Agenda
Board of Zoning Appeals Regular Meeting
Tuesday, May 12, 2026 - 7:30 PM
151 Martin Street, Birmingham, MI
City Commission Room 205

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1. CALL TO ORDER

2. ROLL CALL

3. ANNOUNCEMENTS

4. APPROVAL OF THE MINUTES

a) Minutes from 4-14-26

5. APPEALS

Address	Petitioner	Appeal	Type/Reason
400 Weschester Way	Trey Brice	26-10	Dimenisonal
1788 Bower	Dirk Moore	26-11	Dimenisonal
34952 Woodward	Zachary Weiss	26-12	Dimenisonal
488 Willits	Armando Ybarra	26-14	Dimenisonal
1573 Chesterfield	Bard DeVies	26-15	Dimenisonal

6. CORRESPONDENCE

7. GENERAL BUSINESS

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

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

9. ADJOURNMENT

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

Link to Access Virtual Meeting: https://zoom.us/j/963 4319 8370
Telephone Meeting Access: 877 853 5247 US Toll-free
Meeting ID Code: 963 4319 8370

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

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

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

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

Title VI

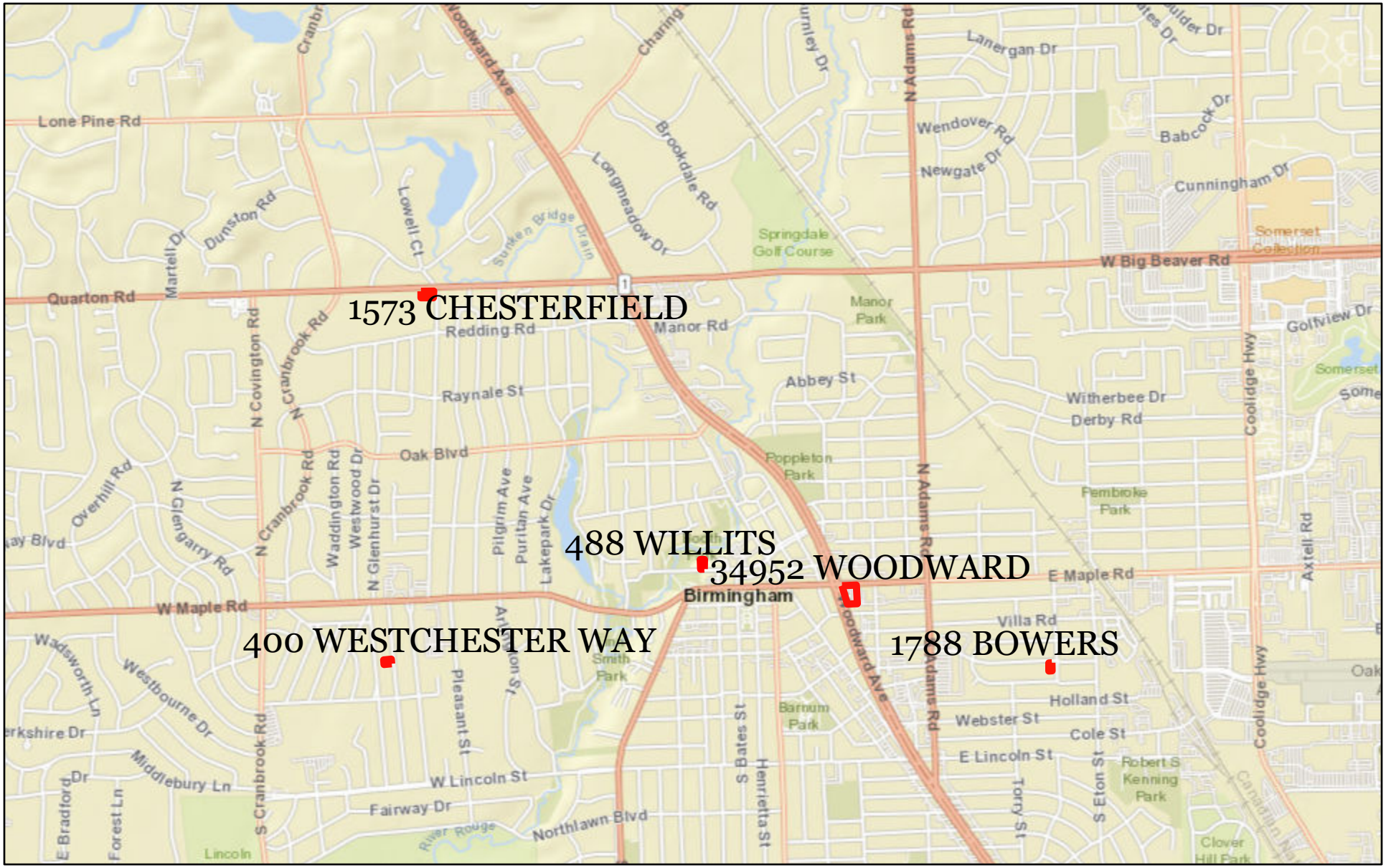
Persons with disabilities that may require assistance for effective participation in this public meeting should contact the City Clerk's Office at the number (248) 530-1880, or (248) 644-3405 (for the hearing impaired) at least one day before the meeting to request help in mobility, visual, hearing, 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) 644-3405 (para las personas con incapacidad auditiva) por lo menos un dia antes de la reunión para solicitar ayuda a la movilidad, visual, auditiva, o deotras asistencias. (Title VI of the Civil Rights Act of 1964)

The public entrance during non-business hours is through the police department at the Pierce Street entrance only. Individuals requiring assistance entering the building should request aid via the intercom system at the parking lot entrance gate on Henrietta Street

La entrada pública durante horas no hábiles es a través del Departamento de policía en la entrada de la calle Pierce solamente. Las personas que requieren asistencia entrando al edificio debe solicitar ayudan a través del sistema de intercomunicación en la puerta de entrada de estacionamiento en la calle de Henrietta

MAY BZA MAP



April 27, 2026

1:36,112

0 0.23 0.45 0.9 mi

0 0.35 0.7 1.4 km

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Board Of Zoning Appeals – Regular Meeting Minutes
April 14, 2026 – 7:30 p.m.
City Commission Room 205, 151 Martin Street, Birmingham, MI

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1. CALL TO ORDER

Minutes of the regular meeting of the City of Birmingham Board of Zoning Appeals ("BZA") held on April 14, 2026. The meeting was convened at 7:30 p.m.

2. ROLL CALL

Present: Chair Erik Morganroth; Board Members Kevin Hart, Carl Kona, Richard Lilley; Alternate Board Member Victoria Policicchio

Absent: Vice Chair Jason Canvasser; Board Members John Miller, Ron Reddy; Alternate Board Member Susan Shacket

Staff: Building Official Zielke; Planning Director Dupuis, City Transcriptionist Eichenhorn, Assistant Building Official Erickson

3. ANNOUNCEMENTS

Announcements may be found in the evening's agenda packet.

4. APPROVAL OF THE MINUTES OF THE BZA MEETINGS OF MARCH 10, 2026

Motion by Kona
Seconded by Policicchio to approve.

Motion carried, 5-0.

VOICE VOTE
Yeas: Lilley, Policicchio, Morganroth, Hart, Kona
Nays: None

5. APPEALS

1) 34952 Woodward

Appeal 26-12

PD Dupuis requested the Board postpone the item to the next meeting on May 12, 2026.

Motion by Kona
Seconded by Lilley to postpone Appeal 26-12 for 34952 Woodward to our next regularly scheduled meeting.

Motion carried, 5-0.

VOICE VOTE
Yeas: Lilley, Policicchio, Morganroth, Hart, Kona
Nays: None

2) 1263 Brookwood
Appeal 26-13

The applicant was unavailable for the meeting.

Motion by Policicchio
Seconded by Kona to postpone the appeal on 1263 Brookwood to the next available date.

Motion carried, 5-0.

VOICE VOTE
Yeas: Lilley, Policicchio, Morganroth, Hart, Kona
Nays: None

6. CORRESPONDENCE

Any submitted correspondence was provided to the Board and the relevant appellants.

7. GENERAL BUSINESS
8. OPEN TO THE PUBLIC FOR MATTERS NOT ON THE AGENDA
9. ADJOURNMENT

No further business being evident, the Board motioned to adjourn at 7:41 p.m.

Jeff Zielke, Building Official

Laura Eichenhorn, City Transcriptionist

CASE DESCRIPTION

400 Westchester Way (26-10)

Hearing date: May 12, 2026

Appeal No. 26-10: The owner of the property known as 400 Westchester Way, requests the following variance for an already constructed rear yard pergola and TV wall:

A. Chapter 126, Article 2, Section 2.06.1 of the Zoning Ordinance requires that the maximum lot coverage is 30% of the lot in the residential zones. The required maximum amount of lot coverage is 30% or 2354.40 SF. The existing is 34.10% (2673.00 SF). The proposed is 37.33% (2930.00 SF). Therefore, a variance of 7.33% (575.60 SF) is being requested.

Staff Notes: The applicant is looking to construct a rear yard pergola with a TV wall.

This property is zoned R1 – Single family residential.

Andrew Erickson
Assistant Building Official

CHAPTER 126 - ZONING

ARTICLE 8: ENFORCEMENT AND PENALTIES

8.01 The Board of Zoning Appeals

3. Variances.
   a. The Board of Zoning Appeals shall hear and grant or deny requests for variances from the strict application of the provisions of the Zoning Ordinance where there are practical difficulties or unnecessary hardships in carrying out the strict letter of such chapter. In granting a variance, the Board of Zoning Appeals may attach such conditions as it may deem reasonably necessary to promote the spirit and intent of the Zoning Ordinance. The Board of Zoning Appeals shall not grant any variance unless it first determines that:
      i. Because of special conditions applicable to the property in question, the provisions of the Zoning Ordinance, if strictly applied, unreasonably prevent the property owner from using the property for a permitted purpose;
      ii. Literal enforcement of the chapter will result in unnecessary hardship;
      iii. The granting of the variance will not be contrary to the spirit and purpose of the Zoning Ordinance nor contrary to the public health, safety and welfare; and
      iv. The granting of the variance will result in substantial justice to the property owner, the owners of property in the area and the general public.

(EACH i-iv must be satisfied)

400 WESTCHESTER WAY



April 27, 2026

1:1,128

0 0.01 0.01 0.02 mi

0 0.01 0.02 0.04 km

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

CITY OF BIRMINGHAM
Community Development - Building Department
151 Martin Street, Birmingham, MI 48009
Community Development: 248-530-1850
Fax: 248-530-1290 / www.bhamgov.org

APPLICATION FOR THE BOARD OF ZONING APPEALS

Application Date: _____ **Hearing Date:** _____

Received By: _____ **Appeal #:** _____

Type of Variance:	☐ Interpretation	☐ Dimensional	☐ Land Use	☐ Sign	☐ Admin Review

I. PROPERTY INFORMATION:

Address:	Lot Number:	Sidwell Number:
400 WestChester Way, Birmingham MI 48009-1513	N/A	08-19-35-128-029

II. OWNER INFORMATION:

Name: Adam & Marissa Wolfe			
Address: 400 WestChester Way	City: Birmingham	State: MI	Zip code: 48009
Email:* wolfeadam@icloud.com marissawolfe@yahoo.com>		Phone: (248)416-2193 (marissa)	

III. PETITIONER INFORMATION:

Name: Trey Brice	Firm/Company Name: Taft, Stettinius & Hollister, LLP.		
Address: 27777 Franklin Rd, Suite 2500	City: Southfield	State: MI	Zip code: 48034
Email: tbrice@taftlaw.com		Phone: (248)727-1407	

IV. GENERAL INFORMATION:

The Board of Zoning Appeals typically meets the second Tuesday of each month. Applications along with supporting documents must be submitted on or before the 12th day of the month preceding the next regular meeting. Please note that incomplete applications will not be accepted.

To insure complete applications are provided, appellants must schedule a pre-application meeting with the Building Official, Assistant Building Official and/or City Planner for a preliminary discussion of their request and the documents that will be required to be submitted. Staff will explain how all requested variances must be highlighted on the survey, site plan and construction plans. Each variance request must be clearly shown on the survey and plans including a table as shown in the example below. All dimensions to be shown in feet measured to the second decimal point.

The BZA application fee is **$360.00** for single family residential; **$560.00** for all others. This amount includes a fee for a public notice sign which must be posted at the property at least 15-days prior to the scheduled hearing date.

Variance Chart Example

Requested Variances	Required	Existing	Proposed	Variance Amount
Variance A, Front Setback	25.00 Feet	23.50 Feet	23.50 Feet	1.50 Feet
Variance B, Height	30.00 Feet	30.25 Feet	30.25 Feet	0.25 Feet

V. REQUIRED INFORMATION CHECKLIST:

- ○ One original and nine copies of the signed application
- ○ One original and nine copies of the signed letter of practical difficulty and/or hardship
- ○ One original and nine copies of the certified survey
- ○ 10 folded copies of site plan and building plans including existing and proposed floor plans and elevations
- ○ If appealing a board decision, 10 copies of the minutes from any previous Planning, HDC, or DRB board meeting

VI. APPLICANT SIGNATURE

Owner hereby authorizes the petitioner designated below to act on behalf of the owner.
By signing this application, I agree to conform to all applicable laws of the City of Birmingham. All information submitted on this application is accurate to the best of my knowledge. Changes to the plans are not allowed without approval from the Building Official or City Planner.
*By providing your email to the City, you agree to receive news and notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.

Signature of Owner: _____ **Date:** 2/11/26

Signature of Petitioner: Trey Brice _____ **Date:** 2/11/26

CITY OF BIRMINGHAM
BOARD OF ZONING APPEALS
RULES OF PROCEDURE

ARTICLE I - Appeals

A. Appeals may be filed under the following conditions:

1. A property owner may appeal for variance, modification or adjustment of the requirements of the Zoning Ordinance.

2. A property owner may appeal for variance, modification or adjustment of the requirements of the Sign Ordinance.

3. Any aggrieved party may appeal the decision of the Planning Board and/or the Building Official in accordance with the City of Birmingham Zoning Ordinance, Article Eight, Section 8.01 (D) Appeals. If an appellant requests a review of any determination of the Building Official, a complete statement setting forth the facts and reasons for the disagreement with the Building Official's determination shall include the principal point, or points on the decision, order or section of the ordinance appealed from, on which the appeal is based.

B. Procedures of the Board of Zoning Appeals (BZA) are as follows:

1. Regular BZA meetings, which are open to the public, shall be held on the second Tuesday of the month at 7:30 P.M. provided there are pending appeals. There will be a maximum of seven appeals heard at the regular meeting which are taken in the order received. If an appeal is received on time after the initial seven appeals have been scheduled, it will be scheduled to the next regular meeting.

2. All applications for appeal shall be submitted to the Community Development Department on or before the 12th day of the month preceding the next regular meeting. If the 12th falls on a Saturday, Sunday, or legal holiday, the next working day shall be considered the last day of acceptance.

3. All property owners and occupants within 300 feet of the subject property will be given written notice of a hearing by the City of Birmingham.

4. See the application form for specific requirements. If the application is incomplete, the BZA may refuse to hear the appeal. The Building Official or City Planner may require the applicant to provide additional information as is deemed essential to fully advise the Board in reference to the appeal. Refusal or failure to comply shall be grounds for dismissal of the appeal at the discretion of the Board.

5. In variance requests, applicants must provide a statement that clearly sets forth all special conditions that may have contributed to a practical difficulty that is preventing a reasonable use of the property.

6. Where the Birmingham Zoning Ordinance requires site plan approval of a project by the City Planning Board before the issuance of a building permit, applicants must obtain preliminary site plan approval by the Planning Board before appeal to the BZA for a variance request. If such appeal is granted by the BZA, the applicant must seek final site plan and design review approval from the Planning Board before applying for a building permit.

7. An aggrieved party may appeal a Planning Board decision. Such appeal must be made within 30 days of the date of the decision. The BZA, in its discretion, may grant additional time in exceptional circumstances.

8. Appeals from a decision of the Building Official shall be made within 30 days of the date of the order, denial of permit, or requirement or determination contested. The BZA, in its discretion, may grant additional time in exceptional circumstances.

9. An appeal stays all proceedings in accordance with Act #110, Public Acts of 2006, Article VI, Section 125.3604 (3).

C. The order of hearings shall be:

1. Presentation of official records of the case by the Building Official or City Planner as presented on the application form.

2. Applicant's presentation of his/her case—the applicant or his/her representative must be present at the appeal hearing.

3. Interested parties' comments and view on the appeal.

4. Rebuttal by applicant.

5. The BZA may make a decision on the matter or request additional information.

D. Motions and Voting

1. A motion is made to either grant or deny a petitioner's request
    a) For a motion to grant or deny a non-use variance request, the motion must receive four (4) affirmative votes to be approved.
    b) For a motion to grant or deny a use variance request, the motion must receive five (5) affirmative votes to be approved.
    c) For a motion to grant or deny an appeal of a decision or order by an administrative official or board, the motion must receive four (4) affirmative votes to be approved.

2. When a motion made is to approve or deny a petitioner's request and if there is a tie vote, then the vote results in no action by the board and the petitioner shall be given an opportunity to have his or her request heard the next regularly scheduled meeting when all the members are present.

3. When there are less than seven (7) members of the board present for a meeting, then a petitioner requesting a use variance shall be given an opportunity at the beginning of the meeting to elect to have it heard at the next regularly scheduled meeting.

4. When there are less than six (6) members present for a meeting, then all petitioners shall be given an opportunity at the beginning of the meeting to elect to have the request heard at the next regularly scheduled meeting.

ARTICLE II - Results of an Appeal

A. The Board may reverse, affirm, vary or modify any order, requirement, decision or determination as in its opinion should be made, and to that end, shall have all the powers of the officer from whom the appeal has been taken.

B. The decisions of the Board shall not become final until the expiration of five (5) days from the date of entry of such orders or unless the Board shall find that giving the order immediate effect is necessary for the preservation of property and/or personal rights and shall so certify on the record.

C. Whenever any variation or modification of the Zoning Ordinance is authorized by resolution of the BZA, a Certificate of Survey must be submitted to the Community Development Department with the building permit application. A building permit must be obtained within one year of the approval date.

D. Failure of the appellant, or his representative, to appear for his appeal hearing will result in the appeal being adjourned to the next regular meeting. If, after notice, the appellant fails to appear for the second time, it will result in an automatic withdrawal of the appeal. The appellant may reapply to the BZA.

E. Any applicant may, with the consent of the Board, withdraw his application at any time before final action.

F. Any decision of the Board favorable to the applicant is tied to the plans submitted, including any modifications approved by the Board at the hearing and agreed to by the applicant, and shall remain valid only as long as the information or data provided by the applicant is found to be correct and the conditions upon which the resolution was based are maintained.

ARTICLE III - Rehearings

A. No rehearing of any decision of the Board shall be considered unless new evidence is submitted which could not reasonably have been presented at the previous hearing or unless there has been a material change of facts or law.

B. Application or rehearing of a case shall be in writing and subject to the same rules as an original hearing, clearly stating the new evidence to be presented as the basis of an appeal for rehearing.

I certify that I have read and understand the above rules of procedure for the City of Birmingham Board of Zoning Appeals.



Signature of Applicant

27777 Franklin Road, Suite 2500
Southfield, MI 48034-8214
Tel: 248.351.3000 | Fax: 248.351.3082
taftlaw.com

Trey Brice
248.727.1407
tbrice@taftlaw.com

April 14, 2026

Jeff Zielke, NCIDQ, LEED AP, COSS-AOA
Building Official
City of Birmingham
151 Martin Street
Birmingham, MI 48012
jzielke@bhamgov.org

Re: Variance Request - 400 Westchester Way

Dear Mr. Zielke:

On behalf of our client, Adam and Marisa Wolfe, we would like to thank you for meeting with Matt Mosher of Mosher Design Co. to discussed a proposed variance request to permit a trellis and decorative backwall feature for the Wolfe's property located at 400 Westchester Way.

The Wolfe's property is 7,848 square feet. When the Wolfe's purchased the property, the existing home and improvements totaled 2,692 square feet of lot coverage, or 34.3%, which exceeds the 30.0% maximum permitted lot coverage within the zoning district. With the inclusion of both features, the total lot coverage would increase to 37.3% under the strict application of the zoning ordinance. However, the practical impact on the Wolfe's lot minimal. The proposed structures only add 24 square feet, or 0.3%, of actual ground coverage. The trellis is open to the sky and does not function as a solid-roof enclosed structure in any meaningful sense.

The proposed trellis is a detached accessory structure that is open to nature. It does not introduce additional impervious surface, does not alter existing drainage patterns, and does not affect stormwater runoff, utilities, or adjacent properties. As proposed, the structure preserves the intent of the zoning ordinance to regulate bulk and lot coverage while protecting public health, safety, and welfare. The same reasoning can also be applied to the fireplace wall.

Strict application of the lot coverage standard in this instance creates a practical difficulty, as it would prohibit a minimal, low-impact accessory structure that does not materially affect site conditions or neighborhood character. The requested variance

represents a minor deviation that is technical in nature and would not result in any adverse impacts.

The subject property is located in an area where attached accessory structures such as pergolas and trellises are common. Approval of the variance would ensure consistency with established neighborhood character and promote the fair and uniform application of the zoning ordinance.

For these reasons, we are requesting approval of the requested variance. The features as proposed, result in no measurable impact on public health, safety, or welfare and are consistent with the intent of the ordinance as well as prior zoning decisions within the City of Birmingham.

Thank you for your time and consideration. Please feel free to contact me should you require any additional information and to schedule the pre-application meeting.

Sincerely,

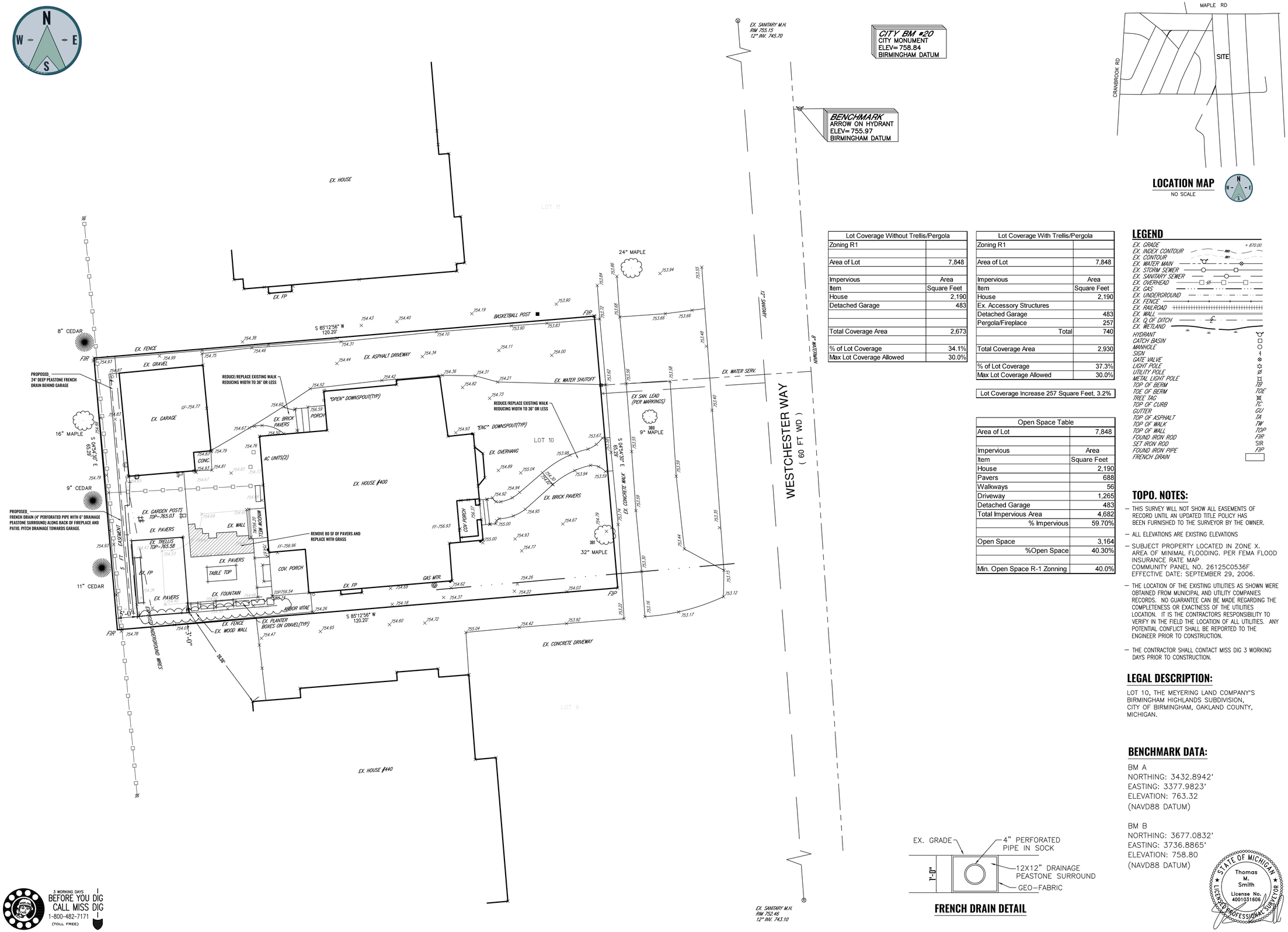
Taft Stettinius & Hollister LLP

Trey Brice

Trey Brice

cc: Adam & Marisa Wolfe
Matt Mosher, Mosher Design Co.

199726329v1



LOCATION MAP

NO SCALE

Lot Coverage Without Trellis/Pergola	
Zoning R1	
Area of Lot	7,848
Impervious	Area
Item	Square Feet
House	2,190
Detached Garage	483
Total Coverage Area	2,673
% of Lot Coverage	34.1%
Max Lot Coverage Allowed	30.0%

Lot Coverage With Trellis/Pergola	
Zoning R1	
Area of Lot	7,848
Impervious	Area
Item	Square Feet
House	2,190
Ex. Accessory Structures	
Detached Garage	483
Pergola/Fireplace	257
Total	740
Total Coverage Area	2,930
% of Lot Coverage	37.3%
Max Lot Coverage Allowed	30.0%

Lot Coverage Increase 257 Square Feet, 3.2%

Open Space Table	
Area of Lot	7,848
Impervious	Area
Item	Square Feet
House	2,190
Pavers	688
Walkways	56
Driveway	1,265
Detached Garage	483
Total Impervious Area	4,682
% Impervious	59.70%
Open Space	3,164
%Open Space	40.30%
Min. Open Space R-1 Zonning	40.0%

LEGEND

EX. GRADE × 870.00
EX. INDEX CONTOUR 880
EX. CONTOUR 881
EX. WATER MAIN
EX. STORM SEWER
EX. SANITARY SEWER
EX. OVERHEAD
EX. GAS
EX. UNDERGROUND
EX. FENCE
EX. RAILROAD
EX. WALL
EX. Q.OF DITCH
EX. WETLAND

HYDRANT	
CATCH BASIN	
MANHOLE	
SIGN	
GATE VALVE	
LIGHT POLE	
UTILITY POLE	
METAL LIGHT POLE	
TOP OF BERM	TB
TOE OF BERM	TOE
TREE TAG	
TOP OF CURB	TC
GUTTER	GU
TOP OF ASPHALT	TA
TOP OF WALK	TW
TOP OF WALL	TOP
FOUND IRON ROD	FIR
SET IRON ROD	SIR
FOUND IRON PIPE	FIP
FRENCH DRAIN	

TOPO. NOTES:

- THIS SURVEY WILL NOT SHOW ALL EASEMENTS OF RECORD UNTIL AN UPDATED TITLE POLICY HAS BEEN FURNISHED TO THE SURVEYOR BY THE OWNER.
- ALL ELEVATIONS ARE EXISTING ELEVATIONS
- SUBJECT PROPERTY LOCATED IN ZONE X. AREA OF MINIMAL FLOODING. PER FEMA FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 26125C0536F EFFECTIVE DATE: SEPTEMBER 29, 2006.
- THE LOCATION OF THE EXISTING UTILITIES AS SHOWN WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANIES RECORDS. NO GUARANTEE CAN BE MADE REGARDING THE COMPLETENESS OR EXACTNESS OF THE UTILITIES LOCATION. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY IN THE FIELD THE LOCATION OF ALL UTILITIES. ANY POTENTIAL CONFLICT SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT MISS DIG 3 WORKING DAYS PRIOR TO CONSTRUCTION.

LEGAL DESCRIPTION:

LOT 10, THE MEYERING LAND COMPANY'S BIRMINGHAM HIGHLANDS SUBDIVISION, CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN.

BENCHMARK DATA:

BM A
NORTHING: 3432.8942'
EASTING: 3377.9823'
ELEVATION: 763.32
(NAVD88 DATUM)

BM B
NORTHING: 3677.0832'
EASTING: 3736.8865'
ELEVATION: 758.80
(NAVD88 DATUM)

FRENCH DRAIN DETAIL

3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171
(TOLL FREE)

STATE OF MICHIGAN
Thomas M. Smith
License No. 4001031506
LICENSED PROFESSIONAL SURVEYOR

PRIORITY ENGINEERING, LLC

STATE OF MICHIGAN
TEON C SUJAK
License No. 6201046896
LICENSED PROFESSIONAL ENGINEER

0' 10' 20'
GRAPHIC SCALE: 1" = 10'

400 WESTCHESTER WAY

400 WESTCHESTER WAY
BIRMINGHAM, MI 48304

EXISTING CONDITIONS & PROPOSED DRAINAGE PLAN

Revisions

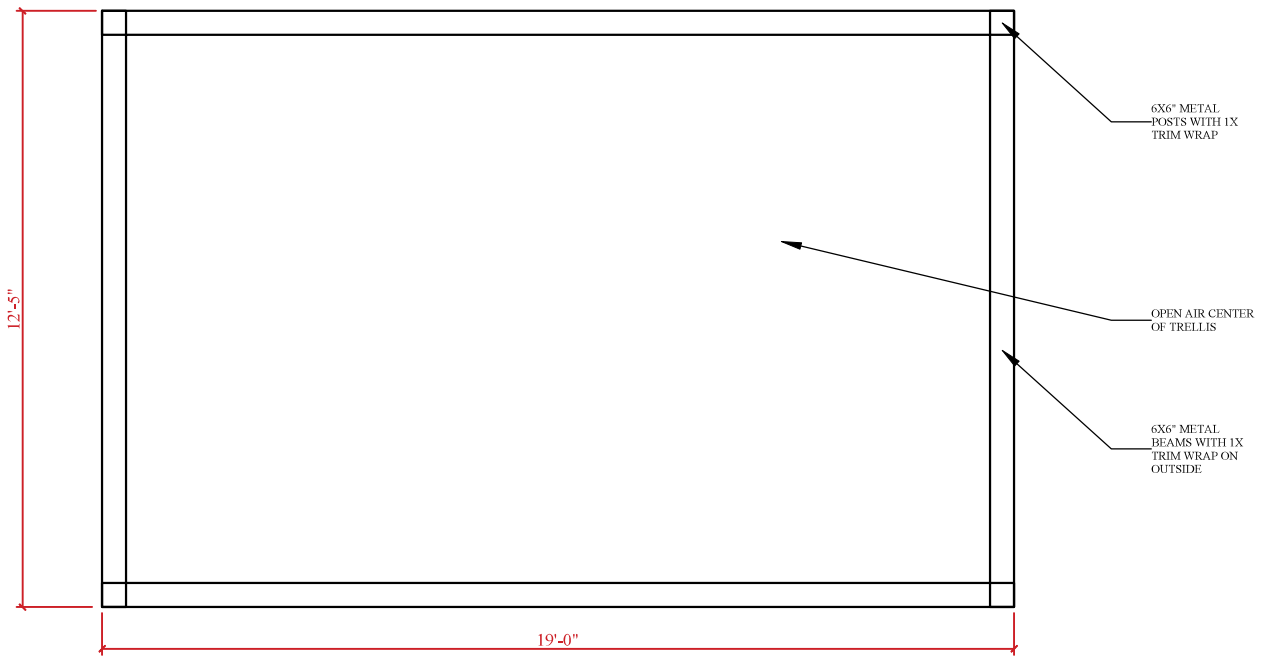
REV	ISSUED FOR	ISSUE DATE	BY

02/09/2026
TCS
CAC
TMS
25-0028
C-100

DRAWING NOTE: SCALE SHOWN IS MEANT FOR 24" X 36" AND WILL SCALE INCORRECTLY IF PRINTED ON ANY OTHER SIZE MEDIA BESIDES 11" X 17"
NO REPRODUCTION SHALL BE MADE WITHOUT PRIOR CONSENT OF PRIORITY ENGINEERING, LLC.
© 2026

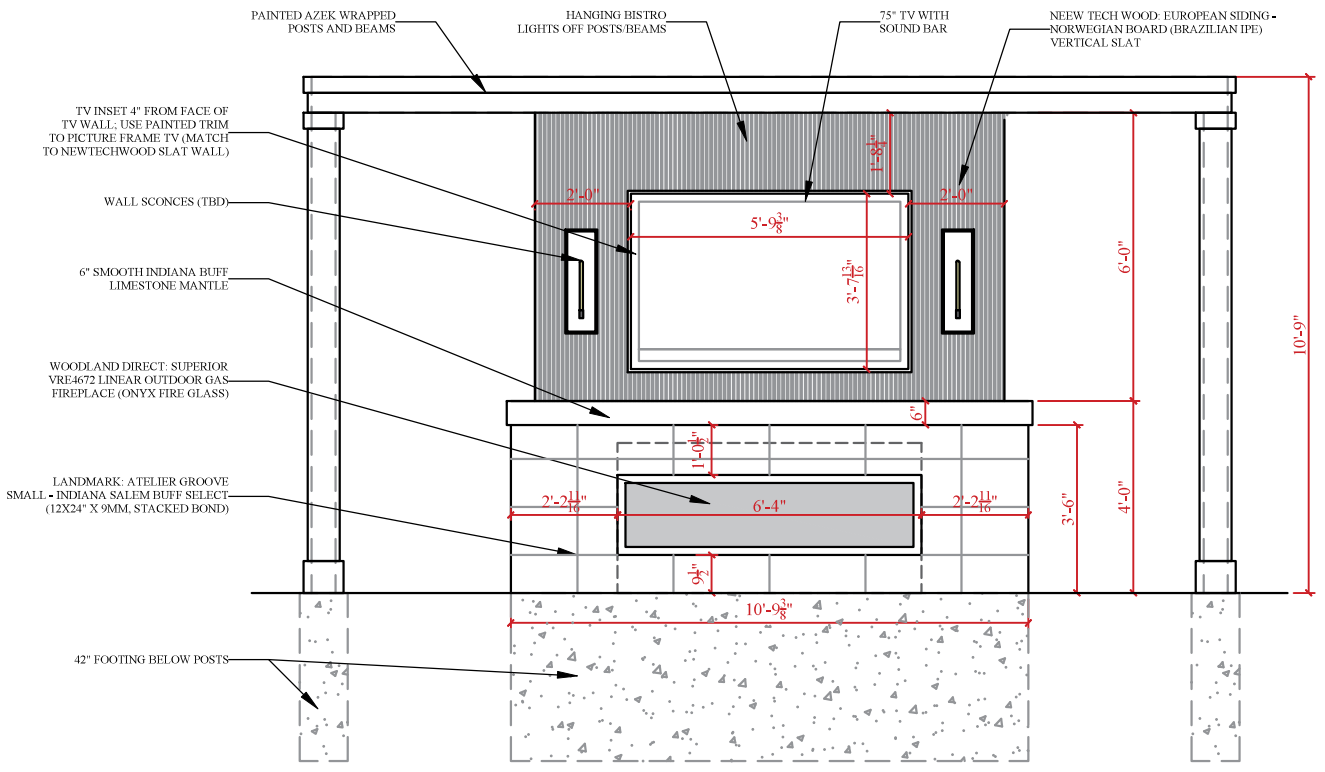
TRELLIS DETAILS

400 WESTCHESTER WAY, BIRMINGHAM, MI



TV WALL TRELLIS PLAN

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



TV WALL TRELLIS ELEVATION

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

CASE DESCRIPTION

1788 Bowers (26-11)

Hearing date: May 12, 2026

Appeal No. 26-11: The owner of the property known as **1788 Bowers**, requests the following variances to construct a second story addition to an existing nonconforming home:

A. Chapter 126, Article 2, Section 2.08.2 of the Zoning Ordinance requires that no side yard setback shall be less than 5.00 feet. The existing is 4.80 feet and the proposed is 4.80 feet. Therefore, a variance of 0.20 feet is being requested.

B. Chapter 126, Article 4, Section 4.74 (C). of the Zoning Ordinance requires that each residential lot shall provide a minimum distance between principal residential buildings on adjacent lots of 14 feet or 25% of the total lot width, whichever is larger. The required is 14.00 feet the proposed in 10.90 feet. Therefore, a variance of 3.10 feet is being requested.

Staff Notes: The applicant is looking to construct a second story addition to an existing nonconforming home.

This property is zoned R2 – Single family residential.

Andrew Erickson
Assistant Building Official

CHAPTER 126 - ZONING

ARTICLE 8: ENFORCEMENT AND PENALTIES

8.01 The Board of Zoning Appeals

3. Variances.
   a. The Board of Zoning Appeals shall hear and grant or deny requests for variances from the strict application of the provisions of the Zoning Ordinance where there are practical difficulties or unnecessary hardships in carrying out the strict letter of such chapter. In granting a variance, the Board of Zoning Appeals may attach such conditions as it may deem reasonably necessary to promote the spirit and intent of the Zoning Ordinance. The Board of Zoning Appeals shall not grant any variance unless it first determines that:
      i. Because of special conditions applicable to the property in question, the provisions of the Zoning Ordinance, if strictly applied, unreasonably prevent the property owner from using the property for a permitted purpose;
      ii. Literal enforcement of the chapter will result in unnecessary hardship;
      iii. The granting of the variance will not be contrary to the spirit and purpose of the Zoning Ordinance nor contrary to the public health, safety and welfare; and
      iv. The granting of the variance will result in substantial justice to the property owner, the owners of property in the area and the general public.

(EACH i-iv must be satisfied)

1788 BOWERS



April 27, 2026

1:1,128

0 0.01 0.01 0.02 mi

0 0.01 0.02 0.04 km

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

CITY OF BIRMINGHAM
Community Development - Building Department
151 Martin Street, Birmingham, MI 48009
Community Development: 248-530-1850
Fax: 248-530-1290 / www.bhamgov.org

APPLICATION FOR THE BOARD OF ZONING APPEALS

Received Date: _____ **Hearing Date:** _____

Received By: _____ **Appeal #:** _____

Type of Variance:	☐ Interpretation	☒ Dimensional	☐ Land Use	☐ Sign	☐ Admin Review

I. PROPERTY INFORMATION:

Address:	Lot Number:	Sidwell Number:
1788 BOWERS ST	B6, AND EAST 39' OF B7	2031152021

II. OWNER INFORMATION:

Name:			
JOAQUIN & KRIS FRIAS			
Address: 1788 BOWERS ST	City: BIRMINGHAM	State: MI	Zip code: 48009
Email:* JFRIAS@SPANISHINTERNATIONAL.COM		Phone: 248-703-9434	

III. PETITIONER INFORMATION:

Name:	Firm/Company Name:		
DIRK MOORE	BATHMATICS LLC		
Address: 2486 LITTLETELL AVE	City: W. BLOOMFIELD	State: MI	Zip code: 48324
Email: DIRKEMOORE@YAHOO.COM		Phone: 248-563-2680	

IV. GENERAL INFORMATION:

The Board of Zoning Appeals typically meets the second Tuesday of each month. COMPLETE digital applications along with supporting documents must be submitted on or before the 12th day of the month preceding the next regular meeting. Please note that incomplete applications will not be accepted.

To insure complete applications are provided, appellants must schedule a pre-application meeting with the Building Official, Assistant Building Official and/or City Planner for a preliminary discussion of their request and the documents that will be required to be submitted. Staff will explain how all requested variances must be highlighted on the survey, site plan and construction plans. Each variance request must be clearly shown on the survey and plans including a table as shown in the example below. All dimensions to be shown in feet measured to the second decimal point.

The BZA application fee is **$750.00** for single family residential; **$950.00** for all others. This amount includes a fee for a public notice sign which must be posted at the property at least 15-days prior to the scheduled hearing date.

Variance Chart Example

Requested Variances	Required	Existing	Proposed	Variance Amount
Variance A, Front Setback	25.00 Feet	23.50 Feet	23.50 Feet	1.50 Feet
Variance B, Height	30.00 Feet	30.25 Feet	30.25 Feet	0.25 Feet

V. REQUIRED INFORMATION CHECKLIST:

Please provide the following in your electronic submission:

- ○ Completed and signed application
- ○ Signed letter of practical difficulty and/or hardship
- ○ Certified survey
- ○ Building plans including existing and proposed floor plans and elevations
- ○ If appealing a board decision, provide a copy of the minutes from any previous Planning, HDC, or DRB board meeting

VI. APPLICANT SIGNATURE

Owner hereby authorizes the petitioner designated below to act on behalf of the owner.
By signing this application, I agree to conform to all applicable laws of the City of Birmingham. All information submitted on this application is accurate to the best of my knowledge. Changes to the plans are not allowed without approval from the Building Official or City Planner.
*By providing your email to the City, you agree to receive news and notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.

