended for approval of a new food and drink establishment in the O2 and D2 zoning districts at 600 N. Old Woodward Suites 101 & 203, subject to final inspection.

I, Alexandria Bingham, City Clerk of the City of Birmingham, Michigan, do hereby certify that the foregoing is a true and correct copy of the resolution adopted by the Birmingham City Commission at its regular meeting held on March 23, 2026.

_____

Alexandria Bingham
City Clerk

CONTRACT FOR A SPECIAL LAND USE PERMIT
FOR 600 N. OLD WOODWARD SUITES 101 & 203 E. – OLD WORLD PIZZERIA

This Contract is entered into this ___day of _____, 2026 by and between **OLD WORLD PIZZERIA, LLC**, whose address is 116 N. Michigan Ave., Saginaw MI 48602, (herein referred to as Old World Pizzeria) and the **CITY OF BIRMINGHAM**, a Michigan Municipal Corporation, whose address is 151 Martin Street, Birmingham, Michigan 48012 (City).

RECITALS:

WHEREAS, A Special Land Use Permit, Final Site Plan & Design Review application was filed in January 2026 seeking approval for a new food and drink establishment in the O2 Zoning District;

WHEREAS, The land for which the Special Land Use Permit is sought is located on the east side of N. Old Woodward, north of Harmon and adjacent to Lot 6 public parking;

WHEREAS, The land is zoned O2 (Office/Commercial) and D2 (Downtown Overlay), which permits food and drink establishments with a Special Land Use Permit;

WHEREAS, Article 7, section 7.34 of Chapter 126, Zoning requires a Special Land Use Permit to be considered and acted upon by the Birmingham City Commission, after receiving recommendations on the site plan and design from the Planning Board for the proposed Special Land Use;

WHEREAS, The Birmingham Planning Board on January 28, 2026 reviewed the application for Special Land Use Permit, Final Site Plan & Design Review and moved to adopt the findings of the Planning Department in the report dated January 28, 2026 related to the approval criteria outlined in Article 7, Sections 7.27 and 7.36 of the Zoning Ordinance and recommend approval to the City Commission for the new food and drink establishment in the O2 zoning district;

WHEREAS, The Birmingham City Commission has conducted a public hearing on March 23, 2026, and has reviewed the Special Land Use Permit, Final Site Plan & Design Review application and the standards for such review as set forth in Article 7, sections 7.27 and 7.36 of Chapter 126, Zoning, of the City Code;

THEREFORE, the parties agree as follows:

1. Old World Pizzeria acknowledges that no modifications to the site plan, floor plan, elevations or operation of the establishment may be made unless approved by the City Commission through a Special Land Use Permit Amendment as required in the Zoning Ordinance. Modifications include, but are not limited to, name changes, ownership changes, remodeling, etc.

2. Old World Pizzeria agrees that it shall adhere to all Federal, State and Local ordinances

currently in effect or as subsequently amended or enacted.

3. To the fullest extent permitted by law, Old World Pizzeria and any entity or person for whom Old World Pizzeria is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City, its elected and appointed officials, employees and volunteers and others working on behalf of the City against any and all claims, demands, suits, or loss, including all costs connected therewith, including all costs and actual attorney fees, and for any damages which may be asserted, claimed or recovered against or from the City, its elected and appointed officials, employees, volunteers or others working on behalf of the City, by reason of personal injury, including bodily injury, death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with Old World Pizzeria's operation at the Property. Old World Pizzeria is not liable if the act or omission is the City's.

4. In the event Old World Pizzeria fails to reimburse the City the costs and/or attorney fees as required herein, or any part thereof, then said amount could be transferred to the tax roll in accordance with Section 1-14 of the Birmingham City Code as acknowledged by the Business Owner, Old World Pizzeria, whose address is 48009116 N. Michigan Ave., Saginaw MI 48602.

5. This Contract shall be governed by and performed, interpreted and enforced in accordance with the laws of the State of Michigan.

6. If any provision of this Contract is declared invalid, illegal or unenforceable, such provision shall be severed from this Contract and all other provisions shall remain in full force and effect.

7. The City determines that to ensure continued compliance with Code standards and to protect public health, safety, and welfare, this Special Land Use Permit is granted subject to the following conditions:

a. Old World Pizzeria shall abide by all provisions of the Birmingham City Code;
b. Old World Pizzeria shall comply with the approved site and design plans and any amendments thereto; and
c. The Special Land Use Permit may be canceled by the City Commission upon finding after proper notice and a hearing that the continued use is not in the public interest.

8. Failure to comply with any of the above conditions may result in termination of the Special Land Use Permit after Old World Pizzeria has been given notice and a hearing.

9. Except as herein specifically provided Old World Pizzeria and its heirs, successors, and assigns shall be bound by all ordinances of the City of Birmingham in effect at the time of the issuance of this permit, and as they may be subsequently amended. Failure of Old World Pizzeria to comply with all the ordinances of the City may result in the Commission revoking this Special Land Use Permit, after notice and a hearing.

10. Old World Pizzeria is recommended for the approval of a food and drink establishment in the O2 and D2 zoning districts of Birmingham at 600 N. Old Woodward, subject to final

inspection.

11. This Contract shall be binding upon and apply and inure to the benefit of the parties hereto and their respective successors or assigns. The covenants, conditions, and the agreements herein contained are hereby declared binding on the City and Old World Pizzeria. It is further agreed that there shall be no change, modification, or alteration hereof, except in writing, signed by all of the parties hereto. No party shall assign any of the rights under this Contract without prior approval, in writing, of the other. Any attempt at assignment without prior written consent shall be void and of no effect.

(This space intentionally left blank)

IN WITNESS WHEREOF, the parties hereby have executed this Contract as of the date set forth above.

OLD WORLD PIZZERIA, LLC

By: Cyrus Gumus

Its: Managing Partner

Date: 3/13/2026

STATE OF MICHIGAN)
) ss:
COUNTY OF OAKLAND)

On this _____day of _____, 2026, before me personally appeared _____, who acknowledged that with authority on behalf of **OLD WORLD PIZZERIA, LLC** to do so he/she signed this Agreement.

_____
Notary Public
_____County, Michigan
Acting in _____ County, Michigan
My commission expires: _____

CITY OF BIRMINGHAM

By: _____
Clinton Baller, Mayor

By: _____
Alexandria D. Bingham, City Clerk

APPROVED:

_____
Jana L. Ecker, City Manager
(Approved as to substance)

_____
Nicholas Dupuis, Planning Director
(Approved as to substance)

_____
Mary M. Kucharek, City Attorney
(Approved as to form)

Old World Pizzeria

Coming Soon To Suite 203 and Suite 101 located at

600 N. Old Woodward in the Maplewood Office Park

O.W.P.

OLD WORLD PIZZERIA

Project Goals

- **Bring Old World Pizzeria to Birmingham** with the same scratch-made dough, house recipes, and consistent guest experience.
- **Create a vibrant, family-friendly neighborhood destination** that activates the street, supports walkability, and adds energy to the downtown dining mix.
- **Invest long-term in the community** through local hiring, strong operations, and a high-quality buildout that adds to the already exceptional scene of Birmingham.

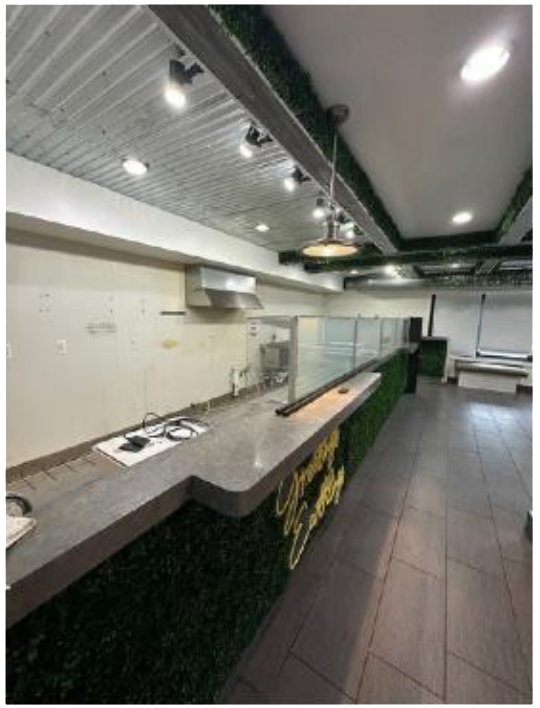
Building Information

Formerly Café Succo

600 North Old Woodward Birmingham, MI

IMAGES | Existing Former Café Succo










The Original Old World Pizzeria

IMAGES | Existing OWP















20” Round Pies

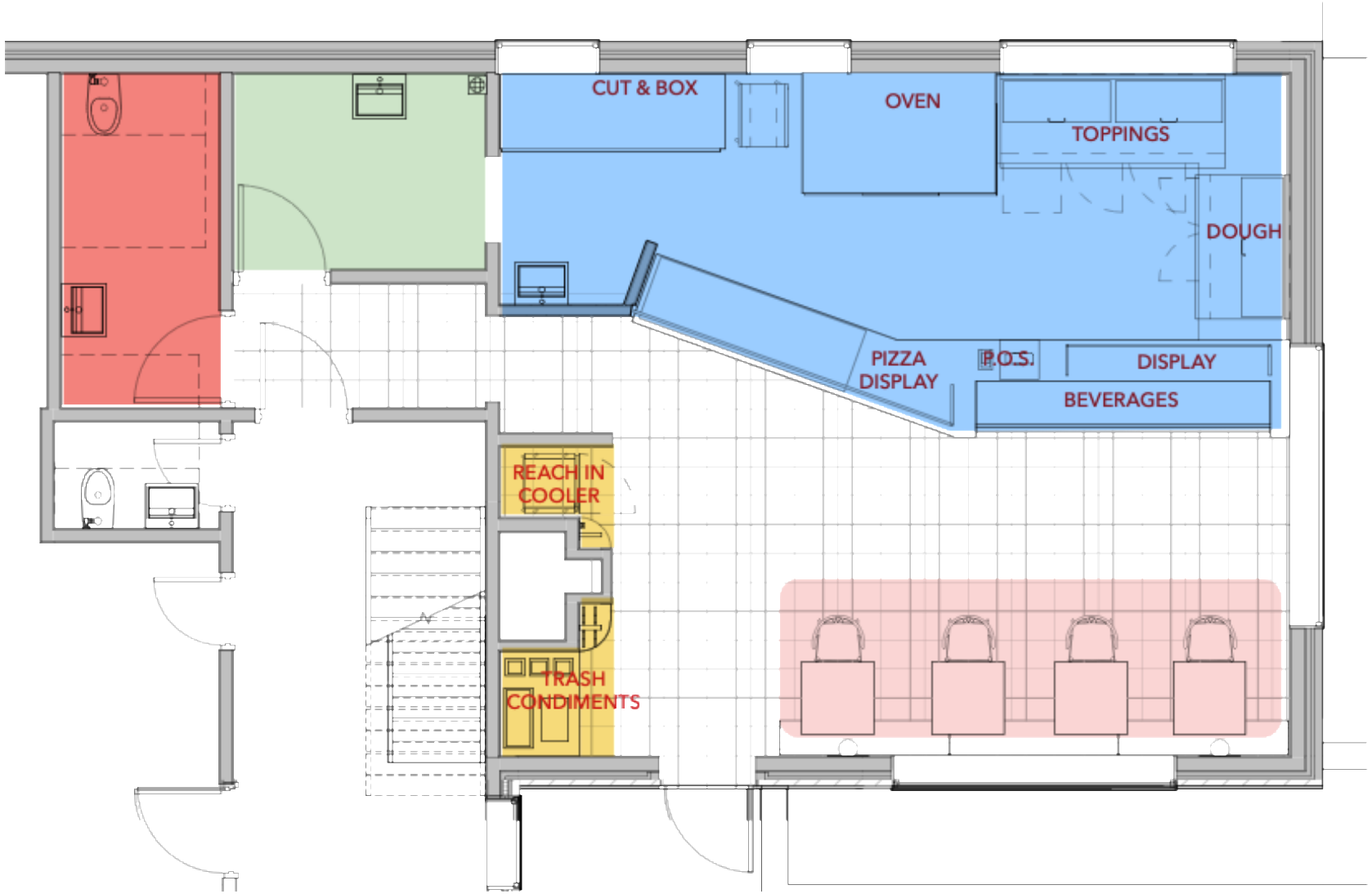



Leelanau
LOCAL CHERRY
CHERRY LIMEADE
CHERRY LEMONADE


Eat Your Dreams

Proposed Plans

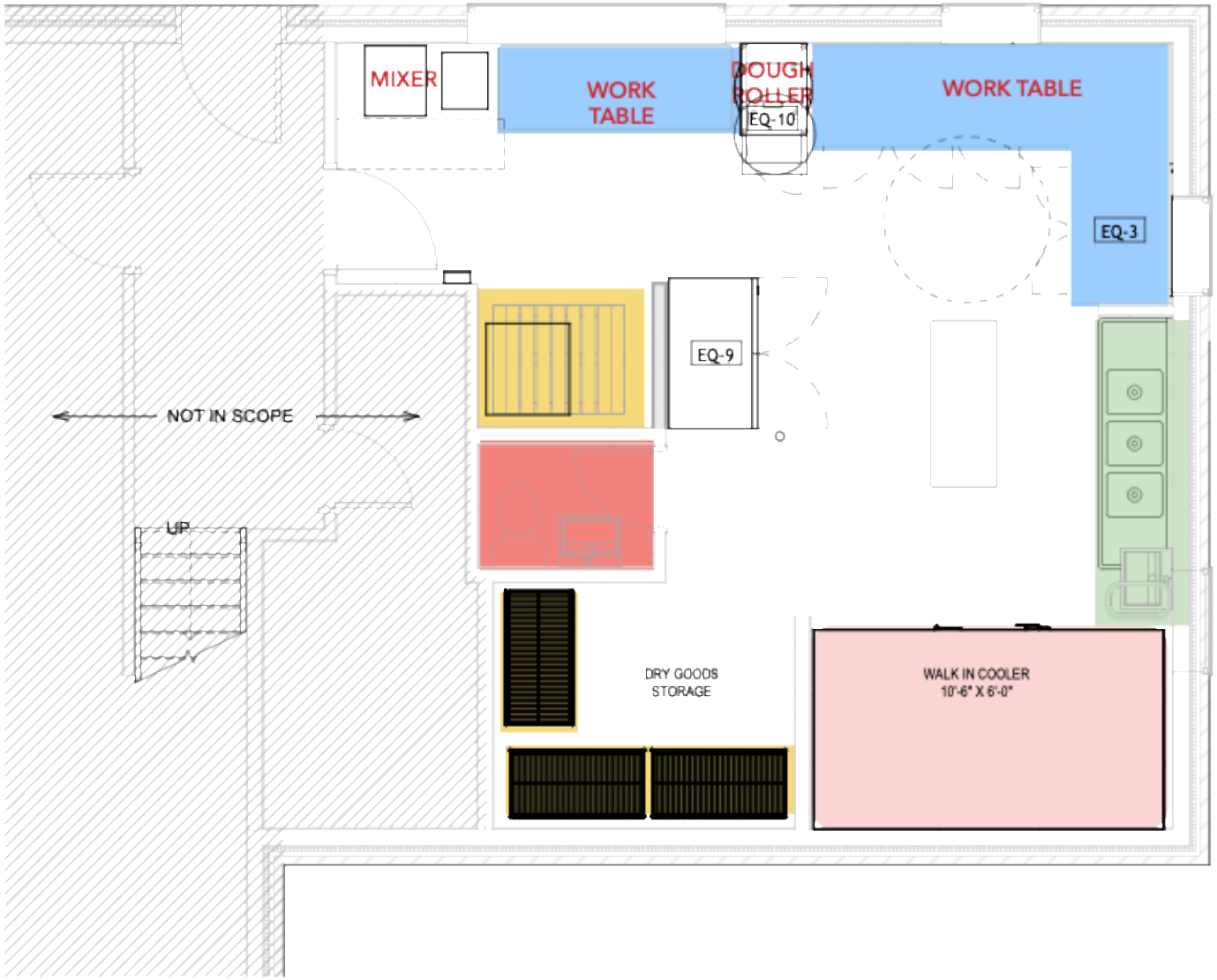
1ST FLOOR | Proposed Plan



KEY

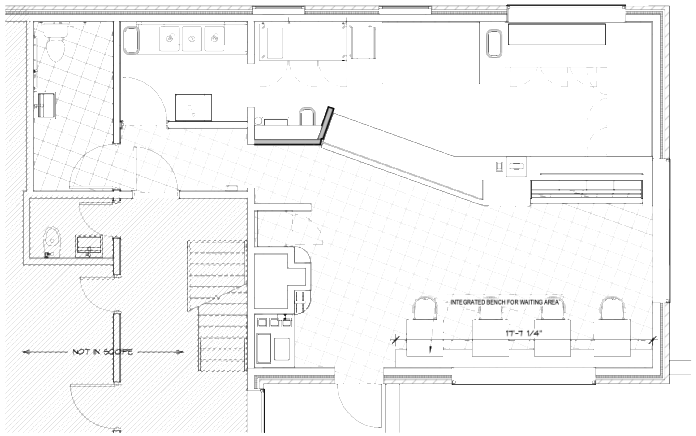
- FOOD PREP & DISPLAY
- 3 COMPARTMENT SINK
- TOILET ROOM
- STORAGE / DISPLAY
- SEATING AREA

BASEMENT | Proposed Plan



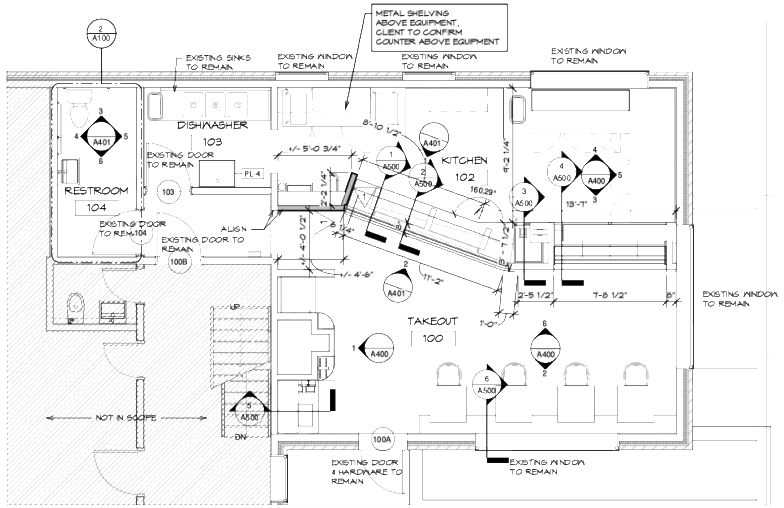
KEY

- FOOD PREP
- 3 COMPARTMENT SINK
- TOILET ROOM
- STORAGE
- WALK IN COOLER



FIRST FLOOR - FURNTITURE

Scale: 1/4" = 1'-0"



FIRST FLOOR - PLAN

Scale: 1/4" = 1'-0"

Door Schedule

Dr. No.	Door Size	Door Location	Door Type	Door Material	Frame Type	Frame Material	Hardware Type	Rating	Remarks
001	3' - 0" x 7' - 0"	KITCHEN	EX.	EX.	EX.	EX.	EX.		1
002	2' - 4" x 7' - 0"	EX. BATH.	EX.	EX.	EX.	EX.	EX.		2
100A	3' - 0" x 7' - 0"	KITCHEN	EX.	EX.	EX.	EX.	EX.		1
100B	3' - 0" x 7' - 0"	KITCHEN	EX.	EX.	EX.	EX.	A		
103	3' - 0" x 7' - 0"	DISHWASHER	EX.	EX.	EX.	EX.	B		
104	3' - 0" x 7' - 0"	RESTROOM	EX.	EX.	EX.	EX.	C		

REMARKS:
1. EXISTING DOOR, FRAME AND HARDWARE TO REMAIN. LOCK TO BE RE-KEY
2. EXISTING DOOR, FRAME AND HARDWARE TO REMAIN.

Hardware		
INTERIOR DOOR - Set D Butts Lockset w/ Keypad Bumper	INTERIOR DOOR - Set C Butts Indicator Latchset w/ Lockset Bumper Closer	INTERIOR DOOR - Set C Butts Latchset Bumper

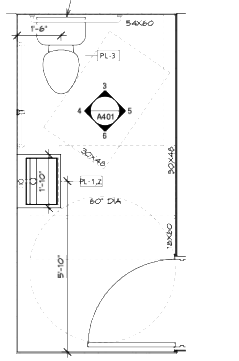
ALL DOORS TO HAVE LEVER HANDLE LOCK AND LATCHSETS TO MEET WITH BARRIER FREE REQUIREMENTS. SEE SPECIFICATIONS

ALL DOORS TO BE SOLID CORE WITH A STAIN / POLYURETHANE FINISH TO BE APPROVED BY OWNER. WOOD FRAMES TO BE PAINTED FINISH.

DOOR OPENING FORCE WILL BE AS FOLLOWS:
1. INTERIOR HINGED DOORS (OTHER THAN FIRE DOORS):- 5.0 LBS OR 22.2 N.
2. SLIDING OR FOLDING DOORS = RELEASED WITH A FORCE OF 15 LBS OR 67 N SET IN MOTION WITH A FORCE OF 30 LBS OR 133

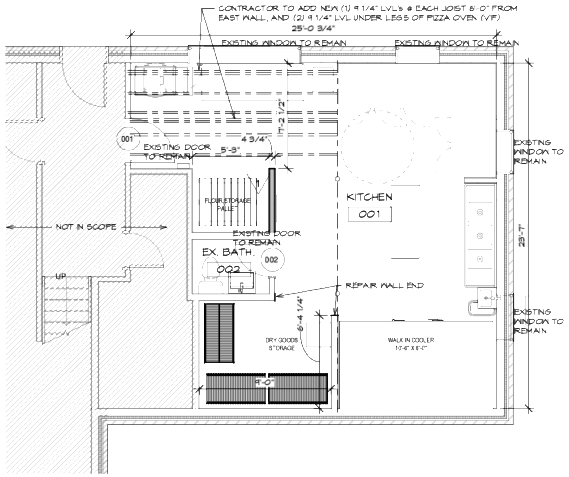
RESTROOM

Scale: 1/2" = 1'-0"



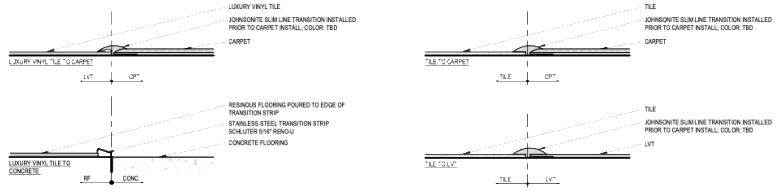
BASEMENT - PLAN

Scale: 1/4" = 1'-0"

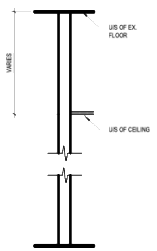


WALL LEGEND

1 — 5/8" GYP. BOARD ON BOTH SIDES OF 9 5/8" METAL STUDS @ 16" O.C. GYPSUM BOARD TO UNDERSIDE OF FLOOR DECK ABOVE. INSTALL MINERAL WOOL BATT INSULATION FOR THE FIRE BLOCKING AT ALL CEILING LINES AND AT THE TOP OF THE STUD WALL. INSTALL SLIP JOINT TOP TRACK TO THE UNDER SIDE OF THE EXISTING METAL DECK AND STRUCTURE

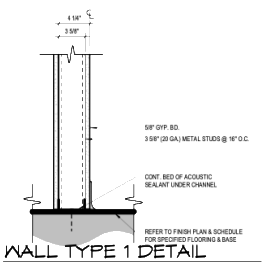


FLOOR FINISH TRANSITION



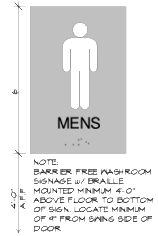
WALL HEIGHT DETAIL

Scale: N.T.S.



WALL TYPE 1 DETAIL

Scale: N.T.S.



NOTE:
BARRIER FREE WASHROOM SIGNAGE w/ BRAILLE MOUNTED MINIMUM 4'-0" ABOVE FLOOR TO BOTTOM OF SIGN. LOCATE MINIMUM OF 4" FROM SWING SIDE OF DOOR.

Restroom Sign

GENERAL NEW WORK FLOOR PLAN NOTES

1. ANY BUILDOUT THAT IS DEVELOPED FROM THE INTENT OF THIS INFORMATION MUST COMPLY WITH ALL APPLICABLE BUILDING CODES, REGULATIONS, AND STANDARDS.
2. PROVIDE EXIT SIGNS AS REQ'D WHICH SHALL CONFORM TO ALL APPLICABLE CODES. EXIT SIGNS SHALL BE INTERNALLY OR EXTERNALLY ILLUMINATED BY TWO ELECTRICAL LAMPS OR SHALL BE OF AN APPROVED SELF-LUMINOUS TYPE. WHEN THE LUMINANCE ON THE FACE OF AN EXIT SIGN IS FROM AN EXTERNAL SOURCE, IT SHALL HAVE AN INTENSITY OF NOT LESS THAN 50 FOOTCANDLES FROM EITHER LAMP. INTERNALLY ILLUMINATED SIGNS SHALL PROVIDE EQUIVALENT ILLUMINESCENCE. THE COLOR AND DESIGN OF LETTERING, ARROWS AND OTHER SYMBOLS ON THE EXIT SIGN SHALL BE IN CONTRAST WITH THEIR BACKGROUND. WORDS ON THE SIGN SHALL BE IN BLOCK LETTERS, 6" IN HEIGHT WITH A STROKE OF NOT LESS THAN 3/4". REFERENCE ELECTRICAL DWG. FOR QUANTITY & LOCATIONS.
3. EXITS SHALL BE ILLUMINATED AT ANY TIME THE BUILDING IS OCCUPIED WITH LIGHT HAVING AN INTENSITY OF NOT LESS THAN ONE FOOTCANDLE AT FLOOR LEVEL.
4. REFER TO BASE BUILDING LIFE SAFETY AND REFLECTED CEILING PLANS FOR FIRE RATED PARTITIONS.
5. REMOVE EXISTING FINISHES AT EXTERIOR WALLS, COLUMNS, AND FLOOR DECK WHERE THEY ARE PEELING/DETERIORATING UNLESS OTHERWISE INDICATED.
6. FLOOR SURFACE TO BE CLEAN, SOUND AND MOISTURE FREE PRIOR TO INSTALLING ALL FLOOR FINISHES.
7. ALL DIRT, DUST, LAITANCE, CURING COMPOUNDS, GLUE AND DELAMINATING MATERIALS MUST BE REMOVED PRIOR TO ANY MATERIAL APPLICATIONS.
8. COORDINATE FLOOR FINISH WITH FINISH PLANS.
9. REFER TO SHEET A.004 FOR EQUIPMENT SCHEDULE AND REFER TO SHEET A.703 FOR FURNITURE TAGS.
10. CARPENTRY CONTRACTOR TO PROVIDE BLOCKING IN PARTITIONS FOR ALL WALL MOUNTED INSTALLATIONS. BLOCKING TO BE NON-COMBUSTIBLE UNLESS OTHERWISE NOTED.
11. SEE FLOOR PLAN ON THIS SHEET FOR FIRE EXTINGUISHER LOCATIONS.
12. ALL CORNERS ARE DRAWN TO BE 90 DEGREES OR 45 DEGREES UNLESS OTHERWISE NOTED.
13. DIMENSIONS OF NEW WORK CAN BE WITHIN +/- 5".
14. FIELD VERIFY EXISTING WALL ASSEMBLY TYPES AND MATCH THE EXISTING WALL PROFILES WHEN ALIGNING NEW PARTITIONS WITH EXISTING.
15. REFER TO SHEET A.003 FOR TYPICAL DIMENSIONING CONVENTIONS USED FOR TOILET ROOM EQUIPMENT AND FIXTURES.

BLOCKING NOTE:
GC TO PROVIDE ALL 3/4" THK. FIRE-RETARDANT IN-WALL & IN-MILLWORK PLYWOOD BLOCKING AS REQUIRED FOR TELEVISIONS, PLUMBING ACCESSORIES, COAT HOOKS, MILLWORK AND SIGNAGE.

NEW WORK PLAN LEGEND

- EXISTING WALL OR ELEMENT TO REMAIN
- PROPOSED NEW WALL
- EXISTING AREA NOT IN SCOPE OF THIS PROJECT
- WALL TYPE TAG
- FEC-01 — SEMI-RECESSED FIRE EXTINGUISHER CABINET
- PROPOSED NEW MILLWORK

MGA Architects-Designers
Moisseev/Gordon Associates, Inc.
4351 Delemere Court
Royal Oak, MI 48073
248.549.4500 voice
248.549.7300 facs.
www.mga-architects.net

provoke design
Provoke Design
248.943.8943 voice
www.provoke-design.com

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Use of these drawings is limited to the client for the subject project. Common law copyright is reserved by the Architect.

Use figured dimensions only. Do not scale the drawings.

Client:
Old World Pizza
600 N. Old Woodward Ave, Birmingham, MI

Project Title:
Pizzeria Interior Build-Out
600 N. Old Woodward Ave., Birmingham, MI

Sheet Title:
FLOOR PLAN

Project Number: 25438
Drawn By: MJN
Checked By: MJN
Approved By: AJM
Date: 10-13-2025

Issued:

For Demo Permit	11-12-25
Progress Set	12-19-25
Permit Set	1-16-26

Sheet Number:
A100

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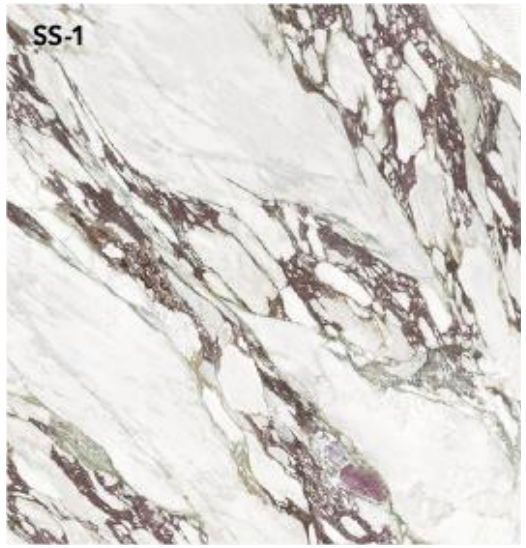
>>> finishes

BRAND INTERPRETATION | OWP



FINISH UPDATE | Look & Feel

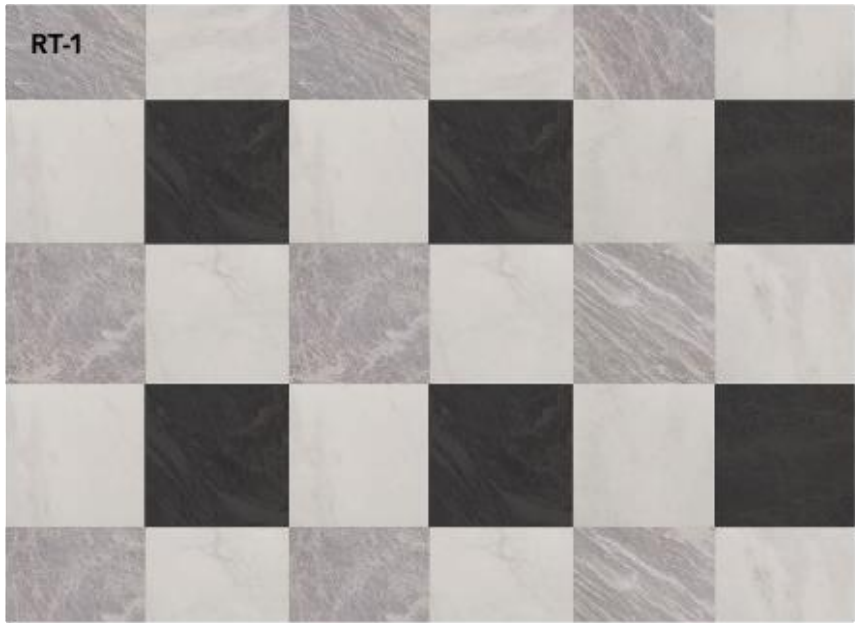
PL-1











P-1





P-2

FB-1

Concept Photo 3D Rendering



Concept Photo 3D Rendering



Thank you!

MEMORANDUM

Planning Department

DATE: January 28th, 2026

TO: Nicholas Dupuis, Planning Director

FROM: Leah Blizinski, City Planner

SUBJECT: 600 N. Old Woodward Suites 101 & 203 – Old World Pizzeria – Special Land Use Permit, Final Site Plan & Design Review

---

INTRODUCTION:
The applicant has submitted a Special Land Use Permit application for a food or drink establishment in the O2 (Office Commercial) zoning district at the north end of Downtown Birmingham. The necessity for a Special Land Use Permit is simple in that the O2 zoning district requires such for a food or drink establishment. There will be no liquor sales for on premise or off premise consumption at this juncture. The restaurant will have seating as well as carryout options.

In the recent past, the subject site was home to Café Succo, a food and drink establishment operating under a Special Land Use Permit since 2013. Café Succo was a sit down juice bar and coffee shop and also did not offer liquor sales for on premise or off premise consumption.

The proposed new restaurant, Old World Pizzeria, will serve pizza for takeout or eat-in with a modest amount of seating proposed. The proposal includes the kitchen in the basement, a kitchen and service counter on the first floor, seating for 8 (4 chairs and 4 tables, with seating for 4 on a bench along the front wall) in a dining area at the front of the first floor (N. Old Woodward side). There are no outdoor seats proposed at this time.

1.0 Land Use and Zoning

1.1 Existing Land Use – The subject site is currently a 2-story commercial building and is currently operating as a takeout and sit down food and drink establishment.

1.2 Zoning – The subject site exists within the O2 (Office-Commercial) and D2 (Downtown Overlay) zoning districts.

1.3 Summary of Adjacent Land Use and Zoning –

	North	South	East	West
Existing Land Use	Commercial	Public Property	Public Property	Multiple Family Residential
Existing Zoning District	O2 – Office Commercial	PP – Public Property	PP – Public Property	R6 – Multiple Family Residential
Overlay Zoning District	D2	D2	N/A	N/A

2.0 Setback and Height Requirements

There are no changes to the bulk, height or placement and no issues associated with the proposed project.

3.0 Screening and Landscaping

3.1 Dumpster Screening – The applicant has stated that although there are no waste receptacles on site, they have secured dumpster privileges for the common dumpster in the rear public parking lot area.

3.2 Parking Lot Screening – The proposed restaurant does not contain an off-street parking facility, thus the parking lot screening requirements are not applicable.

3.3 Mechanical Equipment Screening – There are no changes proposed to the existing rooftop units, nor are any new rooftop or ground mounted mechanical units proposed.

3.4 Landscaping – There are no changes proposed to the landscaping on site.

3.5 Streetscape – The subject site's location in the north end of Downtown Birmingham and the public parking facility directly in front of the building create a poor environment for benches, bike racks or waste receptacles. The area across the parking facility and the boulevard on N. Old Woodward contain street trees and streetlights.

4.0 Parking, Loading and Circulation

4.1 Parking – The subject site is located within the former Parking Assessment District, thus no parking analysis is required for the commercial use proposed.

4.2 Loading – Article 4, Section 4.24 does not require commercial uses between 0 and 10,000 sq. ft. to provide any off-street loading facilities. The building is 1,425 sq. ft. and thus does not require an off-street loading space.

4.3 Vehicular Circulation and Access – Vehicles access the site via a public parking facility directly adjacent to the site. There are no changes proposed in this regard.

4.4 Pedestrian Circulation and Access – Pedestrian access to the building is located through a single door on the N. Old Woodward façade. No changes are proposed to the entrance.

5.0 Lighting

There are no new exterior light fixtures proposed as a part of this project. The building currently contains 2 gooseneck light fixtures over the front window.

6.0 Design Review

There are no exterior changes proposed to the building at this time.

7.0 Required Attachments

	Submitted	Not Submitted	Not Required
Existing Conditions Plan	☐	☐	☒
Detailed and Scaled Site Plan	☒	☐	☐
Certified Land Survey	☐	☐	☒
Interior Floor Plans	☒	☐	☐
Landscape Plan	☐	☐	☒
Photometric Plan	☐	☐	☒
Colored Elevations	☐	☐	☒
Material Specification Sheets	☐	☐	☒
Material Samples	☐	☐	☒
Site & Aerial Photographs	☒	☐	☐

8.0 Approval Criteria

In accordance with Article 7, section 7.27 of the Zoning Ordinance, the proposed plans for development must meet the following conditions:

1. *The location, size and height of the building, walls and fences shall be such that there is adequate landscaped open space so as to provide light, air and access to the persons occupying the structure.*

   The location, size and height of the building, walls and fences is not changing and therefore adequate landscaped open space so as to provide light, air and access to the persons occupying the structure will remain.

2. *The location, size and height of the building, walls and fences shall be such that there will be no interference with adequate light, air and access to adjacent lands and buildings.*

The location, size and height of the building, walls and fences is not changing and therefore there will be no interference with adequate light, air and access to adjacent lands and buildings.

3. *The location, size and height of the building, walls and fences shall be such that they will not hinder the reasonable development of adjoining property nor diminish the value thereof.*

   The location, size and height of the building, walls and fences is not changing and will not hinder the reasonable development of adjoining property nor diminish the value thereof.

4. *The site plan, and its relation to streets, driveways and sidewalks, shall be such as to not interfere with or be hazardous to vehicular and pedestrian traffic.*

   The site plan, and its relation to streets, driveways and sidewalks does not interfere with and is not hazardous to vehicular and pedestrian traffic. None of the existing conditions with respect to these items is changing.

5. *The proposed development will be compatible with other uses and buildings in the neighborhood and will not be contrary to the spirit and purpose of this chapter.*

   The proposed development is extremely similar to what was previously existing on the site and is compatible with other uses and buildings in the neighborhood and will not be contrary to the spirit and purpose of the chapter.

6. *The location, shape and size of required landscaped open space is such as to provide adequate open space for the benefit of the inhabitants of the building and the surrounding neighborhood.*

   The location, shape and size of required landscaped open space is not changing and is such as to provide adequate open space for the benefit of the inhabitants of the building and the surrounding neighborhood.

Additionally, Article 7, Section 7.36 states that the City Commission shall not approve of any requests for a special land use permit unless it determines that the following standards are met:

1. *The use is consistent with and will promote the intent and purpose of this Zoning Ordinance.*

   The pizzeria use is consistent with and will promote the intent and purpose of the Zoning Ordinance.

2. *The use will be compatible with adjacent uses of land, the natural environment, and the capabilities of public services and facilities affected by the land use.*

A takeout pizza counter with limited eat-in space is compatible with adjacent use of land, the natural environment and the capabilities of public services and facilities affected by the land use.

3. *The use is consistent with the public health, safety and welfare of the city.*

   The use is consistent with the public health, safety and welfare of the city.

4. *The use is in compliance with all other requirements of this Zoning Ordinance.*

   The use is in compliance with all the other requirements of the Zoning Ordinance.

5. *The use will not be injurious to the surrounding neighborhood.*

   The use will not be injurious to the surrounding neighborhood.

6. *The use is in compliance with state and federal statutes.*

   To the best of our knowledge, the use is in compliance with state and federal statutes.

9.0 Recommendation

Based on a review of the site plan submitted, the Planning Department finds that the proposed Special Land Use Permit, Final Site Plan and Design Review application meets the requirements of Article 7, section 7.27 and 7.36 of the Zoning Ordinance. Thus, the Planning Department recommends that the Planning Board recommend **APPROVAL** to the City Commission the Special Land Use Permit, Final Site Plan and Design Review for 600 N. Old Woodward Suites 101 & 203 – Old World Pizzeria.

10.0 Sample Motion Language for Special Land Use Permit

Motion to adopt the findings of the Planning Department in the report dated January 28, 2026 related to the approval criteria outlined in Article 7, Section 7.36 of the Zoning Ordinance and recommend that the City Commission **APPROVE** the Special Land Use Permit application for 600 N. Old Woodward Suites 101 & 203 – Old World Pizzeria.

OR

Motion to **POSTPONE** the Special Land Use Permit and Final Site Plan for 600 N. Old Woodward Suites 101 & 203 – Old World Pizzeria – pending receipt of the following:

1._____
2._____
3._____

OR

Motion to recommend that the City Commission **DENY** the Special Land Use Permit and Final Site Plan for 600 N. Old Woodward Suites 101 & 203 – Old World Pizzeria – for the following reasons:

1._____
2._____
3._____

11.0 Sample Motion Language for Final Site Plan & Design Review

Motion to adopt the findings of the Planning Department in the report dated January 28, 2026 related to the approval criteria outlined in Article 7, Section 7.27 of the Zoning Ordinance and recommend that the City Commission **APPROVE** the Final Site Plan & Design Review application for 600 N. Old Woodward Suites 101 & 203 – Old World Pizzeria.

OR

Motion to **POSTPONE** the Final Site Plan & Design Review application for 600 N. Old Woodward Suites 101 & 203 – Old World Pizzeria – pending receipt of the following:

1. _____
2. _____
3. _____

OR

Motion to adopt the findings of the Planning Department in the report dated January 28, 2026 related to the approval criteria outlined in Article 7, Section 7.27 of the Zoning Ordinance and recommend that the City Commission **DENY** the Final Site Plan & Design Review application for 600 N. Old Woodward – Old World Pizzeria – for the following reasons:

1. _____
2. _____
3. _____

MEMORANDUM

Engineering Department

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Melissa Coatta, City Engineer

SUBJECT: Bird Phase 1B Project
Contract #7-26 (W) Contract Award

INTRODUCTION:

As part of the City's 2025-2026 Capital Improvement Plan, Bird Avenue from Grant Street to Cummings Avenue will receive water main replacement, sewer improvements, and the installation of a new concrete road. The City received and opened bids for the Bird Phase 1B Project Contract #7-26 (W). Six (6) bids were received for consideration. The Engineering Department recommends awarding this contract to F.D.M. Contracting, Inc.

BACKGROUND:

The Bird Phase 1B Project includes the removal and replacement of the concrete pavement and utility improvements on Bird Avenue from Grant Street to Cummings Avenue. The existing 4-inch water main, originally installed in 1921, will be replaced with an 8-inch water main. The existing sewer ranges in size from 8 inches to 15 inches and will be replaced or lined depending on its condition. In addition, a new storm sewer will be installed as part of the project.

On March 9, 2026, the City Commission declared necessity for a sewer and water lateral special assessment district in the project area. The Confirmation of the Roll public hearing will take place at the March 23, 2026, City Commission meeting.

The Engineering Department opened bids on February 12, 2026, and received six (6) bids, as listed in the attached summary. The lowest bidder was F.D.M. Contracting, Inc., at $1,298,186.82. F.D.M. Contracting, Inc. has previously worked in the City of Birmingham, and the Engineering Department is confident they are qualified to perform the work.

As required for all City construction projects, F.D.M. Contracting, Inc. has submitted a 5% bid surety with their bid, which will be forfeited if they do not provide signed contracts, bonds, and insurance required by the contract.

LEGAL REVIEW:

The City Attorney reviewed and approved the standard RFP and contract language used for bidding this project. The City Attorney has no objections to the suggested Commission action.

FISCAL IMPACT:
This project is included in the 2025-2026 budget within the Local Street Fund, Sewer Fund, and Water Fund. The total estimated construction cost of the project is $1,428,005.50, which includes F.D.M. Contracting, Inc.'s bid in the amount of $1,298,186.82, and a 10% contingency. Funding for the project will be provided by the following accounts:

Fund Account	Fund ID Number	Project Award	10% Contingencies	Total
Local Street Fund	203.0-449.001-981.0100	$502,545.99	$50,254.60	$668,474.95
Sewer Fund	590.0-537.000-981.0100	$400,213.49	$40,021.35	$691,371.45
Water Fund	591.0-544.000-981.0100	$395,427.34	$39,542.73	$483,413.70
Total Construction Costs		$1,298,186.82	$129,818.68	$1,428,005.50

Enclosed is the recommendation letter from Nowak & Fraus which includes bid pricing for similar construction items in other communities.

SUSTAINABILITY:
This project includes installation of a section of separated storm sewer that will drain to the combined sewer at Cummings Avenue. Replacing sewer and water laterals that do not meet City standards during construction helps preserve the integrity of the new roadway by avoiding future excavation for lateral replacement.

DESIGN CONSIDERATIONS:
ADA requirements are incorporated into the project.

PUBLIC COMMUNICATIONS:
Property owners received notification during the sewer and water lateral special assessment district process. A property owners' meeting was held on Tuesday, February 24, 2026, and communication methods for property owners in the project area will be included in the general project announcement.

SUMMARY:
The Engineering Department recommends the Bird Phase 1B Project Contract #7-26 (W) be awarded to F.D.M. Contracting, Inc.

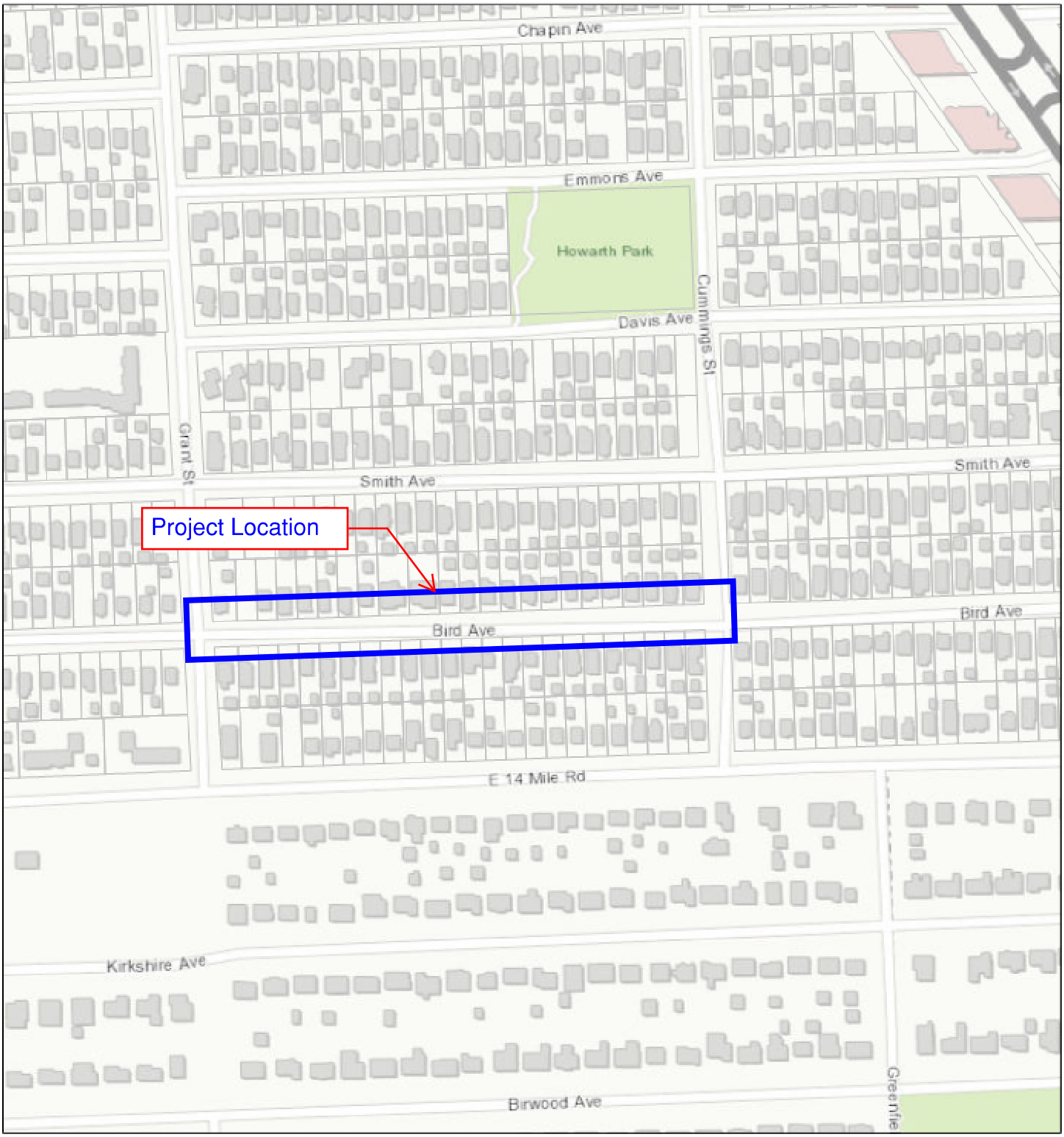
ATTACHMENTS:
1. Project Area Map
2. Bid Summary
3. Nowak and Fraus Recommendation Letter
4. Plans
5. Contract Book

SUGGESTED COMMISSION ACTION:

Make a motion adopting a resolution to award the Bird Phase 1B Project #7-26 (W) to F.D.M. Contracting, Inc. in the amount of $1,298,186.82 plus a 10% construction contingency for a total of $1,428,005.50. In addition, to authorize the Mayor and Clerk to sign the agreement on behalf of the City contingent upon execution of the agreement and meeting all the insurance and bond requirements by F.D.M. Contracting, Inc. Funding for this project has been budgeted in the following accounts:

Fund Account	Fund ID Number	Project Award	10% Contingencies	Total
Local Street Fund	203.0-449.001-981.0100	$502,545.99	$50,254.60	$668,474.95
Sewer Fund	590.0-537.000-981.0100	$400,213.49	$40,021.35	$691,371.45
Water Fund	591.0-544.000-981.0100	$395,427.34	$39,542.73	$483,413.70
Total Construction Costs		$1,298,186.82	$129,818.68	$1,428,005.50

Bird Phase 1B Project



3/13/2026, 1:32:17 PM

OC Tax Parcels

1:4,514

0 0.03 0.06 0.11 mi

0 0.04 0.09 0.18 km

Oakland County, Michigan, SEMCOG, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA

City of Birmingham

Oakland County, Michigan, SEMCOG, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA

BID TABULATION
CITY OF BIRMINGHAM
2026 BIRD AVENUE PHASE 1B PAVING PROJECT
CONTRACT #7-26(W)

Bids Due: February 12, 2026

Item	Quantity	Unit	**F.D.M Contracting, Inc.** 49156 Van Dyke Shelby Twp., Michigan 48317		**Eminent Excavating LLC** 514 S. Fort Street Detroit, Michigan 48217		**Diponio Contracting** 51251 Simone Industrial Drive Shelby Twp., Michigan 48316		**Pamar Enterprises, Inc.** 31604 Pamar Court New Haven, Michigan 48048		**HMC, LLC** 297 Elmwood Drive Troy, Michigan 48083		**Birmingham Lawn Maintenance,** 2934 Frembes Road Waterford, Michigan 48329	
			Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
BIRD AVE. SEWER PAY ITEMS														
1. 15" Combined Sewer, PVC, SDR 26, Trench A	73	LF	$ 175.00	$ 12,775.00	$ 170.00	$ 12,410.00	$ 270.00	$ 19,710.00	$ 292.00	$ 21,316.00	$ 165.00	$ 12,045.00		$ -
2. 15" Storm Sewer, C76, CL-IV, Trench A	142	LF	$ 123.00	$ 17,466.00	$ 160.00	$ 22,720.00	$ 150.00	$ 21,300.00	$ 254.00	$ 36,068.00	$ 105.00	$ 14,910.00		$ -
3. 10" Storm Sewer, PVC SDR 26, Trench A	49	LF	$ 110.00	$ 5,390.00	$ 155.00	$ 7,595.00	$ 140.00	$ 6,860.00	$ 214.00	$ 10,486.00	$ 115.00	$ 5,635.00		$ -
4. Pre-Lining Preparation, Cleaning & Video Inspection, 15-inch Storm Sewer	306	LF	$ 12.17	$ 3,724.02	$ 7.00	$ 2,142.00	$ 7.00	$ 2,142.00	$ 12.00	$ 3,672.00	$ 15.00	$ 4,590.00		$ -
5. Pre-Lining Preparation, Cleaning & Video Inspection, 10-inch Comb. Sewer	499	LF	$ 10.14	$ 5,059.86	$ 5.00	$ 2,495.00	$ 5.00	$ 2,495.00	$ 10.00	$ 4,990.00	$ 6.00	$ 2,994.00		$ -
6. Pre-Lining Preparation, Cleaning & Video Inspection, 8-inch Comb. Sewer	472	LF	$ 9.13	$ 4,309.36	$ 5.00	$ 2,360.00	$ 5.00	$ 2,360.00	$ 9.00	$ 4,248.00	$ 6.00	$ 2,832.00		$ -
7. Sewer Lining, Pre-Liner, 15" RIFI-CIPP, Storm Sewer	306	LF	$ 1.00	$ 306.00	$ 4.85	$ 1,484.10	$ 4.85	$ 1,484.10	$ 1.50	$ 459.00	$ 155.00	$ 47,430.00		$ -
8. Sewer Lining, Pre-Liner, 10" RIFI-CIPP, Comb. Sewer	499	LF	$ 1.00	$ 499.00	$ 2.50	$ 1,247.50	$ 2.50	$ 1,247.50	$ 1.00	$ 499.00	$ 86.00	$ 42,914.00		$ -
9. Sewer Lining, Pre-Liner, 8" RIFI-CIPP, Comb. Sewer	472	LF	$ 1.00	$ 472.00	$ 2.50	$ 1,180.00	$ 2.20	$ 1,038.40	$ 0.80	$ 377.60	$ 68.00	$ 32,096.00		$ -
10. Sewer Lining, 15" RIFI-CIPP, Storm Sewer	306	LF	$ 63.90	$ 19,553.40	$ 73.00	$ 22,338.00	$ 73.00	$ 22,338.00	$ 63.00	$ 19,278.00	$ 145.00	$ 44,370.00		$ -
11. Sewer Lining, 10" RIFI-CIPP, Comb. Sewer	499	LF	$ 41.59	$ 20,753.41	$ 44.00	$ 21,956.00	$ 44.00	$ 21,956.00	$ 41.00	$ 20,459.00	$ 85.00	$ 42,415.00		$ -
12. Sewer Lining, 8" RIFI-CIPP, Comb. Sewer	472	LF	$ 36.51	$ 17,232.72	$ 42.00	$ 19,824.00	$ 42.00	$ 19,824.00	$ 36.00	$ 16,992.00	$ 65.00	$ 30,680.00		$ -
13. Cut/Grind Protruding Sewer Leads, Any Material	5	EA	$ 76.07	$ 380.35	$ 320.00	$ 1,600.00	$ 320.00	$ 1,600.00	$ 75.00	$ 375.00	$ 150.00	$ 750.00		$ -
14. Cut/Grind Root Intrusion	5	EA	$ 76.07	$ 380.35	$ 320.00	$ 1,600.00	$ 320.00	$ 1,600.00	$ 75.00	$ 375.00	$ 150.00	$ 750.00		$ -
15. Cut/Grind Mineral Deposit	5	EA	$ 76.07	$ 380.35	$ 320.00	$ 1,600.00	$ 320.00	$ 1,600.00	$ 75.00	$ 375.00	$ 250.00	$ 1,250.00		$ -
16. Sewer Service, 6" PVC SDR 23.5	972	LF	$ 112.00	$ 108,864.00	$ 145.00	$ 140,940.00	$ 253.00	$ 245,916.00	$ 178.00	$ 173,016.00	$ 200.00	$ 194,400.00	*	$ -
17. New 5'-0" Diameter Combined Manhole w/ Interior Drop	1	EA	$ 13,000.00	$ 13,000.00	$ 14,000.00	$ 14,000.00	$ 6,000.00	$ 6,000.00	$ 13,500.00	$ 13,500.00	$ 7,500.00	$ 7,500.00		$ -
18. New 4'-0" Diameter Combined Manhole (Construct Online)	1	EA	$ 7,500.00	$ 7,500.00	$ 6,000.00	$ 6,000.00	$ 7,500.00	$ 7,500.00	$ 9,800.00	$ 9,800.00	$ 7,000.00	$ 7,000.00		$ -
19. New 6'-0" Diameter Storm Manhole w/ 2' Sump, Weir Wall & Gas Trap, Construct Online (Per Detail)	1	EA	$ 17,500.00	$ 17,500.00	$ 17,000.00	$ 17,000.00	$ 20,000.00	$ 20,000.00	$ 28,500.00	$ 28,500.00	$ 18,000.00	$ 18,000.00		$ -
20. New 4'-0" Diameter Storm Manhole w/ 2' Sump, Construct Online	1	EA	$ 7,500.00	$ 7,500.00	$ 6,000.00	$ 6,000.00	$ 6,500.00	$ 6,500.00	$ 10,250.00	$ 10,250.00	$ 7,000.00	$ 7,000.00	*	$ -
21. New 4'-0" Diameter Storm Manhole w/ 2' Sump	1	EA	$ 5,000.00	$ 5,000.00	$ 5,500.00	$ 5,500.00	$ 5,500.00	$ 5,500.00	$ 6,500.00	$ 6,500.00	$ 5,000.00	$ 5,000.00		$ -
22. New 2'-0" Diameter Storm Inlet	4	EA	$ 2,200.00	$ 8,800.00	$ 3,000.00	$ 12,000.00	$ 2,500.00	$ 10,000.00	$ 3,950.00	$ 15,800.00	$ 3,000.00	$ 12,000.00		$ -
23. 6" Perforated Pipe Underdrain (No sock)	1,186	LF	$ 25.00	$ 29,650.00	$ 30.00	$ 35,580.00	$ 20.00	$ 23,720.00	$ 17.00	$ 20,162.00	$ 25.00	$ 29,650.00		$ -
24. Sewer Investigation, Laterals	7	EA	$ 1,230.00	$ 8,610.00	$ 1,200.00	$ 8,400.00	$ 1,100.00	$ 7,700.00	$ 1,000.00	$ 7,000.00	$ 500.00	$ 3,500.00		$ -
25. Sewer Service Tap, 6"	40	EA	$ 350.00	$ 14,000.00	$ 550.00	$ 22,000.00	$ 1,000.00	$ 40,000.00	$ 800.00	$ 32,000.00	$ 1,500.00	$ 60,000.00		$ -
26. Sewer Tap, 15", Combined	2	EA	$ 1,500.00	$ 3,000.00	$ 1,200.00	$ 2,400.00	$ 3,000.00	$ 6,000.00	$ 12,500.00	$ 25,000.00	$ 2,000.00	$ 4,000.00		$ -
27. Sewer Tap, 6", Underdrain	1	EA	$ 370.00	$ 370.00	$ 1,000.00	$ 1,000.00	$ 200.00	$ 200.00	$ 800.00	$ 800.00	$ 250.00	$ 250.00		$ -
28. Reconstruct Manhole (if and where needed)	10	VF	$ 200.00	$ 2,000.00	$ 500.00	$ 5,000.00	$ 550.00	$ 5,500.00	$ 550.00	$ 5,500.00	$ 275.00	$ 2,750.00		$ -
29. Remove & Replace Structure Cover (as directed by City)	5	EA	$ 1,100.00	$ 5,500.00	$ 800.00	$ 4,000.00	$ 1,000.00	$ 5,000.00	$ 1,250.00	$ 6,250.00	$ 750.00	$ 3,750.00		$ -
30. Remove Ex. Sewer Manhole	4	EA	$ 825.00	$ 3,300.00	$ 1,000.00	$ 4,000.00	$ 700.00	$ 2,800.00	$ 650.00	$ 2,600.00	$ 500.00	$ 2,000.00		$ -
31. Remove Ex. Drainage Structure	2	EA	$ 620.00	$ 1,240.00	$ 1,000.00	$ 2,000.00	$ 700.00	$ 1,400.00	$ 650.00	$ 1,300.00	$ 500.00	$ 1,000.00		$ -
32. Remove Ex. 15" Combined Sewer	69	LF	$ 35.00	$ 2,415.00	$ 25.00	$ 1,725.00	$ 20.00	$ 1,380.00	$ 17.00	$ 1,173.00	$ 15.00	$ 1,035.00		$ -
33. Remove Ex. 15" Storm Sewer	21	LF	$ 34.00	$ 714.00	$ 25.00	$ 525.00	$ 25.00	$ 525.00	$ 15.00	$ 315.00	$ 15.00	$ 315.00		$ -
34. Remove Ex. 10" Storm Sewer	30	LF	$ 34.00	$ 1,020.00	$ 25.00	$ 750.00	$ 25.00	$ 750.00	$ 15.00	$ 450.00	$ 15.00	$ 450.00		$ -
35. Bulkhead Structure, 12" or Less	1	EA	$ 208.00	$ 208.00	$ 4,000.00	$ 4,000.00	$ 700.00	$ 700.00	$ 450.00	$ 450.00	$ 500.00	$ 500.00		$ -
36. Bulkhead Pipe, Larger than 8"	3	EA	$ 317.00	$ 951.00	$ 4,000.00	$ 12,000.00	$ 550.00	$ 1,650.00	$ 650.00	$ 1,950.00	$ 500.00	$ 1,500.00	*	$ -
37. CCTV Sewer Acceptance Inspection	1	LS	$ 1,166.00	$ 1,166.00	$ 10,000.00	$ 10,000.00	$ 2,000.00	$ 2,000.00	$ 2,500.00	$ 2,500.00	$ 16,500.00	$ 16,500.00		$ -
SUBTOTAL - BIRD AVE. SEWER PAY ITEMS				**$ 350,989.82**		**$ 437,371.60**		**$ 528,296.00**		**$ 504,785.60**		**$ 663,761.00**	*	**$ -**
BIRD AVE. WATER MAIN PAY ITEMS														
38. Remove Hydrant	1	EA	$ 945.00	$ 945.00	$ 750.00	$ 750.00	$ 900.00	$ 900.00	$ 750.00	$ 750.00	$ 500.00	$ 500.00		$ -
39. Fire Hydrant Assembly, Complete	2	EA	$ 9,500.00	$ 19,000.00	$ 8,500.00	$ 17,000.00	$ 8,000.00	$ 16,000.00	$ 9,500.00	$ 19,000.00	$ 10,000.00	$ 20,000.00		$ -
40. 8" D.I. CL 52 Water Main w/ Polywrap, Trench A	940	LF	$ 230.00	$ 216,200.00	$ 175.00	$ 164,500.00	$ 160.00	$ 150,400.00	$ 199.00	$ 187,060.00	$ 135.00	$ 126,900.00		$ -
41. 6" D.I. CL 52 Water Main w/ Polywrap, Trench A	20	LF	$ 126.00	$ 2,520.00	$ 175.00	$ 3,500.00	$ 140.00	$ 2,800.00	$ 169.00	$ 3,380.00	$ 115.00	$ 2,300.00		$ -
42. 8" Water Main Connection to Ex. 8" Water Main	2	EA	$ 8,500.00	$ 17,000.00	$ 12,000.00	$ 24,000.00	$ 10,000.00	$ 20,000.00	$ 9,500.00	$ 19,000.00	$ 7,500.00	$ 15,000.00		$ -
43. New Water Service, 1", Trench A, Copper	390	LF	$ 53.00	$ 20,670.00	$ 70.00	$ 27,300.00	$ 60.00	$ 23,400.00	$ 44.00	$ 17,160.00	$ 150.00	$ 58,500.00		$ -
44. Water Service Connection, 1.5"	1	EA	$ 4,500.00	$ 4,500.00	$ 4,000.00	$ 4,000.00	$ 1,300.00	$ 1,300.00	$ 3,500.00	$ 3,500.00	$ 700.00	$ 700.00		$ -
45. Water Service Connection, 1"	46	EA	$ 1,100.00	$ 50,600.00	$ 1,000.00	$ 46,000.00	$ 850.00	$ 39,100.00	$ 1,500.00	$ 69,000.00	$ 500.00	$ 23,000.00		$ -
46. Install Curb Stop & Box, 1"	10	EA	$ 625.00	$ 6,250.00	$ 1,000.00	$ 10,000.00	$ 550.00	$ 5,500.00	$ 425.00	$ 4,250.00	$ 625.00	$ 6,250.00		$ -
47. Hydra-Stop, Line-Stop, 8"	1	EA	$ 1,000.00	$ 1,000.00	$ 1.00	$ 1.00	$ 10,000.00	$ 10,000.00	$ 500.00	$ 500.00	$ 6,500.00	$ 6,500.00		$ -

BID TABULATION
CITY OF BIRMINGHAM
2026 BIRD AVENUE PHASE 1B PAVING PROJECT
CONTRACT #7-26(W)

Bids Due: February 12, 2026

Item	Quantity	Unit	F.D.M Contracting, Inc. 49156 Van Dyke Shelby Twp., Michigan 48317		Eminent Excavating LLC 514 S. Fort Street Detroit, Michigan 48217		Diponio Contracting 51251 Simone Industrial Drive Shelby Twp., Michigan 48316		Pamar Enterprises, Inc. 31604 Pamar Court New Haven, Michigan 48048		HMC, LLC 297 Elmwood Drive Troy, Michigan 48083		Birmingham Lawn Maintenance, 2934 Frembes Road Waterford, Michigan 48329	
			Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
48. Hydra-Stop, Line-Stop, 4"	1	EA	$ 1,000.00	$ 1,000.00	$ 1.00	$ 1.00	$ 9,000.00	$ 9,000.00	$ 450.00	$ 450.00	$ 5,500.00	$ 5,500.00		$ -
49. Abandon Existing Water Mains, Entire Project	1	LS	$ 5,800.00	$ 5,800.00	$ 10,000.00	$ 10,000.00	$ 3,000.00	$ 3,000.00	$ 1,500.00	$ 1,500.00	$ 10,000.00	$ 10,000.00		$ -
SUBTOTAL - BIRD AVE. WATER MAIN PAY ITEMS				**$ 345,485.00**		**$ 307,052.00**		**$ 281,400.00**		**$ 325,550.00**		**$ 275,150.00 ***		**$ -**
BIRD AVE. PAVING PAY ITEMS														
50. Earth Excavation	700	CY	$ 42.00	$ 29,400.00	$ 40.00	$ 28,000.00	$ 70.00	$ 49,000.00	$ 128.00	$ 89,600.00	$ 40.00	$ 28,000.00		$ -
51. Subgrade Undercutting, 21AA Limestone	70	CY	$ 40.00	$ 2,800.00	$ 80.00	$ 5,600.00	$ 80.00	$ 5,600.00	$ 75.00	$ 5,250.00	$ 80.00	$ 5,600.00		$ -
52. Subgrade Undercutting, 1"x3" Limestone	35	CY	$ 75.00	$ 2,625.00	$ 80.00	$ 2,800.00	$ 70.00	$ 2,450.00	$ 75.00	$ 2,625.00	$ 85.00	$ 2,975.00		$ -
53. Subgrade Geogrid Fabric, Tensar Triax TX130S	1,000	SY	$ 3.00	$ 3,000.00	$ 4.50	$ 4,500.00	$ 3.00	$ 3,000.00	$ 3.50	$ 3,500.00	$ 4.00	$ 4,000.00		$ -
54. Remove and Salvage Brick Pavers	135	SF	$ 25.00	$ 3,375.00	$ 25.00	$ 3,375.00	$ 8.00	$ 1,080.00	$ 11.00	$ 1,485.00	$ 5.00	$ 675.00		$ -
55. Removing Concrete Drive Approach	384	SY	$ 10.00	$ 3,840.00	$ 20.00	$ 7,680.00	$ 25.00	$ 9,600.00	$ 12.00	$ 4,608.00	$ 10.00	$ 3,840.00		$ -
56. Removing Concrete Sidewalk & Ramp (sawcutting included)	190	SY	$ 8.00	$ 1,520.00	$ 20.00	$ 3,800.00	$ 25.00	$ 4,750.00	$ 11.00	$ 2,090.00	$ 10.50	$ 1,995.00		$ -
57. Removing Pavement Full Depth (Curb & Gutter included)	3,109	SY	$ 18.00	$ 55,962.00	$ 16.00	$ 49,744.00	$ 15.00	$ 46,635.00	$ 14.00	$ 43,526.00	$ 21.50	$ 66,843.50		$ -
58. Aggregate Base, MDOT 21AA Limestone, 8"	3,265	SY	$ 20.00	$ 65,300.00	$ 22.00	$ 71,830.00	$ 24.00	$ 78,360.00	$ 22.00	$ 71,830.00	$ 24.25	$ 79,176.25		$ -
59. Concrete Pavement, Non-reinforced, 7", Incl. integral 5" curb ("Birmingham Roll")	3,109	SY	$ 59.00	$ 183,431.00	$ 60.00	$ 186,540.00	$ 57.00	$ 177,213.00	$ 75.00	$ 233,175.00	$ 83.50	$ 259,601.50		$ -
60. Concrete Drive Approach, 6"	454	SY	$ 65.00	$ 29,510.00	$ 56.00	$ 25,424.00	$ 80.00	$ 36,320.00	$ 56.00	$ 25,424.00	$ 74.50	$ 33,823.00		$ -
61. Concrete Sidewalk, 6" (Includes Ramps)	565	SF	$ 12.00	$ 6,780.00	$ 7.00	$ 3,955.00	$ 13.00	$ 7,345.00	$ 11.00	$ 6,215.00	$ 22.00	$ 12,430.00		$ -
62. Concrete Sidewalk, 4"	1,110	SF	$ 7.00	$ 7,770.00	$ 6.50	$ 7,215.00	$ 8.00	$ 8,880.00	$ 6.00	$ 6,660.00	$ 9.00	$ 9,990.00		$ -
63. Adjust Structure Cover	3	EA	$ 700.00	$ 2,100.00	$ 750.00	$ 2,250.00	$ 600.00	$ 1,800.00	$ 800.00	$ 2,400.00	$ 500.00	$ 1,500.00		$ -
64. Maintenance Aggregate for Entire Project	1	LS	$ 22,000.00	$ 22,000.00	$ 15,000.00	$ 15,000.00	$ 12,000.00	$ 12,000.00	$ 2,500.00	$ 2,500.00	$ 10,000.00	$ 10,000.00		$ -
SUBTOTAL - BIRD AVE. PAVING PAY ITEMS				**$ 419,413.00**		**$ 417,713.00**		**$ 444,033.00**		**$ 500,888.00**		**$ 520,449.25**		**$ -**
BIRD AVE. GENERAL PAY ITEMS														
65. Mobilization (Max. 5% of Bid)	1		$ 59,000.00	$ 59,000.00	$ 60,000.00	$ 60,000.00	$ 70,000.00	$ 70,000.00	$ 75,000.00	$ 75,000.00	$ 85,000.00	$ 85,000.00		$ -
66. Traffic Maintenance & Control	1		$ 27,500.00	$ 27,500.00	$ 15,000.00	$ 15,000.00	$ 10,000.00	$ 10,000.00	$ 37,000.00	$ 37,000.00	$ 50,000.00	$ 50,000.00		$ -
67. Inspector Crew Days	$650.00	/DAY	62.00	$ 40,300.00	65.00	$ 42,250.00	75.00	$ 48,750.00	85.00	$ 55,250.00	80.00	$ 52,000.00		$ -
68. Water and Sewer Allowance	1		$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00		$ -
69. Audio-Video Route Survey	1		$ 950.00	$ 950.00	$ 10,000.00	$ 10,000.00	$ 945.00	$ 945.00	$ 2,500.00	$ 2,500.00	$ 5,000.00	$ 5,000.00		$ -
70. Pavement Marking, Polyurea, 24 inch Stop Bar, White	27		$ 16.00	$ 432.00	$ 16.00	$ 432.00	$ 16.00	$ 432.00	$ 16.00	$ 432.00	$ 17.60	$ 475.20		$ -
71. Pavement Marking, Polyurea, 24 inch Crosshatching, White	168		$ 16.00	$ 2,688.00	$ 16.00	$ 2,688.00	$ 16.00	$ 2,688.00	$ 16.00	$ 2,688.00	$ 17.60	$ 2,956.80		$ -
72. Recessing Pavt Mkrg, Transv	390		$ 4.00	$ 1,560.00	$ 5.00	$ 1,950.00	$ 5.00	$ 1,950.00	$ 5.00	$ 1,950.00	$ 5.50	$ 2,145.00		$ -
73. Salvage Existing Signs	1		$ 510.00	$ 510.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 250.00	$ 250.00		$ -
74. New Signs	10		$ 31.00	$ 310.00	$ 30.00	$ 300.00	$ 30.00	$ 300.00	$ 30.00	$ 300.00	$ 50.00	$ 500.00		$ -
75. Sign Post, U-Channel	24		$ 21.00	$ 504.00	$ 25.00	$ 600.00	$ 20.00	$ 480.00	$ 20.00	$ 480.00	$ 50.00	$ 1,200.00		$ -
76. Tree Protection, 3" Dia. Or Greater	22		$ 120.00	$ 2,640.00	$ 250.00	$ 5,500.00	$ 150.00	$ 3,300.00	$ 100.00	$ 2,200.00	$ 300.00	$ 6,600.00		$ -
77. Mulch, 3"	200		$ 15.00	$ 3,000.00	$ 8.80	$ 1,760.00	$ 8.80	$ 1,760.00	$ 7.00	$ 1,400.00	$ 10.00	$ 2,000.00	$ 7.50	$ 1,500.00
78. Topsoil, 3"	970		$ 6.50	$ 6,305.00	$ 6.95	$ 6,741.50	$ 6.95	$ 6,741.50	$ 8.00	$ 7,760.00	$ 8.50	$ 8,245.00	$ 4.50	$ 4,365.00
79. Sod, Class A	970		$ 6.00	$ 5,820.00	$ 8.50	$ 8,245.00	$ 8.50	$ 8,245.00	$ 9.00	$ 8,730.00	$ 10.00	$ 9,700.00	$ 7.00	$ 6,790.00
80. Inlet Filter, Silt Sack	12		$ 65.00	$ 780.00	$ 125.00	$ 1,500.00	$ 110.00	$ 1,320.00	$ 100.00	$ 1,200.00	$ 100.00	$ 1,200.00		$ -
SUBTOTAL - BIRD AVE. GENERAL PAY ITEMS				**$ 182,299.00**		**$ 187,466.50**		**$ 187,411.50**		**$ 227,390.00**		**$ 257,272.00**		**$ 12,655.00**
BIRD AVENUE TOTAL BID:				**$ 1,298,186.82**		**$ 1,349,603.10**		**$ 1,441,140.50**		**$ 1,558,613.60**		**$ 1,716,632.25 ***		**$ 12,655.00**

* Indicates Correction By Engineer

March 3, 2026

City of Birmingham
151 Martin Street
Birmingham, MI 48012

Attn: Ms. Melissa A. Coatta, P.E.
City Engineer

Re: Recommendation for Bid Award
Bird Avenue Phase 1B Project - Contract #7-26W
NFE Job #O947

Dear Ms. Coatta,

Bids for the subject project were received, opened, and read on Thursday, February 12th, 2026 at 2:00 p.m. at City Hall. A total of six (6) bids were received and read. The bids have been tabulated, checked, and are in order. This project was not bid with any alternates.

The low bidder for the project is FDM Contracting, Inc. (FDM) from Shelby Township, Michigan, with a total bid amount of $1,298,186.82. This total is approximately 2.2% higher than the engineer's estimate for the same scope of work.

To provide additional context on the overall low bid cost, in the table below, we have compared several key unit prices for typical pay items to average unit prices compiled from other recently bid projects located in S.E. Michigan. While these comparisons provide "data points", it is important to note that unit rates from a single low bidder on a project will not always correlate to average prices due to the nature of the competitive bidding process.

Pay Item Name	FDM Bid Unit Price	Average Comparable Unit Price
2' Diameter Storm Inlet	$2,200 each	$2,030 each
8" D.I. Water Main	$230 per linear foot	$182 per linear foot
4" Concrete Sidewalk	$7.00 per square foot	$6.93 per square foot

NFE has experience working with FDM on numerous previous infrastructure projects, both in Birmingham and other surrounding communities. Based on this previous experience, along with review of their submitted reference projects, we do not have any concerns about FDM's capability to perform the work.

We therefore recommend that Contract #7-25W for the Bird Avenue Phase 1A Project be awarded to FDM Contracting, Inc. in the amount of **$1,298,186.82.**

Please do not hesitate to contact our office if you have any questions or comments.

Sincerely,

Paul Tulikangas, P.E.
Associate / Engineering Manager

Brett Buchholz, P.E.,
Principal

BIRMINGHAM

A WALKABLE CITY

ENGINEERING DEPARTMENT

BIRD AVENUE PHASE 1B PROJECT
CONTRACT #7-26W

SHEET INDEX

C00 Cover Sheet
C01 Utility Plan Sta. P.O.B. to 4+00
C02 Utility Plan Sta. 4+00 to 8+00
C03 Utility Plan Sta. 8+00 to P.O.E.
C04 Storm Sewer Profile Plan
C05 Utility Service Plan Sta. P.O.B. to 8+00
C06 Utility Service Plan Sta. 8+00 to P.O.E.
C07 Paving & Grading Plan Sta. P.O.B. to 4+00
C08 Paving & Grading Plan Sta. 4+00 to 8+00
C09 Paving & Grading Plan Sta. 8+00 to P.O.E.
C10 Bird Avenue - N. Side Walk & Driveway Grading Detail
C11 Notes and Details
C12 SESC Plan
C13 Advanced Warning Signage (AWS) Traffic Diagram
Q1 Quantities

City of Birmingham - Water Main Standard Notes & Details - 1 of 2
City of Birmingham - Water Main Standard Notes & Details - 2 of 2
City of Birmingham - Sanitary & Combined Sewer Standard Notes & Details - 1 of 2
City of Birmingham - Sanitary & Combined Sewer Standard Notes & Details - 2 of 2
City of Birmingham - Storm Drain Sewer Standard Notes & Details - 1 of 1
City of Birmingham - Paving Standard Notes & Details - 1 of 1

WATER / SEWER SERVICE NOTE

ALL WATER AND SEWER SERVICE LATERAL INFORMATION IS SHOWN PER RECORD, WITHIN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL COORDINATE WITH CITY FOR ALL PRIVATE-SIDE WATER AND SEWER LATERAL INFORMATION, AS REQUIRED, TO CONSTRUCT THE PROJECT (ING.).

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

Know what's **below** **Call** before you dig.

BENCHMARK NOTE

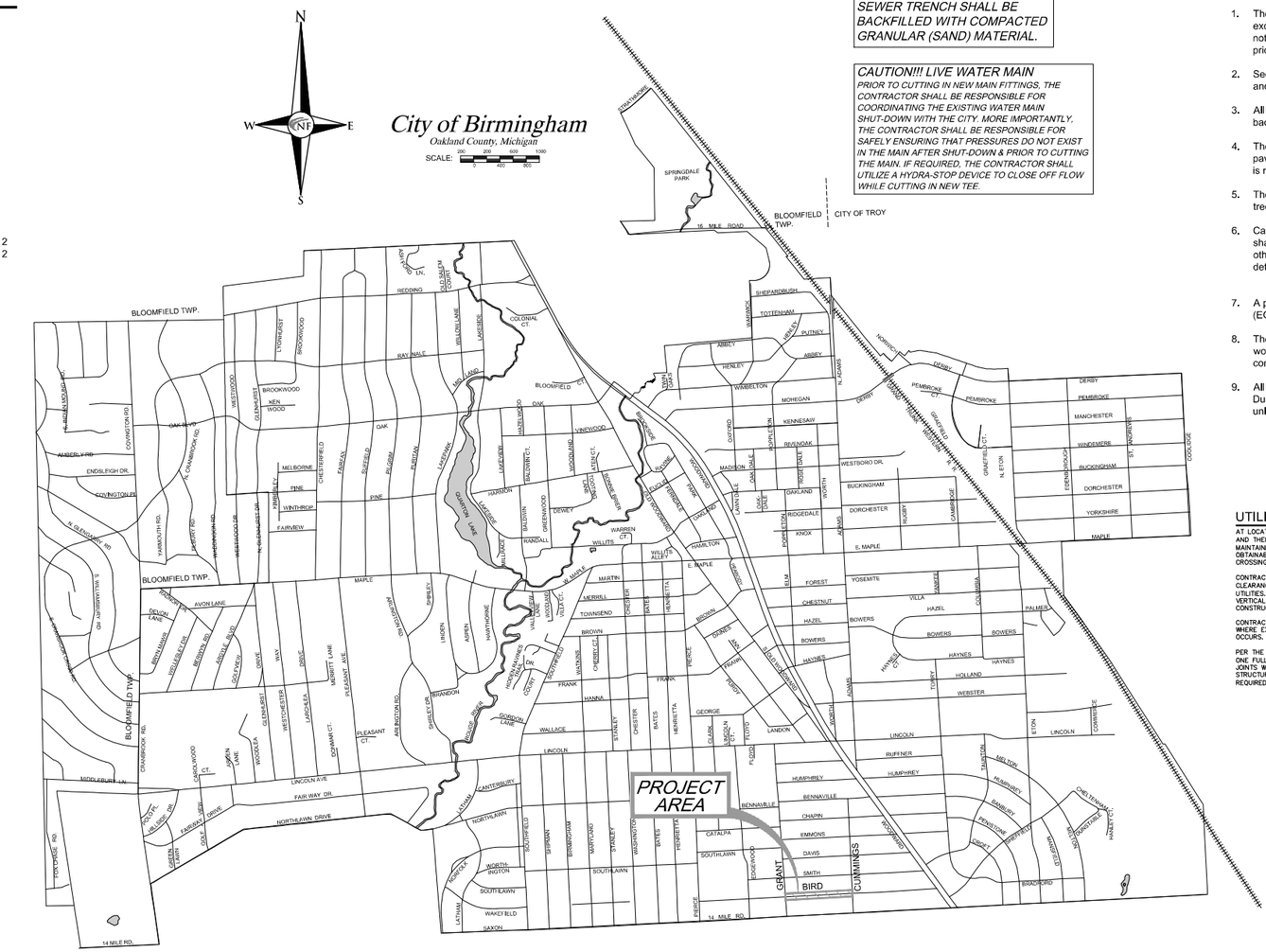
BENCHMARKS SET AND SHOWN PER SHEET WERE ESTABLISHED OFF OF THE CITY OF BIRMINGHAM BENCHMARK DATUM.

N W NF E S

City of Birmingham
Oakland County, Michigan
SCALE: 200 0 200 400 600 1000

ALL WATER MAIN, STORM AND SEWER TRENCH SHALL BE BACKFILLED WITH COMPACTED GRANULAR (SAND) MATERIAL.

CAUTION!!! LIVE WATER MAIN
PRIOR TO CUTTING IN NEW MAIN FITTINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE EXISTING WATER MAIN SHUT-DOWN WITH THE CITY. MORE IMPORTANTLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFELY ENSURING THAT PRESSURES DO NOT EXIST IN THE MAIN AFTER SHUT-DOWN & PRIOR TO CUTTING THE MAIN. IF REQUIRED, THE CONTRACTOR SHALL UTILIZE A HYDRA-STOP DEVICE TO CLOSE OFF FLOW WHILE CUTTING IN NEW TEE.



CONSTRUCTION NOTES

These notes shall apply for all work within this contract:

1. The contractor shall notify MISS DIG 1-800-482-7171 at least 3 working days excluding Saturday, Sunday, and Holidays before making any excavations and notify the City of Birmingham Engineering Department a minimum of 24 hours prior to the start of construction (248-530-1850).
2. See the City of Birmingham Standard Notes & Details for water main, sewer, and paving work.
3. All excavation under or within three feet of pavement, public or private, shall be backfilled and compacted with sand.
4. The joints at the edges of all excavations in the pavement shall be sawcut, or pavement will be removed to existing joints, as directed by the Engineer. There is no separate pay item for saw cutting pavements.
5. The contractor shall be responsible for damage to existing utilities, pavement, trees, landscaping, gravel, etc., whether located on public or private property.
6. Catch basin and inlet castings scheduled for replacement, or new construction shall be EJIW 5000Z4 DI / 5000M4 DI Hinged Assembly unless specified otherwise. Manhole castings shall be EJIW 1040-A cover as noted on the detail sheets and plans, unless otherwise specified.
7. A permit from the Michigan Department of Environment, Great Lakes & Energy (EGLE) is required for all new water main and sanitary sewer installations.
8. The contractor shall coordinate and cooperate with all other utility companies working in the same area, project related or not, during the same allotted construction period.
9. All proposed Public Water Main for this project shall be Pressure Class 52 Ductile Iron Pipe (D.I.P.) in conformance with City of Birmingham specifications, unless otherwise noted.

UTILITY CROSSING NOTE

AT LOCATIONS WHERE THERE ARE CROSSING WITH EXISTING UTILITIES AND THEIR DEPTHS ARE UNKNOWN, 18" VERTICAL SEPARATION WILL BE MAINTAINED WHENEVER POSSIBLE. IF THE 18" SEPARATION IS NOT OBTAINABLE, A CONCRETE ENCASEMENT WILL BE INSTALLED AT THE CROSSING.

CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE AND A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN UTILITIES. WHERE 10' SEPARATION CANNOT BE MAINTAINED, 18" VERTICAL CLEARANCE SHALL BE PROVIDED AND UTILITIES SHALL BE CONSTRUCTED IN SEPARATE TRENCHES.

CONTRACTOR SHALL FIELD VERIFY EXACT DEPTH OF EXISTING PIPE WHERE EXISTING CROSSES PROPOSED. CONTACT ENGINEER IF CONFLICT OCCURS.

PER THE TEN STATES STANDARDS, ARTICLE 8.8.3 (b), "AT CROSSINGS, ONE FULL LENGTH OF WATER PIPE (20') SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. SPECIAL STRUCTURAL SUPPORT FOR THE WATER AND SEWER PIPES MAY BE REQUIRED".

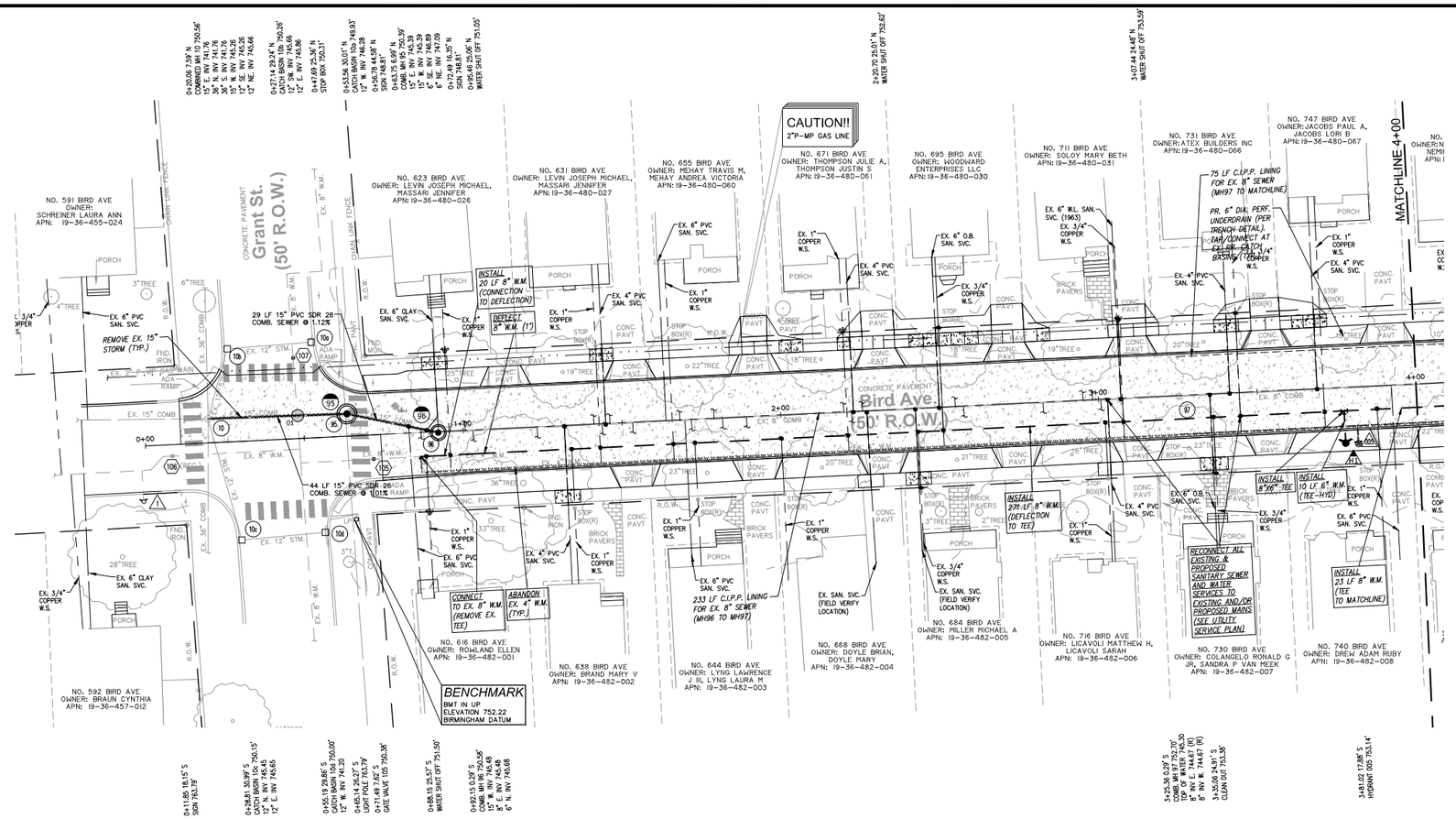
DESIGN ENGINEER SEAL

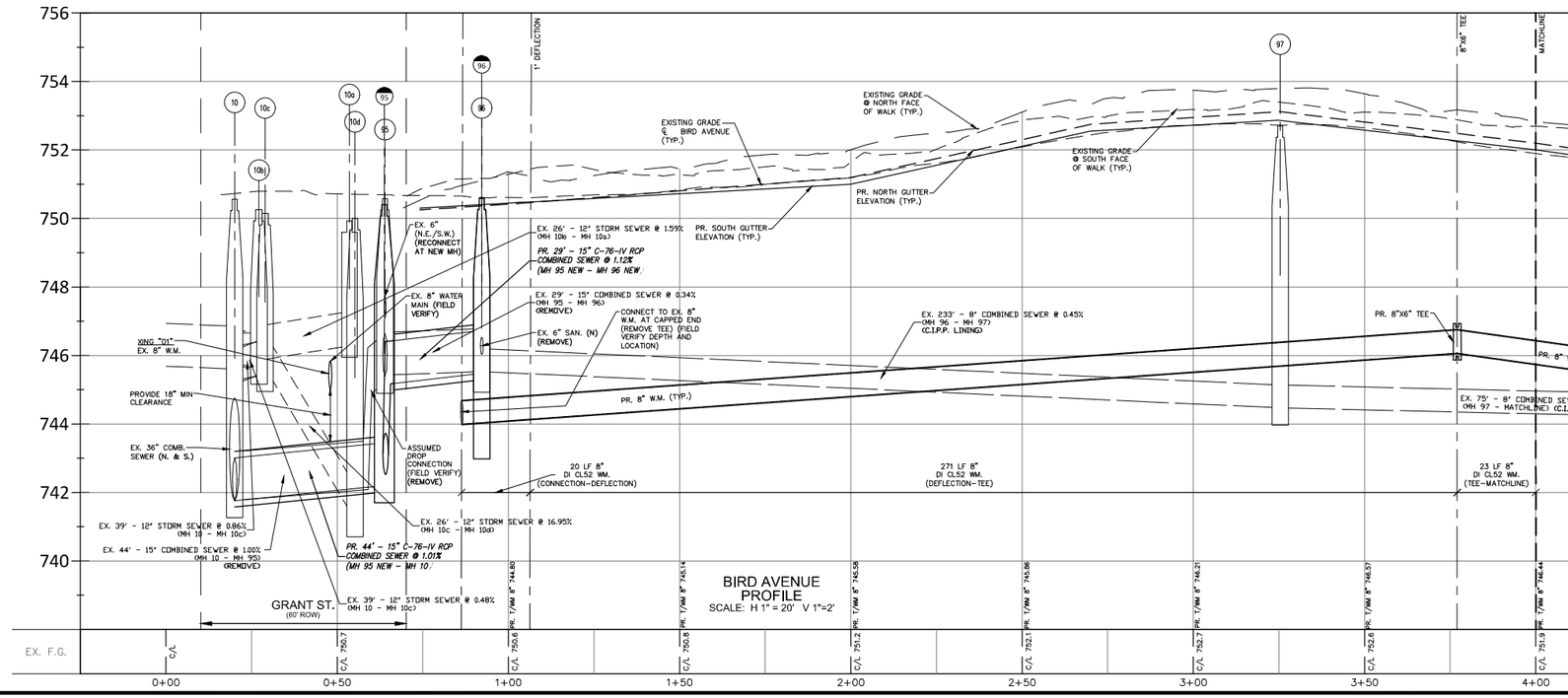
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

APPROVED DATE

02-09-2026 Addendum #1

BIRD AVENUE PHASE 1B PROJECT
CONTRACT #7-26W





UTILITY CROSSING SCHEDULE

01 EX. 8" WM B/P 745.03 (V.I.F.)
PR. 15" STM T/P 743.48
VERTICAL CLEARANCE: 1.55'

EX. STORM STRUCTURE SCHEDULE

10b MAINTAIN
0+27.14 29.24'N
CATCH BASIN 10b
RIM 750.26
12" INV SW 745.66
12" INV E 745.86

10c MAINTAIN
0+28.81 30.99'S
CATCH BASIN 10c
RIM 750.15
12" INV N 745.45
12" INV E 745.65

10a MAINTAIN
0+53.56 30.01'N
CATCH BASIN 10a
RIM 749.93
12" INV N 746.28

10d MAINTAIN
0+55.19 29.86'S
CATCH BASIN 10d
RIM 750.00
12" INV W 741.20

EX. SEWER STRUCTURE SCHEDULE

10 TAP, ADJUST, REMOVE/REPLACE COVER
0+20.06 7.59'N
COMB. MH 10
RIM 750.56
PR. RIM 750.55
15" INV E 741.76 (REMOVE)
36" INV N 741.76 (MAINTAIN)
36" INV S 741.76 (MAINTAIN)
15" INV W 745.26 (MAINTAIN)
12" INV SE 745.26 (MAINTAIN)
12" INV NE 745.66 (MAINTAIN)
PR. 15" INV 741.76 (TAP)

95 REMOVE
0+36.76 6.99'N
COMB. MH 95
RIM 750.39
15" INV E 745.39 (REMOVE)
15" INV N 745.39 (REMOVE)
6" INV SE 746.89
(INVESTIGATE/RE-CONNECT IF REQ.)
6" INV NE 747.09
(INVESTIGATE/RE-CONNECT IF REQ.)

96 REMOVE
0+92.15 0.29'S
COMB. MH 10
RIM 750.58
15" INV W 745.48 (REMOVE)
8" INV E 745.48 (RECONNECT & C.I.P.P LINING)
6" INV N 745.68 (REPLACE PER SVC. SCHEDULE)

97 ADJUST – REMOVE/REPLACE COVER
3+25.36 0.29'S
COMB. MH 97
RIM 752.70
PR. RIM 753.30
TOP/WATER 745.30
8" INV E. 744.67 (R) (C.I.P.P. LINING)
8" INV W. 744.67 (R) (C.I.P.P. LINING)

WATER MAIN SCHEDULE

105 MAINTAIN
0+71.49 7.62'S
STOP BOX 105
RIM 750.38

005 REMOVE
3+81.021 17.88'S
HYDRANT 005 753.14'

111 HYDRANT & ASSEMBLY
PR. STA. 3+77.02 17.50'S
FG 752.75
PR. T/PIPE 746.76

Combined Structure Schedule	
Structure Name	Structure Details
#95 NEW PR. 5' DIA. COMBINED STRUCTURE W/ 12" INT. DROP (INV @ 743.20)	PR. RIM 750.40 PR. 15" W. INV. 742.20 PR. 15" E. INV. 745.15
#96 NEW PR. 4' DIA. COMB. MANHOLE (CONSTRUCT ONLINE EX. 8" COMB. EAST INV. @ 745.53 ± (FIELD VERIFY))	PR. RIM 750.60 PR. 15" W. INV. 745.48

LEGEND
- SWR. SVC. (PER VIDEO INSP.)
- MANHOLE
- CLEAN-OUT
- COMB
- CVR
- HYDRANT
- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- RYCB
- MANHOLE
- CB
- END SECTION
- EXISTING STORM SEWER
- ELEC. METER
- ELEC. MARKER
- TELEPHONE MARKER
- EXISTING BURIED CABLES
- GAS MARKER
- GAS VALVE
- EXISTING GAS MAIN
- UTILITY POLE
- LIGHT POLE
- STRAIN POLE
- GUY WIRE
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- EX PAVERS
- LANDSCAPE BED
- PR. 7" CONC. PAVT. W/ INT. CURB
- EX. SOIL BORING
- PUBLIC PHONE
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- WELL
- PUMP
- PR. 4" CONC. SIDEWALK
- SIGN
- POST/BOLLARD
- PR. FULL-DEPTH ASPH. (5" MIN ON 6" 21AA)
- PARKING METER
- MAIL BOX
- PR. 18" MD. CONC. CURB & GUTTER
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS
NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER
NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼ of Section 36, T. 2N, R.10E City of Birmingham, Oakland County, Michigan

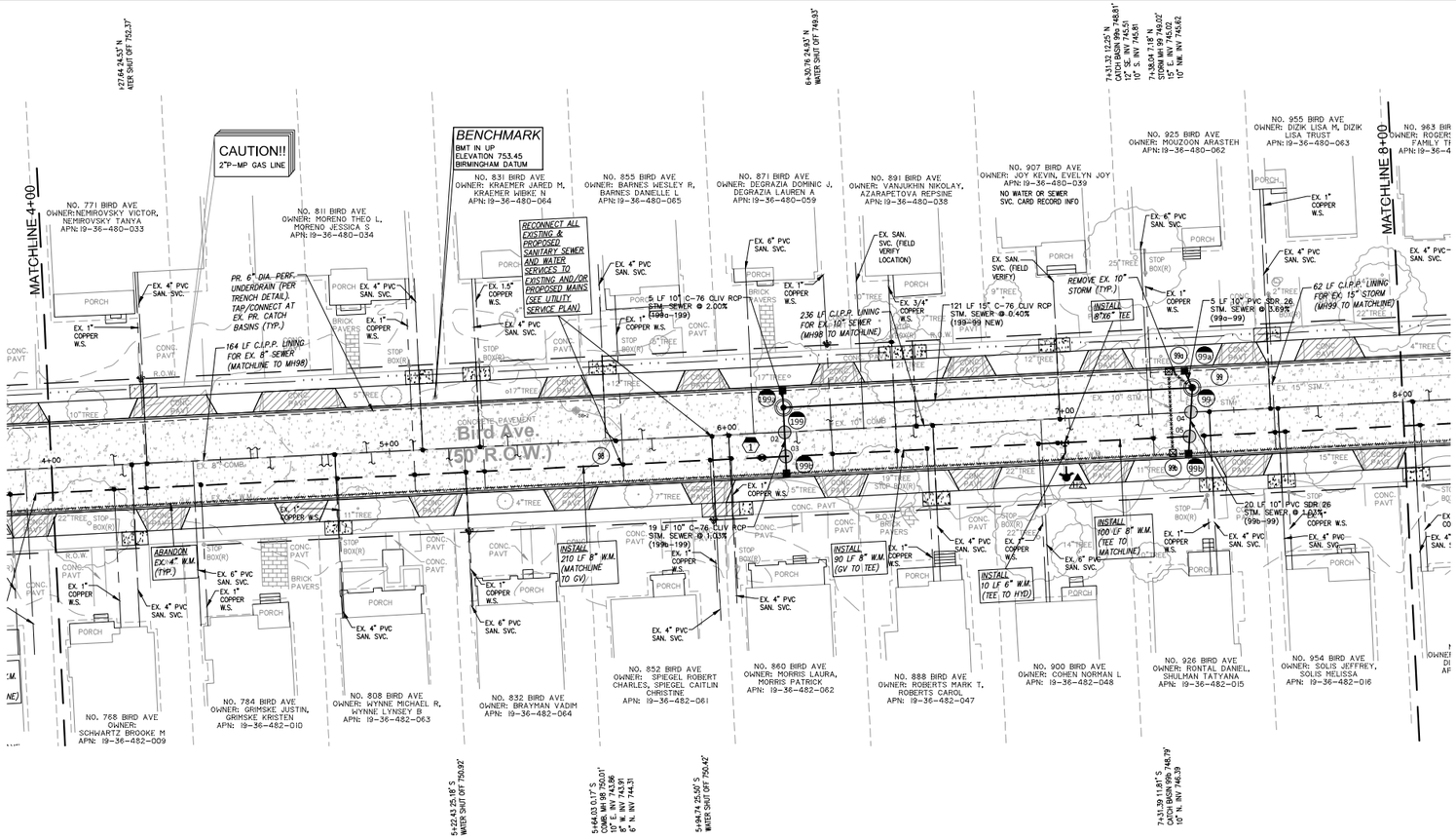
SHEET
Utility Plan Sta. P.O.B. To 4+00

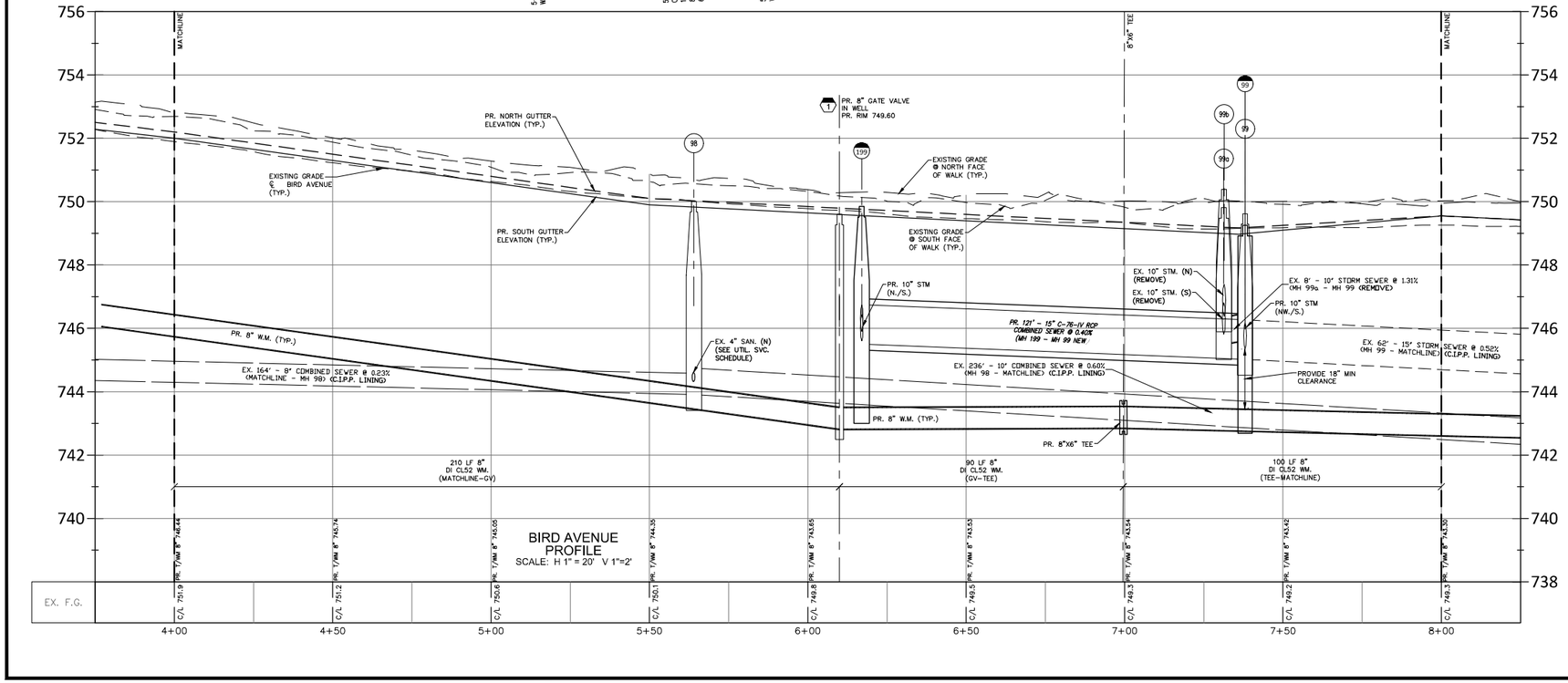
Know what's below Call before you dig.

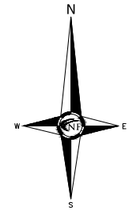
DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS
02-09-2026	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O947
SHEET NO. C01







UTILITY CROSSING SCHEDULE

02 PR. 10" STM B/P 745.95
EX. 10" COMB T/P 744.45
VERTICAL CLEARANCE: 1.50'

03 PR. 10" STM B/P 746.03
PR. 8" WM T/P 743.49
VERTICAL CLEARANCE: 2.54'

04 PR. 10" STM B/P 745.40
EX. 10" COMB T/P 743.72
VERTICAL CLEARANCE: 1.68'

05 PR. 10" STM B/P 745.48
PR. 8" W.M. 743.50
VERTICAL CLEARANCE: 1.98'

Storm Drainage Structure Schedule

Structure Name	Structure Details
#99 NEW PR. 4' DIA. STM MANHOLE W/ 2' SUMP (CONSTRUCT ONLINE EX. 15" E. 745.02, FIELD VERIFY)	PR. RIM 749.26 PR. 15" W. INV. 745.02 PR. 10" NW. INV. 745.35 PR. 10" S. INV. 745.35
#99a NEW PR. 2' DIA. STM INLET	PR. RIM 749.17 PR. 10" SE. INV. 745.55
#99b NEW PR. 2' DIA. STM INLET	PR. RIM 748.97 PR. 10" N. INV. 745.55
#199 PR. 4' DIA. STM MANHOLE W/ 2' SUMP	PR. RIM 749.85 PR. 15" E. INV. 745.50 PR. 10" N. INV. 745.60 PR. 10" S. INV. 745.90
#199a PR. 2' DIA. STM INLET	PR. RIM 749.76 PR. 10" S. INV. 745.50
#199b PR. 2' DIA. STM INLET	PR. RIM 749.56 PR. 10" N. INV. 746.10

EX. SEWER STRUCTURE SCHEDULE

(98) ADJUST – REMOVE & REPLACE COVER
5+64.03 0.17'S
COMB. MH 98
RIM 750.01
PR. RIM 750.25
10" INV E 743.86 (C.I.P.P. LINING)
8" INV W 743.91 (C.I.P.P. LINING)
6" INV N 744.31
(SEE SAN. SVC. SCHEDULE & BULKHEAD STRUCTURE)

EX. STORM STRUCTURE SCHEDULE

(99b) REMOVE
7+31.39 11.81'S
CATCH BASIN 99b
RIM 748.79
10" INV N 746.39

(99a) REMOVE
7+31.32 12.25'N
CATCH BASIN 99a
RIM 948.81
12" INV SE 745.51
10" INV S 745.81

(99) REMOVE
7+38.04 7.18'N
STORM MH 99
RIM 749.02
15" INV E 745.02
(MAINTAIN-RECONNECT AT NEW MH 99)
10" INV NW 745.62 (REMOVE)

WATER MAIN SCHEDULE

HYDRANT & ASSEMBLY
PR. STA. 6+99.62 17.29'S
FG 749.75
PR. T/PIPE 743.54

1 8" GATE VALVE IN WELL
RIM 749.60
PR. T/PIPE 743.51

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION
- EX PAVERS
- PR. 7" CONC. PAVT. W/ REI. CURB
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (5" HMA ON 6" 21AA)
- PR. 15" WD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼
of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

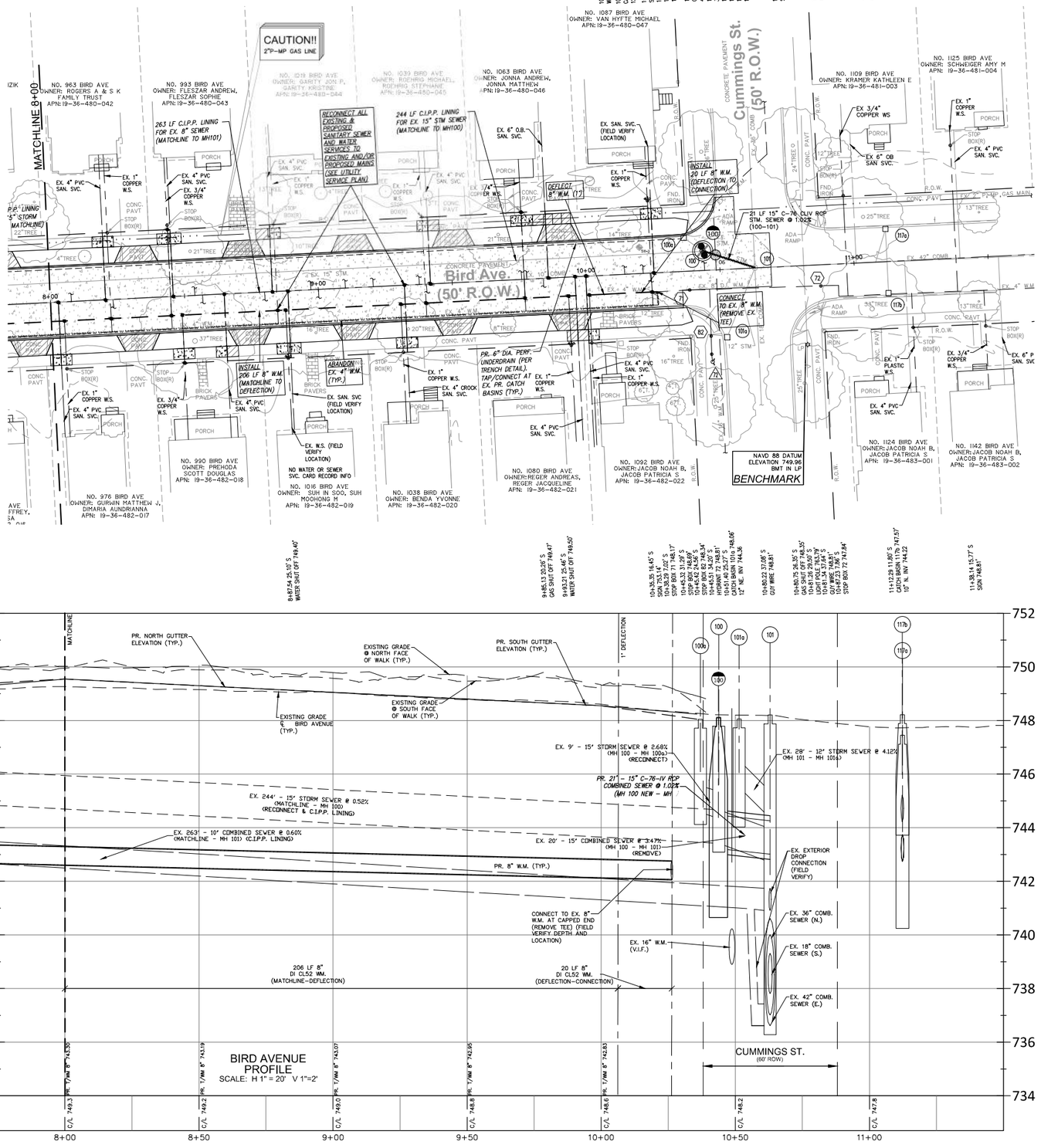
SHEET
Utility Plan Sta. 4+00 To 8+00

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS
02-09-2026	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O947
SHEET NO. C02



UTILITY CROSSING SCHEDULE

06 PR. 15" STM. B/P 742.97
EX. 16" W.M. T/P 740.15 (V.I.F.)
VERTICAL CLEARANCE: 2.82'

Storm Drainage Structure Schedule	
Structure Name	Structure Details
#100 NEW PR. 6' OUTLET CONTROL W/ WEIR WALL & GAS TRAP TOP OF WEIR @ 746.35 (CONSTRUCT ONLINE OF EX. 12" STM. NW. INV @ 743.22 ± & EX. 15" STM. W. INV @ 743.42 ± (FIELD VERIFY))	PR. RIM 748.10 PR. 15" E. INV. 743.22

EX. SEWER STRUCTURE SCHEDULE

(101) TAP
10+62.96 0.14'N
COMB. MH 101
RIM 748.21
42" INV E 736.61 (MAINTAIN)
18" INV S 737.81 (MAINTAIN)
36" INV N 737.01 (MAINTAIN)
10" INV W 736.61 (C.I.P.P. LINING)
12" INV SW 745.51(MAINTAIN)
10" INV W 740.91 (C.I.P.P. LINING)
15" INV NW 743.01 (REMOVE)
PR. 15" NW INV 743.01 (TAP)

EX. STORM STRUCTURE SCHEDULE

(100a) MAINTAIN
10+36.98 12.53'N
CATCH BASIN 100a
RIM 748.05
12" INV SE 744.45

(101a) MAINTAIN
10+51.40 25.27'S
CATCH BASIN 101a
RIM 748.06
12" INV NE 744.36

(117b) MAINTAIN
11+12.29 11.80'S
CATCH BASIN 117b
RIM 747.57
10" INV N 744.22

(117a) MAINTAIN
11+12.32 12.21'N
CATCH BASIN 117a
RIM 747.45
10" INV N 742.44
10" INV S 742.74

(100) REMOVE
10+43.81 7.34'N
STORM. MH 100
RIM 748.12
15" INV E 743.42 (REMOVE)
15" INV W 743.42 (RECONNECT & C.I.P.P. LINING)
12" INV NW 744.22 (RECONNECT & C.I.P.P. LINING)

WATER MAIN SCHEDULE

(71) MAINTAIN
10+38.29 7.02'S
STOP BOX 71 748.17'

(82) MAINTAIN
10+45.42 21.56'S
STOP BOX 82 748.34

(72) MAINTAIN
10+87.23 7.86'S
STOP BOX 72 747.84'

(72a) MAINTAIN
10+45.51 34.20'S
HYDRANT 72 748.81'

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION
- EX PAVERS
- PR. 7" CONC. PAVT. W/ MIL CURB
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (5" HMA ON 6" 21AA)
- PR. 18" WD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS
NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER
NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

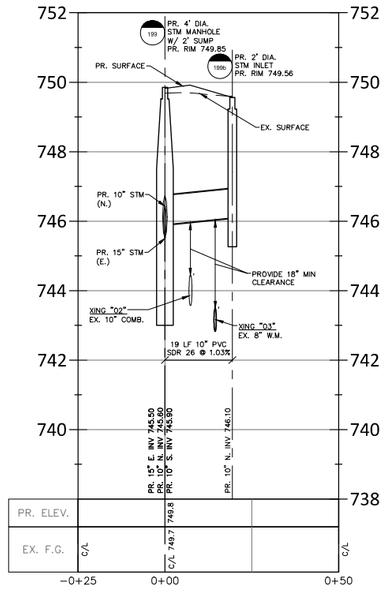
PROJECT LOCATION
Part of the S.E. ¼ of Section 36, T. 2N, R.10E City of Birmingham, Oakland County, Michigan

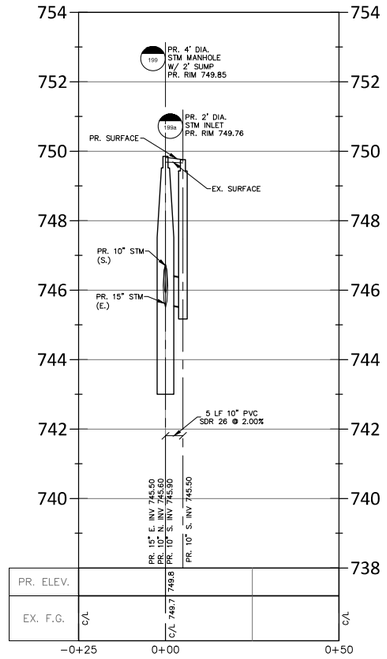
SHEET
Utility Plan Sta. 8+00 To P.O.E.

