



AGENDA

REGULAR MEETING OF THE BIRMINGHAM PLANNING BOARD

WEDNESDAY JUNE 26, 2024 – 7:30 PM

151 MARTIN ST., CITY COMMISSION ROOM 205, BIRMINGHAM MI*

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- A.** Roll Call
 - B.** Review and Approval of the Minutes of the Regular Meeting of **May 22, 2024**
 - C.** Chairpersons' Comments
 - D.** Review of the Agenda
 - E.** Meeting Open to the Public for Items Not on the Printed Agenda
 - F.** Unfinished Business
 - G.** Courtesy Review
 - 1. **Booth Park Trail Improvements Plan**
 - H.** Rezoning Applications
 - I.** Community Impact Studies
 - J.** Special Land Use Permits
 - K.** Site Plan & Design Reviews
 - 1. **33866 Woodward – Polestar/LaFontaine Auto Group – Request for site plan extension for auto sales agency including minor design changes**
 - 2. **685 E. Maple – Kroger/Volta – Design Review request for new illuminated electric vehicle charging stations in existing off-street parking facility**
 - 3. **139 W. Maple – Field Building – Request for Preliminary Site Plan Review for new 4-story addition to rear of existing building in Downtown Birmingham**
 - L.** Study Session
 - 1. **The Birmingham Plan 2040 – Next Steps**
 - M.** Miscellaneous Business and Communications:
 - 1. Pre-Application Discussions
 - i. **185 N. Old Woodward – Bell Bistro – Admin. Approval Request**
 - 2. Communications
 - i. **Project Updates**
 - ii. **July 10, 2024 – Request for Combined Meeting**
 - 3. Administrative Approval Correspondence
 - i. **May 17, 2024 – June 21, 2024**
 - 4. Draft Agenda – **July 10, 2024**
 - 5. Action List – **2024**
 - 6. Other Business
 - N.** Planning Division Action Items
 - 1. Staff Report on Previous Requests
 - 2. Additional Items from Tonight's Meeting
 - O.** Adjournment

*Please note that board meetings will be conducted in person once again. Members of the public can attend in person at Birmingham City Hall OR may attend virtually at:

Link to Access Virtual Meeting: <https://zoom.us/j/111656967>

Telephone Meeting Access: 877-853-5247 US Toll-Free

Meeting ID Code: 111656967

NOTICE: Due to Building security, public entrance during non-business hours is through the Police Department — Pierce St. Entrance only. Individuals with disabilities requiring assistance to enter the building should request aid via the intercom system at the parking lot entrance gate on Henrietta St.

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

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) 644-5115 (para las personas con incapacidad auditiva) por lo menos un día 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).

City Of Birmingham
Regular Meeting Of The Planning Board
May 22, 2024
City Commission Room
151 Martin Street, Birmingham, Michigan

Minutes of the regular meeting of the City of Birmingham Planning Board held on May 22, 2024.
The meeting was convened at 7:30 p.m.

A. Roll Call

Present: Chair Scott Clein, Vice Chair Bryan Williams; Board Members Robin Boyle, Stuart Jeffares, Bert Koseck, Janelle Whipple-Boyce; Alternate Board Member Jason Emerine

Absent: Board Member Daniel Share; Alternate Board Member Nasseem Ramin

Staff: Planning Director Dupuis; Senior Planner Cowan, City Transcriptionist Eichenhorn

B. Approval Of The Minutes Of The Regular Planning Board Meeting of May 8, 2024

05-14-24

Motion by Mr. Williams

Seconded by Mr. Boyle to approve the minutes of the Regular Planning Board meeting of May 8, 2024 as amended.

Motion carried, 7-0.

VOICE VOTE

Yeas: Whipple-Boyce, Williams, Emerine, Clein, Boyle, Koseck, Jeffares

Nays: None

C. Chair's Comments

The Chair welcomed everyone to the meeting and reviewed the meeting's procedures.

D. Review Of The Agenda

E. Meeting Open to the Public for Items Not on the Printed Agenda

F. Unfinished Business/Courtesy Review

G. Rezoning Applications

H. Community Impact Study and Site Plan Review

I. Special Land Use Permits and Final Site Plan and Design Review

- 1. 219 Elm St. – All Seasons 2 – Public Hearing to Review Request for Special Land Use Permit Amendment and Final Site Plan and Design Review for New Commercial Use on First Floor of Independent Senior Living Facility**

PD Dupuis presented the item and answered informational questions from the Board.

Mark Abanatha, architect, and Samuel Beznos, owner, spoke on behalf of the project.

During Board discussion, Board member comments were as follows:

- The high quality of the building was not adequately captured in the renderings.
- It would be positive to increase the street activation on Elm.
- The extra two floors would be worth a significant amount of money, and having a large amount of commercial on the first floor would be a priority.
- The building is very aesthetically pleasing.
- This proposal would not meet the spirit or intent of the ordinance in terms of the first floor commercial use. It would also require variances for the proposed glazing. The commercial space would be unlikely to be successful as a space, and the owner would likely request that it be changed in the future.
- In an attempt to come closer to meeting the ordinance, this proposal demonstrates poor urban design. If this were to be granted, it could be precedent-setting.
- This plan would be different than All Seasons on Maple because those first floor commercial spaces were live-work. This plan proposes strict commercial, which is somewhat different. Commercial may not actually be necessary on the first floor of this building, given the location.
- This building's commercial use should occupy the entire first floor.

05-15-24

Motion by Mr. Boyle

Seconded by Mr. Jeffares to recommend for approval the Final Site Plan & Design Review for 219 Elm St. – All Seasons 2 – subject to the following conditions:

- 1. The applicant must provide more detail on how the architectural standards of Article 3, Section 3.09 are met;**
- 2. The applicant must submit details on how they will achieve 70% glazing on the ground floor, and 60% plus the awnings with no sides; and,**
- 3. The applicant must comply with the requests of all City Departments.**

Board member discussion of the motion was as follows:

- This building would provide some level of mixed use in the Triangle, which has been one of the City's goals. While this proposal would not be commercially as large or diverse as the Board might want, it might not be fair to require more commercial of this project because it is similar to the other types of commercial nearby.
- The aesthetics of the building are very high quality.
- This project does not provide the kind of mixed use the City has been looking to achieve within the Triangle. The commercial aspect should not be considered sufficient to achieve two extra floors.

Motion failed, 1-6.

VOICE VOTE

Yeas: Boyle

Nays: Koseck, Whipple-Boyce, Williams, Emerine, Clein, Jeffares

05-16-24

Motion by Mr. Williams

Seconded by Ms. Whipple-Boyce to recommend to the City Commission denial of the request for the Final Site Plan & Design Review for 219 Elm St. – All Seasons 2.

Motion carried, 6-1.

VOICE VOTE

Yeas: Koseck, Whipple-Boyce, Williams, Emerine, Clein, Jeffares

Nays: Boyle

05-17-24

Motion by Mr. Williams

Seconded by Ms. Whipple-Boyce to recommend to the City Commission disapproval of the Special Land Use Permit for 219 Elm St. – All Seasons 2.

Motion carried, 6-1.

VOICE VOTE

Yeas: Koseck, Whipple-Boyce, Williams, Emerine, Clein, Jeffares

Nays: Boyle

J. Site Plan & Design Reviews

1. 245 Townsend – Parkview Townhomes – Request for Preliminary Site Plan Review for New Attached Single Family Development

SP Cowan presented the item and answered informational questions from the Board.

Chris Longe, architect, spoke on behalf of the project.

During Board discussion, Board member comments were as follows:

- The proposed front facade was aesthetically pleasing and represented an improvement over the current building.
- The offsets would not negatively impact anyone. The west elevation would compliment Shain Park.
- This proposal would also compliment the architecture of the building's diagonal neighbor. The east elevation may benefit from a treatment. The rear wall by the parking should be greenery if possible because of the proximity of the electrical lines.
- Adding attainable housing and more homes in general to Birmingham via this project would be beneficial.

Public Comment

Tina Kumar commented about her driveway, the potential for a greenery wall, and the project's impact on the sewers.

The Chair answered a question from Ann Smallwood.

05-18-24

Motion by Mr. Williams

Seconded by Mr. Emerine to approve the Preliminary Site Plan for 245 Townsend St. with the following conditions:

- 1. The Planning Board approve a waiver of the required 4' variation in front setbacks between units;**
- 2. The applicant submit lighting and material specifications, samples, photometric plan and all other required information for the proposed building to complete the Design Review at Final Site Plan; and,**
- 3. The applicant comply with the requests of all City Departments.**

Motion carried, 7-0.

VOICE VOTE

Yeas: Boyle, Koseck, Whipple-Boyce, Williams, Emerine, Clein, Jeffares

Nays: None

K. Study Session

PD Dupuis presented the items and answered informational questions from the Board.

1. The Birmingham Plan 2040 – Prioritization of Key Actions

During Board discussion, Board member comments were as follows:

- The political aspect of Woodward should be added to the Commission's list.
- A comprehensive parking review will be important.
- For the joint Commission-Planning Board meeting, the staff presentation should explain that the Planning Board was anticipating organizing the 2040 Plan implementation process, that updating the zoning ordinance is the most important priority, and that the second priority would be Woodward.
- It would be helpful to have a few graphics for the joint meeting in order to clarify data and priorities.
- The Woodward gateway may be more important than the N. Old Woodward streetscape. Haynes Square is also important, and would tie into aspects of Woodward. Those two items should be moved above the N. Old Woodward streetscape.
- The Planning Department did an outstanding job organizing the information.

2. Triangle District Mixed-Use Requirements – Study Session

During Board discussion, Board member comments were as follows:

- Studying LEED certification may be more of a medium-term item.
- It would be helpful to address definitions of mixed-used, commercial uses, and how the City can better ensure it is getting a positive return for offering bonus floors.
- Public parking in the Triangle may be necessary to study as well.
- Urban design and streetscape could be a line item. Architectural standards should also be reviewed, as well as opportunities for improving vias.

- Childcare may be less of an appropriate incentive. Attainable housing is a more appropriate one. There may or may not be a way to have some kind of historic preservation as an incentive.
- Perhaps there should be fewer options for gaining extra floors, and the options should be high priorities for the Triangle.
- Deciding on these incentives posthaste is important in order to have them in place before further development occurs in the Triangle.
- It would be most expedient to modify the present incentives to make them as functional as possible for the Triangle. The parking should remain the same for now, with a planned future review to make it commensurate with costs. The plaza has not been selected by any developer, so that could possibly be changed to payment in lieu for a public park or open space. The commercial uses on the first floor could be less than 50% in most cases. Those uses should likely be accessible by the general public. LEED should be left in for now because a better sustainability incentive has not been determined yet.
- Alternatively, LEED should be removed because it should not be sufficient to receive an extra floor. The Board also needs education on all of the LEED levels. LEED at some level should be a requirement for all new buildings in the City.
- Some of the buildings should not need commercial at all for their first floors, depending on their location. Staff should return with a map of the parcels to give a better sense of where these parcels might be located.
- The focus of these uses should be activational rather than transactional.

L. Miscellaneous Business and Communications

- 1. Pre-Application Discussions**
- 2. Communications**
- 3. Administrative Approval Correspondence**
- 4. Draft Agenda**
- 5. Action List - 2024**
- 6. Other Business**

M. Planning Division Action Items

- a. Staff Report on Previous Requests**
- b. Additional Items from tonight's meeting**

There were some requests updated computers due to technological issues during the meeting.

N. Adjournment

No further business being evident, the meeting was adjourned at 9:54 p.m.



Nick Dupuis, Planning Director



Laura Eichenhorn, City Transcriptionist



MEMORANDUM

Department of Public Services

DATE: June 20, 2024

TO: Planning Board

FROM: Carrie Laird, Parks and Recreation Manager
Scott Zielinski, DPS Director

SUBJECT: Booth Park Entry Plaza & Trail Improvements

INTRODUCTION:

Preliminary designs for construction of the Booth Park Entry Plaza & Trail Improvements are currently underway and being routed to the appropriate boards and committees for review and comment.

BACKGROUND:

The Parks and Recreation Bond (approved by Birmingham voters in November of 2020) Priority List includes Trail Improvements and the Booth Park Corner Feature. Since then, a Trail Improvements Concept Plan was developed and accepted by the City Commission in September of 2023 ([Agenda/Minutes](#)). The Commission also approved moving forward with the first phase for improvements, the Booth Park Section of the plan at that time.

At the March 18, 2024 City Commission Meeting ([Agenda/Minutes](#)), Grissim Metz Andriese Associates was selected to perform professional design services for the Booth Park Entry Plaza and Trail Improvements project. Attached is a preliminary plan and some concepts.

The plan was first introduced at a Public Input Session at the Parks and Recreation Board on May 7, 2024 ([Agenda/Minutes](#)). The Parks and Recreation Board provided additional input at their June meeting ([Agenda](#)) and the plan will continue to be an ongoing item at Parks & Recreation Board meetings. This preliminary plan was available to the public on Engage Birmingham by way of survey from May 9, 2024 through May 31, 2024 as well. It has been routed for review and comment by City staff and various boards and committees such as the Wayfinding Committee, the Birmingham Shopping District Maintenance Committee, and the Multi-modal Transportation Board during the month of June in advance of a presentation to the City Commission (date to be determined).

The DPS is seeking feedback and commentary on the preliminary plan for all items under the purview of the Planning Board for consideration into a final plan for construction.

ATTACHMENTS:

- Memo and Presentation from Grissim, Metz, Andriese Associates
- City Staff review comments
- Memos from Planning Director, Nicholas Dupuis: May 15, 2024 and February 26, 2024
- Engage Birmingham Summary Report

MEMORANDUM

Date: June 20, 2024

To: Birmingham Planning Board

From: Sue Grissim, Principal & Project Manager, Grissim Metz Andriese Associates

Re: Booth Park Entry Plaza and Trail Improvements – Topics for June 26th Planning Board Mtg

We look forward to working with you to further our preliminary design for Booth Park. Topics we wish to cover are:

- Three (3) meetings to date with Parks and Rec board in brief – design team initial inventory and assessment and seeking Parks and Rec board feedback on scope, preliminary design review, updated preliminary design with budgeting
- Donor meetings
- Survey results and other city staff comments
- Wayfinding sign committee review
- Shopping district committee review
- Survey completed, have begun to develop bid set
- Upcoming meetings and schedule

BOOTH PARK

BIRMINGHAM, MICHIGAN

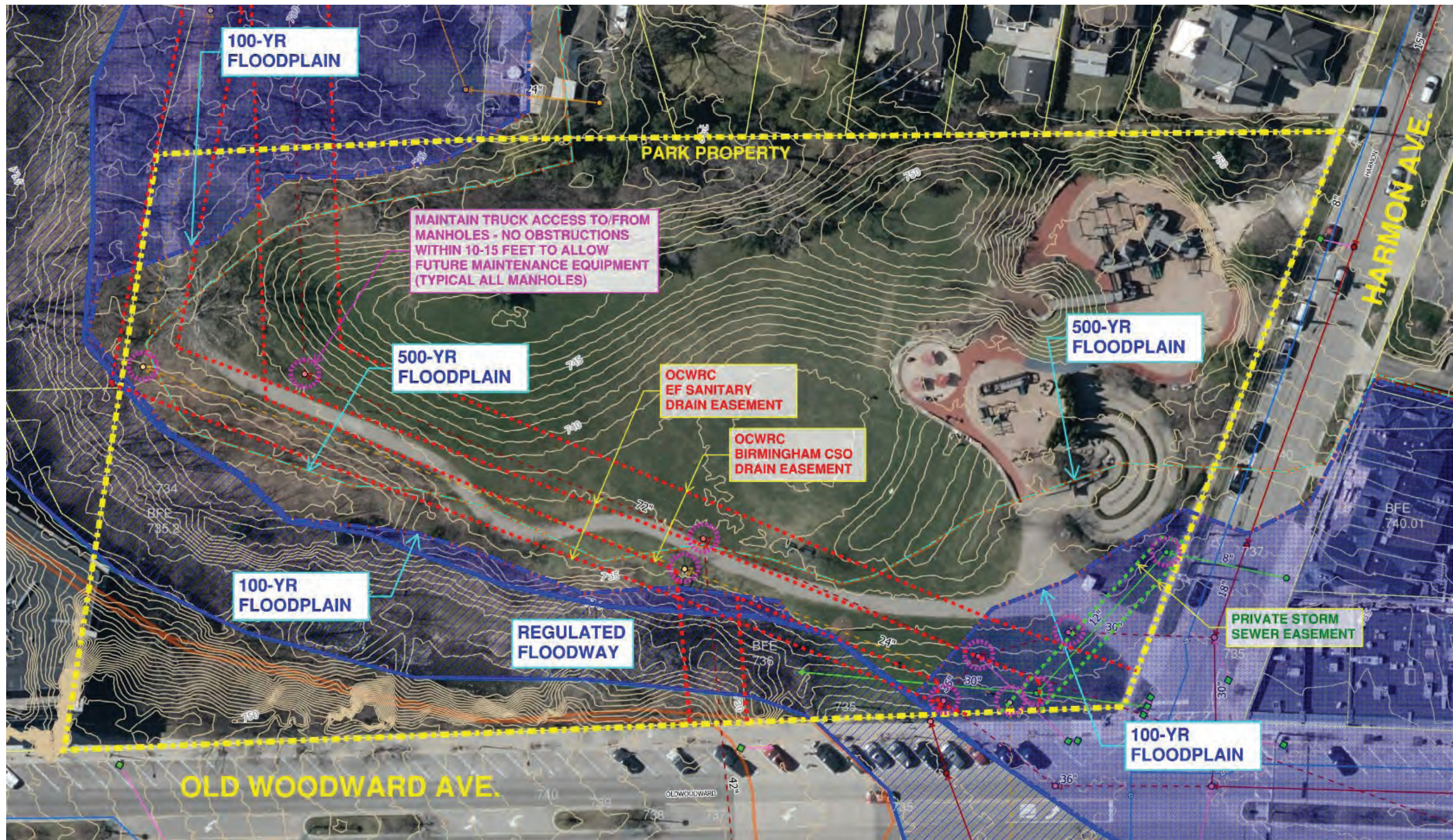
PRELIMINARY DESIGN

06.26.2024

GRISSIM
METZ ASSOCIATES
ANDRIESE



PETERHANS, REA + ROMAN · LLC





Note Key

1. Entry plaza with special paving, seatwalls, movable furniture with umbrellas and art display
2. Restrooms
3. Bike racks and stroller parking
4. Open plaza with special paving, space for activities, coffee cart, food trucks and movable bistro seating to allow for vehicle access
5. Park signage
6. New driveway cut for vehicular access
7. Boardwalk with interpretive signage
8. Rain garden / bioswale (to capture runoff, includes educational signage and demonstration areas)
9. Entry to the existing playground
10. Benches
11. Lounge chairs on the existing lawn ridges
12. Temporary stage / movie screen location
13. Selectively clear vegetation and remove fencing to open view to river
14. Donor benches with customized walk and butterfly garden
15. Trail gateway customized column with signage and planting surround
16. Pollinator garden
17. 10' wide concrete walk
18. 8' wide trail with composed of limestone screenings
19. Hammocks
20. Picnic tables
21. Outdoor gym
22. Swings
23. Landscape beds
24. New canopy trees
25. Existing trees
26. Path down to the river for fishing



Booth Park
Birmingham, Michigan

Preliminary Design
Landscape Plan
06.26.2024

**GRISSIM
METZ
ANDRIESE** ASSOCIATES
HRC
PETERHANS, REA + ROMAN · LLC

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14. Donor benches with customized walk and butterfly garden
15. Trail gateway customized column with signage and planting surround
16. Pollinator garden
17. 10' wide concrete walk
18. 8' wide trail with composed of limestone screenings
19. Hammocks
20. Picnic tables
21. Outdoor gym
22. Swings
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25. Existing trees
26. Path down to the river for fishing

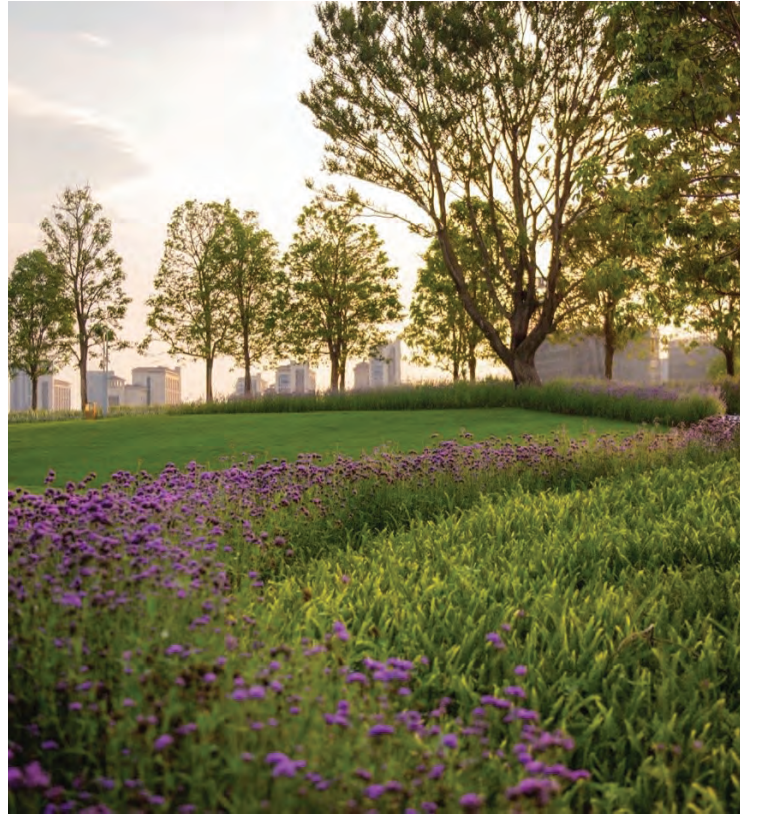


Booth Park
Birmingham, Michigan

Preliminary Design
Landscape Plan
06.26.2024

**GRISSIM
METZ
ANDRIESE** ASSOCIATES
PETERHANS, REA + ROMAN · LLC

HRC







Solid Top Seats - Company: Streetlife



Classic Bike U Rack - Company: CycleSafe Inc.



Set of Every Day Chair and Chipman Table - Company: Landscape Form



Existing Booth Park's bench



Existing Barnum Park's bench



Solid Staple Benches - Company: Streetlife



Thornbury Pavers - Company: Unilock



ECO-PRIORA Pavers - Company: Unilock



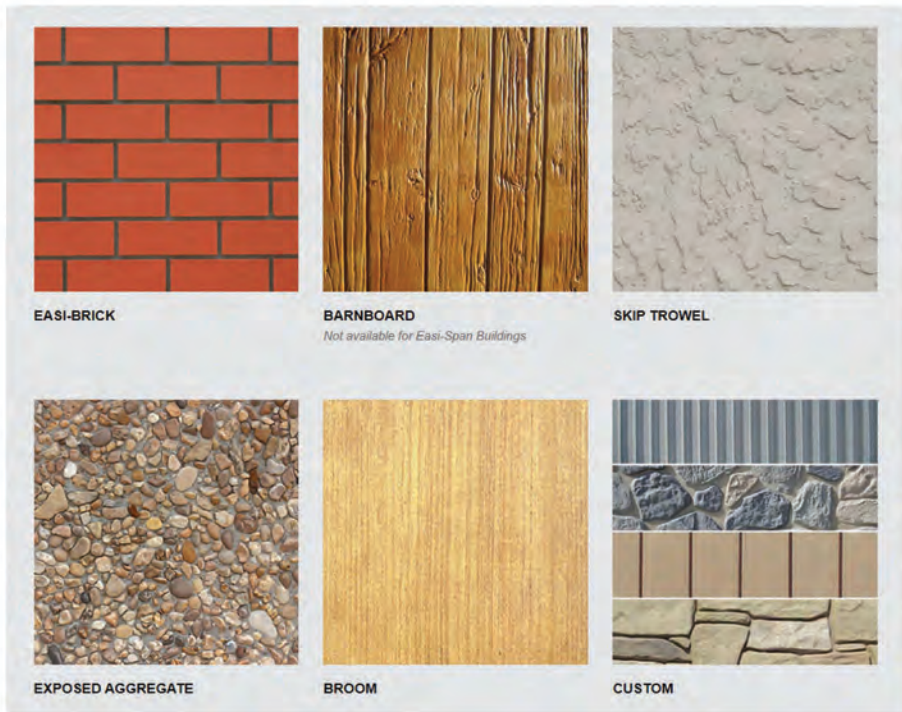
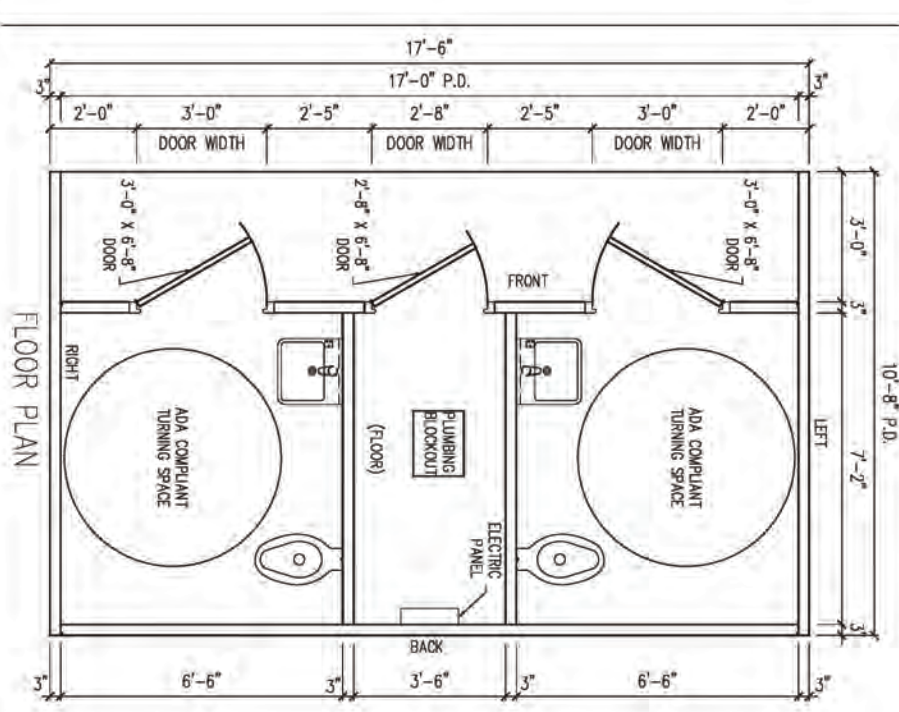
Colored concrete with regular concrete

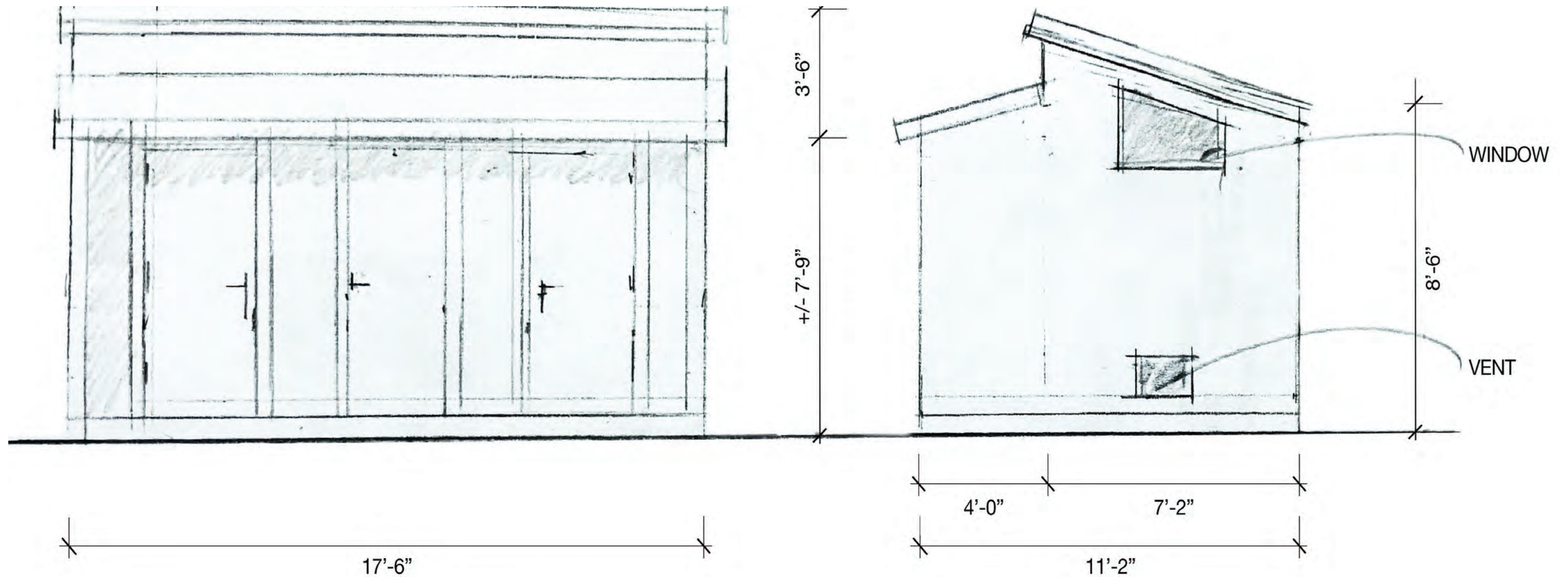




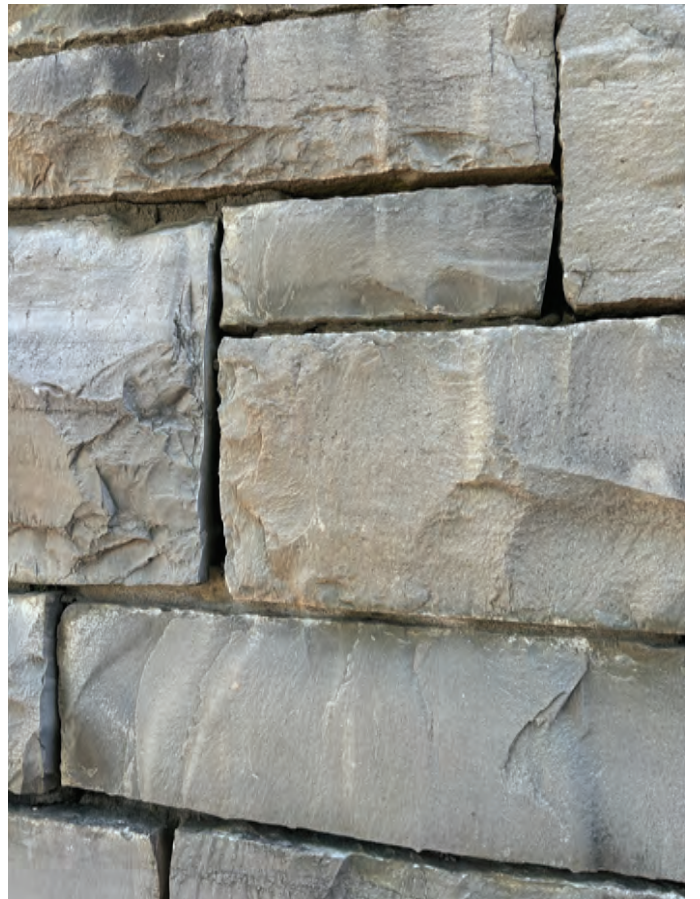
RESTROOM BUILDING

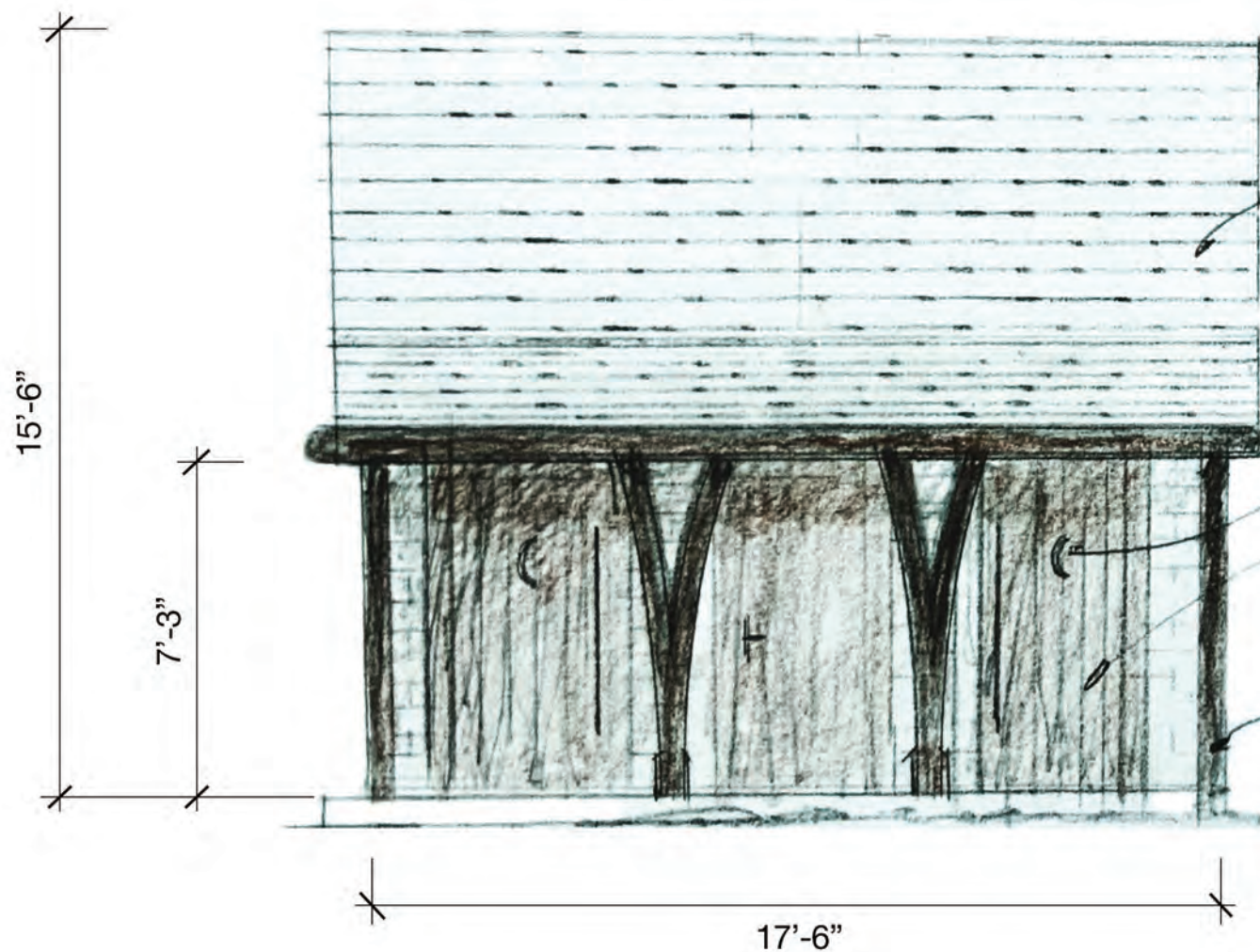
PRE-FABRICATED





NOTE: THIS PREFAB UNITS COMPONENTS AND SIZE IS THE BASIS FOR ALTERNATE DESIGN SUGGESTIONS.





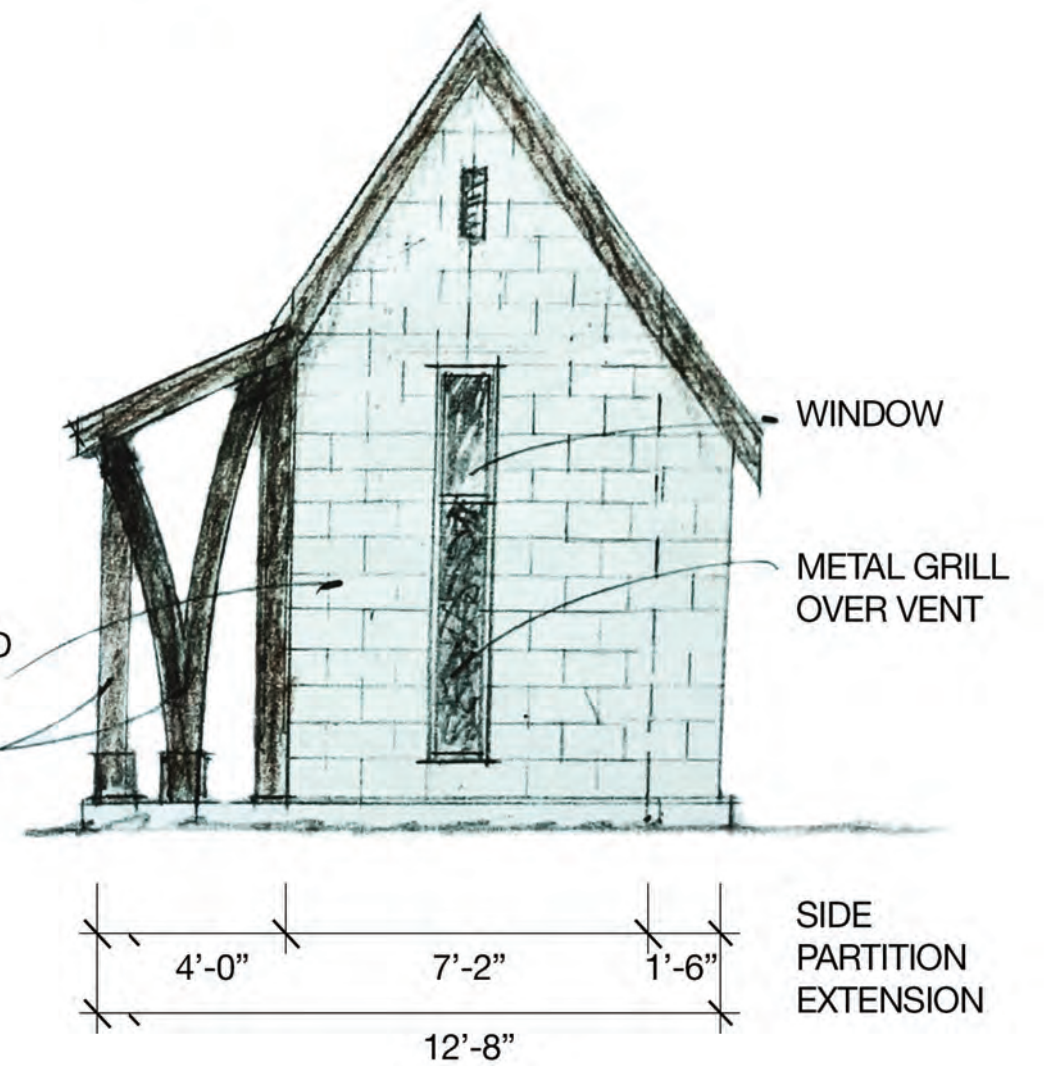
DIMENSIONAL
ASPHALT SHINGLES

APPLIED METAL
DECORATION

COMPOSITE WOOD
DOORS AND TRIM

COLORED AND TEXTURED
CONCRETE BLOCK

CEDAR POSTS



WINDOW

METAL GRILL
OVER VENT

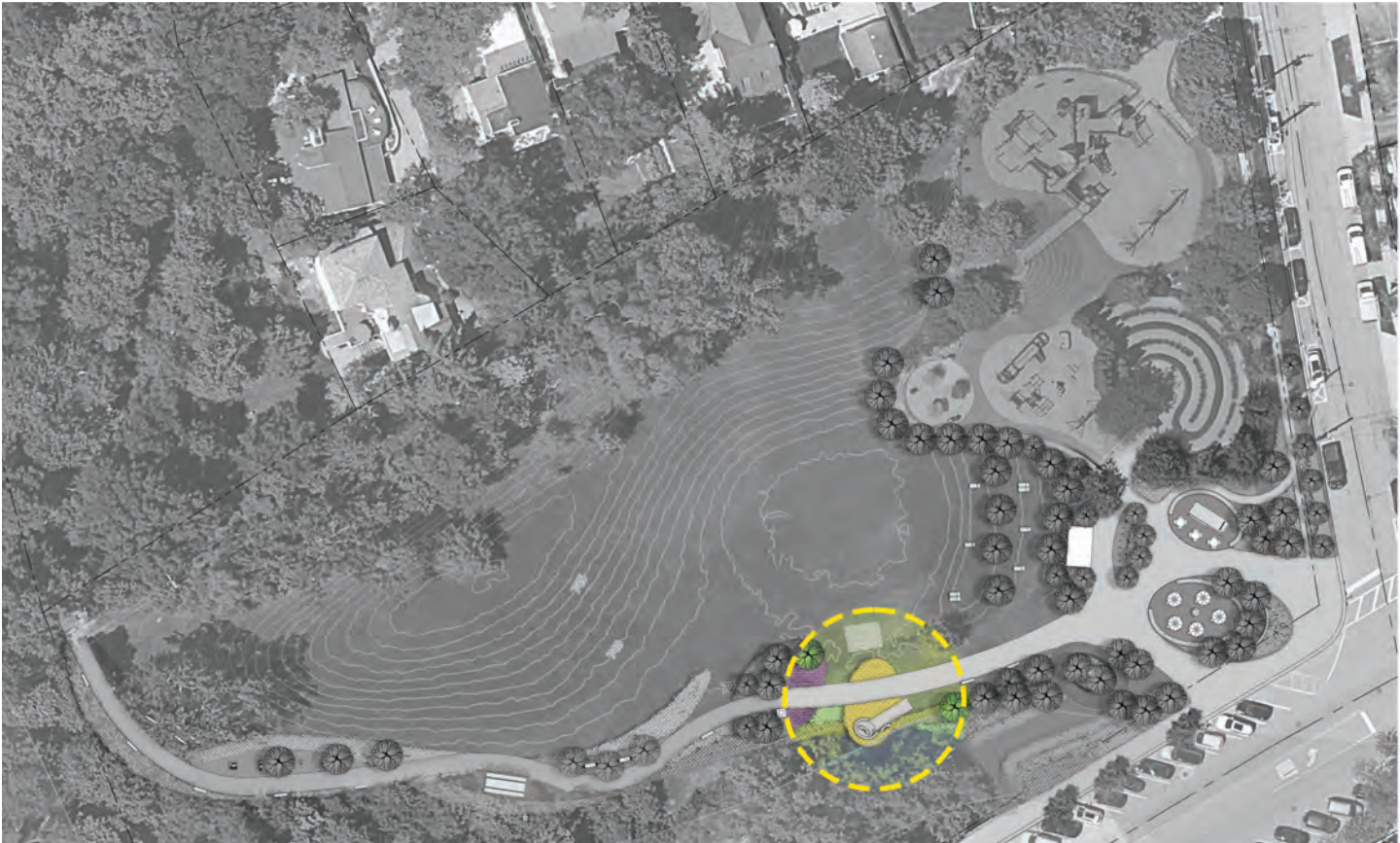
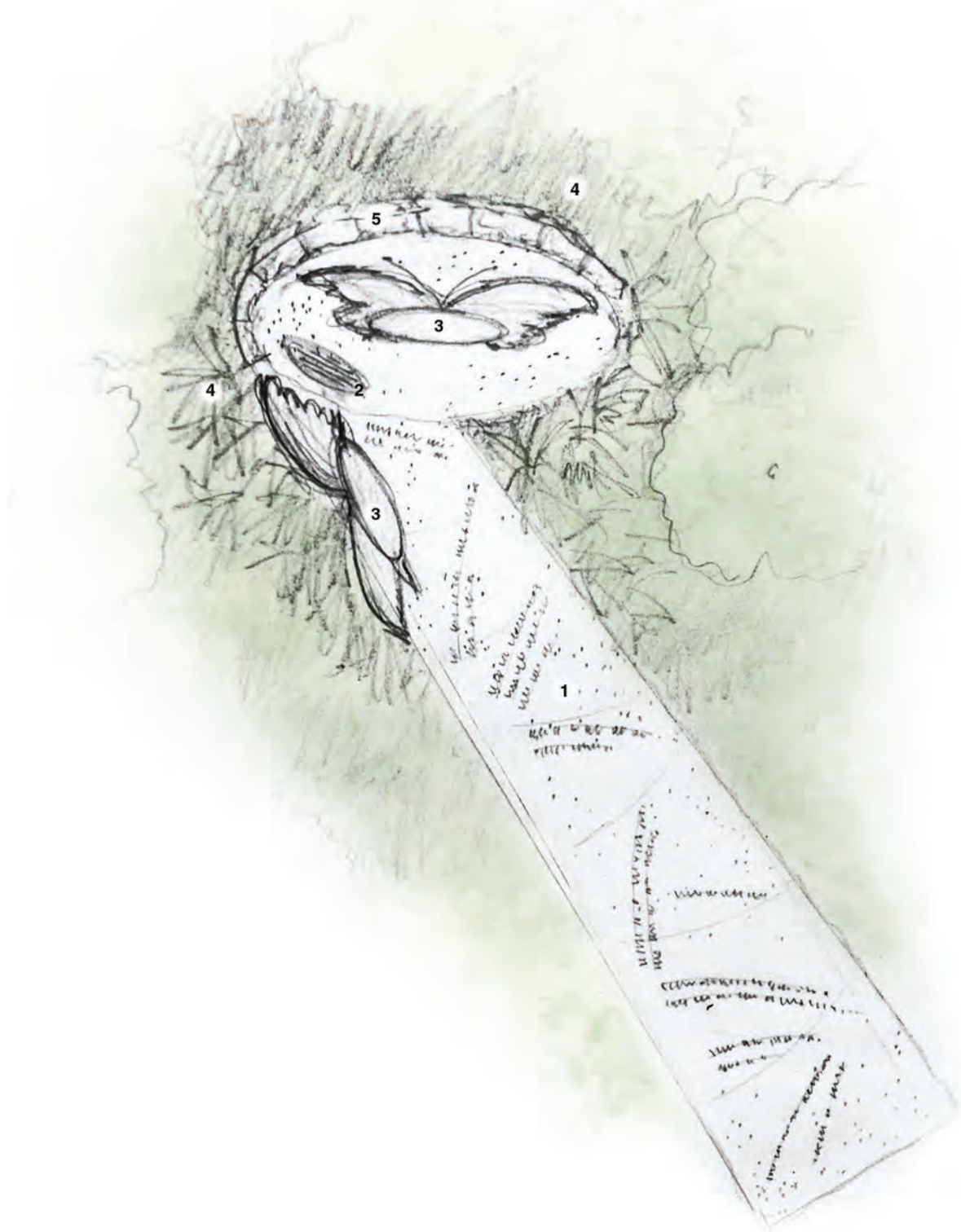
SIDE
PARTITION
EXTENSION











Location of Donor Seating

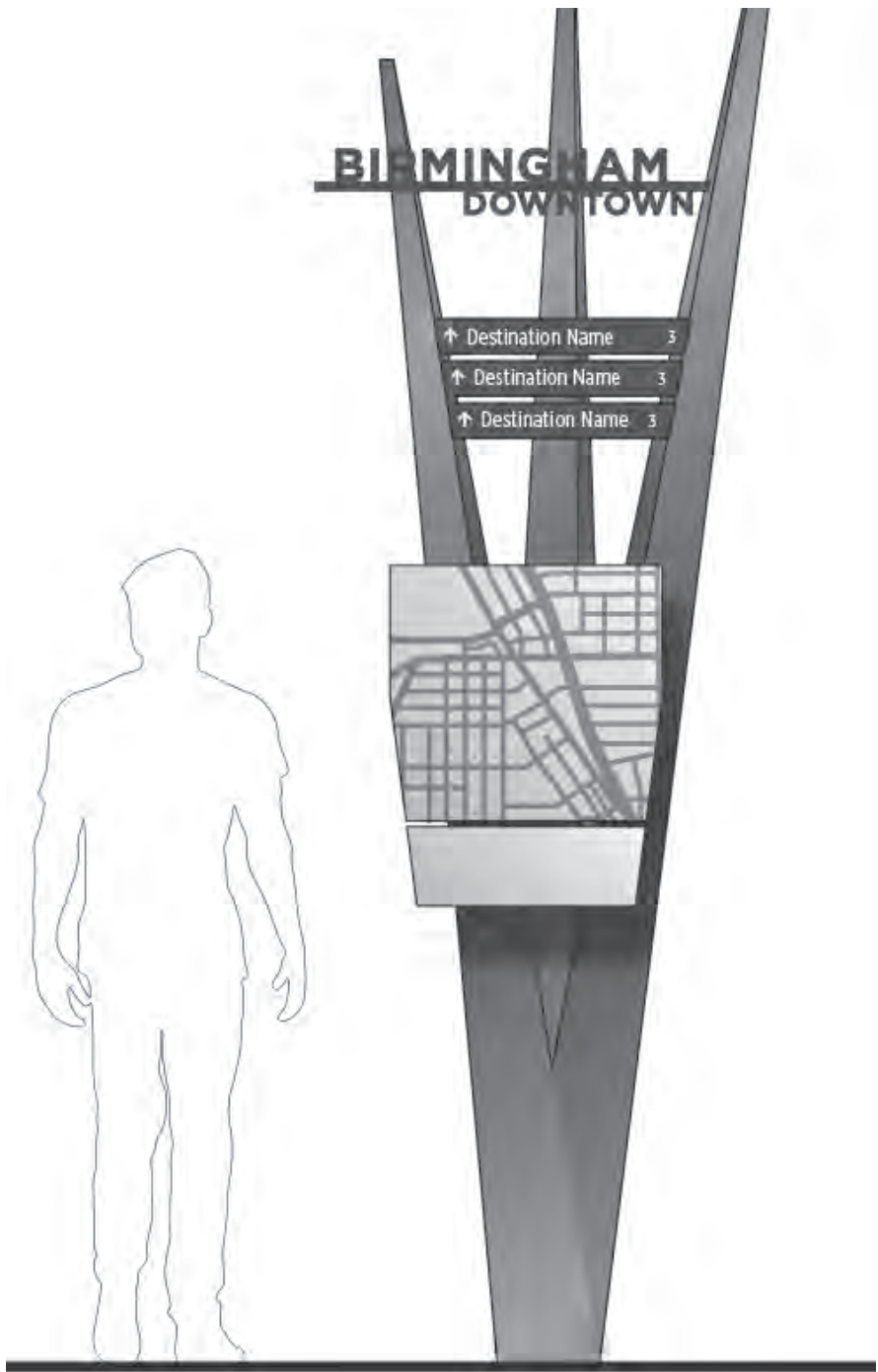
Note Key

1. Exposed aggregate concrete runway with fashion quotes inlays
2. Owner donor plaque
3. Butterfly benches
4. Butterfly plant material surround
5. Retaining wall may be required

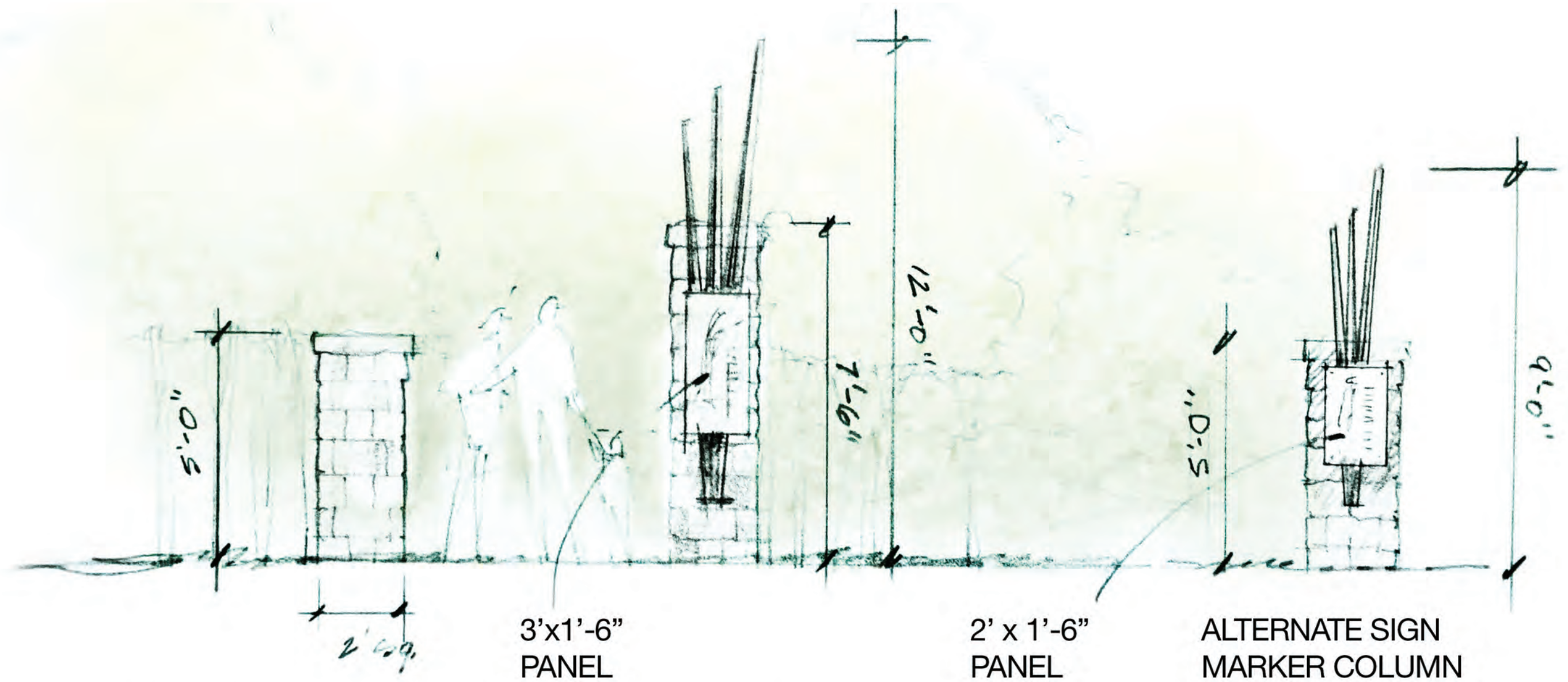




QUARTON LAKE PARK



WAYFINDING AND SIGNAGE (Master Plan Feb. 2024)



NOTE: STONE TO MATCH CITY MARKER STANDARD

Note Key

1. Entry plaza with special paving, seatwalls, movable furniture with umbrellas and art display
2. Restrooms
3. Bike racks and stroller parking
4. Open plaza with special paving, space for activities, coffee cart, food trucks and movable bistro seating to allow for vehicle access
5. Park signage
6. New driveway cut for vehicular access
7. Boardwalk with interpretive signage
8. Rain garden / bioswale (to capture runoff, includes educational signage and demonstration areas)
9. Entry to the existing playground
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12. Temporary stage / movie screen location
13. Selectively clear vegetation and remove fencing to open view to river
14. Donor benches with customized walk and butterfly garden
15. Trail gateway customized column with signage and planting surround
16. Pollinator garden
17. 10' wide concrete walk
18. 8' wide trail with composed of limestone screenings
19. Hammocks
20. Picnic tables
21. Outdoor gym
22. Swings
23. Landscape beds
24. New canopy trees
25. Existing trees
26. Path down to the river for fishing

Signage Legend

- A. Existing park playground sign wall to remain
- B. Historical marker (about park or museum)
- C. Park sign
- D. Sustainable/nature information
- E. Donor plaque (inset in pavement)
- F. Trail sign
- G. Low sign along trail providing additional plant, river or nature information



Booth Park
Birmingham, Michigan

Preliminary Design
Signage Plan
06.26.2024

**GRISSIM
METZ
ANDRIESE**
ASSOCIATES

HRC
PETERHANS, REA + ROMAN · LLC



A. - Existing park playground sign wall to remain



Existing playground sign to be replaced?



Should this sign match signs in Birmingham's Historical Marker program?

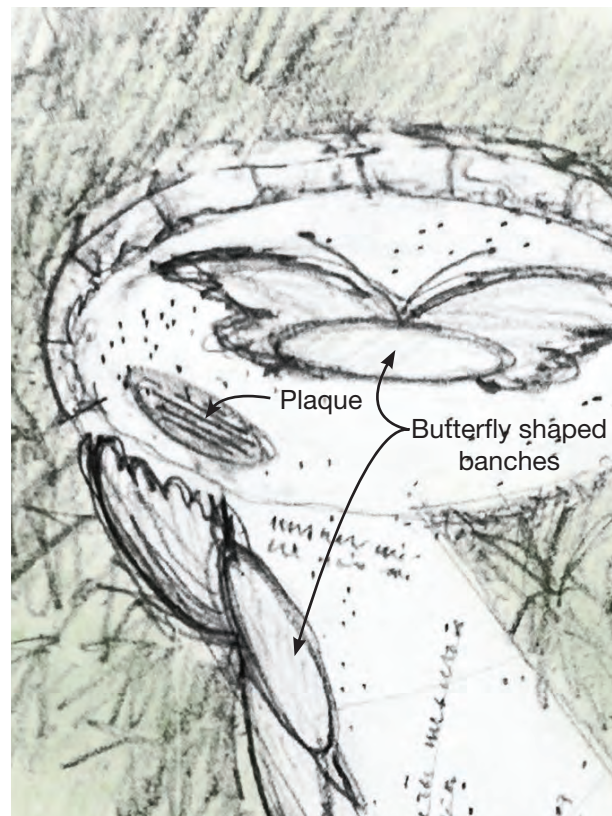
B - Historical marker (about park or museum)



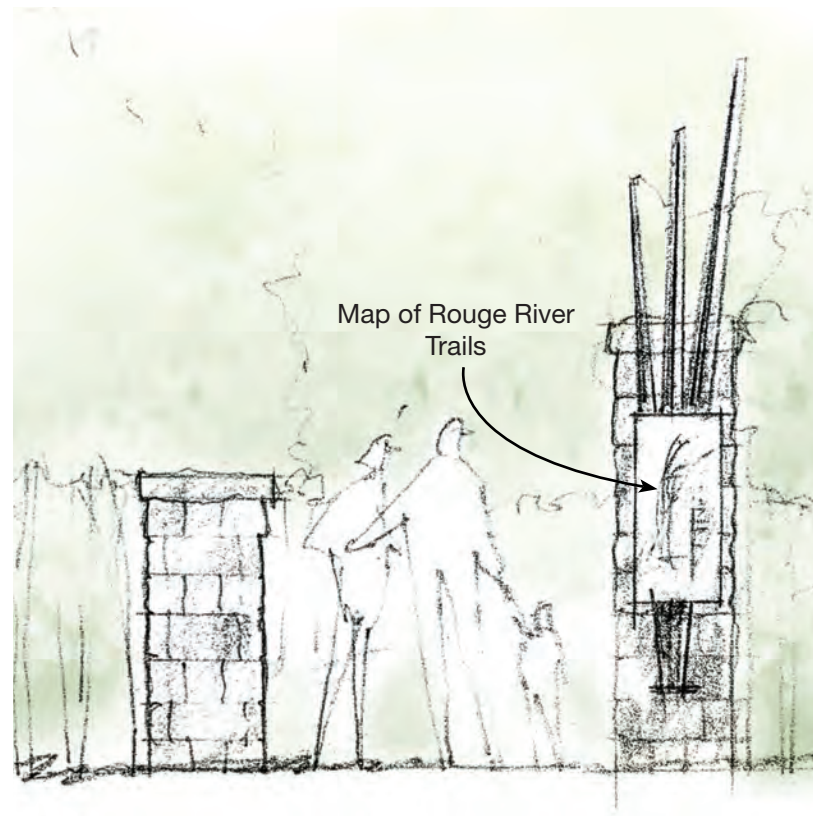
C - Park sign



D - Sustainable/nature information



E - Donor plaque custom design (inset in pavement)



F - Trail sign



G - Low sign along trail providing additional plant, river or nature information



June 4, 2024

Booth Park
 Birmingham, Michigan

Park Preliminary Budget Estimate - Working Draft

<u>General Conditions</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Mobilization			Lump Sum	\$ 30,000.00
Insurance, Permits, and Bonds (8.5%)			Lump Sum	\$ 51,000.00
Layout and Staking			Lump Sum	\$ 10,000.00
General Conditions (5%)			Lump Sum	\$ 30,000.00
General Conditions Sub-Total				\$ 121,000.00

<u>Site Preparation & Removal</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Soil Erosion & Sedimentation			Lump Sum	\$ 5,000.00
Site Preparation & Grading	4,800	sy.	\$ 3.00	\$ 14,400.00
Tree Removals			Lump Sum	\$ 2,000.00
Curb and Concrete Pavement Removal	330	sy.	\$ 10.00	\$ 3,300.00
Site Preparation & Removal Sub-Total				\$ 24,700.00

<u>Trail Entry</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Columns without Signage	2	ea.	\$ 15,000.00	\$ 30,000.00
Special Pavement	950	sf.	\$ 30.00	\$ 28,500.00
Trail Entry Sub-Total				\$ 58,500.00

<u>Plaza and Trail Improvements</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Concrete Plaza Paving (Regular Concrete, 6" depth)	5,300 *	sf.	\$ 10.00	\$ 53,000.00
Concrete Plaza Paving (Colored Concrete, 6" depth)	1,600	lf.	\$ 15.00	\$ 24,000.00
Park Entrance Sign	1	ea.	\$ 15,000.00	\$ 15,000.00
Curb and Gutter Repair	160	lf.	\$ 40.00	\$ 6,400.00
Crushed Stone Trail	3,000	sf.	\$ 3.50	\$ 10,500.00
Benches	2	ea.	\$ 3,000.00	\$ 6,000.00
Concrete Sidewalk, 4" depth	2,000	sf.	\$ 6.00	\$ 12,000.00
Planter Curb	170	lf.	\$ 35.00	\$ 5,950.00
Plaza and Trail Improvements Sub-Total				\$ 132,850.00

* deduct \$20,000 if omit new walk replacing (4) on street parking spaces

CITY OF BIRMINGHAM
 ROUGE RIVER TRAIL IMPROVEMENTS
 ORDER OF MAGNITUDE COST ESTIMATE

August 1, 2023

BOOTH PARK IMPROVEMENTS

GENERAL CONDITIONS				
Mobilization	LS	1	\$15,000.00	\$15,000.00
Insurance, Permits, and Bonds	LS	1	\$20,000.00	\$20,000.00
Project Sign	LS	1	\$2,000.00	\$2,000.00
Layout and Staking	LS	1	\$10,000.00	\$10,000.00
General Conditions (M, O & P @5%)	LS	1	\$29,979.00	\$29,979.00
SUBTOTAL				\$76,979.00

SITE PREPARATION AND REMOVALS				
Soil Erosion & Sedimentation	LS	1	\$10,000.00	\$10,000.00
Site Preparation & Grading	SY	3,494	\$5.00	\$17,470.00
Concrete and Curb Removal	LS	1	\$2,000.00	\$2,000.00
SUBTOTAL				\$29,470.00

TRAIL ENTRY				
Columns	EA	2	\$15,000.00	\$30,000.00
Granite Pavers	SF	320	\$60.00	\$19,200.00
SUBTOTAL				\$49,200.00

PLAZA IMPROVEMENTS				
Concrete Plaza Paving (6" depth)	SF	5,966	\$10.00	\$59,660.00
Seat Wall Curb Planter	LF	70	\$350.00	\$24,500.00
Entrance Sign	LS	1	\$15,000.00	\$15,000.00
Cobblestone Pavers	SF	1311	\$25.00	\$32,775.00
Curb and Gutter Patch	LS	1	\$5,000.00	\$5,000.00
Crushed Stone Trail	SY	268	\$18.00	\$4,824.00
Timber Edging	LF	612	\$30.00	\$18,360.00
Bench	EA	2	\$3,000.00	\$6,000.00
SUBTOTAL				\$166,119.00

<u>Restroom Building</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Easi Set Restroom			Allowance	\$ 134,500.00
Plumbing & Fixtures (W&WW)			Allowance	\$ 14,500.00
Electric & Lighting			Allowance	\$ 14,500.00
HVAC			Allowance	\$ 9,500.00
Waterline and Connections	120	If	\$ 60.00	\$ 7,200.00
Sanitary Line and Connections	140	If	\$ 75.00	\$ 10,500.00
Electric Line and Connections (New Service for Restrooms)	150	If	\$ 50.00	\$ 7,500.00
Restroom Building Sub-Total				\$ 198,200.00

<u>Landscape & Irrigation</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Shade Trees (3" cal.)	36	ea.	\$ 700.00	\$ 25,200.00
Rain Garden Planting Beds (includes maintenance)	4,100	sf.	\$ 2.50	\$ 10,250.00
Regular Planting Beds (Plaza South to Trail Entry)	1,850	sf.	\$ 15.00	\$ 27,750.00
Topsoil for Lawn (3" depth)	70	cy	\$ 45.00	\$ 3,150.00
Sodded Lawn	750	sy.	\$ 5.00	\$ 3,750.00
Repair Irrigation System			Lump Sum	\$ 10,000.00
Landscape & Irrigation Sub-Total				\$ 80,100.00

<u>Lighting/Electrical Service</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Outdoor Rated Duplex Outlets	6	ea.	\$ 300.00	\$ 1,800.00
Security Lighting at Restrooms and Plaza			Lump Sum	\$ 20,000.00
Vendor Electrical Service			Lump Sum	\$ 2,500.00
Conduit for Future Charging Stations			Lump Sum	\$ 7,000.00
Lighting/Electrical Service Sub-Total				\$ 31,300.00

<u>Storm Drainage Features</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Storm Sewer, PVC, 12 inch	145	If	\$ 150.00	\$ 21,750.00
Storm Sewer, PVC, 8 inch	60	If	\$ 120.00	\$ 7,200.00
MSWTD (internal bypass)	1	each	\$ 45,000.00	\$ 45,000.00
Underdrain, Perforated, 6 inch	270	If	\$ 60.00	\$ 16,200.00
Storm MH over Ex Sewer, 5 ft dia	1	each	\$ 8,000.00	\$ 8,000.00
Drainage Structure, 4 ft dia with 2 ft sump	2	each	\$ 5,000.00	\$ 10,000.00
Drainage Structure, 2 ft dia with 1 ft sump	4	each	\$ 3,500.00	\$ 14,000.00
Storm Drainage Features Sub-Total				\$ 122,150.00

<u>Water System Features</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Water Service, 1 inch, Poly	90	If	\$ 50.00	\$ 4,500.00
Yard Hydrant	1	each	\$ 2,500.00	\$ 2,500.00

RESTROOM BUILDING

Easi Set Restroom	LS	1	\$120,000.00	\$120,000.00
Waterline and Connections	LF	118	\$85.00	\$10,030.00
Sanitary Line and Connections	LF	147	\$65.00	\$9,555.00
Electric Line and Connections	LF	172	\$55.00	\$9,460.00
SUBTOTAL				\$149,045.00

LANDSCAPE IMPROVEMENTS

Tree Grates	EA	2	\$4,000.00	\$8,000.00
Trees	EA	2	\$750.00	\$1,500.00
Restoration Seeding and Topsoil	SY	285	\$3.50	\$997.50
Perennial Planting in Planter	LS	1	\$2,500.00	\$2,500.00
SUBTOTAL				\$12,997.50

SUBTOTAL	\$483,810.50
Design and Bidding Contingency (10%)	\$48,381.05
Construction Contingency (10%)	\$48,381.05
Professional Fees (9%)	\$52,251.53
Topographic Survey	\$6,000.00
Soil Borings	\$8,000.00
EGLE PERMIT	\$2,000.00
TOTAL	\$648,824.13

ALTERNATE

Locate Restroom Farther to the South	LF	165	\$190.00	\$31,350.00
Traditional Restroom Building	LS	1	\$140,000.00	\$140,000.00

Drinking Fountain with Dog Dish and Bottle Dispenser	1	each	\$	8,000.00	\$	8,000.00
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Water System Features Sub-Total
 \$ 15,000.00

Sub-Total
 \$ 783,800.00

Contingency 15%
 \$ 117,570.00

FINAL TOTAL
 \$ 901,370.00

<u>Overlook Area at Raingarden North of River</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Deck Overlook	700	sf	\$ 70.00	\$ 49,000.00
Boardwalk Railing	55	lf	\$ 350.00	\$ 19,250.00
Seating	25	lf	\$ 500.00	\$ 12,500.00
Permeable Pavement, 18" depth stone base	820	sf.	\$ 35.00	\$ 28,700.00
Overlook Area/ Rain Gardens Sub-Total				\$ 109,450.00

<u>Restroom Options</u> <u>(add on costs to basic pre-fab unit)</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Customized Easi Set Restroom	1	ea.	Lump Sum	\$ 77,000.00
Stone Wall Custom Restroom	1	ea.	Lump Sum	\$ 100,000.00
Timber Custom Restroom	1	ea.	Lump Sum	\$ 125,000.00

<u>Site Furnishings/Amenities</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Benches	8	ea.	\$ 3,000.00	\$ 24,000.00
Trash Receptacles	2	ea.	\$ 2,000.00	\$ 4,000.00
Set of Table and 4 Chairs	8	ea.	\$ 2,500.00	\$ 20,000.00
Umbrella, 10' diameter	5	ea.	\$ 2,000.00	\$ 10,000.00
Dog Waste Station	2	ea.	\$ 600.00	\$ 1,200.00
Bike Racks	8	ea.	\$ 300.00	\$ 2,400.00
Site Furnishings/Amenities Sub-Total				\$ 61,600.00

<u>Donor Walkway and Seating Area</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Exposed Aggregate Concrete Walkway	165	sf.	\$ 20.00	\$ 3,300.00
Donor Butterfly Bench	2	ea.	\$ 6,000.00	\$ 12,000.00
Fashion Statement Inscriptions & Plaque			Lump Sum	\$ 2,500.00
Butterfly Plantings	400	sf.	\$ 15.00	\$ 6,000.00
Irrigation			Lump Sum	\$ 500.00
Donor Walkway and Seating Area Sub-Total				\$ 24,300.00

<u>Additional Signage</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Historical Marker covering Park and City History	1	ea.	\$ 1,500.00	\$ 1,500.00
Information on Sustainability and Nature	1	ea.	\$ 1,500.00	\$ 1,500.00

Rouge River Trail Wayfinding Sign at Trail Gateway	1	ea.	\$ 2,000.00	\$ 2,000.00
Signs Along Trail with Information on Plantings, Wildlife and the River	6	ea.	\$ 800.00	\$ 4,800.00
Additional Signage Sub-Total			\$	9,800.00

Future Amenities/Landscape/Lighting

Picnic Tables, Large Communal	1	ea.	\$ 17,000.00	\$ 17,000.00
Pad for Art/Sculpture Rotations	1	ea.	\$ 2,000.00	\$ 2,000.00
Hammocks	2	ea.		\$ -
Outdoor Gym Equipment			Allowance	\$ -
Unique Swings	2	ea.		\$ -
Lounge Chairs for Lawn Waves	8	ea.		\$ -
Trees Next to Playground & Waves	16	ea.	\$ 700.00	\$ 11,200.00
Uplighting for Significant features (Art, Sculpture, Gateway Columns)			Lump Sum	\$ 9,000.00
Future Amenities Sub-Total			\$	39,200.00

County Easement:

	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
Grass Stabilizer Grid to Provide Vehicular Access to Utility Structures	520	sy.	\$ 25.00	\$ 13,000.00



Carrie Laird <claird@bhamgov.org>

Booth Park Entry Plaza and Trail Improvements

Nicholas Dupuis <ndupuis@bhamgov.org>

Wed, May 15, 2024 at 10:34 AM

To: Carrie Laird <Claird@bhamgov.org>

Cc: Scott Zielinski <szielinski@bhamgov.org>, Leah Blizinski <lblizinski@bhamgov.org>

Carrie,

Please see attached. Keep up the good work!



Concept Plan Comments to Carrie Laird FULL.pdf

On Thu, May 9, 2024 at 2:38 PM Nicholas Dupuis <ndupuis@bhamgov.org> wrote:

Hey Carrie!

At first glance, this is looking beautiful. It is clear that your team and the consultant have paid a LOT of attention to feedback and general City happenings. I will provide more detailed comments when I have them, but I wanted to know if you would consider the Planning Board when making your rounds as well, since there are a lot of recommendations in our master plans about this area.

On Thu, May 9, 2024 at 10:57 AM Carrie Laird <Claird@bhamgov.org> wrote:

Hi everyone!

We would like to share a preliminary park design and concepts with you, to garner feedback and also route to your appropriate boards as you see fit. We are planning to visit the Wayfinding, Multimodal, BSD Maint Committee upcoming, likely June.

Additionally, we will have a survey available on Engage by the end of this week through May 31st. I've attached the presentation materials as well as the park plan separately. We are in the ideas stage, further development designs are forthcoming later this summer.

Let me know if you have any questions! Thank you!



2024-05-01_B22-241_Booth Park SD Pkg.pdf

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Carrie A. Laird
Parks & Recreation Manager
851 S. Eton
Birmingham, MI 48009
248-530-1714

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Nicholas J. Dupuis

Planning Director



Email: ndupuis@bhamgov.org

Office: 248-530-1856

Social: [Linkedin](#)

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Nicholas J. Dupuis

Planning Director



Email: ndupuis@bhamgov.org

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Carrie Laird <claird@bhamgov.org>

Booth Park Entry Plaza and Trail Improvements

Scott Grewe <Sgrewe@bhamgov.org>
 To: Scott Zielinski <szielinski@bhamgov.org>
 Cc: Carrie Laird <claird@bhamgov.org>

Thu, May 16, 2024 at 4:50 PM

Should be fairly simple, since there is already one there they are already planning for that one to connect to our network.