Signature of Owner: Kristine Frias **Date:** 2/24/26

Signature of Petitioner: Dirk Moore **Date:** 2/24/26

Revised 01/17/2024

CITY OF BIRMINGHAM
BOARD OF ZONING APPEALS
RULES OF PROCEDURE

ARTICLE I - Appeals

A. Appeals may be filed under the following conditions:

1. A property owner may appeal for variance, modification or adjustment of the requirements of the Zoning Ordinance.

2. A property owner may appeal for variance, modification or adjustment of the requirements of the Sign Ordinance.

3. Any aggrieved party may appeal the decision of the Planning Board and/or the Building Official in accordance with the City of Birmingham Zoning Ordinance, Article Eight, Section 8.01 (D) Appeals. If an appellant requests a review of any determination of the Building Official, a complete statement setting forth the facts and reasons for the disagreement with the Building Official's determination shall include the principal point, or points on the decision, order or section of the ordinance appealed from, on which the appeal is based.

B. Procedures of the Board of Zoning Appeals (BZA) are as follows:

1. Regular BZA meetings, which are open to the public, shall be held on the second Tuesday of the month at 7:30 P.M. provided there are pending appeals. There will be a maximum of seven appeals heard at the regular meeting which are taken in the order received. If an appeal is received on time after the initial seven appeals have been scheduled, it will be scheduled to the next regular meeting.

2. All applications for appeal shall be submitted to the Community Development Department on or before the 12th day of the month preceding the next regular meeting. If the 12th falls on a Saturday, Sunday, or legal holiday, the next working day shall be considered the last day of acceptance.

3. All property owners and occupants within 300 feet of the subject property will be given written notice of a hearing by the City of Birmingham.

4. See the application form for specific requirements. If the application is incomplete, the BZA may refuse to hear the appeal. The Building Official or City Planner may require the applicant to provide additional information as is deemed essential to fully advise the Board in reference to the appeal. Refusal or failure to comply shall be grounds for dismissal of the appeal at the discretion of the Board.

5. In variance requests, applicants must provide a statement that clearly sets forth all special conditions that may have contributed to a practical difficulty that is preventing a reasonable use of the property.

6. Where the Birmingham Zoning Ordinance requires site plan approval of a project by the City Planning Board before the issuance of a building permit, applicants must obtain preliminary site plan approval by the Planning Board before appeal to the BZA for a variance request. If such appeal is granted by the BZA, the applicant must seek final site plan and design review approval from the Planning Board before applying for a building permit.

7. An aggrieved party may appeal a Planning Board decision. Such appeal must be made within 30 days of the date of the decision. The BZA, in its discretion, may grant additional time in exceptional circumstances.

8. Appeals from a decision of the Building Official shall be made within 30 days of the date of the order, denial of permit, or requirement or determination contested. The BZA, in its discretion, may grant additional time in exceptional circumstances.

9. An appeal stays all proceedings in accordance with Act #110, Public Acts of 2006, Article VI, Section 125.3604 (3).

C. The order of hearings shall be:

1. Presentation of official records of the case by the Building Official or City Planner as presented on the application form.

2. Applicant's presentation of his/her case—the applicant or his/her representative must be present at the appeal hearing.

3. Interested parties' comments and view on the appeal.

4. Rebuttal by applicant.

5. The BZA may make a decision on the matter or request additional information.

D. Motions and Voting

1. A motion is made to either grant or deny a petitioner's request
    a) For a motion to grant or deny a non-use variance request, the motion must receive four (4) affirmative votes to be approved.
    b) For a motion to grant or deny a use variance request, the motion must receive five (5) affirmative votes to be approved.
    c) For a motion to grant or deny an appeal of a decision or order by an administrative official or board, the motion must receive four (4) affirmative votes to be approved.

2. When a motion made is to approve or deny a petitioner's request and if there is a tie vote, then the vote results in no action by the board and the petitioner shall be given an opportunity to have his or her request heard the next regularly scheduled meeting when all the members are present.

3. When there are less than seven (7) members of the board present for a meeting, then a petitioner requesting a use variance shall be given an opportunity at the beginning of the meeting to elect to have it heard at the next regularly scheduled meeting.

4. When there are less than six (6) members present for a meeting, then all petitioners shall be given an opportunity at the beginning of the meeting to elect to have the request heard at the next regularly scheduled meeting.

ARTICLE II - Results of an Appeal

A. The Board may reverse, affirm, vary or modify any order, requirement, decision or determination as in its opinion should be made, and to that end, shall have all the powers of the officer from whom the appeal has been taken.

B. The decisions of the Board shall not become final until the expiration of five (5) days from the date of entry of such orders or unless the Board shall find that giving the order immediate effect is necessary for the preservation of property and/or personal rights and shall so certify on the record.

C. Whenever any variation or modification of the Zoning Ordinance is authorized by resolution of the BZA, a Certificate of Survey must be submitted to the Community Development Department with the building permit application. A building permit must be obtained within one year of the approval date.

D. Failure of the appellant, or his representative, to appear for his appeal hearing will result in the appeal being adjourned to the next regular meeting. If, after notice, the appellant fails to appear for the second time, it will result in an automatic withdrawal of the appeal. The appellant may reapply to the BZA.

E. Any applicant may, with the consent of the Board, withdraw his application at any time before final action.

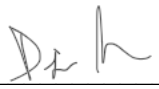
F. Any decision of the Board favorable to the applicant is tied to the plans submitted, including any modifications approved by the Board at the hearing and agreed to by the applicant, and shall remain valid only as long as the information or data provided by the applicant is found to be correct and the conditions upon which the resolution was based are maintained.

ARTICLE III - Rehearings

A. No rehearing of any decision of the Board shall be considered unless new evidence is submitted which could not reasonably have been presented at the previous hearing or unless there has been a material change of facts or law.

B. Application or rehearing of a case shall be in writing and subject to the same rules as an original hearing, clearly stating the new evidence to be presented as the basis of an appeal for rehearing.

I certify that I have read and understand the above rules of procedure for the City of Birmingham Board of Zoning Appeals.



Signature of Applicant

Hardship Letter – Board of Zoning Appeals

Date: February 24, 2026

To the Honorable Members of the City of Birmingham Board of Zoning Appeals:

This letter is submitted in support of the requested dimensional variances for the property located at 788 Bowers Street, Birmingham, Michigan.

The first variance request pertains to the required five (5) foot side-yard setback. The existing structure, originally constructed in 1955, is currently situated approximately 4.8 feet from the lot line, resulting in a two (2) inch encroachment from the required setback. The proposed second-story addition maintains this exact existing footprint and does not increase the degree of nonconformity in any way. The request simply allows continuation of a long-standing condition that has existed for nearly seventy years.

Offsetting the second-story wall by two inches to technically comply with the five-foot requirement is not practical from an engineering and construction standpoint. Such an offset would require structural discontinuity between floors and introduce unnecessary framing complexity that is inconsistent with sound structural practice. The request represents a minimal dimensional difference that produces no measurable impact on adjacent properties while maintaining structural consistency.

The second variance request concerns the required fourteen (14) foot separation between structures. The existing home currently maintains approximately ten (10) feet of separation from the neighboring residence. The proposed addition does not further reduce this existing condition. The separation distance has existed in its current form for decades, and the project does not intensify or expand that nonconformity.

Strict application of the ordinance in this case would create practical difficulties without advancing the intent of the zoning code. The requested variances are minimal, do not alter neighborhood character, do not increase encroachment beyond what has historically existed, and will not negatively impact adjacent properties in terms of light, air, or privacy.

For these reasons, we respectfully request approval of the variances as submitted. Thank you for your consideration.

Respectfully submitted,

Dirk Moore
Bathmatics LLC
Cell: 248-563-2680

TOPOGRAPHIC SURVEY

CERTIFIED TO: SW LUXURY HOMES

NORTH

SCALE: 1"=10'

PROPERTY DESCRIPTION: (AS FURNISHED BY CLIENT)

PARCEL NO. 20-31-152-021
THE WEST 14 FEET OF LOT 86 AND THE EAST 39 FEET OF LOT 87, "ADAMS VILLAGE SUBDIVISION", OF PART OF THE NORTHWEST 1/4 OF SECTION 31, TOWN 2 NORTH, RANGE 11 EAST, CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN AS RECORDED IN LIBER 73 OF PLATS, PAGES 1 AND 2 OF OAKLAND COUNTY RECORDS.

PARCEL AREA

AS SURVEYED:
TOTAL = 7,261.00 SQUARE FEET = 0.166 ACRE

BASIS OF BEARING

DUE EAST ALONG THE SOUTHERLY RIGHT OF WAY LINE OF BOWERS AVENUE AS PLATTED AND AS MONUMENTED IN FIELD.

BENCHMARKS

CITY BENCHMARK #13
ELEVATION = 743.34 (CITY DATUM)
FOUND BRASS CAP AT THE SOUTHEAST CORNER OF ETON ROAD AND HOLLAND STREET.

SITE BENCHMARK
ELEVATION = 753.67 (CITY DATUM)
TOP OF EXISTING HYDRANT LOCATED ON THE SOUTH SIDE OF BOWERS AVENUE IN FRONT OF EXISTING RESIDENCE #1790.

FLOOD NOTE

SUBJECT PARCEL LIES WITHIN ZONE X, AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN; AS PER FLOOD INSURANCE RATE MAP NUMBER 26125C0537F, DATED SEPTEMBER 29, 2006, AS PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

SURVEYOR'S NOTES

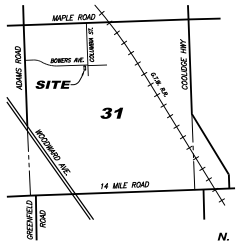
1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.
2. A CURRENT TITLE POLICY HAS NOT BEEN FURNISHED AT TIME OF SURVEY, THEREFORE EASEMENTS AND/OR ENCUMBRANCES AFFECTING SUBJECT PARCEL MAY NOT BE SHOWN.
3. ZONING - R2 (SINGLE FAMILY RESIDENTIAL).
4. FRONT SETBACK AS SURVEYED = 32.76'
5. EXISTING LOT COVERAGE = 1,969 S.F. (27.1%).

CONTRACTOR'S NOTE

The locations of existing underground utilities are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities before commencing work. He agrees to be fully responsible for any and all damages which might be occasioned by his failure to exactly locate and preserve any and all underground utilities.

3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171
(TOLL FREE) for the location of underground utilities

The contractor shall be responsible for adhering to all applicable local, state, and federal standards, specifications, and guidelines for construction.



LOCATION MAP
SCALE: 1" = 2000'

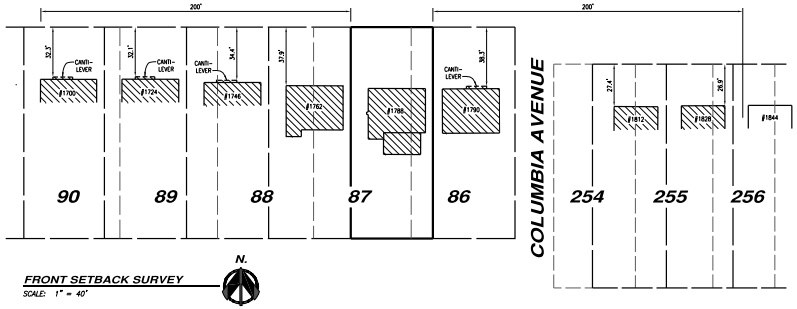
LEGEND

- FOUND MONUMENT AS NOTED
- SET 1/2" REBAR WITH CAP, #46724
- UTILITY POLE
- ELECTRIC METER
- AIR-CONDITIONING UNIT
- GAS METER
- GAS VALVE
- MANHOLE (AS NOTED)
- FIRE HYDRANT
- WATER SHUTOFF
- DOWNSPOUT
- EXISTING TREE & D.B.H.
- EXISTING GROUND ELEVATION
- PARCEL BOUNDARY
- ADJACENT PARCEL
- EASEMENT LINE
- EXISTING BUILDING
- EXISTING CANTILEVER
- EXISTING BRICK PAVERS
- EXISTING PAVEMENT AS NOTED
- EXISTING FENCES
- EX. SANITARY/COMBINED SEWER
- EXISTING WATER LINE
- OVERHEAD LINES
- EXISTING GAS LINE
- GRADE CONTOUR, 1' INTERVAL
- EDGE OF TREES

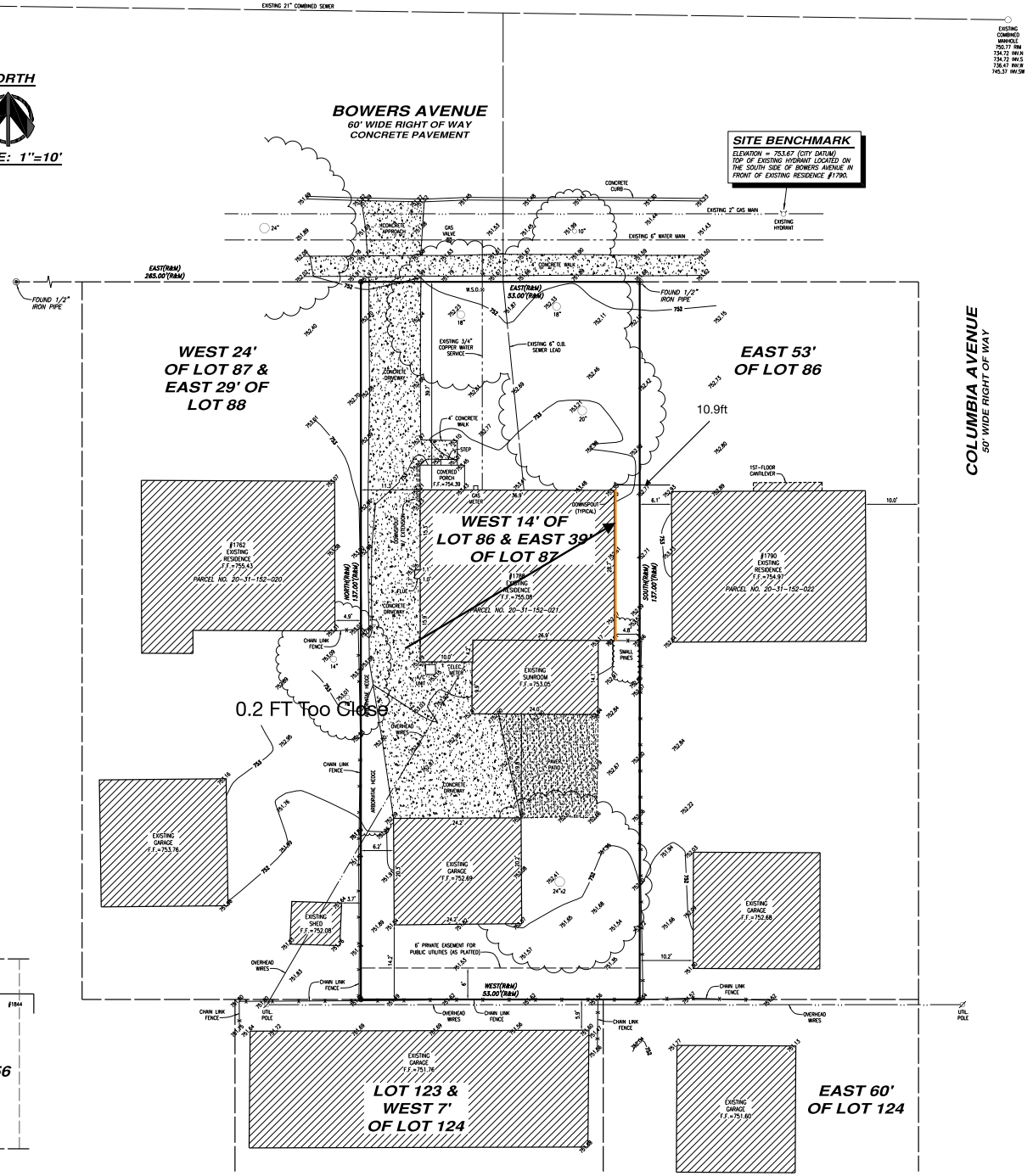
SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT I HAVE SURVEYED THE PROPERTY HEREIN DESCRIBED. THE ELEVATIONS SHOWN HEREON ARE BASED ON A FIELD SURVEY AND THE DRAWING HEREON DELINEATED IS A CORRECT REPRESENTATION OF THE SAME.

SHANE PATRICK AZBELL
LICENSED PROFESSIONAL SURVEYOR, STATE OF MICHIGAN
LICENSE NO. 4001046724



FRONT SETBACK SURVEY
SCALE: 1" = 40'



AZTEC
LAND SURVEYORS INC.
P.O. BOX 353
HOLLY, MI 48442
PHONE:586-306-1253
SHANE@AZTECSURVEY.COM

PROJECT: TOPOGRAPHIC SURVEY
PART OF THE NORTHWEST 1/4 OF SECTION 31, CITY OF BIRMINGHAM, OAKLAND CO., MI

CLIENT: SW LUXURY HOMES
30100 TELEGRAPH RD. SUITE 350
BINGHAM FARMS, MI 48025

JOB NO: 24-137
DATE: 1/22/25
DRAWN BY: S.A.
CHECKED BY: S.A.

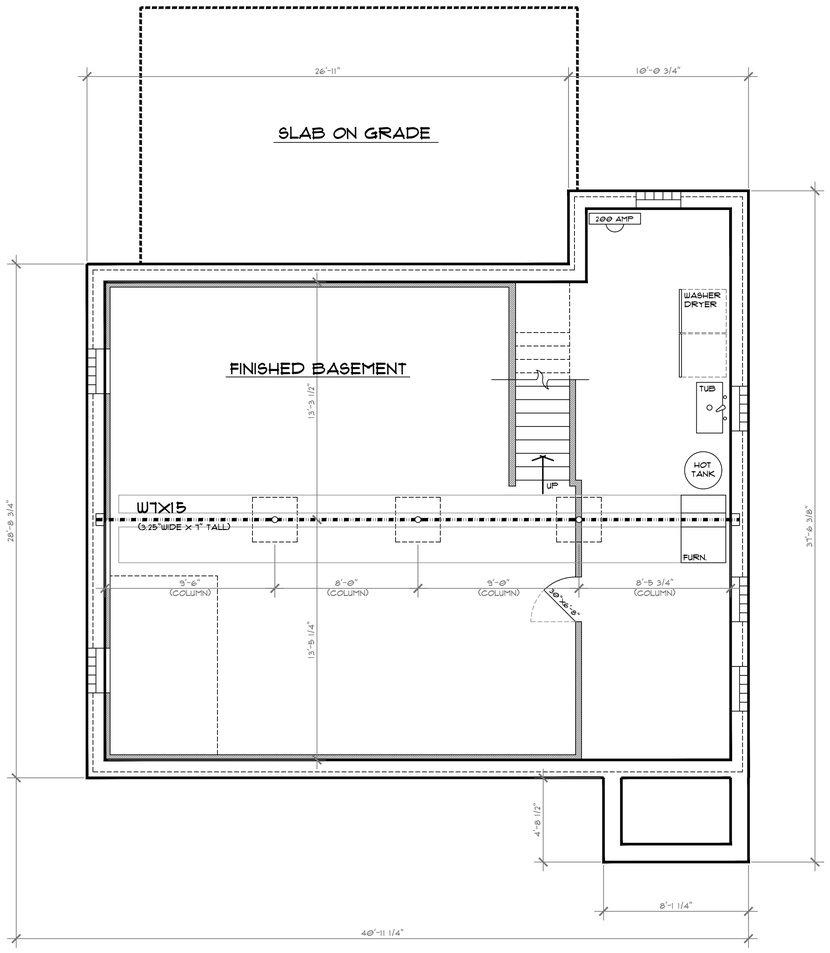
REVISIONS:
2-18-25 ADDED LOT COVERAGE.
4-17-25 UPDATED #1786.

STATE OF MICHIGAN
SHANE PATRICK AZBELL
License No. 4001046724
REGISTERED PROFESSIONAL SURVEYOR

SEAL

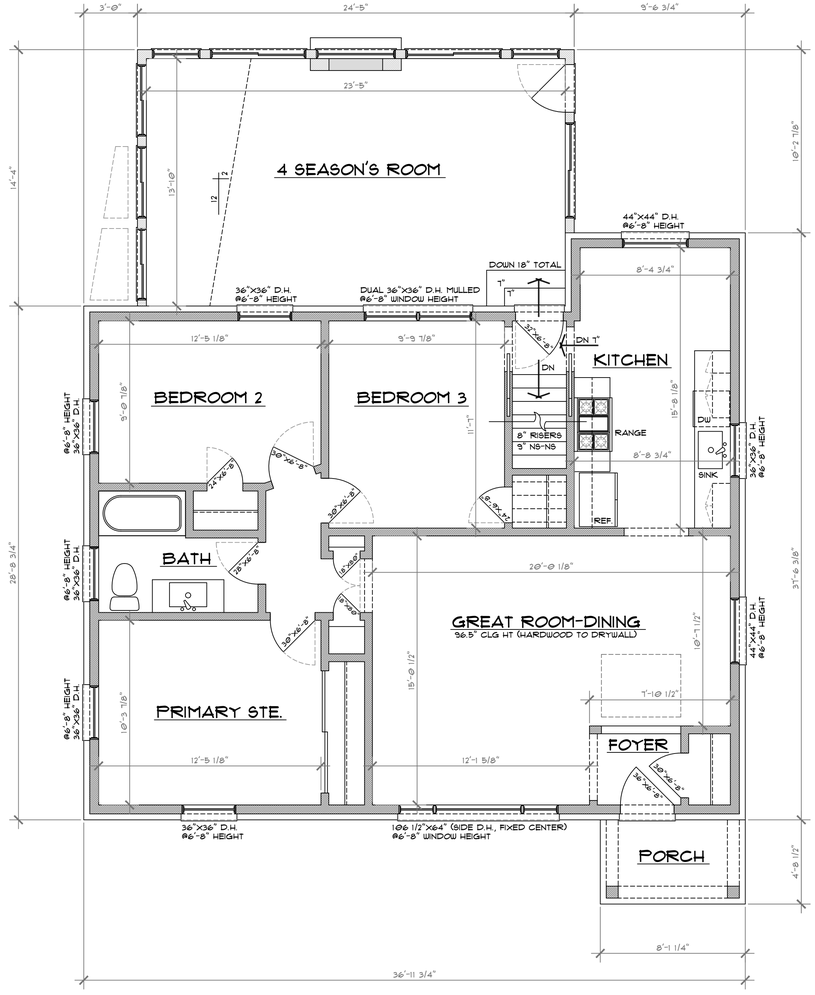
SHEET 1 OF 1

MUNICIPAL REVIEW NUMBERS:



EXISTING FOUNDATION

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



EXISTING MAIN LEVEL

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

HRH Design Group Inc.
"Designers of Extraordinary Custom Homes"
P.O. BOX 7026, Bloomfield Hills Mi. 48302
(248)-494-1544

DATE:	PERMIT-BUILD	DESCRIPTION OF PLAN:
JUNE 26, 2025	BUILD PLANS	FOR CLIENT REVIEW
JUNE 30, 2025	BUILD PLANS	REVISED WINDOW PACKAGE
FEB. 23, 2026	BUILD PLANS	REVISED PER TOWNSHIP REVIEW

PROJECT DESCRIPTION:
1188 BOWERS STREET
BIRMINGHAM MI. 48009

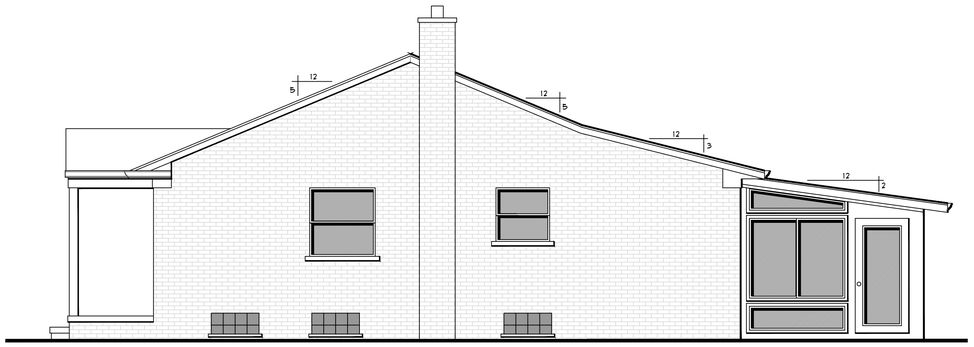
SHEET TITLE:
EXISTING FLOOR PLANS

DATE OF PLAN:
FEB. 23, 2026

JOB NUMBER:
0630-25

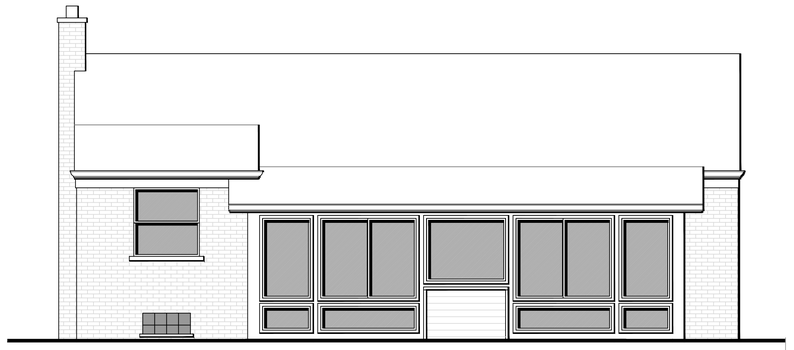
PAGE NUMBER:
1 OF 8

SHEET:
A-1



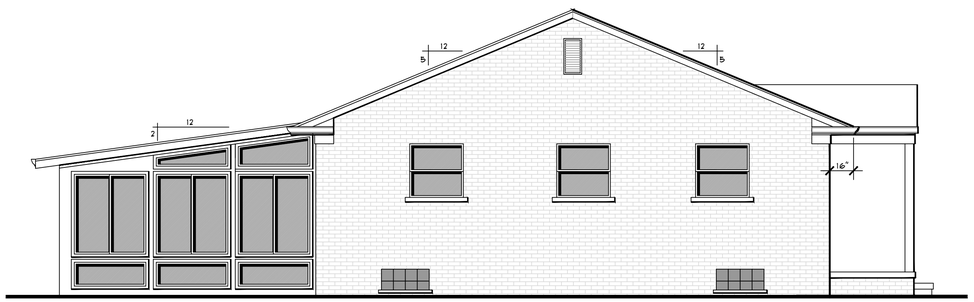
WEST ELEVATION

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



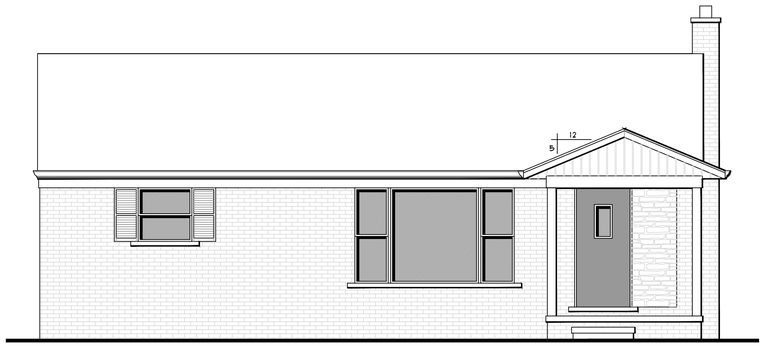
SOUTH ELEVATION

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



EAST ELEVATION

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



NORTH ELEVATION

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

HRH Design Group Inc.
"Designers of Extraordinary Custom Homes"
P.O. BOX 7026, Bloomfield Hills Mi. 48302
(248)-494-1544

DATE:	PERMIT-BUILD	DESCRIPTION OF PLAN:
JUNE 24, 2025	BUILD PLANS	PERMIT REVIEW
JUNE 24, 2025	BUILD PLANS	REVISED PERMIT PACKAGE
FEB. 23, 2026	BUILD PLANS	REVISED PER TOWNSHIP REVIEW

PROJECT DESCRIPTION:
1788 BOWERS STREET
BIRMINGHAM MI. 48009

SHEET TITLE:
EXISTING ELEVATIONS

DATE OF PLAN:
FEB. 23, 2026

JOB NUMBER:
0630-25

PAGE NUMBER:
2 OF 8

SHEET:
A-2

2015 MICHIGAN RESIDENTIAL CODE

ADOPTED INTO LAW BY THE STAE OF MICHIGAN FEBRUARY 8, 2016, THIS CODE IS TO BE ADHERED TO BY THE BUILDER AND ALL TRADES WHO WORK ON SAID PLAN. CERTAIN SECTIONS HAVE BEEN PULLED OUT AND DISPLAYED BEFORE YOU. HOWEVER, THE FOLLOWING ADDENDUM "DOES NOT" LAYOUT THE 2015 MRC CODE IN ITS ENTIRETY. IT IS THE RESPONSIBILITY OF ALL APPLICABLE PARTIES TO BECOME AWARE OF THE NEWLY ADOPTED CODE. A COPY OF THE 2015 MRC CODE CAN BE BOUGHT FROM THE STATE OF MICHIGAN. SEE BUILDER OR ARCHITECT FOR MORE DETAILS.

FOUNDATIONS

SECTION R401

TABLE R401.4.1 PRESUMTIVE LOAD BEARING VALUES OF FOUNDATION MATERIALS

CLASS OF MATERIAL	LOAD BEARING PRESSURE (LBS/SQ.FT.)
CRYSTALLINE BEDROCK	12,000
SEDIMENTARY AND FOLIATED ROCK	4,000
SANDY GRAVEL AND/OR GRAVEL (GW AND GP)	3,000
SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL AND CLAYEY GRAVEL (SW/SP/SM/SC/GM/ AND GC)	2,000
CLAY, SANDY CLAY, SILTY CLAY, CLAYEY SILT, SILT AND SANDY SILT (CL/ML/MH/, AND CH)	1,000

REFER TO TABLE R404.1.1(5) FOR THE MINIMUM VERTICAL REINFORCEMENT SIZE AND SPACING REQUIREMENTS

FOUNDATION CONCRETE

SECTION R402.2

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF F'C AS SHOWN IN TABLE R402.2.... TABLE R402.2

MINIMUM COMPRESSIVE SPECIFIED STRENGTH OF CONCRETE

	MINIMUM SPECIFIED COMPRESSIVE STRENGTH		
TYPE OF LOCATION OF CONC.	NEGLIGABLE	MODERATE	SEVERE
BASEMENT WALL, FOUNDATIONS AND OTHER CONC NOT EXPOSED TO WEATHER	2500	2500	2500
BASEMENT SLABS AND INTERIOR SLABS ON GRADE, ETC GARAGE FLOORS	2500	2500	2500
BASEMENT WALLS, FOUNDATION WALLS, EXT WALL ALL EXPOSED TO WEATHER	2500	3000	3000
PORCHES, CARPORT SLABS AND STEPS EXPOSED TO WEATHER, GAR. SLABS	2500	3000	3500

MINIMUM SIZE FOOTINGS

SECTION R403.1.1

MINIMUM SIZE FOR CONCRETE AND MASONRY FOOTINGS SHALL BE AS SET FORTH IN TABLE R403.1 (REFER TO 2015 MRC SECTION THAT APPLIES). THE FOOTING WIDTH SHALL BE BASED ON R401.4.1. SPREAD FOOTINGS SHAL BE AT LEAST 6" IN THICKNESS. FOOTING PROJECTIONS SHALL BE AT LEAST 2" AND SHALL NOT EXCEED THE THICKNESS OF THE FOOTING.

FOUNDATION ANCHORAGE

SECTION R403.1.6

THE WOOD SOLE PLATE AT EXTERIOR WALLS ON MONOLITHIC SLABS AND WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH ANCHOR BOLTS SPACED A MAXIMUM OF 6 FEET ON CENTER. ANCHOR BOLTS SHALL ALSO BE LOCATED WITHIN 12 INCHES FROM THE ENDS OF EACH PLATE SECTION. BOLTS SHALL BE AT LEAST 1/2 INCHES IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7 INCHES IN MASONRY OF CONCRETE. INTERIOR BEARING WALL SOLE PLATE ON MONOLITHIC SLAB FOUNDATON SHALL BE POSITIVELY ANCHORED WITH APPROVED FASTENERS. A NUT AND WASHER SHALL BE TIGHTENED ON EACH BOLT TO THE PLATE.

EXCEPTIONS: FOUNDATION ANCHOR STRAPS, SPACE AS REQUIRED TO PROVIDE EQUIVELENT ANCHORAGE TO 1/2 INCH DIAMETER ANCHOR BOLTS.

SECTION R404.1.6 HEIGHT OF A FOUNDATION WALL ABOVE FINISHED GRADE: CONCRETE AND MASONRY FOUNDATION WALLS SHALL EXTEND ABOVE THE FINISHED GRADE ADJACENT TO THE FOUNDATION AT ALL POINTS A MINIMUM OF 4 INCHES WHERE MASONRY VENEER IS USED AND A MINIMUM OF 6 INCHES ELSEWHERE.

WOOD BEARING

SECTION 502.6

THE END OF EACH JOISTS, BEAM AND GIRDER SHALL HAVE NOT LESS THAN 1 1/2" INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON MASONRY OR CONCRETE EXCEPT WHERE SUPPORTED ON A 1 INCH BY 4 INCH RIBBON STRIP AND NAILED TO THE ADJACENT STUD OR BY THE USE OR APPROVED JOISTS HANGERS.

SECTION R502.6.1 FLOOR SYSTEMS: JOISTS FRAMING FROM OPPOSITE SIDES OVER A BEARING SUPPORT SHALL LAP A MINIMUM OF 3 INCHES AND SHALL BE NAILED TOGETHER WITH A MINIMUM THREE FACE NAILS A WOOD OR METAL SPLICE WITH STRENGTH EQUAL TO OR GREATER THAN THAT PROVIDED BY THE NAILED LAP IS PERMITTED

SECTION R502.6.2 JOISTS FRAMING. JOISTS FRAMING INTO THE SIDE OF A WOOD GIRDER SHALL BE SUPPORTED BY APPROVED FRAMING ANCHORS OR ON LEDGER STRIPS NOT LESS THAN NOMINAL 2 INCHES BY 2"

CONCRETE FLOORS

SECTION R506.1

CONCRETE SLAB ON GROUND FLOORS SHALL BE A MINIMUM 3.5 INCHES THICK (FOR EXPANSIVE SOILS, SEE SECTION R403.1.8). THE COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE AS SET FORTH IN SECTION R402.1

SECTION R506.2....BASE: A 4" THICK BASE OF COURSE CONSISTING OF CLEAN GRADED SAND, GRAVEL, CRUSHED STONE OR CRUSHED BLAST FURNACE SLAG PASSING A 2" SIEVE SHALL BE PLACED ON PREPARED SUBGRADE WHEN THE SLAB IS BELOW GRADE MIN. 6 MILL RADON AND VAPOR BARRIER PLACED BETWEEN SLAB AND BASE IN COMPLIANCE WITH CODE.

TOP PLATE

SECTION R602.3.2

WOOD STUD WALL SHALL BE CAPPED WITH A DOUBLE TOP PLATE INSTALLED TO PROVIDE OVERLAPPING A CORNERS AND INTERSECTIONS WITH BEARING PARTITIONS. END JOINTS IN TOP PLATED SHALL BE OFFSET AT LEAST 24 INCHES.

R502.8.2 ENGINEERED WOOD PRODUCTS. CUTS, NOTCHES AND HOLES BORED IN LAMINATED VENEER LUMBER, GLUE LAMINATED MEMBER ROI-JOISTS ARE NOT PERMITTED UNLESS THE EFFECTS OF SUCH PENETRATION ARE SPLEGIFICALLY CONSIDERED IN THE DESIGN OF THE MEMBER.

FIRE-BLOCKING

SECTION R302.11

FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS BOTH VERTICAL AND HORIZONTAL AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIRE-BLOCKING SHALL BE PROVIDED IN WOOD FRAMING CONSTRCTION IN THE FOLLOWING LOCATIONS:

1. IN CONCEALED SAPCED OF STUD WALL AND PEERTITIONS, INCLUDING FURRED SLPACES, AT THE CEILING AND FLOOR LEVEL AND AT 10 FOOT INTERVALS BOTH VERTICALLY AND HORIAZONTALLY. BATTS OR BLANKETS ON MINERAL OR GLASS FIBER OR OTHER APPROVED NON RIGID MATERIALS SHALL BE ALLOWED AS FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS.
2. AT ALL INTERSECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, AND COVE CEILINGS.
3. IN CONCEALED SPACES BETWEEN STAIR STRINGER AT THE TOP AND BOTTOM OF RUNS. ENCLOES SPACES UNDER STAIRS SHALL COMPLY WITH SECTION R314.8
4. AT OPENINGS AROUND VENTS, PIPES, AND DUCTS AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION.
5. FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES.
6. FIREBLOCKING OF CORNICES OF A TWO FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPERATION.

STAIRWAY DETAIL

SECTION 311.7

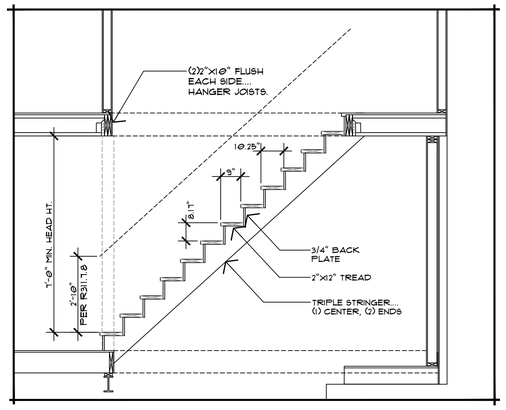
R311.7.1 WIDTH: STAIRWAYS SHALL NOT BE LESS THAN 36" IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQUIRED HEADROOM HEIGHT. HANDRAILS SHALL NOT PROJECT MORE THAN 4.5 INCHES ON EITHER SIDE OF THE STAIRWAY AND THE MINIMUM CLEAR WIDTH OF THE STAIRWAY AT AND BELOW THE HANDRAIL HEIGHT, INCLUDING TREADS AND LANDINGS, SHALL NOT BE LESS THAN 31.5 INCHES WHERE A HANDRAIL IS INSTALLED ON ONE SIDE AND 27 INCHES WHERE HANDRAILS ARE PROVIDED ON BOTH SIDES.

R311.7.2 HEADROOM: THE MINIMUM HEADROOM IN ALL PARTS OF THE STAIRWAY SHALL NOT BE LESS THAN 6 FEET 8 INCHES MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM.

R311.7.4.1 RISER HT: THE MINIMUM RISER HT SHALL BE 8.25". THE RISER SHALL BE MEASURED VERTICALLY BETWEEN LEADING EDGES OF THE ADJACENT TREADS. THE GREATEST RISER HEIGHT WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEDD THE SMALLEST BY MORE THAN 3/8 INCH.

R311.7.4.2 TREAD DEPTH: THE MINIMUM TREAD SHALL BE 9 INCHES. THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF THE ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8". WIDER TREAD DEPTHS SHALL HAVE A MINIMUM TREAD DEPTH OF 10" MEASURED AT A POINT 12 INCHES FROM THE SIDE WHERE THE TREADS ARE NARROWER. WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 6" AT ANY POINT.