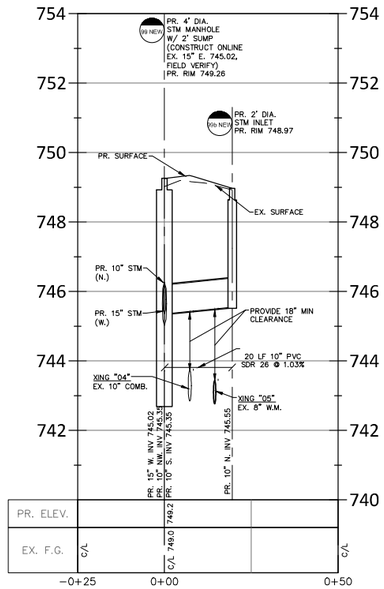
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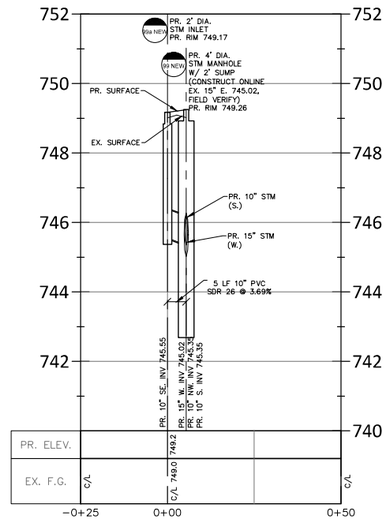
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DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30
NFE JOB NO. O947
SHEET NO. C03









UTILITY CROSSING SCHEDULE

02 PR. 10" STM B/P 745.95
EX. 10" COMB T/P 744.45
VERTICAL CLEARANCE: 1.50'

03 PR. 10" STM B/P 746.03
PR. 8" WM T/P 743.49
VERTICAL CLEARANCE: 2.54'

04 PR. 10" STM B/P 745.40
EX. 10" COMB T/P 743.72
VERTICAL CLEARANCE: 1.68'

05 PR. 10" STM B/P 745.79
EX. 10" COMB 743.50
VERTICAL CLEARANCE: 1.98'

Storm Drainage Structure Schedule

Structure Name	Structure Details
#99 NEW PR. 4' DIA. STM MANHOLE W/ 2' SUMP (CONSTRUCT ONLINE EX. 15" E. 745.02, FIELD VERIFY)	PR. RIM 749.26 PR. 15" W. INV. 745.02 PR. 10" NW. INV. 745.35 PR. 10" S. INV. 745.35
#99a NEW PR. 2' DIA. STM INLET	PR. RIM 749.17 PR. 10" SE. INV. 745.55
#99b NEW PR. 2' DIA. STM INLET	PR. RIM 748.97 PR. 10" N. INV. 745.55
#199 PR. 4' DIA. STM MANHOLE W/ 2' SUMP	PR. RIM 749.85 PR. 15" E. INV. 745.50 PR. 10" N. INV. 745.60 PR. 10" S. INV. 745.90
#199a PR. 2' DIA. STM INLET	PR. RIM 749.76 PR. 10" S. INV. 745.50
#199b PR. 2' DIA. STM INLET	PR. RIM 749.56 PR. 10" N. INV. 746.10

LEGEND

- SWR. SVC. (PER VIDEO INSP.)
- CLEAN-OUT
- MANHOLE
- CATCH BASIN
- EXISTING SAN/COMB SEWER
- DIB
- GW
- HYDRANT
- EXISTING WATER MAIN
- RYCB
- MANHOLE
- CB
- END SECTION
- EXISTING STORM SEWER
- ELEC. METER
- ELECTRIC MARKER
- TELEPHONE MARKER
- EXISTING BURIED CABLES
- GAS METER
- GAS MARKER
- GAS VALVE
- EXISTING GAS MAIN
- UTILITY POLE
- LIGHT POLE
- STRAIN POLE
- GUY WIRE
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION
- EX PAVERS
- PR. 7" CONC. PAVT. W/ INT. CURB
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (5" HMA ON 8" 21AA)
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151 Martin Street
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of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET

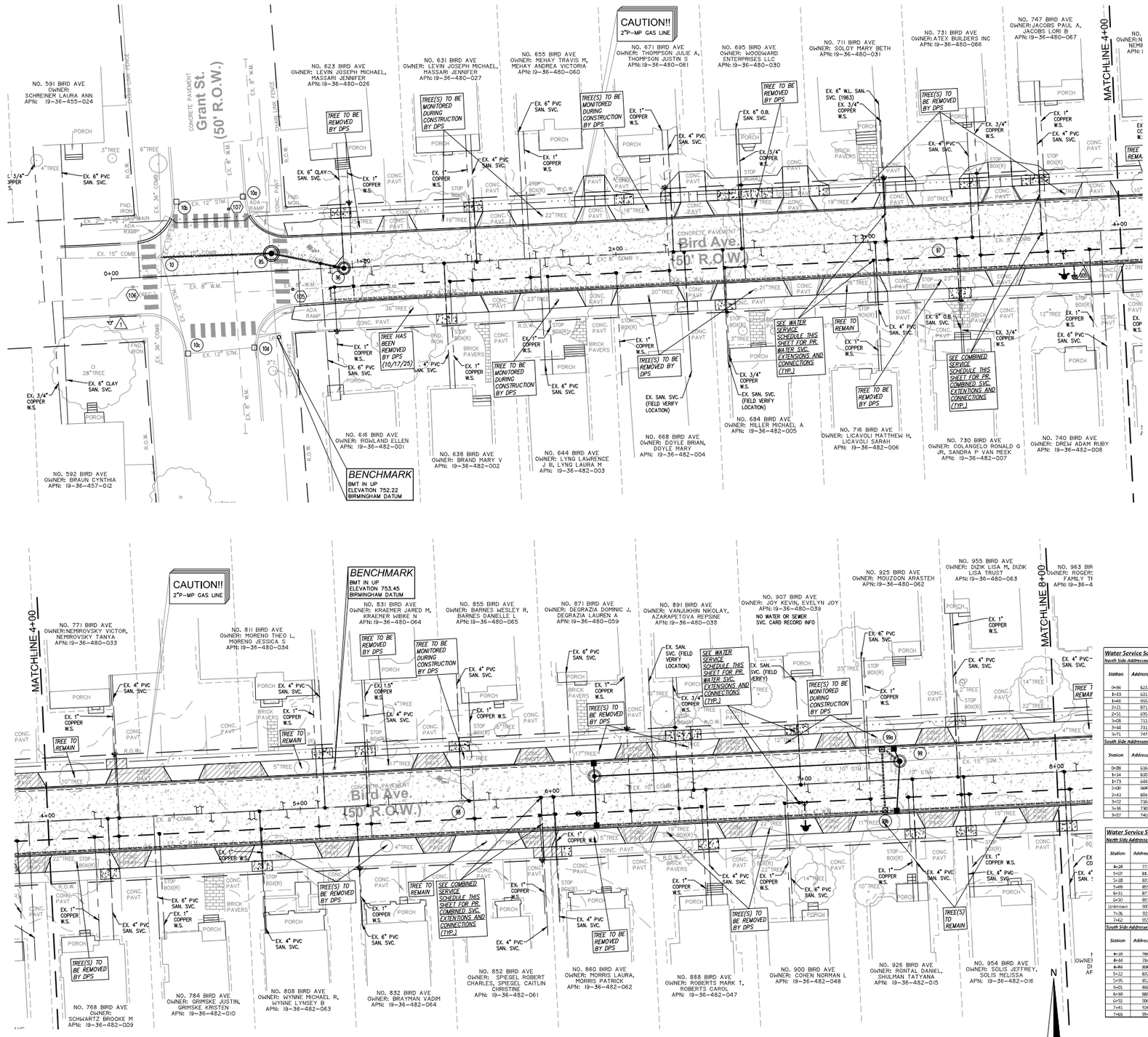
Storm Sewer Profile Plan

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DATE: October 25, 2024
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O947
SHEET NO. C04



Combined Sewer Service Schedule - Bird Avenue Sta. P.O.B. to 4+00

Existing MH95 to MH98

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
0+83	626 Bird Ave	15" Comb.	South	6"	PVC	Active	Replace to New 15" Main	N/A
0+42	616 Bird Ave	15" Comb.	South	6"	PVC	Likely Active	Investigate - To be New 15" Main if Req.	N/A

Existing MH96 to MH97

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
0+92	623 Bird Ave	8" Comb.	North	6"	Clay/D.B.	Active	Replace - Bond & Tap to New 12" Main	26/6"
1+03	615 Bird Ave	8" Comb.	South	6"	Unknown	Capped	New	N/A
1+23	638 Bird Ave	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
1+32	638 Bird Ave	8" Comb.	South	4"	PVC	Active	Replace - Tap to Ex. Main	26/6"
1+41	631 Bird Ave	8" Comb.	North	6"	Unknown	Capped	New	N/A
1+44	628 Bird Ave	8" Comb.	South	6"	Unknown	Capped	New	N/A
1+45	631 Bird Ave	8" Comb.	North	4"	PVC	Active	Replace - Tap to Ex. Main	26/6"
1+46	632 Bird Ave	8" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
1+53	628 Bird Ave	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
1+64	638 Bird Ave	8" Comb.	North	6"	PVC	Active	New - Main to be C.I.P.P. Lined	N/A
1+68	655 Bird Ave	8" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
1+70	644 Bird Ave	8" Comb.	South	4"	PVC	Active	None - Main to be C.I.P.P. Lined	N/A
1+73	644 Bird Ave	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
1+79	655 Bird Ave	8" Comb.	North	6"	Unknown	Capped	New	N/A
1+82	644 Bird Ave	8" Comb.	South	6"	Unknown	Capped	New	N/A
1+89	644 Bird Ave	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
2+00	671 Bird Ave	8" Comb.	North	6"	Unknown	Capped	New	N/A
2+22	671 Bird Ave	8" Comb.	North	6"	Unknown	Capped	New	N/A
2+23	671 Bird Ave	8" Comb.	North	4"	PVC	Active	Replace - Tap to Ex. Main	26/6"
2+26	671 Bird Ave	8" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
2+27	668 Bird Ave	8" Comb.	South	6"	Unknown	Active	Investigate - Rep are & Tap at Ex. Main as Req	26/6"
2+42	684 Bird Ave	8" Comb.	South	6"	Unknown	Active	Investigate - Rep are & Tap at Ex. Main as Req	26/6"
2+50	695 Bird Ave	8" Comb.	North	6"	D.B.	Active	Replace - Tap to Ex. Main	26/6"
2+55	695 Bird Ave	8" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
2+68	684 Bird Ave	8" Comb.	South	6"	Unknown	Capped	None	N/A
2+83	716 Bird Ave	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
2+95	711 Bird Ave	8" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
2+98	711 Bird Ave	8" Comb.	North	6"	Unknown	Capped	New	N/A
3+01	716 Bird Ave	8" Comb.	South	6"	PVC	Capped	None	N/A
3+03	716 Bird Ave	8" Comb.	South	4"	PVC	Active	Replace - Tap to Ex. Main	25/6"
3+07	711 Bird Ave	8" Comb.	North	6"	W.L. 1963	Active	Replace - Tap to Ex. Main	26/6"

Existing MH97 to MH98

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
3+35	730 Bird Ave	8" Comb.	South	6"	D.B.	Active	Replace - Tap to Ex. Main	25/6"
3+41	731 Bird Ave	8" Comb.	North	4"	PVC	Active	Replace - Tap to Ex. Main	26/6"
3+60	747 Bird Ave	8" Comb.	North	4"	PVC	Active	Replace - Tap to Ex. Main	26/6"
3+92	740 Bird Ave	8" Comb.	South	6"	PVC	Active	None - Main to be C.I.P.P. Lined	N/A

Combined Sewer Service Schedule - Bird Avenue Sta. 4+00 to 8+00

Existing MH97 to MH98

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
4+19	771 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
4+21	768 Bird Avenue	8" Comb.	South	6"	Unknown	Capped	None	N/A
4+24	768 Bird Avenue	8" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
4+28	771 Bird Avenue	8" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
4+42	784 Bird Avenue	8" Comb.	South	6"	P.V.C.	Active	New - Main to be C.I.P.P. Lined	N/A
4+59	811 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
4+61	811 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
4+65	784 Bird Avenue	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
4+80	808 Bird Avenue	8" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
4+82	808 Bird Avenue	8" Comb.	South	6"	Unknown	Likely Active	New - Main to be C.I.P.P. Lined	N/A
4+84	808 Bird Avenue	8" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
4+93	811 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
4+95	808 Bird Avenue	8" Comb.	South	4"	Unknown	Capped	None	N/A
5+07	811 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
5+22	831 Bird Avenue	8" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
5+28	832 Bird Avenue	8" Comb.	South	6"	Unknown	Active	New - Main to be C.I.P.P. Lined	N/A
5+32	832 Bird Avenue	8" Comb.	South	6"	P.V.C.	Active	New - Main to be C.I.P.P. Lined	N/A
5+37	831 Bird Avenue	8" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
5+35	831 Bird Avenue	8" Comb.	North	6"	Unknown	Capped	None	N/A
5+38	832 Bird Avenue	8" Comb.	South	6"	Unknown	Capped	None	N/A
5+64	855 Bird Avenue	8" Comb.	North	4"	P.V.C.	Active	Replace - Bond & Tap to Ex. Main	27/6"

Existing MH98 to MH102

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
5+75	855 Bird Avenue	10" Comb.	North	6"	Unknown	Likely Active	New - Main to be C.I.P.P. Lined	N/A
5+78	852 Bird Avenue	10" Comb.	South	6"	Unknown	Capped	None	N/A
5+95	852 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
6+02	880 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
6+08	871 Bird Avenue	10" Comb.	North	6"	P.V.C.	Active	New - Main to be C.I.P.P. Lined	N/A
6+20	880 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	New - Main to be C.I.P.P. Lined	N/A
6+31	871 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
6+42	891 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
6+55	888 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	New - Main to be C.I.P.P. Lined	N/A
6+56	891 Bird Avenue	10" Comb.	North	6"	Unknown	Active	Investigate - Replace & Tap to Ex. Main	26/6"
6+61	888 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
6+93	900 Bird Avenue	10" Comb.	South	6"	P.V.C.	Active	New - Main to be C.I.P.P. Lined	N/A
6+99	907 Bird Avenue	10" Comb.	North	6"	Unknown	Active	Investigate - Replace & Tap to Ex. Main	26/6"
7+21	900 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	New - Main to be C.I.P.P. Lined	N/A
7+22	926 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	New - Main to be C.I.P.P. Lined	N/A
7+25	925 Bird Avenue	10" Comb.	North	6"	P.V.C.	Active	New - Main to be C.I.P.P. Lined	N/A
7+43	926 Bird Avenue	10" Comb.	South	4"	Unknown	Active	Replace - Tap to Ex. Main	25/6"
7+61	880 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
7+63	954 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
7+75	954 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	New - Main to be C.I.P.P. Lined	N/A

Water Service Schedule - Bird Avenue Sta. P.O.B. to 4+00

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
0+96	623 Bird Ave	1" Copper	N/A	1"	N
1+33	631 Bird Ave	1" Copper	N/A	1"	N
1+46	655 Bird Ave	1" Copper	N/A	1"	N
2+21	671 Bird Ave	1" Copper	N/A	1"	N
2+51	695 Bird Ave	3/4" Copper	33/1"	1"	Y
3+08	711 Bird Ave	3/4" Copper	33/1"	1"	Y
3+44	731 Bird Ave	3/4" Copper	33/1"	1"	Y
3+73	747 Bird Ave	1" Copper	N/A	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
0+88	636 Bird Ave	1" Copper	5/1"	1"	N
1+34	628 Bird Ave	1" Copper	5/1"	1"	N
1+73	644 Bird Ave	1" Copper	5/1"	1"	N
2+00	668 Bird Ave	1" Copper	5/1"	1"	N
2+43	684 Bird Ave	3/4" Copper	18/1"	1"	Y
3+02	716 Bird Ave	1" Copper	5/1"	1"	N
3+36	730 Bird Ave	3/4" Copper	18/1"	1"	Y
3+87	740 Bird Ave	1" Copper	5/1"	1"	N

Water Service Schedule - Bird Avenue Sta. 4+00 to 8+00

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
4+28	771 Bird Ave	1" Copper	N/A	1"	N
5+07	811 Bird Ave	1" Copper	N/A	1"	N
5+28	831 Bird Ave	1.5" Copper	N/A	1.5"	N
5+69	855 Bird Ave	1" Copper	N/A	1"	N
6+31	871 Bird Ave	1" Copper	N/A	1"	N
6+50	891 Bird Ave	3/4" Copper	33/1"	1"	Y
Unknown	907 Bird Ave	Unknown from Sewa Material	T.B.D (33/1")	1"	Y
7+26	925 Bird Ave	1" Copper	N/A	1"	N
7+62	955 Bird Ave	1" Copper	N/A	1"	N

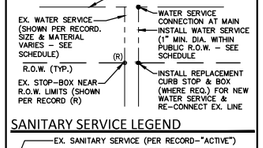
South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
4+18	768 Bird Ave	1" Copper	5/1"	1"	N
4+44	784 Bird Ave	1" Copper	5/1"	1"	N
4+84	808 Bird Ave	1" Copper	5/1"	1"	N
5+22	832 Bird Ave	1" Copper	5/1"	1"	N
5+95	852 Bird Ave	1" Copper	5/1"	1"	N
6+01	880 Bird Ave	1" Copper	5/1"	1"	N
6+59	888 Bird Ave	1" Copper	5/1"	1"	N
6+92	900 Bird Ave	1" Copper	5/1"	1"	N
7+41	926 Bird Ave	1" Copper	5/1"	1"	N
7+65	954 Bird Ave	1" Copper	5/1"	1"	N

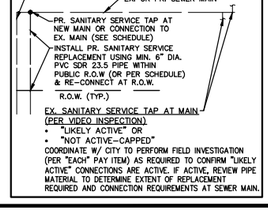
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WATER SERVICE LEGEND



SANITARY SERVICE LEGEND



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CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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PONTIAC, MI 48342-5032
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FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL



PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼ of Section 36, T. 2N, R.10E City of Birmingham, Oakland County, Michigan

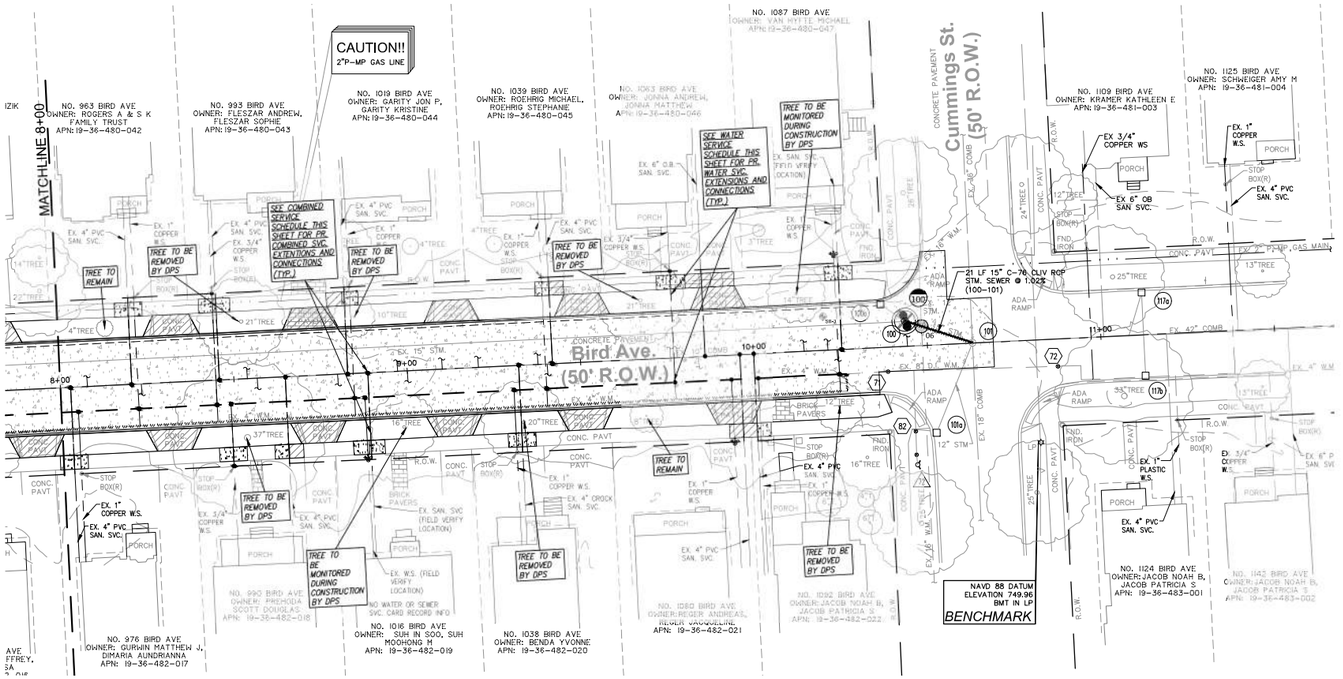
SHEET
Utility Service Plan Sta. P.O.B. To 8+00

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS
02-09-2026	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. O947
SHEET NO. C05



Water Service Schedule -Bird Avenue Sta. 8+00 to P.O.E.

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
8+22	963 Bird Ave	1" Copper	N/A	1"	N
8+45	993 Bird Ave	3/4" Copper	33/1"	1"	Y
8+84	1019 Bird Ave	1" Copper	N/A	1"	N
9+40	1039 Bird Ave	1" Copper	N/A	1"	N
9+77	1063 Bird Ave	3/4" Copper	33/1"	1"	Y
10+24	1087 Bird Ave	1" Copper	N/A	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
8+05	976 Bird Ave	1" Copper	5/1"	1"	N
8+49	990 Bird Ave	3/4" Copper	18/1"	1"	Y
8+87	1016 Bird Ave	Unknown (Verify Size/Material)	T.B.D. (5/1")	1"	N
9+30	1038 Bird Ave	1" Copper	5/1"	1"	N
9+93	1060 Bird Ave	1" Copper	5/1"	1"	N
10+01	1062 Bird Ave	1" Copper	5/1"	1"	N

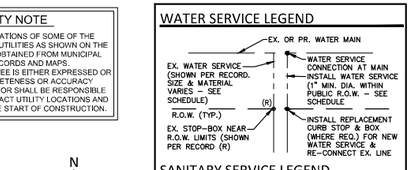
Combined Sewer Service Schedule - Bird Aveenue Sta. 8+00 to P.O.E.

Existing MH98 to MH101

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
8+03	976 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
8+08	963 Bird Avenue	10" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
8+21	963 Bird Avenue	10" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
8+23	976 Bird Avenue	10" Comb.	South	6"	Unknown	Capped	None	N/A
8+46	993 Bird Avenue	10" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
8+54	993 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
8+57	990 Bird Avenue	10" Comb.	South	6"	Unknown	Capped	None	N/A
8+65	990 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
8+80	1016 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
8+83	1019 Bird Avenue	10" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
8+89	1016 Bird Avenue	10" Comb.	South	6"	Unknown	Active	Investigate - Replace & Tap to Ex. Main	25/6"
8+97	1019 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
9+00	1016 Bird Avenue	10" Comb.	South	6"	Unknown	Capped	None	N/A
9+10	1019 Bird Avenue	10" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
9+21	1039 Bird Avenue	10" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
9+32	1038 Bird Avenue	10" Comb.	North	4"	Crock	Active	Replace - Tap to Ex. Main	25/6"
9+37	1039 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
9+40	1038 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
9+42	1039 Bird Avenue	10" Comb.	North	4"	P.V.C.	Active	Replace - Tap to Ex. Main	26/6"
9+76	1063 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
9+78	1063 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
9+84	1080 Bird Avenue	10" Comb.	South	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
9+86	1063 Bird Avenue	10" Comb.	South	6"	O.B.	Active	Replace - Tap to Ex. Main	26/6"
9+96	1080 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
10+00	1062 Bird Avenue	10" Comb.	South	4"	P.V.C.	Active	Replace - Tap to Ex. Main	25/6"
10+14	1087 Bird Avenue	10" Comb.	North	6"	Unknown	Likely Active	None - Main to be C.I.P.P. Lined	N/A
10+21	1087 Bird Avenue	10" Comb.	North	6"	Unknown	Capped	None	N/A
10+24	1092 Bird Avenue	10" Comb.	South	6"	Unknown	Capped	None	N/A
10+25	1087 Bird Avenue	10" Comb.	North	6"	Unknown	Active	Investigate - Replace & Tap to Ex. Main	26/6"
10+44	1087 Bird Avenue	10" Comb.	North	6"	Unknown	Active	None - Main to be C.I.P.P. Lined	N/A

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SEAL

STATE OF MICHIGAN · PAUL TULIKANGAS · ENGINEER NO. 057929 · LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼
of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

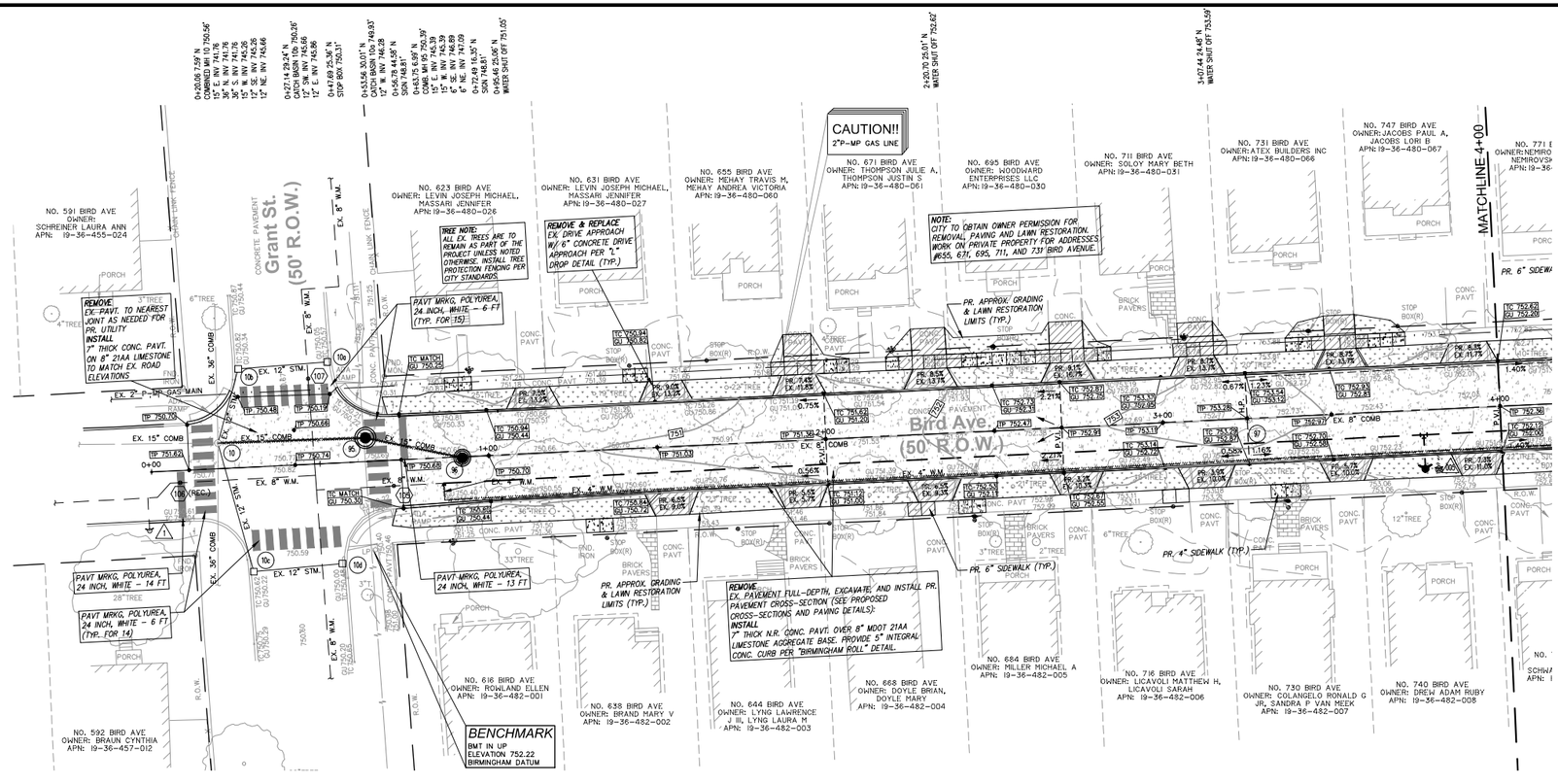
SHEET
Utility Service Plan Sta.
8+00 To P.O.E.

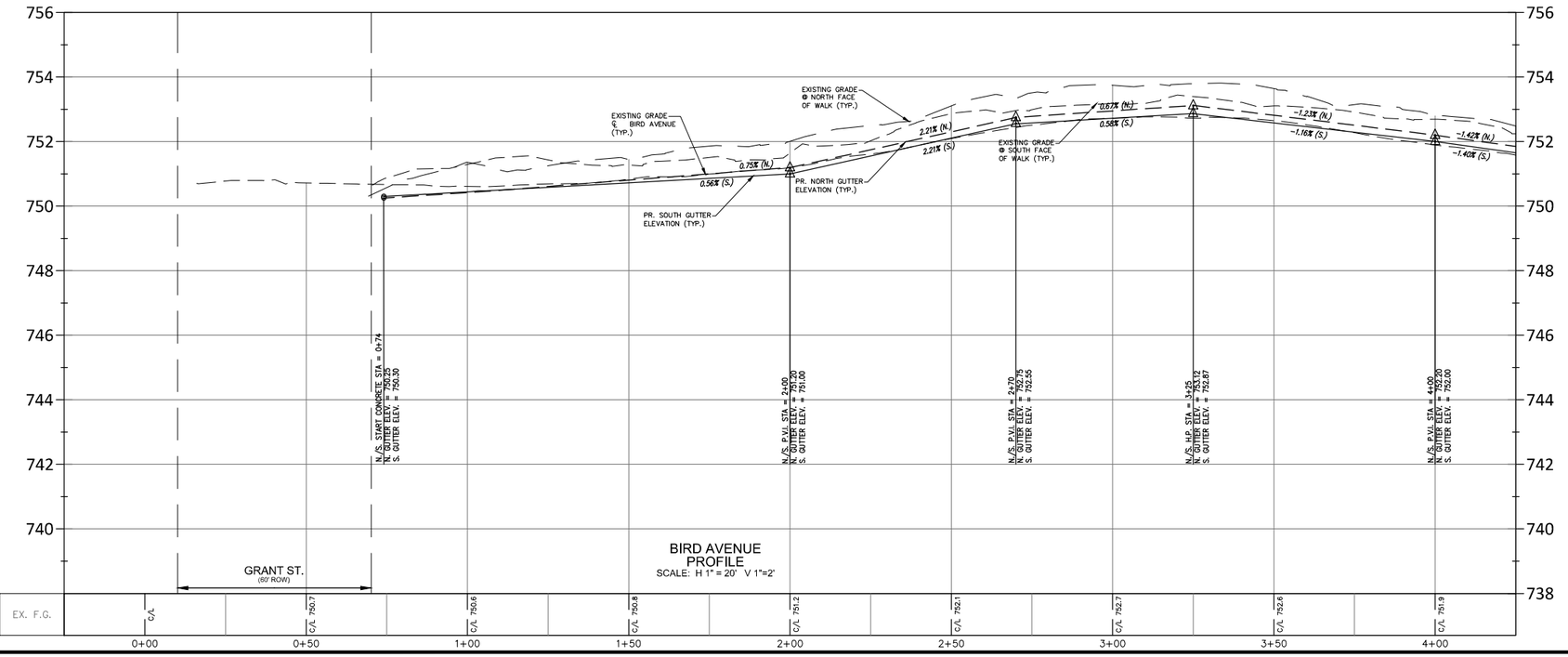
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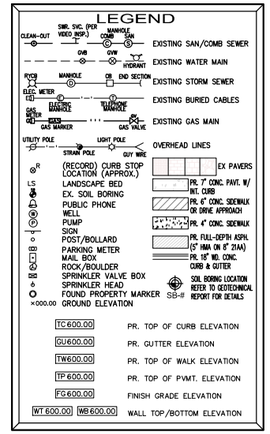
DATE	ISSUED/REVISED
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02-09-2026	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: 1" = 20'

NFE JOB NO. O947
SHEET NO. C06







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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER
NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

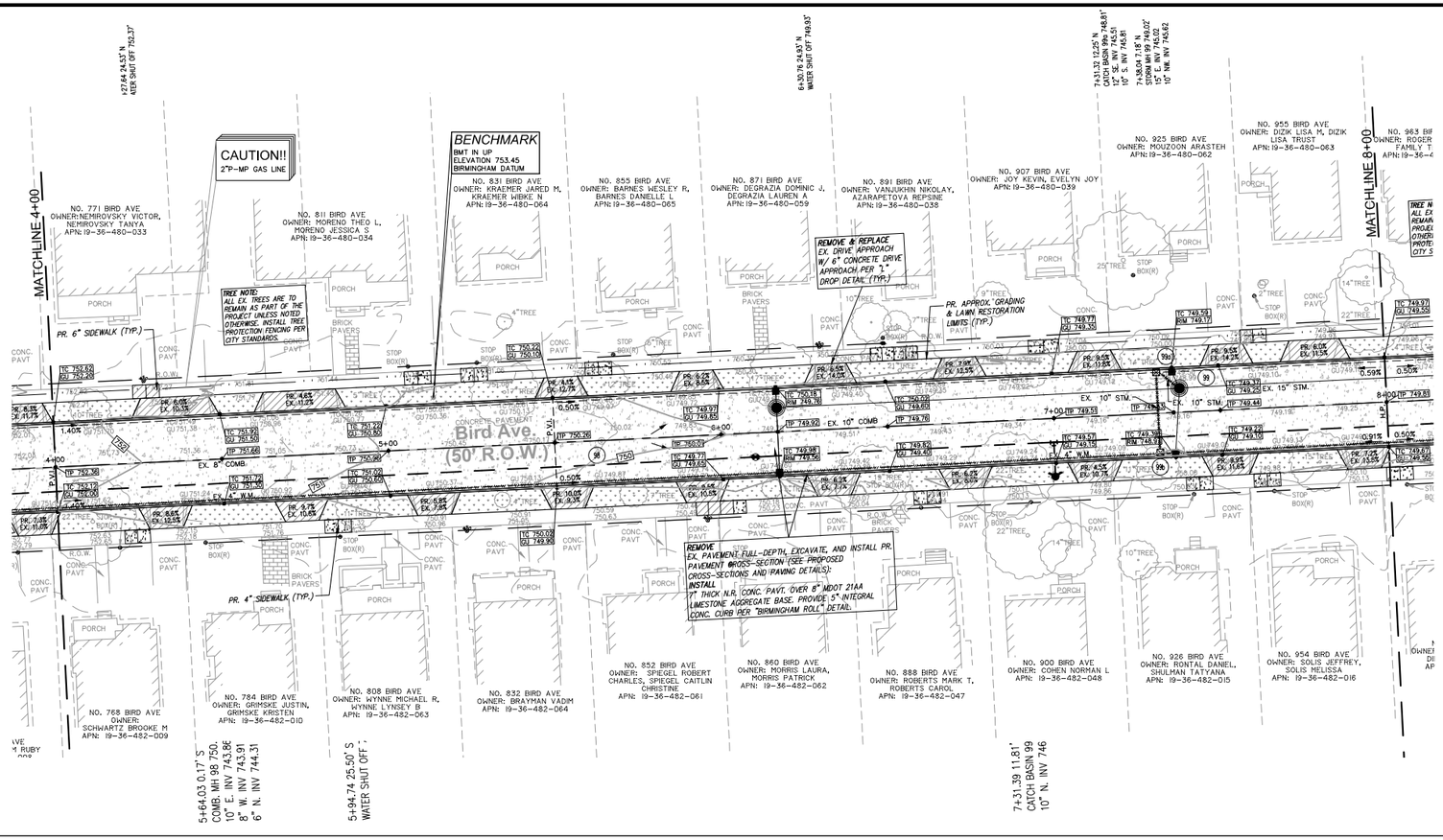
PROJECT LOCATION
Part of the S.E. ¼
of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

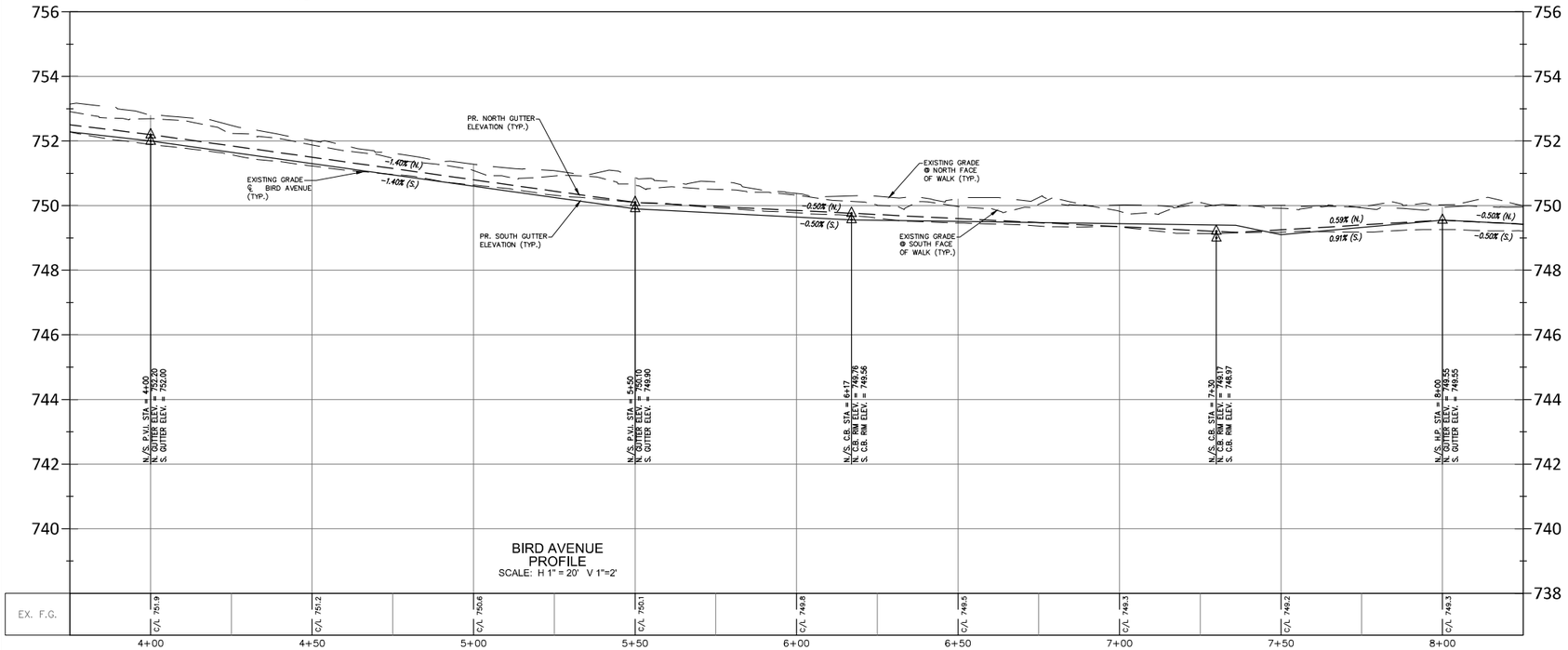
SHEET
Paving & Grading Plan
Sta. P.O.B. To 4+00

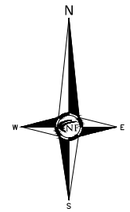
811
Know what's **below**
Call before you dig.

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01-22-2026	BIDS

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K. Withrow
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
October 25, 2024
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30
NFE JOB NO. O947
SHEET NO. C07







LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- GROUND ELEVATION
- EX PAVERS
- PR. 7" CONC. PAVT. W/ INT. CURB
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (5" MIN. ON 6" 21AA)
- PR. 18" MD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

TC 600.00	PR. TOP OF CURB ELEVATION
GU 600.00	PR. GUTTER ELEVATION
TW 600.00	PR. TOP OF WALK ELEVATION
TP 600.00	PR. TOP OF PVMT. ELEVATION
FG 600.00	FINISH GRADE ELEVATION
WT 600.00 / WB 600.00	WALL TOP/BOTTOM ELEVATION

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ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
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A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼
of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

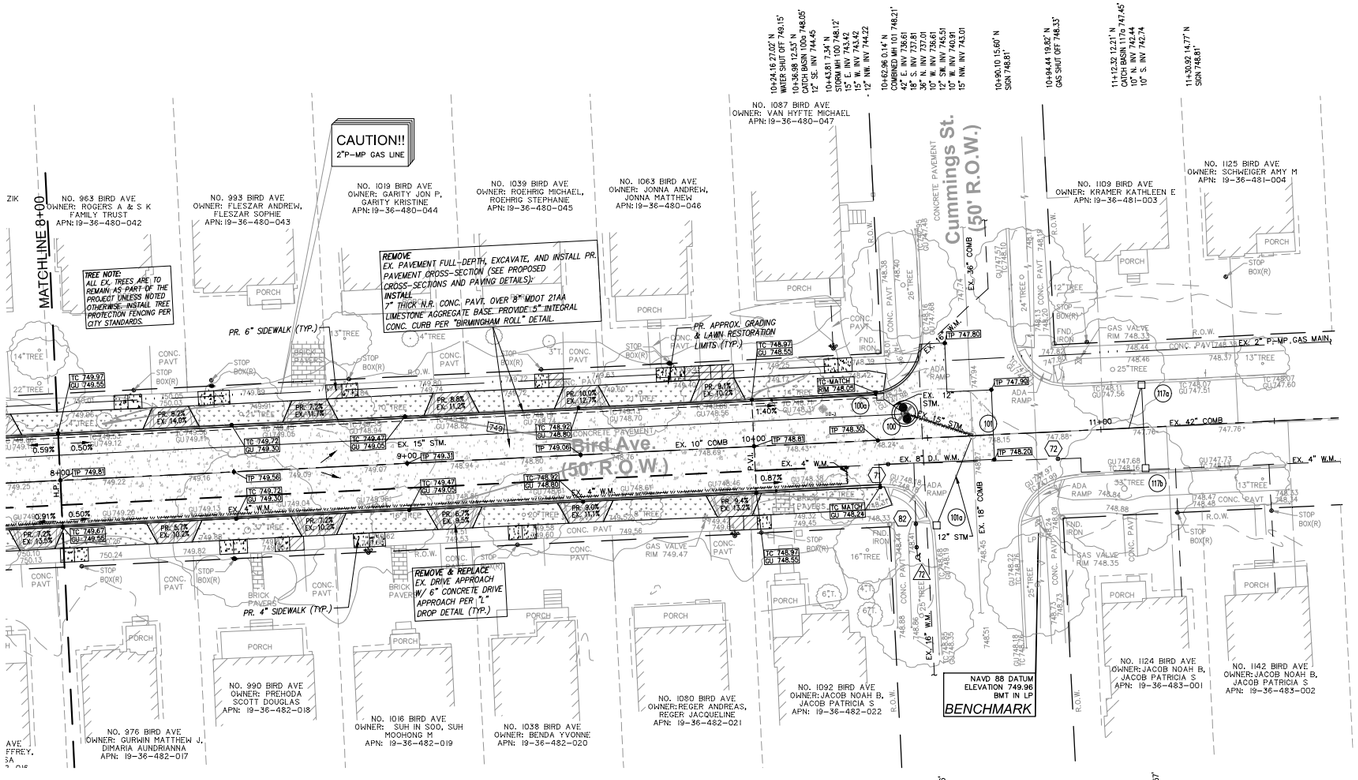
SHEET
Paving & Grading Plan
Sta. 4+00 To 8+00

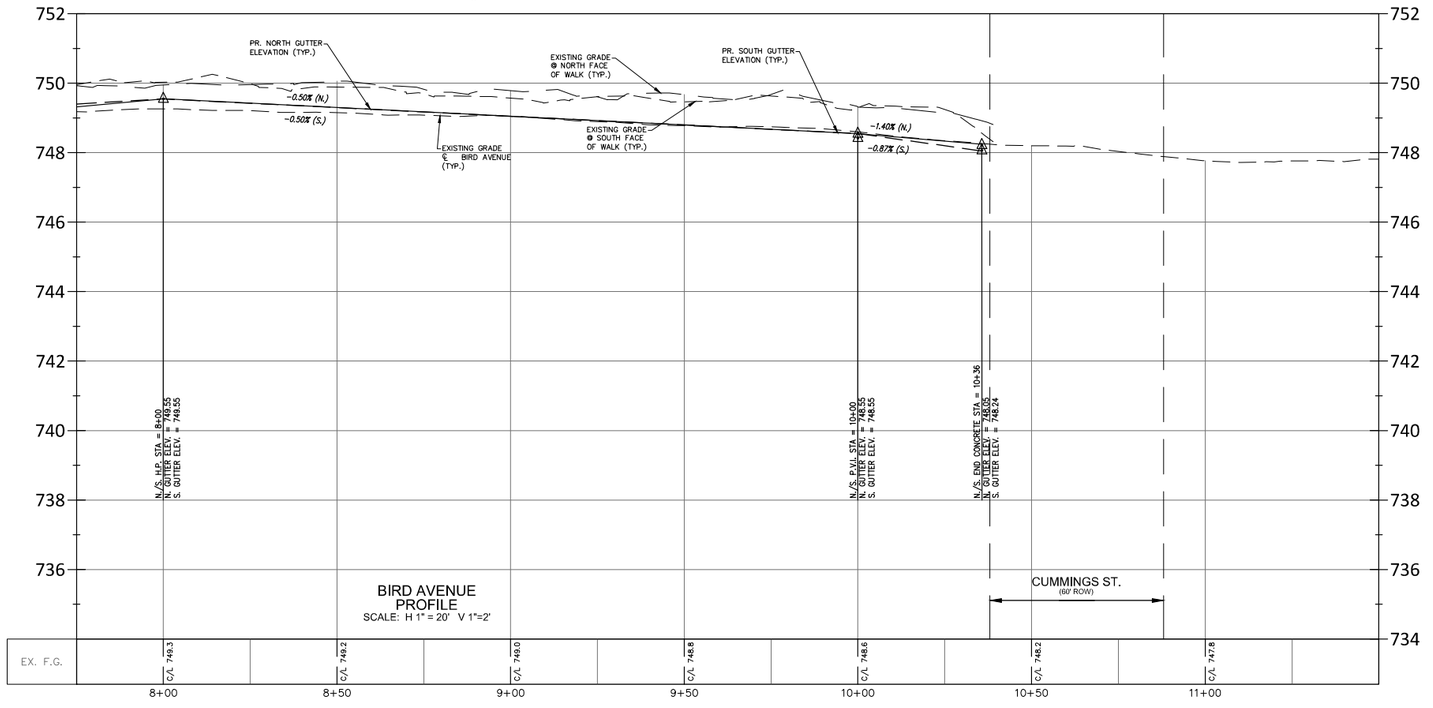
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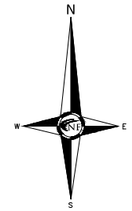
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DESIGNED BY: P. Tulikangas
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DATE: October 25, 2024
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O947
SHEET NO. C08







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SHEET
Paving & Grading Plan
Sta. 8+00 To P.O.E.

811
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DATE	ISSUED/REVISED
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03-09-2026	ADDENDUM 1

DRAWN BY:
K. Withrow

DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

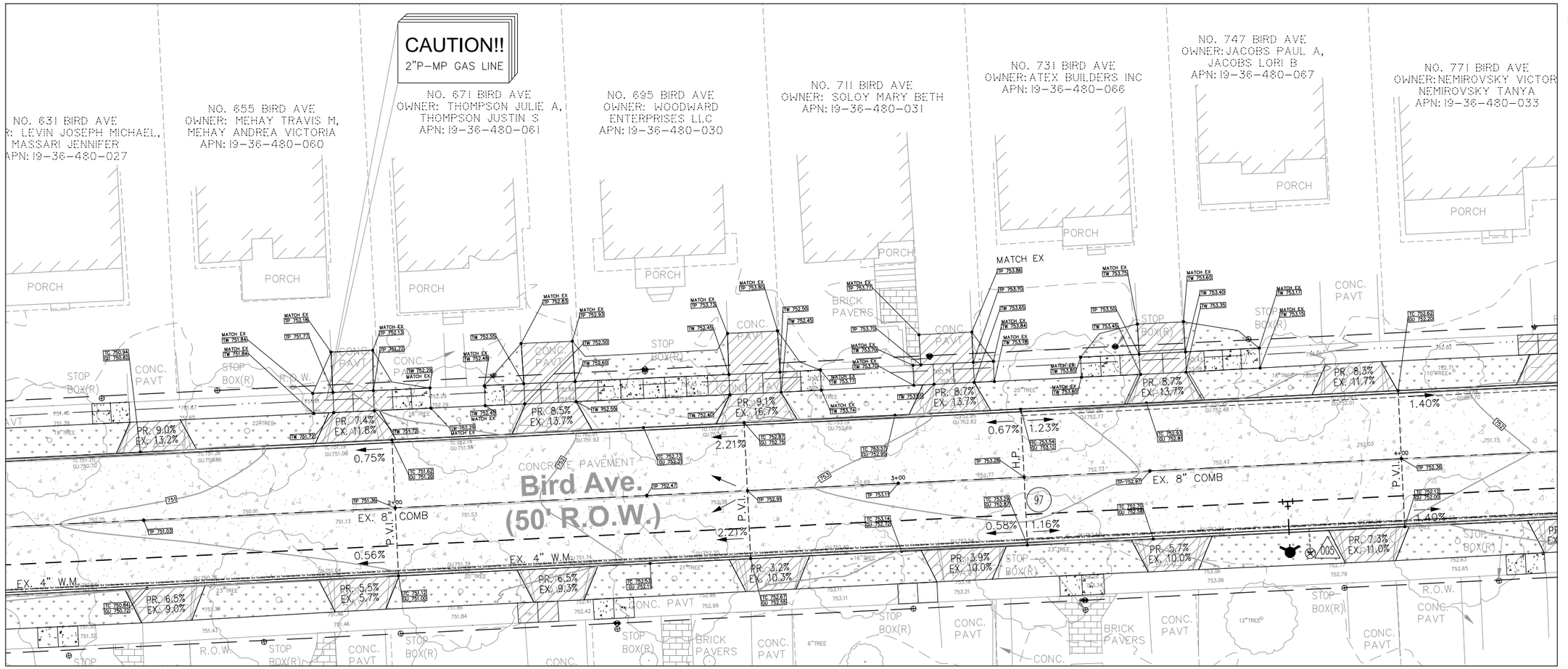
DATE:
October 25, 2024

SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O947
SHEET NO. C09

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX PAVERS
- PR. 7" CONC. PAVT. W/ INT. CURB
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (5" HMA ON 8" 21AA)
- PR. 18" ND. CONC. CURB & GUTTER
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- +000.00 GROUND ELEVATION
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- TC 600.00 PR. TOP OF CURB ELEVATION
- GU600.00 PR. GUTTER ELEVATION
- TW600.00 PR. TOP OF WALK ELEVATION
- TP 600.00 PR. TOP OF PVMT. ELEVATION
- FG 600.00 FINISH GRADE ELEVATION
- WT 600.00 WB600.00 WALL TOP/BOTTOM ELEVATION



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City of Birmingham,
Oakland County, Michigan

SHEET
Bird Avenue - N. Side
Walk & Driveway Grading
Detail

811
Know what's **below**
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DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS

DRAWN BY:
K. Withrow

DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

DATE:
October 25, 2024

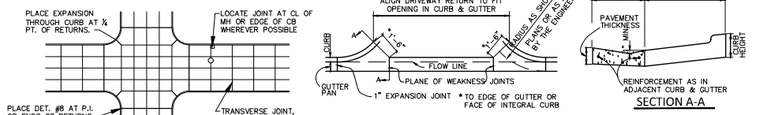
SCALE: 1" = 10'
10 5 0 5 10 5

NFE JOB NO. **O947**
SHEET NO. **C10**

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
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- PR. 7" CONC. PAVT. W/ INT. CURB
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (5" HMA ON 6" 21AA)
- PR. 15" WD. CONC. CURB & GUTTER
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- TW 600.00 PR. TOP OF WALK ELEVATION
- TP 600.00 PR. TOP OF PVMT. ELEVATION
- FG 600.00 FINISH GRADE ELEVATION
- WT 600.00 WB 600.00 WALL TOP/BOTTOM ELEVATION

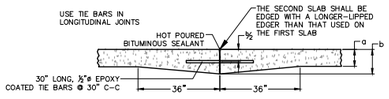
N W E S



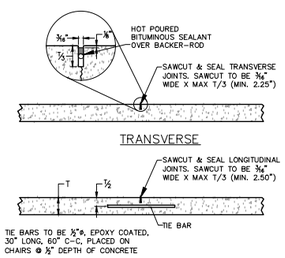
TYPICAL JOINT LAYOUT

MDOT DRIVEWAY OPENING DETAIL 'M'
N.T.S.

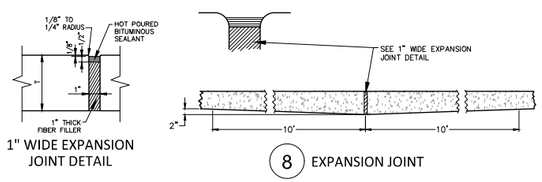
SLAB DESIGNATION	"a"	"b"
6"	6"	8"
7"	7"	9"
7–½"	7–½"	10"
8"	8"	11"
9"	9"	12"



5 CONSTRUCTION JOINT

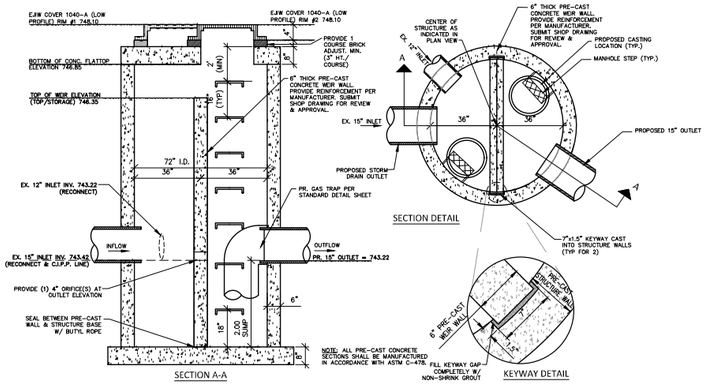


6 CONTRACTION JOINT



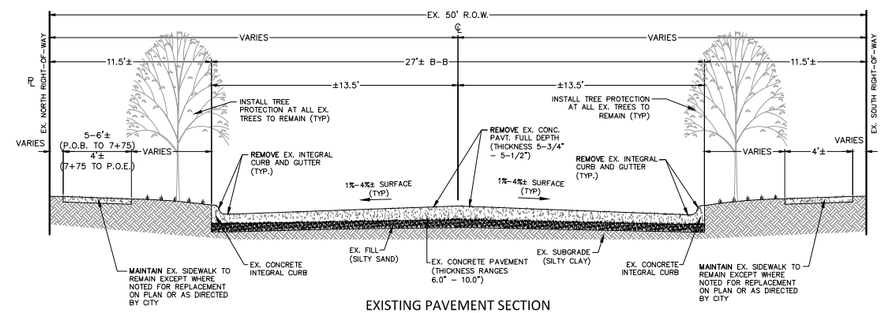
1" WIDE EXPANSION JOINT DETAIL

8 EXPANSION JOINT



100 6' DIAMETER OUTLET CONTROL MANHOLE (SCHEMATIC DETAIL)
N.T.S.

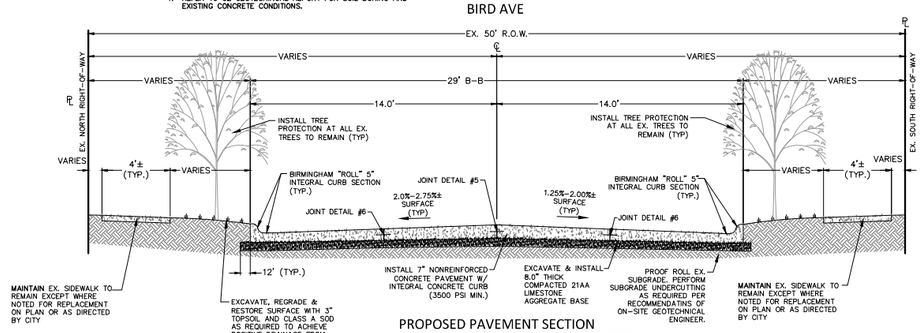
NOTE: OUTLET CONTROL STRUCTURE SHOWN IS SCHEMATIC. CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS SHOWING SITE SPECIFIC PIPE ORIENTATION, WSIR WALL ORIENTATION, INLET/OUTLET PIPE SIZES, RIM ELEVATIONS, ETC. FOR REVIEW AND APPROVAL.



EXISTING PAVEMENT SECTION
N.T.S.

NOTES:
1. REFER TO G2 GEOTECHINCAL REPORT FOR SOIL BORING AND EXISTING CONCRETE CONDITIONS.

BIRD AVE



PROPOSED PAVEMENT SECTION
N.T.S.
BIRD AVE
P.O.B. TO P.O.E.

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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SEAL
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER
NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Bird Avenue
Phase 1B Project
Contract #7-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the S.E. ¼
of Section 36,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

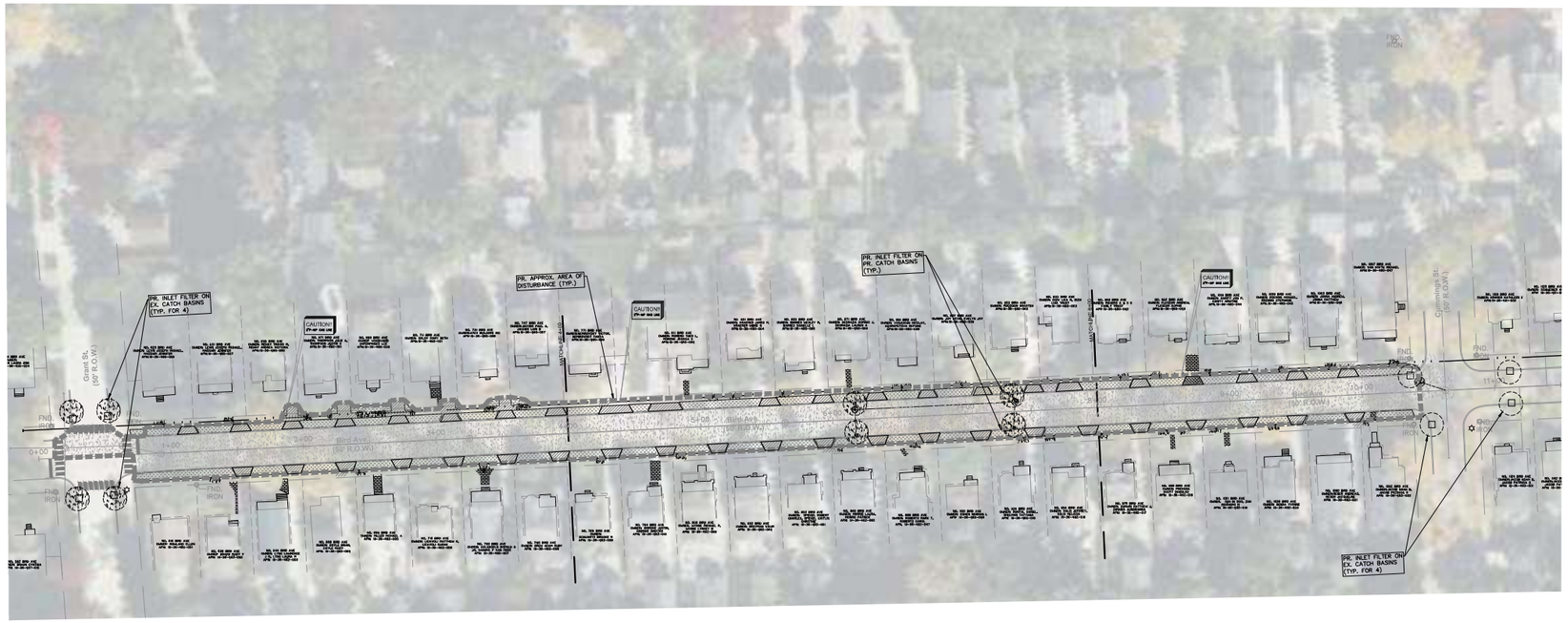
SHEET
Notes and Details

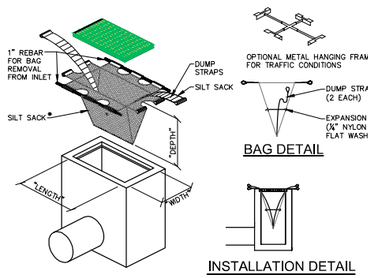
811
Know what's below
Call before you dig.

DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS
02-09-2026	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: N.T.S.

NFE JOB NO. O947
SHEET NO. C11





SILT SACK FILTER DETAIL

LEGEND

- INDICATES APPROXIMATE LIMITS OF EARTH DISTRUPTION
- INDICATES INLET FILTER AND/OR INLET SEDIMENT PIT ON PROPOSED CATCH BASIN (IN ACCORDANCE WITH CITY SPECIFICATIONS AND O.C.W.R.C. DETAILS)

CONSTRUCTION SEQUENCE / TIMING SCHEDULE

1.	INSTALL SOIL EROSION MEASURES	1ST MONTH
2.	COMMENCE UNDERGROUND CONSTRUCTION	2ND MONTH
3.	COMPLETE ROAD CONSTRUCTION	3RD MONTH
4.	COMPLETE LANDSCAPE RESTORATION	4TH MONTH
5.	REMOVE SOIL EROSION MEASURES	5TH MONTH

NOTES

A DISTANCE OF APPROXIMATELY 1.3 MI TO THE NEAREST BODY OF WATER (QUARTON LAKE).

THE APPROXIMATE TOTAL AREA OF EARTH DISRUPTION IS APPROXIMATELY 1.0 ACRES.

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY CONTRACTOR

A SOIL EROSION PERMIT IS REQUIRED FROM THE CITY OF BIRMINGHAM.

SOIL DATA

THIS SITE CONSISTS OF 60B (SHEBEON–URBAN LAND COMPLEX, 0 TO 4 PERCENT SLOPES) BASED ON DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE.

SOIL EROSION CONTROL NOTES

CUTTING, FILLING AND GRADING SHALL BE MINIMIZED AND THE NATURAL TOPOGRAPHY OF THE SITE SHALL BE PRESERVED TO THE MAXIMUM POSSIBLE EXTENT, EXCEPT WHERE SPECIFIC FINDINGS DEMONSTRATE THAT MAJOR ALTERATIONS WILL STILL MEET THE PURPOSES AND REQUIREMENTS OF THIS ORDINANCE.

DEVELOPMENT SHALL BE STAGED TO KEEP THE EXPOSED AREAS OF SOIL AS SMALL AS PRACTICABLE.

SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED BETWEEN THE DISTURBED AREA AND ANY WATERCOURSES, INCLUDING RIVERS, STREAMS, CREEKS, LAKES, PONDS AND OTHER WATERCOURSES; WETLANDS; OR ROADWAYS ON OR NEAR THE SITE.

SEDIMENT RESULTING FROM ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE THAT WATER LEAVES THE SITE.

TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR AWAY FROM THE SITE SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON–EROSIVE VELOCITY.

TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AFTER PERMANENT SOIL EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED. ALL SITES SHALL BE STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES.

IF LAKES, PONDS, CREEKS, STREAMS, OR WETLANDS ARE LOCATED ON OR NEAR THE SITE, EROSION CONTROL MEASURES WHICH DIVERT RUNOFF AND TRAP SEDIMENT MUST BE PROVIDED AT STRATEGIC LOCATIONS. STRAW BALE BERMS MAY BE USED AS TEMPORARY STORMWATER DIVERSION STRUCTURES, BUT WILL NOT BE CONSIDERED SUFFICIENT FOR TRAPPING SEDIMENT. THE USE OF SEDIMENT BASINS, FILTER FABRIC, VEGETATED BUFFER STRIPS, AND ROCK FILTERS IN LIEU OF STRAW BALE BERMS SHALL BE STRONGLY ENCOURAGED. OTHER MEASURES MAY BE REQUIRED IF REASONABLY DETERMINED TO BE NECESSARY TO PROTECT A WATERCOURSE OR WETLAND.

WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED.

PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 15 (FIFTEEN) CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.

VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.

ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.

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City of Birmingham
Bird Avenue
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Contract #7-26(W)

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City of Birmingham,
Oakland County, Michigan

SHEET
SESC Plan

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DATE	ISSUED/REVISED
12-18-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS

DRAWN BY:
K. Withrow

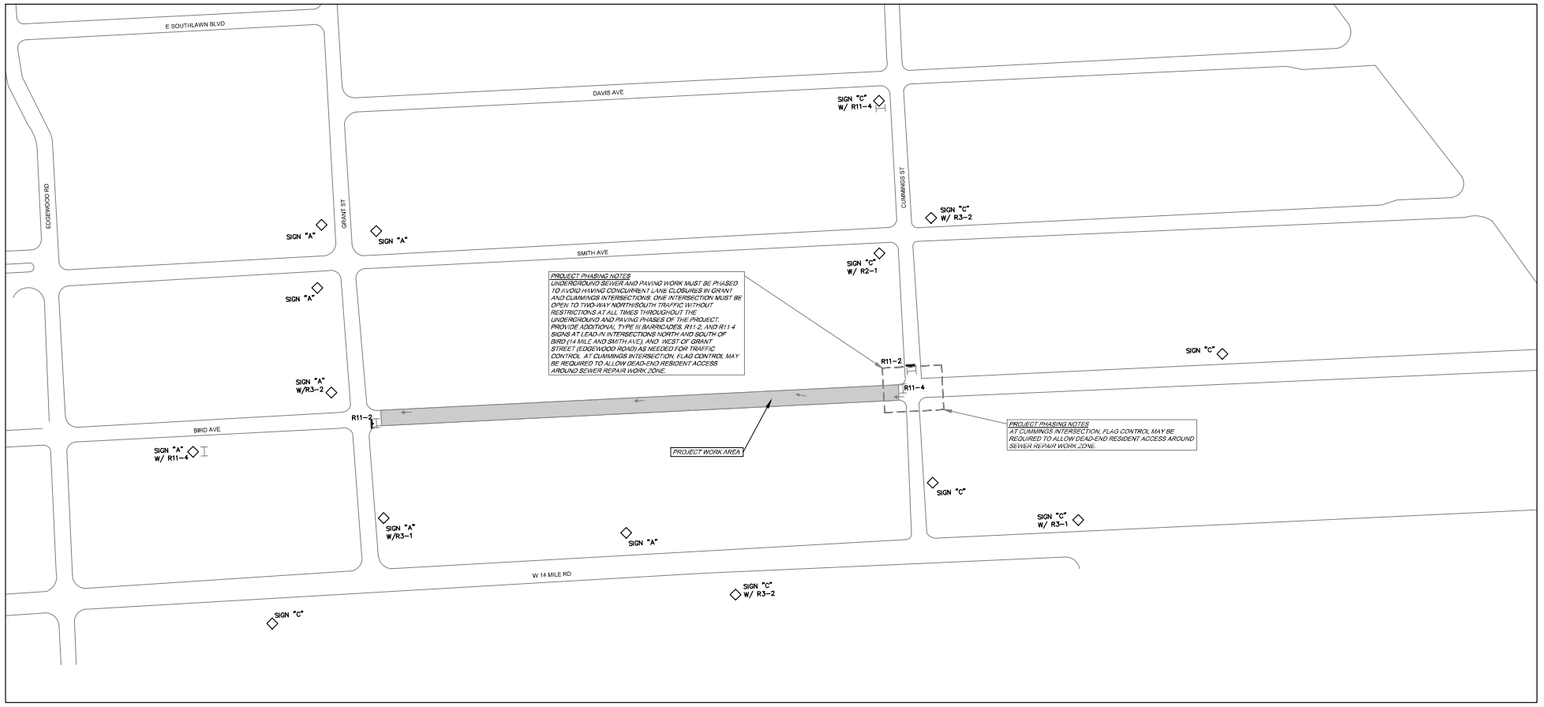
DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

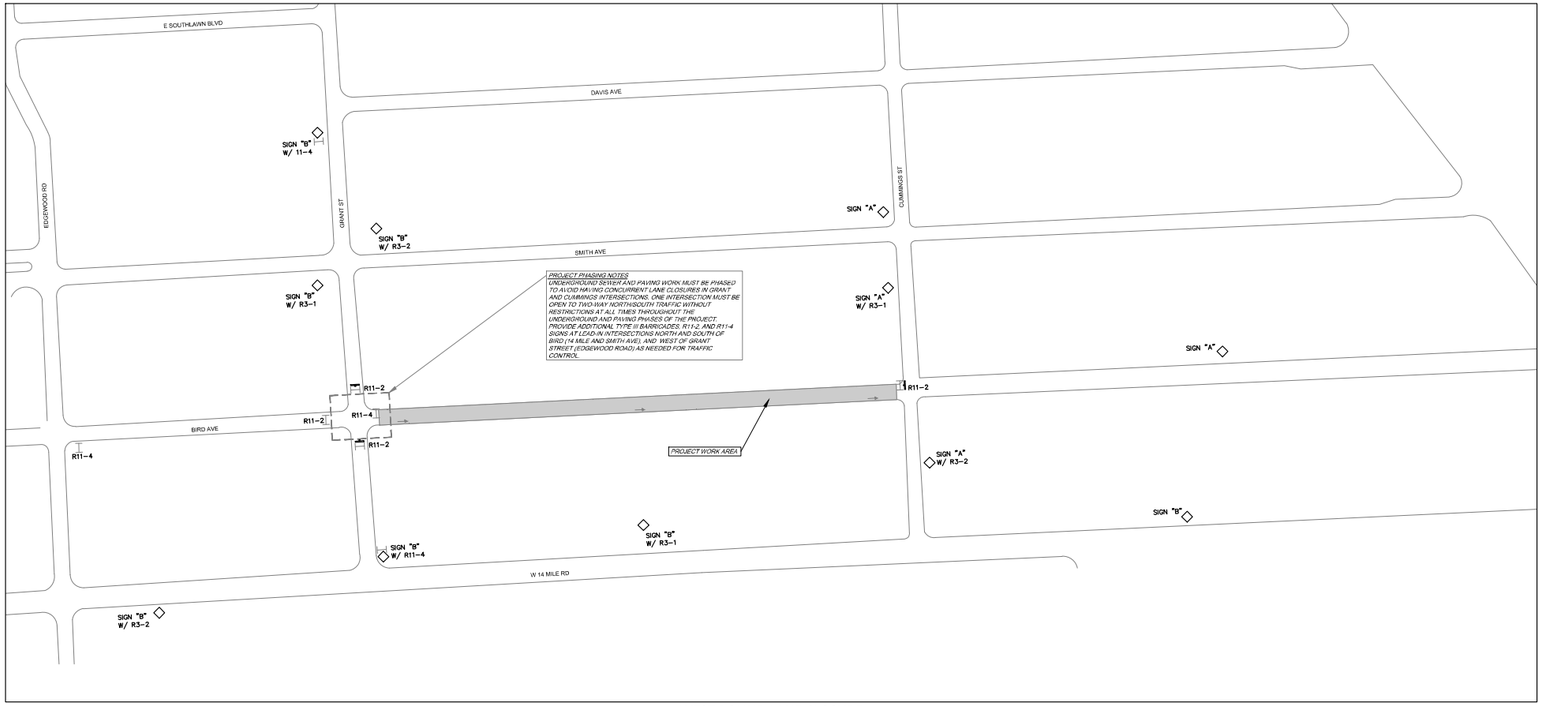
DATE:
October 25, 2024

SCALE: 1" = 50'
50 25 0 25 50 75

NFE JOB NO. O947
SHEET NO. C12



EAST BOUND LANE CLOSURE



WEST BOUND LANE CLOSURE

BIRD AVE. CLOSED TO THRU TRAFFIC (GRANT TO CUMMINGS) SEEK ALT. ROUTE

36"x72" ADVANCE WARNING SIGN "A"
BLACK LEGEND ON ORANGE BACKGROUND

GRANT CLOSED AT BIRD SEEK ALT. ROUTE

36"x72" ADVANCE WARNING SIGN "B"
BLACK LEGEND ON ORANGE BACKGROUND

CUMMINGS CLOSED AT BIRD SEEK ALT. ROUTE

36"x72" ADVANCE WARNING SIGN "C"
BLACK LEGEND ON ORANGE BACKGROUND



R3-1



R3-2

SYMBOL KEY

- TYPE III BARRICADES
- ADVANCED WARNING SIGN
- DETOUR



ADVANCED WARNING SIGN QUANTITIES AS SHOWN

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
SIGN "A"	BIRD AVE CLOSED TO THRU TRAFFIC (GRANT TO CUMMINGS) SEEK ALT. ROUTE	60"x30"	11
SIGN "B"	GRANT CLOSED AT BIRD SEEK ALT. ROUTE	60"x30"	7
SIGN "C"	CUMMINGS CLOSED AT BIRD SEEK ALT. ROUTE	60"x30"	8
R11-4	ROAD CLOSED FOR THRU TRAFFIC	60"x30"	7
R11-2	ROAD CLOSED	60"x30"	6
R3-1	NO RIGHT TURN	24"x24"	6
R3-2	NO LEFT TURN	24"x24"	6

NOTES

1. PLACE TRAFFIC CONTROL DEVICES AS SPECIFIED, OR AS OTHERWISE DIRECTED BY THE CITY OF BIRMINGHAM, INCLUDING ADVANCE WARNING SIGNS AND BARRICADES NOT SPECIFIED ON THIS DIAGRAM. CONTRACTOR/INSPECTOR MUST ACCOMPANY SIGN SUBCONTRACTOR DURING PLACEMENT OF SIGNS THROUGHOUT VARIOUS TRAFFIC CONTROL CHANGES.
2. ALL SIGNS AND BARRICADING SHALL BE IN ACCORDANCE WITH CURRENT M.M.U.T.C.D. AND M.D.OT. SPECIFICATIONS AND TRAFFIC TYPICALS, INCLUDING PLACEMENT OF ADDITIONAL REQUIRED SIGNS/BARRICADES NOT DEPICTED ON THESE PLANS TO CONTROL TRAFFIC, LANE SHIFTS, ETC.
3. ADVANCE WARNING SIGNS AND BARRICADES SHALL REMAIN IN PLACE UNTIL THE NEW ROAD (OR A PORTION THEREOF) IS READY TO BE OPENED FOR TRAFFIC AS DETERMINED BY THE CITY.
4. MAINTAIN SIDEWALKS AND INSTALL & MAINTAIN FENCING & SIGNAGE AS NEEDED TO ENSURE PEDESTRIAN SAFETY. UTILIZE MAINTENANCE AGGREGATE AS REQUIRED.
5. ERECT, REMOVE, AND/OR MAINTAIN ALL ADVANCE WARNING/DETOUR SIGNAGE AS DIRECTED BY THE CITY.
6. TYPE III BARRICADES (LIGHTED) SHALL BE PLACED FOR ALL LANE CLOSURES, AND SHALL INCLUDE A R11-2 OR R11-4 SIGN ON EACH TYPE III BARRICADE WHERE NOTED.
7. ALL SIDEWALK CLOSURES WITHIN CITY LIMITS SHALL HAVE TYPE III BARRICADES AND INCLUDE A SIDEWALK CLOSED SIGN. IF SIDEWALK CLOSURES ARE REQUIRED WITHIN M.D.O.T. RIGHT-OF WAY ON WOODWARD AVENUE (M-1), TYPE II BARRICADES SHALL BE USED.
8. LOCAL RESIDENT TRAFFIC (1-WAY) SHALL TYPICALLY BE MAINTAINED DURING CONSTRUCTION.
9. CONTRACTOR SHALL PROVIDE ADDITIONAL ADVANCED WARNING SIGNAGE TO INDICATE WHEN FULL-WIDTH CLOSURES WILL BE REQUIRED IN ISOLATED WORK AREAS. PROVIDE ADDITIONAL TYPE III BARRICADES, R11-2, AND R11-4 SIGNS WHERE REQUIRED AS PART OF THE LUMP SUM PAY ITEM FOR TRAFFIC CONTROL.
10. CONTRACTOR SHALL PROVIDE FLAG CONTROL AS REQUIRED THROUGHOUT DURATION OF PROJECT.

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Phase 1B Project
Contract #7-26(W)

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T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Advanced Warning Signage (AWS) Traffic Diagram

811
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DATE	ISSUED/REVISED
12-23-2025	ISSUED FOR CITY REVIEW
01-22-2026	BIDS
02-09-2026	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: October 25, 2024
SCALE: N.T.S.

NFE JOB NO. O947
SHEET NO. C13

NO.	ITEM DESCRIPTION	PAY UNIT	SHEET C01 Utility Plan	SHEET C02 Utility Plan	SHEET C03 Utility Plan	SHEET C05 Utility Service Plan	SHEET C06 Utility Service Plan	SHEET C07 P&G Plan	SHEET C08 P&G Plan	SHEET C09 P&G Plan	TOTAL QUANTITY
	SEWER PAY ITEMS										
1	15" Combined Sewer, PVC, SDR 26, Trench A	LF	73								73
2	15" Storm Sewer, C76, CL-IV, Trench A	LF		142							142
3	10" Storm Sewer, PVC SDR 26, Trench A	LF		49							49
4	Pre-Lining Preparation, Cleaning & Video Inspection, 15-inch Storm Sewer	LF		62	244						306
5	Pre-Lining Preparation, Cleaning & Video Inspection, 10-inch Comb. Sewer	LF		236	263						499
6	Pre-Lining Preparation, Cleaning & Video Inspection, 8-inch Comb. Sewer	LF	308	164							472
7	Sewer Lining, Pre-Liner, 15" RIFI-CIPP, Storm Sewer	LF		62	244						306
8	Sewer Lining, Pre-Liner, 10" RIFI-CIPP, Comb. Sewer	LF		236	263						499
9	Sewer Lining, Pre-Liner, 8" RIFI-CIPP, Comb. Sewer	LF	308	164							472
10	Sewer Lining, 15" RIFI-CIPP, Storm Sewer	LF		62	244						306
11	Sewer Lining, 10" RIFI-CIPP, Comb. Sewer	LF		236	263						499
12	Sewer Lining, 8" RIFI-CIPP, Comb. Sewer	LF	308	164							472
13	Cut/Grind Protruding Sewer Leads, Any Material	EA									5
14	Cut/Grind Root Intrusion	EA									5
15	Cut/Grind Mineral Deposit	EA									5
16	Sewer Service, 6" PVC SDR 23.5	LF				667	305				972
17	New 5'-0" Diameter Combined Manhole w/ Interior Drop Connection	EA	1								1
18	New 4'-0" Diameter Combined Manhole (Construct Online)	EA	1								1
19	New 6'-0" Diameter Storm Manhole w/ 2' Sump, Weir Wall & Gas Trap, Construct Online (Per Detail)	EA			1						1
20	New 4'-0" Diameter Storm Manhole w/ 2' Sump, Construct Online	EA		1							1
21	New 4'-0" Diameter Storm Manhole w/ 2' Sump	EA		1							1
22	New 2'-0" Diameter Storm Inlet	EA		4							4
23	6" Perforated Pipe Underdrain (No sock)	LF	150	800	236						1,186
24	Sewer Investigation, Laterals	EA				5	2				7
25	Sewer Service Tap, 6"	EA				28	12				40
26	Sewer Tap, 15", Combined	EA	1		1						2
27	Sewer Tap, 6", Underdrain	EA			1						1
28	Reconstruct Manhole (if and where needed)	VF									10
29	Remove & Replace Structure Cover (as directed by City)	EA									5
30	Remove Ex. Sewer Manhole	EA	2	1	1						4
31	Remove Ex. Drainage Structure	EA		2							2
32	Remove Ex. 15" Combined Sewer	LF	69								69
33	Remove Ex. 15" Storm Sewer	LF		21							21
34	Remove Ex. 10" Storm Sewer	LF		30							30
35	Bulkhead Structure, 12" or Less	EA		1							1
36	Bulkhead Pipe, Larger than 8"	EA									3
37	CCTV Sewer Acceptance Inspection	LS									1
	SUBTOTAL SEWER PAY ITEMS										
	WATER MAIN PAY ITEMS										
38	Remove Hydrant	EA	1								1
39	Fire Hydrant Assembly, Complete	EA	1	1							2
40	8" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	314	400	226						940
41	6" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	10	10							20
42	8" Water Main Connection to Ex. 8" Water Main	EA	1		1						2
43	New Water Service, 1", Trench A, Copper	LF				281	109				390
44	Water Service Connection, 1.5"	EA				1					1
45	Water Service Connection, 1"	EA				34	12				46
46	Install Curb Stop & Box, 1"	EA				7	3				10
47	Hydra-Stop, Line-Stop, 8"	EA									1
48	Hydra-Stop, Line-Stop, 4"	EA									1
49	Abandon Existing Water Mains, Entire Project	LS									1
	SUBTOTAL WATER MAIN PAY ITEMS										
	PAVING PAY ITEMS										
50	Earth Excavation	CY						250	270	180	700
51	Subgrade Undercutting, 21AA Limestone	CY						25	27	18	70
52	Subgrade Undercutting, 1"x3" Limestone	CY						12	14	9	35
53	Subgrade Geogrid Fabric, Tensar Triax TX130S	SY									1,000
54	Remove and Salvage Brick Pavers	SF						25		110	135
55	Removing Concrete Drive Approach	SY						131	168	85	384
56	Removing Concrete Sidewalk & Ramp (sawcutting included)	SY						85	50	55	190
57	Removing Pavement Full Depth (Curb & Gutter included)	SY						1109	1200	800	3,109
58	Aggregate Base, MDOT 21AA Limestone, 8"	SY						1165	1260	840	3,265
59	Concrete Pavement, Non-reinforced, 7", Incl. integral 5" curb ("Birmingham Roll")	SY						1109	1200	800	3,109
60	Concrete Drive Approach, 6"	SY						174	190	90	454
61	Concrete Sidewalk, 6" (Includes Ramps)	SF						375	50	140	565
62	Concrete Sidewalk, 4"	SF						385	385	340	1,110
63	Adjust Structure Cover	EA									3
64	Maintenance Aggregate for Entire Project	LS									1
	SUBTOTAL PAVING PAY ITEMS										
	GENERAL PAY ITEMS										
65	Mobilization (Max. 5% of Bid)	LS									1
66	Traffic Maintenance & Control	LS									1
67	Inspector Crew Days	DAYS									-
68	Water and Sewer Allowance	LS									1
69	Audio-Video Route Survey	LS									1
70	Pavement Marking, Polyurea, 24 inch Stop Bar, White	LF									27
71	Pavement Marking, Polyurea, 24 inch Crosshatching, White	LF									168
72	Recessing Pavt Mkrg, Transv	SF									390
73	Salvage Existing Signs	LS									1
74	New Signs	SF									10
75	Sign Post, U-Channel	LF									24
76	Tree Protection, 3" Dia. Or Greater	EA									22
77	Mulch, 3"	SY									200
78	Topsoil, 3"	SY						330	420	220	970
79	Sod, Class A	SY						330	420	220	970
80	Inlet Filter, Silt Sack	EA									12
	SUBTOTAL GENERAL PAY ITEMS										

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SHEET
Quantities

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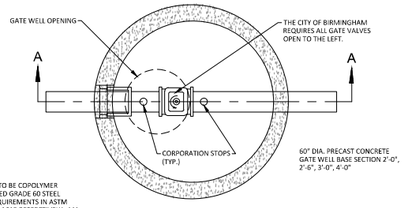
APPROVED BY:
B. Buchholz

DATE:
October 25, 2024

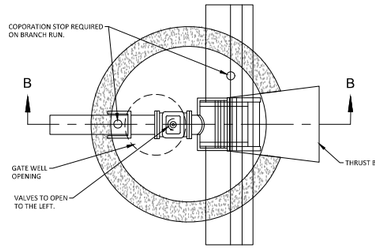
SCALE: N.T.S.

NFE JOB NO. **O947**

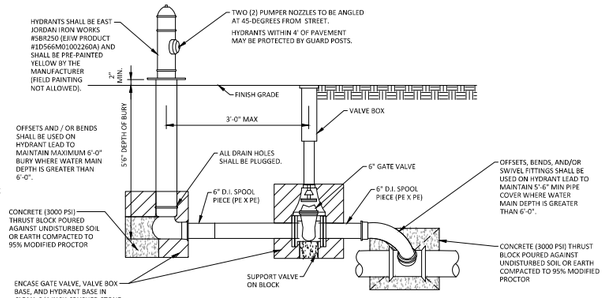
SHEET NO. **Q1**



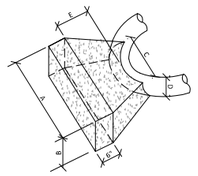
WATER MAIN GATE WELL (TYPICAL), PLAN



WATER MAIN TAPPING SLEEVE, VALVE & WELL (TYPICAL), PLAN

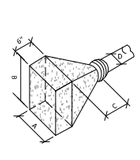


6" HYDRANT SIDE OUTLET



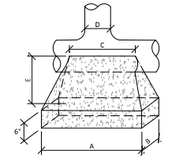
FOR 90° BENDS OR SMALLER

D	A	B	C	E MIN.
20"	8'	6.5'	3.5'	2.5'
16"	6'	4'	2.5'	2'
12"	4'	3'	2'	1.75'
10"	3'	3'	2'	1.75'
8"	3'	2'	2'	1.5'
6"	2'	1.5'	2'	1.25'



FOR PLUGS

D	A	B	C MIN.
20"	7'	5'	2.5'
16"	4'-10"	4'-10"	2'
12"	4'-4"	3'	1'-9"
10"	3'	2'	1.5'
8"	2'-10"	2.5'	1.5'
6"	1.5'	2.5'	1.5'

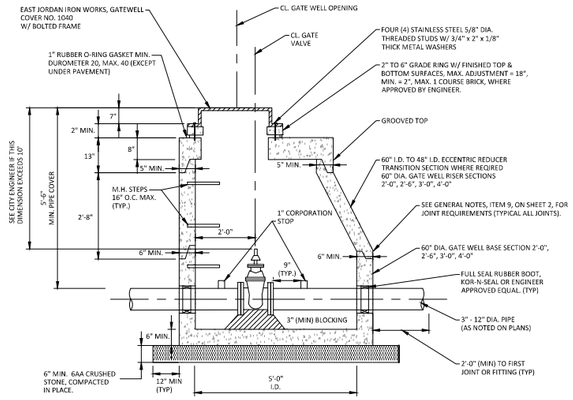


FOR TEES

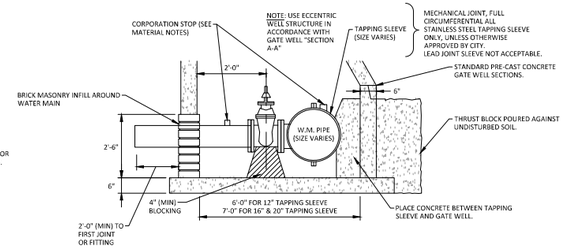
D	A	B	C	E MIN.
20"	6.5'	4.5'	3.5'	3'
16"	4'-8"	4'-8"	2.5'	2.75'
12"	4'	3'	2.5'	2.5'
10"	3'	2'	2'	2.25'
8"	2.5'	2'	2'	2.25'
6"	2'	2'	2'	2.25'

NOTE:
3000 PSA CONCRETE TO BE USED. THRUST BLOCK TO ABUT & REST AGAINST UNDISTURBED SOIL OR EARTH COMPACTED TO 95% MODIFIED PROCTER.

THRUST BLOCK DETAILS

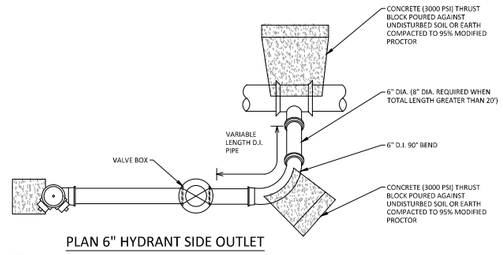


3" THRU 12" GATE WELL ("SECTION A-A")



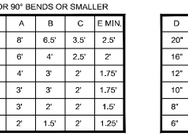
WATER MAIN TAPPING SLEEVE, VALVE & WELL ("SECTION B-B")

NOTES:
1. FOR PIPE SMALLER THAN 16" USE 1" CORPORATION STOP WITH BRONZE SADDLE, FOR 16" PIPE OR LARGER USE 2" CORPORATION STOP WITH BRONZE SADDLE.
2. THE CITY OF BIRMINGHAM DOES NOT ALLOW SIZE ON SIZE TAPPING.

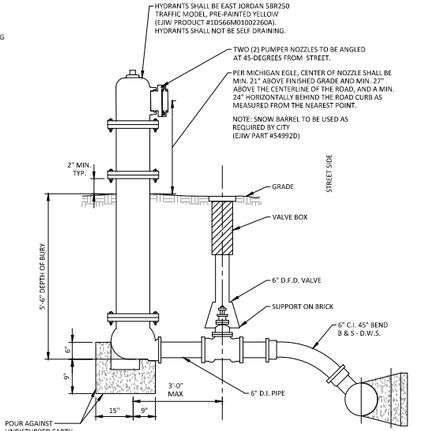


PLAN 6" HYDRANT SIDE OUTLET

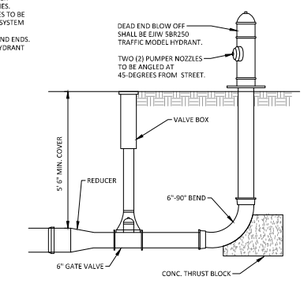
NOTES:
1. HYDRANT EXTENSIONS BETWEEN THE STANDPIPE LOWER SECTION & STANDPIPE UPPER ARE LIMITED TO 18 INCHES.
2. ALL HYDRANTS, COMPANION VALVES, BENDS, AND TEES TO BE FULLY RESTRAINED BY MECHANICAL JOINT RESTRAINT SYSTEM FITTINGS (MEGA-LUG).
3. THRUST BLOCKS ARE REQUIRED AT ALL TEES, BENDS, AND ENDS.
4. ALL HARDWARE (BOLTS, NUTS, WASHERS, ETC.) FOR HYDRANT ASSEMBLIES SHALL BE COR-BLUE.



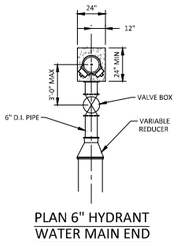
BOTTLE SLEEVE



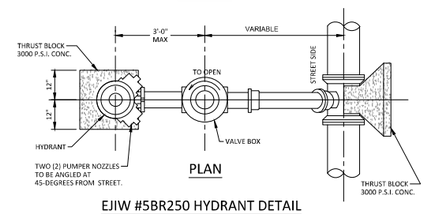
SECTION



DEAD END BLOWOFF CONNECTION

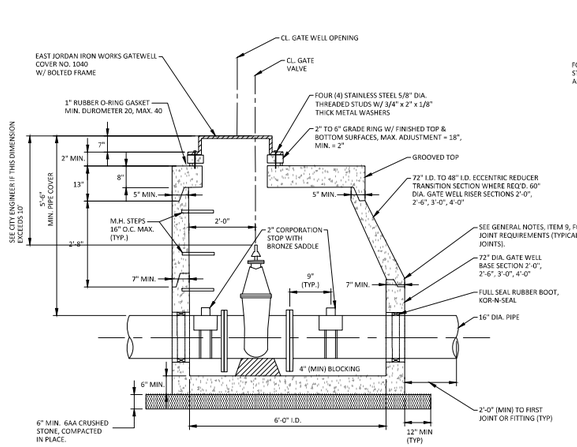


PLAN 6" HYDRANT WATER MAIN END

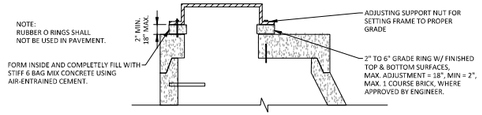


PLAN

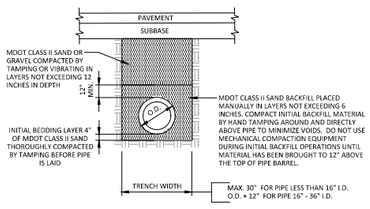
EJIW #5BR250 HYDRANT DETAIL



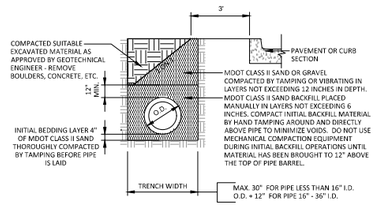
16" GATE WELL ("SECTION A-A")



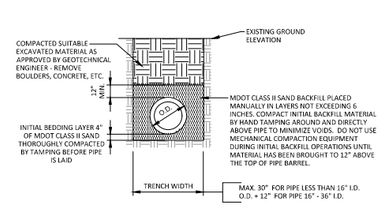
GATE WELL TOPS WITHIN PAVEMENT AREAS



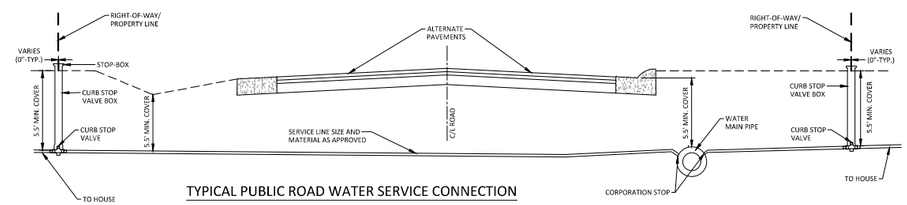
TRENCH DETAIL "A"
WATER MAIN UNDER PAVEMENT



TRENCH DETAIL "A"
WATER MAIN WITHIN INFLUENCE OF PAVEMENT

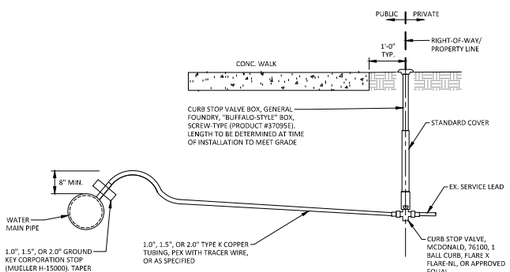


TRENCH DETAIL "B"
WATER MAIN OUTSIDE INFLUENCE OF PAVEMENT

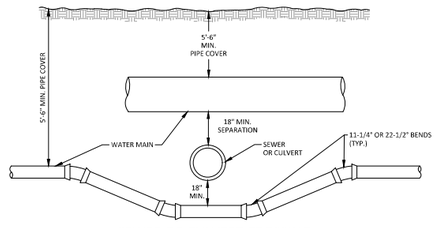


TYPICAL PUBLIC ROAD WATER SERVICE CONNECTION

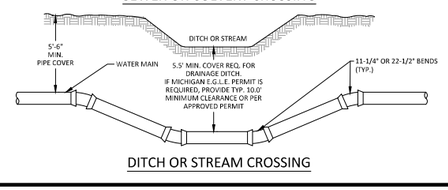
NOTES:
1) WATER SERVICE CURB STOP SHALL BE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY (R.O.W.), TYPICALLY DIRECTLY ON THE ON THE PROPERTY/ R.O.W. LINE.
2) FOR NEW RESIDENTIAL CONSTRUCTION, THE LATERAL LOCATION SHALL BE PER THE APPROVED PLAN.
3) FOR LATERAL LINE REPLACEMENT WITHIN THE PUBLIC R.O.W., THE LATERAL LOCATION WILL BE FIELD DETERMINED BASED ON THE CONNECTION LOCATION TO THE EXISTING SERVICE LINE AT THE R.O.W. LINE. THE ALIGNMENT OF THE SERVICE LINE MAY REQUIRE ADJUSTMENT TO AVOID TREES WITHIN THE R.O.W. TO THE MAXIMUM EXTENT PRACTICABLE, AS APPROVED BY THE CITY.
4) SERVICE TAP LOCATION AT THE WATER MAIN SHALL BE AT CLOCK POSITION 10:30 OR 1:30 UNLESS OTHERWISE NOTED PER APPROVED PLAN.



WATER SERVICE CONNECTION (TYPICAL)



SEWER OR CULVERT CROSSING



DITCH OR STREAM CROSSING

BIRMINGHAM
A WALKABLE CITY

City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Water Main Standard Notes & Details 1 of 2

ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	WM-1

WATER MAIN GENERAL NOTES

1. ALL CONSTRUCTION PROCEDURES AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM.
2. A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION AND SHALL BE SCHEDULED BY THE LOCAL MUNICIPAL ENGINEER. THOSE IN ATTENDANCE SHALL INCLUDE: 1) CITY OF BIRMINGHAM ENGINEERING AND D.P.S DEPARTMENTS, 2) DESIGN ENGINEER, 3) OWNER / DEVELOPER, 4) OTHER PUBLIC AGENCIES HAVING JURISDICTION, AND 6) FRANCHISE UTILITY COMPANIES. CONTRACTOR SHALL PROVIDE MATERIALS LISTING FOR APPROVAL BY MUNICIPAL ENGINEER.
3. CONTRACTOR MUST CONTACT MISS DIG (1-800-482-7171) THREE WORKING DAYS BEFORE THE START OF CONSTRUCTION FOR UNDERGROUND UTILITY LOCATIONS. ALL UTILITIES SHALL BE STAKED BEFORE CONSTRUCTION STARTS.
4. CONTRACTOR SHALL COORDINATE ALL REQUIRED WATER MAIN SHUT-DOWNS WITH THE CITY OF BIRMINGHAM ENGINEERING AND D.P.S. DEPARTMENTS TO ALLOW SUFFICIENT TIME IN ADVANCE OF CONSTRUCTION TO ALLOW FOR RESIDENT AND/OR PROPERTY OWNER NOTIFICATIONS, AND FOR THE CITY TO DEVELOP A SHUT-DOWN PROTOCOL. CONTRACTOR COORDINATION IS REQUIRED TO ASSIST THE CITY IN THE DEVELOPMENT OF THE SHUT-DOWN PROTOCOL TO ENSURE IT ALIGNS WITH THE CONTRACTOR'S PROPOSED MEANS AND METHODS. ANY EXERCISING OF EXISTING VALVES THAT ARE REQUIRED TO PERFORM THE SHUT-DOWN SHALL BE COMPLETED BY THE CITY D.P.S. DEPARTMENT WITH A MINIMUM OF 24-HOUR ADVANCED NOTICE.
5. ALL NECESSARY EASEMENTS FOR WATER MAINS SHALL BE PROVIDED IN THE NAME OF THE OWNER OF THE WATER MAIN PRIOR TO CONSTRUCTION AND ACCEPTANCE OF THE WATER DISTRIBUTION SYSTEM FOR OPERATION.
6. ALL WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF FIVE AND ONE-HALF (5-1/2) FEET BELOW FINISHED GRADES INCLUDING OPEN DRAINAGE COURSES.
7. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, DRIVEWAYS, AND/OR SIDEWALKS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE (95% MAXIMUM UNIT DENSITY).
8. WHERE TWO UTILITIES CROSS, PROVIDE CLASS II BACKFILL MATERIAL IN TWELVE (12) INCH COMPACTED LAYERS TO THE UNDERSIDE OF THE HIGHER UTILITY.
9. WHERE WATER MAINS MUST DIP TO PASS OTHER UTILITIES, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH AND SHALL BE CONSTRUCTED WITH ELEVEN AND ONE-QUARTER (11-1/4) DEGREE VERTICAL BENDS, PROPERLY ANCHORED.
10. ALL PRECAST CONCRETE GATE WELL SECTIONS SHALL BE MANUFACTURED TO CONFORM WITH A.S.T.M. C478, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, AND SHALL BE AS SHOWN ON THESE DETAILS. ALL JOINTS FOR PRECAST CONCRETE GATE WELL SECTIONS SHALL BE "MODIFIED GROOVE TONGUE" WITH GASKET MANUFACTURED TO CONFORM WITH A.S.T.M. C 443, STANDARD SPECIFICATIONS FOR JOINTS FOR CIRCULAR CONCRETE SEWER AND CULVERT PIPE USING RUBBER GASKETS.
11. CONTRACTOR SHALL INSTALL VALVES, TAPPING SLEEVES AND GATE WELL STRUCTURES IN STRICT COMPLIANCE WITH MEASUREMENTS PROVIDED ON THE DETAIL SHEET (FOR EXAMPLE, PROVIDE 2'-0" BETWEEN GATE WELL WALL & CENTERLINE OF OPERATING NUT) TO ALLOW PROPER OPERATION OF VALVE THROUGH GATE WELL OPENING. FAILURE TO DO SO WILL REQUIRE CONTRACTOR TO CORRECT AT HIS OR HER EXPENSE.
12. ALL CROSS-CONNECTION CONTROL DEVICES SHALL BE INSTALLED AS REQUIRED BY THE LOCAL PLUMBING INSPECTOR AND IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF BIRMINGHAM, THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE), AND THE DIVISION OF DRINKING WATER AND ENVIRONMENTAL HEALTH.
13. ALL FITTINGS AND BENDS SHOULD BE BLOCKED IN ACCORDANCE WITH THRUST BLOCK DETAILS, UNLESS ALTERNATE THRUST RESTRAINT SYSTEM (AS INDICATED IN PLANS AND SPECIFICATIONS) IS APPROVED BY THE CITY OF BIRMINGHAM.
14. ALL STEEL AND IRON MATERIAL AND PRODUCTS FOR PERMANENT INCORPORATION INTO THE WORK SHALL MEET BUY AMERICA REQUIREMENT, FEDERAL CODE OF REGULATIONS SECTION 635.410.
15. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND OR GRAVEL TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

WATER MAIN MATERIALS NOTES

1. WATER SUPPLY SYSTEM PIPING (3-INCH OR LARGER) SHALL BE DUCTILE IRON UNLESS OTHERWISE APPROVED BY THE CITY OF BIRMINGHAM.
2. ALL FITTINGS AND MATERIALS TO BE LEAD FREE.
3. USE OF HDPE MAY BE ALLOWED IN SOME LIMITED CASES (AS APPROVED BY CITY.) TWO TRACER WIRES WILL BE REQUIRED. OCWRC STANDARDS AND DETAILS SHALL BE USED WHEN HDPE IS APPROVED FOR USE.
4. ALL WATER MAINS SHALL BE DESIGNED FOR 150 PSI MINIMUM WORKING PRESSURE.
5. DUCTILE IRON PIPE SHALL BE PRESSURE-CLASS CLASS 52 FOR SIZES THREE (3) INCH THROUGH EIGHTEEN (18) INCH, CLASS 55 FOR TWENTY (20) INCH, AND CLASS 56 FOR TWENTY-FOUR (24) INCH AND LARGER.
6. DUCTILE IRON PIPE TO BE FURNISHED AND DELIVERED UNDER THIS SPECIFICATION SHALL MEET ALL REQUIREMENTS OF THE CURRENT AWWA C151 (ANSI A21.5), LATEST REVISION, EXCEPT AS OTHERWISE SPECIFIED HEREIN. PIPE SHALL BE CEMENT MORTAR LINED AND BITUMINOUS SEAL-COATED, IN ACCORDANCE WITH AWWA C104 (ANSI A21.4), LATEST REVISION.
7. JOINTS SHALL BE MECHANICAL OR PUSH-ON JOINTS FOR DUCTILE IRON WATER MAIN AND SHALL BE IN ACCORDANCE WITH AWWA C111 (ANSI AS21.11), LATEST REVISION.
8. FLANGE JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE IN ACCORDANCE WITH AWWA C110 (ANSI A21.10).
9. FITTINGS FOR DUCTILE IRON PIPE SHALL BE DUCTILE IRON AND SHALL MEET REQUIREMENTS OF AWWA C110 (ANSI A21.10) OR AWWA C153 (ANSI A21.53). DUCTILE IRON FITTINGS SHALL BE RATED 350 PSI FOR PIPE SIZES TWENTY-FOUR (24) INCH DIAMETER AND LESS AND 250 PSI FOR PIPE SIZES OVER TWENTY-FOUR (24) INCH DIAMETER. DUCTILE IRON FLANGE FITTINGS SHALL BE RATED FOR 250 PSI FOR ALL PIPE DIAMETERS.
10. WHEN CONNECTING TO EXISTING WATER MAINS, OVERSIZED FITTINGS MAY BE REQUIRED TO MATCH THE OUTER DIAMETER OF THE OLDER WATER MAINS.
11. INSTALL BRASS WEDGES AT ALL PUSH-ON JOINTS IN DUCTILE IRON PIPE INSTALLATIONS. TWO (2) WEDGES PER JOINT FOR PIPES 12 INCH DIAMETER AND LESS, AND FOUR WEDGES PER JOINT FOR PIPES GREATER THAN 12 INCHES IN DIAMETER.
12. ALL BURIED BOLTS, NUTS, AND WASHERS SHALL BE AWWA CAAA LOW ALLOY STEEL COATED WITH COAL TAR AND POLY-WRAPPED WHEN SPECIFIED.
13. ALL BURIED BOLTS, NUTS, AND WASHERS FOR ALL FLANGED CONNECTIONS SHALL BE STAINLESS STEEL (ASTM A320, GRADE B8M) AND HAVE A NEVER-SEIZE TYPE COMPOUND APPLIED TO THE THREADS PRIOR TO INSTALLATION.
14. TEMPORARY CONNECTIONS, WHICH MAY BE MADE FOR CHLORINATING AND FLUSHING PURPOSES, SHALL INCLUDE A TESTABLE DOUBLE-CHECK VALVE BACKFLOW-PREVENTER WITH CURRENT CERTIFICATION.
15. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE ENCASED WITH POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA STANDARD C105/A21.5-10. POLYETHYLENE MATERIAL SHALL BE TYPE 1, CLASS A, GRADE E-1, AND HAVE A MINIMUM THICKNESS OF 0.008" (8-MILS). FLOW RATE SHALL BE 0.4 MAXIMUM, TENSILE STRENGTH SHALL BE 1200 PSI MINIMUM, AND ELONGATION SHALL BE 300%.