Scott A. Grewe
 Chief of Police
 Birmingham Police Department
 151 Martin St.
 Birmingham, MI. 48009
 Dispatch: (248) 644-3405
 Office: (248) 530-1867



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On Thu, May 16, 2024 at 4:10 PM Scott Zielinski <szielinski@bhamgov.org> wrote:

If we are able to provide power, how easy would it be to tie cameras into your network?

On Thu, May 9, 2024 at 4:16 PM Carrie Laird <Claird@bhamgov.org> wrote:

Feedback from our Police Chief

----- Forwarded message -----

From: **Scott Grewe** <Sgrewe@bhamgov.org>
 Date: Thu, May 9, 2024, 13:20
 Subject: Re: Booth Park Entry Plaza and Trail Improvements
 To: Carrie Laird <Claird@bhamgov.org>

Carrie,

I have some concerns over our ability to see into the park. This is an area that is a teen hangout on the evenings, particular on the weekends. Due to the play structure, it can already be difficult but with the additional trees and restrooms and other features it will be impossible to check the park without walking through it. Currently we only have one camera at this location but I would request possibly as many as two additional cameras to provide the ability to check the park. These locations would need power supply. We can look at potential locations, but maybe your designers can add some insight in terms of future site lines once constructed and the ability to construct with a power supply in place.

On Thu, May 9, 2024 at 10:57 AM Carrie Laird <Claird@bhamgov.org> wrote:

Hi everyone!

We would like to share a preliminary park design and concepts with you, to garner feedback and also route to your appropriate boards as you see fit. We are planning to visit the Wayfinding, Multimodal, BSD Maint Committee upcoming, likely June.

Additionally, we will have a survey available on Engage by the end of this week through May 31st. I've attached the presentation materials as well as the park plan separately. We are in the ideas stage, further development designs are forthcoming later this summer.

Let me know if you have any questions! Thank you!



2024-05-01_B22-241_Booth Park SD Pkg.pdf

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Carrie A. Laird
Parks & Recreation Manager
851 S. Eton
Birmingham, MI 48009
248-530-1714

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Scott A. Grewe
Chief of Police
Birmingham Police Department
151 Martin St.
Birmingham, MI. 48009
Dispatch: (248) 644-3405
Office: (248) 530-1867



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Scott D. Zielinski, PE
DPS Director
City of Birmingham
Tel: 248-530-1702



Carrie Laird <claird@bhamgov.org>

Booth Park Entry Plaza and Trail Improvements

Leslie Pielack <LPielack@bhamgov.org>

Mon, May 20, 2024 at 4:43 PM

To: Carrie Laird <Claird@bhamgov.org>

Hi Carrie,

Just got my first chance to look over the preliminary design. **There is a lot I like about it!**

I do have some comments/questions I would like to highlight:

- **I think the hammock idea is great.** I personally like the rope-style because it is simpler, easier to remove or replace, and visually has a lower profile in the natural surroundings.
- **I also really like the rain garden/bioswale design.** The walking bridges help reinforce that it is also a water-related feature, like a dry river bed. But what is the maintenance on that, and will it ever become self-sustaining or always need regular maintenance?
- **Splash pad...** Is it just a random idea, or is it planned for the playground area? I'm not a fan of splash pads...they seem costly and not used enough to be worth the effort, running water lines, etc. if it is inevitable, it seems like it could have a smaller footprint, possibly integrate with the garden areas so the water drains off and has a secondary purpose. Also, I think splash pads are begging for shade for little kids and/or their adults to get relief from hot sun. If not natural shade, maybe a pergola or structure of some kind, or even an awning arrangement. (A small fountain or splash pool would potentially have other uses/purposes than just a splash pad, but I know they have maintenance issues, too.)
- **The kiosk concept is really cool.** I do like the visual but I would suggest a timer/dimmer function and an artistic design that can be adjusted for events, time of day/time of year, etc. I'm guessing there is more in the works about this and it would be a very spectacular anchor for the park, but just wondered about the ability to make adjustments to any lighting.
- **Restroom design-solar?** My favorite concept for the restroom building is something simpler, like the board and batten frame buildings (I like most of the ones sketched), rather than the more elaborate mixed materials one with the stone facing at the foundation...and I definitely dislike the Tudor style for this setting. The frame designs all seem 'modern' and can be made more sustainable and can be less costly to construct. (I also DO love the half moon symbols on the doors!) Have you already looked at solar concepts? Since it will be mostly for day use, I would think solar energy could not only 1) help light it and heat the water for handwashing, but 2) could be an educational opportunity for how sustainable energy works. I have been to a number of state and national parks that use them and they are good for awareness and reinforce the idea that running water, electricity, etc. uses energy. Just a personal reaction, here.
- **Interpretive signage, new canopy trees, etc.** I vote for interpretive signage that uses QR codes, which allow flexibility for whatever the content is...environmental/native plants and animals, sustainability, and naturally, I think a little history would also be cool 😊. QR symbols can be changed out if needs change over time and are much less costly to install than permanent signs. As for canopy trees, the area is not very big, but what about a grouping of mixed native trees and underplantings with interpretive QR codes? Possibly the foundation of an arboretum?

These comments are just me, free associating, based on my personal and professional point of view. Hope they are of use in some way.

On Thu, May 9, 2024 at 10:57 AM Carrie Laird <Claird@bhamgov.org> wrote:

[Quoted text hidden]

[Quoted text hidden]

--

Leslie Pielack

*Director**Birmingham Museum*

248-530-1682



MEMORANDUM

Planning Division

DATE: May 15, 2024

TO: Carrie Laird, Parks & Recreation Manager
Scott Zielinski, Director of Public Services
Parks & Recreation Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: Booth Park Entry Plaza and Trail Improvements – Preliminary Park Design and Concepts Plan

I am pleased to have the opportunity to provide some feedback regarding the preliminary designs for the Booth Park Entry Plaza and Trail Improvement project dated May 7, 2024. As a general observation, the concept plans appear to be very well done. They are attractive, easy to understand, and provide me with a lot of confidence that the consultant team is really paying attention to all of the competing interests and agendas that all involve this property.

In February, I provided a detailed memorandum (attached) regarding the specific objectives of the Birmingham Plan 2040 as they relate to this project, which involved the park space as well as the Rouge River corridor. Fortunately, I believe that the concept plans address most, if not all of the recommendations related to the park space that I quoted from the 2040 Plan. The plans contain much more seating, café/vendor accommodations, restrooms, and the paved plaza that has been a goal of ours since the Downtown Birmingham 2016 Plan. At this time, I would only feel the need to encourage further the use of pervious paving materials, whether it is pavers or otherwise. In my opinion, this should absolutely be done in areas "1" and "4" which contain seating, but would be encouraged along what is now labeled as the 10' wide concrete path. Perhaps small accent portions could be introduced with pervious pavers.

In regards to the 2040 Plan's recommendations on the Rouge River corridor, which were numerous, much of this plan would aid in furthering objectives such as improving the ecosystem and providing better amenities. A lot of the recommendations related to the Rouge are admittedly a bit larger than this project alone, but every little bit helps.

Other than the 2040 Plan, I would like to provide other general feedback related to Planning and Sustainability:

- Every new or improved landscape bed as a part of this project, as well as future projects along this trail, should without exception be native plantings, and all new trees should be native species. In my opinion, this should be clearly stated in the "Note Key" in items such as 8, 15, 16, 23 and 24. This may already be the approach, but I believe that being explicit with our intentions will go a much longer way.
- The new bike racks, and any other new multi-modal infrastructure, should match the downtown standard that is currently in use.
- Wherever possible (and yes, it is possible), recycled or reclaimed materials should be used to build new items such as the restroom facility (if we take the custom route), lounge chairs, gateway columns, and even benches and picnic tables.
- The trail gateway signage and the acknowledgement to the recently approved Wayfinding and Signage Master Plan is well received. Any new sign design will need to go before the Wayfinding and Branding Committee, but my initial reaction is very positive.
- If it means anything coming from me, I think it would be a complete disservice to this beautiful park to install a bland, pre-fabricated restroom unit in such a prominent location. I find the custom designs to be much more interesting and appropriate in this setting. If the budget or other factors necessitate a pre-fabricated unit, I would reconsider the placement to a less visible area. I do see that there appears to be an attempt to hide or screen it with trees, which is very thoughtful, but I do not think it would be enough.
- There is currently a piece of public art located near the entrance that is not noted on this plan. I have been advised that the City has asked the artist to remove the piece, but it could be noted on this plan that the art is going away as to not confuse anyone. In addition, the Planning Department would be supportive of alternate displays of public art, the possible placement of such could be added to this plan to give direction to staff when considering future donations or loans.
- I do not see any lighting as a part of this plan, but if there becomes a need (even just small fixtures to illuminate signage), the fixtures should be solar powered. I would also encourage anything else that requires power to be solar powered, or at a minimum be constructed to be able to accommodate solar at a future date.

Thank you for considering my comments on behalf of the Planning Department, and please do not hesitate to reach out to me should any questions or requests for clarification arise.



MEMORANDUM

Planning Division

DATE: February 26, 2024

TO: Carrie Laird, Parks & Recreation Manager
Scott Zielinski, Director of Public Services
Parks & Recreation Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: Booth Park Entry Plaza and Trail Improvements & The Birmingham Plan 2040

To aid in the development of the Booth Park Entry Plaza and Trail Improvements, the Planning Division would like to provide a brief overview of the recommendations within the Birmingham Plan 2040 ("2040 Plan") that relate to the project both directly and indirectly and could affect the overall project. The Planning Division would expect that any consultant selected for the project will refer to and consider the 2040 Plan and the recommendations within.

Booth Park is heavily discussed in the 2040 Plan in Chapter 3 – Retain Neighborhood Quality and Chapter 4 – Support Mixed-Use Districts. These discussions result in several recommendations (some of which are redundant):

- Building a cafe or vendor accommodations in Booth Park as recommended in the 2016 Downtown Plan.
- Increase the amount of seating in Shain, Booth, and the City's pocket parks with benches.
- Expand café-style seating in Shain and Booth Parks and on all widened sidewalks.
- Update the Parks and Recreation Plan, including amenities and a cafe to Booth Park.
- Install ample benches in Booth Park.
- Install a small café and public restrooms in Booth Park or services for mobile vendors, along with movable tables and chairs.
- Create a paved plaza, ideally pervious, at the entrance to Booth Park with signage and seating.

In addition to Booth Park, the 2040 Plan focuses a lot of its attention on the Rouge River Corridor in which the trail system exists, particularly in Chapter 5 – Advance Sustainability Practices. The following recommendations relating to the Rouge River Corridor could also have a big impact on the project:

- Integrate the Birmingham Museum into the Rouge River trail and park system, including more connections and signage Downtown.
- Create a Sustainability and Climate Action Plan to include support for Rouge River Natural Area improvements.
- Develop and implement a trails and access master plan to improve the Rouge River trails and trail heads. The plan should consider:
 - Installing pedestrian linkages to the park's surrounding neighborhoods and commercial districts, including to Quarton Road.
 - Securing easements of additional key properties to expand the park area and improve its walkability, for complete ecological restoration, and universal accessibility.
 - Installing an environmentally sensitive, hard-surfaced pathway for pedestrians and cyclists along the Rouge River.
 - Expanding the extent of the trail system, crossing the river at more locations to access large portions of the natural area currently cut off.
 - Installing bridges, ramps, and other enhancements to enable access by all ages and abilities.
 - Installing other amenities such as bicycle racks, lighting, markers, seating, and signage at trail heads, and seating, markers, and interpretive features throughout the trail system.
- Develop and implement a restoration master plan to restore the Rouge River ecosystem to its natural and sustainable conditions. The plan should consider:
 - Retaining environmental scientists to inventory and analyze the Rouge corridor's wildlife, ecology, natural systems, and pollution sources.
 - Establishing a phased enhancement time frame to stabilize riverbanks, remove invasive species, reintroduce native ground covers, wildflowers, under-story, and canopy tree species.
 - Identifying and mitigating potential pollution or chemical sources, including the existing Springdale snow storage dumping area.
- Work with area organizations and agencies to oversee, build support, and raise funding for the park's enhancements. Consider securing corporate or philanthropic funding in exchange for special recognition.
- Work with other area and regional organizations and communities to improve the quality of the Rouge River watershed.

In closing, the Planning Division would like to emphasize that these are recommendations, not demands, and that many of these issues would likely require further study before implementation could be considered. However, as major projects such as the Booth Park Entry Plaza and Trail Improvements come up, it is essential that we have the discussions and ensure that the health of the Rouge River Corridor will be protected and improved upon.

The Planning Division will remain open to conversation throughout the entire process and will endeavor to be a partner to the Department of Public Services and Parks and Recreation Board to ensure that the City provides users of the trails, and the ecosystem itself, a project that we can all be proud of.

Note Key

1. Entry plaza with special paving, seatwalls, movable furniture with umbrellas and art display
2. Restrooms
3. Bike racks and stroller parking
4. Open plaza with special paving, space for activities, coffee cart, food trucks and movable bistro seating to allow for vehicle access
5. Park signage
6. New driveway cut for vehicular access
7. Boardwalk with interpretive signage
8. Rain garden / bioswale (to capture runoff, includes educational signage and demonstration areas)
9. Entry to the existing playground
10. Benches
11. Lounge chairs on the existing lawn ridges
12. Temporary stage / movie screen location
13. Selectively clear vegetation and remove fencing to open view to river
14. Donor benches with customized walk and butterfly garden
15. Trail gateway customized column with signage and planting surround
16. Pollinator garden
17. 10' wide concrete walk
18. 8' wide trail with composed of limestone screenings
19. Hammocks
20. Picnic tables
21. Outdoor gym
22. Swings
23. Landscape beds
24. New canopy trees
25. Existing trees



Booth Park
Birmingham, Michigan

Preliminary Design
Landscape Plan
05.07.2024

**GRISSIM
METZ
ANDRIESE**
ASSOCIATES



PETERHANS, REA + ROMAN • LLC

Booth Park Entry Plaza & Trail Improvements

SURVEY RESPONSE REPORT

04 May 2024 - 02 June 2024

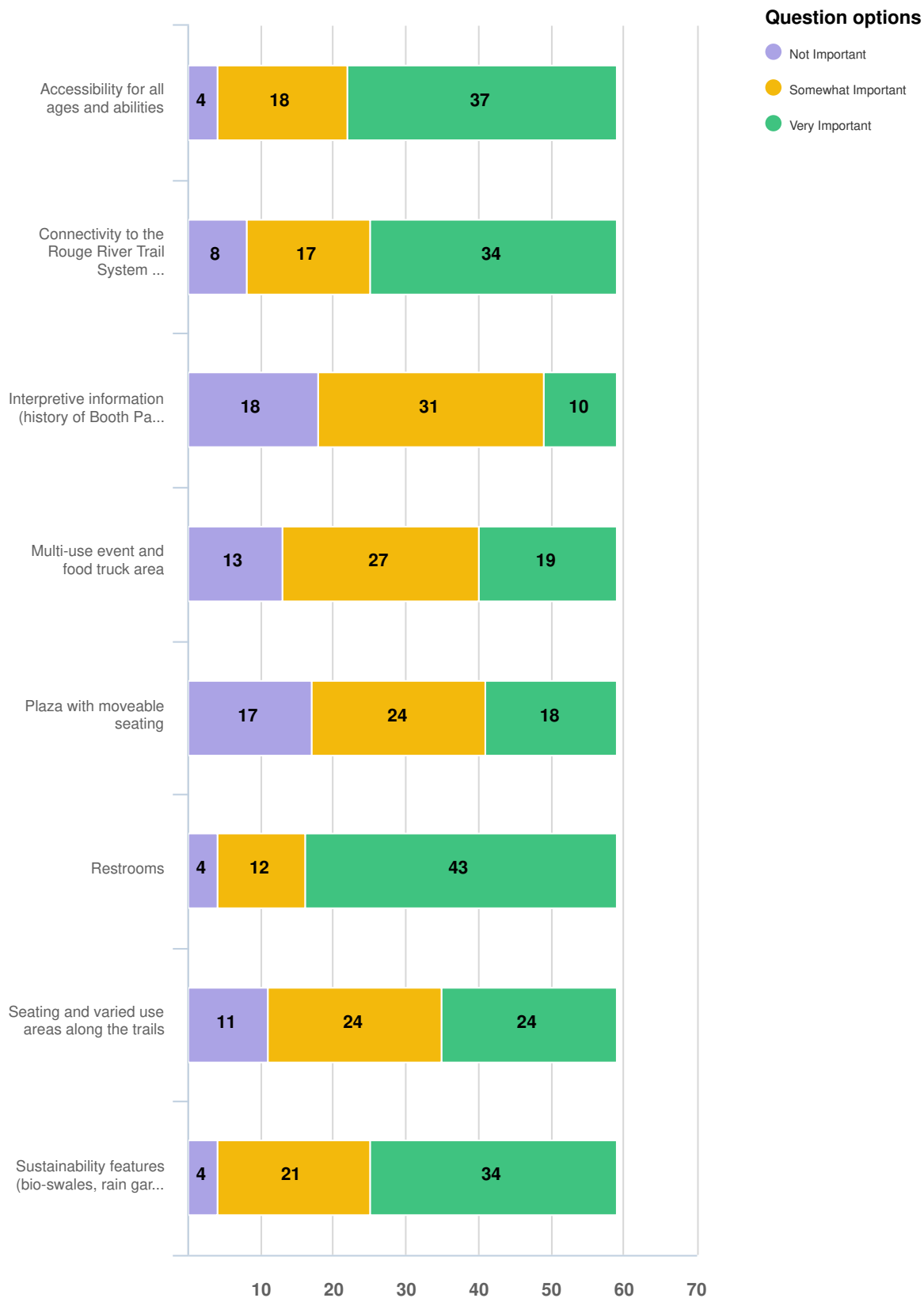
PROJECT NAME:

Booth Park Entry Plaza & Trail Improvements



SURVEY QUESTIONS

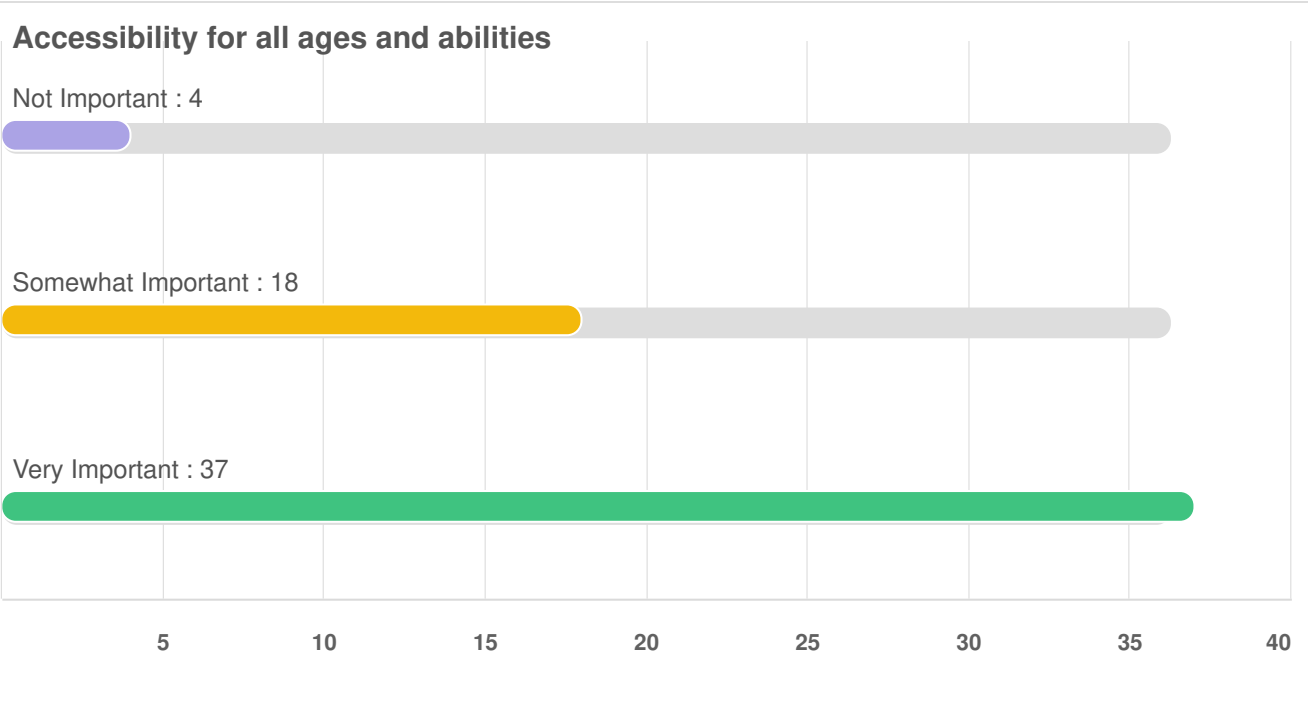
Q1 The Park Plan has incorporated the following features. Please let us know how important they are to you.



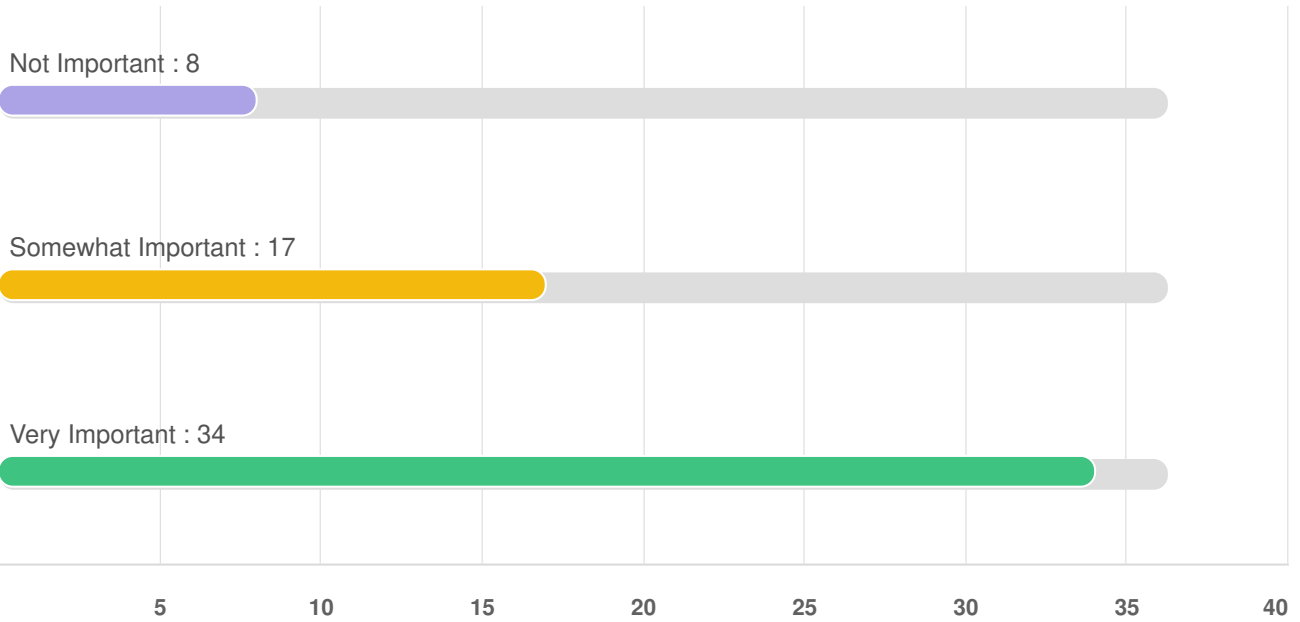
Mandatory Question (59 response(s))

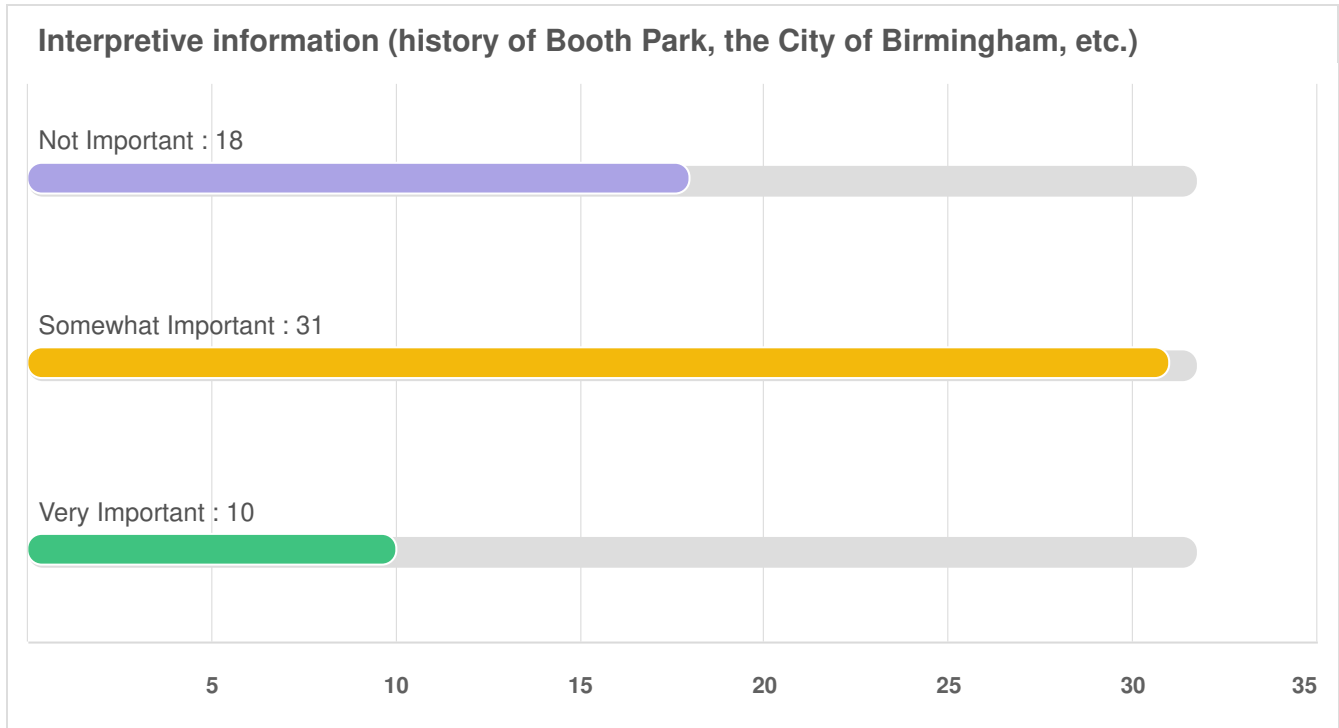
Question type: Likert Question

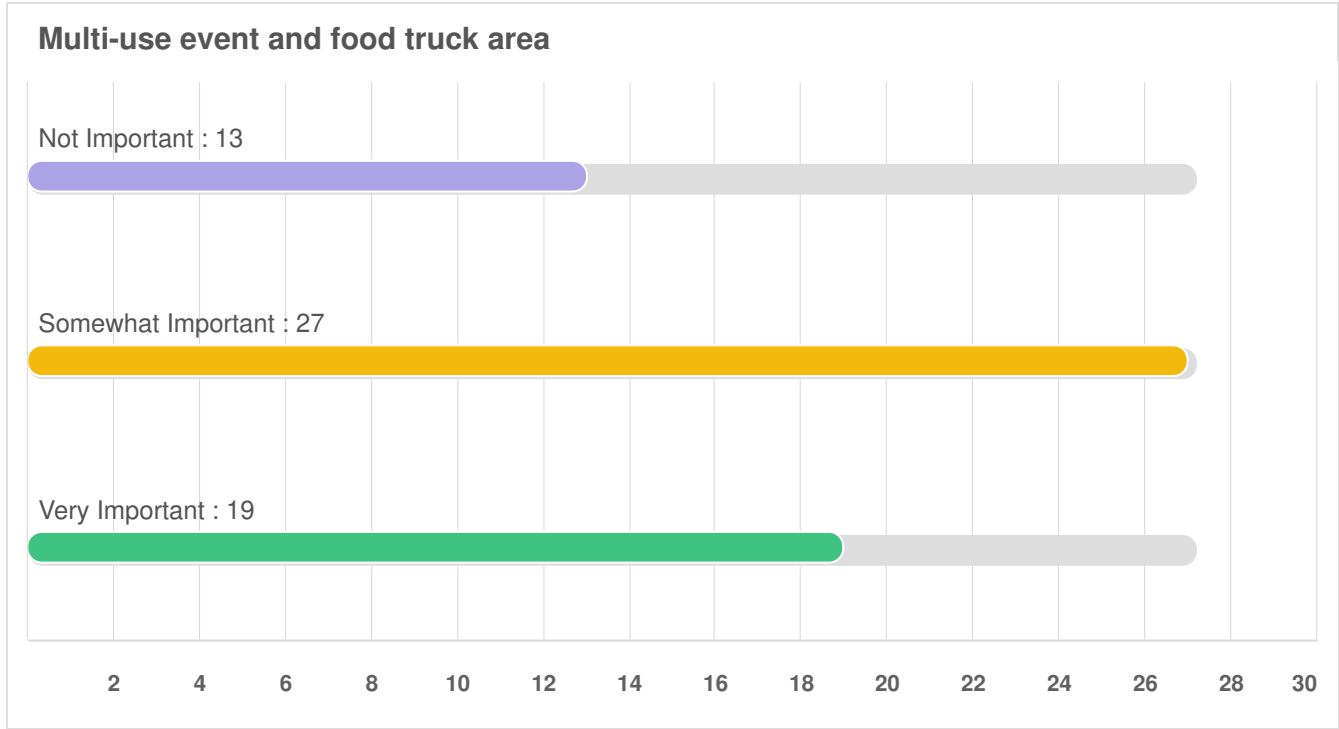
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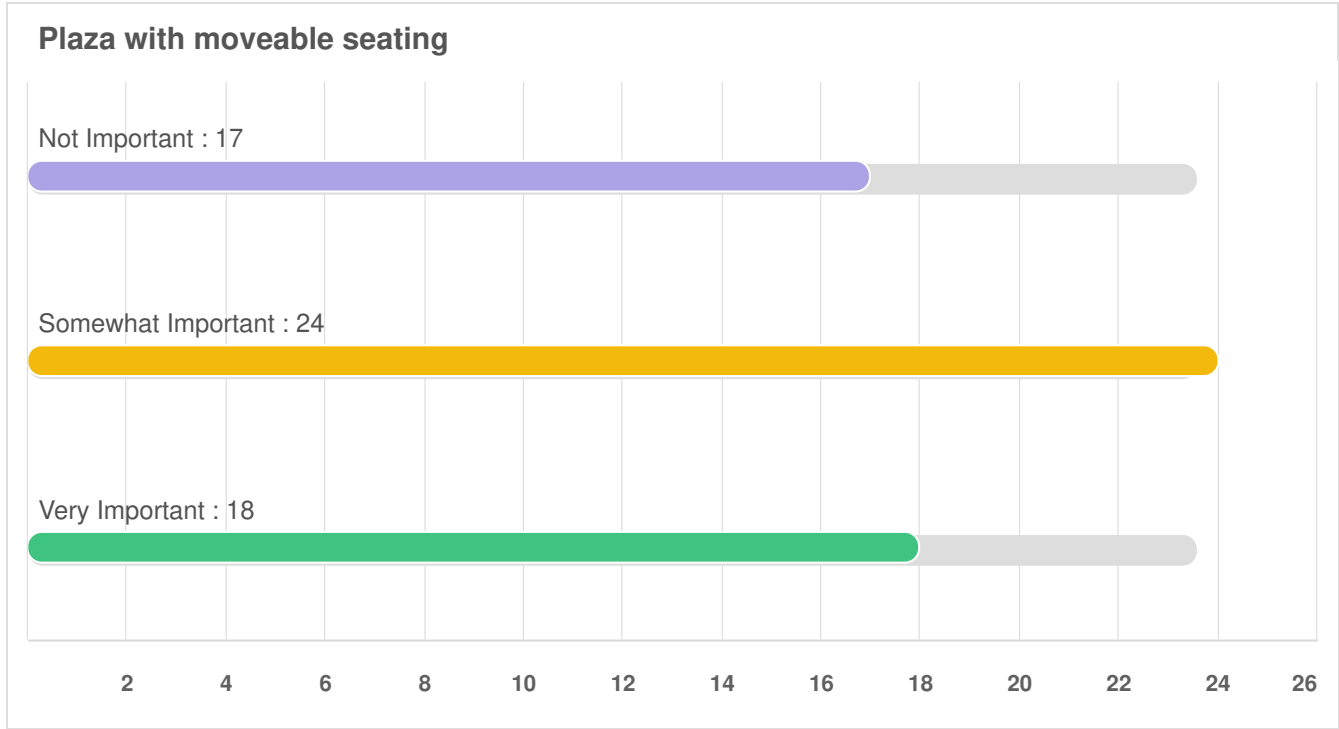


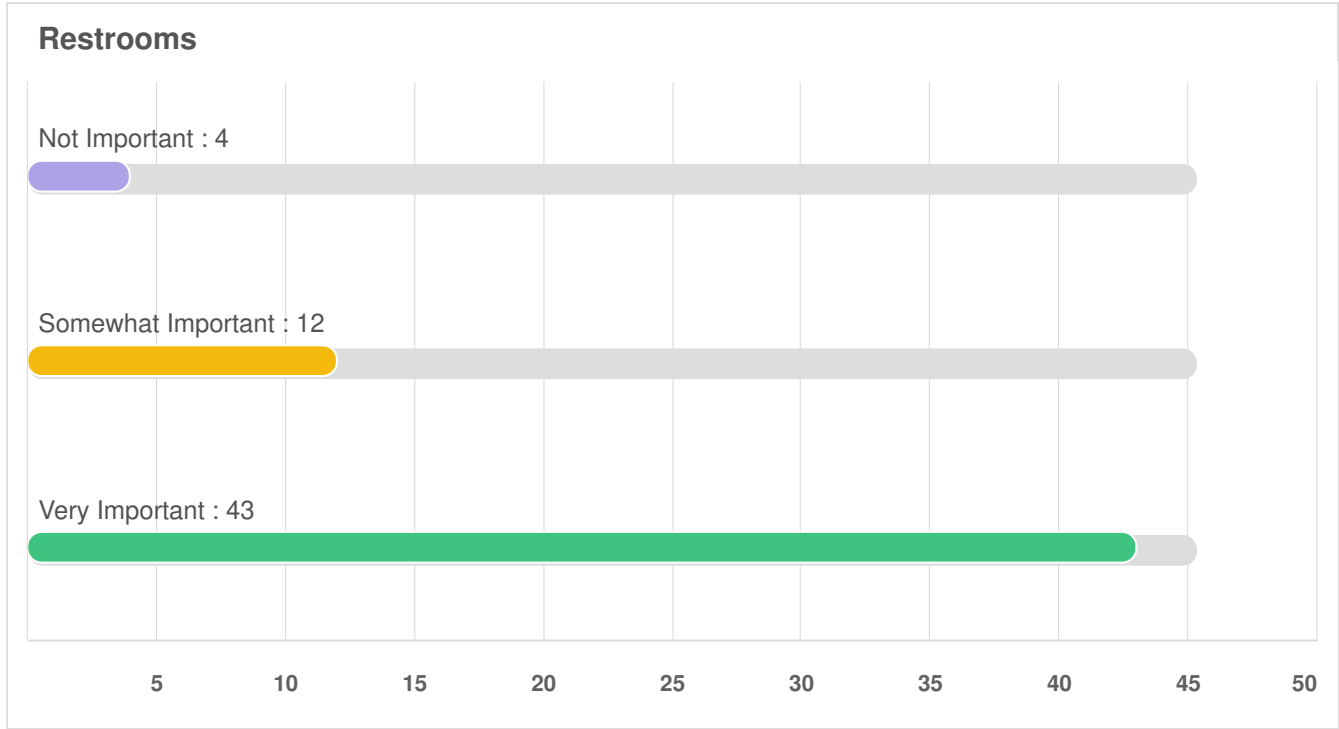
Connectivity to the Rouge River Trail System and to the community with Wayfinding (signs, maps, confidence markers)

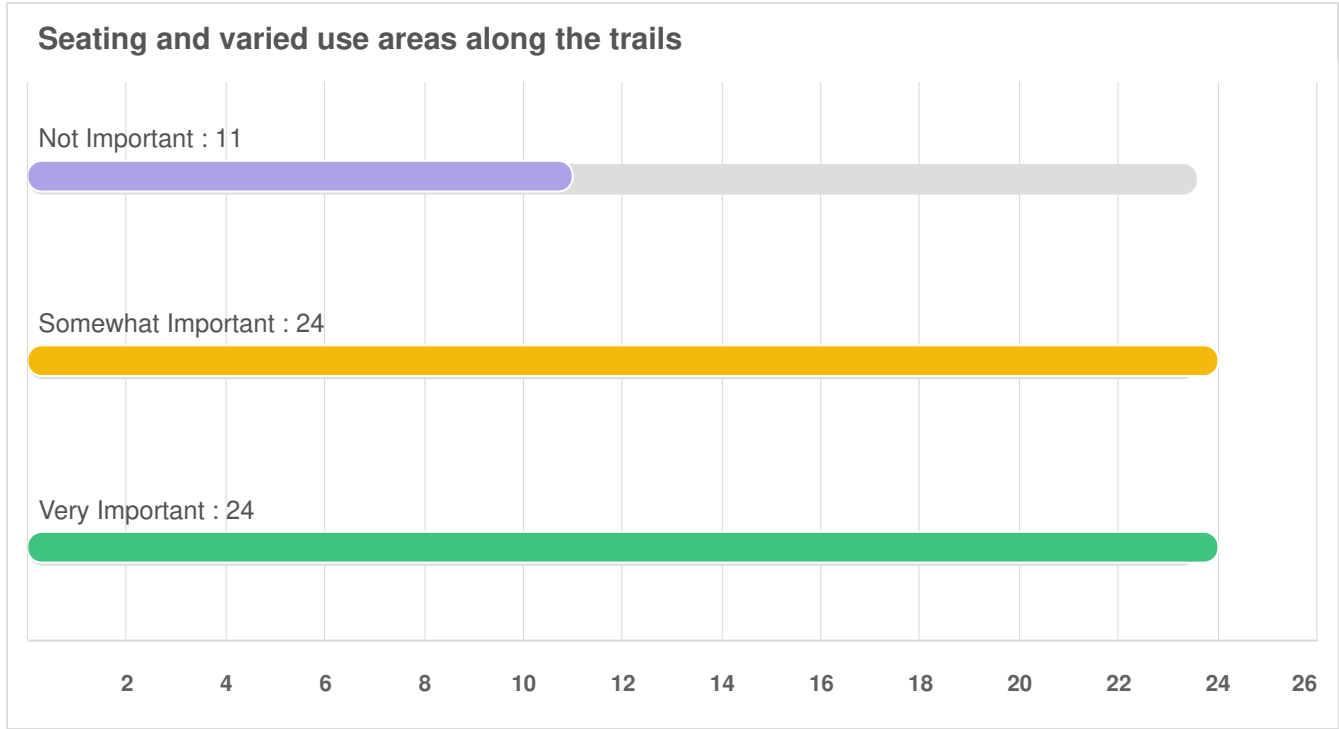












Sustainability features (bio-swales, rain gardens, permeable pavements, native vegetation, riverbank stabilization)

Not Important : 4



Somewhat Important : 21



Very Important : 34



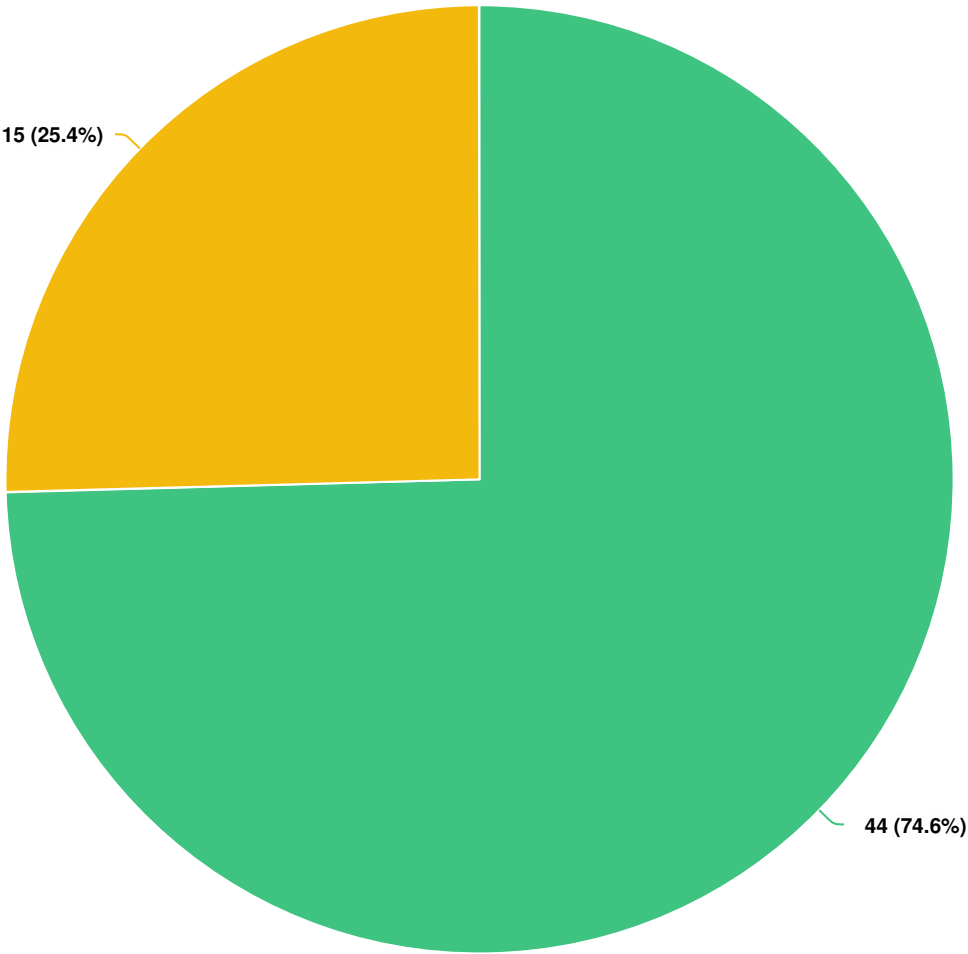
5 10 15 20 25 30 35 40

Q2 | Please rank the features of the Park Plan in order of importance to you. 1=Most Important, 8=Least Important

OPTIONS	AVG. RANK
Restrooms	2.97
Accessibility for all ages and abilities	3.59
Connectivity to the Rouge River Trail System and the community with Wayfinding (signs, maps, confidence markers)	3.83
Sustainability features (bio-swales, rain gardens, permeable pavements, native vegetation, riverbank stabilization)	4.32
Seating and varied use area along the trails	4.78
Multi-use event and food truck area	5.10
Plaza with movable seating	5.12
Interpretive information (history of Booth Park, the City of Birmingham, etc)	6.29

Mandatory Question (59 response(s))
Question type: Ranking Question

Q3 Is there another item of importance to you not described above?

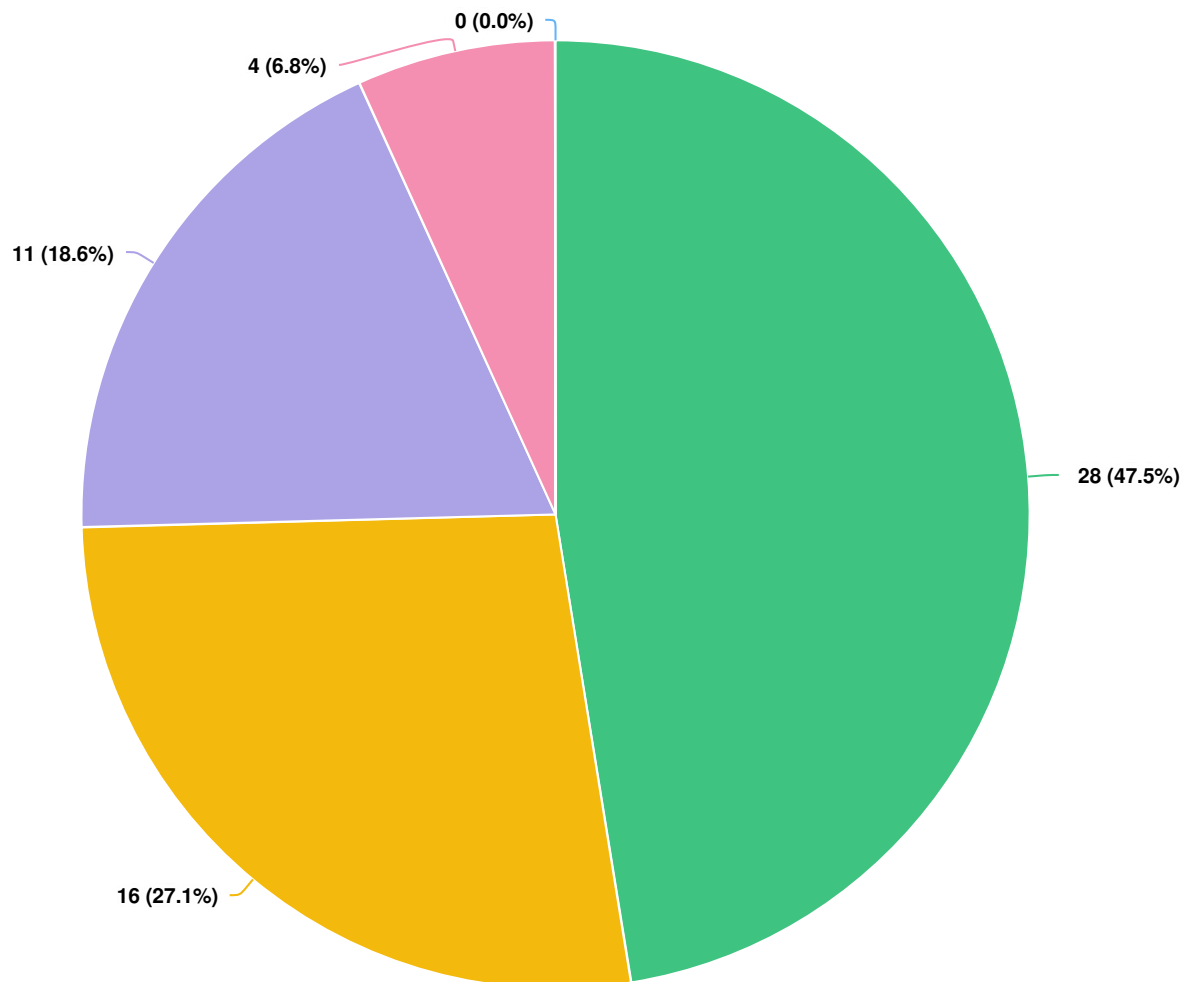


Question options

● Yes- Please describe ● No

Mandatory Question (59 response(s))
Question type: Radio Button Question

Q4 Should lighting be used in the new plaza and restrooms?



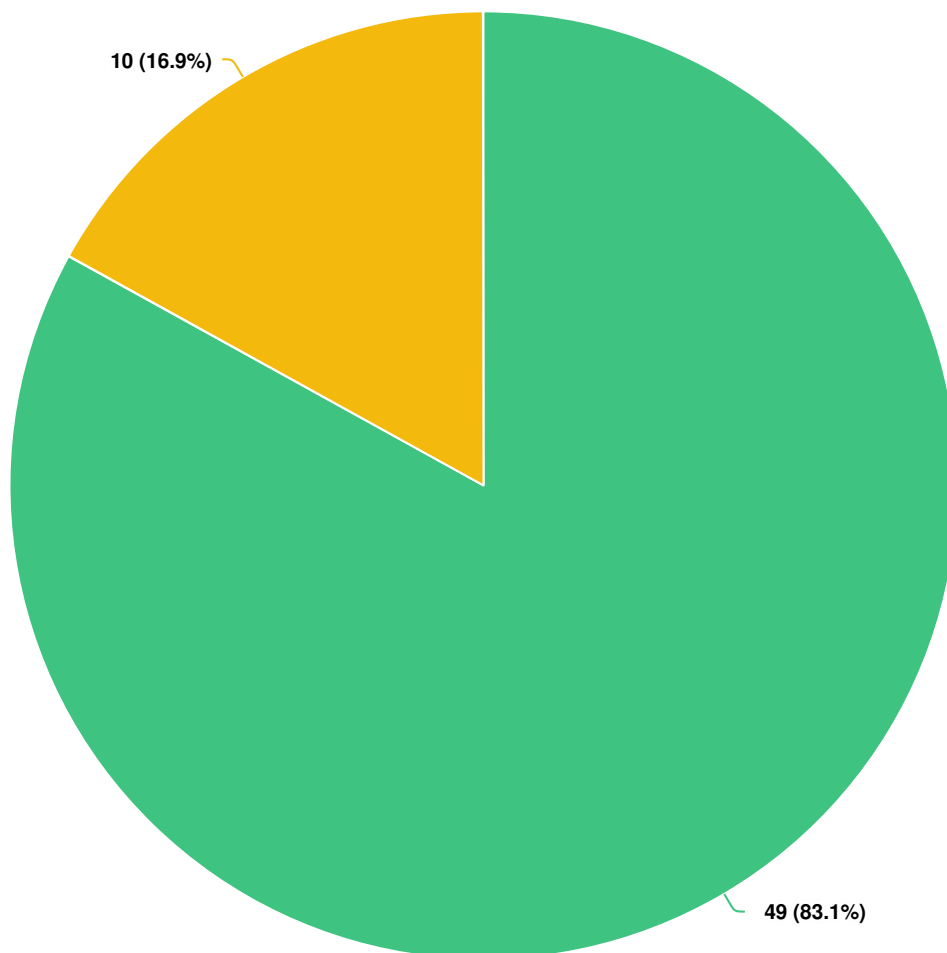
Question options

- Yes, sparingly for plaza only
- I do not think lighting should be used at all
- I would like lighting to extend further into the park in addition to the plaza and restrooms
- Yes, sparingly for restrooms only
- Yes, sparingly for both plaza and restrooms

Mandatory Question (59 response(s))

Question type: Radio Button Question

Q5 | The preliminary design includes ecologically sustainable features, such as permeable pavements, rainwater infiltration, native and wildlife friendly plantings. Are there additional features you would like employed?



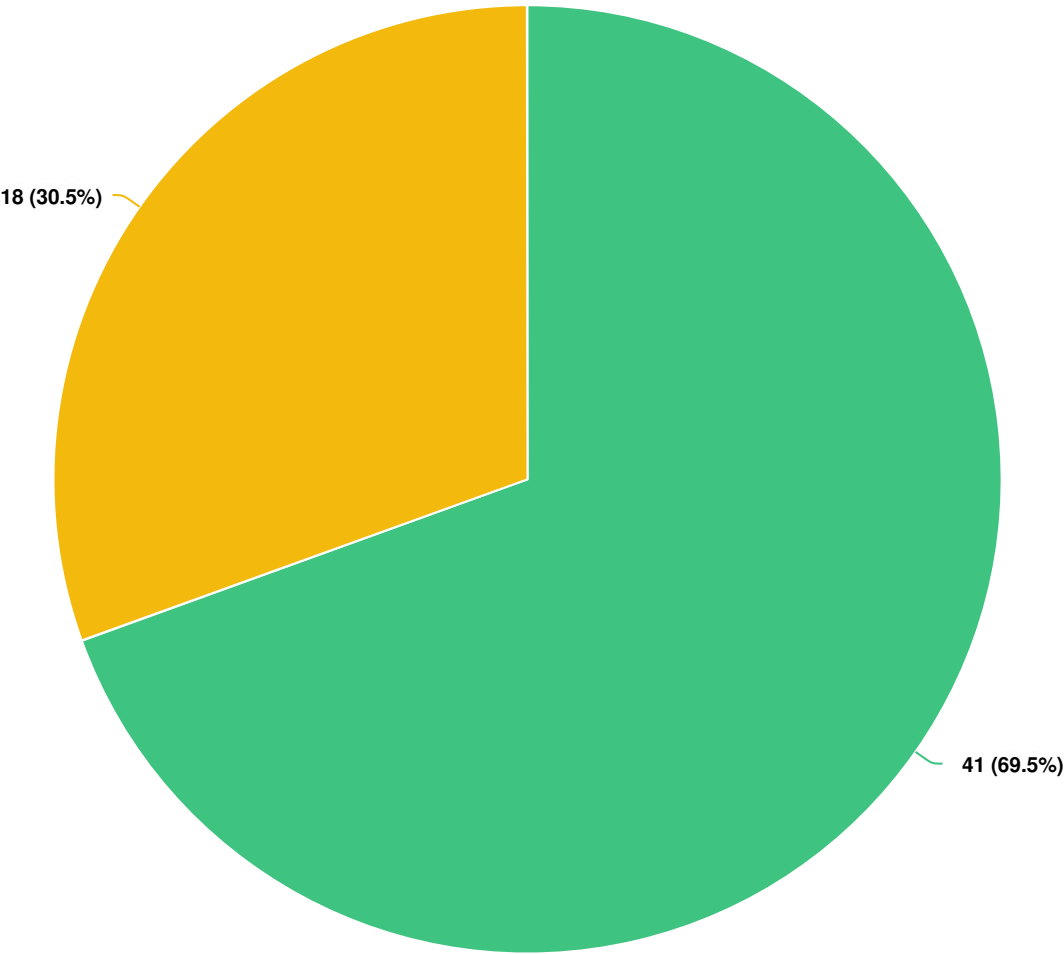
Question options

● Yes- Please describe ● No

Mandatory Question (59 response(s))

Question type: Radio Button Question

Q6 Are there additional amenities you would like added to the park?

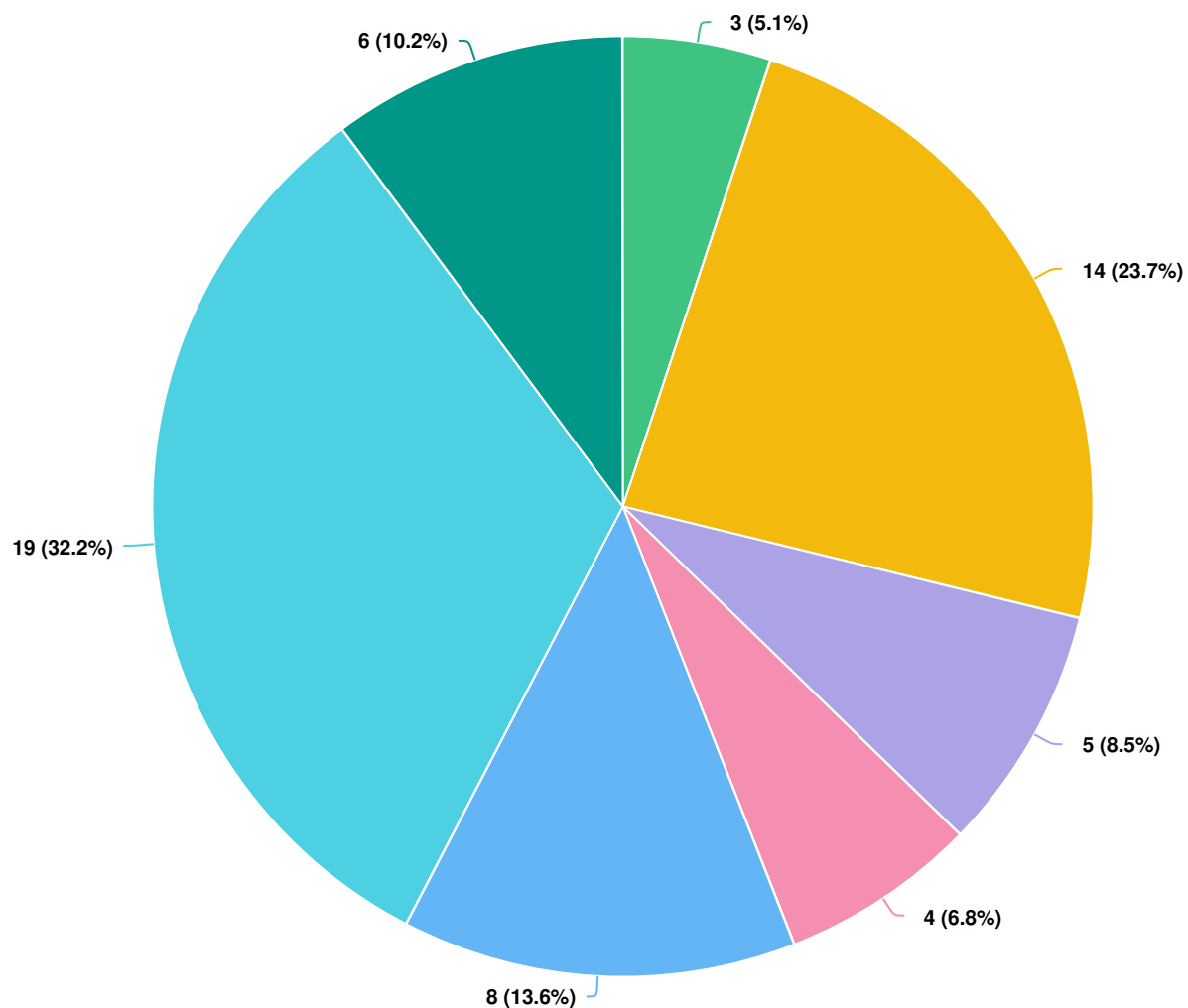


Question options

- Yes- Please describe
- No

Mandatory Question (59 response(s))
Question type: Radio Button Question

Q7 | The pathway improvements to Booth Park must be ADA Accessible. Do you have a preferred surface material for the pathways?

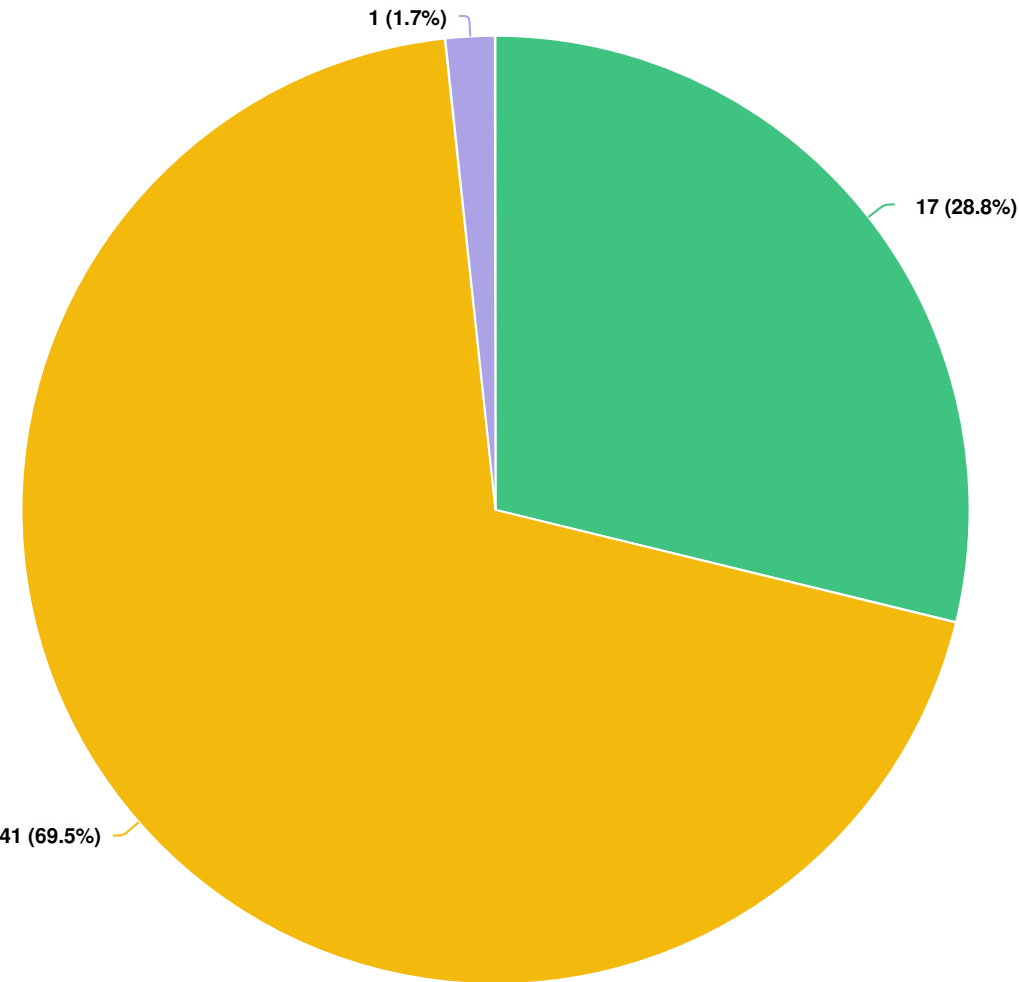


Question options

- ☐ I prefer another option (please specify)
- ☐ No preference
- ☐ I prefer engineered woodchips-the same as the chips for the existing playground at Booth
- ☐ I prefer paver pathways
- ☐ I prefer asphalt pathways
- ☐ I prefer crushed limestone/stone pathways
- ☐ I prefer concrete pathways

Mandatory Question (59 response(s))
Question type: Radio Button Question

Q8 | Please tell us how you use the trail at Booth Park:

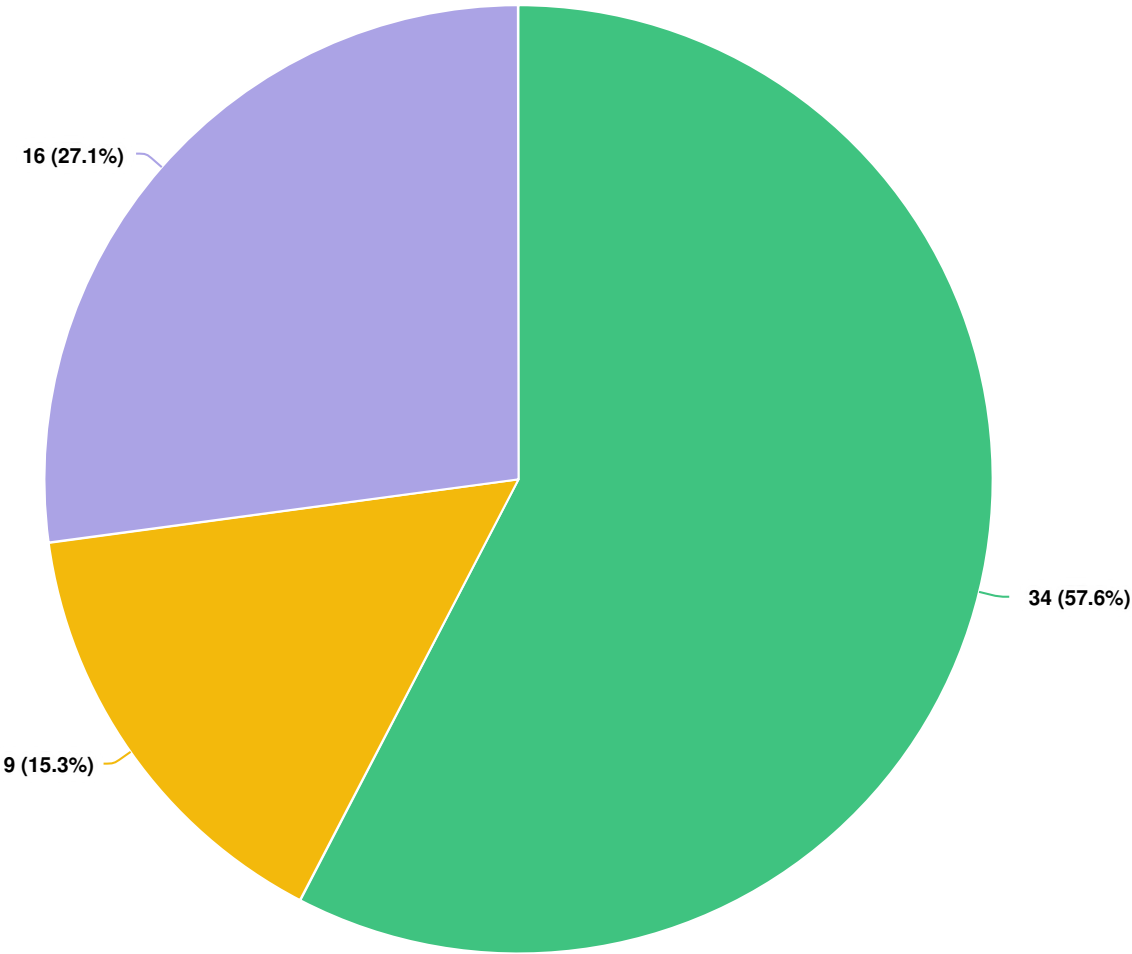


Question options

- ☐ I don't use the trail
- ☐ I use the unmaintained (dirt) paths down to the river that branch off the maintained trail
- ☐ I only use the maintained trail within Booth Park

Mandatory Question (59 response(s))
Question type: Radio Button Question

Q9 Would you like a maintained trail down to the river in the park?



Question options

No preference No Yes

Mandatory Question (59 response(s))
Question type: Radio Button Question

Q10 | Is there anything else you would like us to know about the Park Plan?

mm123

5/14/2024 06:28 PM

The lighting could be on a timer so it is not on all night long to disturb the wildlife/nature and the people who live nearby.

Kim Cramer

5/15/2024 06:19 AM

We love the bathroom addition!! Our kids always complain about the porta potty and will only use it in a true emergency.

archer

5/17/2024 06:26 AM

Connecting all the trails in Birminham is very important. Working on the entrance at booth is just the beginning.

urbandezine

5/17/2024 09:20 AM

The design of the Restroom building should be substantial and architecturally reflect the style of Birmingham buildings

cecollins

5/20/2024 02:50 PM

N/A

christinazivan

5/20/2024 04:28 PM

The drinking fountains don't work & the stairs have been broken and closed off for quite some time.

Madison St

5/20/2024 06:16 PM

I use both the maintained and dirt trails with my dog. We both really enjoy using the trails throughout Birmingham.

lafon1am

5/20/2024 07:03 PM

I'm excited to see it come to fruition for all to enjoy!

sdobelhall

5/20/2024 07:47 PM

Exciting project!

Jdcramer

5/21/2024 05:26 AM

Add more splash pad features

Mkdelo03

5/21/2024 05:48 AM

The appeal of this park / trail is that it is a quiet, well-kept secret that belongs to the surrounding neighborhoods. The addition of plazas, restrooms and food trucks will make the crowds unbearable and totally ruin this hidden gem.

calibanga

5/21/2024 05:58 AM

no

dougcharron

5/21/2024 06:30 AM

It's a great park. Would love a more manicured walking path in the forest. Love the bathroom designs. Overall, great work!

D Lakeview

5/21/2024 07:24 AM

Too much money being spent on this park. In addition, how will restrooms be maintained? That's constant overhead. Use the money to improve the lives of TAXPAYERS.

nadiackeating

5/21/2024 07:28 AM

n/a

KatyD

5/21/2024 12:17 PM

I think Booth Park is a treasure in downtown and we use it fairly often as city residents. We loved taking our boys to "cardboard sled" on the hill, and they loved the musical instruments on the playground. I would like to see access to the river trails.

grannyh

5/22/2024 07:57 AM

no

LM_0928

5/22/2024 05:26 PM

Excited to see updates in this space!

Bookerwyle

5/23/2024 01:53 PM

I think the plan is really nice, especially the added restrooms. But parking and shaded areas should be a priority as well.

Paul Millenbach

5/25/2024 04:08 AM

Yes, it's stupid. It's a park. Leave it alone. It's green space. Spend taxpayer dollars on repairing the decrepit roads.

rexboyce

5/27/2024 05:22 AM

Just some more trash cans throughout the paths.

maro

5/30/2024 08:21 AM

I hope you keep the charm of the current path. it is already a very large path and the vegetation is not sizable. making the path any large/adding use areas could easily cut into the remaining vegetation.

Gabriellerakitin

5/31/2024 11:53 AM

Restrooms are a must for such a known park. Food trucks would be great in the evenings. More events like the movie nights. Gym/workout equipment for parents while kids play!!

Ilyarakitin

5/31/2024 01:06 PM

Restrooms and an exercise area would be of highest importance to me but everything else sounds great and I'm excited for the much needed improvements overall.

julie_e_c

6/01/2024 05:26 AM

I use both types of trails while walking my dog. I feel so fortunate that the trails are within walking distance of my house and just hope that any changes can include more folks with disabilities but still find a way to maintain the wildlife

JoJoJem

6/02/2024 01:56 PM

you're turning booth into city center rather than keeping it neighborhood. unlike Shane, booth trails go thru backyards. -noise & safety must be considered w/ assoc cost. eliminate hammocks and bathrooms from the plan, acct for inc ppl staying longer.

Optional question (26 response(s), 33 skipped)

Question type: Single Line Question



MEMORANDUM

Planning Division

DATE: June 26, 2024

TO: Planning Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: 33866 Woodward – Polestar/LaFontaine Auto Group – Request for Site Plan Extension and Minor Design Changes to Approved Plans.

On July 12, 2023 ([Agenda](#) – [Minutes](#)), the Planning Board moved to approve a Final Site Plan and Design Review application for a new auto sales agency and its associated site/building renovations with several conditions, all of which have since been satisfied by the applicant.

Prior to site plan approval, the applicant received approval to utilize 3 on-street parking spaces towards the off-street parking requirements for the new tenant at the City Commission on June 26, 2023 ([Agenda](#) – [Minutes](#)).

Article 7, Section 7.28 of the Zoning Ordinance states that “Site Plan approval shall be valid for a period of one year from the date it is granted. Upon request, the appropriate reviewing body may grant an extension of not in excess of one year to the applicant prior to the expiration date. Any application for extension of Site Plan approval must be filed on or before the expiration of the original Site Plan approval. An extension may be granted upon compliance with all applicable zoning requirements that are in effect at the time of filing of the application for the extension.”

At this time, the site plan approval for this development is set to expire in July 2024. Thus, the applicant has approached the Planning Department to request an extension. However, the applicant has also advised the City of two changes that have occurred over the course of the past year. Firstly, the LaFontaine Auto Group has adjusted the concept of their new auto sales agency from Polestar to “The Vault”, which is a high end used car sales concept. Auto sales agency is a permitted commercial use with no special permits or approvals required. With this adjustment to tenancy, the applicant is proposing a color change for the façade from white to black, added a few select new materials, and has added significant glazing to the north and west elevations. In addition, there are two new signs proposed on the west façade.

At this time, the site plans as revised (attached to this report) meet the requirements of the Zoning Ordinance and will not require any special considerations or approvals. No square footage is being added, and the interior layout is similar to that of the previous approved plans. **Thus,**

the Planning Department is requesting consideration for Administrative Approval of these changes alongside the site plan extension request.

Sample Motion Language

Motion to approve the final site plan and design review extension request for 33866 Woodward – The Vault – and extend the site plan for ____ months with the following conditions:

1. The applicant must obtain Administrative Approval for the façade changes and new signage; and
2. The applicant must comply with the requests of all City Departments.