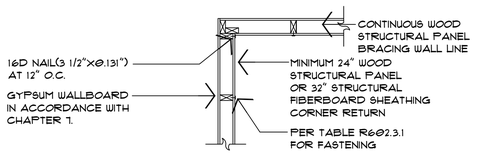
311.7.8.1 HANDRAIL HEIGHT: HEIGHT MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING, OR FINISH SURFACE OF RAMP SLOPING SHALL BE NOT LESS THAN 34" AND NOT MORE THAN 38"



WALL BRACING REQUIREMENTS

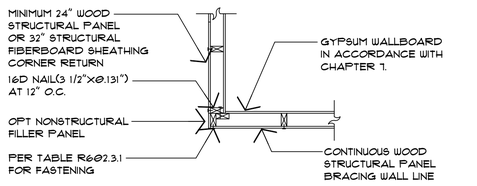
SECTION 602.10

BUILDINGS SHALL BE BRACED IN ACCORDANCE WITH THIS SECTION. WHERE A BUILDING, OR A PORTION THEREOF, DOES NOT COMPLY WITH ONE OF MORE BRACING REQUIREMENTS IN THIS SECTION, THOSE PORTIONS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH SECTION R301.1



INSIDE CORNER DETAIL

SECTION R602.10.4.4(1)

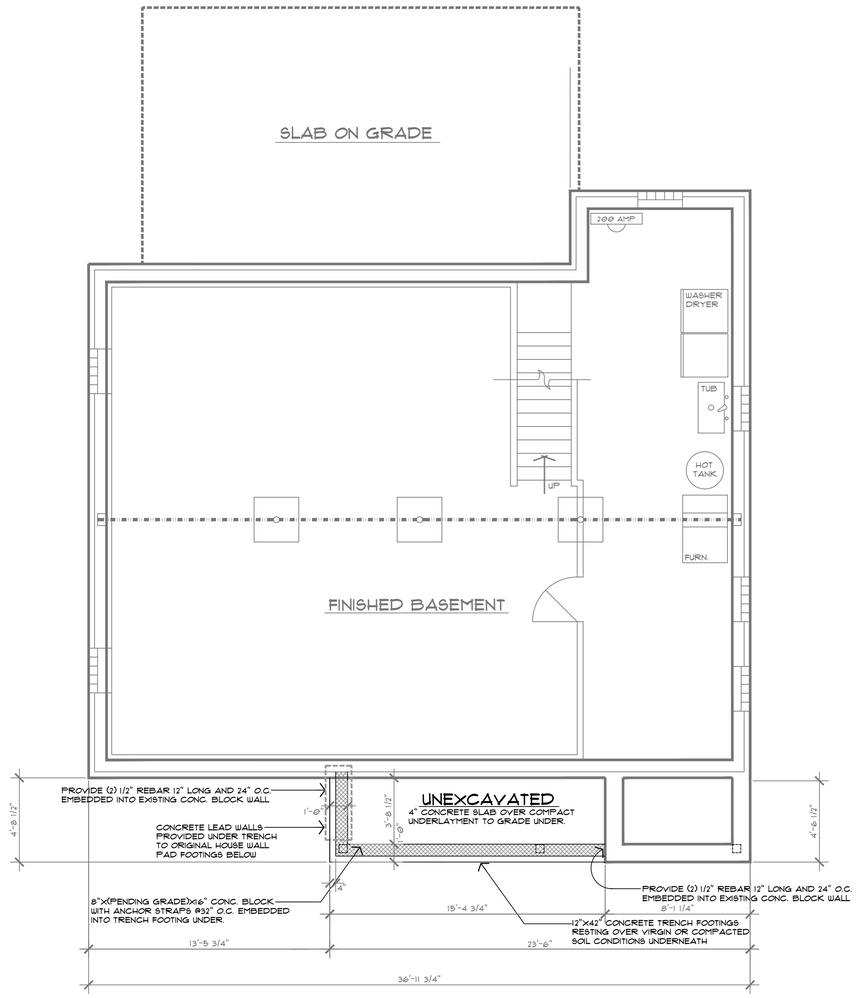


OUTSIDE CORNER DETAIL

SECTION R602.10.4.4(1)

2015 MICHIGAN ENERGY CODE

AS OF FEBRUARY 8, 2016...THE NEW 2015 IECC MODEL ENERGY CODE WAS ADOPTED BY THE STATE OF MICHIGAN. ALL BUILDERS TO COMPLY WITH ALL SECTIONS OF THE NEW CODE BY FILING OUT THE REQUIRED REZCHECK WORKSHEET. ALL SECTIONS OF THE WORKSHEET MUST BE COMPLETED TO SHOW COMPLIANCE PER THE NEW 2015 MODEL ENERGY CODE.



PROPOSED FOUNDATION

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

GENERAL NOTES:

- NOTE A: ALL FOOTINGS SHALL BE PLACED ON UNDISTURBED SOIL.
- NOTE B: SLAB, FOOTING AND WALL COMPRESSIVE STRENGTH SHALL BE 3000 P.S.I. @ 28 DAYS.
- NOTE C: STEEL REINFORCING BARS SHALL BE A.S.T.M. GRADE 60
- NOTE D: ALL STEEL FABRICATION AND ERECTION SHALL MEET A.I.S.C. CODE.

** NOTE...RIGHTS TO THIS HOME PLAN BELONG EXCLUSIVELY TO HRH DESIGN GROUP... AMICHIGAN BASED CORPORATION FOR A ONE TIME BUILD ONLY. ANY ATTEMPT ANY THIRD PARTY OTHER THAT THOSE LISTED WITHOUT WRITTEN CONCENT FROM BOTH PARTIES WILL RENDER THAT PARTY LEGALLY LIABLE IN ACCORDANCE WITH CURRENT COPYRIGHT LAWS.

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HRH Design Group Inc.
"Designers of Extraordinary Custom Homes"
P.O. BOX 7026, Bloomfield Hills Mi. 48302
(248)-494-1544

DATE:	PERMIT-BUILD	DESCRIPTION OF PLAN:
JUNE 24, 2025	BUILD PLANS	PERCENT REVIEW
JULY 24, 2025	BUILD PLANS	REVISED W/ REV PACKAGE
FEB. 23, 2026	BUILD PLANS	REVISED PER TOWNSHIP REVIEW

PROJECT DESCRIPTION:
11788 BOWERS STREET
BIRMINGHAM MI. 48009

SHEET TITLE:
FOUNDATION PLAN

DATE OF PLAN:
FEB. 23, 2026

JOB NUMBER:
0630-25

PAGE NUMBER:
3 OF 8

SHEET:
A-3

2015 MICHIGAN RESIDENTIAL CODE

ADOPTED INTO LAW BY THE STAE OF MICHIGAN FEBRUARY 8, 2016, THIS CODE IS TO BE ADHERED TO BY THE BUILDER AND ALL TRADES WHO WORK ON SAID PLAN. CERTAIN SECTIONS HAVE BEEN PULLED OUT AND DISPLAYED BEFORE YOU. HOWEVER, THE FOLLOWING ADDENDUM "DOES NOT" LAYOUT THE 2015 MRC CODE IN ITS ENTIRETY. IT IS THE RESPONSIBILITY OF ALL APPLICABLE PARTIES TO BECOME AWARE OF THE NEWLY ADOPTED CODE, A COPY OF THE 2015 MRC CODE CAN BE BOUGHT FROM THE STATE OF MICHIGAN. SEE BUILDER OR ARCHITECT FOR MORE DETAILS.

FIRE-BLOCKING

SECTION R302.11

FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS BOTH VERTICAL AND HORIZONTAL AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIRE-BLOCKING SHALL BE PROVIDED IN WOOD FRAMING CONSTRCTION IN THE FOLLOWING LOACTIONS:

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4. AT OPENINGS AROUND VENTS, PIPES, AND DUCTS AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION.
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6. FIREBLOCKING OF CORNICES OF A TWO FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPERATION.

DRAFTSTOPPING REQUIREMENTS

SECTION R302.12

WHEN THER IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR /CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA FO THE CONCEALED SPACE DOES NOT EXCEED 1000 SQUARE FEET. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS. WHERE THE ASSEMBLY IS ENCLOSED BY A FLOOR MEMBRANE ABOVE AND A CEILING MEMBRANE BELOU DRAFTSTOPPING SHALL BE PROVIDED IN FLOOR/CEILING ASSEMBLIES UNDER THE FOLLOWING CIRCUMSTANCES:

1. CEILING IS SUSPENDED UNDER THE FLOOR FRAMING.
2. FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN WEB OR PERFORATED MEMBERS

GARAGE SEPERATIONS

SECTION R302.6

R309.2 SEPERATION REQUIRED: THE GARAGE SHALL BE SEPERATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 1/2" GYPSUM BOARD APPLIED TO THE GARAGE SIDE. GARAGES BENEATH HABITABLE ROOMS SHALL BE SEPERATED FROM ALL HABITABLE ROOMS BY NOT LESS THAN 5/8" TYPE X GYPSUM BOARDS OR EQUIVELANT. WHERE THE THE SEPERATION IS A FLOOR-CEILING ASSEMBLY, THE STRUCTURE SUPPORTING THE SEPERATION SHALL ALSO BE PROTECTED BY NOT LESS THAN 1/2" BOARD OR EQUIVELANT.

R309.1 OPENING PROTECTION: OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED, OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 1 3/8" INCHES IN THICKNESS, SOLID OR HONEYCOMB CORE STELL DOORS NOT LESS THAN 1 3/8" THICK, OR 20 MINUTE FIRE-RATED DOORS.

WOOD BEARING

SECTION 502.6

THE END OF EACH JOISTS, BEAM AND GIRDER SHALL HAVE NOT LESS THAN 1 1/2" INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON MASONRY OR CONCRETE EXCEPT WHERE SUPPORTED ON A 1 INCH BY 4 INCH RIBBON STRIP AND NAILED TO THE ADJACENT STUD OR BY THE USE OR APPROVED JOISTS HANGERS.

SECTION R502.6.1 FLOOR SYSTEMS: JOISTS FRAMING FROM OPPOSITE SIDES OVER A BEARING SUPPORT SHALL LAP A MINIMUM OF 3 INCHES AND SHALL BE NAILED TOGETHER WITH A MINIMUM THREE FACE NAILS A WOOD OR METAL SPLICE WITH STRENGTH EQUAL TO OR GREATER THAN THAT PROVIDED BY THE NAILED LAP IS PERMITTED

SECTION R502.6.2 JOISTS FRAMING. JOISTS FRAMING INTO THE SIDE OF A WOOD GIRDER SHALL BE SUPPORTED BY APPROVED FRAMING ANCHORS OR ON LEDGER STRIPS NOT LESS THAN NOMINAL 2 INCHES BY 2"

TOP PLATE

SECTION R602.3.2

WOOD STUD WALL SHALL BE CAPPED WITH A DOUBLE TOP PLATE INSTALLED TO PROVIDE OVERLAPPING A CORNERS AND INTERSECTIONS WITH BEARING PARTITIONS. END JOINTS IN TOP PLATED SHALL BE OFFSET AT LEAST 24 INCHES.

R502.8.2 ENGINEERED WOOD PRODUCTS. CUTS, NOTCHES AND HOLES BORED IN LAMINATED VENEER LUMBER, GLUE LAMINATED MEMBER RO I-JOISTS ARE NOT PERMITTED UNLESS THE EFFECTS OF SUCH PENETRATION ARE SPLECIFICALLY CONSIDERED IN THE DESIGN OF THE MEMBER.

EXTERIOR WINDOWS

SECTION R609.1

R613.2 WINDOW SILLS: IN DUELLING UNITS, WHERE THE OPENING OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72" ABOVE THE FINISH GRADE OR SURFACE BELOW THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE A MINIMUM OF 24" ABOVE THE FINISHED FLOOR OF THE ROOM IN WHICH THE WINDOW IS LOCATED. GLAZING BETWEEN THE FLOOR AND 24 INCHES SHALL BE FIXED AND HAVE OPENINGS THROUGH WHICH A 4" DIAMETER SPHERE CANNOT PASS.

EXCEPTIONS:
1. WINDOWS WHERE OPENINGS WILL NOT ALLOW A 4" DIAMETER SPHERE TO PASS THROUGH THE OPENING WHEN IT IS IN ITS LARGEST OPENED POSITION.

2. OPENINGS THAT ARE PROVIDED WITH WINDOW GUARDS THAT COMPLY WITH ASTM F 2006 OR F2090

HABITABLE ROOMS

SECTION 303.1

ALL HABITABLE ROOMS SHALL BE PROVIDED WITH AGGREGATE GLAZING AREA OF NOT LESS THAN 8 PERCENT OF THE FLOOR AREA OF SUCH ROOMS. NATURAL VENTING SHALL BE THRU DOORS, LOUVERS, WINDOWS OR OTHER APPROVED OPENINGS TO THE OUTSIDE AIR. SUCH OPENINGS SHALL BE PROVIDED WITH READY ACCESS OR SHALL OTHERWISE BE READILY CONTROLLABLE BY THE BUILDING OCCUPANTS. THE MINIMUM OPENABLE AREA TO THE OUTDOORS SHALL BE 4 PERCENT OF THE FLOOR AREA BEING VENTILATED.

MEANS OF EGRESS

SECTION 311.1

R311.3 HALLWAYS: THE MINIMUM WIDTH OF A HALLWAY SHALL BE NOT LESS THAN 3 FEET.

R311.4.2 DOOR TYPE AND SIZE: THE REQUIRED EXIT DOOR SHALL BE A SIDE HINGED DOOR NOT LESS THAN 3 FEET IN WIDTH AND 6 FEET 8 INCHES IN HEIGHT. OTHER EXTERIOR HINGED DOORS SHALL NOT BE LESS THAN 24 INCHES IN WIDTH AND 6 FEET 6 INCHES IN HEIGHT.

R311.4.2.1 INTERIOR DOORS: SHALL NOT BE LESS THAN 24" IN WIDTH AND 6 FEET 6 INCHES IN HEIGHT.

EMERGENCY ESCAPE

SECTION R.310.1

BASEMENTS WITH HABITABLE SPACE AND EVERY SLPEEPING ROOM SHALL AHVE AT LEAST ONE OPENABLE EMERGENCY ESCAPE AND RESCUE WINDOW OR EXTERIOR DOOR OPENING FOR EMERGENCY ESCAPE AND RESCUE. WHERE OPENINGS ARE PROVIDED AS A MEANS OF ESCAPE AND RESCUE THEY SHALL HAVE A SILL HGT OF NOT MORE THAN 44 INCHES ABOVE THE FLOOR. WHERE A DOOR OPENING HAVING A THRESHOLD BELOW THE ADJACENT GROUND ELEVATION SERVES AS AN EMERGENCY ESCAPE AND RESCUE OPENING AND IS PROVIDED WITH A BULKHEAD ENCLOSURE, THE ENCLOSURE SHALL COMPLY WITH SECTION R310.3. THE NET CLEAR OPENING DIMENSIONS REQUIRED BY THIS SECTION SHALL BE OBTAINED BY THE NORMAL OPERATION OF THE WINDOW OR DOOR OPENING FOR THE INSIDE. ESCAPE AND RESCUE WINDOW OPENINGS WITH A FINISHED SILL HEIGHT BELOW THE ADJACENT GROUND ELEVATION SHALL BE PROVIDED WITH A WINDOW WELL IN ACCORDANCE WITH SECTION R310.2

SECTION R310.1.1 MINIMUM OPENING AREA: ALL EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET.
SECTION R310.1.2 MINIMUM OPENING HEIGHT: THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 24 INCHES.
SECTION R310.1.3 MINIMUM OPENING WIDTH: THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20 INCHES.

SMOKE ALARMS

SECTION R314.1

SINGLE AND MULTI STATION SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:

1. IN EACH SLEEPING ROOM
2. OUTSIDE OF EACH SEPERATE SLEEPING AREA MAXIMUM TEN FOOT FROM THE BEDROOM DOOR.
3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS, AND CELLARS, BUT NOT CRAWL SPACES AND UNINHABITABE SPACES.

WHEN MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHN AN INDIVIDUAL DUELLING UNIT THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH INTERVENING DOORS CLOSED.

ALL SMOKE ALARMS SHALL BE INSTALLED IN ACCORDANCE WITH PROVISIONS OF THIS CODE AND HOUSEHOLD FIRE WARNNG EQUIPMENT PROVISIONS OF NFPA 72

CARBON MONOXIDE DETECTORS

SECTION 315.1

FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE DETECTOR SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VACINITY OF THE BEDROOMS DWELLING UNITS WITHING WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DUELLING UNITS THAT HAVE ATTACHED GARAGES.

TOILET,BATH, SHOWER

SECTION R307

R307.2 BATHTUB AND SHOWER SPACES : BATHTUB AND SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL

WATER RESISTANT BACKING BOARD

SECTION R702.3.7

R702.3.8 WATER RESISTANT GYPSUM BACKING BOARD: GYPSUM BOARD USED AS THE BASE OR BACKER FOR ADHESIVE APPL OF CERAMIC TILE OR OTHER REQUIRED NON- ABSORBANT FINISH MATERIAL SHALL CONFORM TO ASTM C 630 OR C 1178. USE OF WATER RESISTANT GYPSUM BOARD SHALL BE PERMITTED ON CEILINGS WHERE FRAMING SPACING DOES NOT EXCEED 12" O.C. FOR 1/2" THICK AND 16" O.C. FOR 5/8" THICK GYPSUM BOARD.

R702.3.8.1 LIMITATIONS: WATER RESISTANT GYPSUM BACKING BOARD SHALL NOT BE USED WHERE THERE WILL BE DIRECT EXPOSURE TO WATER, OR IN AREAS SUBJECT TO CONTINUOUS HIGH HUMIDITY.

ATTIC ACCESS

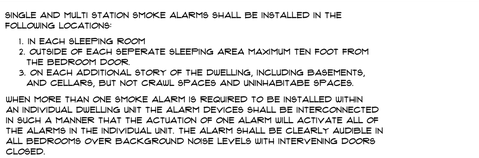
SECTION R807.1

IN BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION, AN ATTIC ACCESS OPENING SHALL BE PROVIDED TO ATTIC AREAS THAT EXCEED 30 SQUARE FEET AND HAV A VERTICAL HEIGHT OF 30 INCHES OR GREATER. THE ROUGH FRAMED OPENING SHALL NOT BE LESS THAN 22 INCHES BY 30 INCHES AND SHALL BE LOCATED IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. A 30 INCH MINIMUM UNOBSTRUCTED HEADROOM IN THE ATTIC SPACE SHALL BE PROVIDED AT SOME POINT ABOVE THE ACCESS OPENING. SEE SECTION M1305.1.3 FOR ACCESS REQUIREMENTS WHERE MECHANICAL EQUIPEMENT IS LOCATED IN ATTICS.

WALL BRACING REQUIREMENTS

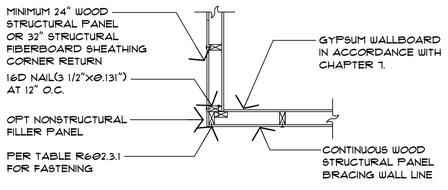
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INSIDE CORNER DETAIL

SECTION R602.10.4.4(1)

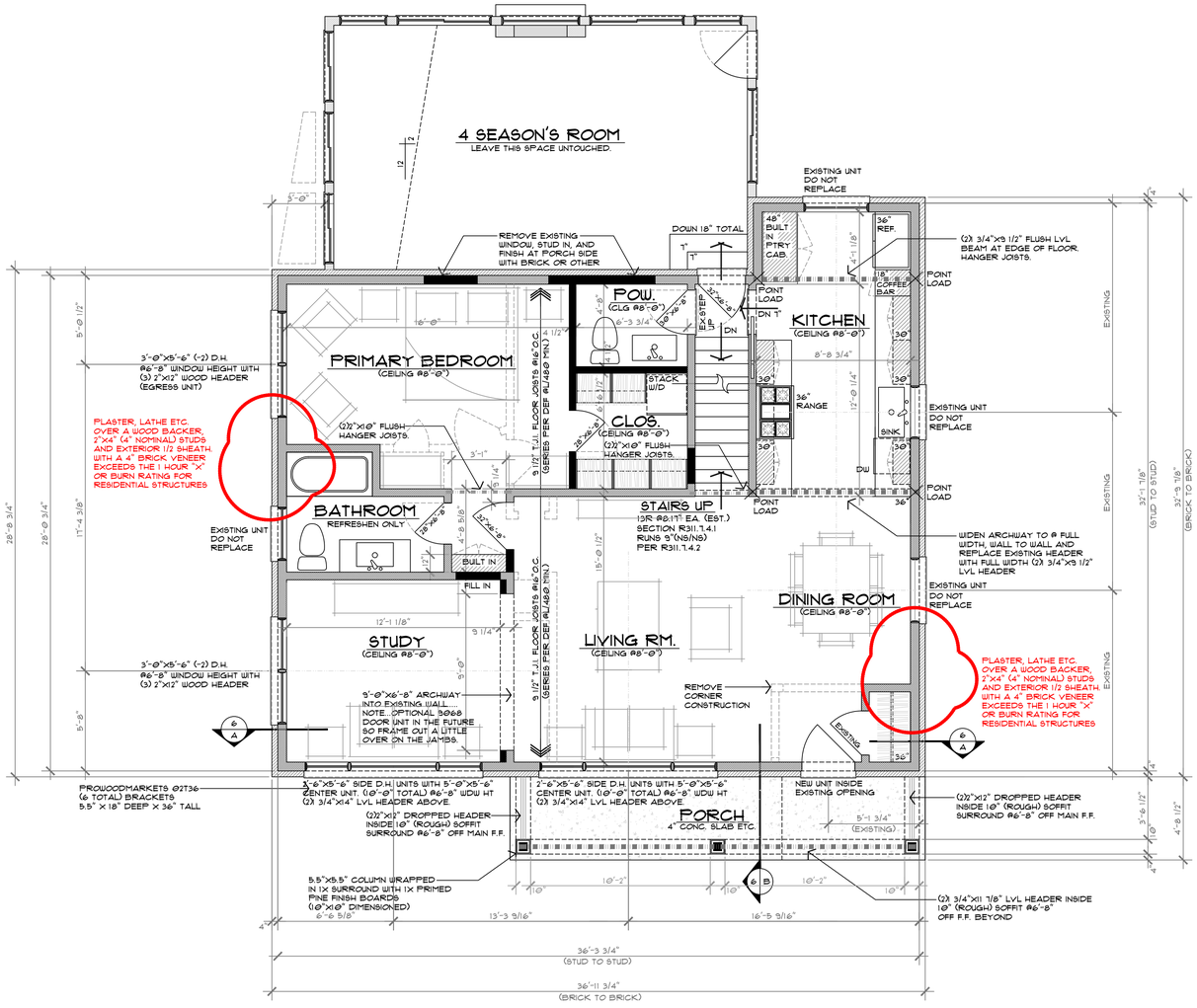


OUTSIDE CORNER DETAIL

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PROPOSED MAIN LEVEL

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

1103.57 SQUARE FEET - THIS LEVEL ONLY

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DATE:	PERMIT-BUILD	DESCRIPTION OF PLAN:
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JULY 25, 2025	BUILD PLANS	REVISED LINDSAY PACKAGE
FEB. 23, 2026	BUILD PLANS	REVISED PER TOWNSHIP REVIEW

PROJECT DESCRIPTION:
11788 BOWERS STREET
BIRMINGHAM MI. 48009

SHEET TITLE:
MAIN LEVEL PLAN

DATE OF PLAN:
FEB. 23, 2026

JOB NUMBER:
0630-25

PAGE NUMBER:
4 OF 8

SHEET:
A-4

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SECTION 311.1

R311.3 HALLWAYS: THE MINIMUM WIDTH OF A HALLWAY SHALL BE NOT LESS THAN 3 FEET.

R311.4.2 DOOR TYPE AND SIZE: THE REQUIRED EXIT DOOR SHALL BE A SIDE HINGED DOOR NOT LESS THAN 3 FEET IN WIDTH AND 6 FEET 8 INCHES IN HEIGHT. OTHER EXTERIOR HINGED DOORS SHALL NOT BE LESS THAN 24 INCHES IN WIDTH AND 6 FEET 6 INCHES IN HEIGHT.

R311.4.2.1 INTERIOR DOORS: SHALL NOT BE LESS THAN 24" IN WIDTH AND 6 FEET 6 INCHES IN HEIGHT.

EMERGENCY ESCAPE

SECTION R.310.1

BASEMENTS WITH HABITABLE SPACE AND EVERY SLPEEPING ROOM SHALL AHVE AT LEAST ONE OPENABLE EMERGENCY ESCAPE AND RESCUE WINDOW OR EXTERIOR DOOR OPENING FOR EMEERGENCY ESCAPE AND RESCUE. WHERE OPENINGS ARE PROVIDED AS A MEANS OF ESCAPE AND RESCUE THEY SHALL HAVE A SILL HGT OF NOT MORE THAN 44 INCHES ABOVE THE FLOOR. WHERE A DOOR OPENING HAVING A THRESHOLD BELOW THE ADJACENT GROUND ELEVATION SERVES AS AN EMERGENCY ESCAPE AND RESCUE OPENING AND IS PROVIDED WITH A BULKHEAD ENCLOSURE, THE ENCLOSURE SHALL COMPLY WITH SECTION R310.3. THE NET CLEAR OPENING DIMENSIONS REQUIRED BY THIS SECTION SHALL BE OBTAINED BY THE NORMAL OPERATION OF THE WINDOW OR DOOR OPENING FOR THE INSIDE. ESCAPE AND RESCUE WINDOW OPENINGS WITH A FINISHED SILL HEIGHT BELOW THE ADJACENT GROUND ELEVATION SHALL BE PROVIDED WITH A WINDOW WELL IN ACCORDANCE WITH SECTION R310.2

SECTION R310.1.1 MINIMUM OPENING AREA: ALL EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.1 SQUARE FEET.

SECTION R310.1.2 MINIMUM OPENING HEIGHT: THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 24 INCHES.

SECTION R310.1.3 MINIMUM OPEINING WIDTH: THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20 INCHES.

TOILET,BATH, SHOWER

SECTION R307

R307.2 BATHTUB AND SHOWER SPACES : BATHTUB AND SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL

WATER RESISTANT BACKING BOARD

SECTION R702.3.7

R702.3.8 WATER RESISTANT GYPSUM BACKING BOARD: GYPSUM BOARD USED AS THE BASE OR BACKER FOR ADHESIVE APPL OF CERAMIC TILE OR OTHER REQUIRED NON- ABSORBANT FINISH MATERIAL SHALL CONFORM TO ASTM C 630 OR C 1178. USE OF WATER RESISTANT GYPSUM BOARD SHALL BE PERMITTED ON CEILINGS WHERE FRAMING SPACING DOES NOT EXCEED 12" O.C. FOR 1/2" THICK AND 16" O.C. FOR 5/8" THICK GYPSUM BOARD.

R702.3.8.1 LIMITATIONS: WATER RESISTANT GYPSUM BACKING BOARD SHALL NOT BE USED WHERE THERE WILL BE DIRECT EXPOSURE TO WATER, OR IN AREAS SUBJECT TO CONTINUOUS HIGH HUMIDITY.

SMOKE ALARMS

SECTION R314.1

SINGLE AND MULTI STATION SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:

1. IN EACH SLEEPING ROOM
2. OUTSIDE OF EACH SEPERATE SLEEPING AREA MAXIMUM TEN FOOT FROM THE BEDROOM DOOR.
3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS, AND CELLARS, BUT NOT CRAWL SPACES AND UNINHABITABE SPACES.

WHEN MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH INTERVENING DOORS CLOSED.

ALL SMOKE ALARMS SHALL BE INSTALLED IN ACCORDANCE WITH PROVISIONS OF THIS CODE AND HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72

CARBON MONOXIDE DETECTORS

SECTION 315.1

FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE DETECTOR SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VACINITY OF THE BEDROOMS DWELLING UNITS WITHNS WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES.

ATTIC ACCESS

SECTION R807.1

IN BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION, AN ATTIC ACCESS OPENING SHALL BE PROVIDED TO ATTIC AREAS THAT EXCEED 30 SQUARE FEET AND HAV A VERTICAL HEIGHT OF 30 INCHES OR GREATER. THE ROUGH FRAMED OPENING SHALL NOT BE LESS THAN 22 INCHES BY 30 INCHES AND SHALL BE LOCATED IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. A 30 INCH MINIMUM UNOBSTRUCTED HEADROOM IN THE ATTIC SPACE SHALL BE PROVIDED AT SOME POINT ABOVE THE ACCESS OPENING. SEE SECTION M1305.1.3 FOR ACCESS REQUIREMENTS WHERE MECHANICAL EQUIPEMENT IS LOCATED IN ATTICS.

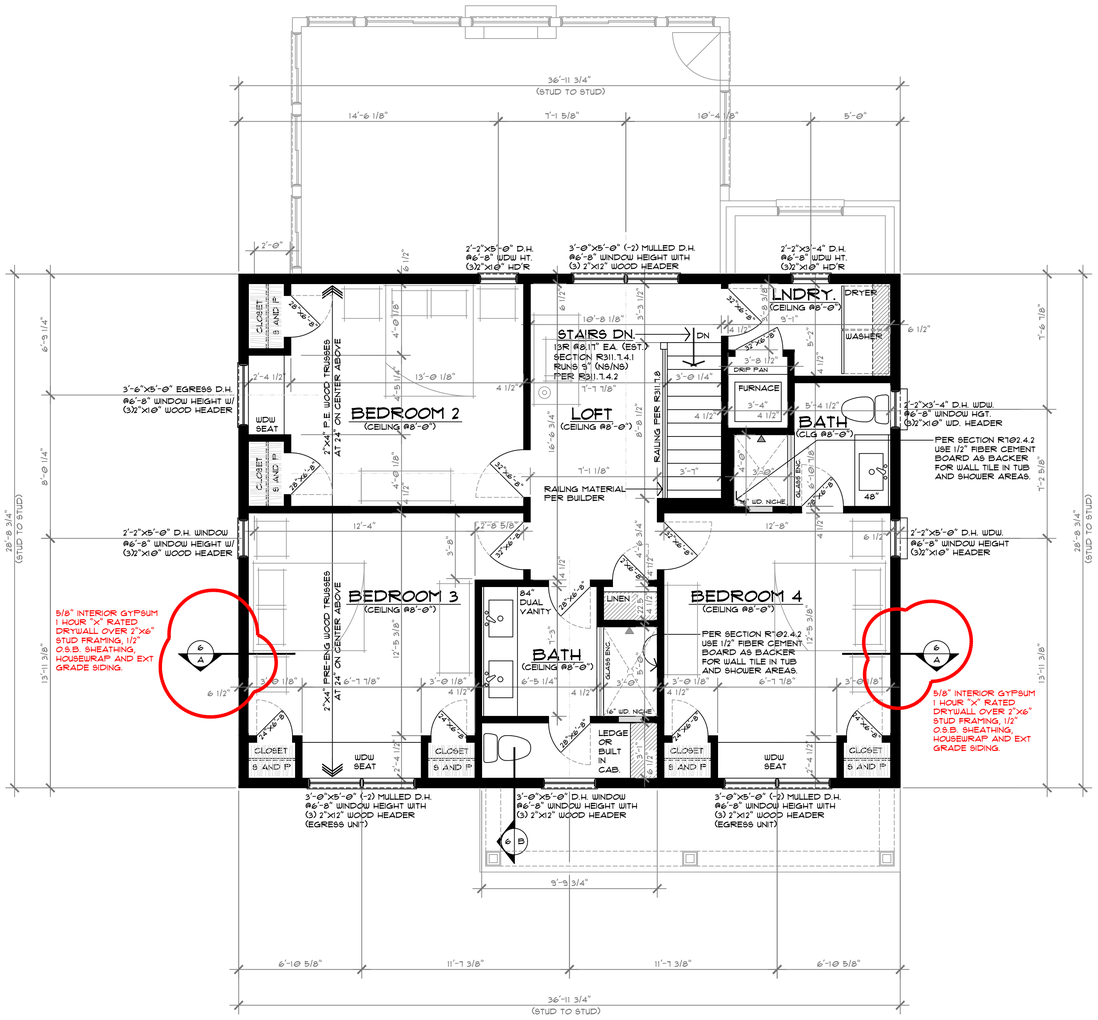
SHOWER-NICHE SPECIFICATIONS

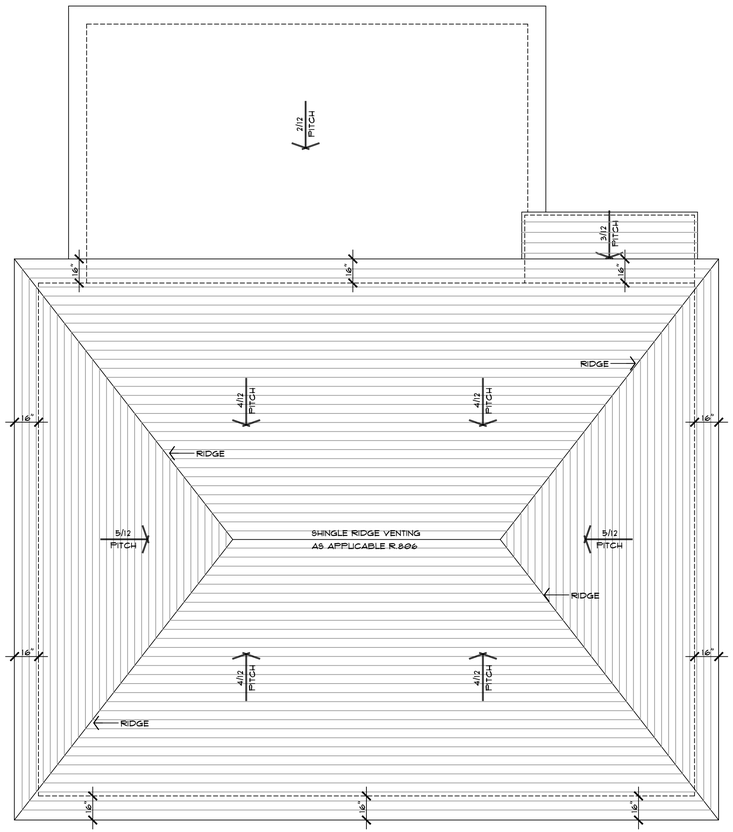
FOR ALL SHOWER NICHES, FRAME THE BOTTOM OF EACH NICHE 32" OFF THE FLOOR WITH A TOP OF THE NICHE @60" OFF FLOOR. LEAVE DUAL STUDS CUT TO LENGTH IN NICHE FOR TILE INSTALLER TO USE TO FRAME CORRECT BOTTOM AND TOP OF NICHE

1) PRIMARY BATH: (2) NICHES, PLUMBING WALL, 12" EACH WITH 12" BETWEEN

2015 MICHIGAN ENERGY CODE

AS OF FEBRUARY 8, 2016...THE NEW 2015 IECC MODEL ENERGY CODE WAS ADOPTED BY THE STATE OF MICHIGAN. ALL BUILDERS TO COMPLY WITH ALL SECTIONS OF THE NEW CODE BY FILING OUT THE REQUIRED REZCHECK WORKSHEET. ALL SECTIONS OF THE WORKSHEET MUST BE COMPLETED TO SHOW COMPLIANCE PER THE NEW 2015 MODEL ENERGY CODE.





PROPOSED UPPER LEVEL

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

1062.38 SQUARE FEET - THIS LEVEL ONLY

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ROOF PLAN

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

GENERAL NOTATION....

1. DIMENSIONS SHOWN ARE TO THE EXT SIDE OF THE SHEATHING AND DOES NOT REFLECT MASONRY.
2. ALL BATH VENTS (NOT SHOWN ON PLAN) SHALL TERMINATE IN ROOF. IF NOT POSSIBLE SEE HRH SITE MANAGER FOR PROPER LOCATION.
3. ALL CHIMNEY SADDLES SHOULD EXTEND 6" BEYOND FINISHED CHIMNEY.
4. METAL CAP AND VENT...SEE BUILDER FOR MANUFACTURERS INSTALLATION SPECIFICATIONS
5. ROOFING SHINGES ARE "LANDMARK" GEORGETOWN GARY LANDMARK PRO

TRUSS DESIGN DRAWINGS

SECTION R802.10.1

TRUSS DESIGN DRAWINGS PREPARED IN CONFORMANCE WITH SECTION 802.10.1 SHALL BE PROVIDED TO THE BUILDING OFFICIAL AND APPROVED PRIOR TO INSTALLATION. TRUSS DESIGN DRAWINGS SHALL INCLUDE, AT A MINIMUM, THE INFORMATION SPECIFIED BELOW. TRUSS DESIGN DRAWINGS SHALL BE PROVIDED WITH THE SHIPMENT OF TRUSSES DELIVERED TO THE JOB SITE.

1. SLOPE OR DEPTH, SPAN AND SPACING
2. LOCATION OF ALL JOINTS
3. REQUIRED BEARING WIDTHS
4. DESIGN LOADS AS APPLICABLE.
   - 4.1 TOP CHORD LIVE LOAD (INCLUDING SNOW LOADS)
   - 4.2 TOP CHORD LIVE LOAD
   - 4.3 BOTTOM CHORD LIVE LOAD
   - 4.4 BOTTOM CHORD DEAD LOAD
   - 4.5 CONCENTRATED LOADS AND THEIR POINTS OF APPLICATION
   - 4.6 CONTROLLING WIND AND EARTHQUAKE LOADS
5. ADJUSTMENTS TO LUMBER AND JOINT CONNECTOR DESIGN VALUES FOR CONDITIONS OF USE.
6. EACH REACTION FORCE AND DIRECTION
7. JOINT CONNECTOR TYPE AND DESCRIPTION (THICKNESS, SIZE AND GUAGE) AND THE DIMENSIONED LOCATION OF EACH JOINT CONNECTION EXCEPT WHERE SYMETRICALLY LOCATED RELATIVE TO THE JOINT INTERFACE
8. LUBER SIZE, SPECIES AND GRADE FOR EACH MEMBER
9. CONNECTION REQUIREMENTS FOR:
   - 9.1 TRUSS TO TRUSS GIRDER
   - 9.2 TRUSS PLY TO PLY
   - 9.3 FIELD SPLLICES
10. CALCULATED DEFLECTION RATIO AND OR MAXIMUM DECRIPTION FOR LIVE LOAD AND TOTAL LOAD
11. MAXIMUM AXIAL COMPRESSION FORCES IN THE TRUSS MEMBERS TO ENABLE CONECTIONS AND ANCHORAGE OF THE PERMANENT CONTINUOUS LATERAL BRACING. FORCES SHALL BE SHOWN ON THE TRUSS DESIGN DRAWINGS OR ON SUPPLEMENTAL DOCUMENTS.
12. REQUIRED PERMANENT TRUSS MEMBER BRACING LOCATIONS

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(248)-494-1544

DESCRIPTION OF PLAN:	DATE:
PERMIT-BUILD	
PRICE CLIENT PACKAGE	JUNE 24, 2025
REVISED IN BOU PACKAGE	JULY 24, 2025
REVISED PER TOWNSHIP	FEB. 23, 2026
BUILD PLANS	
BUILD PLANS	