HYDRANT REQUIREMENTS

1. ALL HYDRANTS SHALL BE EAST JORDAN IRON WORKS 5BR250 TRAFFIC MODEL , TWO-WAY WITH TWO (2) 4-1/2" PUMPER NOZZLE FITTINGS. STANDARD BARREL (EJIW PART NUMBER 54948D) OR SNOW BARREL (EJIW PART NUMBER 54992D) TO BE USED AS REQUIRED BY CITY. ALL HYDRANTS SHALL BE CITY OF BIRMINGHAM STANDARD, AS DETAILED. SELF-DRAINING HYDRANTS SHALL NOT BE USED. HYDRANTS SHALL HAVE BREAKAWAY FLANGE. PER MANUFACTURER, "TRAFFIC-MODEL" HYDRANTS WITH WITH BREAKAWAY FLANGE SHALL BE INSTALLED WITH A 6" THICK CONCRETE COLLAR (2' WIDTH x 2' DEPTH), CENTERED AROUND THE FINISHED GRADE OF THE HYDRANT, WHERE HYDRANTS ARE INSTALLED IN SANDY SOILS OR CONNECTED TO PVC OR HDPE WATER MAINS.
2. HYDRANTS SHALL BE RATED FOR 250 PSI WORKING PRESSURE.
3. HYDRANTS SHALL HAVE A MINIMUM 5-1/4" VALVE OPENING.
4. THE OPERATING NUT SHALL BE A ONE-PIECE DESIGN, MANUFACTURED OF ASTM B-584 BRONZE. IT SHALL BE 1-1/8" PENTAGON - POINT TO FLAT IN SIZE/SHAPE.
5. THE DIRECTION OF OPENING SHALL BE LEFT. AN ARROW SHALL BE CAST ON THE TOP TO THE HYDRANT TO INDICATE THE OPENING DIRECTION.
6. HYDRANTS SHALL HAVE A DEPTH OF BURY OF 5'6", UNLESS OTHERWISE NOTED.
7. ALL HYDRANTS SHALL BE PAINTED YELLOW ABOVE GROUND AND BLACK BELOW GROUND WITH A FINISH COAT OF YELLOW PAINT AS FURNISHED FROM THE MANUFACTURER (FIELD PAINTING NOT ALLOWED). HYDRANT CAP SHALL BE PAINTED SAME COLOR AS THE HYDRANT.
8. ALL FIRE HYDRANT JOINTS SHALL BE TOTALLY RESTRAINED BY THE USE OF MEG-A-LUGS OR OTHER APPROVED RESTRAINED JOINT. THRUST BLOCKS ARE ALSO REQUIRED.
9. ALL HYDRANTS SHALL BE CONSTRUCTED WITH A SIX (6) INCH COMPANION GATE VALVE IN A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX, WHICH SHALL INCLUDE A FIVE AND ONE-QUARTER (5-1/4) INCH SCREW SHAFT. VALVE BOXES SHALL BE EJ VALVE BOX NO. 8560 OR APPROVED EQUAL, AND SHALL INCLUDE A VALVE BOX RISER (EJ NO. 8500) AND VALVE BOX DROP LID W/ TWO PICKHOLES (EJ NO. 6800) WITH "WATER" LETTERING.

VALVE AND SLEEVE NOTES

1. GATE VALVES, SIZES THREE (3) INCH THROUGH SIXTEEN (16) INCH AND TAPPING VALVES, SHALL BE RESILIENT SEAT WEDGE TYPE WITH MECHANICAL JOINTS AND NON-RISING STEM.
2. ALL GATE VALVES SHALL BE FURNISHED AND INSTALLED SUCH THAT THEY OPEN WHEN TURNED "LEFT" OR COUNTER-CLOCKWISE.
3. ALL IN LINE GATE VALVES THREE (3) INCH AND LARGER SHALL BE IN WELLS AS DETAILED.
4. ALL GATE WELL COVERS SHALL BE CITY OF BIRMINGHAM STANDARD AS DETAILED.
5. ALL GATE VALVES WITH OPERATING NUTS AT A DISTANCE GREATER THAN FIVE (5) FEET BELOW GROUND SURFACE SHALL BE PROVIDED WITH AN EXTENSION STEM. THE LENGTH OF THE EXTENSION STEM SHALL REACH WITHIN FIVE (5) FEET FROM THE GROUND SURFACE. WHEN AN EXTENSION STEM IS USED, IT SHALL BE HELD IN PLACE BY AN EXTENSION STEM GUIDE SUITABLY FASTENED TO THE WALL OF THE GATE WELL. THE EXTENSION STEM SHALL BE MECHANICALLY ATTACHED TO THE OPERATING NUT. DETAILS OF THE EXTENSION SYSTEM AND THE METHOD OF INSTALLATION SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
6. BUTTERFLY VALVES MAY BE USED FOR VALVES GREATER THAN 16-INCH DIAMETER AND SHALL BE MODEL 2F11 AS MANUFACTURED BY HENRY PRATT COMPANY OR APPROVED EQUAL.
7. TAPPING VALVES SHALL BE AWWA C515 FL X MJ AS MANUFACTURED BY EAST JORDAN IRON WORKS WITH RESILIENT SEATED GATE VALVES AS APPROVED BY THE CITY OF BIRMINGHAM.
8. TAPPING SLEEVES SHALL BE ALL STAINLESS STEEL (BODY, FLANGE AND HARDWARE), MANUFACTURED BY ROMAC INDUSTRIES; JCM 432; SMITH-BLAIR 663/665 OR APPROVED EQUAL.

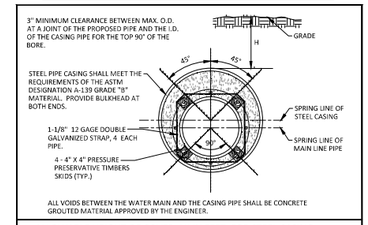
WATER SERVICE (DOMESTIC SUPPLY AND FIRE SUPPRESSION NOTES

14. FOR DOMESTIC SUPPLY AND FIRE SUPPRESSION BUILDING WATER SERVICES: A SINGLE TAP IS ALLOWED ON THE WATER MAIN, WHICH SHALL SPLIT INTO SEPARATE DOMESTIC AND FIRE SUPPRESSION LINES OUTSIDE OF THE BUILDING, SHALL BE USED UNLESS OTHERWISE APPROVED BY CITY.
16. VALVES TO BE INSTALLED ON EACH INDIVIDUAL LEAD ON THE EXTERIOR OF THE BUILDING.
17. EASEMENTS FOR WATER MAIN LEADS REQUIRED UP TO THE EXTERIOR SHUT OFF VALVE.
18. CORPORATION STOPS USED FOR INSERTION INTO MAINS SHALL BE MUELLER TYPE H-15000. ALL STOPS SHALL BE CONSTRUCTED OF HEAVY-DUTY BRASS COMPONENTS MEETING THE REQUIREMENT OF ASTM B62. ALL STOPS SHALL HAVE AN AWAA TAPER THREADED INLET WITH COPPER FLARE STRAIGHT CONNECTION OUTLET. CORPORATION STOPS SHALL BE MANUFACTURED AND TESTED IN ACCORDANCE WITH THE LATEST VERSION OF AWWA C800.
19. CURB STOP VALVES SHALL BE MCDONALD, TYPE 76100, 1 BALL CURB, FLARE x FLARE-NL. TYPICAL RESIDENTIAL CURB STOP VALVE BOXES SHALL BE BY GENERAL FOUNDRY, BUFFALO STYLE BOX, SCREW-TYPE (PRODUCT #37095E). WHERE CURB STOP VALVES WILL BE LOCATED WITHIN PAVEMENT, A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX SHALL BE FURNISHED AND INSTALLED TO PROVIDE A RIM ELEVATION FLUSH WITH THE SURROUNDING PAVEMENT. VALVE BOXES SHALL BE EJ VALVE BOX NO. 8560 OR APPROVED EQUAL, AND SHALL INCLUDE A VALVE BOX RISER (EJ NO. 8500) AND VALVE BOX DROP LID W/ TWO PICKHOLES (EJ NO. 6800) WITH "WATER" LETTERING.

ACCEPTANCE OF NEW WATER MAINS

1. PRIOR TO WATER MAIN ACCEPTANCE THE FOLLOWING CONDITIONS MUST BE MET:
   - 1.1) PRESSURE TESTING AND BACTERIA TESTING MUST BE COMPLETED IN ACCORDANCE WITH CITY OF BIRMINGHAM AND OAKLAND CUNTY REQUIREMENTS
   - 1.2) ALL EASEMENT AND RIGHT-OF-WAY ACQUISITION MUST BE ACCEPTED BY THE CITY OF BIRMINGHAM,
   - 1.3) THE CITY OF BIRMINGHAM MUST BE PROVIDED WITH THE BILL OF SALE.
   - 1.4) ALL "RECORD DRAWINGS" MUST BE ACCEPTED AND APPROVED BY THE CITY OF BIRMINGHAM.
   - 1.5) THE CITY OF BIRMINGHAM MUST WITNESS THE CONNECTION OF THE WATER MAIN TO THE EXISTING WATER MAIN, AFTER WHICH RESIDENTIAL AND COMMERCIAL TAPS WILL BE ALLOWED.
2. THE CONTRACTOR SHALL NOTIFY THE CITY OF BIRMINGHAM FOR NEW CONSTRUCTION TAP, PRESSURE TESTING, BACTERIOLOGICAL SAMPLING, CONNECTIONS TO EXISTING WATER MAIN, AND FINAL FIELD REVIEW. A SEVENTY-TWO (72) HOUR ADVANCE NOTICE IS REQUIRED.
3. THE CONTRACTOR SHALL DISINFECT AND PRESSURE TEST ALL NEW WATER MAIN CONSTRUCTION PURSUANT TO THE CURRENT STANDARDS SPECIFIED BY THE CITY OF BIRMINGHAM AND OAKLAND COUNTY.
4. THE WATER MAIN SHALL PASS A TEST OF 150 PSI FOR A TWO (2) HOUR PERIOD. WATER LOSS SHALL NOT EXCEED A RATE OF 11.65 U.S. GALLONS PER INCH DIAMETER, PER MILE OF WATERLINE IN TWENTY-FOUR (24) HOURS.
5. WHERE CONTRACTOR SUPPLIED GAUGES ARE REQUIRED, MINIMUM SIZE SHALL BE 3 1/2 INCH DIAMETER OR LARGER GRADUATED IN ONE (1) OR TWO (2) POUND INCREMENTS FROM 1 TO 160 P.S.I., OR HIGHER.
6. PRESSURE TESTING AND BACTERIA TESTING MUST BE SUCCESSFULLY COMPLETED PRIOR TO CONNECTION TO THE EXISTING WATER SUPPLY SYSTEM.

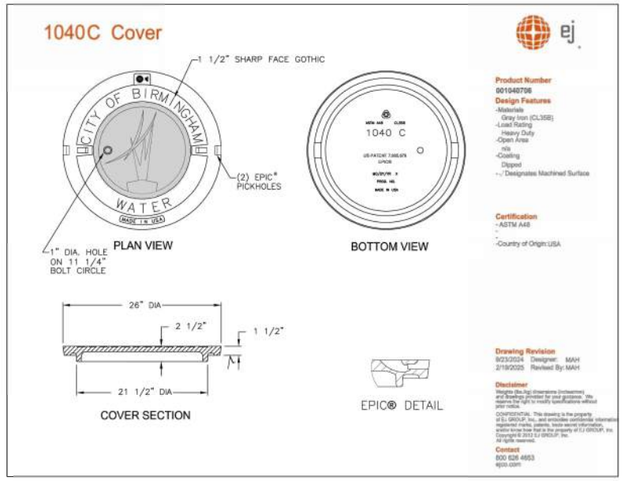
TYPICAL WATER MAIN TUNNEL CASING DETAIL



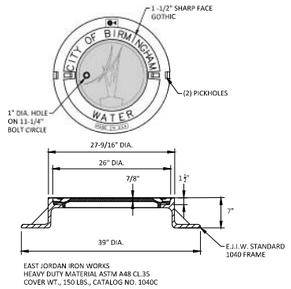
ALLOWABLE HEIGHT OF COVER (H) IN FEET, FOR STEEL CASING

WALL THICKNESS (IN.)		STEEL CASING OUTSIDE DIAMETER (IN.)									
FRACT.	DEC.	12	14	16	18	20	24	28	30	36	42
3/8	0.1875	39	30	24	21	19	17	16			
1/4	0.250	50	50	39	31	27	21	19	18	16	
5/16	0.3125			50	48	39	28	23	21	18	17
3/8	0.375				50	50	39	29	27	22	19
7/16	0.4375						50	39	34	26	21
1/2	0.500							50	44	31	25
9/16	0.5625								50	39	30
5/8	0.625									48	35

1. FOR 36" WATER MAIN PROVIDE A MIN. OF 60" DIA. CASING WITH 1" WALL THICKNESS.
2. CASING PIPE JOINTS TO BE FULLY WELDED AROUND THE CIRCUMFERENCE BY A CERTIFIED WELDER.



CITY OF BIRMINGHAM - GATE WELL COVER
(FURNISH & INSTALL W/ STANDARD EJIW 1040 FRAME)



CITY OF BIRMINGHAM GATE WELL
COVER & STANDARD FRAME

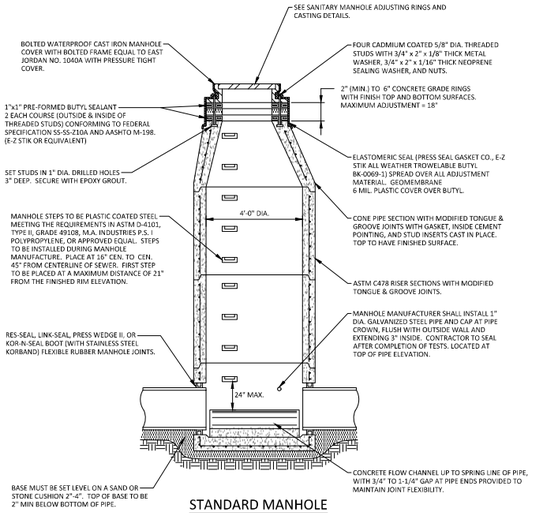
TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.

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151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

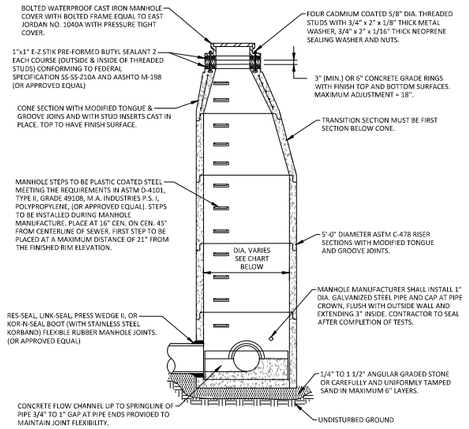
Water Main Standard Notes & Details
2 of 2

ISSUE DATE:	SCALE:	SHEET NO.
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STANDARD MANHOLE

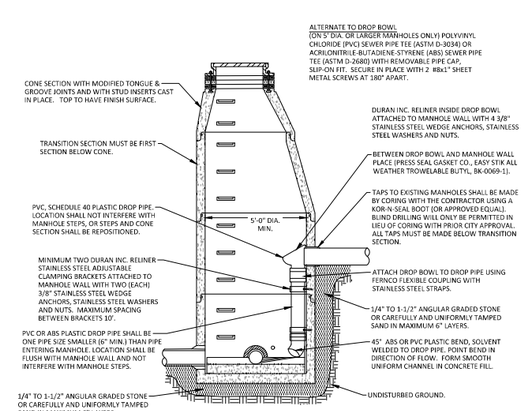
SEWER LESS THAN 20' DEEP -
PIPE DIAMETER 18 INCHES OR LESS



STANDARD OVERSIZED MANHOLE

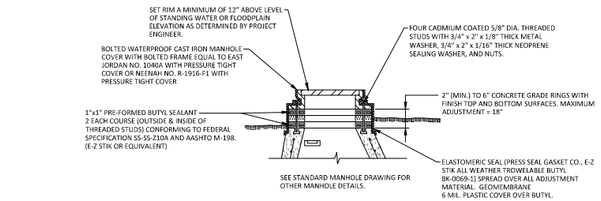
MANHOLE SIZING CHART

MANHOLE DIAMETER	MAX. PIPE SIZE FOR STRAIGHT THRU INST.	MAX. PIPE SIZE FOR RIGHT ANGLE INST.
5'	36"	24"
6'	42"	36"
7'	60"	42"

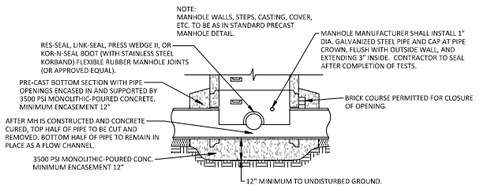


INTERIOR DROP CONNECTION

SEWER SIZE	DROP SIZE	MH SIZE
UP TO 10"	8"	5'
UP TO 18"	10"	5'

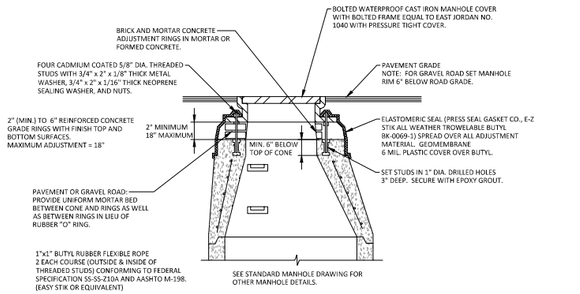


MANHOLE WITHIN FLOOD PRONE AREAS

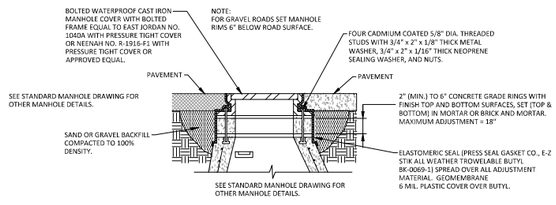


MANHOLE CONSTRUCTED OVER EXISTING SEWER

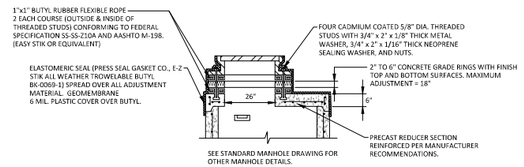
FOR LOCAL SANITARY SEWER EXTENSION CONNECTING DIRECTLY OR INDIRECTLY TO OCWRC SYSTEMS



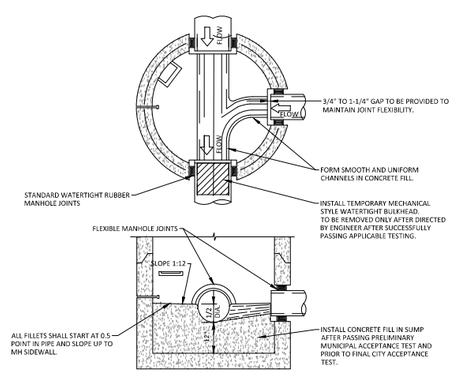
SANITARY MANHOLE ADJUSTING RINGS & CASTING DETAIL



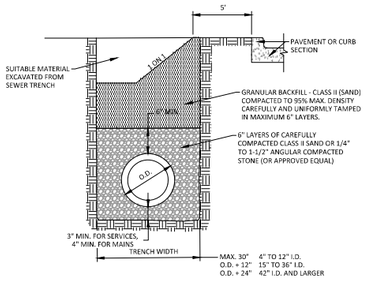
MANHOLE TOPS WITHIN PAVEMENT AREAS



FLAT TOP MANHOLE

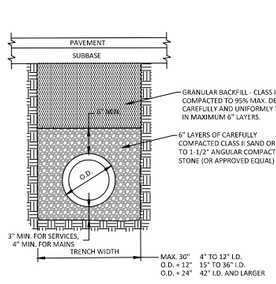


SUMP MANHOLE FOR TESTING, CLEANING AND DEWATERING



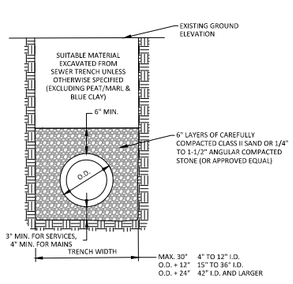
TRENCH DETAIL "A"

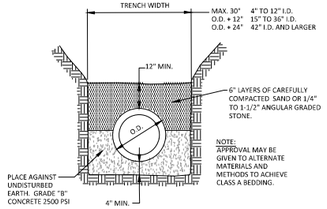
SEWER UNDER ROAD BED OR WITHIN THE INFLUENCE OF ROAD BED



TRENCH DETAIL "B"

SEWER NOT UNDE ROAD BED





CONCRETE CRADLE

BIRMINGHAM
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151 Martin Street
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Sanitary & Combined Sewer Standard Notes & Details 1 of 2

ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	SS-1

SANITARY & COMBINED SEWER CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM AND THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER (WRC). ALL SANITARY & COMBINED SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY A STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER PROVIDED BY, OR CAUSED TO BE PROVIDED BY, THE CITY OF BIRMINGHAM.

2. AT ALL CONNECTIONS AND BEFORE START OF CONSTRUCTION, THE CONTRACTORS MUST OBTAIN THE REQUIRED CITY OF BIRMINGHAM, WRC SEWER INSPECTION, AND MICHIGAN E.G.L.E. PART 41 PERMITS. THE CONTRACTOR SHALL NOTIFY THE CITY 48 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. FINAL ACCEPTANCE TESTS MUST BE WITNESSED BY CITY PERSONNEL AND MUST BE SCHEDULED IN ADVANCE.

3. NO SEWER INSTALLATION SHALL HAVE AN INFILTRATION EXCEEDING 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE IN A 24 HOUR PERIOD, AND NO SINGLE RUN OF SEWER BETWEEN MANHOLES SHALL EXCEED 100 GALLONS PER INCH DIAMETER PER MILE. AIR TESTS IN LIEU OF INFILTRATION TESTS SHALL BE AS SPECIFIED IN THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER (OCWRC) STANDARDS. ONLY PIPE AND PIPE JOINTS APPROVED BY THE CITY MAY BE USED FOR SANITARY & COMBINED SEWER CONSTRUCTION.

4. AT ALL CONNECTIONS TO AN EXISTING SEWER, OR EXTENSION THERETO, A WATERTIGHT BULKHEAD WITH A CAPPED ONE INCH DIAMETER PIPE TO PERMIT MEASURING INFILTRATION SHALL BE PROVIDED. A TEMPORARY 12-INCH DEEP SUMP SHALL ALSO BE PROVIDED IN THE FIRST MANHOLE ABOVE THE CONNECTION WHICH WILL BE FILLED IN AFTER SUCCESSFUL COMPLETION OF ANY ACCEPTANCE TEST UP TO THE STANDARD FILLET PROVIDED FOR THE FLOW CHANNEL.

5. AT ALL TIMES WHEN LAYING OF NEW PIPE IS NOT ACTUALLY IN PROGRESS, THE UPSTREAM OPEN END OF THE PIPE SHALL BE CLOSED BY TEMPORARY WATERTIGHT PLUGS OR BY OTHER APPROVED MEANS. IF WATER IS IN THE TRENCH WHEN WORK IS RESUMED, THE PLUG SHALL NOT BE REMOVED UNTIL THE DANGER OF WATER ENTERING THE PIPE HAS PASSED.

6. ALL SANITARY & COMBINED SEWER PIPE SIX (6) INCHES IN DIAMETER AND LARGER SHALL BE INSTALLED IN CONFORMANCE WITH CITY OF BIRMINGHAM TRENCH DETAILS CONTAINED HEREIN, TRENCH DETAIL "A" OR "B", INCLUDING BEDDING AND BACKFILL AT A MINIMUM OF 6 INCHES ABOVE THE TOP OF PIPE WITH NATURAL STONE CONFORMING TO M.D.O.T. 6A GRADATION REQUIREMENTS.

7. ALL SANITARY & COMBINED SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH TRENCH "A" DETAIL AT ALL LOCATIONS UNDERNEATH OR WITHIN THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

8. ALL SANITARY & COMBINED SEWER PIPE MAY BE INSTALLED IN ACCORDANCE WITH TRENCH DETAIL "B" IN LOCATIONS OUTSIDE THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS.

9. SANITARY AND COMBINED SEWER MAIN PIPE SHALL BE THE TYPE, CLASS, AND SIZE AS SHOWN ON THE APPROVED ENGINEERING PLANS, AND SHALL MEET THE FOLLOWING CRITERIA (ANY DEVIATIONS FROM THESE SPECIFICATIONS REQUIRE PRIOR APPROVAL BY THE CITY):

   A. REINFORCED CONCRETE PIPE (RCP): ASTM C-76, CLASS IV:
   - ALL REINFORCED CONCRETE PIPE SHALL HAVE MODIFIED GROOVED TONGUE JOINTS WITH O-RING TYPE RUBBER GASKET, PER A.S.T.M. SPECIFICATIONS C443.
   - THE INSIDE JOINTS OF PIPE SIZES OVER 27" DIAMETER SHALL BE POINTED UP WITH MORTAR UPON COMPLETION OF BACKFILLING OPERATIONS.

   B. POLYVINYL CHLORIDE PIPE (PVC):
   - PVC SDR 23.5 SEWER PIPE: PER ASTM D-3034 (6" DIA.)
   - PVC SDR 26 SEWER PIPE: PER ASTM D-3034 (8"-15" DIA.) AND ASTM F-679 (18" TO 24" DIA.)
   - PVC SCHEDULE 40 SEWER PIPE:ASTM D-1785 "STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE) (PVC) PLASTIC PIPE", SCHEDULES 40, 80, AND 120.
   - PVC COMPOUNDS TO MEET ASTM D-1784.

10. SANITARY AND COMBINED MANHOLE STRUCTURE REQUIREMENTS:
   - ALL NEW MANHOLES ARE TO BE MANUFACTURED TO ASTM C-478 SPECIFICATIONS.
   - ALL NEW MANHOLES SHALL HAVE CITY-APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS.
   - MANHOLES SHALL BE OF PRECAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS, PRE CAST MANHOLE CONE SECTIONS SHALL BE CITY-APPROVED MODIFIED ECCENTRIC CONE TYPE.
   - TAPS THROUGH MANHOLE JOINTS OR CONE SECTIONS ARE PROHIBITED UNLESS OTHERWISE APPROVED.
   - ALL MANHOLE STEPS TO BE PLASTIC COATED STEEL MEETING THE REQUIREMENTS IN ASTM D 2146 TYPE II, GRADE 49108, MA. INDUSTRIES P.S.I. POLYPROPYLENE, (OR APPROVED EQUAL). STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE AT 16" CENTERS 45° FROM CENTERLINE OF SEWER.
   - CONE SECTION WITH MODIFIED GROOVE TONGUE JOINTS AND WITH STUD INSERTS CAST IN PLACE. TOP TO HAVE FLUSH SURFACE.
   - ASTM C-478 RISER SECTION WITH MODIFIED GROOVE TONGUE JOINTS.
   - RES-SEAL, LINK-SEAL, PRESS WEDGE II, OR KOR-N-SEAL BOOT (WITH STAINLESS STEEL KORBAND) FLEXIBLE RUBBER MANHOLE JOINTS.
   - PRECAST CONCRETE BASE MUST BE SET LEVEL ON A SAND CUSHION OF NOT LESS THAN 2" OR MORE THAN 4". FOR MANHOLES, TOP OF BASE TO BE 2" MIN BELOW BOTTOM OF SEWER PIPE.
   - ON PRECAST MANHOLES BOTTOM SECTION SHALL BE ACCURATELY SET PLUMB.

11. SANITARY SEWER LEAD CONNECTIONS TO TAP INTO MAINLINE, NOT TAP AT MANHOLE. PIPE SHALL BE POLYVINYL CHLORIDE PIPE (PVC) - ASTM D-2241, SDR 23.5, 6" DIAMETER. PVC COMPOUNDS TO MEET ASTM D-1784.

12. SANITARY LEADS ARE PRIVATE, UP TO THE CONNECTION POINT TO THE MAINLINE PUBLIC SEWER, INCLUDING THE CONNECTION.

13. ALL NEW MANHOLES SHALL HAVE CITY APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS. MANHOLES SHALL BE OF PRE CAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. PRE- CAST MANHOLE CONE SECTIONS SHALL BE CITY APPROVED MODIFIED ECCENTRIC CONE TYPE. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS, AS INDICATED.

14. AT ALL CONNECTIONS TO MANHOLES, INTERIOR DROP CONNECTIONS WILL BE REQUIRED WHEN THE DIFFERENCE IN INVERT ELEVATIONS EXCEEDS 18 INCHES.

15. TAPS TO EXISTING MANHOLES SHALL BE MADE BY CORING. THE CONTRACTOR SHALL PLACE A KOR-N-SEAL BOOT (OR APPROVED EQUAL) AFTER CORING IS COMPLETED. BLIND DRILLING WILL NOT BE PERMITTED IN LIEU OF CORING.

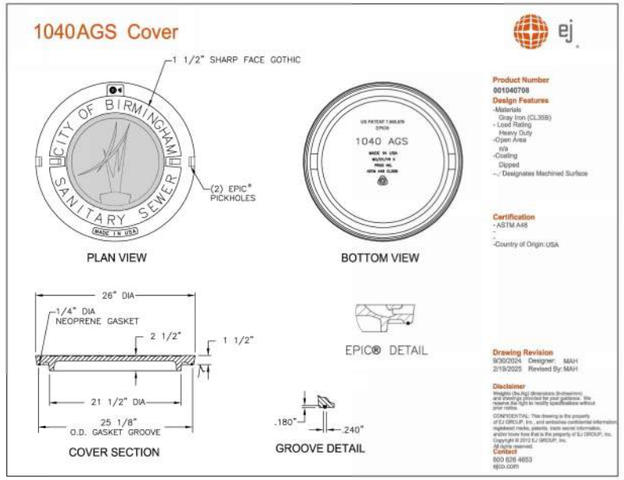
16. NEW MANHOLES CONSTRUCTED DIRECTLY ON CITY OR WRC SEWERS SHALL BE PROVIDED WITH APPROPRIATE LETTERED MANHOLE COVERS. NEW MANHOLES BUILT OVER AN EXISTING SANITARY SEWER SHALL HAVE MONOLITHIC POURED BOTTOMS.

17. NO GROUND WATER, STORM WATER, CONSTRUCTION WATER, DOWN SPOUT DRAINAGE OR WEEP TILE DRAINAGE SHALL BE ALLOWED TO ENTER ANY SANITARY SEWER INSTALLATION.

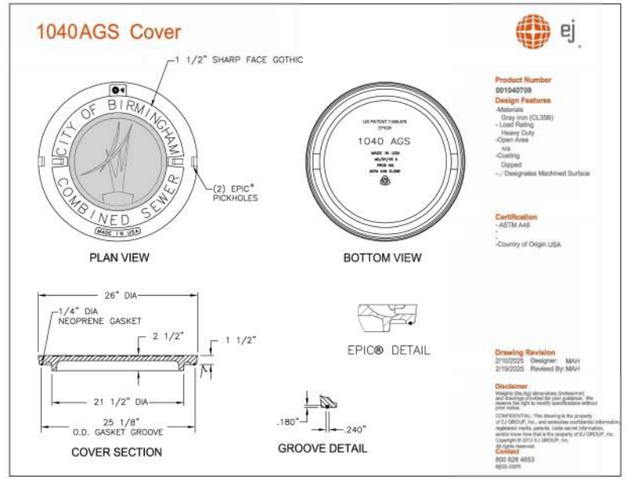
18. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL TELEPHONE MISS DIG FOR THE LOCATION OF UNDERGROUND PIPELINE AND CABLE FACILITIES AND SHALL ALSO NOTIFY REPRESENTATIVES OF OTHER UTILITIES LOCATED IN THE VICINITY OF THE WORK.

19. AN 18 INCH MINIMUM VERTICAL SEPARATION AND A 10 FOOT MINIMUM HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN SANITARY OR COMBINED SEWER AND WATER MAIN.

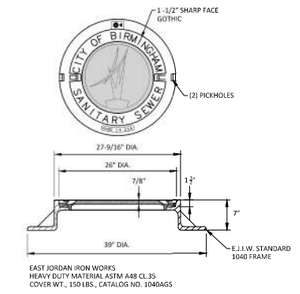
20. CLEANOUTS FOR SANITARY SEWER LEADS WITHIN PAVED SURFACE SHALL HAVE TRAFFIC RATED FRAME AND CASTING.



CITY OF BIRMINGHAM MANHOLE COVER - SANITARY SEWER



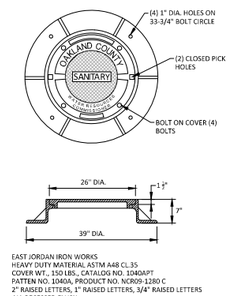
CITY OF BIRMINGHAM MANHOLE COVER - COMBINED SEWER



EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL.35
COVER WT., 150 LBS., CATALOG NO. 1040AGS

CITY OF BIRMINGHAM SANITARY SEWER MANHOLE COVER & STANDARD FRAME

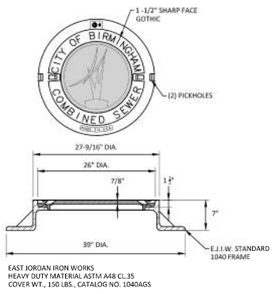
TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.



EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL.35
COVER WT., 150 LBS., CATALOG NO. 1040APT
PATTEN NO. 1040A, PRODUCT NO. NCR09-1280 C
2" RAISED LETTERS, 1" RAISED LETTERS, 3/4" RAISED LETTERS
ALL RECESSED FLUSH.

OAKLAND COUNTY WRC SANITARY SEWER MANHOLE COVER

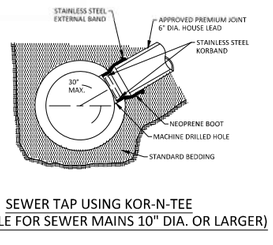
TO BE USED ON COUNTRY DESIGNATED SANITARY SEWER INTERCEPTOR MANHOLES



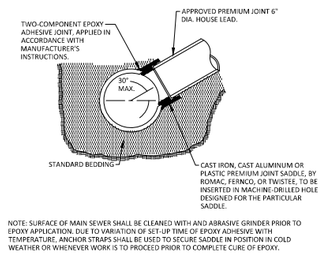
EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL.35
COVER WT., 150 LBS., CATALOG NO. 1040AGS

CITY OF BIRMINGHAM COMBINED SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.

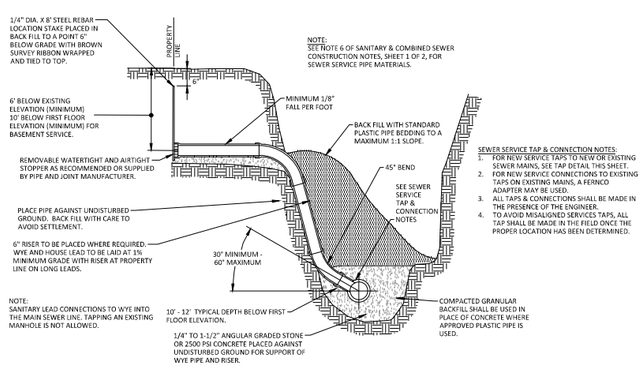


SEWER TAP USING KOR-N-TEE
(ALLOWABLE FOR SEWER MAINS 10" DIA. OR LARGER)

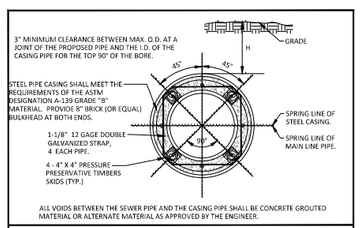


NOTE: SURFACE OF MAIN SEWER SHALL BE CLEANED WITH AND ABRASIVE GRINDER PRIOR TO EPOXY APPLICATION. DUE TO VARIATION OF SET-UP TIME OF EPOXY ADHESIVE WITH TEMPERATURE, ANCHOR STRAPS SHALL BE USED TO SECURE SADDLE IN POSITION IN COLD WEATHER OR WHENEVER WORK IS TO PROCEED PRIOR TO COMPLETE CURE OF EPOXY.

SEWER TAP USING TAPPING SADDLE
(ALLOWABLE FOR ALL SIZES OF MAIN SEWER PIPES



TYPICAL HOUSE LEAD DETAIL



ALLOWABLE HEIGHT OF COVER (H) IN FEET, FOR STEEL CASING

FRACT.	DEC.	WALL THICKNESS (IN.)	STEEL CASING OUTSIDE DIAMETER (IN.)									
			12	14	16	18	20	24	28	30	36	42
3/16	0.1875		39	30	24	21	19	17	16			
1/4	0.250		50	50	39	31	27	21	19	18	16	
5/16	0.3125				50	48	39	28	23	21	18	17
3/8	0.375					50	50	39	29	27	22	19
7/16	0.4375							50	39	34	26	21
1/2	0.500								50	44	31	25
9/16	0.5625									50	39	30
5/8	0.625										48	35

NOTE:1. FOR 36" SEWER PROVIDE A MIN. OF 60" DIA. CASING WITH 1" WALL THICKNESS.
2. CASING PIPE JOINTS TO BE FULLY WELDED AROUND THE CIRCUMFERENCE BY A CERTIFIED WELDER.

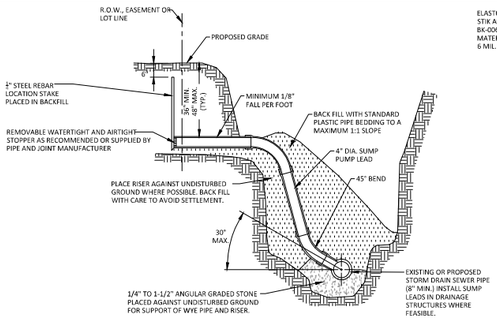
TYPICAL SEWER TUNNEL CASING DETAIL

BIRMINGHAM
A WALKABLE CITY

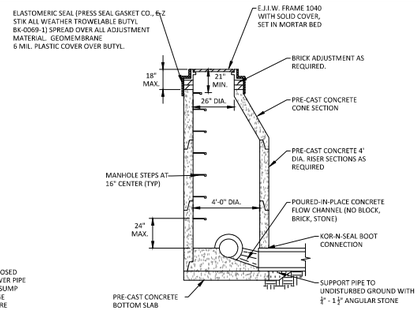
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Sanitary & Combined Sewer
Standard Notes & Details 2 of 2

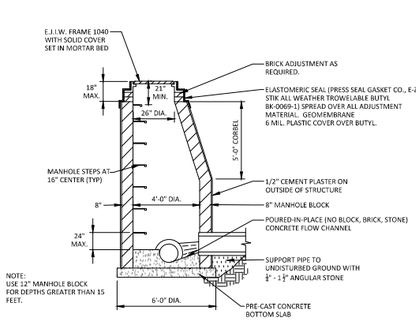
ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	SS-2



HOUSE LEAD DETAIL FOR 4" DIA. PLASTIC SUMP PUMP LEADS



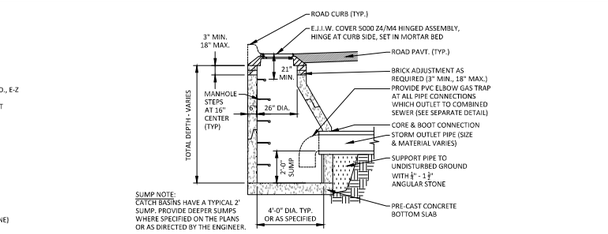
PRE-CAST MANHOLE



NOTE:
USE 12" MANHOLE BLOCK FOR DEPTHS GREATER THAN 15 FEET.

STANDARD MANHOLE DETAILS

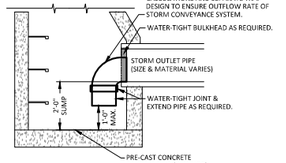
BLOCK MANHOLE



SUMP NOTE:
CATCH BASINS HAVE A TYPICAL 2' SUMP. PROVIDE DEEPER SUMPS WHERE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

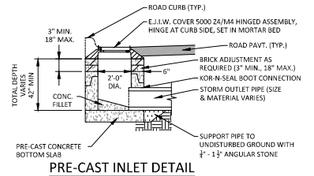
PRE-CAST CATCH BASIN DETAIL (IN ROAD CURB LINE)

SUMP NOTE:
STORM MANHOLES SHALL HAVE 2' SUMP WHERE CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER. WHERE SUMP IS SPECIFIED ON STORM MANHOLES, FLOW CHANNELS WILL NOT BE REQUIRED.

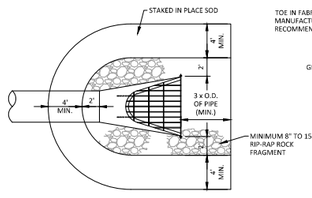


PVC ELBOW GAS TRAP

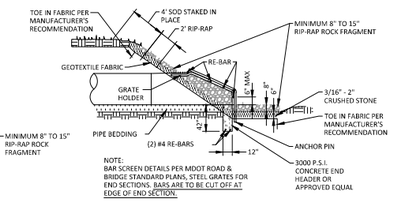
NOTE:
REQUIRED AT ALL STORM PIPE CONNECTIONS WHICH OUTLET TO COMBINED SEWER



PRE-CAST INLET DETAIL (IN ROAD CURB LINE)

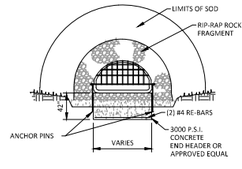


PLAN VIEW



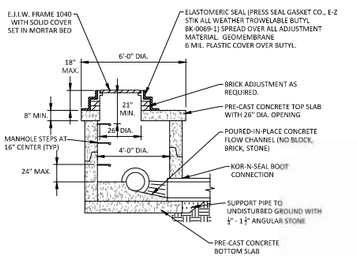
NOTE:
BAR SCREEN DETAILS PER MDOT ROAD & BRIDGE STANDARD PLANS. STEEL GRATES FOR END SECTIONS. BARS ARE TO BE CUT OFF AT EDGE OF END SECTION.

PROFILE VIEW

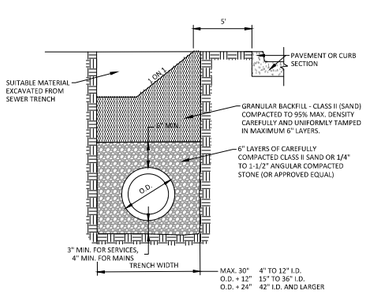


END VIEW

END SECTION AND BAR SCREEN DETAIL

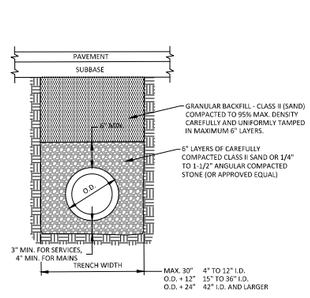


PRE-CAST LOW HEAD MANHOLE DETAIL



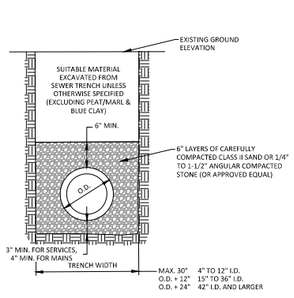
TRENCH DETAIL "A"

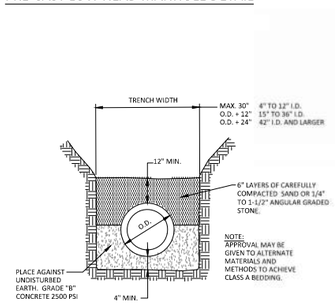
SEWER UNDER ROAD BED OR WITHIN THE INFLUENCE OF ROAD BED



TRENCH DETAIL "B"

SEWER NOT UNDE ROAD BED





CONCRETE CRADLE

PIPE SCHEDULE

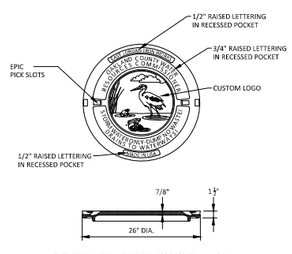
WITHIN 1 ON 1 ZONE OF INFLUENCE OF ROADWAY MEASURED FROM BACK OF CURB.	< 3' COVER 3' - 10' COVER > 10' COVER	C76 - CL V C76 - CL IV C76 - CL V OR APPROVED EQUAL
OUTSIDE ZONE OF INFLUENCE OR ROADWAY, IN REAR YARD OR GREENBELT.	SMOOTH LINED CORRUGATED HDPE, CPVC A 2000, C-76 CL IV OR V, SCH. 40 PVC, SDR 23.5, SDR 26, CSP, OR APPROVED EQUAL	
DRIVE CULVERTS	C-76 CL IV OR CORRUGATED METAL PIPE (CMP)	

NOTES:
1. ALL PIPE TO BE INSTALLED PER MANUFACTURER RECOMMENDED STANDARDS AND AS SHOWN ON PLANS.
2. ALL PIPE SHALL BE FURNISHED WITH PREMIUM JOINTS.

TYPICAL M.H. GRATES

APPLICATION	GRATE ID NUMBER
CURB AND GUTTER	EJIW 5000 Z4/M4 HINGED (SEE DETAIL THIS SHEET)
PAVEMENT	EJIW 1040-M1
GREEN BELT	EJIW 1040-N
DITCH	EJIW 6508 EJIW 6517

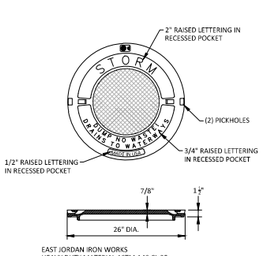
OR APPROVED EQUAL



EAST JORDAN IRON WORKS OR APPROVED EQUAL HEAVY DUTY MATERIAL ASTM A48 CL 35B
CATALOG NO. 1040A PATTERN NO. 1040A, PRODUCT NO. 104718 OAKCOSTD. 2" HIGH RAISED LETTERS, 1" WIDE RAISED LETTERS ALL IN RECESSED POCKET.

OAKLAND COUNTY WRC STORM SEWER MANHOLE COVER

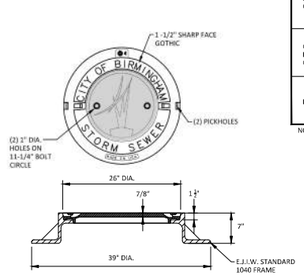
TO BE USED ONLY FOR MANHOLES ON DESIGNATED COUNTRY DRAINS



EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL 35
COVER WT., 150 LBS., CATALOG NO. 1040A
2" HIGH RAISED LETTERS, 3/4" WIDE RAISED LETTERS
ALL RECESSED FLUSH.

PRIVATE STORM SEWER MANHOLE COVER

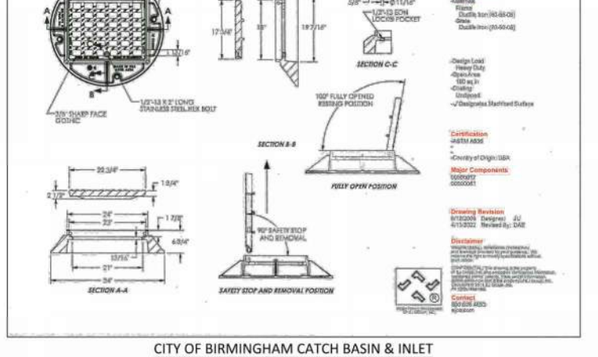
TO BE USED ON ALL STORM SEWER MANHOLES OTHER THAN COUNTY OR CITY DESIGNATED DRAINS.



EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL 35
COVER WT., 150 LBS., CATALOG NO. 1040CGS

CITY OF BIRMINGHAM STORM SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.



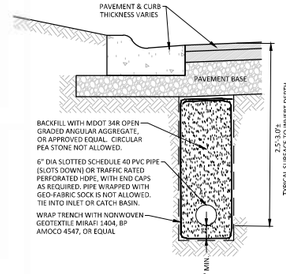
CITY OF BIRMINGHAM CATCH BASIN & INLET FRAME & COVER - STORM SEWER



CITY OF BIRMINGHAM MANHOLE COVER - STORM SEWER

STORM DRAIN SEWER CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM. ALL STORM SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY A STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER PROVIDED BY, OR CAUSED TO BE PROVIDED BY, THE CITY OF BIRMINGHAM.
2. ALL STORM DRAIN SEWER PIPE SIX (6) INCHES IN DIAMETER AND LARGER SHALL BE INSTALLED IN CONFORMANCE WITH CITY OF BIRMINGHAM TRENCH DETAILS CONTAINED HEREIN, TRENCH DETAIL "A" OR "B", INCLUDING BEDDING AND BACKFILL AT A MINIMUM OF 6 INCHES ABOVE THE TOP OF PIPE WITH NATURAL STONE CONFORMING TO M.D.O.T. 6A GRADATION REQUIREMENTS.
3. ALL STORM DRAIN SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH TRENCH "A" DETAIL AT ALL LOCATIONS UNDERNEATH OR WITHIN THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.
4. ALL STORM DRAIN SEWER PIPE MAY BE INSTALLED IN ACCORDANCE WITH TRENCH DETAIL "B" IN LOCATIONS OUTSIDE THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS.
5. STORM DRAIN SEWER DRAINAGE PIPE SHALL BE THE TYPE, CLASS, AND SIZE AS SHOWN ON THE APPROVED ENGINEERING PLANS, AND SHALL MEET THE FOLLOWING CRITERIA (ANY DEVIATIONS FROM THESE SPECIFICATIONS REQUIRE PRIOR APPROVAL BY THE CITY):
   - A. REINFORCED CONCRETE PIPE (RCP): ASTM C-76, CLASS IV:
     - ALL REINFORCED CONCRETE PIPE SHALL HAVE MODIFIED GROOVED TONGUE JOINTS WITH O-RING TYPE RUBBER GASKET, PER A.S.T.M. SPECIFICATIONS C443.
     - THE INSIDE JOINTS OF PIPE SIZES OVER 27" DIAMETER SHALL BE POINTED UP WITH MORTAR UPON COMPLETION OF BACKFILLING OPERATIONS.
   - B. POLYVINYL CHLORIDE PIPE (PVC):
     - PVC SDR 23.5 SEWER PIPE: PER ASTM D-3034 (6" DIA.)
     - PVC SDR 26 SEWER PIPE: PER ASTM D-3034 (8"-15" DIA.) AND ASTM F-679 (18" TO 24" DIA.
     - PVC SCHEDULE 40 SEWER PIPE:ASTM D-1785 "STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE) (PVC) PLASTIC PIPE", SCHEDULES 40, 80, AND 120.
     - PVC COMPOUNDS TO MEET ASTM D-1784
   - C. HIGH-DENSITY POLYETHYLENE PIPE (HDPE):
     - 4" OR 6" DIAMETER ALLOWABLE FOR PAVEMENT UNDERDRAIN APPLICATIONS.
     - SINGLE WALL, CORRUGATED , PERFORATED PIPE SUITABLE TO TRAFFIC LOADING APPLICATIONS.
     - PIPE SHALL MEET AASHTO M252, TYPE C OR CP
     - JOINTS SHALL MEET SOIL-TIGHT REQUIREMENTS PER AASHTO M252 OR M294
   - D. CORRUGATED STEEL PIPE REQUIREMENTS (CSP) (ONLY ALLOWED FOR USE IN SMALL DIAMETER (15" DIA. OF LESS) DRAINAGE CULVERTS):
     - CORRUGATED STEEL PIPE SHALL BE PROVIDED CORRESPONDING TO THE DIAMETER OR ARCH SHAPE (RISE AND SPAN) AS SPECIFIED ON THE PLANS.
     - ALL CORRUGATED STEEL PIPE SHALL BE GALVANIZED AND COATED WITH BITUMINOUS ASPHALT TO RETARD CORROSION. AS AN ALTERNATE TO THIS REQUIREMENT, AN ALUMINIZED STEEL PIPE, OR APPROVED EQUAL, MAY BE SUBSTITUTED.
     - ALL CORRUGATED STEEL PIPE SHALL BE JOINED TOGETHER WITH A WATERTIGHT CIRCUMFERENTIALLY CORRUGATED STEEL COUPLING BAND FURNISHED WITH TWO (2) RUBBER GASKETS.
     - CORRUGATED STEEL PIPE SHALL HAVE WELDED SEAMS WITH HELICAL CORRUGATIONS. EACH END OF THE HELICAL CORRUGATED PIPE SHALL BE RE-ROLLED TO AN ANNULAR CONFIGURATION TO ACCOMMODATE THE WATERTIGHT COUPLING BAND DESCRIBED HEREIN. RIVETED OR LOCK SEAM PIPE IS UNACCEPTABLE.
6. STORM MANHOLE, CATCH BASIN, AND INLET STRUCTURE NOTES AND REQUIREMENTS:
   - ALL NEW CATCH BASINS, INLETS, AND MANHOLES ARE TO BE MANUFACTURED TO ASTM C-478 SPECIFICATIONS.
   - ALL NEW CATCH BASINS, INLETS, AND MANHOLES SHALL HAVE CITY-APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS.
   - MANHOLES SHALL BE OF PRECAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. PRE CAST MANHOLE CONE SECTIONS SHALL BE CITY-APPROVED MODIFIED ECCENTRIC CONE TYPE.
   - TAPS THROUGH MANHOLE JOINTS OR CONE SECTIONS ARE PROHIBITED UNLESS OTHERWISE APPROVED.
   - ALL MANHOLE, CATCH BASIN, OR INLET STRUCTURE STEPS TO BE PLASTIC COATED STEEL MEETING THE REQUIREMENTS IN ASTM D 2146 TYPE II, GRADE 49108, MA. INDUSTRIES P.S.I. POLYPROPYLENE, (OR APPROVED EQUAL). STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE AT 16" CENTERS 45° FROM CENTERLINE OF SEWER.
   - CONE SECTION WITH MODIFIED GROOVE TONGUE JOINTS AND WITH STUD INSERTS CAST IN PLACE. TOP TO HAVE FLUSH SURFACE.
   - ASTM C-478 RISER SECTION WITH MODIFIED GROOVE TONGUE JOINTS.
   - KOR-N-SEAL BOOT (WITH STAINLESS STEEL KORBAND) FLEXIBLE RUBBER MANHOLE JOINTS AT ALL PIPE CONNECTIONS.
   - PRECAST CONCRETE BASE MUST BE SET LEVEL ON A SAND CUSHION OF NOT LESS THAN 2" OR MORE THAN 4". FOR MANHOLES, TOP OF BASE TO BE 2" MIN BELOW BOTTOM OF SEWER PIPE.
   - ON PRECAST MANHOLES BOTTOM SECTION SHALL BE ACCURATELY SET PLUMB.
7. ALL END SECTIONS 18" AND LARGER SHALL BE PROVIDED WITH A GALVANIZED BAR SCREEN.
8. STANDARD RIP-RAP SHALL BE 8"-15" FRAGMENTED NATURAL ROCK. HEAVY RIP-RAP SHALL BE 16"-24" FRAGMENTED NATURAL ROCK. (NO BROKEN CONCRETE SHALL BE ALLOWED)
9. SUMP PUMP LEAD REQUIREMENTS:
   - SUMP PUMP LEADS CONNECTED TO A MANHOLE SHALL BE CORED AND BOOTED.
   - SUMP PUMP MAINS AND LEADS SHALL BE SDR 23.5, SCHEDULE 40, NON PERFORATED, SOLID WALL, ABS TRUSS, PVC TRUSS, ADS N-12 WT, OR APPROVED EQUAL, WITH PREMIUM JOINTS.
   - ENDS OF ALL 4" SUMP PUMP LEADS SHALL BE TEMPORARILY CAPPED AND THEIR LOCATION STAKED, WITNESSED AND RECORDED.
   - ALL SUMP PUMP LEADS TO BE TAKEN TO THE PROPERTY LINE, EASEMENT LINE OR AS INDICATED ON THE PLAN.
   - SUMP PUMP MAINS MUST HAVE A CLEANOUT WITH A MINIMUM INSIDE DIAMETER OF 24", CONSTRUCTED AT CHANGES OF ALIGNMENT, ENDS OF SUMP PUMP MAINS OR AS INDICATED ON THE PLAN.



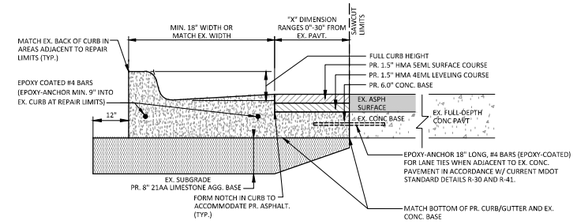
6" PERFORATED UNDERDRAIN TRENCH DETAIL

BIRMINGHAM
A WALKABLE CITY

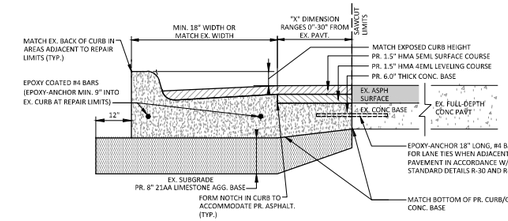
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www.bhamgov.org

Storm Drain Sewer Standard Notes & Details 1 of 1

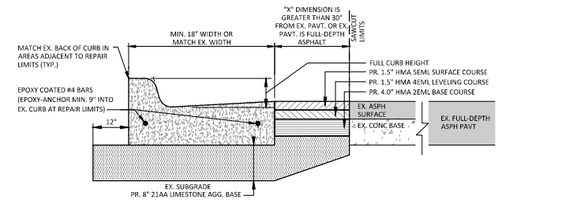
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01-22-26	NTS	SD-1



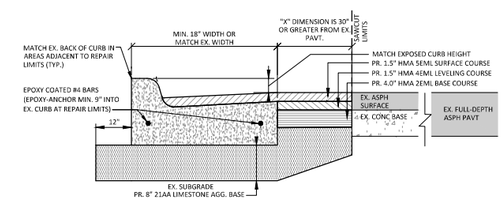
CONCRETE CURB & GUTTER INSTALLATION, TYPE 1 (EXPOSED GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH CONCRETE OR COMPOSITE PAVEMENT)



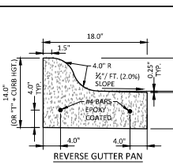
CONCRETE CURB & GUTTER INSTALLATION, TYPE 2 (OVERLAID GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH CONCRETE OR COMPOSITE PAVEMENT)



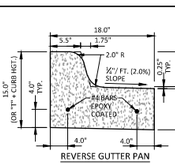
CONCRETE CURB & GUTTER INSTALLATION, TYPE 1 (EXPOSED GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH ASPHALT OR COMPOSITE PAVEMENT)



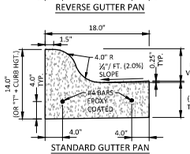
CONCRETE CURB & GUTTER INSTALLATION, TYPE 2 (OVERLAID GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH ASPHALT OR COMPOSITE PAVEMENT)



REVERSE GUTTER PAN

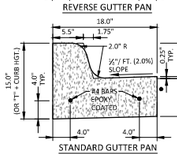


REVERSE GUTTER PAN



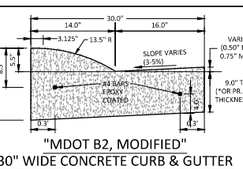
STANDARD GUTTER PAN

"BIRMINGHAM ROLL"
18" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

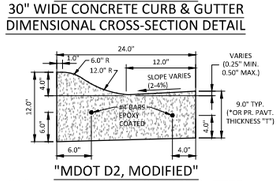


STANDARD GUTTER PAN

"MDOT F2, MODIFIED"
18" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL



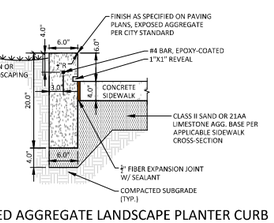
"MDOT B2, MODIFIED"
30" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL



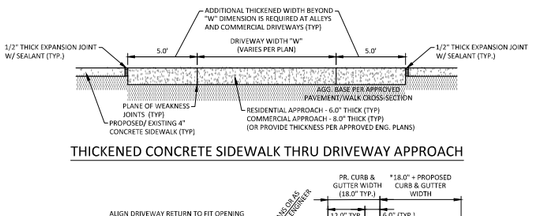
"MDOT D2, MODIFIED"
24" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

CONCRETE CURB & GUTTER NOTES

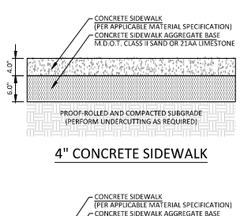
1. REFER TO M.D.O.T. STANDARD PLAN R-30 (CURRENT VERSION) FOR TYPICAL CURB AND GUTTER DETAILS, WHICH SHALL BE USED EXCEPT AS MODIFIED HEREIN, OR UPON DIRECTION BY THE ENGINEER.
2. PER M.D.O.T. STANDARD PLAN R-30, EPOXY-COATED #4 LANE TIES SHALL BE INSTALLED WHEN CONCRETE CURB & GUTTER IS INSTALLED ADJACENT TO EXISTING OR PROPOSED FULL-DEPTH CONCRETE PAVEMENT. LANE TIES MAY BE OMITTED WHEN CURB IS FORMED INTEGRAL TO A CONCRETE PAVEMENT CROSS-SECTION.
3. ALL CONCRETE CURB & GUTTER INSTALLED WITHIN M.D.O.T.- OR ROAD COMMISSION FOR OAKLAND COUNTY (R.C.O.C.) PUBLIC RIGHT-OF-WAYS SHALL ADHERE TO STANDARDS AND SPECIFICATIONS OF APPROVED PERMITS REQUIRED TO COMPLETE THE WORK'S THE GOVERNING AGENCIES.
4. ALL PROPOSED CONCRETE CURB & GUTTER SHALL PROVIDE THE TYPICAL CURB HEIGHTS FOR EACH TYPE OF CURB AS SHOWN IN THE DIMENSIONAL CROSS-SECTION DETAILS, EXCEPT AT LOCATIONS WHERE CURB & GUTTER IS REQUIRED TO MATCH EXISTING OR WHERE ALTERNATE CURB HEIGHTS ARE SPECIFIED ON THE PLANS.
5. PREPARE THE EXISTING AGGREGATE SUBBASE LAYER BELOW CURB AND GUTTER BY CONDITIONING, GRADING, AND/OR RE-SHAPING THE SUBBASE, AND FURNISHING, PLACING, AND COMPACTING SUPPLEMENTAL THICK 21AA AGGREGATE BASE TO ACHIEVE PROPOSED PLAN GRADE. ALL NECESSARY PREPARATION WORK SHALL BE INCLUDED IN APPLICABLE PAY ITEMS FOR CONCRETE CURB & GUTTER.
6. PER THE DIMENSIONAL CROSS-SECTION DETAILS, THE PROPOSED PAVEMENT THICKNESS,"T" IS EQUAL TO THE THICKNESS OF PROPOSED FULL-DEPTH CONCRETE PAVEMENT ADJACENT TO THE CURB & GUTTER, POURED SEPARATELY OR INTEGRAL. THE PROPOSED SLOPE WITHIN THE GUTTER PAN IS EQUAL TO THE CROSS-SLOPE OF THE CONCRETE PAVEMENT WHEN CURB & GUTTER IS POURED INTEGRAL TO THE PAVEMENT.
7. TYPICAL USE OF THE VARIOUS TYPES OF CONCRETE CURB AND GUTTER ARE AS FOLLOWS (OR IN ACCORDANCE WITH THE APPROVED PLANS OR PER DIRECTION BY THE ENGINEER):
   - 7.A. "BIRMINGHAM ROLL" DETAIL: LOCAL RESIDENTIAL STREETS
   - 7.B. "MDOT F2, MODIFIED" DETAIL: RESIDENTIAL, COMMERICAL & INDUSTRIAL COLLECTOR STREETS
   - 7.C. "MDOT D2, MODIFIED" DETAIL: MOUNTABLE CURB APPLICATIONS
   - 7.D. "MDOT B2, MODIFIED" DETAIL: DRIVEWAY OR ROADWAY MEDIANS



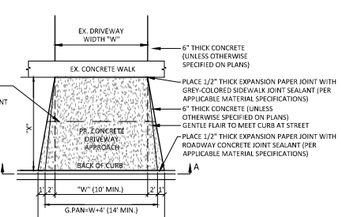
EXPOSED AGGREGATE LANDSCAPE PLANTER CURB



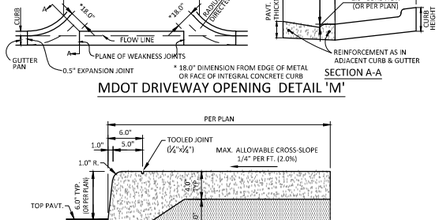
THICKENED CONCRETE SIDEWALK THRU DRIVEWAY APPROACH



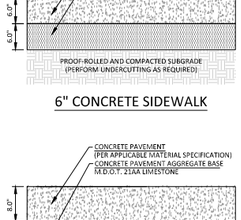
4" CONCRETE SIDEWALK



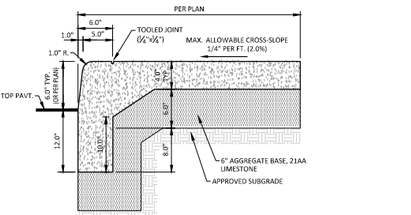
CONCRETE DRIVEWAY APPROACH - DETAIL 'L'



MDOT DRIVEWAY OPENING DETAIL 'M'



6" CONCRETE SIDEWALK

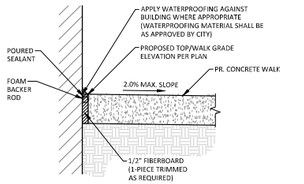


MONOLITHIC CURB AND WALK

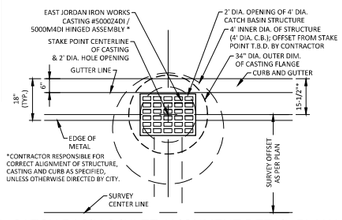
8" CONCRETE PAVEMENT

GENERAL PAVEMENT REMOVAL & CONSTRUCTION NOTES

1. PAVEMENTS SHALL BE OF THE TYPE, THICKNESS, AND CROSS-SECTIONS AS INDICATED HEREIN OR AS PROPOSED ON THE APPROVED ENGINEERING PLANS.
2. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM AND THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXCEPT WHERE MODIFIED OR SUPPLEMENTED HEREIN, OR ON THE APPROVED ENGINEERING PLANS.
3. ALL PAVING CONSTRUCTION OCCURRING WITHIN THE CITY OF BIRMINGHAM PUBLIC RIGHT-OF-WAY (R.O.W.) REQUIRES THAT THE DEVELOPER OR CONTRACTOR NOTIFY THE CITY ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE, SO THAT THE CITY MAY PROVIDE INSPECTION IF REQUIRED.
4. CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.
5. FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.
6. ALL PAVEMENTS CALLED FOR FULL-DEPTH REMOVAL AND REPLACEMENT SHALL BE SAWCUT FULL-DEPTH THROUGH THE PAVEMENT SECTION PRIOR TO REMOVAL.
7. BRICK PAVER WALKS OR DRIVEWAYS LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY (R.O.W.) SHALL BE REMOVED AS DIRECTED BY THE CITY. THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNER IN ADVANCE TO DETERMINE WHETHER THE REMOVED BRICK PAVER MATERIALS SHALL BE SALVAGED AND RETURNED TO THE OWNER OR DISPOSED OF.
8. IN ANY LOCATIONS WHERE ADJACENT PAVEMENTS ARE DAMAGED BEYOND THE PLANNED REMOVAL LIMITS, THE CONTRACTOR SHALL REPLACE THE PAVEMENTS "IN KIND" TO MATCH EXISTING MATERIAL(S), THICKNESS, UNDERLYING AGGREGATE BASE MATERIAL, AND OVERALL PAVEMENT CROSS-SECTION, AT NO ADDITIONAL COST TO THE CITY OR OWNER.
9. ALL TREES NOT INDICATED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION. WHERE NECESSARY, AND UPON REVIEW AND APPROVAL BY THE CITY, TREE ROOTS SHALL BE CUT CLEANLY. AT NO TIME WILL RIPPING OR TEARING OF TREE ROOTS BE ACCEPTABLE. CONTRACTORS SHALL COORDINATE WITH THE CITY DEPARTMENT OF PUBLIC SERVICES (DPS) IN ADVANCE OF CUTTING TREE ROOTS TO DETERMINE IF DPS REQUIRES PERSONNEL TO BE ON SITE TO WITNESS THE TREE CUTTING WORK.
10. SOILS, ROCKS, OR OTHER MISCELLANEOUS DEBRIS WHICH ARE REQUIRED TO BE REMOVED TO COMPLETE THE PROPOSED CONSTRUCTION, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE, AND LEGALLY DISPOSED OF, UNLESS DIRECTED OTHERWISE FROM THE CITY.
11. PAVEMENT SUBGRADE AND BASE MATERIALS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
12. EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS (INCLUDED IN PAVING WORK).
13. ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.
14. FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.



EXPANSION JOINT DETAIL AT BUILDING



CURB, CATCH BASIN & INLET ALIGNMENT DETAIL PLAN VIEW

AMERICANS WITH DISABILITIES ACT (A.D.A.) SIDEWALK, RAMP & LANDING COMPLIANCE NOTES

SIDEWALK FLAGS, RAMPS, AND LANDINGS SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS FOLLOWS:

SIDEWALK REQUIREMENTS:

1. THE RUNNING SLOPE OF CONSTRUCTED WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20 (5.0%).
2. THE CROSS-SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48 (2.0%).
3. CHANGES IN LEVEL OF 1/4 INCH (0.02 FEET) HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.
4. SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

RAMP REQUIREMENTS:

5. CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
6. RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.
7. THE CROSS-SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48 (2.0%).
8. THE LONGITUDINAL SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:12 (8.3%).
9. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10 (10.0%).
10. THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.
11. COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20 (5.0%). THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.
12. CURB RAMPS WITH A RUNNING SLOPE EQUAL OR LESS THAN 1:20 DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 1:48 PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL
13. CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
14. WHEN 60 INCH (5 FOOT) MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 48 INCHES (4 FEET) AND LANDINGS TO NOT LESS THAN 48" x 48" (4' x 4').
15. DIAGONAL OR CORNER TYPE CURB RAMPS WITH RETURNED CURBS OR OTHER WELL-DEFINED EDGES SHALL HAVE THE EDGES PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE A CLEAR SPACE 48 INCHES (4 FEET) MINIMUM OUTSIDE ACTIVE TRAFFIC LANES OF THE ROADWAY. DIAGONAL CURB RAMPS PROVIDED AT MARKED CROSSINGS SHALL PROVIDE THE 48 INCHES (4 FEET) MINIMUM CLEAR SPACE WITHIN THE MARKINGS. DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 24 INCHES (2 FEET) LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.
16. SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COURSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.
17. DETECTABLE WARNING SURFACE COVERAGE IS 24 INCHES (2 FEET) MINIMUM IN THE DIRECTION OF RAMP / PATH TRAVEL AND THE FULL WIDTH OF THE RAMP / PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2 INCHES MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.
18. DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND / OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.
19. RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. SEE BELOW FOR LANDING REQUIREMENTS.

LANDING / TURNING SPACE REQUIREMENTS:

20. LANDINGS SHALL BE REQUIRED AT TOP OF CURB RAMPS AND TOP AND BOTTOM OF CURB RAMPS AND OTHER SIDEWALK RAMPS (SIDEWALKS WITH LONGITUDINAL SLOPE OF 5.0% OR GREATER).
21. LANDINGS SHALL BE PROVIDED WITH SLOPES NOT STEEPER THAN 1:48 (2.0%) IN ALL DIRECTIONS.
22. THE LANDING CLEAR LENGTH SHALL BE 36 INCHES (3 FEET) MINIMUM. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE CURB RAMP, EXCLUDING FLARED SIDES, LEADING TO THE LANDING.
23. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING AREA WITH DIMENSIONS OF 60 INCHES (5 FEET) MINIMUM BY 60 INCHES (5 FEET) MINIMUM.
24. TURNING SPACES, SUCH AS KEY FLAGS WHERE TWO SEPARATE SIDEWALK DIRECTIONAL ALIGNMENTS INTERSECT, SHALL MEET THE SAME REQUIREMENTS AS LANDINGS AS DEFINED ABOVE.

PAVEMENT MATERIAL SPECIFICATIONS

AGGREGATE BASE:

1. ROAD PAVEMENTS, CURB & GUTTER, AND COMMERCIAL/INDUSTRIAL DRIVEWAYS
   - 1.A. PROVIDE CRUSHED LIMESTONE CONFORMING TO MDOT 21AA GRADATION REQUIREMENTS (MINIMUM 8.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.
2. RESIDENTIAL DRIVEWAYS
   - 2.A. PROVIDE CRUSHED LIMESTONE CONFORMING TO MDOT 21AA GRADATION REQUIREMENTS (MINIMUM 6.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.
3. CONCRETE SIDEWALKS
   - 3.A. PROVIDE CRUSHED LIMESTONE (MDOT 21AA GRADATION) OR MDOT CLASS II SAND (MINIMUM 6.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.

HOT MIX ASPHALT (H.M.A.) MIXTURES:

2. UNLESS OTHERWISE SPECIFIED ON THE APPROVED ENGINEERING PLANS, THE FOLLOWING HOT MIX ASPHALT (H.M.A.) MIXTURES SHALL BE USED FOR NEW ASPHALT PAVEMENT CONSTRUCTION AND ASPHALT ROAD REPAIRS:
   - 2.A. SURFACE COURSE: MDOT HMA MIXTURE NO. 5EML (MAX. APPLICATION RATE OF 220 LB/SYD.)
   - 2.B. LEVELING COURSE: MDOT HMA MIXTURE NO. 4EML (MAX. APPLICATION RATE OF 220 LB/SYD.)
   - 2.C. BASE COURSE: MDOT HMA MIXTURE NO. 3EML (MAX. APPLICATION RATE OF 330 LB/SYD.)
3. ALL MIX DESIGNATIONS SHALL MEET APPLICABLE MINIMUM REQUIREMENTS PER MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.
4. BINDER FROM RECYCLED ASPHALT PAVEMENT (RAP) MATERIALS SHALL BE LIMITED TO NOT MORE THAN 17 PERCENT OF THE TOTAL MIX BINDER CONTENT BY WEIGHT. FINAL BINDER FOR ALL MIXES SHALL MEET SPECIFICATION REQUIREMENTS FOR PERFORMANCE-GRADE PG64-28.
5. TACK/BOND COAT SHALL BE SS-1H WITH A MINIMUM APPLICATION RATE OF 0.10 GAL/SQUARE YARD.

STANDARD PORTLAND CEMENT CONCRETE (P.C.C.) MIXTURES:

1. CONCRETE PAVEMENT, CURB & GUTTER, AND COMMERCIAL/INDUSTRIAL DRIVEWAYS:
   - 1.A. CONCRETE GRADE 3500HP PER MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.
     - 1.A.A. ALL PCC MIXTURES REQUIRE:
       - 1.A.A.A. COARSE AGGREGATE MATERIAL MEETING "OPTIMIZED AGGREGATE GRADATION REQUIREMENTS" (IN ACCORDANCE WITH SECTION 10.04.03 OF THE MDOT 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION).
       - 1.A.A.B. FINE AGGREGATE MATERIAL MEETING MDOT SPECIAL PROVISION 20SP-1002A-01 REQUIREMENTS FOR ALKALI SILICA REACTIVITY.
       - 1.A.A.C. 25 TO 40 PERCENT REPLACEMENT OF THE PORTLAND CEMENT CONTENT IN THE PCC MIXTURE WITH A SUPPLEMENTARY CEMENTITIOUS MATERIAL (GROUND GRANULATED BLAST-FURNACE SLAG (GGBFS) OR OTHER APPROVED EQUAL).
     - 2.A.A.C. A MAXIMUM WATER CEMENT RATIO OF 0.43 TO REDUCE SCALING POTENTIAL.
     - 2.A.B. FOR NEW CONCRETE PAVEMENT AND/OR CURB INSTALLATIONS WHICH REQUIRE MORE THAN 10 CUBIC YARDS OF PCC REDI-MIX MATERIAL (APPROXIMATELY 1 TRUCKLOAD), THE PCC MIXTURE SHALL ALSO CONTAIN A VISCOSITY-MODIFYING ADMIXTURE INTENDED TO IMPROVE FINISHING CHARACTERISTICS AND REDUCE THE POTENTIAL FOR SURFACE SCALING.
   - 2.B. PORTLAND CEMENT: TYPE 1L W/ LOW ALKALI CONTENT (0.6% OR LESS)
   - 2.C. FINE AGGREGATE: 2NS SAND

BIRD AVENUE PHASE 1B PROJECT

BIRMINGHAM

A WALKABLE CITY

CONTRACT #7-26(W)

CITY OF BIRMINGHAM

ENGINEERING DEPARTMENT

Contractor's Name: F.D.M. Contracting LLC

THE AMERICAN INSTITUTE OF ARCHITECTS

AIA Document A310

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we

FDM Contracting, Inc.
49156 Van Dyke Avenue,Shelby Township, MI 48317

as Principal, hereinafter called Principal, and

Harco National Insurance Company
4200 Six Forks Road, Suite 1400,Raleigh, NC 27609

a corporation duly organized under the laws of the State of **Illinois**
as Surety, hereinafter called Surety, are held and firmly bound unto

City of Birmingham
151 Martin Street,Birmingham, MI 48009

as Obligee, hereinafter called Obligee, in the sum of **Five Percent of Accompanying Bid**

Dollars (**5% of Bid**

for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for (Here insert full name, address and description of project)

Bird Ave. Phase 1B Project

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this **12th** day of **February**, **2026**.

FDM Contracting, Inc.

(Witness)

(Principal) (Seal)

Fred Meram (Title) President

Harco National Insurance Company

(Witness)

(Surety) (Seal)

Holly Nichols, Attorney in Fact (Title)

POWER OF ATTORNEY

Bond # N/A

HARCO NATIONAL INSURANCE COMPANY
INTERNATIONAL FIDELITY INSURANCE COMPANY

Member companies of IAT Insurance Group, Headquartered: 4200 Six Forks Rd, Suite 1400, Raleigh, NC 27609

KNOW ALL MEN BY THESE PRESENTS: That **HARCO NATIONAL INSURANCE COMPANY**, a corporation organized and existing under the laws of the State of Illinois, and **INTERNATIONAL FIDELITY INSURANCE COMPANY**, a corporation organized and existing under the laws of the State of New Jersey, and having their principal offices located respectively in the cities of Rolling Meadows, Illinois and Newark, New Jersey, do hereby constitute and appoint

Nicholas Ashburn, Jason Rogers, Holly Nichols, Richard McGregor, Michael Lechner, Mark Madden, Gabriel Pringle, Shaheen Farzam-Behboodi, Robert Heuer

Rochester Hills, MI

their true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, and the execution of such instrument(s) in pursuance of these presents, shall be as binding upon the said **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY**, as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by their regularly elected officers at their principal offices.

This Power of Attorney is executed, and may be revoked, pursuant to and by authority of the By-Laws of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** and is granted under and by authority of the following resolution adopted by the Board of Directors of **INTERNATIONAL FIDELITY INSURANCE COMPANY** at a meeting duly held on the 13th day of December, 2018 and by the Board of Directors of **HARCO NATIONAL INSURANCE COMPANY** at a meeting held on the 13th day of December, 2018.

"**RESOLVED**, that (1) the Chief Executive Officer, President, Executive Vice President, Senior Vice President, Vice President, or Secretary of the Corporation shall have the power to appoint, and to revoke the appointments of, Attorneys-in-Fact or agents with power and authority as defined or limited in their respective powers of attorney, and to execute on behalf of the Corporation and affix the Corporation's seal thereto, bonds, undertakings, recognizances, contracts of indemnity and other written obligations in the nature thereof or related thereto; and (2) any such Officers of the Corporation may appoint and revoke the appointments of joint-control custodians, agents for acceptance of process, and Attorneys-in-fact with authority to execute waivers and consents on behalf of the Corporation; and (3) the signature of any such Officer of the Corporation and the Corporation's seal may be affixed by facsimile to any power of attorney or certification given for the execution of any bond, undertaking, recognizance, contract of indemnity or other written obligation in the nature thereof or related thereto, such signature and seals when so used whether heretofore or hereafter, being hereby adopted by the Corporation as the original signature of such officer and the original seal of the Corporation, to be valid and binding upon the Corporation with the same force and effect as though manually affixed."

IN WITNESS WHEREOF, **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** have each executed and attested these presents on this 31st day of December, 2025

STATE OF NEW JERSEY
County of Essex

STATE OF ILLINOIS
County of Cook

Michael F. Zurcher
Executive Vice President, Harco National Insurance Company
and International Fidelity Insurance Company

On this 31st day of December, 2025 , before me came the individual who executed the preceding instrument, to me personally known, and, being by me duly sworn, said he is the therein described and authorized officer of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY**; that the seals affixed to said instrument are the Corporate Seals of said Companies; that the said Corporate Seals and his signature were duly affixed by order of the Boards of Directors of said Companies.

IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my Official Seal, at the City of Newark, New Jersey the day and year first above written.

Cathy Cruz a Notary Public of New Jersey
My Commission Expires April 16, 2029

CERTIFICATION

I, the undersigned officer of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Sections of the By-Laws of said Companies as set forth in said Power of Attorney, with the originals on file in the home office of said companies, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand on this day, February 12, 2026

A02850

Irene Martins, Assistant Secretary

CITY OF BIRMINGHAM
BIRD AVENUE PHASE 1B PROJECT
CONTRACT #7-26(W)

ADDENDUM NO. 1

Monday, February 9, 2026

The following is a summary of the scope of work changes incorporated into the project as Addendum #1.

Bidders are hereby instructed to acknowledge receipt of the addenda documents on the Section 100 Proposal form by writing the date (2/9/26) and Addendum #1 on the submitted form.

The following clarifications to the bidding documents and overall project scope of work are provided based on questions received from potential bidders:

1. **Clarifications:**
    a. **CIPP Sewer Lining: (Clarification to Specification Section 2708)**
        i. Clarification to Section 1.4D: Cure water for all CIPP lining applications will be allowed to outlet to the existing sanitary/combined sewer system on Bird Avenue.
        ii. Clarification to Section 3.3 & 3.4: Per this specification section 3.3, air/steam inversion method is prohibited for use in sewers with diameters greater than 12 inches. As such, the CIPP lining proposed for the 15" storm sewer will require use of the "water inversion" method, or "pulled-in place method", as outlined in specification section 3.4.

The following summary is provided to overview revisions to the bidding documents:

2. **Drawings**
    a. Cover sheet has been re-plotted to reflect issuance date of 02/09/26 "Addendum #1".
    b. Utility Plan Sta. P.O.B to 4+00 - Sheet C01:
        i. Proposed structure schedule now indicates 95 New and 96 New and "Combined Sewer" structures.
    c. Utility Plan Sta. 4+00 to 8+00 - Sheet C02:
        i. Proposed pipe inverts and slopes for 10" diameter storm pipes have been adjusted for structures 99a, 99b, and 99 new. Proposed utility crossing schedule information has been updated accordingly.
    d. Utility Plan Sta. 8+00 to P.O.E. - Sheet C03:
        i. Existing 16" water main that runs north/south on Cummings has been added to the survey background. An additional utility crossing 06 is shown in the utility crossing schedule (the 16" water main is anticipated to be well below the proposed 15" storm, which is replacing an existing 15" storm at similar depth).

e. Storm Sewer Profile Plan - Sheet C04:
    i. Sheet title has been corrected in title block.
    ii. Structure 99 New has been depicted with required 2' sump in profile views.
f. Utility Service Plan Sheets – Sheets C05 thru C06:
    i. Callouts for existing trees have been updated based on feedback from the City DPS department. Existing trees are called out to be maintained, removed by DPS, or monitored by DPS during construction. Where existing trees are indicated to be maintained or monitored, the contractor will be expected to protect existing tree roots and trunks in accordance with applicable specifications, during utility and paving construction.
    ii. On Sheet C06, the previous address listed as #1061 Bird has been corrected to #1016 Bird. This address has been corrected on the topo survey background, and on the water/sewer service tables on this sheet.
g. Paving and Grading Plan Sta. 8+00 to P.O.E. - Sheet C09
    i. Minor updates to clarify overall grading design with additional grading callouts added to the profile view.
h. Notes and Details - Sheet C11
    i. Updates to the 6' Diameter Outlet Control Structure detail to reflect the proposed gas trap as an elbow fitting on the proposed 15" diameter outlet pipe.
i. Advanced Warning Signage (AWS) Traffic Diagram - Sheet C13
    i. Note has been added to the East Bound Lane Closure diagram to stipulate that flag control may be required during construction at the Bird/Cummings intersection to allow resident access to Bird east of Cummings, which is a dead-end street.

3. Specifications

a. Supplemental Specifications (Section 900, Section 1.03 "Permit Fees")

i. This section has been added to stipulate contractor requirements and fee payments for securing other agency permits on behalf of the City. Permits from other agencies required on this project include Oakland County Water Resources Commissioner (OCWRC) for inspection of the proposed combined sewers, and the Road Commission for Oakland County (RCOC) for installation of temporary traffic signage within the 14 Mile Road public right-of-way. Each permit requires fees to be paid by the Contractor on behalf of the City up to $1,000.00. Other costs incurred by the Contractor to secure these permits (bonding, insurance, etc.) are considered incidental to the project, and no additional payment will be made by the City.

End of Addendum

BIRD AVENUE PHASE 1B PROJECT
CONTRACT #7-26(W)
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450	Color Audio-Video Route Survey	2 Pages
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712	Concrete Sidewalk Construction	9 Pages
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2708	Resin Impregnated Flexible Fabric Line and Cured-in-Place Pipe	20 Pages
2751	Cleaning of Sewer Lines	5 Pages

900 Supplemental Specifications_____ 20 Pages

Appendices:

A: G2 Consulting Group – Soil Boring & Pavement Core Information_____ 21 Pages

ADVERTISEMENT

CITY OF BIRMINGHAM, MICHIGAN
BIRD AVENUE PHASE 1B PROJECT
CONTRACT #7-26(W)

Sealed proposals endorsed "BIRD AVENUE PHASE 1B PROJECT - Contract #7-26(W)" will be received from contractors by the City of Birmingham, at the office of the City Clerk, located at 151 Martin Street, Birmingham, Michigan, until **2:00 P.M. local time, on Thursday, February 12th, 2026.** The proposals will be opened and publicly read aloud at that time. Bids submitted after the exact time specified for receipt will not be considered.

A pre-bid meeting will be held at the Birmingham City Hall building (151 Martin Street, Birmingham, MI 48009) on **Wednesday, February 4th, 2025**, between **9:30-10:30 am**. Bidders should meet on the 2nd floor, near the engineering department at the east end of the building. **Attendance for the pre-bid meeting is OPTIONAL, but recommended for general contract bidders.**

General Description of Work: This project includes sewer lining, replacement of storm and combined sewers, water main, and pavements within the work area.

Major work items include: approximatley 1,277 linear feet of sewer lining, 263 linear feet of mainline sewer installation; 972 linear feet of sanitary service replacement, 960 linear feet of new water main; 390 linear feet of water service replacement; 3,109 square yards of pavement removal and replacement with new concrete pavement with integral curb; 454 square yeards of new concrete driveway approaches; 1,675 square feet of new concrete sidewalks; 970 square yards of lawn restoration; and other items to make a complete project.

Bidders shall review and comply with all Contract Documents, and supplemental information, as defined in the Information For Bidders.

Bidding documents for this project must be obtained electronically through the Michigan Inter-governmental Trade Network (MITN), which may be accessed at https://www.bidnetdirect.com/mitn. Vendors wishing to obtain copies of the bidding documents will need to register through the MITN website. Electronic versions of bidding documents will be posted to MITN starting **Thursday, January 22nd, 2026**.

The successful bidder shall be required to post bonds, and to comply with the contract requirements of the City Charter. Bids are firm, and no bid may be withdrawn for a period of sixty (60) days after opening of bids.

Procurement for the City of Birmingham will be handled in a manner providing fair opportunity for all businesses. This will be accomplished without abrogation or sacrifice of quality and as determined to be in the best interest of the City of Birmingham. The City reserves the right to reject any and all bid proposals, to waive any irregularity in any of the bid proposals submitted, and to accept any proposal which it shall deem to be the most favorable to the interest of the City.

A certified check or bid bond in the amount of five percent (5%) of the base bid must accompany each bid proposal.

ALEXANDRIA BINGHAM
CITY CLERK

Published in:
MITN

BIRD AVENUE PHASE 1B PROJECT #7-26(W)

SWORN STATEMENT OF QUALIFICATIONS

In order to provide the City of Birmingham with Contractors and Subcontractors who will carry out the work in a timely and satisfactory manner, a Sworn Statement of Qualifications must be submitted to the Engineering Division, City of Birmingham, prior to the bid opening by close of business, **5:00 p.m., Thursday, February 5th, 2026**. The qualifications of the General Contractor and Subcontractors to be used on the project will be reviewed on the basis of the proposed bidder's past performance on sewer, water main, and/or paving work of a similar nature for the City of Birmingham and other owners. Those bidders and bidders' subcontractors who are determined not to be suitable to bid on any work shall be notified in writing of the determination before the bids are opened.

The Bidder must answer all questions. If more space is needed to complete a question, attach a separate sheet.

Name: F.D.M. Contracting LLC

Address: 49156 Van Dyke
Shelby Twp., Mi 48317

Telephone: (586)739-8400 Fax: (586)739-8402 Email: Fred@fdmcontracting.net Website: https://fdmcontracting.net

Number of Years Operating Under Your Present Name: 28 years

General Nature of Work Performed: Excavating & Underground Utilities Construction Company.

Number of construction crews **employed by your company** relating to the type of work under this contract: 3 crews

Number of construction personnel that constitutes a crew (foreman, pipe layers, excavator, and loader operators, etc.): 6 Construction personnels plus Truck Drivers

Number of construction crews the company **will place on site full-time** in order to complete this project, in its entirety, within the designated time frame: 1-2 crews

The undersigned states that he/she has performed sewer and/or paving work similar in character and condition to that described in the Proposal. List three (3) projects that have been completed over the last three (3) years, including all work performed for the City of Birmingham. The contract amount must be, at minimum, within 50% of the engineer's estimate, except for work that was performed for the City of Birmingham. References provided below the 50% minimum will not be accepted.

✓ 02/05/26 Emailed

REFERENCE PROJECT #1:

Project Name: See attached

Owner: _____

Contact Person: _____ Telephone No.: _____

Contract Amount: $_____

Final Contract Price: $_____

Date Completed: _____

Description of Work Performed:

REFERENCE PROJECT#2:

Project Name: See attached

Owner: _____

Contact Person: _____ Telephone No.: _____

Contract Amount: $_____

Final Contract Price: $_____

Date Completed: _____

Description of Work Performed:

REFERENCE PROJECT #3:

Project Name: See attached

Owner: _____

Contact Person: _____ Telephone No.: _____

Contract Amount: $_____

Final Contract Price: $_____

Date Completed: _____

Description of Work Performed:

List major work presently under contract:

Name of Project	Percent Complete	Owner	Engineer	Contract Amount
Clay/Ira WM	90 %	Clay Twp.	Project Controls	$ 968,408.25
Pegg's Lane + Sanders Dr.	60 %	Charter Twp. of Chesterfield	OHM Advisors	$ 2,846,137.00
	%			$
	%			$
	%			$

SUBCONTRACTOR INFORMATION:

The Bidder agrees to use the following subcontractors for the performance of the work of their respective trades for this project, unless otherwise approved in writing by the Owner prior to signing of the contract. Contractor shall include, at a minimum, the subcontractor that will perform any work with a total value of 25% or more of the contract total value.

Name, Address & Telephone Number of Subcontractor	Type of Work By Subcontractor	Percentage of Contract Value by Subcontractor
Mark Anthony Contracting Inc. 4810 Old Plank Road Milford, MI 48381	Concrete paving	10%
D+E Landscaping + Grading 69620 Lowe Plank Richmond, MI 48062	Landscaping	10%

CONTRACTOR QUESTIONAIRE:

Have you, at any time, failed to complete a contract?

___ Yes ✓ No

Are there any judgements, claims or suits pending by or outstanding against you?

___ Yes ✓ No

If the answer to either question is Yes, submit details on separate sheet.

List all judgments against your firm due to construction contracts in the last three (3) years. Include separate pages if necessary.

CERTIFICATION

I hereby certify that the above information is true and correct this 27 day of January, 2026.

By: F.D.M. Contracting LLC

Signature and Title: _____ / president

Written Name: Fred Meram

Address: 49156 Van Dyke, Shelby Twp., Mi 48317

STATE OF MICHIGAN)
) SS
County of Macomb)

Subscribed and Sworn to before me, a Notary Public, in and for Macomb County, Michigan,

on this 27 day of January, 2026.

_____
Notary Public

In and for the County of Macomb, MI.

My commission Expires: 01/05/2027

INSTRUCTIONS

Complete all requested information on this form and submit it to the City of Birmingham at the information shown below before the close of business **5:00 p.m., Thursday, February 5th, 2026.**

Attention: Melissa A. Coatta, City Engineer
Email: mcoatta@bhamgov.org

Receipt of the form may be confirmed by calling (248) 530-1839.

Copies of this Sworn Statement form will be sent by email to prospective bidders upon request.

PROPOSAL

BIRD AVENUE PHASE 1B PROJECT

CONTRACT #7-26(W)

TO THE CITY OF BIRMINGHAM, MICHIGAN:

The undersigned, being familiarized with the local conditions affecting the cost of the work and the Contract Documents including all those sections listed in the Index, and the following addenda:

Date	Addendum Number
02/09/2024	#1

hereby proposes to perform everything noted hercin and to provide and furnish all labor, materials, except as otherwise specified, necessary to construct and complete in a workmanlike manner all of the work required to be performed for the **Bird Avenue Phase 1B Project, Contract #7-26(W)** in conformance with the requirements shown or implied in the above contract documents all of which are hereby made a part of this contract at the following unit price as here stated and further defined in the specifications.

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
	DIVISION 1: SEWER PAY ITEMS				
1.	15" Combined Sewer, PVC, SDR 26, Trench A	73	LF	175.00	12,775.00
2.	15" Storm Sewer, C76, CL-IV, Trench A	142	LF	123.00	17,466.00
3.	10" Storm Sewer, PVC SDR 26, Trench A	49	LF	110.00	5,390.00
4.	Pre-Lining Preparation, Cleaning & Video Inspection, 15-inch Storm. Sewer	306	LF	12.17	3,724.02
5.	Pre-Lining Preparation, Cleaning & Video Inspection, 10-inch Comb. Sewer	499	LF	10.14	5,059.86
6.	Pre-Lining Preparation, Cleaning & Video Inspection, 8-inch Comb. Sewer	472	LF	9.13	4,309.36
7.	Sewer Lining, Pre-Liner, 15" RIFI-CIPP, Storm Sewer	306	LF	1.00	306.00
8.	Sewer Lining, Pre-Liner, 10" RIFI-CIPP, Comb. Sewer	499	LF	1.00	499.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
9.	Sewer Lining, Pre-Liner, 8" RIFI-CIPP, Comb. Sewer	472	LF	1.00	472.00
10.	Sewer Lining, Liner, 15" RIFI-CIPP, Storm Sewer	306	LF	63.90	19,553.40
11.	Sewer Lining, Liner, 10" RIFI-CIPP, Comb. Sewer	499	LF	41.59	20,753.41
12.	Sewer Lining, Liner, 8" RIFI-CIPP, Comb. Sewer	472	LF	36.51	17,232.72
13.	Cut/Grind Protruding Sewer Leads, Any Material	5	EA	76.07	380.35
14.	Cut/Grind Root Intrusion	5	EA	76.07	380.25
15.	Cut/Grind Mineral Deposit	5	EA	76.07	380.25
16.	Sewer Service, 6" PVC SDR 23.5	972	LF	112.00	108,864.00
17.	New 5'-0" Diameter Combines Manhole w/ Interior Drop Connection	1	EA	13,000.00	13,000.00
18.	New 4'-0" Diameter Storm Manhole, Construct Online	1	EA	7,500.00	7,500.00
19.	New 6'-0" Diameter Storm Manhole w/ 2' Sump, Wier Wall & Gas Trap, Construct Online (Per Detail)	1	EA	17,500.00	17,500.00
20.	New 4'-0" Diameter Storm Manhole w/ 2' Sump, Construct Online	1	EA	7,500.00	7,500.00
21.	New 4'-0" Diameter Storm Manhole w/ 2' Sump	1	EA	5,000.00	5,000.00
22.	New 2'-0" Diameter Storm Inlet	4	EA	2,200.00	8800.00
23.	6" Perforated Pipe Underdrain (No sock)	1,186	LF	25.00	29,650.00
24.	Sewer Investigation, Laterals	7	EA	1,230.00	8610.00
25.	Sewer Service Tap, 6"	40	EA	350.00	14,000.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
26.	Sewer Tap, 15", Combined	2	EA	1,500.00	3,000.00
27.	Sewer Tap, 6", Underdrain	1	EA	370.00	370.00
28.	Reconstruct Manhole (if and where needed)	10	VF	200.00	2,000.00
29.	Remove & Replace Structure Cover (as directed by City)	5	EA	1100.00	5,500.00
30.	Remove Ex. Sewer Manhole	4	EA	825.00	3300.00
31.	Remove Ex. Drainage Structure	2	EA	620.00	1,240.00
32.	Remove Ex. 15" Storm Sewer	69	LF	35.00	2415.00
33.	Remove Ex. 10" Storm Sewer	21	LF	34.00	714.00
34.	Remove Ex. 10" Storm Sewer	30	LF	34.00	1,020.00
35.	Bulkhead Structure, 12" or Less	1	EA	208.00	208.00
36.	Bulkhead Pipe, Larger than 8"	3	EA	312.00	951.00
37.	CCTV Sewer Acceptance Inspection	1	LS	1,166.00	1,166.00
	SUBTOTAL DIVISION 1: SEWER PAY ITEMS				$350,989.82

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
	DIVISION 2: WATER MAIN PAY ITEMS				
38.	Remove Hydrant	1	EA	945.00	945.00
39.	Fire Hydrant Assembly, Complete	2	EA	9,500.00	19,000.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
40.	8" D.I. CL 52 Water Main w/ Polywrap, Trench A	940	LF	$ 230.00	$ 216,200.00
41.	6" D.I. CL 52 Water Main w/ Polywrap, Trench A	20	LF	126.00	2,520.00
42.	8" Water Main Connection to Ex. 8" Water Main	2	EA	8,500.00	17,000.00
43.	New Water Service, 1", Trench A, Copper	390	LF	53.00	20,670.00
44.	Water Service Connection, 1.5"	1	EA	4,500.00	4,500.00
45.	Water Service Connection, 1"	46	EA	1,100.00	50,600.00
46.	Install Curb Stop & Box, 1"	10	EA	625.00	6,250.00
47.	Hydra-Stop, Line-Stop, 8"	1	EA	1,000.00	1,000.00
48.	Hydra-Stop, Line-Stop, 4"	1	EA	1,000.00	1,000.00
49.	Abandon Existing Water Mains, Entire Project	1	LS	5,800.00	5,800.00
	SUBTOTAL DIVISION 2: WATER MAIN PAY ITEMS				$ 345,485.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
	DIVISION 3: PAVING PAY ITEMS				
50.	Earth Excavation	700	CY	42.00	29,400.00
51.	Subgrade Undercutting, 21AA Limestone	70	CY	40.00	2,800.00
52.	Subgrade Undercutting, 1"x3" Limestone	35	CY	75.00	2,625.00
53.	Subgrade Geogrid Fabric, Tensar Triax TX130S	1,000	SY	3.00	3,000.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
54.	Removing and Salvage Brick Pavers	135	SF	25.00	3,375.00
55.	Removing Concrete Drive Approach	384	SY	10.00	3,840.00
56.	Removing Concrete Sidewalk & Ramp (sawcutting included)	190	SY	8.00	1520.00
57.	Removing Pavement Full Depth (Curb & Gutter included)	3,109	SY	18.00	55,962.00
58.	Aggregate Base, MDOT 21AA Limestone, 8"	3,265	SY	20.00	65,300.00
59.	Concrete Pavement, Non-reinforced, 7", Incl. integral 5" curb ("Birmingham Roll")	3,109	SY	59.00	183,431.00
60.	Concrete Drive Approach, 6"	454	SY	65.00	29,510.00
61.	Concrete Sidewalk, 6" (Includes Ramps)	565	SF	12.00	6,780.00
62.	Concrete Sidewalk, 4"	1,110	SF	7.00	7,770.00
63.	Adjust Structure Cover	3	EA	700.00	2,100.00
64.	Maintenance Aggregate for Entire Project	1	LS	22,000.00	22,000.00
	SUBTOTAL DIVISION 3: PAVING PAY ITEMS				$419,413.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
	DIVISION 4: GENERAL PAY ITEMS				
65.	Mobilization (Max. 5% of Bid)	1	LS	59,000.00	59,000.00
66.	Traffic Maintenance & Control	1	LS	27,500.00	27,500.00
67.	Inspector Crew Days	62	DAYS	$650.00	40,300.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
68.	Water and Sewer Allowance	1	LS	$30,000.00	$30,000.00
69.	Audio-Video Route Survey	1	LS	950.00	950.00
70.	Pavement Marking, Polyurea, 24 inch Stop Bar, White	27	LF	16.00	432.00
71.	Pavement Marking, Polyurea, 24 inch Crosshatching, White	168	LF	16.00	2688.00
72.	Recessing Pavt Mkrg, Transv	390	SF	4.00	1,560.00
73.	Salvage Existing Signs	1	LS	510.00	510.00
74.	New Signs	10	SF	31.00	310.00
75.	Sign Post, U-Channel	24	LF	21.00	504.00
76.	Tree Protection, 3" Dia. Or Greater	22	EA	120.00	2640.00
77.	Mulch, 3"	200	SY	15.00	3,000.00
78.	Topsoil, 3"	970	SY	6.50	6,305.00
79.	Sod, Class A	970	SY	6.00	5,820.00
80.	Inlet Filter, Silt Sack	12	EA	65.00	780.00
	SUBTOTAL DIVISION 4: GENERAL PAY ITEMS				$182,299.00

TOTAL BID $1,298,186.82

Accompanying this proposal is a certified check, bid bond or bank draft in the amount of five (5) percent of the total bid, payable to the City of Birmingham, Michigan, which it is agreed will be forfeited to the City of Birmingham if the undersigned fails to enter into a contract in conformity with the form of contract incorporated herein, and furnish bonds and insurance as specified within twenty-one (21) days after the contract is awarded to the undersigned or withdraws this bid within sixty (60) days of the date hereof.

In submitting this bid, it is understood that the right is reserved by the City of Birmingham, Michigan to reject any or all bids.

The undersigned hereby agrees to execute a contract with the City of Birmingham, Michigan according to the forms attached hereto and furnish the required bonds, all within twenty-one (21) days after the award of the contract; and will fully complete all work as stated under TIME OF COMPLETION and LIQUIDATED DAMAGES in Supplemental Instructions to Bidders.

The Bidder will identify the business entity as individuals, or if doing business under assumed name, indicate assumed name, partnership (naming partners) and indicate official capacity of persons executing proposal and bid.

Contractor's Name F.D.M. Contracting LLC

Street Address 49156 Van Dyke

City Shelby Twp. County Macomb

State/Zip Code Mi, 48317

Telephone (586) 739-3400 Fax (586) 739-8402

Date 01/29/2024

Signed by

Print Name: Fred Meram

Title: President

If a corporation, give state in which incorporated: Michigan

Witnessed: Susan C. Bellew

Print Name: Susan C Bellew

Name of Superintendent Steve Ward & Donnie Mares

Supervision & time sequence according to the General Requirements

Give below at least three (3) references as to ability to do work proposed.

Name See attached Address _____

Firm _____ Telephone _____

Name _____ Address _____

Firm _____ Telephone _____

Name _____ Address _____

Firm _____ Telephone _____

Give below the last five (5) projects worked on, including those currently in progress, in chronological order. The names need not all be different from those listed above:

Project #1: Name of Project: See attached

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Project #2: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Project #3: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Project #4: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Project #5: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Give below all the subcontractors to be used on the project: If additional space is necessary, please use the back of this page. Should the contractor wish to use any subcontractors that are not on this list after award, the contractor shall submit a written request to the Engineer and obtain authorization for same, prior to proceeding. All subcontractors not listed must receive written approval from the City of Birmingham, prior to working on this project.

Name _____ Address 46900 West Road, Novi, MI 48377

Firm GM a Sons Telephone (248) 956-7939

Type of Work to be Performed: Concrete

Name _____ Address 31604 Parmer Court, New Haven, MI 48048

Firm Parmer Ent. Telephone (586) 749-8593

Type of Work to be Performed: CIPP

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

END OF SECTION

F.D.M. CONTRACTING LLC 49156 Van Dyke | Shelby Twp., MI 48317

Office (586) 739-8400 | Fax (586) 739-8402

Project References - Current & Completed List

City of Huntington Woods - 2026 Pavement Rec., Sewer Repair/Repl. & WM Replacement Project

City of Hunting Woods (Owner)
Engineering: Nowak & Fraus Engineers (248) 332-7931
46777 Woodward Avenue, Pontiac, MI 48342
Contract $Amount: $1,399,397.90
Start Date: 03/03/2026
Completion Date: 10/27/2026
Description: Installation of approx. 2,900 Lf. of Water Main Replacement, Complete Roads Removal & Replacement, and approx. 5,500 Lf. Storm Sewer Removal & Replacement.

Charter Twp. of Chesterfield Twp. - Peggy Lane & Seaden Dr. WM Replacement

Charter Twp. of Chesterfield Twp. (Owner)
Engineering: OHM Advisors (734) 522-6711
34000 Plymouth Road, Livonia, MI 48150
Contract $Amount: $2,846,137.00
Start Date: 09/22/2025
Completion Date: 05/01/2026
Description: Replacement of approx. 4,600 Ft of 8" WM to be Installed on Peggy Lane & Seaden Dr. to be Installed via Open Cut, Directional Drill & Pipe Bursting. Approx. 185 Ft of WM Lining under 23 Mile Rd., also includes RR of Pavement, Curb, Gutter & Drive Openings, New Valves, Hydrants & Service Leads.

Township of Clay Twp. – Clay/Ira WM Interconnect

Township of Clay Twp. (Owner)
Engineering: Project Control Engineering, Inc. (810) 794-1931
2420 Pointe Tremble Road
Algonac, MI 48001
Contract $Amount: $968,408.25
Start Date: 10/27/2025
Completion Date: 12/15/2025
Description: WM Installation-Directional Drill 16" HDPE DR-11, Open Cut PVC C909 16" WM. Install Hydrants, Valves, Tapping Sleeves & Water Services along Michigan Hwy. M-29.

Veridian Subdivision Phase 2 - Salty Development LLC

Salty Development LLC (Owner)
Engineering: AEW, Engineer (586) 726-1234
51301 Schoenherr Road, Shelby Twp., MI 48315
Contract $Amount: $1,914,369.00
Start Date: 08/14/2025
Completion Date: 12/19/2025
Description: Installing approx. 2,700 Lf. of 8" Ductile Iron WM, 2,500 Lf. 10" & 1,600 Lf. of 6" Sanitary & Storm Sewer.

Veridian Subdivision Phase 3 - Veridian Phase 3 LLC

Salty Development LLC (Owner)
Engineering: AEW, Engineer (586) 726-1234
51301 Schoenherr Road, Shelby Twp., MI 48315
Contract $Amount: $1,426,537.00
Start Date: 08/14/2025
Completion Date: 12/19/2025
Description: Installing approx. 2,200 Lf. of 8" Ductile Iron WM, Gate Valves & Wells, 2,535 Lf. 10" & 2,397 Lf. of 6" Sanitary & Storm Sewer.

Chicago Rd. & 13 Mile Rd. – Florence Cement Co. (F.D.M. is a Subcontractor)

City of Warren, MI (Owner)
General Contractor: Florence Cement Co.
Engineering: Hubbell, Roth & Clark, Inc. (248) 454-6300
555 Hulet Drive, PO Box 824, Bloomfield Hills, MI 48303-0824
Contract $Amount: $149,996.00
Start Date: 08/21/2025
Completion Date: 08/29/2025
Description: Approx. 500 Ft. of 12" HDPE Directional Drilling.

MDOT #2412-051 Frazho Rd. from Hoover Rd. to Schoenherr Rd. / M.L. Chartier (F.D.M. is a Subcontractor)

City of Warren, MI / MDOT (Owner)
Engineering: Hubbell, Roth & Clark, Inc. (248) 454-6300
555 Hulet Drive, PO Box 824, Bloomfield Hills, MI 48302-0360
Contract $Amount: $1,401,344.30
Start Date: 03/17/2025
Completion Date: 06/30/2025
Description: Installation of Water Mains, Open Cut Pipe Bursting.

City of Huntington Woods - 2025 Pavement Rec., Sewer Repair/Repl. & WM Replacement

City of Hunting Woods (Owner)
Engineering: Nowak & Fraus Engineers (248) 332-7931
46777 Woodward Avenue, Pontiac, MI 48342
Contract $Amount: $2,259,223.50
Start Date: 04/07/2025
Completion Date: 10/17/2025
Description: Installation of approx. 2,900 Lf. of Water Main Replacement, Complete Roads Removal & Replacement, and approx. 5,500 Lf. Storm Sewer Removal & Replacement.

City of Pleasant Ridge- Oakdale Blvd. 8" WM Replacement

City of Pleasant Ridge (Owner)
Engineering: AEW, Engineer (586) 726-1234
51301 Schoenherr Road, Shelby Twp., MI 48315

Contract $Amount: $1,439,594.25
Start Date: 04/23/2025
Completion Date: 08/07/2025
Description: Installation of 1,586 Lf., 8'' HDPE Directional Drilled with Water Service Replacement along with Concrete Replacement.

City of Birmingham – Bird Ave Phase IA- Project #7-25(W)

City of Birmingham (Owner)
Engineering: Nowak & Fraus Engineers (248) 332-7931
46777 Woodward Ave, Pontiac, MI 48342
Contract $Amount: $1,675,691.00
Start Date: 06/23/2025
Completion Date: 09/24/2025
Description: Full Road Removal & Replacement, Water Main & Storm Replacement along with 563 Lf. of Sewer Pipe Lining.

City of Huntington Woods - 2024 Pavement Rec., Sewer Repair/Repl. & WM Replacement

City of Hunting Woods (Owner)
Engineering: Nowak & Fraus Engineers (248) 332-7931
46777 Woodward Avenue, Pontiac, MI 48342
Contract $Amount: $5,485,781.25
Start Date: 05/06/2024
Completion Date: 11/14/2024 & project was completed on time.
Description: Installation of approx. 5,500 Lf. of Water Main Replacement, Complete Roads Removal & Replacement, and approx. 3,000 Lf. Storm Sewer Removal & Replacement.

City of Birmingham – Redding Rd. Sewer & WM Improvement Contract #9-23(S)

City of Birmingham (Owner)
Engineering: HRC Engineering Consultants (248) 454-6300
555 Hulet Drive, Bloomfield Hills, MI 48302-0360
Contract $Amount: $2,967,637.00
Start Date: 04/08/2024
Completion Date: 99% Completion.
Description: Installation of approx. 1,450 Lf. of Storm Sewer, 1,200 Sft. Ductile Iron Water Main, 500 Ft. of Pipe Bursting, 3,600 Sft. of Pavement/Curb & Sidewalk, and Full Road RR.

City of Troy – Elliott Water Main Replacement, Contract #23-07

City of Troy (Owner)
Engineering: City of Troy Engineering Dept.
500 W. Big Beaver, Troy, MI 48084
Contract $Amount: $1,879,258.00
Start Date: 04/15/2024
Completion Date: 09/12/2024 & project was completed on time.
Description: Installation of approx. 2,500 Lf. 12" DI Directional Drill, and approx. 8,200 Syd. of Cold Milling Pavement.

Utica Community Schools - Crissman Elementary - James P. Contracting (F.D.M. is a Subcontractor)

Utica Community School (Owner)
Engineering: AEW Engineering, Inc. (586) 726-1234
51301 Schoenherr Road, Shelby Twp., MI 48315
Contract $Amount: $643,575.00
Start Date: 06/17/2024
Completion Date: 08/30/2024 & project was completed on time.
Description: Installation of Drain Structure, Water Main, Sewer RR, Storm Sewer Repair.