City of Birmingham,
Oakland County, Michigan
CONSTRUCTION DOCUMENTS
Prepared For
LaFontaine Automotive Group

Owner

LAFONTAINE AUTOMOTIVE GROUP
4000 WEST HIGHLAND ROAD
HIGHLAND, MICHIGAN 48357
CONTACT: MR. GARY LAUNDROCHE
PHONE: (248) 714-1502
EMAIL: GLAUNDROCHE@LAFONTAINEMOTORS.COM

Architect

STUDIO DETROIT ARCHITECTS
2040 PARK AVENUE, SUITE 200
DETROIT, MICHIGAN 48226
CONTACT: ANDREW ASHBY
PHONE: (310) 622-3065
EMAIL: ANDREW@STUDIO-DETROIT.COM

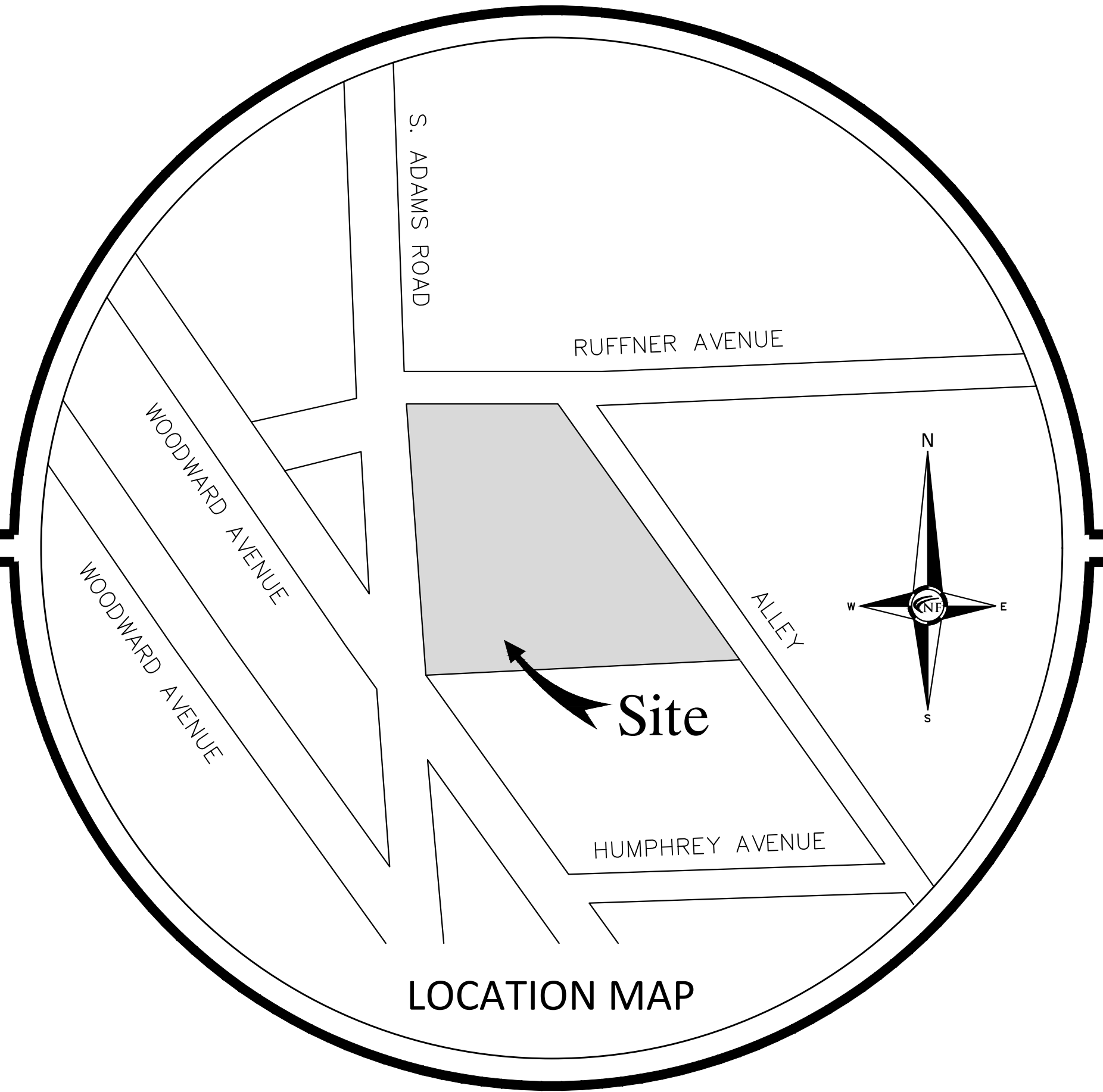
Landscape Architect

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVENUE
PONTIAC, MICHIGAN 48342
CONTACT:
MR. GEORGE A. OSTROWSKI, PLA, LEED AP
PHONE: (248) 332-7931
EMAIL: GOSTROWSI@NFE-ENGR.COM

Civil Engineer

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVENUE
PONTIAC, MICHIGAN 48342
CONTACT: MR. JASON R. LONGHURST, P.E.
PHONE: (248) 332-7931
EMAIL: JLONGHURST@NFE-ENGR.COM

PART OF THE NE 1/4 OF SECTION 31,
TOWN 2 NORTH, RANGE 11 EAST



SHEET INDEX

C0 Cover Sheet
C1 Topographic, Boundary, and Tree Survey
C2 Demolition Plan
C3 Engineering Plan
C4 Notes and Details Plan

L1 Tree Preservation Plan
L2 Landscape Plan

1 of 1 Photometric Plan

A1.1 Partial Floor Plan - New Work
A2.1 Exterior Elevations
A2.2 Exterior Elevations

LEGAL DESCRIPTION

LAND SITUATED IN THE CITY OF BIRMINGHAM, COUNTY OF OAKLAND, STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:

PARCEL 1
LOTS 429 AND 430 AND OUTLOT B, LEINBACH-HUMPHREY'S WOODWARD AVENUE SUB, ACCORDING TO THE RECORDED PLAT THEREOF, AS RECORDED IN LIBER 27 OF PLATS, PAGE 5, OAKLAND COUNTY RECORDS.

TAX IDENTIFICATION NUMBER: 08-20-31-302-001 (PARCEL 1)

PARCEL 2
LOT 377 EXCEPT THE EAST 36.17 FEET, LEINBACH-HUMPHREY'S WOODWARD AVENUE SUB, ACCORDING TO THE RECORDED PLAT THEREOF, AS RECORDED IN LIBER 27 OF PLATS, PAGE 5, OAKLAND COUNTY RECORDS.

TAX IDENTIFICATION NUMBER: 08-20-31-302-005 (PARCEL 2)

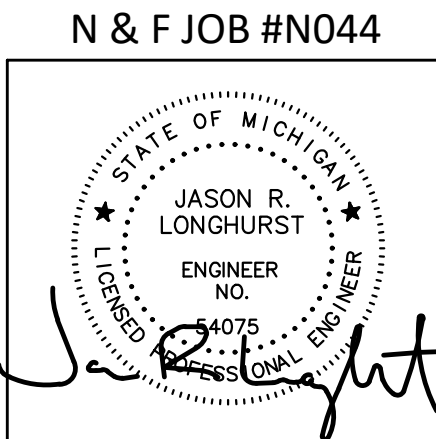
PARCEL 3
THE EAST 36.17 FEET OF LOT 377, LEINBACH-HUMPHREY'S WOODWARD AVENUE SUB, ACCORDING TO THE RECORDED PLAT THEREOF, AS RECORDED IN LIBER 27 OF PLATS, PAGE 5, OAKLAND COUNTY RECORDS.

TAX IDENTIFICATION NUMBER: 08-20-31-302-006 (PARCEL 3)

Project Name

The Vault, Birmingham
33866 Woodward Avenue

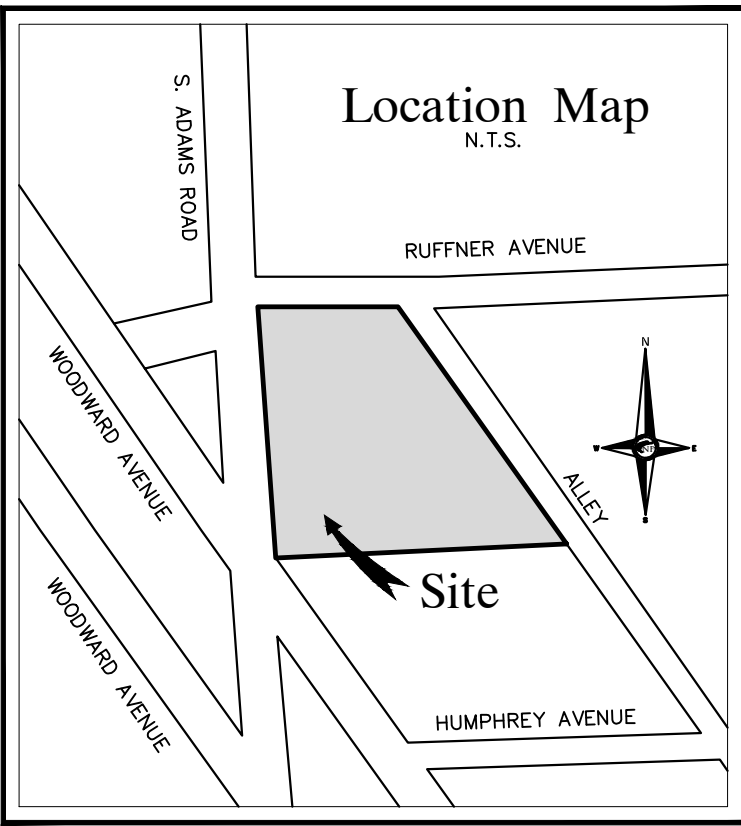
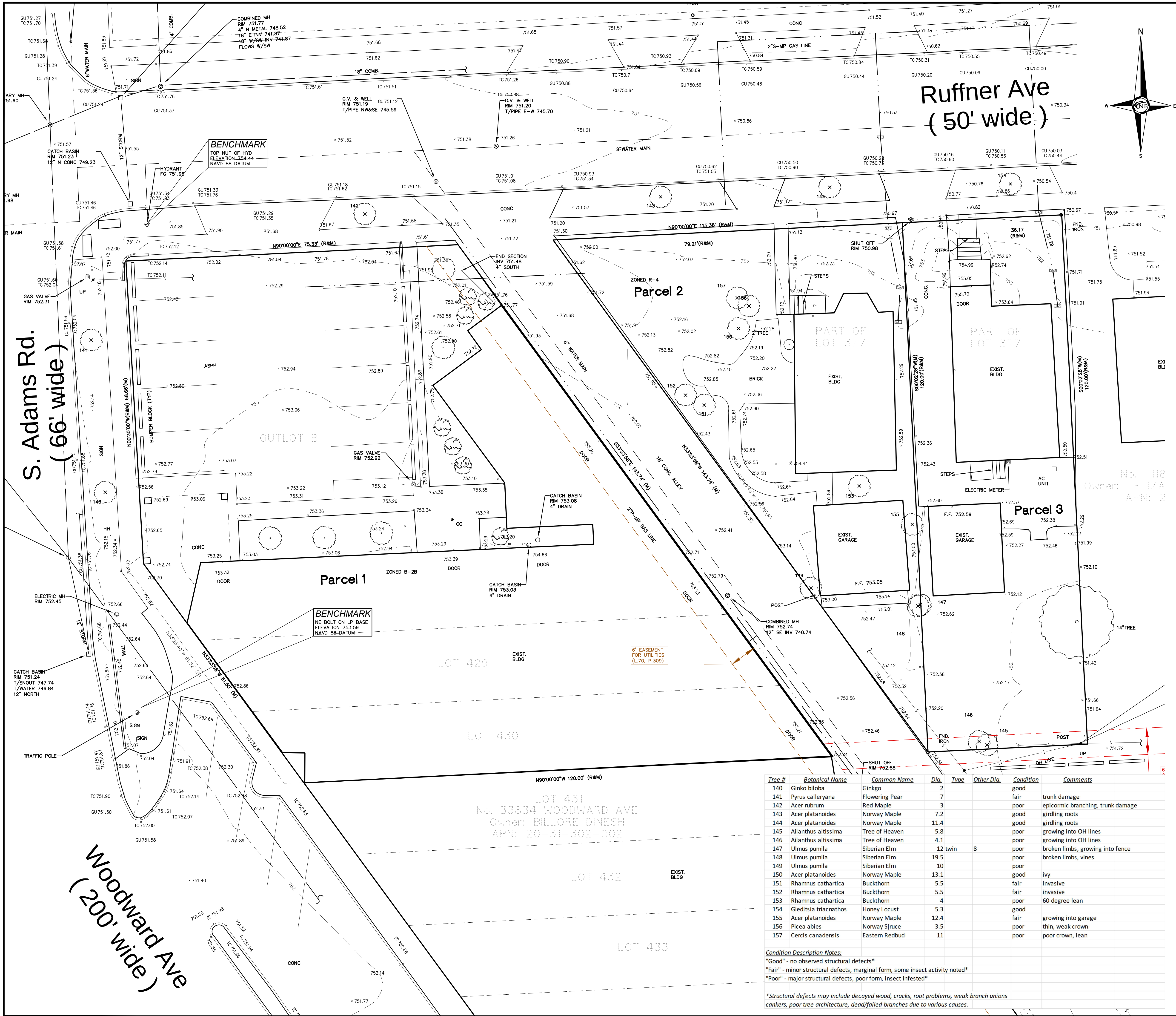
REVISIONS:
2023-05-01 ISSUED FOR OWNER REVIEW
2023-06-12 REVISED PER OWNER
2023-06-19 REVISED PER CITY
2023-11-29 REVISED PER OWNER
2024-05-23 REVISED PER OWNER
2024-05-28 REVISED PER OWNER



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.NFE-ENGR.COM



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LEGAL DESCRIPTION

LAND SITUATED IN THE CITY OF BIRMINGHAM, COUNTY OF OAKLAND, STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:

PARCEL 1
LOTS 429 AND 430 AND OUTLOT B, LEMBAUGH-HUMPHREY'S WOODWARD AVENUE SUB, ACCORDING TO THE RECORDED PLAT THEREOF, AS RECORDED IN LIBER 27 OF PLATS, PAGE 5, OAKLAND COUNTY RECORDS.

TAX IDENTIFICATION NUMBER: 08-20-31-302-001 (PARCEL 1)

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LOT 377 EXCEPT THE EAST 36.17 FEET, LEMBAUGH-HUMPHREY'S WOODWARD AVENUE SUB, ACCORDING TO THE RECORDED PLAT THEREOF, AS RECORDED IN LIBER 27 OF PLATS, PAGE 5, OAKLAND COUNTY RECORDS.

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TAX IDENTIFICATION NUMBER: 08-20-31-302-006 (PARCEL 3)

BASIS OF BEARING NOTE

THE BASIS OF BEARING FOR THIS SURVEY WAS ESTABLISHED BY THE RECORDED PLAT.

FLOOD HAZARD NOTE

THE PROPERTY DESCRIBED ON THIS SURVEY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. THE PROPERTY LIES WITHIN ZONE X OF THE CURRENT AVAILABLE FLOOD INSURANCE RATE MAP IDENTIFIED AS MAP NO. 26125C0537F BEARING AN EFFECTIVE DATE OF 09/29/2006.

UTILITY NOTE

ALL UTILITIES ARE UNDERGROUND UNLESS OTHERWISE NOTED. THE UTILITIES SHOWN ON THIS SURVEY WERE DETERMINED BY FIELD OBSERVATION. ALL LOCATIONS ARE APPROXIMATE. THE LOCATION OF ANY OTHER UNDERGROUND SERVICES WHICH MAY EXIST CAN ONLY BE DEPICTED IF A UTILITY PLAN IS FURNISHED TO THE SURVEYOR.

NOTE: DTE HAS NEW REGULATIONS THAT MAY IMPACT DEVELOPMENT OUTSIDE THEIR EASEMENT OR THE PUBLIC RIGHT OF WAY. CLIENT SHALL CONTACT DTE TO DETERMINE THE "NEW" STRUCTURES AND POWER LINE REQUIREMENTS AS THEY MAY APPLY TO ANY FUTURE BUILDING OR RENOVATION OF A STRUCTURE. DTE ENERGY CAN BE CONTACTED AT 800-477-4747.

MISS DIG / UTILITY DISCLAIMER NOTE

A MISS DIG TICKET NUMBER 2022061001979, PURSUANT TO MICHIGAN PUBLIC ACT 174 WAS ENTERED FOR THE SURVEYED PROPERTY. DUE TO THE EXTENDED REPORTING PERIOD FOR UNDERGROUND FACILITY OWNERS TO PROVIDE THEIR RECORDS, THE SURVEY MAY NOT REFLECT ALL THE UTILITIES AT THE TIME THE SURVEY WAS ISSUED ON 3/22/23. THE SURVEY ONLY REFLECTS THOSE UTILITIES WHICH COULD BE OBSERVED BY THE SURVEYOR IN THE FIELD OR AS DEPICTED BY THE UTILITY COMPANY RECORDS FURNISH PRIOR TO THE DATE THIS SURVEY WAS ISSUED. THE CLIENT AND/OR THEIR AUTHORIZED AGENT SHALL VERIFY WITH THE FACILITY OWNERS AND/OR THEIR AUTHORIZED AGENTS, THE COMPLETENESS AND EXACTNESS OF THE UTILITIES LOCATION.

TOPOGRAPHIC SURVEY NOTES

ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER.

LEGEND

MANHOLE	EXISTING SANITARY SEWER
HYDRANT	EXISTING SAN. CLEAN OUT
MANHOLE	EXISTING WATER MAIN
MANHOLE	EXISTING STORM SEWER
UTILITY POLE	EX. R.Y. CATCH BASIN
GUY POLE	EXISTING BURIED CABLES
GUY WIRE	OVERHEAD LINES
SIGN	LIGHT POLE
EXISTING GAS MAIN	

SEAL



PROJECT

The Vault, Birmingham
33866 Woodward Avenue

CLIENT

LaFontaine Automotive Group
4000 West Highland Rd.
Highland, MI 48357

Contact: Mr. Gary Laundroche

Phone: (248) 714-1502

Email:

glaundroche@lafontainemotors.com

PROJECT LOCATION

Part of the NE 1/4
of Section 31
T. 2N, R. 11E
City of Birmingham,
Oakland County, Michigan

SHEET

Boundary, Topographic,
and Tree Survey



DATE

2023-05-01 ISSUED FOR OWNER REVIEW

2023-06-12 REVISED PER OWNER

2023-06-19 REVISED PER CITY

2023-06-12 REVISED PER OWNER

2023-11-29 REVISED PER OWNER

2024-05-23 REVISED PER OWNER

2024-05-28 REVISED PER OWNER

DRAWN BY:

C. Herren

DESIGNED BY:

K. Navaroli

APPROVED BY:

K. Navaroli

DATE:

March 30, 2023

SCALE: 1" = 10'

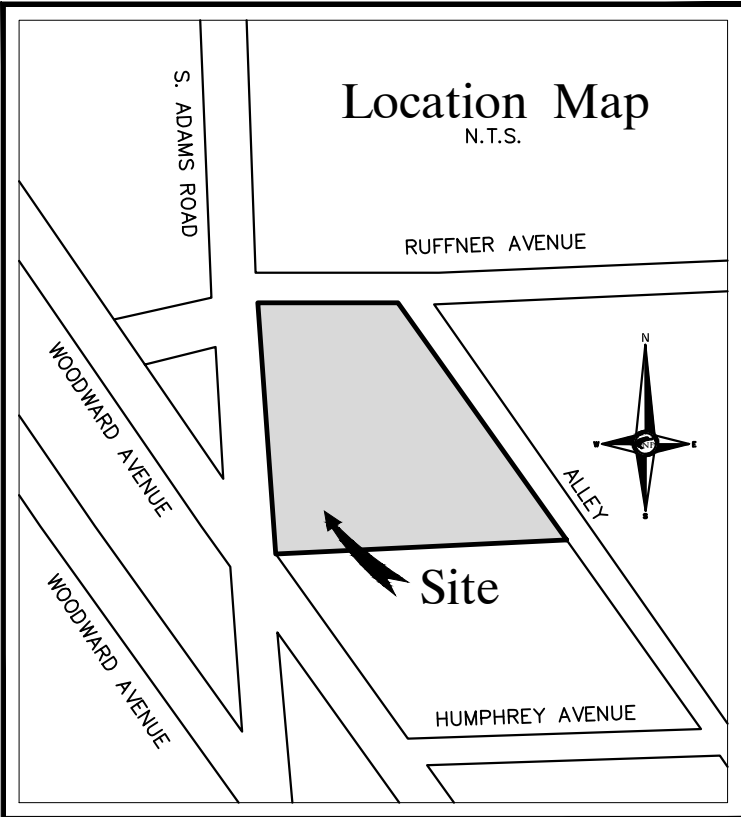
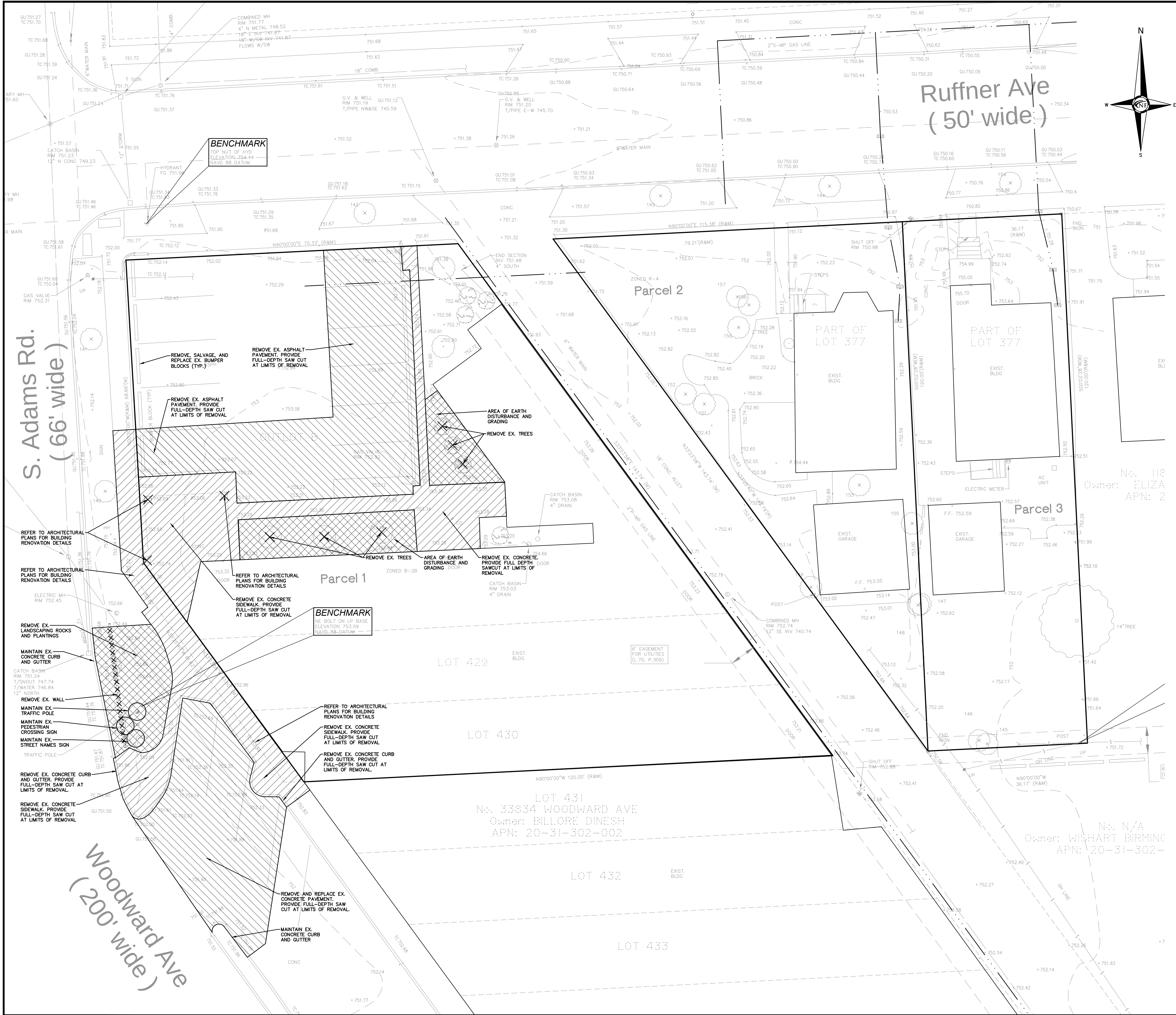
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NFE JOB NO.

N044

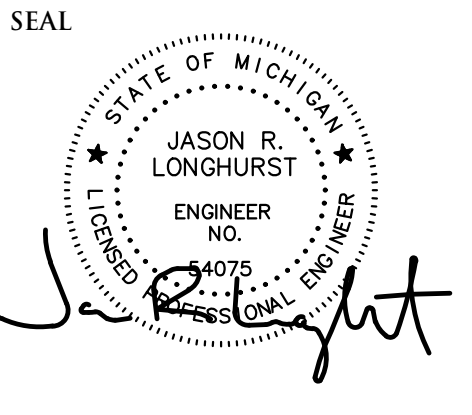
SHEET NO.

C1



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PROJECT
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CLIENT
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Contact: Mr. Gary Laundroche
Phone: (248) 714-1502
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PROJECT LOCATION
Part of the NE 1/4
of Section 31
T. 2N, R. 11E
City of Birmingham,
Oakland County, Michigan

SHEET
Demolition Plan

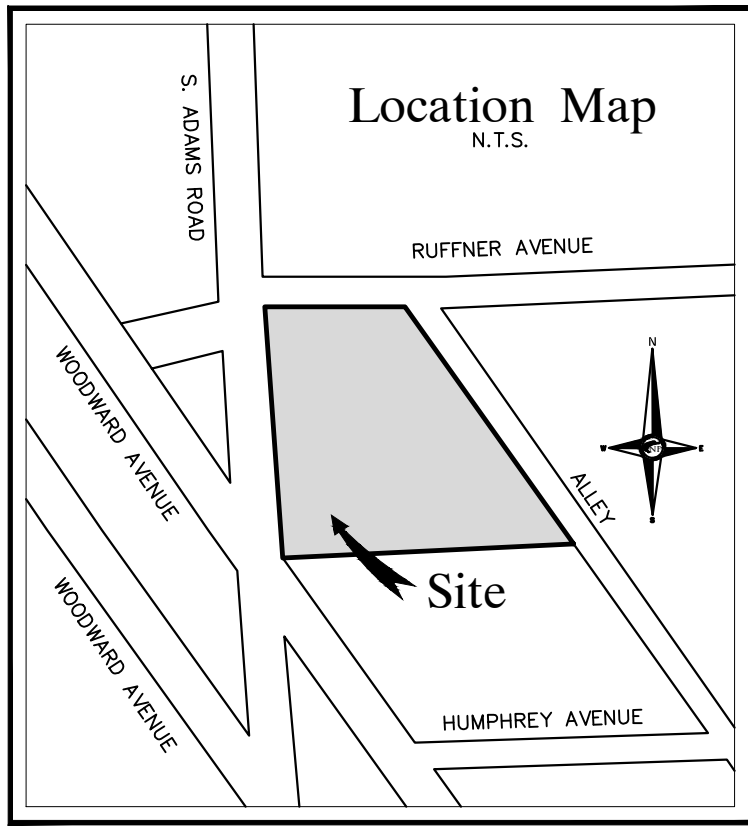
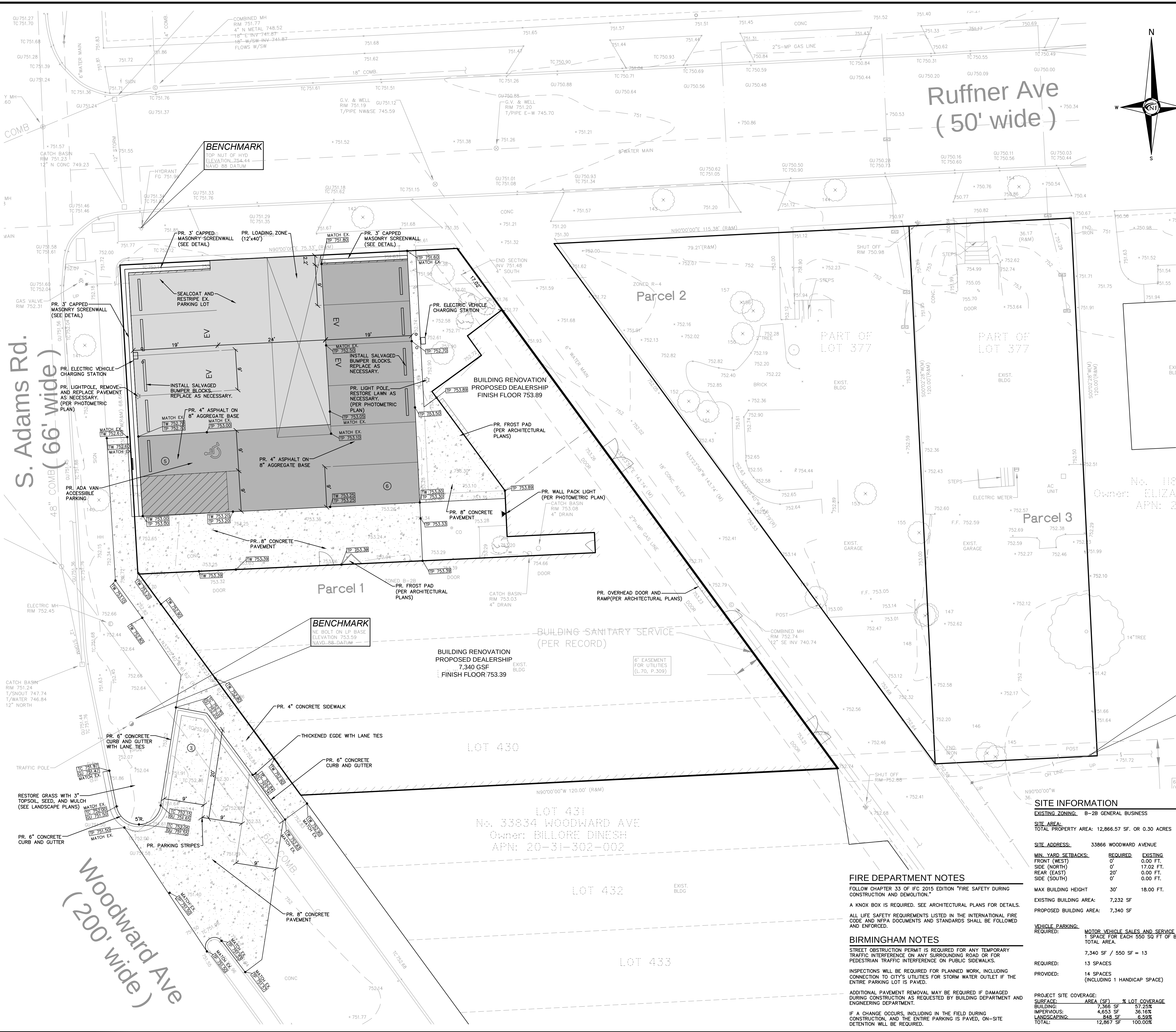


DATE	ISSUED/REVISED
2023-05-01	ISSUED FOR OWNER REVIEW
2023-06-12	REVISED PER OWNER
2023-06-19	REVISED PER CITY
2023-06-12	REVISED PER OWNER
2023-11-29	REVISED PER OWNER
2024-05-23	REVISED PER OWNER
2024-05-28	REVISED PER OWNER

DRAWN BY:
B. Girschach
DESIGNED BY:
T. Wood
APPROVED BY:
J. Longhurst
DATE:
May 1, 2023
SCALE: 1" = 10'
NFE JOB NO. **N044** SHEET NO. **C2**

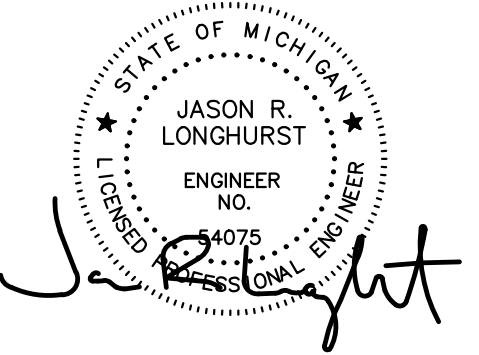
DEMOLITION NOTES
DEMOLITION OF SITE IMPROVEMENTS SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE PUBLIC AGENCY HAVING JURISDICTION OVER SAID DEMOLITION.
FOR ANY DEMOLITION WITHIN PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR, AND SECURE, ALL NECESSARY PERMITS AND LICENSES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF UTILITY INFORMATION (THE DESIGN ENGINEER MAKES NO GUARANTEE NOR ASSUMES ANY LIABILITY AS TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY DATA).
THE CONTRACTOR SHALL COORDINATE TRUCK ROUTES WITH THE MUNICIPALITY PRIOR TO COMMENCEMENT OF SITE DEMOLITION. ALL TRUCKS SHALL BE TARPED OR PROPERLY SECURED TO CONTAIN DEMOLITION DEBRIS PRIOR TO LEAVING SITE.
EXISTING ON-SITE UNDERGROUND UTILITIES AND BUILDING SERVICES HAVE BEEN INDICATED BASED UPON THE BEST AVAILABLE UTILITY RECORDS AND/OR ON-SITE INSPECTION. NO GUARANTEE IS MADE BY THE DESIGN ENGINEER, AS TO THE COMPLETENESS OR ACCURACY OF UTILITY DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF UTILITY INFORMATION (THE DESIGN ENGINEER MAKES NO GUARANTEE NOR ASSUMES ANY LIABILITY AS TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY DATA).
PRIOR TO THE REMOVAL OR ABANDONMENT OF ANY EXISTING UNDERGROUND UTILITY OR BUILDING SERVICE LINES CALLED FOR IN THE PLANS OR DISCOVERED DURING EXCAVATION, THE CONTRACTOR MUST DETERMINE IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE. IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE/ACTIVE, THE CONTRACTOR MUST TAKE ALL THE NECESSARY STEPS TO GUARANTEE THAT THE UTILITY LINE OR BUILDING SERVICE IS RECONNECTED WITHOUT AN INTERRUPTION IN SERVICE. THE RECONNECTION OF THE UTILITY LINE OR BUILDING SERVICE MUST BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE APPROPRIATE GOVERNMENTAL AGENCY OR PRIVATE UTILITY COMPANY.
SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO SITE DEMOLITION.
* THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF THE SITE DEMOLITION.
THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANIES ELECTRICAL SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.
THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANIES GAS SERVICES SHALL BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.
THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANIES COMMUNICATION SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.
THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE APPROPRIATE CABLE MEDIA COMPANY. REMOVAL OF CABLE SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE CABLE COMPANY.
THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF PRIVATE UTILITY COMPANIES AND COORDINATE UTILITY SERVICE SHUT OFF/DISCONNECT, PRIOR TO DEMOLITION OF EXISTING STRUCTURES OR PROPERTIES.
ALL UTILITY METERS SHALL BE REMOVED BY THE APPROPRIATE UTILITY COMPANY.
ANY ON-SITE STORM SEWER FACILITIES LOCATED DURING DEMOLITION SHALL BE REMOVED AND BULK HEADED AT THE PROPERTY LINE IF INDICATED FOR REMOVAL ON THE PLANS.
PRIOR TO BUILDING DEMOLITION, ALL HAZARDOUS MATERIAL SHALL BE REMOVED BY OTHERS. THE DEMOLITION CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER SHOULD ANY SUSPICIOUS MATERIAL BE FOUND.
WATER SERVICES AND/OR STOP-BOX SHALL BE PRESERVED AND BULK HEADED AT THE PROPERTY LINE OR AS DIRECTED BY THE OWNER'S REPRESENTATION.
WHERE EXISTING BUILDINGS PLANNED FOR DEMOLITION FALL WITHIN PROPOSED BUILDING FOOT PRINTS, BASEMENT FLOOR SLABS, FOUNDATION WALLS AND FOOTINGS SHALL BE COMPLETELY REMOVED AND BACK FILLED WITH MDOT CLASS II GRANULAR MATERIAL AND BE MACHINE COMPACTED TO A MINIMUM OF 98% OF MATERIALS MAXIMUM DENSITY.

LEGEND	
	EXISTING SANITARY SEWER
	EXISTING SAN. CLEAN OUT
	EXISTING WATER MAIN
	EXISTING STORM SEWER
	EX. R. Y. CATCH BASIN
	EXISTING BURIED CABLES
	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN
	EXISTING UTILITY TO BE REMOVED
	EXISTING UTILITY TO BE ABANDONED
	INDICATES EXISTING TREE TO BE REMOVED
	INDICATES AREAS OF PAVEMENT, BUILDINGS, ETC. TO BE REMOVED



NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NFE-ENGR.COM

SEAL



PROJECT

The Vault, Birmingham
33866 Woodward Avenue

CLIENT

LaFontaine Automotive Group
4000 West Highland Rd.
Highland, MI 48357

Contact: Mr. Gary Laundroche
Phone: (248) 714-1502

Email:
glaundroche@lafontainemotors.com

PROJECT LOCATION

Part of the NE 1/4
of Section 31
T. 2N, R. 11E
City of Birmingham,
Oakland County, Michigan

SHEET

Engineering Plan



Know what's below
Call before you dig.

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2023-05-01 ISSUED FOR OWNER REVIEW

2023-06-12 REVISED PER CITY

2023-06-19 REVISED PER CITY

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2023-11-29 REVISED PER OWNER

2024-05-23 REVISED PER OWNER

2024-05-28 REVISED PER OWNER

DRAWN BY:

B. Girschach

DESIGNED BY:

T. Wood

APPROVED BY:

J. Longhurst

DATE:

May 1, 2023

SCALE: 1" = 10'

10 5 0 5 10 5

NFE JOB NO.

N044

SHEET NO.

C3

TRASH BIN NOTE

TRASH BINS WILL BE STORED INSIDE THE BUILDING

NOTES

EXISTING WATER MAIN AND SANITARY LINES TO REMAIN
CONNECT TO EXISTING ROOF DRAINS.

GENERAL PAVING NOTES

PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION
AS INDICATED ON THE PLANS AND AS FOLLOWS:

CONCRETE: PORTLAND CEMENT TYPE 1A (AIR-ENTRAINED) WITH A
MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC
YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF
3,500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.

ASPHALT: BASE COURSE - MDOT BITUMINOUS MIXTURE HMA 4E
ML
SURFACE COURSE - MDOT BITUMINOUS MIXTURE HMA
SE ML
BOND COAT - MDOT SS-1H EMULSION AT 0.10
GALLON PER SQUARE YARD

PAVEMENT BASE 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.

ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL
BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND
IMMEDIATELY FOLLOWING FINISHING OPERATION.

ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED
RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER
SAWCUT OPERATION. FEDERAL SPECIFICATION SS-5164.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH
THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY
AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD
SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.

ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE
CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.

ALL SIDEWALK RAMP, CONFORMING TO PUBLIC ACT NO. 8, 1993,
SHALL BE INSTALLED AS INDICATED ON THE PLANS.

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.

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.

EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE
STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO
PLACEMENT OF BASE MATERIALS.

EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL
INTERSECTION RADII.

SIDEWALK RAMP, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL
BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL
BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.

ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE
SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE
PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT
EXCEEDING 9 INCHES THICK TO 98% OF THE MAXIMUM DENSITY
(MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.

ESTIMATED QUANTITIES

PAVING

DESCRIPTION	QUANTITY	UNITS
4" NON-REINFORCED CONCRETE SIDEWALK	545	S.F.
8" NON-REINFORCED CONCRETE PAVEMENT	250	S.Y.
4" ASPHALT PAVEMENT ON 8" AGGREGATE	200	S.Y.
6" CONCRETE CURB AND GUTTER	85	L.F.

PAVING LEGEND

	PROPOSED CONCRETE PAVEMENT
	PROPOSED SEALCOAT AND RESTRIPE
	PROPOSED ASPHALT PAVEMENT

LEGEND

	EXISTING SANITARY SEWER
	SAN. CLEAN OUT
	EXISTING WATERMAIN
	EXISTING STORM SEWER
	EX. R. Y. CATCH BASIN
	EXISTING BURIED CABLES
	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN
	PROPOSED LIGHT POLE

SITE INFORMATION

EXISTING ZONING: B-28 GENERAL BUSINESS

SITE AREA:
TOTAL PROPERTY AREA: 12,866.57 SF. OR 0.30 ACRES

SITE ADDRESS: 33866 WOODWARD AVENUE

MIN. YARD SETBACKS:
FRONT (WEST) 0' 0.00 FT.
SIDE (NORTH) 0' 17.02 FT.
REAR (EAST) 20' 0.00 FT.
SIDE (SOUTH) 0' 0.00 FT.

MAX BUILDING HEIGHT 30' 18.00 FT.

EXISTING BUILDING AREA: 7,232 SF

PROPOSED BUILDING AREA: 7,340 SF

VEHICLE PARKING:

REQUIRED: MOTOR VEHICLE SALES AND SERVICE
1 SPACE FOR EACH 550 SQ FT OF BUILDINGS
TOTAL AREA.
7,340 SF / 550 SF = 13

PROVIDED: 13 SPACES

PROVIDED: 14 SPACES (INCLUDING 1 HANDICAP SPACE)

PROJECT SITE COVERAGE:
SURFACE AREA (SF) % LOT COVERAGE
BUILDING 7,366 SF 57.25%
IMPERVIOUS 4,653 SF 36.16%
LANDSCAPING 848 SF 6.59%
TOTAL 12,867 SF 100.00%

FIRE DEPARTMENT NOTES

FOLLOW CHAPTER 33 OF IFC 2015 EDITION "FIRE SAFETY DURING
CONSTRUCTION AND DEMOLITION"

A KNOX BOX IS REQUIRED. SEE ARCHITECTURAL PLANS FOR DETAILS.

ALL LIFE SAFETY REQUIREMENTS LISTED IN THE INTERNATIONAL FIRE
CODE AND NFPA DOCUMENTS AND STANDARDS SHALL BE FOLLOWED AND
ENFORCED.

BIRMINGHAM NOTES

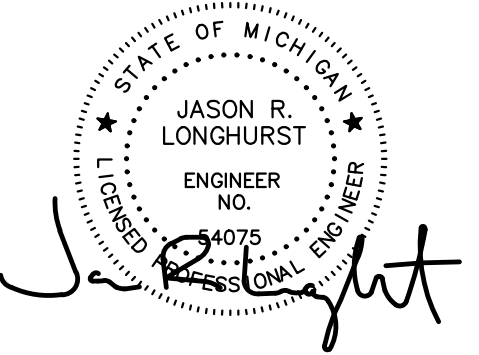
STREET OBSTRUCTION PERMIT IS REQUIRED FOR ANY TEMPORARY
TRAFFIC INTERFERENCE ON ANY SURROUNDING ROAD OR FOR
PEDESTRIAN TRAFFIC INTERFERENCE ON PUBLIC SIDEWALKS.

INSPECTIONS WILL BE REQUIRED FOR PLANNED WORK, INCLUDING
CONNECTION TO CITY'S UTILITIES FOR STORM WATER OUTLET IF THE
ENTIRE PARKING LOT IS PAVED.

ADDITIONAL PAVEMENT REMOVAL MAY BE REQUIRED IF DAMAGED
DURING CONSTRUCTION AS REQUESTED BY BUILDING DEPARTMENT AND
ENGINEERING DEPARTMENT.

IF A CHANGE OCCURS, INCLUDING IN THE FIELD DURING
CONSTRUCTION, AND THE ENTIRE PARKING IS PAVED, ON-SITE
DETENTION WILL BE REQUIRED.

SEAL



PROJECT

The Vault, Birmingham
33866 Woodward Avenue

CLIENT

LaFontaine Automotive Group
4000 West Highland Rd.
Highland, MI 48357

Contact: Mr. Gary Laundroche
Phone: (248) 714-1502

Email:
glaundroche@lafontainemotors.com

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Part of the NE 1/4
of Section 31
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Notes and Details
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DRAWN BY:

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C4

UTILITIES

AT LEAST 72 HOURS (3 WORKING DAYS) PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY MISS DIG AND THE LOCAL COMMUNITY (WHERE APPLICABLE) TO STAKE LOCATIONS OF EXISTING UTILITIES.

THE CONTRACTOR SHALL EXPOSE AND VERIFY EXISTING UTILITIES FOR LOCATION, SIZE, DEPTH, MATERIAL, AND CONFIGURATION PRIOR TO CONSTRUCTION. COSTS FOR EXPLORATORY EXCAVATION IS AN INCIDENTAL COST AND SHALL NOT BE CONSIDERED AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY EXISTING UTILITIES WHICH DO NOT MATCH THE PLANS AND SPECIFICATIONS PRIOR TO COMMENCING WORK. ANY FIELD CHANGES OF THE PROPOSED UTILITIES SHALL BE APPROVED BY THE OWNER AND ENGINEER BEFORE THE WORK IS DONE.

THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE. ANY SERVICE OR UTILITY DAMAGED OR REMOVED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR, IN CONFORMANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY PROVIDER.

DAMAGE TO PRIVATE PROPERTY

ALL SIDEWALKS, DRIVEWAYS, LAWNS, FENCING, TREES, SHRUBS, SPRINKLERS, LANDSCAPING, ETC., THAT ARE DAMAGED DURING CONSTRUCTION MUST BE REPAIRED OR REPLACED, IN KIND OR BETTER, BY THE CONTRACTOR. ALL STREET SIGNS, MAIL BOXES, ETC., REMOVED SHALL BE REPLACED IN KIND OR BETTER, BY THE CONTRACTOR. ALL THE REPAIRS OR REPLACEMENTS DUE TO THE CONTRACTOR'S WORK ARE TO BE INCLUDED IN THE CONTRACT PRICE(S) AND SHALL NOT BE AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL SECURE PERMISSION IN WRITING FROM ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON ANY ADJOINING PROPERTIES, UNLESS OFFSITE PERMITS HAVE ALREADY BEEN OBTAINED BY THE OWNER AS PART OF THE CONTRACT DOCUMENTS.

DEWATERING OF TRENCH AND EXCAVATIONS

IF NOT SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION DESIGN DOCUMENTS, THE DESIGN OR QUALITATIVE ANALYSIS OF GROUND WATER DEWATERING SYSTEMS IS BEYOND THE SCOPE OF DESIGN FOR THESE DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING AND PROVIDING APPROPRIATE EXCAVATION DEWATERING SYSTEMS FOR USE DURING CONSTRUCTION.

THE DEWATERING METHOD SELECTED BY THE CONTRACTOR WILL NOT ADVERSELY AFFECT ADJACENT PAVEMENTS OR STRUCTURES PRIOR TO BEGINNING DEWATERING CONDITIONS. MEANS AND METHODS OF DEWATERING ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF DEWATERING WILL BE INCLUDED IN THE WORK OF THE CONTRACTOR CONSTRUCTING THE UNDERGROUND UTILITIES UNLESS SPECIFICALLY INDICATED OTHERWISE.

BY-PASS PUMPING

FROM TIME TO TIME IT MAY BE NECESSARY FOR THE CONTRACTOR TO BY-PASS PUMP TO COMPLETE THE WORK INDICATED ON THE PLANS. THE COST OF BY-PASS PUMPING, THE METHODS, EQUIPMENT AND MEANS OF PROVIDING THAT WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK WHETHER SPECIFICALLY CALLED OUT ON THE PLANS OR NOT.

MEANS AND METHODS FOR PIPE CONSTRUCTION

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MEANS AND METHODS FOR CONSTRUCTING THE UNDERGROUND PIPE SYSTEMS PROPOSED ON THE PLANS, INCLUDING BUT NOT LIMITED TO THE NEED FOR SHORING/BRACING OF TRENCHES, DEWATERING OF TRENCHES, SCHEDULING THE WORK AT OFF PEAK HOURS, AND/OR MAINTAINING EXISTING FLOWS THAT MAY BE ENCOUNTERED VIA PUMPING, BY-PASS PIPING OR OTHER MEANS. THE CONTRACTOR SHALL NOT BE PAID ANY ADDITIONAL COMPENSATION TO IMPLEMENT ANY MEANS AND METHODS TO SATISFACTORILY COMPLETE THE CONSTRUCTION.

PAVEMENT REMOVAL

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE THICKNESS OF THE PAVEMENT REMOVAL. PAVEMENT CORE SAMPLES ARE FOR INFORMATIONAL PURPOSES ONLY AS TO THE THICKNESS OF THE PAVEMENT AT THE LOCATION OF THE SAMPLE. THE OWNER AND ENGINEER MAKE NO REPRESENTATION, WARRANTY OR GUARANTY THAT THE SAMPLES ACCURATELY REFLECT THE PAVEMENT THICKNESS ON THE PROJECT.

MAINTENANCE OF TRAFFIC

DURING THE PROGRESS OF THE WORK THE CONTRACTOR SHALL ACCOMMODATE BOTH VEHICULAR AND PEDESTRIAN RIGHTS OF WAY. THE CONTRACTOR'S EQUIPMENT AND OPERATIONS ON PUBLIC STREETS SHALL BE GOVERNED BY ALL APPLICABLE LOCAL, COUNTY AND STATE ORDINANCES, REGULATIONS AND LAWS. THE CONTRACTOR SHALL OBTAIN AND SATISFY ANY AND ALL PERMIT REQUIREMENTS BY THE LOCAL, COUNTY AND STATE GOVERNMENTAL AGENCIES.

IN ADDITION, WHERE THE WORK REQUIRES THE CLOSURE OF ONE OR MORE LANES OR IS WITHIN THE INFLUENCE OF THE ROAD OR PEDESTRIAN RIGHT OF WAY, THE CONTRACTOR SHALL PROVIDE ALL SIGNS, BARRICADES, FLAG PERSONS AND OTHER TRAFFIC CONTROL MEASURES AS REQUIRED BY MDT, THE COUNTY, OR THE COMMUNITY HAVING JURISDICTION OF THE ROAD AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

COMPENSATION FOR TRAFFIC CONTROL SHALL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE(S) UNLESS SPECIFIC TRAFFIC CONTROL ITEMS ARE INCLUDED IN THE ACCEPTED BID PROPOSAL.

IRRIGATION

THE CONTRACTOR SHALL MAINTAIN OR REPAIR ANY EXISTING IRRIGATION SYSTEMS WITHIN THE PROJECT AREA UNLESS THE DRAWINGS CALL FOR THE IRRIGATION SYSTEM TO BE REMOVED. THE OWNER AND NFE MAKE NO REPRESENTATIONS, WARRANTY OR GUARANTY AS TO THE LOCATION OF THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT THE IRRIGATION SYSTEM DURING CONSTRUCTION ACTIVITIES. COMPENSATION FOR MAINTAINING OR REPAIRING EXISTING IRRIGATIONS SYSTEMS SHALL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE(S) UNLESS SPECIFIC IRRIGATION SYSTEM REPAIR ITEMS ARE INCLUDED IN THE ACCEPTED BID PROPOSAL.

SUB-SOIL CONDITIONS

ANY SOIL BORING PROVIDED BY THE OWNER AND/OR ENGINEER IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THIS INFORMATION IS NOT OFFERED AS EVIDENCE OF GROUND CONDITIONS THROUGHOUT THE PROJECT AND ONLY REFLECT THE GROUND CONDITIONS AT THE LOCATION OF THE BORING ON THE DATE THEY WERE TAKEN.

THE ACCURACY AND RELIABILITY OF THE SOIL LOGS AND REPORT ARE NOT WARRANTED OR GUARANTEED IN ANY WAY BY THE OWNER OR ENGINEER AS TO THE SUB-SOIL CONDITIONS FOUND ON THE SITE. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION AND SUB-SOIL INVESTIGATION AND SECURE OTHER SUCH INFORMATION AS THE CONTRACTOR CONSIDERS NECESSARY TO DO THE WORK PROPOSED AND IN PREPARATION OF THEIR BID.

SUBGRADE UNDERCUTTING AND PREPARTION

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ANY AND ALL SOLS WHICH DO NOT CONFORM TO THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A SUBGRADE IN CONFORMANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS. THE MEANS AND METHODS USED TO ACHIEVE THE REQUIRED RESULT SHALL REST SOLELY WITH THE CONTRACTOR.

ANY AREAS OF UNDERCUTTING THAT RESULT IN ADDITIONAL OR EXTRA WORK BECAUSE THEY COULD NOT BE IDENTIFIED BY THE CONTRACTOR'S PRE-BID SITE OBSERVATION OR ARE NOT SET FORTH IN THE PLANS AND SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE ANY EXTRA WORK IS PERFORMED. THE CONTRACTOR SHALL MAKE A REQUEST FOR ANY ADDITIONAL COMPENSATION FOR THE UNDERCUTTING IN WRITING AND THE REQUEST SHALL CONFORM TO THE CONTRACT'S CHANGE ORDER PROVISIONS.

STRUCTURE BACKFILL

STRUCTURAL BACKFILL SHALL BE PLACED IN CONFORMANCE WITH THE PROJECT PLANS, SPECIFICATIONS OR AS REQUIRED BY THE COMMUNITY, GOVERNMENT AGENCY OR UTILITY THAT HAS JURISDICTION OVER THE WORK.

TRENCH BACKFILL

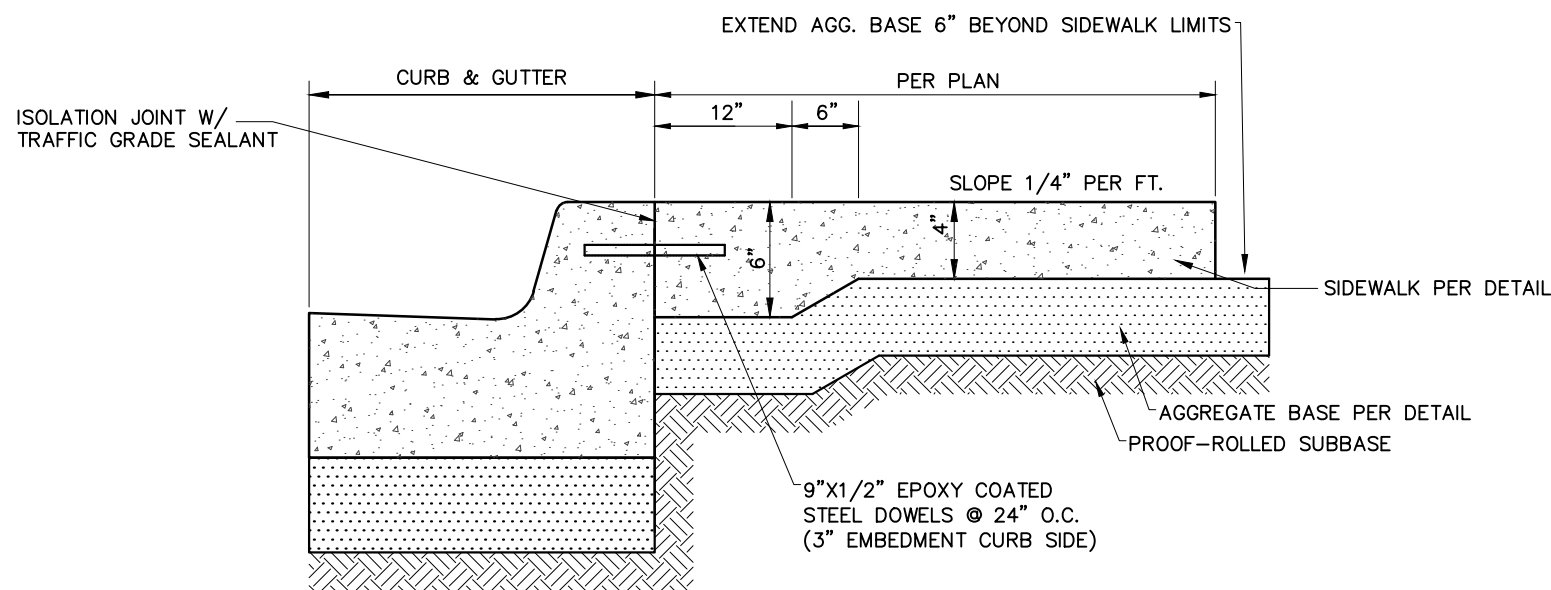
TRENCH BACKFILL SHALL BE PLACED IN CONFORMANCE WITH THE PLANS AND/OR SPECIFICATIONS. TRENCH BACKFILL SHALL ALSO BE INSTALLED IN CONFORMANCE WITH THE COMMUNITY REQUIREMENTS OR AGENCY/UTILITY GOVERNING SAID TRENCH CONSTRUCTION. IN THE CASE OF CONFLICTING REQUIREMENTS, THE MORE STRINGENT SHALL APPLY.

EARTH BALANCE / GRADING

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHETHER THE SITE EARTHWORK BALANCES OR NOT. ANY EXCESS CUT MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR. IN A LIKE MANNER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMPORT APPROVED FILL MATERIAL AND PLACE IT AS REQUIRED TO ATTAIN THE SITE GRADE AND COMPACTION REQUIREMENTS PER THE ENGINEER'S PLAN AND ALL APPLICABLE GOVERNMENTAL STANDARDS. THE ENGINEER AND OWNER MAKE NO REPRESENTATION AS TO THE QUANTITIES THAT MAY BE NEEDED TO CREATE A BALANCED EARTHWORK CONDITION OR THAT THE SITE EARTHWORK IS BALANCED.

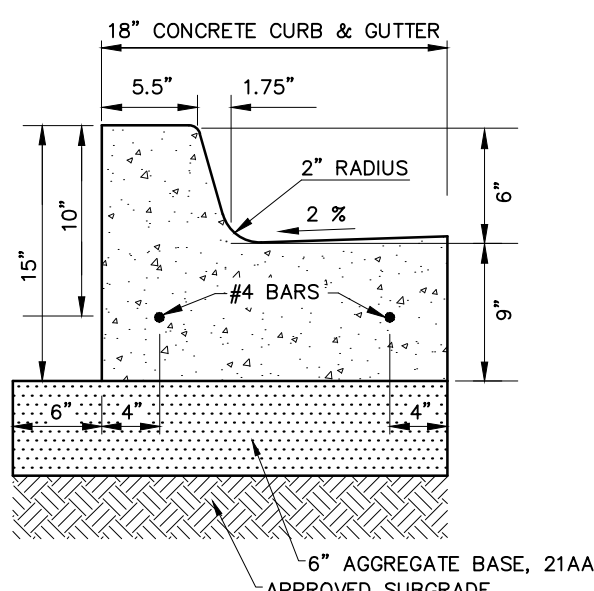
SOIL EROSION / SEDIMENTATION CONTROL

THE CONTRACTOR SHALL OBTAIN THE REQUIRED SOIL EROSION PERMIT AND SATISFY ALL REGULATORY REQUIREMENTS FOR CONTROLLING SOIL EROSION AND SEDIMENT TRANSPORT. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR INSPECTION OR APPROVAL OF THE CONTRACTOR'S WORK IN CONNECTION WITH SATISFYING THE SOIL EROSION PERMIT REQUIREMENTS UNLESS SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS.



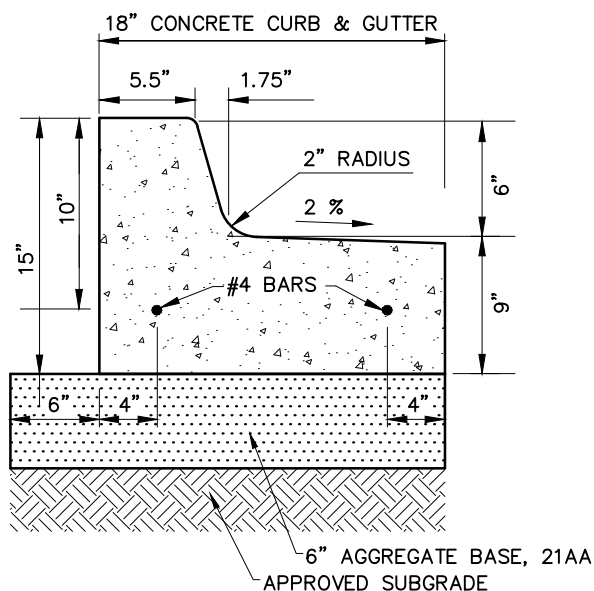
THICKENED EDGE SIDEWALK

N.T.S.



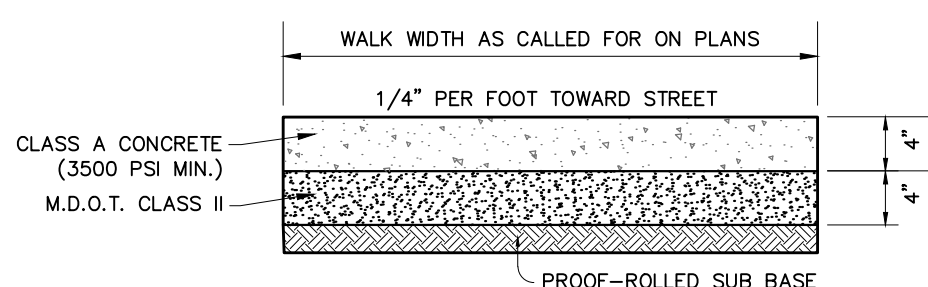
CONCRETE CURB DETAIL 'A'

N.T.S.



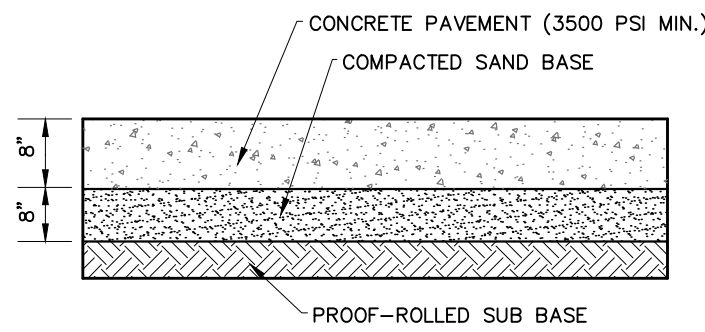
CONCRETE CURB DETAIL 'B'

N.T.S.



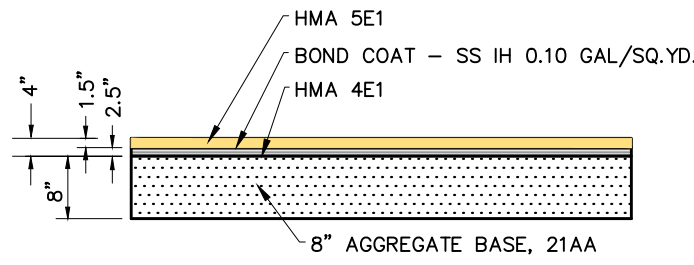
CONCRETE SIDEWALK SECTION

N.T.S.



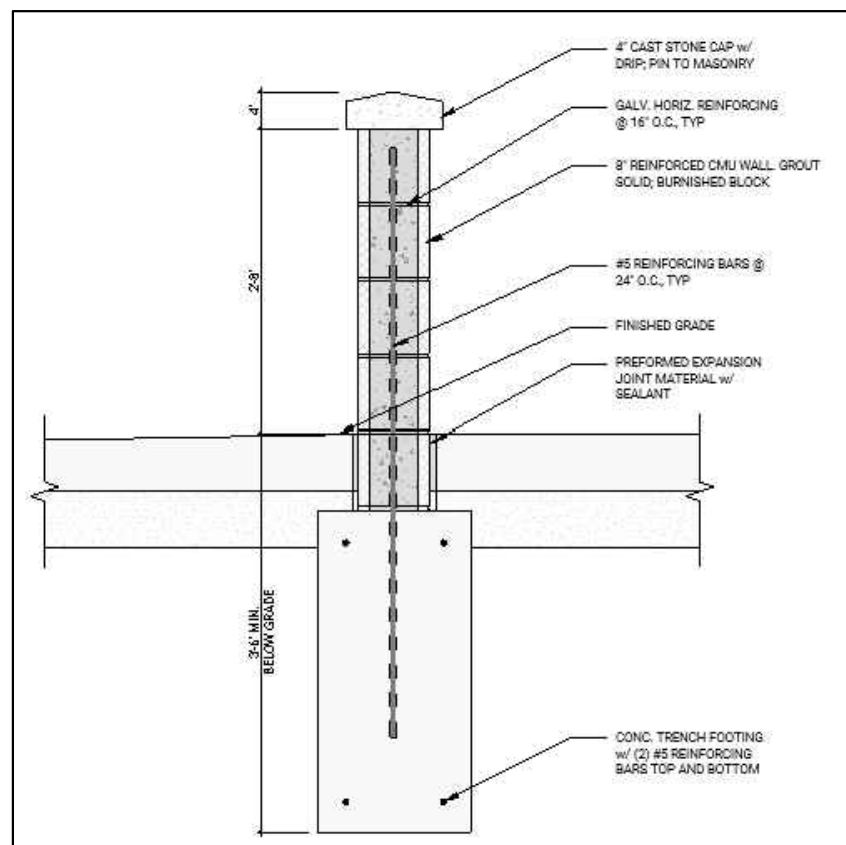
8" CONCRETE SECTION

N.T.S.



4" ASPHALT PAVING SECTION

N.T.S.



SCREENWALL DETAIL

N.T.S.

S. ADAMS ROAD
(66' WIDE)

WOODWARD AVENUE
(200' WIDE)

RUFFNER AVENUE
(50' WIDE)

PUBLIC ALLEY
(18' WIDE)

6" EASEMENT
FOR UTILITIES
(L.70, P.309)

LOT 431
No. 33834 WOODWARD AVE
Owner: BILLORE DINESH
APN: 20-31-302-002

LOT 432

LOT 430

BUILDING RENOVATION
PROPOSED DEALERSHIP
7,340 G.S.F.

BUILDING
RENOVATION
PROPOSED
DEALERSHIP

TREE PROTECTION FENCING TO BE
PLACED MIN 1' OUTSIDE THE LIMITS
OF GRADING LINE OR TREE DRIPLINE,
SHOWN PER PLAN AND COORDINATED
W/ PROPOSED GRADING ACCORDING
TO CIVIL DWGS

TREE TO BE PRUNED
TO ELIMINATE SUCKERS
AND LOW BRANCHES

TREE PROTECTION FENCING TO BE
PLACED AT THE EDGE OF PAVEMENT
TO PROTECT THE GROUNDCOVER
AND PLANTINGS

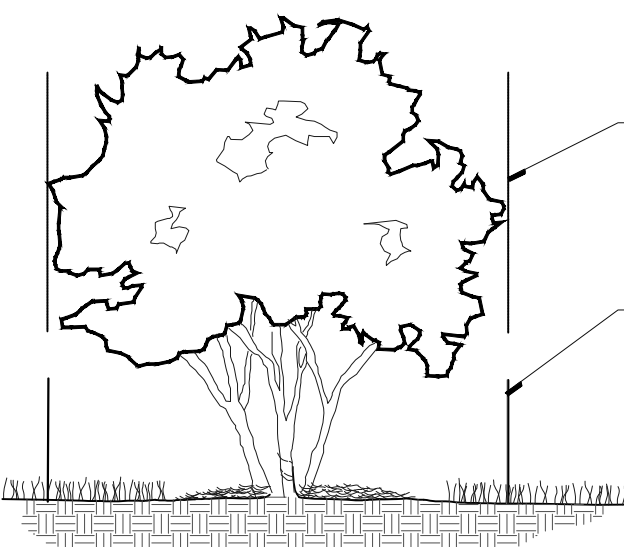
TREE PROTECTION FENCING TO BE
PLACED AT THE EDGE OF PAVEMENT
TO PROTECT THE GROUNDCOVER
AND PLANTINGS

EXISTING THREE (3)
LIMELIGHT TREE HYDRANGEA
AND GROUNDCOVER TO BE
REMOVED

REMOVE EXISTING STONE
AS SHOWN TO FACILITATE
PLANT INSTALLATION

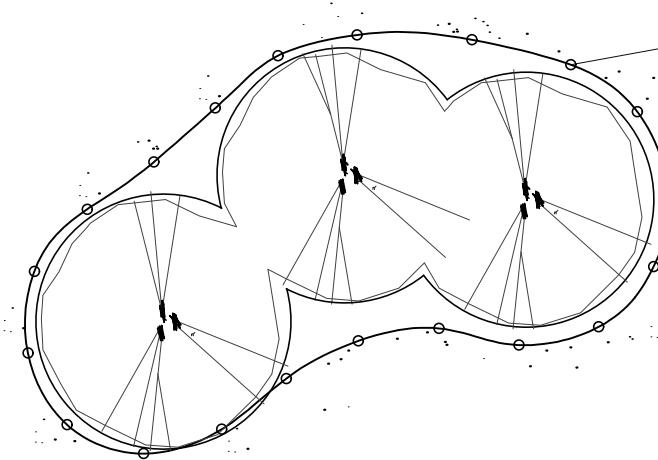
EXISTING HORNBEAM
TO BE REMOVED

EXISTING TIMBER WALL, STONE
AND PLANT BED TO BE REMOVED



TREE PROTECTION DETAIL-SECTION

TREE DRIPLINE
4' HIGH PROTECTIVE
FENCE, AS SPECIFIED
PLACED AT A MINIMUM
1' OUTSIDE THE DRIPLINE
OF THE TREE



TREE PROTECTION DETAIL-PLAN

5/8" X 6/8" RE-ROD, OR
EQUAL, SUPPORT POSTS
EVERY 10' O.C.
INSTALL POSTS A MIN. 24"
INTO GROUND, TYPICAL

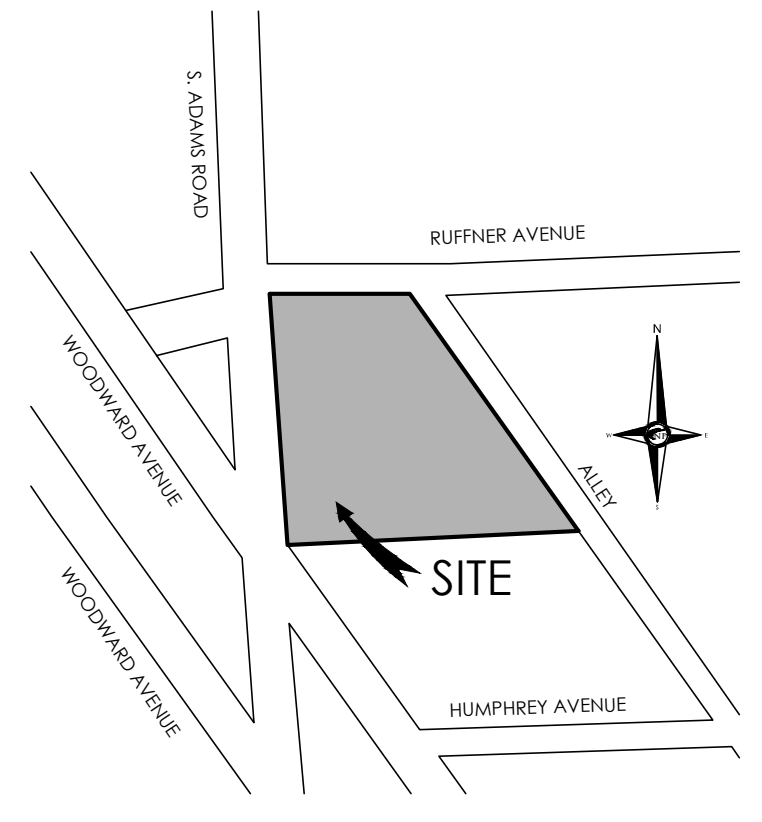
4' HIGH FENCING, AS SPECIFIED,
TO BE PLACED 1' OUTSIDE THE DRIPLINE
OR LIMITS OF GRADING, AS
INDICATED ON PLAN, TYPICAL

NOTE:
FENCING TO BE 4' HIGH ORANGE
SNOW FENCE, OR APPROVED EQUAL

PROTECTION FENCING TO BE
MAINTAINED THROUGHOUT THE
CONSTRUCTION PERIOD

LEGEND:

- TREES TO BE REMOVED
- TREES TO REMAIN
- TREE PROTECTION FENCING



LOCATION MAP

GENERAL TREE PROTECTION NOTES

- APPROVED TREE PROTECTION SHALL BE ERECTED PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, AND SHALL REMAIN IN PLACE UNTIL THE IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
- ALL UNDERSTORY VEGETATION WITHIN THE LIMITS OF PROTECTIVE FENCING SHALL BE PRESERVED.
- NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIPLINE OF ANY TREE DESIGNATED TO REMAIN, INCLUDING BUT NOT LIMITED TO, PLACING SOLVENTS, BUILDING MATERIALS, CONSTRUCTION EQUIPMENT, OR SOIL DEPOSITS WITHIN THE DRIPLINE.
- WHERE GROUPINGS OF TREES ARE TO REMAIN, TREE FENCING SHALL BE PLACED AT THE LIMITS OF GRADING LINE.
- DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY TREE SCHEDULED TO REMAIN.
- ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.
- SWALES SHALL BE ROUTED TO AVOID THE AREA WITHIN THE DRIPLINE OF PROTECTED TREES.
- TREES LOCATED ON ADJACENT PROPERTIES THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.
- ROOT ZONES OF PROTECTED TREES SHOULD BE SURROUNDED WITH RIGIDLY STAKED FENCING.
- THE PARKING OF VEHICLES AND RUNNING EQUIPMENT SHALL BE PROHIBITED UNDER THE DRIPLINE OF PROTECTED TREES.
- THE STRIPPING OF TOPSOIL FROM AROUND PROTECTED TREES SHALL BE PROHIBITED.
- ALL TREES TO BE REMOVED SHALL BE CUT AWAY FROM TREES TO REMAIN.
- THE GRUBBING OF UNDERSTORY VEGETATION WITHIN CONSTRUCTION AREAS SHOULD BE CLEARED BY CUTTING VEGETATION AT THE GROUND WITH A CHAIN SAW OR MINIMALLY WITH A HYDRO-AXE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT PER ORDINANCE GUIDELINES, FOR THE DAMAGE OR REMOVAL OF ANY TREE DESIGNATED TO REMAIN.
- TREES TO BE REMOVED SHALL BE FIELD VERIFIED, EVALUATED AND FLAGGED FOR REMOVAL, BY THE LANDSCAPE ARCHITECT OR FORESTER, ONLY AS DIRECTED BY THE OWNER OR OWNERS REPRESENTATIVE.