PROJECT DESCRIPTION:
11788 BOWERS STREET
BIRMINGHAM MI. 48009

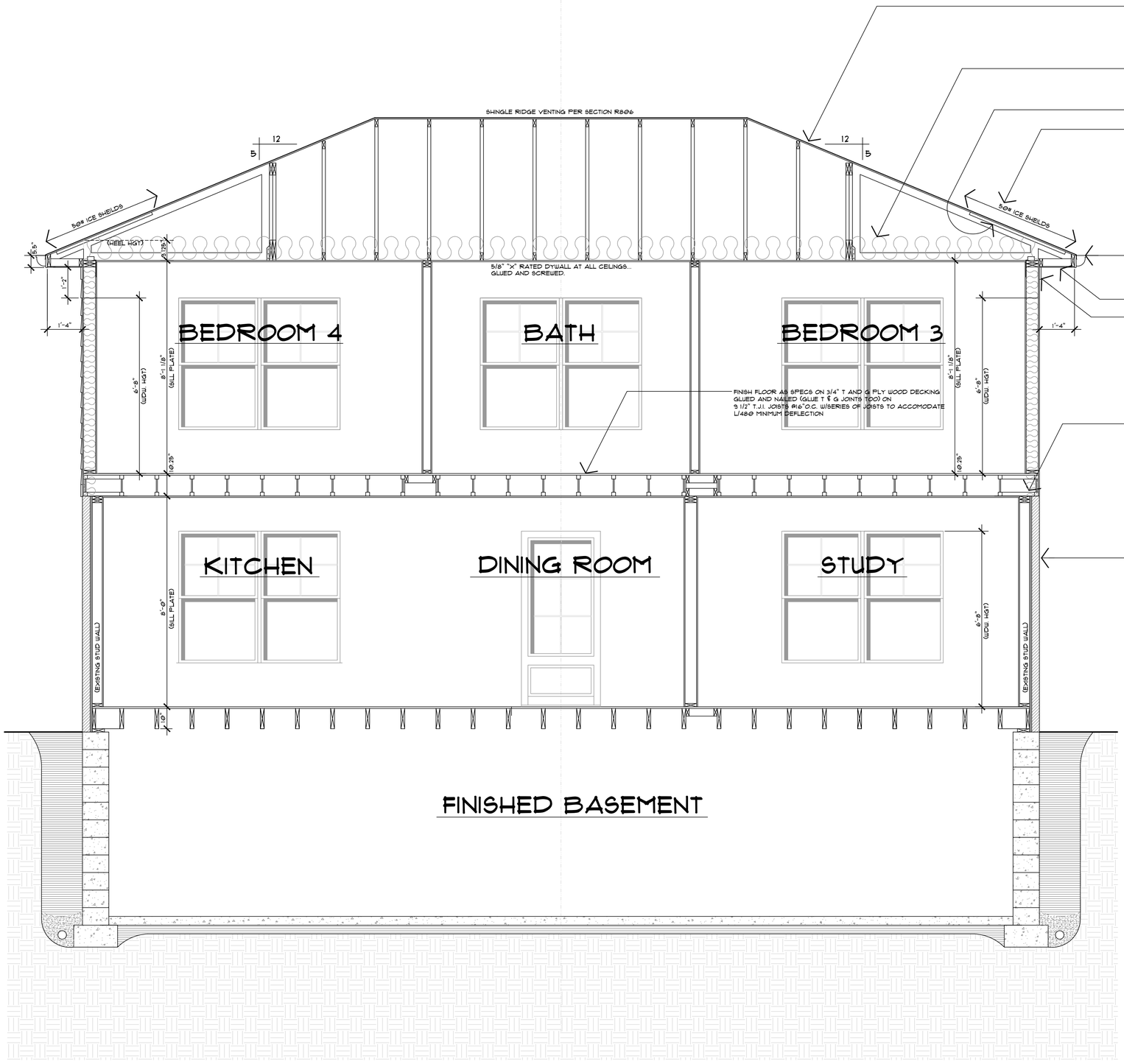
SHEET TITLE:
UPPER LEVEL - ROOF PLAN

DATE OF PLAN:
FEB. 23, 2026

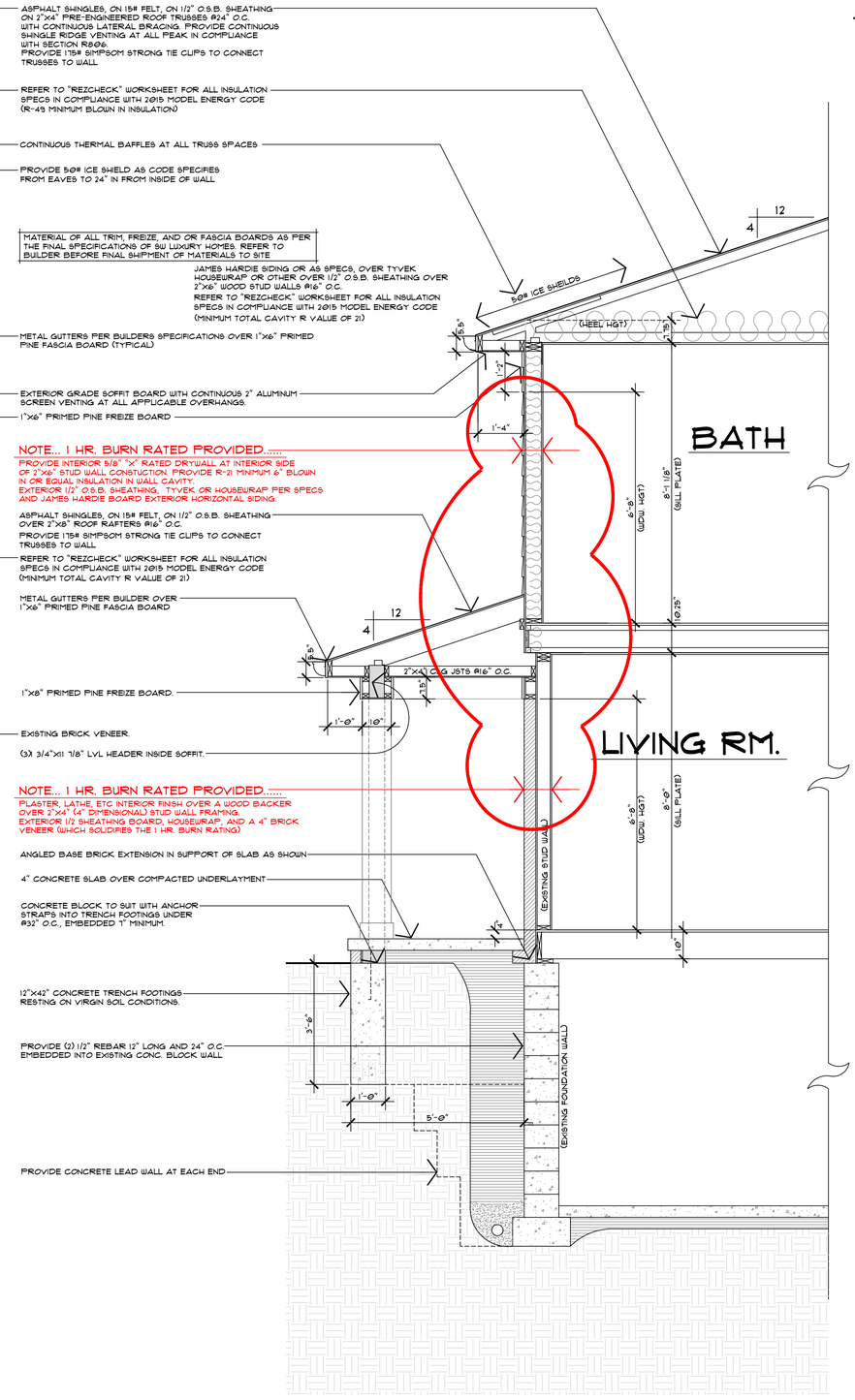
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0630-25

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6 A FULL BUILDING SECTION SCALE: 1/2"=1'-0"



6 B PARTIAL SECTION SCALE: 1/2"=1'-0"

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DESCRIPTION OF PLAN:	PERMIT-BUILD	DATE:
PERMIT RESUBMITTAL	BUILD PLANS	JUNE 26, 2025
REVISED LINTEL PACKAGE	BUILD PLANS	JULY 25, 2025
REVISED PER TOWNSHIP REVIEW	BUILD PLANS	FEB. 23, 2026

PROJECT DESCRIPTION:
1788 BOWERS STREET
BIRMINGHAM MI. 48009

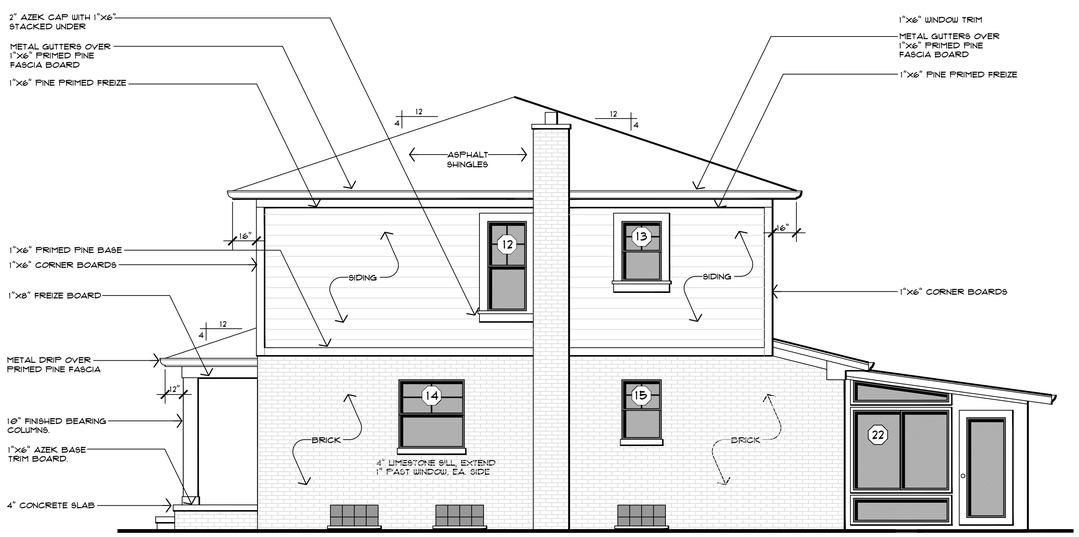
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SECTION DETAILS

DATE OF PLAN:
FEB. 23, 2026

JOB NUMBER:
0630-25

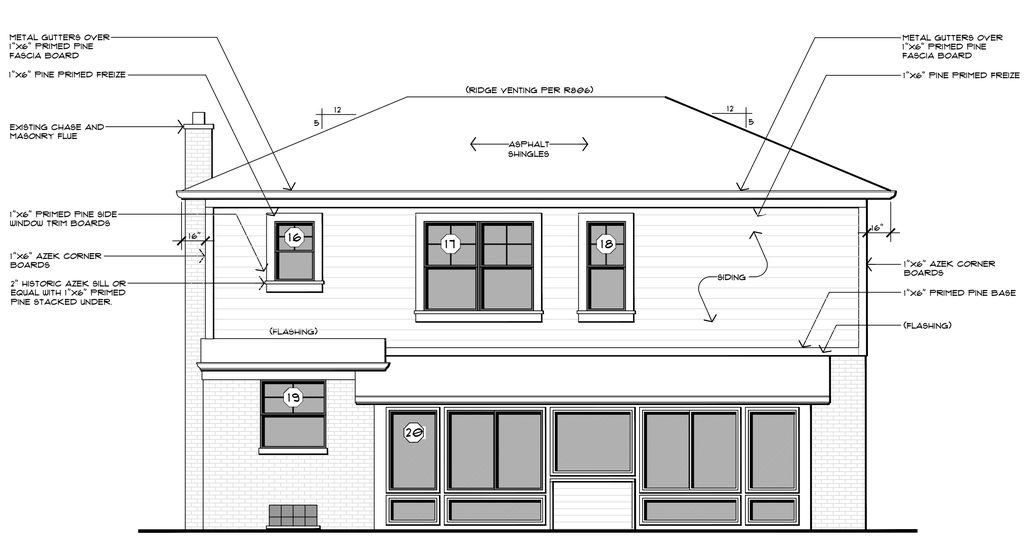
PAGE NUMBER:
6 OF 8

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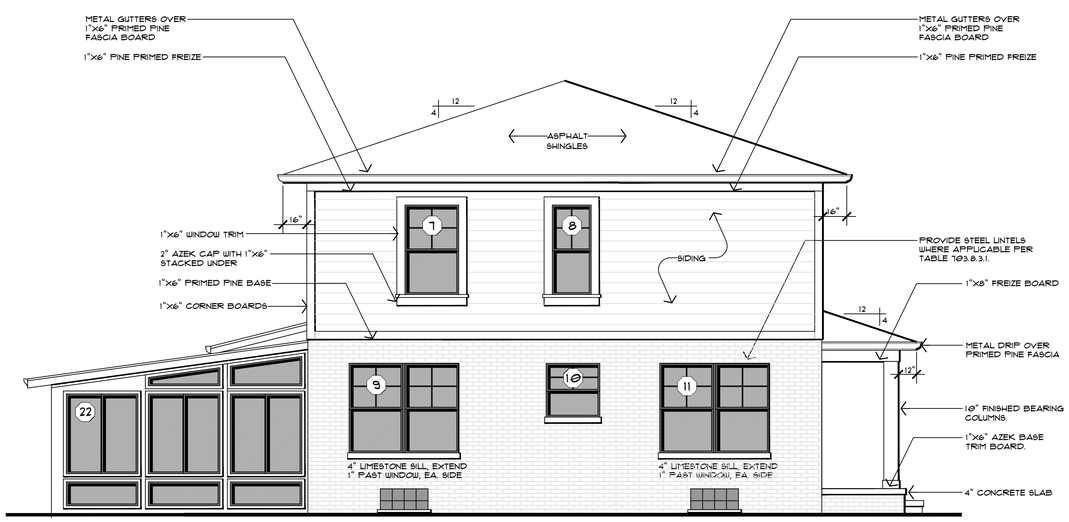
WEST ELEVATION

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



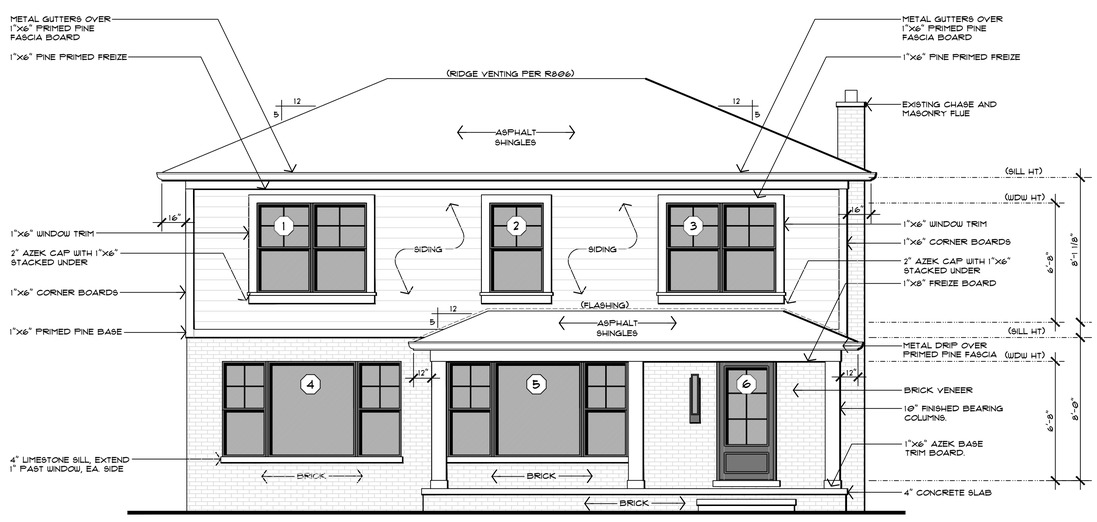
SOUTH ELEVATION

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



EAST ELEVATION

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



NORTH ELEVATION

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

WINDOW/DOOR SCHEDULE

1	3'-0"x5'-0" (-2) MULLED D.H. #6'-8" WINDOW HEIGHT	8	2'-2"x5'-0" D.H. WINDOW #6'-8" WINDOW HEIGHT	15	EXISTING WINDOW. DO NOT REPLACE.		
2	3'-0"x5'-0" D.H. #6'-8" WINDOW HEIGHT	9	3'-0"x5'-6" (-2) MULLED D.H. #6'-8" WINDOW HEIGHT	16	2'-7"x3'-4" D.H. WINDOW #6'-8" WINDOW HEIGHT		
3	3'-0"x5'-0" (-2) MULLED D.H. #6'-8" WINDOW HEIGHT	10	EXISTING WINDOW. DO NOT REPLACE.	17	3'-0"x5'-0" (-2) MULLED D.H. #6'-8" WINDOW HEIGHT		
4	2'-6"x5'-6"/5'-0"x5'-6" FIXED 2'-6"x5'-6" #6'-8" WDW. HEIGHT	11	3'-0"x5'-6" (-2) MULLED D.H. #6'-8" WINDOW HEIGHT	18	2'-7"x5'-0" D.H. WINDOW #6'-8" WINDOW HEIGHT		
5	2'-6"x5'-6"/5'-0"x5'-6" FIXED 2'-6"x5'-6" #6'-8" WDW. HEIGHT	12	2'-2"x5'-0" D.H. WINDOW #6'-8" WINDOW HEIGHT	19	EXISTING WINDOW. DO NOT REPLACE.		
6	REPLACE FRONT DOOR WITH EQUAL SIZED DOOR.	13	2'-2"x3'-4" D.H. WINDOW #6'-8" WINDOW HEIGHT	20	FOUR SEASONS ROOM. NOT TO BE TOUCHED OR RENOVATED.		
7	3'-0"x5'-0" EGRESS D.H. #6'-8" WINDOW HEIGHT	14	EXISTING WINDOW. DO NOT REPLACE.				

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(248)-494-1544

DATE:	PERMIT-BUILD	DESCRIPTION OF PLAN:
JUNE 24, 2025	BUILD PLANS	PRESENT REVIEW
JUNE 24, 2025	BUILD PLANS	REVISED WDW PACKAGE
FEB. 23, 2026	BUILD PLANS	REVISED PER TOWNSHIP REVIEW

PROJECT DESCRIPTION:
17188 BOWERS STREET
BIRMINGHAM MI. 48009

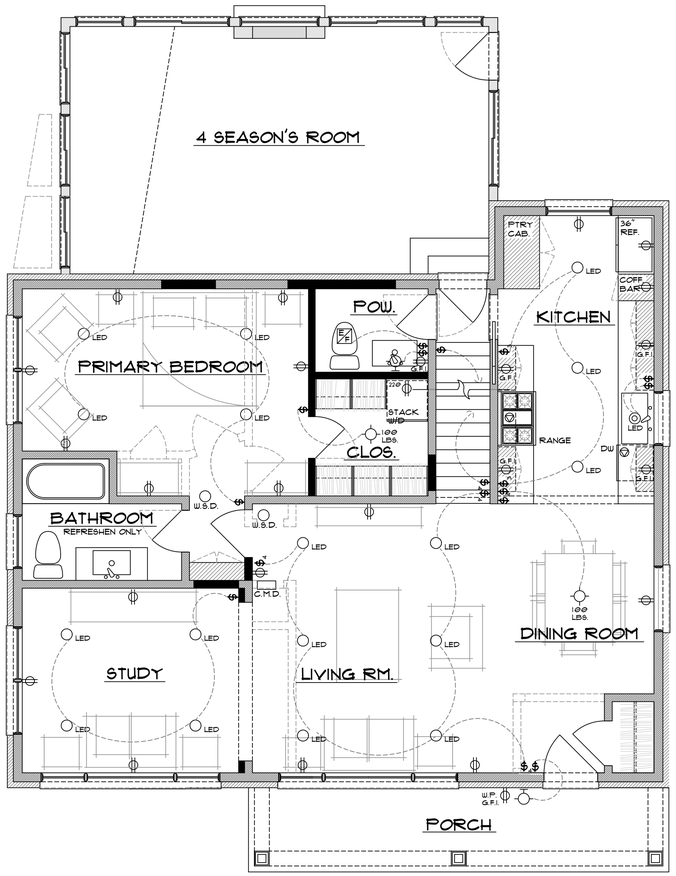
SHEET TITLE:
ELEVATIONS

DATE OF PLAN:
FEB. 23, 2026

JOB NUMBER:
0630-25

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SHEET:
A-7



ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
$	SINGLE POLE SWITCH		FLOOR LIGHT WITH 2 LAMPS
$3	THREE WAY SWITCH	E/F	EXHAUST FAN (# OF CFM REQUIRED)
$4	FOUR WAY SWITCH	E/F LED	EXHAUST FAN WITH LIGHT COMBINATION
$D	DIMMER SWITCH		CEILING FAN
$J	JAMB SWITCH		CEILING FAN WITH LIGHT
	DUPLEX RECEPTACLE	S.D.	WIRED SMOKE DETECTOR WITH BATTERY BACKUP
G.F.I.	DUPLEX RECEPTACLE WITH GROUD FAULT INTERUPT	C.M.D.	CARBON MONOXIDE DETECTOR
W.P. G.F.I.	WATERPROOF G.F.I.	C T.V.	CABLE TV CONNECTION
	FLOOR RECEPTACLE	A/V	AUDIO VISUAL BOX
100 LBS.	CEILING MOUNTED LIGHT (WEIGHT RATED BY HRW)	J	JUNCTION BOX
	SURFACE MOUTED LIGHT 66" A.F.F. MOUNT HT. U.N.O.		DOOR BELL BUTTON
INC.	INCANDESCENT FIXTURE		DOOR BELL CHIME
	6" RECESSED DOUNLIGHT TRIM/FINISH WHITE	CAR	CAR CHARGING STATION
W.P.	6" RECESSED DOUNLIGHT WATERPROOF FIXTURE		TELEPHONE JACK
S	RECESSED DOUNLIGHT MOUNTED ON SLOPE SURF.	T	THERMOSTAT
ST	STEP LIGHTING TOP, MIDDLE, BOTTOM	200 AMP	ELECTRICAL METER
4"	4" RECESSED DOUNLIGHT TRIM/FINISH WHITE	200 AMP	ELECTRICAL PANEL
LED	LED RECESSED DOUNLIGHT TRIM/FINISH WHITE		CONDUIT
	ART LIGHTING FIXTURE		COLD AIR RETURN

SMOKE ALARMS

SECTION R314.1

SINGLE AND MULTI STATION SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:

1. IN EACH SLEEPING ROOM
2. OUTSIDE OF EACH SEPERATE SLEEPING AREA MAXIMUM TEN FOOT FROM THE BEDROOM DOOR.
3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS, AND CELLARS, BUT NOT CRAWL SPACES AND UNINHABITABE SPACES.

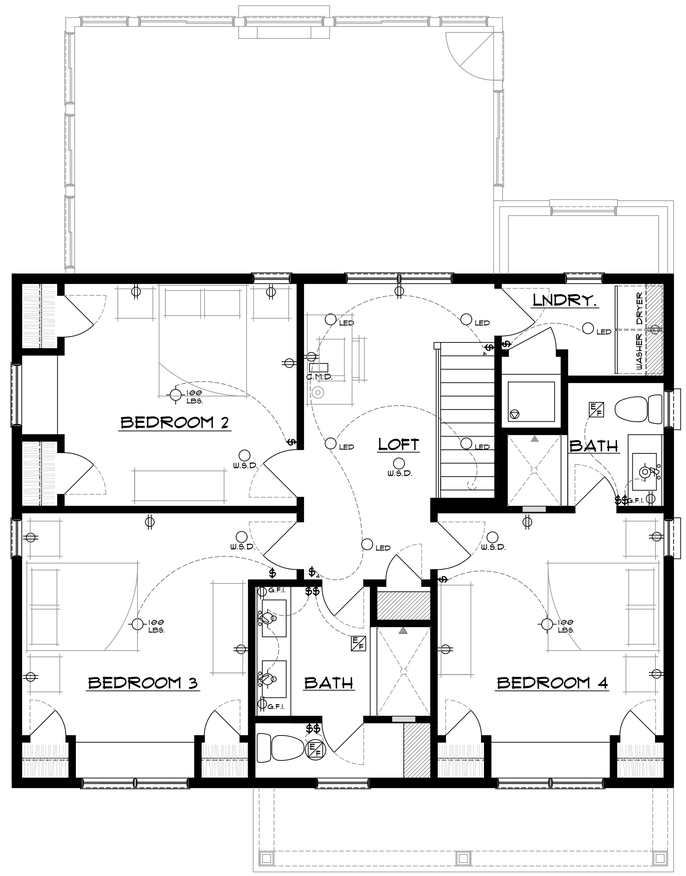
WHEN MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH INTERVENING DOORS CLOSED.

ALL SMOKE ALARMS SHALL BE INSTALLED IN ACCORDANCE WITH PROVISIONS OF THIS CODE AND HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72

CARBON MONOXIDE DETECTORS

SECTION 315.1

FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE DETECTOR SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VACINITY OF THE BEDROOMS DWELLING UNITS WITHING WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES.



MAIN LEVEL ELECTRICAL PLAN

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

*NOTE A: THE ELECTRICAL PLAN(S) SHOWN ARE CONCEPTUAL IDEAS AND DESIGNS ONLY AND ARE SUBJECT TO CHANGE AS PER CODES, BUILDER, OWNER, AND/OR ELECTRICIAN.

*NOTE B: ALL SMOKE DETECTORS TO BE INTERCONNECTED WITH BATTERY BACK-UP.

*NOTE C: CARBON MONOXIDE DETECTORS PER CODE

NOTE...50% OF ALL FIXTURES TO BE HIGH EFFICIENCY NEON BULBS.... G.E. F13DBX-827 4P.

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UPPER LEVEL ELECTRICAL PLAN

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

*NOTE A: THE ELECTRICAL PLAN(S) SHOWN ARE CONCEPTUAL IDEAS AND DESIGNS ONLY AND ARE SUBJECT TO CHANGE AS PER CODES, BUILDER, OWNER, AND/OR ELECTRICIAN.

*NOTE B: ALL SMOKE DETECTORS TO BE INTERCONNECTED WITH BATTERY BACK-UP.

*NOTE C: CARBON MONOXIDE DETECTORS PER CODE

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(248)-494-1544

DATE:	PERMIT-BUILD	DESCRIPTION OF PLAN:
JUNE 24, 2025	BUILD PLANS	PER CLIENT REQUEST
JULY 29, 2025	BUILD PLANS	REVISED UNIBOX PACKAGE
FEB. 23, 2026	BUILD PLANS	REVISED PER TOWNSHIP REVIEW

PROJECT DESCRIPTION:
1788 BOWERS STREET
BIRMINGHAM MI. 48009

SHEET TITLE:
ELECTRICAL PLANS

DATE OF PLAN:
FEB. 23, 2026

JOB NUMBER:
0630-25

PAGE NUMBER:
8 OF 8

SHEET:
A-8

CASE DESCRIPTION

34952 Woodward & 690 E. Maple (26-12)

Hearing date: May 12, 2026

Appeal No. 26-12: The owner of the property known as **34952 Woodward & 690 E. Maple** requests the following variances to construct a new 7-10 story mixed-use building in the Triangle District of Birmingham:

A. Chapter 126, Article 3, Section 3.08(C) of the Zoning Ordinance requires new buildings in the MU5 zoning district to be constructed to a height of no more than 78 feet and 6 stories if the bonus height requirements of Section 3.08(E) are met. The applicant has met the requirements of Section 3.08(E). The proposed overall building height is 77.67 feet and 7 stories. Therefore, a variance of 1 story is being requested.

B. Chapter 126, Article 3, Section 3.08(D) of the Zoning Ordinance requires new buildings in the MU7 zoning district to be constructed to a height of no more than 114 feet and 9 stories if the bonus height requirements of Section 3.08(E) are met. The applicant has met the requirements of Section 3.08(E). The proposed overall building height is 111 feet and 10 stories. Therefore, a variance of 1 story is being requested.

Staff Notes: This applicant is proposing to construct a new building across two properties (to be combined) and two separate zoning districts (MU5 and MU7). The building contains two levels of underground parking, two levels of above ground parking, 1 level of commercial/retail, and the remaining upper levels as residential apartments and condominiums.

The Triangle District contains a provision that permits developers access to bonus stories provided they meet the requirements of Section 3.08(E). This development is proposing to take advantage of the bonus stories by providing a mixed-use development and public parking in accordance with the requirements therein. Related this request in particular is the public parking requirement, which necessitates that the developer provide an addition 198 off-street parking spaces on top of the parking required for the uses provided in the building. This has resulted in a competition for space within the building that was resolved by the applicant in a matter that increased the number of stories within the building, but does not increase the overall height beyond the permitted maximums, including the bonus stories.

The subject property has three zoning designations: B2 (General Business), MU5 (Mixed-Use) & MU7 (Mixed-Use).

Nicholas Dupuis
Planning Director

CHAPTER 126 - ZONING

ARTICLE 8: ENFORCEMENT AND PENALTIES

8.01 The Board of Zoning Appeals

3. Variances.
   a. The Board of Zoning Appeals shall hear and grant or deny requests for variances from the strict application of the provisions of the Zoning Ordinance where there are practical difficulties or unnecessary hardships in carrying out the strict letter of such chapter. In granting a variance, the Board of Zoning Appeals may attach such conditions as it may deem reasonably necessary to promote the spirit and intent of the Zoning Ordinance. The Board of Zoning Appeals shall not grant any variance unless it first determines that:
      i. Because of special conditions applicable to the property in question, the provisions of the Zoning Ordinance, if strictly applied, unreasonably prevent the property owner from using the property for a permitted purpose;
      ii. Literal enforcement of the chapter will result in unnecessary hardship;
      iii. The granting of the variance will not be contrary to the spirit and purpose of the Zoning Ordinance nor contrary to the public health, safety and welfare; and
      iv. The granting of the variance will result in substantial justice to the property owner, the owners of property in the area and the general public.

(EACH i-iv must be satisfied)

34952 WOODWARD



April 27, 2026

1:1,128

0 0.01 0.01 0.02 mi

0 0.01 0.02 0.04 km

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

CITY OF BIRMINGHAM
Community Development - Building Department
151 Martin Street, Birmingham, MI 48009
Community Development: 248-530-1850
Fax: 248-530-1290 / www.bhamgov.org

APPLICATION FOR THE BOARD OF ZONING APPEALS

Received Date: _____ **Hearing Date:** _____

Received By: _____ **Appeal #:** _____

Type of Variance:	☐ Interpretation	☐ Dimensional	☐ Land Use	☐ Sign	☐ Admin Review

I. PROPERTY INFORMATION:

Address: 34952 Woodward & 690 E. Maple	Lot Number: Part - 2, 45 & 6 All - 7, 8	Sidwell Number: 19-36-226-002 19-36-226-003

II. OWNER INFORMATION:

Name: Maryko Hospitality LLC			
Address: 30500 Northwestern Hwy #525	City: Farmington Hills	State: MI	Zip code: 48334
Email:* Mkoza@group10.net		Phone: 248 - 855 - 2100	

III. PETITIONER INFORMATION:

Name: Zachary Weiss	Firm/Company Name: Birmingham Gateway LLC		
Address: 31731 Northwestern Hwy 250W	City: Farmington Hills	State: MI	Zip code: 48334
Email: ZWeiss@beztak.com		Phone: 248-737-6192	

IV. GENERAL INFORMATION:

The Board of Zoning Appeals typically meets the second Tuesday of each month. COMPLETE digital applications along with supporting documents must be submitted on or before the 12th day of the month preceding the next regular meeting. Please note that incomplete applications will not be accepted.

To insure complete applications are provided, appellants must schedule a pre-application meeting with the Building Official, Assistant Building Official and/or City Planner for a preliminary discussion of their request and the documents that will be required to be submitted. Staff will explain how all requested variances must be highlighted on the survey, site plan and construction plans. Each variance request must be clearly shown on the survey and plans including a table as shown in the example below. All dimensions to be shown in feet measured to the second decimal point.

The BZA application fee is **$750.00** for single family residential; **$950.00** for all others. This amount includes a fee for a public notice sign which must be posted at the property at least 15-days prior to the scheduled hearing date.

Variance Chart Example

Requested Variances	Required	Existing	Proposed	Variance Amount
Variance A, Front Setback	25.00 Feet	23.50 Feet	23.50 Feet	1.50 Feet
Variance B, Height	30.00 Feet	30.25 Feet	30.25 Feet	0.25 Feet

V. REQUIRED INFORMATION CHECKLIST:

Please provide the following in your electronic submission:

- ○ Completed and signed application
- ○ Signed letter of practical difficulty and/or hardship
- ○ Certified survey
- ○ Building plans including existing and proposed floor plans and elevations
- ○ If appealing a board decision, provide a copy of the minutes from any previous Planning, HDC, or DRB board meeting

VI. APPLICANT SIGNATURE

Owner hereby authorizes the petitioner designated below to act on behalf of the owner.
By signing this application, I agree to conform to all applicable laws of the City of Birmingham. All information submitted on this application is accurate to the best of my knowledge. Changes to the plans are not allowed without approval from the Building Official or City Planner.
*By providing your email to the City, you agree to receive news and notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.

Signature of Owner: _____ **Date:** 3/12/26

Signature of Petitioner: _____ **Date:** 3/10/26

Revised 01/17/2024

CITY OF BIRMINGHAM
BOARD OF ZONING APPEALS
RULES OF PROCEDURE

ARTICLE I - Appeals

A. Appeals may be filed under the following conditions:

1. A property owner may appeal for variance, modification or adjustment of the requirements of the Zoning Ordinance.

2. A property owner may appeal for variance, modification or adjustment of the requirements of the Sign Ordinance.

3. Any aggrieved party may appeal the decision of the Planning Board and/or the Building Official in accordance with the City of Birmingham Zoning Ordinance, Article Eight, Section 8.01 (D) Appeals. If an appellant requests a review of any determination of the Building Official, a complete statement setting forth the facts and reasons for the disagreement with the Building Official's determination shall include the principal point, or points on the decision, order or section of the ordinance appealed from, on which the appeal is based.

B. Procedures of the Board of Zoning Appeals (BZA) are as follows:

1. Regular BZA meetings, which are open to the public, shall be held on the second Tuesday of the month at 7:30 P.M. provided there are pending appeals. There will be a maximum of seven appeals heard at the regular meeting which are taken in the order received. If an appeal is received on time after the initial seven appeals have been scheduled, it will be scheduled to the next regular meeting.

2. All applications for appeal shall be submitted to the Community Development Department on or before the 12th day of the month preceding the next regular meeting. If the 12th falls on a Saturday, Sunday, or legal holiday, the next working day shall be considered the last day of acceptance.

3. All property owners and occupants within 300 feet of the subject property will be given written notice of a hearing by the City of Birmingham.

4. See the application form for specific requirements. If the application is incomplete, the BZA may refuse to hear the appeal. The Building Official or City Planner may require the applicant to provide additional information as is deemed essential to fully advise the Board in reference to the appeal. Refusal or failure to comply shall be grounds for dismissal of the appeal at the discretion of the Board.

5. In variance requests, applicants must provide a statement that clearly sets forth all special conditions that may have contributed to a practical difficulty that is preventing a reasonable use of the property.

6. Where the Birmingham Zoning Ordinance requires site plan approval of a project by the City Planning Board before the issuance of a building permit, applicants must obtain preliminary site plan approval by the Planning Board before appeal to the BZA for a variance request. If such appeal is granted by the BZA, the applicant must seek final site plan and design review approval from the Planning Board before applying for a building permit.

7. An aggrieved party may appeal a Planning Board decision. Such appeal must be made within 30 days of the date of the decision. The BZA, in its discretion, may grant additional time in exceptional circumstances.

8. Appeals from a decision of the Building Official shall be made within 30 days of the date of the order, denial of permit, or requirement or determination contested. The BZA, in its discretion, may grant additional time in exceptional circumstances.

9. An appeal stays all proceedings in accordance with Act #110, Public Acts of 2006, Article VI, Section 125.3604 (3).

C. The order of hearings shall be:

1. Presentation of official records of the case by the Building Official or City Planner as presented on the application form.

2. Applicant's presentation of his/her case—the applicant or his/her representative must be present at the appeal hearing.

3. Interested parties' comments and view on the appeal.

4. Rebuttal by applicant.

5. The BZA may make a decision on the matter or request additional information.

D. Motions and Voting

1. A motion is made to either grant or deny a petitioner's request
    a) For a motion to grant or deny a non-use variance request, the motion must receive four (4) affirmative votes to be approved.
    b) For a motion to grant or deny a use variance request, the motion must receive five (5) affirmative votes to be approved.
    c) For a motion to grant or deny an appeal of a decision or order by an administrative official or board, the motion must receive four (4) affirmative votes to be approved.

2. When a motion made is to approve or deny a petitioner's request and if there is a tie vote, then the vote results in no action by the board and the petitioner shall be given an opportunity to have his or her request heard the next regularly scheduled meeting when all the members are present.

3. When there are less than seven (7) members of the board present for a meeting, then a petitioner requesting a use variance shall be given an opportunity at the beginning of the meeting to elect to have it heard at the next regularly scheduled meeting.

4. When there are less than six (6) members present for a meeting, then all petitioners shall be given an opportunity at the beginning of the meeting to elect to have the request heard at the next regularly scheduled meeting.

ARTICLE II - Results of an Appeal

A. The Board may reverse, affirm, vary or modify any order, requirement, decision or determination as in its opinion should be made, and to that end, shall have all the powers of the officer from whom the appeal has been taken.

B. The decisions of the Board shall not become final until the expiration of five (5) days from the date of entry of such orders or unless the Board shall find that giving the order immediate effect is necessary for the preservation of property and/or personal rights and shall so certify on the record.

C. Whenever any variation or modification of the Zoning Ordinance is authorized by resolution of the BZA, a Certificate of Survey must be submitted to the Community Development Department with the building permit application. A building permit must be obtained within one year of the approval date.

D. Failure of the appellant, or his representative, to appear for his appeal hearing will result in the appeal being adjourned to the next regular meeting. If, after notice, the appellant fails to appear for the second time, it will result in an automatic withdrawal of the appeal. The appellant may reapply to the BZA.

E. Any applicant may, with the consent of the Board, withdraw his application at any time before final action.

F. Any decision of the Board favorable to the applicant is tied to the plans submitted, including any modifications approved by the Board at the hearing and agreed to by the applicant, and shall remain valid only as long as the information or data provided by the applicant is found to be correct and the conditions upon which the resolution was based are maintained.

ARTICLE III - Rehearings

A. No rehearing of any decision of the Board shall be considered unless new evidence is submitted which could not reasonably have been presented at the previous hearing or unless there has been a material change of facts or law.

B. Application or rehearing of a case shall be in writing and subject to the same rules as an original hearing, clearly stating the new evidence to be presented as the basis of an appeal for rehearing.

I certify that I have read and understand the above rules of procedure for the City of Birmingham Board of Zoning Appeals.

Zachary Weiss
_____
Signature of Applicant

W|W|R|P
Williams Williams Rattner & Plunkett, P.C.
Attorneys and Counselors
380 North Old Woodward Avenue
Suite 300
Birmingham, Michigan 48009
Tel: (248) 642-0333
Fax: (248) 642-0856
www.wwrplaw.com

March 12, 2026

Board of Zoning Appeals
City of Birmingham
151 Martin Street
Birmingham, MI 48009

Re: Letter of Hardship/Practical Difficulty, Application for Dimensional Variance
Beztak Birmingham Development Mixed-Use Project
34952 Woodward Avenue & 690 E. Maple Road

Dear Members of the Board of Zoning Appeals:

This law office represents Birmingham Gateway LLC ("Developer") with respect to the above Project. Please accept this letter as a letter of hardship and practical difficulty pursuant to Chapter 126 of the Birmingham City Code ("Zoning Ordinance") Section 8.01(F)(3)(a). This letter is attached to and made a part of the Board of Zoning Appeals Application referenced above.

Background

The Beztak Birmingham development proposes a vibrant residential and commercial mixed-use project at the southeast corner of Woodward Avenue and Maple Road on long vacant property in downtown Birmingham ("Project"). This development includes ground-floor retail, 224 residential units and a structured parking garage providing 422 parking spaces, including 198 publicly accessible parking spaces. The Project enhances this prominent gateway to Birmingham intersection through widened sidewalks, new planting beds and enhanced landscaping, additional street trees, and integrated public parking while reinforcing walkability and downtown vitality.

The Project features a desirable twenty (20') foot high first story, where retail and restaurant uses will be located along Woodward Avenue and the corner, with the condominium and apartment lobbies fronting E. Maple Road. The Project houses two (2) levels of underground parking, along with a ground floor level and mezzanine level of parking within the twenty (20') foot high area behind the retail and lobby frontage. These parking areas are concealed within the building, so there is very little visibility from adjacent parcels or the public right-of-ways.

The Project is comprised of two legal parcels. Both parcels are in the B-2 zoning district. The majority of the Project is subject to the MU-7 Triangle Overlay District ("Overlay District" or "District"), but a portion of the Project on the eastern side is subject to the MU-5 District.

Developer submitted a Combined CIS & Site Plan Review Application for the Project to the City's Community Development Department on or about February 17, 2026. The site plan is scheduled to be reviewed by the Birmingham Planning Board at its March 25, 2026 meeting.

Following discussion with the City's Community Development Department, it was determined that the Project requires a single dimensional variance to the story requirements of the Triangle Overlay District in order to technically comply with the City's Zoning Ordinance. The Project ***meets*** the maximum height requirements in terms of gross feet provided in the Zoning Ordinance, but has one additional required story in excess of the Zoning Ordinance requirement, due to the addition of the parking mezzanine level required to provide additional needed public and private parking.

The height of the Project is in compliance with the MU-5 Overlay District maximum height requirement of 78 feet, and with the MU-7 Overlay District maximum height requirement of 114 feet, as it meets the additional building height standards of Section 3.08(E). The analysis is as follows:

1. The MU-5 Overlay District permits a maximum of 66 feet with five (5) stories. Section 3.08(C). The Project is also entitled to an additional 12 feet and one (1) story of height because the requirements of Section 3.08(E) are met.

2. The MU-7 Overlay District permits a maximum of 90 feet with seven (7) stories. Section 3.08(D). The Project is also entitled to an additional 24 feet and two (2) stories of height because the requirements of Section 3.08(E) are met.

3. Section 3.08(E) allows this additional height for buildings that are at least 100 feet from single-family residential zoning districts if such buildings satisfy the following requirements:

    a. "A multi-level parking structure that offers parking available to the public at the rate of one parking space available to the public for every 300 square feet of building area allowed in the additional stories."

    The sixth story of that portion of the Project in the MU-5 district and the eighth and ninth stories of that portion of the Project in the MU-7 district comprise 59,294 square feet of building area / 300 = 198 public parking spaces required, ***which are provided by the Project***, satisfying this criteria.

    b. "A mixed use building that provides residential dwelling units above first-floor commercial where a minimum of 50% of the building floor area is residential."

> The Project is comprised of a mixed-use building with residential apartments and condominiums above the first-floor retail use. 300,017 square feet of building floor area is residential / 539,521 square feet of total building area = ***55.6%, in excess of the 50% requirement***, satisfying this criteria.

The variance is necessary because the 2021 Michigan Building Code restricts mezzanines in this type of building construction to not greater than one-half (50%) of the floor area of the first floor of the Project. MBC §505.2.1.2. The floor area of the proposed "mezzanine parking level" is 62% of the applicable first floor area required for the calculation (38,628sf mezzanine parking level / 62,291sf first floor level). It is therefore considered an actual floor, requiring the variance.

Variance Request

Developer has worked diligently within the Zoning Ordinance to limit the need here to a single Project variance on this important but complex development. When the mezzanine parking level is included, the building has seven (7) stories in the MU-5 Overlay District with the bonus height allocation, where six (6) stories are permitted, and the building has ten (10) stories in the MU-7 Overlay District with the bonus height allocation, where nine (9) stories are permitted. Therefore, the dimensional variances requested are as follows:

1. A dimensional variance of one (1) story to the height requirement of Section 3.08(C) which permits a maximum of six (6) stories when seven (7) stories is proposed for the MU-5 Overlay District; and

2. A dimensional variance of one (1) story to the height requirement of Section 3.08(D) which permits a maximum height of nine (9) stories when ten (10) stories is proposed for the MU-7 Overlay District.

Project Benefits to the Community

The Project supports and strengthens downtown Birmingham as a vibrant mixed-use destination, and meets the goals and objectives of the City's current Master Plan. The Project supports the City's Master Plan by:

- Activating a prominent "Gateway" corner
- Reinforcing pedestrian-oriented urban design
- Concentrating residential density within the downtown core
- Supporting retail and restaurant vitality
- Encouraging multimodal transportation

- Enhancing the Woodward Avenue corridor streetscape

The Project also supports the Master Plan objective of providing additional public parking within the Triangle Overlay District. The Project invests substantial resources in furthering this City objective by adding 198 parking spaces that are accessible for public use.