Utica Community Schools – Rose Kidd Elementary - James P. Contracting (F.D.M. is a Subcontractor)

Utica Community School (Owner)
Engineering: AEW Engineering, Inc. (586) 726-1234
51301 Schoenherr Road, Shelby Twp., MI 48315
Contract $Amount: $67,450.00
Start Date: 06/17/2024
Completion Date: 08/30/2024 & project was completed on time.
Description: Installation of Drain Structure, Water Main, Sewer RR, Storm Sewer Repair.

Charter Twp. of Clinton - Emery St. WM Replacement #0242-0354 and Farley & Garvin St. WM Replacements #0242-0363

Charter Twp. of Clinton (Owner)
Engineering: AEW, Engineer
51301 Schoenherr Road, Shelby Twp., MI 48315
Contract $Amount: $1,829,409.00 Revised (Mod. & 2 Extensions)
Start Date: 10/17/2023
Completion Date: 05/31/2024 & project was completed on time.
Description: Water Main Replacement & Construction in existing residential area, Sanitary Sewer in existing area, and Directional Drilling for New Water Main.

City of Royal Oak - 2023 Water Main Improvements Contract CAP2310

City of Royal Oak (Owner)
Engineering: Holly Donoghue, P.E., (248) 246-3266
203 S. Troy Street, Royal Oak, MI 48067
Contract $Amount: $3,185,649.75
Start Date: 04/17/2023
Completion Date: 09/15/2023 & project was completed on time.
Description: Installation of 8" & 12" Ductile Iron via Open Cut Directional Drilling & Pipe Bursting Water Mains, Removal of Pavement, Concrete Paving; with Integral Curb, Driveways, Sidewalks. Gutters, Asphalt Paving & Restoration.

City of Royal Oak / Ajax Paving - Major Roads Improvements. Contract CAP2308 (we are a Subcontractor)

City of Royal Oak (Owner)
Engineering: Holly Donoghue, P.E., (248) 246-3266
203 S. Troy Street, Royal Oak, MI 48067

Contract $Amount: $1,579,495.00
Start Date: 05/08/2023
Completion Date: 09/15/2023 & project was completed on time.
Description: Installation of Storm Sewers, Drainage Structures, Removal & Replace WM Hydrant.

City of Royal Oak / Ajax Paving - 2023 Asphalt Resurfacing Imp. & Contract Mod. 2024 Contract CAP2315 & Mod. under CAP2415 - (we are a Subcontractor)

City of Royal Oak (Owner)
Engineering: Holly Donoghue, P.E., (248) 246-3266
203 S. Troy Street, Royal Oak, MI 48067
Contract $Amount: $327,068.05
Start Date: 05/08/2023 & Contract Mod. 2024 Start Date: 04/09/2024
Completion Date: 09/15/2023 & Mod. on 04/30/2024 projects were completed on time.
Description: Installation of Storm Sewers, Drainage Structures, Removal & Replace Water Main Hydrant.

City of Birmingham - Quarton Lake-Phase 2 Contract #1-23

City of Birmingham (Owner)
Engineering: Nowak & Fraus, Engineer (248) 332-7931
151 Martin Street, Birmingham, MI 48012
Contract $Amount: $1,062,984.25
Start Date: 03/15/2023
Completion Date: 06/30/2023 & project was completed on time.
Description: Installation of approx. 1,762 Lf. of Storm Sewer, Water Main 1,900 Lf., 7,300 Syd. Capeseal Surfacing & 1,705 Sft. of Misc. Curb & Sidewalk.

Utica Community School - Monfort Elementary – James P. Contracting (F.D.M. is a Subcontractor)

Utica Community School (Owner)
Engineering: AEW Engineering, Inc. (586) 726-1234
51301 Schoenherr Road, Shelby Twp., MI 48315
Contract $Amount: $452,741.84
Start Date: 07/01/2023
Completion Date: 07/28/2023
Description: Sewer Removal, Water Main, Drain Structure.

City of Royal Oak - 2021-2022 Water Main Improvements Contract CAP2110 & Contract Modifications

City of Royal Oak (Owner)
Engineering: Holly Donoghue, P.E., (248) 246-3266
203 S. Troy Street, Royal Oak, MI 48067
Contract $Amount: $3,984,911.89
Start Date: 05/10/2021
Completion Date: 07/27/2022 & project was completed on time.
Description: Installation of Sanitary, Storm, Ductile Iron Water Main, via HDPE, Pipe Bursting & Open Cut, Concrete Removal & Paving, Asphalt Paving, and Restoration.

Charter Twp. of Bloomfield Twp. - Porters Lane Emergency Sanitary Sewer Replacement
Bloomfield Twp. (Owner)
Engineering: Hubbell, Roth & Clark, Inc., P.E. (248) 454-6300
4200 Telegraph Road, Bloomfield Twp., MI 48302
Contract $Amount: $930,182.85
Start Date: 03/21/2022
Completion Date: 10/10/2022 & project was completed on time.
Description: Emergency Sewer Repair.

City of Farmington Hills - Normandy Hills Subdivision Water Main Project
City of Farmington Hills (Owner)
Engineering: City of Farmington Hills Engineering Dept. (248) 871-2560
31555 Eleven Mile Road, Farmington Hills, MI 48336-1165
Contract $Amount: $2,257,426.30
Start Date: 04/04/2022
Completion Date: 09/23/2022 & project was completed on time.
Description: 12,000 Lf. of Water Main via Open Cut Directional Drilling & Pipe Bursting.

Orchard Lake Rd. - City of Farmington Hills, MDOT #20402, ML Chartier (we are the Subcontractors)
City of Farmington Hills (Owner)
Engineering: City of Farmington Hills Engineering Dept. (248) 871-2560
31555 Eleven Mile Road, Farmington Hills, MI 48336-1165
Contract $Amount: $385,460.00
Start Date: 04/05/2022
Completion Date: 05/13/2022 & project was completed on time.
Description: 1,200 Ft. of 14" HDPE via Pipe Bursting Installation of Water Mains & Connection to Existing WM, Gate Valves & Wells, Fire Hydrant and Removal of Fire Hydrant.

City of Ferndale - 2022 Water Main Improvement. & 2023 Contract Mod. – Contract #WM-2022-01
City of Ferndale (Owner)
Engineering: Giffels Webster, Engineer
1025 E. Maple Road, Suite 100, Birmingham, MI 48009
Contract $Amount: $2,335,119.00
Start Date: 05/16/2022
Completion Date w/ Modifications: 10/30/2023 & project was completed on time.
Description: Installing approx. 3,800 feet of Ductile Iron Water Main R.R., Gate Valves, Fire Hydrants, Domestic Water Services, Concrete Pavement, Sidewalks, Ramps, Curbs, Gutters, HMA Cold Milling & HMA Surface, Paving, Lawn Restoration and Other Associated Work Items.

Grand Square of Orion - Brown Road RE Holdings, LLC
Brown Road RE Holdings, LLC (Owner)
OHM Orchard, Hills & McCliment, Inc.
30201 Orchard Lake Rd., Suite #110, Farmington Hills, MI 48334
Contract $Amount: $1,988,184.15

Start Date: 03/28/2022
Completion Date: 12/22/2022 & project was completed on time.
Description: Installation of Water Main, Sanitary Sewer, Storm Sewer, Site Grading & Balancing, Storm, Ductile Iron Water Main, Concrete Removal & Paving, Asphalt Paving, and Restoration.

Woodspring Suites Dearborn - Concord Hospitality Enterprises, Co. (we are a subcontractor)
Concord Hospitality Enterprises Co. (Owner)
NRC Builders (General Contractor)
Engineering: Nowak & Fraus Engineering (248) 332-7931
Contract $Amount: $863,576.00
Start Date: 06/27/2022
Completion Date: 11/15/2022 & project was completed on time.
Description: Sanitary, Storm, Water Main & Grading.

Grand Square of Orion - Brown Road RE Holdings, LLC
Brown Road RE Holdings, LLC (Owner)
Engineering: OHM Orchard, Hills & McCliment, Inc.
30201 Orchard Lake Rd., Suite #110, Farmington Hills, MI 48334
Contract $Amount: $1,700,000.00
Start Date: 03/28/2022
Completed: 12/22/2022 & project was completed on time.
Description: Installation of Water Main, Sanitary Sewer, Storm Sewer, Site Grading & Balancing, Storm, Ductile Iron Water Main, Concrete Removal & Paving, Asphalt Paving, and Restoration.

Staybridge Suites Royal Oak - Midwest Lodging Group (we are a subcontractor)
Midwest Lodging Group (Owner)
Engineering: Stellar Development, LLC, (248) 419-5550
2600 Auburn Road, Auburn Hills, MI 48326
Contract $Amount: $1,020,000.00
Start Date: 10/26/2022
Completion Date: 06/30/20223 & project was completed on time.
Description: Site Grading & Underground Utilities for Storm, Water & Sewer.

Utica Community School - Utica High Tennis Courts - James P. Contracting (F.D.M. is a Subcontractor)
Utica Community School (Owner)
Engineering: AEW Engineering, Inc. (586) 726-1234
51301 Schoenherr Road, Shelby Twp., MI 48315
Contract $Amount: $492,722.79
Start Date: 06/07/2022
Completion Date: 07/13/2022
Description: Full Parking Lot Recon. at Collins & West Utica Elementaries and Storm Sewer.

City of Ferndale - 2021 Water Main Improvement Program

City of Ferndale (Owner)
Engineering: Giffels Webster, Engineer
1025 E. Maple Road, Suite 100, Birmingham, MI 48009
Contract $Amount: $1,597,242.00
Start Date: 05/03/2021
Completion Date: 11/01/2021 & project was completed on time.
Description: Install Sanitary Sewer, New Water Main with all appurtenances. R&R Concrete Curb, R.R. Concrete pavement, Cold Milling HMA Surface, HMA Paving.

Charter Twp. of Chesterfield Twp. - 23 Mile Rd 2021 Water Main

Charter Twp., of Chesterfield (Owner)
Engineering: OHM Advisors, 34000 Plymouth Road, Livonia, MI 48150
Contract $Amount: $1,545,889.00
Start Date: 03/22/2021
Completed: 07/19/2021 & project was completed on time.
Description: Installation of New Ductile Iron, & Directional Drill HDPE WM & Pipe Bursting.

City of Southfield / MDOT #2104-22 - 12 Mile Road WM

City of Southfield / MDOT #2104-22 (Owner)
Engineering: HRC - Matt Slicker, P.E., (248) 454-6300
Contract $Amount: $427,123.00
Start Date: 09/22/2021
Completed: 10/29/2021 & project was completed on time.
Description: Installation of 1,677 LF of 12", Directional Drill C-900 Fusible PVC Pipe, 8" – 16" Ductile Iron Pipe, Gate Valves & Hydrants.

Groesbeck Retail – M-97 RE Holdings, LLC

M-97 RE Holdings, LLC (Owner)
Engineering: Triumph Engineering
3021 Orchard Lake Road, Farmington Hills, MI 48334
Contract $Amount: $304,365.74
Start Date: 08/10/2021
Completed: 11/30/2021 & project was completed on time.
Description: Site Grading & Balancing, Sanitary Sewer, Storm Sewer, and Water Services.

Detroit PW-7018 - City of Detroit / Fort Wayne Contracting (we are a subcontractor)

City of Detroit & Fort Wayne Contracting (Owner)
Engineering: Ian Duncan, P.E., (313) 202-1174
300 East Seven Mile Road, Detroit, MI 48203
Contract $Amount: $170,675.00
Start Date: 09/02/2021
Completion Date: 11/09/2021 & project was completed on time.
Description: Storm Sewer Tap, RCP Pipe, Manholes, and Catch Basins.

BIRD AVENUE PHASE 1B PROJECT
CONTRACT #7-26(W)

CONTRACT

THIS AGREEMENT made the _____ day of_____, 2026, by and between the CITY OF BIRMINGHAM, Oakland County, Michigan, hereinafter called the "City", and F.D.M. Contracting LLC of the City of Shelby Township, County of Macomb, State of Michigan, hereinafter called the "Contractor", relative to Contract No. 7-26(W), otherwise known as: BIRD AVENUE PHASE 1B PROJECT in the amount of $ 1,298,186.82 to wit:

1. The documents consisting of RFP, including all exhibits and the General Contract Conditions, and the Bid shall be incorporated herein by reference, shall become a part of this Agreement, and shall be binding upon both parties hereto. If there is a conflict between these documents, this Agreement shall control, then the RFP, and then the Bid.

2. The Contractor shall furnish all labor, materials, and appliances necessary, and to all the work as set forth in the Proposal, and in accordance with the plans and specifications, which have been made a part of this agreement in a manner, time and place, as therein set forth.

    a. The Contractor shall provide a Performance Bond, which form is attached hereto and incorporated herein by reference to protect the City and conditioned upon the faithful performance of the contract in accordance with the plans, specifications, and terms hereof.

    b. The Contractor shall provide a Payment Bond which form is attached hereto and incorporated herein by reference for the protection of the claimants as defined in MCL §129.201(6) to supply labor or materials to the principal Contractor or his Subcontractor and the prosecution of the work provided for in this contract.

3. Time is of the essence of this agreement. All the work to be performed by the Contractor shall be completed on or before the Time of Completion, as set forth in the Supplemental Instructions to Bidders. The Contractor shall pay to the City as liquidated damages, the amount per day as set forth under Liquidated Damages in the Supplemental Instructions to Bidders, for each calendar day after the date specified under Time of Completion that the work to be performed by the Contractor is not completed. Liquidated damages are established because of the difficulty in ascertaining actual damages which the City might sustain and are not intended as a penalty.

4. The City promises and agrees to pay said Contractor for all labor, materials and appliances supplied, and for all work performed under this agreement at the unit prices provided in the attached Proposals and Specifications.

5. For the faithful performances of the terms of this agreement, said parties respectively bind themselves, their successors, heirs, executors, administrators, and assigns.

IN WITNESS WHEREOF, the parties execute this agreement as of the day and year first written above.

CITY OF BIRMINGHAM

Attest _____
City Clerk

By: _____
Mayor

Witnessed _____

By: _____
Fred Meraw/president
Contractor

APPROVAL (1.135 City Code)

_____
City Manager as to Substance

_____
City Attorney as to Form

Ashley Reasby/Asst. Finance Director
Director of Finance as to Financial Obligation

_____
City Engineer

SECTION 115
IRAN SANCTIONS ACT CERTIFICATION FORM

Pursuant to Michigan Law and the Iran Economic Sanction Act, 2012 PA 517 ("Act"), prior to the City accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must certify that it is not an "Iran Linked Business", as defined by the Act.

By completing this form, the Vendor certifies that it is not an "Iran Linked Business", as defined by the Act and is in full compliance with all provisions of the Act and is legally eligible to submit a bid for consideration by the City.

Susan C. Bellew — PREPARED BY (Print Name)
02/05/26 — DATE

Office Mgr. — TITLE
02/05/24 — DATE

Susan C. Bellew — AUTHORIZED SIGNATURE
suzy@fdmcontracting.net — E-MAIL ADDRESS

F.D.M. Contracting LLC — COMPANY

49152 Van Dyke, Shelby Twp., Mi 48317 — ADDRESS
(586) 739-8400 — PHONE

NAME OF PARENT COMPANY

ADDRESS

PHONE

38-3434972 — TAXPAYER I.D.#

BIRD AVENUE PHASE 1B PROJECT
CONTRACT #7-26(W)

PERFORMANCE BOND

Bond #3000254

KNOW ALL PEOPLE BY THESE PRESENTS that we, the undersigned FDM Contracting, Inc.

49156 Van Dyke Avenue, Shelby Township, MI 48317 as Principal, and Harco National Insurance Company as Surctics, arc hereby held and firmly bound unto the **CITY OF BIRMINGHAM, MICHIGAN** in the sum of One Million Two Hundred Ninety-eight Thousand One Hundred Eighty-six & 82/100--- Dollars ($ 1,298,186.82-----), in lawful money of the United States, for the payment of which we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns this _____ day of _____, 2026.

WHEREAS, the above bounded Principal has entered a certain written contract with the above-named City of Birmingham, Michigan dated _____ day of _____, 2026 for the construction of Bird Avenue Phase 1B Project - Contract #7-26(W)

_____,

which contract is hereby referred to and made a part hereof as fully and to the same extent as if the same were entirely written herein,

AND THE SAID SURETY, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder of the specifications accompanying the same shall in anywise affects its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work or to the specifications.

NOW, THEREFORE, the condition of the above obligation is such that if the Principal shall fully perform the annexed contract according to the terms thereof, or as such terms may be changed or modified by mutual agreement, and shall guarantee all work furnished against all defects and incidental damage to other property for a period of one (1) year following final acceptance of the work, then this obligation shall be void, otherwise the same shall remain in full force and effect.

This Bond is provided in compliance with and subject to the provisions of Act 213 of the Public Acts of Michigan for 1963, as amended by Act 351 of the Public Acts of Michigan for 1972, also known as MCL §129.201 et. seq.

WITNESSED:

By: Susan C. Bellis

FDM Contracting, Inc.

By:

Fred Meram, President

Principal

Harco National Insurance Company

By:

Nicholas Ashburn, Attorney-in-Fact

BIRD AVENUE PHASE 1 PROJECT
CONTRACT #7-26(W)

PAYMENT BOND Bond #3000254

KNOW ALL PEOPLE BY THESE PRESENTS, that we FDM Contracting, Inc. 49156 Van Dyke Avenue, Shelby Township of the state of MI 48317 hereinafter called the "Principal" and Harco National Insurance Company hereinafter called the "Surety", are held and firmly bound unto those persons known as "Claimants", as defined in MCL §129.206(6) supplying labor or materials to the Principal or his subcontractors and the prosecution of the work provided for in a certain Contract by and between the City of Birmingham and the Principal in the sum of One Million Two Hundred Ninety-eight Thousand One Hundred Eighty-six & 82/100--- Dollars ($ 1,298,186.82---), in lawful money of the United States, for the payment whereof, we bid ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally this _____ day of _____, 2026.

WHEREAS the above named Principal has entered into a Contract with the CITY OF BIRMINGHAM, MICHIGAN dated the _____ day of _____, 2026, wherein said principal has covenanted and agreed as follows, to wit:

To furnish all the labor and materials Bird Avenue Phase 1B Project Contract #7-26(W)

and,

WHEREAS this Bond is given in compliance with and subject to the provisions of Act No. 213 of the Public Acts of Michigan for 1963, as amended by Act. No. 351 of the Public Acts of Michigan for 1972, also known as MCL §129.201 et seq.

NOW, THEREFORE, the condition of the above obligation is such that if all persons or claimants as defined in Public Act 213 of 1963 supplying labor or materials to the principal contractor or his subcontractors in the prosecution of the work provided for in the contract are paid, the obligation of this Bond shall be void; otherwise, it shall be in full force and effect.

WITNESSED:

By: Susan C. Bellis

FDM Contracting, Inc.

By: Fred Meram, President

Principal

Harco National Insurance Company

By:

Nicholas Ashburn, Attorney-in-Fact

Surety

POWER OF ATTORNEY

Bond # 3000254

HARCO NATIONAL INSURANCE COMPANY
INTERNATIONAL FIDELITY INSURANCE COMPANY

Member companies of IAT Insurance Group, Headquartered: 4200 Six Forks Rd, Suite 1400, Raleigh, NC 27609

KNOW ALL MEN BY THESE PRESENTS: That **HARCO NATIONAL INSURANCE COMPANY**, a corporation organized and existing under the laws of the State of Illinois, and **INTERNATIONAL FIDELITY INSURANCE COMPANY**, a corporation organized and existing under the laws of the State of New Jersey, and having their principal offices located respectively in the cities of Rolling Meadows, Illinois and Newark, New Jersey, do hereby constitute and appoint

Nicholas Ashburn, Jason Rogers, Holly Nichols, Richard McGregor, Michael Lechner, Mark Madden, Gabriel Pringle, Shaheen Farzam-Behboodi, Robert Heuer

Rochester Hills, MI

their true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, and the execution of such instrument(s) in pursuance of these presents, shall be as binding upon the said **HARCO NATIONAL INSURANCE COMPANY and INTERNATIONAL FIDELITY INSURANCE COMPANY**, as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by their regularly elected officers at their principal offices.

This Power of Attorney is executed, and may be revoked, pursuant to and by authority of the By-Laws of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** and is granted under and by authority of the following resolution adopted by the Board of Directors of **INTERNATIONAL FIDELITY INSURANCE COMPANY** at a meeting duly held on the 13th day of December, 2018 and by the Board of Directors of **HARCO NATIONAL INSURANCE COMPANY** at a meeting held on the 13th day of December, 2018.

"**RESOLVED**, that (1) the Chief Executive Officer, President, Executive Vice President, Senior Vice President, Vice President, or Secretary of the Corporation shall have the power to appoint, and to revoke the appointments of, Attorneys-in-Fact or agents with power and authority as defined or limited in their respective powers of attorney, and to execute on behalf of the Corporation and affix the Corporation's seal thereto, bonds, undertakings, recognizances, contracts of indemnity and other written obligations in the nature thereof or related thereto; and (2) any such Officers of the Corporation may appoint and revoke the appointments of joint-control custodians, agents for acceptance of process, and Attorneys-in-fact with authority to execute waivers and consents on behalf of the Corporation; and (3) the signature of any such Officer of the Corporation and the Corporation's seal may be affixed by facsimile to any power of attorney or certification given for the execution of any bond, undertaking, recognizance, contract of indemnity or other written obligation in the nature thereof or related thereto, such signature and seals when so used whether heretofore or hereafter, being hereby adopted by the Corporation as the original signature of such officer and the original seal of the Corporation, to be valid and binding upon the Corporation with the same force and effect as though manually affixed."

IN WITNESS WHEREOF, **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** have each executed and attested these presents on this 31st day of December, 2025

INTERNATIONAL FIDELITY INSURANCE COMPANY CORPORATE SEAL 1904 NEW JERSEY

STATE OF NEW JERSEY
County of Essex

STATE OF ILLINOIS
County of Cook

HARCO NATIONAL INSURANCE COMPANY CORPORATE SEAL 1984 ILLINOIS

Michael F. Zurcher
Executive Vice President, Harco National Insurance Company
and International Fidelity Insurance Company

On this 31st day of December, 2025 , before me came the individual who executed the preceding instrument, to me personally known, and, being by me duly sworn, said he is the therein described and authorized officer of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY**; that the seals affixed to said instrument are the Corporate Seals of said Companies; that the said Corporate Seals and his signature were duly affixed by order of the Boards of Directors of said Companies.

CATHY CRUZ NOTARY PUBLIC STATE OF NEW JERSEY

IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my Official Seal, at the City of Newark, New Jersey the day and year first above written.

Cathy Cruz a Notary Public of New Jersey
My Commission Expires April 16, 2029

CERTIFICATION

I, the undersigned officer of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Sections of the By-Laws of said Companies as set forth in said Power of Attorney, with the originals on file in the home office of said companies, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand on this day,

A02850

Irene Martins, Assistant Secretary

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 3/11/2026

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Guy Hurley, LLC 989 E. South Boulevard Suite 200 Rochester Hills MI 48307	CONTACT NAME: Brandi Schonter PHONE (A/C, No, Ext): (248) 519-1307 FAX (A/C, No): (248) 519-1401 E-MAIL ADDRESS: BSchonter@ghbh.com
INSURED F.D.M. Contracting, LLC Equipment Yard LLC 49156 Van Dyke Avenue Shelby Twp MI 48317	INSURER A: The Phoenix Ins. Co A++ XV — NAIC # 25623 INSURER B: St Paul Protective Ins. Co A++ XV — NAIC # 24767 INSURER C: Travelers Pro & Cas of America A++XV — NAIC # 25674 INSURER D: The Travelers Ind Co. A++ XV — NAIC # 25658 INSURER E: INSURER F:

COVERAGES **CERTIFICATE NUMBER:** 26-27 Master **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X XCU Coverage Included X Contractual Liability GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY X PRO-JECT LOC OTHER			C05X001359	02/16/2026	02/16/2027	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS			BA5X000652	02/16/2026	02/16/2027	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
C	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION $			CUP5X002829	02/16/2026	02/16/2027	EACH OCCURRENCE AGGREGATE	$ 4,000,000 $ 4,000,000
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		UB5X001206	02/16/2026	02/16/2027	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
A	Inland Marine			C05X001359	02/16/2026	02/16/2027	Installation Floater	100,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The City of Birmingham, including all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof are Additional Insureds on a primary and noncontributory basis for General Liability and Auto Liability when required by written contract.

CERTIFICATE HOLDER

City of Birmingham
151 Martin Street
Birmingham, MI 48009

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

R McGregor/ALNAVA

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A STOCK COMPANY



Markel American Insurance Company

4521 Highwoods Parkway
Glen Allen, Virginia 23060
(800) 431-1270

INSURANCE POLICY

Coverage afforded by this policy is provided by the Company (Insurer) and named in the Declarations.

In **Witness Whereof**, the company (insurer) has caused this policy to be executed and attested and countersigned by a duly authorized representative of the company (insurer) identified in the Declarations.

Kathleen Anne Sturgeon

Secretary

President

MARKEL AMERICAN INSURANCE COMPANY

PRIVACY NOTICE

U. S. Consumer Privacy Notice Rev. 1/1/2020

FACTS	WHAT DOES MARKEL GROUP OF COMPANIES REFERENCED BELOW (INDIVIDUALLY OR COLLECTIVELY REFERRED TO AS "WE", "US", OR "OUR") DO WITH YOUR PERSONAL INFORMATION?
Why?	In the course of Our business relationship with you, We collect information about you that is necessary to provide you with Our products and services. We treat this information as confidential and recognize the importance of protecting it. Federal and state law gives you the right to limit some but not all sharing of your personal information. Federal and state law also requires Us to tell you how We collect, share, and protect your personal information. Please read this notice carefully to understand what We do.
What?	The types of personal information We collect and share depend on the product or service you have with Us. This information can include: • your name, mailing and email address(es), telephone number, date of birth, gender, marital or family status, identification numbers issued by government bodies or agencies (i.e.: Social Security number or FEIN, driver's license or other license number), employment, education, occupation, or assets and income from applications and other forms from you, your employer and others; • your policy coverage, claims, premiums, and payment history from your dealings with Us, Our Affiliates, or others; • your financial history from other insurance companies, financial organizations, or consumer reporting agencies, including but not limited to payment card numbers, bank account or other financial account numbers and account details, credit history and credit scores, assets and income and other financial information, or your medical history and records. Personal information does not include: • publicly-available information from government records; • de-identified or aggregated consumer information. When you are no longer Our customer, We continue to share your information as described in this Notice as required by law.
How?	All insurance companies need to share customers' personal information to run their everyday business. In the section below, We list the reasons financial companies can share their customers' personal information; the reasons We choose to share; and whether you can limit this sharing. We restrict access to your personal information to those individuals, such as Our employees and agents, who provide you with insurance products and services. We may disclose your personal information to Our Affiliates and Nonaffiliates (1) to process your transaction with Us, for instance, to determine eligibility for coverage, to process claims, or to prevent fraud, or (2) with your written authorization, or (3) otherwise as permitted by law. We do not disclose any of your personal information, as Our customer or former customer, except as described in this Notice.

Reasons We can share your personal information	Do We share?	Can you limit this sharing?
For Our everyday business purposes and as required by law – such as to process your transactions, maintain your account(s), respond to court orders and legal/regulatory investigations, to prevent fraud, or report to credit bureaus	Yes	No
For Our marketing purposes – to offer Our products and services to you	Yes	No
For Joint Marketing with other financial companies	Yes	No
For Our Affiliates' everyday business purposes – information about your transactions and experiences	Yes	No
For Our Affiliates' everyday business purposes – information about your creditworthiness	No	We don't share
For Our Affiliates to market you	No	We don't share
For Nonaffiliates to market you	No	We don't share
Questions? Call (888) 560-4671 or email privacy@markel.com		

Who We are	
Who is providing this Notice?	A list of Our companies is located at the end of this Notice.

What We do	
How do We protect your personal information?	We maintain reasonable physical, electronic, and procedural safeguards to protect your personal information and to comply with applicable regulatory standards. For more information, visit www.markel.com/privacy-policy.
How do We collect your personal information?	We collect your personal information, for example, when you • complete an application or other form for insurance • perform transactions with Us, Our Affiliates, or others • file an insurance claim or provide account information • use your credit or debit card We also collect your personal information from others, such as consumer reporting agencies that provide Us with information such as credit information, driving records, and claim histories.
Why can't you limit all sharing of your personal information?	Federal law gives you the right to limit only • sharing for Affiliates' everyday business purposes – information about your creditworthiness • Affiliates from using your information to market to you • sharing for Nonaffiliates to market to you State laws and individual companies may give you additional rights to limit sharing. See the Other Important Information section of this Notice for more on your rights under state law.

Definitions	
Affiliates	Companies related by common ownership or control. They can be financial and nonfinancial companies. • Our Affiliates include member companies of Markel Group.
Nonaffiliates	Companies not related by common ownership or control. They can be financial and nonfinancial companies. • Nonaffiliates that We can share with can include financial services companies such as insurance agencies or brokers, claims adjusters, reinsurers, and auditors, state insurance officials, law enforcement, and others as permitted by law.
Joint Marketing	A formal agreement between Nonaffiliated companies that together market financial products or services to you. • Our Joint Marketing providers can include entities providing a service or product that could allow Us to provide a broader selection of insurance products to you.

Other Important Information
For Residents of AZ, CT, GA, IL, ME, MA, MN, MT, NV, NJ, NC, OH, OR, and VA: Under state law, under certain circumstances you have the right to access and request correction, amendment or deletion of personal information that We have collected from or about you. To do so, contact your agent, visit www.markel.com/privacy-policy, call (888) 560-4671, or write to Markel Corporation Privacy Office, 4521 Highwoods Parkway, Glen Allen, VA 23060. We may charge a reasonable fee to cover the costs of providing this information. We will let you know what actions We take. If you do not agree with Our actions, you may send Us a statement.
For Residents of CA: You have the right to review, make corrections, or delete your recorded personal information contained in Our files. To do so, contact your agent, visit www.markel.com/privacy-policy, call (888) 560-4671, or write to Markel Corporation Privacy Office, 4521 Highwoods Parkway, Glen Allen, VA 23060. We do not and will not sell your personal information. For the categories of personal information We have collected from consumers within the last 12 months, please visit: www.markel.com/privacy-policy.
For Residents of MA and ME: You may ask, in writing, for specific reason, for an adverse underwriting decision.
Markel Group of Companies Providing This Notice: City National Insurance Company, Essentia Insurance Company, Evanston Insurance Company, FirstComp Insurance Company, Independent Specialty Insurance Company, National Specialty Insurance Company, Markel Bermuda Limited, Markel American Insurance Company, Markel Global Reinsurance Company, Markel Insurance Company, Markel International Insurance Company Limited, Markel Service, Incorporated, Markel West, Inc. (d/b/a in CA as Markel West Insurance Services), Pinnacle National Insurance Company, State National Insurance Company, Inc., Superior Specialty Insurance Company, SureTec Agency Services, Inc. (d/b/a in CA as SureTec Agency Insurance Services), SureTec Indemnity Company, SureTec Insurance Company, United Specialty Insurance Company, Inc.



MARKEL AMERICAN INSURANCE COMPANY

NOTICE TO POLICYHOLDERS
CLAIM REPORTING

Please immediately report a new claim under this policy to:

newclaims@markel.com

For general claims inquiries after a claim has been reported, please email:

markelclaims@markel.com

In order for us to expedite the handling of your claim and quickly refer it to the appropriate party, please have the following information available:

- Claim number (or report as new)
- Your name, contact information and position with the Named Insured
- Date of loss
- Policy number and insured name
- Details of loss

Our address and additional contact information are as follows:

Markel Claims
P.O. Box 2009
Glen Allen, VA 23058-2009
Phone: 800-362-7535 (800) 3MARKEL
Fax: 855-662-7535 (855) 6MARKEL

Markel understands the importance of having knowledgeable claims professionals prepared to answer your questions with personal attention and expertise. With claims professionals located across four times zones, you are sure to find the claims assistance you need -- when you need it.

PLEASE REFER TO THE POLICY FOR ANY NOTICE AND REPORTING PROVISIONS AND DUTIES IN THE EVENT OF LOSS OR DAMAGE TO COVERED PROPERTY.



MARKEL AMERICAN INSURANCE COMPANY

U.S. TREASURY DEPARTMENT'S OFFICE OF FOREIGN ASSETS CONTROL ("OFAC") ADVISORY NOTICE TO POLICYHOLDERS

No coverage is provided by this Policyholder Notice nor can it be construed to replace any provisions of your policy. You should read your policy and review your Declarations page for complete information on the coverages you are provided.

This Notice provides information concerning possible impact on your insurance coverage due to directives issued by OFAC. **Please read this Notice carefully.**

The Office of Foreign Assets Control (OFAC) administers and enforces sanctions policy, based on Presidential declarations of "national emergency". OFAC has identified and listed numerous:

- Foreign agents;
- Front organizations;
- Terrorists;
- Terrorist organizations; and
- Narcotics traffickers;

as "Specially Designated Nationals and Blocked Persons". This list can be located on the United States Treasury's web site – https://www.treasury.gov/ofac.

In accordance with OFAC regulations, if it is determined that you or any other insured, or any person or entity claiming the benefits of this insurance has violated U.S. sanctions law or is a Specially Designated National and Blocked Person, as identified by OFAC, this insurance will be considered a blocked or frozen contract and all provisions of this insurance are immediately subject to OFAC. When an insurance policy is considered to be such a blocked or frozen contract, no payments nor premium refunds may be made without authorization from OFAC. Other limitations on the premiums and payments also apply.

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MARKEL AMERICAN INSURANCE COMPANY

MICHIGAN NOTICE TO POLICYHOLDER

Effective March 31, 2003, this policy is exempt from the filing requirement of section 2236 of the insurance code of 1956, 1956 PA 218, MCL 500.2236, and therefore, may contain forms and/or rates that have not been filed with the state of Michigan.

Markel American Insurance Company

MARKEL®

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY DECLARATIONS

POLICY NUMBER: OCP-MAR-0003866 RENEWAL OF POLICY:

Named Insured and Mailing Address (No., Street, Town or City, County, State, Zip Code)

City of Birmingham
151 Martin Street
Birmingham, MI 48009

Policy Period: From 03/11/2026 to 03/11/2027 at 12:01 A.M. at your mailing address shown above.

IN RETURN FOR THE PAYMENT OF THE PREMIUM, AND SUBJECT TO ALL THE TERMS OF THIS POLICY, WE AGREE WITH YOU TO PROVIDE THE INSURANCE AS STATED IN THIS POLICY.

Description And Form Of Business

Business Description: Municipality

☐ Individual ☐ Partnership ☐ Joint Venture ☐ LLC ☒ Other Organization: Municipality

Location(s) Of Covered Operations

Various
Birmingham, MI 48009
Contract #: 7-26(W), Sewer lining, replacement of storm and combined sewers, water main, and pavements within the work area.

Designated Contractor Name And Mailing Address

F.D.M. Contracting LLC
49156 Van Dyke Avenue
Shelby Twp, MI 48317

Limits Of Insurance

Each Occurrence Limit: $3,000,000
Aggregate Limit: $6,000,000

Producer Number, Name and Mailing Address	
123ocp.com	214317
565 East Swedesford Road	
Suite 100	
Wayne, PA 19087	

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Classification And Premium				
Classification	**Code No.**	**Premium Basis**	**Rate Per $1,000 Of Cost**	**Advance Premium**
MICHIGAN Construction Operations - Owner - Not Otherwise Classified (Not Railroads) - Excluding Operations On Board Ships	16292	$1,298,186	$1.213	$2,250.00

State Tax Or Other (If Applicable)	$0.00
Terrorism	$0.00 (Included)
Total Premium	$2,250.00

Premium shown is payable at inception.

Forms And Endorsements

Forms and Endorsements applying to this Coverage Part and made part of this policy at time of issue:

MJIL 1000 (06 10), MPIL 1007 (01 20), MPIL 1074 (02 20), MPIL 1083 (04 15), MIL-PN-MI (03 03), MDGL 1510 (01 23), MDIL 1001 (08 11), CG 0009 (04 13), CG 2170 (01 15), CG 2176 (01 15), CG 2951 (12 07), CG 3370 (03 05), IL 0021 (09 08), MIL 1214 (09 17), MGL 1356 (10 20), MGL 1603 (01 23), MGL 1608 (01 23), MGL 1609 (01 23), MGL 1612 (01 23), MGL 1965 (01 23), MGL TERR-1 (01 15)

These Declarations, together with the Coverage Form and any Endorsement(s), complete the above numbered policy.

Countersigned: 03/11/2026 By: John K Clark

DATE **AUTHORIZED REPRESENTATIVE**

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MARKEL AMERICAN INSURANCE COMPANY

FORMS SCHEDULE

Form Number	Form Name
MJIL 1000 (06 10)	Policy Jacket/Signature Page
MPIL 1007 (01 20)	Privacy Notice
MPIL 1074 (02 20)	Notice To Policyholders Claim Reporting
MPIL 1083 (04 15)	U.S. Treasury Department's Office Of Foreign Assets Control ("OFAC") Advisory Notice To Policyholders
MIL-PN-MI (03 03)	Michigan Notice To Policyholder
MDGL 1510 (01 23)	Owners and Contractors Protective Liability Declarations
MDIL 1001 (08 11)	Forms Schedule
CG 0009 (04 13)	Owners and Contractors Protective Liability Coverage Form - Coverage For Operations Of Designated Contractor
CG 2170 (01 15)	Cap On Losses From Certified Acts Of Terrorism
CG 2176 (01 15)	Exclusion Of Punitive Damages Related To A Certified Act Of Terrorism
CG 2951 (12 07)	Employment-Related Practices Exclusion
CG 3370 (03 05)	Silica Or Silica-Related Dust Exclusion
IL 0021 (09 08)	Nuclear Energy Liability Exclusion Endorsement (Broad Form)
MIL 1214 (09 17)	Trade Or Economic Sanctions
MGL 1356 (10 20)	Exclusion – Cyber Incident, Data Compromise, And Violation Of Statutes Related To Personal Data
MGL 1603 (01 23)	Exclusion - Asbestos
MGL 1608 (01 23)	Exclusion - Fungi Or Bacteria
MGL 1609 (01 23)	Exclusion - Lead Liability
MGL 1612 (01 23)	Total Pollution Exclusion
MGL 1965 (01 23)	Additional Insured - Engineers, Architects, Or Surveyors
MGL TERR-1 (01 15)	Confirmation Of Certified Acts Of Terrorism Coverage

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE FORM – COVERAGE FOR OPERATIONS OF DESIGNATED CONTRACTOR

Various provisions of this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy the words "you" and "your" refer to the Named Insured shown in the Declarations. The words "we", "us" and "our" refer to the company providing this insurance.

The word "insured" means any person or organization qualifying as such under Section **II** – Who Is An Insured.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section **V** – Definitions.

SECTION I – COVERAGES

BODILY INJURY AND PROPERTY DAMAGE LIABILITY

1. Insuring Agreement

a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "bodily injury" or "property damage" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "bodily injury" or "property damage" to which this insurance does not apply. We may, at our discretion, investigate any "occurrence" and settle any claim or "suit" that may result. But:

(1) The amount we will pay for damages is limited as described in Section **III** – Limits Of Insurance; and

(2) Our right and duty to defend ends when we have used up the applicable limit of insurance in the payment of judgments or settlements.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Supplementary Payments.

b. This insurance applies to "bodily injury" and "property damage" only if:

(1) The "bodily injury" or "property damage" is caused by an "occurrence" and arises out of:

(a) Operations performed for you by the "contractor" at the location specified in the Declarations; or

(b) Your acts or omissions in connection with the general supervision of such operations;

(2) The "bodily injury" or "property damage" occurs during the policy period; and

(3) Prior to the policy period, no insured listed under Paragraph **1.** of Section **II** – Who Is An Insured and no "employee" authorized by you to give or receive notice of an "occurrence" or claim, knew that the "bodily injury" or "property damage" had occurred, in whole or in part. If such a listed insured or authorized "employee" knew, prior to the policy period, that the "bodily injury" or "property damage" occurred, then any continuation, change or resumption of such "bodily injury" or "property damage" during or after the policy period will be deemed to have been known prior to the policy period.

c. "Bodily injury" or "property damage" which occurs during the policy period and was not, prior to the policy period, known to have occurred by any insured listed under Paragraph **1.** of Section **II** – Who Is An Insured or any "employee" authorized by you to give or receive notice of an "occurrence" or claim, includes any continuation, change or resumption of that "bodily injury" or "property damage" after the end of the policy period.

d. "Bodily injury" or "property damage" will be deemed to have been known to have occurred at the earliest time when any insured listed under Paragraph **1.** of Section **II** – Who Is An Insured or any "employee" authorized by you to give or receive notice of an "occurrence" or claim:

(1) Reports all, or any part, of the "bodily injury" or "property damage" to us or any other insurer;

(2) Receives a written or verbal demand or claim for damages because of the "bodily injury" or "property damage"; or

(3) Becomes aware by any other means that "bodily injury" or "property damage" has occurred or has begun to occur.

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e. Damages because of "bodily injury" include damages claimed by any person or organization for care, loss of services or death resulting at any time from the "bodily injury".

2. Exclusions

This insurance does not apply to:

a. Expected Or Intended Injury

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" resulting from the use of reasonable force to protect persons or property.

b. Contractual Liability

"Bodily injury" or "property damage" for which the insured is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages:

(1) That the insured would have in the absence of the contract or agreement; or

(2) Assumed in a contract or agreement that is an "insured contract", provided the "bodily injury" or "property damage" occurs subsequent to the execution of the contract or agreement. Solely for the purposes of liability assumed in an "insured contract", reasonable attorneys' fees and necessary litigation expenses incurred by or for a party other than an insured are deemed to be damages because of "bodily injury" or "property damage", provided:

(a) Liability to such party for, or for the cost of, that party's defense has also been assumed in the same "insured contract"; and

(b) Such attorneys' fees and litigation expenses are for defense of that party against a civil or alternative dispute resolution proceeding in which damages to which this insurance applies are alleged.

c. Work Completed Or Put To Intended Use

"Bodily injury" or "property damage" which occurs after the earlier of the following times:

(1) When all "work" on the project (other than service, maintenance or repairs) to be performed for you by the "contractor" at the site of the covered operations has been completed; or

(2) When that portion of the "contractor's" "work", out of which the injury or damage arises, has been put to its intended use by any person or organization, other than another contractor or subcontractor working directly or indirectly for the "contractor" or as part of the same project.

d. Acts Or Omissions By You And Your Employees

"Bodily injury" or "property damage" arising out of your, or your "employees", acts or omissions other than general supervision of "work" performed for you by the "contractor".

e. Workers' Compensation And Similar Laws

Any obligation of the insured under a workers' compensation, disability benefits or unemployment compensation law or any similar law.

f. Employer's Liability

"Bodily injury" to:

(1) An "employee" of the insured arising out of and in the course of:

(a) Employment by the insured; or

(b) Performing duties related to the conduct of the insured's business; or

(2) The spouse, child, parent, brother or sister of that "employee" as a consequence of Paragraph **(1)** above.

This exclusion applies whether the insured may be liable as an employer or in any other capacity and to any obligation to share damages with or repay someone else who must pay damages because of the injury.

This exclusion does not apply to liability assumed by the insured under an "insured contract".

g. Damage To Property

"Property damage" to:

(1) Property you own, rent, or occupy, including any costs or expenses incurred by you, or any other person, organization or entity, for repair, replacement, enhancement, restoration or maintenance of such property for any reason, including prevention of injury to a person or damage to another's property;

(2) Property loaned to you;

(3) Personal property in the care, custody or control of the insured; or

(4) "Work" performed for you by the "contractor".

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h. War

"Bodily injury" or "property damage", however caused, arising, directly or indirectly, out of:

(1) War, including undeclared or civil war;

(2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or

(3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

i. Mobile Equipment

"Bodily injury" or "property damage" arising out of the use of "mobile equipment" in, or while in practice for, or while being prepared for, any prearranged racing, speed, demolition, or stunting activity.

j. Pollution

(1) "Bodily injury" or "property damage" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants":

(a) At or from any premises, site or location which is or was at any time owned or occupied by, or rented or loaned to, any insured. However, this subparagraph does not apply to:

(i) "Bodily injury" if sustained within a building and caused by smoke, fumes, vapor or soot produced by or originating from equipment that is used to heat, cool or dehumidify the building, or equipment that is used to heat water for personal use, by the building's occupants or their guests;

(ii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire";

(b) At or from any premises, site or location which is or was at any time used by or for any insured or others for the handling, storage, disposal, processing or treatment of waste;

(c) Which are or were at any time transported, handled, stored, treated, disposed of, or processed as waste by or for:

(i) Any insured; or

(ii) Any person or organization for whom you may be legally responsible; or

(d) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the "pollutants" are brought on or to the premises, site or location in connection with such operations by such insured, contractor or subcontractor. However, this subparagraph does not apply to:

(i) "Bodily injury" or "property damage" arising out of the escape of fuels, lubricants or other operating fluids which are needed to perform the normal electrical, hydraulic or mechanical functions necessary for the operation of "mobile equipment" or its parts, if such fuels, lubricants or other operating fluids escape from a vehicle part designed to hold, store or receive them. This exception does not apply if the "bodily injury" or "property damage" arises out of the intentional discharge, dispersal or release of the fuels, lubricants or other operating fluids, or if such fuels, lubricants or other operating fluids are brought on or to the premises, site or location with the intent that they be discharged, dispersed or released as part of the operations being performed by such insured, contractor or subcontractor;

(ii) "Bodily injury" or "property damage" sustained within a building and caused by the release of gases, fumes or vapors from materials brought into that building in connection with operations being performed by or on behalf of any insured; or

(iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire".

(e) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the operations are to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of "pollutants".

(2) Any loss, cost or expense arising out of any:

(a) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of "pollutants"; or

(b) Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of "pollutants".

However, this paragraph does not apply to liability for damages because of "property damage" that the insured would have in the absence of such request, demand, order or statutory or regulatory requirement, or such claim or "suit" by or on behalf of a governmental authority.

k. Damage To Impaired Property Or Property Not Physically Injured

"Property damage" to "impaired property" or property that has not been physically injured, arising out of:

(1) A defect, deficiency, inadequacy or dangerous condition in "work" performed for you by the "contractor"; or

(2) A delay or failure by you or anyone acting on your behalf to perform a contract or agreement in accordance with its terms.

This exclusion does not apply to the loss of use of other property arising out of sudden and accidental physical injury to "work" performed for you by the "contractor".

l. Electronic Data

Damages arising out of the loss of, loss of use of, damage to, corruption of, inability to access, or inability to manipulate electronic data.

However, this exclusion does not apply to liability for damages because of "bodily injury".

As used in this exclusion, electronic data means information, facts or programs stored as or on, created or used on, or transmitted to or from computer software, including systems and applications software, hard or floppy disks, CD-ROMs, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.

SUPPLEMENTARY PAYMENTS

1. We will pay, with respect to any claim we investigate or settle, or any "suit" against an insured we defend:

   a. All expenses we incur.

   b. Up to $250 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which this insurance applies. We do not have to furnish these bonds.

   c. The cost of bonds to release attachments, but only for bond amounts within the applicable limit of insurance. We do not have to furnish these bonds.

   d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to $250 a day because of time off from work.

   e. All court costs taxed against the insured in the "suit". However, these payments do not include attorneys' fees or attorneys' expenses taxed against the insured.

   f. Prejudgment interest awarded against the insured on that part of the judgment we pay. If we make an offer to pay the applicable limit of insurance, we will not pay any prejudgment interest based on that period of time after the offer.

   g. All interest on the full amount of any judgment that accrues after entry of the judgment and before we have paid, offered to pay, or deposited in court the part of the judgment that is within the applicable limit of insurance.

   h. Expenses incurred by the insured for first aid administered to others at the time of an accident for "bodily injury" to which this insurance applies.

   These payments will not reduce the limits of insurance.

2. If we defend an insured against a "suit" and an indemnitee of the insured is also named as a party to the "suit", we will defend that indemnitee if all of the following conditions are met:

   a. The "suit" against the indemnitee seeks damages for which the insured has assumed the liability of the indemnitee in a contract or agreement that is an "insured contract";

   b. This insurance applies to such liability assumed by the insured;

   c. The obligation to defend, or the cost of the defense of, that indemnitee, has also been assumed by the insured in the same "insured contract";

   d. The allegations in the "suit" and the information we know about the "occurrence" are such that no conflict appears to exist between the interests of the insured and the interests of the indemnitee;

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e. The indemnitee and the insured ask us to conduct and control the defense of that indemnitee against such "suit" and agree that we can assign the same counsel to defend the insured and the indemnitee; and

f. The indemnitee:

(1) Agrees in writing to:

(a) Cooperate with us in the investigation, settlement or defense of the "suit";

(b) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the "suit";

(c) Notify any other insurer whose coverage is available to the indemnitee; and

(d) Cooperate with us with respect to coordinating other applicable insurance available to the indemnitee; and

(2) Provides us with written authorization to:

(a) Obtain records and other information related to the "suit"; and

(b) Conduct and control the defense of the indemnitee in such "suit".

So long as the above conditions are met, attorneys' fees incurred by us in the defense of that indemnitee, necessary litigation expenses incurred by us and necessary litigation expenses incurred by the indemnitee at our request will be paid as Supplementary Payments. Notwithstanding the provisions of Paragraph **2.b.(2)** of Section **I** – Coverages – Bodily Injury And Property Damage Liability, such payments will not be deemed to be damages for "bodily injury" and "property damage" and will not reduce the limits of insurance.

Our obligation to defend an insured's indemnitee and to pay for attorneys' fees and necessary litigation expenses as Supplementary Payments ends when we have used up the applicable limit of insurance in the payment of judgments or settlements or the conditions set forth above, or the terms of the agreement described in Paragraph **f.** above, are no longer met.

SECTION II – WHO IS AN INSURED

1. If you are designated in the Declarations as:

a. An individual, you and your spouse are insureds.

b. A partnership or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to their duties as partners or members of a joint venture.

c. A limited liability company, you are an insured. Your members are also insureds, but only with respect to their duties as members of a limited liability company. Your managers are insureds, but only with respect to their duties as your managers.

d. An organization other than a partnership, joint venture or limited liability company, you are an insured. Your "executive officers" and directors are insureds, but only with respect to their duties as your officers or directors. Your stockholders are also insureds, but only with respect to their liability as stockholders.

2. Each of the following is also an insured:

a. Any person (other than your "employee") or any organization while acting as your real estate manager.

b. Any person or organization having proper temporary custody of your property if you die, but only:

(1) With respect to liability arising out of the maintenance or use of that property; and

(2) Until your legal representative has been appointed.

c. Your legal representative if you die, but only with respect to duties as such. That representative will have all your rights and duties under this Coverage Part.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

SECTION III – LIMITS OF INSURANCE

1. The Limits of Insurance shown in the Declarations and the rules below fix the most we will pay regardless of the number of:

a. Insureds;

b. Claims made or "suits" brought; or

c. Persons or organizations making claims or bringing "suits".

2. The Aggregate Limit is the most we will pay for the sum of damages because of all "bodily injury" and "property damage".

3. Subject to Paragraph **2.** above, the Each Occurrence Limit is the most we will pay for the sum of damages because of all "bodily injury" and "property damage" arising out of any one "occurrence".

If you designate more than one project in the Declarations, the Aggregate Limit shall apply separately to each project.

The Limits of Insurance of this Coverage Part apply separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits of Insurance.

SECTION IV – CONDITIONS

1. Bankruptcy

Bankruptcy or insolvency of the insured or of the insured's estate will not relieve us of our obligations under this Coverage Part.

2. Cancellation

a. The first Named Insured shown in the Declarations may cancel this policy by mailing or delivering to us advance written notice of cancellation.

b. We may cancel this policy by mailing or delivering to the first Named Insured and the "contractor" written notice of cancellation at least:

(1) 10 days before the effective date of cancellation if we cancel for nonpayment of premium; or

(2) 30 days before the effective date of cancellation if we cancel for any other reason.

c. We will mail or deliver our notices to the first Named Insured's and the "contractor's" last mailing address known to us.

d. Notice of cancellation will state the effective date of cancellation. The policy period will end on that date.

e. If this policy is cancelled, we will send the "contractor" any premium refund due. If we cancel, the refund will be pro rata. If the first Named Insured cancels, the refund may be less than pro rata. The cancellation will be effective even if we have not made or offered a refund.

f. If notice is mailed, proof of mailing will be sufficient proof of notice.

3. Changes

This policy contains all the agreements between you, the "contractor" and us concerning the insurance afforded. The first Named Insured shown in the Declarations and the "contractor" are authorized to make changes in the terms of this policy with our consent. This policy's terms can be amended or waived only by endorsement issued by us and made a part of this policy.

4. Duties In The Event Of Occurrence, Claim Or Suit

a. You must see to it that we are notified as soon as practicable of an "occurrence" which may result in a claim. To the extent possible, notice should include:

(1) How, when and where the "occurrence" took place;

(2) The names and addresses of any injured persons and witnesses; and

(3) The nature and location of any injury or damage arising out of the "occurrence".

b. If a claim is made or "suit" is brought against any insured, you must:

(1) Immediately record the specifics of the claim or "suit" and the date received; and

(2) Notify us as soon as practicable.

You must see to it that we receive written notice of the claim or "suit" as soon as practicable.

c. You and any other involved insured must:

(1) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the claim or "suit";

(2) Authorize us to obtain records and other information;

(3) Cooperate with us in the investigation or settlement of the claim or defense against the "suit"; and

(4) Assist us, upon our request, in the enforcement of any right against any person or organization which may be liable to the insured because of injury or damage to which this insurance may also apply.

d. No insured will, except at that insured's own cost, voluntarily make a payment, assume any obligation, or incur any expense, other than for first aid, without our consent.

5. Examination Of Your Books And Records

We may examine and audit your books and records as well as the "contractor's" books and records as they relate to this policy at any time during the policy period and up to three years afterward.

6. Inspections And Surveys

a. We have the right to:

(1) Make inspections and surveys at any time;

(2) Give you reports on the conditions we find; and

(3) Recommend changes.

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b. We are not obligated to make any inspections, surveys, reports or recommendations and any such actions we do undertake relate only to insurability and the premiums to be charged. We do not make safety inspections. We do not undertake to perform the duty of any person or organization to provide for the health or safety of workers or the public. And we do not warrant that conditions:

(1) Are safe or healthful; or

(2) Comply with laws, regulations, codes or standards.

c. Paragraphs **a.** and **b.** of this condition apply not only to us, but also to any rating, advisory, rate service or similar organization which makes insurance inspections, surveys, reports or recommendations.

d. Paragraph **b.** of this condition does not apply to any inspections, surveys, reports or recommendations we may make relative to certification, under state or municipal statutes, ordinances or regulations, of boilers, pressure vessels or elevators.

7. Legal Action Against Us

No person or organization has a right under this Coverage Part:

a. To join us as a party or otherwise bring us into a "suit" asking for damages from an insured; or

b. To sue us on this Coverage Part unless all of its terms have been fully complied with.

A person or organization may sue us to recover on an agreed settlement or on a final judgment against an insured; but we will not be liable for damages that are not payable under the terms of this Coverage Part or that are in excess of the applicable limit of insurance. An agreed settlement means a settlement and release of liability signed by us, the insured and the claimant or the claimant's legal representative.

8. Other Insurance

The insurance afforded by this Coverage Part is primary insurance and we will not seek contribution from any other insurance available to you unless the other insurance is provided by a contractor other than the designated "contractor" for the same operation and job location designated in the Declarations. Then we will share with that other insurance by the method described below.

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach, each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

9. Premiums

The "contractor":

a. Is responsible for the payment of all premiums; and

b. Will be the payee for any return premiums we pay.

10. Premium Audit

a. We will compute all premiums for this Coverage Part in accordance with our rules and rates.

b. Premium shown in this Coverage Part as advance premium is a deposit premium only. At the close of each audit period we will compute the earned premium for that period and send notice to the "contractor". The due date for audit and retrospective premiums is the date shown as the due date on the bill. If the sum of the advance and audit premiums paid for the policy period is greater than the earned premium, we will return the excess to the "contractor".

c. The "contractor" must keep records of the information we need for premium computation, and send us copies at such times as we may request.

11. Separation Of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Part to the first Named Insured, this insurance applies:

a. As if each Named Insured were the only Named Insured; and

b. Separately to each insured against whom claim is made or "suit" is brought.

12. Transfer Of Rights Of Recovery Against Others To Us

If the insured has rights to recover all or part of any payment we have made under this Coverage Part those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

13. When We Do Not Renew

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

SECTION V – DEFINITIONS

1. "Auto" means:
   a. A land motor vehicle, trailer or semitrailer designed for travel on public roads, including any attached machinery or equipment; or
   b. Any other land vehicle that is subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged.

   However, "auto" does not include "mobile equipment".
2. "Bodily injury" means bodily injury, sickness or disease sustained by a person, including death resulting from any of these at any time.
3. "Contractor" means the contractor designated in the Declarations.
4. "Employee" includes a "leased worker". "Employee" does not include a "temporary worker".
5. "Executive officer" means a person holding any of the officer positions created by your charter, constitution, bylaws or any other similar governing document.
6. "Hostile fire" means one which becomes uncontrollable or breaks out from where it was intended to be.
7. "Impaired property" means tangible property, other than work performed for you, that cannot be used or is less useful because:
   a. It incorporates work performed for you that is known or thought to be defective, deficient, inadequate or dangerous; or
   b. You have failed to fulfill the terms of a contract or agreement;

   if such property can be restored to use by the repair, replacement, adjustment or removal of the work performed for you or your fulfilling the terms of the contract or agreement.
8. "Insured contract" means:
   a. A lease of premises;
   b. A sidetrack agreement;
   c. Any easement or license agreement, except in connection with construction or demolition operations on or within 50 feet of a railroad;
   d. An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality; or
   e. An elevator maintenance agreement.
9. "Leased worker" means a person leased to you by a labor leasing firm under an agreement between you and the labor leasing firm, to perform duties related to the conduct of your business. "Leased worker" does not include a "temporary worker".
10. "Mobile equipment" means any of the following types of land vehicles, including any attached machinery or equipment:
    a. Bulldozers, farm machinery, forklifts and other vehicles designed for use principally off public roads;
    b. Vehicles maintained for use solely on or next to premises you own or rent;
    c. Vehicles that travel on crawler treads;
    d. Vehicles, whether self-propelled or not, maintained primarily to provide mobility to permanently mounted:
       (1) Power cranes, shovels, loaders, diggers or drills; or
       (2) Road construction or resurfacing equipment such as graders, scrapers or rollers;
    e. Vehicles not described in Paragraph **a., b., c.** or **d.** above that are not self-propelled and are maintained primarily to provide mobility to permanently attached equipment of the following types:
       (1) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment; or
       (2) Cherry pickers and similar devices used to raise or lower workers;
    f. Vehicles not described in Paragraph **a., b., c.** or **d.** above maintained primarily for purposes other than the transportation of persons or cargo.

       However, self-propelled vehicles with the following types of permanently attached equipment are not "mobile equipment" but will be considered "autos":
       (1) Equipment designed primarily for:
          (a) Snow removal;
          (b) Road maintenance, but not construction or resurfacing; or
          (c) Street cleaning;
       (2) Cherry pickers and similar devices mounted on automobile or truck chassis and used to raise or lower workers; and

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(3) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment.

However, "mobile equipment" does not include land vehicles that are subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged. Land vehicles subject to a compulsory or financial responsibility law or other motor vehicle insurance law are considered "autos".

11. "Occurrence" means an accident, including continuous or repeated exposure to substantially the same general harmful conditions.

12. "Pollutants" mean any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

13. "Property damage" means:

a. Physical injury to tangible property, including all resulting loss of use of that property. All such loss of use shall be deemed to occur at the time of the physical injury that caused it; or

b. Loss of use of tangible property that is not physically injured. All such loss of use shall be deemed to occur at the time of the "occurrence" that caused it.

For the purposes of this insurance, electronic data is not tangible property.

As used in this definition, electronic data means information, facts or programs stored as or on, created or used on, or transmitted to or from, computer software, including systems and applications software, hard or floppy disks, CD-ROMs, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.

14. "Suit" means a civil proceeding, brought in the United States of America (including its territories and possessions), Puerto Rico or Canada, in which damages because of "bodily injury" or "property damage" to which this insurance applies are alleged. "Suit" includes:

a. An arbitration proceeding in which such damages are claimed and to which the insured must submit or does submit with our consent; or

b. Any other alternative dispute resolution proceeding in which such damages are claimed and to which the insured submits with our consent.

15. "Temporary worker" means a person who is furnished to you to substitute for a permanent "employee" on leave or to meet seasonal or short-term workload conditions.

16. "Work" includes materials, parts or equipment furnished in connection with the operations.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CAP ON LOSSES FROM CERTIFIED ACTS OF TERRORISM

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY

A. If aggregate insured losses attributable to terrorist acts certified under the federal Terrorism Risk Insurance Act exceed $100 billion in a calendar year and we have met our insurer deductible under the Terrorism Risk Insurance Act, we shall not be liable for the payment of any portion of the amount of such losses that exceeds $100 billion, and in such case insured losses up to that amount are subject to pro rata allocation in accordance with procedures established by the Secretary of the Treasury.

"Certified act of terrorism" means an act that is certified by the Secretary of the Treasury, in accordance with the provisions of the federal Terrorism Risk Insurance Act, to be an act of terrorism pursuant to such Act. The criteria contained in the Terrorism Risk Insurance Act for a "certified act of terrorism" include the following:

1. The act resulted in insured losses in excess of $5 million in the aggregate, attributable to all types of insurance subject to the Terrorism Risk Insurance Act; and

2. The act is a violent act or an act that is dangerous to human life, property or infrastructure and is committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

B. The terms and limitations of any terrorism exclusion, or the inapplicability or omission of a terrorism exclusion, do not serve to create coverage for injury or damage that is otherwise excluded under this Coverage Part.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION OF PUNITIVE DAMAGES RELATED TO A CERTIFIED ACT OF TERRORISM

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY

A. The following exclusion is added:

This insurance does not apply to:

TERRORISM PUNITIVE DAMAGES

Damages arising, directly or indirectly, out of a "certified act of terrorism" that are awarded as punitive damages.

B. The following definition is added:

"Certified act of terrorism" means an act that is certified by the Secretary of the Treasury, in accordance with the provisions of the federal Terrorism Risk Insurance Act, to be an act of terrorism pursuant to such Act. The criteria contained in the Terrorism Risk Insurance Act for a "certified act of terrorism" include the following:

1. The act resulted in insured losses in excess of $5 million in the aggregate, attributable to all types of insurance subject to the Terrorism Risk Insurance Act; and
2. The act is a violent act or an act that is dangerous to human life, property or infrastructure and is committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

C. The terms and limitations of any terrorism exclusion, or the inapplicability or omission of a terrorism exclusion, do not serve to create coverage for injury or damage that is otherwise excluded under this Coverage Part.

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EMPLOYMENT-RELATED PRACTICES EXCLUSION

This endorsement modifies insurance provided under the following:

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART

The following exclusion is added to Paragraph **2., Exclusions** of **Coverages – Bodily Injury And Property Damage Liability (Section I – Coverages):**

This insurance does not apply to:

"Bodily injury" to:

(1) A person arising out of any:

(a) Refusal to employ that person;

(b) Termination of that person's employment; or

(c) Employment-related practices, policies, acts or omissions, such as coercion, demotion, evaluation, reassignment, discipline, defamation, harassment, humiliation, discrimination or malicious prosecution directed at that person; or

(2) The spouse, child, parent, brother or sister of that person as a consequence of "bodily injury" to that person at whom any of the employment-related practices described in Paragraphs **(a), (b)** or **(c)** above is directed.

This exclusion applies:

(1) Whether the injury-causing event described in Paragraphs **(a), (b)** or **(c)** above occurs before employment, during employment or after employment of that person;

(2) Whether the insured may be liable as an employer or in any other capacity; and

(3) To any obligation to share damages with or repay someone else who must pay damages because of the injury.

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SILICA OR SILICA-RELATED DUST EXCLUSION

This endorsement modifies insurance provided under the following:

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

A. The following exclusion is added to Paragraph **2., Exclusions** of **Section I – Coverages Bodily Injury And Property Damage Liability:**

2. Exclusions

This insurance does not apply to:

SILICA OR SILICA-RELATED DUST

a. "Bodily injury" arising, in whole or in part, out of the actual, alleged, threatened or suspected inhalation of, or ingestion of, "silica" or "silica-related dust".

b. "Property damage" arising, in whole or in part, out of the actual, alleged, threatened or suspected contact with, exposure to, existence of, or presence of, "silica" or "silica-related dust".

c. Any loss, cost or expense arising, in whole or in part, out of the abating, testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, neutralizing, remediating or disposing of, or in any way responding to or assessing the effects of, "silica" or "silica-related dust", by any insured or by any other person or entity.

B. The following definitions are added to the **Definitions** Section:

1. "Silica" means silicon dioxide (occurring in crystalline, amorphous and impure forms), silica particles, silica dust or silica compounds.

2. "Silica-related dust" means a mixture or combination of silica and other dust or particles.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

NUCLEAR ENERGY LIABILITY EXCLUSION ENDORSEMENT

(Broad Form)

This endorsement modifies insurance provided under the following:

COMMERCIAL AUTOMOBILE COVERAGE PART
COMMERCIAL GENERAL LIABILITY COVERAGE PART
FARM COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
MEDICAL PROFESSIONAL LIABILITY COVERAGE PART
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY

1. The insurance does not apply:

A. Under any Liability Coverage, to "bodily injury" or "property damage":

(1) With respect to which an "insured" under the policy is also an insured under a nuclear energy liability policy issued by Nuclear Energy Liability Insurance Association, Mutual Atomic Energy Liability Underwriters, Nuclear Insurance Association of Canada or any of their successors, or would be an insured under any such policy but for its termination upon exhaustion of its limit of liability; or

(2) Resulting from the "hazardous properties" of "nuclear material" and with respect to which **(a)** any person or organization is required to maintain financial protection pursuant to the Atomic Energy Act of 1954, or any law amendatory thereof, or **(b)** the "insured" is, or had this policy not been issued would be, entitled to indemnity from the United States of America, or any agency thereof, under any agreement entered into by the United States of America, or any agency thereof, with any person or organization.

B. Under any Medical Payments coverage, to expenses incurred with respect to "bodily injury" resulting from the "hazardous properties" of "nuclear material" and arising out of the operation of a "nuclear facility" by any person or organization.

C. Under any Liability Coverage, to "bodily injury" or "property damage" resulting from "hazardous properties" of "nuclear material", if:

(1) The "nuclear material" **(a)** is at any "nuclear facility" owned by, or operated by or on behalf of, an "insured" or **(b)** has been discharged or dispersed therefrom;

(2) The "nuclear material" is contained in "spent fuel" or "waste" at any time possessed, handled, used, processed, stored, transported or disposed of, by or on behalf of an "insured"; or

(3) The "bodily injury" or "property damage" arises out of the furnishing by an "insured" of services, materials, parts or equipment in connection with the planning, construction, maintenance, operation or use of any "nuclear facility", but if such facility is located within the United States of America, its territories or possessions or Canada, this exclusion **(3)** applies only to "property damage" to such "nuclear facility" and any property thereat.

2. As used in this endorsement:

"Hazardous properties" includes radioactive, toxic or explosive properties.

"Nuclear material" means "source material", "special nuclear material" or "by-product material".

"Source material", "special nuclear material", and "by-product material" have the meanings given them in the Atomic Energy Act of 1954 or in any law amendatory thereof.

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"Spent fuel" means any fuel element or fuel component, solid or liquid, which has been used or exposed to radiation in a "nuclear reactor".

"Waste" means any waste material **(a)** containing "by-product material" other than the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its "source material" content, and **(b)** resulting from the operation by any person or organization of any "nuclear facility" included under the first two paragraphs of the definition of "nuclear facility".

"Nuclear facility" means:

(a) Any "nuclear reactor";

(b) Any equipment or device designed or used for **(1)** separating the isotopes of uranium or plutonium, **(2)** processing or utilizing "spent fuel", or **(3)** handling, processing or packaging "waste";

(c) Any equipment or device used for the processing, fabricating or alloying of "special nuclear material" if at any time the total amount of such material in the custody of the "insured" at the premises where such equipment or device is located consists of or contains more than 25 grams of plutonium or uranium 233 or any combination thereof, or more than 250 grams of uranium 235;

(d) Any structure, basin, excavation, premises or place prepared or used for the storage or disposal of "waste";

and includes the site on which any of the foregoing is located, all operations conducted on such site and all premises used for such operations.

"Nuclear reactor" means any apparatus designed or used to sustain nuclear fission in a self-supporting chain reaction or to contain a critical mass of fissionable material.

"Property damage" includes all forms of radioactive contamination of property.

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MARKEL AMERICAN INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

TRADE OR ECONOMIC SANCTIONS

The following is added to this policy:

Trade Or Economic Sanctions

This insurance does not provide any coverage, and we (the Company) shall not make payment of any claim or provide any benefit hereunder, to the extent that the provision of such coverage, payment of such claim or provision of such benefit would expose us (the Company) to a violation of any applicable trade or economic sanctions, laws or regulations, including but not limited to, those administered and enforced by the United States Treasury Department's Office of Foreign Assets Control (OFAC).

All other terms and conditions remain unchanged.

MARKEL AMERICAN INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – CYBER INCIDENT, DATA COMPROMISE, AND VIOLATION OF STATUTES RELATED TO PERSONAL DATA

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE FORM
POLLUTION LIABILITY LIMITED COVERAGE FORM DESIGNATED SITES
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE FORM

A. The following exclusion is added to the Exclusions section of the Coverage Form, and all insuring agreements added to this policy by separate endorsement other than an endorsement described in Paragraph **B.** below, and replaces any Electronic Data exclusion found anywhere in the policy:

This insurance does not apply to:

Cyber Incident, Data Compromise, And Violation Of Statutes Related To Personal Data

Damages caused by, arising out of, or in any way involving, directly or indirectly:

(1) The loss of, loss of use of, corruption of, inability to access, or reduction in functionality of a "computer system", including, but not limited to:

(a) Damage to or loss of data occurring on a "computer system";

(b) Unauthorized access of a "computer system";

(c) Computer malware on a "computer system";

(d) Human error affecting a "computer system";

(e) System failure occurring on a "computer system";

(f) A defect of a "computer system";

(g) Social engineering, including, but not limited to, any priming, pretexting, spoofing, or other fraudulent, manipulative, or deceptive communication; or

(h) Cyber extortion;

(2) Any:

(a) Access to or disclosure of (whether such access or disclosure is authorized or unauthorized); or

(b) Theft, alteration, or corruption of;

any person's or organization's confidential, intellectual, or proprietary information or data, including, but not limited to, "personal data", patents, trade secrets, processing methods, customer lists, or any other type of nonpublic information; or

(3) Any action or omission that violates or is alleged to violate any federal, state, or local statute, law, rule, ordinance, or regulation that addresses, prohibits, regulates, or limits the printing, interception, dissemination, disposal, collecting, recording, sending, transmitting, communicating, distribution, sharing, sale, storage, retaining, receiving, or protection of "personal data", including, but not limited to:

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(a) The Illinois Biometric Information Privacy Act (BIPA);

(b) The California Consumer Privacy Act (CCPA);

(c) The California Invasion Of Privacy Act (CIPA);

(d) The New York Stop Hacks and Improve Electronic Data Security Act (SHIELD Act);

(e) The European Union General Data Protection Regulation (GDPR); or

(f) Any similar or related federal, state, or local statute, law, rule, ordinance, or regulation;

including any amendments thereto.

This exclusion applies even if damages are claimed for notification costs, credit monitoring or repair expenses, forensic expenses, public relation expenses, costs associated with the replacement or reissuance of payment cards, fines, penalties, loss of use of property that has not been physically damaged, or any other loss, cost, or expense incurred by you or others arising out of that which is excluded above.

However, this exclusion does not apply to liability for damages because of "bodily injury" or physical damage to tangible property of others. For the purpose of this exclusion, electronic data is not tangible property. The insurance afforded by this exception is excess over any other valid and collectible insurance available to the insured, whether primary, excess, contingent, or issued on any other basis.

As used in this exclusion, electronic data means information, facts, or programs stored as or on, created or used on, or transmitted to or from computer software, including systems and applications software, hard or floppy disks, CD-ROMs, tapes, drives, cells, data processing devices, or any other media which are used with electronically controlled equipment.

B. If this policy contains an endorsement adding an insuring agreement that specifically provides coverage that is excluded in Paragraph **A.** above, then the exclusion added by this endorsement does not apply to such insuring agreement solely to the extent of the coverage provided by such endorsement.

C. The following definitions are added to the Definitions section:

"Computer system" means computer hardware, firmware, software, or any components thereof.

"Personal data" means information that identifies, relates to, describes, is capable of being associated with, or could reasonably be linked to a particular person or household, including, but not limited to:

a. Identifiers such as a real name, alias, postal address, unique personal identifier, online identifier, Internet Protocol address, email address, password, account name, social security number, driver's license or state identification card number, passport number, telephone number, insurance policy number, employment, employment history, bank account number, credit card number, debit card number, or any other financial information, medical information, or health insurance information, or other similar identifiers, characteristics, or descriptors;

b. Commercial information, including records of personal property, products, or services purchased, obtained, or considered, transactions occurring over a peer-to-peer electronic cash system, or other purchasing or consuming histories or tendencies;

c. Biometric data or information (such as a fingerprint, voice print, retina or iris image, or other unique physical representation or digital representation of biometric data);

d. Internet or other electronic network activity information, including, but not limited to, browsing history, search history, and information regarding a person's or household's interaction with an internet website, application, or advertisement;

e. Geolocation data;

f. Audio, electronic, visual, thermal, olfactory, or similar information;

g. Professional or employment-related information that is not publicly available;

h. Education information, defined as information that is not publicly available personally identifiable information as defined in the Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. section 1232g; 34 CFR Part 99) including any amendments thereto;

i. Identifiers set forth in any state or federal consumer protection or privacy statute or law including, but not limited to, the identifiers shown in Paragraphs **a.** through **h.** above; or

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j. Inferences drawn from any of the identifiers shown in Paragraphs **a.** through **i.** above to create a profile about a person or household reflecting such person's or household's preferences, characteristics, psychological trends, predispositions, behavior, attitudes, intelligence, abilities, or aptitudes.

All other terms and conditions remain unchanged.

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MARKEL AMERICAN INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – ASBESTOS

This endorsement modifies insurance provided under the following:

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE FORM

A. The following exclusion is added to Paragraph **2.** Exclusions under Section **I** – Coverages, Bodily Injury And Property Damage Liability:

This insurance does not apply to:

Asbestos

(1) "Bodily injury" or "property damage" caused by or arising out of, in whole or in part, either directly or indirectly, asbestos.

(2) Any legal obligation of any insured for indemnification or contribution due to damages because of "bodily injury" or "property damage" caused by or arising out of, in whole or in part, either directly or indirectly, asbestos.

(3) Any loss, cost, expense, or damages arising out of any:

(a) Request, demand, or order that any insured or others test for, monitor, clean up, remove, abate, contain, treat, or neutralize asbestos or in any way respond to or assess the effects of asbestos; or

(b) Claim or "suit" relating to testing for, monitoring, cleaning up, removing, abating, containing, treating, or neutralizing asbestos or in any way responding to or assessing the effects of asbestos.

B. For the purpose of this endorsement, asbestos means any form of asbestos or asbestos-containing material, including but not limited to asbestos or asbestos-containing material that is:

1. Airborne, as a fiber, particle, or dust;

2. Contained in a product;

3. Carried or transmitted on clothing or by any other means;

4. Inhaled or ingested; or

5. Contained in or a part of any:

a. Building, building material, or insulation product; or

b. Component part of any building, building material, or insulation product.

All other terms and conditions remain unchanged.

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MARKEL AMERICAN INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – FUNGI OR BACTERIA

This endorsement modifies insurance provided under the following:

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE FORM

A. The following exclusion is added to Paragraph **2.** Exclusions under Section **I** – Coverages, Bodily Injury And Property Damage Liability:

This insurance does not apply to:

Fungi Or Bacteria

(1) "Bodily injury" or "property damage" which would not have occurred, in whole or in part, but for the actual, alleged, or threatened inhalation of, ingestion of, contact with, exposure to, existence of, or presence of, any "fungi" or bacteria on or within a building or structure, including its contents, regardless of whether any other cause, event, material, or product contributed concurrently or in any sequence to such injury or damage.

(2) Any loss, cost, or expense arising out of the abating, testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, neutralizing, remediating, or disposing of, or in any way responding to, or assessing the effects of, "fungi" or bacteria, by any person or entity.

(3) Costs and expenses to investigate or defend any claim or "suit" or payment of any fine or penalty for the exclusions in Paragraphs **(1)** or **(2)** above.

This exclusion applies:

(a) To any obligation to share damages with or repay someone else who must pay damages; and

(b) To any "fungi" existing, emanating from, or moving anywhere indoors or outdoors.

B. The following definition is added to Section **V** – Definitions:

"Fungi" means any type or form of fungus, including mold or mildew and any mycotoxins, spores, scents, or by-products produced or released by fungi.

All other terms and conditions unchanged.

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MARKEL AMERICAN INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – LEAD LIABILITY

This endorsement modifies insurance provided under the following:

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE FORM

The following exclusion is added to Paragraph **2.** Exclusions under Section **I** – Coverages, Bodily Injury And Property Damage Liability:

This insurance does not apply to:

Lead Liability

(1) "Bodily injury" or "property damage" arising out of or caused by lead or any material or substance containing lead;

(2) Any legal obligation of any insured for indemnification or contribution due to damages arising out of "bodily injury" or "property damage" arising out of or caused by lead or any material or substance containing lead; or

(3) Loss, cost, expense, or damages arising out of any:

(a) Request, demand, or order that any insured or others test for, monitor, clean up, remove, abate, contain, treat, or neutralize lead or any material or substance containing lead, or in any way respond to or assess the effects of lead; or

(b) Claim or "suit" relating to, testing for, monitoring, cleaning up, removing, abating, containing, treating, or neutralizing lead or any material or substance containing lead, or in any way responding to or assessing the effects of lead.

All other terms and conditions remain unchanged.

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MARKEL AMERICAN INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

TOTAL POLLUTION EXCLUSION

This endorsement modifies insurance provided under the following:

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE FORM

Exclusion **j.** of Paragraph **2.** Exclusions under Section **I** – Coverages, Bodily Injury And Property Damage Liability is replaced by the following:

This insurance does not apply to:

j. Pollution

(1) "Bodily injury" or "property damage" which would not have occurred in whole or in part but for the actual, alleged, or threatened discharge, dispersal, seepage, migration, release, or escape of "pollutants" at any time.

(2) Any loss, cost, or expense arising out of any:

(a) Request, demand, order, or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify, or neutralize, or in any way respond to, or assess the effects of "pollutants"; or

(b) Claim or "suit" by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, or neutralizing, or in any way responding to, or assessing the effects of "pollutants".

All other terms and conditions remain unchanged.

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MARKEL AMERICAN INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – ENGINEERS, ARCHITECTS, OR SURVEYORS

This endorsement modifies insurance provided under the following:

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE FORM

A. Section **II** – Who Is An Insured is amended to include as an additional insured any architect, engineer, or surveyor engaged by you, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by your acts or omissions, or the acts or omissions of those acting on your behalf:

1. In connection with your premises; or

2. In the performance of your ongoing operations.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law;

2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured; and

3. The coverage provided to the additional insured will not be broader than that provided to the Named Insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusion applies:

This insurance does not apply to "bodily injury" or "property damage" arising out of the rendering of or the failure to render any professional services by or for you, including:

1. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders, or drawings and specifications; or

2. Supervisory, inspection, architectural, or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training, or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" involved the rendering of or the failure to render any professional services by or for you.

C. With respect to the insurance afforded to these additional insureds, the following is added to Section **III** – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable limits of insurance;

whichever is less.

This endorsement does not increase the applicable limits of insurance.

All other terms and conditions remain unchanged.

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MARKEL AMERICAN INSURANCE COMPANY

THIS ENDORSEMENT IS ATTACHED TO AND MADE PART OF YOUR POLICY IN RESPONSE TO THE DISCLOSURE REQUIREMENTS OF THE TERRORISM RISK INSURANCE ACT. THIS ENDORSEMENT DOES NOT GRANT ANY COVERAGE OR CHANGE THE TERMS AND CONDITIONS OF ANY COVERAGE UNDER THE POLICY.

CONFIRMATION OF CERTIFIED ACTS OF TERRORISM COVERAGE – TERRORISM RISK INSURANCE ACT

SCHEDULE

Terrorism Premium:	$0
Federal Share Of Terrorism Losses:	80%

Disclosure Of Premium

We have notified you that under the Terrorism Risk Insurance Act we must make certified acts of terrorism coverage available in the policies we offer.

Certified acts of terrorism coverage has been provided because either you have indicated to us or your agent that certified acts of terrorism coverage is desired or we have provided certified acts of terrorism coverage at no additional charge. If you have chosen to purchase certified acts of terrorism coverage, the premium charge is the amount shown in the Schedule of this notice.

If there is no premium shown above or the premium shown is $0, there is no separate premium for the coverage during this policy period.

Disclosure Of Federal Participation In Payment Of Terrorism Losses

The United States Government, Department of the Treasury, will pay a share of terrorism losses insured under the federal program. The federal share equals a percentage (as shown in the Schedule of this notice) of that portion of the amount of such insured losses that exceeds the applicable insurer retention. However, if aggregate insured losses attributable to terrorist acts certified under the Terrorism Risk Insurance Act exceed $100 billion in a calendar year, the Treasury shall not make any payment for any portion of the amount of such losses that exceeds $100 billion.

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To: CITY OF BIRMINGHAM
151 MARTIN
P.O. BOX 3001
BIRMINGHAM, MI 48012-3001

Date Submitted: _____

Date Received: _____

REQUEST FOR PARTIAL PAYMENT

Partial Payment Request # ____

The undersigned (the "Contractor") hereby requests payment for work performed on BIRD AVENUE PHASE 1B PROJECT #7-26(W) for the period beginning _____ and ending _____. Attached is an itemized list of completed quantities delivered to date.

During the above period, did Contractor incur additional costs for labor or materials because the bid package was missing important information? _____ (if yes, you must provide details of the additional costs and the missing information).

During the above period, did Contractor incur additional costs for labor or materials because the bid package contained information that was not true? _____ (if yes, you must provide details of the additional costs and the untrue statements).

During the above period, did Contractor incur additional costs for labor or materials because the site conditions were different from what you expected? _____ (if yes, you must provide details of the additional costs and the site conditions, both what you expected and what you encountered).

During the above period, did Contractor incur additional costs for labor or materials because of any reasons not mentioned above? _____ (if yes, you must provide details of the additional costs and the reasons the same were incurred).

The above does not include additional work through work directives issued by the City of Birmingham as described on the attached or as covered by an agreed basis of payment attached. _____.

Contractor hereby certifies, represents and warrants that all suppliers, subcontractors and employees have been paid in full for all materials and labor provided on the job during the above period. Contractor certifies, represents and warrants that there have been no change orders issued or requested during the above period, except for the following:_____

_____.

Contractor certifies, represents and warrants that Contractor will never request payments, other than the request made in this form, for any work performed or materials provided during the above period, except for the following unresolved items: _____

_____.

Attached are the following documents
Further detailing the above.

1. _____
2. _____
3. _____

Contractor:

_____
(Company or Contractor Name)

_____
(Signature of Officer of the Company)

_____
Type or Print Name and Title

CONTRACTOR'S AFFIDAVIT

To: CITY OF BIRMINGHAM
151 MARTIN ST.
P.O. BOX 3001
BIRMINGHAM, MI 48012-3001

Date Submitted_____

Date Received_____

REQUEST FOR FINAL PAYMENT

Payment Request # _____

The undersigned _____
Name of Contractor

hereby represents that on _____ he/she (it) was awarded a contract by
Date

The City of Birmingham hereafter called the Owner to complete construction, in accordance with the terms and conditions of Contract No. 7-26(W), Contract Name BIRD AVENUE PHASE 1B PROJECT; and the undersigned further represent that the subject work has now been accomplished and the said contract has now been completed.

The undersigned hereby warrants and certifies that all of his/her (its) indebtedness arising by reason of the said contract has been fully paid or satisfactorily secured; and that all claims from subcontractors and others for labor and material used in accomplishing the said contract, have been fully paid or satisfactorily settled. The undersigned further agrees that if any such claim should hereafter arise, he/she (it) shall assume responsibility for the same immediately upon request to do so by the Owner.

The undersigned, for a valuable consideration, the receipt of which is hereby acknowledged, does further hereby waive, release and relinquish any and all claims or right of lien which the undersigned now has or may hereafter acquire upon the subject premises for labor and material used in accomplishing said project owned by the Owner.

This affidavit is freely and voluntarily given with full knowledge of the facts on this ____ day of _____, 2026.

Company or Contractor Name:_____

Signature of Officer of Company:_____

Type or Print Name and Title: _____ _____
Name Title

Subscribed and sworn to before me, a Notary Public in and for _____County,

Michigan on this _____ day of _____, 2026.

_____, Notary Public

My commission expires: _____

SWORN STATEMENT

STATE OF MICHIGAN)
) ss:
COUNTY OF OAKLAND)

_____ , being duly sworn, deposes and says that _____ is the Contractor for an improvement to the following described real property situated in the County of Oakland, City of Birmingham, State of Michigan, described as follows:

in accordance with the general requirements of the Contract by and between the CITY OF BIRMINGHAM and _____ the following is a statement of each subcontractor, supplier and laborer for the payment of wages or fringe benefits and withholdings is due but unpaid with whom the (contractor)(subcontractor) has (contracted) (subcontracted) for the performance under the contract with the CITY OF BIRMINGHAM, and that the amounts due to the persons as of the date hereof are correctly and fully set forth opposite their names as follows:

Name of Subcontractor Supplier or Laborer	Type of Improvement Furnished	Total Contract Price	Amount Already Paid	Amount Currently Owing	Amount of Laborer Wages	Amount of Laborer, Fringe Benefits and Withholdings Due but Unpaid
TOTALS						

The contractor has not procured material from, or subcontracted with, any person other than those set forth above, and owes no money for the improvement other than the sums set forth above.

Deponent further says that he or she makes the foregoing statement as the (contractor)(subcontractor) or as _____ of the (contractor)(subcontractor) for the purpose of representing to the CITY OF BIRMINGHAM that the Payment Bond for labor and materials is free from claims for the possibility of claims except as specifically set forth above.

Deponent further says that he or she is a duly authorized representative of the (contractor)(subcontractor) and has been authorized to give this release of all claims against the City arising under or by virtue of contract _____ dated _____.

_____

Deponent

Subscribed and sworn to before me

this ____ day of _____, 2026

_____

Notary Public

_____ County, Michigan

My Commission Expires:

WORK DIRECTIVE

From: CITY OF BIRMINGHAM
151 MARTIN
P.O. BOX 3001
BIRMINGHAM, MI 48012-3001

Time:_____ Date: _____

Work Directive No. _____

To: Contractor:_____

Name and # of Contract: BIRD AVENUE PHASE 1B PROJECT, CONTRACT #7-26(W)

The following changed condition(s) is recognized by the City of Birmingham for the above referenced Contract. In order to ensure continuation of the progress of the contract this work directive is issued for the following work described below:

_____

_____

_____

_____

_____

The basis for payment will be: _____ Written Quotation from the contractor.

_____Unit Bid Prices _____ Time and Material

_____Other (describe) _____

A written quotation shall include a detailed description of the tasks involved and the expected timetable to be completed along with a firm quotation for cost.

A time and material basis for work shall be supplemented with agreed quantities and prices between the contractor's field representative authorized to act on behalf of the contractor and the city inspector. It also shall be backed up by unit prices for time, material and equipment supplied to the City in a timely manner. Should this information not be readily available, it shall be provided the following day or a basis for payment shall be agreed to in writing within 24 hours of agreeing to a time and material work directive.

Any other basis shall be approved by all parties in writing before starting work. Should a utility cause the delay, names and approval shall be obtained if possible by their agent.

Approved:

Contractor Supt.	Date	City Inspector	Date	City Engineer	Date

SECTION 301
SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

1.01 TIME OF COMPLETION

Upon review of the submitted bids received on **Thursday, February 12th, 2026,** the City will issue a Notice of Intent to Award Letter to the confirmed, responsive, and qualified low bidder. After receipt of this letter, the Contractor will be allowed to start initiation of the contract, including procurement of bonding and insurance documents. Upon receipt of satisfactory bonding & insurance documentation, the City Engineering Department will then recommend the project for final approval at a forthcoming City Commission meeting.

It is anticipated that the project will receive approval from the Birmingham City Commission on **Monday, March 23rd, 2026.** The Contractor shall be allowed to commence the project after City Commission approval so long as all bonds and insurance submittals have been approved, the contract has been fully executed by both parties, and a pre-construction meeting has been held.

The Contractor shall have the project substantially completed by Thursday, July 2nd, 2026. Substantial completion shall be defined by having all utility construction completed, all roadway, sidewalk, and driveway pavements being installed and cured, and all greenbelt areas restored to final grade using with applicable lawn restoration pay items.

The Contractor shall have the project finally completed by Friday, July 31st, 2026. Final completion shall be defined as having all punch list work completed, pavement markings and permanent signage installed, satisfactory establishment of landscaping restoration, and all temporary signage, traffic controls, and all other equipment and materials removed from the site.

LIQUIDATED DAMAGES

A. The contractor shall pay to the City of Birmingham as liquidated damages, the sum of one-thousand dollars ($1,000) per day for each calendar day after the completion dates specified under "Time of Completion" that the work to be performed by the contractor is not completed. Liquidated damages in this amount shall apply for each day that the project is not substantially or finally complete beyond the dates specified under "Time of Completion", regardless of the actual time work began. Liquidated damages are established to compensate the City and the public for the costs of the inconvenience caused by the contractor by extending the work beyond the time specified. Liquidated damages are in place of actual damages, which the City of Birmingham might sustain, and are not intended as a penalty.

B. In addition to the overall project Time of Completion requirements listed above, the following job requirements shall be placed on this Contract:

   The Contractor shall provide the Engineer with a written comprehensive time schedule that details the various steps in the Contract to ensure that the order of the utility and paving operations is clear and meets all applicable phasing requirements specified in the drawings for each work area.

C. For the purpose of determining Liquidated Damages, the Contract Time for work shall be increased proportionally to increases in contract value (if any) for this portion of the work provided that the following conditions are met:

   1. Increase in contract value is greater than 10% of the base bid;
   2. The parties have not adjusted the Contract Time by other mutually agreeable means such as an executed change order;

3. Adjustments in time on account of unusual weather shall be made in accordance with Section 108.08.D. of the 2020 MDOT Standard Specifications for Construction. The Contractor shall submit a written request for a time extension due to unusual weather conditions, along with supporting documentation, within fourteen (14) days after the last day of the calendar month in which the delay occurred. Failure to notify the City within this time limit shall constitute a waiver of claim for a time extension on account of unusual weather.

1.02 QUESTIONS REGARDING THE CONTRACT DOCUMENTS

A. All questions about meaning or intent of Contract Documents shall be submitted to the Engineer in writing. Address written inquiries to:

Melissa A. Coatta, P.E.
City Engineer
City of Birmingham Engineering Department
P.O. Box 3001
Birmingham, MI 48012
Phone: 248-530-1839
Fax: 248-530-1290
Email: mcoatta@bhamgov.org

B. Replies will be issued by Addenda delivered to all parties recorded by as having received Contract Documents for Bidding. Questions received less than five (5) days prior to date for opening of Bids will not be answered. Only answers contained in formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. Any Addendum issued during pre-bid period shall be included in the Bid, shall become part of Contract Documents, and shall be acknowledged on Bid Form.

1.03 PROJECT SCHEDULE

A. The Contractor shall submit their preliminary construction schedule within fourteen (14) days of the award of this Contract, along with the signed contract, and required bonds and insurance certificates.

B. Details on the schedule shall be sufficient to meet the requirements set forth in paragraph 1.02 above, or else the Engineer shall have the right to reject and request further information to meet the needs of this requirement.

1.04 HOURS OF WORK

A. Typically, work of this nature is allowed six (6) days a week, from 7:00 AM to 7:00 PM, Monday through Saturday, excluding major holidays, such as Memorial Day, July 4th and Labor Day.

1.05 CONTRACTOR SUPERVISION

A. The Contractor shall have a competent superintendent or foreman available at all times, authorized to act for the contractor as agent on the work, who thoroughly understands the plans and specifications, and who shall receive instructions from the Engineer. The superintendent or foreman shall be responsible for all subcontractors. The superintendent or foreman shall be designated by name prior to commencement of the work, and shall be available ON SITE for proper management of the project for the duration of the contract, regardless of whether or not the contractor or subcontractors are engaged in activity on the project.

1.06 WORK AREA

A. The contractor for this project shall be alert to the fact that the work areas are very visible to the public, and that his work operations have a direct impact on a large number of people on a daily basis. The work shall be organized to minimize the number of work days as much as possible. Also, the contractor shall keep his work area as clean and dust-free as practical at all times.

1.07 STATEMENT OF QUANTITIES

A. The quantities indicated in the proposal are the engineer's estimate of quantities required for the project, and bids will be computed, reviewed, analyzed and compared using these quantities. While these quantities have been estimated with as much accuracy as practical beforehand, they should not be construed as defining, or limiting the amount of work to be performed under this Contract, but rather as information furnished to bidders as an approximate estimation of the work items, and as a basis for comparing bids.

1.08 COORDINATION CLAUSE

A. The following coordination issues are brought to the Contractor's attention for consideration when preparing their bid and planning the construction:

1. Utility owners, such as Detroit Edison, AT&T, and Consumer's Energy, may be relocating their facilities during construction operations. The Contractor is to cooperate with and help facilitate such operations.
2. The Contractor shall protect all existing infrastructure, materials, and operations of the City of Birmingham.
3. Emergency services must be given immediate passage through the construction site.
4. Waste disposal vehicle routes through the construction site must be accommodated at all times.
5. The Contractor shall be responsible to coordinate with the City of Birmingham Police and Fire Departments regarding road closures connected to execution of work in this Contract.
6. There are other construction projects that will be in operation during the term of this Contract and may impact local traffic. The Contractor shall so conduct their operations to cooperate fully with the other contractors, and minimize conflicts to ensure maximum safety and courtesy in the expedient completion of this work.

END OF SECTION

SECTION 310
GENERAL INSTRUCTIONS TO BIDDERS

1.01 CONTRACT PRICE

A. Proposals are solicited on the basis of unit prices and/or lump sum prices which are to be clearly set forth in the Proposal Form. The final contract price on the accepted proposal will be determined by multiplying the number, or fraction thereof, units of work actually performed, or labor, material, or appliances actually supplied by the price designated for such items in the proposal. The total bid figure on the proposal form is merely for purposes of estimating and comparing costs, and under no circumstances on unit price contracts does it constitute or imply the total contract price.

1.02 FORM OF PROPOSAL

A. All proposals must be made in the form attached hereto. Additional copies of this proposal form for the bidder's files may be obtained on request at the City Engineering Department.

B. All prices stated in the proposals must be plainly written in figures.

C. All information called for on the proposal must be furnished to enable a fair comparison of the bids.

D. The place of residence of each bidder, or the official address in the case of a firm or company, with county and state, must be given with the signature.

E. Each proposal must be enclosed in a sealed envelope addressed to the City Clerk of the City of Birmingham, and endorsed upon the outside with the name of the project, as it appears in the advertisement for bids.

1.03 CONFORMITY TO PLANS AND SPECIFICATIONS

A. Proposals must be made in full conformity to all the conditions, as set forth in the plans and specifications for the work now on file in the office of the City Engineer.

1.04 AGENCY

A. Anyone signing a proposal as agent of another or others must submit with the proposal, legal evidence of their authority to do so.

1.05 LEGAL STATUS OF BIDDER

A. The legal status of the bidder, that is, as a corporation, a partnership or an individual, must be stated in the proposal. A corporation bidder must name the state in which its articles of incorporation are held, and must give title of the official having authority under the bylaws to sign contracts. A partnership bidder must give the full names and addresses of all partners.

1.06 CERTIFIED CHECK, BIDDER'S BOND OR BANK DRAFT

A. Each proposal must be accompanied by a certified check, bidder's bond or bank draft in an amount not less than five (5) percent of the total price, drawn to the order of the City of Birmingham, as a guarantee of good faith on the part of the bidder and subject to the conditions stipulated in the proposal form.

B. No proposal shall be withdrawn for a period of sixty (60) days after the date set for the opening of bids.

C. A single check, bond or draft may serve to cover two (2) or more alternative proposals when such alternative proposals are submitted by the same bidder.

D. The bid deposit of all except the three (3) lowest bidders will be returned within three (3) weeks after the opening of bids. The bid deposit of the three (3) lowest bidders will be returned within two (2) weeks after the contract has been executed by both parties.

1.07 OBLIGATION TO EXECUTE CONTRACT

A. The bidder whose proposal is accepted will be required to execute the contract, and to furnish sureties hereafter specified, within twenty-one (21) days after receiving notice of such acceptance; and in case of refusal or failure to do so, the bidder shall be considered to have abandoned all rights and interest in the award, and the bid deposit may be declared to be forfeited to the City, as liquidated damages and not a penalty, and the contract may be awarded to another.

1.08 BONDS

A. The successful bidder will be required to furnish two (2) bonds, each on the forms provided as follows:

1. A Performance Bond in an amount not less than 100% of the contract price in favor of the City of Birmingham, conditioned upon the faithful performance of the contract, and completion on or before the date specified.

2. A Payment Bond for labor or material running to the claimants, which is defined in MCL §129.206 as those persons supplying labor or materials to the principal contractor or subcontractors in the prosecution of the work provided for in this contract in an amount not less than 100% of the contract price for the protection of those persons supplying labor, materials or both.

B. The cost of all bond premiums is incidental to the other work on this project and shall be included in the Contractor's bid price(s) for the work. No additional or separate payment shall be made to the Contractor for providing the required bonds.

1.09 INDEMNITY

A. The Contractor shall indemnify the City of Birmingham in accordance with the INDEMNITY section set forth in the General Requirements.

1.10 INSURANCE

A. The Contractor shall not commence work under this contract until obtainment of the insurance required under this paragraph. All coverages shall be with insurance companies licensed and admitted to do business in the State of Michigan. All coverages shall be with insurance carriers acceptable to the City of Birmingham. The cost of all insurance premiums is incidental to the other work on this project and shall be included in the Contractor's bid price(s) for the work. No additional or separate payment shall be made to the Contractor for providing the required insurance coverage.

1. **Workers' Compensation Insurance:** The Contractor shall procure and maintain during the life of this contract, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.

2. **Commercial General Liability Insurance:** The Contractor shall procure and maintain during the life of this contract, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than $3,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent

Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.

3. **Motor Vehicle Liability:** The Contractor shall procure and maintain during the life of this contract Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than $3,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.

4. **Additional Insured:** Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement starting the following shall be Additional Insureds. The City of Birmingham, including all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. This coverage shall be primary to any coverage that may be available to the additional insured, whether any other available coverage be primary, contributing or excess.

5. **Pollution Liability Insurance:** CONTRACTOR shall procure and maintain during the life of this Agreement Pollution Liability Insurance, with limits of liability of not less than $1,000,000, per occurrence preferred, but claims made accepted.

6. **Cancellation Notice:** Workers' Compensation Insurance, Commercial General Liability Insurance and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal shall be sent to the Finance Department, City of Birmingham, P.O. Box 3001, 151 Martin Street, Birmingham, Michigan 48012.

7. **Owners Contractors Protective Liability:** The Contractor shall procure and maintain during the life of this contract, an Owners Contractors Protective Liability Policy with limits of liability not less than $3,000,000 per occurrence, combined single limit, Personal Injury, Bodily Injury and Property Damage. The City of Birmingham shall be "Name Insured" on said coverage. Thirty (30) days' Notice of Cancellation shall apply to this policy.

B. Proof of Insurance Coverage: The Contractor shall provide the City of Birmingham at the time the contracts are returned for execution, Certificates of Insurance and/or policies, acceptable to the City of Birmingham, as listed below:

1. Two (2) copies of Certificate of Insurance for Workers' Compensation;
2. Two (2) copies of Certificate of Insurance for Commercial General Liability;
3. Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
4. Original policy, or original binder pending issuance of policy, for Owners Contractors Protective Liability Insurance;
5. If so requested, Certified Copies of all policies mentioned above will be furnished.

C. Coverage Expiration: If any of the above coverages expire during the term of this contract, the Contractor shall deliver renewal certificates and/or policies to the City of Birmingham at least ten (10) days prior to the expiration date.

D. Maintaining Insurance: The CONTRACTOR also agrees to provide all insurance coverage as specified. Upon failure of the CONTRACTOR to obtain or maintain such insurance coverage for the term of the agreement, the City of Birmingham may, at its option, purchase such coverage from

the contract amount. In obtaining such coverage, the City of Birmingham shall have no obligation to procure the most cost-effective coverage but may contract with any insurer for such coverage.

1.11 EXAMINATION OF SITE

A. It is expected that each bidder will make a personal examination of the entire site of the proposed work, and of its surroundings. It will be assumed that each bidder, before offering his proposal, has obtained firsthand information concerning any probable interference and the available facilities for transporting, handling and storing of construction equipment and materials, and concerning other conditions which may affect his work.

1.12 LEGAL CONDITIONS

A. Bidders are notified that they should acquaint themselves with the various provisions in the laws of the State of Michigan, and in the ordinances and regulations of the City of Birmingham and Oakland County, with respect to the carrying on of public improvements.

1.13 BIDDER'S ABILITY

A. It is the intention of the City to award the contract for this job to a contractor whose construction skill and financial resources are fully equal to the task of prosecuting the work in a satisfactory manner, and of bringing it to completion within the time limit specified. With this end in view, the Form of Proposal calls for at least three (3) references concerning his ability to do this particular class of work, and a reference list of the last five (5) projects, including those not completed or currently being performed. The mere ability to offer bonds will not be taken as sufficient evidence of responsibility on the part of the bidder. If the contract is awarded to a foreign company, a certificate of authority to do business in this state must accompany executed contract.

1.14 PAYMENTS

A. Partial payments will be made monthly to the Contractor during the satisfactory progress of the working accordance with the Payments section of the General Requirements.

1.15 RIGHT TO ACCEPT, REJECT AND TO WAIVE DEFECTS

A. The City reserves the right to accept any proposal, to reject any or all proposals, and to waive any defect or irregularity in any proposal, if it appears advantageous to the City to do so.

B. In particular, any alterations, erasure or interlineation in the Specifications which are made a part, specifically, of these instruments, or of the Form of Proposal, shall render the accompanying proposal irregular and subject to rejection by the City. In case any explanation, additions or alterations are to be offered, they shall be indicated on separate sheets attached to the proposal form and referred to therein.

C. Proposals which are clearly unbalanced, will also be considered as irregular, and will be subject to instant rejection by the City.

END OF SECTION

SECTION 400
GENERAL REQUIREMENTS

1.01 DEFINITION OF TERMS

A. The intent and meaning of words and expressions, or pronouns used in their stead, occurring in these specifications or in other contract documents, shall be interpreted as described under Section 101.03 Definitions of Terms of the Current Standard Specifications for Construction adopted by the Michigan Department of and Transportation, with the following additions or exceptions:

1. City - The corporation of the City of Birmingham, Michigan
2. Commission - The Commission of the City of Birmingham, Michigan, and any other board, body, official or officials to which or to whom the powers belonging to the said Commission shall, by virtue of any act or acts, hereafter passed or be held to appertain.
3. Engineer - The person holding the position or acting in the capacity of City Engineer of the City of Birmingham, Michigan, acting either directly or through his properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.
4. Directed, required, permitted, etc. - Whenever in the specifications the words "as directed", "as required", "as permitted", or words of like effect are used, it shall be understood that the direction, requirements or permission of the Engineer is intended; similarly, the words "approved", "acceptable", "satisfactory", or words of like import shall mean approved by, or acceptable, or satisfactory to the Engineer.

1.02 INTENT OF THE PLANS, SPECIFICATIONS AND CONTRACT

A. The intent of the plans, specifications and contract is to provide for the completion of the work in substantial compliance with the details as shown thereon, and as described herein. The Contractor shall furnish all labor, materials, equipment, tools, transportation and necessary supplies, and shall perform all operations required to complete the work in accordance with the specifications, and the lines, grades and cross sections provided for on the plans, or by authorization.

1.03 EXTRA WORK

A. No extra work shall be started, or extra material furnished, until such extra work or furnishing of extra material is authorized in writing by the Engineer.

B. The price for such extra work or material must be approved by the Engineer. Said price may be a unit price, a lump sum price, or if the Engineer so elects, the work shall be done on a force account basis, which will be paid for in the following manner:

1. For all labor, teams and foremen in direct charge of the specific work, the Contractor shall receive the actual rate of wage paid for each and every hour that said labor, teams and foremen are actually engaged in such work, plus 20% of the sum thereof.
2. For materials and supplies, the Contractor will receive the actual cost of such materials delivered on the work, including freight charges, as shown by original receipted bills, plus 15% of the sum thereof.
3. For any machinery and equipment owned or rented by the Contractor, which it may be deemed necessary or desirable to use on extra work, the Contractor will be paid at the actual charge-out rate, if reasonable, for his own equipment, or at the actual rental price paid, if

reasonable, for rented equipment for each and every hour that such equipment is used on the work, to which sum 15% will be added.

4. Bond premium, workmen's compensation insurance, personal injury public liability and property damage public liability insurance, unemployment compensation, and Federal Social Security will be paid for at actual cost, to which sum 15% will be added. The Contractor shall furnish satisfactory evidence of the rate or rates paid for such insurance.

5. The compensation as herein provided shall be accepted by the Contractor as payment in full for extra work done by force account, and the said percentages shall cover profit, superintendence, general expense, overhead, and the use of small tools and equipment for which no rental is allowed.

1.04 ALTERATION IN CHARACTER OF WORK

A. Should the Contractor encounter, or the Engineer encounter, during the progress of the work, sub-surface and/or latent conditions at the site materially differing from those shown on the plans or indicated in the specifications, the Engineer's attention shall be called immediately to such conditions before they are disturbed. The Engineer shall thereupon investigate the conditions, and if he finds that they materially differ from those shown on the plans and indicated in the specifications, he shall at once make such changes in the plans and/or specifications, as he may find necessary.

1.05 COORDINATION OF SPECIFICATIONS AND PLANS

A. In case of discrepancy, written figures shall govern over numerals, figured dimensions shall govern over scaled dimensions, plans shall govern over standards specifications, supplemental specifications shall govern over standard specifications and plans, and special provisions shall govern over supplemental specifications.

B. The Contractor shall not take advantage of any apparent error or omission in the plans or specifications, but the Engineer shall be permitted to make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the plans and specifications.

1.06 AUTHORITY OF ENGINEER

A. The Engineer shall decide all questions which may arise as to the quality and acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work; all questions which may arise as to the interpretation of the plans and specifications; and all questions as to the satisfactory and acceptable fulfillment of the terms of the contract by the Contractor.

1.07 INSPECTION

A. Inspectors may be appointed and directed to inspect all materials used, and all work done. The inspection may extend to all parts of the work, and to the preparation or manufacture of the materials for use in the work. The Inspectors will not be authorized to revoke, alter, enlarge or relax any of the provisions of these specifications, nor to change the plans in particular. The Inspector on the work will inform the Engineer as to the progress of the work, the manner in which it is being done, and the quality of the materials being used. He will also call to the attention of the Contractor any failure to follow the plans and specifications that he may observe. In case of any dispute arising between the Contractor and the Inspector as to the materials furnished, or the manner of performing the work, the Inspector shall have the authority to reject materials or suspend the work until the question at issue can be referred to and be decided by the Engineer. In no instance shall any action or omission on the part of the Inspector relieve the

Contractor of the responsibility of completing the work in accordance with the plans and specifications.

B. The Engineer and his duly authorized Inspector, shall at all times have the right to enter the premises upon which the work under this contract is being done, and to inspect said work and to ascertain whether or not the construction is carried out in accordance with the terms of the contract or specifications; and the Contractor shall render all necessary assistance and provide all reasonable facilities and give ample time for such inspection.

1.08 SUPERVISION

A. The Contractor shall give his personal supervision to the faithful prosecution of the work. In case of his absence, he shall have a competent superintendent or foreman on the work site who shall follow, without delay, all instructions of the Engineer or his assistants in the prosecution and completion of the work, and every part thereof in conformity with this contract. He shall also have full authority to supply material and labor immediately.

B. The Contractor's supervisor shall be responsible to act on behalf of the Contractor. This includes being present or available at all times, making decisions on behalf of the Contractor and Subcontractor, scheduling, monitoring work progress on a continued basis, communicating with City representatives, etc. His name shall be submitted prior to the start of work, with all appropriate ways of contacting him. He shall remain the responsible Contractor's representative throughout completion of the project, including any subcontract work associated with this contract. If it is necessary to replace this person, it shall have the approval of the Engineer.

1.09 TIME AND SEQUENCE OF WORK

A. The Contractor shall have control over the sequence of order of execution of the several parts of the work to be done under this contract, and over the methods of accomplishing the required results, except as some particular sequence or method may be distinctly demanded by these specifications and plans, or by the express provisions of the contract.

B. The Engineer may, however, make such reasonable requirements as may in his judgment be necessary for the proper and effective protection of work partially or wholly completed, and to these requirements the Contractor shall strictly conform.

C. The Contractor shall submit a written work plan prior to starting construction. This shall include a written schedule, critical path or equal, to focus in on the date required for completion. This schedule must be updated periodically (not to exceed two (2) weeks) if it becomes necessary to modify the plan. This does not relieve the Contractor of the responsibility to complete the contract according to contractual stipulations. Any modification to the time schedule must obtain prior written approval from the Engineer.

D. Once the Contractor has mobilized, the Contractor must execute the contract in a continuous, expeditious manner, and may not suspend prosecution of work without written permission of the Engineer.

1.10 RELATION TO OTHER CONTRACTORS

A. The Contractor shall so conduct his operations as not to interfere with or injure the work of other Contractors employed by the City on adjoining or related work, and he shall promptly make good any injury or damage which may be done to such work by him.

B. Should a contract for adjoining work be awarded to another Contractor, and should the work on one of these contracts interfere with that of the other, the Engineer shall decide which Contractor shall cease work for the time being, and which shall continue, or whether the work of both

contracts shall continue at the same time and in what manner. In case territory of one contract should be the necessary means of access to another contract, the Engineer shall have power to grant reasonable privileges with respect to the transportation or movement of men, equipment or materials, as he may adjudge to be necessary or expedient, and in the best interest of the City. Any decision which the Engineer may make as to method and time of conducting work or the use of the territory shall not be made the basis of any claim for damage, but an extension of time may be claimed if justified by the circumstances, the same as in the case of other delays caused by the acts of the City. Any difference of opinion or conflict of interest which may arise between the Contractor and other Contractors or workmen of the City in regard to adjoining work, shall be determined and adjusted by the Engineer.

1.11 CONSTRUCTION STAKES

A. The location, alignment, elevation and grade of the work will be determined by the Engineer, who will set such stakes as are necessary to properly mark these elements. The Contractor shall assume full responsibility for detail dimensions and elevations measured from the lines, grades and elevations so established.

B. The Engineer may require the Contractor, at the Contractor's expense, to provide such masts, scaffolds, batterboards, straightedges, templates or other devices as may be necessary to facilitate laying out, inspecting and constructing the work.