DEMOLITION NOTES:

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING SURVEY INFORMATION INCLUDING THE UTILITY SYSTEMS BEFORE ANY DEMOLITION OR CONSTRUCTION WORK OCCURS. ANY DISCREPANCIES WITH THE SURVEY INFORMATION SHALL BE REPORTED TO THE ARCHITECT AND OWNERS REPRESENTATIVE IMMEDIATELY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR COST INCURRED DUE TO DAMAGE AND REPLACEMENT OF SAID UTILITIES.
- ALL EXISTING IMPROVEMENTS, MATERIALS AND PLANT MATERIAL TO REMAIN WITHIN THE NEW CONSTRUCTION AREA SHALL BE PROPERLY AND ADEQUATELY PROTECTED FROM DAMAGE DURING THE DEMOLITION OPERATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE TO THE ORIGINAL CONDITION ANY OF THESE EXISTING ITEMS THAT ARE DAMAGED OR DISTURBED IN ANY WAY.
- ALL MATERIALS TO BE REUSED OR SALVAGED SHALL BE STORED IN AN AREA DESIGNATED BY THE CITY ENGINEER FOR THAT PURPOSE. ALL SALVAGED MATERIALS SHALL REMAIN THE PROPERTY OF THE CITY ENGINEER.
- STREETS, SIDEWALKS AND ADJACENT PROPERTIES SHALL BE PROTECTED THROUGHOUT THE WORK AS REQUIRED BY LOCAL CODES AND REGULATIONS AND APPROVED BY THE OWNER.
- ALL MATERIAL SPECIFIED TO BE REMOVED SHALL BE DISPOSED OF OFF-SITE PER LOCAL CODES AND REGULATIONS. CONTRACTOR SHALL COORDINATE METHOD OF DISPOSAL WITH CITY ENGINEER PRIOR TO COMMENCEMENT OF WORK.
- MATERIALS TO BE REUSED OR SALVAGED SHALL BE STORED IN AN AREA DESIGNATED BY THE OWNERS REPRESENTATIVE FOR THAT PURPOSE. ALL SALVAGED MATERIALS SHALL REMAIN THE PROPERTY OF THE OWNER.
- DURING DEMOLITION OPERATIONS EVERY EFFORT SHALL BE MADE TO CONTROL DUST, PER CITY REQUIREMENTS.
- TREES AND SHRUBS TO BE REMOVED WITHIN THE LIMITS OF WORK SHALL BE CLEARLY IDENTIFIED WITH BRIGHTLY COLORED RIBBON.
- GRUBBING SHALL INCLUDE ALL WEEDS, SHRUBS, STUMPS AND ROOT SYSTEMS OF REMOVED PLANT MATERIAL, IRRIGATION PIPING AND ANY OTHER IRRIGATION MATERIALS WITHIN THE LIMITS OF DEMOLITION. GRUBBING SHALL BE TO THE DEPTHS BELOW PROPOSED IMPROVEMENTS INDICATED AS FOLLOWS: CONCRETE PAVING AND WALKWAYS-TOTAL DEPTH OF PAVING AND SUB-BASE; ASPHALT PAVING-TOTAL DEPTH OF PAVING AND SUB-BASE; LAWN AND OTHER PLANTINGS AREAS-REMOVE DEPTH REQUIRED OF STUMPS AND ROOTS OVER TWO (2) INCHES IN DIAMETER AND TURF.
- PROTECT EXISTING TREES TO REMAIN PER TYPICAL TREE PROTECTION DETAIL.
- STOCKPILED TOPSOIL SHALL BE STORED ON SITE AND REMAIN PROTECTED FROM CONTAMINATION PRIOR TO REDISTRIBUTION.
- SAWCUT AND REMOVE EXISTING ASPHALT AS REQUIRED TO INSTALL NEW SITE IMPROVEMENTS AND ADJUST GRADES WITHIN CITY STREETS. ALL WORK WITHIN CITY RIGHT OF WAY SHALL MEET CITY STANDARDS AND SPECIFICATIONS.
- ARRANGE FOR APPLICABLE UTILITY COMPANY TO RELOCATE EXISTING CABLES, WIRES, PHONE LINES, ETC. ALONG WITH EDISON POWER LINES AS REQUIRED.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL APPLICABLE PERMITS AND FEES NECESSARY FOR THE COMPLETE CONSTRUCTION OF THE PROJECT.



NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257

SEAL



PROJECT

The Vault, Birmingham
33866 Woodward Avenue

CLIENT

LaFontaine Automotive Group
4000 West Highland Rd.
Highland, MI 48357

Contact: Mr. Gary Laundroche
Phone: (248) 714-1502
Email:
glaundroche@lafontaineautomotors.com

PROJECT LOCATION

Part of the NE 1/4
of Section 31
T. 2N, R. 11E
City of Birmingham,
Oakland County, Michigan

SHEET

Tree Preservation Plan



REVISIONS

06/19/23 REVISED PER CITY REVIEW
11/30/23 REVISED PER CITY OWNER
05/23/24 REVISED PER OWNER

DRAWN BY:

G. Ostrowski

DESIGNED BY:

G. Ostrowski

APPROVED BY:

G. Ostrowski

DATE:

April 26, 2023

SCALE: 1" = 10'



NFE JOB NO.

N044

SHEET NO.

L1

S. ADAMS ROAD
(66' WIDE)

WOODWARD AVENUE
(200' WIDE)

RUFFNER AVENUE
(50' WIDE)

PUBLIC ALLEY
(18' WIDE)

BUILDING
RENOVATION
PROPOSED
DEALERSHIP

BUILDING RENOVATION
PROPOSED DEALERSHIP
7,340 G.S.F. 429

LOT 431
No. 33834 WOODWARD AVE
Owner: BILLORE DINESH
APN: 20-31-302-002

LOT 432

LOT 430

LANDSCAPE REQUIREMENTS

EXISTING SITE ZONING: B2-B, GENERAL BUSINESS DISTRICT
EXISTING SITE AREA: 12,866.57 S.F. OR 0.295 ACRES

STREET TREES

1 TREE PER 40 L.F. OF FRONTAGE

REQUIRED:

RUFFNER: 75.33 L.F. OF FRONTAGE / 40 L.F. = 1.88 OR 2 TREES REQUIRED

PROVIDED: 1 EXISTING AND 1 PROPOSED

ADAMS ROAD: 68.66 L.F. OF FRONTAGE / 40 L.F. = 1.72 OR 2 TREES REQUIRED

PROVIDED: 2 EXISTING TREES

PARKING LOT LANDSCAPE REQUIREMENTS

PARKING LOT REQUIREMENTS NOT APPLICABLE

AS PARKING LOT IS ONLY 4,061.09 S.F.

PLANT SCHEDULE

KEY	QTY	BOTANICAL/COMMON NAME	SIZE	SPACING	ROOT	COMMENT
GROUNDCOVERS/PERENNIALS						
HK	11	Hokonechloa macro Japanese Forest Grass	2 GAL	24" OC	CONT	
HS	5	Hemerocallis 'Stella D'Oro' Stella D'Oro Daylily	2 GAL	24" OC	CONT	

GENERAL LANDSCAPE NOTES

- LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING CONDITIONS AND REVIEW PROPOSED PLANNING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, THE PLAN SHALL GOVERN QUANTITIES. CONTACT THE LANDSCAPE ARCHITECT WITH ANY CONCERNS.
- THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION OR ANY PHASE OF WORK. ANY DAMAGE OR INTERUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES, AND SHALL REPORT ANY UNACCEPTABLE SITE CONDITIONS TO THE OWNERS REPRESENTATIVE PRIOR TO COMMENCEMENT.
- PLANTS SHALL BE FULLY WELL-BRANCHED, AND IN HEALTHY VIGOROUS GROWING CONDITION.
- PLANTS SHALL BE WATERED BEFORE AND AFTER PLANTING & COMPLETE. ALL TREES MUST BE STAKED, FERTILIZED AND MULCHED AND SHALL BE GUARANTEED TO FULFILL A NORMAL GROWTH CYCLE FOR AT LEAST ONE (1) YEAR FOLLOWING PLANTING.
- ALL MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED IN THE MOST RECENT EDITION OF THE "AMERICAN STANDARDS FOR NURSERY STOCK".
- CONTRACTOR WILL SUPPLY FINISHED GRADE AND EXCAVATE AS NECESSARY TO SUPPLY PLANT MIX DEPTH IN ALL PLANTING BEDS AS INDICATED IN PLANT DETAILS AND A DEPTH OF 4" IN ALL LAWN AREAS.
- PROVIDE CLEAN BACKFILL SOIL, USING MATERIAL STOCKPILED ON-SITE. SOIL SHALL BE SCREENED AND FREE OF DEBRIS, FOREIGN MATERIAL, AND STONE. SLOW-RELEASE FERTILIZER SHALL BE ADDED TO THE PLANT PITS BEFORE BEING BACKFILLED. APPLICATION SHALL BE AT THE MANUFACTURER'S RECOMMENDED RATES.
- AMENDED PLANT MIX (PREPARED TOPSOIL) SHALL CONSIST OF 1/3 SCREENED TOPSOIL, 1/3 SAND, AND 1/3 "BARKY DOO" COMPOST. MIXED WELL AND SPREAD TO A DEPTH AS INDICATED IN PLANTING DETAILS.
- ALL PLANTINGS SHALL BE MULCHED WITH SHREDDED HARDWOOD BARK. SPREAD TO A DEPTH OF 3" FOR TREES AND SHRUBS, AND 2" ON ANNUALS, PERENNIALS, AND GROUNDCOVER PLANTINGS. MULCH SHALL BE FREE FROM DEBRIS AND FOREIGN MATERIAL, AND PICES ON MICROSTRESS.
- NO SUBSTITUTIONS OR CHANGES OF LOCATION, OR PLANT TYPE SHALL BE MADE WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS PRIOR TO INSTALLATION.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PLANT MATERIAL IN A VERTICAL CONDITION THROUGHOUT THE GUARANTEED PERIOD. THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE SHALL HAVE THE RIGHT TO REJECT ANY WORK OR MATERIAL THAT DOES NOT MEET THE REQUIREMENTS OF THE PLANS AND/OR SPECIFICATIONS.
- THE LANDSCAPE CONTRACTOR SHALL SEED AND MULCH OR SOD (AS INDICATED ON PLANS) ALL AREAS DESIGNATED AS SUCH ON THE PLANS, THROUGHOUT THE CONTRACT LIMITS. FURTHER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING AREAS DISTURBED DURING CONSTRUCTION, NOT IN THE CONTRACT LIMITS, TO EQUAL OR GREATER CONDITION.
- ALL LANDSCAPE AREAS SHALL HAVE PROPER DRAINAGE THAT PREVENTS EXCESSIVE WATER FROM PONDING ON LAWN AREAS OR AROUND TREES AND SHRUBS.
- ALL LANDSCAPE AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.

NOTE:

USE 3" CALIPER, STAKE TREES BELOW 3" CALIPER.

STAKE TREES JUST BELOW FIRST BRANCH USING 3" WIRE BELT LANE NYLON OR PLASTIC STRAPS. CONNECT FROM TREE TO STAKE OPPOSITE.

ALLOW FOR SOME SWAYING. REMOVE AFTER ONE (1) YEAR.

DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.

REMOVE ALL TAGS, STRING, PLASTIC AND OTHER MATERIALS.

USE 3" HARDWOOD STAKES PER TREE. 30" ABOVE GROUND FOR UPRIGHT, 18" IF ANGLED.

DRIVE STAKES INTO UNDISTURBED SOIL 6-8" OUTSIDE ROOTBALL TO A DEPTH OF 18" BELOW TREE PIT. REMOVE AFTER ONE (1) YEAR. WIRE OR ROPE THROUGH A HOSE SHALL NOT BE ALLOWED.

MULCH 3" DEPTH WITH SHREDDED HARDWOOD BARK. MULCH SHALL BE NATURAL IN COLOR. LEAVE 3" CLEAR AROUND BASE OF TREE.

MOUND TO FORM 3" EARTH SAUCER.

REMOVE ALL NON-Biodegradable MATERIALS FROM THE ROOTBALL. CUT DOWN WIRE BASKET AND FOLD DOWN ALL BURLAP FROM 1/2 OF ROOTBALL.

PLANTING MIX TO BE AMENDED PER SITE CONDITIONS AND REQUIREMENTS OF THE PLANT MATERIAL.

SCAFFOLD SUBGRADE AND PLANTING PITS. RECOMPACT PIT BASE TO 4" DEPTH.

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DRIVE STAKES INTO UNDISTURBED SOIL 6-8" OUTSIDE ROOTBALL TO A DEPTH OF 18" BELOW TREE PIT. REMOVE AFTER ONE (1) YEAR. WIRE OR ROPE THROUGH A HOSE SHALL NOT BE ALLOWED.

MULCH 3" DEPTH WITH SHREDDED HARDWOOD BARK. MULCH SHALL BE NATURAL IN COLOR. LEAVE 3" CLEAR AROUND BASE OF TREE.

MOUND TO FORM 3" EARTH SAUCER.

REMOVE ALL NON-Biodegradable MATERIALS FROM THE ROOTBALL. CUT DOWN WIRE BASKET AND FOLD DOWN ALL BURLAP FROM 1/2 OF ROOTBALL.

PLANTING MIX TO BE AMENDED PER SITE CONDITIONS AND REQUIREMENTS OF THE PLANT MATERIAL.

SCAFFOLD SUBGRADE AND PLANTING PITS. RECOMPACT PIT BASE TO 4" DEPTH.

DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.

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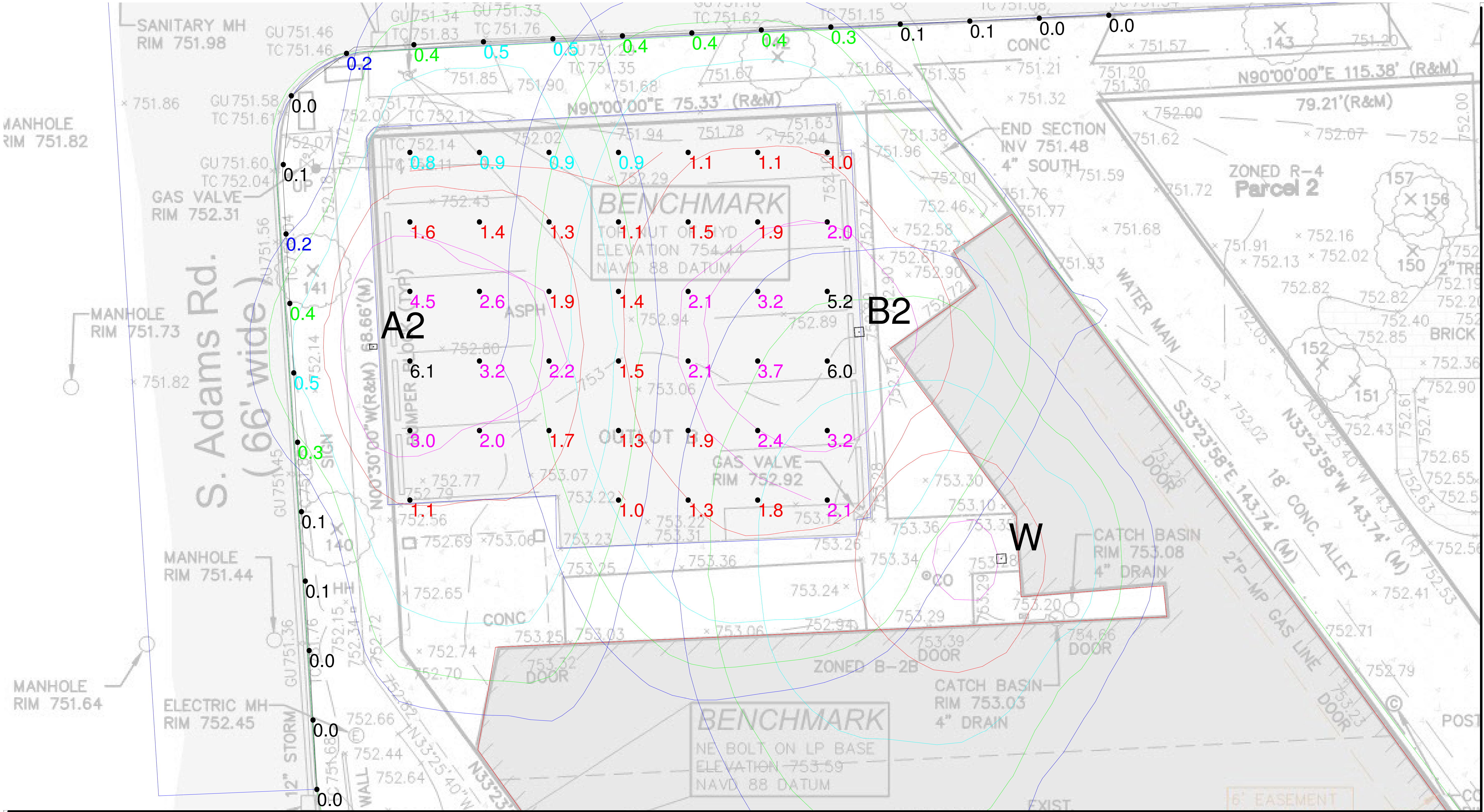
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Luminaire Schedule							
Symbol	Qty	Label	LLF	Description	Mounting Height	Luminaire Lumens	Luminaire Watts
	1	A2	0.890	LDS-SAL-110-DB-T4-1-40-MAS-BS	16	6325	110
	1	B2	0.890	LDS-SAL-60-DB-T4-1-40-MAS-X-X	16	8204	60.21
	1	W	0.890	LDS-LFC-30-DB-T4-1-40	18	4185	29.83

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
AsphaltLOT_Planar	Illuminance	Fc	2.15	6.1	0.8	2.69	7.63
PropertyLine	Illuminance	Fc	0.22	0.5	0.0	N.A.	N.A.

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE THE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP. THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

Illuminance Values

- 0.2 - 0.29 fc
- 0.3 - 0.49 fc
- 0.5 - 0.99 fc
- 1.0 - 1.99 fc
- 2.0 - 5.0 fc

REFERENCE ONLY - REFER TO ELECTRICAL AND ARCHITECTURAL SHEETS

LED Innovation Since 2006

#	Date	Comments

Revisions

Drawn By: M. Woznicki, LC

Checked By:

Date: 5/2/2023

Scale:

LaFontaine Woodward

4

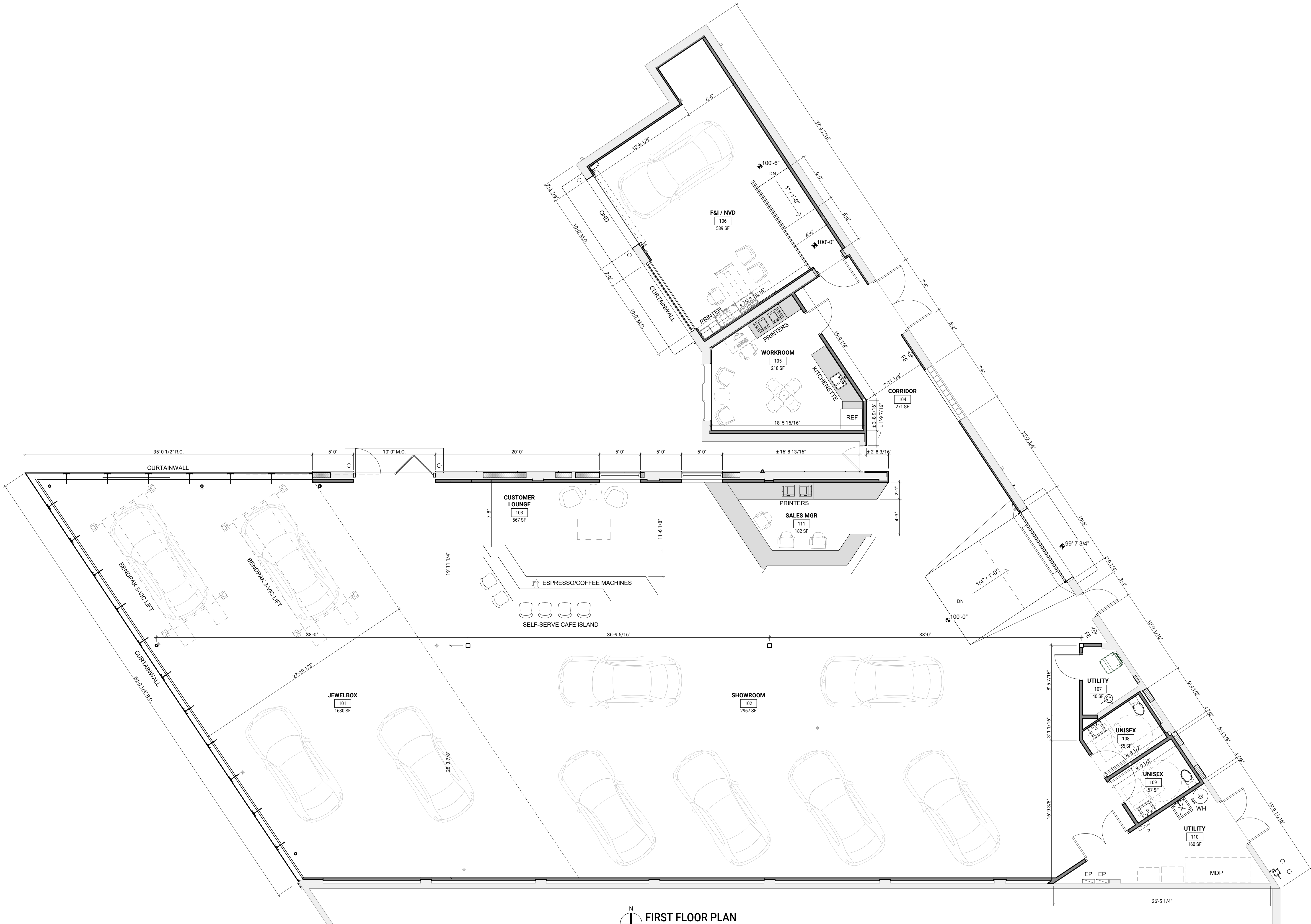
Page 1 of 3

GROSS BUILDING AREA	
FIRST FLOOR	7,290 SF
TOTAL BUILDING AREA (GSF)	7,290 SF

STUDIO
DETROIT
ARCHITECTS

2040 PARK AVENUE, SUITE 200
DETROIT, MICHIGAN 48226
STUDIO-DETROIT.COM

PROJECT MANAGER
STEVEN H. FOURNIER, AIA, NCARB
P. 248.376.2617



N
FIRST FLOOR PLAN
3/16" = 1'-0"

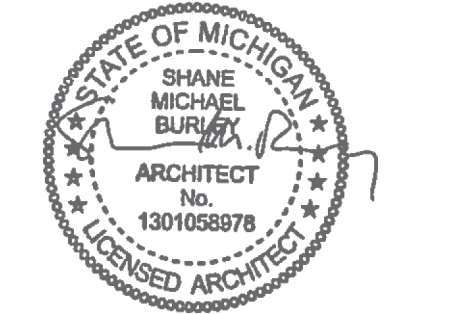
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ISSUED

05.14.24	OWNER REVIEW
05.29.24	SPA

DRAWN TAP
CHECKED SHF

SEAL



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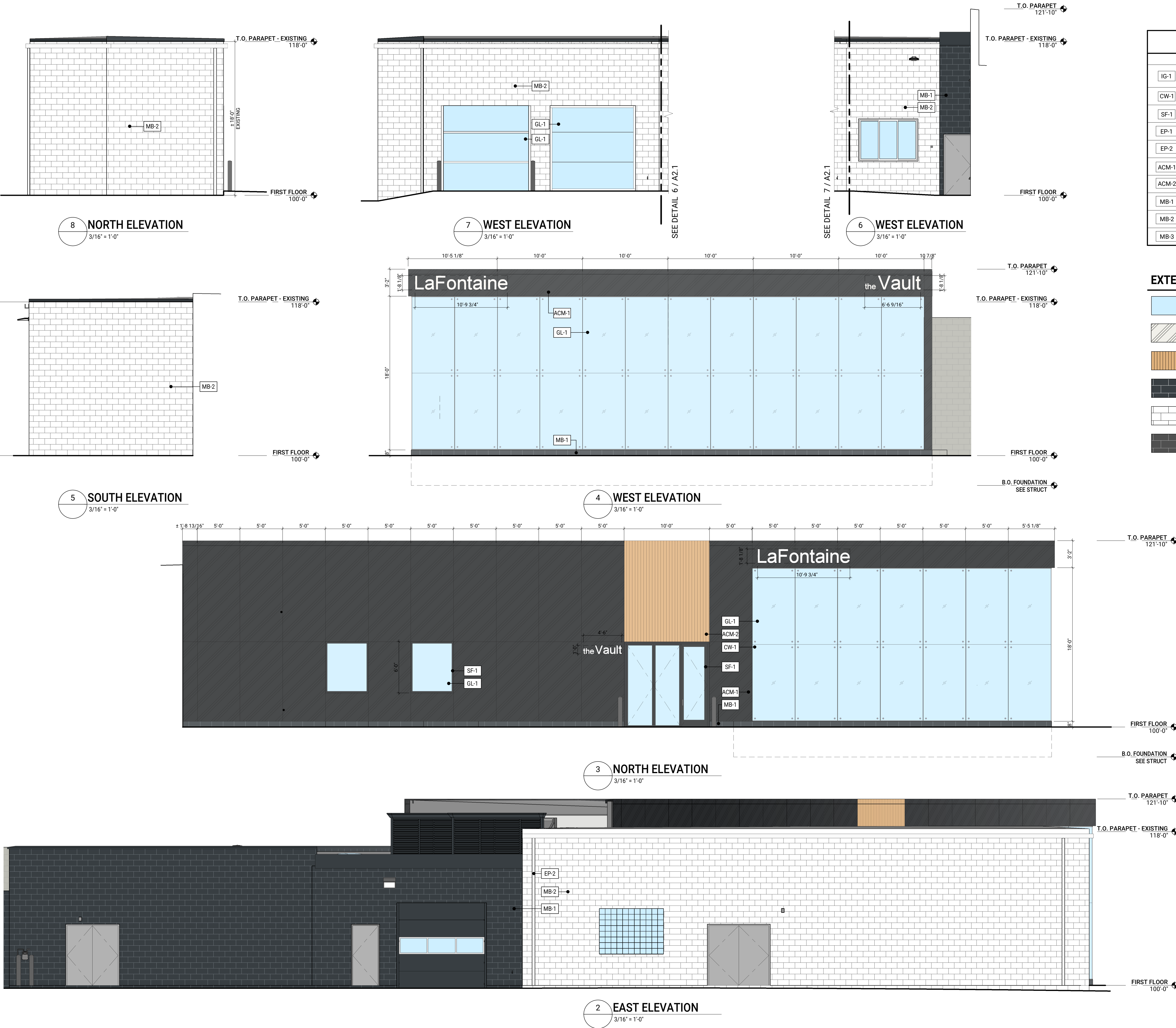
LAFONTAINE
AUTOMOTIVE GROUP

PROJECT 24020

THE VAULT
BIRMINGHAM
33866 WOODWARD AVENUE
BIRMINGHAM, MI 48009

FLOOR PLAN - NEW
WORK

A1.1



EXTERIOR MATERIALS		
	MATERIAL	FINISH
IG-1	EXTERIOR GLAZING	SOLARBAN 72 ACUTY (LOW IRON) w/ 67% VLT AND 0.28 SHGC
CW-1	CURTAINWALL	GLASS MULLIONS w/ SPIDER FITTINGS
SF-1	STOREFRONT	BLACK; THERMALLY BROKEN
EP-1	EXTERIOR PAINT	BLACK
EP-2	EXTERIOR PAINT	WHITE
ACM-1	ALUMINUM COMPOSITE MATERIAL	BLACK
ACM-2	ALUMINUM COMPOSITE MATERIAL	WOOD
MB-1	CONCRETE MASONRY UNIT	SMOOTH BLOCK; EP-1
MB-2	CONCRETE MASONRY UNIT	SMOOTH BLOCK; EP-2
MB-3	CONCRETE MASONRY UNIT	BURNISHED BLOCK; BOARDMAN

EXTERIOR PANEL LEGEND

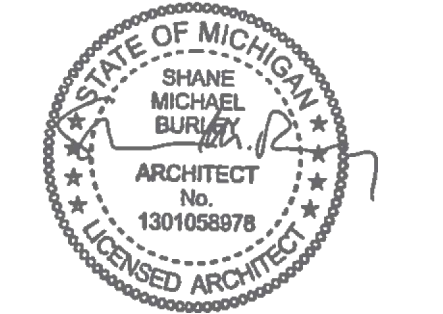
- IG-1, EXTERIOR GLAZING; SOLARBAN 72 ACUTY (LOW IRON)
- ACM-1, PANEL
- ACM-2, PANEL
- MB-1, MASONRY BLOCK, PAINTED EP-1
- MB-2, MASONRY BLOCK, PAINTED EP-2
- MB-3, MASONRY BLOCK, BURNISHED

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AUTOMOTIVE GROUP

PROJECT 24020

THE VAULT
BIRMINGHAM
33866 WOODWARD AVENUE
BIRMINGHAM, MI 48009

EXTERIOR ELEVATIONS

A2.1

EAST FACADE EXT. MAT. CALCS - TOTAL AREA 2,354 S.F.		
MATERIAL	MATERIAL AREA	% PROPOSED
PAINTED BRICK BLOCK	2,007 S.F.	85.3 %
CURTAIN WALL SYSTEM	0 S.F.	0.0 %
ALUMINUM COMPOSITE PANEL SYSTEM (ACM)	0 S.F.	0.0 %
MECHANICAL SCREEN	79 S.F.	3.4 %
FENESTRATION	267 S.F.	11.3%

WEST FACADE EXT. MAT. CALCS - TOTAL AREA 1,334 S.F.		
MATERIAL	MATERIAL AREA	% PROPOSED
PAINTED BRICK BLOCK	0 S.F.	0.0 %
CURTAIN WALL SYSTEM	1,080 S.F.	81.0 %
ALUMINUM COMPOSITE PANEL SYSTEM (ACM)	254 S.F.	19.0 %
MECHANICAL SCREEN	0 S.F.	0.0 %
FENESTRATION	0 S.F.	0.0 %

WEST FACADE EXT. MAT. CALCS - TOTAL AREA 293 S.F.		
MATERIAL	MATERIAL AREA	% PROPOSED
PAINTED BRICK BLOCK	235 S.F.	80.2 %
CURTAIN WALL SYSTEM	0 S.F.	0.0 %
ALUMINUM COMPOSITE PANEL SYSTEM (ACM)	0 S.F.	0.0 %
MECHANICAL SCREEN	0 S.F.	0.0 %
FENESTRATION	58 S.F.	19.8 %

NORTH FACADE EXT. MAT. CALCS - TOTAL AREA 425 S.F.		
MATERIAL	MATERIAL AREA	% PROPOSED
PAINTED BRICK BLOCK	425 S.F.	100 %
CURTAIN WALL SYSTEM	0 S.F.	0.0 %
ALUMINUM COMPOSITE PANEL SYSTEM (ACM)	0 S.F.	0.0 %
MECHANICAL SCREEN	0 S.F.	0.0 %
FENESTRATION	0 S.F.	0.0 %

WEST FACADE GLAZING CALCS - TOTAL AREA 505 S.F.		
MATERIAL	MATERIAL AREA	% PROPOSED
GLAZING	480 S.F.	95.0 %
NON-GLAZING	25 S.F.	5.0 %

NORTH FACADE GLAZING CALCS - TOTAL AREA 814 S.F.		
MATERIAL	MATERIAL AREA	% PROPOSED
GLAZING	391 S.F.	48.0 %
NON-GLAZING	423 S.F.	52.0 %

NORTH FACADE EXT. MAT. CALCS - TOTAL AREA 2,224 S.F.		
MATERIAL	MATERIAL AREA	% PROPOSED
PAINTED BRICK BLOCK	0 S.F.	0.0 %
CURTAIN WALL SYSTEM	633 S.F.	28.5 %
ALUMINUM COMPOSITE PANEL SYSTEM (ACM)	1,431 S.F.	64.3 %
MECHANICAL SCREEN	0 S.F.	0.0 %
FENESTRATION	160 S.F.	7.2 %

SOUTH FACADE EXT. MAT. CALCS - TOTAL AREA 352 S.F.		
MATERIAL	MATERIAL AREA	% PROPOSED
PAINTED BRICK BLOCK	352 S.F.	100 %
CURTAIN WALL SYSTEM	0 S.F.	0.0 %
ALUMINUM COMPOSITE PANEL SYSTEM (ACM)	0 S.F.	0.0 %
MECHANICAL SCREEN	0 S.F.	0.0 %
FENESTRATION	0 S.F.	0.0 %

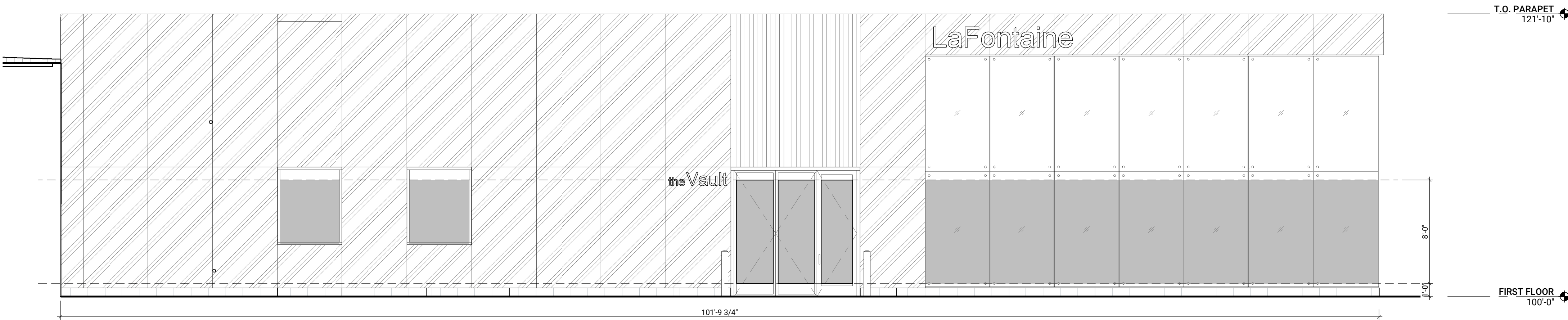
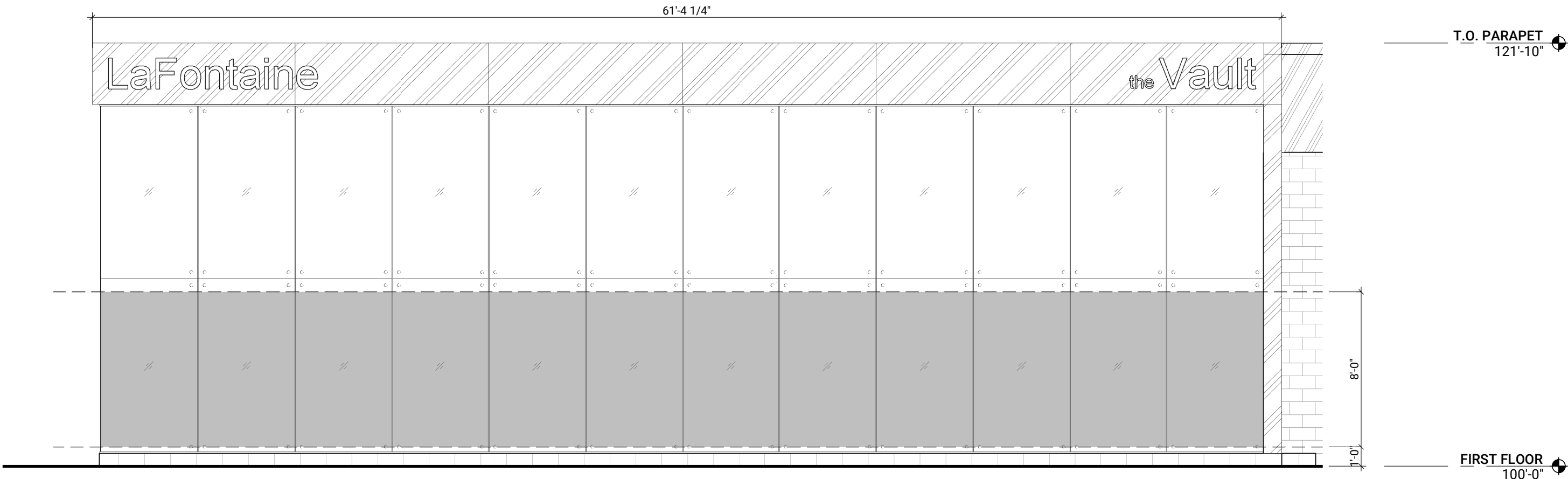
WEST FACADE EXT. MAT. CALCS - TOTAL AREA 320 S.F.		
MATERIAL	MATERIAL AREA	% PROPOSED
PAINTED BRICK BLOCK	415 S.F.	67.0 %
CURTAIN WALL SYSTEM	0 S.F.	0.0 %
ALUMINUM COMPOSITE PANEL SYSTEM (ACM)	0 S.F.	0.0 %
MECHANICAL SCREEN	0 S.F.	0.0 %
FENESTRATION	205 S.F.	33.0 %

BUILDING SIGNAGE CALCULATIONS	
WALL SIGN LOCATION	AREA
LAFONTAINE - NORTH ELEVATION	18.13 S.F.
THE VAULT - NORTH ELEVATION	4.50 S.F.
LAFONTAINE - WEST ELEVATION	18.13 S.F.
THE VAULT - WEST ELEVATION	10.98 S.F.

EXTERIOR MATERIALS		
	MATERIAL	FINISH
IG-1	EXTERIOR GLAZING	SOLARBAN 72 ACUITY (LOW IRON) w/ 67% VLT AND 0.28 SHGC
CW-1	CURTAINWALL	GLASS MULLIONS w/ SPIDER FITTINGS
SF-1	STOREFRONT	BLACK; THERMALLY BROKEN
EP-1	EXTERIOR PAINT	BLACK
EP-2	EXTERIOR PAINT	WHITE
ACM-1	ALUMINUM COMPOSITE MATERIAL	BLACK
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MB-1	CONCRETE MASONRY UNIT	SMOOTH BLOCK; EP-1
MB-2	CONCRETE MASONRY UNIT	SMOOTH BLOCK; EP-2
MB-3	CONCRETE MASONRY UNIT	BURNISHED BLOCK; BOARDMAN

EXTERIOR PANEL LEGEND

	IG-1, EXTERIOR GLAZING; SOLARBAN 72 ACUITY (LOW IRON)
	ACM-1, PANEL
	ACM-2, PANEL
	MB-1, MASONRY BLOCK, PAINTED EP-1



STUDIO DETROIT ARCHITECTS

2040 PARK AVENUE, SUITE 200
DETROIT, MICHIGAN 48226
STUDIO-DETROIT.COM

PROJECT MANAGER
STEVEN H. FOURNIER, AIA, NCARB
P. 248.376.2617

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05.29.24 SPA

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AUTOMOTIVE GROUP

PROJECT 24020

THE VAULT
BIRMINGHAM
33866 WOODWARD AVENUE
BIRMINGHAM, MI 48009

FACADE
CALCULATIONS

A2.2



MEMORANDUM

Planning Division

DATE: June 26th, 2024
TO: Planning Board
FROM: Leah Blizinski, City Planner
SUBJECT: 685 E. Maple – Volta Chargers – Design Review

Zoning: B2 (General Business)
Overlay: D2 (Downtown Overlay)
Existing Use: Commercial

Introduction

The applicant has submitted a Design Review application for two Level 2 electric vehicle charger “media stations” with LED advertising displays to be located in the rear surface parking lot of an existing one-story commercial building on Woodward in Birmingham. The subject site is located on the east side of Woodward and north of Maple in the off-street parking facility accessory to the grocery store. Volta Chargers proposes to install the electric vehicle chargers in two parking spaces in partnership with the existing business on site, Kroger. Accessory parking uses are permitted in the B2 zoning district. Electric vehicle chargers have also been approved in accessory parking uses on a case-by-case basis. However, EV charging with “media stations” and/or LED advertising displays have not been previously approved in the City of Birmingham.

Building Exterior

The site/design plans submitted does not contain proposals for renovations to the existing façade or building. The applicant has submitted site plans with specifications for proposed materials and construction/installation of the chargers and associated media stations.

Signage

Signage is proposed as a part of the Design Review application submitted. At a high level, the proposed “media station” signs do not meet the requirements of the Sign Ordinance. The proposed media stations do not meet the criteria for Broadcast Media Device due to their size or the sign ordinance standards for permitted illumination.

Article 3.02 defines Broadcast Media Device: 'An electronic display unit with a screen no larger than 1.5 square feet in size (such as a TV), that broadcasts audio and video designed for viewing by individual customers while purchasing goods and services.' The proposed media stations include "dual 55 in. digital displays with dynamic media content" and therefore do not meet the ordinance. Additionally, it is unclear if the proposed media stations include audio components.

Article 1.03, section A (2) of the sign ordinances states that "all illumination shall be a steady, continuous burning of bulbs or lights. The flashing, blinking, oscillating, rotating or intermittent turning on and off of any illumination device is prohibited." The proposed media stations include "digital displays with dynamic media content" and therefore do not meet the ordinance.

Lighting

The site/design plans submitted appear to indicate internally illuminated digital displays as well as LED lighting around the exterior of the media station. These new light fixtures require review by the Planning Department/Design Review Board. A photometric plan has not been requested or provided to illustrate the light distribution or illuminance on the site. The Planning Board may wish to discuss this determination.

In addition, specification sheets have been submitted demonstrating proposed fixtures that are not cutoff or full cutoff. Unless specifically permitted within this ordinance, all luminaires are required to be full cutoff or cutoff and positioned in a manner that does not unreasonably invade abutting or adjacent properties. Exception to cutoff luminaires can be made at the discretion of the Design Review Board under any of the following conditions:

1. The distribution of upward light is controlled by means of refractors or shielding to the effect that it be used solely for the purpose of decorative enhancement of the luminaire itself and does not expel undue ambient light into the nighttime environment.
2. The luminaire is neither obtrusive nor distracting, nor will it create a traffic hazard or otherwise adversely impact public safety, with appropriate methods used to eliminate undesirable glare and/or reflections.
3. The luminaire is consistent with the intent of the Master Plan, Urban Design Plan(s), Triangle district plan, Rail District plan and/or Downtown Birmingham 2016 Report, as applicable.
4. The scale, color, design or material of the luminaire will enhance the site on which it is located, as well as be compatible with the surrounding buildings or neighborhood.
5. Lighting designed for architectural enhancement of building features (i.e. architectural enhancement lighting). Appropriate methods shall be used to minimize reflection and glare.
6. The site lighting meets all requirements set forth in this ordinance including, but not limited to, light trespass and nuisance violations.

Planning and Zoning

Although the building is not changing its footprint, there are some applicable planning and zoning issues that require review as a part of the Design Review application submitted:

- Building Use – The B2 zoning district permits grocery store uses. There are no changes being proposed to the principal use of the building. There are no special zoning requirements or use specific standards that apply to this particular use.
- Parking – Parking facility – off-street is a permitted accessory use. The use of the parking spaces is not proposed to change with the installation of electric vehicle charging technology.
- Screening – The applicant is not proposing any additional screening on the site.

Required Attachments

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

Design Standards

Article 7, Section 7.09 states that the Planning Board shall review all documents submitted pursuant to this section and shall determine the following:

1. All of the materials required by this section have been submitted for review.
2. All provisions of this Zoning Ordinance have been complied with.
3. The appearance, color, texture and materials being used will preserve property values in the immediate neighborhood and will not adversely affect any property values.
4. The appearance of the building exterior will not detract from the general harmony of and is compatible with other buildings already existing in the immediate neighborhood.
5. The appearance of the building exterior will not be garish or otherwise offensive to the sense of sight.
6. The appearance of the building exterior will tend to minimize or prevent discordant and unsightly properties in the City.
7. The total design, including but not limited to colors and materials of all walls, screens, towers, openings, windows, lighting and signs, as well as treatment to be utilized in concealing any exposed mechanical and electrical equipment, is compatible with the intent

of the urban design plan or such future modifications of that plan as may be approved by the City Commission.

Planning Division Analysis

Based on the requirements of Article 7, Section 7.09, the Planning Division recommends that the Design Review Board **DENY** the Design Review application for 685 E. Maple – Volta Chargers – for the following reasons:

1. The proposed media stations do not meet the sign ordinance standards for 'broadcast media device';
2. The proposed media stations do not meet the sign ordinance standards for illumination; and
3. Proposed lighting elements included on the media stations are not cutoff or full cutoff.

Sample Motion Language

Motion to **DENY** the Design Review application 685 E. Maple – Volta Charges – for the following reasons:

1. _____
2. _____
3. _____

OR

Motion to **APPROVE** the Design Review application for 685 E. Maple. – Volta Chargers – with the following conditions:

1. The applicant receives all applicable variances from the Board of Zoning Appeals.
2. _____
3. _____

OR

Motion to **POSTPONE** the Design Review application for 685 E. Maple. – Volta Chargers – pending receipt of the following:

1. _____
2. _____
3. _____

PERMITTING SUBMITTAL DRAWINGS - NOT TO BE USED FOR CONSTRUCTION PURPOSES

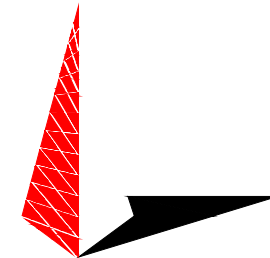
volta

KROGER #685 DETROIT, MI

685 E MAPLE ROAD
BIRMINGHAM, MI 48009
OAKLAND COUNTY

volta

155 DE HARO STREET
SAN FRANCISCO, CA 94103



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

ITEM	TASK	YES	NO	N/A
1	CONTACT 811 UTILITY PRIOR TO EXCAVATION WORK.			
2	NOTIFY VOLTA & TEP OF ANY DISCREPANCIES W/ PLANS OR POTENTIAL CONFLICTS.			
3	VERIFY ALL FIELD CONDITIONS PRIOR TO START OF CONSTRUCTION IN ACCORDANCE WITH THESE PLANS.			
4	INSTALL WORK AREA PROTECTION MEASURES.			
5	FIELD LOCATE EXISTING UTILITIES AND CROSSINGS & VERIFY NO CONFLICTS W/PROPOSED INFRASTRUCTURE.			
6	FIELD VERIFY ALL STALL DIMENSIONS AND EQUIPMENT LOCATIONS.			
7	CONFIRM ALL ADA AND LOCAL REQUIREMENTS ARE MET.			
8	ESTABLISH TEMPORARY CONSTRUCTION ACCESS(ES).			
9	IMPLEMENT AND MAINTAIN EPSC CONTROL MEASURES PER LOCAL REQUIREMENTS.			
10	LOCATE VERTICAL AND HORIZONTAL UTILITIES PRIOR TO BORING.			
11	PROVIDE PROPOSED LIMITS OF ASPHALT OVERLAY SKETCH TO TEP & VOLTA (IF NEEDED).			
12	SEED & STABILIZE ALL DISTURBED AREAS AFTER FINAL GRADING.			

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE BUILDING/ DWELLING, STRUCTURAL, PLUMBING, MECHANICAL, ELECTRICAL, AND FIRE/LIFE SAFETY CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THE LOCAL GOVERNING AUTHORITIES CODES.

VOLTA PROPOSES:

- 2 STANDARD PARKING STALLS ARE TO BE CONVERTED INTO 2 STANDARD ELECTRIC VEHICLE (EV) PARKING STALLS. 2 ELECTRIC VEHICLE CHARGING STATIONS ARE TO BE INSTALLED IN CONCRETE ISLANDS ADJACENT TO THE EV PARKING STALLS. ELECTRICAL CONDUITS WILL BE EXTENDED FROM THE EXISTING BUILDING TO THE ELECTRIC VEHICLE CHARGING STATIONS. VOLTA WILL ALSO PAINT AND MARK ALL EV CHARGING PARKING STALLS AND INSTALL NECESSARY PARKING SIGNS.

APPLICANT:

TOWER ENGINEERING PROFESSIONALS
326 TRYON RD
RALEIGH, NC 27603
CONTACT: SAMUEL A. TURKAL
PHONE: (919) 661-6351
EMAIL: SATURKAL@TEPGROUP.NET

VOLTA REPRESENTATIVE:

VOLTA
155 DE HARO STREET
SAN FRANCISCO, CA 94103
CONTACT: RICHARD SCHNIPKE
PHONE: (740) 965-1342
EMAIL: RICHARD.SCHNIPKE@VOLTACHARGING.COM

SITE PARTNER:

KROGER
685 E MAPLE ROAD
BIRMINGHAM, MI 48009
CONTACT: KEN REISIG
PHONE: (248) 939-0113
EMAIL: KEN.REISIG@KROGER.COM

PROGRAM MANAGER:

TOWER ENGINEERING PROFESSIONALS
CONTACT: SCOTT C. BRANTLEY, P.E.
PHONE: (919) 661-6351
EMAIL: SBRANTLEY@TEPGROUP.NET

CIVIL ENGINEER:

TOWER ENGINEERING PROFESSIONALS
CONTACT: JOSHUA H. CARDEN, P.E.
PHONE: (919) 661-6351
EMAIL: JCARDEN@TEPGROUP.NET

ELECTRICAL ENGINEER:

TOWER ENGINEERING PROFESSIONALS
CONTACT: MARK S. QUAKENBUSH, P.E.
PHONE: (919) 661-6351
EMAIL: MQUAKENBUSH@TEPGROUP.NET

REV	DATE	DESCRIPTION	BY
0	01/16/2024	CD90s - PRELIMINARY	DJL
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ISSUE DATE

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KROGER #685
DETROIT, MI

685 E MAPLE ROAD
BIRMINGHAM, MI 48009

SHEET TITLE

TITLE SHEET

SHEET NUMBER

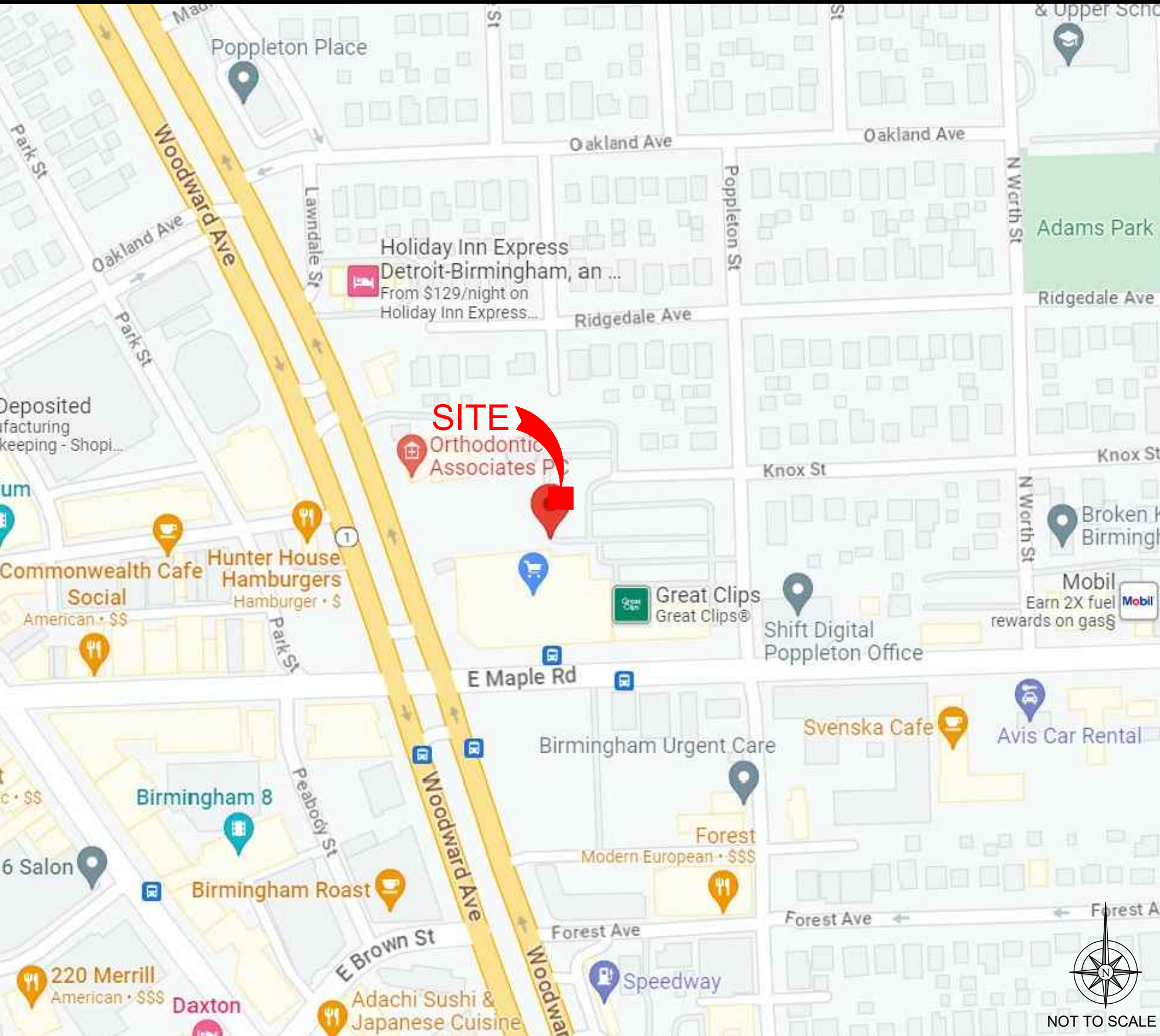
T-1

CONTRACTOR VERIFICATION CHECKLIST

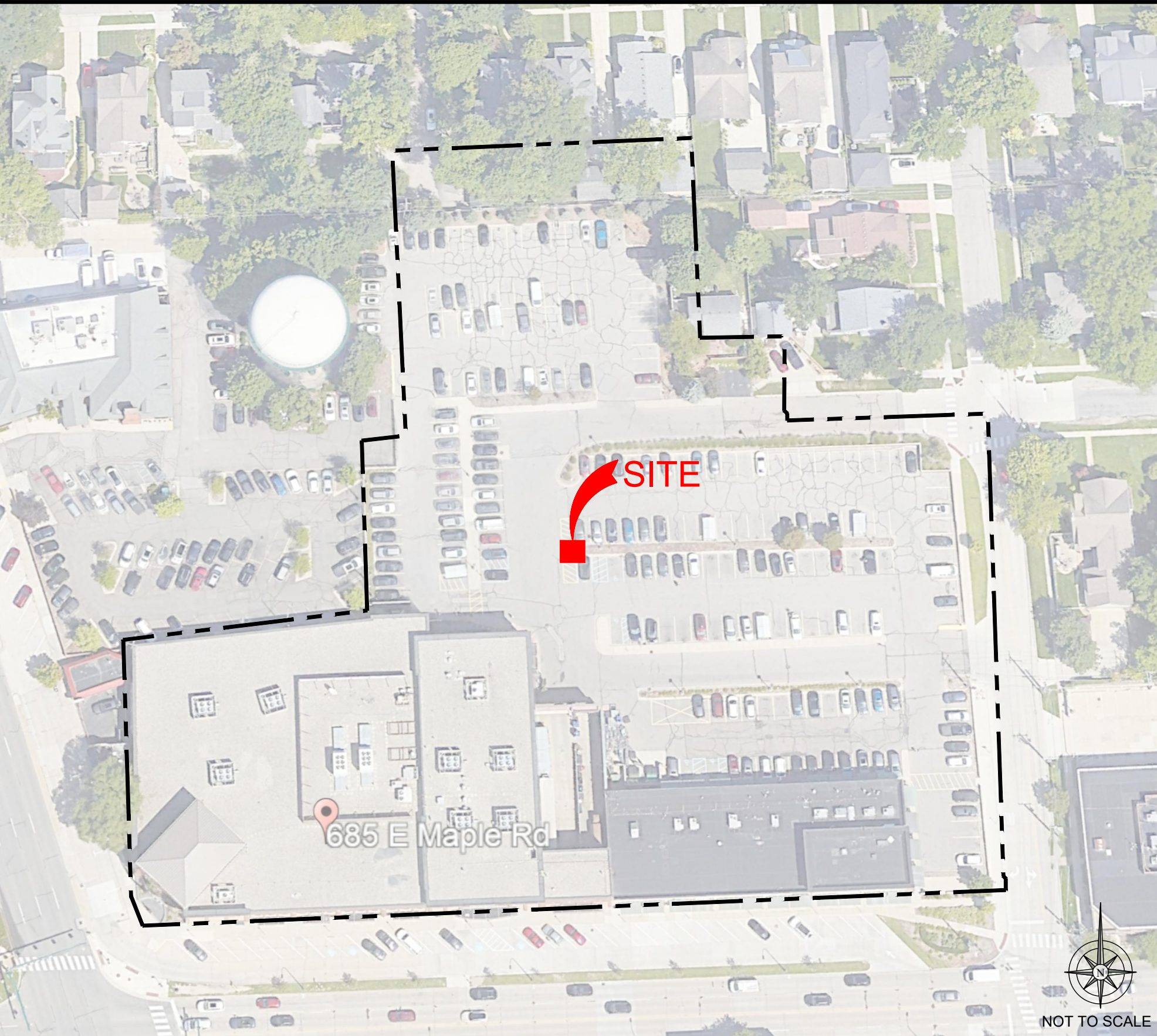
CODE BLOCK

PROJECT DESCRIPTION

PROJECT TEAM



VICINITY MAP



LOCAL MAP

SHEET	DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
T-3	CIVIL AND ELECTRICAL NOTES
T-4	VOLTA STATION CUT SHEET
C-1	OVERALL SITE PLAN
C-2	ENLARGED SITE PLANS
C-3	DETAILS SPEC SHEETS
C-4	CONDUIT PENETRATION DETAILS
C-5	FIRE PENETRATION DETAILS
C-6	FOUNDATION DETAILS
E-1	ELECTRICAL ONE LINE DIAGRAM
E-1A	PANEL SCHEDULES
E-2	ELECTRICAL DETAILS

SHEET INDEX



DIG ALERT



Know what's below.
CALL before you dig.

CALL AT LEAST TWO WORKING
DAYS BEFORE YOU DIG

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING LOCATIONS, CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME

DO NOT SCALE DRAWINGS

GENERAL CONSTRUCTION NOTES

1.

FOR THE PURPOSE CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
GENERAL CONTRACTOR: TBD
CONTRACTOR: TBD
OWNER:VOLTA

2.

THE FOLLOWING ARE ABBREVIATED SPECIFICATIONS. ALL ITEMS NECESSARY FOR A COMPLETE AND OPERABLE JOB (TO THE SATISFACTION OF OWNER) WHETHER SHOWN OR IMPLIED SHALL BE HELD AS THE RESPONSIBILITY OF THE CONTRACTOR

3.

THE GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD DOCUMENTS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

4.

ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUES ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.

5.

ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND FEDERAL, STATE AND LOCAL JURISDICTION CODES, ORDINANCES AND APPLICABLE REGULATIONS.

6.

UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

7.

PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE "NOTED". DIMENSIONS SHOWN ARE TO FINISH SURFACES, UNLESS SAID DIMENSION IS A SPACING BETWEEN EQUIPMENT, IN WHICH CASE IT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.

8.

THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

9.

IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING.

10.

THE GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.

11.

CONSTRUCTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE.

12.

WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.

13.

THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.

14.

THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

15.

THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

16.

THE GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.

17.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.

18.

THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.

19.

THE GENERAL CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OT 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.

20.

ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. THE CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.

21.

ONLY ITEMS SPECIFICALLY CALLED OUT TO BE REMOVED OR DEMOLISHED SHALL BE AFFECTED. ANY ITEMS INCLUDING, BUT NOT LIMITED TO, CURBS, PAVEMENT, UTILITY ITEMS, LANDSCAPING, ETC. SHALL REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO REPAIR OR REPLACE ANY AFFECTED ITEMS AT OWNERS DISCRETION.

GENERAL CONSTRUCTION NOTES CONT,

21.

ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.

22.

THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.

23.

CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.

24.

NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

25.

THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT, SIDEWALKS AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.

26.

ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.

27.

THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.

28.

THE CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.

29.

NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.

30.

CONTRACTOR AND ALL OF HIS SUBCONTRACTORS THAT PERFORM ANY WORK ON THIS PROJECT SHALL BE CURRENTLY LICENSED BY ALL AGENCIES WHICH GOVERN OVER THE LAND(S) ON WHICH CONSTRUCTION IS TO TAKE PLACE. CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS AS REQUIRED, ALL COSTS SHALL BE BORNE BY CONTRACTOR.

31.

TRASH REMOVAL: CONTRACTOR SHALL REMOVE ALL TRASH CREATED BY HIMSELF OR HIS SUBCONTRACTORS DUE TO DEMOLITION OR CONSTRUCTION. THE CONTRACTOR SHALL ALSO REMOVE TRASH CREATED BY OTHER SUBCONTRACTORS INCLUDING CABLE REELS, CARDBOARD BOXES AND PACKING. PROMPTLY CLEAN-UP ALL SOILING, DEBRIS AND OTHER UNSIGHTLY OR HAZARDOUS CONDITIONS, CAUSED BY WORK OR DELIVERIES UNDER THIS CONTRACT, FROM THE BUILDING GROUNDS, ENTRIES, CORRIDORS, STAIRWAYS, ELEVATORS OR OTHER PUBLIC AREAS. ALL SHALL BE REMOVED FROM THE SITE IN A TIMELY FASHION TO A LEGAL DISPOSAL FACILITY.

32.

SIGNAGE: CONTRACTOR SHALL MAINTAIN SECURITY AROUND PERIMETER OF CONSTRUCTION SITE DURING ALL HOURS BY INSTALLING A TEMPORARY RIBBON FOR INTERIOR WORK TO IDENTIFY CONSTRUCTION AREAS AS REQUIRED. SIGNAGE SHALL BE POSTED WITH NOTIFICATIONS OF "NO TRESPASSING" AND "CONSTRUCTION AREA".

33.

CHECK ACCURACY OF ALL DIMENSIONS IN THE FIELD. UNLESS SPECIFICALLY NOTED, DO NOT FABRICATE ANY MATERIALS OFF SITE, NOR DO ANY CONSTRUCTION UNTIL THE ACCURACY OF DRAWING DIMENSIONS HAVE BEEN VERIFIED AGAINST ACTUAL FIELD DIMENSIONS.

34.

THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONFLICTS OR DISCREPANCIES IN THE CONTRACT DOCUMENTS OR FIELD CONDITIONS PRIOR TO EXECUTING THE WORK IN QUESTION. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF DETAILS ARE CONSIDERED UNSOUND, UNSAFE, NOT WATERPROOF, OR NOT WITHIN CUSTOMARY TRADE PRACTICE.

35.

INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

PARKING AND ACCESSIBILITY NOTES

1.

PROPOSED PAVEMENT STRIPING SHALL LINE UP WITH EXISTING STRIPING WHEREVER POSSIBLE. ADDITIONAL PAVEMENT STRIPE IS NOT NECESSARILY PARALLEL TO THE CONSTRUCTED CHARGING ISLAND.

2.

THIS ACCESSIBILITY REVIEW WAS UNDERTAKEN TO IDENTIFY DESIGN FEATURES OF THE PROJECT THAT MAY BE CONSIDERED BY GOVERNMENTAL AGENCIES OR DEPARTMENTS, OR NON-GOVERNMENTAL GROUPS TO BE NON-COMPLIANT WITH THE AMERICANS WITH DISABILITIES ACT OF 1990, REVISED 2010 ADA REGULATIONS AND STANDARDS. THE AMERICANS WITH DISABILITIES ACT OF 1990 IS A FEDERAL CIVIL RIGHTS LAW, THERE IS NO FEDERAL REVIEW PROCESS TO ENSURE FULL COMPLIANCE WITH THE GUIDELINES, EXCEPT THROUGH THE FEDERAL COURT SYSTEM. THE DEPICTIONS, NOTES, AND RECOMMENDATIONS, EXPRESSED ON THIS PLAN ARE BASED ON PROFESSIONAL JUDGEMENT GAINED FROM PAST EXPERIENCE WITH ACCESSIBILITY LAWS, CODES, AND STANDARDS AND THE WORKING INVOLVEMENT TO DEVELOP ACCESSIBILITY STANDARDS THAT WILL MEET OR EXCEED THE APPLICABLE FEDERAL GUIDELINES. ACCORDINGLY, NO CLAIMS OR WARRANTIES, EXPRESSED OR IMPLIED, ARE MADE THAT IN PREPARING THIS PLAN AND PROPOSING RECOMMENDATIONS, THAT ALL POSSIBLE BARRIERS TO ALL PEOPLE HAVE BEEN IDENTIFIED.

3.

CONTRACTOR SHALL ACHIEVE A MINIMUM OF 1 % BUT NO MORE THAN A 2% SLOPE IN ANY DIRECTION WITHIN ADJACENT ACCESSIBLE SPACE AND BLEND ASPHALT OVERLAY TO EXISTING GRADES AS REQUIRED. CONTRACTOR SHALL PROVIDE A SKETCH TO VOLTA OF PROPOSEDLIMITS OF ASPHALT OVERLAY TO ACHIEVE THIS REQUIREMENT PRIOR TO BEGINNING PAVEMENT WORK.

4.

ACCESSIBLE EV STALLS WERE DESIGNED BASED ON EXISTING CONDITIONS AND WITHOUT THE BENEFIT OF SURVEY DATA. ALL ADA AND LOCAL REQUIREMENTS INCLUDING BUT NOT LIMITED TO SLOPE AND SPACING SHALL BE CONFIRMED BY THE CONTRACTOR AND MET AT THE TIME OF CONSTRUCTION.

5.

CONTRACTOR TO NOTIFY THE ENGINEER OF ANY DISCREPANCIES IN ACCESSIBILITY PRIOR TO CONSTRUCTION.

TRAFFIC CONTROL NOTES

1.

DURING THE CONSTRUCTION PERIOD; SIDEWALKS, SHOULDERS, TRAVEL LANE(S), OR STREETS MAY HAVE TO BE TEMPORARILY CLOSED OR RESTRICTED FOR THE UNLOADING / LOADING OF EQUIPMENT OR AS A RESULT OF CONSTRUCTION ACTIVITIES THEMSELVES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE DIRECTLY WITH THE LOCAL GOVERNING AUTHORITIES ON ANY SUCH CLOSURES AND MUST OBTAIN WRITTEN PERMISSION FROM THE APPROPRIATE AUTHORITIES PRIOR TO IMPLEMENTING SUCH CLOSURES OR RESTRICTIONS. ANY CLOSURE OR RESTRICTION MUST COMPLY WITH THE STATE MANUAL OF UNIFORM CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS (LATEST EDITION AND REVISION), AND WITH ANY AND ALL ADDITIONAL APPLICABLE CITY, VILLAGE, OR COUNTY REQUIREMENTS. THE CONTRACTOR SHALL PREPARE AND SUBMIT A FORMAL TRAFFIC CONTROL / MOT PLAN TO THE LOCAL GOVERNING AUTHORITIES IF REQUESTED. ALL REQUIRED CONSTRUCTION TRAFFIC MAINTENANCE DEVICES SHALL BE PROVIDED, ERECTED AND MAINTAINED, AND ULTIMATELY REMOVED BY THE CONTRACTOR.

2.

THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY ACCESS TO ALL ABUTTING PROPERTIES AND INTERSECTING STREET AT ALL TIMES DURING THE CONSTRUCTION OF THE IMPROVEMENTS ANTICIPATED. DRIVEWAYS MUST BE MAINTAINED AND ALL TRENCHES SHALL BE BACKFILLED AT THE END OF EACH WORK DAY. PER THE STATE MUTCD AND OTHER APPLICABLE APPROPRIATE GOVERNING REQUIREMENTS, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFEGUARDS SUCH AS BARRICADES, SATISFACTORY BARRIERS, CONES, SIGNAGE, BARRELS, MESSAGE BOARDS, LIGHTING, FLAGMEN, LAW ENFORCEMENT OFFICERS, ETC. TO AVOID DAMAGE AND / OR INJURY TO VEHICLES AND PERSONS TRAVERSING THE CONSTRUCTION AREA.

volta

155 DE HARO STREET
SAN FRANCISCO, CA 94103

TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

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KROGER #685
DETROIT, MI

685 E MAPLE ROAD
BIRMINGHAM, MI 48009

SHEET TITLE

GENERAL NOTES & SYMBOLS

SHEET NUMBER

T-2

SITE NOTES:

1. HORIZONTAL DIRECTIONAL DRILLING (HOD) OR OTHER TRENCHLESS METHODS AS APPROVED BY SITE HOST ARE THE PREFERRED METHOD TO INSTALL CONDUIT BENEATH EXISTING PARKING LOTS AND PAVED AREAS.
 - 1.1. CONDUIT SHALL BE INSTALLED AT A MINIMUM DEPTH OF TWO AND ONE-HALF FEET (2.5') OR BELOW THE FREEZE LINE, WHICHEVER IS DEEPER. CONDUIT TYPE AND DESIGN TO BE SPECIFIED BY VOLTA AND MEET ALL LOCAL REQUIREMENTS. CONDUIT DIAMETER SHALL BE NO LARGER THAN TWO (2) INCHES.
 - 1.2. THE RECEIVING PIT SHALL BE LOCATED AS CLOSE AS REASONABLY POSSIBLE TO THE PROPOSED WALL PENETRATION TO LIMIT THE LENGTH OF BUILDING-MOUNTED CONDUIT. LOCATE RECEIVING PIT WITHIN ASPHALT PAVED AREA OR CONCRETE SIDEWALK AREA; RECEIVING PIT SHALL NOT BE LOCATED WITHIN THE UNLOADING PAD [SIX TO TEN INCH (6-1 0") REINFORCED CONCRETE SLAB AT THE REAR OF THE STORE]. RECEIVING PIT LOCATION AND WORK AREA SHALL NOT AFFECT SITE HOST CUSTOMER OR DELIVERY TRAFFIC.
 - 1.3. THE RECEIVING PIT SIZE SHALL BE LIMITED TO THREE FEET (3') BY THREE FEET (3') AND SHALL NOT UNDERMINE THE BUILDING FOUNDATION, ENCLOSURES OR CONCRETE UNLOADING PAD.
 - 1.4. BACKFILL EXCAVATIONS AND REPAIR PAVEMENT PER SPECIFICATIONS BELOW.
 - 1.5. WHERE CONCRETE PAVEMENT, SIDEWALK, ASPHALT PAVEMENT, CURBING, OR CURBING GUTTER IS REMOVED, THE WIDTH OF THE REMOVAL SHALL EXCEED THE ACTUAL WIDTH AT THE TOP OF THE TRENCH BY TWELVE INCHES (12") ON EACH SIDE OF THE TRENCH, OR A TOTAL OF TWO FEET (2') WIDER THAN THE TRENCH.
 - 1.6. TRENCHING THROUGH THE CONCRETE RECEIVING PAD AT THE REAR OF THE STORE OR THE DRIVE-THRU SLAB IS NOT ALLOWED. ONLY TRENCHING THROUGH MINOR CONCRETE INSTALLATIONS SUCH AS SIDEWALKS WILL BE PERMITTED.
 - 1.7. EXCAVATE TRENCHES TO A DEPTH FOUR INCHES (4") DEEPER THAN BOTTOM OF FINISHED PIPE ELEVATION.
 - 1.8. THE BOTTOM WIDTH OF THE TRENCH SHALL BE AS REQUIRED TO PERMIT CONDUIT TO BE PROPERLY LAIN AND BACKFILL TO BE PLACED AND PROPERLY COMPACTED.
 - 1.9. REMOVED PAVEMENT, CONCRETE AND EXCAVATED MATERIALS UNSUITABLE FOR USE AS BACKFILL SHALL BE DISPOSED OFFSITE.
 - 1.10. BEDDING AND BACKFILL MAY BE MATERIAL EXCAVATED FROM THE TRENCH PROVIDED THAT IT IS FREE FROM DEBRIS AND ROCKS LARGER THAN ONE AND ONE-HALF INCHES (1-1/2").
 - 1.11. OVER THE PIPE, IN LAYERS NOT EXCEEDING FOUR INCHES (4"), PLACE AND COMPACT SUITABLE FILL MATERIAL TO NINETY-FIVE PERCENT (95%) DRY DENSITY AS DETERMINE BY ASTM D698.
 - 1.12. COMPACTING EQUIPMENT SHALL BE OF SUCH DESIGN, WEIGHT, AND QUALITY AS IS REQUIRED TO OBTAIN THE DENSITIES SPECIFIED HEREIN OR INDICATED ON THE DESIGN DRAWINGS. AREAS INACCESSIBLE TO SELF-PROPELLED COMPACTING EQUIPMENT SHALL BE COMPACTED OR CONSOLIDATED BY HAND-OPERATED MECHANICAL TAMPERS OR VIBRATORS.
 - 1.13. RESTORE GRASS, LANDSCAPING, IRRIGATION AND ALL FEATURES TO THEIR PRECONSTRUCTION CONDITION.
2. ANY UTILITIES, PAVEMENT, IRRIGATION, LANDSCAPING OR OTHER SITE FEATURES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY CONTRACTOR TO SITE HOST SPECIFICATION.
 - 2.1. WHERE LANDSCAPING IS IMPACTED, IT IS THE RESPONSIBILITY OF CONTRACTOR TO REPOSITION OR PROVIDE NEW LANDSCAPING WITHIN THE SITE HOST PROPERTY TO ENSURE COMPLIANCE WITH ANY CODE REQUIREMENTS.
 - 2.2. WHERE PARKING LOT, SIDEWALK OR OTHER PAVED AREAS ARE IMPACTED OR DAMAGED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR THE AREA TO LIKE NEW CONDITION. REPAIR SHOULD EXTEND BEYOND DAMAGED AREA TO NEAREST CLEAN BREAK THAT ALIGNS WITH ARCHITECTURAL BREAKS, MATERIAL JOINTS, PAVEMENT MARKINGS, ETC.
3. WHERE APPLICABLE, UTILITY SERVICE PROVIDER TO USE SITE HOST APPROVED ROE (RIGHT OF ENTRY) AGREEMENT. SITE HOST PROGRAM MANAGER WILL PROVIDE TEMPLATE WHEN NECESSARY.
4. ASPHALT PAVEMENT REMOVAL AND REPLACEMENT
 - 4.1. SAW CUT THE PAVEMENT TO NEAT, STRAIGHT LINES TO THE FULL DEPTH OF THE PAVEMENT. PAVEMENT REMOVAL SHALL EXTEND A MINIMUM OF TWELVE INCHES (12") BEYOND THE EDGES OF THE REMOVAL AREA. ANY OTHER PAVEMENT AREAS DAMAGED DURING REMOVAL SHALL ALSO BE REPAIRED OR REPLACED AS NECESSARY
 - 4.2. REMOVE THE PAVEMENT WITHOUT DAMAGING THE PAVEMENT THAT IS TO REMAIN IN-PLACE.
 - 4.3. IF BASE REPLACEMENT IS REQUIRED, COMPACT THE IN-SITU SOILS TO NINETY-FIVE PERCENT (95%) ASTM D698 AND PLUS OR MINUS TWO PERCENT (2%) OF OPTIMUM MOISTURE CONTENT. REMOVE AND REPLACE ANY UNSUITABLE IN-SITU SOILS.
 - 4.4. PLACE AND COMPACT BASE MATERIAL TO NINETY-FIVE PERCENT (95%) OF ASTM D698.
 - 4.5. APPLY PRIME COAT TO AGGREGATE BASE IN COMPLIANCE WITH THE DOT SPECS. PRIME COAT SHALL NOT BE APPLIED MORE THAN TWENTY-FOUR (24) HOURS BEFORE ASPHALT PAVEMENT IS PLACED. APPLICATION RATE TO BE PER THE DOT SPEC.
 - 4.6. CLEAN AND APPLY TACK COAT TO THE ENDS OF CURBS, EDGES OF CONCRETE SURFACES, EDGES OF MANHOLES AND **INLETS** AND EDGES OF SAW CUT PAVEMENT THAT WILL REMAIN IN-PLACE.
 - 4.7. PLACE AND COMPACT HOT -MIX ASPHALT. HOT-MIX ASPHALT THICKNESS SHALL BE THE GREATER OF THE IN-PLACE ASPHALT OR THREE AND ONE-HALF INCHES (3.5"). ASPHALT MIX DESIGN SHALL BE BY THE CONTRACTOR.
 - 4.8. PLANT MIXED ASPHALT BASE/BINDER COURSE: PROVIDE ONE COURSE LAID TO A MINIMUM COMPACTED THICKNESS OF TWO INCHES (2").
 - 4.9. PLANT MIXED ASPHALT SURFACE COURSE: PROVIDE ONE COURSE LAID TO A MINIMUM COMPACTED THICKNESS OF ONE AND ONE-HALF INCHES (1-1/2").
 - 4.10. FOR SMALLER JOBS, IT MAY NOT BE FEASIBLE TO INSTALL BINDER AND SURFACE COURSES, IN WHICH CASE SURFACE COURSE, PLACED AND COMPACTED IN TWO LIFTS WILL BE ACCEPTED.
 - 4.11. IF PLACING HOT MIX ASPHALT WITH A SHOVEL, BEGIN PLACING HMA AGAINST THE EDGES OF THE PATCH AND WORKING INWARD. HMA SHOULD NOT BE PLACED IN THE CENTER OF THE PATCH AND RAKED TOWARDS THE EDGES.
 - 4.12. THE FIRST PASS OF THE ROLLER OR COMPACTION EQUIPMENT SHOULD BE ALONG THE EDGES OF THE PATCH TO PROPERLY FORM THE JOINT. THE ROLLER WHEEL OR COMPACTION EQUIPMENT SHOULD OVERHANG THE EXISTING PAVEMENT ONTO THE PATCH BY SIX INCHES (6"). AFTER THE PERIMETER OF THE PATCH HAS BEEN COMPACTED BEGIN TO WORK TOWARDS THE CENTER OF THE PATCH WITH SUCCESSIVE PASSES OFFSET BY SIX INCHES (6").
 - 4.13. THE CONTRACTOR SHALL UTILIZE THE APPROPRIATE HEAVY COMPACTION EQUIPMENT TO ACHIEVE THE REQUIRED COMPACTION OF THE ASPHALT.
 - 4.14. SEAL THE AREA AROUND THE EDGES WITH AN ELASTOMERIC LIQUID ASPHALT SEALER TO PROTECT AGAINST WATER INFILTRATION, INCLUDING ANY INADVERTENT OVERCURTS DURING THE SAW CUTTING PROCEDURE

GENERAL ELECTRICAL SPECIFICATIONS

1. CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE ALL ITEMS DEFINED IN THE CONTRACT DOCUMENTS. THE CONTRACT DOCUMENTS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: THE CONTRACT, AND CONSTRUCTION DRAWINGS. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO INSTALL ALL ELECTRICAL EQUIPMENT, CONDUIT, WIRING ETC. AS SHOWN OR IMPLIED ON THE DRAWINGS AND TO PROVIDE A COMPLETE OPERATIVE SYSTEM TO THE SATISFACTION OF OWNER.
2. INSTALLATION OF ALL ELECTRICAL EQUIPMENT, DEVICES, CONDUITS, ETC. MUST BE COORDINATED WITH ALL OTHER TRADES. COORDINATE SHUTDOWN TIMES AND WORKING HOURS WITH BUILDING OWNER, INCLUDING OFF HOURS, WEEKEND, AND HOLIDAY WORK AS REQUIRED.
3. GUARANTEE - CONTRACTOR SHALL FURNISH OWNER WITH A WRITTEN GUARANTEE TO PROMPTLY REMEDY ALL DEFECTS OF WORK OR MATERIALS WITHOUT CHARGE FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE AND INSPECTION.
4. MATERIALS - ALL MATERIALS AND EQUIPMENT SHALL BE NEW, IN ORIGINAL CONTAINERS/WRAPPINGS, SHALL BE SPECIFICATION GRADE, AND LABELED OR LISTED BY U.L. OR AN ACCREDITED TESTING ORGANIZATION AS REQUIRED BY LOCAL INSPECTORS.
5. ALL EQUIPMENT SHALL BE DESIGNED TO OPERATE ON VOLTAGE AND PHASE SPECIFIED. CONTRACTOR FURNISHING EQUIPMENT OTHER THAN INDICATED SHALL BE RESPONSIBLE FOR ANY CHANGES IN CONDUCTORS, RACEWAYS, SWITCHES, MAIN FEEDERS, AND APPURTENANCES AND PAY ALL ASSOCIATED COSTS. REQUIREMENTS FOR ANY INCREASE IN CAPACITIES SHALL BE REVIEWED BY ENGINEER.
6. CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC. ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER, PRIOR TO BEGINNING ANY WORK.
7. CODES AND ORDINANCES
 - 7.1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH LATEST EDITION OF NEC AND ALL APPLICABLE CODES AND ORDINANCES, INCLUDING SUCH AS PERTAIN TO THE SAFETY AND HEALTH RELATIONS. CODES AND ORDINANCES SHALL TAKE PRECEDENCE OVER THE DRAWINGS AND SPECIFICATIONS ONLY IN CASE OF CONFLICT AND SHALL INCLUDE BUT NOT BE LIMITED TO:
 - 7.1.A. UL - UNDERWRITERS LABORATORIES
 - 7.1.B. NEC - NATIONAL ELECTRICAL CODE
 - 7.1.C. NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
 - 7.1.D. OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT
 - 7.1.E. SBC - STANDARD BUILDING CODE
 - 7.1.F. NFPA - NATIONAL FIRE CODES
8. EXISTING CONDITIONS AND DEMOLITION
 - 8.1. ALL ELECTRICAL DEMOLITION WORK, INCLUDING MATERIAL REMOVAL FROM THE SITE, SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. BEFORE PROCEEDING WITH THE DEMOLITION WORK, THE CONTRACTOR SHALL OBTAIN FROM THE BUILDING OWNER A LIST OF ANY REMOVED ITEMS TO BE SALVAGED. ALL OTHER REMOVED MATERIALS AND EQUIPMENT SHALL BE PROPERLY DISCARDED OFF THE PREMISES.
 - 8.2. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PROPERTY RESULTING FROM THE CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE AT THE COMPLETION OF WORK.
9. BASIC ELECTRICAL MATERIALS AND METHODS
 - 9.1. WHERE STRUCTURAL OPENINGS ARE NOT AVAILABLE, THE CONTRACTOR SHALL CORE DRILL OR CUT CHASES IN WALLS AND FLOORS AS REQUIRED. ALL PENETRATIONS OF THE BUILDING WALLS, CEILING AND FLOORS, THE CONTRACTOR SHALL SEAL WITH QUALITY CAULK, FIRE RATED AND WATERTIGHT.
 - 9.2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CUTTING, SUBSEQUENT PATCHING, AND REQUIRED FLASHING FOR ALL ITEMS NECESSARY FOR ELECTRICAL PART OF THE CONTRACT. PATCH, PAINT, AND REPAIR ANY AREA DAMAGED TO THE SATISFACTION OF THE BUILDING OWNER.
 - 9.3. THE EXACT LOCATIONS OF ALL ELECTRICAL DEVICES, EQUIPMENT AND CONDUIT, AS SHOWN ON THE DRAWING, IS APPROXIMATE. WHEN NOT SHOWN IN DETAIL, THE EXACT LOCATION OR ROUTING SHALL BE DETERMINED BY THE CONTRACTOR, SUBJECT TO THE APPROVAL OF OWNER.
 - 9.4. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS OR OTHER SUPPORT FOR THE MOUNTING AND SUPPORT OF ALL ITEMS REQUIRING THE SAME AS REQUIRED BY N.E.C.
 - 9.5. TRENCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND COMPACTION. WHEN DIRECTIONAL BORING IS REQUIRED, CONTRACTOR SHALL INSTALL A LOOSE TONING WIRE WITHIN INSTALLED CONDUIT TO ALLOW FOR IDENTIFICATION OF UNDERGROUND CONDUITS.
 - 9.6. ALL BOLTS SHALL BE STAINLESS STEEL.
 - 9.7. FOR UNDERGROUND RACEWAYS, PROVIDE ADDITIONAL SLACK IN CONDUCTORS AND CONDUIT EXPANSION JOINTS IN ORDER TO ALLOW FOR EARTH MOVEMENT FROM SETTLEMENT, FROST, ETC. IN ORDER TO PREVENT DAMAGE TO THE CONDUCTORS OR TO THE EQUIPMENT CONNECTED TO THE RACEWAYS PER THE NEC.
10. ELECTRICAL EQUIPMENT
 - 10.1. ALL EQUIPMENT SHALL BE DESIGNED TO OPERATE ON VOLTAGE AND PHASE SPECIFIED. CONTRACTOR FURNISHING EQUIPMENT OTHER THAN INDICATED SHALL BE RESPONSIBLE FOR ANY CHANGES IN CONDUCTORS, RACEWAYS, SWITCHES, MAIN FEEDERS, AND APPURTENANCES AND PAY ALL ASSOCIATED COSTS. REQUIREMENTS FOR ANY INCREASE IN CAPACITIES SHALL BE REVIEWED BY ENGINEER.
11. FIRESTOPPING AND SEALING ELECTRICAL PENETRATIONS
 - 11.1. CONTRACTOR SHALL FURNISH AND INSTALL FIRESTOPPING FOR SEALING AROUND ELECTRICAL PENETRATIONS THROUGH FIRE OR SMOKE BARRIERS, AND FLOORS.
 - 11.2. FIRE STOPPING MATERIALS SHALL BE INTUMESCENT SAFETY BARRIERS DESIGNED TO BLOCK THE SPREAD OF FIRE AND SMOKE THROUGH PENETRATIONS CREATED BY ELECTRICAL INSTALLATIONS IN FIRE RATED WALLS AND FLOORS. MATERIALS SHALL BE FLAME, TOXIC FUME, AND WATER RESISTANT AND SHALL HAVE A MINIMUM 3 HOUR FIRE RATING. FIRE RATING SHALL BE DEFINED BY TESTS CONDUCTED BY ASTM, UL OR OTHER TESTING AND INSPECTION AGENCIES ACCEPTABLE TO THE AHJ.

12. GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

12.1. ALL RACEWAYS AND EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE N.E.C. AND ANY LOCAL CODES.

12.2. ALL CONDUITS SHALL CONTAIN A CODE SIZE GROUNDING CONDUCTOR.

12.3. EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSULATED WITH GREEN-COLORED INSULATION.

12.4. GROUNDING ELECTRODE CONDUCTORS SHALL BE STRANDED CABLE.

13. ELECTRICAL IDENTIFICATION

13.1. PROVIDE NAMEPLATES FOR ALL MAJOR ELECTRICAL EQUIPMENT AND ON EQUIPMENT AS DIRECTED BY OWNER. CLEARLY LABEL EQUIPMENT FOR VOLTA STATIONS WITH NOMENCLATURE SHOWN ON DRAWINGS (E.G. EVCS #1, EVCS #2, ETC).

13.2. PROVIDE ALL FEEDERS AND BRANCH CIRCUIT WIRING WITH COLOR CODED VINYL TAP WRAPPED A MINIMUM OF 1.5 TIMES AROUND CIRCUMFERENCE OF JACKET/SHIELDING TO DESIGNATE PHASE.

13.3. COLOR CODING OF CONDUCTORS SHALL BE PER OWNERS REQUIREMENTS.

13.4. CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL SERVICE CONDUITS. CAUTIONS TAPE TO READ "CAUTION BURIED ELECTRIC"

14. CONDUCTORS AND CABLES

14.1. WIRING - ALL CONDUCTORS SHALL BE EQUAL TO OR BETTER THAN MINIMUM #12 AWG FOR POWER, #14 AWG FOR CONTROL WITH 98% CONDUCTIVITY STRANDED COPPER, 600V, COLOR CODED, UNLESS NOTED ALUMINUM (AL). REFER TO "ALUMINUM CONDUCTOR REQUIREMENTS" THIS SHEET. PROVIDE 75°C RATED CONDUCTORS FOR AMPACITIES ABOVE 100A AND 60°C RATED CONDUCTORS FOR AMPACITIES OF 100 AMPS OR LESS. PROVIDE SOLID OR STRANDED FOR #10 AWG AND SMALLER, STRANDED FOR #8 AWG AND LARGER. UNLESS NOTED OTHERWISE ON DRAWINGS.

14.2. WIRE SIZE OF BRANCH CIRCUITS SHALL BE ADJUSTED TO COMPENSATE FOR VOLTAGE DROP BASED UPON ACTUAL CONDUIT ROUTING. CONTRACTOR SHALL MAINTAIN VOLTAGE DROP AS RECOMMENDED BY N.E.C. (NOT TO EXCEED 3%).

14.3. PROVIDE A SEPARATE NEUTRAL FOR EACH BRANCH CIRCUIT, FEEDER, ETC. NEUTRALS ARE NOT PERMITTED TO BE SHARED.

14.4. CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER.

14.5. ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED - NO SUBSTITUTIONS.

15. ALUMINUM CONDUCTOR REQUIREMENTS

15.1. ALUMINUM CONDUCTOR GRADE SHALL BE MINIMUM AA-8000 OR THE NEWEST ALUMINUM CONDUCTOR SPECIFICATION BEING USED BY THE INDUSTRY.

15.2. THE CONTRACTOR SHALL ABIDE BY ALL ARTICLES RELATED TO ALUMINUM CONDUCTORS IN THE LATEST ISSUE OF THE NEC.

15.3. ALUMINUM CONDUCTORS SHALL ONLY BE TERMINATED USING ALUMINUM RATED CONNECTIONS. CONTRACTOR SHALL VERIFY TERMINATIONS ON EACH DEVICE OR EQUIPMENT BEFORE START OF WORK FOR RATED ALUMINUM CONNECTORS. THE CONTRACTOR SHALL ABIDE BY ALL ALUMINUM WIRING INSTALLATION STANDARDS AS REQUIRED BY THE NEIS (NATIONAL ELECTRICAL INSTALLATION STANDARDS) PUBLISHED BY THE NECA (NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION). THE CONTRACTOR SHALL ABIDE BY ALL STANDARDS IN THE NECA / AA - 2006, WHICH DEFINES MINIMUM STANDARDS OF QUALITY AND WORKMANSHIP.

16. RACEWAY AND BOXES

16.1. RACEWAYS: UNLESS NOTED OTHERWISE, ALL EXPOSED CONDUIT SHALL BE R.G.S., SCHEDULE 80 AND COVERED 6" BELOW FINISHED GRADE TO BE PVC, SCHEDULE 40. PROVIDE WEATHERPROOF FLEX CONNECTIONS WHERE REQUIRED. CONTRACTOR SHALL PROVIDE JUNCTION AND/OR PULL BOXES WHERE SHOWN ON THE DRAWINGS, OR AS REQUIRED, WHETHER SHOWN ON THE DRAWINGS OR NOT, AND SIZED PER N.E.C. PROVIDE NON-METALLIC ENCLOSURE WITH OPEN BOTTOM AND GASKETED COVER MANUFACTURED BY QUIAZITE OR EQUIVALENT WITH DRIVE-OVER COVER ABLE TO WITHSTAND OCCASIONAL NON-DELIBERATE LIGHT VEHICULAR TRAFFIC. LABEL COVER TO SUIT INSTALLATION (I.E. "POWER" "COMMUNICATIONS", "LIGHTING", ETC.) AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

16.1.A. ABOVE GRADE: R.G.S.

16.1.B. BELOW GRADE: SCHEDULE 40 PVC (UNLESS NOTED OTHERWISE)

16.2. ALL WIRING SHALL BE INSTALLED IN CONDUIT. ALL CONDUIT SHALL BE A MINIMUM OF 3/4".

16.3. CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS - 200 LBS TEST POLYETHYLENE CORD. CONTRACTOR SHALL PROVIDE MANUFACTURED LONG RADIUS BENDS FOR ALL CONDUITS. RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR 'GOLD GALV'.

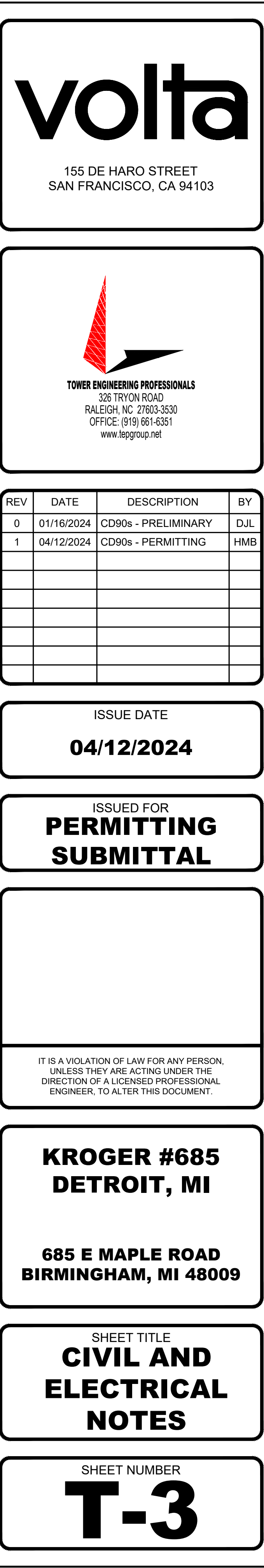
16.4. OUTLET BOXES SHALL BE CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.

17. SAFETY SWITCHES

17.1. ALL DISCONNECT SWITCHES SHALL BE HEAVY-DUTY CONSTRUCTION WITH LOCKABLE HANDLES SIZED AS NOTED ON THE DRAWINGS AND/OR RISER DIAGRAM. PROVIDE NEMA ENCLOSURE AS REQUIRED BY EXPOSURE TYPE. ALL FUSIBLE SWITCHES SHALL BE PROVIDED WITH DUAL ELEMENT FUSES SIZED PER THE EQUIPMENT MANUFACTURER'S RECOMMENDATION.

18. FUSES

18.1. FUSES SHALL BE DUAL ELEMENT, TIME DELAY CURRENT LIMITING. CONTRACTOR SHALL COORDINATE FUSE SIZES WITH EQUIPMENT MANUFACTURER'S REQUIREMENTS AND PER THE N.E.C.





Level 2 Media Station

Matching charging speed with business needs.

Volta Charging is driving the transition to clean electric transportation by transforming properties with electric vehicle charging. No longer will people drive to fuel, but fuel where they go.

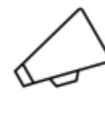
Placing the right chargers for each property's businesses and customers.

Volta's turn-key electric vehicle charging is tailored to each location's needs and desired customer experience to increase traffic and customer engagement. Our fully integrated EV chargers include high-impact digital media screens that provide properties with branding and messaging as well as additional revenue opportunities.

Key features

- 

Turn-Key Solution, White Glove Service

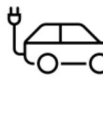
 - All installation costs covered by Volta (chargers, engineering, permitting, construction services)
 - Ongoing networking, maintenance & monitoring
 - Over-the-air station software updates
 - 24/7 customer support
- 

Volta Media Advantage

 - Dual 55" digital displays with dynamic media content
 - Curated brand & community messaging opportunities
 - Engagement opportunities & QR capabilities
- 

Cloud-Based Partner Portal

 - Real-time station status
 - Accessible partner portal reporting utilization insights, data & ESG analytics

- 

Level 2 Charging

 - Charges up to 10kW (up to 40 miles of range/hour)
 - Dwell times of +2 hours
 - Universal J1772 connector
- 

Dedicated Mobile App

 - Real-time station availability
 - Check-in & charging session details
 - Supports Apple Pay, Google Pay & credit card
- 

Flexible Payment Options

 - In-app payment methods (Apple Pay, Google Wallet, credit & debit card)
- 

Patented & Award-Winning Station Design

 - Weather-resistant enclosure
 - ETL listed and UL recognized
 - Designed for ADA compliance



Tech specs

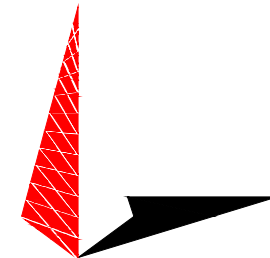
Station Rating	10 kW
AC Input	
Input Voltage	208 VAC, 1-phase
Input Current	48 A
Input Wiring	3-wire (L1, L2, GND)
Input Frequency Range	60 Hz
Circuit Breaker	60 A, 2-pole
AC Input (Auxiliary)	
Input Voltage	120 VAC, 1-phase
Input Current	6 A
Input Wiring	3-wire (L1, N, GND)
Circuit Breaker	20 A
Protection	
Ground Fault Protection	Yes
Ground Monitor	Yes
Protection	Over-Voltage, Over-Current, Over-Temperature, Short-Circuit
Environment Conditions	
Operating Temperature	-30°C to +50°C
Operating Altitude	6500 ft.
Humidity	95% Non-Condensing
Physical Characteristics	
Station Dimension	36.5" W x 15.5" D x 85" H
Station Weight	700 lbs
Enclosure Rating	NEMA 3R
Compliance	
Safety	FCC, UL 2231/2, UL 2594, NEC Article 625, CSA C22.2 No. 280-16
ADA	Yes
Features	
Connector Type	J1772
Cable Length	15 feet
Cable Management System	Yes
Contactless Reader	Yes, NFC
Display	55-inch w/ Ambient Light Sensor
Network Interface	OCPP 1.6J
Network Connectivity	Cellular
Demand Response	Yes, OpenADR 2.0b

Level 2 Media Station



volta

155 DE HARO STREET
SAN FRANCISCO, CA 94103



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

REV	DATE	DESCRIPTION	BY
0	01/16/2024	CD90s - PRELIMINARY	DJL
1	04/12/2024	CD90s - PERMITTING	HMB

ISSUE DATE

04/12/2024

ISSUED FOR

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KROGER #685
DETROIT, MI

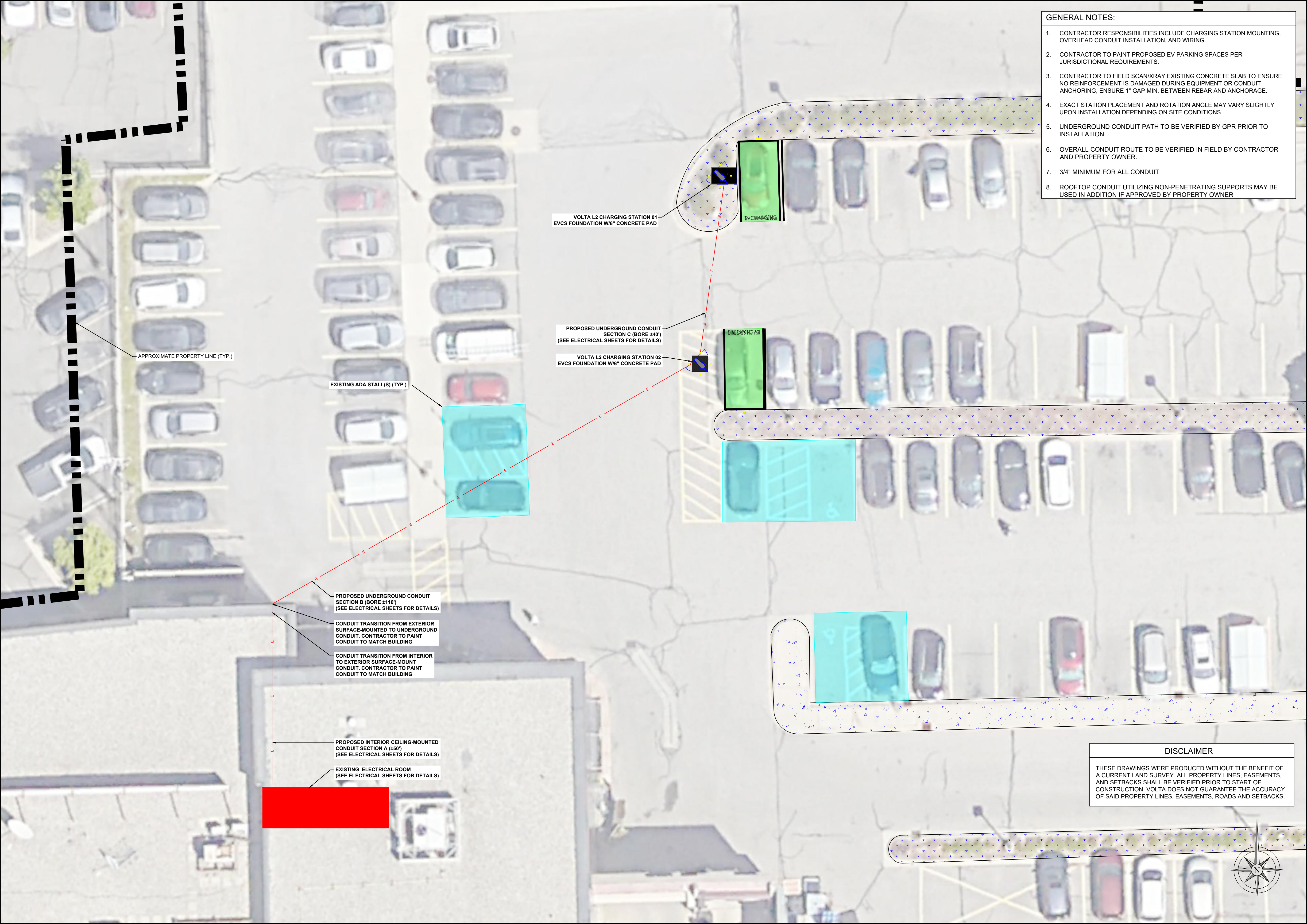
685 E MAPLE ROAD
BIRMINGHAM, MI 48009

SHEET TITLE

VOLTA STATION
CUT SHEET

SHEET NUMBER

T-4



- GENERAL NOTES:
1. CONTRACTOR RESPONSIBILITIES INCLUDE CHARGING STATION MOUNTING, OVERHEAD CONDUIT INSTALLATION, AND WIRING.
 2. CONTRACTOR TO PAINT PROPOSED EV PARKING SPACES PER JURISDICTIONAL REQUIREMENTS.
 3. CONTRACTOR TO FIELD SCAN/XRAY EXISTING CONCRETE SLAB TO ENSURE NO REINFORCEMENT IS DAMAGED DURING EQUIPMENT OR CONDUIT ANCHORING, ENSURE 1" GAP MIN. BETWEEN REBAR AND ANCHORAGE.
 4. EXACT STATION PLACEMENT AND ROTATION ANGLE MAY VARY SLIGHTLY UPON INSTALLATION DEPENDING ON SITE CONDITIONS
 5. UNDERGROUND CONDUIT PATH TO BE VERIFIED BY GPR PRIOR TO INSTALLATION.
 6. OVERALL CONDUIT ROUTE TO BE VERIFIED IN FIELD BY CONTRACTOR AND PROPERTY OWNER.
 7. 3/4" MINIMUM FOR ALL CONDUIT
 8. ROOFTOP CONDUIT UTILIZING NON-PENETRATING SUPPORTS MAY BE USED IN ADDITION IF APPROVED BY PROPERTY OWNER

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155 DE HARO STREET
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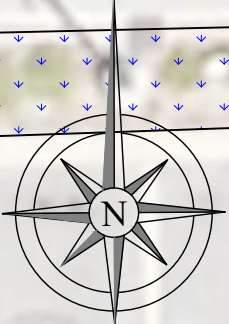
**685 E MAPLE ROAD
BIRMINGHAM, MI 48009**

SHEET TITLE
**OVERALL
SITE PLAN**

SHEET NUMBER
C-1

DISCLAIMER

THESE DRAWINGS WERE PRODUCED WITHOUT THE BENEFIT OF A CURRENT LAND SURVEY. ALL PROPERTY LINES, EASEMENTS, AND SETBACKS SHALL BE VERIFIED PRIOR TO START OF CONSTRUCTION. VOLTA DOES NOT GUARANTEE THE ACCURACY OF SAID PROPERTY LINES, EASEMENTS, ROADS AND SETBACKS.



10' 0 5' 10' SCALE: 1" = 10'-0" (24x36)
(OR) 1" = 20'-0" (11x17)

1

OVERALL SITE PLAN



ENLARGED SITE PLAN - STATIONS 1 & 2

- GENERAL NOTES:
1. CONTRACTOR RESPONSIBILITIES INCLUDE CHARGING STATION MOUNTING, OVERHEAD CONDUIT INSTALLATION, AND WIRING.
 2. CONTRACTOR TO PAINT PROPOSED EV PARKING SPACES PER JURISDICTIONAL REQUIREMENTS.
 3. CONTRACTOR TO FIELD SCAN/XRAY EXISTING CONCRETE SLAB TO ENSURE NO REINFORCEMENT IS DAMAGED DURING EQUIPMENT OR CONDUIT ANCHORING, ENSURE 1" GAP MIN. BETWEEN REBAR AND ANCHORAGE.
 4. EXACT STATION PLACEMENT AND ROTATION ANGLE MAY VARY SLIGHTLY UPON INSTALLATION DEPENDING ON SITE CONDITIONS
 5. UNDERGROUND CONDUIT PATH TO BE VERIFIED BY GPR PRIOR TO INSTALLATION.
 6. OVERALL CONDUIT ROUTE TO BE VERIFIED IN FIELD BY CONTRACTOR AND PROPERTY OWNER.
 7. 3/4" MINIMUM FOR ALL CONDUIT
 8. ROOFTOP CONDUIT UTILIZING NON-PENETRATING SUPPORTS MAY BE USED IN ADDITION IF APPROVED BY PROPERTY OWNER
 9. EXACT POSITIONING OF CONCRETE PAD MAY VARY DUE TO ONSITE CONDITIONS. CONTRACTOR TO VERIFY WITH VOLTA CONSTRUCTION MANAGER FOR ANY VARIATIONS GREATER THAN 12" IN ANY DIRECTION.
 10. STATIONS TO BE PLACED A MINIMUM OF 24" FROM EDGE OF CURB. CONTRACTOR TO VERIFY BOLLARD REQUIREMENTS WITH VOLTA CONSTRUCTION MANAGER FOR STATIONS PLACED LESS THAN 24".



EVCS 01 PLACEMENT



EVCS 02 PLACEMENT

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DETROIT, MI**

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SHEET TITLE

**ENLARGED
SITE PLAN**

SHEET NUMBER

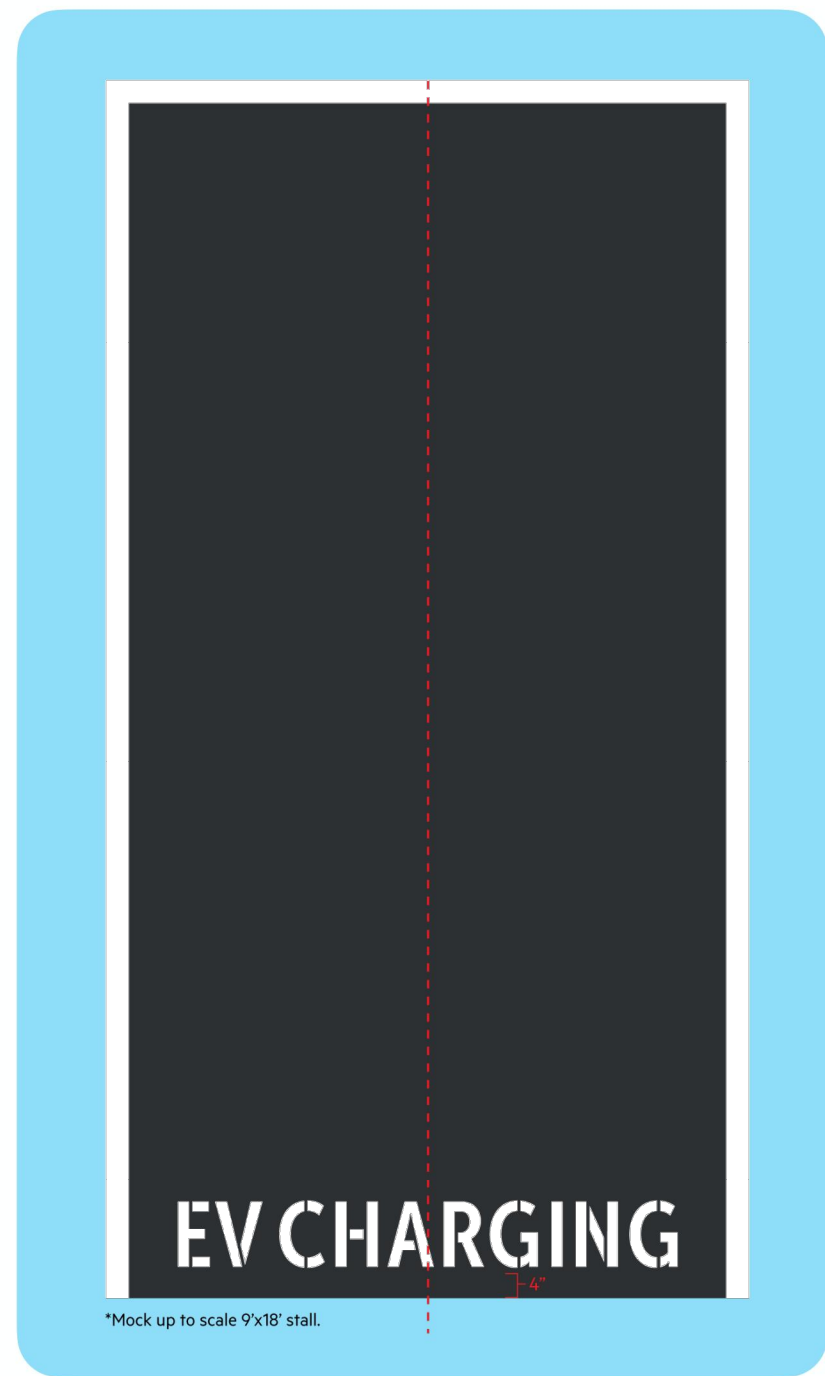
C-2

Volta Charging

STRIPING GUIDELINES

PRODUCTS

Cement & Asphalt background: Latex-free 4.75 Gal. Ultra Shaded Drawing Film Sealer
Traffic Paint: Sherwin Williams TP2233 LF Yellow TTP-2942D, TP2232 White TTP-1962D



Founded in 2020. Designed in San Francisco, built to last in the USA.

info@voltacharging.com

1 of 3

SURFACE PREP

Backgrounds are to only be painted for marquee locations or any location where the existing space has conflicting designations or is poor shape. For all other instances please proceed to branded striping.

CEMENT & ASPHALT BACKGROUND:

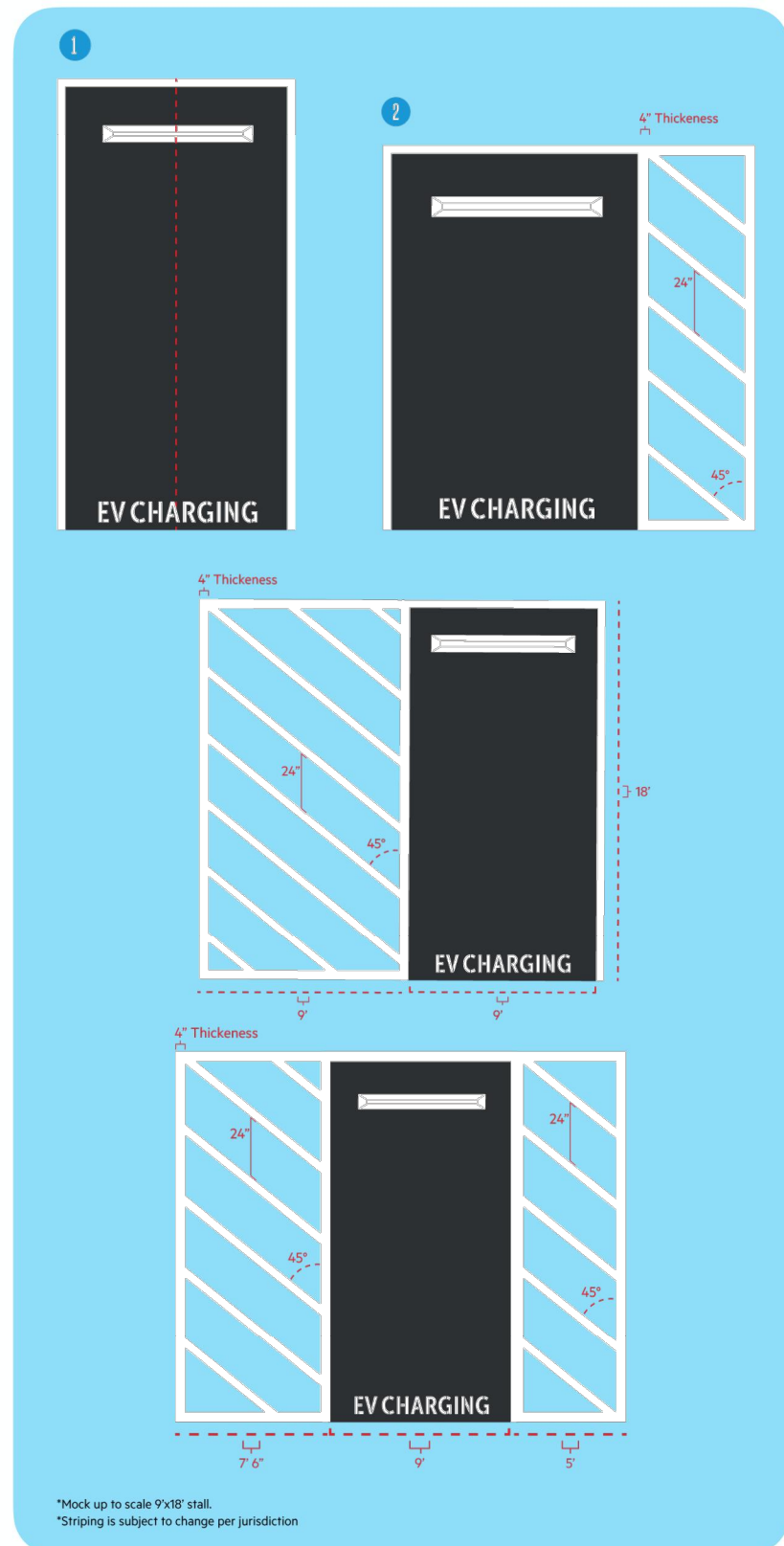
All backgrounds must run edge-to-edge across the entire parking space. Asphalt should be resealed with sealcoat.

BRANDED STRIPING

LETTERS Place centered, 4 inches from the bottom of the stall.

Volta Charging

STRIPING GUIDELINES



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2 of 3

ABSOLUTELY DO NOT

- Paint only a portion of the background (edge-to-edge or not at all)
- Break EV CHARGING into 2 lines

ACCESSORIES

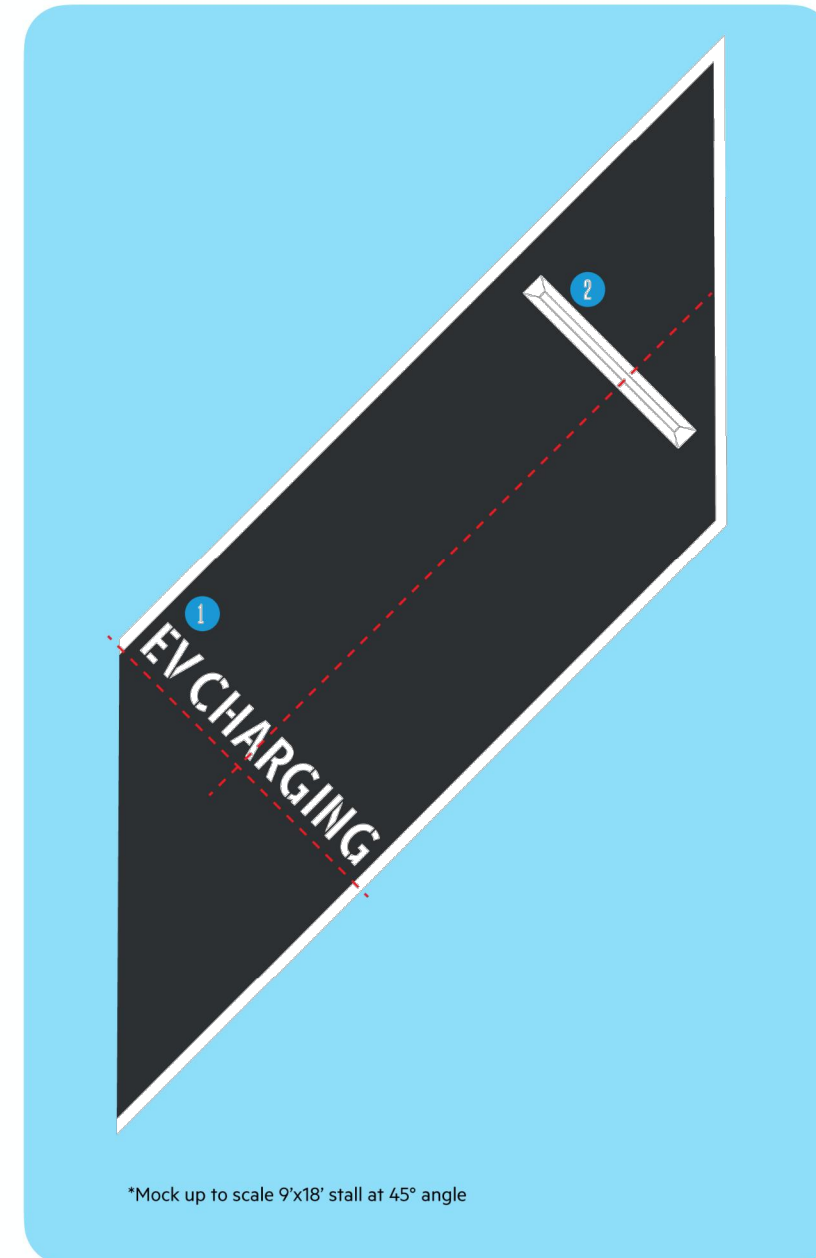
1. WHEEL STOPS Place centered within the stall. Wheel Stops should be painted white.

2. ACCESS AISLE Should be painted white.

CURBS No need to paint the curbs unless curbs are damaged and repaired. If repaired, paint the curb(s) to match existing conditions.

Volta Charging

STRIPING GUIDELINES



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3 of 3

DIAGONAL STALLS

- LETTERS Place centered, 4 inches from the bottom of the stall.
- WHEEL STOPS Place in the same angle as the stall lines. Center according to the space left in angled area. Wheel Stops should be painted white.

EV STRIPING GUIDELINES

SCALE
N.T.S.

01

EV STRIPING GUIDELINES

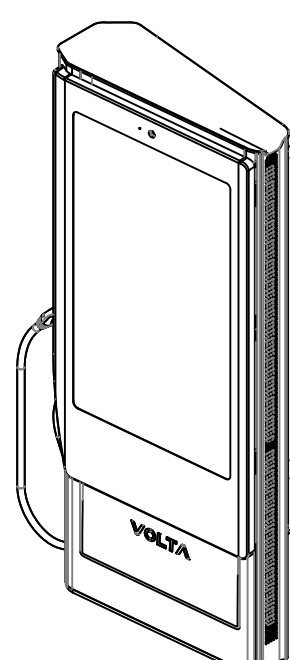
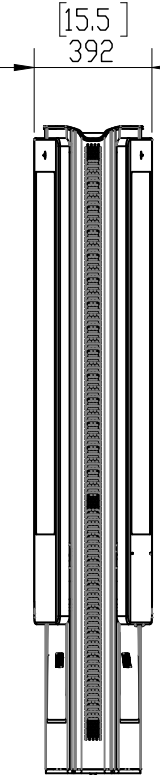
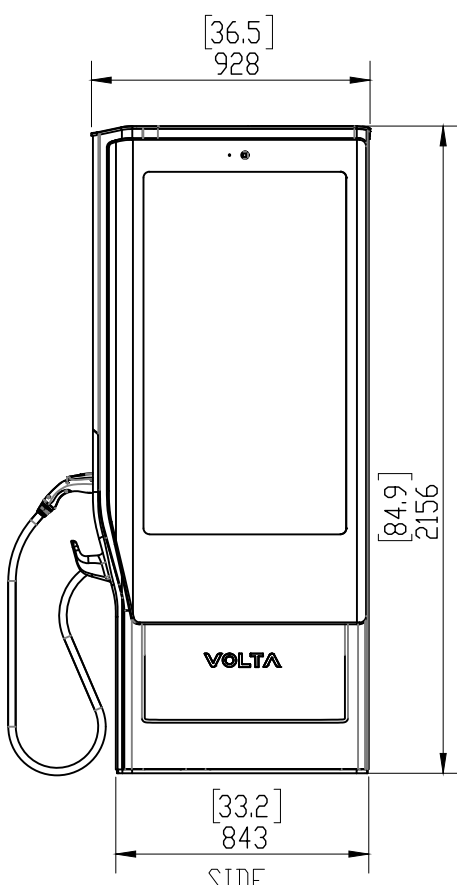
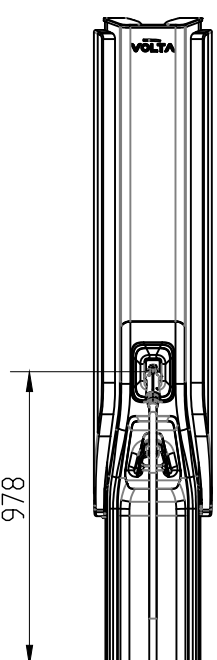
SCALE
N.T.S.

02

EV STRIPING GUIDELINES

SCALE
N.T.S.

03



(2x DISPLAYS)

CHARGER SPECIFICATIONS

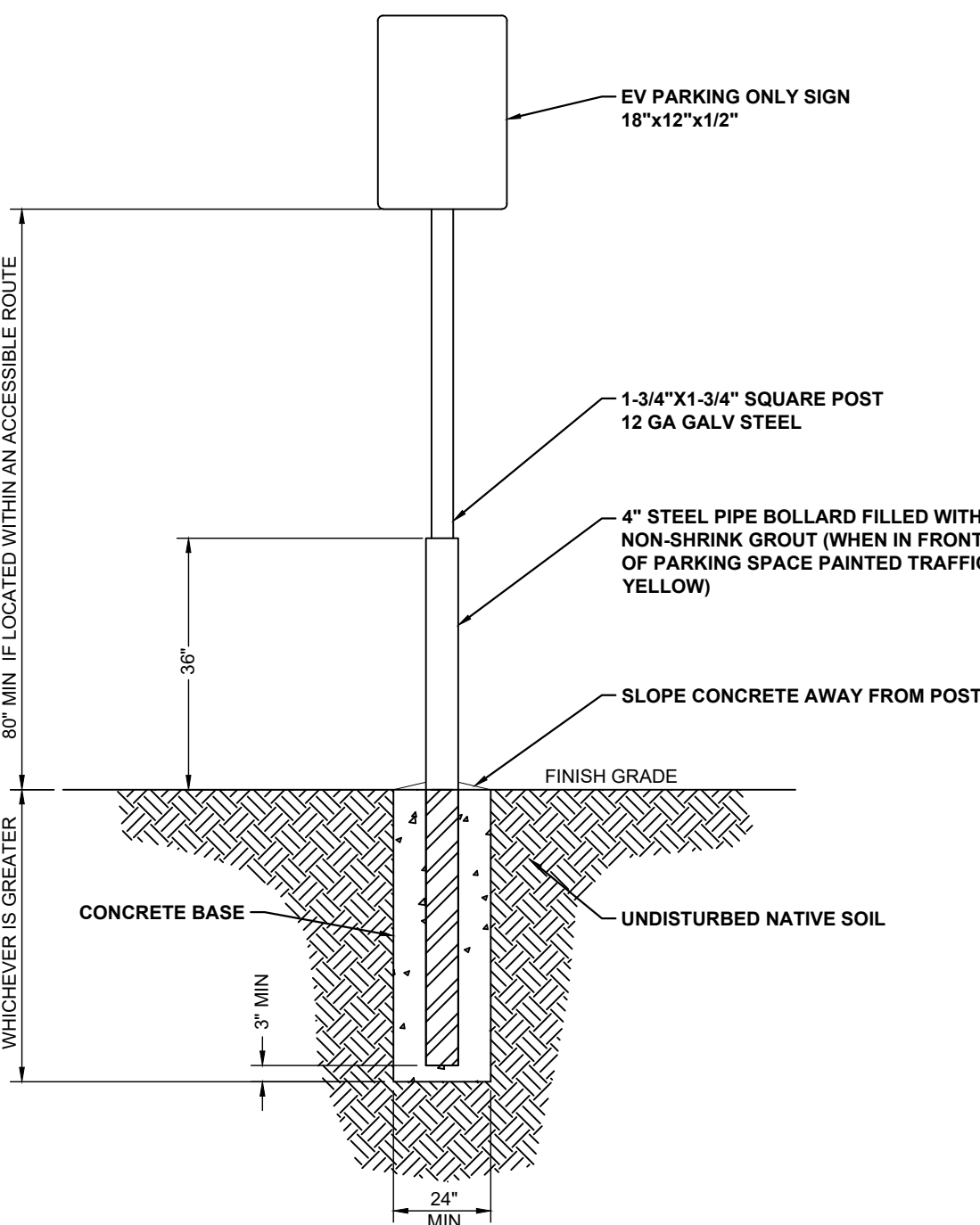
SIZE: H 85.0" X W 36.5" X D 15.5"
CORD LENGTH: 12.5'
POWER OUTPUT: 208-240VAC,
48A (MAX), 10 kW MAX
PLUG: SAE J1772 COMPLAINT
LISTINGS: UL E354307

POWER REQUIREMENTS:

CHARGING UNIT: 60A/3P
200Y/240V BREAKER
STATION AUX POWER: 20A/1P
120V BREAKER

NOTES

THE GRIP RANGE FOR THE
CHARGE CABLE BEGINS AT 38.5"
ABOVE PARKING SURFACE



NOTES:

- SIGN TO BE GREEN (PANTONE 355C) WITH WHITE LETTERING AND MUST BE REFLECTIVE LETTERING.
- TO BE PLACED AT HEAD OF PARKING STALL.
- POST MOUNTED OBJECTS PER SECTION 11B-307.3.
- THIS DETAIL SHALL BE USED WHEN SIGN POST IS LOCATED IN PARKING LOT PAVEMENT, OR WITHIN 2' CAR OVERHAND ZONE.
- REFER TO NOTES FOR ASSUMED GEOTECHNICAL PARAMETERS. THIS SIGN DESIGN ASSUMES ASCE 7-10 WIND SPEED 115 MPH AND AN EXPOSURE CATEGORY B. IF EITHER OF THESE GEOTECHNICAL PROPERTIES OR ASCE 7-10 WIND PARAMETERS DIFFER BASED ON LOCATION THE DESIGN MUST BE UPDATED BY A STRUCTURAL ENGINEER.

NOTE:

ALL SIGNS TO BE INSTALLED AT 60" ABOVE FINISH FLOOR. IF SIGNS ARE LOCATED WITHIN AN ACCESSIBLE ROUTE, THEY WILL BE INSTALLED AT 80" ABOVE FINISHED FLOOR. MEASUREMENTS ARE TAKEN FROM BOTTOM OF LOWEST SIGN

V4 L2 EVCS (60A/2P BREAKER)

SCALE
N.T.S.

04

SIGN POST W/ BOLLARD

SCALE
N.T.S.

05

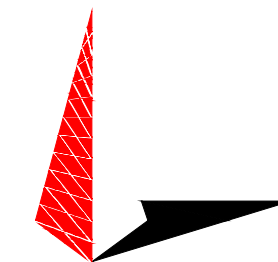
SIGN REQUIREMENTS

SCALE
N.T.S.

06

volta

155 DE HARO STREET
SAN FRANCISCO, CA 94103



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

REV	DATE	DESCRIPTION	BY
0	01/16/2024	CD90s - PRELIMINARY	DJL
1	04/12/2024	CD90s - PERMITTING	HMB

ISSUE DATE

04/12/2024

ISSUED FOR
**PERMITTING
SUBMITTAL**

IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE
DIRECTION OF A LICENSED PROFESSIONAL
ENGINEER, TO ALTER THIS DOCUMENT.

**KROGER #685
DETROIT, MI**

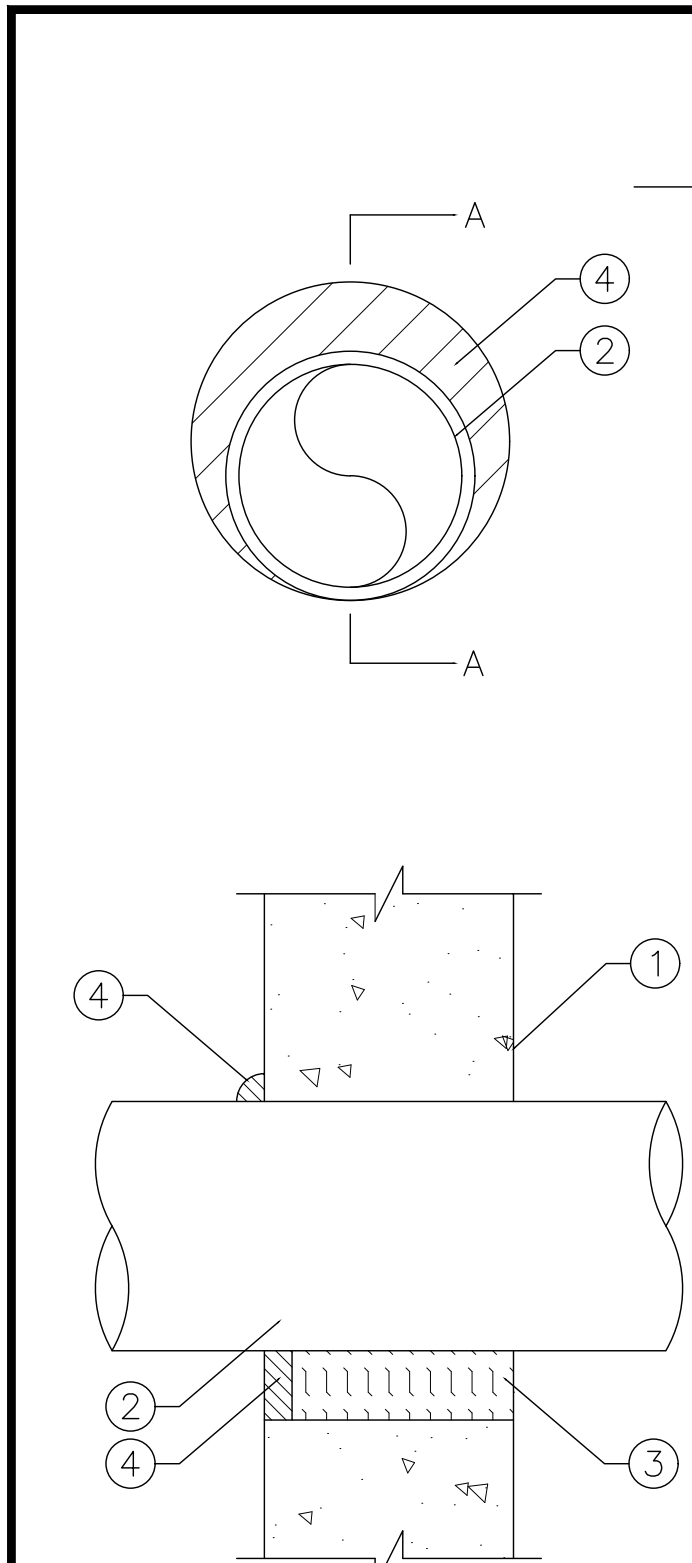
**685 E MAPLE ROAD
BIRMINGHAM, MI 48009**

SHEET TITLE
**DETAILS
SPEC SHEET**

SHEET NUMBER

C-3

NOTE: THE ORIGINAL SIZE OF THIS PLATE IS 36" X 48". SCALE IS TO BE USED FOR REDUCED OR ENLARGED SHEET SIZES.



U.L. SYSTEM NO. C-AJ-1150
CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902

F RATING = 3-HR.
T RATING = 0-HR.

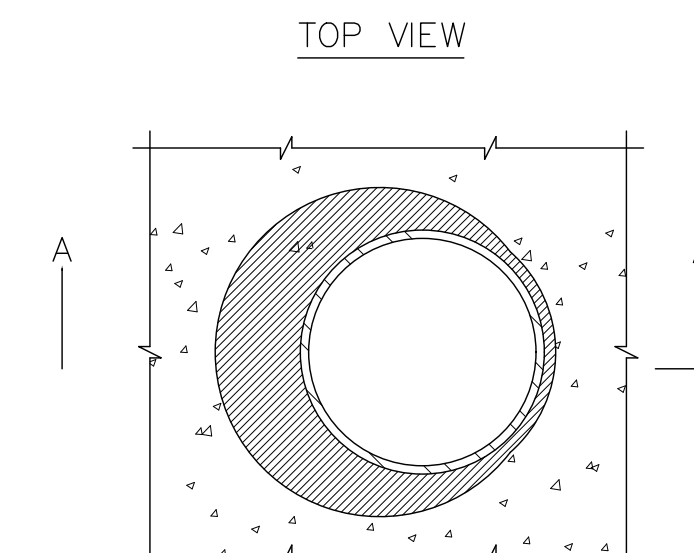
- FLOOR OR WALL ASSEMBLY -- MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS *. MAXIMUM DIAMETER OF OPENING IS 8".
SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- THROUGH PENETRATIONS -- ONE METALLIC PIPE OR CONDUIT TO BE INSTALLED WITHIN THE FIRESTOP SYSTEM. PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM 0". (POINT CONTACT) TO MAXIMUM 1-3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:
A. STEEL PIPE -- NOMINAL 6" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE.
B. IRON PIPE -- NOMINAL 6" DIAMETER (OR SMALLER) CAST OR DUCTILE IRON PIPE.
C. CONDUIT -- NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOMINAL 6" DIAMETER (OR SMALLER) STEEL CONDUIT.
- PACKING MATERIAL -- MINIMUM 4" THICKNESS OF MINIMUM 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
- FILL, VOID, OR CAVITY MATERIAL* -- SEALANT -- MINIMUM 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR AND WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MINIMUM 1/2" DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. U.L. RATING APPLIES ONLY WHEN CP601S OR CP604 SEALANT IS USED.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- CP601S, CP604, CP606 OR FS-ONE SEALANT

*BEARING THE UL CLASSIFICATION MARK

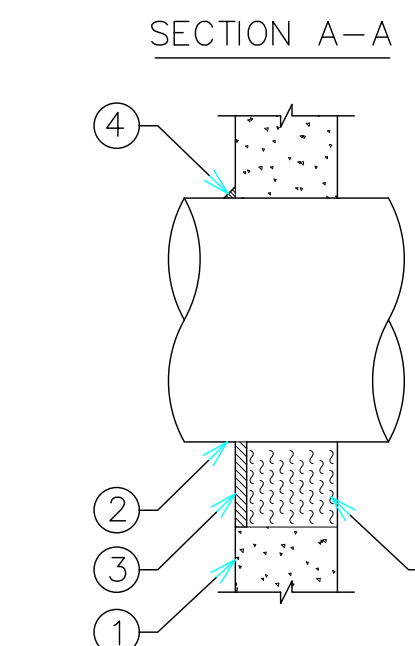
U.L. SYSTEM NO. C-AJ-1498
METAL PIPE THROUGH CONCRETE FLOOR, WALL, OR BLOCK WALL

F RATING = 2-HR.
T RATING = 0-HR.

TOP VIEW



SECTION A-A



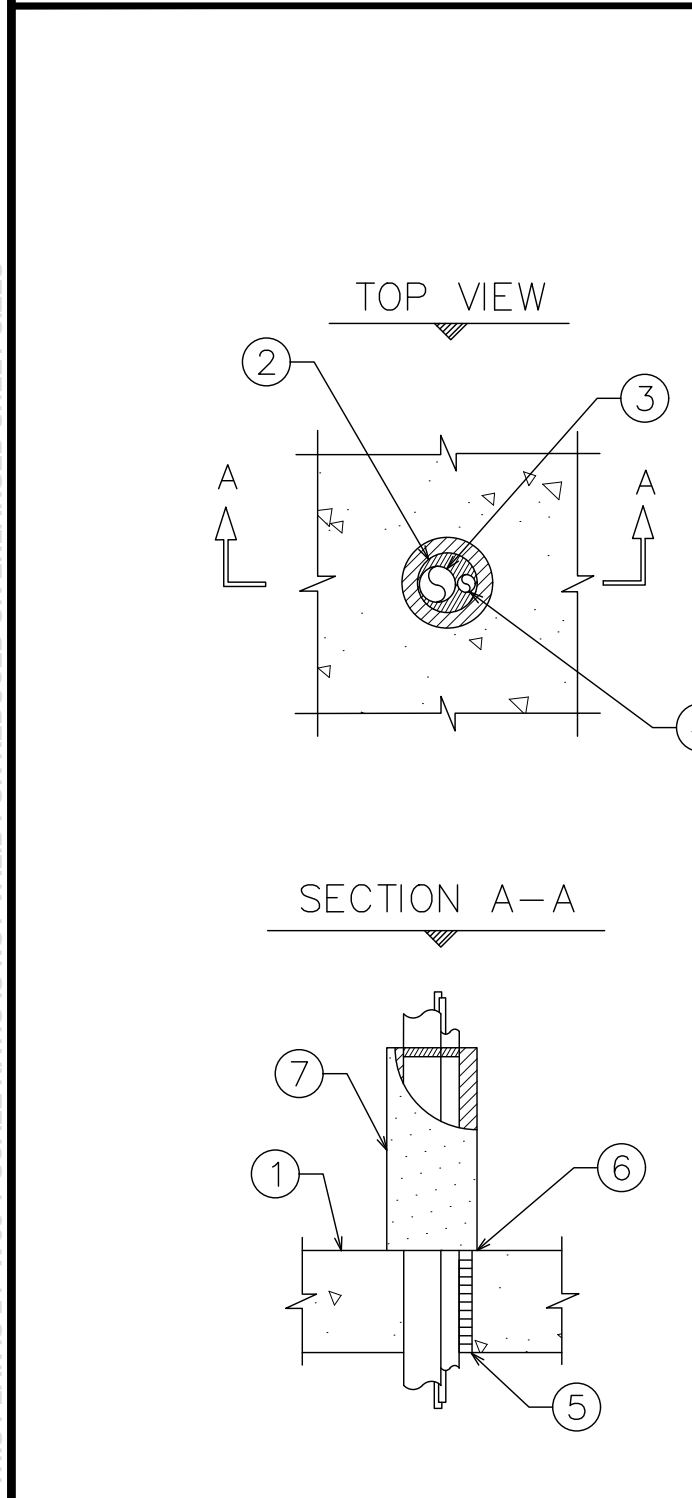
NOTE:
HILTI FS-ONE MATERIAL IS SUITABLE FOR USE IN CONCRETE, BRICK, TILE, GYPSUM, AND WOOD WALLS

- CONCRETE FLOOR OR WALL ASSEMBLY :
A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 4-1/2" THICK).
C. ANY U.L. CLASSIFIED CONCRETE BLOCK WALL.
- THROUGH PENETRATIONS TO INCLUDE ANY OF THE FOLLOWING:
A. MAXIMUM 8" NOMINAL DIAMETER STEEL PIPE.
B. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
C. MAXIMUM 4" NOMINAL DIAMETER EMT.
D. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT.
- MINIMUM. 1/2" DEPTH HILTI FS-ONE HIGH PERFORMANCE INTUMESCENT 2-HR FIRESTOP SEALANT.
- MINIMUM. 1/2" BEAD HILTI FS-ONE HIGH PERFORMANCE INTUMESCENT 2-HR FIRESTOP SEALANT. 5. MINIMUM 4" THICK MINERAL WOOL (MINIMUM. 4 PCF DENSITY) (SEE NOTE NO. 4).

WALL PENETRATION - LOAD BEARING

SCALE
N.T.S.

01



U.L. SYSTEM NO. C-BJ-8020
MULTIPLE PENETRANTS THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

F RATING = 2-HR; T RATING = 0-HR OR 2-HR.

- CONCRETE FLOOR ASSEMBLY (2HR FIRE RATING):
A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 6" THICK).
B. PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).
C. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
- ANY CONBONATION OF THE FOLLOWING METALLIC PENETRANTS MAY BE WITHIN GROUPING (ONLY 1 PIPE MAY EXCEED 1" NOMINAL DIAMETER):
A. MAXIMUM 2" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
B. MAXIMUM 2" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
C. MAXIMUM 2" NOMINAL DIAMETER STEEL CONDUIT OR EMT.
- MAXIMUM 1/4" NOMINAL DIAMETER COPPER PIPE OR TUBING (MAX QTY. = 2) MAY BE WITHIN GROUPING.
- MAXIMUM 7/C NO.12 AWG POWER CABLE (MAX QTY. =3) MAYBE WITHIN GROUPING.
- MINIMUM 5-3/4" THICKNESS MINERAL WOOL (MIN. 4PCF DENSITY) TIGHTLY PACKED.
- MINIMUM 1/4" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT.
- [OPTIONAL] NOMINAL 1" THICK GLASS-FIBER PIPE INSULATION (12"HIGH) INSTALLED AROUND GROUPING OF PENETRANTS, RESTING FLUSH WITH TOP SURFACE OF FLOOR.

NOTES :

- MAXIMUM DIAMETER OF OPENING = 4"
- ANNULAR SPACE = MINIMUM 0", MAXIMUM 2".
- ONE GROUPING OF ANY COMBINATION OF THE ABOVE LISTED PIPES, TUBING, CONDUITS AND CABLES TO BE INSTALLED WITHIN THE OPENING.
- WHEN PIPE IS USED , T-RATING = 2HR.
- WHEN PIPE INSULATION IS USED, APPLY A MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT BETWEEN THE GROUPING OF PENETRANTS AND THE PIPE INSULATION, FLUSH WITH TOP END OF INSULATION.
- MINIMUM 1/4" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANTIS REQUIRED ON BOTH SIDES OF A WALL.

U.L. SYSTEM NO. W-L-1084

EXISTING STUDS. CONTRACTOR TO FIELD VERIFY STUD LOCATIONS.

PROPOSED RF CABLES.

PROPOSED FIRESTOPPING. SEE DETAILS ON THIS SHEET.

PROPOSED 2"Ø CONDUIT SLEEVE TO EXTEND 2" BEYOND BOTH SIDES OF WALL.

- WALL ASSEMBLY --
A. STUDS --
WOOD -- NOMINAL 2x4 IN. LUMBER SPACED 16" O.C.
STEEL CHANNEL -- MINIMUM 3-5/8" WIDE AND SPACED MAXIMUM 24" O.C.
B. GYPSUM BOARD -- NOMINAL 5/8" THICK GYPSUM WALLBOARD OPENING IS 1-1/2" LARGER THAN THE OUTSIDE DIAMETER OF THE PIPE.
- THROUGH PENETRATIONS -- ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED WITHIN THE FIRESTOP SYSTEM, RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. ANNULAR SPACE MIN. 3/4".
A. STEEL PIPE -- NOMINAL 12"Ø (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
B. CONDUIT -- NOMINAL 6"Ø (OR SMALLER) ELECTRICAL METALLIC TUBING OR STEEL CONDUIT.
C. COPPER TUBING -- NOMINAL 6"Ø (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
D. COPPER PIPE -- NOMINAL 6"Ø (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
- FILL, VOID, OR CAVITY MATERIAL* -- SEALANT -- MINIMUM 5/8"THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL ASSEMBLY.

3M COMPANY --FB-2000+

*BEARING THE UL CLASSIFICATION MARK

MULTIPLE PENETRANTS THRU CONCRETE/BLOCK FLOOR/WALL

SCALE
N.T.S.

03

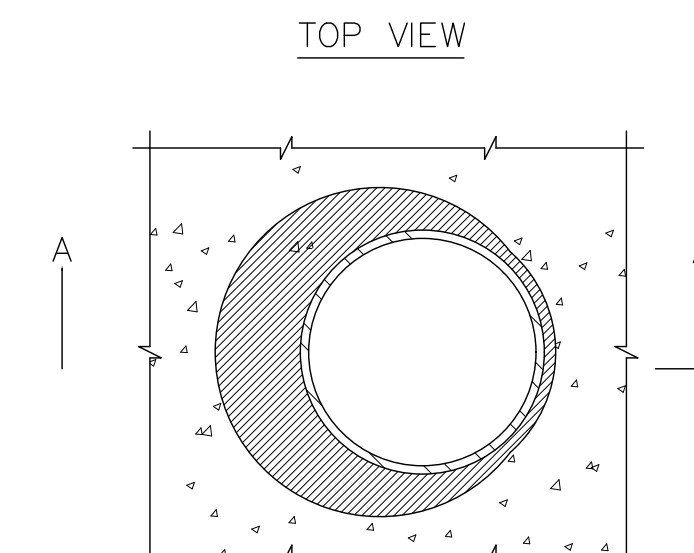
PENETRATION NOTES:

- USE GROUND PENETRATING RADAR PRIOR TO CORE DRILLING. NO CUTTING/DAMAGING OF EXISTING REBAR IS ALLOWED.
- MAXIMUM DIAMETER OF OPENING = 8".
- ANNULAR SPACE = MINIMUM 0", MAXIMUM 2".
- WALLS REQUIRE 1/2" DEPTH OF SEALANT FLUSH WITH BOTH SIDES.
- IF MAXIMUM PIPE SIZE IS 4" NOMINAL DIAMETER, A MINIMUM 3" THICKNESS OF MINERAL WOOL MAY BE USED.
- SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS -- HILTI, INC. TULSA, OK 1-800-879-8000

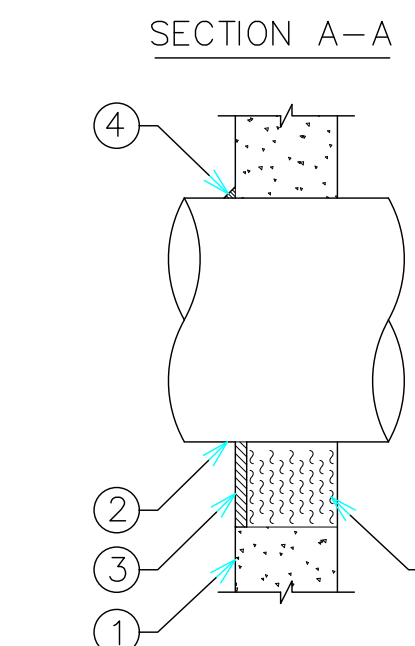
U.L. SYSTEM NO. C-AJ-1498
METAL PIPE THROUGH CONCRETE FLOOR, WALL, OR BLOCK WALL

F RATING = 2-HR.
T RATING = 0-HR.