The Project furthers the various uses and purposes of the Triangle Overlay District as set forth in Section 3.05 of the Zoning Ordinance. The Project is a mixed-use commercial and residential development with first-floor retail/restaurant uses and residential apartments and condominiums on the upper floors, similar to the downtown character of many buildings west of Woodward Avenue. It features different building heights to achieve appropriate scale along Woodward and Maple with the proper transitions to neighboring areas and is located more than 100 feet from any single-family residential zoning district. The Project's architectural and landscape features will contribute to the high standards expected in Birmingham with high (20') Maple Road frontage retail and atrium spaces, significant glass, and an integrated color scheme. The parking spaces are integrated within the building to be significantly concealed from public view. Wide sidewalks with substantial streetscape elements will also be featured.

Traffic congestion is minimized by installing drive access on three (3) sides of the building. 422 parking spaces are provided to service the Project's residents, commercial space employees and customers, with many of these spaces available for the general public. The shared parking analysis provided by Developer in its Traffic Impact Study indicates that the Project has sufficient parking to meet the anticipated parking demand during peak demand periods. Such parking will help to promote pedestrian access to the downtown for Project residents, customers and the general public, as people can park at the Project and walk to their destination. The Project improves mobility within the area by allowing convenient access by vehicle, bicycle and pedestrian traffic. It is located adjacent to two (2) SMART bus stops to support public transit use. It also features widened sidewalks, enhanced streetscape elements and bicycle accommodations to encourage safe non-motorized travel.

Finally, the Project will create a pedestrian friendly sense of place within the Triangle Overlay District, supporting and igniting economic development with its mixture of quality uses, providing important tax base increases on long vacant parcels and providing a high quality development gateway to the City's downtown for new residents and patrons of downtown businesses.

Variance Standards - §8.01(F)(3)

Section 8.01(F)(3) of the Zoning Ordinance authorizes the Zoning Board to grant Developer a variance to the maximum height/story requirement if the applicable criteria have been met. Developer submits that the variance standards in the Zoning Ordinance have been met as described below:

i. Because of special conditions applicable to the property in question, the provisions of the zoning ordinance, if strictly applied, unreasonably prevent the property owner from using the property for a permitted purpose. §8.018(F)(3)(a)(i)

One of the challenges of the Triangle Overlay District is the ability to develop this District in general, and the subject property in particular, with sufficient public parking for patrons and customers of the Project and surrounding areas within the District. The Project is designed to help address this issue. The mixed uses of residential and retail are permitted uses for the Project, but the lack of an ample supply of parking within the District prevents Developer from providing such permitted mixed uses in compliance with the maximum story limits within the District due to the need for a mezzanine parking story, though maximum height requirements in feet are met. Strict compliance would require the removal of the mezzanine level of parking, reducing parking by 76 spaces. Such reduction would result in a corresponding reduction of residential units and a reduction of public parking available within the Project. This result would jeopardize the Project, and would at the very least fail to provide 198 public parking spaces within the Project, requiring unwanted parking variances. Therefore, the lack of sufficient parking within the Triangle Overlay District presents a special condition that negatively impacts the Project, and without the variance for the mezzanine parking level, would not allow for sufficient parking to enable the proposed permitted uses of this property, and would significantly reduce the parking made available to the public.

ii. Literal enforcement of the chapter will result in unnecessary hardship. §8.018(F)(3)(a)(ii)

As noted above, literal enforcement of the Zoning Ordinance in this situation would result in elimination of the mezzanine parking level of the Project and reduce parking both for customers and residents of the Project, as well as available public parking in the Triangle Overlay District, which would be contrary to stated Birmingham City policies. Developer seeks to provide parking to help facilitate the lack of sufficient public parking in the District. The elimination of a level of parking to comply with the Zoning Ordinance would create a hardship for the Project by either reducing the amount of parking provided, and/or reducing the number of residential units otherwise permitted by the height limitations and other provisions of the Zoning Ordinance.

iii. The granting of the variance will not be contrary to the spirit and purpose of the Zoning Ordinance nor contrary to the public health, safety and welfare. §8.018(F)(3)(a)(iii)

The requested variance is consistent with the spirit and purpose of Zoning Ordinance. By granting the requested variance, the Project will continue to comply with the height limitations (in feet) of the MU-5 and MU-7 mixed-use districts. The variance would not alter the exterior dimensions of the Project, and will help to minimize inefficient surface parking lots in favor of providing additional public parking in a compact, mixed-use, pedestrian-friendly development, as the Triangle Overlay District encourages.

The requested variance will also not be contrary to, but promote the public health, safety and welfare. The Project will provide parking not otherwise available to the public and is designed to conceal such parking from public view, benefitting the surrounding area.

iv. The granting of the variance will result in substantial justice to the property owner, the owners of property in the area and the general public. §8.018(F)(3)(a)(iii)

The requested variance for the mezzanine level of parking results in substantial justice to Developer and the public by enabling the Project to be constructed with a building height, design and density in compliance with all other requirements of the Zoning Ordinance, including the height limitations (in feet) of Section 3.08 of the Zoning Ordinance. The exterior dimensions of the Project would not be increased if the variance is granted.

Similarly, the requested variance results in substantial justice to other property owners in the area and the general public by providing additional public parking spaces that would not be available without the requested Project variance. Such parking spaces will be provided in a parking deck below grade and constructed within the building, so as to be concealed from public view from such neighboring properties.

Conclusion

Developer respectfully requests that the Board of Zoning Appeals grant a single variance for the additional story requested to facilitate the construction of the mezzanine level of parking, which provides an additional 76 parking spaces for the Project's residential and retail customers, as well as the public. Such variance would further the goals and objectives of the City's Master Plan, the Triangle Overlay District Ordinance, Birmingham public policy, and would provide additional concealed parking that benefits the District, the general public and the Project without any adverse public or private effects.

If you have any further questions or comments about the above, please do not hesitate to contact this office at your earliest convenience. We look forward to addressing this matter at the public hearing.

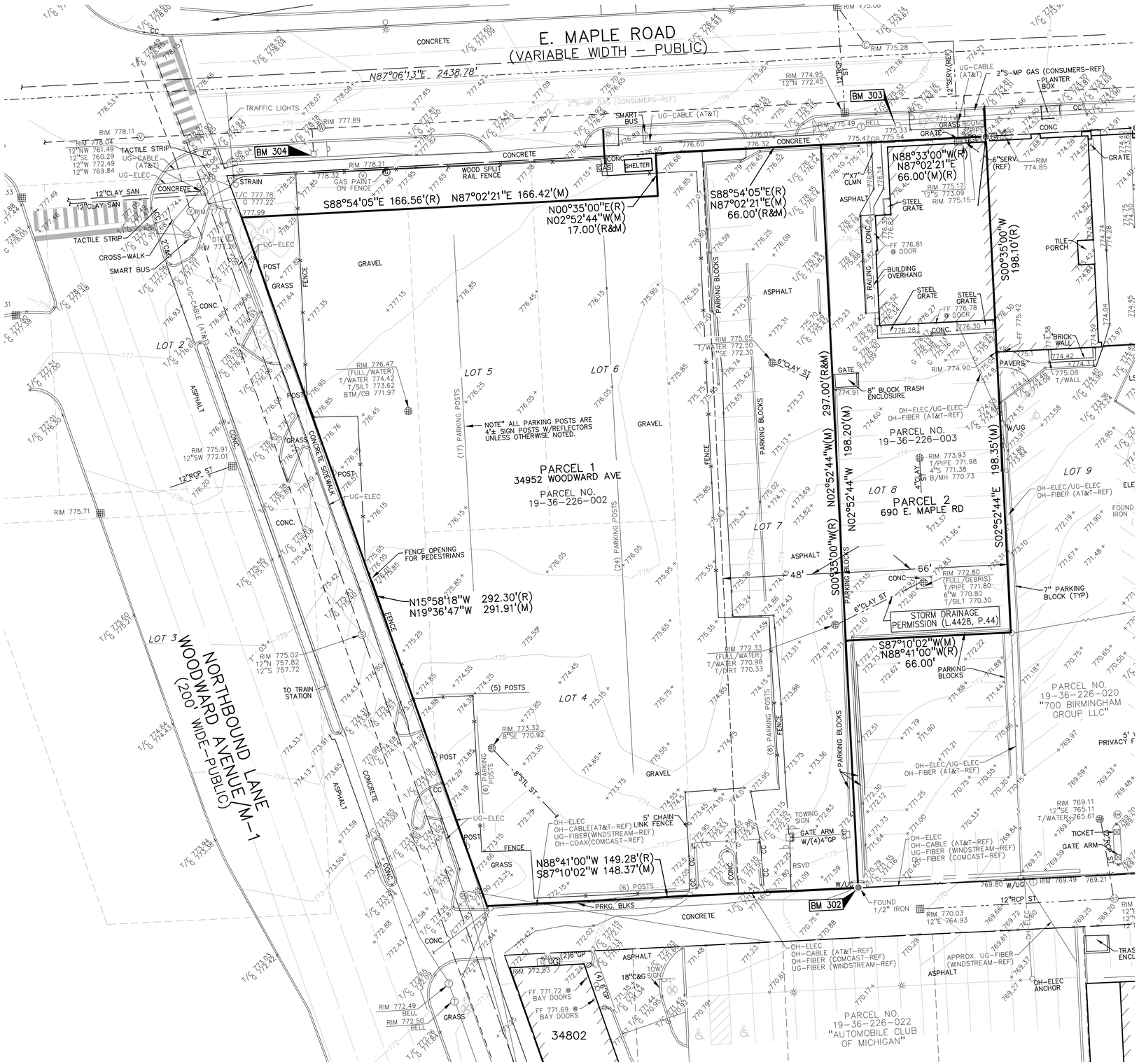
Very truly yours,
WILLIAMS, WILLIAMS, RATTNER & PLUNKETT, P.C.

John D. Gaber

John D. Gaber

cc: Birmingham Gateway LLC
Saroki Architecture
PEA Group

4023721



LEGEND:

- EX. OH, ELEC, POLE & GUY WIRE
- EX. U.G. CABLE TV & PEDESTAL
- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- EX. U.G. ELEC.MANHOLE, METER & HANDHOLE
- EX. GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. TRANSFORMER & IRRIGATION VALVE
- EX. WATER MAIN
- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- EX. WATER VALVE BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
- EX. YARD DRAIN & ROOF DRAIN
- EX. UNIDENTIFIED STRUCTURE
- EX. MAILBOX, SIGN & LIGHTPOLE
- EX. FENCE
- EX. GUARD RAIL
- EX. SPOT ELEVATION
- EX. CONTOUR
- EX. WETLAND
- IRON FOUND / SET
- NAIL FOUND / NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND / SET
- SECTION CORNER FOUND
- RECORDED / MEASURED / CALCULATED

R M C

REFERENCE DRAWINGS:
TOPOGRAPHIC SURVEY, PEA JOB NO. 2018-349, DATED 11/18/2018

CABLE	AT&T MAP A1, DATED 01/13/2023
FIBER OPTIC	COMCAST CABLE MAP, EMAIL DATED 01/10/2023 WINDSTREAM MAP, EMAIL DATED 01/05/2023
GAS	CONSUMERS MAP 060361, DATED 10/26/22

CITY OF BIRMINGHAM BENCHMARKS:

CITY BM #6
NORTHEAST CORNER OF ADAMS & MAPLE.
ELEV. - 765.61

REFERENCE BENCHMARKS
(Per PEA Job No. 2018-349)

REF. BM #300:
TOP NUT ON HYDRANT, SOUTH SIDE OF MAPLE ROAD, APPROX. 45 FEET NORTHEAST OF THE NORTHEAST CORNER OF BUILDING #920-970.
ELEV. - 770.33

REF. BM #301:
PK NAIL IN NORTHWEST FACE OF THE 2ND UTILITY POLE EAST OF ELM STREET, APPROX. 115 FEET EAST OF THE MOST SOUTHEAST CORNER OF BUILDING #219.
ELEV. - 768.49

BM #302
FOUND NAIL IN THE SOUTH FACE OF A UTILITY POLE LOCATED ON THE NORTH SIDE OF THE ALLEY AT THE SOUTHEAST PROPERTY CORNER.
ELEV. - 777.63
(REVISED LOCATION)

BM #303
TOP/SOUTHWEST ANCHOR BOLT ON A LIGHT POLE LOCATED ON THE SOUTH SIDE OF E. MAPLE ROAD, APPROX. 15'± NORTHEAST OF THE NORTHWEST BUILDING CORNER OF 690 E. MAPLE.
ELEV. - 777.67

BM #304
ARROW ON TOP/HYDRANT LOCATED ON THE SOUTH SIDE OF E. MAPLE ROAD, APPROX. 30'± EAST OF WOODWARD AVENUE.
ELEV. - 779.88

LEGAL DESCRIPTION:
(Per First American Title Insurance Company, Commitment No. 968431)

Land in the City of Birmingham, Oakland County, MI, described as follows:

PARCEL 1:
Part of Lot 6 and all of Lot 7 and part of Lots 2, 4 and 5 of ASSESSOR'S PLAT NO. 3 according to the plat thereof recorded in Liber 46 of Plats, Page 29 of Oakland County Records and part of vacated High Street, all being more fully described as follows: Beginning at a point at the intersection of the East line of Hunter Boulevard and the South line of Maple Road, as originally established; thence in a Southeasterly direction along the East line of Hunter Boulevard, 310.08 feet to a point on the South line of Lot 4; thence Easterly along the South line of Lots 4 and 7, 149.28 feet to the Southeast corner of Lot 7; thence Northerly along the Easterly line of Lot 7, 297.00 feet to a point; thence Westerly in a straight line along the Northerly line of Lots 7, 6, 5 and 2, 237.63 feet to the Point of Beginning. EXCEPT the North 17.00 feet of Lots 2, 5 and 6 and vacated High Street as set forth in Liber 2266, page 205, Oakland County Records.

PARCEL 1 ALSO DESCRIBED AS:
Lot 7, part of Lots 2, 4, 5, 6 and part of vacated High Street of ASSESSOR'S PLAT NO. 3 according to the plat thereof recorded in Liber 46 of Plats, Page 29 of Oakland County Records, described as: Beginning at the Northeast corner of said Lot 7; thence South 00 degrees 35 minutes 00 seconds West, along the East line of said Lot 7 a distance of 297.00 feet; thence North 88 degrees 41 minutes 00 seconds West, 149.28 feet to the Easterly line of 204.00 foot wide Woodward Avenue; thence North 15 degrees 58 minutes 18 seconds West along said Easterly line 292.30 feet to the South line of 83.00 foot wide Maple Road; thence South 88 degrees 54 minutes 05 seconds East along said South line 166.56 feet to the West line of said Lot 7; thence North 00 degrees 35 minutes 00 seconds East along said West line 17.00 feet to the South line of 66.00 foot wide Maple Road; thence South 88 degrees 54 minutes 05 seconds East, along said South line 66.00 feet to the Point of Beginning.

PARCEL 2:
Lot 8, EXCEPT the South 98.8 feet of

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FLOOD INSURANCE RATE MAP NUMBER 26125C0537F, DATED SEPTEMBER 29, 2006.

PEA GROUP
t: 844.813.2949
www.peagroup.com

Know what's below. Call before you dig.

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE AND NOT NECESSARILY ACCURATE OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT
BIRMINGHAM GATEWAY, LLC
31731 NORTHWESTERN HIGHWAY
SUITE 250W
FARMINGTON HILLS, MI 48334

PROJECT TITLE
BIRMINGHAM MIXED USE DEVELOPMENT
SOUTHEAST CORNER OF MAPLE ROAD AND WOODWARD AVENUE
CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN

REVISIONS
- -

ORIGINAL ISSUE DATE:
FEBRUARY 18, 2026

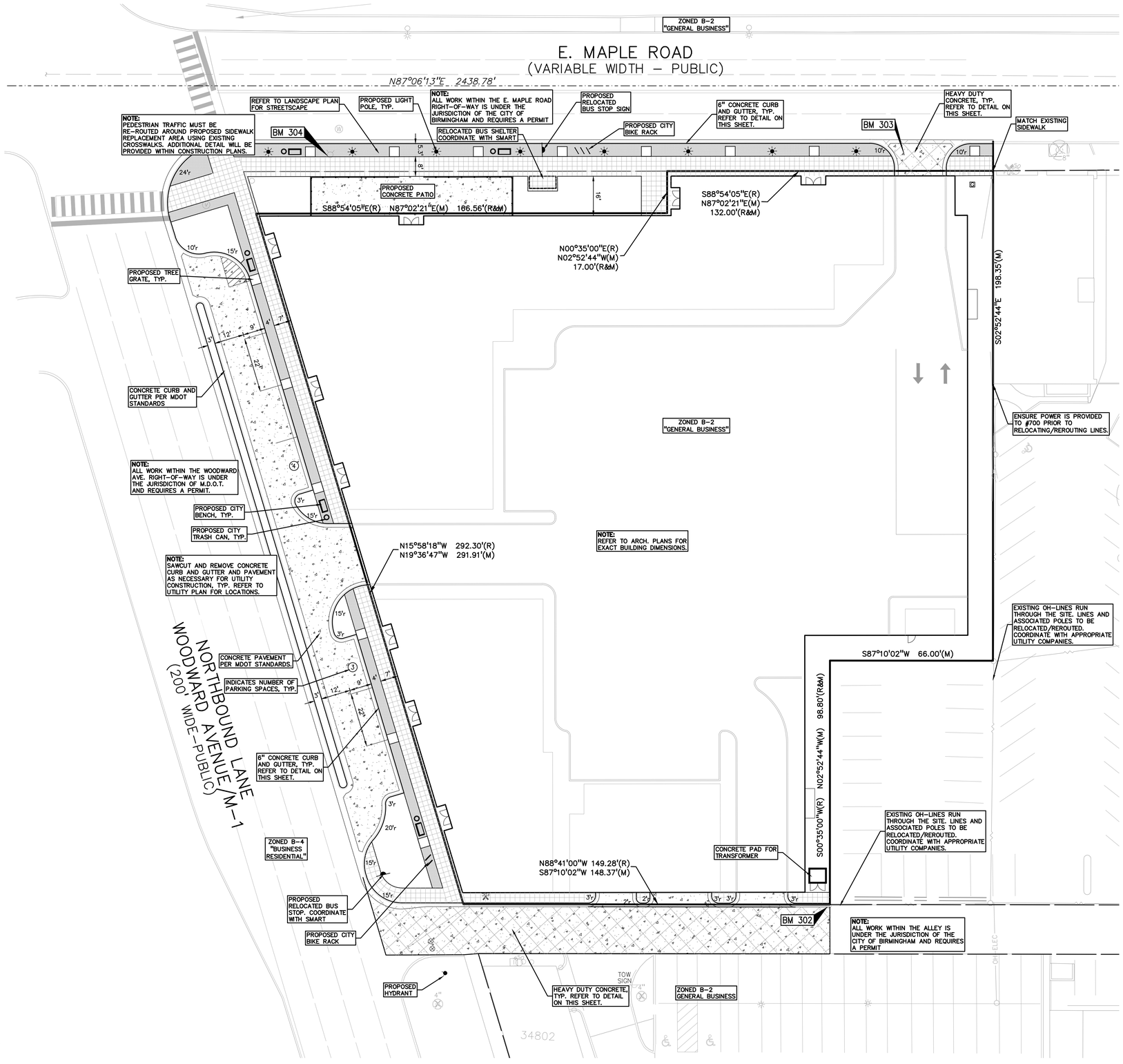
DRAWING TITLE
TOPOGRAPHIC SURVEY

PEA JOB NO.	2022-1461
P.M.	JBT
DN.	KFP
DES.	KFP

DRAWING NUMBER:
P-1.0

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-1461 RYAN - BIRMINGHAM MP\DWG\D_SITE_PLAN\P-1.0(TOPO-2021461.dwg PLOT DATE: 2/18/2026
BY: Kayla Hanson



S:\PROJECTS\2022\2022-1461 RYAN - BIRMINGHAM MF\DWG\J_SITE_PLAN\(P-3.0)SM-22"x17" Grey PLOT DATE: 2/19/2026
BY: Hayat Pracon

LEGEND:

- CONCRETE PAVEMENT (STD DUTY / HEAVY DUTY / R.O.W. ONLY)
- ASPHALT PAVEMENT (STD DUTY / HEAVY DUTY / DEEP STRENGTH)
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE
- FENCE
- GUARD RAIL

GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WIT CITY OF BIRMINGHAM CURRENT STANDARDS AND REGULATIONS.
3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHT-OF-WAYS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND/OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

DEMOLITION NOTES:

REMOVE THE FOLLOWING ON-SITE ITEMS:

PARKING LOT, STORM SEWER, LANDSCAPING, LIGHT POLES, SIDEWALK, AND BUILDING.

SITE DATA TABLE:

SITE AREA: 1.55 ACRES (67,479.51 SF.) NET AND GROSS

ZONING: B-2, GENERAL BUSINESS

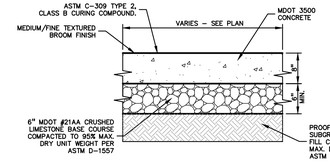
PROPOSED USE: RETAIL AND MULTI-FAMILY RESIDENTIAL

BUILDING INFORMATION:
MAXIMUM ALLOWABLE BUILDING HEIGHT = 114 FT. (9 STORIES)
PROPOSED BUILDING HEIGHT = 9 STORY

BUILDING FOOTPRINT AREA = 60,618 SF.

BUILDING LOT COVERAGE = 89.8%

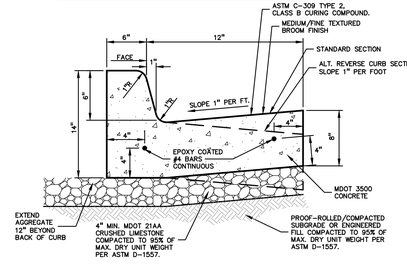
SETBACK REQUIREMENTS:	REQUIRED:	PROPOSED:
FRONT (NORTH)	0'	VARIES
SIDE (EAST)	0'	VARIES
SIDE (WEST)	0'	VARIES
REAR (SOUTH)	N/A'	VARIES



HEAVY DUTY CONCRETE DETAIL
NOT TO SCALE

NOTE:
ALTERNATE REVERSE CURB SECTION TO BE USED ONLY WHEN DRAINING AWAY FROM CURB. SEE PLAN FOR LOCATION.

NOTE:
PROVIDE CONTROL JOINTS IN CURB AT 10' O.C. PROVIDE EXPANSION JOINT AND JOINT SEALANT AT END OF RADIUS RETURNS PER MDOT AND ACA STANDARDS. PROVIDE EXPANSION JOINTS AND JOINT SEALANT WHERE CURBS ABUT STRUCTURES.



18"x6" STANDARD CONCRETE CURB AND GUTTER
NOT TO SCALE

NOT FOR CONSTRUCTION

PEA GROUP
t: 844.813.2949
www.peagroup.com

NORTH

0 10 20 40
SCALE: 1" = 20'

811 Know what's below. Call before you dig.

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. NO GUARANTEE OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT
BIRMINGHAM GATEWAY, LLC
31731 NORTHWESTERN HIGHWAY
SUITE 250W
FARMINGTON HILLS, MI 48334

PROJECT TITLE
BIRMINGHAM MIXED USE DEVELOPMENT
SOUTHEAST CORNER OF MAPLE ROAD AND WOODWARD AVENUE
CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN

REVISIONS
-

ORIGINAL ISSUE DATE:
FEBRUARY 18, 2026

DRAWING TITLE
PRELIMINARY SITE PLAN

PEA JOB NO.	2022-1461
P.M.	JBT
DN.	KFP
DES.	KFP

DRAWING NUMBER:
P-3.0

... - Beztak - Birmingham, MI | PAS | 2/18/2026

Unit Type	Level	1 BEDROOM		1 BEDROOM +		2 BEDROOMS		2 BEDROOMS +		3 BEDROOMS		Total	CONDO - 2 BEDROOMS		CONDO - 2 BEDROOMS +		CONDO - 3 BEDROOMS		CONDO - 3 BEDROOMS +		Total	Total
		A		A+		B		B+		C			D		D+		E		E+			
Area (SF)		900		1,000		1,200		1,400		1,500			1,500		1,200		1,800		2,500			
	B2																					
	B1																					
	G																					
	M																					
	2	19		0		8		0		1		28									28	
	3	22		0		9		1		1		33									33	
	4 _5	23		0		10		1		2		36									36	
	6	23		0		10		1		2		36									36	
	7	18		0		8		1		1		28									28	
	8											0	6		5		2		2		15	15
	9											0	9		0		2		1		12	12
Unit per Type		128		0		55		5		9		197	15		5		4		3		27	224
Parking Ratio		1.00	Per Unit	1.25	Per Unit	1.25	Per Unit	1.25	Per Unit	1.25	Per Unit		1.25	Per Unit	1.25	Per Unit	1.25	Per Unit	1.25	Per Unit		
Total Parking Required			Stalls		Stalls		Stalls		Stalls		Stalls	214		Stalls		Stalls		Stalls		Stalls	497	
Unit Parking												*214*									248	
Bonus Floor Parking																					198	
Retail Parking																					51	
Total Parking Provided																					422	
Surface Parking																					7	
T & Compact parking																					25	
Handicap parking																					15	
Standard parking																					375	
Total Unit		128		0		55		5		9		197	15		5		4		3		27	
Bed Count		128		0		110		15		27		280	30		15		12		12		69	
NRSF by Type		115,200		0		66,000		7,000		13,500		201,700	22,500		6,000		7,200		7,500		43,200	
NRSF Ave. unit												1,024									1,600	
Unit Mix		64.97%		0.00%		27.92%		2.54%		4.57%		100.0%	55.56%		18.52%		14.81%		11.11%		100.0%	

Amenities & Support							Tabulations			
Lobby/Leasing	Retail	Amenity	MEP & Services	Loading& Trash	Parking Area	Parking Count	Gross Building Area	GRSF	NRSF	Efficiency (NRSF / (GROSS BLDG − PARKING))
			924		59,949	147	61,807			
			1,858		59,949	143	61,807			
6,331	15,304		0	2,244	44,743	56	62,291			
			2,454		36,174	76	38,628			
		9,453	640				46,280	36,187	30,100	65.04%
							42,407	41,767	32,997	77.81%
			640				46,280	45,640	39,949	86.32%
							45,743	45,103	39,416	86.17%
		484	397				35,720	34,839	30,591	85.64%
		1,003	217				29,046	27,826	23,819	82.00%
			217				23,232	23,015	19,004	81.80%
6,331	15,304	10,940	7,987	2,244	200,815	422	539,521	300,017	255,825	75.5%
					490	Area/space				
						Parking Ratio				
						(Per unit)				

1 parking per 1B, 1.25 parking per 2B, 1.25 parking per 3B
1 parking space per 300 square feet
1 parking space per 300 square feet of retail

67,469	Site Area	1.55	Acres
	Density	=	Total units / Acreage
0.92	Lot Coverage	=	Ground Floor/Site Area
338,706	GFA	=	Gross Bldg Area - Parking Area
5.02	FAR	=	GFA / Site Area

REQUIRED PARKING CALCULATION

Unit Count	Apt. Unit	Condo Unit	Parking Req.
1 Bed Room	128		128
1 Bed Room +	0		0
2 Bed Room	55	15	88
2 Bed Room +	5	5	13
3 Bed Room	9	4	16
3 Bed Room +		3	4
Total	**197**	**27**	**248**

Retail Space & Leasing Office: 15304 SF/300 = 51
MU-5 and MU-7 Additional
Level 6 (MU-5 portion): 8,700 SF/300 = 29
Level 8: 28,120 SF/300 = 94
Level 9 22,474 SF/300 = 75
Total required Parking: 497

BKV GROUP
SAROKI ARCHITECTURE
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Birmingham, Michigan 48009

Date: **Issued For:**

2026-02-10	CLIENT & CONSULTANT REVIEW
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2026-02-18	PRELIMINARY SITE PLAN APPROVAL

Sheet No.:
A001
BUILDING TABULATIONS

BASEMENT 2		
BUILDING AREA:	61,807	SF
STORMWATER/SUMP STATION	934	SF
MEP:	924	SF
PARKING/ SERVICES:	59,949	SF
TOTAL PARKING:	147	SPACES
STANDARD PARKING	*137*	SPACES
HANDICAP PARKING	*5*	SPACES
T & COMPACT PARKING	*5*	SPACES



LEGEND

- LOBBY
- AMENITY
- RETAIL
- PARKING
- APARTMENTS
- CONDO UNIT
- MEP/STOTRAGE
- GREEN AREA

NORTH

H10 / A090 Composite
Below Grade Parking Level 2
SCALE: 1/16" = 1'-0"

BKV GROUP
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Sheet No.:
A090

COMPOSITE
BELOW GRADE
PARKING LEVEL 2

BASEMENT 1		
BUILDING AREA:	61,807	SF
MEP:	1,858	SF
PARKING/ SERVICES:	59,949	SF
TOTAL PARKING:	143	SPACES
STANDARD PARKING	*129*	*SPACES*
HANDICAP PARKING	*5*	*SPACES*
T & COMPACT PARKING	*9*	*SPACES*



LEGEND

- LOBBY
- AMENITY
- RETAIL
- PARKING
- APARTMENTS
- CONDO UNIT
- MEP/STOTRAGE
- GREEN AREA

NORTH

H10 / A100 Composite Below Grade Parking Level 1
SCALE: 1/16" = 1'-0"

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Sheet No.:
A100

COMPOSITE
BELOW GRADE
PARKING LEVEL 1



GROUND LEVEL		
BUILDING AREA:	62,291	SF
MEP:	-	SF
TRASH/LOADING:	2,244	SF
RETAIL :	15,304	SF
LOBBY/LEASING:	6,331	SF
PARKING/ SERVICES:	44,743	SF
TOTAL PARKING:	56	SPACES
SURFACE PARKING	7	SPACES
STANDARD PARKING	43	SPACES
HANDICAP PARKING	2	SPACES
T & COMPACT PARKING	4	SPACES

H10 / A110 Composite First Level Floor Plan
SCALE: 1/16" = 1'-0"

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Sheet No.:
A110

COMPOSITE
FIRST LEVEL FLOOR PLAN

Requested Variance	Allowed	Proposed	Variance Amount
Variance A - Additional story in MU-5 District	5 stories / 66' high + 1 story / 12' per Section 3.08(E) for a total of 6 stories / 78' maximum	One additional story of mezzanine parking. 7 stories total / not to exceed 78' height	1 story
Variance B - Additional story in MU-7 District	7 stories / 90' high + 2 stories / 24' per Section 3.08(E) for a total of 9 stories / 114' maximum	One additional story of mezzanine parking. 10 stories total / not to exceed 114' height	1 story

LEVEL MEZZANINE		
BUILDING AREA:	38,628	SF
MEP & STORAGE	2,454	SF
PARKING/ SERVICES:	36,174	SF
TOTAL PARKING:	76	SPACES
STANDARD PARKING	66	SPACES
HANDICAP PARKING	3	SPACES
T & COMPACT PARKING	7	SPACES



ALL PARKING ON MEZZANINE LEVEL TO BE PUBLIC PARKING

TOTAL PARKING:	76 SPACES
STANDARD PARKING:	66 SPACES
BARRIER FREE PARKING:	3 SPACES
TANDEM PARKING:	3 SPACES
COMPACT PARKING:	4 SPACES

LEGEND

- LOBBY
- AMENITY
- RETAIL
- PARKING
- APARTMENTS
- CONDO UNIT
- MEP/STOTRAGE
- GREEN AREA

NORTH

H10 / A110m

Composite Mezzanine Level Floor Plan

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

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Sheet No.:

A110m

COMPOSITE MEZZANINE LEVEL FLOOR PLAN

LEVEL 2	
BUILDING AREA:	46,280 SF
MEP:	640 SF
AMENITY:	9,453 SF
GROSS RES. AREA:	36,187 SF
CIRCULATION:	6,087 SF
NET RES. AREA:	30,100 SF
UNIT COUNT:	28 UNITS



LEGEND

- LOBBY
- AMENITY
- RETAIL
- PARKING
- APARTMENTS
- CONDO UNIT
- MEP/STOTRAGE
- GREEN AREA

NORTH

H10 / A120 Composite Second Level Floor Plan
SCALE: 1/16" = 1'-0"

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Sheet No.:
A120

COMPOSITE
SECOND LEVEL FLOOR PLAN

LEVEL 3	
BUILDING AREA:	42,407 SF
MEP:	640 SF
GROSS RES. AREA:	41,767 SF
CIRCULATION:	8,770 SF
NET RES. AREA:	32,997 SF
UNIT COUNT:	33 UNITS



LEGEND

- LOBBY
- AMENITY
- RETAIL
- PARKING
- APARTMENTS
- CONDO UNIT
- MEP/STOTRAGE
- GREEN AREA

NORTH

H10 / A130 Composite Third Level Floor Plan

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

BKV GROUP

SAROKI ARCHITECTURE

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Sheet No.:
A130

COMPOSITE
THIRD LEVEL FLOOR PLAN

LEVELS 4-5 (2 LEVELS)	
BUILDING AREA:	46,280 SF
MEP:	640 SF
GROSS RES. AREA:	45,640 SF
CIRCULATION:	5,691 SF
NET RES. AREA:	39,949 SF
UNIT COUNT:	36 UNITS



LEGEND

- LOBBY
- AMENITY
- RETAIL
- PARKING
- APARTMENTS
- CONDO UNIT
- MEP/STOTRAGE
- GREEN AREA

H10 / A140 Composite Fourth Level Floor Plan
SCALE: 1/16" = 1'-0"

BKV GROUP
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Sheet No.:
A140

COMPOSITE
FOURTH LEVEL FLOOR PLAN

LEVELS 4-5 (2 LEVELS)	
BUILDING AREA:	46,280 SF
MEP:	640 SF
GROSS RES. AREA:	45,640 SF
CIRCULATION:	5,691 SF
NET RES. AREA:	39,949 SF
UNIT COUNT:	36 UNITS



LEGEND

- LOBBY
- AMENITY
- RETAIL
- PARKING
- APARTMENTS
- CONDO UNIT
- MEP/STOTRAGE
- GREEN AREA

NORTH

H10
A150

Composite
Fifth Level Floor Plan
SCALE: 1/16" = 1'-0"

BKV GROUP
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Sheet No.:
A150

COMPOSITE
FIFTH LEVEL FLOOR PLAN

LEVEL 6	
BUILDING AREA:	45,743 SF
MEP:	640 SF
GROSS RES. AREA:	45,103 SF
CIRCULATION:	5,687 SF
NET RES. AREA:	39,416 SF
UNIT COUNT:	36 UNITS



LEGEND

- LOBBY
- AMENITY
- RETAIL
- PARKING
- APARTMENTS
- CONDO UNIT
- MEP/STOTRAGE
- GREEN AREA

NORTH

H10 / A160 Composite Sixth Level Floor Plan
SCALE: 1/16" = 1'-0"

BKV GROUP
SAROKI ARCHITECTURE
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Sheet No.:
A160

COMPOSITE
SIXTH LEVEL FLOOR PLAN

LEVEL 7		
BUILDING AREA:	35,720	SF
MEP:	397	SF
AMENITY:	484	SF
GROSS RES. AREA:	34,839	SF
CIRCULATION:	4,248	SF
NET RES. AREA:	30,591	SF
UNIT COUNT:	28	UNITS



LEGEND

- LOBBY
- AMENITY
- RETAIL
- PARKING
- APARTMENTS
- CONDO UNIT
- MEP/STOTRAGE
- GREEN AREA

NORTH

H10
A170

Composite
Seventh Level Floor Plan
SCALE: 1/16" = 1'-0"

BKV GROUP
SAROKI ARCHITECTURE
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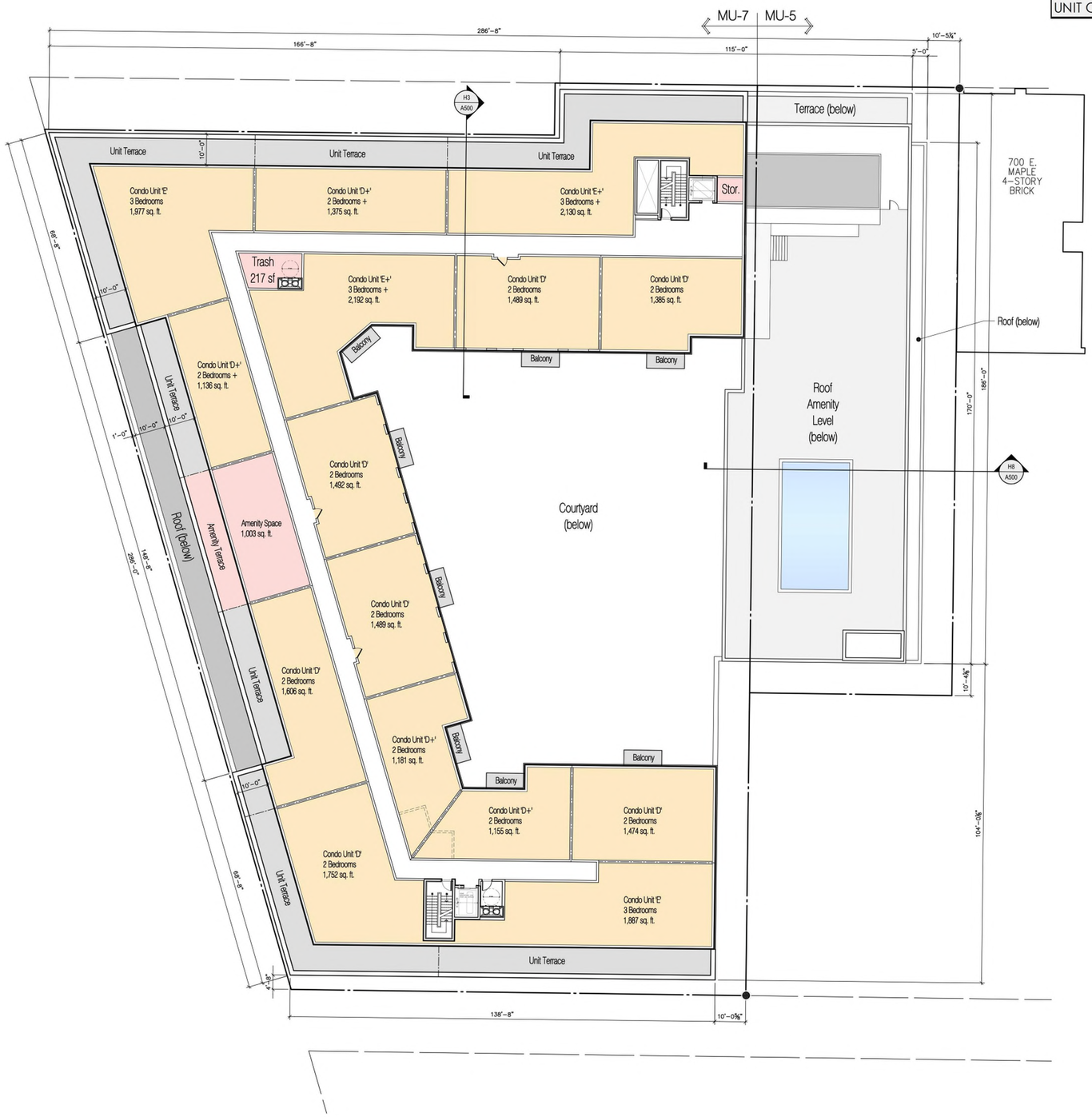
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Sheet No.:
A170

COMPOSITE
SEVENTH LEVEL FLOOR PLAN

LEVEL 8	
BUILDING AREA:	29,046 SF
MEP:	217 SF
AMENITY:	1,003 SF
GROSS RES. AREA:	27,826 SF
CIRCULATION:	4,007 SF
NET RES. AREA:	23,819 SF
UNIT COUNT:	15 UNITS



LEGEND

- LOBBY
- AMENITY
- RETAIL
- PARKING
- APARTMENTS
- CONDO UNIT
- MEP/STOTRAGE
- GREEN AREA

NORTH

H10
A180

Composite
Eighth Level Floor Plan
SCALE: 1/16" = 1'-0"