C. The Contractor shall exercise proper care in the preservation of all stakes set for his use, or for the use of the Engineer, and if such stakes are injured, lost or removed by the Contractor's operations, the cost of resetting may be charged to the Contractor. The Department will be responsible for the accuracy of lines, slopes and grades established by the City, except that the Contractor shall not take advantage of any obvious errors or omissions.

1.12 SOIL CONDITIONS

A. The Contractor shall make his own determination of the soil conditions and he shall complete the work in whatever materials, and under whatever conditions he may encounter or create, without extra cost of the City.

1.13 MATERIALS FURNISHED BY THE CITY

A. When specified, the City of Birmingham may furnish materials at no cost to the Contractor. All other materials necessary to complete the project shall be furnished by the Contractor.

B. Materials to be furnished by the City will be at the Department of Public Works Yard at Eton Road and Holland Avenue. The Department of Public Works will require the Contractor to provide a written authorization from the Engineer before releasing any materials. The Contractor shall load and transport all such materials from the Department of Public Works Yard to the construction site, at his own expense.

C. The City may, at its discretion, furnish to the Contractor, any materials, supplies or transportation required for extra work, and the Contractor shall not be entitled to any allowance or percentage on account of materials, supplies or transportation so furnished.

1.14 STORED MATERIAL

A. Materials and equipment distributed, stored or placed upon or near the site of the work shall be at all times so disposed as not to interfere with work being prosecuted by the City, or by other Contractors in the City employ, or with street drainage, fire hydrants, or with access thereto, and not to hinder any more than may be necessary the ordinary pedestrian or vehicular traffic of the streets. Such material shall be stored in such a manner as to facilitate inspection.

1.15 REJECTED MATERIAL

A. If any materials used in the work, brought upon the ground, or selected for use in the work shall be condemned by the Engineer on account of bad or improper workmanship, or as being unsuitable or not in conformity with the specifications, the Contractor shall forthwith remove from the work or its vicinity, without delay, all such rejected or condemned material of whatever kind. Upon failure to do so within forty-eight (48) hours after having been so directed by the Engineer, the condemned material may be removed by the City and the cost of said removal deducted from any money that is then due, or that may thereafter become due to the Contractor. No payment shall be made until such materials, work or workmanship has been removed and proper materials and workmanship substituted therefor.

1.16 WATER SUPPLY

A. Water for construction purposes may be taken from the City mains, at no charge, subject to the rules of the City Water Department. Special approval of the Engineer must be obtained prior to the opening of any fire hydrant.

B. The Contractor shall provide for his employees an adequate supply of drinking water taken from the City mains.

1.17 SANITARY REGULATIONS

A. Necessary convenience, properly secluded from public observation, shall be constructed where needed for the use of laborers on the work. Such conveniences shall be located, constructed and maintained, subject to the approval of the Engineer and the collections therein shall be removed at such times, and to such places as he shall direct. The Contractor shall obey and enforce such sanitary regulations as may be prescribed by the County Health Department.

1.18 PERMITS AND LICENSES

A. The Contractor shall procure all permits and licenses and pay all charges and fees necessary and incident to the due and lawful prosecution of the work. Unless otherwise stated in these contract documents, there will be no charge for any permits required by the City of Birmingham.

1.19 LAWS AND ORDINANCES

A. The Contractor shall keep himself fully informed of all local ordinances and regulations, state and national laws in any manner affecting the work herein specified. He shall at all times observe and comply with, and shall cause all his agents and employees to observe and comply with, said ordinances, laws and regulations, and shall protect and indemnify the City and its duly authorized officers and agents against any claim or liability arising from or based on the violation of any such laws, ordinances, regulations, etc.

B. The Contractor shall obey and abide by all the laws of the State of Michigan and of the Federal Government relating to the employment of labor on public work and all Charter provisions and ordinances of the City of Birmingham regulating or in respect to public improvements.

C. The Contractor and his Subcontractors shall not discriminate against any employee or applicant for employment, to be employed in the performance of this contract, with respect to hire, tenure, terms, conditions or privileges of employment, because of sex, race, color, religion, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

1.20 PROPERTY AND SURVEY MONUMENTS

A. Before any monuments or stakes marking the boundaries of property along or near the work are removed or disturbed, the Contractor shall notify the Engineer in sufficient time so that they can be properly located and reset.

B. All precautions shall be taken to avoid disturbance of permanent survey monuments of any City, County or State authority, and when any of these are disturbed or destroyed, the Contractor shall restore them to the satisfaction of such authority and shall pay all costs incurred by such authority in connection therewith.

1.21 BUILDING AND OTHER STRUCTURES ENCOUNTERED

A. Full responsibility shall be assumed by the Contractor for the protection of all buildings and other structures, public or private, including tracks, pavements, driveways, curbs, poles, signs, hydrants, underground pipes and conduits and other structures of every sort that may be encountered in or adjacent to the work.

B. Wherever settlement or lateral movement of structures might occur, adequate underpinning or other means of support shall be installed. Where necessary, such support shall be installed in advance of construction.

1.22 PROTECTION TO TREES AND SHRUBBERY

A. The Contractor shall take all prudent and feasible measures that will reduce or eliminate the impacts of development and construction on City owned trees. Trees or shrubbery shall be surrounded by protective cushioning, posts or fencing before construction work begins, if, in the judgment of the Staff Arborist, such precautions are necessary. Further detailed information is included in the supplemental specifications section of the contract if applicable.

1.23 DUST CONTROL

A. All Contractors working on projects that require removal of the paved surface during construction shall provide dust control as directed by the Engineer, at no additional cost to the City. When weather conditions are such that dusty conditions can be created, the Contractor shall be prepared to take action. When dry conditions are declared by the Engineer, the Contractor shall have a water truck and calcium chloride on site at all times, to be applied as needed. The Contractor shall be pro-active with respect to applying dust control measures as needed.

1.24 PROTECTION AND RESTORATION OF PROPERTY

A. The Contractor shall restore, at his own expense, any and all public or private property damaged or injured in consequences of any act or omission on his part, or on the part of his employees or agents, to a condition similar and equal to that existing before such damage or injury was done. If the Contractor neglects to repair or make restoration, the Engineer may, after forty-eight (48) hours written notice to the Contractor, proceed to make such repairs or restoration, and will deduct the cost thereof from any monies that are or may become due the Contractor.

1.25 RESPONSIBILITY FOR DAMAGE TO WORK

A. The Contractor shall protect his work and materials from damage, due to the nature of the work, the action of the elements, the carelessness of other contractors, or from any cause whatever, until the completion and acceptance of the work. Should any damage occur, he shall repair or replace it at his own expense, and complete the work to the satisfaction of the Engineer.

1.26 INDEMNITY

A. To the fullest extent permitted by law, the CONTRACTOR and any entity or person for whom the CONTRACTOR is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the CITY OF BIRMINGHAM, its elected and appointed officials, employees and volunteers and any others working on behalf of the CITY OF BIRMINGHAM against, any and all claims demands, suites, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from and the CITY OF BIRMINGHAM, its elected and appointed officials, employees, volunteers or others working on behalf of the CITY OF BIRMINGHAM, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this Agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of its elected or appointed officials, employees, volunteers or other working on behalf of the CITY OF BIRMINGHAM.

1.27 INSURANCE

A. The Contractor shall comply with the INSURANCE requirements set forth in the General Instructions to Bidders.

1.28 PUBLIC TRAVEL

A. The Contractor shall at no additional compensation make suitable and adequate provisions, unless otherwise authorized by the Engineer, for the safe and free passage of persons and vehicles by, over or under the work while it is in progress.

B. The Contractor shall obtain permission from the Engineering Department to close or block any street. The Contractor shall notify the Engineering Department at least four (4) hours before closing or blocking any street.

1.29 PUBLIC SAFETY

A. The Contractor shall furnish, erect and maintain a good and sufficient fence, railing or barrier around all exposed portions of his work, to effectively prevent any accident in consequences of his operations and to protect the work. Such fences, railings and barriers shall be illuminated from sunset to sunrise by suitable and sufficient lights, flares or torches, in such a manner as to make them clearly visible to approaching pedestrians and/or traffic.

B. When equipment and materials are located within the construction site, or within any public right-of-way, the public shall be safe-guarded by suitable and sufficient signs, lights, barricades or other means furnished and maintained by the Contractor.

C. If any portion of the work is not properly barricaded, signed or lighted by one-half (1/2) hour after sunset, the necessary barricades, signs and lights may be placed by the City and all costs to the City for such work will be charged to the Contractor. The furnishing, erection and maintenance of barricades, signs and lights by the City will not relieve the Contractor of his responsibility for the protection of traffic and the work.

D. The Contractor shall provide such traffic regulators and watchmen as are necessary to insure safe and convenient travel by the public and to protect the work.

E. Barricades, signs and lights shall be erected in accordance with the provisions of the Michigan Manual of Uniform Traffic Control Devices.

1.30 MAINTAINING SERVICE TO DRAIN, WATER MAINS, ETC.

A. The Contractor shall maintain in continuous and effective service all drains, sewers, watercourses and water mains touched during the progress of the work. If it should become necessary to temporarily divert or obstruct the flow of any watercourse or drain, written consent must first be obtained from the Engineer, and then the Contractor shall assume full responsibility for the consequences.

1.31 NOTIFICATION OF UTILITIES

A. The Contractor shall notify all utilities of his intention to excavate or otherwise cause any underground disturbance, by calling MISS DIG at least three (3) full working days before commencing such excavating or disturbances.

B. The rights are reserved to both the City and to the owners of public utilities or franchises to enter upon the work for the purpose of making repairs to their installations and making changes in their installations necessitated by the work.

1.32 SUBLETTING OR ASSIGNING

A. The Contractor shall perform without subletting, at least twenty-five (25) percent of the work provided for in this contract, computed on the basis of cost.

B. The subletting of any portion of the contract work shall be subject to approval by the Engineer, but such approval shall not relieve the Contractor of responsibility for the work of such Subcontractors who likewise shall be bound by all pertinent provisions of these specifications. Before any work is sublet, the Contractor shall satisfy the Engineer that the proposed Subcontractor is suitably equipped and experienced in that kind of work, and that he has proper financial resources to enable him to carry it out.

C. No assignment by the Contractor of any principal construction contract or any part thereof, or of the funds to be received thereunder by the Contractor will be recognized unless such assignment has had the approval of the Engineer, and the Surety has been given due notice of such assignment in writing.

D. No assignment will receive approval unless the instrument of assignment contains a clause to the effect that it is agreed that the funds to be paid the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for the performance of the work called for in said contract in favor of all persons, firms or corporations rendering such services or supplying such materials.

1.33 DISCHARGE OF EMPLOYEES

A. The Contractor shall employ only competent, skillful persons to do the work. Whenever the Engineer shall notify the Contractor in writing that, in his opinion, any employee on the work is incompetent, impertinent, disobedient, unfaithful, disorderly or otherwise unsatisfactory, that employee shall be discharged from the work and shall not again be employed on it except with the written consent of the Engineer.

1.34 PROSECUTION OF WORK

A. The Contractor shall begin work in accordance with the detailed progress schedule after execution of the Contract by the City. He shall prosecute the work in the order given in the progress schedule, with force and equipment adequate to complete the major items, portions, or sections within the time limit therein fixed for completion. In case of failure to proceed with the work as rapidly as is provided in the progress schedule, or if it appears at any time that such work

is not being prosecuted in such manner as to insure its completion within the time specified, the Engineer shall have the right to require the Contractor to furnish and place in operation such additional force and equipment as the Engineer shall deem necessary to bring the work up to the progress schedule; with or without notice to the Surety, place such working force and equipment on the work and charge the Contractor the cost of the labor and such rental and depreciation rates for the plant and equipment as in his judgment is reasonable, and for such time as the plant and equipment are in service.

1.35 EXTENSION OF TIME

A. If the Contractor is obstructed or delayed in the prosecution or completion of the work by reason of the neglect, delay or default of any other Contractor having a contract with the City for adjoining or contiguous work; by reason of any damage that may happen thereto by the unusual action of the elements; by reason of the abandonment of the work by the employees in a general strike; the part of the City in doing work or furnishing material, the

B. Contractor shall have no claim of damages for any such cause or delay. He shall, however, be entitled to such extension of the time specified for the completion of the work as the Engineer shall determine to be just and proper, provided however, that such claim for such extension of time is made by the Contractor in writing to the Engineer within one (1) week from the time when any such cause for delay occurs.

1.36 SUNDAY AND HOLIDAY WORK

A. No work shall be done on Sundays, or upon any days celebrated as holidays by the City of Birmingham, except in case of emergency, or to protect work from damage or injury. All Sunday or holiday work must have prior written approval of the Engineer.

1.37 NIGHT WORK

A. No work shall be carried on from 7:00 p.m. to 7:00 a.m., except in case of emergency, or to protect from damage or injury work that has already been done. All night work must have the prior written approval of the Engineer. This provision does not apply to work covered under the provision entitled "shutting off water".

1.38 MEASUREMENT OF QUANTITIES

A. Quantities of work completed under the contract will be measured by the Engineer according to United States standard measures. When material is measured by weight in tons, the unit shall be the ton of two thousand (2000) pounds.

B. All longitudinal measurements for area of base courses, surface courses and pavements will be made along the actual surface of the roadway. For all transverse measurements for area of base courses, surface courses and pavement, the dimensions used in calculating the pay area shall be the neat dimensions provided in the plans or by authorization.

C. Structures will be measured according to neat lines provided on the plans or by authorization.

D. All materials which are specified for measurement by the cubic yard "Loose Measure" will be measured at the location where used on the project under construction, unless otherwise provided.

1.39 CLEANING UP

A. Upon completion of the actual work of construction, the Contractor shall clean up and leave in a neat condition all the premises which he has occupied during the construction period.

B. Before the time of the final estimate, the Contractor shall remove from the premises, debris, rubbish and all unused materials, together with all tools and equipment, or shall deposit them at such points and in such a manner as the Engineer may require.

C. Before leaving the grounds, the Contractor shall replace and put in good repair all fences, telephone poles and lines, roadways and other property that may have been damaged by him in the progress of the work.

1.40 ENVIRONMENTAL PROTECTION

A. Contractor shall at all times be responsible to insure that no chemicals, pollutants or other harmful or hazardous materials are spilled, discharged or otherwise released into the environment or onto City property, rights-of-way or into the storm or sanitary systems. Should such a release occur, Contractor shall immediately take action to extract the contaminants and prevent further exposure and damage. Contractor shall immediately contact the City and all other required governmental agencies to assess and determine the necessary and appropriate remediation activities. Contractor shall be responsible for all costs and damages stemming from the release including, but not limited to, the cost to remove and dispose of the contaminant, repair/replace/restore the affected areas, and all costs incurred by the City or governmental agency in response.

1.41 UNNOTICED DEFECTS

A. Any defective work or material that may be discovered by the Engineer before the final acceptance of the work, or before final payment has been made, shall be removed and replaced by work and material which conform to the specifications. Failure to neglect on the part of the Engineer to condemn or reject bad or inferior work or materials shall not be construed to imply acceptance of such work or materials.

1.42 FINAL INSPECTION

A. As soon as practicable, after the completion of all the work covered by the Contract, the Engineer shall make the final inspection of the work. If the work is found to comply with all the terms of the Contract plans and specifications, the Engineer shall accept the completed work with reasonable promptness. If the work is not acceptable to the Engineer at the time of such inspection, he shall advise the Contractor as to the particular defects to be remedied before final acceptance.

B. If within a period of ten (10) days after such notification the Contractor has not taken steps to speedily complete the work as outlined by the Engineer, the Engineer may, without further notice to the Contractor and without in any way impairing the Contractor, make such arrangements as he may deem necessary to have the work completed in a satisfactory manner. The cost of so completing the work may be deducted from any monies due, or which may become due the Contractor.

C. Use by the City or public of all or any part of the work before acceptance shall not be construed as acceptance of the part used.

1.43 PAYMENTS

A. Partial payments will be made monthly on the basis of the value of work completed during the estimated period, less the percentages retained as specified herein, provided the work is progressing in accordance with the progress schedule, provided the contract provisions are being fulfilled, and provided the time of completion has not elapsed.

B. The Contractor shall be responsible to submit requests for partial payments in writing by completing the Request for Partial Payment form supplied in the contract and/or by the City with

the attached appropriate quantities as measured or estimated by the Superintendent. Final payment shall be made by an officer of the company submitting

C. final quantities to the Engineer based upon the value of the work performed and materials completed in accordance with the contract. Prior to final payment, and as a condition thereto, the Contractor shall furnish the City with a duly executed, notarized, "Contractor's Affidavit", stating that all bills and claims have been satisfied, except as stated therein, and a release of all claims against the City arising under and by virtue of this Contract.

D. If the Contractor fails to submit a request for a payment, as specified, the Engineer may at his (her) discretion prepare a Contractor's Estimate for such payment.

E. When submitting a request for partial or final payment, the Contractor shall complete the appropriate forms as included in Section 140 of the Contract. When requesting a partial payment, the Contractor shall submit the "Request for Partial Payment" form and the "Sworn Statement" form. When requesting final payment, the Contractor shall complete the "Request for Final Payment" form and the "Sworn Statement" form.

F. When the Contractor determines that work will need to be completed outside of the specified pay items, the "Work Directive" form shall be submitted to the Engineer and approved prior to said work commencing.

G. Except as hereinafter provided, the City will retain ten (10) percent from the partial payments of the amount earned up to fifty (50) percent of the Contract price. After fifty (50) percent of the Contract work is in place, the City will not hold additional retainage, unless the Engineer determines that the Contractor is not making satisfactory progress. If the Engineer determines the Contractor is not making satisfactory progress, the City may retain up to ten (10) percent of the value of the work over fifty (50) percent of the Contract price.

H. After final acceptance of the Contract work by the Engineer, he shall process a final estimate for the total amount due the Contractor, less the total amount of all previous payments. Except as hereinafter provided, the total amount due the Contractor shall include interest earned on retained amounts from partial payments.

I. Prior to final payment, and as a condition thereto, the Contractor shall furnish the City with a duly executed, notarized, affidavit or certificate, stating that all bills and claims have been satisfied, except as stated therein, and a release of all claims against the City arising under and by virtue of this Contract.

J. In case evidence exists that all bills with respect to the work have not been paid in full, the Engineer may retain out of any amounts due the Contractor, sufficient sums to cover all such unpaid bills.

K. Except as hereinafter provided, and at the City's option, a dispute regarding the percent retained from partial payments or regarding payment of interest on retained amounts, shall be settled in accordance with the provisions of Act 524 of the Public Acts of Michigan for 1980.

L. For a Contract having a dollar value of less than $30,000.00, or a Contract having three (3) months or less between the date of the Contractor and the Contract Time of Completion:

1. The City will retain ten (10) percent of the amount earned from partial payments.
2. The City will not pay interest on amounts retained from partial payments.
3. The provision to settle disputes in accordance with Act 524 will not apply.

1.44 SETTLEMENT OF DISPUTES

A. Any controversy of claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suite in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds $1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suite in the Oakland County Circuit Court or the 48th District Court.

1.45 MAINTENANCE AND GUARANTY

A. The Contractor shall guarantee all the work furnished under this Contract against all defects in workmanship and materials, and incidental damage to other property, for a period of one (1) year following the date of the final acceptance of the work by the City. The Performance Bond shall fully cover all guarantees contained in this article.

1.46 CONFLICT OF INTEREST

A. The Contractor shall not directly or indirectly employ or otherwise use a City official of the City of Birmingham in conjunction with this contract. If subsequent to entering into the Contract a City official, a spouse, child or parent shall become directly or indirectly interested in the contract, the City shall have the right to terminate the contract without further liability if the disqualification has not been removed within thirty (30) days after the City has given notification of the disqualifying interest.

1.47 INSPECTOR CREW DAYS

A. It shall be the responsibility of the bidder to extend as a bid item in his proposal, when called for, the number of inspection crew days he requires for the completion of the project, times the unit price for inspection. The basis of computing crew days shall be as follows:

Total Hours Worked	Crew Days Charged
When an Inspector reports to the project and the Contractor decides not to work, or does not appear to work, weather permitting.	- One-half (1/2) crew day
Under four (4) hours	- One-half (1/2) crew day
Four (4) hours or more	- One (1) crew day
Over Eight (8) hours or more	- Three eights (3/8) crew day for each two hour or part thereof

B. The above hours are only for the usual working days of Monday through Friday.

C. All Saturday work shall multiply the number of crew days by a factor of 1.5. All Sunday work shall multiply the number of crew days by a factor of 2.0.

D. All holiday work shall multiply the number of crew days by a factor of 2.0. Holiday work shall include all legal holidays, and any other days when the Municipal Building of the City of Birmingham is officially closed.

E. The amount bid shall be included in comparative evaluation of the bids. OMISSION OF THIS ITEM, WHEN CALLED FOR, SHALL BE CAUSE FOR REJECTION OF THE BID.

F. The City of Birmingham will bill the Contractor four hundred ($400) dollars per day for each day they require inspection according to the Engineer. The bill must be paid monthly to the City of Birmingham Treasurer. A thirty (30) day grace period will be provided in which to pay the inspection bill, after which a 1% per month late fee will be assessed. All inspection bills must be paid prior to issuance of final payment.

G. In the event that the number of crew days required is less than the amount bid, the excess shall be paid to the Contractor at the end of the project. If the number of days required is more than the amount bid, the pay item shall remain as the amount bid, and all days used shall be due to the City prior to final payment.

H. If the quantity of work under the Contract varies from that stated in the Proposal, the number of "crew days" allowed under the bid item shall be increased or decreased in proportion to changes in the total value of work under the Contract. This revision in the number of crew days shall be agreed upon at the time the Contract quantities are revised.

I. The Contractor shall give the City Engineer at least twenty-four (24) hour notice, exclusive of Saturdays, Sundays or holidays, when the project requires an increase or decrease in the number of Inspectors. Failure to observe this requirement will either necessitate the charging of one-half (1/2) crew day if the Inspector appears on the project, or the halting of all additional work until an Inspector is available. Unless the Inspector is notified in advance, crew days will be charged when an Inspector appears on a project and the Contractor decides not to work.

J. A separate crew day shall be charged for each and every Inspector or Engineer employed on a project for inspection purposes.

K. The number of Inspectors or Engineers required for the complete inspection of any project shall be as determined by the City Engineer.

L. One (1) Inspector or Engineer shall be assigned to each construction crew or each operation listed below:

1. General
    a. Material Testing (not the operations done by a testing laboratory).
    b. Checking barricades and lighting.
    c. Checking maintenance of traffic.
    d. Emergency conditions, as determined by the Engineer.
    e. Measuring quantities when said measurements are taken during one of the operations included within this list.
2. Clean-Up and Complaints
    a. Replacement of driveways, sidewalks, pavement, etc.
    b. Checking restoration and answering complaints.
3. Water Mains and Appurtenances

a. Excavation.
b. Laying of Mains.
c. Installing Valves and Hydrants.
d. Tunneling, Jacking or Boring of Water Mains.
e. Backfilling of Trenches.
f. Restoration of Existing Conditions.
g. Cleanup.
h. Pressure Testing.
i. Cleansing and Disinfecting.
j. Checking final installation for conformance to specifications prior to releasing for connections to be made.
k. The same Inspector may inspect the installation of hydrants, thrust blocks, gate wells, etc., in the proximity of the pipe laying operations, provided the Contractor cooperates to the extent that no portion of the work is covered prior to inspection.

4. Concrete Pavement
   a. Excavation and Preparation of the Site.
   b. Mucking and Filling Ditches.
   c. Pavement Removal.
   d. Subgrade Preparation and Fine Grading.
   e. Adjusting and Reconstructing Existing Structures.
   f. Sub-Base Construction.
   g. Checking Form Alignment and Grade.
   h. Placing of Concrete.
   i. Constructing Compression Cylinders.
   j. Finishing of Concrete.
   k. Placing of Cold Weather Protection.
   l. Sawing and Sealing.
   m. Finish Grading.
   n. Coring Finished Pavement (One (1) crew day will be charged for each twelve (12) cores taken).
   o. Adjusting Existing Driveways and Sidewalks.
   p. Seeding and Mulching.
   q. Restoration.
   r. Site Clean-Up.
   s. Checking final pavement prior to final acceptance for conformance to specifications.

5. Sanitary, Combined, and Storm Sewers, and Appurtenances
    a. Excavation and Preparation of the Site.
    b. Checking Sewer Pipe.
    c. Installing Pipe Bed.
    d. Laying Pipe.
    e. Installing House Leads.
    f. Tunneling, Jacking or Boring of Sewer.
        i. Mining Operation:
        ii. Placement of Concrete:
            -One (1) Inspector in Tunnel.
            -One (1) Inspector Top Side.
    g. Constructing Manholes, Catch Basins, Inlets.
    h. Backfilling.
    i. Restoration.
    j. Infiltration or Ex-Filtration Tests.
    k. Site Clean-Up.
    l. Final checking of sewers prior to releasing for connections to be made or placing in service.
    m. The same Inspector may inspect the installation of manholes, catch basins, inlets, etc., in the proximity of the pipe laying operation, provided the Contractor cooperates to the extent that no portion of the work is covered prior to inspection.
6. Reinforced Concrete Structures
    a. Excavation for Structure.
    b. Sheeting.
    c. Checking Forms and Resteel.
    d. Placing of Concrete.
    e. Backfilling Around Structures.
    f. Checking Installation of Equipment.
7. Asphalt Paving and Pavement Resurfacing
    a. Excavation.
    b. Preparation of Subgrade.
    c. Construction of Base.
    d. Preparation of Existing Pavement.
    e. Priming Base Course.
    f. Construction of Bituminous Concrete Pavement or Surface.

g. Checking of Material.

h. Checking of Asphalt Plants.

i. Checking of Final Pavement for Conformance to Specifications.

j. Restoration.

k. Site Clean-Up.

M. Inspection rates for crew days will be charged as follows:

1. Through 4 Hours = $325.00
2. Over 4 Hours to 8 Hours = $650.00
3. Over 8 Hours = $243.75 for each two hours or part thereof
4. Saturdays
    a. Through 4 Hours = $487.50
    b. Over 4 Hours = $243.75 for each two hours or part hereof

N. No payment on inspector crew days shall occur while the project is in progress. Upon final evaluation and inspection approval inspector crew days will be calculated and paid along with the final payment of the project to the contractor.

END OF SECTION

SECTION 450
COLOR AUDIO-VIDEO ROUTE SURVEY

PART 1. GENERAL

1.01 SUMMARY

A. The bid item "Audio-Video Route Survey" is included in the proposal to cover the cost of obtaining a record of the existing conditions prior to the start of construction.

B. The Contractor shall engage the services of a professional electrographer actively engaged in color audio-video recordings of projects similar to the work included under this Contract.

C. The firm performing this work shall have the equipment and experience necessary to produce a digital color audio-video recording of the prescribed quality, meeting all of the requirements specified herein.

D. The Engineer may require the video taping of a "sample" route to verify the ability of the electrographer to perform the work.

E. All digital recordings and written records shall become the property of the Owner. The firm performing this work shall also provide one complete copy of all media files in electronic format on a "flash drive" or similar physical device, along with applicable written records to the Engineer.

F. Complete coverage shall include all surface features located within the public right-of-way, easement areas and adjacent private properties up to building line when such properties lie within the zone of influence of construction and will be supported by appropriate audio descriptions made simultaneously with video coverage. Such coverage shall include but not be limited to all existing driveways, sidewalks, curbs, ditches, roadways, landscaping, trees, culverts, mail boxes, headwalls, and retaining walls, or buildings located within such zone of influence.

G. Coverage shall include the entire project area impacted by construction and any portions of streets to be used by the Contractor as access roads and/or haul roads.

H. When conventional wheeled vehicles are used, the distance from the camera lens to the ground shall not be less than twelve (12) feet to insure proper perspective.

I. In some instances, audio-video coverage will be required in areas not accessible by conventional wheeled vehicles. Such coverage shall be obtained by walking or special conveyance approved by the Owner.

J. All recordings must be made using digital equipment to produce full-colored audio-video media files in a typical electronic format playable on standard computer software. One complete copy of media files and written records shall be provided to the Owner prior to commencing construction on this project.

K. Buildings shall be identified by street number, when visible, in such a manner that structures of the proposed system can be located by reference. In all instances, however, locations shall be identified by audio or visual means at intervals not-to-exceed 100 lineal feet in the general direction of travel.

L. The rate of speed in the general direction of travel of the conveyance used during recording shall not exceed 30 feet/minute. Panning rates and zoom-in, zoom-out rates shall be controlled sufficiently such that stop-action during play-back will produce clarity of detail in the object viewed.

M. All recording shall be done during times of good visibility. No recording shall be done during periods of visible precipitation, or when more than 10% of the ground area is covered with snow or standing water, unless otherwise authorized by the Owner.

N. Any recorded coverage not acceptable to the Owner shall be rerecorded at no additional charge.

O. The Owner shall have the authority to designate areas for which coverage may be added or omitted and this shall be considered as incidental to the Contract.

P. All media files shall be properly identified as to location, time and date in a manner acceptable to the Owner in written format.

Q. A record of the contents of each media file shall be supplied by a sheet identifying each segment in the flash-drive by location, number, time, starting point, traveling direction and ending point.

R. The recording shall be done prior to placement of materials or equipment on the construction area and the media contents must be furnished one week prior to the start of construction.

S. To preclude the possibility of tampering or editing in any manner, all video recordings, must, by electronic means, display continuously and simultaneously generated transparent digital information to include the date and time of recording, as well as the corresponding engineering stationing numbers. The date information will contain the month, day and year; for example 10/5/96 and be placed directly below the time information. The time information shall consist of hours, minutes and seconds, separated by colons. For example 10:53:18. This transparent information will appear on the extreme upper left-hand third of the screen.

T. The engineering stationing numbers must be continuous, accurate and correspond to the project stationing and must include the standard engineering symbols. For example 14+84. This transparent information will appear on the extreme area covered, direction of travel, viewing side, etc.

U. Below the engineering station, periodic transparent alpha/numeric information will appear. This information will consist of the name of the project, name of area covered, direction of travel, viewing side, etc.

V. In order to produce the proper detail and prospective, artificial lighting will be required where it is necessary to fill in shadow areas caused by trees, utility poles, road signs, or other such objects.

1.02 BASIS OF PAYMENT

A. Payment shall be by "Lump Sum" based on construction zones as identified on the construction plans.

PART 2. MATERIALS

Not Applicable

PART 3. EXECUTION

Not Applicable

END OF SECTION

SECTION 500
WATER MAIN CONSTRUCTION

PART 1. GENERAL

1.01 SUMMARY

A. The work of this section shall consist of the installation of water mains, valves, risers, corporations, boxes, hydrants, water services and connections, of the size and character and at the locations shown on the drawings. This work shall include the provision of all labor, materials, equipment, and supervision required, including excavation, bedding, backfill, testing and sterilization and other incidental work necessary for a complete system. The Contractor shall set crosses, tees, bends, sleeves, and other special fittings in the main where shown on the drawings or directed by the Engineer. All unconnected openings of such special fittings shall be closed by standard plugs. All special fittings shall be incidental to the water main construction.

1.02 REFERENCES

A. Unless otherwise specified, all water main pipe materials shall conform to the latest edition of the applicable AWWA standards for construction.

B. Performance and material requirements shall meet specific Reference Standards as referred to hereinafter under individual items.

C. Unless otherwise specified, all materials shall also conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 CERTIFICATION AND INSPECTION

A. All pipe and fittings delivered to the job shall be accompanied by certification papers showing that the pipe and fittings have been tested in accordance with the applicable Specifications for this project. All pipe and fittings will be inspected upon delivery to the jobsite. No cracked, broken or damaged pipe will be allowed in this work.

B. Each piece of ductile iron pipe and each fitting shall have its weight and class designation conspicuously painted or cast on it. All other pipe materials shall have the class designation painted thereon. Where required, other designation marks shall be painted on the pipe or fittings to indicate correct location in the pipeline in conformity to a detailed layout plan.

1.04 SHOP DRAWINGS AND GUARANTEES

A. Contractor shall furnish shop drawings and guarantees of the items to be furnished under this section of the Contract. Design details of joints and joint restraint shall be submitted to the Engineer for consideration and approval before ordering any pipe.

PART 2. MATERIALS

2.01 WATER MAIN PIPE

A. All water main pipe supplied and installed on this project shall be Pressure Class 52 Ductile Iron Pipe (DIP) conforming to ANSI A21.5, latest revision.

B. Joints shall be push-on type conforming to ANSI A21.11, latest revision.

C. Ductile iron pipe shall be cement mortar lined and bituminous seal coated, in accordance with ANSI A21.4, latest revision.

2.02 POLYETHYLENE ENCASEMENT

A. All ductile iron pipe and fittings shall be encased with polyethylene encasement in accordance with the requirements of ANSI/AWWA Standard C105/A21.5-10.

B. Polyethylene encasement materials shall be manufactured of virgin polyethylene possessing the following characteristics:

1. Type, Class, Grade, other Characteristics:
   a. In accordance with A.S.T.M. Specification D-1248-84 or latest revision thereof.
   b. Type.....I
   c. Class A..... A natural color where exposure to weather (including sunlight) is less than forty-eight (48) hours total burial OR Black where exposure to weather (including sunlight) may be more than forty-eight (48) hours. Exposure to weather should be kept to a minimum, and in no case should it exceed ten (10) days.
   d. Grade..... E-1
   e. Flow Rate (formerly Melt Index) .....0.4 maximum
   f. Tensile Strength..... 1200 psi
   g. Elongation.....300%
   h. Dielectric Strength.... Volume resistivity, ohm-Cm3 = 1015 volts per mil thickness.
   i. Polyethylene tube material shall have a thickness of .008" (8-mils). Thickness tolerance shall not exceed 10% of the total tube thickness. A suggested tube size for each pipe diameter is listed in Table 1 below. For pipe sizes greater than 24", tube size may be determined by multiplying the nominal pipe diameter by 2.25 to obtain minimum flat tube width.

TABLE 1: Polyethylene Flat Tube Width (Inches)

Nominal Pipe Diameter (Inches)	Ductile Iron Pipe, Bell & Spigot Joints	Ductile Iron Pipe with Mechanical Joints
4	16	16
6	20	20
8	24	24
10	27	27
12	30	30
14	34	34
16	37	37
18	41	41
20	45	45
24	54	54

C. Adhesive tape used to connect Water main Polyethylene Encasement shall be a general-purpose adhesive tape two (2) inches wide and approximately ten (10) mils thick, such as Scotchrap No. 50, Polyken No. 900, or Tapecoat CT. Tape used for repair of damage to the polyethylene shall possess a life expectancy equal to that of the polyethylene.

2.03 FITTINGS

A. Ductile Iron Water Main Fittings shall be furnished in accordance with ANSI A21.10, latest revision, and AWWA C104 & C153, latest revisions.

B. Joints shall be mechanical joint or push-on, conforming to ANSI A21.11, latest revision. When called for on the plans or supplemental specifications, fittings shall be cement mortar lined as detailed for pipe.

C. When connecting to existing water mains, oversized fittings may be required to match the outer diameter of the older water mains. The Contractor shall determine sizes as necessary.

2.04 HYDRANTS

A. Hydrants shall be EJIW model 5BR with 6" mechanical joint inlet, two pumper nozzles, all opening left, 5'6" bury, plugged drain, block bolts (EJIW Product #1D566M01002260A).

B. Hydrants shall be manufactured to conform to AWWA C502 standard specifications.

2.05 GATE VALVES AND BOXES

A. All gate valves shall be of the resilient seat wedge type with mechanical joints and non-rising stem.

B. Gate valves shall be designed for 150 psi working pressure and meet the requirements of AWWA Specification C509.

C. Gate valves shall be cast iron body, fully bronze mounted, bronze stem, O ring stem seal, non-rising stem and wedge disc with resilient rubber seat ring disc seat. Gate valves shall have a clear waterway equivalent in area, when fully open, equal to that of the connecting pipe.

D. Valves shall be made to open when turned to the left, or counterclockwise.

E. The gate valves shall have square wrench nuts.

F. Gate valves of the size specified shall be produced by either Mueller or East Jordan Iron Works.

G. Gate valves are typically required to be installed in pre-cast concrete wells manufactured in accordance with ASTM C478 and C433.

H. When approval is granted by the city, valve boxes may be used and shall be of the three (3) piece adjustable height type with cast iron curves with a 5 1/4" shaft diameter. The cover shall be marked "WATER". The length of the box shall be adequate for the depth of cover at the valve location.

2.06 WATER LEADS

A. All water service leads shall be of Type K copper of the sizes called for on the plans.

2.07 CORPORATION STOPS

A. Corporation stops shall be Mueller Model No. H-15000

B. Corporation Stops shall have an AWWA Taper threaded inlet with copper flare straight connection outlet.

C. Corporation Stops shall be manufactured and tested to meet ANSI/AWWA Standard C800.

D. Corporation stops shall be constructed of heavy-duty brass components meeting the requirements of ASTM B62.

2.08 CURB STOPS AND BOXES

A. Curb Stops shall be manufactured and tested to meet ANSI/AWWA Standard C800.

B. Curb stops shall be constructed of heavy-duty brass components meeting the requirements of ASTM B62.

C. Inlet and outlet shall both have copper flare straight connections.

D. Curb stops valve shall have Minneapolis pattern thread top

E. Curb stop valves shall be McDonald 76100, 1 Ball Curb, Flare X Flare-NL.

F. Curb stop boxes shall be by General Foundry, "Buffalo-Style" box, Screw-type (Product #37095E)

PART 3. CONSTRUCTION

3.01 GENERAL

A. All pipe installation methods and procedures shall be in accordance with the current version of AWWA C600.

3.02 CARE IN HANDLING PIPE

A. The pipe shall be distributed at the site by the Contractor as required and care shall be exercised to prevent injury to the pipe in handling. Proper tools and implements for safely handling the pipe and other materials shall be provided by the Contractor, and particular care shall be exercised to prevent the abrasion of the pipe coating which shall be repainted, if injured, with coal tar varnish properly mixed with oil and heated before applying. The Contractor shall keep on hand a sufficient supply of the coal tar varnish for such purpose.

B. Care shall be taken in handling cement-lined pipe. Hooks inserted inside the pipe shall have blunt ends which will spread the bearing to more than two (2) square inches of cement surface.

C. Pipe must be protected from falling, either from truck to ground or into the trench and, when distributed along the line or stored near a road, must be kept clear of passing vehicles.

D. All materials will be inspected before placing in the trench, and if defective, marked "REJECTED" and removed from the work by the Contractor at no additional expense to the City. All damaged materials shall be replaced by the Contractor at no cost to the City.

3.03 MATERIALS FURNISHED BY THE CITY

A. See the "General Requirements" section for materials furnished by the City.

3.04 SHUTTING OFF WATER

A. The Contractor shall familiarize himself with the locations of existing gate valves, and have the gates made easily accessible for emergency shut-offs. He shall always keep on the job all the necessary equipment to shut the water off and to make immediately emergency repairs without undue delay.

B. WARNING: Since some water mains and valves are old, it is not uncommon for valves to not shut off "tight". In such cases, it may be necessary to close additional valves and/or for the Contractor to contend with a flow of water through such valve(s).

C. In case of an emergency break in a water line due to his construction operations, it shall be the Contractor's responsibility to supply water for immediate needs to those deprived of such service.

3.05 EXISTING STRUCTURES AND UTILITIES

A. The Contractor shall notify all utilities of his intention to excavate or otherwise cause any underground disturbance, by calling MISS DIG at least three (3) full working days before commencing such excavation or disturbance.

B. Underground structures and utilities are shown on the construction drawings as an aid to the Contractor, but the Owner does not guarantee their location or that other underground structures or utilities may not be encountered. No attempt has been made to show utility services on the plans, and it shall be the Contractor's responsibility to locate them. The City will, whenever possible, and when requested by the Contractor, stake the location of sewer and water services at the street right-of-way line.

C. In crossing over or under underground utilities, the Contractor shall use all possible care in protecting the utilities and to maintain their free unobstructed continuous use. The Contractor will be required without additional compensation to repair, replace or rebuild any such improvement injured or damaged by him, and he shall be responsible to the department, companies, individuals, or corporations controlling such improvements.

D. All underground utilities shall be supported on a foundation of sand or sand-gravel thoroughly compacted by mechanical tamping to prevent future settlement and possible failure of the utility. "Cement reinforced sand backfill" rather than "sand or sand 'gravel" shall be used under sewers and sewer services. Gas mains and gas services shall be supported in accordance with the requirements of the Consumer Power Company.

3.06 TRENCH EXCAVATION

A. Excavation shall be open cut. All work shall be done to true line and grade. The Contractor shall protect all line and grade stakes and he will be held responsible for any defective work occasioned by his negligence in this regard.

B. The trench shall be of sufficient depth to provide a cover above the crown of the pipe of at least five and six inches (5.5 feet).

C. The bottom of trench shall be excavated neatly to the required grade and filled four (4) inches with MDOT Class II sand thoroughly compacted by tamping before the pipe is laid.

D. Methods and equipment for excavating shall be such as will produce a trench without excessive width or irregularity. The width of trench shall be sufficient to allow the pipe to be laid and jointed properly and to allow the backfill to be placed and compacted properly.

E. The Contractor shall take great care to protect all trees and shrubs along the site of the work. No equipment will be permitted which causes excessive damage to existing trees along the site of the work.

F. If the trench at any point along the line will be opened nearer than six (6) feet to the face of the trunk of an existing tree, and in the opinion of the Engineer the excavation would be injurious to the tree, he may require the Contractor to tunnel under the tree at no extra cost to the City.

G. Selected excavated material may be used for backfilling under trees and it shall be thoroughly tamped to completely fill the excavated space.

H. Where the trench must be cut through concrete or asphalt pavement, driveways, or sidewalk particular care shall be taken not to damage adjoining areas. All cuts through existing concrete or asphalt pavements, and driveways shall be made with a concrete saw, except where an existing parallel joint is located not more than two (2) feet beyond the line of the intended saw cut. In that case the pavement or driveway shall be removed and replaced to the existing joint. Sidewalks shall not be saw cut and all removal and replacement shall go to existing joints. Pavement breaking using a drop weight may be limited or prohibited by the Engineer, if the Engineer determines the use of such equipment is causing damage to adjacent structures.

3.07 TUNNELING

A. Tunneling, Boring and Jacking under pavements or streets will not be allowed without the approval of the Engineer in writing, or unless noted on plans or in the Specifications. Where tunneling is permitted there shall be a minimum clear space of not less than six (6) inches between the outside of the pipe in the tunnel and the face of the excavation or the sheeting or bracing that is nearest the pipe. Upon completion of the construction work in the tunnel, the sheeting and bracing (if any) shall be left in place and all the remaining space between the outside of the pipe and the excavation shall be filled with cement reinforced sand backfill thoroughly compacted. The Contractor shall receive no additional compensation for sheeting and bracing left in place in the tunnel.

3.08 EXCAVATED MATERIAL

A. The materials excavated and to be used in backfilling shall be so handled and stored as to cause as little inconvenience as possible to the public travel and adjoining property owners. The materials excavated and not suitable or needed for backfilling shall be disposed of by the Contractor at his own dumpsites.

B. Payment for handling the surplus excavated material, as outlined above, shall be included in the unit prices quoted in the proposal for pipe installation.

3.09 LAYING PIPE

A. Water mains shall be laid with a minimum of five (5) feet of cover from the top of the main to the final surface grade above the main, unless otherwise designated on the plans, authorized by the Engineer, or necessary to connect to existing fittings.

B. Before laying pipe, all lumps, blisters, and excess coal tar coating shall be removed from the bell and spigot ends of each pipe; the outside of the spigot and the inside of the bell shall then be wire brushed and wiped clean and dry.

C. Before lowering, and while suspended, the pipe shall be inspected for defects and rung with a light hammer to detect cracks. Any defective, damaged, or unsound pipe shall be rejected. The interior of each piece shall be inspected for cleanness and cleared of any dirt or foreign matter before being lowered into the trench.

D. Each length of pipe shall have bearing upon the sub-grade throughout the length of the barrel. The pipe will not be permitted to rest in the trench on any hard unyielding object such as stone, brick, etc. Blocking pipe up to proper level with blocking of any kind will not be permitted.

E. Unless otherwise directed, pipe shall be laid with bell ends facing the direction of laying. After a length of pipe is placed in the trench the spigot shall be centered in the bell of the adjacent pipe, the pipe shoved into position and brought into true alignment, and there secured with sand, carefully tamped under and on each side of the pipe.

F. When the temperature is above 60 degrees F., the spigot of each pipe laid shall be brought tightly home in the bell of the preceding pipe. When the temperature is below 60 degrees F., the pipe shall be laid with the spigot end approximately 1/16" from the face of the bell to allow for expansion.

G. Wherever deflections at joints are required by changes in grade or alignment or to plumb valve stems, the deflection at any joint shall not exceed three-quarters of the maximum deflection recommended by the manufacturer of the joint used.

H. Where necessary to cut pipe, cutting shall be done with approved tools and cut ends of pipe shall be square and regular. Cutting shall be done in a manner to avoid damage to lining and coating.

I. Spigot ends of field cut pipe shall be tapered back one-eighth (1/8) inch at an angle of thirty (30) degrees with the centerline of the pipe.

J. All branches or other openings shall be bulkheaded until either capped or connected. The end of the pipe shall be bulkheaded and braced at the end of each day's work.

K. Tools or other objects shall not be stored or left in the pipe.

3.10 JOINTING OF PIPE

A. Molded rubber gasket slip on type joints shall be used for jointing of pipe. Prior to positioning the rubber gasket, the bell and spigot shall be wiped clean. After properly positioning the gasket in the bell, the joint shall be lubricated with an approved lubricant.

B. The spigot end shall be centered into the bell end until it engages the gasket. The joining pipe shall then be aligned both vertically and horizontally before applying force to make the joint. Any deflection shall be taken after the joint assembly has been completed.

C. Mechanical joints may be used as an alternate for the slip-on type joining, if approved by the Engineer.

3.11 INSTALLATION OF POLYETHYLENE ENCASEMENT

A. Polyethylene encasement shall be installed on all new pipe and fittings installed on this project. Although not intended to be a completely air- and water-tight enclosure, the polyethylene shall provide a continuous barrier between the pipe and the surrounding backfill.

B. On Pipe:

1. Cut polyethylene tube to a length approximately two (2) feet longer than the length of the pipe section. Slip the polyethylene around the pipe, centering it to provide a one (1) foot overlay on each adjacent pipe section, and bunching it accordion fashion until it clears the pipe ends.
2. Lower the pipe into the trench and make up the pipe joint with the preceding section of pipe. A shallow bell hole must be made at joints to facilitate installation of the polyethylene.
3. After completing the joint, make the overlap. Pull the bunched-up polyethylene from the preceding length of pipe, slip it over the end of the new length of pipe, and secure in place with one circumferential turn of tape, plus enough new pipe section over the end of the first wrap until it overlaps the joint at the end of the preceding length of pipe. Tape it in place. Take up the slack width to make a snug, but not tight, fit along the barrel of the pipe, securing the fold as necessary with adhesive tape at quarter points.
4. Repair any rips, punctures, or other damage to the polyethylene with tape, or with a short length of polyethylene tube cut open, wrapped around the pipe, and secured with tape. Proceed with installation of the next section of pipe.

C. On Pipe – Alternate Method:

1. Cut polyethylene tube to a length approximately one (1) foot shorter than the length of the pipe section. Slip polyethylene around the pipe, centering it to provide six (6) inches of bare pipe at each end. Make polyethylene snug, but not tight; tape down at quarter points and secure ends as described above.
2. Before making up a joint, slip a three (3) foot length of polyethylene tube over the end of the proceeding pipe section, bunching it accordion fashion. After completing the joint, pull the three (3) foot length of polyethylene over the joint, overlapping the polyethylene previously

installed on each adjacent section of pipe by a least one (1) foot; make snug, tape down, and secure each end as described above.

3. Repair any rips, punctures, or other damage to the polyethylene as described above. Proceed with installation of the next section of pipe in the same manner.

D. Bends, Reducers, Offsets, and other fittings that can be wrapped in a polyethylene encasement tube shall be covered with polyethylene in the same manner as the pipe.

E. Valves and other odd-shaped fittings which cannot practically be wrapped in a tube, shall be wrapped with a flat sheet obtained by splitting open a length of polyethylene tube. This sheet shall be passed under the valve and brought up around the body of the stem. Seams shall be made by bringing the edges together, folding over twice, and tamping down. Slack width and overlaps at joints shall be handled as described above. Tape polyethylene securely in place at valve stem and other penetrations.

F. Openings for branches, service taps, blow-offs, air valves and similar appurtenances shall be made by making an X-shaped cut in the polyethylene and temporarily folding the film back. After the appurtenance is installed, replace the film, and repair the cut, as well as other damaged areas in the polyethylene, with tape. Branches, service taps, blow-offs, air valves and similar appurtenances shall not be wrapped with polyethylene unless otherwise specified or shown on the drawings.

G. Junctions Between Wrapped and Unwrapped Pipe:

1. Where polyethylene wrapped pipe joins a pipe which is not wrapped, extend the polyethylene tube to cover the unwrapped pipe three (3) feet, unless shown on the drawings. Secure the end with circumferential turns of tape.

3.12 COATING OF BOLTS

A. All bolts and nuts installed by the Contractor shall be coated with coal tar.

3.13 SHORING, SHEETING AND BRACING

A. Where necessary for the safety of persons, adjoining structures, or property, or the work itself, the Contractor shall adequately sheet or shore the trenches and sides of all excavations and shall provide adequate support for such sheeting or shoring. The sheeting, shoring and supports shall be furnished, placed and maintained by the Contractor during the time of need for same.

B. As the excavations are backfilled, the Contractor shall carefully pull the sheeting and remove its supports in such a manner as not to endanger persons, adjoining structures or property or the work, taking care that the space left unfilled by the removal of the sheeting is compactly backfilled. No extra compensation will be allowed for removal of sheeting, shoring or supports.

3.14 THRUST BLOCKING

A. Bends, tees, dead end of pipe or fittings and hydrants shall have concrete thrust blocks installed in accordance with the details as shown on the contract drawings. No separate payment will be made for thrust blocks. This work is incidental to the installation of the water main.

3.15 GATE VALVES

A. The cost of installing gate valves in new water mains and in hydrant connections shall be included with the appropriate pay item for construct gate wells, install gate valve and box, or hydrant connection.

B. Payment for installing gate valves in existing mains will be made at the contract unit price each.

C. Gate valves and valve boxes shall be furnished by the Contractor.

3.16 GATE WELLS

A. Gate wells shall be constructed at the locations as indicated on the contract drawings.

B. Gate well walls are to be built of pre-cast concrete meeting ASTM C-478 and joints meeting ASTM C433. The outside of masonry gate wells shall be plastered to a thickness of one-half (1/2) inch with mortar. The inside joints shall be left smooth. The ring shall be set in a bed of mortar and adjusted to the grade set by the Engineer.

C. Gate wells will be paid for at the contract unit price each, which will be payment in full for furnishing all materials (including Construction castings), for all necessary excavation, backfilling, disposal of surplus material, removing and replacing pavement, curb, curb and gutter, sidewalk, and driveways, and constructing the structure complete.

D. Where gate wells are constructed over new gate valves, the unit price shall cover furnishing and installing both the gate well and the gate valve.

3.17 HYDRANT INSTALLATION

A. Hydrants shall be set plumb and to the grade established by the Engineer.

B. Payment for hydrant installation will be made at the contract unit price each, which price will be payment in full for excavation; furnishing and installing a tee in the water main; furnishing and installing the hydrant, the gate valve, and the gate valve box; blocking; and backfilling.

C. Six (6) inch hydrant connection pipe from the main to the hydrant will be paid for at the contract unit price per lineal foot for installing six (6) inch ductile iron pipe.

3.18 HYDRANT REMOVAL

A. Wherever possible, hydrants to be removed shall be left in service until new hydrants to be installed are in service. The Contractor shall do all necessary excavation required and shall remove the hydrant and hydrant valve (if any) and cap and plug the hydrant connection at the main. After the connection has been capped or plugged, necessary concrete blocking shall be placed and before backfilling, the connection shall be tested for leakage. Salvaged hydrants and fittings shall be delivered by the Contractor to the Department of Public Services Yard.

B. Payment for hydrant removal will be made at the contract unit price each, which price will be payment in full for excavation, removing hydrant and gate valve, plugging, blocking, backfilling, removing the existing surface materials, and replacing the surface materials with the same type and thickness of material as removed.

3.19 BACKFILLING OPEN TRENCHES

A. Before the usual backfilling is commenced, sand backfill shall be placed along the side and under the lower haunches of the pipe up to the top or crown of the pipe for the full width of the trench. This sand backfill shall be placed manually in layers not exceeding six (6) inches in thickness. Each layer shall be thoroughly compacted by mechanical tamping or vibrating. The cost of placing this sand backfill to the top of the pipe shall be included in the unit price bid for installation of the pipe.

B. Insofar as practicable, without interfering with the progress of the work, the Contractor shall keep streets, driveways and sidewalks open to safe use by the public.

C. All trenches and excavations under existing pavement, proposed pavement, existing roadways, driveways or sidewalk shall be backfilled with sand or gravel and thoroughly compacted by

mechanical tamping or vibrating in layers not exceeding 12 inches in depth. The Engineer may require the Contractor to further consolidate the backfill by the water jetting method after compaction by mechanical means.

D. Backfill shall not be placed against any portion of a structure until it (structure) has passed inspection.

E. Where the trench or excavation is in the parkway between the roadway and the street line or in unimproved streets, excavated material may be used in completing the backfill. Care shall be taken in placing this backfill to make sure that all boulders, pieces of concrete and such other material that might damage the pipe or structure, or prevent consolidation are not allowed to remain in the backfill material and it shall be compacted by tamping, jetting, or using compacting equipment.

F. If a bulldozer or other machine is used to place the backfill material, no material shall be pushed or dropped into the trench but shall be placed on the sloping ends of the completed backfill and allowed to roll in place to the bottom of the trench.

G. All trenches and excavations shall be backfilled as soon as inspection is completed to avoid unnecessary risk of damage to the line and to reduce the risk of accidents involving the public.

H. After backfilling is completed, the Contractor shall promptly remove all surplus and waste materials from the site, leaving the site and all places disturbed or affected by the work in a neat and orderly and dust free condition.

3.20 NEW WATER MAIN CONNECTIONS TO EXISTING MAINS

A. When connecting to existing water mains, oversized fittings may be required to match the outer diameter of the older water mains. The Contractor shall determine if oversized fittings are necessary for each connection, and shall provide all necessary materials, parts, tools, labor, equipment and all incidental work required for the connection. No additional compensation will be made for the use of oversized fittings on any connection to an existing water main.

3.21 CONNECT WATER SERVICES TO NEW MAIN

A. This item involves connecting water services to new water mains. The water services to be connected to the new mains are currently connected to water mains that will be removed or abandoned under this contract.

B. The Contractor shall install corporations in the new main and connect the services at the corporations. Locations and sizes of existing water services are shown on the plans in accordance with the best information available to the City. However, there will be no adjustment made in pay items if the locations or sizes are different than those shown on the plans.

C. If the Contractor encounters a lead water service during the installation of the water main or water service connections, they shall notify the City of the lead water service. Once the material of the service is verified by the City, the Contractor shall remove and replace the lead service with a type K copper or PE water service to the either the first shut-off valve inside the house, or 18 inches inside the house, whichever is shorter, in accordance with Michigan EGLE requirements. Follow City protocol requirements for homeowner coordination.

D. New pipe necessary to make the connections shall be Type K Copper and shall be of the same size as the existing service.

E. For water service connections where the existing water service will cross the trench of the proposed water main installation, payment will be made for installing a water service connection

using the existing water service lead (unless it is a lead water service). No payment will be made for installing new Type K Copper water service on these leads. Any new Type K Copper water service required on these services shall be considered incidental to the construction of the water service connection.

3.22 MAINTENANCE OF TRENCHES

A. During the period between the time when a section of water main is completed and the time when the final pavement surface is replaced, the Contractor shall maintain the top of the trench in a suitable condition for traffic to use. The Contractor shall place a minimum thickness of three inches of cold-mix asphalt in all areas where pavements have been removed. Such cold-mix asphalt shall be maintained, and supplemented, if necessary, until such time as permanent pavement is replaced.

B. There is no separate pay item for maintenance of trenches, as that work is considered incidental to the water main construction.

3.23 SURFACE RESTORATION

A. Surfaces removed or damaged for the construction shall be replaced as follows, unless otherwise specified on the plans:

1.	Existing Surface	Replaced By
a.	Gravel (driveways, shoulders, etc.)	8" 23A aggregate
b.	Bituminous mat	5" full-depth asphalt
c.	Asphalt (full-depth or over aggregate)	5" full-depth asphalt
d.	Concrete pavement	8" concrete
e.	Asphalt surfaced concrete	8" concrete and 2" asphalt surfacing
f.	Concrete sidewalk	4" concrete, except 6" at drives
g.	Grass surface	3" topsoil plus seed or sod

B. For asphalt surfaces, the top shall be a wearing course mixture at one (1) inch minimum thickness. The balance of the thickness shall be: (a) leveling course mixture when over a concrete base and (b) base course mixture when in a full-depth asphalt.

C. Surfaces not described above, which are damaged for the construction, shall be replaced with the same type and thickness of material removed.

D. All surface restoration shall comply with the City's Standard Details and specifications for the specific type of work being done.

3.24 FLUSHING

A. Upon completion, the new main shall be flushed with potable water until the water runs clear in color and no foreign matter is discharged. The main shall be slowly filled and due care taken to expel all air from the main. A temporary connection may be installed to conduct the water out of the trench. Flushing shall be done in a manner that will not cause damage to adjacent property.

B. Standards for proper flushing shall conform to AWWA C600 and C605.

C. Per AWWA C651, a minimum of 3 feet/second flushing velocity in the line shall be provided while conducting the preliminary flushing.

3.25 PRESSURE TEST

A. The pressure test shall be performed in accordance with AWWA C600. The leakage, as measured by water meter or by other means approved by the Engineer, from the section of main under test pressure shall not exceed a rate of 10.49 U.S. gallons per inch of main diameter per mile of pipe in twenty-four (24) hours. (See "Water Main Disinfection & Leakage Test" table at the end of this specification section).

B. In case the leakage under test exceeds the maximum above specified, the leaks shall be discovered and repaired in an approved manner.

C. Any faulty pipe, fittings, valves, or other accessories included in work under this Contract and disclosed during testing shall be replaced with sound material and the test shall be repeated until specified requirements are met.

3.26 CLEANSING AND DISINFECTION OF NEW WATER MAIN

A. Before the new water mains and appurtenances are placed in service, they shall be cleansed, sterilized, and the water passing through them must show by tests safe bacteriological results.

B. All rules and practices of the Oakland County Health Department, the Michigan Department of Public Health, and the Michigan Department of Environmental Quality must be strictly followed.

C. The Contractor shall provide all necessary connections at the points of beginning of the individual sections of mains for applying chlorine to the mains for disinfection purposes.

D. After water mains laid under this contract have been acceptably tested and flushed, they shall be disinfected by the Contractor, in accordance AWWA Standard C651 for the "continuous feed method". All new mains and pipe shall be chlorinated with up to twenty-five (25) parts per million or more of liquid chlorine, or approved equal, and the chlorinated water allowed to stand in the mains for twenty-four (24) hours, at the end of which period the chlorinated water at all parts of the new mains shall show a free available chlorine residual of not less than ten (10) parts per million. If less than ten (10) parts per million residual is shown at the end of the first twenty-four (24) hour period, additional chlorine shall be added until a residual of not less than ten (10) parts per million at all parts of the new system is shown after a subsequent twenty-four-hour period. The chlorinated water shall then be removed from the mains by the Contractor and the mains left full of water ready for use. (See "Water Main Disinfection & Leakage Test" table at the end of this specification section). Care should be taken to not excessively chlorinate the water main pipes above the recommended levels as over chlorination may negatively impact the integrity of the water main and appurtenances.

E. After satisfactory chlorination of the mains has been completed as described above, and the chlorinated water flushed out and the mains filled with potable water, the Southeastern Oakland County Water Authority will take bacteriological samples of the water in the mains for analysis, under supervision by the engineer. Two consecutive sets of acceptable bacteriological test samples shall be taken minimally 24 hours apart from at least one end of the line and at every branch line which exceeds one pipe length, at maximum length intervals of 1 sample per 1,200 linear feet of water main pipe. More frequent sampling (1 sample for every 200 feet) is required if trench water or debris has entered the pipe. All samples shall be analyzed by an EGLE-approved laboratory. If the analyses of samples show the Construction water to be unpotable because of unsatisfactory disinfection of the mains, the mains shall be re-chlorinated at the Contractor's expense until satisfactory samples are obtained. Any charges by the Water Authority for re-testing the water shall be paid by the Contractor.

F. De-chlorination of the water mains shall be in accordance with AWWA C655 and necessary testing and approval shall occur prior to the water system being placed back into service, or any discharges from the water system to the environment.

3.27 PAYMENT FOR WATER MAINS

A. Measurement of completed and accepted water main laid will be made in lineal feet, measured on the axis of the pipe laid from the beginning to the end and shall include measurements through fittings and valves. Branches will be measured in lineal feet from the center of the tee or cross, on the supplying water main, to the end of the pipe or special casting including the cap or plug in the case of a dead end and to the center of hydrants.

B. The unit price per lineal foot of pipe laid shall include all excavating; tunneling; boring and jacking; sheeting; bracing; shoring and de-watering of trench; removing and replacing pavement, sidewalk, or other type of existing surface; furnishing, laying and jointing of pipe and fittings; installing gate valves; connecting to existing water main; installing blocking; all backfilling; flushing; pressure testing; and disinfecting.

3.28 WATER MAIN DISINFECTION & LEAKAGE TEST

TABLE 2: WATER MAIN DISINFECTION AND LEAKAGE TEST

Nominal Pipe Diameter (Inches)	Contents Per 1,000 Feet of Pipe		Pounds of Calcium Hypochlorite @ 65% to obtain 50 PPM Per 1,000 Feet of Pipe	Allowable Leakage (L)* in Gallons of Water Per 1,000 Feet of Pipe at 150 PSI in Two Hour Test
	Cubic Feet	Gallons		
4	87.3	650	0.42	0.67
6	196	1,470	0.94	0.99
8	349	2,610	1.67	1.32
10	545	4,080	2.62	1.65
12	785	5,880	3.77	1.99
16	1,396	10,400	6.67	2.64

*L = 10.49 gallons per day, per mile, per inch diameter at 150 psi., per AWWA C600.

SECTION 600
SEWERS AND RELATED STRUCTURES

PART 1. GENERAL

1.01 SUMMARY

A. This work shall include the furnishing of all labor, materials and construction equipment necessary for the construction of sewers of the size and character shown on the drawings and specified herein including the furnishing and installing of the pipe and bedding and necessary testing. This work shall include the provision of all labor, materials, equipment, and supervision required, including excavation, bedding, backfill, testing and sterilization and other incidental work necessary for a complete system.

B. The work of this section shall also consist of the furnishing and construction of manholes and catch basins including inlets as detailed on the Drawings and at the locations shown on the Drawings. Concrete, excavation and backfill shall be as specified in this section and other sections of the specifications. Manholes and catch basins shall be complete with frames, inlets, etc., to meet new or existing pavement surfaces, sidewalks, or grades and shall be included in the work under this section of the Contract.

C. Contractor shall check entire length of route for acceptability of site conditions, up to and including soil conditions, to perform this work prior to bidding and again prior to mobilizing on the site to perform the various work items.

1.02 REFERENCES

A. Performance and material requirements shall meet specific Reference Standards as referred to hereinafter under individual items.

B. Unless otherwise specified, all materials shall also conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 CERTIFICATION AND INSPECTION

A. All pipe and fittings delivered to the job shall be accompanied by certification papers showing that the pipe and fittings have been tested in accordance with the applicable Specifications for this project. All pipe and fittings will be inspected upon delivery to the jobsite. No cracked, broken or damaged pipe will be allowed in this work.

B. Each piece of pipe and each fitting shall have its weight and class designation conspicuously painted or cast on it. All other pipe materials shall have the class designation painted thereon. Where required, other designation marks shall be painted on the pipe or fittings to indicate correct location in the pipe line in conformity to a detailed layout plan.

1.04 SHOP DRAWINGS AND GUARANTEES

A. Contractor shall furnish shop drawings and guarantees of the items to be furnished under this section of the Contract. Design details of joints and joint restraint shall be submitted to the Engineer for consideration and approval before ordering any pipe.

PART 2. MATERIALS

2.01 SEWER PIPE

A. All sewer pipe supplied and installed on this project shall be of the sizes and types called for on the drawings.

1. Reinforced Concrete Sewer Pipe (RCSP): ASTM C\-76, Class IV, or as designated on the drawings.
2. Polyvinyl Chloride Pipe (PVC) - ASTM D-3034, SDR 23.5, for 6-inch diameters. PVC compounds to meet ASTM D-1784.
3. Polyvinyl Chloride Pipe (PVC) - ASTM D-3034, SDR 26, for 8-inch to 15-inch diameters. ASTM F-679, SDR 26, for 18-inch to 24-inch diameters. PVC compounds to meet ASTM D-1784.
4. PVC Schedule 40 Sewer Pipe: ASTM D1785 "Standard Specification for PolyVinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120.

2.02 SEWER POINT REPAIR MATERIALS

A. The materials acceptable for use in making a point repair are listed below:

1. Sewer Pipe - The following types of sewer pipe may be used as replacement pipe for a point repair. They shall conform to the appropriate American Society for Testing Materials (ASTM) Specification as listed below and any other ASTM or other applicable specification:
   a. PVC Schedule 40 Sewer Pipe for 10" and smaller only.
   b. ASTM C76 Class IV Concrete Sewer Pipe for 12" diameter and larger.
   c. Approved Equal

2. Sewer Connections and Appurtenances
   a. Service Connection - Any service connection replaced during a point repair shall conform to the pipe manufacturer's recommendations and specifications and applicable ASTM Specifications, for the service connection and for installation of such. The material of the connection shall be similar to the sewer pipe it will be connected to.

2.03 PIPE BEDDING

A. All sewer six (6) inches in diameter and larger laid on this project shall be installed in conformance with the bedding requirements established on the cross-sections shown on the City of Birmingham Standard Notes & Details for Sanitary, Combined, and Storm Sewers, as applicable.

2.04 STRUCTURES

A. Unless otherwise noted on the drawings or in supplemental specifications, precast manhole sections shall be used for all new sewer structures, including manholes, catch basins, and inlets. All concrete shall be 4,000 pounds per square inch, as determined by core test or cylinders. All precast sections shall bear the stamp of an approved testing laboratory as having been tested and delivered from tested stock of the manufacturer, at the expense of the Contractor. Precast reinforced manhole sections shall meet the requirements of current A.S.T.M. C-478, and shall be in accordance with the City of Birmingham Standard Notes & Details for Sanitary, Combined, and Storm Sewers, as applicable.

B. The top section shall be an eccentric cone with one straight side (with manhole steps installed in straight side at the factory). The top section shall be set at an elevation to provide for three (3) courses of brick between the top face and the manhole frame when set to grade. All precast

manholes shall be standard tongue and groove using mastic joint materials equal to DeWitt No. 10. All interior joints shall be pointed with mortar and all visible leaks must be stopped.

C. Manhole frames and covers shall be E.J.I.W. #1040-A, with logo covers and text indicating sanitary, combined, or storm sewer. Drainage structure frames and covers shall be E.J.I.W. #5000 Z4/M4 with hinged assembly, except where modified on the plan.

D. Cast iron manhole steps shall be castings meeting the requirements of A.S.T.M. Specifications for "Gray Iron Castings," A48, Class No. 35B. The steps shall be approximately 10" x 10" x 3". Steps in precast manhole sections shall be cast in place at the plant.

E. All manholes shall have channeled bottoms. For sewers 12" diameter or less, the channel shall be 3/4 depth of pipe. For sewers larger than 12" diameter, the channel shall be a minimum of 9" deep.

2.05 GRANULAR BACKFILL

A. Contractor shall install compacted sand backfill meeting MDOT Class II specifications, compacted to 95% maximum modified proctor density in the locations required per MDOT Standard Detail R-83-B, or where called for on the plans.

PART 3. EXECUTION

3.01 MEASUREMENT AND PAYMENT

A. Where called for in the proposal, the compensation to the Contractor for the sewer installation of the diameter specified will be paid for at the contract unit price per lineal foot measured in place along the center of the pipe. The contract unit price for this work shall be payment in full for furnishing the materials including wyes and all necessary excavation, sheeting or bracing, draining, laying, jointing, bedding, backfilling, disposal of surplus materials, testing, and restoration, and all other work incidental to the construction of the sewer. Final measurements for sewer will be total lineal feet from center to center of standard manholes or center of manholes to face of tunnel sewers where connection only is made thereto.

B. Junction chambers, gate chambers, and other special structures will not be included in measurements of the sewer. Sewer measurements at these structures will end and begin respectively at inside wall of outlet and inlet end respectively, unless otherwise indicated on the plans.

C. Unless specified otherwise, manholes and drainage structures will be paid for at the contract unit price each, which price shall be payment in full for furnishing the materials, including the required fittings, frames, and full grates, steps, and for all labor, equipment and tools, all necessary excavation, backfilling, disposal of surplus material, and all work incidental to the completed structures.

3.02 PIPE DELIVERY

A. A test certificate from an independent testing laboratory showing strength of pipe when tested in accordance with the applicable A.S.T.M. Standards shall be submitted to the Engineer before pipe is delivered to the job site. One certificate shall be furnished for each size of pipe. The Engineer may require additional tests of pipe stored at the plant or delivered to the job, should he have reason to believe that inferior pipe is being delivered on the job. The cost of each test shall be borne by the Contractor. The pipe supplier shall also furnish a certificate stating that all pipe supplied was manufactured from substantially the same material and in the same manner as pipe tested and all pipe delivered to site shall have the test stamp of the testing laboratory making such tests.

B. The pipe shall be distributed at the site by the Contractor as required, and care shall be exercised to prevent injury to the pipe in handling. Proper tools and implements, for safely handling the pipe and other materials, shall be provided by the contractor.

C. Pipe must be protected from falling, either from truck to ground or into the trench, and when distributed along the line or stored near a road, must be kept clear of passing vehicles.

D. The Contractor shall place the pipe so as to cause the least amount of interference to abutting property owners and traffic using the street. Barricades and lighting shall be provided at intersections and other locations where the pipe will interfere with pedestrian or vehicular traffic.

E. All damage caused by storage of the pipe on the construction site shall be repaired by the Contractor, including but not limited to sidewalks, driveways, lawns, and shrubbery. No pipe shall be allowed to be stored longer than three days prior to beginning construction on the section of sewer.

F. All materials will be inspected before placing in the trench, and if defective, marked "REJECTED" and removed from the site by the Contractor. All damaged materials shall be replaced by the Contractor at no additional cost to the City.

3.03 EXISTING STRUCTURES AND UTILITIES

A. Underground structures and utilities are shown on the construction drawings as an aid to the contractor, but the owner does not guarantee their location or that other underground structures or utility services on the plans, and it shall be the Contractor's responsibility to locate them. The City will, whenever possible, and when requested by the Contractor, stake the location of sewer and water services at the street right-of-way line.

B. In crossing over or under underground utilities, the Contractor shall use all possible care in protecting the utilities and to maintain their free unobstructed continuous use. The contractor will be required without additional compensation to repair, replace or rebuild any such improvement injured or damaged by him, and shall be responsible to the department, companies, individuals or corporation controlling such improvements.

C. All underground utilities shall be supported on a foundation of sand or sand-gravel thoroughly compacted by mechanical tamping in order to prevent future settlement and possible failure of the utility. Under sewers and sewer services "cement reinforced sand backfill" rather than "sand or sand gravel" shall be used. Gas mains and gas services shall be supported in accordance with the requirements of the Consumers Power Company.

3.04 MAINTAINING FLOW

A. All combined sewers will likely have continuous dry weather flows, all of which shall be diverted in a safe manner so as to cause no inconvenience to the public. Special care must be taken to ensure that no part of the work is built under water, and the work must remain dry until all concrete and/or mortar has set up.

3.05 EXCAVATION

A. Excavation shall be open cut from the surface. All work shall be done to true line and grade. The Contractor shall remove all obstructions or encumbrances (except those which are specifically noted to be preserved) which may be in the proposed line of the sewer, the cost of doing such work shall be included in the contract unit price per lineal foot for laying sewer.

B. Trenches shall not be excavated for a distance greater than fifty (50) feet in advance of completed sewer without the permission of the Engineer.

C. Excavated material permitted to be used for backfill may be deposited along the line of work where space permits provided it does not cause damage to trees, shrubs, fences, etc., nor cause excessive inconvenience to public travel and adjoining property owners, nor endanger the bank of the trench by imposing too great a load thereon. All material in excess of the quantity permitted for backfilling and all materials unsuitable for backfilling shall be hauled away by the Contractor at his expense in an expeditious manner.

D. Excavation shall be of sufficient widths and depths to provide adequate room for the construction and installation of the work to the lines, grades, and dimensions called for on the drawings, except the width of a trench from the invert to a height twelve inches above the top of the sewer barrel shall not be greater than as follows:

Pipe Size	Maximum Trench Width
12" or less	30"
15" to 36"	O.D. + 12"
42" or greater	O.D. + 24"

E. If the trench width as specified above is exceeded, the Contractor shall install, at his own expense, concrete cradling or other approved bedding, to support the additional backfill load. In case the bottom of the trench is unsuitable as a foundation, it shall be further excavated and prepared. If the unsuitable condition of the foundation is caused by factors beyond the Contractor's control, the additional excavation and preparation will be paid for as extra work.

F. Where, through the Contractor's construction procedure, or because of poor existing ground conditions, it is impossible to maintain alignment and grade properly, the Contractor shall, at his own expense, excavate below grade and replace with large size aggregate or slag in order to insure the pipe, when laid, will maintain correct alignment and grade.

G. If the trench at any point along the line will be opened nearer than six (6) feet to the face of the trunk of an existing tree, and in the opinion of the Engineer the excavation would be injurious to the tree, he may require the Contractor to tunnel under the tree.

H. Selected excavated material may be used for backfilling under trees and it shall be thoroughly tamped to completely fill the excavated space between the pipe and excavation by means of mechanical tampers.

I. Where the trench must be cut through concrete or asphalt pavement, driveways, or sidewalk, particular care shall be taken not to unnecessarily damage adjoining areas. All cuts through existing concrete or asphalt pavement, sidewalks or driveways are to be resurfaced with like materials. Pavement breaking by the use of a drop weight is prohibited.

J. Excavation shall be sheeted and braced as necessary to ensure complete working safety and to protect adjoining structures or conduits. If at any time the Engineer has reason to believe that the sheeting or bracing installed by the Contractor is insufficient, he may require that an additional amount shall be placed, but such requirement or failure to make such requirements shall not relieve the Contractor from his liability.

K. No extra compensation shall be paid the Contractor for sheeting or bracing left in place, unless ordered left in place by the Engineer and then only a fair salvage value for the material left in place shall be paid. The Contractor shall receive no extra compensation for sheeting or bracing left in place in tunnels.

3.06 TUNNELING

A. Tunneling under pavements or streets will not be allowed without the approval of the Engineer in writing, or unless noted on plans or in the Specifications. Where tunneling is permitted, there shall be a minimum clear space of not less than six (6) inches between the outside of the pipe in the tunnel and the face of the excavation or the sheeting or bracing that is nearest the pipe.

B. All space outside the finished sewer wall shall be completely filled with 1:2 cement-sand grout applied under pressure.

C. Facilities for ventilation and lighting shall be supplied as necessary for reasonable working conditions and for inspection.

D. Any excess trench excavation made below the pipe shall be refilled with crushed stone, sand, or concrete as directed by the Engineer. Under all conditions, sewer pipe shall have a firm bearing which will insure permanent grade and alignment and proper support against crushing load.

E. Upon completion of the construction work in tunnel, the sheeting and bracing, if any, shall be left in place and all the remaining space between the outside of the pipe and the excavation shall be filled with cement reinforced sand backfill and thoroughly compacted.

F. When boring under pavement, the pit must be a minimum of ten (10) feet away from the pavement edge, unless previously approved by the Engineer.

3.07 LAYING PIPE

A. Unless otherwise allowed under specific specifications for a particular type of sewer or unless permitted by the Engineer, construction shall begin at the outlet end of sewer and proceed upgrade.

B. All pipe shall be laid true to line and grade and the ends of the pipe shall abut against each other with the bell end facing the direction of laying. Each pipe as laid shall be checked by the Contractor with line and a grade pole or a laser beam to insure that this result is obtained.

C. Alignment of laser beams shall be checked with sufficient frequency to assure compliance with plans.

D. Each pipe shall be inspected for defects prior to being lowered into the trench and inside of pipe and outside of spigot shall be cleaned of any dirt or foreign matter.

E. Proper support and bedding of all pipe through the full length of the barrel shall be made by constructing bedding as required and detailed on the plans. Special care shall be observed to avoid load on bells of bell and spigot pipe. Each pipe shall be pushed firmly against pipe previously placed and carefully aligned.

F. Mechanical means, consisting of a cable placed inside the pipe with a suitable winch, jack, or come-along for pulling the pipe home and holding the pipe in position, shall be used where the manual means will not result in pushing and holding the pipe in position.

G. Work executed during the winter shall receive exceptional attention to avoid excessive backfill load on pipe. If sides of trench are frozen, the amount of selected material tamped above the pipe shall be increased to at least two feet. No frozen backfill material shall be used.

H. At manholes the pipe shall be placed on a concrete cradle from the manhole to the point where the sewer trench does not exceed the specified width and shall be done in accordance with the City of Birmingham "Underground Structures and Water Main Standards".

3.08 JOINTS

A. All sewer joints shall be sealed with flexible, watertight, rubber type gaskets; pre-cast die molded bituminous material as used on slip seal pipe; or an approved equal. Before placing the pipe in position in the trench adjusted to grade, the joint compound on both ends of the pipe shall be painted with suitable solvent or lubricant material. The spigot or tongue ends of the pipe to be laid shall be inserted and shoved home against the base of the socket last laid. Throughout this operation every effort shall be taken to prevent sand or gravel from entering the joint or pipe.

B. Joint material shall be applied to the pipe on the day the pipe is placed in the trench. Joint material shall be stored in closed containers when unattended.

C. Concrete pipe 36" and larger shall have all joints inside cement pointed, with cement mortar compound of one (1) part cement and two (2) parts of sand. Mastic compound or any foreign material within 3/4" below inside finish of pipe shall be thoroughly removed before cement grout is applied.

3.09 MANHOLES, DRAINAGE STRUCTURES

A. Manholes and drainage structures shall be constructed of the type and in accordance with the details shown on the plans and at the locations shown on the plans. All necessary steps, frames, and covers shall be furnished and installed. Covers shall be set at the required final elevation so that no subsequent adjustment shall be necessary.

B. Excavation shall be carried to the depth required to permit the construction of the required base and bottom of excavation shall be trimmed to a uniform horizontal bed. The excavation shall be sufficiently wide to allow for shoring, bracing, or form work, should any or all be necessary, and to allow for accessibility in plastering the exterior of brick masonry. The excavated section shall be completely de-watered before any concrete is placed thereon.

C. Concrete shall be Grade A 3,000 pounds per square inch compressive strength, minimum content 1.375 barrels per cubic yard.

D. Brick shall be made of clay or shale or concrete brick and shall be whole, thoroughly and evenly burned, of close and uniform texture, free from cracks and warps, with even faces and uniform texture, and uniform in shape and size. Brick shall show a minimum average compressive strength of 2,000 pounds per square inch and average absorption of water in twenty-four (24) hours of not more than 22 percent of dry weight.

E. The brick shall be laid radially in courses in a full bed of mortar with interior joint not more than 1/4" in width. Whole bricks only shall be used except to effect closure and to fill in the outside portion of the radial joints. Each seventh course shall be laid in "stretchers," the intervening courses shall be composed of "headers". Below a depth of thirteen (13) feet, walls of brick manholes shall be laid in alternative stretcher and header courses.

F. When completed, manholes and drainage structures shall have sand or gravel placed uniformly around the structure in one foot lifts, and compacted in place. No backfill shall be placed around manholes or structures for twenty-four (24) hours, if an outside plaster coat has been applied.

G. Manholes and Structures shall not be placed under conditions which may be expedited to result in defective work. If the soil at the established grade is not sufficiently stable to properly support structures, the Contractor, at his own expense, shall excavate up to 24" below grade and refill the trench to the proper grade with compacted crushed stone chips. If stable support cannot be established in this manner, the work shall be discontinued until plans for change in construction have been submitted by the Contractor to the Engineer for approval and approval has been granted.

3.10 SERVICE CONNECTIONS

A. Service connections shall be made to sewers with "wyes" manufactured on the sewer pipe. Breaking holes in the pipe will not be allowed without specific authorization of the Engineer.

3.11 SHEETING AND BRACING

A. Where necessary in order to construct the work called for by the contract, to insure the safety of the men, or to protect other things of value, the Contractor shall adequately sheet or brace all open excavation or tunnels. The Contractor shall install additional sheeting or bracing as directed by the Engineer, but such order, or failure to give such order, shall not release the Contractor from his liability for damage to person or property under this contract.

B. All sheeting, shoring and bracing, unless left in place as ordered by the Engineer, shall be removed from open trench work progressively with the backfilling operations in order to prevent slides from the sides of the trench. All sheeting left in place shall be cut off five (5) feet below ground line.

3.12 PUMPING, BAILING AND DRAINING

A. The Contractor shall provide and maintain adequate pumping and drainage facilities for removal and disposal of waste from trenches or other excavation.

B. Where the work is in ground containing an excessive amount of water, the Contractor shall provide, install, maintain, and operate suitable well points, connecting manifolds, and reliable pumping equipment to operate same to insure proper construction of the work.

C. In no case shall water be allowed to rise in or about the pipe before the joint has become thoroughly set. No walking on or over the pipes after they are laid, except as may be necessary in tamping the earth in refilling, will be permitted until they are covered with earth to a depth of twelve (12) inches.

D. Drainage or discharge lines shall be connected to adjacent public storm sewers or extended to nearby watercourses wherever possible. In any event, all pumping and drainage shall be done without damage to any highway or other property, public or private, and without interference with the rights of the public or private property owners.

E. The Contractor shall receive no extra compensation for providing, maintaining, or operating any de-watering or drainage facilities.

3.13 BACKFILLING

A. It is the intent of these specifications that all of the excavation be backfilled with thoroughly consolidated, suitable material in such a manner that the alignment and grade of the construction work in the excavation be not disturbed and that the subsequent settlement of the surface over the excavation and adjacent thereto be avoided as far as possible.

B. Insofar as practicable, without interfering with the progress of the work, the Contractor shall keep streets, driveways and sidewalks open to safe use by the public.

C. All trenches and excavations under existing pavement, proposed pavement, existing roadways, driveways or sidewalk shall be backfilled with sand or gravel and thoroughly compacted by mechanical tamping or vibrating. Where the existing roadway or driveway is gravel surfaced, the top eight (8) inches of the backfill shall be road gravel. The Contractor will not be required to replace any oil treatment or seal coat, however, he shall maintain the top of the trench in a dust free manner until completion of the project. No additional payment will be allowed for the sand or gravel backfill, the cost of which shall be included in the unit price bid for the installation of the pipe and structures.

D. Backfill shall not be placed against any portion of a structure until it (structure) has passed inspection.

E. Where the trench or excavation is located in the parkway between the roadway and the street line or in unimproved streets, excavated material may be used in completing the backfill. Care shall be taken in placing this backfill to make sure that all boulders, pieces of concrete and such other material that might damage the pipe or structure, or prevent consolidation are not allowed to remain in the backfill material and it shall be compacted by tamping, jetting, or by use of compacting equipment.

F. If a bulldozer or other machine is used to place the backfill material, no material shall be pushed or dropped into the trench, but shall be placed on the sloping ends of the completed backfill and allowed to roll in place to the bottom of the trench.

3.14 EMERGENCY REPAIR

A. When the Contractor is not actively performing work on a particular construction site, but where delayed construction operations, testing and/or surface restoration work yet remains to be completed to meet the requirements of the Specifications, situations may arise of an emergency nature as a result of such uncompleted work which may affect directly or indirectly public and/or private property or which may ultimately, either directly or indirectly, affect the health, safety, and welfare of individuals or the general public. While these situations can readily develop as emergencies, the Engineer shall direct field related operations and require immediate efforts by the Contractor to remedy the deficiency in a method of his choosing because of his expertise in the field, time being of the essence. The correction of the emergency which may arise when no construction activity exists on the construction site shall be handled in the following manner.

1. The Engineer shall inspect the site, take any necessary photographs and/or prepare any necessary sketches of conditions at the site to determine that the situation constitutes an emergency.

2. The Engineer then has three (3) alternate sources of manpower and equipment to be selected to remedy the emergency situation in the following order:

   a. The Contractor under contract with the Owner to perform all work on the site location in question.
   b. The City's Department of Public Services (DPS).
   c. An independent contractor designated by the Engineer.

B. Since the nature and extent of most unfinished work on a particular construction site is well known by both the Engineer's authorized agent and the Contractor at the time of declaring an "emergency situation" as set forth herein before the Contractor, under contract to the Owner for the particular project, the Contractor would be the first party notified and would be expected to respond immediately with necessary labor and equipment to remedy the problem.

C. If a reasonable time to respond to the emergency notification is not evident, in the best judgment of the Engineer, then the Contractor shall be judged to have waived his rights to physically correct the problem, but not to his obligations to pay for such physical correction or damages resulting therefrom. The Engineer shall then contact the City's DPS for their assistance in correcting the "emergency situation". Where existing commitments by the DPS prohibits their immediate response to the request of the Engineer, the Engineer shall finally direct that corrective measures be performed by the independent contractor noted above to perform such work when so directed.

D. Since the cost for all remedial work undertaken by the Contractor on this project shall be borne by the Contractor and it is necessary to engage the assistance of the DPS or an independent contractor, then all costs incurred shall be deducted from monies due and payable to the Contractor on the particular project as set forth on any ensuing regular job estimates.

E. Typical costs which will be deducted from the contractor monies due would be as follows:

1. Payroll wages, benefits, and taxes.
2. Material bills.
3. Equipment rental (Detroit area rates) and mobilization costs.
4. 15% profit and overhead for independent contractor.
5. Inspection costs.

3.15 POINT REPAIRS TO SEWER LINES

A. It is the intent of the specifications to provide a basis by which a contractor can successfully and completely make a point repair to a sanitary sewer line. This basis shall cover all aspects of a point repair including methods, materials, and payment for work.

B. A point repair to a sanitary sewer line shall be defined as a repair made at a specified location on a sanitary sewer line.

C. A point repair shall be classified by the inside diameter of the pipe and the length of pipe replaced.

D. Methods:

1. The method by which a repair shall include all supervision, labor, equipment and materials necessary to perform and successfully complete the following items:

a. Excavating a trench deep enough to uncover a sanitary sewer line, wide enough to work in, and long enough to uncover up to twenty (20) linear feet of sewer pipe while providing protection of adjacent utilities, pavements, etc.
b. Remove any landscaping fences, asphalt, concrete, base material, storm sewer, etc., that interferes with the repair made at each specified point, and for the replacement of said landscaping, fences, asphalt, concrete, base materials, storm sewer, etc., in the same or better condition as found. Any such item not replaced in the same or better condition as found, as determined by the Engineer, shall be redone at the Contractor's expense.
c. De-water any trench where excess water accumulates and installation, as required, of compacted sand backfill under paved area.
d. Replace and reshape the bottom of the trench so that the grade of the pipe replaced will match that required for the existing sewer line. Any material replaced in the bottom of the trench shall be compacted so as to prevent sags in the sewer line due to settlement of the trench material.
e. Repair and replace up to twenty (20) feet of the existing sewer pipe with the properly sized pipe the same as existing, as needed.
f. Repair and replace any house service lateral encountered within the required twenty (20) linear feet of uncovered pipe with properly sized service, as specified and with enough sewer pipe to reconnect to the service line where it was severed.
g. Tie all new laid sewer pipe to existing sewer pipe, main sewer lines and service lines, so that no possible source of infiltration/inflow (a leak in the line) may be created.
h. Any sewer pipe broken by the Contractor, outside of the required twenty (20) linear feet of pipe, shall be replaced or repaired at the Contractor's expense. All such

occurrences shall be pointed out by the Contractor to the Engineer when they happen. The materials to use for making the tie-in shall be properly sized.

i. Backfill the open excavation so that the ground elevation will most nearly match the elevation before excavation.

E. Bypass Pumping:

1. On all sewer lines in which a point repair is to be made, the normal flow of sewage shall be re-routed by bypass pumping.

END OF SECTION

SECTION 610
FLOWABLE FILL

PART 1. GENERAL

1.01 SUMMARY

A. This work shall include the furnishing of all labor, materials and construction equipment necessary for the providing flowable fill for the abandonment of sewers and/or structures of the size and character shown on the drawings and specified herein.

B. Where called for on the drawings certain areas of the excavation and areas of existing structures and sewers to be abandoned shall be backfilled with flowable fill.

1.02 REFERENCES

A. Performance and material requirements shall meet specific Reference Standards as referred to hereinafter under individual items.

B. Unless otherwise specified, all materials shall also conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 SUBMITTALS

A. The method used to measure fly ash and cement shall be submitted for acceptance. The contractor's proposed method shall be one that compliments the type of mixing plant being used and provides assurance that the percentage of cement is being satisfactorily controlled. Cement content shall be based on the dry weight of the fly ash in the mix. The batched weight of fly ash shall be corrected for its moisture content. Water shall be measured, although its control will be a function of consistency (slump and workability) of the mix.

PART 2. MATERIALS

2.01 FLOWABLE FILL

A. Flowable fill shall consist of a mixture of fly ash, cement and water such as "C-Fill" as manufactured by Clawson Concrete or "M-Crete" as manufactured by Michigan Foundation or equal.

B. Cement shall be Portland Cement conforming to A.S.T.M. C 150 Type I. Air entrained cement, pozzolan, and other types of cement shall not be used. Fly ash shall conform to the requirements of A.S.T.M. C618, Class F. Water shall be potable.

C. The stabilized fly ash mixture shall contain 4 to 5% Portland cement based on the dry weight of the fly ash. Occasional batches of mixture with a cement content of 3 to 4% will be allowed provided immediate action is taken to restore the cement content to the specified range. Mixtures containing less than 3% shall not be used. The mixture shall have a slump of 10 to 12 inches at the point of placement. The mix temperature shall not be lower than 50°. The mixture shall have a compressive strength of 100 psi minimum at twenty-eight (28) days.

PART 3. EXECUTION

3.01 PREPARATION

A. Prior to abandoning sewers with flowable fill, the Contractor shall install all necessary bulkheads in sewers and/or structures and ensure that they will not leak when flowable fill is placed.

3.02 MIXING

A. The flowable fill may be mixed by a pug mill, central concrete mixer, turbine mixer or other acceptable equipment or method. Provisions shall be made to maintain the mix temperatures and slump as stated.

3.03 PLACEMENT

A. The material shall be placed by end or side dumping, tremie, pump, conveyors, or other suitable method. Lines and grades shall be as shown on the design drawings. Stabilized fly ash shall be protected from freezing temperatures for the initial twenty-four (24) hours after placement. Protection may consist of earth cover, straw, or a sacrificial layer of the stabilized fly ash mix.

3.04 MEASUREMENT & PAYMENT

A. Unless it is identified in the Proposal as a separate pay item, installation of flowable fill is incidental to the other work of this project.

END OF SECTION

SECTION 710
PORTLAND CEMENT CONCRETE PAVEMENT CONSTRUCTION

PART 1. GENERAL

1.01 SUMMARY

A. This section includes the provision of all labor, materials, equipment, supervision and incidentals required for the furnishing and placement of ready mixed Portland Cement Concrete (PCC) pavement and curbs and gutter.

1.02 REFERENCES

A. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 SUBMITTALS

A. Contractor shall submit proposed mix design for all PCC pavements to be supplied on this project.

B. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.01 CONCRETE

A. Provide materials in accordance with subsection 602.02 of the Standard Specifications for Construction and the contract.

B. Portland Cement Concrete (PCC) Mixtures shall meet MDOT requirements for Concrete Grade 3500HP, which requires coarse aggregate material to meet optimized aggregate gradation requirements in accordance with Section 10.04.03 of the MDOT 2020 Standard Specifications for Construction. The submitted PCC mix design shall document that the optimized aggregate gradation and associated process control has been provided in accordance with the MDOT Optimized Aggregate Gradation Spreadsheet.

C. Fine aggregate shall be MDOT 2NS sand, and meet MDOT special provision 20SP-1002A-01 requirements for alkali silica reactivity.

D. MDOT 3500HP mixtures require a range between 25-percent to 40-percent of replacement of the Portland cement content with supplementary cementitious materials (SCM's). All PCC mixtures allowed for use in Birmingham shall meet at least one of the following criteria:

1. Provide a maximum of 25-percent replacement of the Portland cement in the concrete mixture with a SCM (Ground Granulated Blast-Furnace Slag (GGBFS) or approved equal).

2. Utilize Portland cement that has a low alkali percentage (0.6% or less total cement alkali content).

E. Portland cement type I, type II, or type IL may be used in the PCC mixture. If type IL is used, a maximum allowable water/cement ratio in the mixture shall be limited to 0.43 to reduce scaling potential.

F. The concrete mixture supplied on this project shall conform to the requirements of the Concrete Durability Requirements section for resistance to alkali-silica reactivity (ASR) and for air entraining requirements.

G. Concrete provided on this project shall be Ready Mixed Concrete; central mixed or transit mixed concrete is permitted. The source of ready mixed concrete shall be approved by the Engineer.

H. Admixtures - Admixtures shall be used only when specified or authorized by the Engineer.

I. The City reserves the right to make air and slump tests on any or all loads of concrete supplied to the job prior to placing the concrete in the grade. Concrete shall not be placed in the grade until such tests have been completed and approved by the Engineer. Concrete not meeting the specifications will be rejected. Re-tempering of rejected concrete for re-use on the job will not be allowed.

J. Water shall not be added to the concrete at any time without specific permission by the Engineer.

2.02 AGGREGATE BASE COURSE

A. Unless otherwise specified on the drawings, or in the specifications, the aggregate base course to support the PCC pavement shall be MDOT 21AA crushed limestone compacted to 95% of the maximum modified proctor density.

B.

PART 3. CONSTRUCTION

3.01 EXAMINATION

A. Contractor shall verify the existing conditions prior to submitting a bid on the project.

3.02 EQUIPMENT

A. All equipment used in the construction of the work shall be inspected and shall meet approval of the Engineer prior to start of construction. All equipment, tools and machinery shall be maintained in a satisfactory working condition.

3.03 MAINTAINING TRAFFIC

A. The Contractor shall furnish, erect and maintain road construction barricades in accordance with current Michigan Manual of Uniform Traffic Control Devices.

B. The Contractor shall at all times allow access to abutting property along the job. It is not intended that this shall permit access to the property during the actual processes of construction, however, the Contractor shall provide for temporary crossings and crossovers over the work partially completed prior to final completion of the construction. No roadway surface shall be opened to traffic prior to authorization by the Engineer.

3.04 CONCRETE PAVEMENT REMOVAL

A. Caution shall be exercised during pavement breaking operations, and the use of a crane and ball type pavement breaker will not be permitted. Equipment used for this work shall be such as will not cause damage to adjacent buildings and underground utilities.

B. Concrete pavement removal will be paid for at the contract unit price per square yard, which shall include the removal of adjacent curb or curb and gutter, and any asphaltic concrete surfacing. No additional payment will be made for pavement removal with reinforcing.

3.05 CUTTING TREE ROOTS

A. Tree roots larger than two (2) inches in diameter shall not be cut beyond a point three (3) inches in back of the proposed curb line, and no tree roots shall be cut beyond a point beyond twelve (12) inches behind the proposed curb line. The above limits may be exceeded only with specific

authorization by the City Department of Public Services (DPS). If the contractor believes tree root cutting is required, in any locations throughout the project, they shall notify the City Inspector and City DPS at least 5 working days in advance of their required schedule for cutting the roots. The 5-day notification will allow DPS to review the proposed impacts from an overall tree health and public safety perspective, and allow sufficient time to remove the tree, grind stump, or have other work performed by the City as required. The contractor may elect to sub-contract any tree removal or grinding services, which may be determined to be required by DPS, to help expedite their overall project schedule, at no additional cost to the City.

3.06 EXCAVATION

A. All earth and other material shall be excavated for the full depth and width of the cross section, as given on the plans.

B. Trees and stumps to be removed will be removed by the City at no cost to the Contractor, unless otherwise determined based on the protocol listed under the CUTTING TREE ROOTS section above. Removing and disposing of shrubs, brush and trees or stumps less than four (4) inches in diameter shall be considered as incidental to the work of excavation.

C. The Contractor shall rough grade as close as possible to finished subgrade, leaving a minimum to be removed in fine grading.

D. Excavation material shall be disposed of by the Contractor in the following order of preference:

1. Along the site of the work to fill requirements of the work.
2. At the Contractor's own dump sites.

E. Excavation will be determined by the average end area method of all material included above the base between backs of curbs, or edges of pavement where no curb is constructed. Excavation and fill required from curb to property line will be classed as grading. Concrete pavement removal and other items included in separate pay items will be deducted from excavation. Asphalt removal will be considered part of excavation.

F. Excavation for manholes, catch basins, inlets and gate wells shall be included in the price bid for these items.

G. All excavated material stored along the line of work between curb and sidewalk on improved lawns shall not be left longer than forty-eight (48) hours. Said lawns or otherwise improved parkway shall be left in a neat and clean state within the specified forty-eight (48) hours.

H. Excavated material removed in fine grading or any other operations shall be removed from any completed pavement slab, before any slab is opened for traffic whatsoever, including Contractor's equipment.

3.07 PREPARATION OF SUBGRADE

A. The subgrade shall be smoothed, trimmed and compacted in the required line, grade and cross section to receive the pavement. The roadbed shall be compacted to at least ninety-five (95) percent of the maximum unit weight. The subgrade thus formed shall be maintained in a smooth and compacted condition until pavement has been placed. Should the subgrade between the forms become rutted or disturbed in any manner, the subgrade shall be reshaped and compacted as specified herein.

B. Compaction shall be accomplished by self-propelled steel wheeled or a pneumatic-tired roller weighing not less than five (5) tons or a self-propelled vibratory compactor of adequate size to compact the subgrade to the required density.

C. No concrete shall be placed on the subgrade until the subgrade has been approved by the Engineer.

D. The cost for preparation of subgrade will be paid for under the items "Earth Excavation" or "Station Grading", as noted in the Proposal, and not as a separate pay item.

E. The roadbed and adjacent grade shall be maintained in such condition that the work will be well drained at all times. If it is necessary, in the prosecution of the work, to interrupt existing surface drainage, sewers or underdrainage, then temporary drainage facilities shall be provided until the permanent drainage work is completed. The construction of all temporary drainage facilities shall be considered as incidental to the construction of the project.

F. The Contractor shall perform a proof roll on the subgrade, to be witnessed by the Engineer to determine if there are areas that are unstable or need additional compaction. Proof rolling of subgrade shall be performed with a pneumatic-tired rolling equipment, developing a load of thirty (30) to fifty (50) tons. In a systematic manner acceptable to the Engineer, the equipment shall perform a minimum of three (3) passes over the designated areas(s). When proof rolling of the subgrade shows an area to be unstable as determined by the Engineer, the unstable material shall be removed and replaced to the limits designated by the Engineer.

3.08 INSTALLING ROADWAY BASE

A. Aggregate base shall be placed on streets, roadways, shoulders and driveways at the thickness shown on the drawings in not more than six (6) layers. Such surface shall be compacted to 95% density and shall meet lines and grades established on the drawings or meeting existing pavements.

B. The aggregate base shall not be placed if the subgrade is saturated.

3.09 ADJUSTING CASTINGS

A. Existing manholes, water valve gate wells, catch basins and other like surface structures shall be raised, lowered, shifted in alignment or reconstructed if necessary to fit the proposed line or grade. This work will be paid for at the unit price as bid in the proposal. If there are no work items listed in the proposal for this work, it shall be considered incidental to the other work of the project.

3.10 FORMS

A. Forms shall be of metal, of any approved section which will insure their rigidity under the impact, thrust and weight of the heaviest machine carried on them.

B. Forms shall have a minimum length of ten (10) feet, and shall have a depth not less than the edge thickness of the work prescribed. Forms with a height of eight (8) inches or more shall have a base width of at least eight (8) inches. Other forms shall have a minimum base width of six (6) inches. The forms shall be straight, free from distortion and shall show no vertical variation greater than one-eighth (1/8) of an inch in ten (10) foot lengths from the true plane surface on the top of the forms when tested with a ten (10) foot straight edge.

C. Flexible forms and hand finishing will be required on all pavement where the edge of pavement radius is less than two hundred (200) feet.

D. When tree roots may not be cut enough to allow room to use forms as specified above, wood forms (planks) may be used to reduce impacts to the tree roots. The contractor and their paving subcontractor (if applicable) are solely responsible for determining their means and methods for forming and constructing the roadway to minimize impacts to trees, tree trunks, and tree roots in proximity to the roadway in advance of staring their paving operations, and may be required to use wood forms and hand-work to complete all or portions of the proposed roadway paving when directed by the City, at no additional cost to the contract unit prices.

E. The method of connections between form sections shall be such that a locked joint is formed free from vertical movement in excess of one-eighth (1/8) of an inch and horizontal movement in excess of one-quarter (1/4) on an inch under the impact, thrust and weight of the heaviest machine carried on the forms. Each form shall be fully pinned with pins of an adequate length, and the soil under the forms shall be thoroughly compacted by use of a mechanical form tamper or vibrator.

F. All forms shall be thoroughly cleaned and oiled before concrete is placed against them.

G. Forms shall be set at least three hundred (300) feet in advance of the paver, in order to allow ample time for inspection and checking prior to the placing of concrete.

3.11 POURING CONCRETE

A. The roadway base and subgrade shall be in a moist condition, but not saturated, at the time concrete is placed.

B. Concrete shall be handled from the mixer to the place of deposit as rapidly as possible, and by methods which will prevent separation of the ingredients. The concrete shall be deposited directly into the forms as nearly as possible in its final position, so as to avoid re-handling. The piling up of concrete in the forms will not be permitted. No concrete which has partially hardened shall be deposited in the work.

C. Before beginning a run of concrete, all hardened concrete or foreign material shall be completely removed from the inner surface of the mixer and conveying equipment. Before depositing any concrete, all debris or other foreign matter shall be removed from the space to be occupied by the concrete; all reinforcing steel shall be secured in its proper locations and shall be inspected and approved by the Engineer.

D. Concrete shall be worked into all the recesses and corners of the forms and closely compacted around the reinforcing steel by means of thorough spading or an approved method of mechanical vibration.

E. When the air temperature falls to 40°F and is dropping, no concrete shall be placed. Pouring may be started when the temperature is 35°F in the shade, away from artificial heat, and is rising. All concrete during curing shall be protected in freezing weather by straw, hay or tarpaulins, for not less than seventy-two (72) hours after pouring.

F. No concrete shall be poured on a frozen, dry, saturated, or uncompacted subgrade.

3.12 PAVEMENT CONSTRUCTION

A. Concrete shall be placed only on subgrade prepared as previously specified. After the concrete has been deposited, it shall be struck off and consolidated by an approved finishing machine to such an elevation that when all finishing operations are completed, the surface will conform to the required finished grade. While striking off, a uniform ridge of concrete at least two (2) inches above the finished pavement grade shall be maintained ahead of the screed for its entire length. In consolidating, the finishing machine shall operate over each section of the pavement at least twice. Only sufficient mortar shall be worked to the surface to provide for a dense smooth finish. Excessive operation of the machine over a given area will not be permitted. Segregated particles of coarse aggregate, which may collect in front of the screed, shall be thoroughly mixed by hand with the mass of concrete already on the subgrade.

B. The concrete shall then be floated by means of a hand operated wood float not less than five (5) feet long.

C. As soon as the above operations are completed, all laitance, surplus water and inert materials shall be worked entirely off the pavement, and the surface made smooth by scraping or dragging with a rigid straightedge ten (10) feet in length.

D. The straightedge shall be placed at the center of the slab, with the blade parallel to the centerline, and pulled slowly and uniformly to the edge. This operation shall be repeated until the surface of the concrete is free from irregularities and makes contact at all points with the bottom of the straightedge. The straightedge shall then be moved forward one-half (1/2) its length and the operations repeated.

E. Depressions found in the surface shall be filled with fresh concrete and consolidated by floating with long handled float not less than five (5) feet in length. This float may also be used to smooth sections of the surface that may have become rough or torn by scraping the straightedge. Where a wood float does not give satisfactory surface, the Contractor will be required to provide metal or metal-shod long handled floats.

F. The surface will then be tested for smoothness with the straightedge. During this operation, the contact of the straightedge with the concrete shall be uniform over the entire length tested. At the time of testing, the surface shall be free from soft mortar or excessive water.

G. As soon as all excessive moisture has disappeared, and while it is still possible to produce a uniform surface of gritty texture, the pavement shall be finished by dragging a seamless strip of damp burlap or cotton fabric, not less than five (5) feet, nor more than six (6) feet in width, over the full width of the pavement. The fabric shall be renewed as often as necessary, to obtain the required texture.

H. Transverse connection joints shall be raised one-eighth (1/8) inch above the slab and finished with a notched wood float, not less than five (5) feet long, to eliminate high or low spots following burlapping. The edge next to all expansion and construction joints shall be rounded with a finishing tool having a radius of one-quarter (1/4) inch.

I. The finishing of the surface and any joints shall be done from a bridge which does not touch the concrete at any point. The finished concrete shall be free from porous or open spots; no portion of the surface shall vary more than one-quarter (1/4) inch below a straightedge ten (10) feet in length laid on the pavement parallel to the centerline of the street.

J. Immediately following final finishing operations, the gutter line shall be water tested to assure uniform grade and complete drainage.

K. Should any unevenness appear in the surface of the pavement more than allowed by the Specifications, the Contractor shall at once take measures to eliminate such unevenness. After the concrete has obtained its initial set, no depressions shall be fixed by filling with concrete. In case the unevenness covers a large area of the slab, then the entire slab shall be removed and replaced with new concrete.

L. Any laitance deposited on pavement shall be immediately cleaned off.

M. The paving mixer will not be permitted on completed pavement and vehicles will be permitted only after the concrete has obtained a compressive strength of 3,500 psi. Any equipment wheels (including finishing machine) shall operate at least one (1) foot from the edge of the pavement.

3.13 JOINTS

A. Pre-molded bituminous expansion joints, construction joints, pre-molded bituminous contraction joints and sawed longitudinal contraction joints shall be placed in all pavements. All of the above-mentioned joints shall be included in the price bid per square yard of pavement. Care must be exercised in joint construction, to insure vertical planes and complete separation at the joint.

B. Expansion Joints - Expansion joints shall be one (1) inch thick and of the pre-molded non-extruding bituminous fiber filler type. Joints shall be perpendicular to the subgrade and extend entirely through the concrete to between one-quarter (1/4) inch and one-half (1/2) inch below the top of the pavement to accommodate joint sealant, which shall be placed to 1/8-inch below the top of pavement elevation. Expansion joint material shall bear uniformly on subgrade. After the concrete has set, and before the pavement has been opened to traffic, the joint shall be thoroughly cleaned and filled to the surface of the pavement with a hot poured rubber-asphalt type joint sealer.

C. Contraction Joints – All the longitudinal and transverse contraction joints shall be cut with a self-propelled concrete saw to a width and depth as shown on the plans, prior to any traffic being permitted on the new pavement. Transverse contraction joints shall be edged at the curb, properly aligned and shall butt against adjacent sections, with no space between ends. Sawed joints shall be cleaned by washing and blowing out with air immediately after sawing, and permitted to dry out at least twenty-four (24) hours prior to sealing. All contraction joints shall sawcut to the width and depth as indicated on the plans (3/16" width, and 1/3 the thickness of the proposed concrete section (with a 2.25" minimum depth). After cleaning, transverse contraction joints shall have a pre-molded bituminous material ("backer-rod"), one-quarter (1/4) inch diameter, placed approximately 1" below the top of pavement, to allow for joint sealant to be placed above the backer road to 1/8" below the top of pavement. Longitudinal contraction joints shall filled full-deoth with sealant material, to 1/8" below the top of pavement. Joints shall be sealed with a hot poured rubber asphalt type joint sealing material applied with pressure equipment designed for that particular purpose.

D. If the Contractor elects to construct a full width pavement with a center longitudinal contraction joint, said joint shall be cut in more than twelve (12) hours, and no more than thirty (30) hours after the pouring and finishing of that part of the pavement.

E. Construction Joints - Longitudinal construction joints shall be placed as shown on plans. Construction joints shall also be placed at the ends of all pours, and at places where paving operations are stopped for a period of more than one-half (1/2) hour, except where such pours end at expansion joints. The second pour of concrete shall be edged with a longer lipped edging tool than the first concrete pour. Joints shall be sealed with a hot poured rubber-asphalt type joint sealing material applied with pressure equipment designed for that particular purpose.

3.14 REMOVAL OF FORMS

A. Forms shall not be removed from freshly placed concrete until it has set for at least twelve (12) hours. They shall be carefully removed and in such a manner that no damage will be done to the edge of the pavement.

B. After the forms have been removed, the ends of all joints shall be cleaned and all honeycombed areas pointed.

C. The sides of the pavement shall be covered with curing material, or with at least twelve (12) inches of wetted earth, wetted straw or other suitable curing agent, except where honeycombed areas are to be pointed. Such areas shall be covered with wetted burlap until the pointing has been completed, at which time they shall be cured as specified above.

3.15 WHITE MEMBRANOUS CURING

A. After finishing operations have been complete, and immediately after the free water has left the surface, the surface of the pour shall be completely coated and sealed with a uniform layer of white membranous curing compound.

B. The compound shall be applied in continuous uniform film by means of mechanical pressure sprayer equipment at a rate of not less than two (2) gallons per twenty-five (25) square yards of

surface. The equipment shall provide adequate stirring of the compound during application. The equipment for applying the compound must be approved by the Engineer before work is started.

C. If rain falls on the newly coated pavement before the film has dried sufficiently to resist damage, or if the film is damaged in any other way, the Contractor will be required to apply a new coat of material to the affected areas equal in curing value to that specified for the original coat.

3.16 CLEAN-UP AND GRADING

A. The Contractor shall perform final grading the area between the edge of the new pavement and the sidewalk, or the property line if there is no sidewalk. This area shall be graded to drain to the curb.

B. Wherever lawn areas are unnecessarily damaged by the Contractor, he will be required to repair any such areas at his own expense.

3.17 GRADING AT INTERSECTIONS

A. The Contractor shall grade from the completed paving at a grade not exceeding one (1) inch in twenty (20) inches at all places where the paving adjoins the roadways. At existing roadways, the re-graded area shall be finished with the same type of material as removed. At places where paving adjoins gravel or gravel treated roadways, the regarded area shall be finished with a road gravel at a minimum thickness of six (6) inches compacted. However, the Contractor will not be required to replace any oil treatment or seal coat.

B. There will be no additional payment for this work, and the cost of such should be included in the price bid for the concrete pavement.