TOP VIEW



SECTION A-A



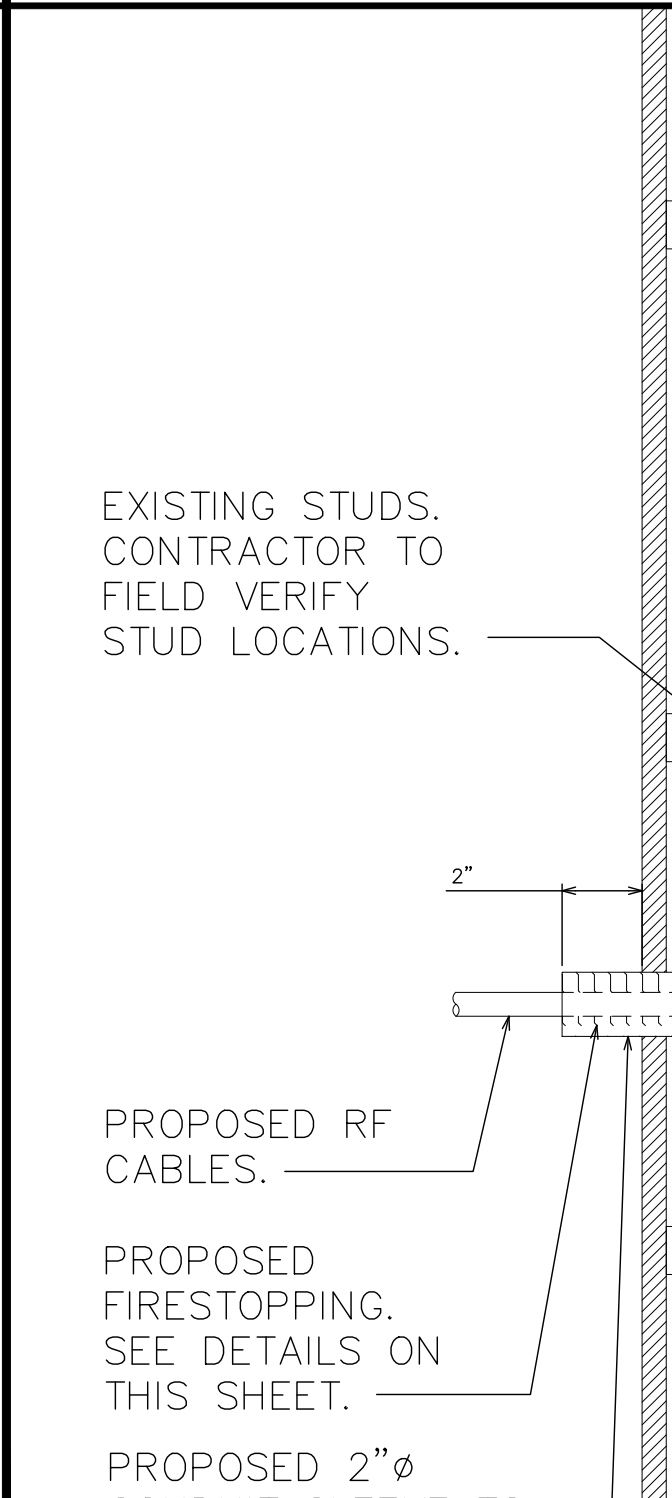
NOTE:
HILTI FS-ONE MATERIAL IS SUITABLE FOR USE IN CONCRETE, BRICK, TILE, GYPSUM, AND WOOD WALLS

- CONCRETE FLOOR OR WALL ASSEMBLY :
A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 4-1/2" THICK).
C. ANY U.L. CLASSIFIED CONCRETE BLOCK WALL.
- THROUGH PENETRATIONS TO INCLUDE ANY OF THE FOLLOWING:
A. MAXIMUM 8" NOMINAL DIAMETER STEEL PIPE.
B. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
C. MAXIMUM 4" NOMINAL DIAMETER EMT.
D. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT.
- MINIMUM. 1/2" DEPTH HILTI FS-ONE HIGH PERFORMANCE INTUMESCENT 2-HR FIRESTOP SEALANT.
- MINIMUM. 1/2" BEAD HILTI FS-ONE HIGH PERFORMANCE INTUMESCENT 2-HR FIRESTOP SEALANT. 5. MINIMUM 4" THICK MINERAL WOOL (MINIMUM. 4 PCF DENSITY) (SEE NOTE NO. 4).

FLOOR/WALL PENETRATION

SCALE
N.T.S.

02



U.L. SYSTEM NO. W-L-1084

EXISTING STUDS. CONTRACTOR TO FIELD VERIFY STUD LOCATIONS.

PROPOSED RF CABLES.

PROPOSED FIRESTOPPING. SEE DETAILS ON THIS SHEET.

PROPOSED 2"Ø CONDUIT SLEEVE TO EXTEND 2" BEYOND BOTH SIDES OF WALL.

- WALL ASSEMBLY --
A. STUDS --
WOOD -- NOMINAL 2x4 IN. LUMBER SPACED 16" O.C.
STEEL CHANNEL -- MINIMUM 3-5/8" WIDE AND SPACED MAXIMUM 24" O.C.
B. GYPSUM BOARD -- NOMINAL 5/8" THICK GYPSUM WALLBOARD OPENING IS 1-1/2" LARGER THAN THE OUTSIDE DIAMETER OF THE PIPE.
- THROUGH PENETRATIONS -- ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED WITHIN THE FIRESTOP SYSTEM, RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. ANNULAR SPACE MIN. 3/4".
A. STEEL PIPE -- NOMINAL 12"Ø (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
B. CONDUIT -- NOMINAL 6"Ø (OR SMALLER) ELECTRICAL METALLIC TUBING OR STEEL CONDUIT.
C. COPPER TUBING -- NOMINAL 6"Ø (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
D. COPPER PIPE -- NOMINAL 6"Ø (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
- FILL, VOID, OR CAVITY MATERIAL* -- SEALANT -- MINIMUM 5/8"THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL ASSEMBLY.

3M COMPANY --FB-2000+

*BEARING THE UL CLASSIFICATION MARK

U.L. SYSTEM NO. W-L-1084

- WALL ASSEMBLY --
A. STUDS --
WOOD -- NOMINAL 2x4 IN. LUMBER SPACED 16" O.C.
STEEL CHANNEL -- MINIMUM 3-5/8" WIDE AND SPACED MAXIMUM 24" O.C.
B. GYPSUM BOARD -- NOMINAL 5/8" THICK GYPSUM WALLBOARD OPENING IS 1-1/2" LARGER THAN THE OUTSIDE DIAMETER OF THE PIPE.
- THROUGH PENETRATIONS -- ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED WITHIN THE FIRESTOP SYSTEM, RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. ANNULAR SPACE MIN. 3/4".
A. STEEL PIPE -- NOMINAL 12"Ø (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
B. CONDUIT -- NOMINAL 6"Ø (OR SMALLER) ELECTRICAL METALLIC TUBING OR STEEL CONDUIT.
C. COPPER TUBING -- NOMINAL 6"Ø (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
D. COPPER PIPE -- NOMINAL 6"Ø (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
- FILL, VOID, OR CAVITY MATERIAL* -- SEALANT -- MINIMUM 5/8"THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL ASSEMBLY.

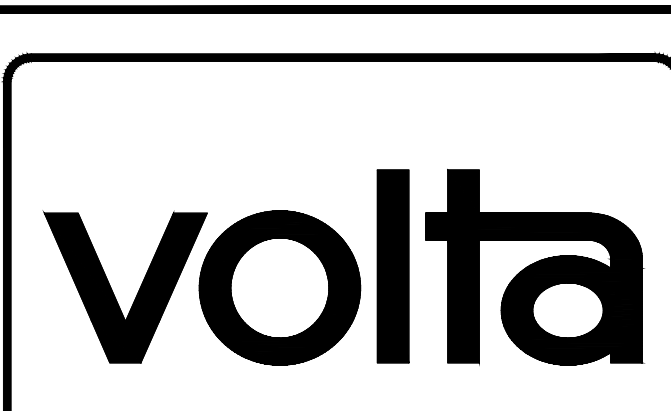
3M COMPANY --FB-2000+

*BEARING THE UL CLASSIFICATION MARK

WALL PENETRATION

SCALE
N.T.S.

04



155 DE HARO STREET
SAN FRANCISCO, CA 94103



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

REV	DATE	DESCRIPTION	BY
0	01/16/2024	CD90s - PRELIMINARY	DJL
1	04/12/2024	CD90s - PERMITTING	HMB

ISSUE DATE

04/12/2024

ISSUED FOR

PERMITTING

SUBMITTAL

KROGER #685

DETROIT, MI

685 E MAPLE ROAD

BIRMINGHAM, MI 48009

SHEET TITLE

CONDUIT

PENETRATION

DETAILS

SHEET NUMBER

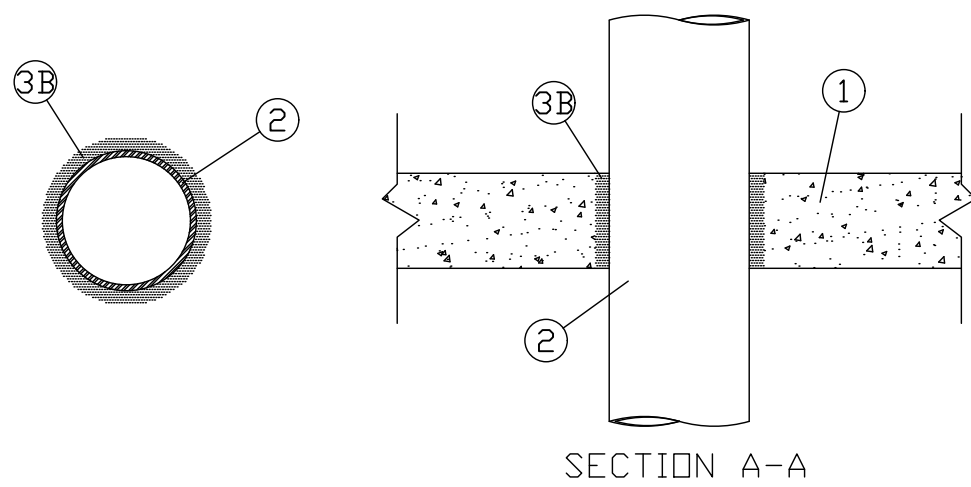
C-4

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE: 1/4" = 1'-0". THIS DRAWING IS NOT VALID FOR REFERENCE OR FOR ANY OTHER PURPOSES.

GUIDE XHEZ
THROUGH-PENETRATION FIRESTOP SYSTEMS

(01/01/00)
C-AJ-1089 - A CARD

SYSTEM NO. C-AJ-1089
(FORMERLY SYSTEM NO. 476)
F-RATING - 3 HR
T-RATING - 1/2 HR



(CONT'D ON C-AJ-1089 - B CARD)

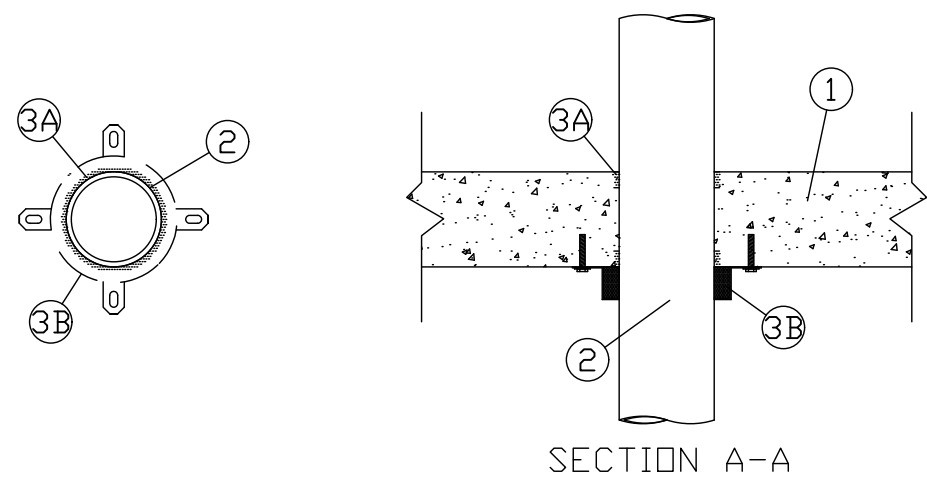
GUIDE XHEZ 01/01/00
THROUGH-PENETRATION C-AJ-1089 - B CARD
FIRESTOP SYSTEMS

SYSTEM NO. C-AJ-1089
(FORMERLY SYSTEM NO. 476)
F RATING -- 3 HR
T RATING -- 1/2 HR
1. FLOOR OR WALL ASSEMBLY -- MIN 4-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX DIAM OF OPENING IS 8 IN.
SEE CONCRETE BLOCK (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
2. THROUGH PENETRANTS -- ONE METALLIC PIPE, CONDUIT OR TUBING TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. A NOM ANNULAR SPACE OF 11/16 IN. IS REQUIRED WITHIN FIRESTOP SYSTEM. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
A. STEEL PIPE -- NOM 6 IN. DIAM (OR SMALLER) SCHEDULE 5 (OR HEAVIER) STEEL PIPE.
B. IRON PIPE -- NOM 6 IN. DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
C. CONDUIT -- NOM 4 IN. DIAM (OR SMALLER) ELECTRICAL METALLIC TUBING OR NOM 6 IN. DIAM (OR SMALLER) RIGID GALV STEEL CONDUIT.
3. FIRESTOP SYSTEM -- THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:
A. FORMS -- (NOT SHOWN) -- USED AS A FORM TO PREVENT LEAKAGE OF FILL MATERIAL DURING INSTALLATION. FORMS TO BE A RIGID SHEET MATERIAL CUT TO FIT THE CONTOUR OF THE PENETRATING ITEM AND FASTENED TO THE UNDERSIDE OF FLOOR OR BOTH SIDES OF WALL. FORMS TO BE REMOVED AFTER FILL MATERIAL HAS CURED.
B. FILL, VOID OR CAVITY MATERIAL* -- MORTAR -- MIN 4-1/2 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR WITH BOTH SURFACES OF WALL. MORTAR IS TO MIXED AT A RATE OF 1:2 PARTS DRY MIX TO ONE PART WATER BY WEIGHT IN ACCORDANCE WITH THE FILL MATERIAL MANUFACTURER'S INSTALLATION INSTRUCTIONS.
SPECIFIED TECHNOLOGIES INC. -- SPECSEAL MORTAR.
*BEARING THE UL CLASSIFICATION MARKING

GUIDE XHEZ
THROUGH-PENETRATION FIRESTOP SYSTEMS

(01/01/00)
C-AJ-2038 - A CARD

SYSTEM NO. C-AJ-2038
(FORMERLY SYSTEM NO. 534)
F-RATING - 3 HR
T-RATING - 3 HR
L RATING AT AMBIENT - 1 CFM/SQ FT
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT



(CONT'D ON C-AJ-2038 - B CARD)

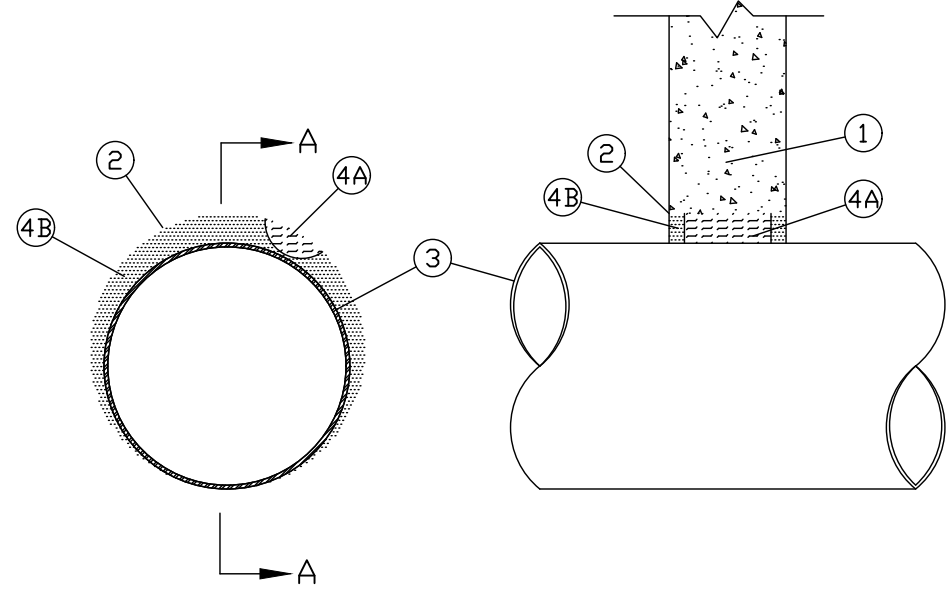
GUIDE XHEZ 01/01/00
THROUGH-PENETRATION C-AJ-2038 - B CARD
FIRESTOP SYSTEMS

SYSTEM NO. C-AJ-2038
(FORMERLY SYSTEM NO. 534)
F RATING 3 HR
T RATING 3 HR
L RATING AT AMBIENT -- 1 CFM/SQ FT
L RATING AT 400 F -- LESS THAN 1 CFM/SQ FT
1. FLOOR OR WALL ASSEMBLY -- MIN 4-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. FLOOR MAY ALSO BE CONSTRUCTED OF ANY MIN 6 IN. THICK UL CLASSIFIED HOLLOW-CORE PRECAST CONCRETE UNITS*. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING IS 5 IN.
SEE CONCRETE BLOCKS (CAZT) AND PRECAST CONCRETE UNITS (CFTV) CATEGORIES IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
2. THROUGH PENETRANTS -- ONE NONMETALLIC PIPE OR CONDUIT TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. A NOM ANNULAR SPACE OF 1/4 IN. IS REQUIRED WITHIN THE FIRESTOP SYSTEM. PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF THE FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF NONMETALLIC PIPES OF CONDUITS MAY BE USED:
A. POLYVINYL CHLORIDE (PVC) PIPE -- NOM 4 IN. DIAM (OR SMALLER) SCHEDULE 40 SOLID OR CELLULAR CORE PVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS.
B. RIGID NONMETALLIC CONDUIT+ -- NOM 4 IN. DIAM (OR SMALLER) SCHEDULE 40 OR 80 PVC CONDUIT INSTALLED IN ACCORDANCE WITH ARTICLE 347 OF THE NATIONAL ELECTRICAL CODE (NFPA NO. 70).
C. CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE -- NOM 4 IN. DIAM (OR SMALLER) SDR17 CPVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS.
D. ACRYLONITRILE BUTADIENE STYRENE (ABS) PIPE -- NOM 4 IN. DIAM (OR SMALLER) SCHEDULE 40 SOLID OR FOAMED CORE ABS PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS.
3. FIRESTOP SYSTEM -- THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:
A. FILL, VOID OR CAVITY MATERIAL* -- CAULK FORCED INTO ANNULAR SPACE TO MAX EXTENT POSSIBLE. CAULK SHALL BE INSTALLED FLUSH WITH BOTH SURFACES OF FLOOR OR WALL ASSEMBLY.
SPECIFIED TECHNOLOGIES INC. -- SPECSEAL 100, 101 OR 105 SEALANT
B. FIRESTOP DEVICE* -- GALV STEEL COLLAR LINED WITH AN INTUMESCENT MATERIAL SIZED TO FIT THE SPECIFIC DIAM OF THE THROUGH-PENETRANT. DEVICE SHALL BE INSTALLED AROUND THROUGH-PENETRANT IN ACCORDANCE WITH THE ACCOMPANYING INSTALLATION INSTRUCTIONS. DEVICE INCORPORATES ANCHOR TABS FOR SECUREMENT TO BOTTOM SURFACE OF FLOOR OR TO BOTH SURFACES OF WALL ASSEMBLY BY MEANS OF 1/4 IN. DIAM BY 1-3/4 IN. LONG CONCRETE ANCHORS IN CONJUNCTION WITH 1/4 IN. DIAM BY 1-1/2 IN. STEEL FENDER WASHERS.
SPECIFIED TECHNOLOGIES INC. -- SPECSEAL FIRESTOP COLLAR
*BEARING THE UL CLASSIFICATION MARKING

GUIDE XHEZ
THROUGH-PENETRATION FIRESTOP SYSTEMS

(01/01/00)
W-J-1070 - A CARD

SYSTEM NO. W-J-1070
F RATING - 4 HR
T RATING - 0 HR
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT

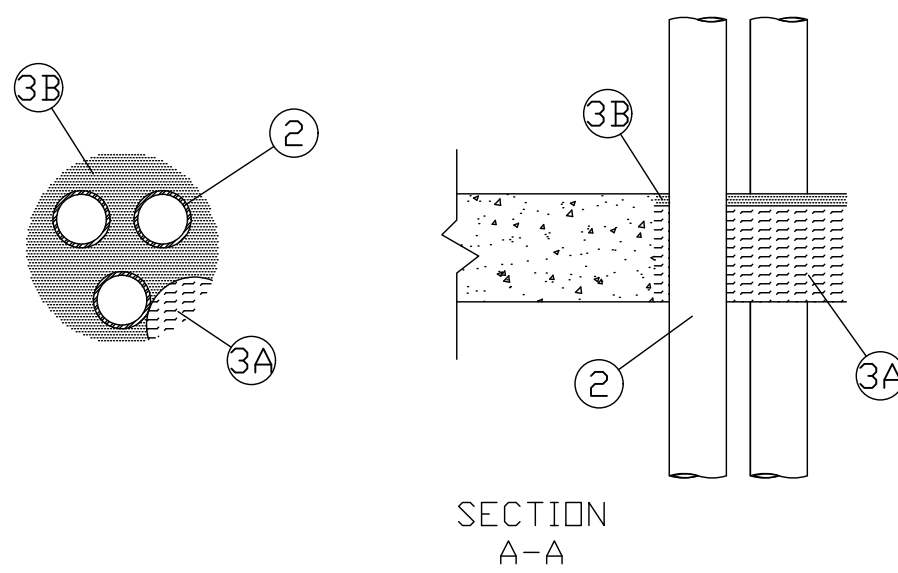


(CONT'D ON W-J-1070 - B CARD)

GUIDE XHEZ 01/01/00
THROUGH-PENETRATION W-J-1070 - B CARD
FIRESTOP SYSTEMS

SYSTEM NO. W-J-1070
F RATING -- 4 HR
T RATING -- 0 HR
L RATING AT AMBIENT -- LESS THAN 1 CFM/SQ FT
L RATING AT 400 F -- LESS THAN 1 CFM/SQ FT
1. WALL ASSEMBLY -- MIN 7-5/8 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING IS 26 IN.
SEE CONCRETE BLOCK (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
2. STEEL SLEEVE -- (OPTIONAL) -- CYLINDRICAL SLEEVE FABRICATED FROM MIN 0.031 IN. THICK (NO. 22 MSG) GALV SHEET STEEL AND HAVING A MIN 2 IN. LAP ALONG THE LONGITUDINAL SEAM. THE ENDS OF THE STEEL SLEEVE SHALL BE INSTALLED FLUSH WITH EACH FACE OF THE WALL OR EXTEND A MAX 1/4 IN. BEYOND EACH SURFACE OF THE WALL.
3. THROUGH PENETRANTS -- ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN THE PIPE, CONDUIT OR TUBING AND THE PERIPHERY OF THE OPENING SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 2 IN. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
A. STEEL PIPE -- NOM 24 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
B. IRON PIPE -- NOM 24 IN. DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
C. CONDUIT -- NOM 6 IN. DIAM (OR SMALLER) RIGID STEEL CONDUIT, NOM 4 IN. DIAM (OR SMALLER) ELECTRICAL METALLIC TUBING OR NOM 1 IN. DIAM (OR SMALLER) FLEXIBLE STEEL CONDUIT.
D. COPPER TUBING -- NOM 6 IN. DIAM (OR SMALLER) TYPE M (OR HEAVIER) COPPER TUBING.
E. COPPER PIPE -- NOM 6 IN. DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
4. FIRESTOP SYSTEM -- THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:
A. PACKING MATERIAL -- MIN 5-5/8 IN. THICKNESS OF 4 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM EACH EDGE OF SLEEVE TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
B. FILL, VOID OR CAVITY MATERIAL* -- CAULK -- MIN 1 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH ENDS OF STEEL SLEEVE. A MIN 1/4 IN. THICK BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE POINT CONTACT LOCATION ON BOTH SURFACES OF WALL. WHEN SLEEVE PROJECTS BEYOND SURFACE OF WALL, A MIN 1/4 IN. THICK BEAD OF CAULK SHALL BE APPLIED TO OUTER PERIMETER OF SLEEVE AT INTERFACE WITH WALL SURFACES.
SPECIFIED TECHNOLOGIES INC. -- SPECSEAL 100, 101, 102, 129, 105 SEALANT
*BEARING THE UL CLASSIFICATION MARKING

GUIDE XHEZ
THROUGH-PENETRATION FIRESTOP SYSTEMS



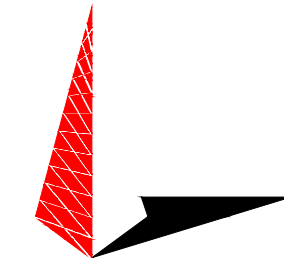
GUIDE XHEZ 01/01/00
THROUGH-PENETRATION C-AJ-1048 - B CARD
FIRESTOP SYSTEMS

SYSTEM NO. C-AJ-1048
(FORMERLY SYSTEM NO. 329)
F RATING -- 3 HR
T RATING -- 1/2 HR
L RATING AT AMBIENT -- LESS THAN 1 CFM/SQ FT
L RATING AT 400 F -- LESS THAN 1 CFM/SQ FT

1. FLOOR OR WALL ASSEMBLY -- MIN 4-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE FLOOR OR MIN 5 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING IS 8 IN.
SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
2. THROUGH PENETRANTS -- THREE METALLIC PIPES, CONDUITS OR TUBING TO BE INSTALLED WITHIN THE OPENING. THE SPACE BETWEEN PIPES, CONDUITS OR TUBING SHALL BE A NOM 1 IN. THE SPACE BETWEEN PIPES, CONDUITS OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN 5/8 IN. TO MAX 2-5/8 IN. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
A. STEEL PIPE -- NOM 2 IN. DIAM (OR SMALLER) SCHEDULE 5 (OR HEAVIER) STEEL PIPE.
B. CONDUIT -- NOM 2 IN. DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR RIGID STEEL CONDUIT.
3. FIRESTOP SYSTEM -- THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:
A. PACKING MATERIAL -- MIN 4 IN. THICKNESS OF MIN 4.8 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
B. FILL, VOID OR CAVITY MATERIAL* -- CAULK -- MIN 1/2 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR WITH BOTH SURFACES OF WALL.
GENERAL ELECTRIC CO. -- PENSIL 100 CAULK FOR FLOORS AND WALLS.
SPECIFIED TECHNOLOGIES INC. -- PENSIL 100 SEALANT FOR FLOORS AND WALL, PENSIL 300 SEALANT FOR FLOORS AND WALLS AND PENSIL 300 S/L SEALANT FOR FLOORS ONLY.
*BEARING THE UL CLASSIFICATION MARKING

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155 DE HARO STREET
SAN FRANCISCO, CA 94103



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326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

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**KROGER #685
DETROIT, MI**

**685 E MAPLE ROAD
BIRMINGHAM, MI 48009**

SHEET TITLE
**FIRE
PENETRATION
DETAILS**

SHEET NUMBER

C-5

NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ASTM A184, ASTM A185 AND THE DESIGN & CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE
2. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AND BE OF A TYPE AS FOLLOWS:

SLUMP - 4" MIN. / 6" MAX.
AIR ENTRAINMENT - 2% TO 3% BY VOLUME

CLASSES OF CONCRETE

CLASS	28 DAY STRENGTH (PSI)	MAX. WATER/CEMENT RATIO	PLACEMENT LOCATION	REMARKS
TYPE III	SEE TABLE	0.45	ALL LOCATION	NORMAL WT.

CONCRETE				
ITEM	MINIMUM 28 DAY COMPRESSIVE STRENGTH			REMARKS
	3,000 P.S.I.	4,000 P.S.I.	5,000 P.S.I.	
FOUNDATION		●		NORMAL WEIGHT

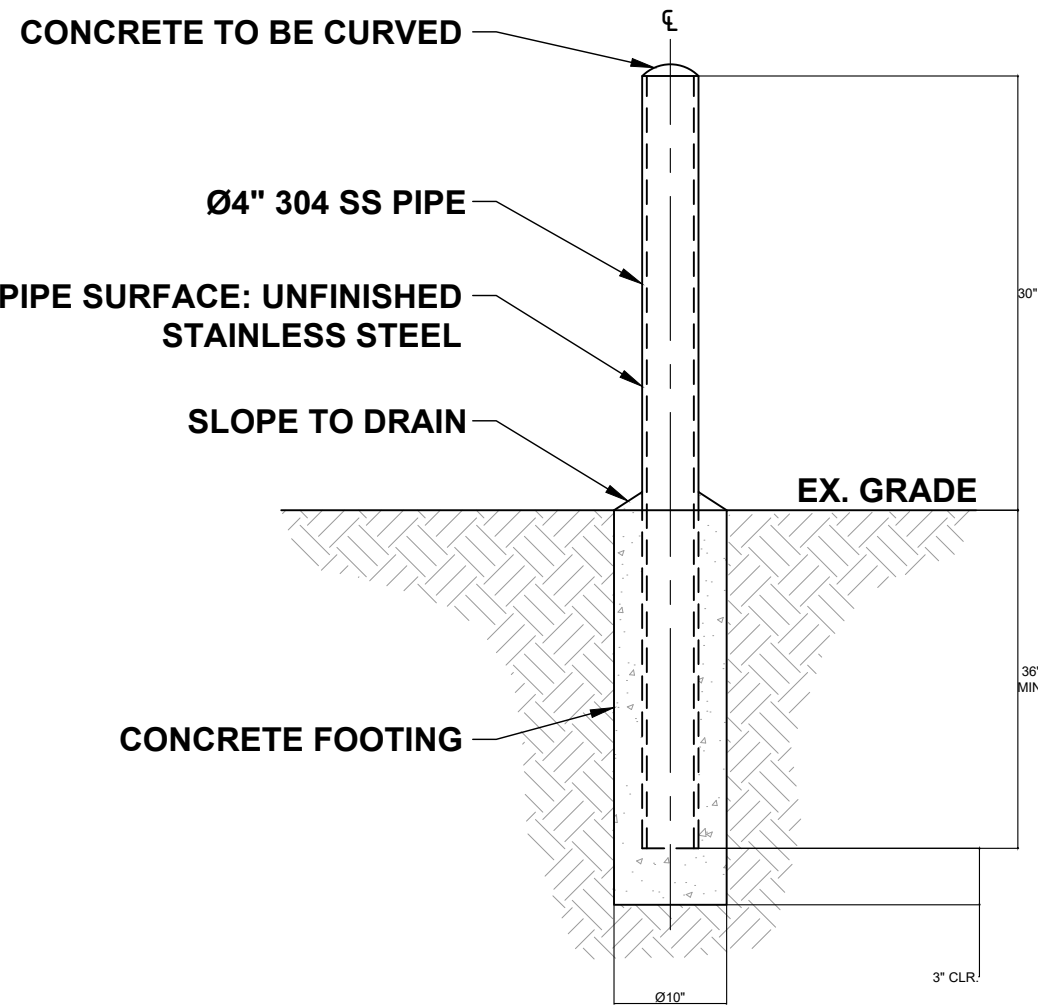
3. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL FABRIC UNLESS OTHERWISE NOTED. SPLICES FOR REBAR SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO. LAPS FOR WELDING WIRE FABRIC SHALL BE AT LEAST TWO FULL MESHES, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS OTHERWISE NOTED ON DRAWINGS.

CONCRETE CAST AGAINST EARTH.....3"
CONCRETE EXPOSED TO EARTH OR WEATHER
#6 AND LARGER.....2"
#5 AND SMALLER & W.W.F.....1-1/2"

CLEARANCES OF REINFORCING STEEL FOR ADJACENT SURFACES				COVER
WHERE CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH				
FOR SLAB BOTTOM				1-1/2"
FOR FOUNDATION WALLS, GRADE BEAMS AND PIERS				2"
FOR FOOTING AND BOTTOM OF WALLS AND GRADE BEAMS				2"
WHERE CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH				
FOR BEAMS, WALLS AND PIERS				1-1/2"
TOP OF SLAB				1"
DEVELOPMENT LENGTH AND SPLICE TABLE				
BAR SIZE	DEVELOPMENT LENGTH (TOP BARS)	DEVELOPMENT LENGTH (OTHER BARS)	DEVELOPMENT LENGTH (TOP BARS)	DEVELOPMENT LENGTH (OTHER BARS)
	F'C = 4 KSI	F'C = 4 KSI	F'C = 4 KSI	F'C = 4 KSI
#4	12"	12"	16"	16"
#5	13"	12"	17"	16"
#6	18"	14"	24"	18"
#7	29"	23"	36"	30"
#8	37"	29"	48"	38"
#9	47"	37"	62"	48"
#10	60"	46"	78"	60"
#11	74"	57"	97"	74"
NOTES: 1. LENGTHS ARE BASED ON fy = 60 KSI AND NORMAL WEIGHT CONCRETE 2. TOP BARS ARE HORIZONTAL BARS SO PLACED THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS PLACED IN THE MEMBER BELOW THE BAR				

5. MAXIMUM COARSE AGGREGATE SIZE SHALL BE 3/4".
6. INSTALLATION OF CONCRETE ANCHORS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS. THE ANCHOR BOLTS, DOWELS OR RODS SHALL CONFORM TO THE ANCHOR MANUFACTURERS SPECIFICATIONS FOR MATERIAL STRENGTH, EMBEDMENT DEPTH, SPACING, AND EDGE DISTANCE OR AS DETAILED ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEER APPROVAL WHEN DRILLING HOLES IN CONCRETE. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD, HILTI OR APPROVED EQUAL. IF THE MANUFACTURER'S SPECIFICATIONS AND DETAILS ARE GROUND TO CONFLICT WITH THAT SHOWN HEREIN, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
7. ALLOWABLE SOIL PRESSURE = 1000 P.S.F. (ASSUMED)
8. CENTER FOOTINGS AND PIERS UNDER SUPPORTED MEMBERS UNLESS SHOWN OTHERWISE.
9. THE STRUCTURAL DRAWINGS SHALL BE COORDINATED ARCHITECTURAL, MECHANICAL, ELECTRICAL, HVAC, AND CIVIL DRAWINGS FOR THE SIZE AND LOCATION OF EMBEDDED ITEMS, OPENINGS, SLEEVES, INSERTS, DOWELS, DEPRESSIONS, PITS, ETC. DO NOT CUT REINFORCEMENT UNLESS INDICATED BY SECTION OF DETAIL. AT LOCATIONS OF CONFLICT, SPREAD THE REINFORCEMENT TO ACCOMMODATE PLACEMENT. ADD ADDITIONAL BARS IF NECESSARY TO MAINTAIN SPACING REQUIREMENTS.
10. WHEN THE SIDES OF FOOTINGS ARE EARTH FORMED, EACH SIDE SHALL BE WIDENED AT LEAST 3 INCHES MORE THAN REQUIRED DIMENSION. THE MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE INCREASED ACCORDINGLY BY THE SAME AMOUNT.
11. EXPOSED CORNERS OF WALLS, ETC. SHALL BE FORMED WITH STANDARD 3/4" INCH CHAMFERS, UNLESS NOTED OTHERWISE.
12. ALL CONCRETE KEYWAYS SHALL BE NOMINAL 2"x4" UNLESS NOTED OTHERWISE.
13. REINFORCING BARS SHALL BE COLD BENT. BARS PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT, WITHOUT PERMISSION FROM THE ENGINEER.
14. #11 AND SMALLER BARS MAY BE SPLICED USING MECHANICAL CONNECTIONS OR CONTACT LAP SPLICES. BAT LAPS SHALL BE SECURELY WIRED TOGETHER.

15. CONFORM TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI 315, THE STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE BUILDINGS, ACI 301, AND THE BUILDING CODE REQUIREMENTS FOR THE REINFORCED CONCRETE, ACI 318.
16. PROVIDE AND SCHEDULE ON SHOP DRAWINGS ACCESSORIES TO HOLD REINFORCING IN POSITION. SPACE HIGH CHAIRS SHALL BE NO MORE THAN 4'-0" APART, WIRE TO BOTTOM REINFORCING PROVIDE #5 SUPPORT BARS ON HIGH CHAIRS. SPACE SLAB BOLSTERS NO MORE THEN 3'6" APART.
17. WELDED WIRE FABRIC SHALL CONFORM THE THE REQUIREMENTS OF ASTM A185. WELDED WIRE FABRIC MUST HAVE END LAPS AND EDGE LAPS OF ONE FULL MESH AND SHALL BE HELP IN PLACE BY WIRING ALL LAPS SECURELY TOGETHER.
18. DETAILS NOT SHOWN ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI DETAILING MANUAL 315.
19. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND OTHER INSERTS SHALL BE WELL SECURED IN POSITION AND INSPECTED BY QUALITY INSPECTOR PRIOR TO PLACING CONCRETE. ALL COLUMN DOWELS AND ANCHOR BOLTS SHALL BE SET BY TEMPLATE.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL FORMING, TEMPORARY BRACING, AND SHORING.
21. ALL CONCRETE SURFACES SHALL BE COMPLETELY CLEANED FROM ANY DIRT, TRASH OR OTHER CONTAMINATION TO THE SURFACE BEFORE POURING NEW CONCRETE.
22. COMPLY WITH ACI 305 FOR HOT WEATHER PLACEMENT.
23. COMPLY WITH ACI 306 FOR COLD WEATHER PLACEMENT.
24. EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE RED HEAD A7+ SYSTEM (AS SPECIFIED IN DWG.) OR ENGINEERS APPROVED EQUAL.



- NOTES:
1. CONTRACTOR TO ENSURE PLACEMENT OF BOLLARD DOES NOT IMPACT VISIBILITY OF STATION SCREEN.
2. CONTRACTOR TO ENSURE BOLLARD PLACEMENT DOES NOT OBSTRUCT 3' DOOR SWING ON BOTH SIDES OF MEDIA STATION.
3. THIS BOLLARD IS NOT RATED FOR VEHICULAR IMPACT.

BOLLARD DETAIL

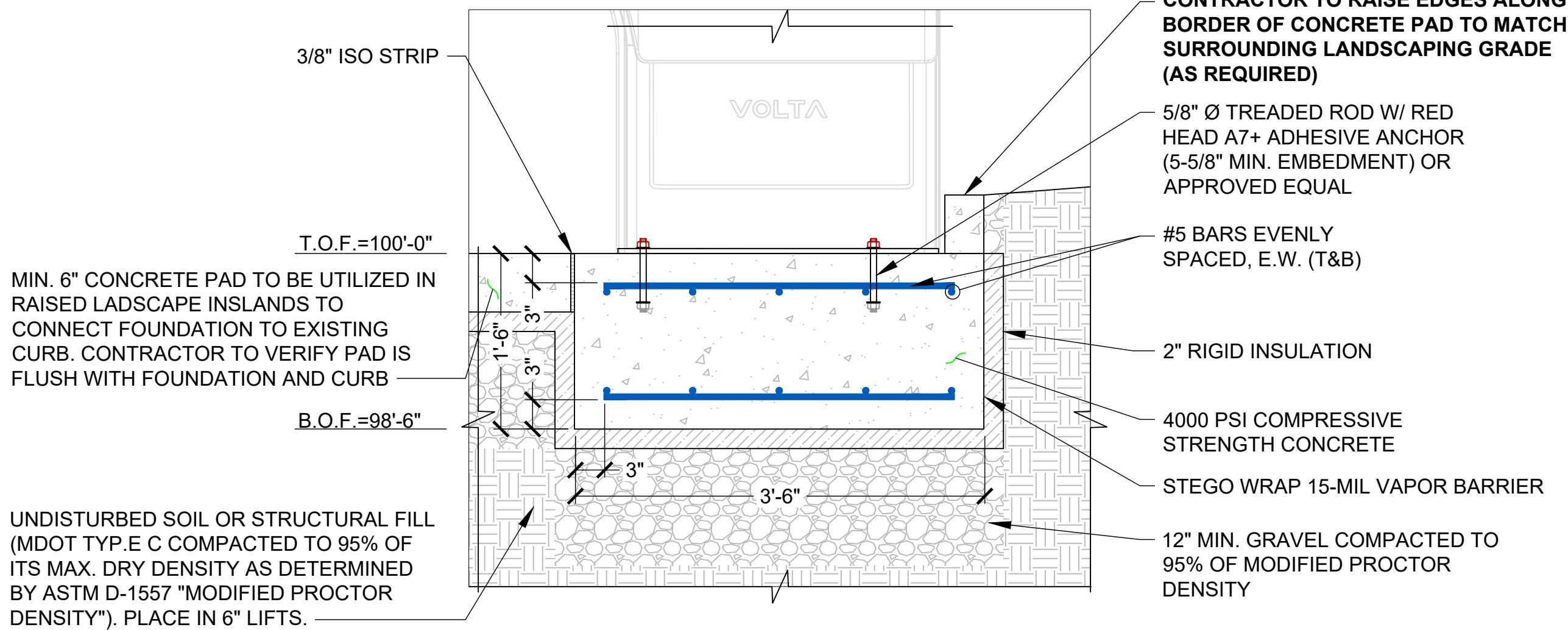
SCALE
N.T.S.

01

VOLTA V4 FOUNDATION

SCALE
1" = 1'-0"

02



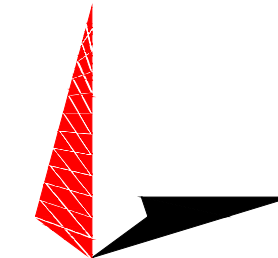
V4 L2 EVCS FOUNDATION SECTION A-A

SCALE
1" = 1'-0"

03

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155 DE HARO STREET
SAN FRANCISCO, CA 94103



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326 TRYON ROAD
RALEIGH, NC 27603-3530
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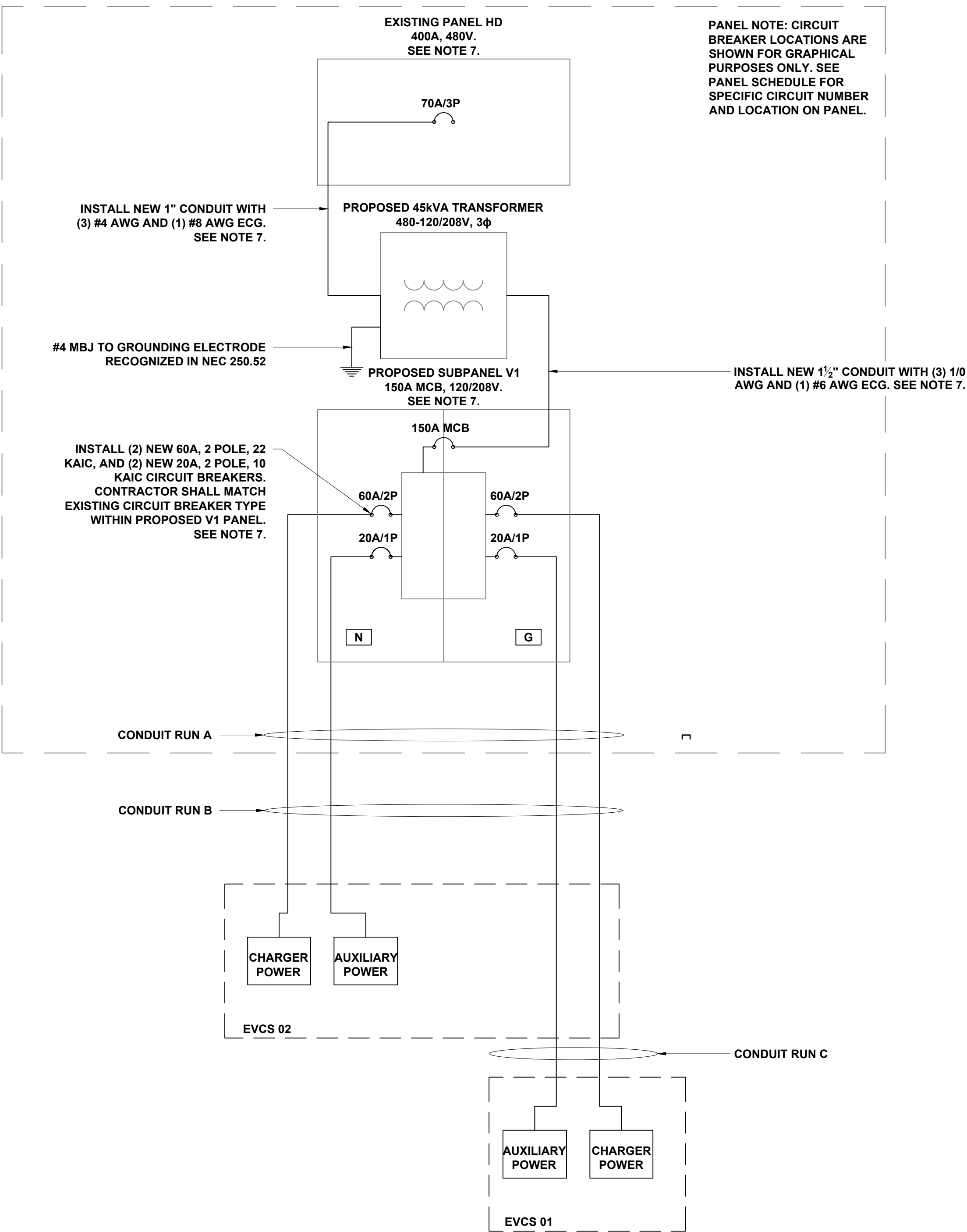
SHEET TITLE

FOUNDATION
DETAILS

SHEET NUMBER

C-6

EXISTING ELECTRICAL ROOM



NOTES:

- ALL ELECTRICAL WORK AND RELATED ACTIVITIES PERFORMED ON SITE SHALL BE DONE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC) STANDARDS BEING ENFORCED BY ALL APPLICABLE JURISDICTIONAL REQUIREMENTS AT THE TIME OF CONSTRUCTION.
- ANY PAVEMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
- CONTRACTOR SHALL USE XHHW COPPER CONDUCTORS.
- CONTRACTOR SHALL USE EMT INSIDE AND OUTSIDE ABOVE GRADE WHERE NOT SUBJECT TO DAMAGE. CONTRACTOR SHALL RGS INSIDE AND OUTSIDE ABOVE GRADE WHERE SUBJECT TO DAMAGE. CONTRACTOR SHALL USE PVC SCHEDULE 80 BELOW GRADE.
- SEE SHEETS C-1 AND C-2 FOR CONDUIT STUB UP LOCATIONS.
- CONTRACTOR TO LOCATE JUNCTION BOX, LINE BOX (LB), OR APPROVED ALTERNATIVE FOR SITE SPECIFIC RUN LENGTHS AND BENDS.
- FINAL PANEL SELECTION IS PENDING BASED ON RESULTS OF 30-DAY LOGGING METER STUDY. LOAD STUDY MUST BE COMPLETED BEFORE CONSTRUCTION DRAWINGS ARE ISSUED.

CONDUIT SCHEDULE

CONDUIT SECTION	SECTION LENGTH	CONDUIT #	CONDUIT SIZE	CONDUCTORS	INSTALLATION METHOD
A	±50'	1	2"	(4) #4 AWG, (4) #10 AWG & (2) #6 AWG GND	CEILING MOUNTED
B	±110'	1	2"	(4) #4 AWG, (4) #10 AWG & (2) #6 AWG GND	DIRECTIONAL BORE
C	±40'	1	1½"	(2) #4 AWG, (2) #10 AWG & (1) #6 AWG GND	DIRECTIONAL BORE

CONTRACTOR TO USE LISTED CONDUIT SIZE ABOVE OR LARGER.

48A L2 Conductor Voltage Drop Table, Two Charging Stations											
<200FT	200FT-255FT	255FT-275FT	275FT-320FT	320FT-400FT	400FT-440FT	440FT-510FT	510FT-635FT	635FT-700FT	700FT-800FT		
(4) #4 AWG +	(4) #3 AWG +	(4) #2 AWG +	(4) #2 AWG +	(4) #1 AWG +	(4) #1/0 AWG +	(4) #1/0 AWG +	(4) #2/0 AWG +	(4) #3/0 AWG +	(4) #3/0 AWG +	(4) #4 AWG +	(4) #4 AWG +
(4) #10 AWG +	(4) #10 AWG +	(4) #10 AWG +	(4) #8 AWG +	(4) #8 AWG +	(4) #8 AWG +	(4) #6 AWG +	(4) #6 AWG +	(4) #6 AWG +	(4) #6 AWG +	(4) #4 AWG +	(4) #4 AWG +
(2) #6 AWG GND	(2) #4 AWG GND	(2) #4 AWG GND	(2) #4 AWG GND	(2) #4 AWG GND	(2) #3 AWG GND	(2) #3 AWG GND	(2) #3 AWG GND	(2) #2 AWG GND	(2) #1 AWG GND	(2) #1 AWG GND	(2) #1 AWG GND

VOLTAGE DROP TABLE NOTES

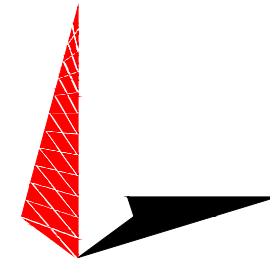
- THERE ARE TO BE NO WIRE SIZE CHANGES OTHER THAN <10' FROM THE CHARGER OR PANEL AS NEEDED FOR LARGE CONDUCTORS TO LAND ON THE TERMINAL LUGS OF THE UPSTREAM PANEL OR CHARGER.
- THE DISTANCES IN THIS TABLE ARE TOTAL DISTANCES, NOT HORIZONTAL DISTANCES. INCLUDE VERTICAL RUNS AND JUNCTION BOX COIL LENGTH IN THE TOTAL CONDUCTOR DISTANCE.
- WHEN MORE THAN ONE CHARGING STATION CIRCUIT CONDUCTORS ARE IN A CONDUIT, USE ONLY ONE SHARED EQUIPMENT GROUND CONDUCTOR.
- WHEN INSTALLING #1/0 AWG OR LARGER CONDUCTORS FROM THE POWER SOURCE TO EVCS, INCLUDE MULTICONDUCTOR TAPS IN THE CLOSEST JUNCTION BOX PRIOR TO ENTERING THE EVCS OR IN THE EVCS ITSELF SO THAT #6 AWG CONDUCTORS CAN BE TERMINATED IN THE EVCS.

ELECTRICAL ONE LINE DIAGRAM

1

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155 DE HARO STREET
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SHEET TITLE

**ELECTRICAL ONE
LINE DIAGRAM**

SHEET NUMBER

E-1

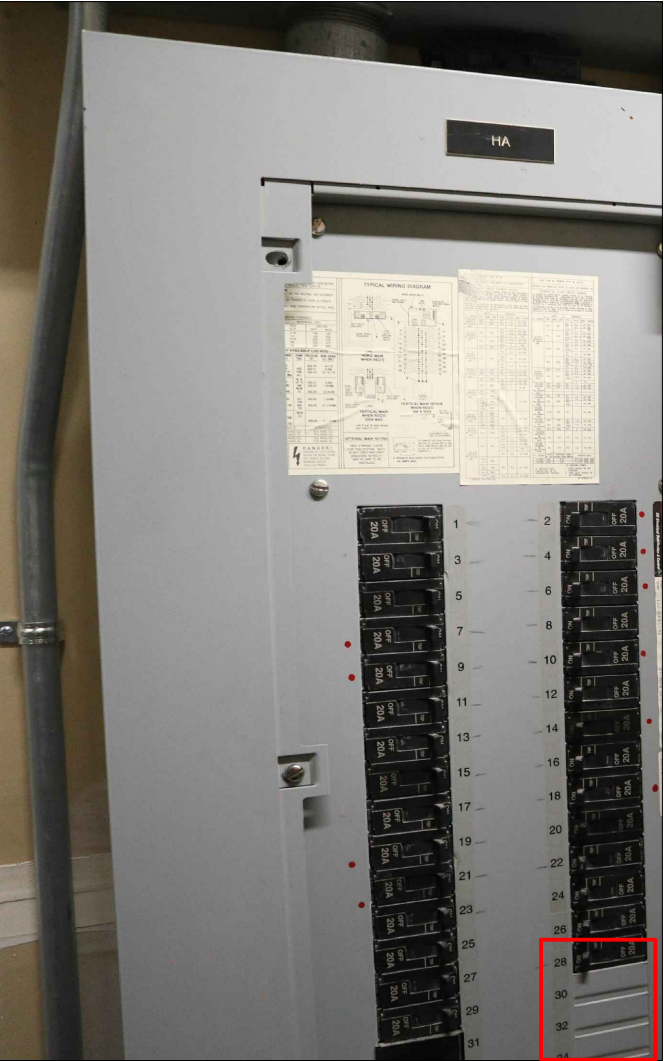
PROPOSED 'HA' 480V PANEL SCHEDULE													
LOAD SERVED	VOLT AMPS (WATTS)			TRIP	CKT #	PHASE	CKT #	TRIP	VOLT AMPS (WATTS)			LOAD SERVED	
	L1	L2	L3						L1	L2	L3		
PRODUCE LTS	3840			20A	1	A		32	20A	3840			SALES FL LTS
PRODUCE LTS		3840		20A	3	B		34		3840			SALES FL LTS
SALES FL LTS			3840	20A	5	C		36			3840		SALES FL LTS
SALES FL LTS	3840			20A	7	A		38	20A				SALES FL LTS
SALES FL LTS		3840		20A	9	B		40		3840			SALES FL LTS
SALES FL LTS			3840	20A	11	C		42			3840		SALES FL LTS
SALES FL LTS	3840			20A	13	A			20A				SALES FL LTS
SALES FL LTS		3840		20A	15	B				3840			SALES FL LTS
SALES FL LTS			3840	20A	17	C					3840		SALES FL LTS
SALES FL LTS	3840			20A	19	A						3840	PERIMETER LTS
SALES FL LTS		3840		20A	21	B							PERIMETER LTS
SALES FL LTS			3840	20A	23	C							UNKNOWN
SUSHI LTS		3840		20A	25	A				3840			UNKNOWN
UNKNOWN	3840			20A	27	B					3840		UNKNOWN
UNKNOWN		3840		20A	29	C						3840	UNKNOWN
UNKNOWN			3840	20A	31	A		30				11520	
SPARE (OFF)	0				32	B		32	70A	6360			NEW PANEL V1
SPARE (OFF)		0			34	C		34			6360		
SPARE (OFF)			0		36	A		36	20A			0	
SPARE (OFF)	0				37	B		38	20A	0			
SPARE (OFF)		0			39	C		40	20A		0		
SPARE (OFF)			0	20A	41	A		42	20A			0	
VOLT AMPS	19200	19200	19200							25560	25560	26880	VOLT AMPS
400A MLO, 3ø, 4W, 277/480V					L1	L2	L3						
					44760	44760	46080			VOLT AMPS			
					161.6	161.6	166.4			AMPS			
						166.4				MAX AMPS			
						208.0				MAX 125%			

FINAL PANEL SELECTION IS PENDING BASED ON RESULTS OF 30-DAY LOGGING METER STUDY.
LOAD STUDY MUST BE COMPLETED BEFORE CONSTRUCTION DRAWINGS ARE ISSUED.

PROPOSED SUB-PANEL 'V1' 120/208V SCHEDULE														
LOAD SERVED	VOLT-AMPERES (WATTS)			TRIP	CKT #	PHASE			CKT #	TRIP	VOLT-AMPERES (WATTS)			LOAD SERVED
	L1	L2	L3			A	B	C			L1	L2	L3	
L2 CHARGER 01	5760			60A	1	A			2	-	-		-	
		5760			3	B					-		-	
L2 CHARGER 02			5760	60A	5	C						-	-	
	5760				7	A							-	
L2 CHARGER 01		600		20A	9						-		-	
L2 CHARGER 02			600	20A	11							-	-	
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EXISTING PANEL 'HA'

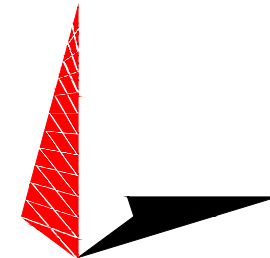


EXISTING PANEL 'HA'

INSTALL NEW 70A, 3P BREAKER

volta

155 DE HARO STREET
SAN FRANCISCO, CA 94103



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-5351
www.tepgroup.net

REV	DATE	DESCRIPTION	BY
0	01/16/2024	CD90s - PRELIMINARY	DJL
1	04/12/2024	CD90s - PERMITTING	HMB

ISSUE DATE

04/12/2024

ISSUED FOR
**PERMITTING
SUBMITTAL**

IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE
DIRECTION OF A LICENSED PROFESSIONAL
ENGINEER, TO ALTER THIS DOCUMENT.

**KROGER #685
DETROIT, MI**

**685 E MAPLE ROAD
BIRMINGHAM, MI 48009**

SHEET TITLE

**PANEL
SCHEDULES**

SHEET NUMBER

E-1A

GENERAL NOTES:

1. A NATIONALLY RECOGNIZED LABORATORY SHALL LIST ALL EQUIPMENT IN COMPLIANCE WITH ART110.3

2. ALL EXTERIOR EQUIPMENT SHALL BE RAIN TIGHT AND APPROVED FOR USE IN WET CONDITIONS

3. ALL CONDUCTORS SHALL BE PROVIDED WITH STRAIN RELIEF UPON ENTRY INTO ENCLOSURES.

4. EACH UNGROUNDED CONDUCTOR SHALL BE IDENTIFIED BY PHASE AND SYSTEM PER ART 210.5

5. ALL METALLIC COMPONENTS SHALL BE GROUNDED VIA ELECTRIC GROUNDING CONDUCTORS

6. CHARGING UNITS ARE EQUIPPED WITH AN INTEGRATED CONTRACTOR TO PREVENT BACK FEEDING OF POWER TO THE SOURCE

7. CONTRACTOR TO FIELD VERIFY MAIN FEED BREAKER SUPPORTING DISTRIBUTION PANEL IS APPROPRIATELY SIZED TO SUPPORT THE LOAD. CONTRACTOR SHALL CONTRACT THE ENGINEERING TEAM IMMEDIATELY IF BREAKER IS FOUND TO BE INSUFFICIENT

ELECTRICAL NOTES:

1. ALL ELECTRICAL WORK AND RELATED ACTIVITIES PERFORMED ON-SITE SHALL BE DONE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NEC) STANDARDS BEING ENFORCED BY ALL APPLICABLE JURISDICTIONAL REQUIREMENTS AT THE TIME OF CONSTRUCTION.

2. UTILITY EQUIPMENT INSTALLATIONS AND PREP WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY ENGINEER AT TIME OF PRECONSTRUCTION MEETING TO ENSURE ACCURACY OF INSTALLATIONS.

3. CONDUIT PATHS ARE REPRESENTATIVE ONLY. EXACT CONDUIT PLACEMENT TO BE DETERMINED ON SITE BASED ON FIELD CONDITIONS.

ABBREVIATIONS

A AMPERE

AC ALTERNATING CURRENT

AL ALUMINUM

ART ARTICLE

AUX AUXILIARY

BLDG BUILDING STRUCTURE

CONC CONCRETE

CU COPPER

DC DIRECT CURRENT

EGC EQUIPMENT GROUNDING CONDUCTOR

(E) EXISTING

EMT ELECTRIC METALLIC TUBING

EV ELECTRIC VEHICLE

EVSE ELECTRIC VEHICLE SUPPLY EQUIPMENT

GALV GALVANIZED

GND GROUND

HDG HOT DIPPED GALVANIZED

I CURRENT

KVA KILOVOLT AMPERE

KW KILOWATT

M METER

MAX MAXIMUM

MIN MINIMUM

N NEUTRAL

NEC NATIONAL ELECTRIC CODE

NTS NOT TO SCALE

(N) NEW

OC ON CENTER

PL PROPERTY LINE

PVC POLYVINYL CHLORIDE

RMC RIGID METALLIC CONDUIT

SCH SCHEDULE

SS STAINLESS STEEL

TYP TYPICAL

V VOLT

W WATT

XFMR TRANSFORMER

ELECTRICAL NOTES & ABBREVIATIONS

SCALE

N.T.S.

01

NOTES:

1. ACTUAL SEPARATION OF CONDUITS TO BE DETERMINED BY SITE SPECIFIC REQUIREMENTS.

2. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.

3. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLES, EQUIPMENT, ETC.)

4. PROVIDE RGS CONDUIT FOR INSTALLATIONS BELOW PARKING LOTS AND ROADWAYS.

SCALE

N.T.S.

02

NOTES:

1. ACTUAL SEPARATION OF CONDUITS TO BE DETERMINED BY SITE SPECIFIC REQUIREMENTS.

2. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.

3. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLES, EQUIPMENT, ETC.)

4. PROVIDE RGS CONDUIT FOR INSTALLATIONS BELOW PARKING LOTS AND ROADWAYS.

SCALE

N.T.S.

03

JUNCTION BOX SHALL BE POLYMER CONCRETE CONSTRUCTION

TOP VIEW

LID SHALL BE TIER 15 RATED

COVER DETAIL

CONCRETE COLLAR CLASS A3

SECTION VIEW

#68, #78, #8 AGGREGATE PLACED UNDER ENTIRE BOTTOM OF BOX

NOTE:
1. COMMUNICATIONS JUNCTION BOX COVER SHALL READ "COMM".

NON-TRAFFIC RATED JUNCTION BOX

SCALE

N.T.S.

04

NOTE:
1. EXACT CONDUIT DIAMETERS MAY VARY UPON INSTALLATION. REFERENCE CONDUIT SIZE PER THE CONDUIT SCHEDULE.

SCALE

N.T.S.

05

TRANSITION FROM PVC TO RMC FOR ANY EXPOSED CONDUIT AT GRADE TO STUB UP

NOTE:
1. EXACT CONDUIT DIAMETERS MAY VARY UPON INSTALLATION. REFERENCE CONDUIT SIZE PER THE CONDUIT SCHEDULE.

SCALE

N.T.S.

06

volta

155 DE HARO STREET
SAN FRANCISCO, CA 94103

TOWER ENGINEERING PROFESSIONALS
325 TRYON ROAD
RALEIGH, NC 27603-3530
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ISSUED FOR

PERMITTING SUBMITTAL

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

KROGER #685 DETROIT, MI

685 E MAPLE ROAD
BIRMINGHAM, MI 48009

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

E-2



MEMORANDUM

Planning Division

DATE: June 26, 2024
TO: Planning Board Members
FROM: Nicholas Dupuis, Planning Director
SUBJECT: 139 W. Maple – Preliminary Site Plan Review

The subject site, 139 W. Maple, is located in Downtown Birmingham in the B4 (Business-Residential) and D4 (Downtown Overlay) Zoning Districts. The site is on the south side of W. Maple in the middle of the block that runs from Pierce to Henrietta.

At this time, the applicant has submitted a Preliminary Site Plan Review application to add a 4-story addition to the rear of an existing 2-story commercial building. Preliminary Site Plan Review is designed to give the developer a tentative approval prior to development of construction plans. The footprint of the addition is located in an undeveloped portion of the site along the alley, and a portion of the building will cantilever over the existing building.

Along with its location in Downtown Birmingham, the building is also located in the Central Business Historic District and is a designated historic resource known as the Field Building. On June 5, 2024 ([Agenda](#)), the Historic District Commission moved to approve a historic Design Review application for the project based on the Secretary of the Interior Standards for Rehabilitation numbers 1, 2, 5, 9 and 10. The approval was conditioned on lightening the mass on the roof and providing a plan to rehabilitate portions of the historic building that are in disrepair. **The applicant is expected to satisfy these conditions at Final Site Plan review.**

1.0 Land Use and Zoning

- 1.1 Existing Land Use – The existing site is commercial.
- 1.2 Existing Zoning – B4 (Business-Residential) and D4 (Downtown Overlay)
- 1.3 Summary of Adjacent Land Use and Zoning – The following chart summarizes the existing land use and zoning adjacent to and/or in the vicinity of the subject site.

	North	South	East	West
Existing Land Use	Office/ Commercial	Office/ Commercial	Office/ Commercial	Office/ Commercial
Existing Zoning District	B4 (Business-Residential)	B4 (Business-Residential)	B4 (Business-Residential)	B4 (Business-Residential)
Overlay Zoning District	D4	D4	D4	D4

In terms of the uses within the proposed addition on this property, the first floor is dedicated to parking and internal circulation. The second floor is labeled as office space which would connect to the existing second floor of the Field Building. The third floor of the addition is office, and the fourth floor is residential with an active rooftop use. In general, the proposed mix of uses are generally permitted. However, Article 3, Section 3.04 (C) states that in a D4 Zone, two stories may be dedicated to office use *only when the Planning Board permits a fifth story*. Because there is no fifth story proposed, the applicant is only permitted one story of office. Thus, **the applicant must adjust the use on either the 2nd or 3rd floor of the addition to ensure the standards of the Downtown Overlay are met.**

2.0 Setback and Height Requirements

There are no issues with the bulk, area or placement of the proposed addition. Please see the attached Zoning Compliance Summary for details on dimensions and the buildings placement on the property.

Related to height are the rooftop use provisions located in Article 5, Section 5.12 of the Zoning Ordinance. Rooftop uses are permitted in the B4 zoning district provided rooftop structures and amenities may not contain habitable space. In addition, rooftop amenities such as pergolas, trellises and other similar items are permitted on a rooftop, provided

1. They are set back at least 5 feet from the eave line.
2. They are of sufficient weight or anchored to the building to resist anticipated wind loads.
3. They do not have full enclosures.
4. They do not include eisenglass or similar enclosure materials.

The applicant appears to meet the rooftop use standards at this time.

3.0 Screening and Landscaping

- 3.1 Dumpster Screening – Based on the site plans submitted, there is a dumpster enclosure proposed on the first floor of the addition on the east side. Although screened on three sides, it does not appear that the receptacles are screened from the alley side by a gate or other material. **The applicant must clarify the extent of the proposed dumpster screening and ensure that all waste receptacles are screened from view at Final Site Plan.**
- 3.2 Parking Lot Screening – The only off-street parking facilities proposed as a part of this project are 3 garages accessed from the alley. These garage spaces are screened by overhead garage doors and the building façade.
- 3.3 Mechanical Equipment Screening – The applicant is showing a large mechanical equipment enclosure on the roof that is located behind the rooftop use. The enclosure is proposed to match the height of the stairwell and elevator shaft height at nearly 12 ft. Although the mechanical details are not known at this time, the enclosure appears to be adequate. **The applicant must provide details on the types and locations of mechanical equipment proposed at Final Site Plan to ensure that the screening is satisfactory.**
- 3.4 Landscaping – There is no landscaping required or proposed as a part of this development project.
- 3.5 Streetscape – There are no changes proposed to the streetscape as a part of this development project. The W. Maple streetscape was recently reconstructed by the City and contains trees and pedestrian light fixtures in the area of the existing building.

4.0 Parking, Loading and Circulation

- 4.1 Parking – Due to the subject sites location within the former Parking Assessment District, the applicant is not required to provide parking for the commercial uses within the building, either existing or proposed. However, Article 4, Section 4.46 of the Zoning Ordinance requires residential uses in B4 to provide 1.5 off-street parking spaces for a 3 or more room unit. With only one residential unit proposed, the applicant is required to provide 1.5 off-street parking spaces. The applicant is proposing 3 off-street parking spaces in garages along the alley. Thus, the applicant meets the required parking.
- 4.2 Loading – The proposed development does not require any loading spaces on site. The proposed combined office area is less than 10,000 sq. ft., while the

existing commercial area is less than 5,000 sq. ft. If the types of uses were to change based on the requirements of the Downtown Overlay, the applicant may be required to provide one off-street loading space for a commercial use in excess of 5,000 sq. ft. However, Article 4, Section 4.24 (C)(2) permits the Planning Board to reduce loading space requirements for any building abutting a paved public alley 18 feet or more in width by 1 loading space for each 40 feet of alley that abuts the lot upon which the building is located. It appears this building would be eligible for the reduction should it be necessary.

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

4.4 Pedestrian Circulation and Access – There are no changes proposed to pedestrian circulation and access of the site. The main entrances for the commercial space exists along W. Maple, as does access for the upper floors. The proposed addition will add secondary points of ingress/egress for the upper floors of office.

5.0 Lighting

The site/design plans submitted do not show any proposed light fixtures at this time. **Any new light fixtures proposed are expected to be shown on the site/design plans at Final Site Plan along with specification sheets and photometric plans, should they be required.**

6.0 Design Review

As is typical with Preliminary Site Plans, the Planning Department will provide a high level overview of the design elements that have been shown on the site/design plans at this time. A full design review will be completed at Final Site Plan.

Due to the buildings location within the Downtown Overlay, the architectural standards in Article 3, Section 3.04 (E) apply. Although the building appears to meet many of the requirements, the Planning Department would like to provide some preliminary concerns related to the following standards:

1. Glazing – The Zoning Ordinance requires that the glazed area of a facade above the first floor shall not exceed 35% of the total area, with each facade being calculated independently. **As it stands, the north façade appears to significantly exceed the 35% maximum.**
2. Facade Material – The Zoning Ordinance requires at least 90% of the exterior finish material on all facades that face a street be limited to the following: glass, brick, cut stone, cast stone, coarsely textured stucco, or wood. **The large format porcelain cladding does not appear to meet this standard.**

Overall, the Planning Department would expect much more detail at Final Site Plan including material specifications, glazing calculations, color choices, and other necessary detail.

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.
- (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.
- (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.
- (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.
- (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.
- (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.

9.0 Recommendation

Based on a review of the site plan submitted and the standards of Article 7, Section 7.27, the Planning Department recommends that the Planning Board **APPROVE** the Preliminary Site Plan Review application for 139 W. Maple subject to the following conditions:

1. The applicant must provide all of the detail requested by the Planning Department at Final Site Plan; and
2. The applicant must comply with the requests of all City Departments.

10.0 Sample Motion Language

Motion to **APPROVE** the Preliminary Site Plan Review application for 139 W. Maple subject to the following conditions:

1. The applicant must provide all of the detail requested by the Planning Department at Final Site Plan; and
2. The applicant must comply with the requests of all City Departments.