BKV GROUP

SAROKI ARCHITECTURE

430 N. OLD WOODWARD
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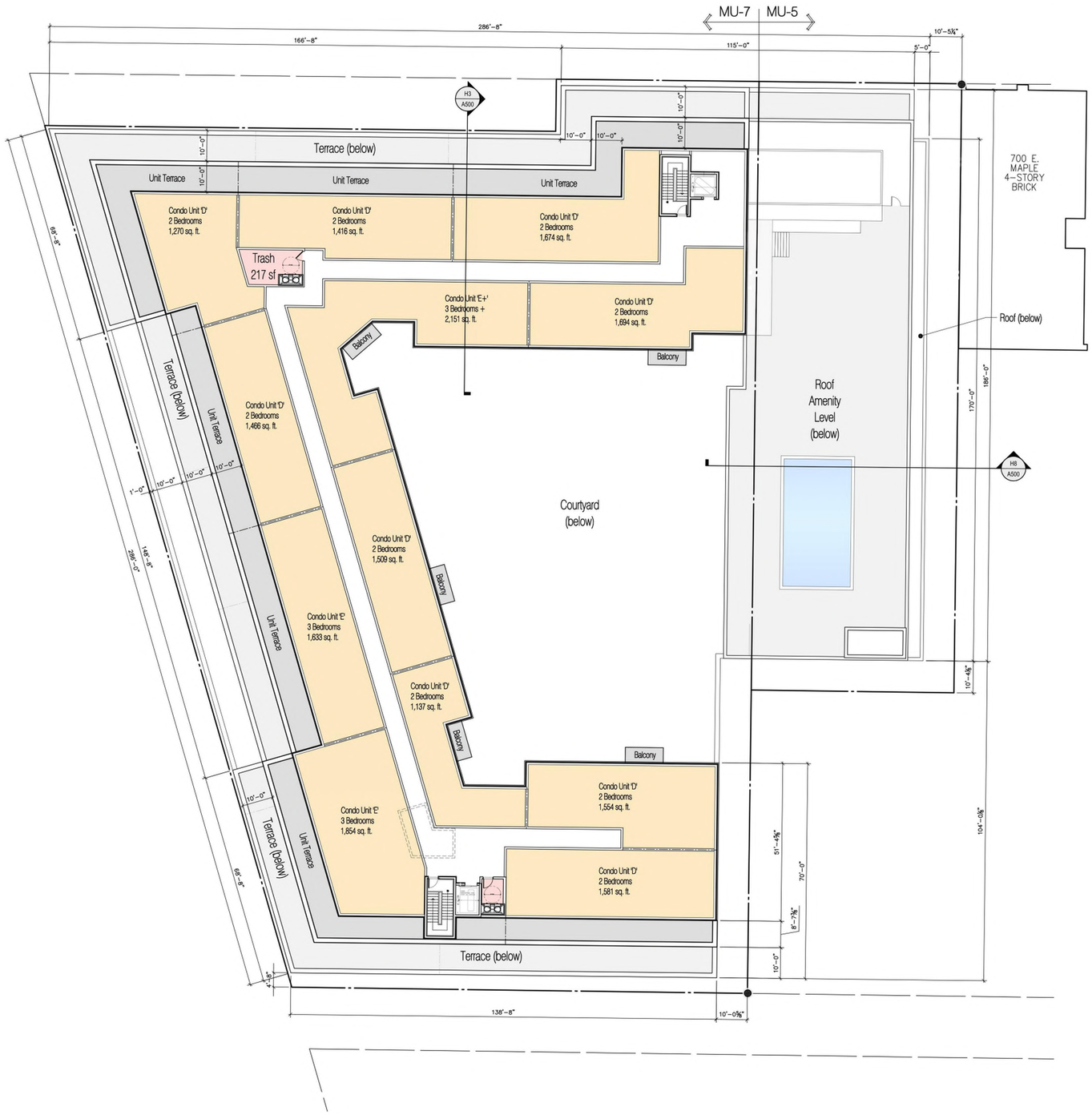
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Sheet No.:

A180

COMPOSITE
EIGHTH LEVEL FLOOR PLAN

LEVEL 9	
BUILDING AREA:	23,232 SF
MEP:	217 SF
GROSS RES. AREA:	23,015 SF
CIRCULATION:	4,011 SF
NET RES. AREA:	19,004 SF
UNIT COUNT:	12 UNITS



LEGEND

- LOBBY
- AMENITY
- RETAIL
- PARKING
- APARTMENTS
- CONDO UNIT
- MEP/STOTRAGE
- GREEN AREA

Composite
Ninth Level Floor Plan
SCALE: 1/16" = 1'-0"

BKV GROUP
SAROKI ARCHITECTURE
430 N. OLD WOODWARD
BIRMINGHAM, MI 48009
P. 248.258.5707
F. 248.258.5515
SarokiArchitecture.com

Project:
Beztak
Birmingham
Development
Woodward Ave. & Maple Road
Birmingham, Michigan 48009

Date:	Issued For:
2026-02-10	CLIENT & CONSULTANT REVIEW
2026-02-13	PRELIMINARY SITE PLAN APPROVAL - CLIENT REVIEW PACKAGE
2026-02-18	PRELIMINARY SITE PLAN APPROVAL

Sheet No.:
A190

COMPOSITE
NINTH LEVEL FLOOR PLAN

Requested Variance	Allowed	Proposed	Variance Amount
Variance A - Additional story in MU-5 District	5 stories / 66' high + 1 story / 12' per Section 3.08(E) for a total of 6 stories / 78' maximum	One additional story of mezzanine parking. 7 stories total / not to exceed 78' height	1 story
Variance B - Additional story in MU-7 District	7 stories / 90' high + 2 stories / 24' per Section 3.08(E) for a total of 9 stories / 114' maximum	One additional story of mezzanine parking. 10 stories total / not to exceed 114' height	1 story

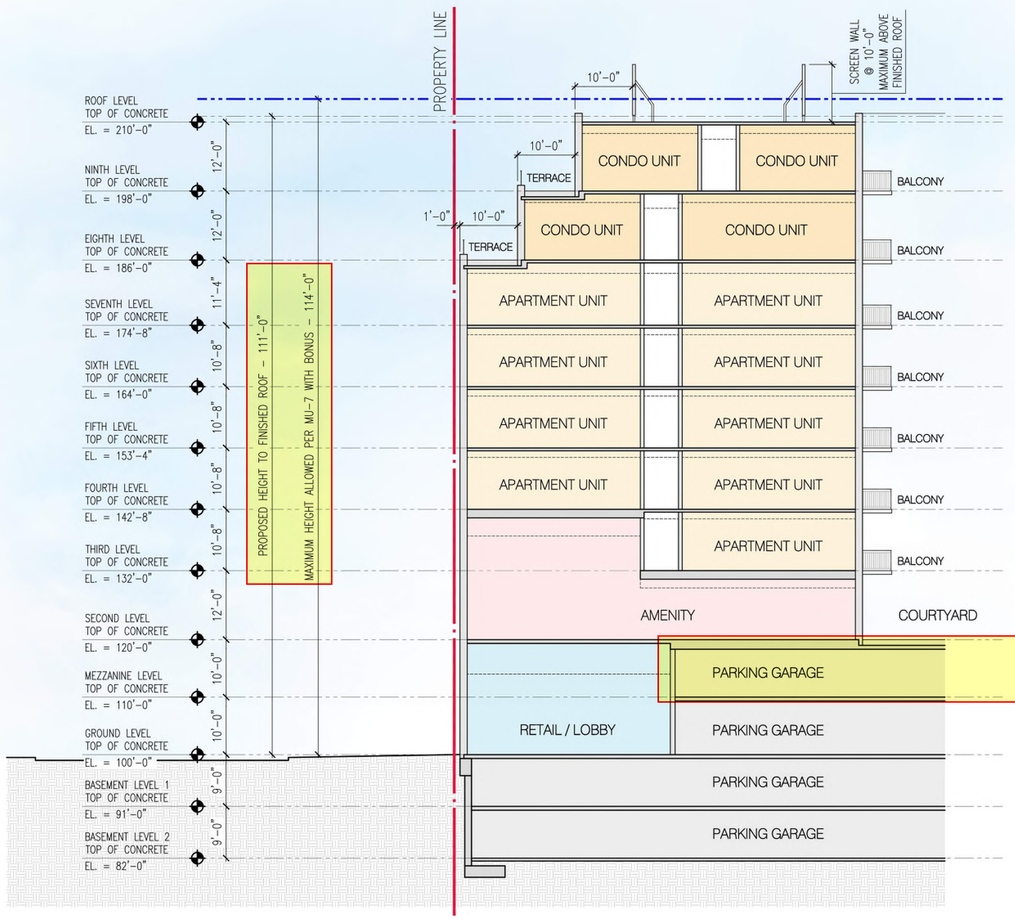
AREA OF REQUESTED VARIANCE

ONE ADDITIONAL MEZZANINE LEVEL OF PARKING.

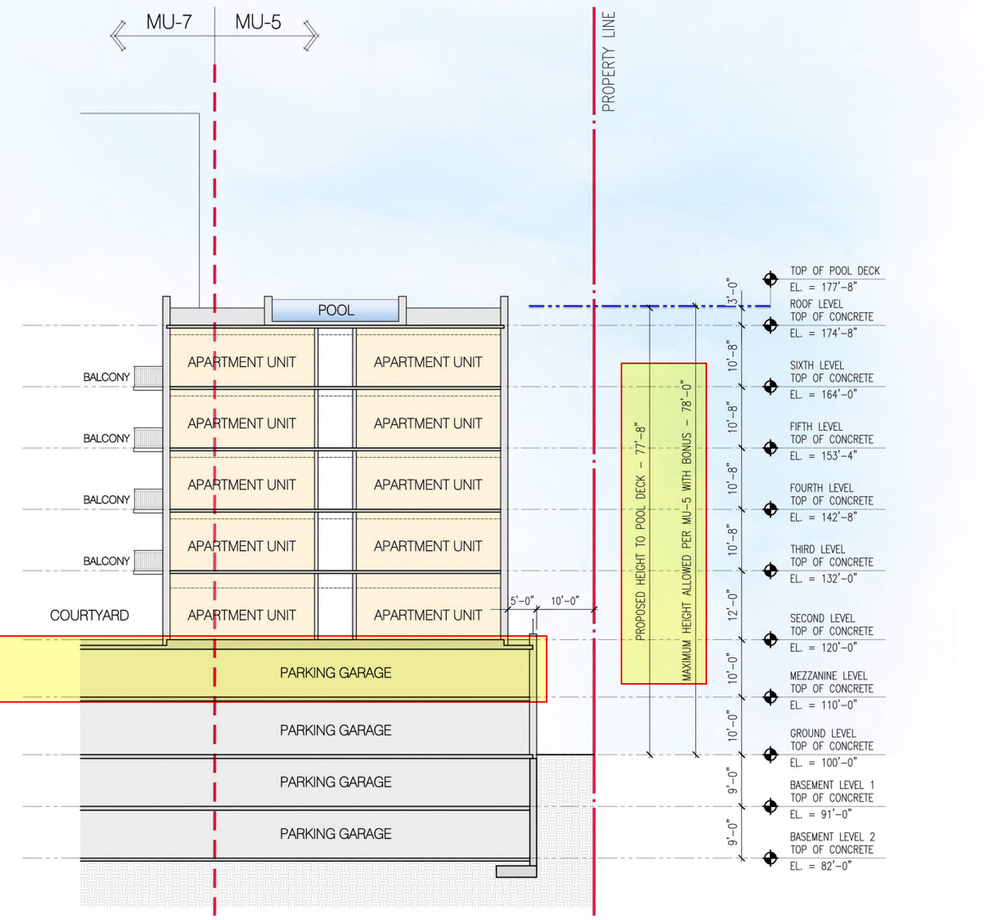
UNDER SECTION 3.08 HEIGHT AND PLACEMENT REQUIREMENTS OF THE TRIANGLE OVERLAY DISTRICT OF THE ZONING ORDINANCE, THE MU-5 DISTRICT ALLOWS FOR A BUILDING OF 5 STORIES AND 66 FEET WITH AN ADDITIONAL 1 STORY AND 12' OF HEIGHT FOR A TOTAL OF 6 STORIES AND 78' OF HEIGHT WHEN SECTION 3.08(E) IS MET.

LIKEWISE, THE MU-7 DISTRICT ALLOWS FOR A BUILDING OF 7 STORIES AND 90' WITH AN ADDITIONAL 2 STORIES AND 24' OF HEIGHT FOR A TOTAL OF 9 STORIES AND 114' OF HEIGHT WHEN SECTION 3.08(E) IS MET.

WE ARE REQUESTING AN ADDITIONAL STORY TO ALLOW THE PORTION OF THE BUILDING IN THE MU5 DISTRICT TO BE 7 STORIES AND THE PORTION OF THE BUILDING IN THE MU-7 DISTRICT TO BE 10 STORIES TOTAL. THE VARIANCE OF THE ADDITIONAL STORY OF PARKING WILL NOT CAUSE THE BUILDING HEIGHT TO EXCEED THE ALLOWABLE HEIGHTS OF 78' IN THE MU-5 DISTRICT OR THE 114' IN THE MU-7 DISTRICT.



H3 / A500 Partial Building Section
SCALE: 3/32" = 1'-0"



H8 / A500 Partial Building Section
SCALE: 3/32" = 1'-0"

BKV GROUP
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Project:
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Birmingham
Development
Woodward Ave. & Maple Road
Birmingham, Michigan 48009

Date: **Issued For:**

2026-02-18 PRELIMINARY SITE PLAN APPROVAL

Sheet No.:
A500

DIAGRAMMATIC PARTIAL BUILDING SECTIONS



H10
A800
Exterior Perspective Renderings
SCALE: NOT TO SCALE

BKV GROUP
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Woodward Ave. & Maple Road
Birmingham, Michigan 48009

Date: **Issued For:**

Sheet No.:
A800

EXTERIOR PERSPECTIVE RENDERINGS



Exterior Perspective Renderings
SCALE: NOT TO SCALE

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Birmingham
Development
Woodward Ave. & Maple Road
Birmingham, Michigan 48009

Date: **Issued For:**

Sheet No.:
A801

EXTERIOR PERSPECTIVE RENDERINGS



Exterior Perspective Renderings
SCALE: NOT TO SCALE

BKV GROUP
SAROKI ARCHITECTURE
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Birmingham
Development
Woodward Ave. & Maple Road
Birmingham, Michigan 48009

Date: **Issued For:**

Sheet No.:
A802

EXTERIOR PERSPECTIVE RENDERINGS



Exterior Perspective Renderings
SCALE: NOT TO SCALE

BKV GROUP
SAROKI ARCHITECTURE
430 N. OLD WOODWARD
BIRMINGHAM, MI 48009
P. 248.258.5707
F. 248.258.5515
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Project:
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Birmingham
Development
Woodward Ave. & Maple Road
Birmingham, Michigan 48009

Date: **Issued For:**

Sheet No.:
A803

EXTERIOR PERSPECTIVE RENDERINGS



H10 / A804 Exterior Perspective Renderings
SCALE: NOT TO SCALE

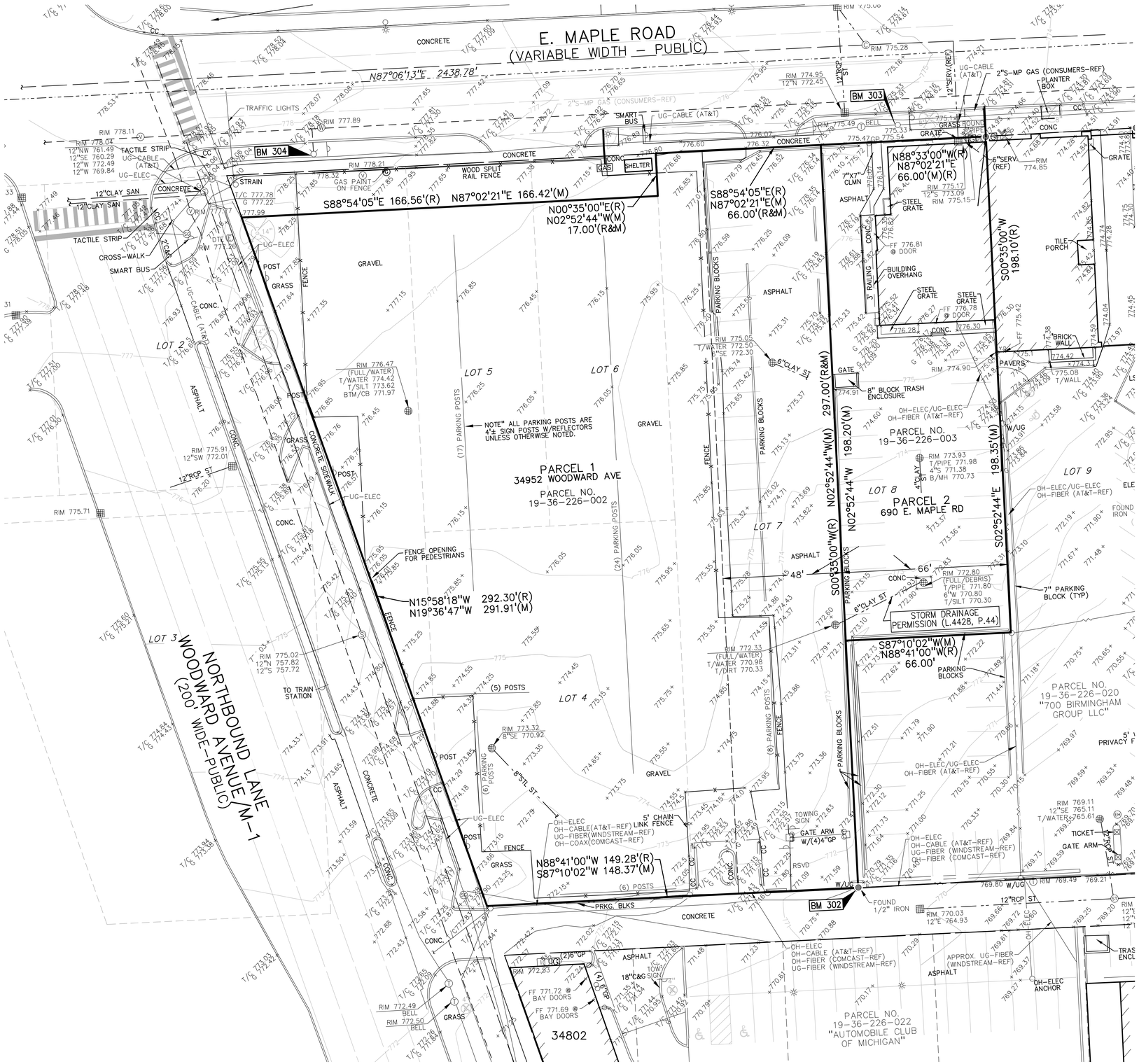
BKV GROUP
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P. 248.258.5707
F. 248.258.5515
SarokiArchitecture.com

Project:
Beztak
Birmingham
Development
Woodward Ave. & Maple Road
Birmingham, Michigan 48009

Date: **Issued For:**

Sheet No.:
A804

EXTERIOR PERSPECTIVE RENDERINGS


E. MAPLE ROAD
(VARIABLE WIDTH – PUBLIC)
N87°06'13"E 2438.78'
BM 303
BM 304
BM 302
S88°54'05"E 166.56'(R) N87°02'21"E 166.42'(M)
N00°35'00"E(R)
N02°52'44"W(M)
17.00'(R&M)
S88°54'05"E(R)
N87°02'21"E(M)
66.00'(R&M)
N88°33'00"W(R)
N87°02'21"E
66.00'(M)(R)
S00°35'00"W
198.10'(R)
N02°52'44"W(R) N02°52'44"W(M) 297.00'(R&M)
N02°52'44"W 198.20'(M)
S02°52'44"E 198.35'(M)
PARCEL 1
34952 WOODWARD AVE
PARCEL NO.
19-36-226-002
PARCEL 2
690 E. MAPLE RD
PARCEL NO.
19-36-226-003
N15°58'18"W 292.30'(R)
N19°36'47"W 291.91'(M)
N88°41'00"W 149.28'(R)
S87°10'02"W 148.37'(M)
S87°10'02"W(M)
N88°41'00"W(R)
66.00'
NORTHBOUND LANE
WOODWARD AVENUE/M-1
(200' WIDE-PUBLIC)
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
PARCEL NO.
19-36-226-020
"700 BIRMINGHAM
GROUP LLC"
PARCEL NO.
19-36-226-022
"AUTOMOBILE CLUB
OF MICHIGAN"
34802
TRAFFIC LIGHTS
SMART BUS
TACTILE STRIP
CROSS-WALK
TO TRAIN STATION
GAS SHELTER
GAS PAINT ON FENCE
WOOD SPLIT RAIL FENCE
2"S-MP GAS (CONSUMERS-REF)
UG-CABLE (AT&T)
12"CLAY SAN
12"RCP ST
12"SERV.(REF)
PLANTER BOX
GRASS ROUND
GRATE
CONCRETE
ASPHALT
GRAVEL
CONC.
GRASS
FENCE
POST
UG-ELEC
OH-ELEC/UG-ELEC
OH-FIBER (AT&T-REF)
OH-ELEC
OH-CABLE(AT&T-REF)
UG-FIBER(WINDSTREAM-REF)
OH-COAX(COMCAST-REF)
OH-CABLE (AT&T-REF)
UG-FIBER (WINDSTREAM-REF)
OH-FIBER (COMCAST-REF)
5' CHAIN LINK FENCE
GATE ARM W/(4)4"GP
TOWING SIGN
RSVD
PARKING BLOCKS
(17) PARKING POSTS
(24) PARKING POSTS
(6) PARKING POSTS
(5) POSTS
(6) POSTS
NOTE" ALL PARKING POSTS ARE 4'± SIGN POSTS W/REFLECTORS UNLESS OTHERWISE NOTED.
FENCE OPENING FOR PEDESTRIANS
PRKG. BLKS
6"CLAY ST
8"CLAY ST
STEEL GRATE
BUILDING OVERHANG
3' RAILING
TILE PORCH
1-BRICK WALL
PAVERS
6" BLOCK TRASH ENCLOSURE
GATE
7"X7" CLMN
STORM DRAINAGE PERMISSION (L.4428, P.44)
7" PARKING BLOCK (TYP)
PARKING BLOCKS
APPROX. UG-FIBER (WINDSTREAM-REF)
OH-ELEC ANCHOR
TICKET
GATE ARM
PRIVACY F
FOUND 1/2" IRON
FOUND IRON
18"C&G
(2)6"GP
(4)4"GP
FF 771.72 @ BAY DOORS
FF 771.69 @ BAY DOORS
FF 776.81 @ DOOR
FF 776.78 @ DOOR
RIM 778.11
RIM 778.04
12"NW 761.49
12"SE 760.29
12"W 772.49
12"W 769.84
RIM 778.21
RIM 777.89
RIM 775.28
RIM 774.95
12"N 772.45
RIM 775.49
RIM 775.47
CB 775.54
RIM 775.17
12"S 773.09
RIM 775.15
RIM 774.85
RIM 775.05
T/WATER 772.50
8"SE 772.30
RIM 774.90
T/WALL 775.08
RIM 776.47
(FULL/WATER)
T/WATER 774.42
T/SILT 773.62
BTM/CB 771.97
RIM 775.91
12"SW 772.01
RIM 775.71
RIM 773.32
8"SE 770.92
RIM 773.93
T/PIPE 771.98
4"S 771.38
B/MH 770.73
RIM 772.80
(FULL/DEBRIS)
T/PIPE 771.80
6"W 770.80
T/SILT 770.30
RIM 772.33
(FULL/WATER)
T/WATER 770.98
T/DIRT 770.33
RIM 769.11
12"SE 765.11
T/WATER 765.61
RIM 770.03
12"E 764.93
RIM 772.49
BELL
RIM 772.50
BELL
RIM 772.83
RIM 772.26
BELL
RIM 775.02
12"N 757.82
12"S 757.72
RIM 772.49
T/PIPE 771.98
4"S 771.38
B/MH 770.73
T/C 778.49
T/C 778.60
T/C 778.53
T/C 778.04
T/C 778.46
T/C 778.07
T/C 778.08
T/C 778.18
T/C 778.19
T/C 778.06
T/C 778.04
T/C 778.10
T/C 778.03
T/C 777.78
G 777.22
T/C 777.49
T/C 777.44
T/C 777.86
T/C 777.74
T/C 777.68
T/C 777.63
T/C 777.71
T/C 777.77
T/C 777.26
T/C 777.11
T/C 777.01
T/C 776.93
T/C 777.18
T/C 777.39
T/C 777.03
T/C 776.95
T/C 777.00
T/C 776.90
T/C 776.91
T/C 776.84
T/C 776.80
T/C 776.75
T/C 776.70
T/C 776.65
T/C 776.60
T/C 776.55
T/C 776.50
T/C 776.45
T/C 776.40
T/C 776.35
T/C 776.30
T/C 776.25
T/C 776.20
T/C 776.15
T/C 776.10
T/C 776.05
T/C 776.00
T/C 775.95
T/C 775.90
T/C 775.85
T/C 775.80
T/C 775.75
T/C 775.70
T/C 775.65
T/C 775.60
T/C 775.55
T/C 775.50
T/C 775.44
T/C 775.38
T/C 775.33
T/C 775.27
T/C 775.22
T/C 775.16
T/C 775.11
T/C 775.05
T/C 774.99
T/C 774.94
T/C 774.88
T/C 774.82
T/C 774.76
T/C 774.71
T/C 774.65
T/C 774.59
T/C 774.53
T/C 774.48
T/C 774.42
T/C 774.36
T/C 774.30
T/C 774.25
T/C 774.19
T/C 774.13
T/C 774.07
T/C 774.02
T/C 773.96
T/C 773.90
T/C 773.85
T/C 773.79
T/C 773.73
T/C 773.68
T/C 773.62
T/C 773.56
T/C 773.50
T/C 773.45
T/C 773.39
T/C 773.33
T/C 773.28
T/C 773.22
T/C 773.16
T/C 773.11
T/C 773.05
T/C 772.99
T/C 772.94
T/C 772.88
T/C 772.82
T/C 772.77
T/C 772.71
T/C 772.65
T/C 772.60
T/C 772.54
T/C 772.48
T/C 772.43
T/C 772.37
T/C 772.31
T/C 772.26
T/C 772.20
T/C 772.14
T/C 772.09
T/C 772.03
T/C 771.97
T/C 771.92
T/C 771.86
T/C 771.80
T/C 771.75
T/C 771.69
T/C 771.63
T/C 771.58
T/C 771.52
T/C 771.46
T/C 771.41
T/C 771.35
T/C 771.29
T/C 771.24
T/C 771.18
T/C 771.12
T/C 771.07
T/C 771.01
T/C 770.95
T/C 770.90
T/C 770.84
T/C 770.78
T/C 770.73
T/C 770.67
T/C 770.61
T/C 770.56
T/C 770.50
T/C 770.44
T/C 770.39
T/C 770.33
T/C 770.27
T/C 770.22
T/C 770.16
T/C 770.10
T/C 770.05
T/C 769.99
T/C 769.93
T/C 769.88
T/C 769.82
T/C 769.76
T/C 769.71
T/C 769.65
T/C 769.60
T/C 769.54
T/C 769.48
T/C 769.43
T/C 769.37
T/C 769.31
T/C 769.26
T/C 769.20
T/C 769.14
T/C 769.09
T/C 769.03
T/C 768.97
T/C 768.92
T/C 768.86
T/C 768.80
T/C 768.75
T/C

CASE DESCRIPTION

488 Willits (26-14)

Hearing date: May 12, 2026

Appeal No. 26-14: The owner of the property known **488 Willits**, requests the following variances to construct a new home with an attached garage:

A. Chapter 126, Article 2, Section 2.08.4 of the Zoning Ordinance requires a maximum midpoint roof height for a pitched roof in an R-2 zoning district is 28.00 feet for this property. The proposed midpoint is 37.48 feet; therefore, a variance of 9.48 feet is being requested.

B. Chapter 126, Article 2, Section 2.08.4 of the Zoning Ordinance requires a maximum roof height for a flat roof in an R-2 zoning district is 24.00 feet for this property. The proposed roof height is 32.46 feet; therefore, a variance of 8.46 feet is being requested.

C. Chapter 126, Article 2, Section 2.08.4 of the Zoning Ordinance requires a maximum eave height for the building for an R-2 zoning district is 24.00 feet for this property. The proposed eave height is 32.46 feet; therefore, a variance of 8.46 feet is being requested.

Staff Notes: The applicant is looking to construct a new home with an attached garage on a lot that slops to the rear. A Variance was granted in 2025. See minutes attached.

This property is zoned R2 – Single family residential.

Andrew Erickson
Assistant Building Official

CHAPTER 126 - ZONING

ARTICLE 8: ENFORCEMENT AND PENALTIES

8.01 The Board of Zoning Appeals

3. Variances.
   a. The Board of Zoning Appeals shall hear and grant or deny requests for variances from the strict application of the provisions of the Zoning Ordinance where there are practical difficulties or unnecessary hardships in carrying out the strict letter of such chapter. In granting a variance, the Board of Zoning Appeals may attach such conditions as it may deem reasonably necessary to promote the spirit and intent of the Zoning Ordinance. The Board of Zoning Appeals shall not grant any variance unless it first determines that:
      i. Because of special conditions applicable to the property in question, the provisions of the Zoning Ordinance, if strictly applied, unreasonably prevent the property owner from using the property for a permitted purpose;
      ii. Literal enforcement of the chapter will result in unnecessary hardship;
      iii. The granting of the variance will not be contrary to the spirit and purpose of the Zoning Ordinance nor contrary to the public health, safety and welfare; and
      iv. The granting of the variance will result in substantial justice to the property owner, the owners of property in the area and the general public.

(EACH i-iv must be satisfied)

488 WILLITS



April 27, 2026

1:1,128

0 0.01 0.01 0.02 mi

0 0.01 0.02 0.04 km

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

CITY OF BIRMINGHAM
Community Development - Building Department
151 Martin Street, Birmingham, MI 48009
Community Development: 248-530-1850
Fax: 248-530-1290 / www.bhamgov.org

APPLICATION FOR THE BOARD OF ZONING APPEALS

Received Date: _____ **Hearing Date:** _____

Received By: _____ **Appeal #:** _____

Type of Variance:	☐ Interpretation	☐ Dimensional	☐ Land Use	☐ Sign	☐ Admin Review

I. PROPERTY INFORMATION:

Address:	Lot Number:	Sidwell Number:
488 Willits Street	1	19-25-376-040

II. OWNER INFORMATION:

Name:			
Armando Yparra			
Address:	City:	State:	Zip code:
Email:* aggdesignbuildinc@gmail.com		Phone: 248.830.6679	

III. PETITIONER INFORMATION:

Name:	Firm/Company Name:		
Armando Yparra	AG Design & Build		
Address:	City:	State:	Zip code:
Email: aggdesignbuildinc@gmail.com		Phone: 248.830.6679	

IV. GENERAL INFORMATION:

The Board of Zoning Appeals typically meets the second Tuesday of each month. COMPLETE digital applications along with supporting documents must be submitted on or before the 12th day of the month preceding the next regular meeting. Please note that incomplete applications will not be accepted.

To insure complete applications are provided, appellants must schedule a pre-application meeting with the Building Official, Assistant Building Official and/or City Planner for a preliminary discussion of their request and the documents that will be required to be submitted. Staff will explain how all requested variances must be highlighted on the survey, site plan and construction plans. Each variance request must be clearly shown on the survey and plans including a table as shown in the example below. All dimensions to be shown in feet measured to the second decimal point.

The BZA application fee is **$750.00** for single family residential; **$950.00** for all others. This amount includes a fee for a public notice sign which must be posted at the property at least 15-days prior to the scheduled hearing date.

Variance Chart Example

Requested Variances	Required	Existing	Proposed	Variance Amount
Variance A, Front Setback	25.00 Feet	23.50 Feet	23.50 Feet	1.50 Feet
Variance B, Height	30.00 Feet	30.25 Feet	30.25 Feet	0.25 Feet

V. REQUIRED INFORMATION CHECKLIST:

Please provide the following in your electronic submission:

- ○ Completed and signed application
- ○ Signed letter of practical difficulty and/or hardship
- ○ Certified survey
- ○ Building plans including existing and proposed floor plans and elevations
- ○ If appealing a board decision, provide a copy of the minutes from any previous Planning, HDC, or DRB board meeting

VI. APPLICANT SIGNATURE

Owner hereby authorizes the petitioner designated below to act on behalf of the owner.

By signing this application, I agree to conform to all applicable laws of the City of Birmingham. All information submitted on this application is accurate to the best of my knowledge. Changes to the plans are not allowed without approval from the Building Official or City Planner.

*By providing your email to the City, you agree to receive news and notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.

Signature of Owner: _____ **Date:** 4-9-26

Signature of Petitioner: _____ **Date:** 4-9-26

CITY OF BIRMINGHAM
BOARD OF ZONING APPEALS
RULES OF PROCEDURE

ARTICLE I - Appeals

A. Appeals may be filed under the following conditions:

1. A property owner may appeal for variance, modification or adjustment of the requirements of the Zoning Ordinance.

2. A property owner may appeal for variance, modification or adjustment of the requirements of the Sign Ordinance.

3. Any aggrieved party may appeal the decision of the Planning Board and/or the Building Official in accordance with the City of Birmingham Zoning Ordinance, Article Eight, Section 8.01 (D) Appeals. If an appellant requests a review of any determination of the Building Official, a complete statement setting forth the facts and reasons for the disagreement with the Building Official's determination shall include the principal point, or points on the decision, order or section of the ordinance appealed from, on which the appeal is based.

B. Procedures of the Board of Zoning Appeals (BZA) are as follows:

1. Regular BZA meetings, which are open to the public, shall be held on the second Tuesday of the month at 7:30 P.M. provided there are pending appeals. There will be a maximum of seven appeals heard at the regular meeting which are taken in the order received. If an appeal is received on time after the initial seven appeals have been scheduled, it will be scheduled to the next regular meeting.

2. All applications for appeal shall be submitted to the Community Development Department on or before the 12th day of the month preceding the next regular meeting. If the 12th falls on a Saturday, Sunday, or legal holiday, the next working day shall be considered the last day of acceptance.

3. All property owners and occupants within 300 feet of the subject property will be given written notice of a hearing by the City of Birmingham.

4. See the application form for specific requirements. If the application is incomplete, the BZA may refuse to hear the appeal. The Building Official or City Planner may require the applicant to provide additional information as is deemed essential to fully advise the Board in reference to the appeal. Refusal or failure to comply shall be grounds for dismissal of the appeal at the discretion of the Board.

5. In variance requests, applicants must provide a statement that clearly sets forth all special conditions that may have contributed to a practical difficulty that is preventing a reasonable use of the property.

6. Where the Birmingham Zoning Ordinance requires site plan approval of a project by the City Planning Board before the issuance of a building permit, applicants must obtain preliminary site plan approval by the Planning Board before appeal to the BZA for a variance request. If such appeal is granted by the BZA, the applicant must seek final site plan and design review approval from the Planning Board before applying for a building permit.

7. An aggrieved party may appeal a Planning Board decision. Such appeal must be made within 30 days of the date of the decision. The BZA, in its discretion, may grant additional time in exceptional circumstances.

8. Appeals from a decision of the Building Official shall be made within 30 days of the date of the order, denial of permit, or requirement or determination contested. The BZA, in its discretion, may grant additional time in exceptional circumstances.

9. An appeal stays all proceedings in accordance with Act #110, Public Acts of 2006, Article VI, Section 125.3604 (3).

C. The order of hearings shall be:

1. Presentation of official records of the case by the Building Official or City Planner as presented on the application form.

2. Applicant's presentation of his/her case—the applicant or his/her representative must be present at the appeal hearing.

3. Interested parties' comments and view on the appeal.

4. Rebuttal by applicant.

5. The BZA may make a decision on the matter or request additional information.

D. Motions and Voting

1. A motion is made to either grant or deny a petitioner's request
    a) For a motion to grant or deny a non-use variance request, the motion must receive four (4) affirmative votes to be approved.
    b) For a motion to grant or deny a use variance request, the motion must receive five (5) affirmative votes to be approved.
    c) For a motion to grant or deny an appeal of a decision or order by an administrative official or board, the motion must receive four (4) affirmative votes to be approved.

2. When a motion made is to approve or deny a petitioner's request and if there is a tie vote, then the vote results in no action by the board and the petitioner shall be given an opportunity to have his or her request heard the next regularly scheduled meeting when all the members are present.

3. When there are less than seven (7) members of the board present for a meeting, then a petitioner requesting a use variance shall be given an opportunity at the beginning of the meeting to elect to have it heard at the next regularly scheduled meeting.

4. When there are less than six (6) members present for a meeting, then all petitioners shall be given an opportunity at the beginning of the meeting to elect to have the request heard at the next regularly scheduled meeting.

ARTICLE II - Results of an Appeal

A. The Board may reverse, affirm, vary or modify any order, requirement, decision or determination as in its opinion should be made, and to that end, shall have all the powers of the officer from whom the appeal has been taken.

B. The decisions of the Board shall not become final until the expiration of five (5) days from the date of entry of such orders or unless the Board shall find that giving the order immediate effect is necessary for the preservation of property and/or personal rights and shall so certify on the record.

C. Whenever any variation or modification of the Zoning Ordinance is authorized by resolution of the BZA, a Certificate of Survey must be submitted to the Community Development Department with the building permit application. A building permit must be obtained within one year of the approval date.

D. Failure of the appellant, or his representative, to appear for his appeal hearing will result in the appeal being adjourned to the next regular meeting. If, after notice, the appellant fails to appear for the second time, it will result in an automatic withdrawal of the appeal. The appellant may reapply to the BZA.

E. Any applicant may, with the consent of the Board, withdraw his application at any time before final action.

F. Any decision of the Board favorable to the applicant is tied to the plans submitted, including any modifications approved by the Board at the hearing and agreed to by the applicant, and shall remain valid only as long as the information or data provided by the applicant is found to be correct and the conditions upon which the resolution was based are maintained.

ARTICLE III - Rehearings

A. No rehearing of any decision of the Board shall be considered unless new evidence is submitted which could not reasonably have been presented at the previous hearing or unless there has been a material change of facts or law.

B. Application or rehearing of a case shall be in writing and subject to the same rules as an original hearing, clearly stating the new evidence to be presented as the basis of an appeal for rehearing.

I certify that I have read and understand the above rules of procedure for the City of Birmingham Board of Zoning Appeals.



_____

Signature of Applicant

krieger klatt
ARCHITECTS
architecture interiors consulting

Board of Zoning Appeals
Community Development – Building Department
151 Martin Street
Birmingham, MI 48009

Re: 488 Willits Street – BZA Practical Difficulties Response

Board of Zoning Appeals Members,

Thank you for your consideration of our Variance requests. Below are responses to the prompts from the BZA Variance Standards Form.

1. Strict application of the zoning ordinance unreasonably prevents petitioner from using their property for a permitted use.

Strict compliance will not prevent the Owner from using the property as a single family residence but it will be unnecessarily burdensome for the following reasons:

The proposed home's overall height as well as each individual floor height will be severely impacted due to the significant change in grade across the site, approximately 9 feet from front to back. The zoning ordinance states building height is taken from the existing grade point which, in our case, would reduce our buildable height by 9 feet at the back of the house. Additionally, the proposed residence is intended to primarily have flat roofs which are subject to a lower maximum height (24') than what gable/hip roofs (28') are allowed, so we are already limited to a reduced height of 4' for the overall structure of the house.

If we were to have our building height reduced by an additional 9 feet due to the lowest grade point, we would effectively not be able to build a second floor on the house, which is an allowed use within the zoning district. In new construction, a typical house would have 10' high first floor ceilings, 9' high second floor ceilings, with approximately 4' of structure above grade for a grand total of 23' of height above grade. So, even if the grade drop was only 1', the height of the flat roofs would already exceed the maximum allowed roof height of 24'.

The applicant is proposing to tear down an existing home which, by today's standards, would be considered outdated due to a number of features: 1) only a single car garage, 2) low/clipped ceiling heights on both the first and second floors, and 3) types of exterior materials and trim being used (primarily vinyl). The new home on the lot would be a modern classical style which would fit in, not only with today's design styles and standards, but also the design trends that are popping up in the neighboring areas and city. The proposed design of the home will have minimal to no impact on the surrounding homes as the house will be designed in a way that 1) complies with the zoning ordinance in terms of height at the street (public) side of the lot where the grade is the highest and 2) does not go against the spirit and intent of the zoning ordinance, as the grade drops away, as any roof structure would fit within the theoretical allowed building height envelope.

2. Strict enforcement of the zoning ordinance will result in unnecessary hardship.

The applicant is simply looking for relief when it comes to the overall building and roof height of the structure as it pertains to the drop in grade that occurs along the site. Due to this drop in grade, an unnecessary hardship is present in that the building and roof heights are taken from the lowest grade point which results in ceiling and wall heights being extremely limited and the constructability of a full height second floor being made difficult. If strict enforcement of the zoning ordinance was taken, the owner would be unnecessary burdened by the shorter roof and ceiling heights due to the change in grade that is outside of their control.

3. Granting the requested variances would not be contrary to the spirit and purpose of the zoning ordinance, nor contrary to the public health, safety, and welfare.

Granting of the variances would not be contrary to the spirit and purpose of the ordinance because the change in grade is what is presenting the hardship and if it were to not exist (i.e. if the site was mostly flat), there would be no challenges present with the allowed roof heights. Additionally, from the public viewpoint and street/sidewalk view, the house would appear no taller than any of the surrounding new homes in the area as the grade along the front of the house is fairly consistent and flat which gives the appearance of a typical overall building height.

The requested variances would also not impact the public health, safety, and welfare in any way as the general public will not be using the site for any purposes and the house will not encroach into any public right-of-ways, easements, etc. that would affect any surrounding properties or public ways.

4. Granting the requested variances will result in substantial justice to petitioner, owners of the properties in the area, and to the general public.