3.18 CURB, CURB AND GUTTER

A. Joints in integral curb shall line up with, and be the same type as, those in the concrete pavement.

B. Joints in separate straight curb and in curb and gutter shall line up with, and be the same type as, those in adjacent concrete pavement, but spacing shall in no case exceed ten (10) feet. The Contractor shall use face forms on all straight curbs.

C. The face and top of the curb shall be finished smooth and true to line, grade and cross section. No more troweling than necessary shall be done. Prior to the initial set of the concrete, the curb face shall be lightly brushed to give a slightly roughened surface. The curb shall be dropped to within (1) inch of the gutter at integral curb shall proceed simultaneously and follow immediately the placing of pavement concrete.

D. Form excavations on the street side of curb and gutter sections shall be backfilled with road gravel and thoroughly compacted.

3.19 DRIVES

A. The Contractor shall remove and replace, or construct gravel, asphalt or concrete drives adjacent to new construction where designated by the Engineer.

B. Drives shall be constructed on a uniform slope from the gutter to the sidewalk, property line or place designated by the Engineer.

C. Gravel Drives - The existing material shall be excavated and road gravel placed at a minimum thickness of six (6) inches compacted.

D. Asphalt Drives - The existing material shall be excavated, and a minimum thickness of one and one half (1 1/2) inches of hot mix asphalt pavement placed on a road gravel base, with a minimum

compacted thickness of five (5) inches. A neat joint shall be cut when meeting existing asphaltic concrete.

E. Concrete Drives - Concrete drives shall be six (6) inches thick, unless otherwise designated. A portion of an existing concrete drive to be removed shall be removed to an existing joint, or to a joint made with a concrete saw. Concrete drives shall be constructed in accordance with the procedures and specifications for Cement Concrete Pavement.

F. Payment will be made at the contract unit price per square yard, and for the designated thickness, which will be payment-in-full for excavating material other than concrete, and for constructing the drive complete.

G. Payment for concrete removal will be made at the contract unit price per square yard. Payment for saw cutting will be made at the contract unit price per lineal foot.

3.20 CONCRETE HEADERS

A. Concrete end headers shall be placed at the end of all pavements, including street returns not connecting with concrete or asphaltic concrete pavements.

B. Payment will be made at the contract unit price per square yard for the adjoining concrete pavement.

3.21 SAW CUTTING

A. Payment for saw cutting will be made at the contract unit price per lineal foot for saw cutting designated on the plans, or designated by the Engineer.

B. No additional payment will be made for saw cutting pavement joints or for saw cutting done for the Contractor's convenience.

3.22 DAMAGE BY CONSTRUCTION

A. Sidewalks, driveways, etc., unnecessarily damaged by construction operations shall be repaired or replaced as directed by the Engineer, at no additional cost to the City.

3.23 MEASUREMENT AND PAYMENT

A. Concrete pavement will be paid for at the contract unit price per square yard, which will be payment in full for furnishing all materials (not including pavement reinforcement), dowels, tie bars, joint dowel hook bolts, and all joint materials; laying, curing and protecting the concrete; constructing the pavement complete; grading at intersections; and maintaining traffic.

B. Payment for integral curb will be included in the contract unit price per square yard for concrete pavement with integral curb.

END OF SECTION

SECTION 711
PORTLAND CEMENT CONCRETE DURABILITY REQUIREMENTS

PART 1. GENERAL

1.03 SUMMARY

B. All Portland cement concrete mixtures supplied by the Contractor for this project shall have been tested under this specification and shown to be resistant to excessive expansion caused by alkali-silica reactivity (ASR) and provides adequate air entrainment for freeze thaw durability. The contractor shall construct the project with practices outlined in this specification.

C. All labor, materials, equipment, supervision and incidentals required for complying with the requirements of this section shall be incidental to the other work of this project.

1.04 REFERENCES

B. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.05 SUBMITTALS

B. Contractor shall submit proposed mix design for all Portland cement concrete mixtures to be supplied on this project.

C. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.03 PORTLAND CEMENT CONCRETE MIXTURE COMPONENTS

A.	Portland cement	ASTM C-150
B.	Fine Aggregate	ASTM C-33
C.	Coarse Aggregate	ASTM C-33
D.	Fly Ash, Class F	ASTM C-618
E.	Slag Cement, Grade 100, 120	ASTM C-689
F.	Silica Fume	ASTM C-1240
G.	Blended Cements	ASTMC-595
H.	Air Entraining Admixtures	ASTM C-260
I.	Chemical Admixtures	ASTM C-494
J.	White Membrane Cure	ASTM C-309 Type 2

PART 3. EXECUTION

3.03 ALKALI-SILICA REACTIVITY

A. Provide documentation to the Engineer that the concrete mixture does not present the potential for deleterious expansion caused by alkali-silica reactivity (ASR). Provide current ASR test results (valid for 2 years from completion of testing), for the fine aggregate that is proposed to be used in the concrete, from an independent testing laboratory proficient in ASR testing. The independent

testing laboratory must certify in writing, including a signed statement that all testing was conducted in accordance with the designated standard test procedures, described herein. Test results must conform to the specified criterion for one of the following standard test methods. ASR testing is not required for concrete pavement repairs and temporary concrete pavements. Use the Rounding Method described in ASTM E 29 when determining significant digits for reporting expansion test results.

1. Method 1. ASTM C 1293. Concrete Prism Test. If the expansion of concrete prisms is not greater than 0.040 percent (rounded to the nearest 0.001 percent) after 1 year, the fine aggregate is considered non-deleterious to ASR and may be used in the JMF.

2. Method 2. ASTM C 1567. Mortar Bar Test. If no previous test data are available for the fine aggregate that shows it is resistant to ASR using Method 1, above, replace 25 to 40 percent of the Portland cement in the concrete mixture with a supplementary cementitious material. A blended cement meeting the requirements of ASTM C 595 containing the above Portland cement and supplementary cementitious material proportions may also be used.

   Demonstrate the ability of the supplementary cementitious material to control the deleterious expansion caused by ASR by molding and testing mortar bars according to the standard test method described in ASTM C 1567 using the mix proportions and constituent sources for both the aggregates and the cementitious materials that will be used for the project. Make at least three test specimens for each cementitious materials-aggregate combination. If the average of three mortar bars for a given cementitious materials-aggregate combination produces an expansion less than 0.10 percent (rounded to the nearest 0.01 percent) at 14 days of immersion, the JMF associated with that combination will be considered non-deleterious to ASR. If the average expansion is 0.10 percent (rounded to the nearest 0.01 percent) or greater, the JMF associated with that combination will be considered not sufficient to control the deleterious expansion caused by ASR and the JMF will be rejected.

3. Method 3. ASTM C 1260. Mortar Bar Test. If the expansion of the mortarbars is less than 0.10 percent (rounded to the nearest 0.01 percent) at 14 days of immersion, the fine aggregate is considered non-deleterious to ASR and may beused in the concrete without the need for ASR mitigation. The Engineer will not approve the use of the JMF if the expansion exceeds the respective threshold limits for the respective ASTM test method used.

3.04 QUALITY CONTROL

A. The Owner and Contractor shall monitor the concrete that is delivered to the project site so as to insure that the approved mix design is being followed. The supplier shall include on the delivery ticket for each batch of concrete delivered to the job, the identification and proportions of each material batched. In lieu of individual batch tickets a detailed summary report showing the batch weights for each load may be submitted, at the end of each production shift, provided that individual ticket information is supplied upon request for inspection and testing personnel.

B. When concrete is placed during cold weather, below 40 degrees F, the use of accelerators, heated aggregates, silica fume and/or additional forms of cold weather protection will be required. Cold weather will not eliminate the requirement for furnishing and placing a concrete mix that is considered resistant to ASR attack.

C. Prior to cool weather placement, temperatures between 40 and 60 degrees F, the set time of the proposed mix shall be verified under anticipated field conditions. This information shall be used when scheduling pours and saw crews.

3.05 AIR ENTRAINMENT

A. Air entrainment shall be accomplished by addition of an approved air entraining agent. Air content as determined by ASTM C 231 or ASTM C 173, shall be determined on each day of production as early and as frequently as necessary until the air content is consistently acceptable. Acceptance testing for air content shall be on the grade ahead of the placement operation.

B. Paver placement:

1. The target air content of the in-place finished plastic concrete is 6.0%. During production acceptance will be at the point of acceptance sampled ahead of the paver, the target value referred to as the Acceptance Air Content (AAC). The AAC will be determined by the air loss actually experienced during transportation, consolidation and placement of the concrete. The difference between the as-produced concrete in front of the paver and the in-place air content will be considered the air loss. The AAC for the project will be 6.0% plus an amount equal to the air loss.

2. To establish the initial target AAC on the first day of paving, the first load shall be tested at the plant. For up to the first ten (10) loads, the AAC measured prior to placement shall be at least 8.0% and no more than 12.0%. After initial testing at the plant at least two sample sets shall be tested to determine the actual air loss during placement. A set shall consist of two (2) samples of concrete from the same batch, one taken at the point of discharge and the other from the in-place concrete behind the paver. The air loss from the two (2) sets shall be averaged and added to 6.0% to establish the AAC (rounded to the next higher 0.5%). The project acceptance air tests shall be taken prior to placement and shall be within the range of the AAC plus 2.0% or minus 1.0%.

3. After the AAC has been established it shall be verified and/or adjusted through daily checks of the air loss through the paver. The loss through the paver shall be checked twice daily. A Revised AAC shall be established if the average air loss from two (2) consecutive tests deviates by more than 0.5% from the current accepted air loss.

C. Hand placed concrete:

1. The air content for non-slip form paving shall be 7.0% plus 1.5% or minus 1.0% at point of placement.

3.06 CONSTRUCTION PROCESSES

A. Aggregate control

1. Gradation control – The Contractor shall provide a detailed stockpile management plan, describing their process control procedure for shipping, handling, and stockpiling of each aggregate including workforce training.

2. Moisture control – All aggregate materials must be conditioned to a moisture content of not less than saturated surface dry (SSD) prior to batching. A watering process using some type of sprinkler system is required on all coarse aggregate material stockpiles.

B. Mixing

1. Central mix plants

a. The total volume of the batch shall not exceed the designated size of the mixer or the rated capacity as shown on the manufacturer's rating plate.

b. Drum Mix Plants:

i. After all solid materials are assembled in the mixer drum; the mixing time shall be a minimum of sixty (60) seconds and a maximum of five (5) minutes. The mixing time may be decreased if the ASTM C-94 11.3.3 mixer efficiency tests show that the concrete mixing is satisfactory. The Engineer may require an increase in the minimum mix time if the mixer efficiency test determines that the concrete is not being mixed satisfactorily. The minimum mixing time shall start after the mixer is fully charged. Mixers shall be operated at the speed recommended by the manufacturer as mixing speed. The mixer shall be charged so that a uniform blend of materials reached the mixer throughout the charging cycle. Any additional slump water required shall be added to the mixing chamber by the end of the first 25% of the specified mixing time. Mixers shall not be used if the drum is not clean or if the mixing blades are damaged or badly worn.

c. Ribbon mixers:

i. After all solid materials are assembled in the mixer; the mixing time shall be a minimum of thirty (30) seconds and a maximum of 2.5 minutes. The mixing time may be decreased if the ASTM C-94 11.3.3 mixer efficiency tests show that the concrete mixing is satisfactory. The Engineer may require an increase in the minimum mix time if the mixer efficiency test determines that the concrete is not being mixed satisfactorily. The minimum mixing time shall be indicated by an accurate timing device which is automatically started when the mixer is fully charged. Mixers shall be operated at the speed recommended by the manufacturer as mixing speed. The mixer shall be charged so that a uniform blend of materials reached the mixer throughout the charging cycle. After any additional slump water is added to the mixing chamber the mixing shall continue for a minimum of ten (10) seconds. Mixers shall not be used if the mixer is not clean or if the mixing blades are damaged or badly worn.

2. Truck mixers

a. The capacities and mixing capabilities shall be as defined in ASTM C 94, and each unit shall have an attached plate containing the information described therein. The plate may be issued by the Truck Mixer Manufacturer. The mixer capacity shall not be exceeded, and the mixing speeds shall be within the designated limits. Truck mixers shall be equipped with a reliable reset revolution counter. If truck mixers are used for mixing while in transit, the revolution counter shall register the number of revolutions at mixing speed.

b. An authorized representative of the concrete producer shall certify that the interior of the mixer drum is clean and reasonably free of hardened concrete, that the fins or paddles are not broken or worn excessively, that the other parts are in proper working order, and that the unit has been checked by the representative within the previous thirty (30) calendar day period to substantiate this certification. The current, signed certification shall be with the unit at all times.

c. The required mixing shall be between seventy (70) and ninety (90) revolutions. The mixing shall be at the rate designated by the manufacturer and shall produce uniform, thoroughly mixed concrete.

d. The Engineer may inspect mixer units at any time to assure compliance with certification requirements, and removal of inspection ports may be required. Should the Engineer question the quality of mixing, the Engineer may check the slump

variation within the batch. Should the slump variation between two (2) samples taken, one (1) after approximately 20% discharge and one (1) after approximately 90% discharge of the batch, show a variation greater than 3/4 inch (20 mm) or 25% of the average of the two, whichever is greater, the Engineer may require the mixing to be increased, the batch size reduced, the charging procedure be modified or the unit removed from the work.

e. The practice of adding water on the site shall be discouraged. After the first round of trucks has been adjusted on the grade the amount of water added at the plant shall be adjusted and shall become the point of adjustment throughout the pour. All water additions on site shall be approved by the Engineer.

C. Curing

1. Apply liquid curing compound in a fine atomized spray to form a continuous, uniform film on the horizontal surface, vertical edges, curbs and back of curbs immediately after the surface moisture has disappeared, but no later than thirty (30) minutes after concrete placement. With approval of the Engineer, the timing of cure application may be adjusted due to varying weather conditions and concrete mix properties.
2. The cure system shall be on site and tested prior to concrete placement.
3. Apply a curing compound at a rate of application not less than two (2) gallons per twenty-five (25) square yard; keep the material thoroughly mixed per the manufactures recommendation and do not dilute the compound.
4. The finished product shall appear as a uniformly painted solid white surface. Areas exhibiting a blotchy or spotty appearance shall be recoated immediately.

END OF SECTION

SECTION 712
CONCRETE SIDEWALK CONSTRUCTION

PART 1. GENERAL

1.01 SUMMARY

A. This section includes the provision of all labor, materials, equipment, supervision and incidentals required for the construction of concrete sidewalks and ramps, and associated work, including detectable warning plates for sidewalk ramps as required for compliance with the American with Disabilities Act.

B. Related Sections: The following sections contain requirements that relate to this Section:

1. Concrete Durability Requirements

1.02 REFERENCES

A. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

B. All sidewalk and ramp shall meet ADA requirements for slope, surface finish, width, and all other requirements.

1.03 SUBMITTALS

A. Contractor shall submit proposed mix design for all concrete to be supplied for sidewalk construction.

B. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.01 CONCRETE

A. Portland Cement Concrete (PCC) Mixtures shall meet MDOT requirements for Concrete Grade 3500 in accordance with MDOT 2020 Standard Specifications for Construction.

B. Coarse aggregate shall be natural limestone and conform to MDOT gradation requirements for 6AA material.

C. Fine aggregate shall be MDOT 2NS sand, and meet MDOT special provision 20SP-1002A-01 requirements for alkali silica reactivity.

D. MDOT 3500 mixtures require a range between 25-percent to 40-percent of replacement of the Portland cement content with supplementary cementitious materials (SCM's). All PCC mixtures allowed for use in Birmingham shall meet at least one of the following criteria:

1. Provide a maximum of 25-percent replacement of the Portland cement in the concrete mixture with a SCM (Ground Granulated Blast-Furnace Slag (GGBFS) or approved equal).

2. Utilize Portland cement that has a low alkali percentage (0.6% or less total cement alkali content).

E. The concrete mixture supplied on this project shall conform to the requirements of the Concrete Durability Requirements section for resistance to alkali-silica reactivity (ASR).

F. Admixtures shall be used only when specified or authorized by the Engineer.

G. The City reserves the right to make air and slump tests on any or all loads of concrete supplied to the job prior to placing the concrete in the grade. Concrete shall not be placed on the grade until such tests have been completed and approved by the Engineer. Concrete not meeting the specifications will be rejected. Re-tempering of rejected concrete for re-use on the job will not be allowed.

H. Water shall not be added to the concrete at any time without specific permission by the Engineer.

2.02 TRUNCATED DOMES / DETECTABLE WARNING

A. Truncated Domes / Detectable Warning shall be manufactured of cast iron, and shall at a minimum have the following properties:

Slip Resistance (ASTM C-1028):	1.10 Dry / 1.06 Wet
Wear Resistance (ASTM C-501):	7333
Impact Resistance (ASTM D-1709)	>238 Newtons
Adhesion to Concrete (Bond Strength ASTM D-482)	>5000 lbs
Tensile Strength (ASTM A-48)	35,000 PSI

B. Truncated Domes / Detectable Warning shall be supplied with a natural finish and shall not be "dipped" in asphaltic or other material.

C. Truncated Domes / Detectable Warning shall be supplied at each sidewalk ramp in accordance with ADAAG and/or MDOT requirements, whichever is more stringent.

D. Truncated Domes / Detectable Warning shall be at least two (2) feet deep along the direction of travel. The detectable warning plate width shall generally be five (5) feet, unless otherwise specified on the drawings or in the field by the Engineer. Radial plates may be used where called for on the drawings, or in the field by the Engineer.

E. Truncated Domes / Detectable Warning shall be manufactured by East Jordan Iron Works, or approved equal.

2.03 FORMS

A. Forms shall be of metal or wood, and of an approved section. Materials, other than metal or wood shall not be used for forms, unless specifically authorized by the Engineer.

B. Forms shall be straight, free from distortions, and shall show no vertical variation greater than one-eighth (1/8) of an inch in ten (10) foot lengths from the true plane surface on the top of the forms when tested with a ten (10) foot straight edge, and shall show no lateral variations greater than one-quarter (1/4) of an inch from the true plane surface on the vertical face of the form when tested with a ten (10) foot straight edge.

2.04 JOINTS AND JOINT SEALANT

A. All expansion joints shall be 1/2-inch thick pre-molded, non-extruding bituminous fiber filler type.

B. All expansion joints within and adjacent to concrete sidewalks and driveways shall be sealed using a two-part polysulfide sealant, self-leveling, light gray color, per federal specifications TT-S-0027E, Type 1, Dow Corning #780, or approved equal.

PART 3. CONSTRUCTION

3.01 EXAMINATION

A. Contractor shall verify the existing conditions prior to submitting a bid on the project.

3.02 PREPARATION

A. If removal and replacement of the existing sidewalk is specified in the work item, the Contractor shall remove the existing sidewalk to the extent shown on the plans, or as directed by the Engineer in the field.

B. During removals and construction, Contractor shall protect all adjacent sidewalks, pavement, curb and gutter, and drive approaches from damage. Any adjacent infrastructure that is damaged by the Contractor during construction shall be replaced by the Contractor at no additional cost to the City.

C. The subgrade shall be formed by trenching or filling to the required elevation for bottom of concrete, or to bottom of subbase, if a subbase is specified. All sod and vegetative matter shall be stripped from the subgrade.

D. The subgrade after grading shall be thoroughly tamped or otherwise compacted, to insure its stability. Any soft, spongy or otherwise unstable areas in the subgrade shall be removed and replaced with granular fill.

E. In cuts, the subgrade shall be made sufficiently wide to permit the proper placing of forms, and in fills, the subgrade shall be made at least one (1) foot wider on each side than the required width of sidewalk.

F. All fills shall be of granular material, and shall be placed in thoroughly compacted layers not to exceed six (6) inches in depth. Compaction shall be accomplished by the use of mechanical equipment or hand tamps with metal bases.

G. Existing sidewalks or paved areas under proposed sidewalks shall be removed, except where grade will allow at least two (2) inches of granular fill to be placed over them.

3.03 SIDEWALK THICKNESS

A. Unless otherwise noted on the drawings, sidewalks shall be at least four (4) inches thick, except at ramps and across driveways, where they shall be at least six (6) inches thick.

3.04 DISPOSAL OF WALK AND EXCAVATED MATERIALS

A. The old walk, after removal, and excavated materials shall be disposed of by the Contractor at his own expense. He shall provide his own dump. When directed by the Engineer, the Contractor shall leave removed sod in an area adjacent to the construction. The Contractor will not be held responsible for the sod after that time or responsible for the condition of the area under which the sod was placed.

3.05 PREPARATION OF SUBGRADE

A. The subgrade shall be formed by trenching or filling to the required elevation for bottom of concrete, or to bottom of subbase, if a subbase is specified. All sod and vegetative matter shall be stripped from the subgrade.

B. The subgrade after grading shall be thoroughly tamped or otherwise compacted, to insure its stability. Any soft, spongy or otherwise unstable areas in the subgrade shall be removed and replaced with granular fill.

C. In cuts, the subgrade shall be made sufficiently wide to permit the proper placing of forms, and in fills, the subgrade shall be made at least one (1) foot wider on each side than the required width of sidewalk.

D. All fills shall be of granular material, and shall be placed in thoroughly compacted layers not to exceed six (6) inches in depth. Compaction shall be accomplished by the use of mechanical equipment or hand tamps with metal bases.

E. Existing sidewalks or paved areas under proposed sidewalks shall be removed, except where grade will allow at least two (2) inches of granular fill to be placed over them.

3.06 PROTECTION OF TREES

A. Where a tree is less than twenty-four (24) inches from the existing walk, or at the Engineer's discretion, the Contractor may be required to curve the walk around the tree, maintaining the full width of the walk through the curve. The Contractor shall cut and remove all tree roots that are in the sidewalk grade. Merely shaving the roots in order to place the sidewalk at proper grade and thickness will not be acceptable. The cost of the work of cutting and removing the roots and curving the walk around the trees shall be included in the unit price bid. The City may elect to cut and remove certain tree roots with their own forces, but the Contractor shall submit his bid based on performing all of the necessary root cutting and removal.

3.07 BARRICADES AND LIGHTS

A. Barricades and lights shall be placed in accordance with the "Public Safety" section of the "General Requirements" section of these specifications. In addition, the following requirements shall be met.

B. Barricades used under this contract shall be "horses" or other barricades approved by the Engineer. Barricades made of rope, wood siding and other similar types will not normally be approved by the Engineer.

C. Barricades shall be placed where sidewalks under construction join sidewalks or driveways which are open for use.

D. Lights shall be placed at the beginning and end of construction in each block. Where such lights are more than five hundred (500) feet apart, intermediate lights shall be placed so that the distance between any light does not exceed five hundred (500) feet.

3.08 FORMS

A. Forms shall be of metal or wood, and of an approved section. Materials, other than metal or wood shall not be used for forms, unless specifically authorized by the Engineer.

B. Forms shall be straight, free from distortions, and shall show no vertical variation greater than one-eighth (1/8) of an inch in ten (10) foot lengths from the true plane surface on the top of the forms when tested with a ten (10) foot straight edge, and shall show no lateral variations greater than one-quarter (1/4) of an inch from the true plane surface on the vertical face of the form when tested with a ten (10) foot straight edge.

3.09 FORMING

A. Forms must be used for all edges of all sidewalk construction. Where proposed walk abuts existing concrete, and the edge of the existing concrete is true to line and grade, the existing concrete, with or without expansion paper, will be considered a form for the new sidewalk.

B. Forms shall be installed true to line and grade established by the Engineer. They shall be adequately staked and braced to remain on line and grade during the placement of concrete.

C. Walk shall pitch to the center of the street at the rate of one-quarter (1/4) inch per foot of width, unless otherwise provided. Forms shall be of the full depth specified for the walk.

D. Before placing concrete, forms shall be thoroughly cleaned and oiled.

3.10 PLACING AND FINISHING CONCRETE

A. Before beginning a run of concrete, all hardened concrete or foreign material shall be completely removed from the inner surface of the mixer and conveying equipment. Before depositing any concrete, all debris or other foreign matter shall be removed from the space to be occupied by the concrete.

B. The subgrade shall be thoroughly wetted and the concrete shall be deposited thereon to the proper depth. So called "two course" pouring will not be permitted. Concrete shall be handled from the mixer to the place of deposit as rapidly as possible and by methods which will prevent separation of the ingredients. The concrete shall be deposited directly into the forms as nearly as possible in its final position, so as to avoid re-handling. The piling up of concrete in the forms will not be permitted. No concrete which has partially hardened shall be deposited in the work.

C. Concrete shall be worked into all the recesses and corners of the forms by means of thorough spading of an approved method or mechanical vibration.

D. When the air temperature falls to 40°F and is dropping, no concrete shall be placed. Pouring may be started when the temperature is 35°F in the shade, away from artificial heat, and is rising. All concrete during curing shall be protected from freezing by straw, hay or tarpaulins, for not less than seventy-two (72) hours after pouring.

E. No concrete shall be poured on a frozen, dry or uncompacted subgrade.

F. The concrete shall be alternately tamped and struck off with a strike board until all voids are removed and the surface has the required grade and cross section. The strike board shall be long enough so it can always be in contact with both forms. The surface shall be floated with a wood or aluminum float, followed by a steel float, just enough to produce a smooth surface free from irregularities. All edges and joints shall be rounded to a radius of one-quarter (1/4) inch with an approved finishing tool. The surface shall then be brushed to slightly roughen the surface and remove the finishing tool marks.

G. The end of a run of concrete shall not remain unformed for more than one-half (1/2) hour, by which time a header form shall be placed. If a header is not placed, the concrete shall be removed back to the last transverse joint prior to continuing the pour. Headers, when used, shall not vary more than six (6) inches in location from the normal transverse joint location.

3.11 JOINTS

A. Joints shall be constructed true to line, with their faces perpendicular to the surface of the sidewalk, and shall not vary more than one-quarter (1/4) inch from their designated position. Transverse joints shall be constructed at right angles to the centerline of the sidewalk, and longitudinal joints shall be constructed parallel to the centerline, unless otherwise required.

B. When the sidewalk is constructed in partial width slabs, transverse joints in the succeeding slab shall be placed in line with like joints in the adjacent slab. In the case of widening existing sidewalks, transverse joints shall be placed in line with like joints in the existing sidewalk.

C. The concrete at the faces of all joints shall be thoroughly spaded and compacted to fill all voids, and the surface shall be finished smooth and true to grade.

D. Expansion Joints - Expansion joints shall be of the pre-molded non-extruding bituminous fiber filler type.

E. In new sidewalk, one-half (1/2) inch thick expansion joints shall be placed at intervals of not more than fifty (50) feet.

F. One-half (1/2) inch thick expansion joints shall also be placed at junctions with curb junctions, parallel curb and gutter, sidewalks, drives, buildings and other rigid structures.

G. All sidewalk expansion joints paper shall be placed to provide a minimum of 1/2-inch below the walk surface elevation to allow for at least 3/8-inch of joint filler/sealant to be placed to an elevation just below the surface elevation. All sidewalk expansion joints shall be sealed using gray-colored, two-part polysulfide sealant as indicated in part 2 above.

H. Contraction Joints - Insofar as feasible, joints shall be spaced at intervals equal to the width of the walk and with maximum transverse and longitudinal intervals of ten (10) feet. Joints shall be produced by use of slab division forms extending the full width and one-half (1/2) the depth of the walk. The joints shall be of not less than one-eighth (1/8) inch, nor more than one-quarter (1/4) inch in width, and shall be finished smooth and true to line.

I. Slab division forms shall remain in the concrete a sufficient length of time to insure permanent separation of the concrete.

3.12 WHITE MEMBRANOUS CURING

A. After finishing operations have been completed, and immediately after the free water has left the surface, the surface of the sidewalk shall be completely coated and sealed with a uniform layer of white membranous curing compound.

B. The compound shall be applied in a continuous uniform film by means of mechanical pressure sprayer equipment at a rate of not less than one (1) gallon per two hundred (200) square feet of surface. The equipment shall provide adequate stirring of the compound during application. The equipment for applying the compound must be approved by the Engineer before work is started.

C. If the compound is too thick for satisfactory application during cold weather, the material may be warmed in a water bath at temperatures not over 100°F. Thinning with solvents will not be permitted.

D. If rain falls on the newly coated sidewalk before the film has dried sufficiently to resist damage, or if the film is damaged in any other way, the Contractor will be required to apply a new coat of material to the affected areas equal in curing value to that specified for the original coat.

3.13 SIDEWALK RAMPS

A. Sidewalk ramps shall be constructed in accordance with these Concrete Sidewalk Construction Specifications, and in accordance with MDOT Standard Detail R-28, latest edition.

B. Surface texture of ramps shall be that obtained by a coarse brooming, transverse to the slope of the ramps. The normal gutter line profile shall be maintained through the area of ramps.

C. There is no separate pay item for sidewalk ramps. The sidewalk portion of ramps will be paid for as concrete sidewalk construction. Work required at the curb for ramps will be paid for under a curb pay item, depending on the type of curb work performed.

D. Each ramp shall include a Truncated Domes / Detectable Warning installed at the back of the curb. The Truncated Domes / Detectable Warning shall generally be five (5) feet wide by two (2) feet deep. If that is not possible given the site constraints, then they shall be at least as wide as the existing adjacent sidewalk. Radial Truncated Domes / Detectable Warning plates may be required in some locations.

3.14 REMOVAL OF FORMS

A. Forms shall not be removed from freshly placed concrete until it has set for at least twelve (12) hours. They shall be carefully removed, and in such a manner that no damage will be done to the edge of the sidewalk.

3.15 PROTECTION OF EXISTING LAWNS

A. The Contractor shall use extreme care while replacing existing sidewalks or constructing new sidewalks in existing lawns not to damage the lawns. The Contractor shall remove a maximum of six (6) inches of sod beyond the edges of the sidewalk. He shall remove the sod after cutting it with a square nosed shovel on a parallel line to the sidewalk.

B. The Contractor shall protect existing lawns at all times during his work. Equipment or vehicles will not be permitted on established lawns. The Contractor will be held responsible for all damage to lawns more than six (6) inches away from sidewalk construction. Sod and other excavated materials shall not be placed on existing lawns. Any lawn area damaged as a result of the Contractor's operations may be repaired by the City at the Contractor's expense.

3.16 UNDERGROUND SPRINKLER SYSTEMS

A. Some of the houses in the sidewalk replacement area may have underground sprinkler systems for their lawns. The owners of these sprinkler systems have been notified that they are responsible for locating for the Contractor, all underground sprinkler equipment adjacent to any sidewalk that is to be replaced. The Contractor will be required to use caution when working around these known underground sprinkler systems, and shall repair any damage to sprinklers if, in the opinion of the Engineer, insufficient care was taken to prevent damage to the sprinkler system.

3.17 SERVICE WALKS

A. Where the grade of a new or replaced sidewalk does not meet the grade of a private service walk, the Contractor may be required to replace a portion of the service walk. The Contractor will be required to replace only that portion of the service walk that the Engineer determines is necessary to eliminate a hazard or drainage problem.

B. Payment for replacement of service walks will be made at the contract unit price for four (4) inch concrete sidewalk replacement.

3.18 CONSTRUCTION AT PAVED DRIVEWAYS

A. Sidewalk Replacement at Concrete Driveways

1. The existing sidewalk shall be removed without damaging the driveway. Expansion joints shall be replaced along each edge of the sidewalk, and the sidewalk shall be replaced using the expansion paper at the drive as forms.

B. Sidewalk Replacement at Asphalt Driveways

1. The existing sidewalk, and a maximum of four (4) inches of asphalt on each side of the sidewalk, shall be removed without damaging the rest of the drive. A neat joint shall be cut in the asphalt prior to removing the sidewalk. The sidewalk shall be formed across the

driveway. Wood forms may be used in such locations. Upon completion of the sidewalk construction, the Contractor shall place road gravel in the form excavations. There will be no additional payment made for cutting the neat joints, removing asphalt and placing road gravel in the form excavations. The City shall then be responsible to have the remaining asphalt replaced by others.

2. Where an asphalt driveway is in good condition and at a suitable grade, the Engineer may direct that the sidewalk be removed and replaced without removing a portion of the driveway. In such case, the Contractor shall use caution to avoid damage to the asphalt. Also, the Contractor will not be required to set forms. The Contractor should avoid getting cement on the surface of any asphalt drive.

C. New Sidewalk at Concrete Driveways

1. The Contractor shall saw cut and remove that portion of the driveway necessary to be removed to construct the sidewalk, and necessary to be removed because of grade. The sidewalk shall be formed across the driveway, and following the removal of the forms, the remaining portion of the driveway removed shall be replaced.

D. New Sidewalk (asphalt drives)

1. The Contractor shall cut neat joints in the asphalt at locations determined by the Engineer. The Contractor shall remove the asphalt between the neat joints, shall form the sidewalk across the drive, and following the removal of the forms, shall fill the form excavations with road gravel. There will be no additional payment made for cutting the neat joints, removing the asphalt and placing road gravel in the form excavations.

3.19 CONSTRUCTION AT UNPAVED DRIVEWAYS

A. The Contractor shall backfill the form excavation across unpaved drives with the same type material as exists in the adjacent driveway.

3.20 FINAL GRADING

A. For new sidewalk construction, the Contractor shall grade to a uniform slope from the top of the walk to top of the curb, and from the walk to the property line. In the event there is no curb, grading shall be done for a distance of 10 (ten) feet towards the centerline of the street to the existing grade. If this provision should involve destroying or re-grading established lawns and parkways, the Contractor shall confer with the Engineer before starting such grading.

B. Grading and clean-up work shall be done as soon as possible following the completion of any section of sidewalk, and in no case shall more than two (2) consecutive days (excluding Sundays and holidays) elapse from the time any section of sidewalk is placed until the adjacent grading and clean-up is completed.

C. In establishing lawns, the Contractor shall place a minimum of two (2) inches of topsoil in all form excavations and on all re-graded areas. The topsoil shall be tamped and graded, and then seeded with grass seed. Clean excavated material may be used to fill under the required topsoil. Topsoil and seed used shall be of a high quality and approved by the Engineer. Topsoil shall be free of sticks, stones, clumps of clay, debris and similar materials.

D. In unimproved areas, clean excavated material may be used for grading.

3.21 PAYMENT

A. Payment will be made by unit price per square foot of walk constructed, and price bid shall include: placement and preparation of granular fill (4" or 6" of compacted class II sand base per plan

details); forming, furnishing, placing and finishing of concrete (thickness as specified); placing of jointing materials; curing compound; removal of forms; and grading as specified.

B. There will be no additional payment for removing and replacing unstable subgrade.

C. No deductions in payment will be made for areas of sidewalk construction occupied by manhole castings, utility boxes, pole bases and similar objects, provided no one such object occupies more than ten (10) square feet of the new (or replaced) sidewalk. Where any one such object occupies more than ten (10) square feet of the new (or replaced) sidewalk, no payment will be made for sidewalk within that area.

END OF SECTION

SECTION 750
HOT MIX ASPHALT PAVEMENT CONSTRUCTION

PART 1. GENERAL

1.01 SUMMARY

A. This section includes the provision of all labor, materials, equipment, supervision and incidentals required for the furnishing and placement of plant mixed Hot Mix Asphalt (HMA) pavements.

1.02 REFERENCES

A. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 SUBMITTALS

A. Contractor shall submit proposed mix design for all hot mix asphalt to be supplied on this project.

B. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.01 HOT MIX ASPHALT PAVEMENTS

A. Hot-mix asphalt mixture designations shall be as specified on the drawings for wearing (surface) course, leveling course, and base course as applicable. All mix designations shall meet applicable minimum requirements per MDOT standard specifications for construction.

B. Binder from Recycled Asphalt Pavement (RAP) materials shall be limited to not more than 17 percent of the total mix binder content by weight. Final binder for all mixes shall meet specification requirements for Performance-Grade PG64-28.

C. Bond coat shall be SS-1h.

PART 3. CONSTRUCTION

3.01 EXAMINATION

A. Contractor shall verify the existing conditions prior to submitting a bid on the project.

3.02 ASPHALTIC - BITUMINOUS

A. For purposes of these specifications, the words, "asphaltic" and "bituminous", and comparable variations of such words, will be considered to be interchangeable.

3.03 MAINTAINING TRAFFIC

A. The Contractor shall furnish, erect and maintain road construction barricades in accordance with current Michigan Manual of Uniform Traffic Control Devices.

B. The Contractor shall at all times allow access to abutting property along the job. It is not intended that this shall permit access to the property during the actual processes of construction, however, the Contractor shall provide for temporary crossings and crossovers over the work partially completed prior to final completion of the construction. No roadway surface shall be opened to traffic prior to authorization by the Engineer.

3.04 ADJUSTING CASTINGS

A. This work will consist of adjusting manhole, gate well and drainage structure castings to the elevation of the finished surface in accordance with the "Adjusting Drainage Structure Covers" section of the MDOT specifications.

B. In concrete pavements, the top of the concrete replaced around castings shall be held down two (2) inches below the elevation of the finished surface.

C. Prior to placing the top course of asphaltic concrete, the area around castings shall be filled with asphaltic concrete to the elevation of the leveling course.

D. Variable adjusting castings shall not be used unless specifically authorized by the Engineer.

E. The City may elect to replace some castings. In such cases, the Contractor shall deliver the old castings and pick up new castings at the City Department of Public Services (DPS) yard on Eton Road. That work will be considered to be incidental to Adjusting Castings.

3.05 PREPARATION OF EXISTING PAVEMENT FOR ASPHALT OVERLAY

A. Repairing Concrete Curb & Slab Replacement

1. Concrete for concrete curb and slab repairs shall meet the requirements for concrete for Portland Cement Concrete Pavement Construction.

2. Repairs to existing concrete pavements shall be made in accordance with MDOT Standard Drawing R-44, latest edition.

3. Curb repairs shall join existing curbs at existing joints, cracks (where authorized by the Engineer), or at saw cut joints where saw cutting is necessary. Unless otherwise provided for in the specifications, saw cutting shall be incidental to the other work on this project.

B. Removing Bituminous Surface For Joints

1. This work will consist of stripping joints in existing bituminous surfaces in accordance with the "Removing Bituminous Surface" section of the MDOT specifications.

C. Chipping Pavement Around Structures

1. At drainage structures not to be adjusted, the existing concrete or asphaltic pavement surface shall be cut back up to one and one-half (1 1/2) feet, as designated by the Engineer, around the casting to a depth of at least one (1) inch, completely around the structure.

D. Hand Patching

1. Hand patching shall be performed where called for in the plans and specifications, or where directed by the Engineer.

2. Areas where pavement surfaces are badly deteriorated or cracked into small sections will be repaired using this method.

3. Hand patching will include stripping, chipping or otherwise removing existing surface materials from deteriorated areas in bituminous or Portland cement concrete pavements, and replacing by hand or machine methods with bituminous material approved by the Engineer.

4. Joint repairs shall be done in conformance with Detail 7 and 8 on MDOT Standard Plan R-44, latest edition, except as modified by the project plans and specifications. This work will consist of chipping joints in the existing concrete pavement surfaces in accordance with the "Chipping Concrete Pavement for Joints" section of the MDOT specifications.

5. Following the removal of the existing material, holes to be hand patched shall be thoroughly cleaned by blowing out all loose material with an air compressor or with a power blower.
6. Hand patching will not include wedging of low areas.
7. Except as provided herein, this work shall conform to the requirements of the "Hand Patching" section of the MDOT specifications.

E. Joint Clean Out

1. Excess filler in cracks or joints, which may cause bleeding or instability in the opinion of the Engineer, shall be removed to the elevation of the pavement surface. This work is considered to be incidental to the asphalt pavement installation on the project.

3.06 BOND COAT

A. The amount of bond coat applied to existing pavement surfaces shall be 0.15 gallon per square yard, or less if directed by the Engineer.

B. The amount of bond coat applied to new HMA surfaces shall be 0.10 gallon per square yard, or less if directed by the Engineer.

C. Bond coats shall not be diluted, unless authorized by the Engineer.

D. Proper precautions shall be taken to prevent smearing bond coat on adjacent pavement surfaces, curbs, walks, castings, lawns or shrubbery. The Contractor shall remove all such bond coat smeared on the above mentioned items.

E. There is no separate pay item for bond coat, as such work is considered to be incidental to asphaltic surfacing.

F. The Contractor shall furnish tickets or other satisfactory evidence showing the quantity of bond coat used in order to verify the application rate.

3.07 PLACING BITUMINOUS MIXTURE

A. At the end of each period of work on the wearing surface, joints shall be formed by laying and rolling against boards of the thickness of the wearing surface placed at right angles to the centerline across full width of pavement, or by such means as approved by the Engineer.

3.08 MEETING DRIVEWAYS OR OTHER SURFACES

A. Where new asphaltic concrete surfacing is higher than abutting paved driveways or other paved surfaces, the Contractor shall place asphaltic wearing course mixture over such driveways or other paved surfaces to provide a transition to meet the new surface elevation. Where the abutting paved surface drains towards the new surfacing, the surfacing mixture shall be extended for a distance sufficient to provide for drainage onto the new surface, as directed by the Engineer. The surfacing mixture may be feathered to zero thickness at the end of the surfacing.

B. The Contractor shall place bond coat over abutting areas to be surfaced.

C. There is no separate pay item for this work, and payment will be included under the pay item for the asphaltic mixtures used.

3.09 BASIS OF PAYMENT

A. Payment for the types of asphalt pavement and pavement repairs shall be as listed in the Proposal. Bid prices for work items listed in the Proposal shall include all other work necessary for a complete job.

END OF SECTION

SECTION 2704
INTERNAL SEWER INSPECTION

PART 1 GENERAL

1.1 SUMMARY

A. It is the intent of these specifications to provide a basis for which a sewer line can be internally inspected by a Closed Circuit Television (CCTV) camera. The inspection shall include providing the Owner with digital videos, images, and reports that include condition and other descriptive data related to the sewer. This basis shall include all aspects of televising including method, equipment, and payment for work.

B. This Section shall include all supervision, labor, equipment, materials, traffic control, temporary plugging and/or bypassing of flow, disposal of debris, required cleaning, video media, still pictures and any applicable electrical service necessary to successfully complete the inspection and assessment of the designated lines, as well as the required reporting and deliverables which includes the Contractor providing the Owner with applicable recommendations for corrective actions.

C. The Contractor shall provide and furnish all required skilled and unskilled labor, materials, fuel, machinery, tools, so that the contract and all work required to be done under the contract can and will be carried on continuously and expeditiously to completion, in all respects to the satisfaction of the Owner.

D. The sewer lines for which televising is required are shown in these Contract Documents.

E. Related Sections:
   1. Section 02751 – Cleaning of Sewer Lines

1.2 MEASUREMENT AND PAYMENT

A. The Contractor shall provide a video inspection record of all newly constructed sewer mains (storm, sanitary and combined) and new sewer service lines installed for the project in accordance with this specification.

B. Sewer service lines shall be clearly televised to show the condition of the tap/connection at the main, and shall be launched up each lateral to televise the service line from the sewer main to the property line to the maximum extent practicable. The video inspection shall occur after sewer trenches have been backfilled and compacted to final elevation.

C. Final payment will not be made until such time as all deliverables are provided for each televised pipe segment.

1.3 REFERENCES

A. Abbreviations and Acronyms
   1. NASSCO - National Association of Sewer Service Contractors
   2. PACP - Pipeline Assessment and Certification Program
   3. MACP - Manhole Assessment and Certification Program
   4. LACP - Lateral Assessment and Certification Program

B. Definitions
   1. Reverse Setups - a situation that arises when the television camera cannot pass through the manhole section, making it necessary to reverse the positions of the television equipment and enter the sewer from the opposite direction

1.4 QUALIFICATIONS

A. The Contractor or Subcontractor performing the work shall be a company with experience performing internal sewer inspections and shall have a minimum experience of three other projects of at least 50,000 feet within the last five years that included surveying, processing, and interpretation of data associated with CCTV inspections.

B. The work shall be performed under the supervision of personnel trained and certified in the use of NASSCO's PACP for the inspection of sewer mains, LACP for the inspection of laterals, and MACP for the inspection of manholes.

1.5 SUBMITTALS

A. Prior to initiation of work, the Contractor shall submit for Owner review and approval the following:
   1. Data sheets for proposed CCTV equipment, description of proposed electronic storage device (hard drive, etc.) and proposed electronic file formats.
   2. Description of proposed software for recording inspection logs along with a sample of a typical log and samples of all required reports as described in this Section.
   3. Proposed sequence and schedule, and sample resident/business notification letter.
   4. Contact information for Contractor's staff including mobile phone and email, and emergency contact information.

1.6 QUALITY ASSURANCE

A. After completion of one week of Internal Sewer Inspection (or alternative period as approved by the Owner), the Contractor shall provide the Owner with a sample of the required deliverables for the work completed for review and approval of format.

1.7 REPORTING

A. The Contractor shall record any and all defects such as radial and linear cracks no matter how minor, dips, blockages, or obstructions, pipe joint conditions, infiltration and calcite buildup, lateral connections (including reporting active, inactive, or abandoned), root infiltration, deterioration of pipe material surface, penetrating utilities, etc. The Contractor shall record the characteristics and defects observed using the NASSCO PACP/MACP/LACP Inspection Report format and coding for each sewer segment, and provide a shape file with the information in the correct location. All pipes, manholes, laterals and other structures shall be identified using the Owner's naming convention. The operator's NASSCO certification number shall be recorded on the Report.

B. All manhole and pipe assets shall be referenced using the supplied Owner identification numbers ("Owner Asset/Pipe ID #"). Reports generated using a Contractor–generated numbering system will not be accepted. The Pipe ID (not the Manhole ID) shall be used

as the Pipe Segment Reference (PSR). A shape file will be provided to the contractor with the Pipe and Manhole IDs.

C. Location of defects shall be given as a distance from the starting point and location around the pipe (i.e., 2 o'clock)

D. The Contractor shall provide the following reports for each inspected segment that include all descriptions in NASSCO format of all defects found as part of the survey, all NASSCO header information, and identify the asset using the Owner's identification system:

1. Graphic Reports, including:
   a. Linear sketch of the inspected manhole or pipe/lateral segment showing defect locations
   b. List of the individual defects
   c. Defect "grade" assigned using the NASSCO PACP/MACP/LACP Condition Grading System guidelines.
2. Tabular Reports, including:
   a. List of the individual defects
   b. A defect "grade" using the NASSCO PACP/MACP/LACP Condition Grading System guidelines
   c. NASSCO segment scores, including
      1) Overall Pipe Rating (Structural, Maintenance, and Overall)
      2) Pipe Rating Index (Structural, Maintenance, and Overall), and
      3) Quick Scores (Structural, Maintenance and Overall.)
3. Defects by Inspection Report
   a. Generated at completion of the project, or at intermediate milestones as required by the Owner
   b. Includes;
      1) A tabular list of all segments inspected to date,
      2) The surveyed length for each segment,
      3) A count of defects encountered for each segment,
      4) Quick rating scores and,
      5) The overall pipe rating index

E. Submit Samples of Contractor Reports for Owner approval prior to starting project.

F. Provide Final Reports in accordance with Required Deliverables.

1.8 REQUIRED DELIVERABLES

A. The contractor shall deliver an editable database compliant with Pipeline Assessment Certification Program (PACP) Exchange Database standards, set forth by the National Association of Sewer Service Companies Organization (NASSCO), survey details, observations, and shape files for all pipes surveyed. All reports submitted to the Owner by the Contractor must follow the most recent standards set forth by NASSCO, and the database provided by the contractor will be comprehensive with NASSCO's database. Contractor must have their database validated through NASSCO prior to the project start date.

B. The Contractor shall deliver to the Owner one copy each of the Graphic Report and Tabular Report for each segment inspected, and one copy of the Defects by Inspection Report that

summarizes all segments inspected during the project. All reports shall also be provided in Adobe PDF format. Both reports for each sewer segment shall be a single PDF file with the GIS pipe ID or up-steam and down-stream manhole IDs included in the file name.

C. The Contractor shall submit preliminary copies of the Graphic Report, Tabular Report, and NASSCO Exchange Database for areas completed for review as the project progresses.

D. The Contractor shall deliver to the Owner digital copies of all video recordings, still photos, and other media for the segments inspected. The files shall be accessible using commonly-installed software, or a viewer may be provided instead.

E. All electronic records and digital files shall be provided to the Owner on a suitable data storage device (CD, DVD, hard drive, etc.) The devices shall be labelled to correspond with the hard copy inspection reports. Labels shall be permanent with complete project information.

F. The Owner reserves the right to reject any or all televising and recording of sewer segments due to poor quality or clarity of defects. If necessary, the Contractor shall re-inspect those segments as determined by the Owner at no additional cost to the Owner.

G. All video recordings, still images and reports shall become property of the Owner without restriction for copying, re-use or publication

1.9 ACCEPTANCE

A. A daily log of work accomplished shall be duly recorded and acknowledged by the Owner and the Contractor's superintendent.

B. All inspection recordings and reports will be reviewed by the Owner. The Owner shall have the authority to reject all or any portion of recordings not conforming to Specifications. These areas shall be re-inspected at no additional charge.

1.10 SAMPLE REPORTS

A. Samples of the required reporting are located at the end of this Section.

PART 2 PRODUCTS

2.1 INSPECTION EQUIPMENT

A. General:
1. Provide equipment as required for the proposed work to perform inspections of sewer mains, manholes and/or laterals. Laterals shall be inspected from mainline to property line or cleanout located in streets, street rights-of-way, and off road easements.
2. Equipment shall include but not be limited to portable CCTV equipment, vehicles capable of transporting TV equipment and accessing remote easements, cleaning equipment, and any additional equipment and supplies required to allow for communication between personnel and to maintain a safe working environment.

3. The Contractor shall have on site fans and/or blowers necessary to remove any fog or steam that may be present, during or caused by the inspection of the piping system. All cost incurred in the use of fans or blowers shall be considered incidental to this project. No inspection of pipe shall proceed while fog is present.
4. Necessary playback equipment shall be readily accessible in the field for Owner to perform periodic review of the inspection work.

B. Sewer Main CCTV:
1. All equipment used for televising sewer lines shall be of the highest quality and shall have high performance capabilities. It shall be operative in 100 percent humidity conditions and shall be specifically designed for the proposed work.
2. The CCTV camera shall be of the remotely operated pan and tilt type. The rotating camera and lighthead configuration shall provide 240 degrees of pan and tilt angle measuring centerline to centerline and minimum 65-degree lens viewing angle.
3. The camera shall be color and shall provide a minimum of 460 lines of horizontal resolution and 400 lines of vertical resolution.
4. The color camera shall be equipped with the necessary circuitry to allow for either automatic or remote adjustment of the optical focus and iris from the power control unit at the viewing station.
5. Mounting: Cameras may be mounted on conventional camera skids, floating skids or rafts, or maybe handheld and carried manually through larger diameter sewers.
6. Lighting: Suitable to allow clear picture of entire inner pipe wall extending at least 10 feet in front, including black High Density Polyethylene (HDPE) pipe.
7. Image: Capable of self-righting itself.
8. Features: Equipment shall have a display feature capable of showing following information.
   a. Project name.
   b. Contractor's name.
   c. Date and time of inspection.
   d. Inside pipe diameter and type.
   e. Manhole identification (upstream manhole to downstream manhole).
   f. On-going footage counters accurate within 0.2 foot.
9. Operator narration capability: Follow NASSCO standards.
10. Recording of a single section of sewer onto two different media storage devices will not be acceptable. Each sewer segment shall be documented in a continuous video.

C. Lateral CCTV:
1. Shall conform to sewer main CCTV, except as modified herein and also be able to inspect laterals as small as 3-inches diameter for a distance of up to 70 feet from sewer mainline.
2. Launched from within mainline sewer: Unit shall be mounted on tread tractor that moves through sewers and positions inspection camera launcher opposite lateral line connection.
3. Launched from within cleanout: Unit shall be able to travel to mainline sewer.
4. Shall be of the self-leveling type.
5. Display shall include lateral address.

D. Manhole CCTV.
1. Color Video Camera:

a. Shall conform to sewer main CCTV, except as modified herein and also be specifically designed and constructed for this application.
b. Capable of capturing both video and high resolution stills.
c. High-resolution, pan and tilt or rotating head (manually performed or motor operated) with wide viewing angle lens and either automatic or remote focus and iris control.
d. Lighting: Suitable for use with digital color inspection cameras and manhole and structure sizes as identified in contract.
e. Operative in 100 percent humidity conditions.

E. Software:
1. Software for logging condition and feature coding shall conform to current NASSCO standards:
   a. Sewer Mains: Follow PACP
   b. Laterals: Follow LACP
   c. Manholes: Follow MACP
2. The software shall offer all coding compliant with PACP standards and validate each entry before it can be saved.
3. The footage reading from the camera equipment shall be automatically entered into the survey log and shall directly correspond to the noted defect location throughout the pipe graphic and tabular reports generated.
4. Software shall be compatible with Microsoft Windows operating system and shall be capable of importing and exporting data to and from the standard PACP database.
5. Recorded audio-video files shall be in a format viewable by commonly available software, either directly or via export. Any additional software required viewing files in their native format shall be provided at no additional cost with the deliverables.

PART 3 EXECUTION

3.1 GENERAL

A. The Contractor shall be responsible for securing the site and protection of the Owner's personnel and public. Any necessary traffic control shall be in accordance with the current Michigan Manual of Uniform Traffic Control Devices.

B. All inspection and recording of sewer features and condition shall be in accordance with NASSCO standards.

C. Unless otherwise noted, a sewer line shall be repaired or rehabilitated as specified in these Contract Documents prior to insertion of the television camera.

D. Maintain sewer isolation by temporary plugging or bypass pumping, as required by the Contract Documents. Contractor shall conduct operations to prevent backups and sewer overflows, and coordinate all activities with Owner. Should bypass pumping be required, the Contractor shall have personnel witnessing the pumping continuously during operations to assure that the capacity of bypass pumping equipment is sufficient.

E. For sewers impacted by wet weather, including storm sewers, combined sewers and sewers with significant inflow and/or infiltration, work shall be coordinated with weather forecasts. No work shall be scheduled within 24 hours before or after an anticipated precipitation event.

F. The Contractor shall notify affected residents/businesses one day prior to starting cleaning and sewer inspection with a "Resident Notification Letter" informing the residents/businesses of the Contractor's activities and to provide contact information for the Contractor and Owner. The Contractor shall submit the letter for Owner review and approval prior to notification.

G. The Owner shall have the authority to designate areas for which coverage may be added or omitted.

3.2 INSPECTION PREPARATION

A. The Contractor shall be responsible for having the necessary camera skids, floats, and rafts available to allow for inspection in a manner acceptable to the Owner under live flow conditions. The following general criteria shall be followed:

1. No inspections shall be performed where flow depths exceed 50% of pipe diameter without prior approval of the Owner.
2. The maximum flow depth for remote inspection work is 33% of the pipe diameter. The Contractor may be required to perform inspections during off-peak hours (night inspections) if specifically requested by the Owner to achieve this maximum flow standard.
3. No maximum flow depth has been established for manual (walk-through) inspections since depths in excess of one-third pipe will probably make such inspection methods unsafe.
4. Pipes 60 inches in diameter and larger, and having flow depths of less than 20% of the pipe diameter, shall be manually inspected unless the Contractor provides the owner with reasons for deeming manual inspections to be impractical or unsafe.

3.3 INSPECTION METHOD FOR SEWER MAIN LINES

A. All recording of the piping system shall be a continuous record from structure to structure. The camera shall be positioned at the center of the sewer pipe. All inspection shall be completed during times of dry weather flow, and the camera shall record in the same direction as the flow. Inspection against the flow especially during high flow conditions must be approved by the Owner.

B. The rate of speed shall be adjusted to produce a clear, concise record of the piping system and shall not exceed 30 feet per minute for conventional CCTV cameras. Travel shall stop for minimum of 10 seconds to record lateral connections, mainline connections, defects, features, and other observations. Advanced Digital Video Survey (DVS) inspection camera systems with high digital image recording resolution and lighting characteristics will be allowed to record at faster rates subject to Owner review and approval of images.

C. The camera pan/tilt and zoom-in/zoom-out rates shall be controlled sufficient such that during playback all angles or magnifications may be viewed clearly. Lighting shall be sufficient to ensure true color and minimal glare/reflective distortions.

D. Manual winches, power winches, TV cable, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions shall be used to move the camera through the sewer line.

E. If there is interference in the sewer line that will not allow the CCTV equipment to pass, then it shall be backed out of the line and an attempt shall be made to inspect the line from the manhole at the other end. If the entire length of the sewer line cannot be televised because of two or more obstructions, then the Owner shall be notified to determine how to proceed.

3.4 INSPECTION METHOD FOR LARGER DIAMETER SEWER MAIN LINES ("WALKABLE")

A. Manual inspections will be required in lines where conditions will allow the Contractor's inspection crew to safely walk through the sewer, and shall conform to the requirements for sewer main lines except as otherwise modified herein.

B. Manual pipe inspections (walk-through inspections) shall be conducted in such a manner as to transmit the video signal to an above-ground viewing room to permit the Owner to watch the inspection work live on a color monitor in the viewing facility.

C. Direct voice communication between the Owner, the in-pipe inspection personnel, and the recording technician in the above-ground unit shall be maintained at all times during the manual inspection work. Video recording equipment shall also be located above ground in the inspection truck and accurate, continuous footage readings shall be superimposed on the video recording of permanent record.

D. The Contractor shall conform to all regulations and requirements for confined space entry, and shall prepare and submit a health and safety plan to the Owner prior to initiation of any work.

E. The Contractor shall provide for coordination of flow control.

3.5 INSPECTION METHOD FOR LATERALS

A. Follow sewer main line procedure above, modified as follows:
   1. Verify accessible cleanout exists near limits of inspection prior to performing internal inspection. Notify Owner if no cleanout is available.
   2. Isolate section inspected by bypassing flow or turning off property water. Prevent backflow into laterals.

3.6 INSPECTION METHOD FOR MANHOLES

A. Obtain still photos of exterior of manhole and surrounding area, and include manhole identification in photo. This may be done by placement of a whiteboard in the photo or post-editing of image to include the data.

B. Interior manhole inspection
   1. Start at manhole rim in line with largest diameter outgoing pipe.

2. Rotate camera clockwise until 360 degree panorama is complete. Provide still photos of noted defects and features following MACP. Lower camera two to three vertical feet and repeat procedure until bench invert is reached.
3. Record vertical location of all defects and features and position in manhole. All photos and report logs shall include the manhole structure ID and location within manhole.

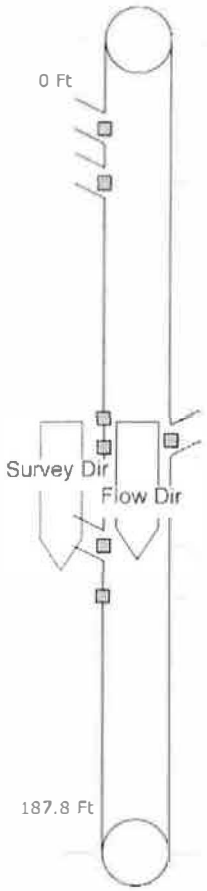
3.7 CLEANUP

A. The Contractor shall be responsible to clean up any debris or spills during each day of work and restore conditions to existing as soon as possible.

B. The Contractor shall be responsible for the disposal of personal protection equipment used during the work.

Pipe Graphic Report Owner Asset ID#

Setup XXX	**Surveyor** XXX	**Certificate #** XXX		**System Owner** OWNER NAME	
Drainage		**Survey Customer** OWNER NAME			
P/O #		**Date** YYYY/MM/DD	**Time** HH:MM	**Street** STREET NAME	
City LOCATION		**Further location details** CAMERA IS HEADING SOUTH			
Up ID #XXX		**Rim to invert**	**Grade to invert**	**Rim to grade**	**Ft**
Down ID #XXX		**Rim to Invert**	**Grade to Invert**	**Rim to grade**	**Ft**
Use Sanitary/Combined/Storm		**Direction** Downstream	**Flow control** Not Controlled	**Media No** XXX	
Shape Circular		**Height** 18 **Width**	**ins** **Preclean** J	**Date Cleaned** YYYY/MM/DD	
Material Vitrified Clay Pipe		**Joint length**	**Total length** **Ft**	**Length Surveyed** 187 80	
Lining		**Year laid**	**Year rehabilitated**	**Weather** Dry	
Purpose Capital Improvement Program Assessment			**Cat**		
Additional Info				Structural O & M Constructional Miscellaneous Hydralic	
Location Light Highway					
Project PROJECT NAME				**Work Order**	
Northing		**Easting**		**Elevation**	
Coordinate System				**GPS Accuracy**	



0.0 Ft	Start of Survey Manhole [C-039] Water Level 0%
20.6 Ft	Crack Multiple 02 to 04 o'clock ST: 3 Tap Break-in 6.000 02 o'clock [WEST]
33.2 Ft	Tap Break-in 6.000 02 o'clock [WEST]
87.6 Ft	Roots Fine Joint 05 to 07 o'clock OM: 1 [S01]
92.6 Ft	Tap Factory 6.000 09 o'clock [EAST]
94.3 Ft	Fracture Circumferential 05 to 07 o'clock ST: 2
117.0 Ft	Tap Break-in 6.000 03 o'clock [WEST]
128.7 Ft	Roots Fine Joint 05 to 07 o'clock OM: 1 [F01]
187.8 Ft	Manhole [C-040] End of Survey

Tabular Report Owner Asset ID#

Setup XXX	**Surveyor** XXX	**Certificate #** XXX	**System Owner** OWNER NAME
Drainage		**Survey Customer** OWNER NAME	
P/O #		**Date** YYYY/MM/DD **Time** 17:10	**Street** STREET NAME
City LOCATION		**Further location details** CAMERA IS HEADING SOUTH	
Up ID #XXX		**Rim to invert**	**Grade to invert**	**Rim to grade** Ft
Down ID #XXX		**Rim to invert**	**Grade to invert**	**Rim to grade** Ft
Use Sanitary/Combined/Storm	**Direction** Down	**Flow control** Not Controlled	**Media No** XXX
Shape Circular	**Height** 18 **Width**	ins **Preclean** J	**Date Cleaned** YYYY/MM/DD
Material Vitrified Clay Pipe	**Joint length**	**Total length**	**Length Surveyed** 187.8
Lining	**Year laid**	**Year rehabilitated**	**Weather** Dry
Purpose Capital Improvement Program Assessment	**Cat**		**Pressure**
Additional info		Structural O & M Constructional Miscellaneous Hydralic	
Location Light Highway			
Project PROJECT NAME			**Work Order**
Northing	**Easting**		**Elevation**
Coordinate System			**GPS Accuracy**

Count	Video	CD	Code		Grade	In1	In2	%	Jnt	Fr	To	ImRef	Remarks
0.0			ST	Start of Survey									
0.0			AMH	Manhole									C-039
0.0			MWL	Water Level				0					
20.6			CM	Crack Multiple	3					C2	04		
20.6			TB	Tap Break-in		6.000				C2			WEST
33.2			TB	Tap Break-in		6.000				C2			WEST
87.6		S01	RFJ	Roots Fine Joint	1				J	C5	07		
92.6			TF	Tap Factory		6.000				C9			EAST
94.3			FC	Fracture Circumferential	2					C5	07		
117.0			TB	Tap Break-in		6.000				C3			WEST
128.7		F01	RFJ	Roots Fine Joint	1				J	C5	07		
187.8			AMH	Manhole									C-040
187.8			FH	End of Survey									

187.8 Ft **Total Length Surveyed**

Scores

Structural:	**Pipe Rating** 5	**Pipe Ratings Index** 2.5	**Quick Rating** 3121
O&M:	**Pipe Rating** 8	**Pipe Ratings Index** 1.6	**Quick Rating** 1500
Overall:	**Pipe Rating** 13	**Pipe Ratings Index** 1.9	**Quick Rating** 3121

Contractor Logo/Name, Address and Contact Information

Project: XXX **Owner: XXX** **System: XXX**
Project Start Date: YYYY/MM/DD **Date of Report: XXX**
Project End Date: YYYY/MM/DD
Total Number of Setups: XXX **Total lft scheduled: XXX** **Total lft completed: XXX**

CCTV Defects by Inspection Report

Location						Structural			O&M			Misc		NASSCO Scoring					
Setup #	Owner Pipe ID#	From MH	To MH	Diameter, Inches	Surveyed Length, ft	Sags	Cracks	Fractures	Deposits Attached	Roots	Tap Break In Obtruding	Material change	Survey Abandoned	Structural Quick Rating	Maintenance Quick Rating	Overall Quick Rating	Structural Pipe Rating Index	Maintnenace Pipe Rating Index	Overall Pipe Rating Index
1	C040P	C039	C040	18	187.8		1	1		8		1		3121	1500	3121	2.5	1.6	1.9
2	C041P	C040	C041	10	40.0				2		4			0000	2600	2600	0.0	2.0	2.0
3	C042P	C041	C042	10	63.5			1						4100	0000	4100	4.0	0.0	4.0
4	C043P	C042	C043	10	64.7								1						
5	C044P	C043	C044	10	80.2	1		1						4121	0000	4121	3.0	0.0	3.0

Contractor Logo/Name Contact Information

END OF SECTION

SECTION 2708

RESIN IMPREGNATED FLEXIBLE FABRIC LINE AND CURED-IN-PLACE PIPE (GRAVITY FLOW)

PART 1 GENERAL:

1.1 SUMMARY

A. This Section shall include all work, materials, labor, and equipment necessary to provide for rehabilitating gravity flow sewer pipelines by the installation of a resin-impregnated flexible tube that will cure into a hard impermeable cured-in-place pipe (CIPP) that shall extend from end to end in a continuous, tight-fitting, watertight pipe-within-a-pipe.

B. Related Requirements
1. Section 02704 – Internal Sewer Inspection
2. Section 02751 – Cleaning of Sewer Lines

1.2 MEASUREMENT AND PAYMENT

A. **Sewer Lining, ___" RIFI-CIPP.....Foot**
Sewer Lining shall be paid for at the contract bid price per linear foot for actual linear footage of cured-in-place pipe installed in the field, complete in place using the RIFI method, for the size of pipe installed. Measurement shall be from center of structure to center of structure. Payment for the cured-in-place pipe shall also include the cost of sealing the pipe in the manholes, reworking the manhole inverts and benches, and all required testing.

B. **Sewer Lining, Pre-Liner, ___" RIFI-CIPP.....Foot**
Sewer Lining shall be paid for at the contract bid price per linear foot for actual linear footage of cured-in-place pipe installed in the field, complete in place using the RIFI method, for the size of pipe installed. Pre-liner installation will be dependent upon infiltration conditions found during construction; where installation of the pre-liner is requested by the Contractor in advance of the final liner system. Use of pre-liner shall not affect the design of the final liner system. Measurement shall be from center of structure to center of structure. Payment for the cured-in-place pipe shall also include the cost of sealing the pipe in the manholes, reworking the manhole inverts and benches, and all required testing.

C. **Cut/Grind Protruding Sewer Leads, [type of sewer lead material] .....Ea**
Cut/grind Protruding Sewer Leads shall be paid for at the contract bid price for the full removal of each service lead excessively protruding more than one inch into the pipe, regardless of the amount of cutting/grinding necessary for removal. Payment for the removal of the protruding sewer leads shall also include the cost of removing the remnants of the protruding sewer lead and cleaning the affected area. Separate pay items have been established for the various types of sewer lead materials that are anticipated to be encountered.

D. **Cut/Grind Root Intrusion.....Ea**
Cut/grind Root Intrusion shall be paid for at the contract bid price for the full removal of each root intrusion at a distinct location (joint, lateral connection, crack) that could not be sufficiently removed following standard cleaning and heavy cleaning methods, and where use of a mechanical or robotic cutter or grinder is necessary to complete the removal. Payment for the removal of the root intrusion shall also include the cost of removing the remnants of the protruding sewer lead and cleaning the affected area.

E. **Cut/Grind Mineral Deposit.....Ea**
Cut/grind Mineral Deposit shall be paid for at the contract bid price for the full removal of each mineral deposit at a distinct location (joint, lateral connection, crack) that could not be sufficiently removed following standard cleaning and heavy cleaning methods, and where use of a mechanical or robotic cutter or grinder is necessary to complete the removal. Payment for the removal of the mineral deposit shall also include the cost of removing the remnants of the protruding sewer lead and cleaning the affected area.

F. The following work items shall be included in the contract bid price per linear foot for **Sewer Lining, ___" RIFI-CIPP**, unless otherwise described and provided for in the Proposal:

1. Design of required liner thickness for each sewer segment, and necessary submittals
2. Pre-installation cleaning of sewer lines and debris disposal
3. Identification of existing live taps
4. Traffic Control
5. Styrene Odor Control Plan
6. Bypassing of flow
7. Installing clean-outs on laterals in areas of high groundwater, and bypassing flow from the clean-outs when necessary
8. Cured-in-place (CIPP) sewer pipe installation, including required testing
9. Air Testing (sampling and measuring of styrene odors)
10. Removal of line obstructions
11. Proper disposal of cure water
12. Sampling and testing of cured-in-place pipe
13. Post installation T.V. inspection with PACP coding
14. Clean-up
15. Reinstate Lateral Connection
16. All additional items described herein as incidental to the work.

G. Any additives, resin modifications, installation methods, or other changes in work necessary to reduce styrene odors shall be indicated in the Styrene Odor Control Plan and shall be included in the contract bid price per linear foot for **Sewer Lining, ___" RIFI-CIPP** whether part of operations as initially planned or in response to styrene presence threshold being exceeded or complaints from odors.

1.3 REFERENCES

A. Abbreviations and Acronyms

1. CIPP – Cured-in-Place Pipe
2. ITCP – Inspector Training Certification Program
3. PACP – Pipeline Assessment and Certification Program (most current version)
4. RIFI – Resin-Impregnated Fabric Inversion Liner

B. Reference Standards
1. ASTM D 790 – Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
2. ASTM D 5813 – Standard Specification for Cured-in-Place Thermosetting Resin Sewer Piping Systems
3. ASTM F 1216 – Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube
4. ASTM F 1743 - Standard Practice for Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe
5. ASTM F 2019 – Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Pulled in Place Installation of Glass Reinforced Plastic (GRP) Cured-in-Place Thermosetting Resin Pipe (CIPP)
6. ASTM F 2994 – Standard Practice for Utilization of Mobile, Automated Cured-In-Place Pipe (CIPP) Impregnation Systems
7. All work shall comply with the reference standards unless specifically stated otherwise in the Specification.
8. References to standards which are made part hereof shall be latest edition thereof.

1.4 ADMINISTRATIVE REQUIREMENTS

A. Access
1. Determine locations of appropriate access points (manholes) for cured-in-place pipe installation.
2. Obtain access rights from private property owners when access across private property is necessary to reach access manholes due to easement congestion which limits equipment travel within existing easements, unless provided by Owner.

B. Coordination
1. Provide adequate notification of work to private property owners that are connected to the sewer being lined whose building laterals will be out of service during the cured-in-place pipe installation, curing, and restoration processes.
2. Notification shall;
   a. Be in writing via door hanger, door flier, or U.S. Mail given 24 hours but no more than 48 hours in advance of service loss (excluding weekends and holidays)
   b. Clearly state purpose of the work.
   c. Advise all affected customers against water usage until the sewer line is placed back in service.
   d. Clearly state the potential consequences of using wastewater generating facilities during the time the building sewer service will be out of service.
   e. Include a 24-hour contact telephone number for questions regarding the work.
3. Limit service outage for any property served by the sewer to no more than 24 hours.

C. Prepare a Styrene Odor Control Plan to minimize project specific styrene odors at the project site and surrounding areas.
1. Submit with Bid Proposal
2. Styrene odor control plan will be used to evaluate the qualifications of the bidder.

D. Collect and dispose of cure water to an Owner approved location when lining sewers that discharge to open waterways.

E. Restore all property in the project work area to a condition equal to or better than existing following completion of construction.

F. Final acceptance of each line segment is contingent on completion and acceptance of sample testing and receipt and approval of post-installation T.V. inspection.

1.5 PROJECT WORK PLAN

A. Prepare a Project Work Plan (PWP) in advance of the pre-construction meeting which clearly defines the CIPP product delivery in conformance with the requirements of the Contract Documents. The PWP shall at minimum contain:
1. Detailed installation plan describing all work necessary and appropriate for a complete CIPP installation.
2. Installation method, sequencing and schedule.
3. Schedule of Submittals.
4. Bypass pumping plan.
5. Traffic control plan
6. Engineering design calculations to for each length of cured-in-place pipe to be installed including the thickness of each proposed CIPP.
7. Detailed public notification plan.
8. Project contact list and defined responsibilities.
9. Proposed procedures for product sampling and testing.
10. Sample field documentation forms, reports, and logs.
11. Outline of specific repair or replacement procedures for potential defects that may occur in the installed CIPP.

B. Compensation for all work required for the preparation of the PWP shall be included in the cost of the project.

1.6 SUBMITTALS

A. Provide all submittals in a timely manner, considering a reasonable review time, and possible resubmittals for corrections if found to not be compliant with these Specifications. Completion of submittal reviews, and review of resubmittals, shall not be a basis for any delay claims.

B. CIPP Liner Design
1. Provide preliminary design of CIPP liner with bid
2. Provide secondary design of CIPP liner if necessary after pre-lining inspection
3. Furnish certified design calculations stamped by a registered professional engineer prior to liner manufacture.

C. Liner Tube data
1. Manufacturer
2. Description of product components
3. Technical data sheets
4. Certified information from manufacturer of the liner tube's nominal void volume.

D. Liner Tube Coating
   1. Material safety data sheets (MSDS)
   2. Technical data sheets
   3. Recommended repair (patching) procedure, if applicable
   4. Design thickness

E. Raw Resin data
   1. Manufacturers of all formulated resin components: resin, catalysts, fillers, additives, and monomers.
   2. Description and percentage utilization of each component for the resin formulation proposed.
   3. Technical data sheets for all formulated resin components
   4. MSDS for all formulated resin components

F. Site Samples
   1. Provide flexural and tensile testing reports of CIPP samples from the last three (3) projects in which testing was completed.
   2. Provide copies of design thickness calculations for the cured-in-place pipe from the flexural and tensile testing reports.

G. Manufacturers' shipping, storage and handling recommendations for all components of the CIPP system.

H. Proposed tube wet-out and cure method, including:
   1. A complete description of the proposed wet-out procedure for the proposed technology.
   2. When epoxy resins are utilized, manufacturer's certification of compliance with ASTM F2994
   3. CIPP manufacturer's recommended installation and cure method - for each diameter and thickness of the CIPP to be installed.

I. Licensed Testing Company to perform third-party flexural properties testing on representative samples collected from the installed CIPP.

J. Personnel Certifications
   1. Documentation of PACP certified personnel assigned to pre- and post-inspection televising of pipelines
   2. Documentation of ITCP certified personnel assigned to project.

K. Styrene Odor Control Plan
   1. Method to continually monitor styrene resin odors in the project area during the liner installation, inversion, and curing process
   2. Method to contain styrene resin odors from the liner container truck.
   3. Method to contain styrene odors during CIPP liner installation and curing.
   4. Method to contain styrene resin odors from inversion water discharging after CIPP curing completion.
   5. Name of the equipment for sampling and measuring styrene odors.
   6. Sample Resident Notification Letter, addressing the issue of styrene odors and providing educational information on how to avoid the odors and what to do if the odors are present in a home/business/school.
   7. Procedures for notifying schools, hospitals, and businesses impacted.

8. Procedures for work progress should maximum permissible styrene odor levels be exceeded.

1.7 QUALITY ASSURANCE

A. The Contractor shall carry out his operations in strict accordance with all OSHA and manufacturer's safety requirements. Particular attention is drawn to those safety requirements involving working with scaffolding and entering confined spaces.

B. Products used in the Work identified herein shall be produced by manufacturers regularly engaged in the manufacture of cured-in-place liners for municipal water systems and with a history of successful production acceptable to the Owner.

C. Verification of Pipeline Inside Diameter
1. Prior to manufacture of the CIPP, the Contractor is responsible for verifying the inside diameter of the pipeline to be rehabilitated to assure a tight-fitting cured-in-place pipe is installed.
2. Sections of liner with visual defects, continuous or intermittent inward folding, or overlapping of excess liner material will be rejected, refer to "Section 3.13 – Non-Conforming Work" for acceptance criteria.
3. Provide a liner with a transition section in cases where the internal diameter of the pipe changes significantly.

D. Styrene Odor Control Monitoring
1. Read and record styrene levels every one (1) hour with a Drager Tube or approved equal.
2. Measure styrene levels a maximum of 10 feet away from the inversion manhole while liner is being inverted and cured.
3. Notify Owner and implement procedures for work progress should styrene level readings exceed 50 ppm or resident complaints of excessive styrene odors are filed.

E. Minimum Qualifications
1. The installing Contractor shall be licensed by the CIPP lining system Manufacturer and shall have successful experience in the installation of CIPP lining systems in municipal wastewater systems.
   a. Provide a copy of the license/agreement or letter from the CIPP Manufacturer that certifies the use and installation of the CIPP lining system by the Contractor.
   b. The Contractor shall be familiar with the specified requirements and methods needed for proper performance of the liner system in accordance with the Work specified herein.
2. Contractor's Field Supervisor Foreman: Minimum five (5) years of continuous experience as a foreman/superintendent for a CIPP installation crew
3. Minimum CIPP installations of the proposed method by the Contractor in the past five (5) years:

Pipe Diameter Range	**Required Performance (inch-miles)**
Up to 18-inch	1,000
18-inch to 36-inch*	200
36-inch and larger*	50

* if in Contract

4. All CCTV work shall be performed under the supervision of personnel trained and certified in the use of NASSCO's PACP for the inspection of sewer mains.

PART 2 PRODUCTS:

2.1 CIPP MATERIALS

A. Liner tube
1. Shall consist of one or more layers of flexible needled felt or an equivalent absorbent non-woven or woven felt fabric, felt/fiberglass or fiberglass that when installed will tightly fit the internal circumference of the existing conduit.
2. Meet the requirements of ASTM F1216, ASTM F1743, ASTM D5813, ASTM F2019 or ASTM F2994 whichever is compatible with the CIPP system proposed.
3. Capable of absorbing and carrying resins
4. Constructed to withstand installation pressures and curing temperatures
5. Have sufficient strength to bridge missing pipe segments
6. Have the ability to stretch to fit irregular pipe sections, negotiate minor bends, and dimple at any service or branch connection.
7. Uniform in thickness and, when subjected to installation pressures, will meet or exceed the designed finish wall thickness in accordance with ASTM F1216, Section 8.6.
8. Mark liner tube for distance at regular intervals along its length, not to exceed 5 feet, and include the CIPP Manufacturers name or identifying symbol (brand).

B. Thermosetting Resin System
1. Corrosion resistant unsaturated, isophthalic polyester or vinyl ester thermoset resin and catalyst system or epoxy resin and hardener that is compatible to the installation process and when properly cured within the tube composite meets the requirements of ASTM F 1216, ASTM F 1743 or ASTM F 2019, the physical properties herein, and those, which are to be utilized in the design of the CIPP for this project.
2. The resin shall produce CIPP which will comply with or exceed the structural and chemical resistance requirements of this specification.
3. Formulate the resin system for the subject project;
   a. Viscosity shall be conducive to its being saturated into the void space of the tube's matrix,
   b. Thixotropy shall be adjusted to minimize its migration during the tube installation process.
4. The pot life of the catalyzed resin system should be such that it provides a reasonable timeframe for the tube to be installed.
5. If necessary, add a dye (pigment), approved by the CIPP manufacturer, to the catalyst or resin to allow visual verification that the liner tube has been thoroughly wet-out.
6. Resins that are expired are not permissible; ensure the resin system to be used is within the resin manufacturer's recommended shelf life.

C. Corrosion Resistance
1. Furnish a corrosion resistant, unsaturated, isophthalic polyester or vinyl ester thermoset resin and catalyst system, or epoxy and hardener compatible with the process that provides cured physical strengths specified herein.
2. The installed CIPP shall have a long term (50 years) corrosion resistance to typical chemicals found in domestic sewage.

D. Chemical Resistance
1. Provide in accordance with the requirements of ASTM F1216, Appendix X2.
   a. Testing for chemical resistance shall be at the Owner's request.
   b. Costs for chemical resistance testing to be borne by the Owner.
2. The pipe within-a-pipe, when cured, shall be chemically resistant to withstand internal exposure to sewage gases containing hydrogen sulfide, carbon monoxide and dioxide, methane gas, dilute sulfuric acid, and external exposure to soil bacteria and chemical attack which may be due to materials in the surrounding ground or sewage within.
3. The finished CIPP shall be fabricated from materials which, when cured, will be chemically resistant to withstand internal exposure to domestic sewage.

E. The color of the interior liner surface shall be light reflective and pre-approved by the Owner, to allow for adequate post installation inspection by closed circuit television.

F. Styrene Chemicals
1. Use minimal styrene chemicals for the CIPP resin to minimize styrene odors in residential homes and business office.
2. The maximum level of released styrene shall not exceed 50 ppm.
3. Where specified for use on the Plans, or as directed by the Owner, provide vinyl ester resin free of styrene, VOC's and HAP's, or epoxy resin.

2.2 PHYSICAL STRENGTH

A. The CIPP system shall conform to the minimum initial structural standards, as listed below.

	Standard	Minimum Required
Flexural Strength	ASTM D 790	4,500 psi
Flexural Modulus of Elasticity	ASTM D 790	250,000 psi

Note: Samples from the project shall be taken and tested in accordance with Section 8 of ASTM F 1216 using either method. See Section 3.8, "Site Quality Control" of this Specification.

2.3 DESIGN

A. Provide measurement verification of the inside diameter of each pipeline to be rehabilitated signed by the installer of the CIPP with the design calculations.

B. Design CIPP wall thickness in accordance with Appendix X1, of ASTM F 1216 using the **fully deteriorated** pipe condition.

C. Design for a minimum fifty (50) year service life under continuous loading conditions.

D. Design such that the net inside diameter of the rehabilitated sewer is as large and smooth as possible.

E. Furnish design calculations **for each run of pipe to be lined** (i.e. manhole to manhole) based on site-specific parameters (diameter, depth, ovality, etc.) and soil modulus and groundwater table levels to be reviewed by the Engineer.
1. All calculations shall be signed and sealed by a Registered Professional Engineer.
2. Multiple runs of the same diameter pipe may be included under a single design calculation if the remaining site-specific parameters do not exceed the parameters assumed in the calculation.
   a. Include site-specific parameters of each run included in the single design calculation.

F. Minimum CIPP liner thickness, unless otherwise specified, shall be determined utilizing design procedures outlined in ASTM F1216, Appendix X1, mechanical properties provided by the CIPP Manufacturer, and the following project specific design assumptions:
1. Existing sewer is fully deteriorated
2. Existing sewer is considered to have 2% ovality in circumference at a minimum
3. CIPP is subjected to a full soil load of 120 lbs/cft at a minimum
4. CIPP is subjected to traffic loads as calculated by AASHTO HS-20-44 Highway Loading over a flexible pavement for sewer segment subject to vehicular traffic.
5. Use 700 psi for modulus of soil reaction for pipe zone backfill at a minimum
6. Use a groundwater elevation at five feet below existing surface elevation or two feet above the top of pipe, at a minimum, whichever yields a higher groundwater loading condition.
7. All calculations shall be signed and sealed by a Registered Professional Engineer in the State of Michigan.

G. Submit price proposal for the length and size of pipeline specified assuming the finished liner is continuous over the entire length of the liner insertion run between manholes.

H. Should pre-lining inspection reveal the sewers to be in substantially different conditions than those in the design considerations, the Contractor shall submit a "secondary design" to request such changes in CIPP wall thickness, supporting such request with revised design computations signed and sealed by a Registered Professional Engineer.
1. Submit secondary design only upon authorization from the Owner.
2. Determine costs to perform a secondary design and install a liner that differs from what was proposed during the bidding process in accordance with the contracting requirements of the Owner, prior to completing the work.

PART 3 EXECUTION:

3.1 PRE-INSTALLATION

A. The following procedures shall be adhered to unless otherwise approved by the Owner's representative.

B. Pre-Installation Cleaning of Sewer Lines
1. Remove all internal debris out of the sewer line that would prevent proper installation of the CIPP.

2. Refer to Section 02751 for the minimum requirements for cleaning of sewer lines
   a. Deliverables specified are not required.

C. Pre-Installation Inspection of Pipelines
1. Inspect pipeline to determine the location of any conditions which may prevent proper installation of the fabric lining into the pipelines, and it shall be noted so that these conditions can be corrected.
2. Refer to Section 02704 for the minimum requirements for inspection of pipelines
   a. Deliverables specified are not required for the pre-inversion inspection

D. Locate Service Connections
1. Record location of all service connections.
2. Determine capped and unused services with Owner.
3. Establish service connections to reinstate
   a. All service connections are to be reinstated unless otherwise directed by the Owner.
   b. Coordinate with the Owner any service connections that are not to be reconnected.
   c. Record plan for all service connections
4. Refer to sample Service Connection Documentation Form that follows this Section.

E. Bypassing Sewage
1. Provide for the bypass pumping of sewage around the section or sections of pipe being installed.
   a. Bypass shall be made by plugging the line at an existing upstream manhole and pumping the flow into a downstream manhole or alternate system.
   b. The pump and bypass lines shall be of adequate capacity and size to handle all the anticipated flow.
   c. If pumping into alternate system, review system capacity to determine if it has adequate capacity to handle the additional flow.
2. Provide for the bypass pumping of sewage and groundwater from service laterals connected to section of cured-in-place pipe being installed.
   a. Required in areas where groundwater elevations at time of construction are above the adjoining footing drain elevations.
   b. Install PVC clean-out using hydro-excavation equipment, or other means as approved by the Owner.
3. The Contractor shall take adequate precautions to assure that no backup of sewage into basement drains occurs during installation.
   a. Monitoring of the surcharge levels during pumping operations is required 24 hours per day, 7 days per week.
   b. The Contractor shall be fully responsible for any damages resulting from their operations.
4. All costs associated for the bypass pumping of sewage around the section or sections of CIPP being installed shall be included in the unit price bid for **Sewer Lining, ___" RIFI-CIPP** unless separate pay items are included in the Proposal for the work described.

F. Line Obstructions
1. Clear line obstructions such as solids, dropped joints, protruding service connections or collapsed pipe that will compromise the proper installation of the CIPP lining.
2. Remove service leads excessively protruding into the pipe more than 5% of the pipe's internal diameter.
a. Use a remote saw cutter or similar method, subject to the approval of the Engineer.
3. If inspection reveals an obstruction that cannot be removed by remote internal type equipment, then the Contractor shall make a point repair excavation to uncover and remove or repair the obstruction. Such excavation shall be approved in writing by the Owner prior to the commencement of the work and shall be considered as a separate pay item.

G. Owner's Review of Pre-Lining CCTV Videos
1. Submit pre-installation inspection videos and reports of sewers to be lined a minimum one (1) week prior to planned lining.
2. No sewers are to be lined until the Owner has authorized the Contractor to proceed with the CIPP installation.

H. Contractor's Review of Pre-Lining CCTV Videos
1. Review the pre-installation inspection videos and reports of sewers to be lined.
2. Determine if the condition of the host pipe is acceptable to receive the CIPP installation.
3. Submit a "secondary design" should the pre-installation inspection reveal the sewers to be in substantially different conditions than those in the design considerations
4. Install pre-liner, per manufacturer's recommendation, where the host pipe material is not compatible with the proposed CIPP product; include this work in "secondary design" submittal.

I. Prior to any lining, the Contractor shall certify to have a minimum of two (2) complete working systems for reconnecting services available for use on this project.

3.2 RESIN IMPREGNATION

A. Designate a location where the uncured resin in the original containers and the unimpregnated tube will be vacuum impregnated prior to installation.
1. Impregnation to be performed in a regulated, quality controlled facility in accordance with local ordinances.
2. Allow the Owner to inspect the materials and "wet out" procedure.
3. Utilize a resin and catalyst system compatible with requirement of this method.

B. Document the volume of resin placed in each tube and the volume of resin indicated by the tube's manufacturer for a complete filling of the void space.
1. Call to the attention of the Owner/Engineer any tube failing to accept the full amount of resin per the tube manufacturer's specifications prior to installation to allow for a visual inspection.
2. Tube's failing to accept at least 95% of the prescribed resin amount shall be reviewed by the manufacturer and certified to the Owner/Engineer of its acceptability for use prior to its installation.

C. Prepare a "Wet Out Report" for each liner
   1. CIPP systems conforming to ASTM F2994 shall provide wet out reports to the Owner for each installation in digital format.
   2. Record wet out quantities on the "Wet Out Report".
   3. Submit to the Owner or Owner's representative with each liner delivery.
   4. Refer to a sample "Wet Out Report" that follows this Section.

3.3 INSTALLATION OF CIPP (INVERSION METHOD)

A. Pressurized air liner inflation/steam is prohibited in sewers greater than 12 inches in diameter, unless otherwise indicated.

B. Provide manufacturer calculated minimum pressure required to hold the tube tight against the existing conduit and maximum allowable pressure so as to not damage the tube.

C. Install resin-impregnated tube in accordance with ASTM F 1216.
   1. Maintain pressures between manufacturer minimum and maximum allowable pressures until the installation is complete.

D. Take suitable precautions to eliminate hazards to personnel in the proximity of the construction when pressurized air is being used.

3.4 INSTALLATION OF CIPP (PULLED-IN-PLACE METHOD)

A. Pressurized air liner inflation/steam or UV curing is prohibited in sewers greater than 12 inches in diameter, unless otherwise indicated.

B. Provide manufacturer calculated minimum pressure (height of water column) required to hold the tube tight against the existing conduit and maximum allowable axial and longitudinal tensile stresses so as not to overstress the felt fiber.

C. Perforate the outer impermeable membrane of the resin-impregnated tube prior to pulling the tube in place.
   1. Install perforations using a perforating roller device, after fabric tube impregnation.
   2. Perforate the tube at the point of manufacture.
   3. Perforations shall be made on both sides of the lay-flat fabric tube covering the full circumference with a spacing no less than 1.5 inches apart and slits a minimum of 0.25 inches long.

D. Install resin-impregnated tube in accordance with ASTM F 1743 or ASTM F 2019.
   1. Utilize a power winch to pull the wet-out fabric tube in place.
      a. Provide a measurement device on the winch or cable to monitor the pulling force.
      b. Measure the overall elongation of the fabric tube after pull-in completion.
   2. Pressurize the resin impregnated tube using the hydrostatic head calibration hose inversion method.
   3. Alternative methods of resin impregnated tube installation require Owner approval prior to use.
   4. Utilize a lubricant during installation of the resin impregnated tube.

E. Take suitable precautions to eliminate hazards to personnel in the proximity of the construction when pressurized air is being used.

3.5 CURING (NON-U/V APPLICATIONS)

A. Required Curing Parameters (for both steam and heated water)
1. Provide the temperature required to affect a cure of the resin as recommended by the resin manufacturer.
2. Provide manufacturer estimated maximum and minimum pressures required to hold the flexible tube tight against the existing conduit during the curing process.

B. Cure the CIPP in accordance with ASTM F 1216 and ASTM F 1743.
1. Fit the heat source with suitable monitors to gauge the temperature of the incoming and outgoing water supply.
2. Place an additional gauge within the impregnated tube and also at the pipe invert at the remote manhole to determine the in place liner temperature during cure.
3. Comply with recommendations from resin manufacturer for water temperature in the line during the cure period.

C. Prepare a CIPP "Curing Report" for each CIPP installation.
1. Log actual temperature readings at various time increments as noted in the "Curing Report" during the curing process.
2. Submit to the Owner/Engineer upon request.
3. Refer to a sample "Curing Report" that follows this Section.

3.6 COOL-DOWN

A. Cool the new CIPP in accordance with ASTM F 1216 and ASTM F 1743.

B. Take care in the release of the static head or air pressure so as not to develop a vacuum that could damage the newly installed CIPP.

3.7 SEALING CIPP

A. Seal the manhole walls, at all manhole inverts in accordance with CIPP system manufacturer's recommendations.

B. Assure completed liner terminations are free of rough edges with smooth transition into the receiving structure.

C. Seal shall be of a resin mixture compatible with the installed liner system.

3.8 SERVICE CONNECTIONS

A. After the cured-in-place pipe has been installed, reconnect existing active house lead connections.
1. Cut a relief hole through the liner at each opening to relieve any water that has accumulated in the leads during the lining process.
2. Complete reconnections without excavation, and in the case of non-man entry pipes, from the interior of the pipeline by means of a television camera and a

cutting device that re-establishes the service connection to 100% of its original capacity.

a. Remove pipe fragments or liner fragments which may obstruct flow or snag debris.
b. Correct overcut openings with a repair patch of a resin mixture compatible with the liner system and of sufficient size to completely cover the overcut.
c. Brush the full circumference of all completed service connections to eliminate rough or jagged edges of the liner.

3. Record status and condition of each service connection.
4. Refer to sample Service Connection Documentation Form that follows this Section.

B. All leads to be reinstated shall be reconnected within 24 hours.
1. No lead shall remain out of service for more than 24 hours.
2. If a lead problem occurs where a lead will remain out of service, the Contractor will provide emergency service at his cost.
3. If sewage and groundwater flows in the lead start to back-up and risk basement flooding, the Contractor will provide emergency service at his cost.
4. Obviously inactive services do not need to be reinstated. Determination of an inactive service requires the approval by the Engineer.

C. Remove coupons of pipe material resulting from service tap cutting
1. Collect at the next manhole downstream of pipe rehabilitation operation prior to leaving site.
2. Coupons are prohibited from passing through the sewer collection system.

3.9 FINISH

A. The finished cured-in-place pipe shall be continuous over the entire length of an inversion run and be as free as commercially practicable from visual defects such as foreign inclusions, dry spots, pinholes and delamination.

B. Restore to existing condition all excavations required for proper inspection of CIPP. or repair of leads. Site restoration for the pipeline rehabilitation work is considered included in the cost of construction unless otherwise indicated under separate pay items listed in the Proposal.

C. Due to the concern for longitudinal shrinkage in CIPP installations, the owner reserves the right to re-inspect the cured-in-place pipe following installation to determine if openings cut for service connections remains properly aligned. The event that service connection openings shift from original location, the contractor shall be responsible for all costs associated with corrective measures for re-alignment and repair of lead openings.

3.10 FIELD QUALITY CONTROL

A. Testing of the installed cured-in-pace pipe shall be required by the Contractor using an approved, licensed third-party testing company. The test specimens for short term flexural properties shall be prepared per ASTM F1216 Section 8, ASTM F1743 Section 8 or ASTM F2019 Section 7.

B. Gravity pipe leakage testing in accordance with ASTM F1216, Section 8.2.

1. If pipe segment is greater than 36-inch in diameter or contains service laterals, gauge the water tightness of the CIPP under a positive head during the curing process.

C. Site Samples
1. Provide short-term flexural testing of the installed CIPP in accordance with ASTM F1216, ASTM F1743, or ASTM F2019.
2. Submit testing reports to the Owner within fourteen (14) days of CIPP installation.
3. Collect enough additional liner specimens for delamination testing should post-installation inspection determine it is necessary.

D. Styrene Odor Control Monitoring
1. Submit record of styrene level measurements to the Owner's Representative at the end of each working day.
2. If a styrene odor complaint is received, Contractor shall mobilize device to the site of the complaint and measure styrene levels every 15 minutes for a minimum of one hour at no additional cost to the Owner.
3. Read and record styrene levels every hour.
4. Measure styrene levels a maximum of ten feet away from the inversion manhole while the liner is being inverted and cured.
5. Implement mitigation procedures should styrene level readings exceed 50 ppm or if complaints of odors are received, including addition of styrene odor reduction agent compatible with the resin being used.

3.11 POST-INSTALLATION

A. Post-Installation Inspection of Pipelines
1. Thoroughly clean the newly installed cured-in-place pipe, removing all debris and build-up that may have accumulated during construction.
2. Refer to Section 02704 for the minimum requirements for inspection of pipelines
   a. Measurement and Payment article does not apply.
   b. Provide the Owner all required deliverables within ten (10) calendar days of the CIPP installation.
3. All costs associated with post inspection of pipelines shall be included in the unit price bid for **Sewer Lining, ___" RIFI-CIPP**.

3.12 NON-CONFORMING WORK

A. Non-conforming work is any work outside of the acceptable tolerances for the item of work identified within these specifications that is considered to affect the performance and/or future maintenance of the new CIPP.

B. The finished CIPP shall be continuous over the entire length of the liner and be free from visual defects such as foreign inclusions, dry spots, pinholes, and delamination.
1. Any visual defects shall be repaired at the Installation Contractor's expense in a manner mutually agreed upon by the Owner and the Installation Contractor.
2. Delamination testing in accordance with ASTM F 1216 may be required by the Owner at the expense of the Contractor should post-installation inspection reveal visual defects. Contractor is responsible for having extra test specimens available for testing.

C. Sections of continuous inward folding or overlapping of excess liner material (commonly referred to as "fins") of greater than three (3) times the pipe diameter will be reviewed with the Contractor and owner for non-conformity.
   1. Sections protruding greater than 10% of the inside diameter of the host pipe will be repaired by mechanical means.
   2. Continuous sections extending greater than 25% of the length of the pipe will be repaired by mechanical means.
   3. Continuous sections protruding greater than 10% of the inside diameter of the host pipe and extending greater than 25% of the length of the pipe will be rejected and the entire length of the CIPP installed shall be replaced.
   4. Repairs and replacements needed to remedy sections of continuous inward folding or overlapping of excess liner material shall be completed at no cost to the Owner.

D. If movement of the cured-in-place pipe has occurred such that the house lead is partially closed, the contractor shall excavate and reconnect the house lead by use of an approved saddle at no cost to the Owner.

E. Removal and replacement of out of tolerance CIPP installations, reconnection of blocked service lines, and all equipment, labor, and materials for excavations, backfill and surface restoration to complete the work shall be performed at no cost to the Owner.

3.13 WARRANTY

A. Warranty the installed product for a period of one (1) year.

B. If the owner finds evidence of a reversal of curvature, shortening of the ends or constriction of house leads, the contractor shall return and restore service and end seals promptly, as part of warranty work.

C. During the warranty period, repair any defects which will affect the integrity or strength of the cured-in-place pipe in a manner mutually agreed by the Owner and the Contractor.

D. The cost of cured-in-place pipe repairs during the warranty period shall be borne by the Contractor.

CIPP Quality Control/Quality Assurance Form

Example Service Connection Documentation Form

Contract:_____Contract No: _____Location: Street/RW _____ MH ___ to MH _____ Size _____ Length _____
Contractor: _____ _____Installer: _____ Inspector _____
Report No: _____ Weather: _____ Temp: _____
Other Work: By-pass Pumping:_____ Cleaning: _____ Point Repairs: _____CCTV: _____ Traffic Control: _____
INSPECTOR: Verify and document the condition of all service connections reinstated by the contractor.

Service Location	Type Defect	Repair Req'd	Comments	Defect Location	Type Defect	Repair Req'd	Comments
46.5	Leaking between CIPP & host pipe	Yes	Grout required				
78.9	Overcut Connection	Yes	Install Connection Hat				

Owners Representative: _____ Signature: _____ Date: _____
Contractors Representative: _____ Signature: _____ Date: _____
Comments:_____

Wet Out Report

Wet Out Request

Date _____
Project No. _____
Basin No. _____
Install No. _____
MH No.'s _____

Diameter, in _____
Thickness,mm _____
Measured Length, ft _____
Wet Out Length, ft _____
Dry Length, ft _____
Total Length, ft _____

Liner No. _____ **Liner Dia.** ____ **Liner Thickness** _____

Resin Type _____ **Lot No.** _____

Wet Out Lgth _____ ft X _____ Lbs/Ft = _____ Total lbs of Resin

Roller Gap Setting (T2+2mm) _____ mm

Totals

Total Resin Used _____ Lbs
Total Perkadox Used _____ Lbs
Total Trig KSM Used _____ Lbs
Total Styrene Used _____ Lbs
Total Acetone Used _____ Lbs

Liner Footage

0	_____	350	_____	700	_____	1050	_____
50	_____	400	_____	750	_____	1100	_____
100	_____	450	_____	800	_____	1150	_____
150	_____	500	_____	850	_____	1200	_____
200	_____	550	_____	900	_____	1250	_____
250	_____	600	_____	950	_____	1300	_____
300	_____	650	_____	1000	_____	1350	_____

Wet Out Time

Prep _____ Hrs
Mixing & Filling _____ Hrs
Conveyer _____ Hrs
Clean Up _____ Hrs

Total Hours to Wet Out _____ Hrs

Supervisor: _____ (Signature)
Date: _____

Crew: _____

Maintain complete and accurate records of every step of the curing process and record all thermocouple temperatures from the start of the process to complete cool down of the liner

WATER CURING LOG

NOTE: Continue to log pressure and temperature every 15 minutes through warm up, full water temperature and cool-down phase.

Date: _____ Job Name: _____
Sec. No.: _____

Job No.: _____ Diameter: _____
Length: _____ Thickness: _____
Boiler #: _____ Operator _____

From MH# _____ To MH# _____

Direction of water flow: Upstream: _____
Downstream: _____

WEATHER	
Normal	
Hot	
Rain	
Cold	
Snow	

	THERMOCOUPLES								
TIME/15 min Interval	BOILER PRESSURE	TUBE PRESSURE	TUBE TEMPERATURE	THERMO #1	THERMO #2				
WARM UP									
EXOTHERM									
COOL DOWN									

Reviewed By: _____ Date: _____

CIPP Quality Control/Quality Assurance Form

Example Odor Documentation Form

Contract:_____ Contract No: _____ Location: Street/RW _____

Contractor: _____ Installer: _____ Inspector _____

Report No: _____ Weather: _____ Temp: _____

Other Work: By-pass Pumping:_____ Cleaning: _____ Point Repairs: _____ CCTV: _____ Traffic Control: _____

Inspector: Ensure that informational literature is distributed to affected properties and/or make arrangements to have measurements of the styrene concentrations, using the applicable Detector Tube tes tingdevice. taken by a testing laboratory. Document all readings taken.

MH-MH	Pipe Size (in)	Pipe Length (ft)	Quality Control Specified	Performance Standard	Acceptable Quality	Quality Assurance Performed	Inspection Yes	Inspection No	Comments

Owners Representative: _____ Signature: _____ Date: _____

Contractors Representative: _____ Signature: _____ Date: _____

Comments: _____

Note: Insert all Quality Control References included in the specifications

END OF SECTION

SECTION 2751
CLEANING OF SEWER LINES

PART 1 GENERAL

1.1 SUMMARY

A. It is the intent of these specifications to provide a basis by which a sanitary sewer line can be cleaned of all excess debris so that internal sewer inspections or other work can be carried out. This basis shall include methods, equipment, and payment of work. Cleaning of sewer lines shall be accomplished by trapping and collecting all sand, debris, and grease at the next manhole, upstream or downstream of the line being cleaned, and removal and proper disposal of said materials in accordance with applicable State and Local laws governing the disposal of such materials. Cleanup operations shall consist of cleaning all debris out of the manholes and off the ground around the manhole and should include removal and proper disposal of said materials.

B. The Contractor shall provide and furnish all required skilled and unskilled labor, materials, fuel, machinery, tools, so that the contract and all work required to be done under the contract can and will be carried on continuously and expeditiously to completion, in all respects to the satisfaction of the Owner.

C. The sewer lines for which cleaning are required are shown or identified in these Contract Documents or as directed by the Owner.

D. Related Sections:
1. Section 02704 - Internal Sewer Inspection
2. Section 02708 – Resin Impregnated Flexible Fabric Liner and Cured-in-Place Pipe

1.2 MEASUREMENT AND PAYMENT

A. Payment for cleaning of a sanitary sewer line shall include all supervision, labor, equipment, water, electrical bills, disposal of debris, cleanup and any other applicable item and shall be included to the rehabilitation and repair items as described in the Specifications herein.

B. "Pre-Lining Preparation, Cleaning & Video Inspection, __-inch Sewer, LF"
The Owner shall pay for a "three-pass" cleaning of sewer pipelines utilizing high pressure jetting equipment, brushes and swabs to allow for passage of the CCTV; removing small amounts of loose debris such as gravel, sand, small rocks, grease and other deleterious materials within the sewer line; and removal of root intrusions and mineral deposits. **"Pre-Lining Preparation, Cleaning & Video Inspection, __-inch Sewer, LF"** will be paid for at the contact unit price per foot measured from inside of manhole to inside of manhole.

D. Sewer Cleaning, Heavy ……..Linear Foot

Should the sewer line have too much debris or blockage to allow a camera to pass through after the original three passes are made additional cleaning may be required. This work shall commence only upon the approval and direction of the Owner and/or the Owner's Representative/Engineer and will be defined as **"Sewer Cleaning, Heavy"**

The Owner shall pay for an additional "three-pass" cleaning of sewer pipelines utilizing high pressure jetting equipment, and mechanical cleaners such as bucket machines, scrapers, cutters and augers to allow for passage of the CCTV; removing obstructions and medium to large amounts of debris such as gravel, sand, rocks, grease and other deleterious materials within the sewer line; removal of mineral deposits in accordance with the cleaning standards detailed in Article 1.2.D and removal of all attached, or encrusted and hard compacted deposits; and removal of roots, root balls. **Sewer Cleaning, Heavy** will be paid for at the contact unit price per foot measured from inside of manhole to inside of manhole, regardless of sewer size.

E. Cleaning Types (deposits and debris)

1. Incidental Cleaning of "Loose" Deposits and Debris (prior to cleaning)
   a. Up to 12" diameter sewer - 25% of sewer height
   b. 13" to 24" diameter sewer - 15% of sewer height
   c. Over 24" diameter sewer - 10% of sewer height
2. Heavy Cleaning of "Attached/Compacted" Deposits and Debris (prior to cleaning)
   a. Up to 12" diameter sewer – over 25% of sewer height
   b. 13" to 24" diameter sewer - over 15% of sewer height
   c. Over 24" diameter sewer - over 10% of sewer height
3. Heavy Cleaning of "Attached/Compacted" Deposits and Debris (following three (3) passes with jetting equipment)
   a. Up to 15" diameter sewer – over 20% of sewer height
   b. 16" to 36" diameter sewer - over 15% of sewer height
   c. Over 36" diameter sewer - over 10% of sewer height

F. Refer to Section 02708 for other provisions related to cleaning the sewers to prepare the pipe for the sewer lining operation. Other pay items have been established for clearing the line of obstructions that are not removed after completion of work described in this Section.

1.3 REFERENCES

A. Abbreviations and Acronyms
   1. NASSCO – National Association of Sewer Service Companies
   2. PACP - Pipeline Assessment and Certification Program
   3. CCTV – Closed Circuit Televising

B. Definitions
   1. Three-Pass Cleaning –Flushing of a sewer with a maximum of (3) passes utilizing high pressure jetting system

C. NAASCO Reference Standards

1. In accordance with NASSCO standards, heavy cleaning may require a step cleaning approach usually by accessing the downstream manhole and cleaning from downstream to upstream. Step cleaning is a systematic and efficient method of cleaning pipe with medium to large amounts of debris. Small sections or lengths of the sewer segment (steps or passes) are cleaned in each pull of the cleaning nozzle. This prevents build-up of debris downstream in the pipe and at the manhole. This also prevents the nozzle from becoming stuck in a large build-up of debris.
2. It is common practice to follow the cleaning nozzle with visual inspection from upstream to downstream to verify that the cleaning process is effective and that the pipe is cleaned per NASSCO standards for accurate PACP coding. However, at times it may be necessary to clean a pipe from the upstream manhole to the downstream manhole (reverse set-up). The reasoning for a reverse set-up is based on the conditions, the access/location and the amount and type of debris in the pipe. Heavy cleaning may require specialized nozzles depending on the amount of debris, the type of deposit, the type of debris or obstruction and the debris location.

1.4 QUALIFICATIONS

A. The Contractor performing the work shall be a company specializing in performing cleaning sanitary sewers and shall have a minimum experience of at least three other projects of similar size and scope within the last five years that include cleaning operations as outlined herein.

1.5 SUBMITTALS

A. Prior to initiation of work, the Contractor shall submit for Owner review and approval the following:
1. Listing of and data sheets for equipment to be used for proposed cleaning work.
2. Proposed water source for cleaning and proposed disposal site for solids cleaned from sewer.

1.6 REQUIRED DELIVERABLES

A. All data pertinent to the line cleaned shall be duly recorded on an adequate cleaning log form as supplied by the Contractor. This form shall be turned over to and remain in the possession of the Engineer after a section of the line has been completed.

B. Landfill disposal logs for all debris.

1.7 ACCEPTANCE

A. A daily log of work accomplished shall be duly recorded and acknowledged by the Owner or Owner's representative and the Contractor's superintendent.

B. All inspection recordings and reports will be reviewed by the Owner. The Owner shall have the authority to reject all or any portion of recordings not conforming to Specifications. These areas shall be re-cleaned at no additional charge.

PART 2 PRODUCTS

2.1 EQUIPMENT

A. All equipment used for cleaning operations, any method, shall be equipment specifically designed for the type of work specified. Self-contained cleaning units shall be used for the work unless otherwise approved by the Owner.

PART 3 EXECUTION

3.1 GENERAL

A. The Contractor shall be responsible for securing the site and protection of the Owner's personnel and public. Any necessary traffic control shall be in accordance with the current Michigan Manual of Uniform Traffic Control Devices.

B. The contractor shall notify the residents/businesses one day prior to starting cleaning with a "Resident Notification Letter" informing the residents/businesses of the Contractor's cleaning activities and to provide contact information for the Contractor and Owner. The Contractor shall submit the letter for Owner review and approval prior to notification. This letter should include contact information for residents to call should clean pressures cause toilet overflows or drain backups.

C. The Contractor shall clean in the direction of flow unless approval is received prior to reverse flow cleaning by the Owner. The liquid filtrate may be drained back into the downstream manhole and shall be disposed of in accordance with all regulations. The Contractor is responsible for providing all required water.

D. Protection During Cleaning Operations - Satisfactory precautions shall be taken to protect the sewer lines from damage that might be inflicted by the improper use of cleaning equipment. Whenever hydraulically propelled cleaning tools, which depend upon water pressure to provide their cleaning force, or any tools which retard the flow of water in the sewer line are used, precautions shall be taken to insure that the water does not cause damage or flooding to public or private property being served by the manhole section involved. The Contractor shall reduce the pressures at the direction of the Owner, or if notified by a resident that such problems are occurring. By reducing pressure, additional cleaning time or passes through needed and shall be done at no additional cost to the Owner.

3.2 METHODS

A. The methods of cleaning a sanitary or combined sewer line which are acceptable for use are outlined below. Approval from the Owner for the method chosen shall be obtained prior to any cleaning work.

B. Bucket Machine Method - This method shall consist of:

1. Rodding the sewer line with a power-driven continuous steel rod of sufficient length and gauge and with the proper cleaning heads or augers, so as to loosen all

solid materials. It shall also provide a means to thread a cable for the power winch.

2. Removal of all solids, materials and other debris by means of a clam-shell type bucket and/or other appliances dragged through the sewer line with power winches of suitable size and horsepower.
3. Brushing of the sewer line with a brush large enough to assure that the line has been cleaned sufficiently. This brush shall be mechanically driven, with the power mechanism properly sized.
4. All electrical drops required by the Contractor shall be arranged for by the Contractor.

C. Hydraulic Cleaning Method - This method shall consist of cleaning and flushing of the sewer line by means of water pumped into the line at a high velocity. This shall be accomplished using between 800 pounds per square inch (P.S.I.) and 1000 P.S.I. of pressure at the pump connected by a high pressure hose to deliver water to a self-propelled nozzle to do the necessary cleaning and flushing. As many passes as necessary shall be made to sufficiently clean the sewer line.