OR

Motion to **POSTPONE** the Preliminary Site Plan Review application for 139 W. Maple pending receipt of the following:

1. _____
2. _____
3. _____

OR

Motion to **DENY** the Preliminary Site Plan Review application for 139 W. Maple for the following reasons:

1. _____
2. _____
3. _____

**Zoning Compliance Summary Sheet
Preliminary Site Plan Review
139 W. Maple**

Existing Site: 2-Story Commercial Building

Zoning: B4 (Business-Residential) and D4 (Downtown Overlay)

Land Use: Commercial

Existing Land Use and Zoning of Adjacent Properties:

	North	South	East	West
Existing Land Use	Office/ Commercial	Office/ Commercial	Office/ Commercial	Office/ Commercial
Existing Zoning District	B4 (Business-Residential)	B4 (Business-Residential)	B4 (Business-Residential)	B4 (Business-Residential)
Overlay Zoning District	D4	D4	D4	D4

Land Area:	Existing:	~5,000 SF
	Proposed:	~5,000 SF
Dwelling Units:	Existing:	0
	Proposed:	1
Minimum Lot Area/Unit:	Required:	N/A
	Proposed:	N/A
Min. Floor Area /Unit:	Required:	600 SF (efficiency or one bedroom) 800 SF (two bedroom) 1,000 SF (three or more bedroom)
	Proposed:	1,728 SF (one bedroom)
Max. Total Floor Area:	Required:	100% in parking assessment district

	Proposed:	100% for commercial/office uses 100%
Min. Open Space:	Required: Proposed:	N/A N/A
Max. Lot Coverage:	Required: Proposed:	N/A N/A
Min Front Setback:	Required: Proposed:	0 FT 0 FT
Side Setbacks	Required: Proposed:	Not Required 0 FT
Rear Setback:	Required: Proposed:	10 FT from Midpoint of Alley 10 FT from Midpoint of Alley
Min. Front+Rear Setback	Required: Proposed:	N/A N/A
Max. Bldg. Height:	Permitted: Proposed:	80 FT, 5 stories 61 FT, 4 stories
Min. Eave Height:	Required: Proposed:	N/A N/A
Floor-Ceiling Height:	Required: Proposed:	N/A N/A
Front Entry:	Required: Proposed:	On frontage line On frontage line
Absence of Bldg. Façade:	Required: Proposed:	N/A N/A
Opening Width:	Required: Proposed:	N/A N/A
Parking:	Required: Proposed:	1.5 off-street parking spaces 3 off-street parking spaces
Min. Parking Space Size:	Required: Proposed:	180 SF 180 SF
Parking in Frontage:	Required:	N/A

	Proposed:	N/A
Loading Area:	Required:	N/A
	Proposed:	N/A

Screening:

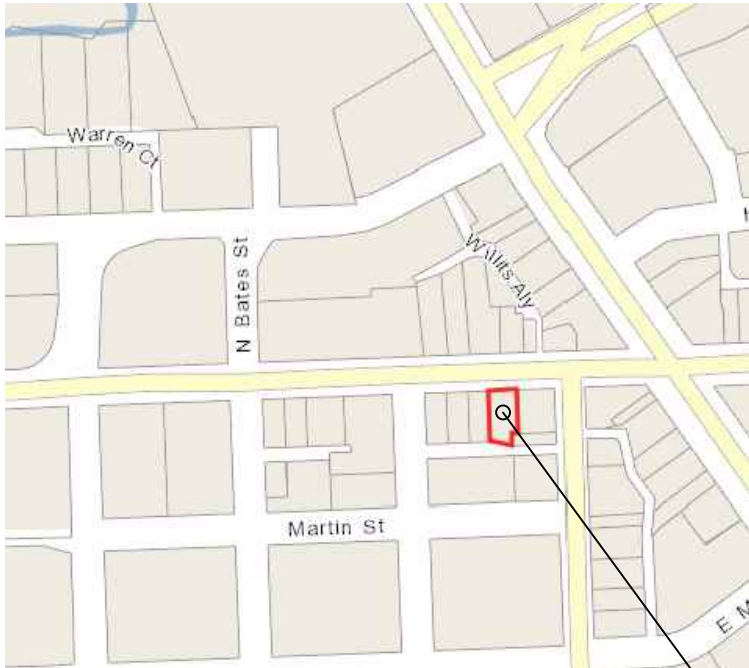
<u>Parking:</u>	Required:	6 ft. screenwall
	Proposed:	Interior parking

<u>Loading:</u>	Required:	N/A
	Proposed:	N/A

<u>Rooftop Mechanical:</u>	Required:	Full screening to compliment the building
	Proposed:	Rooftop enclosure

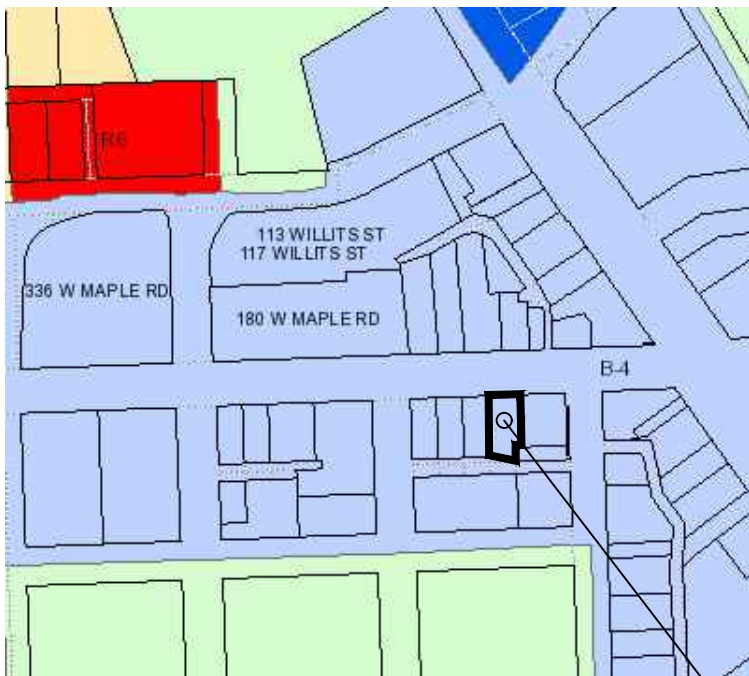
<u>Elect. Transformer:</u>	Required:	Fully screened from public view
	Proposed:	No transformer proposed

<u>Dumpster:</u>	Required:	6 ft. high capped masonry wall with wooden gates
	Proposed:	Trash to be stored within the building



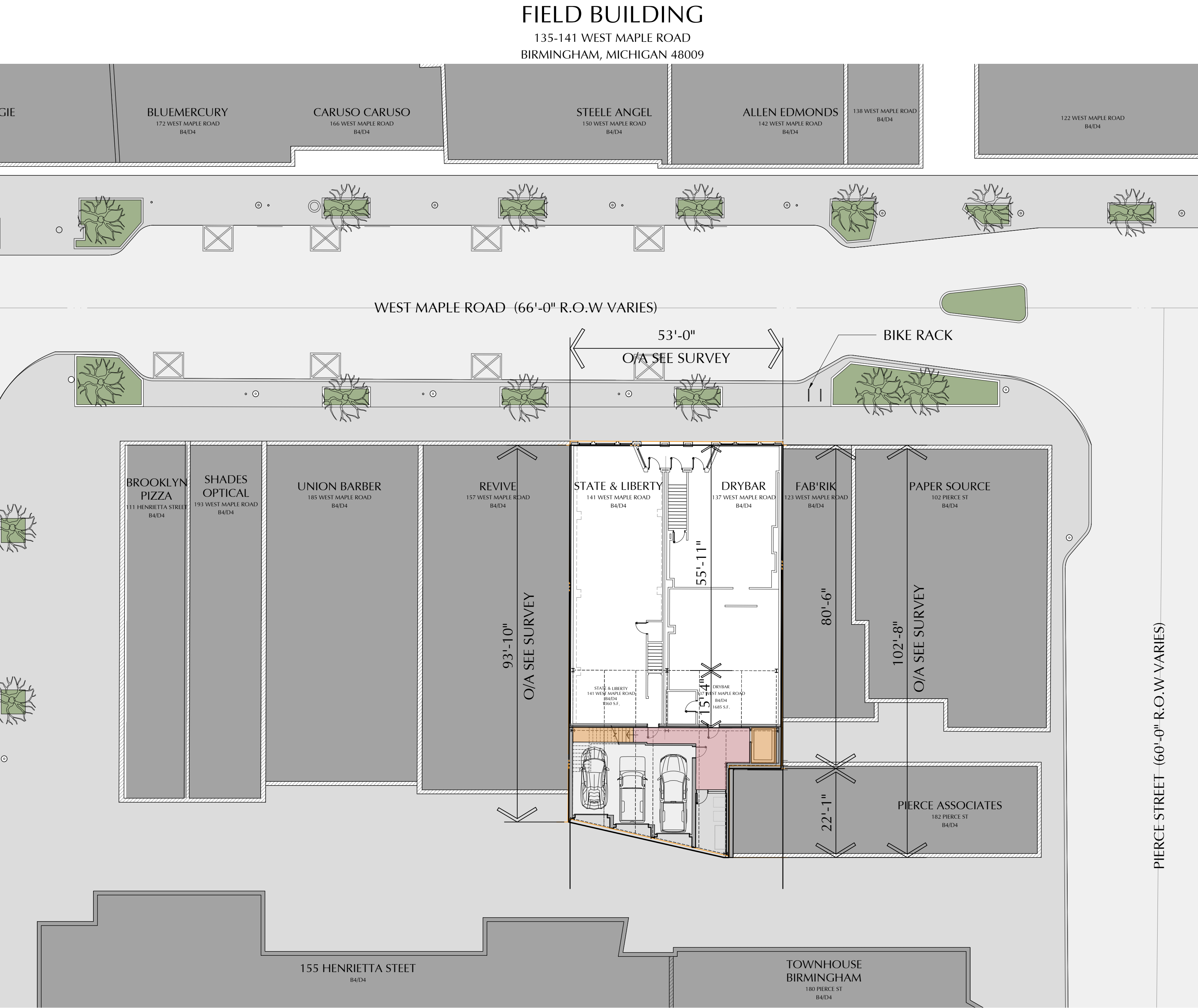
LOCATION MAP

SITE LOCATION:
139 WEST MAPLE ROAD



ZONING MAP

SITE LOCATION
ZONING: B4/D4



SITE DATA		
Site Addresses	139 West Maple Road	
Sidwell/Property ID Numbers	19-36-129-004	
Current Zoning/Overlay	B4/D4	
Proposed Zoning/Use	Mixed Use (Residential, Retail)	
Adjacent Zoning	B4/D4	
Setbacks	None Required	

BUILDING HEIGHT			
Item	Minimum	Maximum	Provided
Ground Level			14'-5"
Level 2-4			37'-7"
Mechanical/ Roof Top			10'-0"
Total		80'-0"	60'-0"

BUILDING USE DATA		
Level	Use	Use Group
Ground Level	Retail	B
Level 2	Office	B
Level 3	Office	B
Level 4	Residential (One Apartment)	R-2

PARKING DATA			
RESIDENTIAL APARTMENTS	1 APARTMENT X 2 (2 BEDROOM APARTMENT)	REQUIRED 2 SPACES	PROVIDED 3 SPACES
RETAIL RETAIL		N/A	N/A
OFFICE OFFICE		N/A	N/A
TOTAL	1 APARTMENT	2 SPACES	3 SPACES

BUILDING ADDITION S.F.		
Level	Use	Square Feet
Basement	Garage	1058 S.F.
Ground Level	Garage	657 S.F.
Level 2	Office	1058 S.F.
Level 3	Office	1728 S.F.
Level 4	Residential	1728 S.F.
TOTAL		6229 S.F.

LEGEND	
	PARKING/TOP ROOF
	OFFICE
	EGRESS
	CIRCULATION
	RESIDENTIAL



FROM MAPLE ROAD
VIEWING TOWARDS HENRIETTA STREET



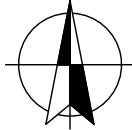
WEST MAPLE ROAD



FROM MAPLE ROAD
VIEWING TOWARDS PIERCE STREET

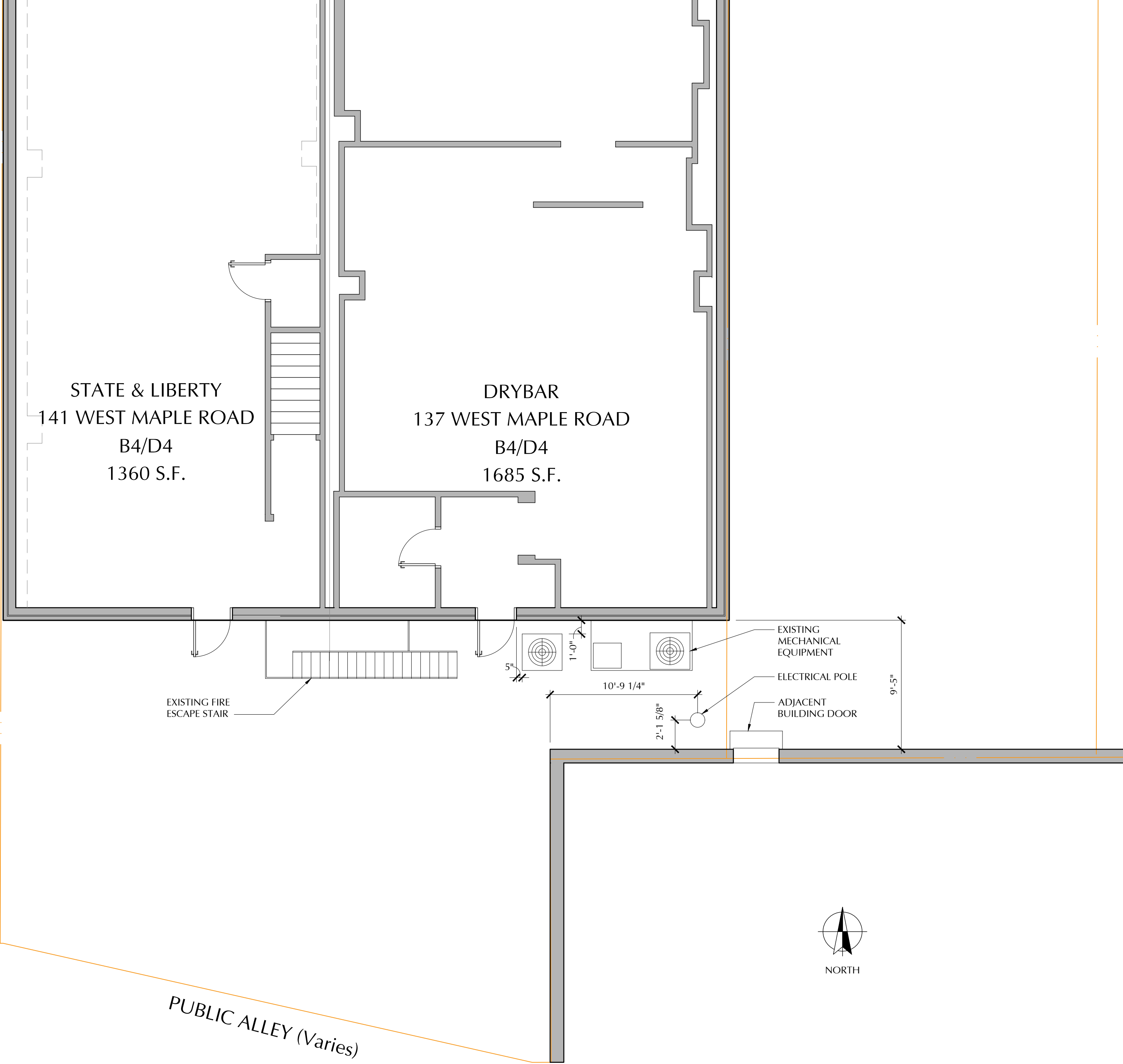
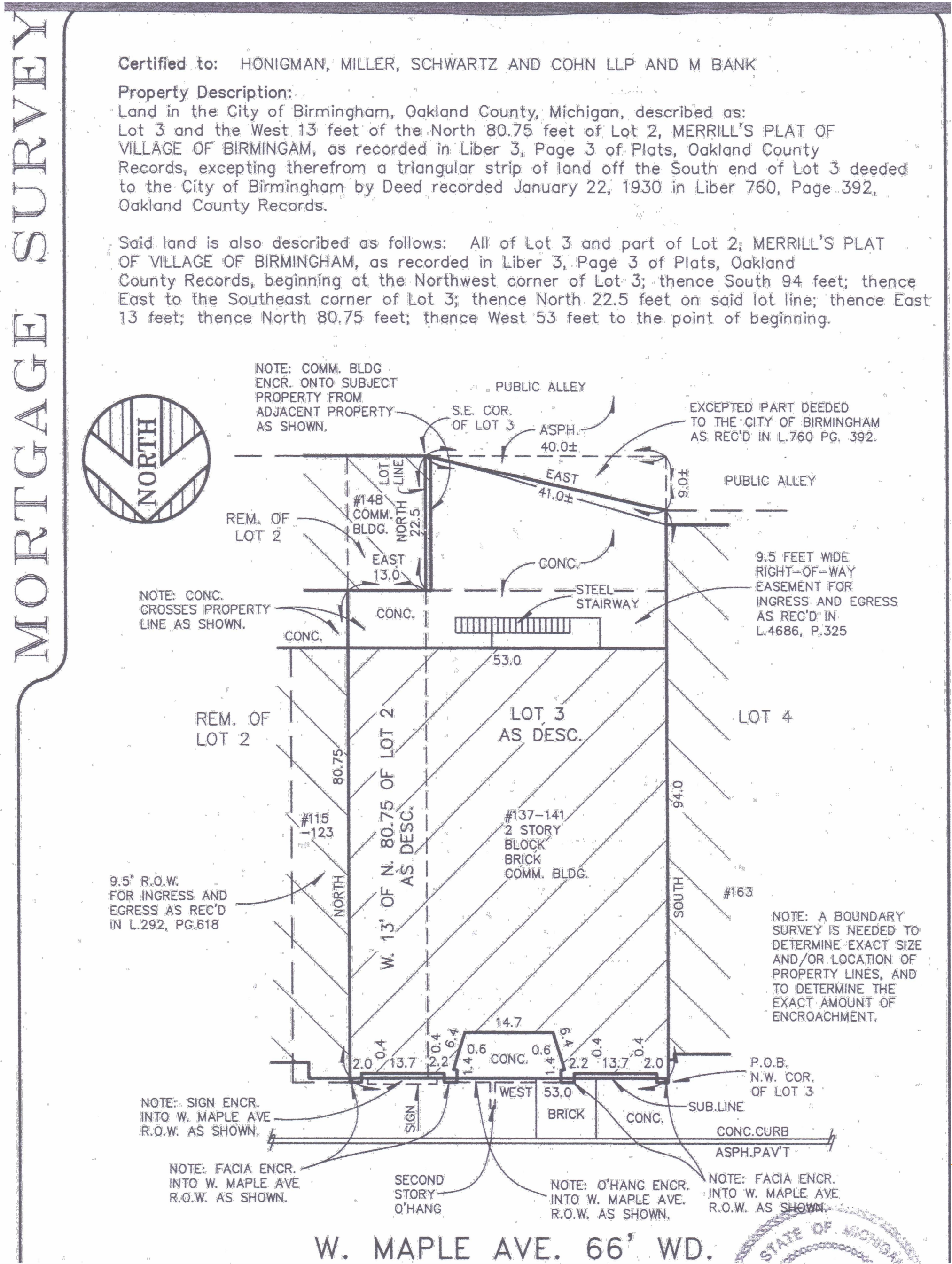
Site Context

SCALE : 1:20



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ARCHITECTURE
INTERIORS
124 Peabody, Birmingham, Michigan 48009 248.258.6940

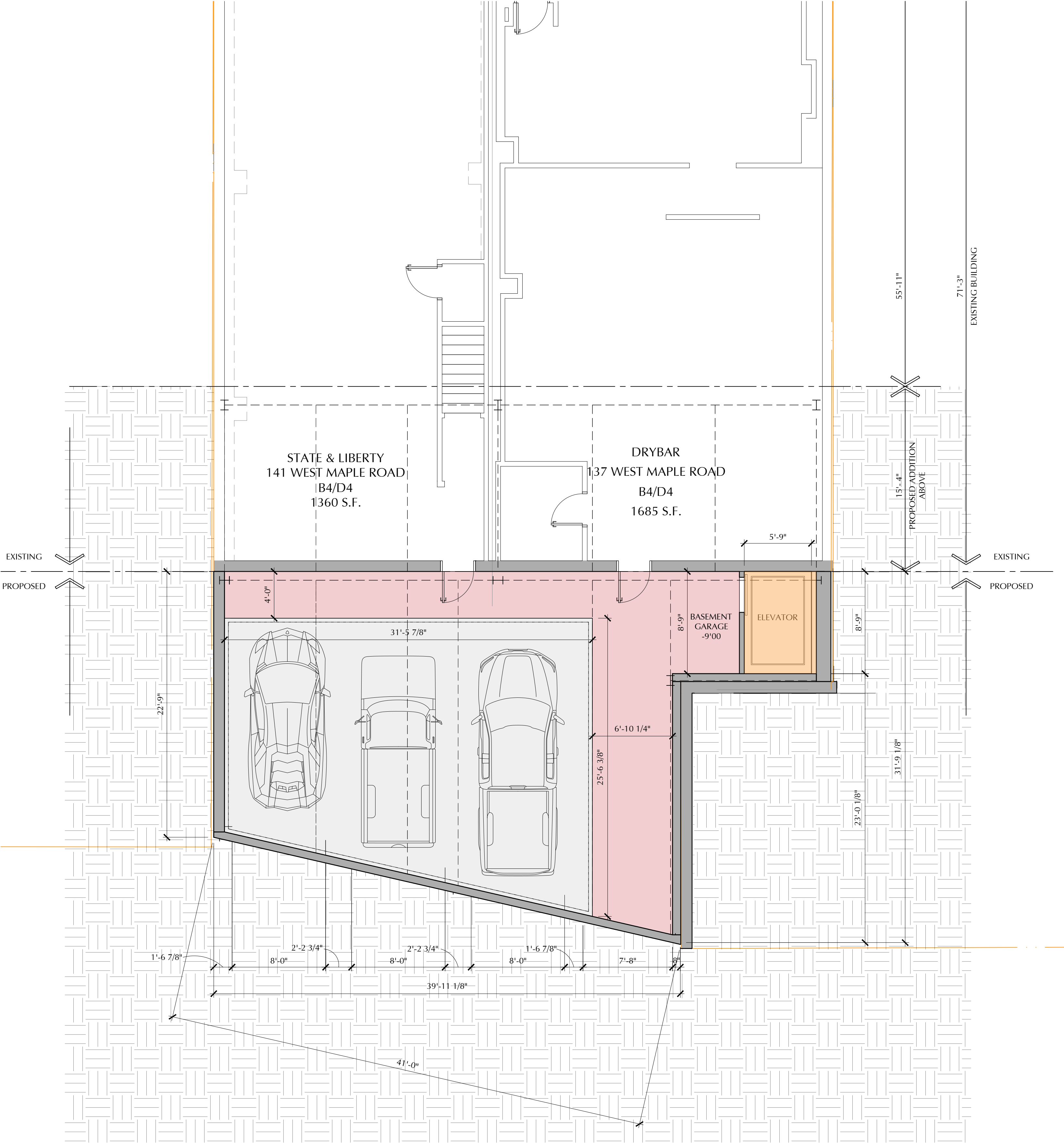
FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



FIRST FLOOR (Existing)

SCALE : 3/16" = 1'-0"

FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009

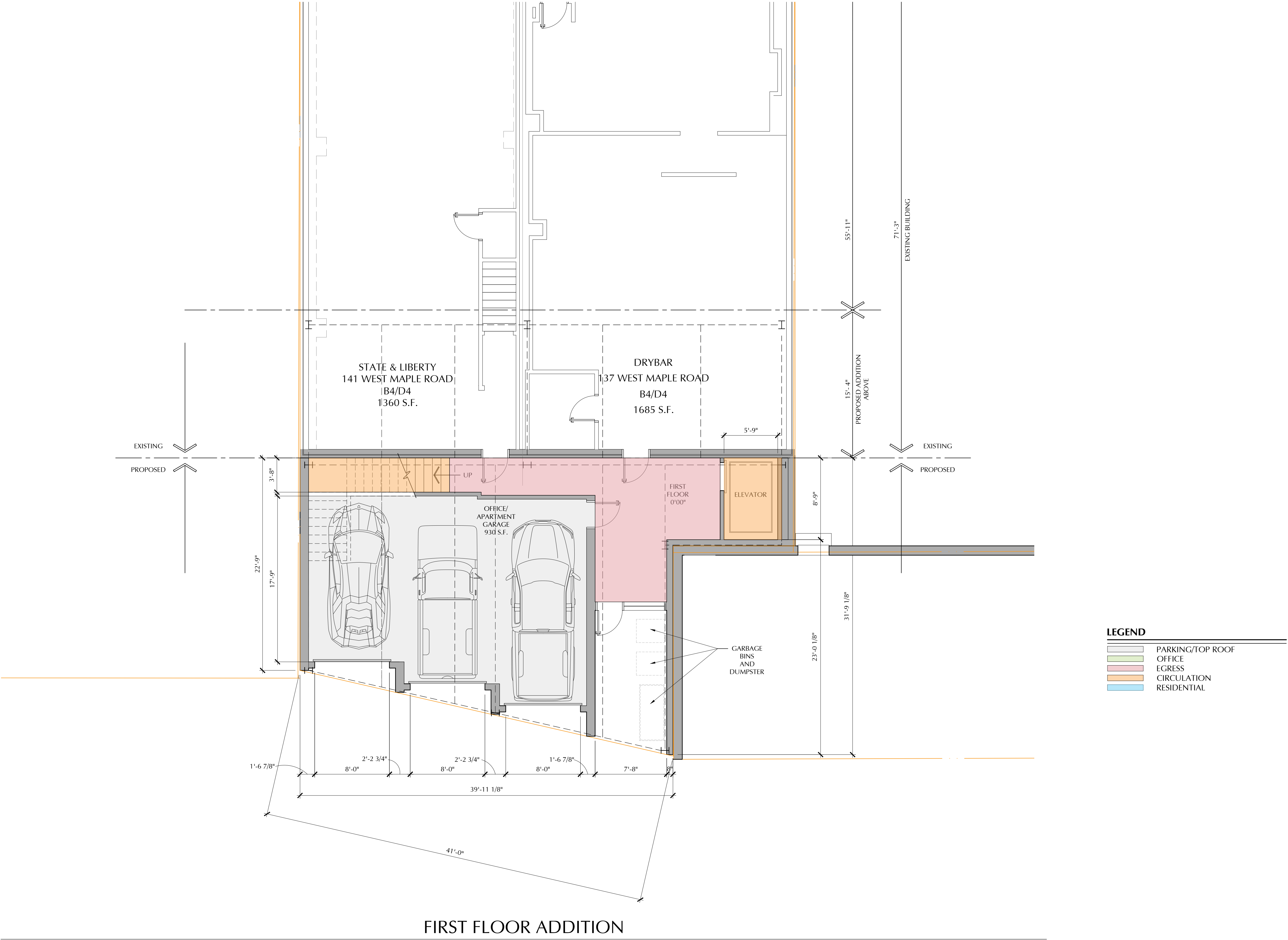


BASEMENT FLOOR

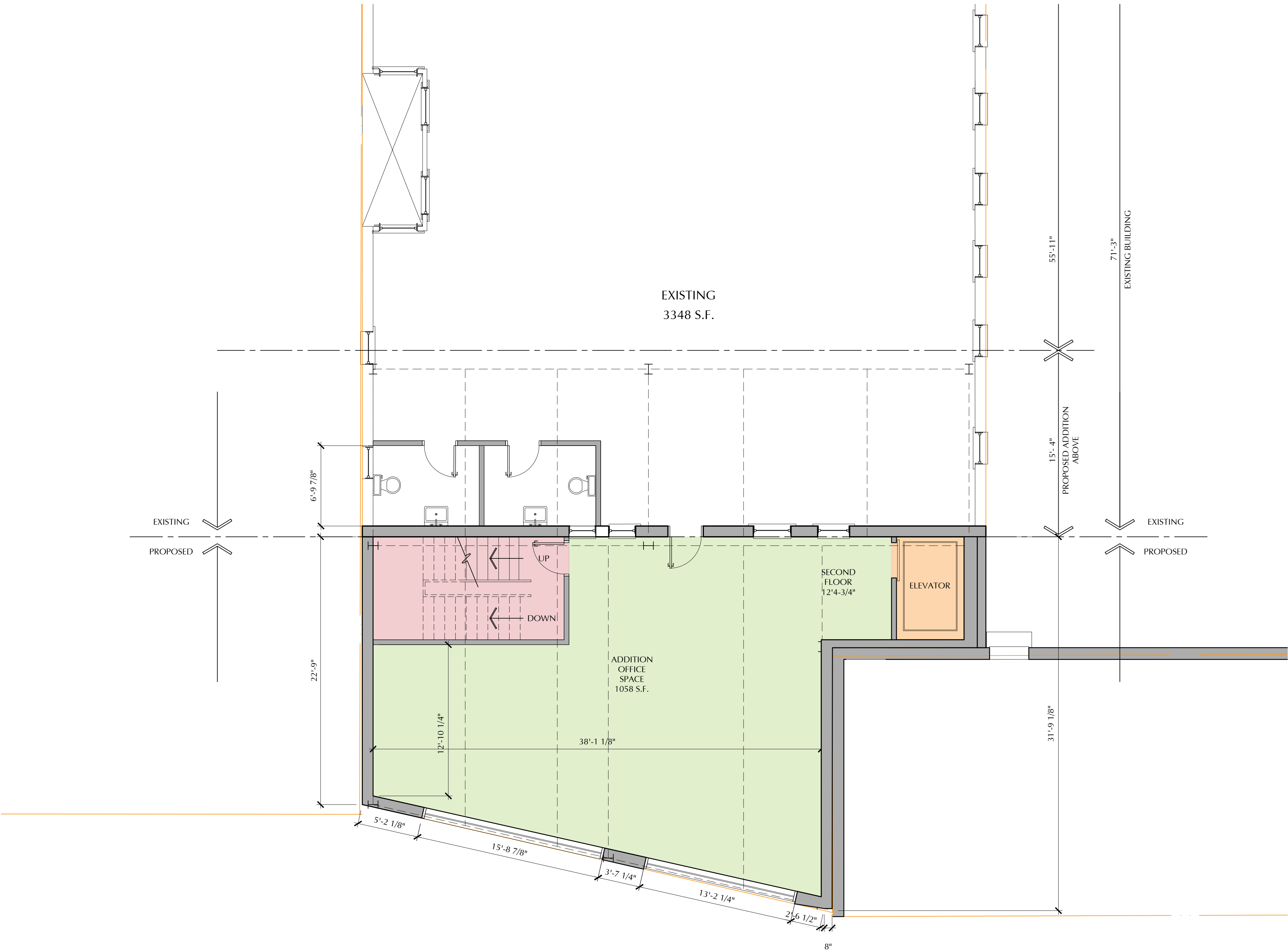
SCALE : 3/16" = 1'-0"

- LEGEND
- PARKING/TOP ROOF
 - OFFICE
 - EGRESS
 - CIRCULATION
 - RESIDENTIAL

FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



LEGEND

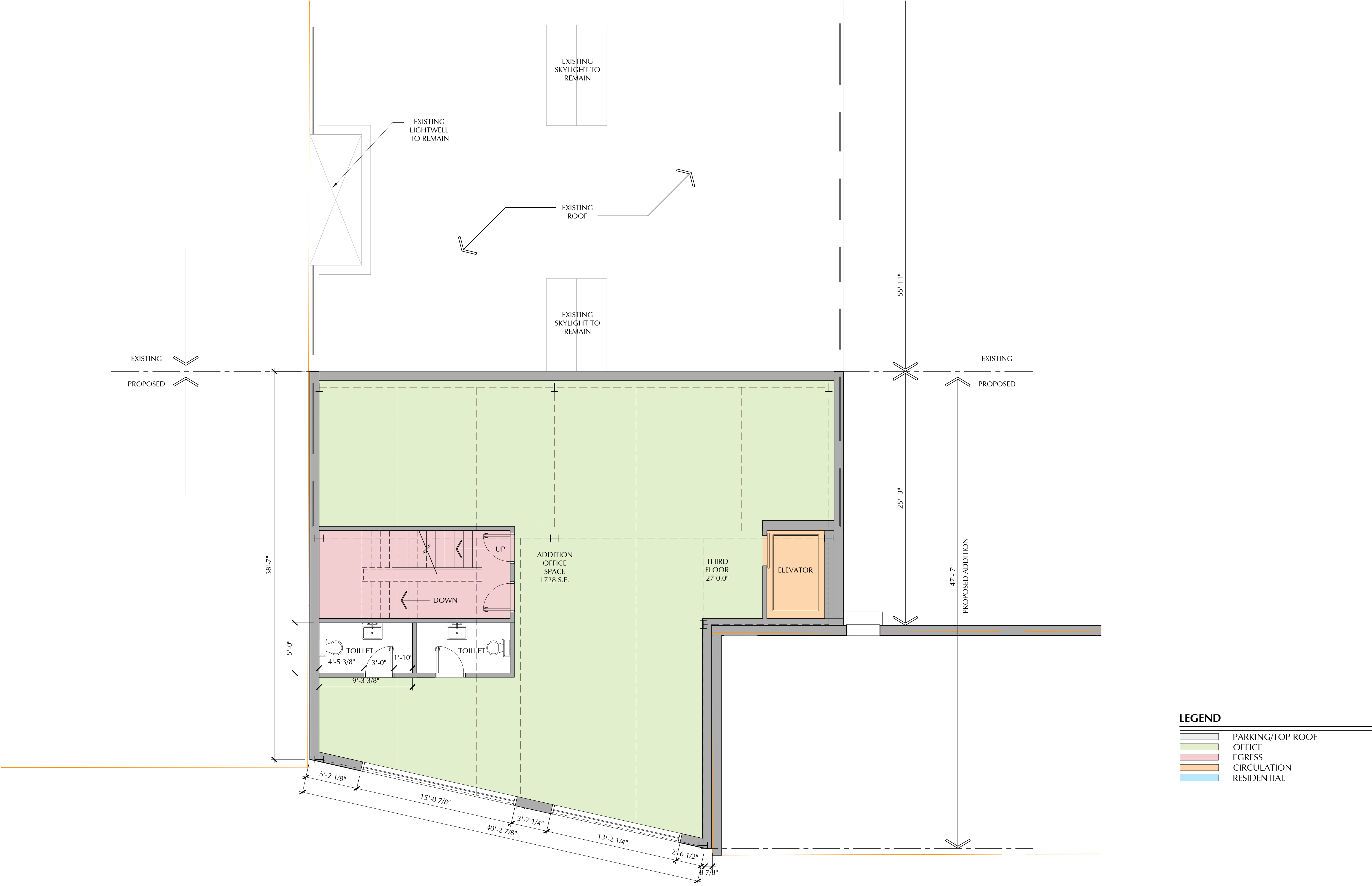
	PARKING
	OFFICE
	EGRESS
	CIRCULATION
	RESIDENTIAL

SECOND FLOOR

SCALE : 3/16" = 1'-0"

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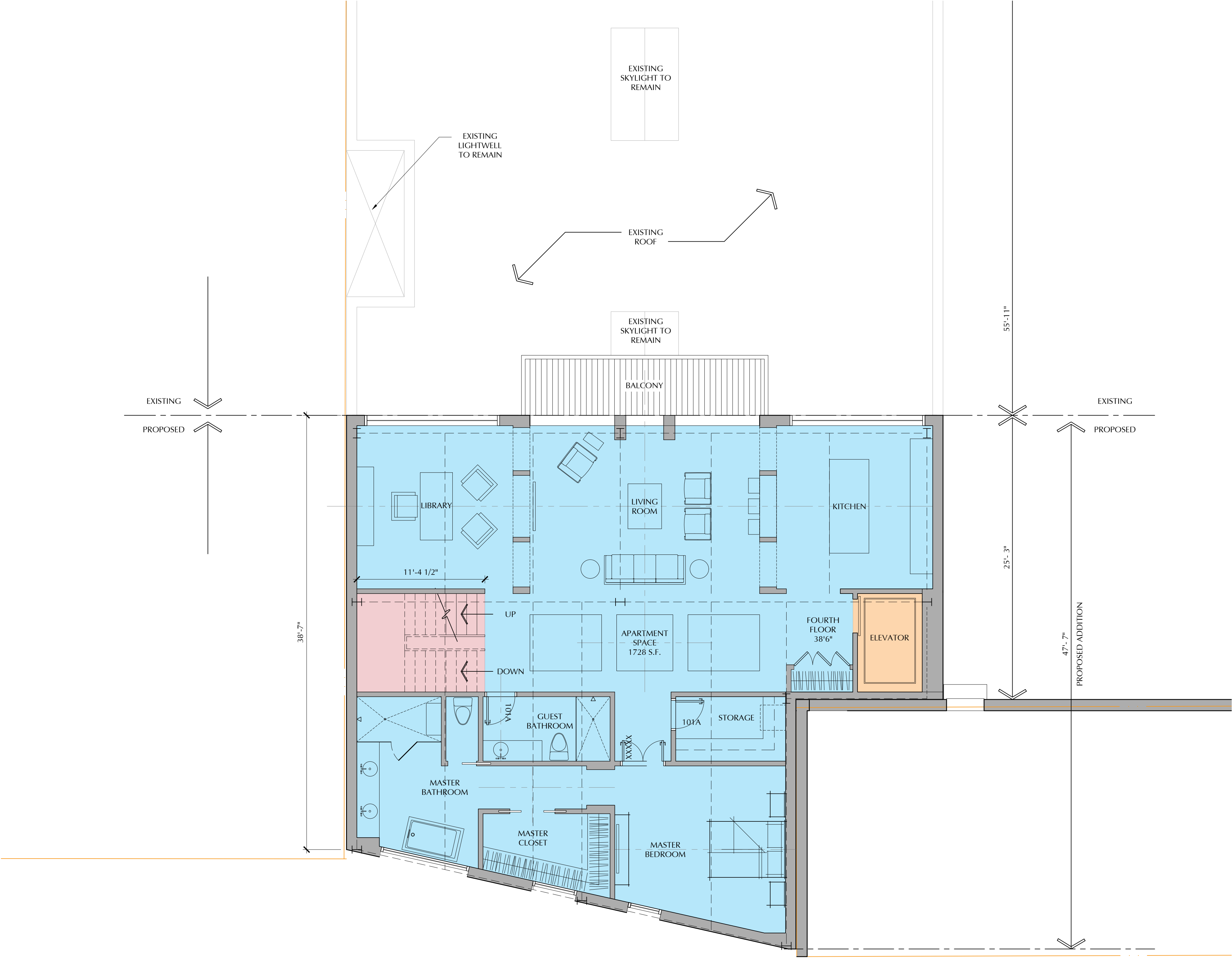
FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



THIRD FLOOR

SCALE : 3/16" = 1'-0"

FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



LEGEND

	PARKING/TOP ROOF
	OFFICE
	EGRESS
	CIRCULATION
	RESIDENTIAL

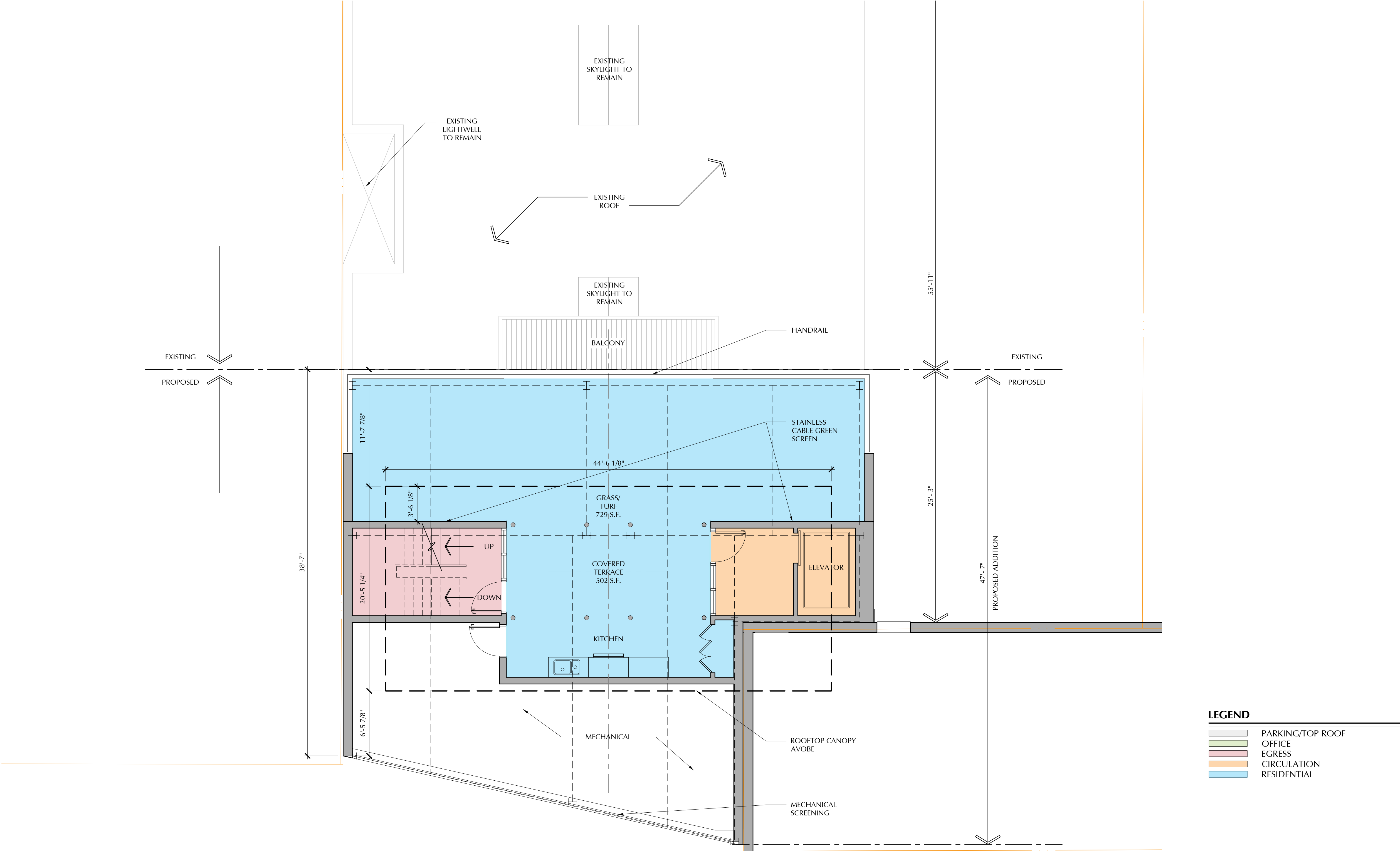
FOURTH FLOOR

SCALE : 3/16" = 1'-0"

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FIELD BUILDING

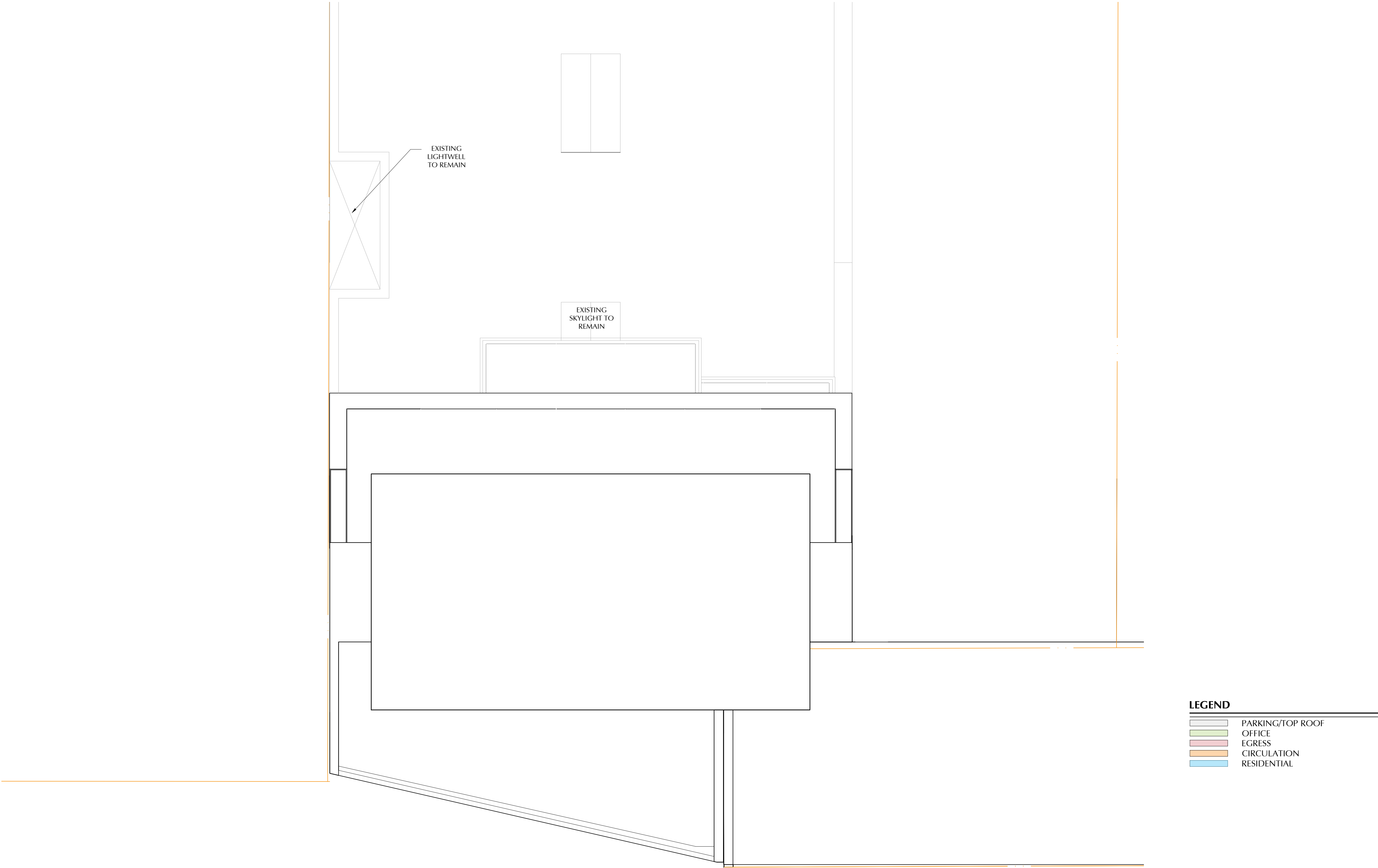
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



FIFTH FLOOR

SCALE : 3/16" = 1'-0"

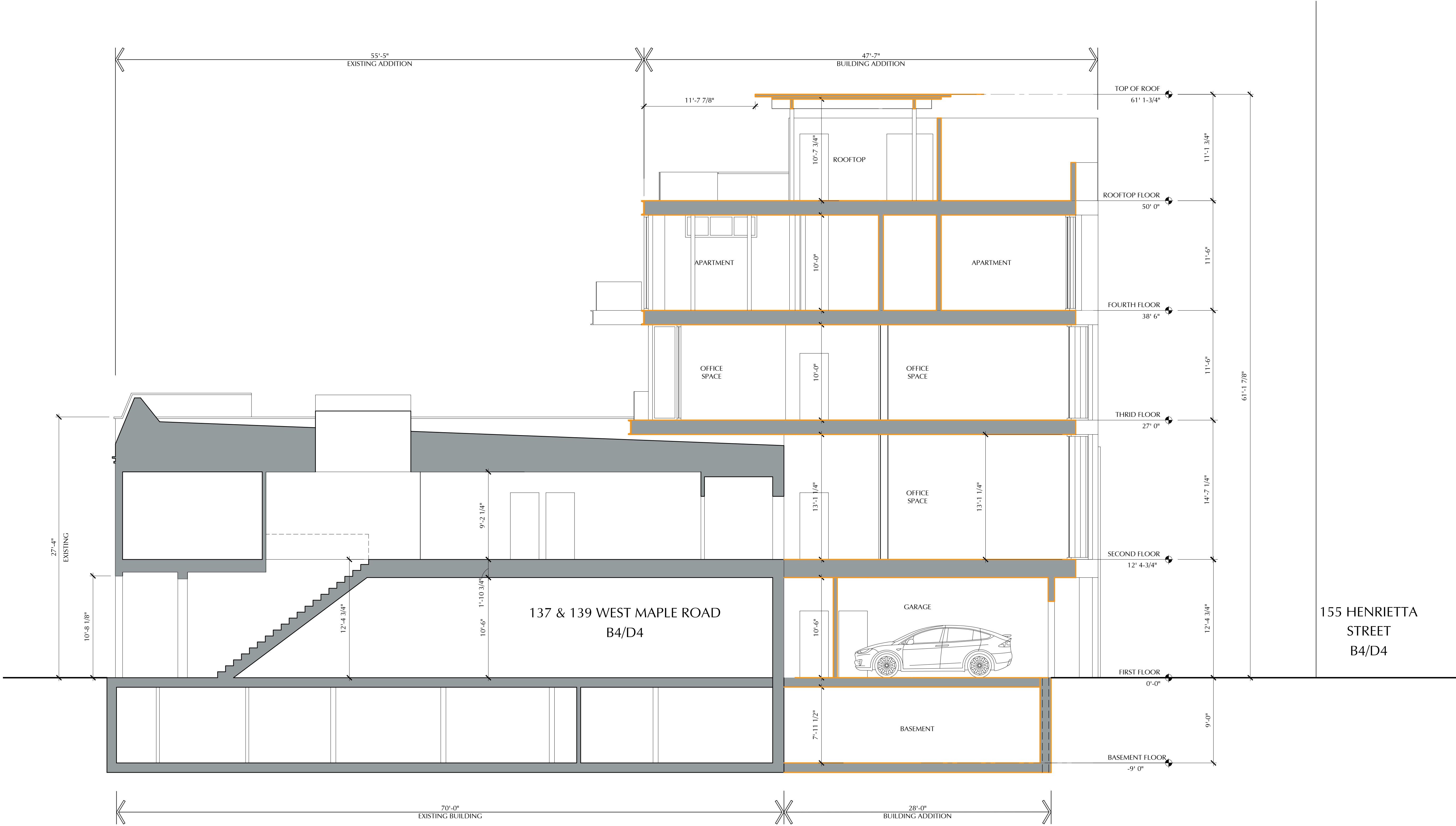
FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



ROOF FLOOR PLAN

SCALE : 3/16" = 1'-0"

FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009

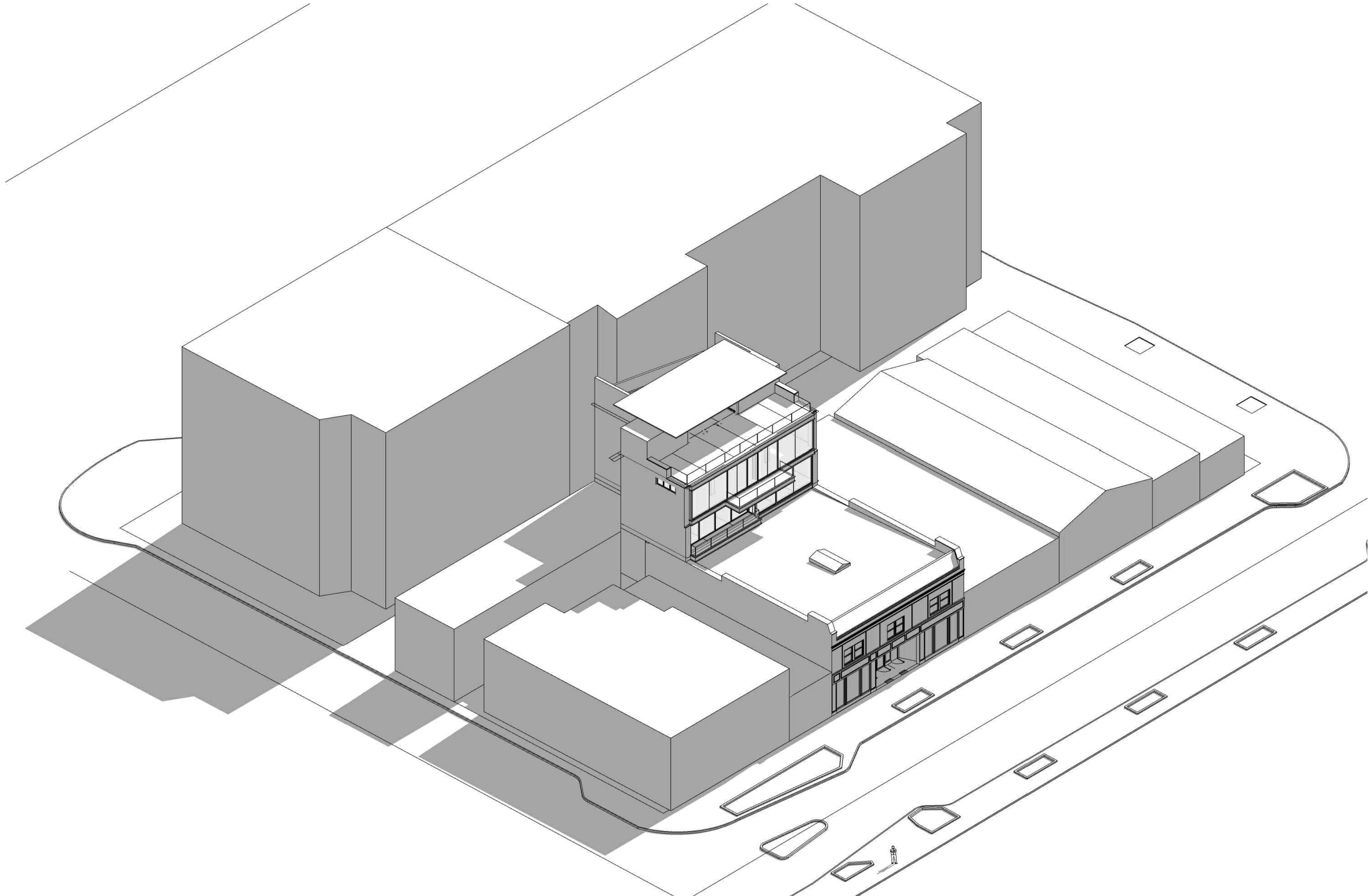


SECTION

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

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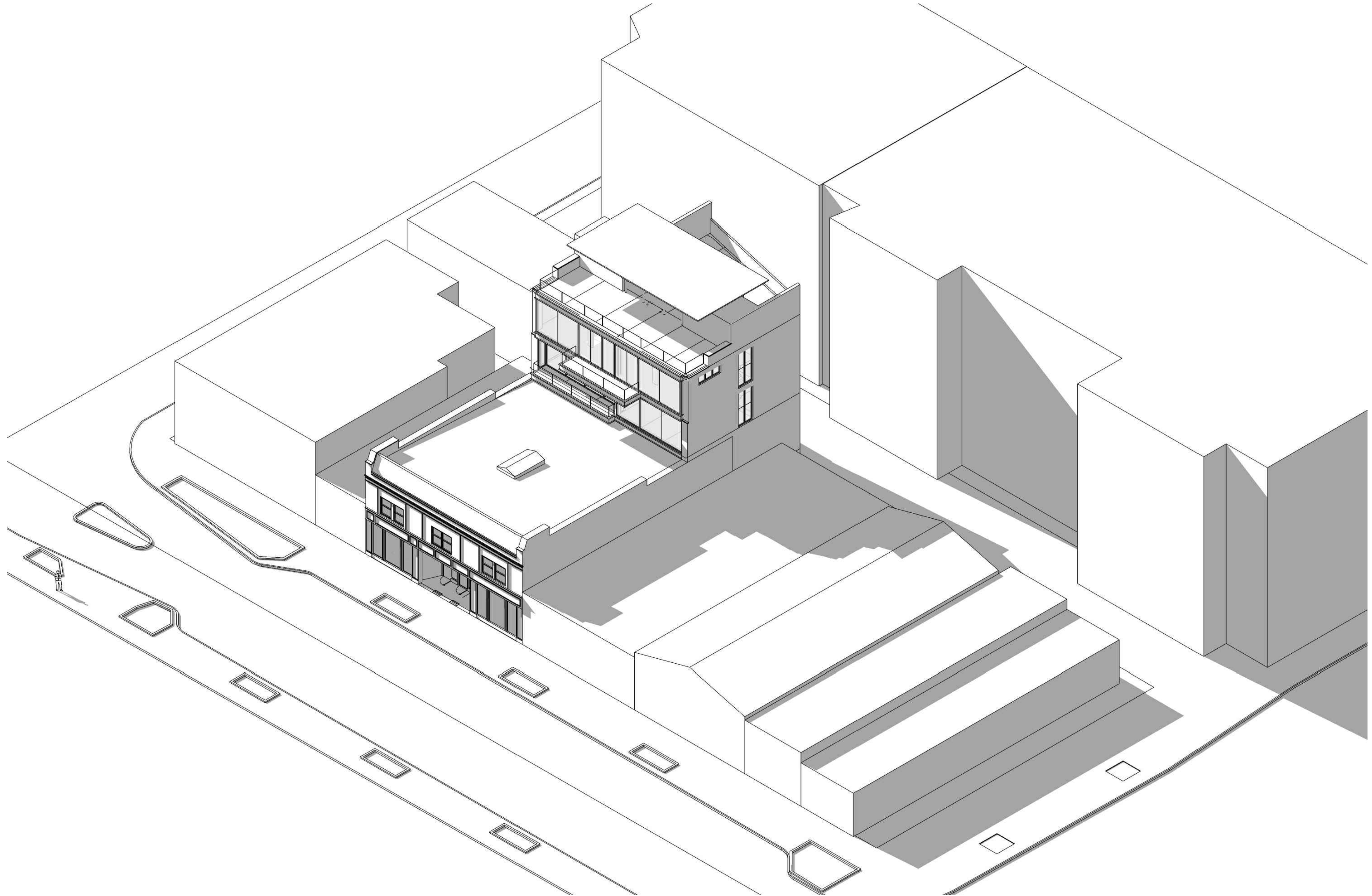
FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



SOUTHWEST ISOMETRIC VIEW

SCALE : N/A

FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



SOUTHEAST ISOMETRIC VIEW

SCALE : N/A

FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



STREETSCAPE LOOKING SOUTHWEST @ EYE LEVEL
SCALE : N/A

FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



STREETSCAPE LOOKING SOUTHWEST @ BIRDS EYE LEVEL

SCALE : N/A

FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



STREETSCAPE LOOKING SOUTHEAST @ EYE LEVEL

SCALE : N/A

FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



STREETSCAPE LOOKING SOUTHEAST @ BIRDS EYE LEVEL

SCALE : N/A

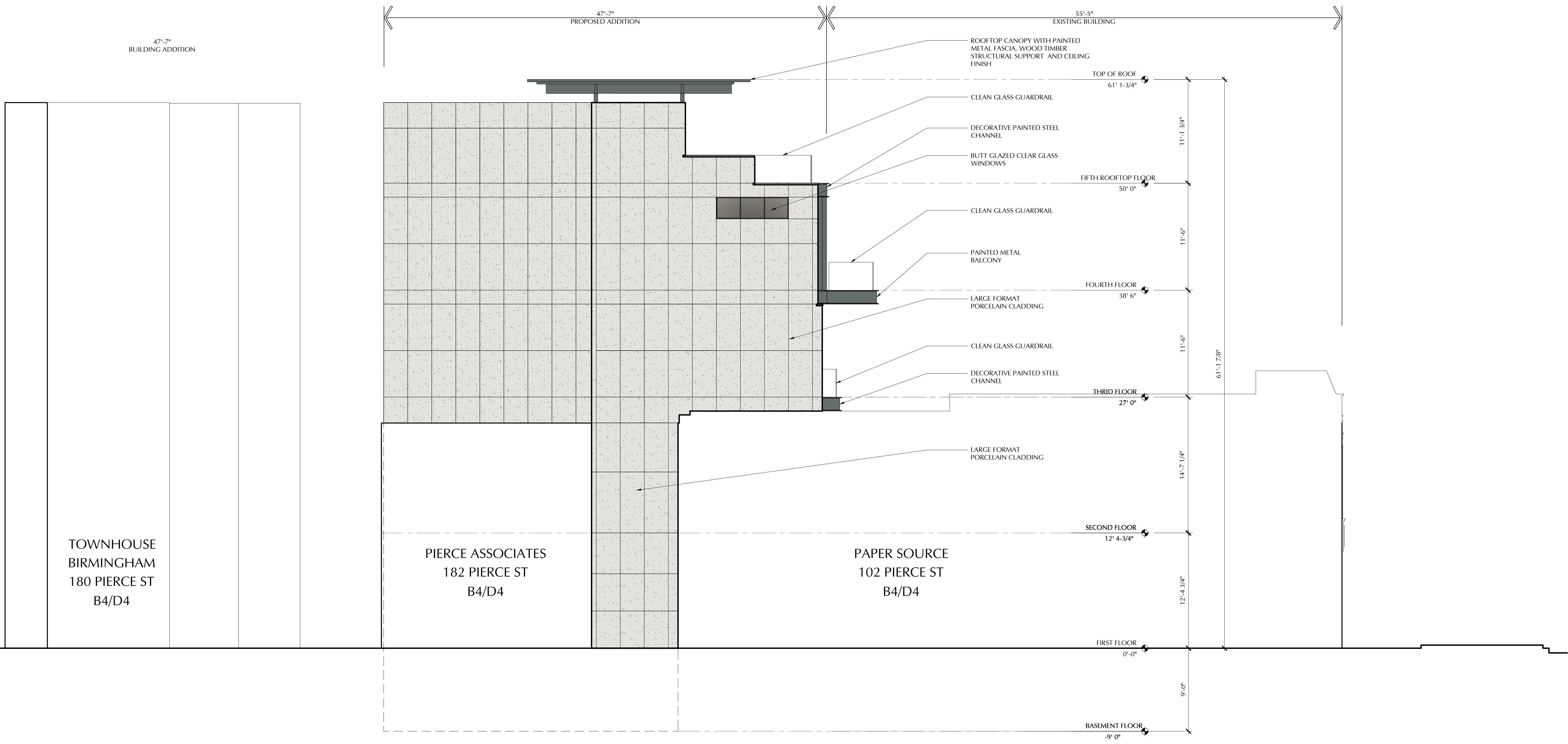
FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



NORTH ELEVATION

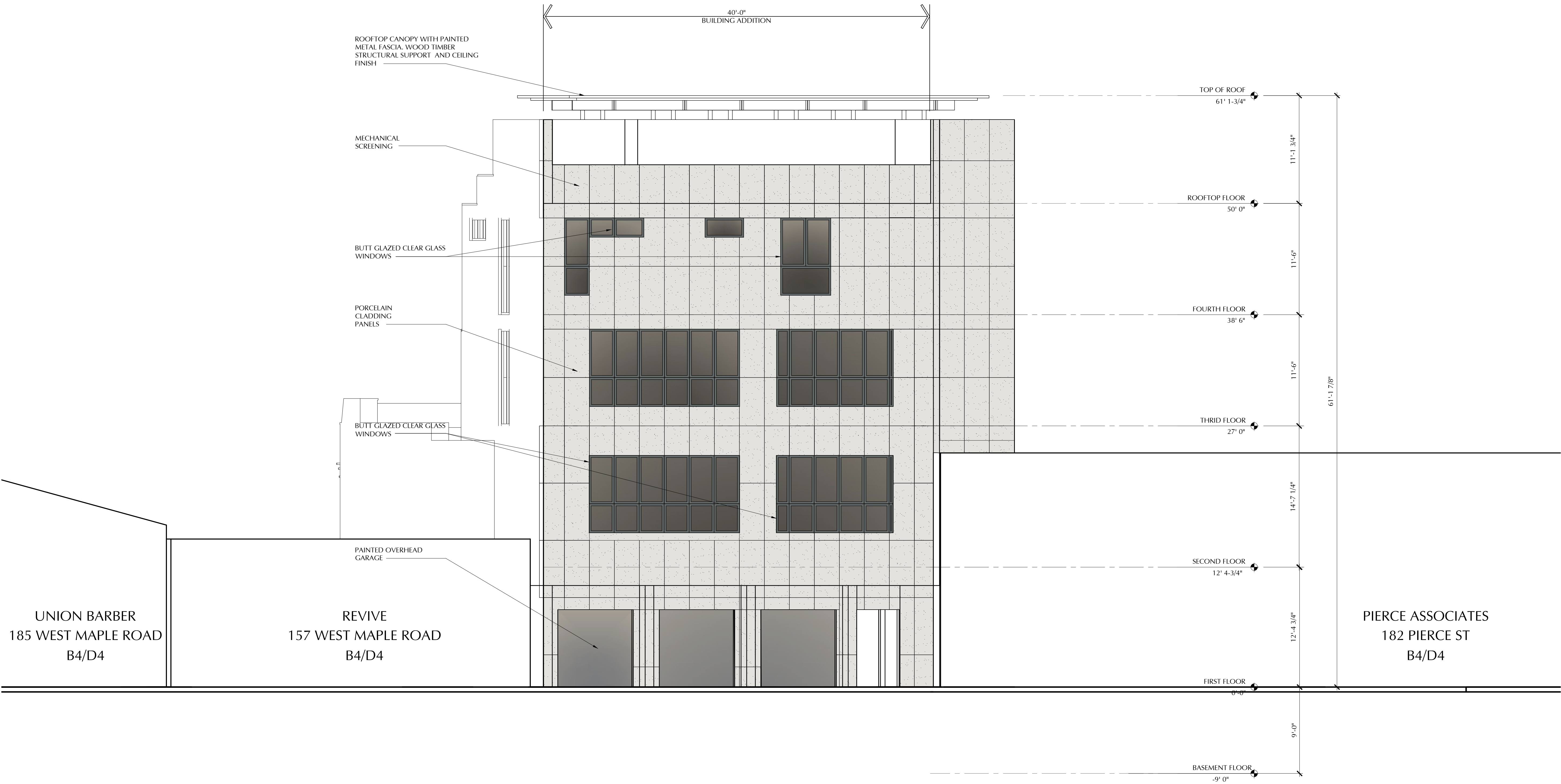
SCALE : 3/16" = 1'-0"

FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



EAST ELEVATION
SCALE : 3/16" = 1'-0"

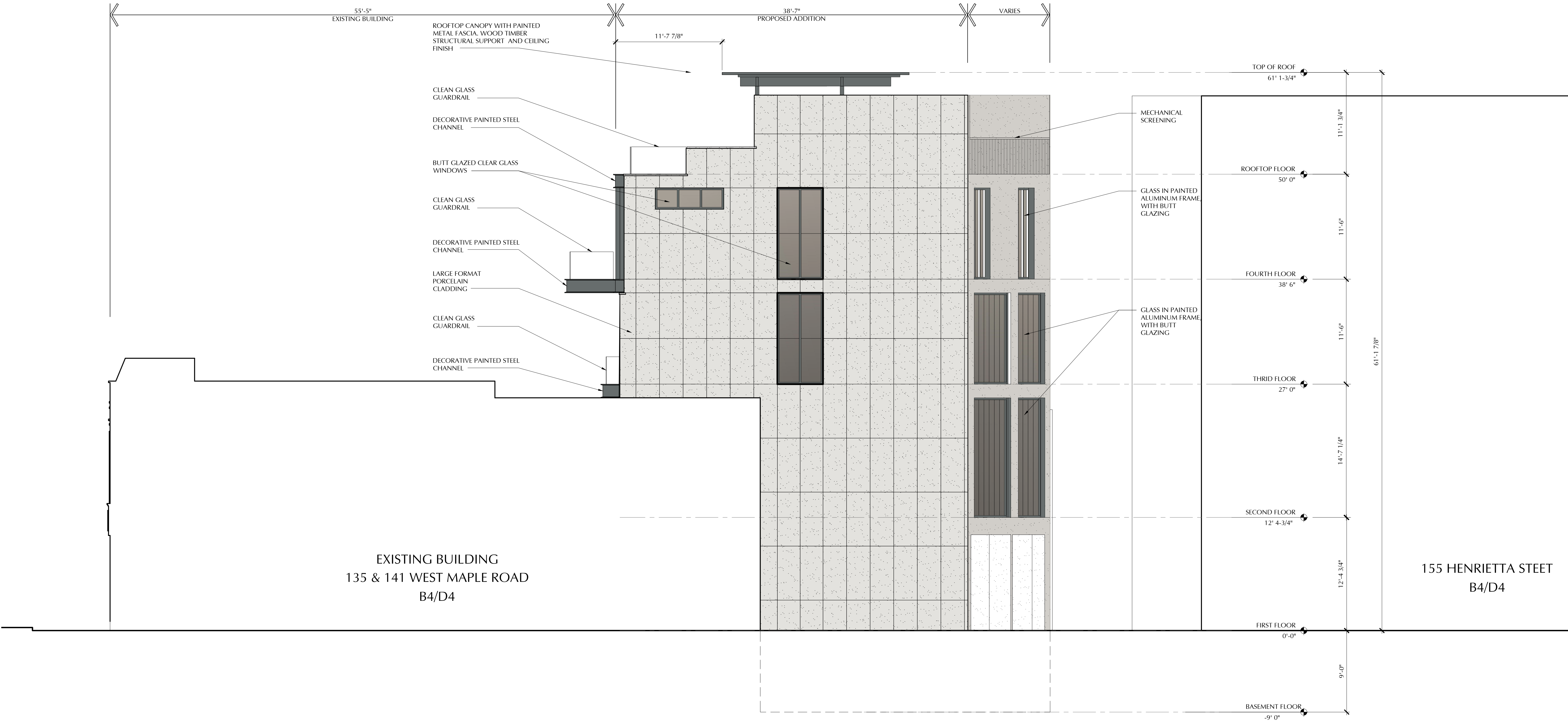
FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



SOUTH ELEVATION

SCALE : 3/16" = 1'-0"

FIELD BUILDING
135-141 WEST MAPLE ROAD
BIRMINGHAM, MICHIGAN 48009



WEST ELEVATION

SCALE : 3/16" = 1'-0"

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FIELD BUILDING

135- 141 West Maple Road.
Birmingham, Michigan 48009



Glass



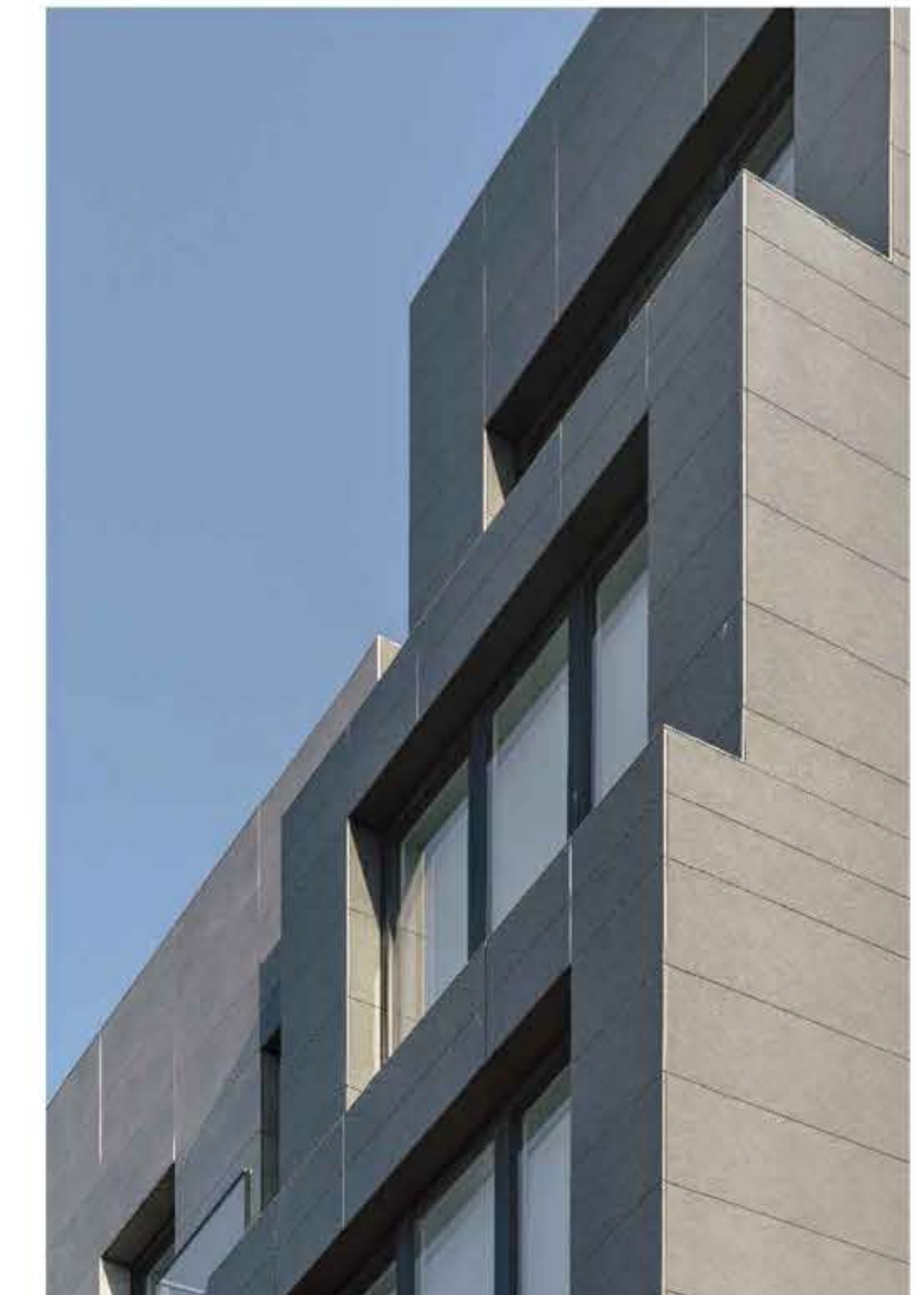
Steel roof with wooden ceiling



Decorative C steel chanel



Porcelain tiles



MATERIAL SAMPLES



FRONT VIEW

SCALE : N/A



FRONT VIEW SUNSET

SCALE : N/A



SOUTHWEST VIEW

SCALE : N/A



SOUTHEAST VIEW

SCALE : N/A



PIERCE STREET WITH MAPLE ROAD VIEW

SCALE : N/A



PIERCE STREET WITH MAPLE ROAD VIEW SUNSET

SCALE : N/A



MEMORANDUM

Planning Division

DATE: June 26, 2024

TO: Planning Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: The Birmingham Plan 2040 – Next Steps

On June 10, 2024 ([Agenda](#)), the Planning Board and City Commission held a joint meeting to discuss the prioritization of key actions from the Birmingham Plan 2040. After a robust discussion, the City Commission indicated full support of the prioritization matrix that was presented to them and suggested a willingness to provide formal direction to all associated boards/commissions at an upcoming meeting of the City Commission. At this time, the Planning Department expects to accomplish this in July, 2024.

In the meantime, the Planning Department would like to suggest discussing and formalizing a regular spot on the Planning Boards agenda for the Birmingham Plan 2040 as a whole. This formal agenda item would not be designed to be discussed at every meeting. Rather, it would serve as a place to discuss the 2040 Plan as a whole as opposed to its corresponding parts. Examples of discussions surrounding the 2040 Plan “as a whole” include the Planning Board’s prioritization matrix, the annual reviews and 5-year reviews of the master plan, and reviews/updates of work being done at other boards/commissions.

The formalization of this suggestion would necessitate a review and amendment of Article II, Subsection F of the Planning Board’s Rules of Procedure. While it is on the table, the Planning Department is also open to other suggestions as it relates to further improving the Rules of Procedure. Attached is the Rules of Procedure document, last updated in 2018, with the amendments noted above. Once completed, the Planning Department would create a new agenda template to match the structure within the Rules of Procedure. As described in the Rules of Procedure, the Planning Board may amend such upon the affirmative vote of five members.

**PLANNING BOARD
OF THE
CITY OF BIRMINGHAM, MICHIGAN**

RULES OF PROCEDURE

Article I – Organization

- A. The Planning Board shall annually, at a regular meeting in April, elect a Chairperson and a Vice-Chairperson to hold office for one year and until their successors are appointed and qualify. No one individual shall serve for more than three (3) consecutive years as Chairperson or for more than three (3) consecutive years as Vice-Chairperson. The Planning Director, or his or her authorized representative, shall act as Secretary and shall appoint a Clerk to record the proceedings.
- B. The Chairman shall preside at all meetings of the Planning Board. In the absence of the Chairman, the Vice-Chairman shall preside, and in the absence of both, if a quorum shall be present, a Chairman shall be designated by a majority of the members of the Planning Board present at the meeting. The presiding officer, subject to these rules, shall decide all points of order or procedure, in accordance with the rules contained in the current edition of Robert's Rules of Order Newly Revised.
- C. The Secretary shall maintain the minutes of the Planning Board's proceedings, shall have custody of all records of the Planning Board; shall supervise all of the clerical work of the Planning Board; and perform such further duties as may be requested by the Planning Board.