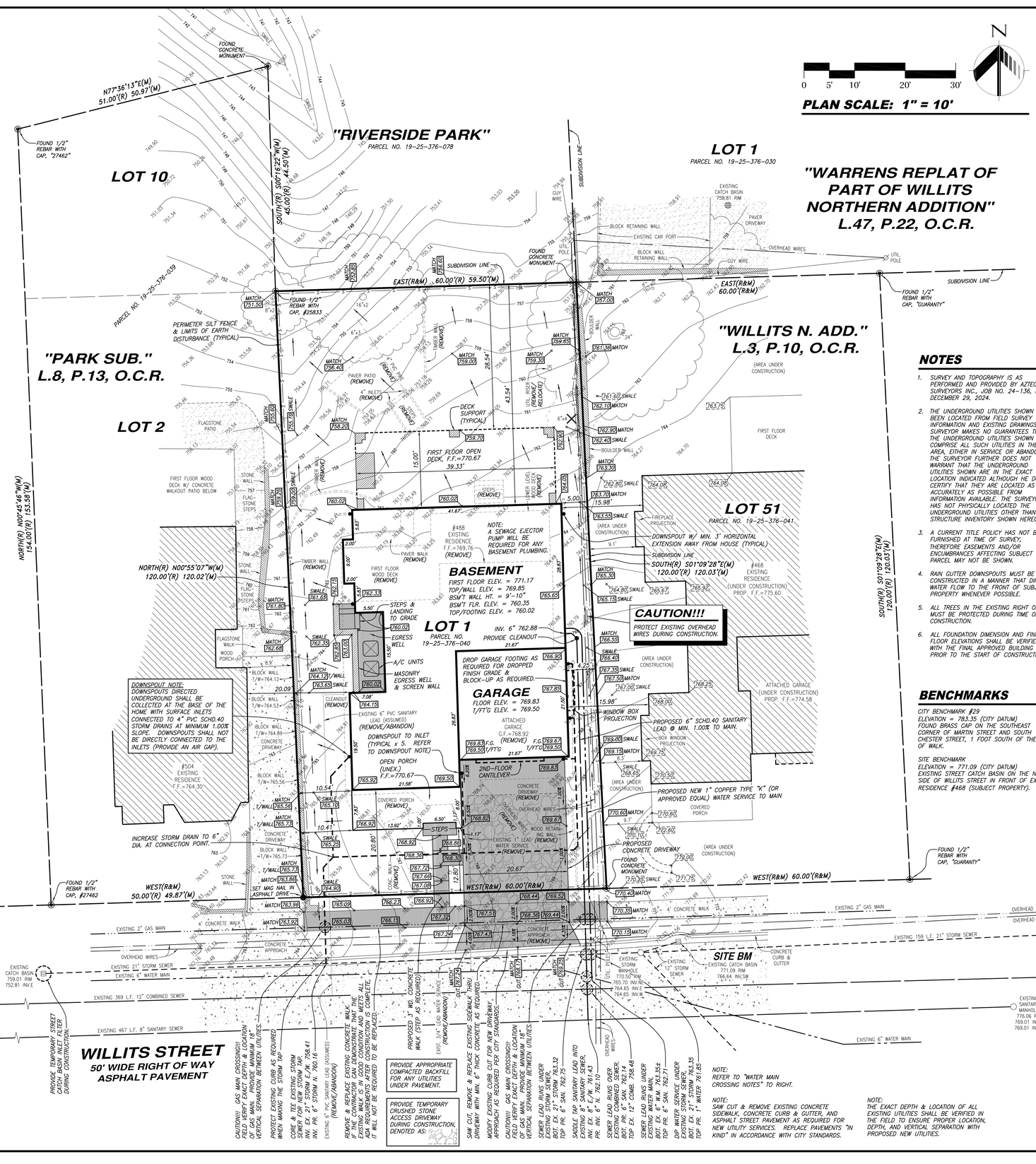
Granting of these variances will result in substantial justice to the petitioner because they will no longer be unnecessarily burdened by existing site conditions they did not create. The petitioner will also be granted justice by allowing them to build a home that meets modern design standards and expectations. Additionally, the neighboring property to the east was granted building height variances for the same issue of grade changes along the site so this will further strengthen any future cases or arguments surrounding these types of issues and help set a stronger precedent in the city moving forward.

5. The practical difficulty is not self-created.

The condition was not self-created. The site topography exists as it is in its current state and has not been modified by the current property owner in any way. While the current owner was aware of the potential challenges in building a new home on the property due to the existing site topography, they did not create the difficulty and were aware of the potential to receive variances for the building heights as has been established by the property directly to the east.

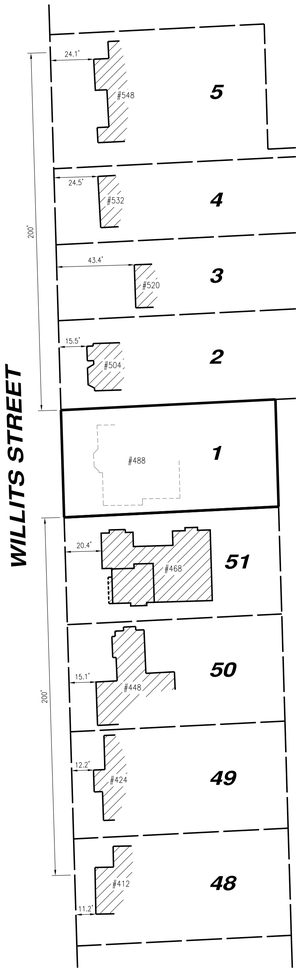
LEGEND

- 760.00 — EXISTING GRADE
- 760 — EXISTING CONTOURS, 1' INTERVAL
- 760.00 — PROPOSED GRADE
- 760.00 — AS-BUILT GRADE
- DIRECTION OF SURFACE DRAINAGE
- S — S — SILT FENCE & LIMITS OF EARTH DISTURBANCE
- EXISTING ASPHALT & CONCRETE PAVEMENTS TO REMAIN
- EXISTING PAVER AREAS TO REMAIN
- PROPOSED NEW PAVEMENT AREAS
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED



0 5' 10' 20' 30'

PLAN SCALE: 1" = 10'



FRONT SETBACK SURVEY

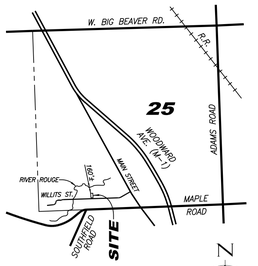
SCALE: 1" = 40'

CONTRACTOR'S NOTE

The locations of existing underground utilities are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities before commencing work. He agrees to be fully responsible for any and all damages which might be occasioned by his failure to exactly locate and preserve any and all underground utilities.

The contractor shall be responsible for adhering to all applicable local, state, and federal standards, specifications, and guidelines for construction.

3 WORKING DAYS
BEFORE YOU DIG CALL MISS DIG
1-800-482-7171
(TOLL FREE) for the location of underground utilities



LOCATION MAP

SCALE: 1"=2000'

PROPERTY DESCRIPTION

PARCEL NO. 19-25-376-040
LOT 1, "PARK SUBDIVISION", PART OF THE SOUTHWEST 1/4 OF SECTION 25, TOWN 2 NORTH, RANGE 10 EAST, CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN AS RECORDED IN LIBER 8 OF PLATS, PAGE 12 OF OAKLAND COUNTY RECORDS.

NOTES

1. *SURVEY AND TOPOGRAPHY IS AS PERFORMED AND PROVIDED BY AZTEC LAND SURVEYORS INC., JOB NO. 24-136, DATED DECEMBER 29, 2024.*
2. *THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.*
3. *A CURRENT TITLE POLICY HAS NOT BEEN FURNISHED AT TIME OF SURVEY, THEREFORE EASEMENTS AND ANY ENCUMBRANCES AFFECTING SUBJECT PARCEL MAY NOT BE SHOWN.*
4. *RAIN GUTTER DOWNSPOUTS MUST BE CONSTRUCTED IN A MANNER THAT DIRECTS WATER FLOW TO THE FRONT OF SUBJECT PROPERTY WHENEVER POSSIBLE.*
5. *ALL TREES IN THE EXISTING RIGHT OF WAY MUST BE PROTECTED DURING TIME OF CONSTRUCTION.*
6. *ALL FOUNDATION DIMENSION AND FINISH FLOOR ELEVATIONS SHALL BE VERIFIED WITH THE FINAL APPROVED BUILDING PLANS PRIOR TO THE START OF CONSTRUCTION.*

BENCHMARKS

CITY BENCHMARK #29
ELEVATION = 783.35 (CITY DATUM)
FOUND BRASS CAP ON THE SOUTHEAST CORNER OF MARTIN STREET AND SOUTH CHESTER STREET, 1 FOOT SOUTH OF THE BACK OF WALK.

SITE BENCHMARK
ELEVATION = 771.09 (CITY DATUM)
EXISTING STREET CATCH BASIN ON THE NORTH SIDE OF WILLITS STREET IN FRONT OF EXISTING RESIDENCE #468 (SUBJECT PROPERTY).

SITE CRITERIA

- *ADDRESS: 488 WILLITS STREET*
- *PARCEL ID NO.: 19-25-376-040*
- *ZONING: R-2, SINGLE FAMILY RESIDENTIAL*
- *AVERAGE FRONT SETBACK AS SURVEYED = 20.80'*
- *REQUIRED MINIMUM REAR SETBACK = 30'*
- *REQUIRED MIN. COMBINED FRONT AND REAR SETBACK = 55'*
- *REQUIRED MINIMUM SIDE SETBACK = 5'*
- *REQUIRED MINIMUM SIDE SETBACK, ONE SIDE = 9'*
- *REQUIRED TOTAL SIDE SETBACK = 25% x 60.00' = 15'*
- *REQUIRED DISTANCE BETWEEN STRUCTURES = 15'*
- *PARCEL AREA AS PLATTED = 7,200 S.F. (0.165 ACRE)*
- *LOT COVERAGE ALLOWED = 30% = 2,160 S.F.*
- *LOT COVERAGE PROPOSED = 2,158 S.F. (30.0%)*
- *OPEN SPACE REQUIRED = 40% = 2,880 S.F.*
- *OPEN SPACE PROPOSED = 4,363 S.F. (60.6%)*
- *FRONT YARD AREA = 1,247 S.F.*
- *FRONT YARD OPEN SPACE REQUIRED = 65% = 811 S.F.*
- *FRONT YARD OPEN SPACE PROPOSED = 818 S.F. (65.6%)*
- *AREA OF EARTH DISTURBANCE = 0.16 ACRE*
- *DISTANCE TO NEAREST BODY OF WATER = APPROX. 160 FEET TO THE RIVER ROUGE TO THE NORTHWEST (REFER TO LOCATION MAP).*

DRAINAGE CALCULATIONS

EXISTING TRIBUTARY TO REAR YARD:
PERVIOUS AREA = 3,371 S.F.
IMPERVIOUS AREA = 2,279 S.F.
TOTAL TRIBUTARY = 5,650 S.F. (0.130 AC.)

EXISTING RUNOFF COEFFICIENT "C" = 0.48

EXISTING VOLUME OF RUNOFF FOR A 10-YEAR STORM = V = (10,500 C.F./ACRE)x(0.48 RUNOFF "C")x(0.130 ACRE) = 655 C.F.

PROPOSED TRIBUTARY TO REAR YARD:
PERVIOUS AREA = 2,994 S.F.
IMPERVIOUS AREA = 1,897 S.F.
TOTAL TRIBUTARY = 4,891 S.F. (0.112 AC.)

PROPOSED RUNOFF COEFFICIENT "C" = 0.47

EXISTING VOLUME OF RUNOFF FOR A 10-YEAR STORM = V = (10,500 C.F./ACRE)x(0.47 RUNOFF "C")x(0.112 ACRE) = 553 C.F.

SUMMARY:
REDEVELOPMENT OF THE PROPERTY RESULTS IN A NET DECREASE IN THE AMOUNT OF DRAINAGE DIRECTED TOWARDS THE REAR YARD.

NOTE

REFER TO SHEET 2 FOR ADDITIONAL NOTES & DETAILS.

WATER MAIN CROSSING NOTES:

1. *IF THE AVAILABLE VERTICAL SEPARATION BETWEEN THE EXISTING WATER MAIN AND THE PROPOSED SANITARY OR STORM SERVICE LATERAL WILL BE BETWEEN 6 AND 18 INCHES, THE CONTRACTOR SHALL INSTALL CITY-STANDARD STONE CHIP PIPE BEDDING MATERIAL IN THE EXCAVATION BETWEEN THE SPRINGLINE OF THE PIPES AND CONSOLIDATE THE STONE CHIPS AS MUCH AS POSSIBLE. STONE CHIP BEDDING MATERIAL SHALL HAVE 100% PASSING THE 1/2" SIEVE, AND NO MORE THAN 3% PASSING THE NO. 30 SIEVE (MDOT LIMESTONE AGGREGATE MIX NO. 29A IS AN ALLOWABLE SUBSTITUTE).*
2. *IF THE AVAILABLE VERTICAL SEPARATION BETWEEN THE EXISTING WATER MAIN AND THE PROPOSED SANITARY OR STORM SERVICE LATERAL IS BETWEEN 2 AND 6 INCHES, THE CONTRACTOR SHALL INSTALL FLOWABLE FILL (CONCRETE MIX CONSISTING OF PORTLAND CEMENT, FLY ASH, SAND AND WATER) BETWEEN THE SPINGLINES OF THE PIPES AT THE CROSSINGS. A SHEET OF NEOPRENE SHALL BE PLACED AROUND BOTH PIPES AS A SEPARATOR TO PREVENT THE CONCRETE FROM BONDING TO THE PIPES.*
3. *WHERE SANITARY OR STORM SERVICE LATERALS CROSS AN EXISTING WATER MAIN WITH LESS THAN 18 INCHES OF VERTICAL SEPARATION, A FULL LENGTH OF SERVICE PIPE SHALL BE USED AT THE CROSSING, CENTERED ON THE POINT OF CROSSING TO MAXIMIZE THE DISTANCE OF THE SEWER SERVICE PIPE JOINTS FROM THE WATER MAIN.*

REVISIONS:
12-3-25 REVISED PER CITY ENGINEER
11-19-25 REVISED PER CITY ENGINEER
12-16-25 REVISED PER CITY ENGINEER
1-7-26 REVISED PER CITY ENGINEER
2-17-26 REVISED PER PLANNER

CLIENT:
MR. ARMANDO GIUSEPPE TRABBA
ARMANDO HOMES, INC.
3975 W. HUNTER RD.
ROCHESTER HILLS, MI 48309
(248) 830-6679

JOB NO: 24-108
DATE: 11-13-25
DRAWN BY: N.P.R.

SEAL:
STATE OF MICHIGAN
NATHAN PAUL ROBINSON
License No. 6201047489
LICENSED PROFESSIONAL ENGINEER

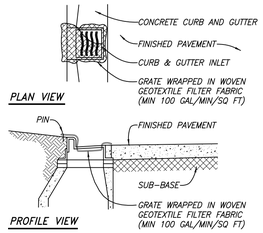
HORIZON ENGINEERING LLC
CIVIL ENGINEERING, SITE PLANNING & LAND DEVELOPMENT CONSULTING
P.O. Box 182158, Shelby Township, Michigan 48318
Phone 586.453.8097

PROJECT:
Lot 1 "Park Subdivision"
#488 WILLITS STREET
PARCEL NO. 19-25-376-040
PART OF THE S.W. 1/4 OF SECTION 25, T.2N., R.10E.
CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN

PLAN:
SITE PLAN & DRAINAGE PLAN

SHEET: 1 OF: 2

MUNICIPAL REVIEW NUMBERS:

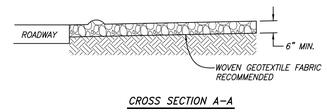


(TO BE USED BEFORE AND AFTER PAVING)

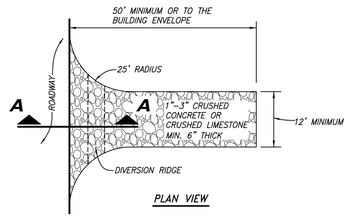
(ALTERNATIVE INLET FILTER MUST BE USED IN AREAS THAT MAY BECOME A SAFETY HAZARD DUE TO FLOODING OR FREEZING)

CURB & GUTTER INLET FILTER DETAIL

(NO SCALE)



CROSS SECTION A-A



PLAN VIEW

TEMPORARY STONE ACCESS DRIVE

(NO SCALE)

SOILS *FROM COUNTY SOILS MAP*

"62B" – URBAN LAND–SPINKS COMPLEX, 0 TO 8 PERCENT SLOPES.
"68" – COHOCTAH–FOX ASSOCIATION.

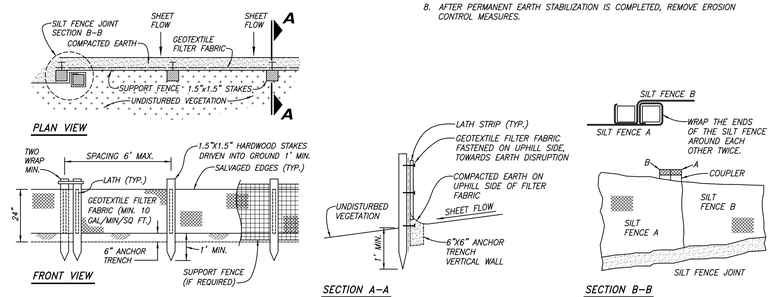
SOIL EROSION MAINTENANCE & SEQUENCE OF CONSTRUCTION

1. *INSTALL ALL TEMPORARY SOIL EROSION CONTROL MEASURES AS PER PLAN.*
2. *INSTALL CONSTRUCTION FENCING PER CITY REQUIREMENTS.*
3. *REMOVE ALL STRUCTURES, PAVEMENTS, TREES, AND OTHER ITEMS, AS APPLICABLE, INDICATED ON THE SITE PLAN FOR REMOVAL.*
4. *BEGIN NEW BUILDING CONSTRUCTION.*
5. *INSTALL UNDERGROUND UTILITIES.*
6. *INSTALL DRIVEWAY AND PAVED AREAS.*
7. *COMPLETE BUILDING CONSTRUCTION AND ESTABLISH FINISH GRADE ON ALL DISTURBED AREAS AND STABILIZE WITH VEGETATIVE COVER.*
8. *REMOVE TEMPORARY SOIL EROSION CONTROL MEASURES.*

NOTE: THE SOIL EROSION AND SEDIMENT CONTROL MEASURES WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY THE BUILDER: ARMANDO GIUSEPPE YBARRA, ARMANDO GIUSEPPE INC., (248) 830-6679. ANY DAMAGED SOIL EROSION MEASURES SHALL BE IMMEDIATELY REPAIRED.

SOIL EROSION NOTES

1. *INSTALL SOIL EROSION CONTROL MEASURES PRIOR TO CONSTRUCTION AND EARTH MOVEMENT.*
2. *A TEMPORARY CRUSHED STONE ACCESS DRIVE SHALL BE PROVIDED FOR ACCESS TO THE SITE DURING CONSTRUCTION. ACCESS TO THE BUILDING SITE SHALL BE LARGE ENOUGH TO ACCOMMODATE FOR ALL CONSTRUCTION TRAFFIC. SITE ACCESS SHALL BE MAINTAINED THROUGHOUT ALL CONSTRUCTION PHASES.*
3. *MAINTAIN ALL CONTROL MEASURES UNTIL EARTH MOVEMENT IS COMPLETED.*
4. *WILLITS STREET SHALL BE CLEANED DAILY AFTER WORK IS COMPLETED AND AS DIRECTED BY THE CITY.*
5. *ALL UNDEVELOPED AREAS ON-SITE SHALL BE STABILIZED AT THE END OF CONSTRUCTION WITH LANDSCAPE MATERIALS (PLANTINGS AND MULCH BEDDING) AND SOD. ALL DISTURBED AREAS WITHIN THE STREET RIGHT-OF-WAY ALONG THE FRONTAGE OF THE SITE SHALL BE STABILIZED WITH SOD. ALL OTHER AREAS OFFSITE DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH SEED & MULCH.*
6. *RIGHT-OF-WAY MUST BE STABILIZED PRIOR TO FINAL GRADE INSPECTION.*
7. *ALL SWALE AREAS, ALL SLOPES GREATER THAN 1:5 AND 10' AROUND STORM STRUCTURES MUST BE STABILIZED PRIOR TO FINAL GRADE INSPECTION.*
8. *AFTER PERMANENT EARTH STABILIZATION IS COMPLETED, REMOVE EROSION CONTROL MEASURES.*



SILT FENCE DETAIL *(MATERIAL: AMOCO PRO PEX 2130 OR APPROVED EQUAL)*

(NO SCALE)

REVISIONS:
12-3-25 REVISED PER CITY ENGINEER.
11-25-25 REVISED PER CITY ENGINEER.
12-16-25 REVISED PER CITY ENGINEER.
1-7-26 REVISED PER CITY ENGINEER.
2-17-26 REVISED PER ARCHITECT.

CLIENT:
MR. ARMANDO GIUSEPPE YBARRA
ARMANDO GIUSEPPE INC.
3975 W HENKEL RD.
ROCHESTER HILLS, MI 48389
(248) 830-6679

JOB NO: 24-108
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PLAN:
SITE PLAN & DRAINAGE PLAN

SHEET:
2 OF: **2**

MUNICIPAL REVIEW NUMBERS:

Proposed New Residence

488 Willits Street
Birmingham, MI 48009

General Scope of Work

1. Construction of new residence and attached garage with covered front porch and rear patio

Building Code Information

1. Michigan Residential Code 2015

Zoning Information

ADDRESS / LOT # : 488 WILLITS ST. / PARCEL #19-25-376-040

ZONED : R2 (SINGLE-FAMILY RESIDENTIAL)

General Contractor

AG Design Build
P: 248.830.6679
agdesignbuildinc@gmail.com

Architects

Krieger | Klatt Architects, Inc. (Jeff Klatt R.A.)
400 E. Lincoln Ave., Suite A
Royal Oak, MI 48067
P: 248.414.9270

Civil Engineer

Horizon Engineering, LLC
PO Box 182158
Shelby Twp., MI 48318
P: 586.453.8097

Structural Engineer

SJW Engineering, Inc.
7325 Triangle Dr.
Sterling Heights, MI 48314
P: 248.341.6206

Location Map



Architectural Sheet Index

G.001	Title Sheet & Architectural Site Plan
1	Site Plan & Drainage Plan
2	Site Plan & Drainage Plan
A.101	Foundation Plan
A.102	Lower Level Floor Plan
A.103	First Floor Plan
A.104	Second Floor Plan
A.105	Attic Floor Plan
A.106	Roof Plan
A.201	Exterior Elevations
A.202	Exterior Elevations
A.203	Exterior Elevations

Lot Coverage Requirements

Lot Area	Allowed Coverage	Maximum Lot Coverage
7200 SF	30%	2160 SF

Lot Coverage Calculations

Name	Area
House	1655 SF
Garage	495 SF
Second Floor Bay Window	9 SF
Total Proposed Lot Coverage =	2159 SF

Minimum Open Space Requirements

Total Lot Area	Minimum Open Space %	Open Space Required	Maximum Covered Space
7200 SF	40%	2880 SF	4320 SF

Open Space Calculations

Name	Area
House	1655 SF
Driveway	526 SF
Garage	495 SF
Egress Well	119 SF
Total Covered Space	2795 SF

Minimum Front Yard Open Space

Total Lot Area	Minimum Open Space %	Open Space Required	Maximum Covered Space
1248 SF	65%	811 SF	437 SF

Front Yard Open Space Calculations

Name	Area
Driveway	437 SF
Total Covered Space	437 SF

Required Building Setbacks

Required Front Setback	Required Side Setback (Small)	Required Side Setback (Large)	Required Side Setbacks (Total)	Required Rear Setback
20.80'	5.25'	9.75'	15.00'	34.20'

Proposed Building Setbacks

Proposed Front Yard Setback	Proposed Side Setback (Small)	Proposed Side Setback (Large)	Proposed Side Setbacks (Total)	Proposed Rear Setback
20.80'	5.25'	10.37'	15.62'	43.54'

Building Height Requirements

Maximum Building Height	Proposed Building Height
28.00'	37.48'

GENERAL SITE NOTES:

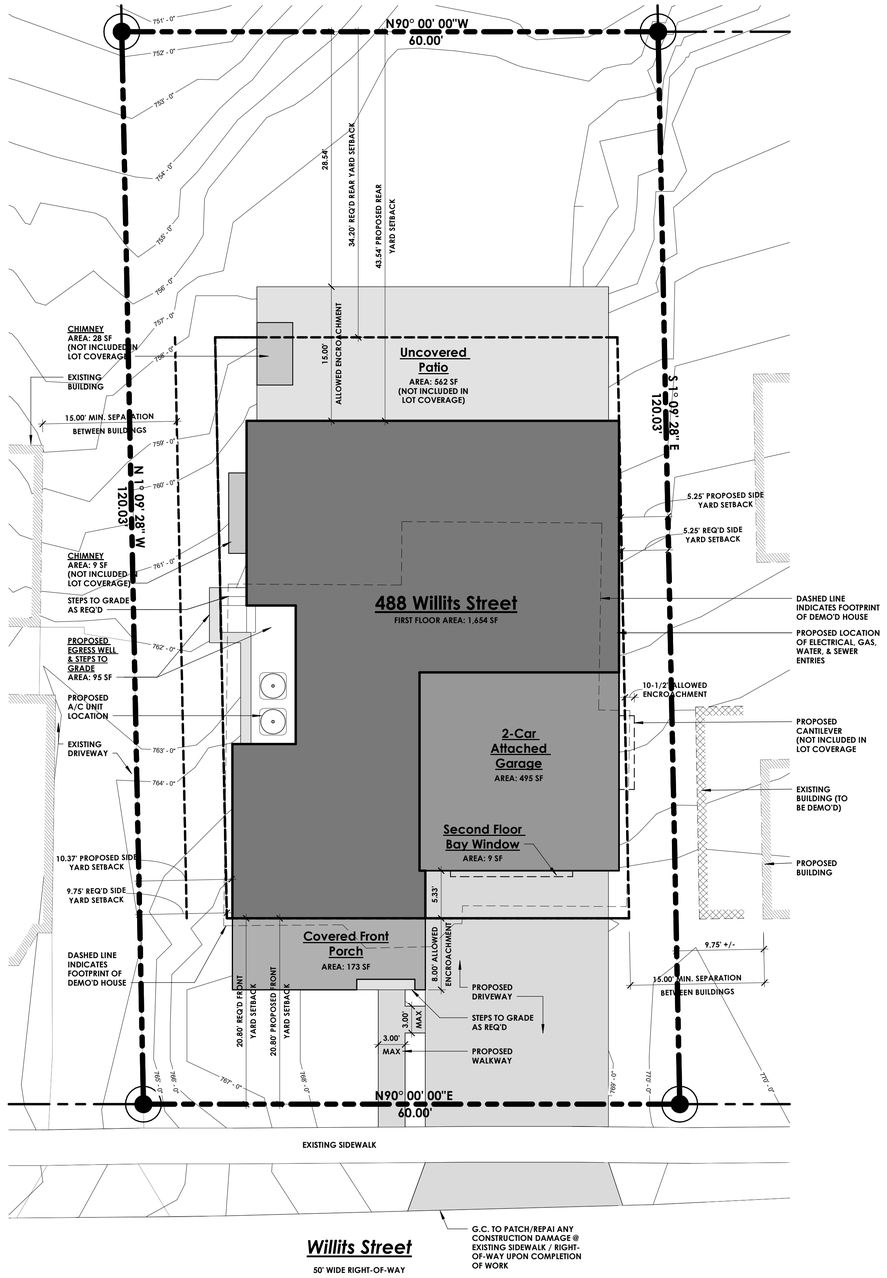
1. SEE CIVIL ENGINEER'S DRAWINGS FOR GRADING INFORMATION. ALL GRADES ARE TO SLOPE AWAY FROM HOUSE AND OUT TO THE STREET AT A MIN. 1/4" / 1' SLOPE IN COMPLIANCE W/ LOCAL CODES.
2. SILT FENCE WILL BE MAINTAINED DURING CONSTRUCTION. SEE CIVIL ENGINEER'S DRAWINGS FOR MORE INFORMATION.
3. SEE CIVIL ENGINEER'S DRAWINGS FOR ANY TREE REMOVAL INFORMATION. PROTECT EXISTING TREES AS REQ'D PER MUNICIPAL STANDARDS.
4. LANDSCAPE DESIGN NOT FINALIZED. REFER TO FUTURE PLANS PREPARED BY LANDSCAPE DESIGNER FOR FINAL DESIGN INFORMATION.
5. VERIFY REQUIREMENTS FOR SITE LIGHTING W/ OWNER. PROVIDE UNDERGROUND CONDUIT(S) AS REQ'D. REFER TO LANDSCAPE PLANS FOR FINAL SITE LIGHTING DESIGN.
6. VERIFY GAS / ELECTRICAL SERVICE LOCATIONS W/ CIVIL ENGINEER'S DRAWINGS / OWNER.
7. PROVIDE IRRIGATION SYSTEM AS DESIGNED BY LANDSCAPE DESIGNER.

SITE PLAN DISCLAIMER:

THIS SITE PLAN IS FOR GENERAL DESIGN PURPOSES ONLY - ALL CIVIL DOCUMENTS & LANDSCAPE PLAN TO BE SUPPLIED BY THE GENERAL CONTRACTOR. THE ARCHITECT IS NOT RESPONSIBLE FOR THE ACCURACY OF THE MEASUREMENTS.

REQUESTED VARIANCES:

1. WAIVE 9.48' OF THE MAXIMUM ALLOWED 28.0' GABLE ROOF HEIGHT FOR A 37.48' GABLE ROOF HEIGHT FROM LOWEST GRADE.
2. WAIVE 8.46' OF THE MAXIMUM ALLOWED 24.0' FLAT ROOF HEIGHT FOR A 32.46' FLAT ROOF HEIGHT FROM LOWEST GRADE.
3. WAIVE 8.46' OF THE MAXIMUM ALLOWED 24.0' EAVE HEIGHT FOR A 32.46' EAVE HEIGHT FROM LOWEST GRADE.



Architectural Site Plan

1/8" = 1'-0"

krieger klatt
ARCHITECTS
architecture interiors consulting
400 E. Lincoln Ave, Suite A | Royal Oak, MI 48067
P: 248.414.9270
www.kriegerklatt.com

Client:

AG Design Build

Project:

Proposed New Residence
488 Willits Street
Birmingham, MI 48009

Issued:

04.10.2026	BZA Submittal

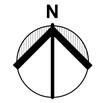
Seal:



Note:

Do not scale drawings.
Use calculated dimensions only.
Verify existing conditions in field.
Exterior dimensions are calculated from outside of sheathing.

North Arrow:



Sheet Title:

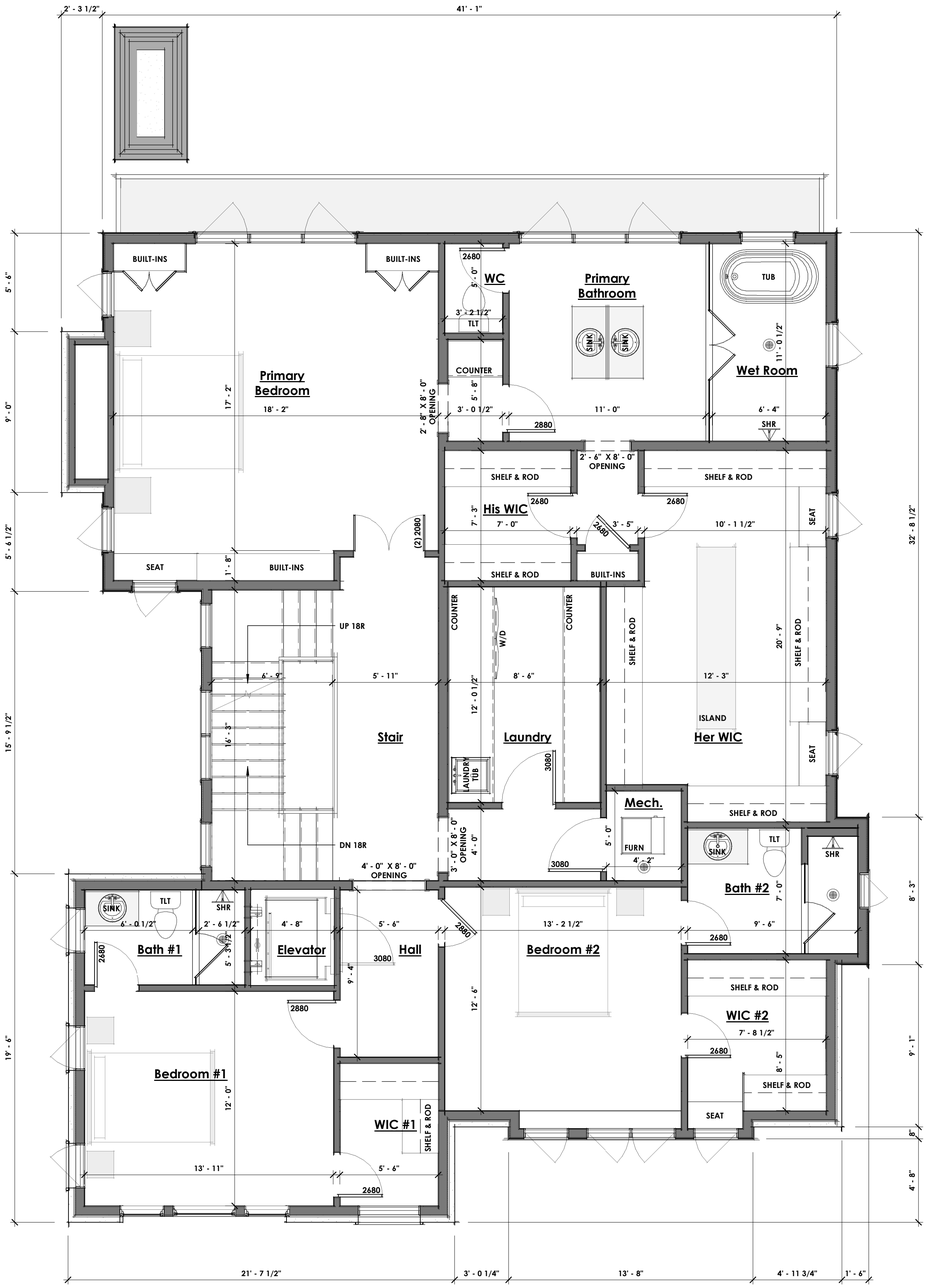
Title Sheet & Architectural Site Plan

Project Number:

25-033

Sheet Number:

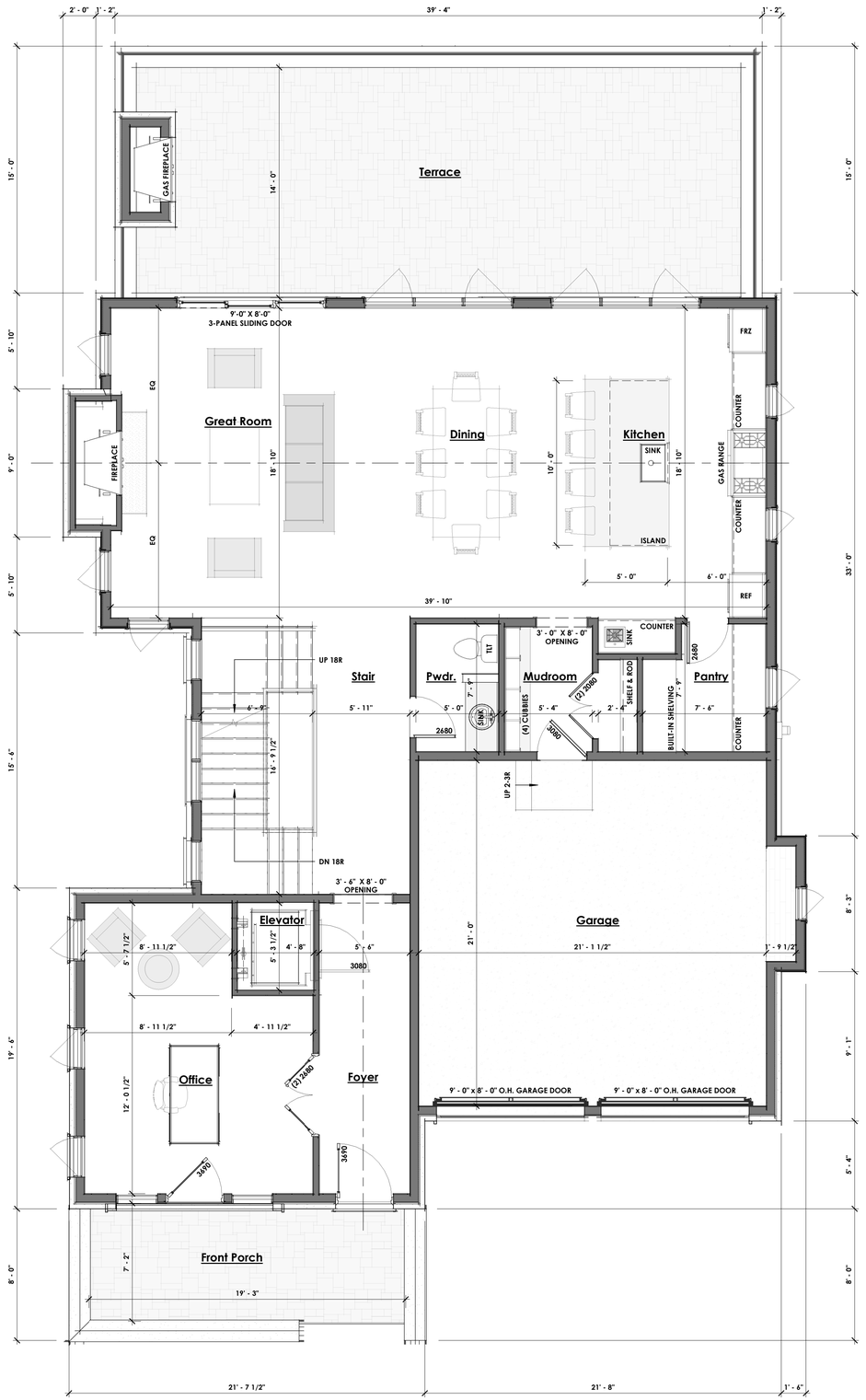
G.001



Proposed Second Floor Plan

1/4" = 1'-0"

Building Square Footages	
Name	**Area**
Finished Basement	1540 SF
First Floor	1655 SF
Second Floor	2137 SF
Habitable Attic	856 SF
Living Space	6188 SF
Unfinished Basement	Not Placed
Terrace	590 SF
Garage	507 SF
Front Porch	169 SF
Roof Deck	838 SF
Chimney	18 SF
Non-Living Space	2123 SF
Total Building Area	8311 SF



Proposed First Floor Plan

1/4" = 1'-0"

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488 Willits Street
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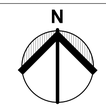
Seal:



Note:

Do not scale drawings.
Use calculated dimensions only.
Verify existing conditions in field.
Exterior dimensions are calculated from outside of sheathing.