3.3 DISPOSAL OF DEBRIS AND CLEANUP

A. After removal of debris out of a manhole, the Contractor shall dispose of debris at a Type II landfill. The Owner will sign the manifest for the debris as the Generator and shall be provided with copies of the landfill invoices after delivery. Any testing required for proper disposal shall be at the Contractor's expense and included in the unit prices bid for sewer cleaning. If the testing indicates the debris is not acceptable for disposal at a Type II landfill, and disposal at a Type III landfill, or other specialized disposal facility is required, the Owner will negotiate a change order for the additional costs for the required disposal. Clean up operations shall consist of cleaning all debris out of the manhole and off the ground around the manhole. At no time shall the Contractor push the debris downstream in the sewer system.

3.4 CLEANUP

A. The Contractor shall be responsible to clean up any debris or spills during each day of work and restore conditions to existing as soon as possible.

END OF SECTION

SECTION 900
SUPPLEMENTAL SPECIFICATIONS

1.01 SCOPE

A. The Supplemental Specifications apply particularly to this Contract. If there are parts of these Specifications, which differ from other sections of these Specifications, the Supplemental Specifications shall control. The 2020 M.D.O.T. Standard Specifications for Construction shall apply for all work items within this contract, except as modified in this Contract Document.

B. The work covered by this Contract shall consist of those items listed in the proposal. The Contractor shall, for the amount of money earned, based on unit prices stated in the Contract Documents, furnish and provide all labor, tools, equipment and materials, and do all work required in excavating and laying new water main and sewer, removing and replacing existing pavement, and other work related to the project. All of the items of work are to be done in accordance with the plans and Contract Documents of which these Specifications are a part.

1.02 MATERIALS

A. All materials shall be new and of the grades specified, and shall be the best of their respective kinds for the uses intended. The terms "approved" and "or approved equal" mean that the Engineer must be consulted and approve the material before the material in question is purchased or installed in the work. The approval of any material by the Engineer does not mean the acceptance of the material actually furnished if it should be found defective or inadequate for the purpose intended.

B. Special brands or grades of material or devices specified or shown on the drawings are named for the purpose of establishing a standard of quality and character desired. Other materials of equality and adaptability for the purpose for which they are intended may be substituted, but shall have the approval of the Engineer as to the equality and adaptability before being incorporated in the work.

C. The Contractor shall order or arrange for materials well in advance of their expected use in the work, as far as practicable, in order to allow time for inspection, etc., and thus avoid unnecessary delays which may otherwise occur.

D. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 PERMIT FEES

A. The sewer replacements for this project involves a single County drainage district. The City has submitted the project to the Oakland Co. Water Resources Commissioner's office (OCWRC) for permitting approval. Once approved, a permit inspection fee will be required to be paid to their office prior to starting construction. The permit fee is not currently known but is anticipated to be less than $1,000.00. The Contractor shall be responsible for payment of the actual fee, up to a cost of $1,000.00, incidental to the cost of installing these sewers. The terms and conditions stated within the forthcoming approval letter from OCWRC shall also apply to this contract, including providing necessary insurance and bonding information as an incidental cost to the contract. Furthermore, the contractor will be required to secure the permit and coordinate inspection for sanitary and/or combined sewer installations from OCWRC, based on their work schedule.

B. Temporary traffic control signage is proposed within the 14 Mile Road public Right-of-way, which is under jurisdiction of the Road Commission for Oakland County (RCOC). The City will submit for permit approval, and the Contractor will be required to secure the permit on behalf of the City, including providing necessary insurance and bonding information as an incidental cost

to the contract. Permit fees up to $1,000.00 shall also be paid by the Contractor as an incidental cost, and the City will pay any fees beyond this amount.

1.04 COMBINED SEWER, VARIOUS SIZES

A. All Combined Sewers shall be constructed of either Reinforced Concrete Pipe (RCP) or Polyvinyl Chloride (PVC) in the classes and sizes as indicated on the plans.

B. All combined sewers will require a permit from the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The City has applied for a permit from the above agency for the replacement of the public combined sewer. The Contractor shall be obligated to have this permit approved and in-hand prior to beginning work on these items.

C. All proposed sewers and leads, six (6) inches and up, shall be bedded and backfilled in accordance with the standard pipe bedding detail as shown in the plans. The pipe bedding shall be crushed stone as required in section 600 of the specifications to a minimum of six (6) inches over the top of the pipe. Within the proposed road surface, backfill shall consist of compacted sand up to the proposed aggregate road base. All bedding, backfill and compaction shall be incidental to the cost of the new sewer installation.

D. Removal of existing sewers is specified on the plans and included in separate pay items. Depending on location, removal may be able to occur in conjunction with proposed sewer installations, or may require separate excavation(s). Removed sewer pipe shall be hauled offsite immediately upon excavation, or deposited in a watertight dumpster, in accordance with Oakland County Health Department regulations. Removed sewers may not be stockpiled within the right-of-way awaiting final removal.

E. Any small diameter pipes that are encountered during excavations for mainline combined sewers that are damaged and confirmed to be inactive shall be bulkheaded prior to backfilling. If these pipes are less than 8 inches or less in diameter, this work shall be considered incidental to the contract work for combined sewer installation and will not be paid for separately.

1.05 STORM SEWER, VARIOUS SIZES

A. All Storm Sewers shall be constructed of either Reinforced Concrete Pipe (RCP) or Polyvinyl Chloride (PVC) in the classes and sizes as indicated on the plans.

B. The contractor shall be responsible for installing gas traps, including sumps, in the first storm structure upstream from a combined sewer, or where specified on the plans. The method for installing gas traps is to install a PVC elbow one size below the pipe being installed, directed down into the sump, as specified on the City of Birmingham Standard Notes & Details.

C. All proposed sewers and leads, six (6) inches and up, shall be bedded and backfilled in accordance with the standard pipe bedding detail as shown in the plans. The pipe bedding shall be crushed stone as required in section 600 of the specifications to a minimum of six (6) inches over the top of the pipe. Within the proposed road surface, backfill shall consist of compacted sand up to the proposed aggregate road base. All bedding, backfill and compaction shall be incidental to the cost of the new sewer installation.

D. Removal of existing sewers is specified on the plans and included in separate pay items. Depending on location, removal may be able to occur in conjunction with proposed sewer installations, or may require separate excavation(s). Removed sewer pipe shall be hauled offsite immediately upon excavation, or deposited in a watertight dumpster, in accordance with Oakland County Health Department regulations. Removed sewers may not be stockpiled within the right-of-way awaiting final removal.

1.06 SEWER SERVICE – VARIOUS SIZES

A. For sewer service replacements, the Contractor will be responsible to locate each service lead as construction progresses and maintain all flow therefrom. For homes where information on the location of the sewer lateral does not exist, the Engineer or his designee shall assist in working to gain access to the house as needed, or reviewing sewer videotape records, to locate said sewer laterals.

B. When installing a new sewer service to an existing sewer, the existing sewer shall be exposed only as much as necessary to verify the stability of it in the area and the condition of the original tap, and connect to it as directed by the Engineer. If the existing sewer is in good condition, it shall be connected with a Fernco adaptor or approved equal, and paid for separately, as detailed below. If the existing main line sewer is damaged and needs repair in the area of the connection, the Contractor and Engineer shall agree to a time and material payment method for repairs to the City sewer, to be charged to the Water and Sewer Allowance pay item. If a new tap is required at a new or existing sewer main, it will be paid for under SEWER SERVICE TAP pay item.

C. Assuming all underground work is completed early in the project, while the main pedestrian sidewalks are still in service; the Contractor shall backfill and provide a temporary walkable surface to accommodate pedestrian traffic in a safe manner until the City sidewalks are repaired. Installation of a temporary stable surface in the sidewalk or other pedestrian areas shall be included in the separate pay item for maintenance aggregate.

1.07 NEW MANHOLE, VARIOUS SIZES

A. All new manhole structures shall include an applicable EJ 1040 frame and cover with City of Birmingham logo and applicable text notation for "Sanitary", "Combined", or "Storm: sewer as applicable for each structure, and as detailed in the City of Birmingham Standard Notes & Details.

B. Adjusting the rim to the proposed elevation noted on the plans is incidental to the installation of a new structure.

C. Where drop connections are required, they shall be constructed in accordance with applicable requirements shown on the City of Birmingham Standard Notes & Details.

1.08 NEW CATCH BASIN OR INLET, VARIOUS SIZES

A. All new catch basins or inlet structures shall include an EJ 5000Z4 DI / 5000M4 DI Hinged Assembly (in the curb line), unless otherwise noted on the plans. Underdrain shall be connected to all inlets and catch basins as shown on plan sheets. A separate pay item has been provided for this work.

B. Adjusting the rim to the proposed elevation noted on the plans is incidental to the installation of a new structure.

1.09 6" PERFORATED PIPE UNDERDRAIN (NO SOCK)

A. The Contractor shall prepare their base bid unit price for this work based on the assumption that edge drain shall be installed per plan, and connected to all new drainage inlets and catch basins located within pavement areas.

B. The unit price for this work shall include all labor, equipment and materials necessary for the complete installation of the underdrain, open-graded angular aggregate backfill and non-geotextile trench wrap as shown in the details on the plans. Connecting the edge drains to the appropriate structures shall be incidental to the unit price for the installation, when the connection is to a new

catch basin or inlet. Taps to existing drainage structures shall be paid for separately as outlined below.

C. To limit weather exposure of subgrade soils, Underdrain installation must be performed in conjunction with installation of the proposed road aggregate base and any subgrade undercutting that will be performed in a given location It is required by the contractor to perform work for underdrain concurrently with installation of final 21AA Aggregate Base layer in a train like manner. The Contractor shall not leave any cut and prepared subgrade surface exposed overnight.

1.10 SEWER INVESTIGATION, LATERALS

A. The City conducted extensive internal sewer camera work within the project area to help prepare the plans for this project. Despite this effort, there will still be instances when it becomes necessary to confirm if an existing sewer service is active or inactive, and therefore if replacement of the service is warranted. The Contractor shall anticipate the City will assist in confirming status with property owners as feasible during installation of the mainline sewers. The purpose of this pay item is to have the contractor provide labor, time, and equipment as needed to help determine the status, location, or material of any unknown sewer services. In particular, this pay item may be used to have the Contractor perform excavation near existing sewer mains (which shall be maintained or replaced in accordance with the drawings), where service connections are believed to exist, in order for the City to determine material of the existing service line and if replacement of said service line is warranted.

B. The bid price shall cover all labor and equipment costs required to perform supplemental excavations as directed by the engineer, assist in dye testing procedures, and for downtime where the contractor may be delayed in completing other project work due to investigative efforts associated with sewer service investigation.

1.11 SEWER SERVICE TAP, VARIOUS SIZES

A. This pay item shall be used for sewer services that require a tap to the new combined sewer main. This work shall be paid for as a SEWER SERVICE TAP. Sewer service taps to all new reinforced concrete pipe or PVC pipe shall be paid under this pay item. In order to avoid misaligned sewer connections, sewer pipe shall not be cored and prepped off-site prior to delivery to the project. All sewer taps in concrete pipe shall be cored and booted in the field once the proper location has been determined (taking the location of existing trees into consideration).

B. All taps to existing structures or sewers shall be core drilled. A flexible rubber boot and appropriate clamps shall be used at the joint. The tapping pipe outside of the structure or sewer will be supported by placing 2,500 PSI concrete fill under the pipe from springline to undisturbed earth. Width of concrete fill support shall be the tapping pipe outside diameter plus twelve (12) inch minimum. Payment for sewer taps shall be based on the unit price bid for sewer tap for the nominal inside diameter of tapping pipe.

1.12 SEWER SERVICE CONNECTION, VARIOUS SIZES

A. This pay item shall be used for sewer service connections to existing sewer pipe where the existing tap can be re-used. All sewer connections shall be made to the existing tap using a Fernco adaptor, or equal. Connections shall be made in the presence of the Engineer. If the Engineer determines that the existing sewer main is in poor condition at the tap requiring additional work, the Contractor shall be prepared to make a repair to the existing sewer while it is excavated, as directed. Such repairs shall be paid for separately under a time and material agreement, using the Water & Sewer Allowance pay item described in more detail below.

1.13 SEWER TAP, VARIOUS SIZES

A. Whenever the Contractor must core drill a new hole in an existing manhole or connect a new mainline sewer of different size or material that the existing pipe which shall be removed, it shall be paid for as a SEWER TAP. Connections into a new manhole or drainage structure that was planned for and shown on the plan sheets and represented on the sewer schedule are incidental to the cost of the manhole or drainage structure.

B. All taps to existing structures shall be core drilled. A flexible rubber boot and appropriate clamps shall be used at the joint. The tapping pipe outside of the structure or sewer will be supported by placing 2,500 PSI concrete fill under the pipe from springline to undisturbed earth. Width of concrete fill support shall be the tapping pipe outside diameter plus twelve (12) inch minimum. Payment for sewer taps shall be based on the unit price bid for various diameters and shall be based on the nominal inside diameter of tapping pipe.

1.14 RECONSTRUCT MANHOLE (IF & WHERE NEEDED)

A. Prior to starting work, the City shall inspect all existing manholes, catch basins, inlets, and gate wells to determine their condition, and recommend needed repairs. Reconstruction will be paid for by the vertical foot, and will vary from minor repairs to the chimney to extensive mortar joint and brick repairs throughout. Final cover adjustments to meet the final pavement grade shall be included in the cost for reconstruction, and shall not be paid for separately under "Adjusting Structure Cover".

B. All structure reconstructs shall be paid according to the pay item RECONSTRUCT MANHOLE (IF & WHERE NEEDED) regardless of the diameter of the structure being reconstructed.

1.15 REMOVE AND REPLACE STRUCTURE COVER

A. As a part of the work of this pay item, the Contractor shall furnish and install new EJ frames and covers on existing utility structures, in accordance with the frame & cover details shown on the City of Birmingham Standard Notes & Details. Necessary structure adjustments to raise or lower the final rim elevation as needed to meet the proposed grade shall be paid for under a separate pay item, but need to be coordinated to accommodate the height of the proposed replacement frame dimensions. Existing utility structures which are subject to having replacement frames and covers installed as part of this pay item include: gate wells, sewer manholes, and catch/basin inlets. Locations for this pay item are indicated on the drawings where they are known during the design process, however, the Contractor shall also be responsible for coordinating and confirming a final inventory with the City prior to ordering the new materials from EJ. Any existing frames and castings removed shall be collected and delivered to the City of Birmingham Department of Public Service yard at 851 S. Eton Road, or disposed of by the Contractor, as directed by the Engineer at no additional cost to the Owner.

1.16 REMOVE EXISTING MANHOLES & DRAINAGE STRUCTURES

A. The Contractor shall remove and dispose of the entire structure, including any base sections, if present, remove the frame and casting and deliver to the City of Birmingham Department of Public Services yard at 851 S. Eton Road (if directed by the Engineer), and backfill the excavation with compacted sand. All portions of the structure removed that are not wanted by the City of Birmingham shall become the property of the Contractor and shall be disposed of properly at no additional cost to the Owner.

1.17 ABANDON EXISTING SEWERS, VARIOUS SIZES (INCLUDING ALL BULKHEADS)

A. Sections of existing sewers shall be abandoned as shown on the plans and called for in the proposal. This pay item shall include pipe bulkheads as needed, and installing flowable fill in the pipe. The Contractor shall submit to the Engineer the mix design to be used for the flowable fill. ALL bulkheads required to complete the abandonment of the specified sewers shall be included in the cost of this work.

1.18 REMOVE EXISTING SEWERS, VARIOUS SIZES

A. The Contractor shall excavate, remove, and dispose of the entire sewer pipe, and backfill the excavation with compacted sand.

B. Depending on location, removal may be able to occur in conjunction with proposed sewer installations, or may require separate excavation(s). Removed sewer pipe shall be hauled offsite immediately upon excavation, or deposited in a watertight dumpster, in accordance with Oakland County Health Department regulations. Removed sewers may not be stockpiled within the right-of-way awaiting final removal.

1.19 BULKHEAD STRUCTURE, VARIOUS SIZES

A. The pay items for various sizes are included in this contract and intended to provide a water-tight repair at existing drainage structures as identified in the drawings, where a pipe is being proposed to be removed from the structure and the structure will be maintained.

1.20 BULKHEAD PIPE, LARGER THAN 8"

A. The pay item is to provide water-tight bulkheads for any pipes larger than 8 inches in diameter that are encountered during excavations for mainline combined sewers that are damaged and confirmed to be inactive. Bulkheads shall be performed prior to backfilling. Bulkheads for any pipes that are 8 inches or less in diameter shall be considered incidental to the contract work for combined sewer installation, and will not be paid for separately.

B. In the event that the City elects to abandon a section of existing sewer in place using flowable fill, any associated bulkheads required at existing pipe openings to contain the flowable fill shall be considered incidental to the cost for the sewer abandonment.

1.21 REMOVE HYDRANT

A. The Contractor shall remove existing hydrants at the locations specified. Cost of this work shall include necessary water main shut-downs and associated coordination with the City to provide business/resident notifications. The Contractor shall be encouraged to conduct this work when an adjacent water-main shut-down is perform for other work, or when an adjacent Hydra-Stop is in operation, to allow this work to be completed expeditiously and safely.

1.22 REMOVE EXISTING GATE VALVE WELL

A. The gate valves shall be abandoned in place. Both ends of the pipe shall be plugged and blocked, as appropriate. The Contractor shall bulkhead any other openings in the structure, remove and dispose of the upper three (3) feet of the structure (remove cone section, if present), remove the frame and casting and deliver to the City of Birmingham Department of Public Services yard at 851 S. Eton Road (if directed by the Engineer), and backfill the structure with compacted sand. All portions of the structure removed that are not wanted by the City of Birmingham shall become the property of the Contractor, and shall be disposed of properly at no additional cost to the Owner.

1.23 FIRE HYDRANT ASSEMBLY, COMPLETE

A. Payment for this item shall be made at the unit price bid per each. Payment shall include all materials, equipment and labor necessary to furnish and install complete hydrant assembly.

B. New hydrants shall be in accordance with the City of Birmingham Standard Notes & Details. The hydrant shall open **LEFT**. The hydrant shall be painted yellow by the manufacturer prior to delivery.

C. On both new hydrants and relocated hydrants, the gate valve and box shall not be paid separately but shall be included in the Hydrant pay item. The type of valve and box to be used is given in the Section 500 Water Main Construction of these Specifications, and as shown on the City of Birmingham Standard Notes & Details.

1.24 DUCTILE IRON CL 52 WATER MAIN W/ POLYWRAP, TRENCH A, VARIOUS SIZES

A. All new water mains installed on this job shall include polywrap as a part of the unit price per lineal foot bid as noted in the water main specification section.

1.25 NEW WATER MAIN CONNECTIONS TO EXISTING WATER MAIN (VARIOUS SIZES)

A. The Contractor shall notify the City at least forty-eight (48) hours before any scheduled water main shut down to make the proposed water main connections. The Contractor may also be required to assist in notifying the properties that will be affected by the shutdown. The Contactor shall complete all required testing on the new water main prior to making the connections to the existing water system.

B. Oversized fittings may be required for making connections to older existing water mains. Use of oversized fittings on water main connections is incidental to the bid price for water main connections.

1.26 NEW WATER SERVICE, VARIOUS SIZES, TRENCH A

A. For the short segments of water service extension needed on existing 1" or larger copper water services, the Contractor shall install Type K copper pipe. Installation of a new stop-box at the property line at these services shall be paid for under a separate pay item.

B. Water services that are being connected to a main that is now closer to the house than the original main shall not be paid for any footage of new pipe. The work required for these service connections shall be covered entirely in the cost per connection, each.

C. Assuming all underground work is completed early in the project, while the main pedestrian sidewalks are still in service, the Contractor shall backfill and provide a temporary walkable surface to accommodate pedestrian traffic in a safe manner until the City sidewalks are removed in their entirety. Installation of a temporary stable surface in the sidewalk or other pedestrian areas shall be included in the separate pay item for maintenance aggregate.

D. Where existing trees make installation of the new water service challenging, the Contractor shall move the new water service as needed to reduce damage to the tree, as directed by the Engineer, at no extra cost, other than the additional footage of pipe installed as measured.

1.27 WATER SERVICE CONNECTION, VARIOUS SIZES

A. This pay item is to connect replacement or new water services to a new or existing water main. Where the new main crosses an existing service, the Contractor will not be paid for any footage of new service pipe to connect the existing service to the new main. When a service needs to be extended from the location of the old main to the new main, the Contractor will be paid for the

installation of NEW WATER SERVICE, TRENCH A in the appropriate size(s) for the length required.

1.28 INSTALL CURB STOP AND BOX

A. All water services that are replaced in their entirety shall have a new curb stop and box at the point designated by the Engineer. Said boxes shall generally be installed on or near the right-of-way (R.O.W.) line and behind the sidewalk. Curb Stop and Boxes shall be installed for such services when they are 2" diameter or less.

B. Bid pricing shall include all labor, equipment, and materials to furnish and install the curb stop and box to the correct finished grade elevation.

1.29 HYDRA-STOP, LINE STOP, VARIOUS SIZES

A. It is possible that some of the valves will not function as well as they should. When directed to do so by the Engineer, a Hydra-Stop system shall be available to temporarily stop the flow of water from one (1) or more of the adjacent water mains, thereby allowing a water main connection with a minimum of time lost. Time lost due to unexpected delays on a water main shutdown shall be compensated for (when said delay is outside of the control of the Contractor) when approved when itemized and submitted to the Engineer, under the "Water and Sewer Allowance" pay item.

B. It shall be noted that the Contractor shall coordinate with City Engineering & DPS to operate and test all necessary valves needed to shut down various portions of the existing water system to implement planned connections. The Contractor shall be prepared to provide the Hydra-Stops only if an inappropriately large shutdown area will be required to implement the connection work.

C. The costs for hydra-stop pay items shall be bid on per "each" basis, and each shall include necessary full-depth pavement removal, earth excavation, operation time, backfill, and pavement replacement (in kind). Additional payment will not be made for overnight fees or other associated fees that may be required to keep the line stop in operation for the duration of the required work is performed while the stop is in place.

1.30 ABANDON WATER MAINS, ENTIRE PROJECT

A. After acceptance of the new water main segments, the Contractor shall begin to abandon the old water main. The water main shall be abandoned as follows:

   A. At the designated locations, cut the water main.

   B. Install a water tight cap and plug to each end of the cut water main.

B. Abandonment of existing gate valve boxes and gate valve wells shall be included as a part of this pay item. Where directed by the Engineer, the gate valves shall be removed and transported to the Department of Public Services yard (851 S. Eton Rd.) for future City use. Both ends of the pipe shall be plugged and blocked. Any leftover materials not wanted by the City shall become the property of the Contractor, who shall properly dispose of them at no additional expense.

C. Abandonment of gate valve wells, where required, shall conform to the following procedure: The Contractor shall bulkhead any other openings in the structure, remove and dispose of the upper three (3) feet of the structure (remove cone section, if present), remove the frame and casting and deliver to the City of Birmingham Department of Public Services yard at 851 S. Eton Road (if directed by the Engineer), and backfill the structure with compacted sand. All portions of the structure removed that are not wanted by the City of Birmingham shall become the property of the Contractor, and shall be disposed of properly at no additional cost to the Owner.

D. Removal or portions of existing water main may be required to accommodate other proposed utility installations, which are typically shown on the plans, but may also be encountered at unknown locations during construction. In both known and unknown cases, the existing water main shall be removed as an incidental cost to this pay item where required. Caps shall be placed at ends of existing pipe to remain to accommodate the abandonment work of other water mains.

E. The Contactor shall be responsible for phasing all utility installations and developing means and methods to allow for the existing water main to remain in service until the proposed replacement water main is installed, tested, and in service for all locations within the project limits.

1.31 EARTH EXCAVATION

A. This work shall be done in accordance with the requirements of Section 205 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, except as herein described:

   A. The work of Earth Excavation shall consist of constructing earth grades by excavating soil or rock and placing embankment as necessary to develop the cross section and grade specified in the plans. The work shall include the salvaging and stockpiling of selected materials; disposing of surplus or unsuitable material; furnishing, placing and compacting of embankment materials; trimming of the earth grade and maintaining the work in a finished condition until acceptance by the Engineer.

   B. Any of the existing material that is excavated and deemed suitable, as determined by the Engineer, may be used for the road embankment material. The Contractor shall be responsible for the proper disposal of any existing material that is excavated and deemed unsuitable by the Engineer.

B. Earth Excavation shall include the following items:

   A. Stripping of vegetation and topsoil within the grading limits.

   B. Clearing of brush and the removal of trees less than four (4) inches in diameter (when approved by the Engineer).

   C. Excavation for roadway, curb, sidewalk, drive approaches and driveways.

   D. Backfilling behind the curb and adjacent to sidewalks, drive approaches and driveways with Engineer approved material.

   E. Grading from the back of curb to sidewalk, right of way line or grading limits to the required depth in order to receive all topsoil and sod surfaces.

   F. Proof-rolling subgrade in accordance with the final design.

C. The estimated quantity for earth excavation is based on "in-place" yards and does not account for trenching of underground utilities or subgrade underdrain.

D. The Contractor shall be responsible for determining his own volume of earth excavation required to construct the proposed roadway to the grade specified in the construction plans. No additional compensation will be made for any variation between the estimated amount stated above and the final amount of earth excavation required to construct the roadway.

1.32 SUBGRADE UNDERCUTTING, 21AA LIMESTONE

A. Once the subbase is exposed, it shall be proof rolled as a part of the preparation for new pavement. Proof rolling shall be done with a pneumatic tired roller capable of being loaded with ballast. The roller shall be operated in a systematic manner and uniform speed over the exposed subgrade soils

so that all areas of the exposed surface are tested. Maximum vehicle speed during proof rolling shall not exceed five (5) MPH. Proof rolling is incidental to the other work of this project and shall not be paid for separately.

B. Those areas that require additional excavation shall be verified by the Engineer prior to proceeding with additional excavation into the subbase. The additional excavation shall be paid for under the pay item, "Subgrade Undercutting, 21AA Limestone". All work of this nature shall be done in the presence of the Engineer. The areas excavated below the subbase grade shall be backfilled with 21AA Limestone, as a part of the cost of the unit price for "Subgrade Undercutting, 21AA Limestone."

C. Procedures for undercutting shall be in accordance with MDOT Standard Specifications for construction. Bid prices shall be based on an "in-place" measure, with compaction of all backfill materials meeting a minimum of 95% of dry density.

1.33 SUBGRADE UNDERCUTTING, 1" X 3" LIMESTONE

A. Once the subbase is exposed, it shall be proof rolled as a part of the preparation for new pavement. Proof rolling shall be done with a pneumatic tired roller capable of being loaded with ballast. The roller shall be operated in a systematic manner and uniform speed over the exposed subgrade soils so that all areas of the exposed surface are tested. Maximum vehicle speed during proof rolling shall not exceed five (5) MPH. Proof rolling is incidental to the other work of this project and shall not be paid for separately.

B. Those areas that require additional excavation shall be verified by the Engineer prior to proceeding with additional excavation into the subbase. The additional excavation shall be paid for under the pay item, "Subgrade Undercutting, 1"x3" Limestone." All work of this nature shall be done in the presence of the Engineer. The areas excavated below the subbase grade shall be backfilled with 1"x3" Limestone, as a part of the cost of the unit price for "Subgrade Undercutting, 1"x3" Limestone."

C. Procedures for undercutting shall be in accordance with MDOT Standard Specifications for construction. Bid prices shall be based on an "in-place" measure, with compaction of all backfill materials meeting a minimum of 95% of dry density.

1.34 SUBGRADE GEOGRID FABRIC, TENSAR TRIAX TX130S

A. The intent of this pay item is to provide additional pavement subgrade stabilization in conjunction with subgrade undercutting pay items, where directed by the Engineer.

B. Bid price shall include all labor, equipment, and material to furnish and install the geogrid fabric per manufacturer requirements.

1.35 REMOVE AND SALVAGE BRICK PAVERS

A. There are certain property owners within the construction zone that have installed brick pavers or other special hardscapes within the right of way that conflict with the proposed construction. The property owners shall be contacted by the City to verify if they wish to maintain ownership of the materials. If they do, the Contractor shall carefully remove and stack the pavers at a mutually agreeable location on the owner's property, within the front yard. Replacement of the pavers, if desired by the property owner, will be their responsibility after completion of this project. Measurement and payment for this item shall be per square foot of paver area removed and salvaged.

B. The Contractor shall work carefully to minimize the need to utilize this pay item, and to ensure that there is no damage to the brick paver materials. Brick paver walks shall only be removed and

salvaged under this pay item where it is directly necessary to carry out the construction work. In general, the Contractor shall only remove brick paver service walks to three (3) feet behind the proposed curb to allow for road construction, unless otherwise directed by the Engineer. The Contractor shall backfill the remaining gap between the curb or sidewalk with gravel to allow the driveway or walkway to be used again until the adjacent owner can have these areas repaired at their expense. Backfilling these areas shall be included in the cost of this work.

C. While generally salvaged brick paver materials shall be stacked on private property to become the adjacent owner's responsibility, the exception shall be at those locations where the replacement of the City sidewalk has required the disruption of a paver walk or driveway on the private side of the sidewalk. In those cases, the Contractor shall be required to backfill and reset the pavers to match the previous conditions to the greatest extent possible, as a part of this pay item.

1.36 REMOVING CONCRETE DRIVE APPROACH

A. Concrete drive approaches shall only be removed as shown on the plans or as directed by the Engineer in the field. There may be some locations where a drive approach will be removed to either an existing joint line, or to a sawcut joint where specified by the Engineer. Any driveway approaches, or portions thereof, that are noted to remain on the plans that are damaged in the execution of the work on this project shall be removed and replaced at no expense to the City or the property owner.

B. The Contractor shall notify the City at least seven (7) days ahead of when they plan to remove any drive approaches so that the City can notify the property owners. The Contractor shall also work with the Engineer to contact property owners and tenants the day that the concrete will be removed to ensure that they will not be stuck in their driveways. During the period when the drive approaches are being removed and replaced, it is imperative that the Contractor maintain the sidewalks along both sides of the street in a safe, passable condition to ensure that the pedestrians have access. The Contractor shall minimize the amount of time between driveway removal and driveway replacement.

C. The unit price for removing concrete drive approaches shall include all costs for the complete removal and disposal of the concrete sections, including any sawcutting required. If a drive approach is a concrete drive approach with an asphalt overlay, it shall be paid for as a concrete drive approach and the unit price for removal shall include the removal of both the asphalt overlay and the concrete drive approach.

1.37 REMOVING ASPHALT DRIVE APPROACH

A. Bituminous drive approaches shall only be removed as shown on the plans or as directed by the Engineer in the field. There may be some locations where a drive approach will be removed to either an existing joint line, or to a sawcut joint where specified by the Engineer. Any driveways, or portions thereof, that are noted to remain on the plans that are damaged in the execution of the work on this project shall be removed and replaced at no expense to the City or the property owner. All sawcutting required to produce a clean edge shall be included in the cost of this pay item, and shall not be paid for separately.

B. The Contractor shall notify the City at least seven (7) days ahead of when they plan to remove any drive approaches so that the City can notify the residents. The Contractor shall also work with the Engineer to contact homeowners the day that the asphalt will be removed to ensure that they will not be trapped in their driveways. During the period when the drive approaches are being removed and replaced, it is imperative that the Contractor maintain the sidewalks along both sides of the street in a safe, passable condition to ensure that the residents have access. The Contractor shall minimize the amount of time between driveway removal and driveway replacement.

C. The unit price for removing asphalt drive approaches shall include all costs for the complete removal and disposal of the proposed sections, including any sawcutting required.

1.38 REMOVING CONCRETE SIDEWALK & RAMP (SAWCUTTING INCLUDED)

A. Sections of City sidewalk will be removed and replaced as a part of the project. The sidewalks shall remain in place as long as possible to allow pedestrian access down the street. This provision is to provide a solid walking path for the residents that need to access their homes on foot as a result of the work.

B. The unit price for removing concrete sidewalks and ramps shall include all costs for the complete removal and disposal of the concrete sections, including any sawcutting required.

1.39 REMOVING PAVEMENT FULL DEPTH (CURB & GUTTER INCLUDED)

A. This pay item shall apply to the full depth removal of the existing asphalt, concrete, and composite pavements and curb and gutter within the road P.O.B. to P.O.E. station limits. Refer to plan sheets for removal limits and the geotechnical investigation report (Appendix A) for the details regarding existing pavements.

B. In all areas, the payment for this item includes full-depth pavement removal to the existing base below the pavement as required to complete the work.

C. The Contractor is encouraged to use care when considering methods of pavement destruction and removals.

D. After main line pavement removal, and during the underground work, the Contractor shall be expected to maintain traffic to all adjacent driveways. Removal of the pavements in the various pay items shall be timed in such a way that makes this maintenance of traffic as simple and effective as possible.

1.40 AGGREGATE BASE, MDOT 21AA LIMESTONE, 8"

A. This pay item shall include all earth excavation and base compaction required to provide a stable surface to install the eight (8) inch stone base, using 21AA limestone, required, as detailed in the proposed pavement cross sections. Installation of the aggregate base shall be paid for by the square yard.

B. Aggregate base placement shall typically extend a minimum of 12 inches beyond the proposed back of curb for full-depth pavement replacement.

C. To limit weather exposure of subgrade soils, 21AA Aggregate Base installation must be performed in conjunction with installation of proposed underdrains and any subgrade undercutting that will be performed in a given location It is required by the contractor to perform work for the final 21AA Aggregate Base layer concurrently with installation of underdrains in a train like manner. The Contractor shall not leave any cut and prepared subgrade surface exposed overnight.

1.41 CONCRETE PAVEMENT, NONREINFORCED, INCL. INTEGRAL CURB

A. This work consists of constructing a jointed Portland cement concrete pavement in accordance with Section 710 and 711 of the project specifications, and also Section 602 of the MDOT 2020 Standard Specifications for Construction.

B. A form riding paving machine or slip-form paving machine which meets the requirements of Section 602.03A of the MDOT 2020 Standard Specifications for Construction shall be utilized to construct the mainline concrete pavement on this Project. A roller screed, power screed, truss screed, etc., will NOT be considered as equivalent to a form riding or slip-form paving machine.

A list of the proposed paving equipment shall be provided to the Engineer at the Pre-Construction Meeting. The Contractor may be allowed to perform 'full' width paving, provided it can be demonstrated that it can be done in a timely manner, and also without causing unwarranted damage to the base of adjacent trees. In areas where existing trees are near the existing and/or proposed road curb, the Contractor should anticipate needing to use wood forms and hand-pouring construction techniques to mitigate potential impacts to trees associated with full-width paving machines forming and construction operations, which will typically require more excavation width behind the curb. These alternative methods shall be reviewed and approved by the Engineer in advance of construction to avoid construction scheduling delays. No machine shall be used that would require more removal of roots at the base of trees as compared to installing a form and paving by hand.

C. There will be no separate measurement and payment for providing the specified equipment. The cost shall be considered incidental to Concrete Pavement pay item.

D. This pay item shall include all concrete pavement with integral curb and gutter, measured by the square yard, where designated on the plan. Sawcutting and sealing of the joints, and placement of lane tie bars for longitudinal joints, shall be included in the cost per square foot. Hook bolts shall be provided at 40" O.C. when butting up against existing concrete pavement. No separate payment will be provided for this preparatory work.

E. The concrete pavement provided under this pay item, along with all other concrete pay items, shall comply with Section 711 for durability and resistance to alkali-silica reactivity. The Contractor shall be responsible to close the area off entirely as needed to ensure that the new pavement is not driven on by any vehicles for a minimum of seven (7) days.

F. The Contractor shall plan to pour the integral curb and gutter section as a part of the mainline concrete pour. Separate pours for the concrete curb and gutter section shall not be approved.

G. All sawcutting and joint sealing, as detailed in Section 710 of these Specifications, shall be incidental to this pay item.

H. The Contractor shall execute the paving portion of the Contract such that removing excess base materials, installation of new limestone base, and installation of new main line concrete with cure time shall be kept to no more than the time specified in Section 301 of these Contract Documents.

1.42 CONCRETE DRIVE APPROACH, 6"

A. All concrete drive approaches on this project shall be a minimum of six (6) inches thick unless otherwise called for on the plans.

B. The concrete drive approaches shall be poured as soon as possible following the roadway curing to allow residents to access their driveways.

C. The Contractor is encouraged to review Section 301 of these Contract Documents relative to the required timing for the placement of the driveway approaches.

D. Typical residential driveway approaches shall be constructed using the City detail for "Type L" driveway approach.

E. Concrete Driveway Approaches shall be constructed on minimum 6 inches of 21AA limestone as incidental to the cost of the approaches.

1.43 CONCRETE SIDEWALK, 4"

A. This pay item is for replacement of sections of sidewalk removed as a part of this project for excavations, at intersections, or removed to install other work on this project.

B. The unit price for sidewalk installation shall include all materials, labor, equipment and other work necessary for grading, grade preparation, six (6) inches sand base, forming, and pouring the concrete sidewalk, and sawcutting the sidewalk joints per the plans.

1.44 HANDICAP RAMP TRUNCATED DOMES

A. Each sidewalk ramp constructed as a part of this project shall include a detectable warning plate of truncated domes. The Contractor shall supply and install cast iron plates as manufactured by East Jordan Iron Works, or approved equal. Payment for the handicap ramp truncated domes shall be per square foot of detectable warning surface installed. In general, each ramp shall include a two (2) foot by five (5) foot detectable warning surface of truncated domes. In cases where there is not enough space for separate ramps, radial plates may be specified on the plans.

B. Contractors have experienced long lead times to obtain the cast iron detectable warning plates. The Contractor shall be encouraged to place the order for the necessary items well in advance of the proposed installation dates. Substitutions or changes in design due to lack of parts shall not be approved.

1.45 ADJUST STRUCTURE COVER

A. All manhole covers that are within the work area that need adjustment, but do not need any repairs below the top six (6) inches beneath the casting shall be paid for under this pay item. If additional work is required below the top six (6) inches beneath the casting, then all of the work, including the adjustment, shall be paid for under the "RECONSTRUCT MANHOLE (IF & WHERE NEEDED)". The repair shall be measured vertically from the top of the existing cover to the ending point of the repair. Adjustment of all new structures shall be included in the price of the new structure, and shall not be paid for under this pay item.

1.46 MAINTENANCE AGGREGATE FOR ENTIRE PROJECT

A. As noted elsewhere, the majority of the project will be closed to through traffic until the work on the project is completed. However, the contractor will be required to maintain access for local residents through most of the project. The only time that the road may be closed off completely from adjacent residents is when the road is being excavated to the base, limestone is being installed, and when the concrete street is being formed, poured, or cured. This pay item is to pay for all labor, materials and equipment to furnish and install temporary aggregate in the roadway and/or the sidewalks to ensure safe passage by the local residents. In particular, there are five (5) areas where the Contractor will be asked to ensure that safe travel is available during the project:

   A. Within the intersections on the project site that will remain open to cross traffic during the construction period.

   B. Within the intersections on job where sewer or water main work will extend out into the intersections.

   C. To allow for access to all driveways on the project after pavement removals and utility work for the day. Conditions during the underground phases shall be such that residents shall be allowed and able to drive to and from a gap in the barricades to their driveways at all times, unless an excavation is underway in the immediate area of their driveway.

   D. At all sidewalk transition areas, ensuring that pedestrians are safe at all times.

   E. At all points where sidewalk has been removed but yet not replaced.

B. Contractor may use crushed concrete, or asphalt millings as long as they provide a smooth passable surface.

1.47 MOBILIZATION

A. The purpose of this pay item is to provide payment to the Contractor for the cost of delivering equipment and materials to the job site as needed throughout the project. The Contractor shall not charge more than 5% of the total cost of the project for this pay item. Providing a price in excess of 5% could be grounds for invalidation of the bid.

B. Payment for this pay item shall be divided into 2 parts. The first payment will be for 75% and the second payment for 25%, with payments arriving on each of the first two disbursements. The Contractor should anticipate being paid approximately every 30 days for work on this Contract.

1.48 TRAFFIC MAINTENANCE AND CONTROL

A. The Contract Proposal indicates that this pay item will be paid for by the Lump Sum. Although paid as a lump sum, note that the Engineer has experienced difficulty in the past with certain Contractors not maintaining signing and traffic control measures on a daily basis to the extent considered necessary to properly protect the work area. Therefore, the Contractor shall submit a written time schedule to be reviewed and approved by the Engineer no later than 7 calendar days after the pre-construction meeting, if not sooner. Once approved, the number of calendar days (not counting Sundays) that the schedule indicates are required to complete the project shall be agreed upon by the Engineer and the Contractor, as stipulated in the written time schedule.

The Engineer will be checking the completeness of the signing and road closure features on a daily basis, and will ask for corrections as noted. The Contractor shall have a minimum of one representative on site with the Engineer at the end of the work day verifying that the condition of the traffic control signage is approved before leaving the project site for the day. The following shall be grounds for not receiving payment for this pay item for any given day:

A. If the Engineer has requested signage to be addressed prior to the Contractor leaving the site and it has not been done, or has not been done satisfactorily. The Engineer shall photograph and document incomplete signage conditions when observed, for the record.

B. If the Contractor's staff has all left the job site for the day before determining whether or not traffic control conditions have been approved by the Engineer. If problems are later identified by the Engineer, they shall be photographed and documented, for the record.

C. When not paying for this pay item under the conditions noted in #2 above, the Engineer shall consider how the discrepancy may have occurred. For example, if the problem is located outside of an area that would have been impacted by the Contractor, and if it appears that the discrepancy was caused by the public (such as the relocation of a barricade) at a time of day that the Contractor would not have reasonably known about the problem, then payment will not be docked for that day. Nevertheless, it shall be the Contractor's responsibility to make the effort to check all pertinent areas at the end of the work day so that this condition does not routinely occur.

D. To calculate the reduction of payment on the LS pay item, the Engineer shall use the following basis as an example:

If the time schedule referenced above indicates that the project will require the maintenance of traffic control measures for 70 calendar days (not including Sundays), and should the Contractor not meet the terms of the pay item for one day under the terms noted above, then the LS pay item shall be reduced in the amount of 1/70 of the pay item for each such day that traffic maintenance has not been performed within the terms of the Contract.

B. Prior to closing any of the streets on this project to through traffic, the Contractor shall supply cones, barriers, and warning signs in accordance with the MUTCD. Road closure signage shall not be erected more than two (2) work days in advance of planned closing, and erection of signing shall not begin until approved by the Engineer. At all entrances to the job site, the Contractor shall always maintain the appropriate number of Type III barricades and an R11-2 (ROAD CLOSED) signs. Appropriate advance warning at entrances to the job site shall be defined as maintaining a Type III at the next end of the affected block and an R11-4 (ROAD CLOSED TO THRU TRAFFIC) sign. Additional barricades shall be supplied as needed when the road is completely closed, such as when preparing the stone grade for paving, and when the concrete pavement has been recently placed. Refer to the proposed Advanced Warning Signage (AWS) diagram for additional traffic control requirements.

C. Project-Specific Traffic Maintenance and Control Requirements:

1. In general, traffic controls shall be provided to prevent thru-traffic within the project limits but resident access must be maintained in at least one direction for the duration of the project. The Contractor shall keep the road accessible to all residents during all phases of the project, except as follows:
    - If concrete or asphalt work is required across a driveway, the work shall be done expeditiously after removals, so as to keep residents parking on the street or other driveways to a minimum.
    - If asphalt or concrete is being placed.
    - If open trenching in the road makes driving in the immediate area hazardous.
2. Due to proposed utility work, which will occur in east and west directions of Bird Avenue on both the north and south sides of the road, and in a north and south directions across the road, it is anticipated there will be various instances throughout the project where local resident traffic will need to be routed in a one-way direction, either east or west bound, between Grant Street and Cummings Street. Refer to the Advanced Warning Signage (AWS) Traffic Diagram included in the drawings for recommended temporary signage to be placed to facilitate the east and west bound lane closure phases.
3. Underground sewer and paving work must be phased to avoid having concurrent lane closures in the Grant Street and Cummings Street intersections. One intersection must be open to two-way north/south traffic without restrictions at all times throughout the underground and paving phases of the project. See additional phasing notes and temporary traffic control signage requirements shown on the Advanced Warning Signage (AWS) Traffic Diagram included in the drawings, for work associated with the sewer construction in the Grant Street and Cummings Street intersections.
4. The Contractor shall provide all materials, labor and equipment necessary to install, maintain, move, and remove traffic control devices as required due to changing traffic access needs during the project.
5. The Contractor shall maintain pedestrian access to sidewalks and vehicular access to driveways (including using temporary maintenance gravel) at all times throughout the project unless otherwise directed by the Engineer. If a parcel has more than one

driveway for access, one driveway may be closed for construction with approval from the engineer.

D. The Contractor shall be responsible for maintaining traffic control that allow local access to the residents as specified above, including having flag control or labor to move barricades as necessary to facilitate both their operations and local traffic.

E. Once the road pavement is installed, and seven (7) days curing has been accomplished, the Contractor shall immediately begin preparing for sidewalk and drive approach construction, again, placing concrete expeditiously to allow the curing time to begin as soon as practical. Particular attention to safe and accessible sidewalks shall be provided when the road is closed to all vehicular traffic, given that the sidewalks shall be the only means of access for residents. The Contractor shall repair all sidewalks in driveway areas at the same time as the adjacent drive approaches, again to reduce the time that driveways are out of service.

F. The Contractor shall maintain signs and barricades as necessary to maintain traffic on this route as shown on the traffic control diagrams in the drawings.

G. It is anticipated that a small number of residents will, due to health or handicapped access reasons, require almost continuous access to their driveway. With that in mind, the Contractor shall include in the cost of the bid up to two (2) gaps for specific driveway access on half of the width of the road. Communications with the homeowners will occur well in advance of the paving phase, and any gapping requirements will be made clear to the Contractor. The City will not encourage any pavement gapping with the public, and if they are not needed, the Contractor will not be asked to provide them.

H. The Contractor shall endeavor to keep the cross streets, as well as the local access within the construction zone as clean and dust free as practical during construction.

1.49 INSPECTOR CREW DAYS

A. The number of crew days for each pay period will be added as a pay item (up to the amount bid as a maximum) and the actual number of days used will be deducted from the overall total amount due with each pay estimate. If the total amount bid has not been used at the end of the contract, the bid amount will be paid on the final estimate.

B. If additional work other than what is noted herein is necessary to complete the project, the City will consider adjusting the inspector crew days number upon request. The adjustment shall be based upon the percentage increase in the total value of the project over what was originally bid.

1.50 WATER & SEWER ALLOWANCE

A. Due to gaps in some of the water & sewer records, there may be some exploratory work required to ensure that all homes are connected to the new water main and combined sewer. City staff will endeavor to assist the Contractor wherever possible to keep such work to a minimum. Unexpected work or time lost due to malfunctioning gate valves, or conflicts with the proposed pipeline shall also qualify as time and material work paid for under this allowance.

B. Payment under this pay item shall only apply when additional work was required as a result of missing information on sewer service connections, or for work that is not normally associated with the pay items as presented in the plans and specifications. The Contractor and the City shall agree to the time spent on a daily basis that will apply under this provision. In addition, the Contractor shall submit a written statement for each such incident, documenting all labor and equipment charges on an hourly basis used, as well as any materials used, to be paid for under this provision.

C. For bidding purposes, the allowance shall be the flat amounts listed in the proposal sections. Any amendment may render the bid invalid.

1.51 PAVEMENT MARKINGS

A. All pavement markings must be provided to the size and color as noted, and using the material noted. All materials shall comply with MDOT standard specifications.

1.52 SALVAGE EXISTING SIGNS

A. The Contractor shall protect and work around all existing signs wherever possible. If signs need to be removed to accommodate underground work, they shall be replaced with a new post and salvaged sign prior to the end of the project.

B. Any STOP signs removed shall be erected again at the end of the day either on a temporary or permanent basis, with a permanent installation required prior to the end of the project. All sign removals and replacements, including relocations where noted on the plans, shall be paid for under the lump sum of Salvage Existing Signs.

C. Street name signs shall be stored in a safe location during construction, and installed back in the same location upon completion of the project. The salvaged signs shall be paid for accordingly.

1.53 SIGN POSTS, U-CHANNEL

A. All new signs posts shall be buried four (4) to five (5) feet below the ground, with an adequate length above the ground to mount all of the new proposed signs above the specified bottom height of the sign. Sign posts shall be a ridgeback U-channel galvanized steel, with a weight of three (3) pounds per linear foot.

1.54 TREE PROTECTION, 3" DIA. OR GREATER

A. The Contractor shall take all prudent and feasible measures that will reduce or eliminate the impacts of development and construction on City owned trees. Trees shall be surrounded by protective cushioning, posts or fencing before construction work begins, if, in the judgment of the Staff Arborist or the Engineer, such precautions are necessary.

B. On all trees greater than three (3) inches in diameter, but less than eighteen (18) inches away from the back of curb (from the edge of the trunk), straw bales shall be installed on end between the tree and the road. Straw bales shall be erected completely around the tree when said tree is in the median. The straw bales shall be wired to the tree around the entire trunk to ensure that they remain in place. If construction of sewer, water main, or concrete requires temporary removal, the bales shall be removed and set aside during that day. The bales shall be re-secured at the end of the work day as needed.

   A. Barriers shall remain in place until all site activities have been completed. Barriers may not be relocated or removed without the prior approval of the Staff Arborist.

   B. The barrier material must be visible and solid enough to withstand the pressure from anything piled up against it.

   C. Protection shall apply to all trees over three (3) inches in diameter.

C. All trees greater than three (3) inches in diameter, but less than eighteen (18) inches away from the back of the curb (from the edge of the trunk) shall have four (4) temporary fence posts installed around the base of the tree, with snow fence connected to all four (4) posts. Snow fence shall remain in place at all times, except when excavation or paving work in the immediate area requires

its temporary removal. After work is completed for the day, the snow fence shall be erected back into place by the Contractor.

D. Activity within the Root Protection Zone of a City owned tree (normally considered the drip line) shall be limited where practical as determined by the Engineer. These activities shall include, but not be limited to, changing grade, stripping topsoil, and/or placing solvents, building materials, construction equipment, or soil deposits within the Root Protection Zone. The Contractor shall be prepared to perform advance pruning of any City owned trees required for clearance during construction development activities. Pruning must be performed by a qualified arborist and not by untrained construction personnel. Any roots damaged during grading or development activities shall be exposed to sound tissue and cut cleanly with a saw following recommended standards and as directed by the Staff Arborist. Whenever possible, no excess soil, additional fill, liquids, or construction debris shall be placed within the Root Protection Zone of any City owned tree. Construction pruning and root pruning of any City owned trees directly affected by construction require obtaining prior approval from the Staff Arborist.

E. Trees shall be protected as described above for any tree over three (3) inches in diameter. Trees less than three (3) inches shall be protected at Contractor expense, however, trees shall be replaced at Contractor expense if there is any damage to the tree as determined by the Engineer or Staff Arborist.

1.55 MULCH, 3"

A. In areas where it will be difficult to establish grass around existing trees, the Contractor shall restore around the trees where directed by the Engineering with three (3) inches of topsoil, and then three (3) inches of hardwood landscape mulch as needed. No mulch shall be placed at trees where the root structure will allow the placement of sod instead. The three (3) inches of topsoil shall be paid for under the Topsoil pay item.

1.56 TOPSOIL, 3"

A. Topsoil shall be placed according to the Michigan Department of Transportation 2012 Standard Specifications for Construction, Modified to be screened with no objects greater that one (1) inch in diameter.

B. Topsoil shall be a loamy material. Payment shall be made for topsoil placed to the depth specified, per square yard. Payment shall include all labor, equipment and materials necessary to place the topsoil.

1.57 SOD, CLASS A

A. Restoration work of this nature shall be limited to the period of time between May 1st and October 31st of each year. Installation of sod (or seed) outside of these dates shall be with special approval only by the Engineer.

B. Payment on 50% of the pay items regarding restoration may be withheld until the sod or seed has satisfactorily germinated or been established.

C. The Contractor shall be responsible for watering all sod placed on the project for a period of fourteen (14) days, and at the end of fourteen (14) days, the sod areas shall be inspected by the City. Any sod areas that appear to be failing shall be marked for removal. Removal and replacement of failed sod areas shall be incidental.

D. A small percentage of the finished areas may be sloped (such as adjacent an existing tree) such that they cannot be sodded. These areas shall be seeded and included in the square yardage for sod

placed. Seed shall also be placed at the same price should any adjacent property owners request seed substitution for sod.

1.58 INLET FILTER, SILT SACK

A. Installation of this item shall follow the standard details prepared by the Oakland County Water Resources Commissioner. The detail for the "Inlet Filter" shall be modified appropriately to accommodate the proposed flat catch basin covers.

B. This pay item will be required on existing catch basins surrounding the project work zones, existing catch basins within the work zones (to either be maintained or removed, during all excavation, removal, subbase preparation, etc.), as well as for all proposed catch basin and storm inlets as they are installed.

C. Furnish and install "Silt Sack" inlet filters, or approved equal.

1.59 LAWN SPRINKLERS

A. In General, the Contractor shall take all necessary precaution to maintain all items placed in the right-of-way, and any items removed or damaged shall be replaced in kind. The exception to this is lawn sprinklers in the right-of-way. As long as the damage is not due to Contractor negligence, sprinklers that are in conflict with the construction may be removed and need not be replaced by the Contractor. The Contractor shall take precautions not to damage the sprinkler system any more than necessary, and shall notify the City of any sprinklers that are found during construction.

B. If a lawn sprinkler line located within the right-of-way is damaged, the Contractor shall sufficiently plug or cap the line to prevent the sprinkler line from discharging when the system is activated, and shall notify the City of the location of the damage.

C. Lawn sprinklers located on private property shall be the Contractor's responsibility to repair if damaged. For the purposes of this provision, private property shall be defined as any sprinkler damaged between the City sidewalk and the house.

1.60 DUST CONTROL

A. Dust & dirt control, and general cleanliness of the project work area and vicinity will be monitored by the Engineer on a regular basis. For unpaved surfaces, dust control can take the form of watering the grade, or treating the grade with calcium chloride. Particular attention shall be paid to areas where cross-streets generate more traffic than usual. For paved surfaces, streets must be swept on a regular basis to avoid excess dust being created by traffic. While minor sweeping can be accomplished by a broom tractor, larger sweeping jobs must be accomplished by a professional street sweeper so as to avoid throwing dust, dirt, and stones into the adjacent yards. Although not a direct pay item, the Contractor shall be prepared to address dust and dirt issues as requested by the Engineer within 24 hours. If such issues are not being addressed timely or inappropriately, the Engineer shall have the right to direct its own forces or other contractor to the job site to address the area in question. Such costs shall be charged against the final payment due to the Contractor.

1.61 PUMPING, BAILING, DRAINING, AND DEWATERING

A. The contractor shall provide and maintain adequate pumping and drainage facilities for removal and disposal of water from trenches or other excavations, to maintain stable excavations.

B. Where the work is in ground containing an excessive amount of water, the contractor shall provide, install, maintain, and operate suitable deep wells or well points, connecting manifolds and reliable pumping equipment to operate the same to ensure proper construction of the work. Alternate dewatering methods may be implemented if approved by the Owner. Refer to the

geotechnical report (Appendix A) for pertinent information, and as applicable, the Contractor shall review identified areas with the potential need for well points for deeper excavations based upon discussions with the geotechnical report preparer.

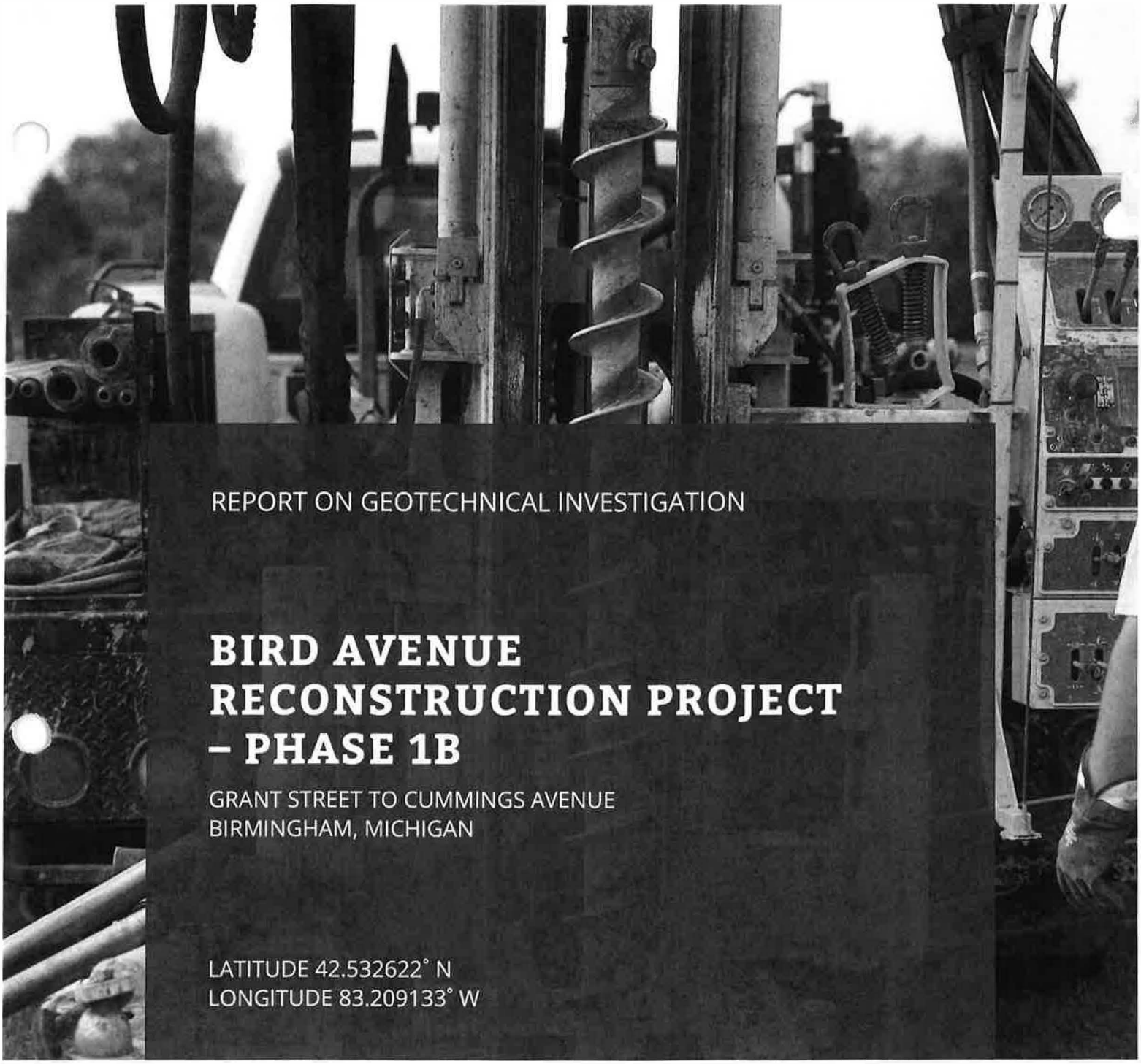
C. Drainage or discharge lines shall be connected to adjacent public storm water drains or extended to nearby water courses wherever possible. In any event, all pumping and drainage shall be done without damage to any highway or other property, public or private, and without interference with the rights of the public or private property owners and in accordance with the EGLE and local requirements for soil erosion and sedimentation control.

D. Costs for providing, maintaining, or operating any dewatering or drainage facilities will not be paid for separately and shall therefore be included in other items of work.

END OF SECTION

APPENDIX – A

SOIL BORING AND PAVEMENT CORE INFORMATION



REPORT ON GEOTECHNICAL INVESTIGATION

BIRD AVENUE RECONSTRUCTION PROJECT – PHASE 1B

GRANT STREET TO CUMMINGS AVENUE
BIRMINGHAM, MICHIGAN

LATITUDE 42.532622° N
LONGITUDE 83.209133° W

G2 CONSULTING GROUP

Prepared for:

Nowak & Fraus Engineers, Inc.
4777 Woodward Avenue
Pontiac, Michigan 48342

G2 Project No. 250770
November 12, 2025

CONSULTING GROUP
Smart.Results.Fast.

November 12, 2025

Mr. Brett J. Buchholz, P.E.
Principal
Nowak & Fraus Engineers, Inc.
47777 Woodward Avenue
Pontiac, Michigan 48342

RE: Report on Geotechnical Investigation
Bird Avenue Reconstruction Project – Phase 1B
Grant Street to Cummings Avenue
Birmingham, Michigan
G2 Project No. 250770

Dear Mr. Buchholz:

We have completed the geotechnical investigation for the proposed water main, sewer, and paving improvement project for Bird Avenue between Grant Street and Cummings Avenue within the City of Birmingham, Oakland County, Michigan. This report presents the results of our observations and analyses and our recommendations for pavement section design, underground utility replacement, and construction as they relate to the geotechnical conditions on site.

We appreciate the opportunity to be of service to the Nowak & Fraus Engineers, Inc., and the City of Birmingham on this project and look forward to discussing the recommendations presented. In the meantime, if you have any questions regarding this report or any other matter pertaining to the project, please contact us.

Sincerely,

G2 Consulting Group, LLC

Jeffrey M. Hayball, P.E.
Project Manager

James L. Berry, P.E.
Project Consultant

JMH/JLB/ljv

EXECUTIVE SUMMARY

The project consists of water main, sewer, and paving improvements for Bird Avenue between Grant Street and Cummings Avenue within the City of Birmingham, Michigan. Bird Avenue is a two lane roadway within the project limits and paved with jointed plain Portland cement concrete (PCC) pavements. Underground improvements include combined sewer upgrades and water main replacement along the route. We assume underground utilities will be installed using open-cut installation methods. It is assumed that maximum excavation depths for the water main will extend up to 6-1/2 feet and between 9 to 15 feet for the combine sewer. Current plans are to construct the pavements with a new PCC or Hot Mix Asphalt (HMA) pavement section. No information regarding traffic counts along the roadway alignment was available upon completion of this report. We assume traffic volume and vehicle mix will be similar to other residential streets within the City.

PCC pavement is present at the ground surface of the borings and generally ranges in thickness from 6 to 10 inches. Loose sandy gravel fill underlies the PCC pavement within boring B-1 and extends to an approximate depth of 2-1/2 feet. Native stiff to hard silty clay underlies the sandy gravel fill within boring B-1 and the PCC pavement within borings B-2 and B-3 and extends to the explored depth of 25 feet. During drilling operations, groundwater was observed within boring B-3 at an approximate depth of 23 feet. Upon completion of drilling operations, groundwater was measured at an approximate depth of 23 feet within boring B-3. No measurable groundwater was observed within borings B-1 and B-2 during or upon completion of drilling operations.

Temporary unsurcharged trench excavations for the proposed open-cut water main installation operations must be sloped back at a minimum of 1-1/2H:1V (horizontal: vertical) within the existing loose sandy gravel fill and at a minimum of 1H:1V within the stiff to hard cohesive soils. Where seepage from excavation cuts is observed, the slopes must be flattened sufficiently to achieve stability, but in no case left steeper that 3H:1V at and below the seepage level.

Groundwater was observed within soil boring B-3 at an approximate depth of 23 feet during and upon completion of drilling operations. Therefore, we anticipate excavation operations for utility construction will be performed in the dry. However, we anticipate that any groundwater accumulation or surface runoff into the excavations can be controlled using conventional minor dewatering measures such as pumping from properly constructed internal sumps.

The recommended HMA pavement section for Bird Avenue consists of 2 inches of MDOT 5EML bituminous concrete wearing course, 3 inches of MDOT 3EML bituminous concrete leveling course, supported on a minimum of 8 inches of MDOT 21AA aggregate base. Alternatively, we recommend a Portland cement jointed plain concrete design section consisting of 7 inches of MDOT 3500HP Portland cement concrete supported on a minimum of 8 inches of MDOT 21AA aggregate base.

Binder grades PG 64-28 are suitable for use with the bituminous concrete mixtures. Top course mixtures should be limited to Tier 1 Recycled Asphalt Percentage (RAP) addition requirements as noted in MDOT Special Provision 12SP501(E) to reduce early reflective cracking. Any imported aggregate base should consist of MDOT 21AA aggregate. MDOT 3500HP grade concrete is recommended for mainline paving. It is recommended that 3500HP grade concrete mixtures contain at most 25 percent GGBFS substitution for Portland cement or use low alkali (0.6% or less total cement alkali) Type I, Type II, or Type IL cement. If Type IL cement is used, the maximum allowable water / cementitious ratio of the mix should be limited to 0.43 to reduce scaling potential.

This summary is not to be considered separate from the entire text of this report, with all the conclusions and recommendations mentioned herein. Details of our analysis and recommendations are discussed in the following sections and in the Appendix of this report.

PROJECT DESCRIPTION

The project consists of water main, sewer, and paving improvements for Bird Avenue between Grant Street and Cummings Avenue within the City of Birmingham, Michigan. Bird Avenue is a two lane roadway within the project limits and paved with jointed plain Portland cement concrete (PCC) pavements. Underground improvements include combined sewer upgrades and water main replacement along the route. We assume underground utilities will be installed using open-cut installation methods. It is assumed that maximum excavation depths for the water main will extend up to 6-1/2 feet and between 9 to 15 feet for the combine sewer. Current plans are to construct the pavements with a new PCC or Hot Mix Asphalt (HMA) pavement section. No information regarding traffic counts along the roadway alignment was available upon completion of this report. We assume traffic volume and vehicle mix will be similar to other residential streets within the City.

SCOPE OF SERVICES

The field operations, laboratory testing, and engineering report preparation were performed under direction and supervision of a licensed professional engineer. Our services were performed according to generally accepted standards and procedures in the practice of geotechnical engineering in this area. Our scope of services for this project is as follows:

1. We performed a total of three (3) pavement cores, B-1 to B-3, through the existing pavements along Bird Avenue within the project limits. Three soil borings were performed at locations B-1 through B-3, extending to a depth of 25 feet each. We measured the existing pavement section material (PCC pavement) and identified the type and condition of subgrade soils.

2. We performed laboratory testing on representative samples obtained from our subsurface exploration. Laboratory testing included visual engineering classification, natural moisture content, Atterberg Limits, dry density, and unconfined compressive strength determinations.

3. We prepared this engineering report. Our report includes recommendations for pavement reconstruction and underground utility replacement construction.

FIELD OPERATIONS

G2 Consulting Group, LLC, selected the number, depth, and location of the pavement core/soil borings. The pavement core/soil borings were located in the field by a G2 representative by measuring from existing site features and landmarks using conventional taping methods. The approximate pavement core/soil boring locations are shown on the Soil Boring Location Plan, Plate No. 1. Ground surface elevations were not available at the time of the field investigation. We recommend the soil boring locations of B-1 through B-3, be surveyed so that soil and groundwater conditions can be referenced by elevation for use in construction.

We used a gas powered core rig equipped with a 6-inch diameter diamond-tipped core barrel to core the pavement at the pavement core/soil boring location. The pavement cores were drilled through the full depth of the existing pavement structure to obtain an accurate determination of the pavement thickness. The core samples were delivered to our laboratory for length measurement and photograph.

The soil borings were drilled using a truck-mounted rotary drilling rig. Continuous flight, 2-1/4-inch inside diameter, hollow-stem augers were used to advance the boreholes. The soil samples were obtained at intervals of 2-1/2 feet within the upper 10 feet and at 5 feet intervals below 10 feet by the Standard Penetration Test (SPT) method ASTM D1586, which involves driving a 2-inch diameter split-spoon sampler into the soil with a 140-pound weight falling 30 inches. The sampler is generally driven three successive 6-inch increments with the number of blows for each increment recorded. The number of blows required to advance the sampler the last 12 inches is termed the

Standard Penetration Resistance (N). The blow counts for each 6-inch increment and the resulting N-value are presented on the soil boring logs.

The soil samples were placed in sealed containers in the field and brought to the laboratory for testing and classification. During the drilling operations, the drilling crew maintained logs of the encountered subsurface conditions, including changes in stratigraphy and observed groundwater levels of the soil borings to be used in conjunction with our analyses of the subsurface conditions. The final boring logs are based on the field logs and laboratory soil classification and testing. After completion of the drilling operations, the boreholes were backfilled with excavated soil and capped with cold patch.

LABORATORY TESTING

The pavement core sample and soil samples from the boring were delivered to the G2 laboratory in Troy, Michigan for photographs and length measurements of the core sample and basic index tests on soil samples. A photograph and length measurement for the core samples are presented as Figure Nos. 6 through 8 in the Appendix.

Representative soil samples were subjected to laboratory testing to determine soil parameters pertinent to pavement design and underground utility construction. An experienced geotechnical engineer classified the samples in general conformance with the Unified Soil Classification System.

Laboratory testing included Atterberg Limits, natural moisture content, dry density, and unconfined compressive strength determinations. Atterberg limits were determined in accordance with ASTM D 4318 "Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils". The unconfined compressive strengths were determined by ASTM Test Method D2166 and using a spring-loaded hand penetrometer. Per ASTM D2166, the unconfined compressive strength of cohesive soils is determined by axially loading a small cylindrical soil sample under a slow rate of strain. The unconfined compressive strength is defined as the maximum stress applied to the soil sample before shear failure. If shear failure does not occur prior to a total strain of 15 percent, the unconfined compressive strength is defined as the stress at a strain of 15 percent. The hand penetrometer estimates the unconfined compressive strength to a maximum of 4-1/2 tons per square foot (tsf) by measuring the resistance of the soil sample to the penetration of a calibrated spring-loaded cylinder.

The results of the moisture content, organic matter content, dry density, and unconfined compressive strength laboratory tests are indicated on the soil boring logs at the depths the samples were obtained. Unconfined Compressive Strength Test are shown graphically on Figure No. 4 within the Appendix. Atterberg limits are shown graphically on Figure No. 5 in the Appendix. We will hold the soil samples for 60 days from the date of this report. If you would like the samples, please let us know.

PAVEMENT AND SUBSURFACE SOIL CONDITIONS

The project includes Bird Avenue, east of Grand Street, with an eastbound and westbound travel lane to the project limits at Cummings Avenue, a distance of approximately 1,500 feet. Residential properties are present along both sides of Bird Avenue within the project limits. A topographic survey was not available upon completion of this report. However, site grades along Bird Avenue are relatively level as any minor grade changes are gradual along the roadway alignment.

Bird Avenue consists of PCC pavements with curbs present along the pavement edge. The existing PCC pavements are generally in fair to poor condition. Surface distress includes random cracking, some joint and crack spalling, corner breaks, and occasional divided slabs. It appears some full depth patching and cold patching within the pavement joints or cracks have been performed in the past. The pavements are crowned, allowing surface runoff water to drain into the curbs present along the pavement edge, which further drain into catch basins built into the curb line.

PCC pavement is present at the ground surface of the borings and generally ranges in thickness from 6 to 10 inches. Sandy gravel fill underlies the PCC pavement within boring B-1 and extends to an approximate depth of 2-1/2 feet. Native silty clay underlies the sandy gravel fill within boring B-1 and the PCC pavement within borings B-2 and B-3 and extends to the explored depth of 25 feet.

The sandy gravel fill is loose in compactness with a Standard Penetration Test (SPT) N-value of 8 blows per foot (bpf). The native silty clay is stiff to hard in consistency with natural moisture contents ranging from 11 to 17 percent, a liquid limit of 25 percent, a plasticity index of 11 percent, dry densities ranging from 124 to 125 pounds per cubic foot (pcf), and unconfined compressive strengths ranging from 3,000 to 9,000 pounds per square feet (psf).

The stratification depths shown on the soil boring logs represent the soil conditions at the boring locations. Variations may occur between borings. Additionally, the stratigraphic lines represent the approximate boundaries between soil types. The transition may be more gradual than what is shown. We have prepared the boring logs on the basis of laboratory classification and testing as well as field logs of the soils encountered.

Soil Boring Location Plan, Plate No. 1, Soil Boring Logs, Figure Nos. 1 through 3, Unconfined Compressive Strength Test, Figure No. 4, and Atterberg Limits Results, Figure No. 5, are presented in the Appendix. Photographs of the pavement core samples are included as Figure Nos. 6 through 8. The soil profiles described above are generalized descriptions of the conditions encountered at the boring locations. General Notes Terminology defining the nomenclature used on the soil boring logs and elsewhere in this report are presented on Figure No. 9.

GROUNDWATER CONDITIONS

Groundwater observations were made during and upon completion of drilling operations. During drilling operations, groundwater was observed within boring B-3 at an approximate depth of 23 feet. Upon completion of drilling operations, groundwater was measured at an approximate depth of 23 feet within boring B-3. No measurable groundwater was observed within borings B-1 and B-2 during or upon completion of drilling operations.

Fluctuations in perched and long-term groundwater levels should be anticipated due to seasonal variations and following periods of prolonged precipitation. It should also be noted that groundwater observations made during drilling operations in predominantly cohesive soils are not necessarily indicative of the static groundwater level. This is due to the low permeability of such soils and the tendency of drilling operations to seal off the natural paths of groundwater flow.

UNDERGROUND UTLITY CONSTRUCTION RECOMMENDATIONS

General

We assume underground utilities will be installed using open-cut installation methods. It is assumed that maximum excavation depths for the water main will extend up to 6-1/2 feet and between 9 to 15 feet for the combine sewer. Once the proposed pipeline profile becomes available and the pipeline installation methods for each segment of the pipeline alignment have been established, G2 should be notified so that we can review our recommendations presented herein.

Open Cut Excavations

Temporary unsurcharged trench excavations for the proposed open-cut water main installation operations must be sloped back at a minimum of 1-1/2H:1V (horizontal: vertical) within the existing loose sandy gravel fill and at a minimum of 1H:1V within the stiff to hard cohesive soils. Where seepage from excavation cuts is

observed, the slopes must be flattened sufficiently to achieve stability, but in no case left steeper that 3H:1V at and below the seepage level. If the temporary construction embankments are to be maintained during the rainy season, berms are suggested along the tops of the embankments to prevent runoff water from entering the excavation and eroding the slope faces. The soils exposed in slope faces should be inspected by qualified personnel so modifications of the slopes can be made if variations in the soil or water conditions occur. If sufficient space for open cut consideration is not available trench box shoring may be used.

Trench box shoring may be used provided some lateral deflection of adjacent soils can be tolerated. If a trench box is used, excavations should be performed from within the trench box, such that no unsupported vertical cut is allowed to exist. A trench box is not recommended where adjacent utilities, roadways, or structures are located less than a lateral distance delineated by a plane extending upward from the bottom edges of the excavation at a 1H:1V slope.

All excavations should be safely sheeted, shored, sloped, or brace in accordance with MI-OSHA requirements. If material is stored or equipment is operated near the excavation, stronger shoring must be used to resist the extra pressure due to the superimposed loads. Care should always be exercised when excavating near existing buildings, roadways, or utilities to avoid undermining. In no case should excavations extend below the level of adjacent structures or utilities unless underpinning is planned.

Groundwater Control

Groundwater was observed within soil boring B-3 at an approximate depth of 23 feet during and upon completion of drilling operations. Therefore, we anticipate excavation operations for utility construction will be performed in the dry. However, we anticipate that any groundwater accumulation or surface runoff into the excavations can be controlled using conventional minor dewatering measures such as pumping from properly constructed internal sumps.

Pipeline Support

Based on the observed subsurface conditions and the anticipated invert elevations, we expect the proposed combined sewer and water main will generally be supported on very stiff to hard silty clay. In general, these soils are adequate for support of the utilities. Bedding material for the proposed sewer should consist of MDOT 6A open-graded material or other approved open graded aggregate. Water main bedding may consist of select granular materials or approved aggregates. Differential movements of the sewer pipeline may occur if the trench bottom is not adequately stabilized. The exposed subgrade should be visually evaluated for stability prior to the backfilling of the construction excavations.

Trench Backfill

The existing gravelly sandy gravel fill and native silty clay are not suitable to be reused as backfill within construction excavations. We recommend clean granular engineered fill should be used to backfill around water main and the remainder of the utility trench. We recommend MDOT Class IIA sand be used as backfill. The initial lift should be compacted using light-duty compaction equipment, such as walk-behind vibratory plate compactors, and should be compacted in a manner that will not disturb the pipe alignment. The next lift of engineered fill may then be placed to 9 inches above the top of the pipe. Again, light-duty compaction equipment should be used to complete the compaction of the engineered fill.

After the bedding material and initial lift of backfill has been placed and compacted, the remainder of the trench should be backfilled in an engineered manner. The engineered fill should be free of organic matter, frozen soil, clods, or other harmful material. All engineered backfill should be placed in loose layers not to exceed 9 inches in thickness and should be mechanically compacted to achieve a density of at least 95 percent of the materials maximum dry density as determined by the Modified Proctor compact test (ASTM D1557) or in accordance with the

latest version of the Michigan Department of Transportation "Density Testing and Inspection Manual". Granular engineered fill material should be placed and compacted at moisture contents within 2 percent above or below the optimum moisture content.

PAVEMENT RECOMMENDATIONS

General

The proposed Bird Avenue pavement improvements are to reconstruct the existing pavements over newly installed underground utilities with a new Portland cement jointed plain concrete or hot-mix-asphalt pavement section. At the time of the investigation, finished site grades were not available. The underlying subgrade soils should be suitable for support of proposed pavements following satisfactory completion of subgrade preparation operations as described in the Pavement Subgrade Preparation Recommendations section of this report.

Pavement Subgrade Preparation Recommendations

The existing Portland cement concrete pavements should be completely removed. The exposed subgrade soils should be graded to promote effective subsurface drainage and then compacted. Once a rough grade has been achieved, the exposed subgrade soils should be evaluated for stability. We recommend the existing cohesive soils be proof rolled with a fully loaded tri-axle dump truck. Any unstable or unsuitable areas noted should be improved by additional compaction or removed and replaced with engineered fill.

Given the existing cohesive subgrade conditions, we anticipate a moderate to high amount of subgrade treatment by undercut may be required during construction operations. We recommend construction operations be performed during the summer months and the exposed subgrade is not left exposed to rain events.

Subgrade undercuts, if required, should be evaluated by a qualified engineering technician to determine if subgrade stabilization is necessary. We recommend that undercut excavations, where required, be backfilled MDOT 21AA placed in an engineered manner. A drain tile should be placed at the deepest portion of subgrade undercuts and connected to the closest catch basin to prevent trapped water from collecting in the granular cut soils or the subgrade should be sloped towards utility installation backfill to drain the undercut. Lift thicknesses should not exceed 9 inches. All engineered fill should be compacted to a density of at least 95 percent of the maximum density determined by the Modified Proctor (ASTM D 1557) method of testing or in accordance with the latest version of the Michigan Department of Transportation "Density Testing and Inspection Manual". All engineered fill material should be placed and compacted at approximately the optimum moisture content. Frozen material should not be used as fill, nor should fill be placed on a frozen subgrade.

Pavement Design

We performed pavement design analyses in accordance with the "AASHTO Guide for Design of Pavement Structures". The subgrade soils will generally consist of sandy gravel fill, native silty clay, and engineered fill placed over utilities. Based on the existing subgrade soils, we have provided design pavement sections based on an effective subgrade resilient modulus of 5,000 pounds per square inch (psi) and an effective modulus of subgrade reaction, k, of 50 pounds per cubic inch (pci).

For the proposed new pavement section, we estimated a serviceability loss of 2.0, a standard deviation of 0.39 for rigid pavements, a standard deviation of 0.49 for flexible pavements, a reliability factor of 0.95, load transfer coefficient of 3.2, a drainage coefficient of 1.0, a Portland cement concrete modulus of rupture of 670 psi, and an elastic modulus of the Portland cement concrete slab of 4,200,000 psi. All pavement materials are specified within the 2020 Standard Specifications for Construction from the Michigan Department of Transportation. The

bituminous concrete pavement materials are described in Section 501 and can be assigned a structural coefficient number of 0.42. Any imported aggregate base material can be assigned a structural coefficient number of 0.14. The proposed pavement section is designed to support 200,000 18-kip Equivalent Single-Axle Loads over a 20 year design life. If traffic volume information changes, G2 Consulting Group should be notified so we can reevaluate our recommendations.

The recommended HMA pavement section for Bird Avenue consists of 2 inches of MDOT 5EML bituminous concrete wearing course, 3 inches of MDOT 3EML bituminous concrete leveling course, supported on a minimum of 8 inches of MDOT 21AA aggregate base. Alternatively, we recommend a Portland cement jointed plain concrete design section consisting of 7 inches of MDOT 3500HP Portland cement concrete supported on a minimum of 8 inches of MDOT 21AA aggregate base.

Binder grades PG 64-28 are suitable for use with the bituminous concrete mixtures. Top course mixtures should be limited to Tier 1 Recycled Asphalt Percentage (RAP) addition requirements as noted in MDOT Special Provision 12SP501(E) to reduce early reflective cracking. Any imported aggregate base should consist of MDOT 21AA aggregate. MDOT 3500HP grade concrete is recommended for mainline paving. It is recommended that 3500HP grade concrete mixtures contain at most 25 percent GGBFS substitution for Portland cement or use low alkali (0.6% or less total cement alkali) Type I, Type II, or Type IL cement. If Type IL cement is used, the maximum allowable water / cementitious ratio of the mix should be limited to 0.43 to reduce scaling potential.

Pavement Drainage

We recommend the proposed pavement have Portland cement concrete curbs with catch basins to provide surface drainage. We recommend subgrade under drains be provided continuously along curbs since they can become a source of water infiltration into the pavement subgrade. Such drains should extend to minimum depths of 4 inches below the bottom of the proposed aggregate base course or granular fill placed within undercut areas. These drains could be connected to nearby catch basins. The pavement and subgrade should be properly sloped to promote effective surface and subsurface drainage and prevent water from ponding. We also recommend pavement subbase materials consist of non-frost-susceptible aggregates where possible.

Pavement Maintenance

We recommend that the joints within newly constructed Portland cement concrete pavements be sealed with hot rubber to prevent moisture intrusion into the subgrade soils below, as well as prevent spalling of the joint due to material entering the joint.

Regular timely maintenance should be performed on the pavement to reduce the potential deterioration associated with moisture infiltration through surface cracks. The owner should be prepared to seal the cracks with a hot-applied elastic crack filler as soon as possible after cracking develops and as often as necessary to block the passage of water to the subgrade soils. In addition, regular joint maintenance should be performed.

GENERAL COMMENTS

We have formulated the evaluations and recommendations presented in this report relative to underground utility construction, site preparation, and pavement reconstruction on the basis of data provided to us relating to the general location for the proposed pavement improvements. Any significant change in this data should be brought to our attention for review and evaluation with respect to the prevailing subsurface conditions.

The scope of the present investigation was limited to evaluation of subsurface conditions for the support of the new underground utilities, pavements, and other related aspects of the development. No chemical, environmental, or hydrogeological testing or analyses were included in the scope of this investigation. If changes occur in the design, location, or concept of the project, the conclusions and recommendations contained in this report are not

valid unless G2 Consulting Group, LLC reviews the changes. G2 Consulting Group, LLC will then confirm the recommendations presented herein or make changes in writing.

We have based the analyses and recommendations submitted in this report upon the data from soil borings performed at the approximate locations shown on the Soil Boring Location Plan, Plate No. 1. This report does not reflect variations that may occur between the actual boring locations. The nature and extent of any such variations may not become clear until the time of construction. If significant variations then become evident, it may be necessary for us to re-evaluate our report recommendations.

Soil conditions at the site could vary from those generalized on the basis of soil borings made at specific locations. It is, therefore, recommended that G2 Consulting Group, LLC be retained to provide soil engineering services during the site preparation and pavement construction phases of the proposed project. This is to observe compliance with the design concepts, specifications, and recommendations. Also, this allows design changes to be made in the event that subsurface conditions differ from those anticipated prior to the start of construction.

APPENDIX

SOIL BORING LOCATION PLAN	PLATE NO. 1
SOIL BORING LOGS	FIGURE NOS. 1 THROUGH 3
UNCONFINED COMPRESSIVE STERNGTH TEST	FIGURE NO. 4
ATTERBERG LIMITS RESULTS	FIGURE NO. 5
PHOTOGRAPHIC DOCUMENTATION	FIGURE NOS. 6 THROUGH 8
GENERAL NOTES TERMINOLOGY	FIGURE NO. 9



Legend

Soil Borings Drilled by 2G Drilling on October 28, 2025

Soil Boring Location Plan

Bird Avenue Reconstruction Project - Phase 1B
Grant Street to Cummings Avenue
Birmingham, Michigan

2G CONSULTING GROUP
Smart.Results.Fast.

Project No. 250770	
Drawn by: JMH	
Date: 8/4/2025	Plate No. 1
Scale: NTS	

Project Name: Bird Avenue Reconstruction Project - Phase 1B

Project Location: Grant Street to Cummings Avenue
Birmingham, Michigan

G2 Project No. 250770

Soil Boring No. B-1

CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PROFILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		PCC Pavement (10 inches) 0.8							
		Fill: Loose Gray Sandy Gravel with trace silt 2.5		S-1	4 6 2	8			
5		Stiff Brown and Gray Silty Clay with trace sand and gravel	5	S-2	2 3 3	6	14.9		3000*
		6.0		S-3	6 11 15	26	16.2		9000*
10		Hard Brown and Gray Silty Clay with trace sand and gravel	10	S-4	11 12 16	28	10.8		9000*
		12.0		S-5	5 5 5	10	14.4	125	6720
15			15						
20		Very Stiff Gray Silty Clay with trace sand and gravel	20	S-6	3 5 6	11	14.2		5500*
25		25.0	25	S-7	3 5 6	11	13.9		5500*
		End of Boring @ 25 ft							
30			30						

Total Depth: 25 ft
Drilling Date: October 28, 2025
Inspector:
Contractor: 2G Drilling
Driller: Q. Torres

Drilling Method:
6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

Water Level Observations:
Dry during and upon completion

Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger Cuttings and capped with cold patch

Figure No. 1

Project Name: Bird Avenue Reconstruction Project - Phase 1B

Project Location: Grant Street to Cummings Avenue
Birmingham, Michigan

G2 Project No. 250770

CONSULTING GROUP

Soil Boring No. B-2

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Portland Cement Concrete (7 inches) 0.6							
				S-1	2 4 6	10	13.8		5000*
5			5	S-2	6 8 8	16	13.5		8000*
		Very Stiff to Hard Brown and Gray Silty Clay with trace sand and gravel		S-3	5 10 13	23	12.1		9000*
10			10	S-4	8 11 15	26	14.0		9000*
		11.0							
15			15	S-5	3 3 6	9	13.1		4500*
		Very Stiff Gray Silty Clay with trace sand and gravel							
20			20	S-6	3 3 7	10	14.4	124	5740
25		25.0	25	S-7	4 5 8	13	14.2		6500*
		End of Boring @ 25 ft							
30			30						

Total Depth: 25 ft
Drilling Date: October 28, 2025
Inspector:
Contractor: 2G Drilling
Driller: Q. Torres

Drilling Method:
6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

Water Level Observations:
Dry during and upon completion

Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger Cuttings and capped with cold patch

Figure No. 2

Project Name: Bird Avenue Reconstruction Project - Phase 1B

Project Location: Grant Street to Cummings Avenue
Birmingham, Michigan

G2 Project No. 250770

Soil Boring No. B-3

CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Portland Cement Concrete (6 inches) 0.5							
				S-1	4 5 8	13	12.5		6500*
5			5	S-2	5 7 7	14	14.2		7000*
		Very Stiff to Hard Brown and Gray Silty Clay with trace sand and gravel		S-3	5 9 13	22	13.3		9000*
10			10	S-4	10 12 16	28	17.1		9000*
		13.0							
15			15	S-5	4 6 7	13	13.2		6500*
		Very Stiff Gray Silty Clay with trace sand and gravel, occasional sand seams							
20			20	S-6	5 4 4	8	13.6	124	6880
25		25.0	25	S-7	4 6 6	12	15.5		6000*
		End of Boring @ 25 ft							
30			30						

Total Depth: 25 ft
Drilling Date: October 28, 2025
Inspector:
Contractor: 2G Drilling
Driller: Q. Torres

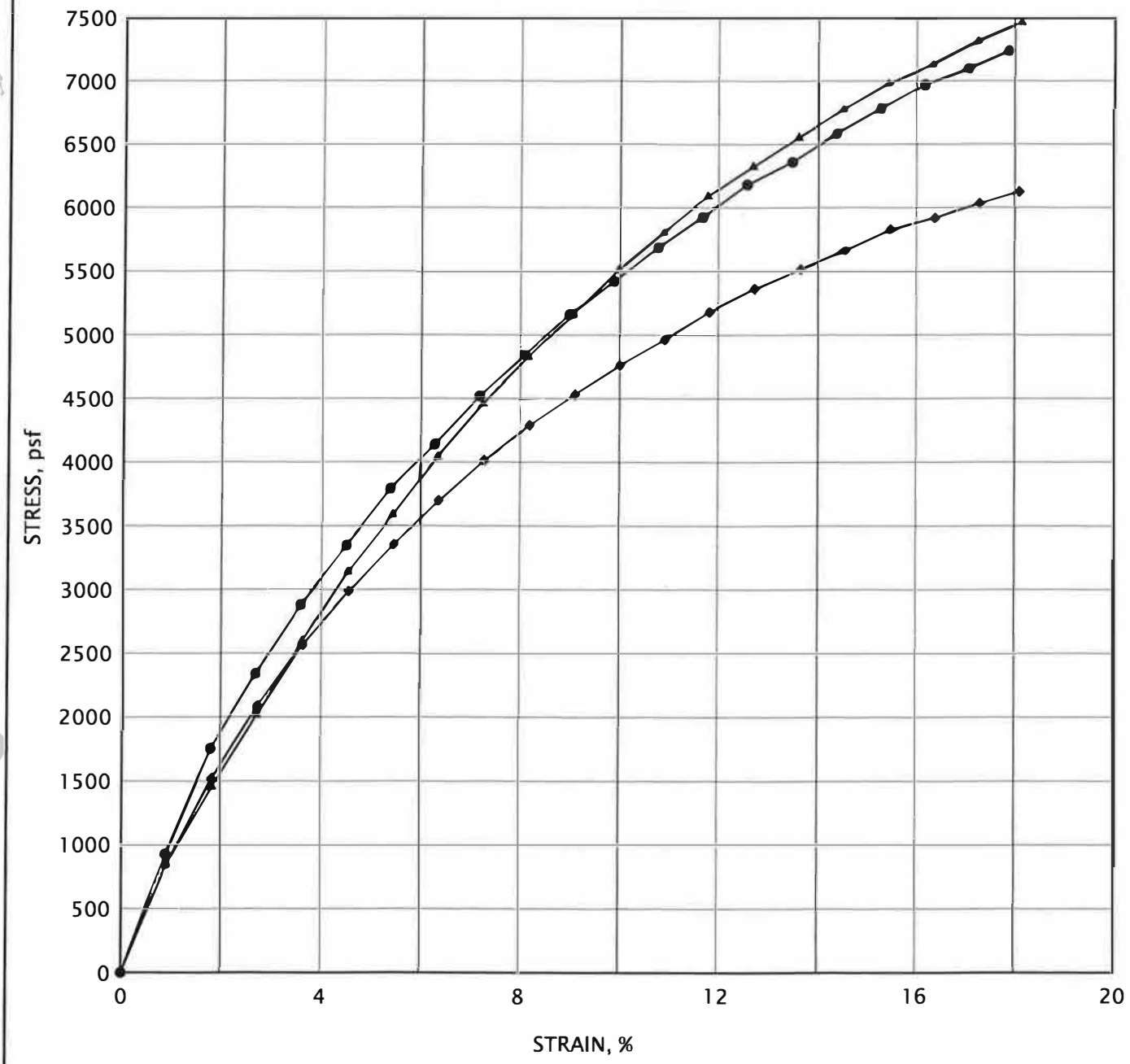
Drilling Method:
6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

Water Level Observations:
23 feet during and upon completion

Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger Cuttings and capped with cold patch

Figure No. 3



	Specimen		Classification	MC%	DD	UC
●	B-1	S-5	Gray Silty Clay	14	125	6720
◆	B-2	S-6	Gray Silty Clay	14	124	5740
▲	B-3	S-6	Gray Silty Clay	14	124	6880

G2 CONSULTING GROUP

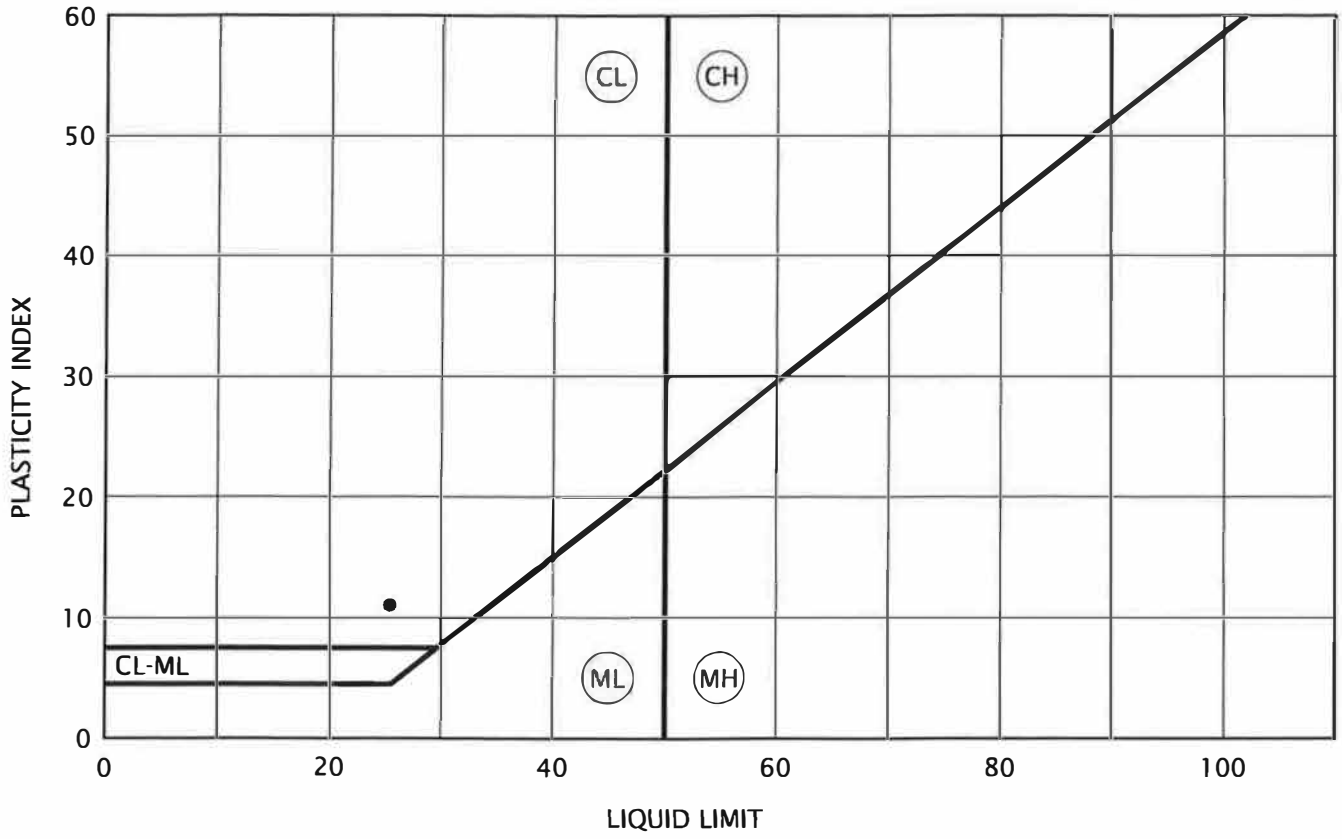
UNCONFINED COMPRESSIVE STRENGTH TEST

Project Name: Bird Avenue Reconstruction Project - Phase 1B

Project Location: Grant Street to Cummings Avenue
Birmingham, Michigan

G2 Project No.: 250770

Figure No. 4



Specimen Identification		LL	PL	PI	Fines	M%	Classification
● B-3	S-1	25	14	11		13	Brown and Gray Silty Clay

CONSULTING GROUP

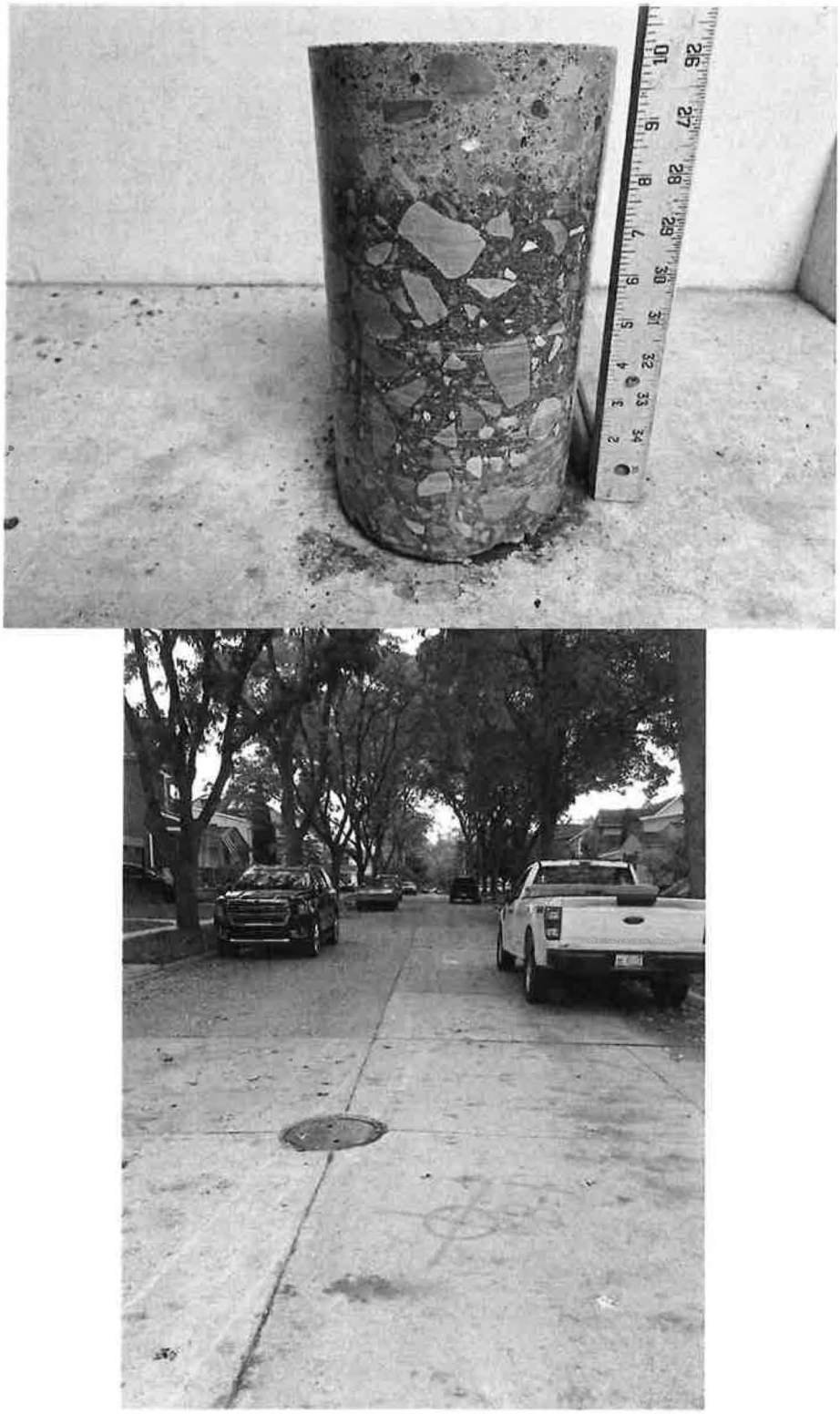
ATTERBERG LIMITS RESULTS

Project Name: Bird Avenue Reconstruction Project - Phase 1B

Project Location: Grant Street to Cummings Avenue
Birmingham, Michigan

G2 Project No.: 250770

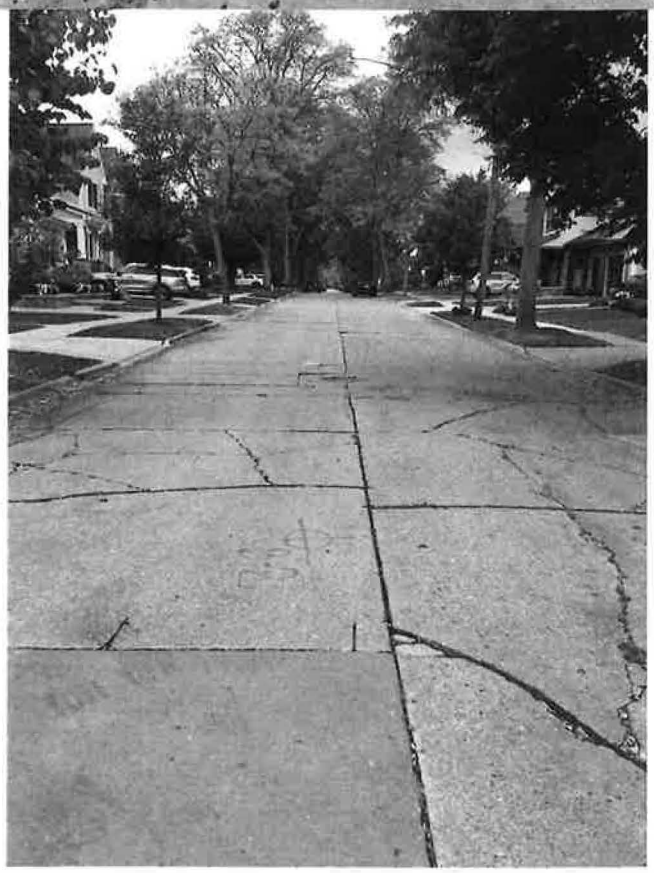
Figure No. 5



Core Photograph B-1: PCC Pavement = 10 inches

Figure No. 6

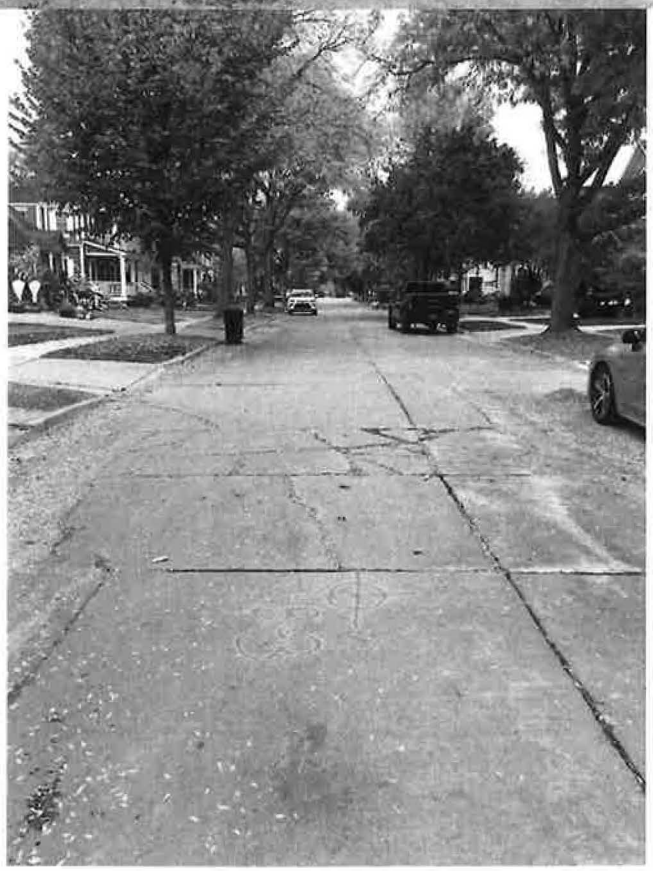




Core Photograph B-2: PCC Pavement = 7 inches

Figure No. 7





Core Photograph B-3: PCC Pavement = 6 inches

Figure No. 8

GENERAL NOTES TERMINOLOGY

Unless otherwise noted, all terms herein refer to the Standard Definitions presented in ASTM D 653.

PARTICLE SIZE

Boulders		- greater than 12 inches
Cobbles		- 3 inches to 12 inches
Gravel	- Coarse	- 3/4 inches to 3 inches
	- Fine	- No. 4 to 3/4 inches
Sand	- Coarse	- No. 10 to No. 4
	- Medium	- No. 40 to No. 10
	- Fine	- No. 200 to No. 40
Silt		- 0.005mm to 0.074mm
Clay		- Less than 0.005mm

CLASSIFICATION

The major soil constituent is the principal noun, i.e. clay, silt, sand, gravel. The second major soil constituent and other minor constituents are reported as follows:

Second Major Constituent (percent by weight)	Minor Constituent (percent by weight)
Trace - 1 to 12%	Trace - 1 to 12%
Adjective - 12 to 35%	Little - 12 to 23%
And - over 35%	Some - 23 to 33%

COHESIVE SOILS

If clay content is sufficient so that clay dominates soil properties, clay becomes the principal noun with the other major soil constituent as modifier, i.e. sandy clay. Other minor soil constituents may be included in accordance with the classification breakdown for cohesionless soils, i.e. silty clay, trace sand, little gravel.

Consistency	Unconfined Compressive Strength (psf)	Approximate Range of (N)
Very Soft	Below 500	0 - 2
Soft	500 - 1,000	3 - 4
Medium	1,000 - 2,000	5 - 8
Stiff	2,000 - 4,000	9 - 15
Very Stiff	4,000 - 8,000	16 - 30
Hard	8,000 - 16,000	31 - 50
Very Hard	Over 16,000	Over 50

Consistency of cohesive soils is based upon an evaluation of the observed resistance to deformation under load and not upon the Standard Penetration Resistance (N).

COHESIONLESS SOILS

Density Classification	Relative Density %	Approximate Range of (N)
Very Loose	0 - 15	0 - 4
Loose	16 - 35	5 - 10
Medium Compact	36 - 65	11 - 30
Compact	66 - 85	31 - 50
Very Compact	86 - 100	Over 50

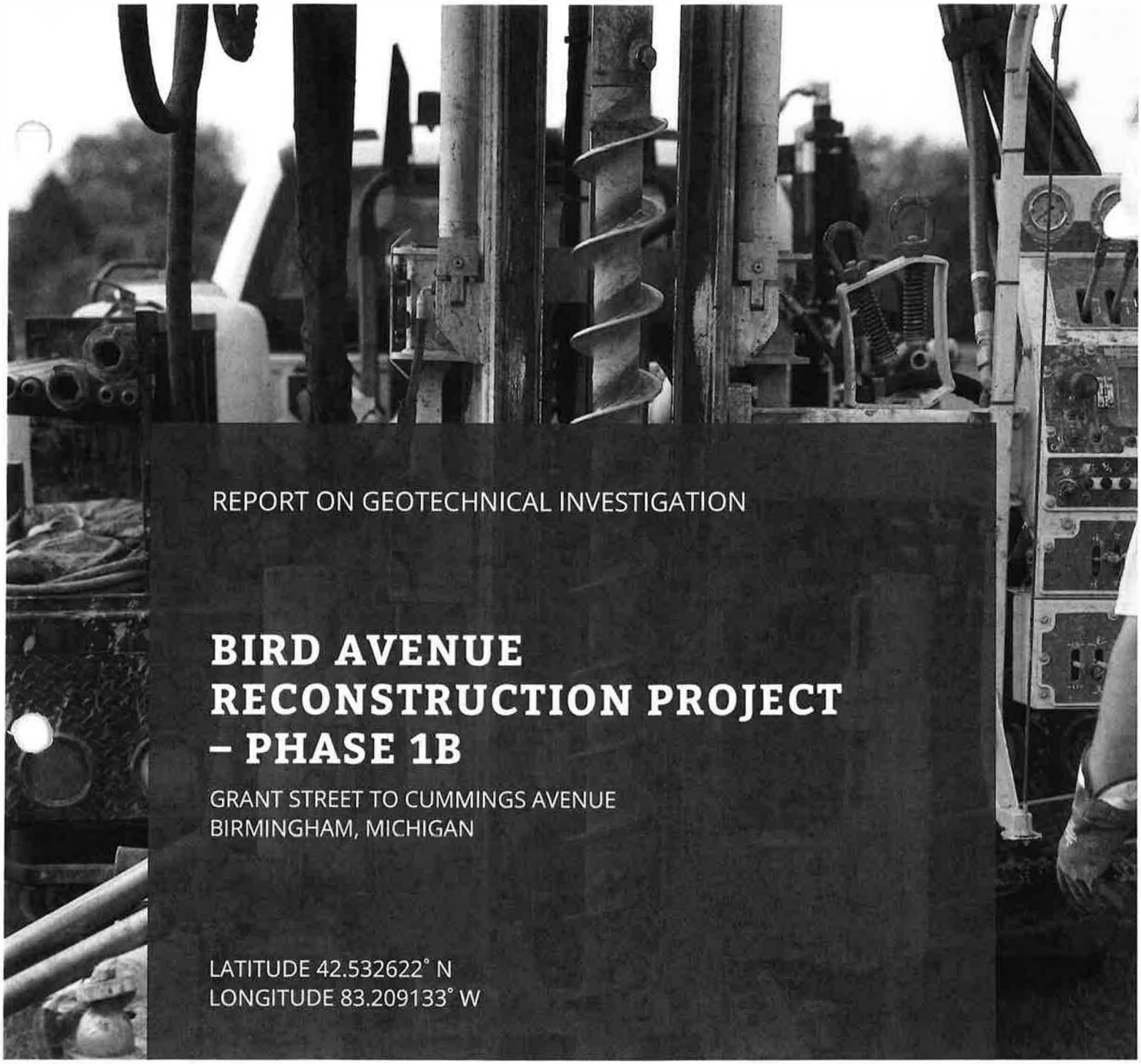
Relative Density of cohesionless soils is based upon the evaluation of the Standard Penetration Resistance (N), modified as required for depth effects, sampling effects, etc.

SAMPLE DESIGNATIONS

AS - Auger Sample – Cuttings directly from auger flight
BS - Bottle or Bag Samples
S - Split Spoon Sample - ASTM D 1586
LS - Liner Sample with liner insert 3 inches in length
ST - Shelby Tube sample - 3 inch diameter unless otherwise noted
PS - Piston Sample - 3 inch diameter unless otherwise noted
RC - Rock Core - NX core unless otherwise noted

STANDARD PENETRATION TEST (ASTM D 1586) - A 2.0 inch outside-diameter, 1-3/8 inch inside-diameter split barrel sampler is driven into undisturbed soil by means of a 140-pound weight falling freely through a vertical distance of 30 inches. The sampler is normally driven three successive 6-inch increments. The total number of blows required for the final 12 inches of penetration is the Standard Penetration Resistance (N).

Figure No. 9



REPORT ON GEOTECHNICAL INVESTIGATION

BIRD AVENUE RECONSTRUCTION PROJECT – PHASE 1B

GRANT STREET TO CUMMINGS AVENUE
BIRMINGHAM, MICHIGAN

LATITUDE 42.532622° N
LONGITUDE 83.209133° W

G2 CONSULTING GROUP

Prepared for:

Nowak & Fraus Engineers, Inc.
4777 Woodward Avenue
Pontiac, Michigan 48342

G2 Project No. 250770
November 12, 2025

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November 12, 2025

Mr. Brett J. Buchholz, P.E.
Principal
Nowak & Fraus Engineers, Inc.
47777 Woodward Avenue
Pontiac, Michigan 48342

RE: Report on Geotechnical Investigation
Bird Avenue Reconstruction Project – Phase 1B
Grant Street to Cummings Avenue
Birmingham, Michigan
G2 Project No. 250770

Dear Mr. Buchholz:

We have completed the geotechnical investigation for the proposed water main, sewer, and paving improvement project for Bird Avenue between Grant Street and Cummings Avenue within the City of Birmingham, Oakland County, Michigan. This report presents the results of our observations and analyses and our recommendations for pavement section design, underground utility replacement, and construction as they relate to the geotechnical conditions on site.