Article II – Meetings

- A. 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.
- B. Regular Planning Board meetings shall be held on the 2nd and 4th Wednesday of the month at 7:30 P.M. at the Birmingham Municipal Building, 151 Martin Street, Birmingham, Michigan.

The meeting held on the second Wednesday of each month is to be reserved for long-range planning activities, matters related to the Planning Board's priority list and specific requests from the City Commission.

The meeting held on the fourth Wednesday of each month is to be devoted to Preliminary Site Plan, Final Site Plan and Design Reviews, Special Land Use Permit Reviews, public hearings, specific requests from the City Commission, and other matters requiring the Planning Board's review.

Meetings will end promptly at 11:00 p.m. Meetings may be extended in their duration up to 12:00 midnight upon the affirmative vote of four (4) Planning Board Members.

- C. Five (5) members of the Planning Board may suspend any rule of procedure including the date or time of regular meetings.
- D. A special meeting may be called by the Chairman or any two (2) members of the Planning Board upon twenty-four (24) hours notice to each member of the Planning Board.
- E. Four (4) members of the Planning Board shall constitute a quorum for the conduct of its business. The concurring affirmative vote of four (4) members of the Planning Board shall be required for approval of plans before the Planning Board and for review or for adoption of any resolution, motion or other action by the Planning Board.
- F. The order of business at the Planning Board meetings shall be as follows:
 - 1. Roll Call
 - 2. Review of the minutes of the previous meeting
 - 3. **Chairpersons Comments**
 - 4. Review of the Agenda
 - 5. Meeting open to the public for items not on the printed Agenda.
 - 6. Unfinished business
 - 7. Rezoning Applications
 - 8. Community Impact Studies
 - 9. Special Land Use Permits
 - 10. Site Plan and Design Reviews
 - 11. Study Session
 - 12. **The Birmingham Plan 2040**
 - ~~13. Meeting open to the public for items not on the printed Agenda~~
 - 14. Miscellaneous business and communications
 - 15. Adjournment
- G. Historic Site Plan Reviews may be held at a joint meeting with the Historic District and Design Review Commission or separately. The Planning Director shall determine the need, date, and time for any such joint meetings.
- H. The Planning Board agenda for the meeting at which site plans and special land use permit requests are discussed, shall be limited to a maximum of five (5) review items (historic and non-historic), including those tabled items which may be carried over from a preceding meeting. Placing a limitation upon the number of items to be accommodated on the Planning Board agenda is necessary to afford both Planning Board members and staff sufficient opportunity to review proposed plans and existing site conditions prior to the meeting, as well as to provide each petitioner's project an adequate, unhurried, collective review by all of the Planning Board members at the meeting itself. Petitions that require consideration of a proposed Cluster Development or Community Impact Study will be considered as separate items. Petitions that require a Special Land Use Permit will be heard in conjunction with the site plan review and will not be considered as separate items. The items to be placed on the agenda will be determined by the Planning Director and the Planning Board chairperson.

Joint meetings of the City Commission and the Planning Board shall be held at least twice per calendar year at a time to be designated by the Mayor, and it shall be the duty of the Mayor to call such meetings.

Article III – Procedure

- A. The Planning Board shall have the responsibility for Site Plan and Design Review, and Special Land Use Permit Review, as outlined in Chapter 126 of the City 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 are not restricted to: requests for change of zoning; request for closing, opening or altering a street, or an alley; requests for issuing building permits; and any other matters which bear relation to the growth of the municipality. When the Planning Board has made any recommendation, the same shall be referred to the City Commission or other appropriate City boards.
- B. An application for Site Plan and Design Review, and Special Land Use Permit Review, shall be filed with the Birmingham Planning Department. This application, together with supporting data, shall be reviewed by the Planning Board.
 1. The application shall be made on a form supplied by the Planning Department.
 2. The "supporting data" referred to above shall consist of the following:
 - I. Two (2) paper copies and one (1) digital copy of all project plans including:
 - i. A detailed existing conditions plan including the subject site in its entirety, including all property lines, buildings, structures, curb cuts, sidewalks, drives, ramps and all parking on site and on the street(s) adjacent to the site, and must show the same detail for all adjacent properties within 200 ft. of the subject sites property lines;
 - ii. A detailed and scaled site plan depicting accurately and in detail the proposed construction, alteration or repair;
 - iii. A certified land survey;
 - iv. Interior floor plans;
 - v. A landscape plan;
 - vi. A photometric plan;
 - vii. Colored elevation drawings for each building elevation;
 - II. Specification sheets for all proposed materials, light fixtures and mechanical equipment;
 - III. Samples of all proposed materials;
 - IV. Photographs of existing conditions on the site including all structures, parking areas, landscaping and adjacent structures;
 - V. Current aerial photographs of the site and surrounding properties;
 - VI. Any other data requested by the Planning Board, Planning Department, or other City Departments.

- C. The application and supporting data shall be submitted to the Birmingham Planning Department not later than the 28th day preceding the meeting of the Planning Board at which the application is requested to be heard. Applications that require the submission of a Community Impact Study and/or Traffic Study shall submit the application and supporting data to the Planning Department not later than the 45th day preceding the meeting of the Planning Board at which the application is requested to be heard.
- D. The Planning Board shall seek public comment regarding each agenda item that requires a motion by the Planning Board.
- E. The Planning Board shall notify the Building Department of its approval or rejection of the application submitted to it for review. If the application is approved, the Secretary shall sign and date the permit application. The Building Department then has the responsibility of comparing those plans with the plans endorsed, approved, dated and signed by all approving members.
- F. Failure of the applicant, or a duly authorized representative, to appear for the hearing will result in the application being adjourned to the next regular meeting at which site plans are scheduled for review. If after notice, the applicant fails to appear for the second time, it will result in an automatic withdrawal of the application. The applicant will be free to reapply without prejudice.
- G. Site Plan Approval shall be valid for a period of one (1) year from the date it is granted. Upon request, the Planning Board may (but need not) grant an extension of not in excess of one (1) year to the applicant prior to the expiration date without the necessity for making an additional presentation. The Building Official shall not issue a permit for such work unless a valid site plan is in effect.

Article IV – Notification of Meetings

Public notice of all special meetings of the Planning Board stating date, time and place of such meetings shall be posted at least eighteen (18) hours prior to the meeting.

Article V – Citizen Participation

During any Planning Board meeting, any person may question or comment upon any specific agenda item at the time the Planning Board considers that item.

The public shall also be invited to make comments on any item not on the meeting agenda under the agenda item, "meeting open to the public for items not on the printed agenda."

No person shall address the Planning Board without first having been recognized by the presiding officer. Once recognized, the member of the public shall go to one of the available microphones, and state his or her name and address before speaking.

The Chairperson may require that speakers limit their comments so as to provide opportunities for comments from all interested persons. In particular, no member of the

public shall normally be permitted to speak a second time on the same issue until all others wishing to make a presentation on the subject have had an opportunity to do so.

If any person becomes loud or unruly, the presiding officer may rule that person out of order and may forfeit that person's opportunity to speak further. A person may also be expelled from the meeting for disruptive conduct.

Article VI – Code of Ethics

The Planning Board members will:

1. Recognize the primary role of community planners is at all times to serve the past, present and future public interest.
2. Continuously strive to achieve high standards of integrity and professionalism so that the public respect for the community planning process is maintained.
3. Comply with the City's Ethics Ordinance.
4. Continually strive to keep the public informed on community planning issues, encourage communication between citizens and elected and appointed officials, and emphasize at all times friendly, courteous and professional service to the public.
5. Be aware of, and give special attention to, the long and short range impacts and inter- relatedness of planning decisions.
6. Endeavor to protect and enhance the natural environment and quality of life through careful and thoughtful decision making, advice and recommendations.
7. Make it a duty to share, advance and contribute to the body of planning knowledge through education, information, and advocacy.
8. Make decisions for the good of the community as a whole and avoid any act or decision that would tend to promote individual or special interests at the expense and/or integrity of community planning.
9. Strive to utilize professional staff and other resources to achieve the most desirable results with regard to the community planning process.
10. Support and defend the laws and the Constitution of the United States of America and State of Michigan.

Article VII – Amendments

These Rules of Procedure may be amended at any regular meeting of the Planning Board upon the affirmative vote of five (5) members.

Adopted: June 13, 2018

1/08/97, 6/10/98, 1/24/2001,
10/12/01, 01/09/02, 03/10/04,
03/09/05, 06/13/18

Planning Board

Type	Title	Description	Where	In Progress	Notes
Policy	Zoning Code Update	Update the zoning code. The following goals are provided greater detail within the chapters listed. See additional goals under “Best Practice Recommendations” in the “Update the Zoning Code” section.	-	☐	
	Comprehensive	Focus on brevity, clarity, graphics, and aligning zones with Future Land Use categories.	2	☐	
		Consolidate zones and uses as much as is practical and ensure the updated document is legible, clear, and predictable	2	☐	
		Extend D2 zoning to the multi-family properties along the west side of Old Woodward up to Quarton.	4	☐	
		Modify the MX District to enable the urban development envisioned for the Rail District.	4	☐	
		Develop an Overlay Zoning District for the Lower Rail District that permits the existing, but somewhat improved condition to persist for the area south of Palmer Street.	4	☐	
		Create a zoning district to enable neighborhood destinations.	1	☐	
		Reduce the amount of open space required per unit for townhomes and multi-family.	2	☐	
		Adjust residential zone boundaries and standards to better match existing housing. Including a study of the city’s residential architectural styles and building types, their key characteristics, position on their properties, driveway configuration, age, and the areas where each common type is located.	3	☐	
		Review and update site, building, and design codes to prevent increased rainwater runoff and other negative impacts from new house construction.	3	☐	
		Consider age-in-place-friendly building regulations, such as grab-bars, ramps, and elevators in single family homes, with careful attention paid to the city’s architectural heritage.	3	☐	
		Address neighborhood lighting standards, including exterior residential lighting intensity and color temperature. See the International Dark Sky Association recommended standards.	3	☐	
	Further Study	Create a new zoning district or modify the transition zone districts to enable infill development of small homes, townhomes, duplexes, and small multi-family buildings, limited to buffer and activity district seams.	2	☐	
		Develop storefront design, signage, and other standards to retain the small-scale business character of Market North.	4	☐	
		Enable Accessory Dwelling Units (ADUs) in already compatible zones: MX, TZ1, TZ3, and R4 through R8. Study ADUs for additional locations within the city and the regulations necessary to ensure compatibility.	2	☐	
		Create subdivision and zoning standards to encourage redevelopment of the Adam’s Square shopping center.	1	☐	
		Establish zoning standards to encourage redevelopment of South Woodward Gateway properties.	4	☐	
		Establish zoning standards to enable Neighborhood Sleeves in the South Woodward Gateway	4	☐	
		Establish zoning standards to enable shared-use alleys, particularly in the South Woodward Gateway.	4	☐	

		Incentivize South Woodward Gateway redevelopment through increased zoning capacity, permitting housing, and reduced parking requirements.	4	☐	
New Plans	Woodward Safety & Beautification Plan	Create a Woodward Safety and Beautification Plan. The following goals are provided greater detail within the chapters listed.	-	☐	(This section shared with MMTB & City Commission)
		Improve Woodward crossings following best practices for pedestrians and cyclists.	1	☐	
		Study lane reduction and re-striping options for Woodward.	1	☒	
		Pursue a speed reduction on Woodward through legislative means.	1	☐	
		Plant a full and consistent tree canopy along the Woodward median throughout Birmingham, beginning with the northern and southern entries.	4	☐	
		Adjust Elm to meet Woodward perpendicularly.	1	☒	
		Adjust Worth to meet Woodward perpendicularly.	1	☐	
New Plans	Woodward Gateways Plan	Create a Woodward Gateways Plan to comprehensively address the three gateway areas along Woodward.	-	☐	(This section shared with City Commission)
		Revisit and adopt plan components for the South Woodward Gateway Plan.	1, 4	☐	
		Create plan components for a North Woodward Gateway, including the future use of public land.	1, 4	☐	
		Create plan components a Downtown Gateway Plan for the Big Woodward and Maple intersection.	1	☐	
New Plans	Haynes Square Plan	Create a Haynes Square Plan which provides the details, timing, and funding for implementing Haynes Square recommendations.	1	☐	
New Plans	North Old Woodward Streetscape	Develop a streetscape plan along North Old Woodward, up to Big Woodward, with a focus on adding on-street parking and pedestrian and bicycle amenities and improving safety	4	☐	
New Plans	Mixed-use Streetscape Plan	Create a streetscape improvement plan for the Triangle District and Rail District.	1	☐	
New Plans	Tree Canopy Improvement Plan	Create a Tree Canopy Improvement Plan. The following goals are provided greater detail within Chapter 3.	-	☐	
		Establish comprehensive policies for trees in streets and open spaces.	3	☐	

Sustainability Board*

Type	Title	Description	Where	In Progress	
Policy	Zoning Code Update	Update the zoning code. The following goals are provided greater detail within the chapters listed. See additional goals under “Best Practice Recommendations” in the “Update the Zoning Code” section.	-	☐	
	Comprehensive	Advance building sustainability in new construction, especially within the City’s mixed-use districts and for municipal buildings.	5	☐	
Programs & Boards	Sustainability Board	Establish a Sustainability Board to oversee the recommendations of this plan section and other future sustainability initiatives.	5	☒	
New Plans	Green Infrastructure	Create a Green Infrastructure Plan to address stormwater run-off and areas experiencing regular flooding.	5	☐	
New Plans	Sustainability Action Plan	Create a Sustainability Action Plan. The following goals are provided greater detail within chapter 5.	-	☒	
		Reduce environmental impacts of municipal operations	5	☐	
		Incentivize green building, renewable energy, and green landscaping.	5	☐	
		Expand recycling and composting	5	☐	
		Implement green stormwater practices in streets and parks.	5	☐	
		Support Rouge River Natural Area improvements.	5	☐	
		Implement other sustainability focused recommendations of this plan.	5	☐	
		Create a Hazard Mitigation Plan addressing the City’s future climate	5	☐	
		Increase inter-governmental cooperation around sustainability initiatives.	5	☐	
		Study the best path towards encouraging or requiring businesses reduce plastic and Styrofoam use.	5	☐	
New Plans	Rouge River Restoration Plan	Develop a plan to improve and maintain the Rouge River natural area. The following goals are provided greater detail within chapter 5.	-	☐	
		Inventory and analyze the Rouge corridor’s wildlife, ecology, natural systems, and pollution sources.	5	☐	
		Stabilize riverbanks, remove invasive species, reintroduce native ground covers, wildflowers, under-story, and canopy tree species.	5	☐	
		Mitigate potential pollution or chemical sources, including the existing Springdale snow storage dumping area.	5	☐	
		Work with area organizations and agencies to oversee, build support, and raise funding for the park’s enhancements.	5	☐	
		Work with other area and regional organizations and communities to improve the quality of the Rouge River watershed.	5	☐	
New Plans	Tree Canopy Improvement Plan	Create a Tree Canopy Improvement Plan. The following goals are provided greater detail within Chapter 3.	-	☐	
		Create 5-, 10-, and 15- year goals to expand tree canopy cover.	3	☐	

		Study the condition of neighborhood tree canopies in parks and private spaces and potential improvements.	3	☐	
		Require that trees removed due to construction be replaced, as well as mandatory contributions to fund new off-site trees.	3	☐	
		Prevent existing, healthy trees from being removed due to new construction.	3	☐	
		Survey areas with constrained root area and establish a plan to add additional soil volume.	3	☐	

*Although a formal Sustainability Board does not exist at this time, the Ad Hoc Environmental Sustainability Committee will consider many of these key actions in their Sustainability and Climate Action Plan, and the rest may be considered by a future formal Sustainability Board.

Multi-Modal Transportation Board

Type	Title	Description	Where	In Progress	Notes
Policy	Zoning Code Update	Update the zoning code. The following goals are provided greater detail within the chapters listed. See additional goals under “Best Practice Recommendations” in the “Update the Zoning Code” section.	-	☐	
	Comprehensive	Adopt a policy requiring a minimum 6 foot clear path along the sidewalk throughout mixed-use districts.	4	☐	
New Plans	Woodward Safety & Beautification Plan	Create a Woodward Safety and Beautification Plan. The following goals are provided greater detail within the chapters listed.	-	☐	(This section shared with City Commission & Planning Board)
		Improve Woodward crossings following best practices for pedestrians and cyclists.	1	☐	
		Study lane reduction and re-striping options for Woodward.	1	☒	
		Pursue a speed reduction on Woodward through legislative means.	1	☐	
		Plant a full and consistent tree canopy along the Woodward median throughout Birmingham, beginning with the northern and southern entries.	4	☐	
		Adjust Elm to meet Woodward perpendicularly.	1	☒	
		Adjust Worth to meet Woodward perpendicularly.	1	☐	
New Plans	Mixed-use Districts Parking Plan	Create a Mixed-use Districts Parking Plan. The following goals are provided greater detail within the chapters listed.	-	☐	
		Study bike parking and electric vehicle charging stations in garages.	4	☐	
Policy	Residential Street Standards	Update the Residential Street Standards, aligning the streetscape elements with Future Land Use categories. Update the Multi-modal Plan accordingly.	3	☐	
		Lower the posted speed on streets throughout town as much as possible.	3	☐	
Policy	Mixed-use District Streets	Adopt a policy requiring a minimum 6-foot clear path along the sidewalk be retained throughout mixed-use districts.	4	☐	
Existing Plan Updates	Multi-modal Plan Update	Update the Multi-modal Plan. The following goals are provided greater detail within the chapters listed. See additional goals under headings “Multimodal Plan Updates” and “Best Practice Recommendations for the Multimodal Plan” in Chapters 1 and 4.	-	☐	
		Address increased pedestrian activity anticipated in mixed-use districts that will grow in residential population.	1	☐	
		Support increased pedestrian activity on both sides of North Old Woodward and provide streetscape amenities.	4	☐	
		Complete gaps in sidewalks, add accessible corner ramps where not already specified, and replace street trees which are displaced by the process.	3	☐	
		Address recent experiences with increased outdoor dining.	1, 4	☐	
		Ensure bicycle facilities are protected on all streets posted at or above 35mph.	1	☐	
		Study bicycle accommodation alternatives along Lincoln.	3	☐	

		Include mobility routes based upon bicycle boulevard practices.	1	☐	
		Implement additional transportation mode best practices for new mobility technology and modes such as micro EVs, golf carts, and micro-mobility.	1	☐	
		Improve the conditions at bus stops along more major roads.	1	☐	
		Add Electric Vehicle charging stations throughout the city at garages, public parking lots, and on-street in Mixed-use Districts.	5	☐	
		Adopt a policy regulating street lighting, including intensity, color temperature, luminaire, and pole height and frequency.	3	☐	
		Include a public education component.	1	☐	
Existing Plan Updates	Eton Road Corridor Plan	Update the Eton Road Corridor Plan. The following goals are provided greater detail within Chapter 4.	-	☐	
		Increase connectivity for pedestrians, bikes, and cars for the area south of Hazel Street including future rail crossings.	4	☐	
		Provide access to the Troy Transit Center and consider the development of surrounding properties.	4	☐	
Studies	Circulator	Study a public circulator to provide viable means of accessing mixed-use districts and other significant destinations without a car.	1	☐	

City Commission

Type	Title	Description	Where	In Progress	Notes
Policy	Zoning Code Update*	Update the zoning code. The following goals are provided greater detail within the chapters listed. See additional goals under “Best Practice Recommendations” in the “Update the Zoning Code” section.	-	☐	
	Further Study	Encourage renovations to expand existing houses rather than the construction of new houses.	3	☐	
	Further Study	Allow cafes, food trucks, carts, and kiosks in parks (currently the Public Property district).	1	☐	
New Plans	Woodward Safety & Beautification Plan	Create a Woodward Safety and Beautification Plan. The following goals are provided greater detail within the chapters listed.	-	☐	(This section shared with MMTB & Planning Board)
		Improve Woodward crossings following best practices for pedestrians and cyclists.	1	☐	
		Study lane reduction and re-striping options for Woodward.	1	☒	
		Pursue a speed reduction on Woodward through legislative means.	1	☐	
		Plant a full and consistent tree canopy along the Woodward median throughout Birmingham, beginning with the northern and southern entries.	4	☐	
		Adjust Elm to meet Woodward perpendicularly.	1	☒	Lavery Porsche Development
		Adjust Worth to meet Woodward perpendicularly.	1	☐	
New Plans	Woodward Gateways Plan	Create a Woodward Gateways Plan to comprehensively address the three gateway areas along Woodward.	-	☐	(This section shared with Planning Board)
		Revisit and adopt plan components for the South Woodward Gateway Plan.	1, 4	☐	
		Create plan components for a North Woodward Gateway, including the future use of public land.	1, 4	☐	
		Create plan components a Downtown Gateway Plan for the Big Woodward and Maple intersection.	1	☐	
Policy	Unbundled Parking*	Pilot unbundled residential parking within Downtown parking garages.	2	☐	
Studies	Residential Districts Parking	Study citywide street on-parking restrictions and permits	3	☐	
New Plans	Mixed-use Districts Parking Plan*	Create a Mixed-use Districts Parking Plan. The following goals are provided greater detail within the chapters listed.	-	☐	
		Establish unbundled residential parking policies within Downtown garages.	2	☐	
		Establish unbundled residential parking policies in all mixed-use districts in existing and future parking garages.	2	☐	
		Provide public parking as recommended in the 2007 Triangle District Plan	1, 2, 4	☐	
		Provide public parking in the Rail District. Consider redevelopment of the DPS building to occupy a portion of a public parking garage in its place, which services the lower Rail District.	2, 4	☐	
		Provide public parking for the western Haynes Square district.	2	☐	
		Study opportunities to accommodate more monthly garage permits.	4	☐	
		Study monthly parking pass fees to better align with prevailing rates.	4	☐	

		Study tiered parking pricing to encourage use of under-utilized garages.	2, 4	☐	
		Study tiered parking meter pricing to encourage use of under-utilized on-street parking.	4	☐	
		Study the potential for Public Private Partnerships to construct garages.	1	☐	
		Study additional parking assessment districts or incremental tax districts for land purchases and financing the development of parking garages.	1	☐	
		Study parking garages at the Bates Street Extension and Lot 6.	4	☐	
		Study technological improvements to ease usage of parking garages.	4	☐	
Policy	Unimproved Streets	Adopt policy recommendations specified by the Ad-hoc Unimproved Streets Committee (AHUSC), including the following:	-	☐	
		Establish a yearly budget to remedy unimproved streets, considering the general fund plus bond strategy and repayment timelines.	3	☐	
		Survey the current condition of unimproved streets, categorized by the current quality such that streets in the most extreme states of disrepair can be prioritized for improvement.	3	☐	
		Remedy unimproved streets according to the repair priority and budget, ensuring improvements occur in multiple Planning Districts each year.	3	☐	
Studies	Civic Facilities Study	Study key civic facilities to continue to support Birmingham residents. The following goals are provided greater detail within chapters specified.	-	☐	
		Study the location, programming, and funding for new facilities for Next.	1	☒	
		Study a permanent, open-air farmers market pavilion with public restrooms on the portion of Lot 6 that is along Old Woodward.	4	☐	
		Establish policy to continue the tradition of constructing Birmingham’s civic buildings and parks as iconic structures and landscapes to the highest standards and at a civic scale	1	☐	
		Study how a Community Foundation / Fund may further Master Plan goals.	1	☐	
Existing Plan Updates	Parks and Recreation Master Plan Update	Expand the 2018 Parks and Recreation Master Plan or create a new plan beyond the 2022 horizon. The following goals are provided greater detail within the chapters listed. See additional goals under headings “Parks Best Practices” in Chapter 4.	-	☒	COMPLETED - Parks & Recreation Plan adopted in 2023
		Purchase part of the Adams Square parking lot for park space, or ensure that redevelopment would require that future park space be provided near Adams and Bowers.	3	☐	
Studies	Shared-use Streets*	Study shared-use streets. The following goals are provided greater detail within the chapters listed.	-	☐	
		Study a shared-use streetscape retrofit along with a social district in the Maple & Woodward district.	1, 4	☐	
		Study a shared-use street section along Cole and Commerce Streets.	4	☐	
		Study additional opportunities in other mixed-use districts.	1, 4	☐	

Boards & Programs	Civic Events	Extend the role of the Public Arts Board or other existing board, or establish a Civic Events Board, to develop regular civic events to continue engaging the community throughout the year and promote existing civic institutions.	1, 4	☐	
		Consider regular events in community parks.	3	☐	
		Consider activities and special events to attract office workers and residents to shop and dine downtown, including weekly events at Shain Park.	4	☐	
Studies	Parking Technology	Review master plan parking recommendations in 2030-35 to evaluate new technologies and trends.	4	☐	

**Likely to be directed to the Planning Board when City Commission is ready*

Parks & Recreation Board

Type	Title	Description	Where	In Progress	Notes
Existing Plan Updates	Parks and Recreation Master Plan Update	Expand the 2018 Parks and Recreation Master Plan or create a new plan beyond the 2022 horizon. The following goals are provided greater detail within the chapters listed. See additional goals under headings “Parks Best Practices” in Chapter 4.	-	☒	COMPLETED - Parks & Recreation Plan adopted in 2023
		Differentiate parks by type to better determine appropriate amenities, services, and best practices.	3	☒	
		Utilize Planning Districts to determine sufficiency of park access across the city, availability of amenities, and consideration of activities and recreation in each season.	3	☐	
		Formalize the public use of school and institutional open spaces for neighborhood recreation, prioritizing under-served Planning Districts.	1, 3	☐	
		Develop Worth Park to provide needed open space for Torry.	3	☐	
		Develop the contemplated linear park and trail along the Rail District.	4	☐	
		Build a cafe or provide accommodations in Booth Park as recommended in the 2016 Downtown Plan.	1, 4	☒	Booth Park Trail Plan
		Increase amenities and connections in Downtown’s parks and mini-parks.	4	☐	
New Plans	Rouge River Trails and Access Master Plan	Develop and implement a trails and access master plan to improve the Rouge River trails and trail heads.	-	☐	
		Install pedestrian linkages to the park’s surrounding neighborhoods and commercial districts, including to Quarton Road.	5	☐	
		Secure easements to expand the park area and improve its walkability, for complete ecological restoration, and universal accessibility.	5	☐	
		Coordinate with Bloomfield and Beverly Hills to expand trail connections.	5	☐	
		Install an environmentally sensitive, hard-surfaced pathway for pedestrians and cyclists along the Rouge River.	5	☐	
		Expand the extent of the trail system, crossing the river at more locations to access large portions of the natural area currently cut off.	5	☐	
		Install bridges, ramps, and other enhancements to enable access by all ages and abilities.	5	☐	
		Install other amenities such as bicycle racks, lighting, markers, seating, and signage at trail heads, and seating, markers, and interpretive features throughout the trail system.	5	☐	

Historic District Commission

Type	Title	Description	Where	In Progress	Notes
Policy	Historic Districts Policy	Adopt a policy to proactively establish new historic districts as well as landmarks.	3	☒	

Public Arts Board

Type	Title	Description	Where	In Progress	Notes
Policy	Public Art Policy	Permit murals and wraps like the popcorn utility wrap to be city-initiated or by the Public Arts Board.	1	☒	
Policy	Art Murals Policy	Implement an art-mural program for large blank wall surfaces in key locations. Coordinate with the Mixed-use Districts Branding Plan.	4	☐	

Wayfinding & Branding Committee

Type	Title	Description	Where	In Progress	Notes
New Plans	Woodward Safety & Beautification Plan	Create a Woodward Safety and Beautification Plan. The following goals are provided greater detail within the chapters listed.	-	☐	
		Provide way-finding and informational signage for public parking	1, 4	☒	
New Plans	Mixed-Use Districts Branding Plan	Create a Mixed-use Districts Branding Plan, in coordination with the Birmingham Shopping District, to brand the City’s multiple mixed-use districts.	1, 4	☐	

Key/Legend

Type	Title	Description	Where	In Progress	Notes
Type of action from Plan	Title of Action from Plan	Dark grey box corresponds to broad action item heading/category	-	☐	Basic notes for tracking
↓	↓	White box corresponds to sub-actions related to broad action above	Chapter	☐	↓



MEMORANDUM

Planning Division

DATE: June 26th, 2025

TO: Planning Board Members

FROM: Leah Blizinski, City Planner

APPROVED: Nicholas Dupuis, Planning Director

SUBJECT: 185 N. Old Woodward – Sign and Facade Pre-Application

185 N. Old Woodward received Final Site Plan approval from the Planning Board May 25th, 2022. The approved site plan provided for a new façade treatment, exterior lighting, awning, signage, new Nana wall doors and small outdoor dining area with planters.

The applicant has submitted plans for signage with a different façade treatment than what was approved by the Planning Board. The Nana wall doors have been removed from the plans and the outdoor dining area does not appear on the plans, but we would ensure that the approved outdoor dining will still be installed. The façade treatment and signage has been changed, the exterior lighting has been removed and the sign is proposed to be backlit. The awning has also been removed in favor of an aluminum tubing grid style treatment.

If the Planning Board is amenable to the Planning Division approving the façade and sign changes administratively, the applicant will still be expected to comply with Article 3.04(C) (10) of the Zoning Ordinance (bistro requirements). Should any other changes arise we will inform the Planning Board as appropriate.

A BACK-LIT ALUMINUM LETTERS
Individual mounted on a wall.

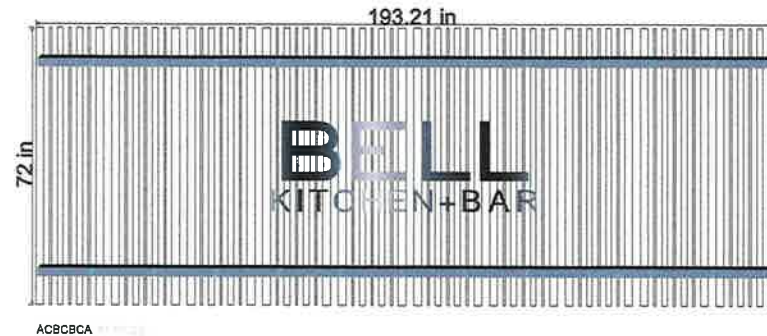
HW-LTR-RT-S

Remote Wired LED Channel
Letterset, Stacked Layout

1	0.040 Inch Aluminum Welded Letters.
2	1/4 " White Acrylic
3	Stand-off Mounting Hardware
4	LED Lighting system
5	Liquid Tight Connector Thru the WALL
6	1/4" drain hole
7	Transformer Box
8	Led Power Sup. w/ external cut off switch
9	listed disconnect switch
10	Primary Electrical Source
11	Existing wall
12	
13	
14	
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16	
17	

we have A 2" ,B 1.5" ,C 0.5"

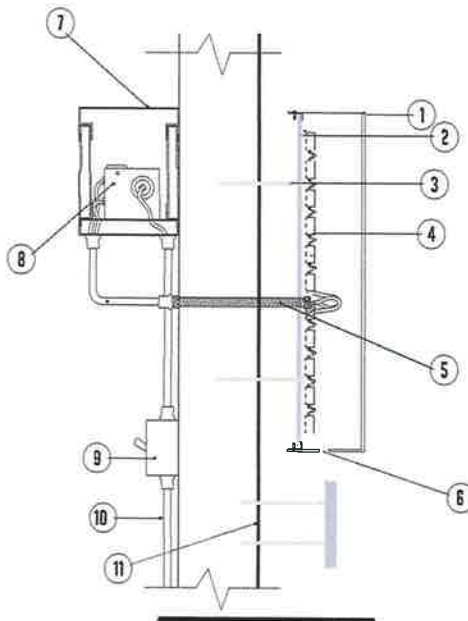
Twelve sections(ACBCBCA 1.5" Spaced out.) 2'spaced repeated pattern.



Aluminum tubing grid fence style. white painted.

BELL Copy ,Brushed gold channel letter backlet.

Kitchen and bar. half inch. thickness. stud mounting



SIDE VIEW (NTS)



CONFIDENTIAL PROPRIETARY DESIGNS AND CONCEPTS

ACCEPTANCE OF ARTWORK The drawing above is an artistic interpretation ONLY, elements may vary based on field measurements. This color proof is intended for verification of spelling, layout, color and composition. (PLEASE HELP AVOID UNNECESSARY COSTS BY CHECKING THIS PROOF VERY CAREFULLY) Signature constitutes authorization to proceed with specifications and conditions of this document as specified. All artwork and designs are property of New Generation Signs (nsgs) and may not be used without the expressed written permission of New Generation Signs.

Approval _____ Date May 2023

NGS

New Generation Signs

Ph 586-759-5706 Cel 586-876-6706

11391 E 8 mile rd warren , michigan 48089

BACK-LIT ALUMINUM LETTERS

Individual mounted on a wall.

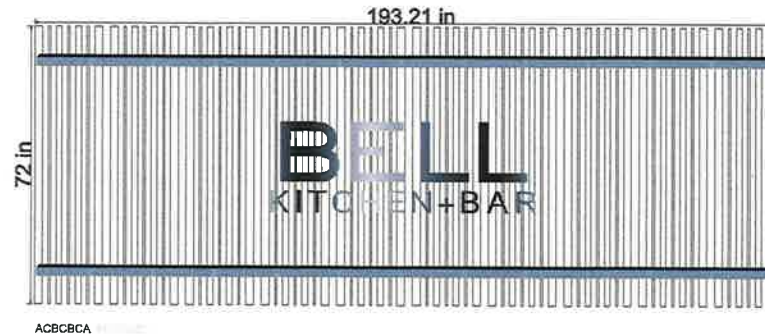
HW-LTR-RT-S

Remote Wired LED Channel Letterset, Stacked Layout

1	0.040 Inch Aluminum Welded Letters.
2	1/4 " White Acrylic
3	Stand-off Mounting Hardware
4	LED Lighting system
5	Liquid Tight Connector Thru the Wall
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10	Primary Electrical Source
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we have A 2" ,B 1.5" ,C 0.5"

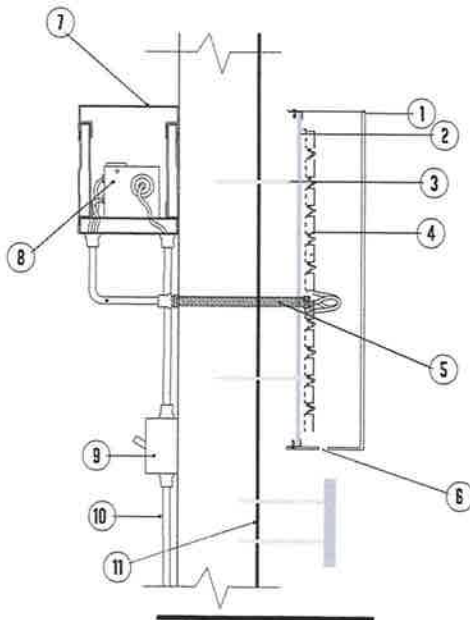
Twelve sections(ACBCBCA 1.5" Spaced out.) 2'spaced repeated pattern.



Aluminum tubing grid fence style. white painted.

BELL Copy ,Brushed gold channel letter backlet.

Kitchen and bar. half inch. thickness. stud mounting



SIDE VIEW (NTS)



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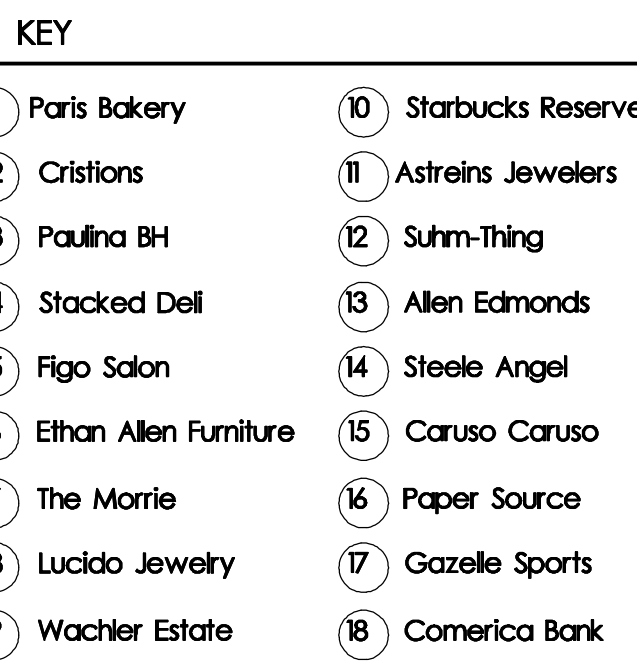
Approval _____

Date May 2023

NGS
New Generation Signs
We get it personal about your signs

Ph 586-759-5706 Cel 586-876-6706

11391 E 8 mile rd warren , michigan 48089



[illegible]

sheet title

Floor Plan & Exterior Dining Layout

project

Bell Bistro

project address

185 N. Old Woodward Ave.
Birmingham, Michigan

designed

designed

drawn

coordination checked

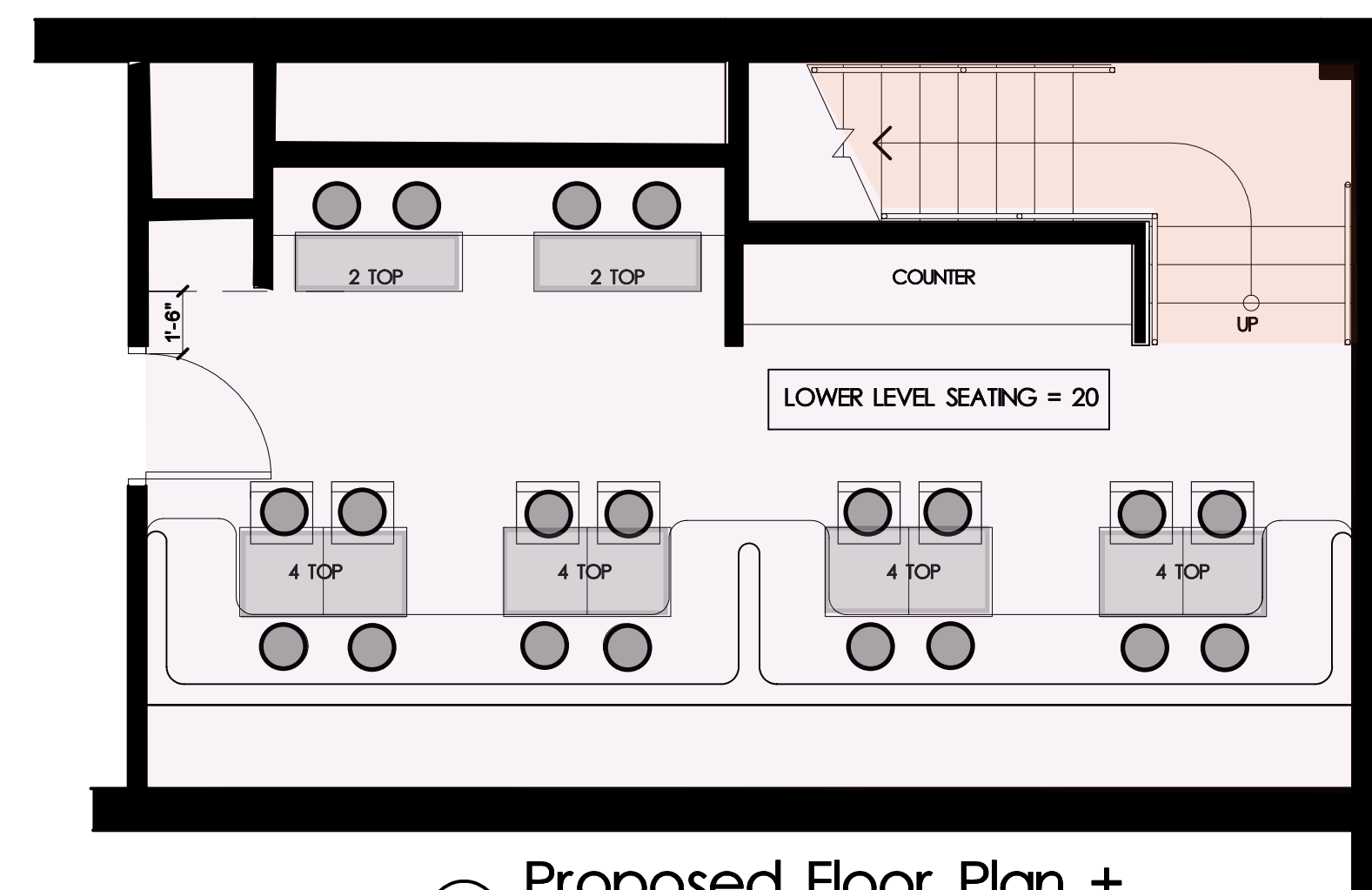
checked approved

project number:

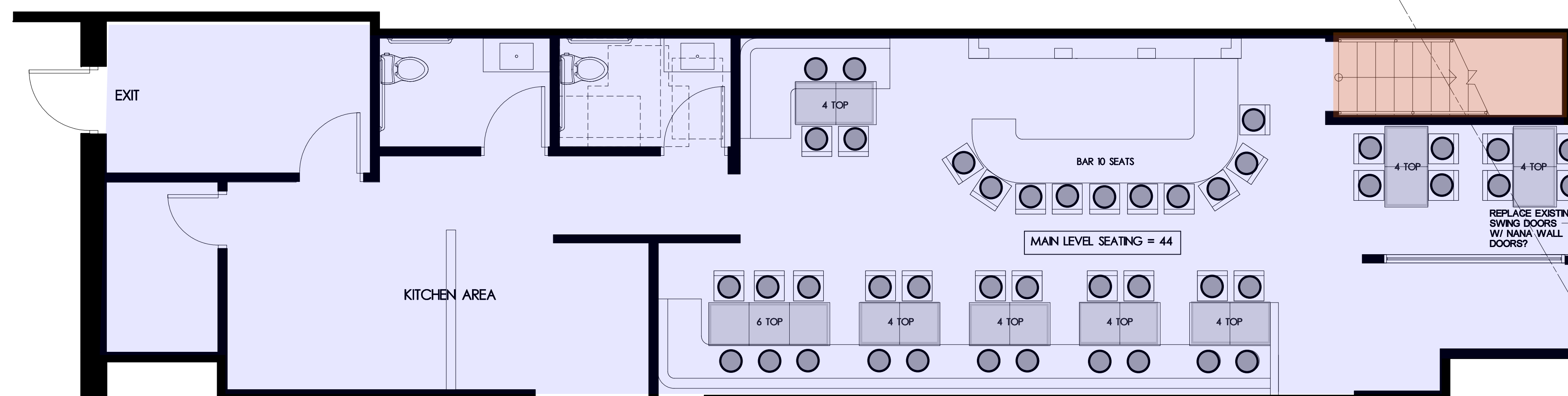
44-2022

sheet number:

SD-1.03

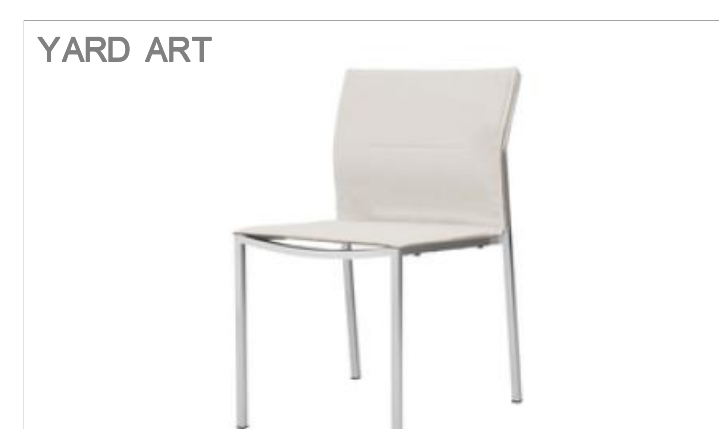


1 SD 103 Proposed Floor Plan + Lower Level Seating Plan



  Proposed Floor Plan +
Proposed Outdoor Seating Plan 1/4" = 1'-0"

INTERIOR SEATING COUNT	
MAIN LEVEL SEATING	=
LOWER LEVEL SEATING	=
TOTAL SEATING	=



ZIX Stacking Side Chain



Outdoor Dining Chair



YU YU IP Bistro Table

DIM: (2) 27.5" x 27.5 x 28.5H
COLOR: BLACK
BASE: GALV STEEL / POWDERCOAT FINISH
TOP: DICAST ALUM W/ POWDERCOAT FINISH

⑤ Outdoor Dining Table



YARD ART

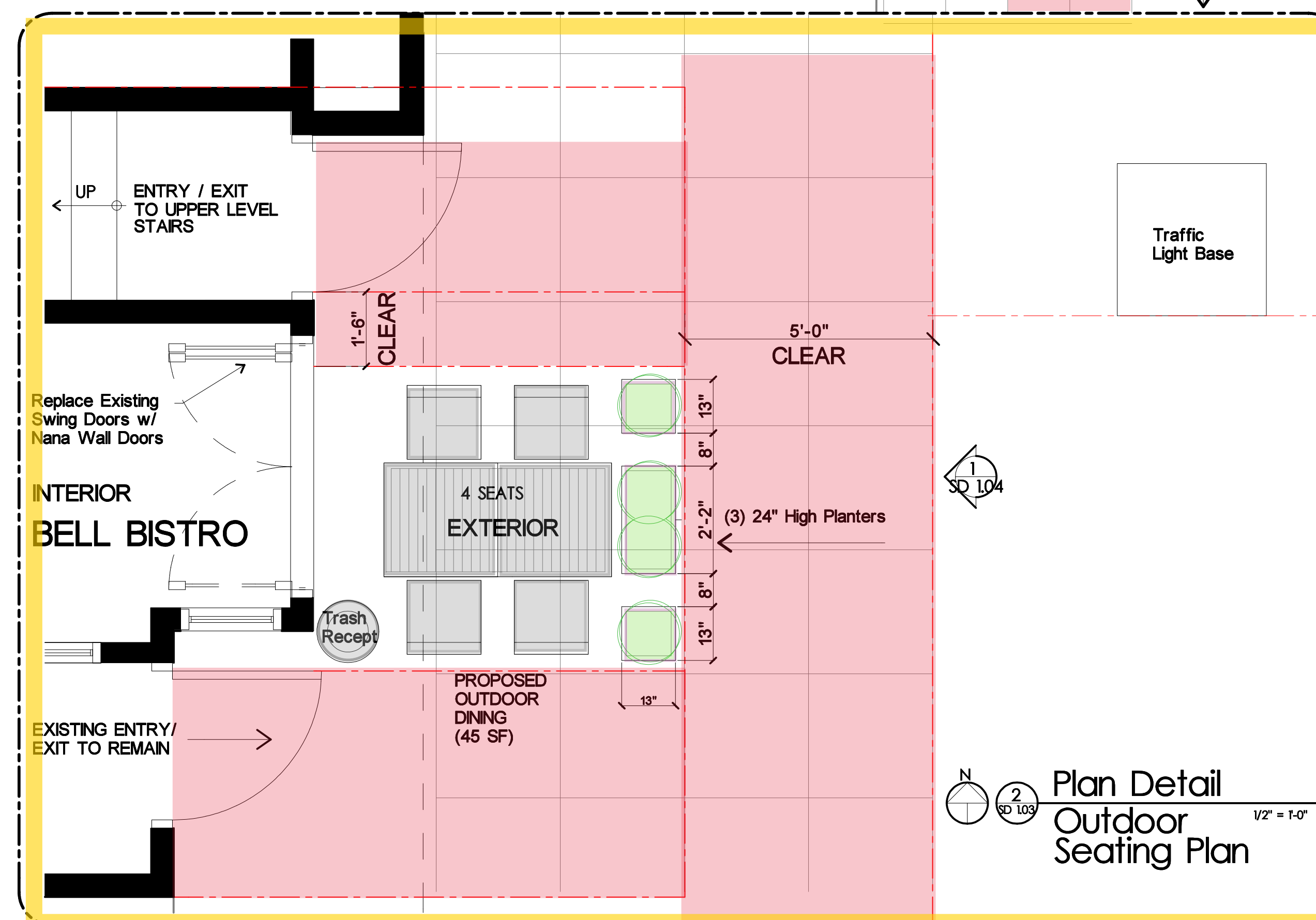
Planters

POWDER COATED ALUMINUM
CHARCOAL
SIZE: (2) 13X13X24H
(1) 26X13X24H



BRUSHED STAINLESS STEEL

7 Trash Receptacle



Plan Detail
Outdoor
Seating Plan

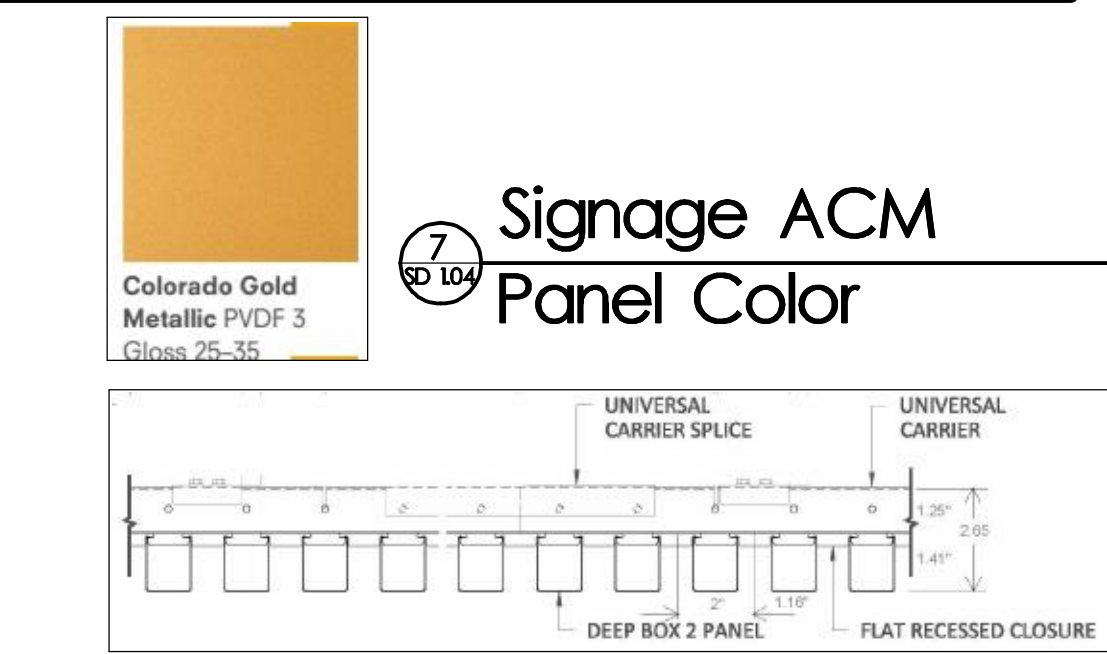
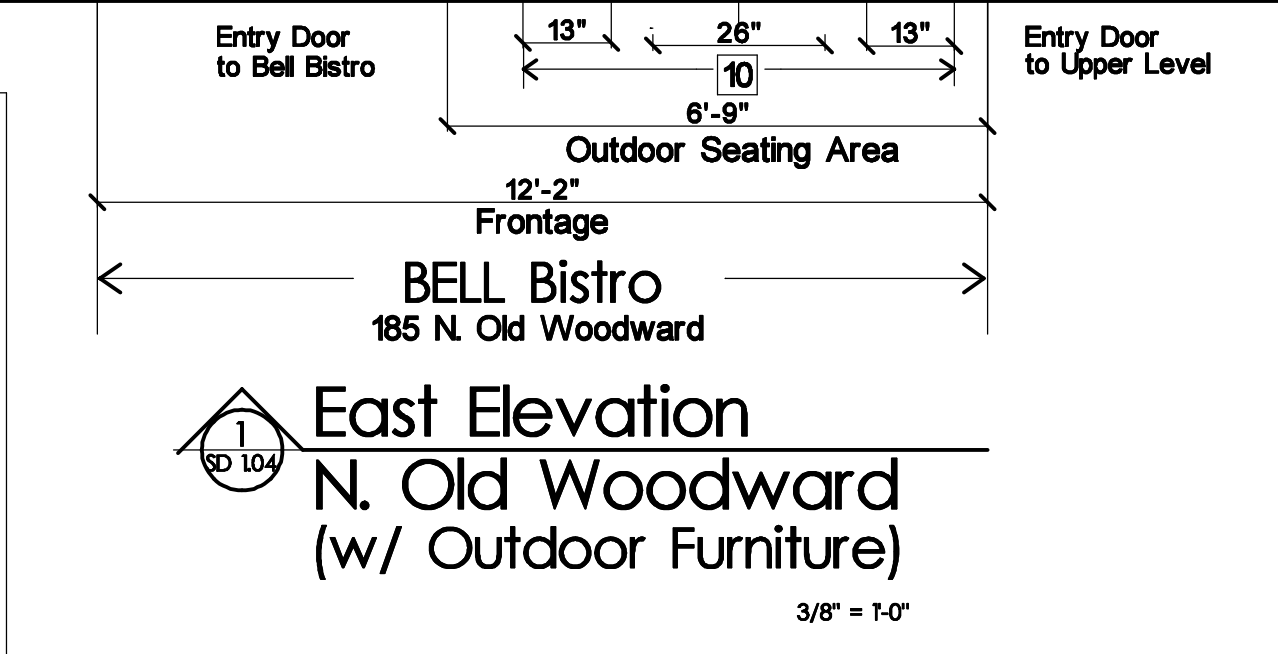
 $\frac{1}{2}'' = 1-C$

KEY

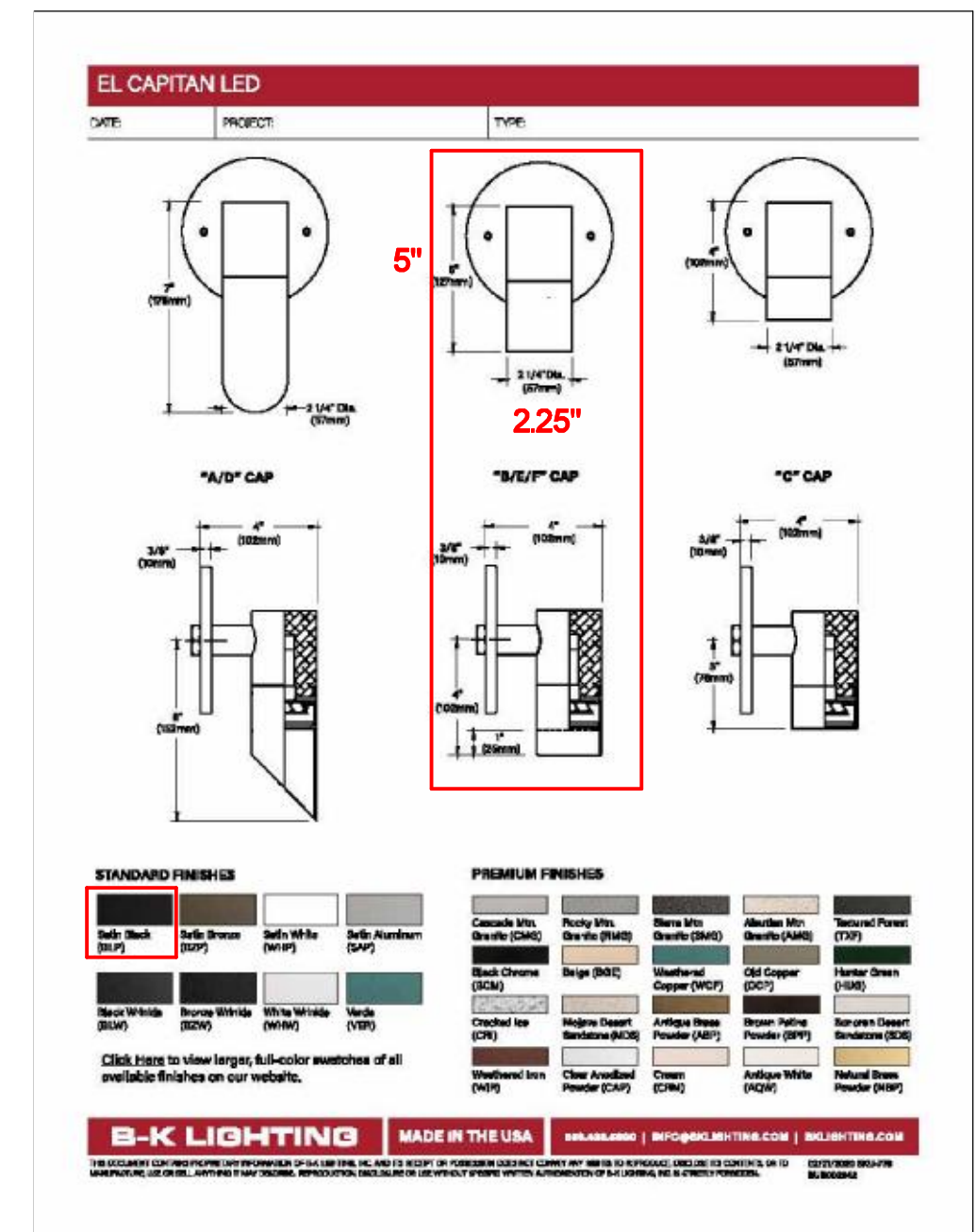
- ☐ GR Garbage Receptacle
- ☒ SL Street Lamp
- ☐ TL Traffic Lamp
- ☐ T Transformer
- ☐ D Dumpster



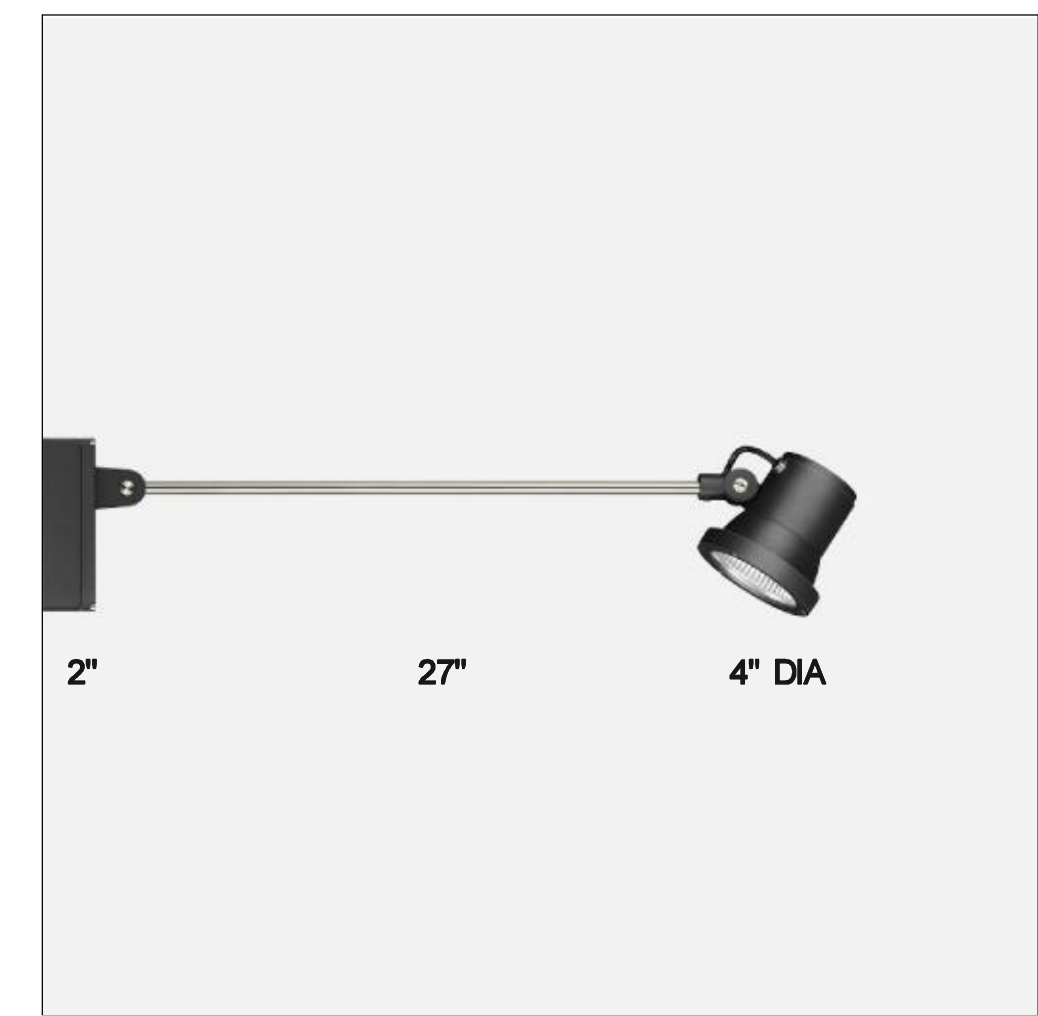
- Drawing Key**
- Existing Crown Profile to Remain
 - Certainteed "Deep Box Channel" Powdercoated .020" Steel Color: 8433 Fine Wenge
 - Sunbrella Canvas Awning (Color to match exist'g)
 - AS 1 Surface mounted linear light fixture
 - AS 2 BEGA Compact (med beam spread) Spotlight
 - New Nanawall doors w/ Clear Glass 80% VLT Black Anodized Aluminum
 - Sign Back Panel = 1/2" ACM (Alucobond or Equal) Color = Colorado Gold PVDF Signage Area = 6.5 sf | Length = 25% of Frontage Raised Di Cast Alum Letters: Color = Black Bell H = 10" Bistro H = 6" Font = Century Gothic
 - Existing recessed light fixtures to remain above door
 - New Entry Door - Black Anodized Aluminum - Insulated (3'-0" x 8'-0" to match existing size and profile) w/ Clear Insulated Glass = 80% VLT
 - Powdercoated Aluminum Planters: (2) 13x13x24 + (1) 26x13x24 (WxDxH)



AS-1 Lighting Fixture
BK LIGHTING - EL CAPITAN
7 W LED 2700 DEG K
13 DEG NARROW SPOT
SATIN BLACK FINISH



AS-2 Lighting Fixture
BEGA COMPACT FLOOD LIGHT
24V DC 7.9 W 2700 DEG K 888 LM
47 DEG BEAM SPREAD (MEDIUM SPOT)
DI CAST ALUMINUM - COLOR: MATT BLACK
27" LONG ARM



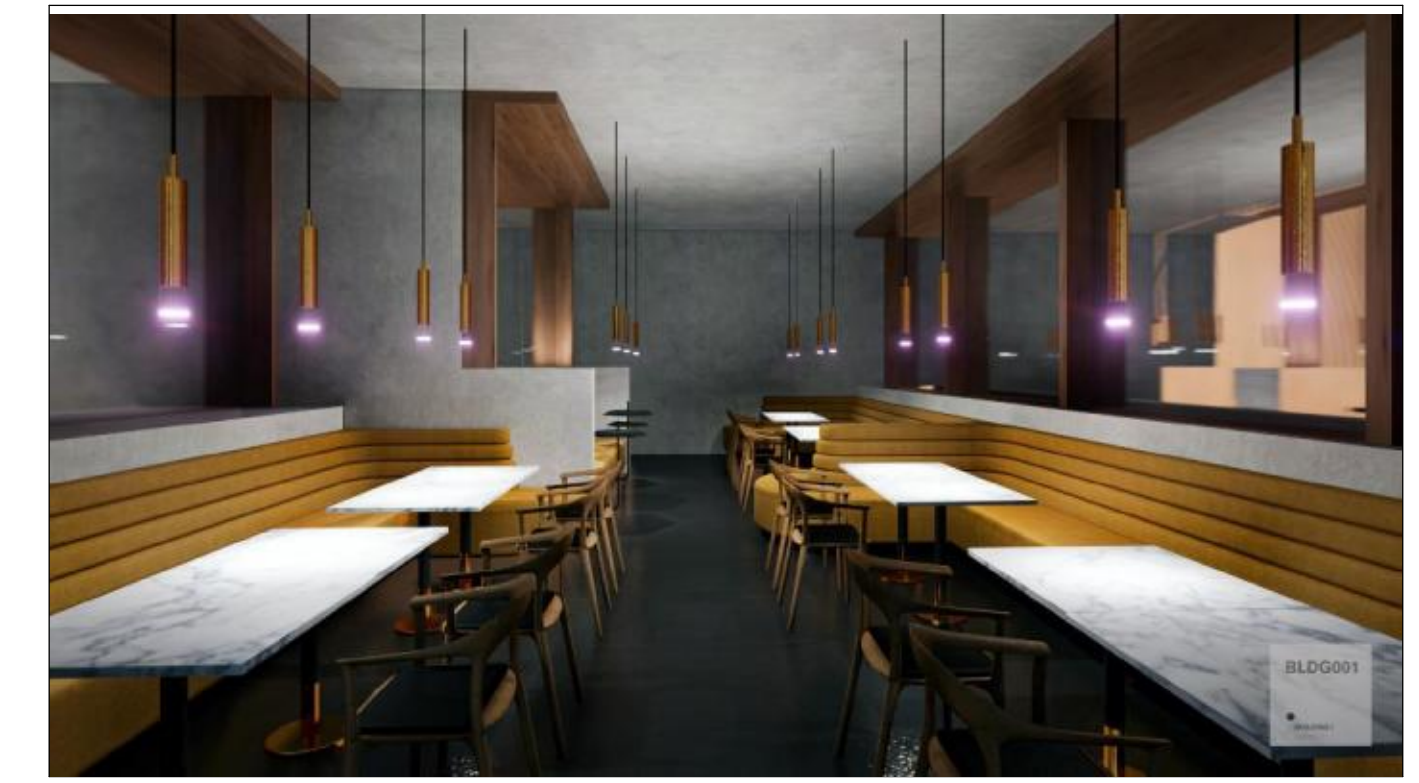
Planter Box Plants
DEEP PURPLE HYDRANGEA



Main Level Dining & Bar Area



Main Level Dining Area



Lower Level Dining Area



Restrooms

Interior Renderings

seat:

L|Z|G Architects

Luckenbach|Ziegelman|Gardner Architects

555 S. Old Woodward Ave, Suite 27L
Birmingham, Michigan 48009

email:
gardner-arch@sbglobalnet

tele:
248.642.3990

issue REVIEW date MAY 12, 2022

sheet title:
Exterior East Elevation Interiors Lighting Plants

project:

project address:
185 N. Old Woodward Ave.
Birmingham, Michigan

designed
drawn
coordination checked
checked approved

project number:
44-2022

sheet number:
SD-1.04

HDC - PLANNING BOARD REVIEW



NOTE: DEEP BOX FACIA
PROJECTS 1.4" FROM BACK PANEL.
SIGNAGE AND RAISED LETTERING
PROJECTS 1.25" FROM BACK PANEL.
SIGNAGE LETTERING IS RECESSED
APPROX .15" BACK FROM THE FACE
OF THE NEW FACIA



4" **BELL Bistro**

2'-0"
Awning Letters
6'-4"
Awning
(Canvas)

Signage Details

Luckenbach/Ziegelman/Gardner Architects



MEMORANDUM

Planning Division

DATE: June 26, 2024

TO: Planning Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: Project Updates & Information

The following report contains the most recent updates on projects that have completed by the Planning Board and are on to the next steps of approval. In addition, other significant development-related projects that have been reviewed or embarked upon by boards/commissions such as the Historic District Commission, Design Review Board, Multi-Modal Transportation Board, or similar bodies have been included for reference as well.

Site Plan & Design Reviews

- 2159 E. Lincoln – Lincoln Yard – Temporary Certificate of Occupancy has been issued
- 34965 Woodward – Peabody Redevelopment – Permit has expired, any new project will need to restart the site plan review process
- 35001 Woodward – Land lease executed by City Commission/Design development, site plan extension granted on October 11, 2023
- 707 S. Worth – Under construction
- 36877 Woodward – Gasow Veterinary Hospital – Under construction
- 243 Merrill – La Strada – Final inspections
- 320 Martin – Birmingham Post Office – Design Development
- 185 N. Old Woodward – Bell Bistro – Permitting/construction
- 460 N. Old Woodward – Wilders – Under construction
- 295 Elm St. – Forest Townhomes – Building permits under review
- 34350 Woodward – Fred Lavery Porsche – Design Development
- 479 S. Old Woodward – Birmingham Tower – Under construction
- 245 S. Eton – Big Rock – Under construction
- 33866 Woodward – Polestar – Permitting/Design development
- 370 E. Brown – Permitting
- 33816 Woodward – Auto Europe – Design development

Ordinance Amendments/Master Planning

- -

Non-Planning Board Projects

- 185 Oakland – Belfor – Façade renovations, permitting
- 33680 Woodward – Petrucci Studio – Under construction
- 163 W. Maple – Seven Daughters – Under construction
- 138 W. Maple – Blakeslee Building – Façade renovations, permitting
- 172 N. Old Woodward – National Bank Building – Façade renovations, design development
- 151 N. Eton – Façade and screening improvements, permitting
- 137 W. Maple – New 4-story addition
- 34500 Woodward – Golling Fiat – Façade renovations, design development

- Church Signs Ordinance Amendment – Public hearing set at City Commission on July 22, 2024
- Historic Preservation Master Plan – In progress.

Sustainability & Climate Action Plan/Greenhouse Gas Emissions Inventory

- Next meeting – July 29, 2024
- Greenhouse Gas Emissions inventory – COMPLETE
- Sustainability and Climate Action Plan – In progress (60%)

ADMIN APPROVAL - PB

App Date	Case #	Scope of Work	Property Address	Status
06/06/2024	PAA24-0038	additional gate at the east elevation of the DTE enclosure for servicing purpose. Use straight lintel instead of arch lintels on two windows at the north elevation. Additional gas meter screen on the south elevation.	219 ELM ST	COMPLETED - APPROVED
Total Processes For Type:				1



AGENDA
REGULAR MEETING OF THE BIRMINGHAM PLANNING BOARD
WEDNESDAY JULY 10, 2024 – 7:30 PM
151 MARTIN ST., CITY COMMISSION ROOM 205, BIRMINGHAM MI*

- A.** Roll Call
- B.** Review and Approval of the Minutes of the Regular Meeting of **June 26, 2024**
- C.** Chairpersons' Comments
- D.** Review of the Agenda
- E.** Meeting Open to the Public for Items Not on the Printed Agenda
- F.** Unfinished Business
- G.** Rezoning Applications
- H.** Special Land Use Permits
- I.** Community Impact Studies
- J.** Site Plan & Design Reviews
- K.** Study Session
 - 1. **Triangle District Mixed-Use Requirements – Study Session**
 - 2. **The Birmingham Plan 2040 – Next Steps**
- L.** Miscellaneous Business and Communications:
 - 1. Pre-Application Discussions
 - 2. Communications
 - i. **Project Updates**
 - 3. Administrative Approval Correspondence
 - i. **June 21, 2024 – July 5, 2024**
 - 4. Draft Agenda – **July 24, 2024**
 - 5. Action List – **2024**
 - 6. Other Business
- M.** Planning Division Action Items
 - 1. Staff Report on Previous Requests
 - 2. Additional Items from Tonight's Meeting
- N.** Adjournment

*Please note that board meetings will be conducted in person once again. Members of the public can attend in person at Birmingham City Hall OR may attend virtually at:

Link to Access Virtual Meeting: <https://zoom.us/j/111656967>

Telephone Meeting Access: 877-853-5247 US Toll-Free

Meeting ID Code: 111656967

NOTICE: Due to Building security, public entrance during non-business hours is through the Police Department — Pierce St. Entrance only. Individuals with disabilities requiring assistance to enter the building should request aid via the intercom system at the parking lot entrance gate on Henrietta St.

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

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) 644-5115 (para las personas con incapacidad auditiva) por lo menos un día 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).



AGENDA
REGULAR MEETING OF THE BIRMINGHAM PLANNING BOARD
WEDNESDAY JULY 24, 2024 – 7:30 PM
151 MARTIN ST., CITY COMMISSION ROOM 205, BIRMINGHAM MI*

- A.** Roll Call
- B.** Review and Approval of the Minutes of the Regular Meeting of **July 10, 2024**
- C.** Chairpersons' Comments
- D.** Review of the Agenda
- E.** Meeting Open to the Public for Items Not on the Printed Agenda
- F.** Unfinished Business
- G.** Rezoning Applications
- H.** Community Impact Studies
- I.** Special Land Use Permits
- J.** Site Plan & Design Reviews
- K.** Study Session
 - 1. **Triangle District Mixed-Use Requirements – Study Session**
 - 2. **The Birmingham Plan 2040 – Next Steps**
- L.** Miscellaneous Business and Communications:
 - 1. Pre-Application Discussions
 - 2. Communications
 - i. **Project Updates**
 - 3. Administrative Approval Correspondence
 - i. **July 5, 2024 – July 19, 2024**
 - 4. Draft Agenda – **August 14, 2024**
 - 5. Action List – **2024**
 - 6. Other Business
- M.** Planning Division Action Items
 - 1. Staff Report on Previous Requests
 - 2. Additional Items from Tonight's Meeting
- N.** Adjournment

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Planning Board Action List – 2024

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	☐	☐
Mixed Use Requirements	Consider changing the requirements for mixed use in the Triangle District.	☐	☐	1 st (January-March)	☒	☐
“Encourage renovations to expand existing houses rather than the construction of new houses.”	Support neighborhoods.	☐	☒	2 nd (April-June)	☐	☐
“Create a Woodward Safety and Beautification Plan.”	Begin to bridge the Woodward divide.	☐	☒	3 rd (July-September)	☐	☐
Ordinance Enforcement	Maintain a vibrant community.	☐	☐	4 th (October-December)	☐	☐