We appreciate the opportunity to be of service to the Nowak & Fraus Engineers, Inc., and the City of Birmingham on this project and look forward to discussing the recommendations presented. In the meantime, if you have any questions regarding this report or any other matter pertaining to the project, please contact us.

Sincerely,

G2 Consulting Group, LLC

Jeffrey M. Hayball, P.E.
Project Manager

James L. Berry, P.E.
Project Consultant

JMH/JLB/ljv

EXECUTIVE SUMMARY

The project consists of water main, sewer, and paving improvements for Bird Avenue between Grant Street and Cummings Avenue within the City of Birmingham, Michigan. Bird Avenue is a two lane roadway within the project limits and paved with jointed plain Portland cement concrete (PCC) pavements. Underground improvements include combined sewer upgrades and water main replacement along the route. We assume underground utilities will be installed using open-cut installation methods. It is assumed that maximum excavation depths for the water main will extend up to 6-1/2 feet and between 9 to 15 feet for the combine sewer. Current plans are to construct the pavements with a new PCC or Hot Mix Asphalt (HMA) pavement section. No information regarding traffic counts along the roadway alignment was available upon completion of this report. We assume traffic volume and vehicle mix will be similar to other residential streets within the City.

PCC pavement is present at the ground surface of the borings and generally ranges in thickness from 6 to 10 inches. Loose sandy gravel fill underlies the PCC pavement within boring B-1 and extends to an approximate depth of 2-1/2 feet. Native stiff to hard silty clay underlies the sandy gravel fill within boring B-1 and the PCC pavement within borings B-2 and B-3 and extends to the explored depth of 25 feet. During drilling operations, groundwater was observed within boring B-3 at an approximate depth of 23 feet. Upon completion of drilling operations, groundwater was measured at an approximate depth of 23 feet within boring B-3. No measurable groundwater was observed within borings B-1 and B-2 during or upon completion of drilling operations.

Temporary unsurcharged trench excavations for the proposed open-cut water main installation operations must be sloped back at a minimum of 1-1/2H:1V (horizontal: vertical) within the existing loose sandy gravel fill and at a minimum of 1H:1V within the stiff to hard cohesive soils. Where seepage from excavation cuts is observed, the slopes must be flattened sufficiently to achieve stability, but in no case left steeper that 3H:1V at and below the seepage level.

Groundwater was observed within soil boring B-3 at an approximate depth of 23 feet during and upon completion of drilling operations. Therefore, we anticipate excavation operations for utility construction will be performed in the dry. However, we anticipate that any groundwater accumulation or surface runoff into the excavations can be controlled using conventional minor dewatering measures such as pumping from properly constructed internal sumps.

The recommended HMA pavement section for Bird Avenue consists of 2 inches of MDOT 5EML bituminous concrete wearing course, 3 inches of MDOT 3EML bituminous concrete leveling course, supported on a minimum of 8 inches of MDOT 21AA aggregate base. Alternatively, we recommend a Portland cement jointed plain concrete design section consisting of 7 inches of MDOT 3500HP Portland cement concrete supported on a minimum of 8 inches of MDOT 21AA aggregate base.

Binder grades PG 64-28 are suitable for use with the bituminous concrete mixtures. Top course mixtures should be limited to Tier 1 Recycled Asphalt Percentage (RAP) addition requirements as noted in MDOT Special Provision 12SP501(E) to reduce early reflective cracking. Any imported aggregate base should consist of MDOT 21AA aggregate. MDOT 3500HP grade concrete is recommended for mainline paving. It is recommended that 3500HP grade concrete mixtures contain at most 25 percent GGBFS substitution for Portland cement or use low alkali (0.6% or less total cement alkali) Type I, Type II, or Type IL cement. If Type IL cement is used, the maximum allowable water / cementitious ratio of the mix should be limited to 0.43 to reduce scaling potential.

This summary is not to be considered separate from the entire text of this report, with all the conclusions and recommendations mentioned herein. Details of our analysis and recommendations are discussed in the following sections and in the Appendix of this report.

PROJECT DESCRIPTION

The project consists of water main, sewer, and paving improvements for Bird Avenue between Grant Street and Cummings Avenue within the City of Birmingham, Michigan. Bird Avenue is a two lane roadway within the project limits and paved with jointed plain Portland cement concrete (PCC) pavements. Underground improvements include combined sewer upgrades and water main replacement along the route. We assume underground utilities will be installed using open-cut installation methods. It is assumed that maximum excavation depths for the water main will extend up to 6-1/2 feet and between 9 to 15 feet for the combine sewer. Current plans are to construct the pavements with a new PCC or Hot Mix Asphalt (HMA) pavement section. No information regarding traffic counts along the roadway alignment was available upon completion of this report. We assume traffic volume and vehicle mix will be similar to other residential streets within the City.

SCOPE OF SERVICES

The field operations, laboratory testing, and engineering report preparation were performed under direction and supervision of a licensed professional engineer. Our services were performed according to generally accepted standards and procedures in the practice of geotechnical engineering in this area. Our scope of services for this project is as follows:

1. We performed a total of three (3) pavement cores, B-1 to B-3, through the existing pavements along Bird Avenue within the project limits. Three soil borings were performed at locations B-1 through B-3, extending to a depth of 25 feet each. We measured the existing pavement section material (PCC pavement) and identified the type and condition of subgrade soils.

2. We performed laboratory testing on representative samples obtained from our subsurface exploration. Laboratory testing included visual engineering classification, natural moisture content, Atterberg Limits, dry density, and unconfined compressive strength determinations.

3. We prepared this engineering report. Our report includes recommendations for pavement reconstruction and underground utility replacement construction.

FIELD OPERATIONS

G2 Consulting Group, LLC, selected the number, depth, and location of the pavement core/soil borings. The pavement core/soil borings were located in the field by a G2 representative by measuring from existing site features and landmarks using conventional taping methods. The approximate pavement core/soil boring locations are shown on the Soil Boring Location Plan, Plate No. 1. Ground surface elevations were not available at the time of the field investigation. We recommend the soil boring locations of B-1 through B-3, be surveyed so that soil and groundwater conditions can be referenced by elevation for use in construction.

We used a gas powered core rig equipped with a 6-inch diameter diamond-tipped core barrel to core the pavement at the pavement core/soil boring location. The pavement cores were drilled through the full depth of the existing pavement structure to obtain an accurate determination of the pavement thickness. The core samples were delivered to our laboratory for length measurement and photograph.

The soil borings were drilled using a truck-mounted rotary drilling rig. Continuous flight, 2-1/4-inch inside diameter, hollow-stem augers were used to advance the boreholes. The soil samples were obtained at intervals of 2-1/2 feet within the upper 10 feet and at 5 feet intervals below 10 feet by the Standard Penetration Test (SPT) method ASTM D1586, which involves driving a 2-inch diameter split-spoon sampler into the soil with a 140-pound weight falling 30 inches. The sampler is generally driven three successive 6-inch increments with the number of blows for each increment recorded. The number of blows required to advance the sampler the last 12 inches is termed the

Standard Penetration Resistance (N). The blow counts for each 6-inch increment and the resulting N-value are presented on the soil boring logs.

The soil samples were placed in sealed containers in the field and brought to the laboratory for testing and classification. During the drilling operations, the drilling crew maintained logs of the encountered subsurface conditions, including changes in stratigraphy and observed groundwater levels of the soil borings to be used in conjunction with our analyses of the subsurface conditions. The final boring logs are based on the field logs and laboratory soil classification and testing. After completion of the drilling operations, the boreholes were backfilled with excavated soil and capped with cold patch.

LABORATORY TESTING

The pavement core sample and soil samples from the boring were delivered to the G2 laboratory in Troy, Michigan for photographs and length measurements of the core sample and basic index tests on soil samples. A photograph and length measurement for the core samples are presented as Figure Nos. 6 through 8 in the Appendix.

Representative soil samples were subjected to laboratory testing to determine soil parameters pertinent to pavement design and underground utility construction. An experienced geotechnical engineer classified the samples in general conformance with the Unified Soil Classification System.

Laboratory testing included Atterberg Limits, natural moisture content, dry density, and unconfined compressive strength determinations. Atterberg limits were determined in accordance with ASTM D 4318 "Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils". The unconfined compressive strengths were determined by ASTM Test Method D2166 and using a spring-loaded hand penetrometer. Per ASTM D2166, the unconfined compressive strength of cohesive soils is determined by axially loading a small cylindrical soil sample under a slow rate of strain. The unconfined compressive strength is defined as the maximum stress applied to the soil sample before shear failure. If shear failure does not occur prior to a total strain of 15 percent, the unconfined compressive strength is defined as the stress at a strain of 15 percent. The hand penetrometer estimates the unconfined compressive strength to a maximum of 4-1/2 tons per square foot (tsf) by measuring the resistance of the soil sample to the penetration of a calibrated spring-loaded cylinder.

The results of the moisture content, organic matter content, dry density, and unconfined compressive strength laboratory tests are indicated on the soil boring logs at the depths the samples were obtained. Unconfined Compressive Strength Test are shown graphically on Figure No. 4 within the Appendix. Atterberg limits are shown graphically on Figure No. 5 in the Appendix. We will hold the soil samples for 60 days from the date of this report. If you would like the samples, please let us know.

PAVEMENT AND SUBSURFACE SOIL CONDITIONS

The project includes Bird Avenue, east of Grand Street, with an eastbound and westbound travel lane to the project limits at Cummings Avenue, a distance of approximately 1,500 feet. Residential properties are present along both sides of Bird Avenue within the project limits. A topographic survey was not available upon completion of this report. However, site grades along Bird Avenue are relatively level as any minor grade changes are gradual along the roadway alignment.

Bird Avenue consists of PCC pavements with curbs present along the pavement edge. The existing PCC pavements are generally in fair to poor condition. Surface distress includes random cracking, some joint and crack spalling, corner breaks, and occasional divided slabs. It appears some full depth patching and cold patching within the pavement joints or cracks have been performed in the past. The pavements are crowned, allowing surface runoff water to drain into the curbs present along the pavement edge, which further drain into catch basins built into the curb line.

PCC pavement is present at the ground surface of the borings and generally ranges in thickness from 6 to 10 inches. Sandy gravel fill underlies the PCC pavement within boring B-1 and extends to an approximate depth of 2-1/2 feet. Native silty clay underlies the sandy gravel fill within boring B-1 and the PCC pavement within borings B-2 and B-3 and extends to the explored depth of 25 feet.

The sandy gravel fill is loose in compactness with a Standard Penetration Test (SPT) N-value of 8 blows per foot (bpf). The native silty clay is stiff to hard in consistency with natural moisture contents ranging from 11 to 17 percent, a liquid limit of 25 percent, a plasticity index of 11 percent, dry densities ranging from 124 to 125 pounds per cubic foot (pcf), and unconfined compressive strengths ranging from 3,000 to 9,000 pounds per square feet (psf).

The stratification depths shown on the soil boring logs represent the soil conditions at the boring locations. Variations may occur between borings. Additionally, the stratigraphic lines represent the approximate boundaries between soil types. The transition may be more gradual than what is shown. We have prepared the boring logs on the basis of laboratory classification and testing as well as field logs of the soils encountered.

Soil Boring Location Plan, Plate No. 1, Soil Boring Logs, Figure Nos. 1 through 3, Unconfined Compressive Strength Test, Figure No. 4, and Atterberg Limits Results, Figure No. 5, are presented in the Appendix. Photographs of the pavement core samples are included as Figure Nos. 6 through 8. The soil profiles described above are generalized descriptions of the conditions encountered at the boring locations. General Notes Terminology defining the nomenclature used on the soil boring logs and elsewhere in this report are presented on Figure No. 9.

GROUNDWATER CONDITIONS

Groundwater observations were made during and upon completion of drilling operations. During drilling operations, groundwater was observed within boring B-3 at an approximate depth of 23 feet. Upon completion of drilling operations, groundwater was measured at an approximate depth of 23 feet within boring B-3. No measurable groundwater was observed within borings B-1 and B-2 during or upon completion of drilling operations.

Fluctuations in perched and long-term groundwater levels should be anticipated due to seasonal variations and following periods of prolonged precipitation. It should also be noted that groundwater observations made during drilling operations in predominantly cohesive soils are not necessarily indicative of the static groundwater level. This is due to the low permeability of such soils and the tendency of drilling operations to seal off the natural paths of groundwater flow.

UNDERGROUND UTLITY CONSTRUCTION RECOMMENDATIONS

General

We assume underground utilities will be installed using open-cut installation methods. It is assumed that maximum excavation depths for the water main will extend up to 6-1/2 feet and between 9 to 15 feet for the combine sewer. Once the proposed pipeline profile becomes available and the pipeline installation methods for each segment of the pipeline alignment have been established, G2 should be notified so that we can review our recommendations presented herein.

Open Cut Excavations

Temporary unsurcharged trench excavations for the proposed open-cut water main installation operations must be sloped back at a minimum of 1-1/2H:1V (horizontal: vertical) within the existing loose sandy gravel fill and at a minimum of 1H:1V within the stiff to hard cohesive soils. Where seepage from excavation cuts is

observed, the slopes must be flattened sufficiently to achieve stability, but in no case left steeper that 3H:1V at and below the seepage level. If the temporary construction embankments are to be maintained during the rainy season, berms are suggested along the tops of the embankments to prevent runoff water from entering the excavation and eroding the slope faces. The soils exposed in slope faces should be inspected by qualified personnel so modifications of the slopes can be made if variations in the soil or water conditions occur. If sufficient space for open cut consideration is not available trench box shoring may be used.

Trench box shoring may be used provided some lateral deflection of adjacent soils can be tolerated. If a trench box is used, excavations should be performed from within the trench box, such that no unsupported vertical cut is allowed to exist. A trench box is not recommended where adjacent utilities, roadways, or structures are located less than a lateral distance delineated by a plane extending upward from the bottom edges of the excavation at a 1H:1V slope.

All excavations should be safely sheeted, shored, sloped, or brace in accordance with MI-OSHA requirements. If material is stored or equipment is operated near the excavation, stronger shoring must be used to resist the extra pressure due to the superimposed loads. Care should always be exercised when excavating near existing buildings, roadways, or utilities to avoid undermining. In no case should excavations extend below the level of adjacent structures or utilities unless underpinning is planned.

Groundwater Control

Groundwater was observed within soil boring B-3 at an approximate depth of 23 feet during and upon completion of drilling operations. Therefore, we anticipate excavation operations for utility construction will be performed in the dry. However, we anticipate that any groundwater accumulation or surface runoff into the excavations can be controlled using conventional minor dewatering measures such as pumping from properly constructed internal sumps.

Pipeline Support

Based on the observed subsurface conditions and the anticipated invert elevations, we expect the proposed combined sewer and water main will generally be supported on very stiff to hard silty clay. In general, these soils are adequate for support of the utilities. Bedding material for the proposed sewer should consist of MDOT 6A open-graded material or other approved open graded aggregate. Water main bedding may consist of select granular materials or approved aggregates. Differential movements of the sewer pipeline may occur if the trench bottom is not adequately stabilized. The exposed subgrade should be visually evaluated for stability prior to the backfilling of the construction excavations.

Trench Backfill

The existing gravelly sandy gravel fill and native silty clay are not suitable to be reused as backfill within construction excavations. We recommend clean granular engineered fill should be used to backfill around water main and the remainder of the utility trench. We recommend MDOT Class IIA sand be used as backfill. The initial lift should be compacted using light-duty compaction equipment, such as walk-behind vibratory plate compactors, and should be compacted in a manner that will not disturb the pipe alignment. The next lift of engineered fill may then be placed to 9 inches above the top of the pipe. Again, light-duty compaction equipment should be used to complete the compaction of the engineered fill.

After the bedding material and initial lift of backfill has been placed and compacted, the remainder of the trench should be backfilled in an engineered manner. The engineered fill should be free of organic matter, frozen soil, clods, or other harmful material. All engineered backfill should be placed in loose layers not to exceed 9 inches in thickness and should be mechanically compacted to achieve a density of at least 95 percent of the materials maximum dry density as determined by the Modified Proctor compact test (ASTM D1557) or in accordance with the

latest version of the Michigan Department of Transportation "Density Testing and Inspection Manual". Granular engineered fill material should be placed and compacted at moisture contents within 2 percent above or below the optimum moisture content.

PAVEMENT RECOMMENDATIONS

General

The proposed Bird Avenue pavement improvements are to reconstruct the existing pavements over newly installed underground utilities with a new Portland cement jointed plain concrete or hot-mix-asphalt pavement section. At the time of the investigation, finished site grades were not available. The underlying subgrade soils should be suitable for support of proposed pavements following satisfactory completion of subgrade preparation operations as described in the Pavement Subgrade Preparation Recommendations section of this report.

Pavement Subgrade Preparation Recommendations

The existing Portland cement concrete pavements should be completely removed. The exposed subgrade soils should be graded to promote effective subsurface drainage and then compacted. Once a rough grade has been achieved, the exposed subgrade soils should be evaluated for stability. We recommend the existing cohesive soils be proof rolled with a fully loaded tri-axle dump truck. Any unstable or unsuitable areas noted should be improved by additional compaction or removed and replaced with engineered fill.

Given the existing cohesive subgrade conditions, we anticipate a moderate to high amount of subgrade treatment by undercut may be required during construction operations. We recommend construction operations be performed during the summer months and the exposed subgrade is not left exposed to rain events.

Subgrade undercuts, if required, should be evaluated by a qualified engineering technician to determine if subgrade stabilization is necessary. We recommend that undercut excavations, where required, be backfilled MDOT 21AA placed in an engineered manner. A drain tile should be placed at the deepest portion of subgrade undercuts and connected to the closest catch basin to prevent trapped water from collecting in the granular cut soils or the subgrade should be sloped towards utility installation backfill to drain the undercut. Lift thicknesses should not exceed 9 inches. All engineered fill should be compacted to a density of at least 95 percent of the maximum density determined by the Modified Proctor (ASTM D 1557) method of testing or in accordance with the latest version of the Michigan Department of Transportation "Density Testing and Inspection Manual". All engineered fill material should be placed and compacted at approximately the optimum moisture content. Frozen material should not be used as fill, nor should fill be placed on a frozen subgrade.

Pavement Design

We performed pavement design analyses in accordance with the "AASHTO Guide for Design of Pavement Structures". The subgrade soils will generally consist of sandy gravel fill, native silty clay, and engineered fill placed over utilities. Based on the existing subgrade soils, we have provided design pavement sections based on an effective subgrade resilient modulus of 5,000 pounds per square inch (psi) and an effective modulus of subgrade reaction, k, of 50 pounds per cubic inch (pci).

For the proposed new pavement section, we estimated a serviceability loss of 2.0, a standard deviation of 0.39 for rigid pavements, a standard deviation of 0.49 for flexible pavements, a reliability factor of 0.95, load transfer coefficient of 3.2, a drainage coefficient of 1.0, a Portland cement concrete modulus of rupture of 670 psi, and an elastic modulus of the Portland cement concrete slab of 4,200,000 psi. All pavement materials are specified within the 2020 Standard Specifications for Construction from the Michigan Department of Transportation. The

bituminous concrete pavement materials are described in Section 501 and can be assigned a structural coefficient number of 0.42. Any imported aggregate base material can be assigned a structural coefficient number of 0.14. The proposed pavement section is designed to support 200,000 18-kip Equivalent Single-Axle Loads over a 20 year design life. If traffic volume information changes, G2 Consulting Group should be notified so we can reevaluate our recommendations.

The recommended HMA pavement section for Bird Avenue consists of 2 inches of MDOT 5EML bituminous concrete wearing course, 3 inches of MDOT 3EML bituminous concrete leveling course, supported on a minimum of 8 inches of MDOT 21AA aggregate base. Alternatively, we recommend a Portland cement jointed plain concrete design section consisting of 7 inches of MDOT 3500HP Portland cement concrete supported on a minimum of 8 inches of MDOT 21AA aggregate base.

Binder grades PG 64-28 are suitable for use with the bituminous concrete mixtures. Top course mixtures should be limited to Tier 1 Recycled Asphalt Percentage (RAP) addition requirements as noted in MDOT Special Provision 12SP501(E) to reduce early reflective cracking. Any imported aggregate base should consist of MDOT 21AA aggregate. MDOT 3500HP grade concrete is recommended for mainline paving. It is recommended that 3500HP grade concrete mixtures contain at most 25 percent GGBFS substitution for Portland cement or use low alkali (0.6% or less total cement alkali) Type I, Type II, or Type IL cement. If Type IL cement is used, the maximum allowable water / cementitious ratio of the mix should be limited to 0.43 to reduce scaling potential.

Pavement Drainage

We recommend the proposed pavement have Portland cement concrete curbs with catch basins to provide surface drainage. We recommend subgrade under drains be provided continuously along curbs since they can become a source of water infiltration into the pavement subgrade. Such drains should extend to minimum depths of 4 inches below the bottom of the proposed aggregate base course or granular fill placed within undercut areas. These drains could be connected to nearby catch basins. The pavement and subgrade should be properly sloped to promote effective surface and subsurface drainage and prevent water from ponding. We also recommend pavement subbase materials consist of non-frost-susceptible aggregates where possible.

Pavement Maintenance

We recommend that the joints within newly constructed Portland cement concrete pavements be sealed with hot rubber to prevent moisture intrusion into the subgrade soils below, as well as prevent spalling of the joint due to material entering the joint.

Regular timely maintenance should be performed on the pavement to reduce the potential deterioration associated with moisture infiltration through surface cracks. The owner should be prepared to seal the cracks with a hot-applied elastic crack filler as soon as possible after cracking develops and as often as necessary to block the passage of water to the subgrade soils. In addition, regular joint maintenance should be performed.

GENERAL COMMENTS

We have formulated the evaluations and recommendations presented in this report relative to underground utility construction, site preparation, and pavement reconstruction on the basis of data provided to us relating to the general location for the proposed pavement improvements. Any significant change in this data should be brought to our attention for review and evaluation with respect to the prevailing subsurface conditions.

The scope of the present investigation was limited to evaluation of subsurface conditions for the support of the new underground utilities, pavements, and other related aspects of the development. No chemical, environmental, or hydrogeological testing or analyses were included in the scope of this investigation. If changes occur in the design, location, or concept of the project, the conclusions and recommendations contained in this report are not

valid unless G2 Consulting Group, LLC reviews the changes. G2 Consulting Group, LLC will then confirm the recommendations presented herein or make changes in writing.

We have based the analyses and recommendations submitted in this report upon the data from soil borings performed at the approximate locations shown on the Soil Boring Location Plan, Plate No. 1. This report does not reflect variations that may occur between the actual boring locations. The nature and extent of any such variations may not become clear until the time of construction. If significant variations then become evident, it may be necessary for us to re-evaluate our report recommendations.

Soil conditions at the site could vary from those generalized on the basis of soil borings made at specific locations. It is, therefore, recommended that G2 Consulting Group, LLC be retained to provide soil engineering services during the site preparation and pavement construction phases of the proposed project. This is to observe compliance with the design concepts, specifications, and recommendations. Also, this allows design changes to be made in the event that subsurface conditions differ from those anticipated prior to the start of construction.

APPENDIX

SOIL BORING LOCATION PLAN	PLATE NO. 1
SOIL BORING LOGS	FIGURE NOS. 1 THROUGH 3
UNCONFINED COMPRESSIVE STERNGTH TEST	FIGURE NO. 4
ATTERBERG LIMITS RESULTS	FIGURE NO. 5
PHOTOGRAPHIC DOCUMENTATION	FIGURE NOS. 6 THROUGH 8
GENERAL NOTES TERMINOLOGY	FIGURE NO. 9



Legend

Soil Borings Drilled by 2G Drilling on October 28, 2025

Soil Boring Location Plan

Bird Avenue Reconstruction Project - Phase 1B
Grant Street to Cummings Avenue
Birmingham, Michigan

2G CONSULTING GROUP
Smart.Results.Fast.

Project No. 250770	
Drawn by: JMH	
Date: 8/4/2025	Plate No. 1
Scale: NTS	

Project Name: Bird Avenue Reconstruction Project - Phase 1B

Project Location: Grant Street to Cummings Avenue
Birmingham, Michigan

G2 Project No. 250770

Soil Boring No. B-1

CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		PCC Pavement (10 inches) 0.8							
		Fill: Loose Gray Sandy Gravel with trace silt 2.5		S-1	4 6 2	8			
5		Stiff Brown and Gray Silty Clay with trace sand and gravel	5	S-2	2 3 3	6	14.9		3000*
		6.0		S-3	6 11 15	26	16.2		9000*
10		Hard Brown and Gray Silty Clay with trace sand and gravel	10	S-4	11 12 16	28	10.8		9000*
		12.0		S-5	5 5 5	10	14.4	125	6720
15			15						
20		Very Stiff Gray Silty Clay with trace sand and gravel	20	S-6	3 5 6	11	14.2		5500*
25		25.0	25	S-7	3 5 6	11	13.9		5500*
		End of Boring @ 25 ft							
30			30						

Total Depth: 25 ft
Drilling Date: October 28, 2025
Inspector:
Contractor: 2G Drilling
Driller: Q. Torres

Drilling Method:
6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

Water Level Observations:
Dry during and upon completion

Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger Cuttings and capped with cold patch

Figure No. 1

Project Name: Bird Avenue Reconstruction Project - Phase 1B

Project Location: Grant Street to Cummings Avenue
Birmingham, Michigan

G2 Project No. 250770

Soil Boring No. B-2

CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Portland Cement Concrete (7 inches) 0.6							
				S-1	2 4 6	10	13.8		5000*
5			5	S-2	6 8 8	16	13.5		8000*
		Very Stiff to Hard Brown and Gray Silty Clay with trace sand and gravel		S-3	5 10 13	23	12.1		9000*
10			10	S-4	8 11 15	26	14.0		9000*
		11.0							
15			15	S-5	3 3 6	9	13.1		4500*
		Very Stiff Gray Silty Clay with trace sand and gravel							
20			20	S-6	3 3 7	10	14.4	124	5740
25		25.0	25	S-7	4 5 8	13	14.2		6500*
		End of Boring @ 25 ft							
30			30						

Total Depth: 25 ft
Drilling Date: October 28, 2025
Inspector:
Contractor: 2G Drilling
Driller: Q. Torres

Drilling Method:
6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

Water Level Observations:
Dry during and upon completion

Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger Cuttings and capped with cold patch

Figure No. 2

Project Name: Bird Avenue Reconstruction Project - Phase 1B

Project Location: Grant Street to Cummings Avenue
Birmingham, Michigan

G2 Project No. 250770

Soil Boring No. B-3

CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Portland Cement Concrete (6 inches) 0.5							
				S-1	4 5 8	13	12.5		6500*
5			5	S-2	5 7 7	14	14.2		7000*
		Very Stiff to Hard Brown and Gray Silty Clay with trace sand and gravel		S-3	5 9 13	22	13.3		9000*
10			10	S-4	10 12 16	28	17.1		9000*
		13.0							
15			15	S-5	4 6 7	13	13.2		6500*
		Very Stiff Gray Silty Clay with trace sand and gravel, occasional sand seams							
20			20	S-6	5 4 4	8	13.6	124	6880
	▼								
25		25.0	25	S-7	4 6 6	12	15.5		6000*
		End of Boring @ 25 ft							
30			30						

Total Depth: 25 ft
Drilling Date: October 28, 2025
Inspector:
Contractor: 2G Drilling
Driller: Q. Torres

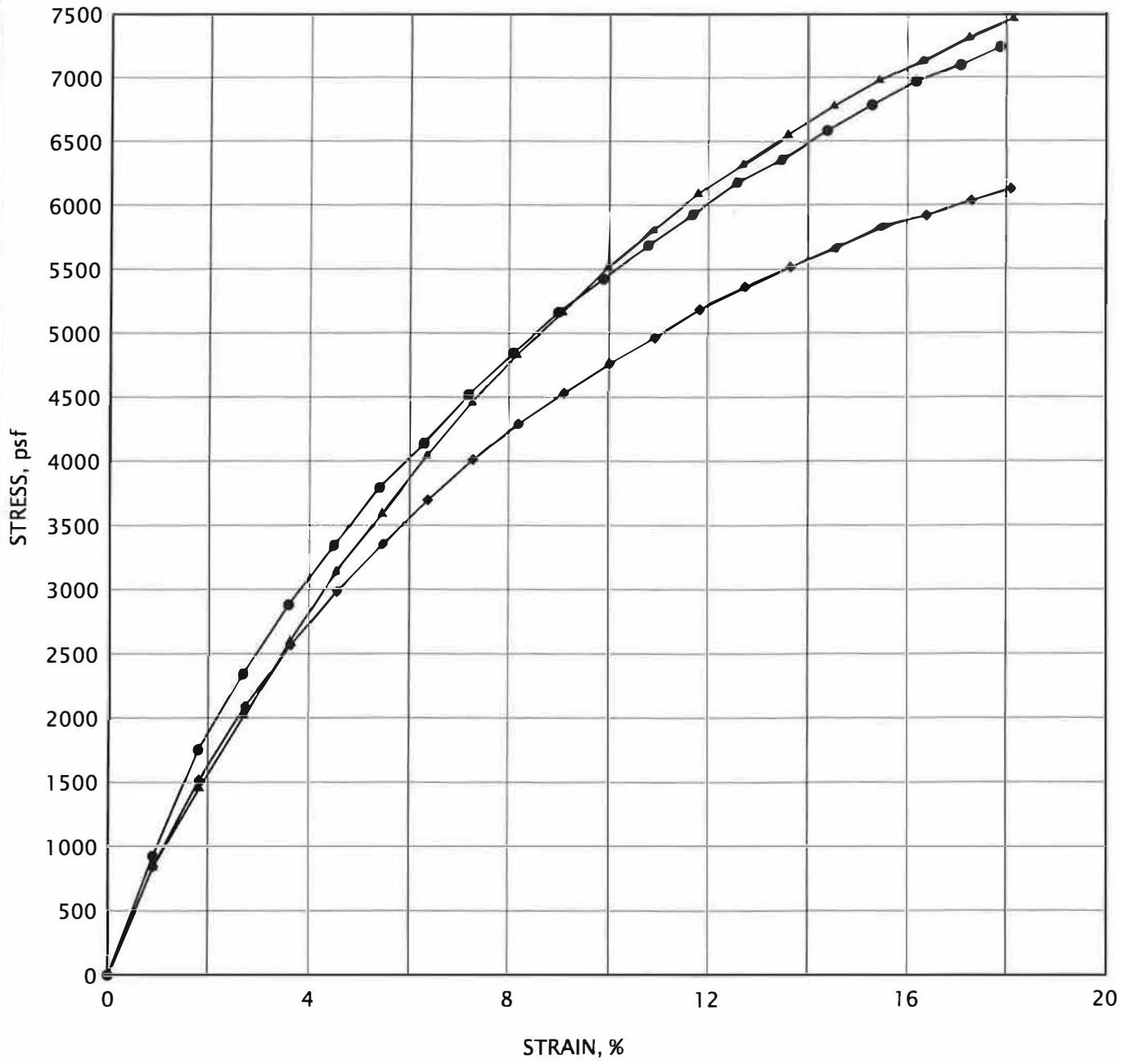
Drilling Method:
6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

Water Level Observations:
23 feet during and upon completion

Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger Cuttings and capped with cold patch

Figure No. 3



	Specimen		Classification	MC%	DD	UC
●	B-1	S-5	Gray Silty Clay	14	125	6720
◆	B-2	S-6	Gray Silty Clay	14	124	5740
▲	B-3	S-6	Gray Silty Clay	14	124	6880

G2 CONSULTING GROUP

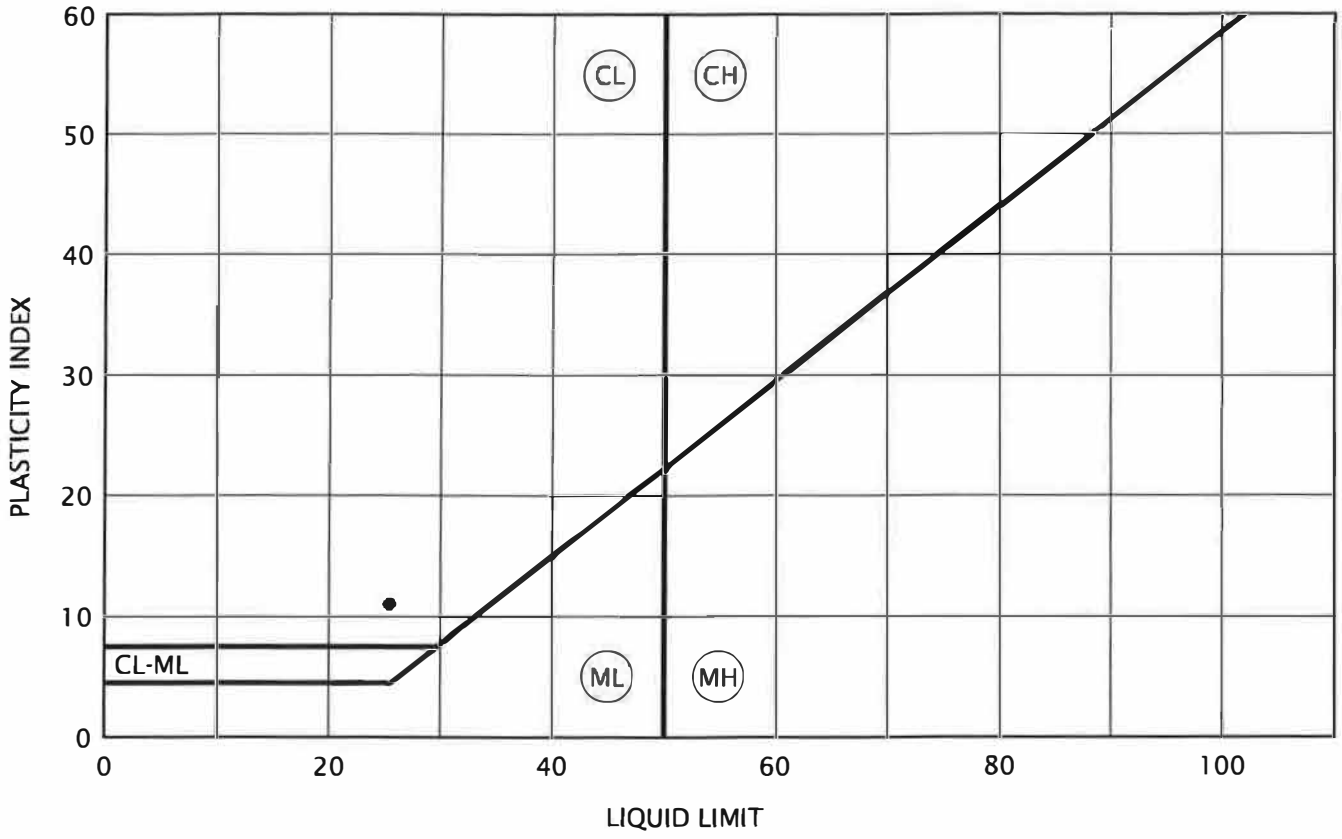
UNCONFINED COMPRESSIVE STRENGTH TEST

Project Name: Bird Avenue Reconstruction Project - Phase 1B

Project Location: Grant Street to Cummings Avenue
Birmingham, Michigan

G2 Project No.: 250770

Figure No. 4



	Specimen Identification		LL	PL	PI	Fines	M%	Classification
●	B-3	S-1	25	14	11		13	Brown and Gray Silty Clay

CONSULTING GROUP

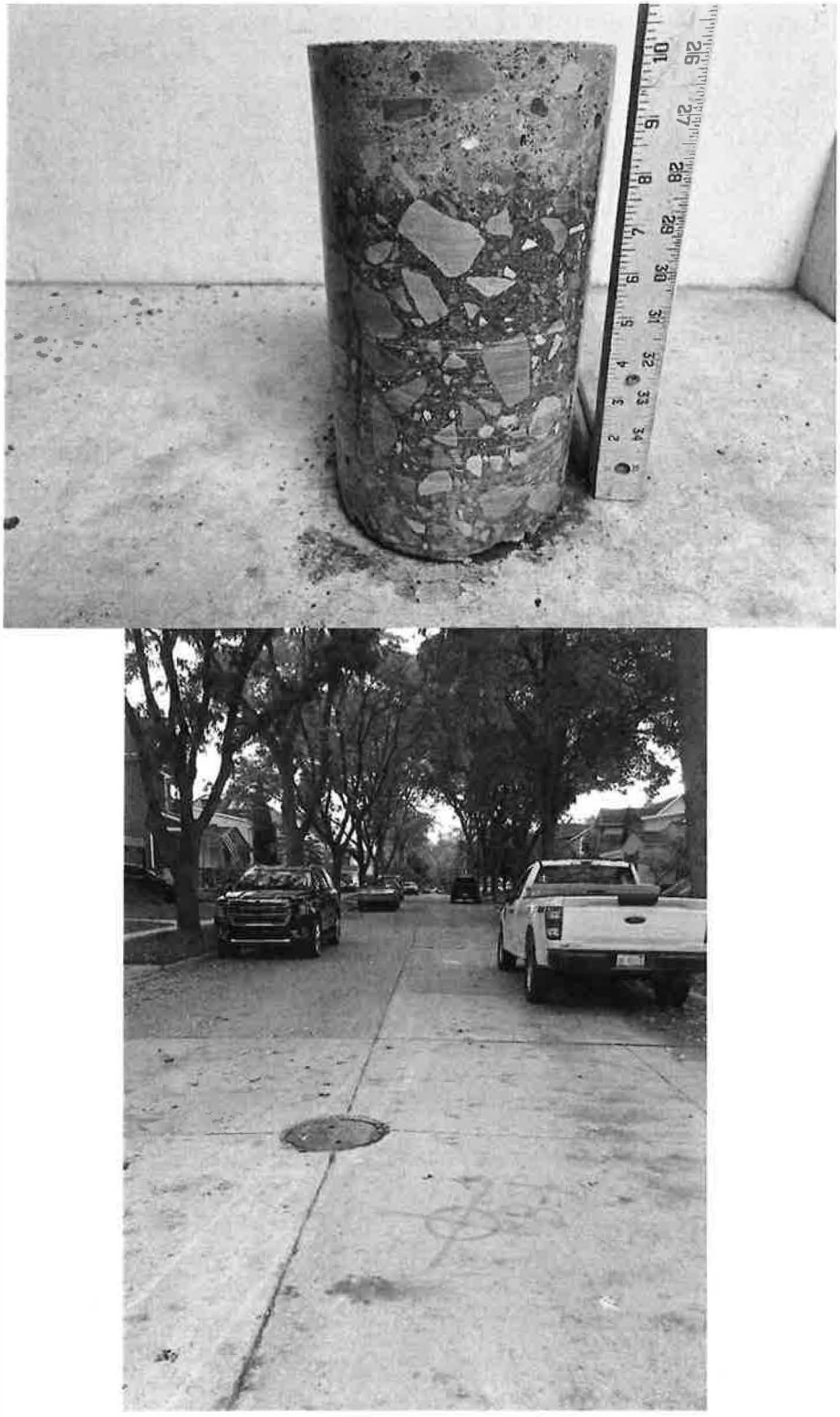
ATTERBERG LIMITS RESULTS

Project Name: Bird Avenue Reconstruction Project - Phase 1B

Project Location: Grant Street to Cummings Avenue
Birmingham, Michigan

G2 Project No.: 250770

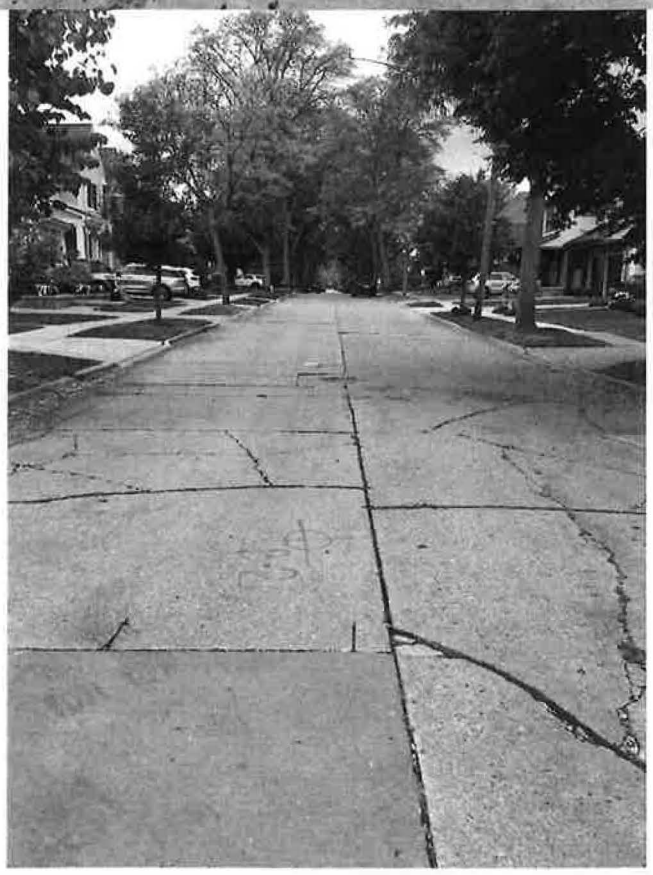
Figure No. 5



Core Photograph B-1: PCC Pavement = 10 inches

Figure No. 6





Core Photograph B-2: PCC Pavement = 7 inches

Figure No. 7





Core Photograph B-3: PCC Pavement = 6 inches

Figure No. 8

GENERAL NOTES TERMINOLOGY

Unless otherwise noted, all terms herein refer to the Standard Definitions presented in ASTM D 653.

PARTICLE SIZE

Boulders		- greater than 12 inches
Cobbles		- 3 inches to 12 inches
Gravel	- Coarse	- 3/4 inches to 3 inches
	- Fine	- No. 4 to 3/4 inches
Sand	- Coarse	- No. 10 to No. 4
	- Medium	- No. 40 to No. 10
	- Fine	- No. 200 to No. 40
Silt		- 0.005mm to 0.074mm
Clay		- Less than 0.005mm

CLASSIFICATION

The major soil constituent is the principal noun, i.e. clay, silt, sand, gravel. The second major soil constituent and other minor constituents are reported as follows:

Second Major Constituent (percent by weight)	Minor Constituent (percent by weight)
Trace - 1 to 12%	Trace - 1 to 12%
Adjective - 12 to 35%	Little - 12 to 23%
And - over 35%	Some - 23 to 33%

COHESIVE SOILS

If clay content is sufficient so that clay dominates soil properties, clay becomes the principal noun with the other major soil constituent as modifier, i.e. sandy clay. Other minor soil constituents may be included in accordance with the classification breakdown for cohesionless soils, i.e. silty clay, trace sand, little gravel.

Consistency	Unconfined Compressive Strength (psf)	Approximate Range of (N)
Very Soft	Below 500	0 - 2
Soft	500 - 1,000	3 - 4
Medium	1,000 - 2,000	5 - 8
Stiff	2,000 - 4,000	9 - 15
Very Stiff	4,000 - 8,000	16 - 30
Hard	8,000 - 16,000	31 - 50
Very Hard	Over 16,000	Over 50

Consistency of cohesive soils is based upon an evaluation of the observed resistance to deformation under load and not upon the Standard Penetration Resistance (N).

COHESIONLESS SOILS

Density Classification	Relative Density %	Approximate Range of (N)
Very Loose	0 - 15	0 - 4
Loose	16 - 35	5 - 10
Medium Compact	36 - 65	11 - 30
Compact	66 - 85	31 - 50
Very Compact	86 - 100	Over 50

Relative Density of cohesionless soils is based upon the evaluation of the Standard Penetration Resistance (N), modified as required for depth effects, sampling effects, etc.

SAMPLE DESIGNATIONS

AS - Auger Sample – Cuttings directly from auger flight
BS - Bottle or Bag Samples
S - Split Spoon Sample - ASTM D 1586
LS - Liner Sample with liner insert 3 inches in length
ST - Shelby Tube sample - 3 inch diameter unless otherwise noted
PS - Piston Sample - 3 inch diameter unless otherwise noted
RC - Rock Core - NX core unless otherwise noted

STANDARD PENETRATION TEST (ASTM D 1586) - A 2.0 inch outside-diameter, 1-3/8 inch inside-diameter split barrel sampler is driven into undisturbed soil by means of a 140-pound weight falling freely through a vertical distance of 30 inches. The sampler is normally driven three successive 6-inch increments. The total number of blows required for the final 12 inches of penetration is the Standard Penetration Resistance (N).

Figure No. 9

MEMORANDUM

Planning Department

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Leah Blizinski, City Planner
Nick Dupuis, Planning Director

SUBJECT: Amendments to Chapter 82 and Chapter 110 of the Birmingham Code of Ordinances to Update the Multimodal Transportation Board

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INTRODUCTION:

In 2011, the City Commission moved to formally support complete streets principles; encouraging the City to consider all users of the right-of-way, develop multi-modal infrastructure, and invite active transportation with safe and ample space for pedestrians, bicyclists and users of transit. In 2013, the City's first Multimodal Transportation Plan was adopted and in 2014 the Multimodal Transportation Board (MMTB) was created. Since 2014, the City of Birmingham has built upon its "Walkable City" brand by continuing its commitment to a safe and convenient environment for pedestrians while also installing several miles of bike lanes, introducing new bicycle infrastructure (bike racks, repair stands), and providing more space and shelter for transit users.

In 2025, with the majority of the action items in the 2013 Multimodal Transportation Plan complete, there was some confusion about the role of the MMTB. For this reason, on August 25, 2025 (Video - Minutes), the City Commission moved to place a moratorium on all future MMTB meetings to allow the City Commission to review and scrutinize Chapter 110, Article II of the Birmingham City Code in order to examine and clarify the scope of authority and purpose and duties of the MMTB. The moratorium was intended to provide time for the City Commission to review the ordinance and provide direction to the MMTB on their scope of authority and purpose and duties.

At this time, the Planning Department has thoroughly reviewed the MMTB's enabling ordinance, considered City Commission feedback and has revised the language to suit current and future needs. The revisions were based on several factors including removing remnants of the former Traffic and Safety Board, and taking into account current master plans, and the environment regarding capital improvements, infrastructure, and shifts in multimodal trends.

BACKGROUND:

On September 8, 2025 (Video – Minutes), the City Commission held a discussion on the MMTB Ordinance. After commission discussion and public comment, the commission moved to allow the MMTB to meet for the purpose of discussing what they want to say at a joint meeting, no other business, to ask the City administration how they would revise this ordinance, and to set a joint City Commission and MMTB meeting that is at least two hours long.

On October 23, 2025 (Video) a Special Meeting of the MMTB was held for the purpose of allowing MMTB board members to discuss what they would say at a future joint meeting with the City Commission. This meeting fulfilled part of the September 8, 2025 City Commission directive to staff.

On December 11, 2025 (Video – Minutes), a joint meeting of the City Commission and Multimodal Transportation board was held. The meeting lasted over two hours and fulfilled the second part of the September 8, 2025 City Commission directive to staff.

On September 8, 2025 City Commission directed staff to advise the Commission on how to revise the ordinance. Staff recommends revising the Multimodal Transportation Board ordinance as provided in the attached ordinance amendments to allow the board to align its focus with activities that provide and enhance opportunities for active transportation throughout the City. Activities such as envisioning a complete bicycle network, filling pedestrian gaps and enhancing existing pathways and amenities are priority duties of the multimodal transportation board and should be enumerated as such. With the knowledge that the default priority in transportation planning is vehicular travel, it is necessary to codify the boards responsibility to advocate for active transportation.

In order to update the responsibilities of the Multimodal Transportation Board to reflect the city's current needs and priorities, ordinance amendments have been proposed to Chapter 82 and Chapter 110 of the Birmingham Code of Ordinances. The language updates the multimodal transportation board ordinance to mirror that of similar boards/commissions in the Code of Ordinances. The language outlines composition, terms/membership, organization and duties of a standing multimodal transportation board.

LEGAL REVIEW:
The City Attorney has reviewed the proposed ordinance and has no objection as to form and content.

FISCAL IMPACT:
There is no fiscal impact for this agenda item.

SUSTAINABILITY:
Promoting active transportation – walking and cycling as well as other forms of people-powered transportation – significantly advances sustainability by reducing greenhouse gas emissions, cutting air/noise pollution, and lowering energy consumption. It improves public health and enhances urban mobility while promoting social equity through accessible infrastructure.

DESIGN CONSIDERATIONS:
There are no design considerations for this agenda item.

PUBLIC COMMUNICATIONS:
There are no required public communications for this agenda item.

SUMMARY:
The Planning Department requests that the City Commission consider amendments to Chapter 110 – Transportation Systems, to remove Article II and to consider amendments to Chapter 82 – Planning, to add Article VII, to add the Multimodal Transportation Board, its composition, terms/membership, organization, scope of authority and purpose and duties to create a clear delineation between the priorities of the multimodal transportation board and traffic enforcement and vehicle codes.

ATTACHMENTS:
1. Proposed Amendments to CHAPTER 110 - TRANSPORTATION SYSTEMS
2. Proposed Amendments to CHAPTER 82 - PLANNING

SUGGESTED COMMISSION ACTION:
Make a motion adopting an ordinance to amend Chapter 110 – Transportation Systems to remove Article II in its entirety.

AND

Make a motion adopting an ordinance to amend Chapter 82 – Planning, to add Article VII, to amend the multimodal transportation board composition, terms, compensation, organization and meetings, scope of authority and purpose and duties.

AN ORDINANCE TO AMEND PART II OF THE CITY CODE, CHAPTER 110. – TRANSPORTATION SYSTEMS, TO REMOVE ARTICLE II – MULTIMODAL TRANSPORTATION BOARD.

Secs. 110-26—110-55. – Reserved.

~~THE CITY OF BIRMINGHAM ORDAINS:~~

~~The City Code, Part II, Chapter 110. – Transportation Systems, Article II. – Multimodal Transportation Board:~~

~~ARTICLE VII. – MULTIMODAL TRANSPORTATION BOARD~~

- ~~**Sec. 110-26. - Composition.**~~

~~(a) The multi-modal transportation board shall consist of nonvoting ex officio members and seven members appointed by the city commission. The nonvoting ex officio members shall be appointed by the city manager. They may include the city engineer, city planner, police chief, or their designated representative, or other representatives as the city manager deems appropriate. Insofar as possible, the city commission shall appoint members as follows:~~

~~(1) One pedestrian advocate member;~~
~~(2) One member with a mobility or vision impairment;~~
~~(3) One member with traffic-focused education and/or experience;~~
~~(4) One bicycle advocate member;~~
~~(5) One member with urban planning, architecture or design education and/or experience; and~~
~~(6) Two members at large living in different geographical areas of the city.~~

~~At least five board members shall be electors or property owners in the city. The remaining board members may or may not be electors or property owners in the city.~~

~~(b)The city commission may appoint two alternate members to serve as needed on the multi-modal transportation board during their term of appointment. An alternate member may be called on a rotating basis to sit as a regular member of the multi-modal transportation board in the absence of a regular member. An alternate member may also be called to service in the place of a regular member for the purpose of reaching a decision on a case in which the regular member has abstained for reasons of conflict of interest. An alternate member having been appointed shall serve in the case until a final decision has been made. An alternate member shall have the same voting rights as a regular member of the multi-modal transportation board. (Ord. No. 2138, 2-10-14; Ord. No. 2200, 9-12-16; Ord. No. 2203, 10-10-16)~~

- ~~**Sec. 110-27. - Terms of members.**~~

~~Initial members of the multi-modal transportation board shall serve for the following terms: two members shall be appointed for one-year terms, two members shall be appointed for two-year terms, and three members shall be appointed for three-year terms. Thereafter, all appointments, except to fill vacancies, shall be for a term of three years. All appointments for~~

the purpose of filling vacancies occurring otherwise than by expiration of term of office shall be for the unexpired term.
(Ord. No. 2138, 2-10-14)

- **Sec. 110-28. - Compensation.**

All members of the multi-modal transportation board shall serve without compensation.
(Ord. No. 2138, 2-10-14)

- **Sec. 110-29. - Organization.**

The multi-modal transportation board shall, from its appointed members, elect a chair who shall be the presiding officer of the board, and a vice-chair who shall serve in the absence of the chair. A secretary, who shall keep and maintain the proceedings of the board, shall be appointed by the board. The secretary need not be a member of the board. The terms of office for such officers shall be one year and until their successors have been elected. The ex officio members of the board may not act as the chair or vice-chair but may serve as secretary.
(Ord. No. 2138, 2-10-14)

- **Sec. 110-30. - Meetings and quorum.**

The multi-modal transportation board shall hold meetings at such time and place as may be established by the board. Special meetings may be called by the secretary at the written request of the chair or any three members of the board on at least two days' notice. A quorum for the transaction of business at the regular and special meetings shall be four appointed members and at least one ex officio member or their designated representative.
(Ord. No. 2138, 2-10-14)

- **Sec. 110-31. - Scope of authority.**

The multi-modal transportation board is a non-administrative board serving solely in an advisory capacity. In that capacity the board may make recommendations to the city commission but may not assume any legislative or administrative authority of the city commission or any department or board established by the city commission except as specifically provided in this chapter. The multi-modal transportation board is not authorized to expend city funds.
(Ord. No. 2138, 2-10-14)

- **Sec. 110-32. - Purpose and duties.**

The purpose of the multi-modal transportation board shall be to assist in maintaining the safe and efficient movement of motorized and non-motorized vehicles and pedestrians on the streets and walkways of the city and to advise the city commission on the implementation of the multi-modal transportation plan, including reviewing project phasing and budgeting. In furtherance of its purpose, the board shall endeavor to provide the following:
(1) Advice on the implementation of the city's multi-modal transportation plan to the city commission.
(2)
Review of the multi-modal transportation plan to assure that it remains current with citywide multi-modal transportation movements and regional transportation plans and initiatives.
(3)
An objective and technical multi-modal evaluation of plans for all road reconstruction and road resurfacing projects, sidewalk and pedestrian crossing projects, intersection or bridge projects, bicycle and transit facility improvement projects.
(4)

~~An objective and technical evaluation of transportation issues brought to the attention of or identified by the board.~~

~~(5)~~

~~An objective and technical evaluation of the transportation plan submitted for proposed development or redevelopment, as referred to the board by the planning board.~~

~~(6)~~

~~An objective and technical multi-modal evaluation of site plans submitted for proposed development or redevelopment, as referred to the board by the planning board.~~

~~(7)~~

~~An objective and technical multi-modal evaluation of any ordinance amendments related to transportation issues, as referred to the board by the planning board or city commission.~~

~~(8)~~

~~The application of accepted transportation engineering practices, multi-modal transportation planning and complete streets practices and national standards, including those published by the American Association of State Highway and Transportation Officials, in solving and preventing transportation problems.~~

~~(9)~~

~~Objective and technical recommendations regarding transportation engineering safety issues to the city commission.~~

~~(10)~~

~~A forum for the voluntary coordination of groups interested in transportation issues.~~

~~(11)~~

~~A forum to review and decide appeals of administrative decisions made by the police department on transportation-related regulatory requests under article VII of this chapter.~~

~~(Ord. No. 2138, 2-10-14)~~

- ~~**Secs. 110-33—110-55. - Reserved.**~~

~~Secs. 110-1—110-25. - Reserved.~~

Ordained this _____ day of _____, 2026. Effective upon publication.

_____
Clinton Baller, Mayor

_____
Alexandria D. Bingham, City Clerk

I, Alexandria D. Bingham, City Clerk of the City of Birmingham, do hereby certify that the foregoing ordinance was passed by the Commission of the City of Birmingham, Michigan at a regular meeting held _____, 2026 and that a summary was published _____, 2026.

_____
Alexandria D. Bingham, City Clerk

AN ORDINANCE TO AMEND PART II OF THE CITY CODE, CHAPTER 82. – PLANNING, TO ADD ARTICLE VII. – MULTIMODAL TRANSPORTATION BOARD.

THE CITY OF BIRMINGHAM ORDAINS:

The City Code, Part II, Chapter 82. – Planning, Article VII. – Multimodal Transportation Board:

ARTICLE VII. – MULTIMODAL TRANSPORTATION BOARD

Sec. 82-112. – Scope of authority.

a) The Multimodal Transportation Board is a non-administrative board serving solely in an advisory capacity to the City Commission, City Manager and City Staff. In that capacity, the board may make recommendations to the City Commission but may not assume any legislative or administrative authority of the City Commission or any department or board established by the City Commission except as specifically provided in this chapter. The Multimodal Transportation Board is not authorized to expend City funds.

Sec. 82-113. – Purpose and duties.

The purpose of the Multimodal Transportation Board shall be to assist in prioritizing active transportation, primarily to promote the safe and efficient movement of people and to advise the City Commission on the implementation of the multimodal transportation plan. In furtherance of its purpose, the board shall endeavor to provide the following:

a) Assist with the implementation of all current, relevant city plans (including by not limited to; Birmingham Green Sustainability and Climate Plan, Birmingham 2040 Plan, Parks & Recreation Master Plan, Historic Preservation Master Plan).
b) Promote the development and maintenance of the city's shared use, bicycle and pedestrian facilities.
c) Promote, through education, active transportation as an alternative means of transportation; and
d) Ensure sensitivity to active and accessible transportation issues which impact bicyclists and pedestrians.
e) Evaluation of other plans, policies, capital improvement projects, site plans, topics and ordinance amendments when assigned by the City Commission or City Manager.

Sec. 82-114. – Composition.

a) The Multimodal Transportation Board shall consist of seven regular members. At least five board members shall reside within the city limits. The remaining board members may reside in surrounding jurisdictions. Members of the board shall have a clearly demonstrated interest or knowledge of active transportation.
b) The City Commission may appoint two alternate members to serve as needed on the Multi-modal Transportation Board during their term of appointment. An alternate member may be called on a rotating basis to sit as a regular member of the Multimodal Transportation Board in the absence of a regular member. An alternate member shall have the same

voting rights as a regular member of the Multimodal Transportation Board when seated in the place of a regular member.

c) Nonvoting ex officio members shall be appointed by the City Manager. They may include the City Engineer, City Planner, Police Chief, or their designated representative, or other representatives as the City Manager deems appropriate.

Sec. 82-115. – Terms.

a) Members of the Multimodal Transportation Board shall be appointed by the City Commission for terms of office of three years; except that two members of the first board shall be appointed to serve for a term of one year, two for terms of two years, and three for terms of three years. All members shall hold office until their successors are appointed. A vacancy occurring in the membership of the Multimodal Transportation Board for any cause shall be filled by a person appointed by the City Commission for the duration of the unexpired term.

Sec. 82-116. – Compensation

All members of the Multimodal Transportation Board shall serve without compensation.

Sec. 82-117. – Organization and meetings.

a) The board shall, from its appointed members, elect a chairperson and vice-chairperson. Each officer will serve a one-year term and may be re-elected. The chairperson shall preside over the board and shall have a right to vote. The vice-chairperson shall, in the case of absence or disability of the chairperson, perform the duties of the chairperson. An ex officio member shall act as administrator of the Committee and shall keep a record of all its proceedings.
b) At least four voting members of the Multimodal Transportation Board shall constitute a quorum for the transaction of its business.
c) All meetings of the Multimodal Transportation Board shall be open to the public, and any person or their duly constituted representative shall be entitled to appear and be heard on any matter applicable to the business at hand before the Multimodal Transportation Board makes its decision.
d) The concurring affirmative vote of four members of the Multimodal Transportation Board shall be required for approval of any resolution, motion or other action by the Multimodal Transportation Board.
e) The Multimodal Transportation Board shall hold meetings at such time and place as may be established by the Planning Director or an authorized representative.

Ordained this _____ day of _____, 2026. Effective upon publication.

_____
Clinton Baller, Mayor

_____
Alexandria D. Bingham, City Clerk

I, Alexandria D. Bingham, City Clerk of the City of Birmingham, do hereby certify that the foregoing ordinance was passed by the Commission of the City of Birmingham, Michigan at a regular meeting held _____, 2026 and that a summary was published _____, 2026.

_____
Alexandria D. Bingham, City Clerk

MEMORANDUM

City Attorney

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Mary Kucharek, City Attorney
Tracy Gaudenzi, City Attorney

SUBJECT: Request for Closed Session Under MCL § 15.268, Sec.8(1)(d) of the Open Meetings Act

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INTRODUCTION:
The City Attorney is requesting to meet with the City Commission in closed session to discuss pending litigation pursuant to MCL § 15.268, Sec.8(1)(d) of the Open Meetings Act.

BACKGROUND:
Pursuant to MCL § 15.268 Sec. 8(1)(d) of the Open Meetings Act the City Attorney wishes to discuss the possible purchase or lease of real property up to the time an option to purchase or lease that real property is obtained.

LEGAL REVIEW:
I am requesting a closed session on Monday, March 23, 2026 pursuant to MCL § 15.268, Sec.8(1)(d) of the Open Meetings Act to consider the purchase or lease of real property up to the time an option to purchase or lease that real property is obtained.

FISCAL IMPACT:
To be discussed in closed session.

SUSTAINABILITY:
N/A

DESIGN CONSIDERATIONS:
N/A

PUBLIC COMMUNICATIONS:
N/A

SUMMARY:

The City Commission is asked to conduct a closed session on Monday, March 23, 2026 pursuant to MCL § 15.268, Sec.8(1)(d) of the Open Meetings Act to consider the purchase or lease of real property up to the time an option to purchase or lease that real property is obtained.

ATTACHMENTS:

1. Open Meetings Act, MCL § 15.268 Closed sessions; permissible purposes, Sec. 8(1)(d).

SUGGESTED COMMISSION ACTION:

Make a motion to meet in closed session pursuant to MCL § 15.268, Sec.8(1)(d) of the Open Meetings Act to consider the purchase or lease of real property up to the time an option to purchase or lease that real property is obtained.

OPEN MEETINGS ACT (EXCERPT)
Act 267 of 1976

15.268 Closed sessions; permissible purposes; applicability to independent citizens redistricting commission.

Sec. 8. (1) Except as otherwise provided in subsection (2), a public body may meet in a closed session only for the following purposes:

(a) To consider the dismissal, suspension, or disciplining of, or to hear complaints or charges brought against, or to consider a periodic personnel evaluation of, a public officer, employee, staff member, or individual agent, if the named individual requests a closed hearing. An individual requesting a closed hearing may rescind the request at any time, in which case the matter at issue must be considered after the rescission only in open sessions.

(b) To consider the dismissal, suspension, or disciplining of a student if the public body is part of the school district, intermediate school district, or institution of higher education that the student is attending, and if the student or the student's parent or guardian requests a closed hearing.

(c) For strategy and negotiation sessions connected with the negotiation of a collective bargaining agreement if either negotiating party requests a closed hearing.

(d) To consider the purchase or lease of real property up to the time an option to purchase or lease that real property is obtained.

(e) To consult with its attorney regarding trial or settlement strategy in connection with specific pending litigation, but only if an open meeting would have a detrimental financial effect on the litigating or settlement position of the public body.

(f) To review and consider the contents of an application for employment or appointment to a public office if the candidate requests that the application remain confidential. However, except as otherwise provided in this subdivision, all interviews by a public body for employment or appointment to a public office must be held in an open meeting pursuant to this act. This subdivision does not apply to a public office described in subdivision (j).

(g) Partisan caucuses of members of the state legislature.

(h) To consider material exempt from discussion or disclosure by state or federal statute.

(i) For a compliance conference conducted under section 16231 of the public health code, 1978 PA 368, MCL 333.16231, before a complaint is issued.

(j) In the process of searching for and selecting a president of an institution of higher education established under section 4, 5, or 6 of article VIII of the state constitution of 1963, to review the specific contents of an application, to conduct an interview with a candidate, or to discuss the specific qualifications of a candidate if the particular process of searching for and selecting a president of an institution of higher education meets all of the following requirements:

(*i*) The search committee in the process, appointed by the governing board, consists of at least 1 student of the institution, 1 faculty member of the institution, 1 administrator of the institution, 1 alumnus of the institution, and 1 representative of the general public. The search committee also may include 1 or more members of the governing board of the institution, but the number does not constitute a quorum of the governing board. However, the search committee must not be constituted in such a way that any 1 of the groups described in this subparagraph constitutes a majority of the search committee.

(*ii*) After the search committee recommends the 5 final candidates, the governing board does not take a vote on a final selection for the president until at least 30 days after the 5 final candidates have been publicly identified by the search committee.

(*iii*) The deliberations and vote of the governing board of the institution on selecting the president take place in an open session of the governing board.

(k) For a school board to consider security planning to address existing threats or prevent potential threats to the safety of the students and staff. As used in this subdivision, "school board" means any of the following:

(*i*) That term as defined in section 3 of the revised school code, 1976 PA 451, MCL 380.3.

(*ii*) An intermediate school board as that term is defined in section 4 of the revised school code, 1976 PA 451, MCL 380.4.

(*iii*) A board of directors of a public school academy as described in section 502 of the revised school code, 1976 PA 451, MCL 380.502.

(*iv*) The local governing board of a public community or junior college as described in section 7 of article VIII of the state constitution of 1963.

(*l*) For a county veteran services committee to interview a veteran or a veteran's spouse or dependent regarding that individual's application for benefits or financial assistance and discuss that individual's

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application for benefits or financial assistance, if the applicant requests a closed hearing. This subdivision does not apply to a county veteran services committee voting on whether to grant or deny an individual's application for benefits or financial assistance. As used in this subdivision, "county veteran services committee" means a committee created by a county board of commissioners under section 1 of 1953 PA 192, MCL 35.621, or a soldiers' relief commission created under section 2 of 1899 PA 214, MCL 35.22.

(2) This act does not permit the independent citizens redistricting commission to meet in closed session for any purpose. As used in this subsection, "independent citizens redistricting commission" means the independent citizens redistricting commission for state legislative and congressional districts created in section 6 of article IV of the state constitution of 1963.

History: 1976, Act 267, Eff. Mar. 31, 1977;—Am. 1984, Act 202, Imd. Eff. July 3, 1984;—Am. 1993, Act 81, Eff. Apr. 1, 1994;—Am. 1996, Act 464, Imd. Eff. Dec. 26, 1996;—Am. 2018, Act 467, Eff. Mar. 27, 2019;—Am. 2021, Act 31, Imd. Eff. June 24, 2021;—Am. 2021, Act 166, Imd. Eff. Dec. 27, 2021.

Compiler's note: Enacting section 1 of Act 166 of 2021 provides:

"Enacting section 1. This amendatory act is intended to clarify that the independent citizens redistricting commission for state legislative and congressional districts, since its establishment under section 6 of article IV of the state constitution of 1963, has been required to conduct all of its business at open meetings, without exception and in a manner that invites wide public participation throughout this state, as provided in section 6(10) of article IV of the state constitution of 1963, and that the commission continues to be subject to this unqualified open meetings requirement."

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MEMORANDUM

Building Department

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Jeff Zielke, Building Official

SUBJECT: Builders' Bonds and Road Repair

City Procedure Regarding Builders' Bonds and Road Repair:

At the Monday, February 23, 2026 meeting, the City Commission voted to discuss contractor bonds for construction related road repairs at a future meeting. These bonds are listed in the Community Development Fee Schedule as*: (h) Bonding requirements for maintenance and replacements costs of public right-of-way facilities: A bond shall be posted prior to the issuance of a building permit for new construction in the amount of $5,000 to assure that the public right-of-way is properly maintained at all times during construction. This includes the replacement of city* sidewalk*, curb and gutter, and the re-establishment of green space in the public right-of-way.*

On March 1, 2025, the Building Department began requiring bond payments of $5,000 for all new construction projects. The bond is designed to pay for the maintenance and replacement costs for damage to the public right-of-way including road surfaces and curbs caused by construction activities.

Prior to the start of a construction project, the existing conditions of the right-of-way are documented with photos and a checklist. Following the construction project, the right-of-way's condition is reviewed to assess whether damage has occurred and what repairs will be necessary to restore the area to its previous condition. If the cost of repairs exceeds the value of the bond, the Building Department will send an invoice for the repairs to the project's permit holder.

In 2025, the Building Department collected 52 bonds and in 2026, 4 bonds have been collected. All of these projects are currently still under construction, so no bond money has been returned at this time, as final assessments have not been yet completed. Bonds will be returned to permit holders who have completed their projects and are issued a Certificate of Occupancy without damaging the right-of-way. If damage occurs, the Engineering Department will assist the Building Department in determining the repair cost. All repairs must be completed prior to a Certificate of Occupancy being issued.

ATTACHMENTS:
None

MEMORANDUM

Police Department

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Scott Grewe, Chief of Police

SUBJECT: Birmingham Police Department's Position on Immigration Enforcement

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INTRODUCTION:

Immigration and Customs Enforcement (ICE) has been conducting enforcement activities across our nation, a topic of great debate. The Police Department has received questions regarding ICE operations within the City and how the Police Department would respond to them. Our priorities remain focused on local public safety and community trust.

BACKGROUND:

The Police Department issued a response regarding its position on any immigration enforcement within the City of Birmingham. The letter stated in part:

> The Birmingham Police Department complies with all applicable local, state, and federal laws while providing compassionate and equitable police services to all those who live, work, and travel in our community. We ensure that our department remains impartial to political swings that occur at the local, state, and federal levels and instead follows the current laws in place.
>
> It is common for outside law enforcement agencies to operate within the City of Birmingham when their investigations necessitate it. However, it's up to the Birmingham Police Department to decide if we will assist those investigations if requested. Regarding a potential ICE operation, at the direction of the Chief of Police, the Birmingham Police Department will not assist ICE in an operation to locate and detain subjects within the City. Additionally, our department can not interfere with or impede ICE from conducting an operation within the City, as it would be a violation of federal law to do so.
>
> In the event ICE were to conduct an operation in the City of Birmingham, our Police Department will respond to calls for assistance to provide safety to all individuals (detainees and law enforcement) as it is our legal duty to do so.
>
> To be clear, we will neither assist nor impede a legal operation, but will take the

appropriate legal action in the event of illegal activity.

The Birmingham Police Department has, in the past, and will continue to contact ICE only when we have contact with an individual who has a Judicial Warrant in the Law Enforcement Information Network (LEIN). Additionally, when our department has contact with an individual due to a traffic stop, an arrest, or any call for service, and we are unable to identify the individual, we may call ICE for assistance with identification. Failure to do so could result in the release of a wanted person.

The Birmingham Police Department will not investigate immigration violations or work with federal agencies investigating them. Our department will not detain a subject based on an immigration detainer, an administrative warrant, or a civil immigration request. The Birmingham Police Department will take the appropriate action for those individuals who have a Judicial Warrant.

LEGAL REVIEW:
The City of Birmingham does not have a 287(g) agreement or any other memorandum of understanding with federal immigration agencies. A 287(g) agreement gives local law enforcement training and authority to enforce immigration law.

Three bills have been proposed in the Michigan Senate (HB 508, 509, and 510) regarding immigration enforcement. The Michigan Association of Chiefs of Police (MACP) legal review team was contacted and advised that MACP opposes all three House Bills for the following reasons.

HB 508 – The bill would create a new act that would ban immigration enforcement actions in sensitive locations.

- MACP opposes this bill because it would conflict with the Federal Supremacy Clause, which holds that federal law prevails over state law.
- A local officer attempting to enforce this, if it became law, would then be in violation of Federal Law by impeding a federal investigation.

HB 509 – This bill would create a new act that would prohibit the disclosure of a person's personal information that would be used to enforce federal immigration law.

- MACP opposes this bill because it could impose costs on local agencies and create roadblocks to the routine sharing of investigative information between law enforcement agencies.
- This bill also states that any request for records would require the "person" submitting the request to comply with all the standards set forth in the bill. This would appear to be in direct conflict with the Freedom of Information Act.

HB 510 – This bill would create a new act that would prohibit law enforcement officers,

outside of specified circumstances, from wearing masks when engaged in citizen contacts.

- MACP is also opposed to this bill as it, too, would clash with the Federal Supremacy Clause.
- A local officer attempting to enforce this if it became law would then be in violation of Federal Law by impeding a federal investigation.
- The State of California attempted to ban masks by federal agents, and it was blocked by the Department of Justice.

There has also been discussion regarding cities attempting to restrict federal law enforcement from public property. Those areas open to the general public are also open to law enforcement. Local municipalities cannot legally block or obstruct legitimate federal law enforcement operations on public property due to the Supremacy Clause of the U.S. Constitution, which places federal law above local authority. The Supremacy Clause, found in Article VI, Clause 2 of the U.S. Constitution, establishes that the Constitution, federal laws made pursuant to it, and treaties constitute the "supreme Law of the Land". It mandates that state judges and officials are bound by federal law, overriding any conflicting state laws or constitutions.

The City attorney has reviewed this legal review and has no objection to the form and content, and further supports the suggested commission action.

FISCAL IMPACT:
N/A

SUSTAINABILITY:
N/A

DESIGN CONSIDERATIONS:
N/A

PUBLIC COMMUNICATIONS:
On November 3, 2026, the Police Department shared a letter with a resident regarding the department's position on immigration enforcement. That same letter was included in the March 9, 2026, regularly scheduled meeting of the City Commission.

SUMMARY:
The Birmingham Police Department complies with all local, state, and federal laws. The Birmingham Police Department will not investigate immigration violations or work with federal agencies investigating them. Our department will not detain a subject based on an immigration detainer, an administrative warrant, or a civil immigration request. The Birmingham Police Department will take appropriate action against individuals who have a

Judicial Warrant.

In the event ICE conducts an operation in the City of Birmingham, our Police Department will respond to calls for assistance to ensure the safety of all individuals (detainees and law enforcement), as it is our legal duty to do so.

ATTACHMENTS:
1. BIPD Statement - ICE
2. Senate Proposed Bills

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to support the Birmingham Police Department’s position to comply with all applicable local, state, and federal laws while providing compassionate and equitable police services to all those who live, work, and travel in our community. Furthermore, to support the Police Department's refusal to work with federal law enforcement for the sole purpose of immigration enforcement and the department's position to not participate in a 287(g) agreement.

BIRMINGHAM POLICE DEPARTMENT

Scott A. Grewe, Chief of Police

Birmingham Police Departments position regarding Immigration and Customs Enforcement (ICE) activity in the City of Birmingham

The Birmingham Police Department is not aware of any activity from ICE within our City, either in the recent past or planned for the future. The Mission Statement of the Birmingham Police Department, which serves as our guiding principle, states;

> **The Birmingham Police Department is dedicated to serving with Professionalism, Integrity, and Courage to protect life and property through compassionate and equitable police services.**

The Birmingham Police Department, complies with all applicable local, state, and federal laws while providing compassionate and equitable police services to all those who live, work, and travel in our community. We ensure that our department remains impartial to political swings that occur at the local, state, and federal levels and instead follow the current laws in place.

It is common for outside law enforcement agencies to operate within the City of Birmingham when their investigations necessitate it. However, it's up to the Birmingham Police Department to decide if we will assist those investigations if requested. Regarding a potential ICE operation within the City, at the direction of the Chief of Police, the Birmingham Police Department will not assist ICE in an operation to locate and detain subjects within the City. Additionally, our department can not interfere with or impede ICE from conducting an operation within the City, as it would be a violation of federal law to do so.

In the event ICE were to conduct an operation in the City of Birmingham, our Police Department will respond to calls for assistance to provide safety to all individuals (detainees and law enforcement) as it is our legal duty to do so.

To be clear, we will neither assist nor impede a legal operation, but will take the appropriate legal action in the event of illegal activity.

151 Martin Street P.O. Box 3001 Birmingham, MI 48012
Phone: 248.530.1870 Fax: 248.530.1270 www.bhamgov.org

SENATE BILL NO. 508

August 26, 2025, Introduced by Senators CAVANAGH, MOSS and CHANG and referred to Committee on Civil Rights, Judiciary, and Public Safety.

A bill to restrict certain immigration enforcement actions in sensitive locations; and to provide for the powers and duties of certain officers and entities.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

Sec. 1. As used in this act:

(a) "Educational institution" means that term as defined in section 2 of the Michigan election law, 1954 PA 116, MCL 168.2.

(b) "Immigration enforcement action" means any of the following actions taken by a law enforcement officer for the purpose of immigration enforcement or to obtain information in

regards to an individual's immigration or citizenship status:

(*i*) Arresting or interviewing an individual.

(*ii*) Conducting a search or surveillance.

(c) "Place of worship" means a church, synagogue, mosque, or other institution of worship, including, but not limited to, a building rented for a religious service.

(d) "Sensitive location" means all of the following:

(*i*) An educational institution.

(*ii*) A place of worship.

(*iii*) A hospital.

(*iv*) The site of a funeral, wedding, or other public religious ceremony.

(*v*) A courthouse.

(*vi*) The site of an organization that is assisting children, pregnant women, victims of crime or abuse, or an individual with significant mental or physical disabilities.

Sec. 2. (1) Except as otherwise provided in this section, a law enforcement officer may not conduct an immigration enforcement action in a sensitive location.

(2) A law enforcement officer may conduct an immigration enforcement action in a sensitive location if a court order directs the law enforcement officer conducting the immigration enforcement action to enter the sensitive location.

(3) A law enforcement officer may conduct an immigration enforcement action in a sensitive location if the immigration enforcement action is necessary to address a threat that poses imminent danger to public safety.

SENATE BILL NO. 509

August 26, 2025, Introduced by Senators CHANG and CAVANAGH and referred to Committee on Civil Rights, Judiciary, and Public Safety.

An act to prohibit government entities from disclosing information that will be used for the enforcement of federal immigration law in certain circumstances.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

Sec. 1. As used in this act:

(a) "Government entity" means any state, county, or municipal department, bureau, division, section, board, commission, trustee, authority, or officer, created by the constitution, statute, or agency action.

(b) "Person" means an individual, partnership, corporation,

organization, government entity, or association of any kind.

(c) "Personal information" means information that identifies an individual, including the individual's photograph or image, name, address, driver license number, Social Security number, telephone number, digitized signature, or medical and disability information. Personal information includes any information pertaining to an individual's criminal history, and any list, dataset, or aggregated data that contains information described in this subdivision.

Sec. 3. (1) Before providing any personal information to a person, a government entity shall require that the person provide the government entity with all of the following, as applicable:

(a) The person's name or the name of the entity on whose behalf the person is requesting the personal information, as applicable.

(b) Contact information for the person.

(c) A statement by the person, under penalty of perjury, about whether the person is requesting the personal information for the purpose of enforcing federal immigration law.

(d) If the person states under subsection (c) that the request for personal information is for the purpose of enforcing federal immigration law, a statement about whether the person has a warrant for that personal information issued by a federal court or a court of this state.

(2) If a person indicates that the personal information will be used for the purpose of enforcing federal immigration law as described in subsection (1), or if the government entity has reason to believe the personal information will be used for the purpose of enforcing federal immigration law, the government entity shall not

provide any personal information to the person unless the person presents a warrant for the personal information issued by a federal court or a court of this state.

Sec. 5. By not later than March 31, 2026 and each March 31 thereafter, each government entity shall provide a report to the attorney general and the legislature containing the following information for the previous calendar year:

(a) The amount of requests the government entity received for personal information to be used for the purpose of enforcing federal immigration law.

(b) The number of requests described in subdivision (a) granted or denied by the government entity.

(c) Any other information requested by the attorney general or the legislature.

Sec. 7. If a government entity that provided personal information to a person determines that the person used the personal information for the purpose of enforcing federal immigration law in violation of section 3, government entities shall not provide any personal information to that person, or to the entity on whose behalf the person requested the personal information, unless obligated by a warrant issued by a federal court or a court of this state.

SENATE BILL NO. 510

August 26, 2025, Introduced by Senators MOSS, CAVANAGH and CHANG and referred to Committee on Civil Rights, Judiciary, and Public Safety.

A bill to amend 1931 PA 328, entitled

"The Michigan penal code,"

(MCL 750.1 to 750.568) by adding section 396a.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

Sec. 396a. (1) Except as provided under subsection (2), a law enforcement officer, while interacting with a member of the public in the performance of the law enforcement officer's duties, shall wear an appropriate uniform and shall not wear a mask or personal disguise.

(2) A law enforcement officer may wear a mask in any of the following circumstances:

(a) To prevent the law enforcement officer from contracting an airborne disease, the law enforcement officer may wear a mask that is designed to prevent the transmission of airborne disease.

(b) To protect the law enforcement officer from airborne toxins during a state of emergency, the law enforcement officer may wear a mask that protects against exposure to the airborne toxins during the state of emergency.

(c) The law enforcement officer may wear a mask that provides physical protection to the face.

(3) A law enforcement officer who violates subsection (1) is guilty of a misdemeanor punishable by imprisonment for not more than 90 days or a fine of not more than $500.00.

(4) This section does not apply to a law enforcement officer engaged in an undercover assignment.

(5) As used in this section:

(a) "Appropriate uniform" means a uniform that displays the law enforcement officer's name or badge number.

(b) "Law enforcement officer" means all of the following:

(*i*) A law enforcement officer as that term is defined in section 2 of the Michigan commission on law enforcement standards act, 1965 PA 203, MCL 28.602.

(*ii*) A federal law enforcement officer.

(c) "Mask" includes, but is not limited to, a piece of nontransparent material meant to cover the face or conceal an individual's identity that would otherwise be readily apparent. Mask does not include a face shield that does not conceal the wearer's face.

(d) "Undercover assignment" means any investigative activity that involves the use of an assumed name or cover identity by a law enforcement officer under the jurisdiction of a federal law enforcement agency, local law enforcement agency, or another law enforcement agency of this state.

Enacting section 1. This amendatory act takes effect 90 days after the date it is enacted into law.

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Resolution re: ICE and CBP

1 message

'Jennifer Bailey' via City Commission <city-commission@bhamgov.org> Sun, Mar 8, 2026 at 10:27 PM
Reply-To: Jennifer Bailey <jennylbailey@icloud.com>
To: city-commission@bhamgov.org

Dear Commissioners,

I urge the City Commission to adopt a resolution prohibiting DHS, CBP, and ICE from using city property without a judicial warrant. These actions were outlined in detail in the February 18, 2026 email from Danielle Mallon. Recent actions by federal immigration authorities across the country have raised serious concerns about constitutional protections, due process, and the safety of community members.

Our city has a responsibility to protect the civil liberties and trust of all residents who rely on public spaces and services. Requiring a warrant before ICE can operate on city property is a reasonable, lawful safeguard that affirms our community's commitment to responsible governance.

Sincerely,

Jenny and Curt Bailey
667 Hanna Street

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To unsubscribe from this group and stop receiving emails from it, send an email to city-commission+unsubscribe@bhamgov.org.
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/D9981B15-D2BD-4E69-B6B7-DE64DE63D291%40icloud.com.

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Resolution to prohibit ICE related activities in Birmingham

'Andi Schreiber' via City Commission <city-commission@bhamgov.org> Mon, Mar 9, 2026 at 8:21 AM
Reply-To: Andi Schreiber <av7946@aol.com>
To: "city-commission@bhamgov.org" <city-commission@bhamgov.org>

Dear Commissioners,

I am writing in support of the actions described in the February 18, 2026 communication from Danielle Mallon included in the materials for the March 9 City Commission meeting.

Federal immigration enforcement actions carried out by ICE and CBP across the country have raised serious concerns about constitutional protections, due process, and the safety of community members. Birmingham should make clear that our local institutions will not be used to facilitate these activities.

For these reasons, I urge the Commission to pass a resolution prohibiting DHS, CBP, and ICE activities on Birmingham city property without a valid judicial warrant and to commit that the city will not enter into a 287(g) agreement with DHS.

Birmingham should stand firmly for constitutional protections, community trust, and the safety of all residents.

Thank you for your consideration.

Andrea Schreiber
1410 Northawn Blvd
313-215-3134

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To unsubscribe from this group and stop receiving emails from it, send an email to city-commission+unsubscribe@bhamgov.org.
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/693161861.6584638.1773058905762%40mail.yahoo.com.

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Resolution to prohibit ICE related activities in B'ham

1 message

Shelli Weisberg <shelliblyth@gmail.com> Sun, Mar 8, 2026 at 6:32 PM
To: city-commission@bhamgov.org

Dear Commissioners,
I am writing to express my support for the actions outlined in the February 18, 2026 email from Danielle Mallon, which is included in your agenda for the March 9, 2026 Birmingham City Commission meeting.

ICE and CBP have engaged in dangerous, reckless, and unconstitutional activities around the country. It is important to take a stand condemning their presence in our city. I urge your action on a resolution to prohibit DHS, CBP, and ICE activities on Birmingham City property without a valid warrant, and to ensure the city does not enter into a 287(g) agreement with DHS.

Sincerely,
Shelli Weisberg
651 W. Frank St.
248-535-7112

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You received this message because you are subscribed to the Google Groups "City Commission" group.
To unsubscribe from this group and stop receiving emails from it, send an email to city-commission+unsubscribe@bhamgov.org.
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/CADFviyX_p6LwutosVpnN8mMYL1n-qnrZmx6LY4hsk7eJgrrnqQ%40mail.gmail.com.

BIRMINGHAM

NOTICE OF INTENTION TO APPOINT TO THE BOARD OF BUILDING TRADES APPEALS

At the regular meeting of Monday, May 18, 2026, the Birmingham City Commission intends to appoint the following positions to the Board of Building Trades Appeals:

- Two regular members to serve three-year terms to expire May 23, 2029
- One regular member to serve the remainder of a three-year term to expire May 23, 2028
- Two regular members to serve the remainder of three-year terms to expire May 23, 2027

Interested citizens may submit an application available at the City Clerk's office or online at www.bhamgov.org/boardopportunities. Applications must be submitted to the City Clerk's office on or before noon on Wednesday, May 13, 2026. These documents will appear in the public agenda for the regular meeting at which time the City Commission may make nominations and vote on appointments.

Duties

The Board of Building Trades Appeals hears and grants or denies requests for variances from strict application of the provisions of the Michigan Building, Residential, Mechanical and Plumbing Codes and the National Electrical Code. The Board of Building Trades Appeals will decide on matters pertaining to specific code requirements related to the construction or materials to be used in the erection, alteration or repair of a building or structure.

Criteria/Qualifications	**Date Applications Due (by noon)**	**Date of Interview**
If your report involves a project or action impacting a specific segment of the public, indicate the means by which individuals have been given information about the item. This could include required notifications and notices, e-mail communications, social media posts, meetings, etc.	5/13/2026	5/18/2026

NOTE: All members of boards and commissions are subject to the provisions of City of Birmingham City Code Chapter 2, Article IX, Ethics and the filing of the Affidavit and Disclosure Statement.

BIRMINGHAM

NOTICE OF INTENTION TO APPOINT TO THE BROWNFIELD REDEVELOPMENT AUTHORITY

At the regular meeting of Monday, May 18, 2026, the Birmingham City Commission intends to appoint the following positions to the Brownfield Redevelopment Authority:

- Two regular members to serve three-year terms to expire May 23, 2029
- One regular member to serve the remainder of a three-year term to expire May 23, 2028
- One regular member to serve the remainder of a three-year term to expire May 23, 2027

Interested citizens may submit an application available at the City Clerk's office or online at www.bhamgov.org/boardopportunities. Applications must be submitted to the City Clerk's office on or before noon on Wednesday, May 13, 2026. These documents will appear in the public agenda for the regular meeting at which time the City Commission may make nominations and vote on appointments.

Duties

The Brownfield Redevelopment Authority shall have the powers and duties to the full extent as provided by and in accordance with the provisions of the Brownfield Redevelopment Financing Act, being Act 381 of the Public Acts of the State of Michigan of 1996, as amended. Among other matters, in the exercise of its powers, the Board may prepare Brownfield plans pursuant to Section 13 of the Act and submit the plans to the City Commission for consideration pursuant to Section 13 and 14 of the Act.

Criteria/Qualifications	**Date Applications Due (by noon)**	**Date of Interview**
If your report involves a project or action impacting a specific segment of the public, indicate the means by which individuals have been given information about the item. This could include required notifications and notices, e-mail communications, social media posts, meetings, etc.	5/13/2026	5/18/2026

NOTE: All members of boards and commissions are subject to the provisions of City of Birmingham City Code Chapter 2, Article IX, Ethics and the filing of the Affidavit and Disclosure Statement.

BIRMINGHAM

NOTICE OF INTENTION TO APPOINT TO THE CITY COMMISSION

At the regular meeting of Monday, April 13, 2026, the Birmingham City Commission intends to appoint a member to fill a vacancy to serve the remainder of a four-year term on the City Commission to expire in November 2027.

Interested citizens may submit an application available at the City Clerk's office or online at www.bhamgov.org/boardopportunities. Applications must be submitted to the City Clerk's office on or before noon on Wednesday, April 8, 2026. These documents will appear in the public agenda for the regular meeting at which time the City Commission may make nominations and vote on appointments.

Duties

Conduct of Business
Commission Meetings shall be governed by the rules contained in the most recent edition of Robert's Rules of Order, Newly Revised in all instances in which they are applicable and not inconsistent with the statutes of the United States or the State of Michigan, or with the Charter or adopted of the City of Birmingham or these Rules of Procedure. Commissioners should be recognized by the presiding officer before speaking.

Commissioners' Attendance at Boards and Committees
It is the decision of the Commission that to avoid the appearance of or a possibility of potential influence or duress upon appointees, or to avoid the possibility of violating the OMA, commissioners shall refrain from appearing at various boards and committees in person or with their names addressed upon remote attendance. Exceptions may occur upon presentation and vote of the entire Commission.

Voting
Birmingham's City Charter states that four members of the City Commission shall constitute a quorum; that the Commission shall act only by ordinance or resolution, that is, an official action in the form of a motion; and that a minimum of four votes shall be required to adopt any such motion.

A Commission member may abstain from voting on a motion if he or she: 1) has a conflict of interest; or 2) lacks sufficient information about the issue to be decided. Any Commissioner who abstains from voting on a motion shall state, for the record, at the outset of the discussion both his or her intention to abstain and reason for doing so. Should the need to abstain become clear during discussion, the member shall state his or her intention at that time. The Commissioner shall then be prohibited from participating in any further discussion or debate on the issue.

Criteria/Qualifications	Date Applications Due (by noon)	Date of Interview
Applicants must be residents of the City of Birmingham for at least one year and be a registered elector.	4/8/2026	4/13/2026

NOTE: All members of boards and commissions are subject to the provisions of City of Birmingham City Code Chapter 2, Article IX, Ethics and the filing of the Affidavit and Disclosure Statement.

BIRMINGHAM
A WALKABLE CITY

OFFICE USE ONLY
Meets Requirements? Yes No

Will Attend / Unable to Attend

APPLICATION FOR VACANT CITY COMMISSION SEAT

Thank you for your interest in serving on the City Commission. This application is to fill the vacant Commission seat until the November 2, 2027 general municipal election.

The purpose of this form is to provide the City Commission with basic information about applicants considered for appointment. NOTE: Completed applications are included in the City Commission agenda packets. The information included on this form is available to the public. City Commissioners are subject to the provisions of the Ethics Ordinance (Chapter 2, Article IX of the City Code).

Applications must be submitted to the City Clerk's Office at or before noon on the Wednesday, April 8, 2026. The appointment will be made at the Monday, April 13, 2026 regular meeting of the City Commission.
(Please print clearly)

Name _____ Phone _____

Residential Address _____ Email _____

Residential City, Zip _____ Length of Residence _____

Business Address _____ Occupation _____

Business City, Zip _____

List your related employment experience

List your related community activities

List your related educational experience

What skills, experiences, or perspectives do you bring to the role that would benefit the City and its residents?

What is your vision for the City's future, and how does it align with the Commission's strategic goals?

What do you see as the biggest challenges facing the City, and how would you address them as a Commissioner?

What opportunities do you think the City should prioritize in the next 1-5 years?

To the best of your knowledge, do you or a member of your immediate family have any direct financial or business relationships with any supplier, service provider or contractor of the City of Birmingham from which you or they derive direct compensation or financial benefit? If yes, please explain:

Do you currently have a relative serving on the City Commission? _____

Per the City Charter: "No person shall be eligible to the office of commissioner who shall not be an elector in the city and who has not been a resident of the city for at least one (1) year immediately prior to his election."
Are you an elector (registered voter) in the City of Birmingham and have you been a resident for at least 1 year prior to your application? _____

_____ _____
Signature of Applicant Date

BIRMINGHAM

NOTICE OF INTENTION TO APPOINT TO THE PARKS AND RECREATION BOARD

At the regular meeting of Monday, April 13, 2026, the Birmingham City Commission intends to appoint the following position to the Parks and Recreation Board:

- One regular member to serve the remainder of a three-year term to expire March 13, 2029
- One alternate member to serve the remainder of a three-year term to expire March 13, 2028

Interested citizens may submit an application available at the City Clerk's office or online at www.bhamgov.org/boardopportunities. Applications must be submitted to the City Clerk's office on or before noon on Wednesday, April 8 2026. These documents will appear in the public agenda for the regular meeting at which time the City Commission may make nominations and vote on appointments.

Duties

The Parks & Recreation Board consists of seven members who serve for three-year terms without compensation. The goal of the board is to promote a recreation program and a park development program for the City of Birmingham. The Parks & Recreation Board shall recommend to the City Commission for adoption such rules and regulations pertaining to the conduct and use of parks and public grounds as are necessary to administer the same and to protect public property and the safety, health, morals, and welfare of the public.

Criteria/Qualifications	**Date Applications Due (by noon)**	**Date of Interview**
Members must be electors of the City of Birmingham.	4/8/2026	4/13/2026

NOTE: All members of boards and commissions are subject to the provisions of City of Birmingham City Code Chapter 2, Article IX, Ethics and the filing of the Affidavit and Disclosure Statement.

MEMORANDUM

Planning Department

DATE: March 23, 2026

TO: Jana Ecker, City Manager

FROM: Nick Dupuis, Planning Director

SUBJECT: Planning Department Annual Report 2025-2026

INTRODUCTION:

The Birmingham Code of Ordinances requires that the Planning Department provide to the City Manager a tentative outline of the programs of its Planning Board, Design Review Board, and Historic District Commission for the ensuing year. Over time, these outlines have evolved into a comprehensive Planning Department Annual Report that includes an outline of the Planning Department team and a breakdown of the Boards/Commissions it staffs and their respective accomplishments and goals.

BACKGROUND:

The City Commission reviewed a Planning Department Annual Report for 2024-2025 on March 24, 2025 (Agenda – Minutes). The City Commission did not provide any comments at that time.

At this time, the Planning Department has prepared its annual report for 2025-2026.

LEGAL REVIEW:

There are no legal reviews required for this agenda item.

FISCAL IMPACT:

There are no fiscal impacts for this agenda item.

SUSTAINABILITY:

There are no sustainability considerations for this agenda item.

DESIGN CONSIDERATIONS:

There are no design considerations for this agenda item.

PUBLIC COMMUNICATIONS:

There are no required public communications as a part of this agenda item.

SUMMARY:

The Planning Department requests that the City Commission review the 2025-2026 Planning Department Annual Report and provide the Planning Department with any necessary feedback.

ATTACHMENTS:
1. Planning Department Annual Report 2025-2026

SUGGESTED COMMISSION ACTION:
There is no required action for this agenda item.

BIRMINGHAM PLANNING DEPARTMENT ANNUAL REPORT

2025 – 2026



PLANNING DEPARTMENT STAFF



Nicholas Dupuis, AICP - Planning Director



Leah Blizinski, AICP – City Planner



Summer Aldred – City Planner



Ed Rickets – Administrative Assistant

Community Development

- Building Department
- Engineering Department
- Planning Department



Lauren Milia – Planning & Sustainability Intern



Laura Eichenhorn - Transcriptionist

Planning Department Boards & Commissions

As a regular function of Planning Department activities, the Planning Department is required to provide regular staff support to the following public bodies:

	Principal Staff Liaison	Information
City Commission	Dupuis	Roster/About
Planning Board	Dupuis	Roster/About
Historic District Commission	Dupuis	Roster/About
Design Review Board	Dupuis	Roster/About
Multi-Modal Transportation Board	Blizinski	Roster/About
Public Arts Board	Aldred	Roster/About
Historic District Study Committee	Dupuis	Roster/About
Wayfinding and Gateway Signage Committee	Dupuis	Roster/About
Environmental Sustainability Committee	Aldred	Roster/About
Triangle District Corridor Improvement Authority	Dupuis	Roster/About
Board of Zoning Appeals	All	Roster/About
Brownfield Redevelopment Authority	Aldred	Roster/About
Parks and Recreation Board	Blizinski	Roster/About

Additional Planning Department Board & Commission Activity

In addition to providing regular staff support to the boards and commissions listed above, the Planning Department has also provided support to the following:

	Principal Staff Liaison	Information
Advisory Parking Committee	-	Roster/About
Birmingham Shopping District Board	-	Roster/About
Museum Board	-	Roster/About

PLANNING BOARD, HISTORIC DISTRICT COMMISSION, & DESIGN REVIEW BOARD

Each year, City Ordinance requires that the Planning Department prepare a report outlining activities at the Planning Board, Historic District Commission and Design Review Board from the previous year. This report covers the year beginning **March 25, 2025** and ending **March 23, 2026**. In preparing the report, the Planning Board, the Historic District Commission, and the Design Review Board have the chance to review their goals and objectives for the upcoming year.

The report is separated into two distinct parts: (1) **Accomplishments** and (2) **Goals**.

The **Accomplishments** section cites in narrative form the activities conducted by each board. This narrative will include a list of public hearings, studies and other reviews. The Planning Department has included Multi-Modal Transportation Board and Public Arts Board accomplishments in this section to satisfy the reporting requirements of their respective enabling ordinances or as requested by the City Commission.

The **Goals** section lists the items from the 2026 Action Lists for the Planning Board, Historic District Commission, and Design Review Board. Action Lists are used to organize and track progress on each group's goals. From this list, each board, as well as the City Commission, has the opportunity to evaluate their goals and objectives, and make any needed amendments.

EXECUTIVE SUMMARY – REVIEW TOTALS

	Site Plans	Design Review	Rezoning/Ord.	Other
Planning Board	16	14	2	11
Historic District Commission	-	3	0	7
Design Review Board	-	6	0	0

Birmingham Code of Ordinance References

- *Chapter 82 (Planning), Article II. – Planning Board, Sec. 82-33. – Duties.*
- *Chapter 82 (Planning), Article V. – Design Review Board, Sec. 82-105. – Duties.*
- *Chapter 127 (Historic Districts), Sec. 127-7. Historic District Commission meetings, recordkeeping and rules of procedure.*

SECTION ONE: ACCOMPLISHMENTS

PLANNING BOARD (PB) (*Chapter 82, Article II.*)

The Planning Board, which meets the second and fourth Wednesdays of each month, sets aside their first meeting of the month for discussion or study items and their second meeting of the month for development reviews. The Planning Board agenda for the meeting at which site plans and special land use permit requests are discussed are limited to a maximum of five (5) review items, including those tabled items which may be carried over from a preceding meeting. The following lists include review items from **March 25, 2025** to **March 23, 2026**. It should be noted that each item may have been reviewed more than once over that period.

Site Plan & Design Review

The purpose of Site Plan Review & Design Review is to provide flexibility in the placement and interrelationship of buildings and uses within each site subject to plan approval, and to provide for the implementation of design concepts while at the same time maintain the overall intensity of land use, density of population, and amounts of light, air, access and landscaped open space as required in the Zoning Ordinance. The Planning Board reviewed the following Site Plan & Design Review applications:

1. 280 E. Lincoln – Grace Baptist Church – Request for Final Site Plan & Design Review for Renovation & Addition to Existing Religious Institution.
2. 479 S. Old Woodward – Birmingham Towers – Request for Final Site Plan & Design Review to Modify Floor Plans and Seek Approval of the Collective Provisions of the Required Off-Street Parking of the Subject Property and the Birmingham Place Pursuant to Article 4, Section 4.45 (G)(3) of the Zoning Ordinance.
3. 185 N. Old Woodward – Bell Bistro – Final Site Plan & Design Review Request for New Outdoor Dining Facility in N. Old Woodward Right-of-Way.
4. 35001 Woodward – Request for site plan approval extension of one year.
5. 163 W. Maple – Origins Café – Final Site Plan & Design Review Request for New Outdoor Dining Platform in W. Maple Right-of-Way.
6. 185 Oakland – Request for Final Site Plan & Design Review for New Whole-Building Generator at Rear of Property (Postponed from February 26, 2025)
7. 2425 E. 14 Mile – Clover Hill Park Cemetery – Request for Final Site Plan & Design Review for renovation to north side of property for a nonconforming use.
8. 168 W. Maple – Teuta – Final Site Plan & Design Review Request for New Outdoor Dining Facility in W. Maple Right-of-Way.
9. 298 S. Old Woodward – Daxton Hotel – Request for Final Site Plan & Design Review to Modify Required Off-Street Loading Facility.
10. 295 Elm – Forest Townhomes – Request for Re-Approval of Expired Final Site Plan & Design Review Approval for Attached Single-Family Townhomes.
11. 283 Hamilton Row – Marrow – Final Site Plan & Design Review Request for New Outdoor Dining Facility in Hamilton Row Right-of-Way.

12. 211 Hamilton Row – NO28 – Request for Final Site Plan & Design Review for New Food & Drink Establishment Engaging in Alcoholic Beverage Sales for On Premise Consumption.
13. 2333 Cole Street – Request for Final Site Plan & Design Review for Major Renovations and Site Improvements at Existing Building.
14. 36977 Woodward – Request for Preliminary Site Plan Review for new 3-story commercial building.
15. 600 N. Old Woodward – Old World Pizza – Request for Final Site Plan & Design Review for New Food & Drink Establishment on O2 (Office-Commercial) Zoning District).
16. 325 S. Eton – District Lofts Phase 3 – Request for Final Site Plan & Design Review for Re-Approval an Expired Site Plan for a New 4-Story Mixed-Use Building.

Special Land Use Permit

Site Plan and Design Review for special land uses are considered and acted upon by the City Commission. Prior to its consideration of a special land use application for an initial permit or an amendment to a permit, the City Commission refers the Site Plan and the design to the Planning Board for its review and recommendation. The Planning Board reviewed the following Special Land Use Permits (SLUPs):

1. 280 E. Lincoln – Grace Baptist Church – Request for Special Land Use Permit Review for Renovation & Addition to Existing Religious Institution.
2. 185 N. Old Woodward – Bell Bistro – Special Land Use Permit Request for New Outdoor Dining Facility in N. Old Woodward Right-of-Way.
3. 298 S. Old Woodward – Daxton Hotel – Request for Special Land Use Permit to Modify Required Off-Street Loading Facility.
4. 211 Hamilton Row – NO28 – Request for Special Land Use Permit Review for New Food & Drink Establishment Engaging in Alcoholic Beverage Sales for On Premise Consumption.
5. 36977 Woodward – Request for Special Land Use Permit for New 3-Story Commercial Building with Commercial Use Greater Than 4,000 sq. ft.
6. 600 N. Old Woodward – Old World Pizza – Request for Special Land Use Permit Review for New Food & Drink Establishment in O2 (Office-Commercial) Zoning District).

Community Impact Study

A Community Impact Study (CIS) is required for any of the following:

- A new structure and/or building of 20,000 square feet of gross floor area or greater;
- A new structure and/or building or addition to an existing structure and/or building equaling less than 20,000 square feet of combined gross floor area upon determination by the Planning Board that the proposed development may exert a significant impact on the City; or
- An addition to an existing structure and/or building with a combined gross floor area of 20,000 square feet or more, provided that the addition has a gross floor area greater than 10% of the gross floor area of the existing structure and/or building.

A CIS addresses a multitude of planning, zoning, land use and environmental issues, as well as public service and transportation concerns. The Planning Board did not review any Community Impact Study applications in this reporting period.

Rezoning & Zoning Ordinance Amendments

The City Commission may, by ordinance, amend, supplement or change the Zoning Ordinance only after the Planning Board has held at least one public hearing regarding a proposed amendment and has reported to the City Commission thereon. The Planning Board has reviewed the following Rezoning applications and Zoning Ordinance Amendments:

1. Impervious Surface, Open Space & Lot Coverage
2. Childcare Ordinance

Courtesy Review

For development proposals on public property that meet the standards of review by the Planning Board, a Courtesy Review is performed to review the standards of Site Plan & Design Review. The Planning Board did not perform any courtesy reviews in this reporting period.

Study Session

The Planning Board is tasked with engaging in long-range planning activities, matters related to the Planning Board's priority list and specific requests from the City Commission. The Planning Board has held the following Study Sessions:

1. Impervious Surface, Open Space & Lot Coverage
2. Childcare Ordinance
3. Zoning Ordinance Update Project
4. Historic Preservation Master Plan
5. The Birmingham Plan 2040 – Progress Update

Pre-Application Discussion

As a part of the development process of the City of Birmingham, the Planning Board affords potential applicants the opportunity for a pre-application discussion to introduce a project and informally discuss proposals. The Planning Board held the following pre-application discussions:

1. 458 N. Old Woodward – Wilders – Outdoor Dining Platform
2. 525 N. Old Woodward – Luxe – Outdoor Dining
3. 283 Hamilton Row – Marrow—Outdoor Dining
4. 35001 Woodward – Floor Plan Changes
5. 2333 Cole – Exterior Renovations
6. 34952 Woodward – New 9-Story Mixed-Use Building
7. 168 W. Maple – Teuta – Bistro & Outdoor Dining Plan
8. 126 S. Old Woodward – Snap Taco – Bistro & Outdoor Dining Plan

HISTORIC DISTRICT COMMISSION (HDC) (Chapter 127)

The Historic District Commission (HDC) meets on the first and third Wednesdays of each month, with a general limit of four (4) regular reviews per meeting. Reviews may be added or deleted at the discretion of the city planner, based on the complexities of individual reviews. Review items include those tabled items which may be carried over from preceding meeting. The following lists include review items from **March 25, 2025** to **March 23, 2026**. It should be noted that each item may have been reviewed more than once over that period.

Historic Design Review

All plans that include construction, addition, alteration, repair, moving, excavation, and demolition of resources in historic districts within the City limits are reviewed by the HDC to safeguard the heritage of the City, stabilize and improve property values, foster civic beauty, strengthen the local economy, and promote the use of historic districts for education, pleasure and welfare of the citizens of the City and of the State. The HDC reviewed the following Design Review applications:

1. 245 S. Eton – Big Rock Chophouse – Request for Design Review for new sign plan.
2. 214 E. Maple – Design Within Reach – Request for Design Review for façade renovations at existing one-story commercial building.
3. 151 Martin St. – Birmingham City Hall – Request for Design Review for New Sally Port Addition to Rear of Building.

Courtesy Review

For development proposals on publicly owned properties within historic districts that require review by the Historic District Commission, a Courtesy Review is performed to review the standards of Design Review in the City Code. There were no Courtesy Reviews held during the report period.

Pre-Application Discussion

As a part of the development process of the City of Birmingham, the HDC affords potential applicants the opportunity for a pre-application discussion to introduce a project and informally discuss proposals. The HDC did not hold any pre-application discussions in this reporting period.

Study Session

The HDC engages in regular activities to further the declaration of history preservation as a public purpose by performing studies, reviewing preservation tactics, and providing continuing education. The HDC has held the following Study Sessions:

1. Historic Preservation Master Plan
2. Historic Plaques
3. Wallace Frost Program
4. 1283 Buckingham – Historic Plaque
5. Demolition Delay – Study Session
6. Certificate of Appropriateness – Study Session
7. National Historic Preservation Month 2026 Programming

DESIGN REVIEW BOARD (DRB) (Chapter 82, Article V.)

The Design Review Board (DRB) meets on the first and third Wednesdays of each month immediately following the Historic District Commission, with a general limit of four (4) regular reviews per meeting. Reviews may be added or deleted at the discretion of the city planner, based on the complexities of individual reviews. Review items include those tabled items which may be carried over from the preceding meeting. The following lists include review items from **March 25, 2025** to **March 23, 2026**. It should be noted that each item may have been reviewed more than once over that period.

Design Review

All plans not requiring Site Plan Review or Historic District Review for the alteration or painting of the exterior of any building and/or the addition of any lighting, signs, equipment or other structures which substantially alter the exterior appearance as determined by the City Planner are submitted to the Design Review Board for review. The purpose of Design Review is to foster attainment of those sections of the City's urban design plans which specifically refer to preservation and enhancement of the particular character of the City and its harmonious development, through encouraging private interests to assist in their implementation. The DRB reviewed the following Design Review applications:

1. 700 E. Maple – Request for Design Review to renovate façade of existing commercial building
2. 36801 Woodward – Request for Design Review to renovate the façade of an existing commercial building
3. 375 Hamilton Row – The NOWW – Request for Design Review for façade renovations at new tenant space in existing building.
4. 151 N. Eton – Request for Design Review for façade renovations.
5. 33900 Woodward – Hunter House – Request for Design Review for façade renovations.
6. 725 S. Adams – Adams Square – Request for Design Review for façade renovations.

Courtesy Review

For development proposals on publicly owned property that require a review by the DRB, a Courtesy Review is performed to review the standards of Design Review in the Zoning Ordinance. There were no Courtesy Reviews held during the report period.

Pre-Application Discussion

As a part of the development process of the City of Birmingham, the DRB affords potential applicants the opportunity for a pre-application discussion to introduce a project and informally discuss proposals. There were no pre-application discussions held during the report period.

Study Session

The DRB engages in regular activities to further the attainment of those sections of the City's urban design plans which specifically refer to preservation and enhancement of the particular character of this City and its harmonious development. There were no study sessions held during the report period.

Planning Board Action List 2026

Topic	General Goals	City Commission Directive?	2040 Plan	Quarter	Status	
					In Progress	Complete
Comprehensive Zoning Ordinance Update	Update the Zoning Ordinance based on recommendations of the 2040 Plan.	☐	☒	Ongoing	☒	☐
The Birmingham Plan 2040	Provide oversight of the implementation of the 2040 Plan	☐	☒	Ongoing	☒	☐
Ordinance Enforcement	Maintain a vibrant community.	☐	☐	Ongoing	☐	☐

Historic District Commission Action List 2026

Historic District Commission Project	Quarter Goals	In Progress	Complete
Demolition Delay Ordinance	1st (January-March)	☒	☐
Website Update	1st (January-March)	☒	☐
Certificate of Appropriateness Update	1st (January-March)	☒	☐
National Historic Preservation Month Program	2nd (April-June)	☒	☐
Create Digital Resources for Historic Designation	2nd (April-June)	☐	☐
Historic District Commission Trainings	2nd (April-June)	☐	☐
Start "40 x 40" Campaign	3rd (July-September)	☐	☐
Newsletter	3rd (July-September)	☐	☐
Enforcement & Maintenance	3rd (July-September)	☐	☐
Review and Inventory Downtown Historic Plaques	3rd (July-September)	☐	☐
Draft Policy for Non-Contributing Resources	3rd (July-September)	☐	☐
Restart Heritage Home Program Refresh	4th (October-December)	☐	☐
Begin Study of Preservation Overlay Districts	4th (October-December)	☐	☐
Newsletter	4th (October-December)	☐	☐
Create CLG Grant Project List	4th (October-December)	☐	☐

Design Review Board Action List 2026

Design Review Board	Quarter	In Progress	Complete
Update Sign Ordinance	Ongoing	☐	☐
Sign Ordinance Enforcement	Ongoing	☐	☐