North Arrow:



Sheet Title:

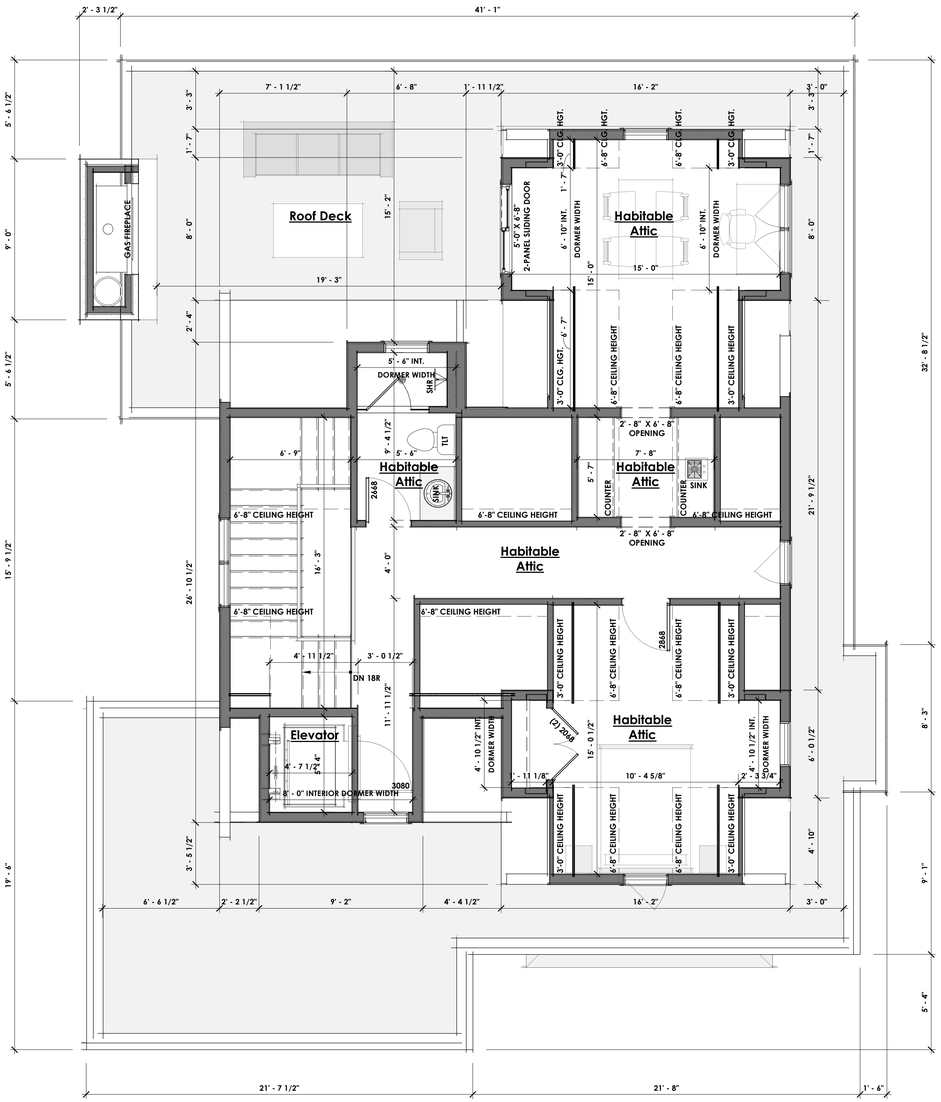
Floor Plans

Project Number:

25-033

Sheet Number:

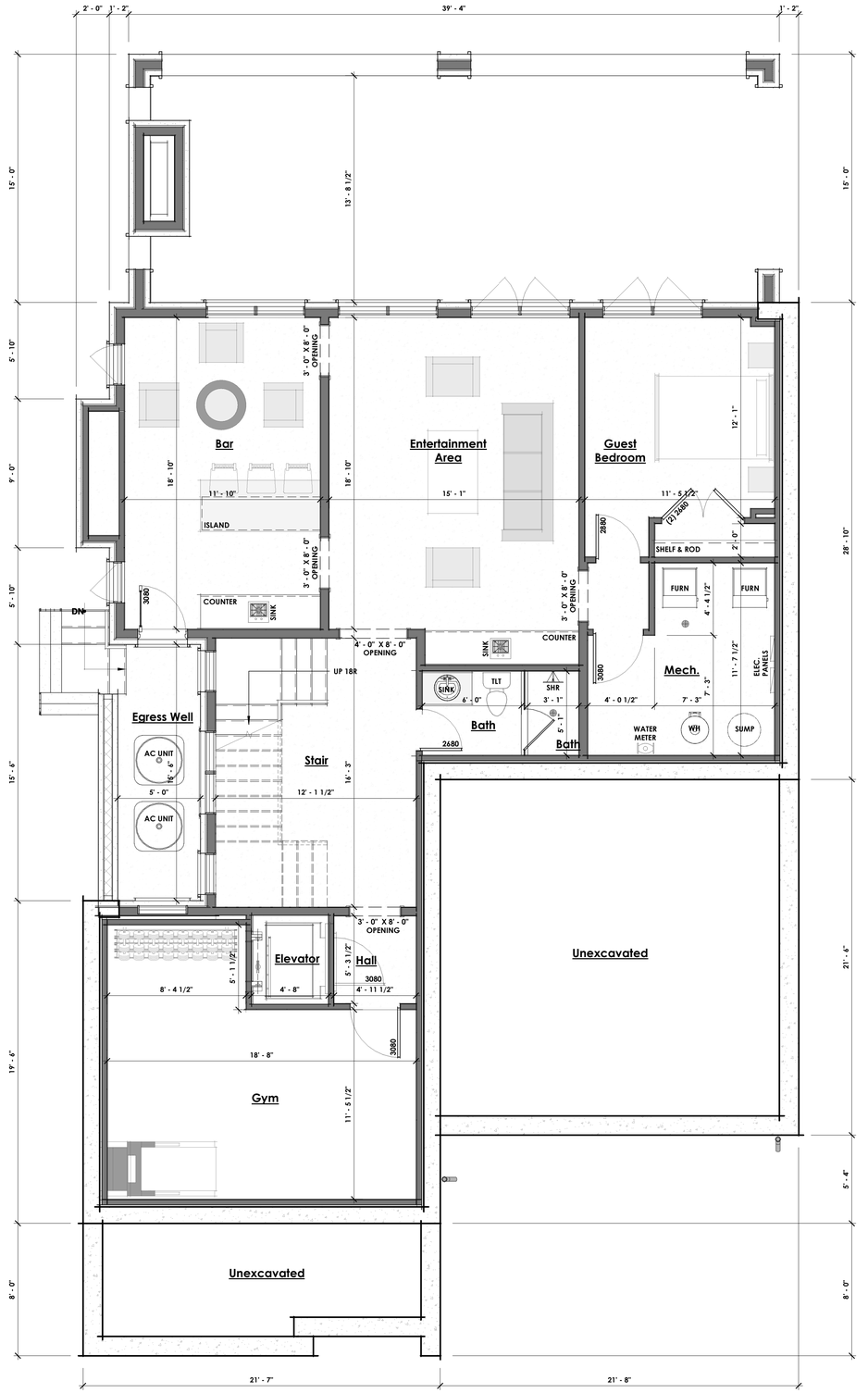
SD.101



Proposed Third Floor Plan

1/4" = 1'-0"

Building Square Footages	
Name	**Area**
Finished Basement	1540 SF
First Floor	1655 SF
Second Floor	2137 SF
Habitable Attic	856 SF
Living Space	6188 SF
Unfinished Basement	Not Placed
Terrace	590 SF
Garage	507 SF
Front Porch	169 SF
Roof Deck	838 SF
Chimney	18 SF
Non-Living Space	2123 SF
Total Building Area	8311 SF



Proposed Lower Level Plan

1/4" = 1'-0"

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Client:

AG Design Build

Project:

Proposed New Residence
488 Willits Street
Birmingham, MI 48009

Issued:

04.10.2026	BZA Submittal

Seal:

STATE OF MICHIGAN · JEFFREY GERALD KLATT · ARCHITECT · 1301069199 · LICENSED ARCHITECT

Note:

Do not scale drawings.
Use calculated dimensions only.
Verify existing conditions in field.
Exterior dimensions are calculated from outside of sheathing.

North Arrow:

N

Sheet Title:

Floor Plans

Project Number:

25-033

Sheet Number:

SD.102

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Client:

AG Design Build

Project:

Proposed New Residence
488 Willits Street
Birmingham, MI 48009

Issued:

04.10.2026	BZA Submittal



Front Elevation
1/4" = 1'-0"

Seal:



Note:

Do not scale drawings.
Use calculated dimensions only.
Verify existing conditions in field.
Exterior dimensions are calculated from outside of sheathing.

North Arrow:

Sheet Title:

Front Elevation

Project Number:

25-033

Sheet Number:

SD.201

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Project:

Proposed New Residence
488 Willits Street
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Issued:

04.10.2026	BZA Submittal



Left Side Elevation

1/4" = 1'-0"

Seal:



Note:

Do not scale drawings.
Use calculated dimensions only.
Verify existing conditions in field.
Exterior dimensions are calculated from outside of sheathing.

North Arrow:

Sheet Title:

Left Side Elevation

Project Number:

25-033

Sheet Number:

SD.202

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Client:

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Project:

Proposed New Residence
488 Willits Street
Birmingham, MI 48009

Issued:

04.10.2026	BZA Submittal



Rear Elevation

1/4" = 1'-0"

Seal:



Note:

Do not scale drawings.
Use calculated dimensions only.
Verify existing conditions in field.
Exterior dimensions are calculated from outside of sheathing.

North Arrow:

Sheet Title:

Rear Elevation

Project Number:

25-033

Sheet Number:

SD.203

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Client:

AG Design Build

Project:

Proposed New Residence
488 Willits Street
Birmingham, MI 48009

Issued:

04.10.2026	BZA Submittal



Right Side Elevation

1/4" = 1'-0"

Seal:



Note:

Do not scale drawings.
Use calculated dimensions only.
Verify existing conditions in field.
Exterior dimensions are calculated from outside of sheathing.

North Arrow:

Sheet Title:

Right Side Elevation

Project Number:

25-033

Sheet Number:

SD.204

The Chair concurred and supported the motion, noting that the home was beautiful and that he appreciated the appellant's intent. Concerns about turning radiuses or architectural consistencies are not factors for granting a variance. The Board also aims to avoid increasing non-conformities, and increasing the non-conformity in this case would be inconsistent with the intent of the ordinance.

Motion carried, 7-0.

ROLL CALL VOTE
Yeas: Hart, Lilley, Yaldo, Kona, Canvasser, Reddy, Morganroth
Nays: None

5) 488 Willits
Appeal 25-11

BOD Zielke presented the item, explaining that the owner of the property known as 488 Willits was requesting the following variances to construct a new home with an attached garage:

> **A. Chapter 126, Article 2, Section 2.08** of the Zoning Ordinance requires a maximum roof height for a pitched roof in an R-2 zoning district of 28.00 feet for this property. The proposed roof height is 38.50 feet; therefore a variance of 10.50 feet is requested.
>
> **B. Chapter 126, Article 2, Section 2.08** of the Zoning Ordinance requires a maximum roof height for a flat roof in an R-2 zoning district of 24.00 feet for this property. The proposed roof height is 32.96 feet; therefore a variance of 8.96 feet is requested.
>
> **C. Chapter 126, Article 2, Section 2.08** of the Zoning Ordinance requires a maximum eave height for the building for an R-2 zoning district of 24.00 feet for this property. The proposed eave height is 32.96 feet; therefore a variance of 8.96 feet is requested.

Staff answered informational questions from the Board.

Jeff Klatt, architect, reviewed the letter describing why these variances were being sought. The letter was included in the evening's agenda packet.

Public Comment
The Board answered an informational question from Celeste Stewart.

Motion by Yaldo
Seconded by Lilley with regard to Appeal 25-11, A. Chapter 126, Article 2, Section 2.08 of the Zoning Ordinance requires a maximum roof height for a pitched roof in an R-2 zoning district of 28.00 feet for this property. The proposed roof height is 38.50 feet; therefore a variance of 10.50 feet is requested; Chapter 126, Article 2, Section 2.08 of the Zoning Ordinance requires a maximum roof height for a flat roof in an R-2 zoning district of 24.00 feet for this property. The proposed roof height is 32.96 feet; therefore a variance of 8.96 feet is requested; and, Chapter 126, Article 2, Section 2.08 of the Zoning Ordinance requires a maximum eave height for the building

for an R-2 zoning district of 24.00 feet for this property. The proposed eave height is 32.96 feet; therefore a variance of 8.96 feet is requested.

Mr. Yaldo moved to approve the variances as requested and tied it to the plans as submitted. He said the architect thoroughly demonstrated that a variance would be required to construct a house on the property due to the unique slope of the lot. The development will do substantial justice to the neighbor and the property owner, granting the variance did not appear to conflict with the spirit or intent of the ordinance, and literal enforcement of the chapter would result in an unnecessary hardship due to the unique circumstances of the lot.

Mr. Hart concurred, and further commended the applicant on the thoroughness of the presentation.

Motion carried, 7-0.

ROLL CALL VOTE
Yeas: Hart, Lilley, Yaldo, Kona, Canvasser, Reddy, Morganroth
Nays: None

6. Correspondence

Any correspondence was provided to the Board and the relevant appellants.

7. General Business

Mr. Yaldo announced his resignation from the Board.

8. Open To The Public For Matters Not On The Agenda

9. Adjournment

No further business being evident, the Board motioned to adjourn at 9:24 p.m.

Bruce R. Johnson, Building Official

Laura Eichenhorn, City Transcriptionist

DRAFT

CASE DESCRIPTION

1573 Chesterfield (26-15)

Hearing date: May 12, 2026

Appeal No. 26-15: The owner of the property known as 1573 Chesterfield, requests the following variance to construct a new home with an attached garage on a corner lot:

A. Chapter 126, Article 4, Section 4.61 (A)1 of the Zoning Ordinance requires a corner lot which has on its side street an abutting interior residential lot shall have a minimum setback from the side street equal to the minimum front setback for the zoning district in which such building is located. This requirement shall not reduce the buildable width of any lot to less than 25 feet. The required setback is 83.06 feet the proposed is 24.83 feet therefore, a variance 58.23 feet is being requested

Staff Notes: The applicant is looking to construct a new home with an attached garage on a corner lot, which abuts a lot in Bloomfield Township. This lot is the remaining lot of three that were separated in 2020.

This property is zoned R1 – Single family residential.

Andrew Erickson
Assistant Building Official

CHAPTER 126 - ZONING

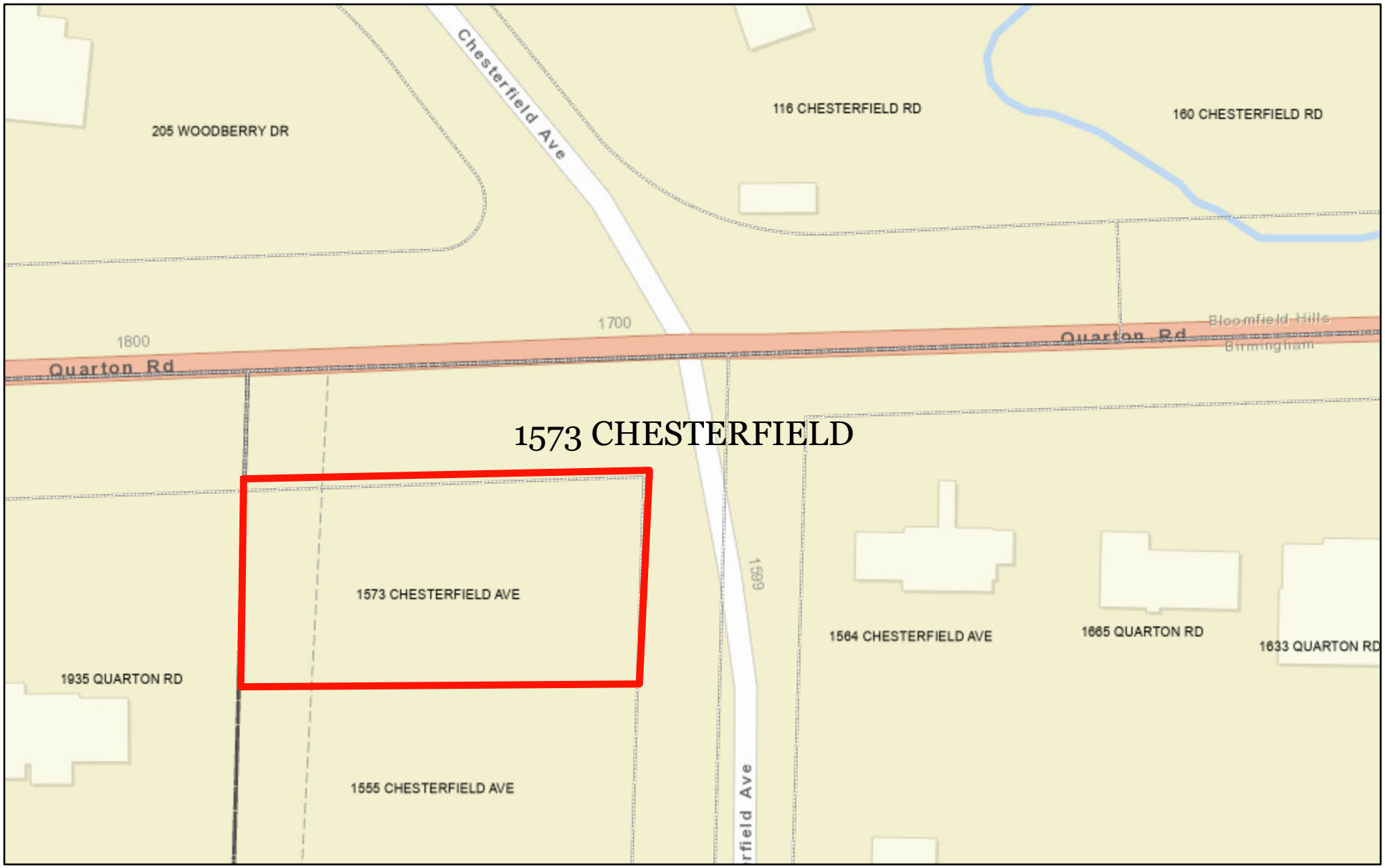
ARTICLE 8: ENFORCEMENT AND PENALTIES

8.01 The Board of Zoning Appeals

3. Variances.
   a. The Board of Zoning Appeals shall hear and grant or deny requests for variances from the strict application of the provisions of the Zoning Ordinance where there are practical difficulties or unnecessary hardships in carrying out the strict letter of such chapter. In granting a variance, the Board of Zoning Appeals may attach such conditions as it may deem reasonably necessary to promote the spirit and intent of the Zoning Ordinance. The Board of Zoning Appeals shall not grant any variance unless it first determines that:
      i. Because of special conditions applicable to the property in question, the provisions of the Zoning Ordinance, if strictly applied, unreasonably prevent the property owner from using the property for a permitted purpose;
      ii. Literal enforcement of the chapter will result in unnecessary hardship;
      iii. The granting of the variance will not be contrary to the spirit and purpose of the Zoning Ordinance nor contrary to the public health, safety and welfare; and
      iv. The granting of the variance will result in substantial justice to the property owner, the owners of property in the area and the general public.

(EACH i-iv must be satisfied)

1573 CHESTERFIELD



April 27, 2026

1:1,128

0 0.01 0.01 0.02 mi

0 0.01 0.02 0.04 km

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

CITY OF BIRMINGHAM
Community Development - Building Department
151 Martin Street, Birmingham, MI 48009
Community Development: 248-530-1850
Fax: 248-530-1290 / www.bhamgov.org

APPLICATION FOR THE BOARD OF ZONING APPEALS

Received Date: _____ **Hearing Date:** _____

Received By: _____ **Appeal #:** _____

Type of Variance:	☐ Interpretation	☐ Dimensional Side Street Setback	☐ Land Use	☐ Sign	☐ Admin Review

I. PROPERTY INFORMATION:

Address: 1573 Chesterfield Avenue	Lot Number: Part of Lot 1	Sidwell Number: 19-26-126-020

II. OWNER INFORMATION:

Name: Sapphire Building Inc.			
Address: 775 Industrial Court	City: Bloomfield Hills	State: MI	Zip code: 48302
Email:* brad@sapphireluxuryhomes.com		Phone: 248-330-2684	

III. PETITIONER INFORMATION:

Name: Brad DeVries	Firm/Company Name: Sapphire Luxury Homes		
Address: 775 Industrial Court	City: Bloomfield Hills	State: MI	Zip code: 48302
Email: brad@sapphireluxuryhomes.com		Phone: 248-330-2684	

IV. GENERAL INFORMATION:

The Board of Zoning Appeals typically meets the second Tuesday of each month. COMPLETE digital applications along with supporting documents must be submitted on or before the 12th day of the month preceding the next regular meeting. Please note that incomplete applications will not be accepted.

To insure complete applications are provided, appellants must schedule a pre-application meeting with the Building Official, Assistant Building Official and/or City Planner for a preliminary discussion of their request and the documents that will be required to be submitted. Staff will explain how all requested variances must be highlighted on the survey, site plan and construction plans. Each variance request must be clearly shown on the survey and plans including a table as shown in the example below. All dimensions to be shown in feet measured to the second decimal point.

The BZA application fee is **$750.00** for single family residential; **$950.00** for all others. This amount includes a fee for a public notice sign which must be posted at the property at least 15-days prior to the scheduled hearing date.

Variance Chart Example

Requested Variances	Required	Existing	Proposed	Variance Amount
Variance A, Front Setback	25.00 Feet	23.50 Feet	23.50 Feet	1.50 Feet
Variance B, Height	30.00 Feet	30.25 Feet	30.25 Feet	0.25 Feet

V. REQUIRED INFORMATION CHECKLIST:

Please provide the following in your electronic submission:

- ○ Completed and signed application
- ○ Signed letter of practical difficulty and/or hardship
- ○ Certified survey
- ○ Building plans including existing and proposed floor plans and elevations
- ○ If appealing a board decision, provide a copy of the minutes from any previous Planning, HDC, or DRB board meeting

VI. APPLICANT SIGNATURE

Owner hereby authorizes the petitioner designated below to act on behalf of the owner.

By signing this application, I agree to conform to all applicable laws of the City of Birmingham. All information submitted on this application is accurate to the best of my knowledge. Changes to the plans are not allowed without approval from the Building Official or City Planner.

*By providing your email to the City, you agree to receive news and notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.

Signature of Owner: ON BEHALF OF SAPPHIRE LUXURY HOMES **Date:** 4.10.2026

Signature of Petitioner: _____ **Date:** 4.10.2026

Revised 01/17/2024

CITY OF BIRMINGHAM
BOARD OF ZONING APPEALS
RULES OF PROCEDURE

ARTICLE I - Appeals

A. Appeals may be filed under the following conditions:

1. A property owner may appeal for variance, modification or adjustment of the requirements of the Zoning Ordinance.

2. A property owner may appeal for variance, modification or adjustment of the requirements of the Sign Ordinance.

3. Any aggrieved party may appeal the decision of the Planning Board and/or the Building Official in accordance with the City of Birmingham Zoning Ordinance, Article Eight, Section 8.01 (D) Appeals. If an appellant requests a review of any determination of the Building Official, a complete statement setting forth the facts and reasons for the disagreement with the Building Official's determination shall include the principal point, or points on the decision, order or section of the ordinance appealed from, on which the appeal is based.

B. Procedures of the Board of Zoning Appeals (BZA) are as follows:

1. Regular BZA meetings, which are open to the public, shall be held on the second Tuesday of the month at 7:30 P.M. provided there are pending appeals. There will be a maximum of seven appeals heard at the regular meeting which are taken in the order received. If an appeal is received on time after the initial seven appeals have been scheduled, it will be scheduled to the next regular meeting.

2. All applications for appeal shall be submitted to the Community Development Department on or before the 12th day of the month preceding the next regular meeting. If the 12th falls on a Saturday, Sunday, or legal holiday, the next working day shall be considered the last day of acceptance.

3. All property owners and occupants within 300 feet of the subject property will be given written notice of a hearing by the City of Birmingham.

4. See the application form for specific requirements. If the application is incomplete, the BZA may refuse to hear the appeal. The Building Official or City Planner may require the applicant to provide additional information as is deemed essential to fully advise the Board in reference to the appeal. Refusal or failure to comply shall be grounds for dismissal of the appeal at the discretion of the Board.

5. In variance requests, applicants must provide a statement that clearly sets forth all special conditions that may have contributed to a practical difficulty that is preventing a reasonable use of the property.

6. Where the Birmingham Zoning Ordinance requires site plan approval of a project by the City Planning Board before the issuance of a building permit, applicants must obtain preliminary site plan approval by the Planning Board before appeal to the BZA for a variance request. If such appeal is granted by the BZA, the applicant must seek final site plan and design review approval from the Planning Board before applying for a building permit.

7. An aggrieved party may appeal a Planning Board decision. Such appeal must be made within 30 days of the date of the decision. The BZA, in its discretion, may grant additional time in exceptional circumstances.

8. Appeals from a decision of the Building Official shall be made within 30 days of the date of the order, denial of permit, or requirement or determination contested. The BZA, in its discretion, may grant additional time in exceptional circumstances.

9. An appeal stays all proceedings in accordance with Act #110, Public Acts of 2006, Article VI, Section 125.3604 (3).

C. The order of hearings shall be:

1. Presentation of official records of the case by the Building Official or City Planner as presented on the application form.

2. Applicant's presentation of his/her case—the applicant or his/her representative must be present at the appeal hearing.

3. Interested parties' comments and view on the appeal.

4. Rebuttal by applicant.

5. The BZA may make a decision on the matter or request additional information.

D. Motions and Voting

1. A motion is made to either grant or deny a petitioner's request
   a) For a motion to grant or deny a non-use variance request, the motion must receive four (4) affirmative votes to be approved.
   b) For a motion to grant or deny a use variance request, the motion must receive five (5) affirmative votes to be approved.
   c) For a motion to grant or deny an appeal of a decision or order by an administrative official or board, the motion must receive four (4) affirmative votes to be approved.

2. When a motion made is to approve or deny a petitioner's request and if there is a tie vote, then the vote results in no action by the board and the petitioner shall be given an opportunity to have his or her request heard the next regularly scheduled meeting when all the members are present.

3. When there are less than seven (7) members of the board present for a meeting, then a petitioner requesting a use variance shall be given an opportunity at the beginning of the meeting to elect to have it heard at the next regularly scheduled meeting.

4. When there are less than six (6) members present for a meeting, then all petitioners shall be given an opportunity at the beginning of the meeting to elect to have the request heard at the next regularly scheduled meeting.

ARTICLE II - Results of an Appeal

A. The Board may reverse, affirm, vary or modify any order, requirement, decision or determination as in its opinion should be made, and to that end, shall have all the powers of the officer from whom the appeal has been taken.

B. The decisions of the Board shall not become final until the expiration of five (5) days from the date of entry of such orders or unless the Board shall find that giving the order immediate effect is necessary for the preservation of property and/or personal rights and shall so certify on the record.

C. Whenever any variation or modification of the Zoning Ordinance is authorized by resolution of the BZA, a Certificate of Survey must be submitted to the Community Development Department with the building permit application. A building permit must be obtained within one year of the approval date.

D. Failure of the appellant, or his representative, to appear for his appeal hearing will result in the appeal being adjourned to the next regular meeting. If, after notice, the appellant fails to appear for the second time, it will result in an automatic withdrawal of the appeal. The appellant may reapply to the BZA.

E. Any applicant may, with the consent of the Board, withdraw his application at any time before final action.

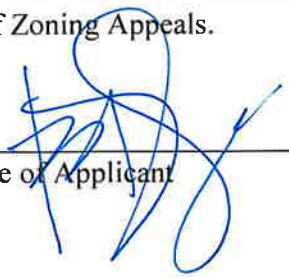
F. Any decision of the Board favorable to the applicant is tied to the plans submitted, including any modifications approved by the Board at the hearing and agreed to by the applicant, and shall remain valid only as long as the information or data provided by the applicant is found to be correct and the conditions upon which the resolution was based are maintained.

ARTICLE III - Rehearings

A. No rehearing of any decision of the Board shall be considered unless new evidence is submitted which could not reasonably have been presented at the previous hearing or unless there has been a material change of facts or law.

B. Application or rehearing of a case shall be in writing and subject to the same rules as an original hearing, clearly stating the new evidence to be presented as the basis of an appeal for rehearing.

I certify that I have read and understand the above rules of procedure for the City of Birmingham Board of Zoning Appeals.



Signature of Applicant

SAPPHIRE
LUXURY HOMES

April 13, 2026

City of Birmingham – Community Development
Attention: Board of Zoning Appeals
151 Martin Street
Birmingham, Michigan 48009

Regarding: 1573 Chesterfield Avenue

Dear Members of the Board of Zoning Appeals,

This letter is submitted in support of the above-referenced Application for Dimensional Variance for the subject property. The request pertains to the Development Standards of the R-1 Single-Family Residential District, specifically the corner lot side street setback requirements along Quarton Road. This submission is accompanied by a proposed site plan, diagrams detailing our request, as well as building plans, elevations, and landscaping proposal.

Pursuant to Section 4.61 SB-02(A)(1) of the Zoning Ordinance, a corner lot with an abutting interior residential lot along its side street (in this case, Quarton Road) is required to maintain a minimum setback equal to the minimum front yard setback of the zoning district. This requirement shall not reduce the buildable width of any lot to less than 25 feet. The ordinance further defines the front setback as the average distance from the front lot line of homes located within 200 feet on the same side of the street.

In this instance, 1935 Quarton Road (in Bloomfield Hills) is an abutting interior lot. The only homes within 200 feet of the subject property, as it relates to the Quarton Road side street setback, are 1935 Quarton Road, which is set back 96.11 feet from Quarton Road, and 1564 Chesterfield Avenue, which is set back 70.00 feet from Quarton Road. Accordingly, the ordinance requires a 83.06-foot side street setback for the subject property. This is shown on DIAGRAM A

It is our opinion that 1935 Quarton Road should not be considered towards the setback requirement, since it is outside the City of Birmingham's jurisdiction.

If 1935 Quarton is removed from the equation, then the only home that would be considered when determining the side road setback would be 1964 Chesterfield Avenue, resulting in a 70.00-foot side street setback We respectfully request a variance of 45.17 feet from this requirement. This is shown on DIAGRAM B. Strict application of the 70.00-foot setback presents a practical difficulty and unnecessary hardship unique to the subject property. Since, adhering to the 83.06-foot average required if 1935 Quarton Road would be even more burdensome, the contents of this letter are in direct reference to DIAGRAM B.

As outlined in Section 8.01(3)(a) of the Zoning Ordinance, the Board of Zoning Appeals may grant a variance where strict enforcement would result in practical difficulties or unnecessary hardship. In support of this request, we offer the following:

i. Special Conditions and Practical Difficulty

The subject property is affected by unique conditions that distinguish it from neighboring parcels. Specifically, the property line used to determine the side street setback is disproportionate to that of the adjacent property (1564 Chesterfield Avenue), which serves as the basis for the setback calculation. As illustrated in the attached diagram, the subject property has a 60.00-foot right-of-way, whereas 1564 Chesterfield Avenue has a 33.00-foot right-of-way.

Due to the jog in the property lines (due to different subdivision platting requirements) strict adherence to the ordinance would impose a setback from Quarton Road that exceeds both the apparent intent of the ordinance and the setback from Quarton Road of the reference property. This practical difficulty is not self-created.

Furthermore, the subject property has 123.88 feet of frontage and 23,678 square feet of lot area, compared to 340.00 feet of frontage and 35,565 square feet lot area for 1564 Chesterfield Avenue. In other words, the subject lot, and the lot in which it is being compared are significantly different in their dimensionality; the subject property has 36.5% of the frontage and 66.5% of the lot area when compared to 1564 Chesterfield Avenue. Therefore, Compliance with a 70-foot setback on the subject property is significantly more restrictive, as it would account for approximately 56.5% of the available frontage, compared to only 20.5% for 1564 Chesterfield Avenue.

ii. Unnecessary Hardship

Literal enforcement of the 70.00-foot setback would limit the buildable width of the property to 41.09 feet at the front setback line. While this exceeds the ordinance defined minimum buildable width of 25 feet, utilizing the full buildable depth (136.22 feet) would result in a maximum building footprint of 5,038 square feet, equating to only 21.2% lot coverage. This is substantially below the 30% maximum lot coverage permitted within the zoning district, thereby restricting the reasonable use of the property.

iii. Consistency with the Spirit and Purpose of the Ordinance

Granting the requested 45.17-foot variance would be consistent with the intent of the Zoning Ordinance. The proposed 24.83-foot side street setback would establish a more proportionate and contextually appropriate relationship to Quarton Road than strict compliance would allow, while enabling the property to achieve the permitted 30% lot coverage.

Furthermore, the proposed variance would not adversely affect public health, safety, or welfare. The proposed side street setback of 24.83 feet and total side setback of 35.43 feet, both exceed the required minimums of 19.88-foot (side setback balance) and 30.45-foot combined side setbacks. The proposed residence is a single-story, ranch-style home with a building height of 20.80', well below the maximum allowable height of 30 feet and three stories.

This request is not intended to maximize all dimensional allowances, but rather to permit a design that aligns with the spirit and purpose of the ordinance while allowing for reasonable use of the property.

iv. Substantial Justice

Approval of the requested variance would ensure that the subject property is granted development rights consistent with those of neighboring properties. The proposed design has been carefully planned to remain compatible with the surrounding area and to integrate cohesively within the existing neighborhood context. Strict adherence to the 70-foot setback requirement would significantly constrain the buildable envelope, resulting in a home with a maximum width of 41.09 feet. Such a limitation would produce a structure that is inconsistent with the character of nearby residences. By comparison, 1555 Chesterfield Avenue and 1525 Chesterfield Avenue—properties more similar in scale and context to the subject property than 1564 Chesterfield —feature front elevations of 64.92 feet and 65.33 feet, respectively. Our proposed building width of 82.25 feet is proportionally consistent with neighboring homes, while remaining comparatively narrower relative to the overall lot width. Specifically, the proposed structure occupies 66.5% of the lot width, compared to 72.0% for 1555 Chesterfield Avenue and 67.5% for 1525 Chesterfield Avenue.

Limiting the property to a 41.09 foot building envelope at the front results in a 32.09 foot building envelope at the rear, significantly limiting any allowable accessory structures, including swimming pools, which must remain in the required rear yard open space only.

To better integrate the proposed residence with the surrounding neighborhood fabric, the landscape plan incorporates numerous large evergreen trees and additional plantings along Quarton Road, exceeding ordinance requirements.

Conclusion

In summary, the requested variance is consistent with the spirit and intent of the Zoning Ordinance, is necessitated by conditions unique to the property, and will not create adverse effects or negatively impact the surrounding community.

For these reasons, I respectfully request that the Board of Zoning Appeals grant the requested dimensional variance of 45.17 feet for the Quarton Road side street setback.

Finally, if 1935 Quarton Road is not considered in the setback calculation on the basis that lies outside the City of Birmingham's jurisdiction, it shall also be considered that there are no abutting interior residential lots adjacent to the subject parcel. In that case, the applicable side street setbacks would be 10 feet and 15 feet pursuant to Section 4.61 SB-02(A)(2), thereby rendering the proposal compliant by-right and eliminating the need for a dimensional variance.

Sincerely,

Brad DeVries | Lead Architect

LEGEND

- EXISTING GRADE (770.00)
- EXISTING CONTOURS, 1' INTERVAL (770)
- PROPOSED GRADE (770.00)
- DIRECTION OF SURFACE DRAINAGE
- SILT FENCE & LIMITS OF EARTH DISTURBANCE
- EXISTING PAVEMENT AREAS TO REMAIN
- PROPOSED NEW PAVEMENT AREAS
- PROPOSED NEW STONE AREAS

0 5' 10' 20' 30'

PLAN SCALE: 1" = 10'

N

NOTE

REFER TO SHEET 2 FOR NOTES & DETAILS.

QUARTON ROAD
120' WIDE RIGHT OF WAY
ASPHALT PAVEMENT

EX. 72" D.W.S.D. WATER MAIN
GRAVEL SHOULDER
EXISTING 10" SANITARY SEWER
SANITARY M.H. 768.85 RIM 762.27 INV. E/W
GATEWELL 769.51 RIM
5' WD. CONC. WALK
EXISTING 16" WATER MAIN
VALVES (TYP.)
GATEWELL 766.05 RIM
EX. 2" PVC
CONC. UTIL. PAD & BOX
CONC. PAD & ELEC. CONTROLS
ELEC. CONTROLS
CONC. BASE FOR METAL RECEIVING TOWER
VENT PIPES & BOLLARDS
EXISTING UNDERGROUND WIRES (AS FLAGGED BY MISS DIG)
GATEWELL 766.07 RIM TOP/PIPE E/W. 755.39
CATCH BASIN 766.43 RIM INV. SW 761.25 INV. SE 761.25 INV. E 762.93
EXISTING SANITARY MANHOLE, 767.14 RIM INV. N.E. 761.89 INV. W. 761.81 (SEWAGE FLOWS N.E.)
EX. 6" WATER MAIN
CONCRETE CURB & GUTTER
GATEWELL 766.74 RIM
5' CONC. WALK
EX. 12" STORM SEWER
STORM MANHOLE 766.00 RIM INV.W. 762.00 INV.E. 762.14 INV.S. 762.14
STORM MANHOLE 766.68 RIM INV.N. 762.13 INV.W. 761.93 INV.SW. 762.13 INV.E. 762.13 (MEL. ENGR. BENCH MARK (OFFSET, FIELD VERIFY))
SIGN
ADA PAD
EXISTING 2" PVC STORM LINE
CONC. UTIL. PAD
GRAVEL DRIVE
EXISTING 16" WATER MAIN
EX. 8" SANITARY SEWER
EXISTING 12" STORM SEWER
EXISTING 8" WATER MAIN
EXISTING 12" WATER MAIN
EXISTING 6" GAS MAIN

SITE BM
CATEWELL 766.05 RIM
I/P N 759.34, I/P S 759.51
STORM RUNS OVER EX. W.M.
BOT. 12" STORM 762.03
BOT. 12" W.M. 759.51

NOTE:
SAW CUT AND REMOVE EXISTING CONCRETE CURB & GUTTER AND ASPHALT PAVEMENT AS REQUIRED FOR STORM SEWER WORK AT EXISTING CATCH BASIN. REPLACE ALL PAVEMENTS "IN KIND" IN ACCORDINANCE WITH CITY SPECIFICATIONS.

CATCH BASIN, 766.47 RIM INV. NE. 762.14 INV. SW. 762.57
PROP. INV. S. 762.20
PROP. INV. W. 762.20
REPAIR EXISTING CATCH BASIN AS REQUIRED.
REMOVE EXISTING 12" STORM PIPE & END SECTION.
PROPOSED 8 L.F. 12" C.S.P. #16GA. @ 0.32%
PROPOSED 2' DIA. CONCRETE MANHOLE, RIM 766.50
INV. N.&S. 762.23
INV. W. 763.00
GATEWELL, 766.80 RIM I/P NAS 758.10±
STORM RUNS OVER EX. W.M. BOT. 12" STORM 762.87 TOP 12" W.M. 759.51
PROVIDE TEMPORARY CRUSHED STONE ACCESS DRIVEWAY.
EXISTING SANITARY MANHOLE, RIM 766.53 INV.NE. 760.46 INV.S. 760.48
PROPOSED 51 L.F. 12" C.S.P. #16GA. @ 0.32%
PERIMETER SILT FENCE & LIMITS OF EARTH DISTURBANCE (TYPICAL)
STORM RUNS OVER EX. W.M. BOT. 4" STORM 762.41 TOP 12" W.M. 759.51
PROPOSED 2' DIA. CONCRETE CATCH BASIN W/ 2' SUMP, RIM 765.65 INV. N.&S. 762.39 INV. W. 762.93
PROPOSED 10' WIDE ASPHALT PARKING LANE
CATCH BASIN 766.10 RIM INV.N. 762.45 INV.S. 763.14 8" PERF
PROPOSED 39 L.F. 12" C.S.P. #16GA. @ 0.32%
STORM RUNS OVER SAN. LD. BOT. 12" STORM 762.27 TOP 6" SAN. LD. 761.98
EXISTING SEWER WYE, INV. 8" N./S. 760.70 ± INV. 6" W. 761.37
PROPOSED 2' DIA. CONCRETE CATCH BASIN W/ 2' SUMP, RIM 765.50 INV. N. 762.51 INV. S.W. 762.51
STORM RUNS OVER EX. W.M. BOT. 4" STORM 762.41 TOP 12" W.M. 759.51
CAUTION!!! BURIED WIRES!!! FIELD VERIFY EXACT DEPTH & LOCATION.
REMOVE EXISTING END SECTION & INSTALL 2' DIA. CONCRETE MANHOLE @ END OF EXISTING PIPE, RIM 767.00 PROP. INV. N.E. 763.46 PROP. INV. W. 764.67 EXIST. INV. S. 764.49
PROVIDE TEMP. STREET CATCH BASIN CURB & GUTTER INLET PROTECTION AS APPROVED EQUAL PER OAKLAND COUNTY WRC STANDARDS (TYPICAL ALL CATCH BASINS IN STREET CURBS)

PART OF LOT 1
#1573 CHESTERFIELD AVE.
PARCEL NO. 19-26-126-020

BASEMENT
FIRST FLOOR ELEV. = 773.35
TOP/WALL ELEV. = 772.00
BSM'T WALL HT. = 9'-10"
BSM'T FLR. ELEV. = 762.50
TOP/FOOTING ELEV. = 762.17

GARAGE
FLOOR ELEV. = 771.50

LOT 2
#1935 QUARTON ROAD
PARCEL NO. 19-26-126-007
(BLOOMFIELD TOWNSHIP)

PART OF LOT 1
#1555 CHESTERFIELD AVE.
PARCEL NO. 19-26-126-021.

CABANA
FLOOR ELEV. 771.76
TOP/WALL ELEV. 769.26

S86°15'00"W(R&M) 201.23'(R&M)
S00°13'38"E(R&M) 111.79'(R&M)
N89°41'42"E(R&M) 201.02'(R&M)
N00°13'18"W(R&M) 123.38'(R&M)

PROVIDE TEMPORARY YARD AREA CATCH BASIN INLET FILTER, "SEDCAGE" OR APPROVED EQUAL, PER OAKLAND COUNTY WRC STANDARDS (TYPICAL, ALL CATCH BASINS IN YARD AREAS)
FOUND CONCRETE MONUMENT, N.W. CORNER OF LOT 1 AND THE POINT OF BEGINNING.
24" DIA. HDPE CATCH BASIN W/ 24" SUMP, RIM 770.85 INV. E. 765.64 INV. S. 765.64 INV. S.E. 765.52
PROPOSED 4' HT. FENCE PER APPLICABLE POOL CODE(S), TYPICAL
PROPOSED TO L.F. 6" PVC SCHD.40 DRAIN PIPE @ MIN. 1.00% SLOPE
LANDSCAPE RETAINING WALL, MAXIMUM 65" HEIGHT.
24" DIA. HDPE CATCH BASIN INLET W/ 24" SUMP, RIM 770.85 INV. E. 764.94 INV. S. 767.32
4" PVC SCHD.40 DRAIN PIPE @ MIN. 1.00% SLOPE
PROPOSED 1" COPPER TYPE "K" (OR APPROVED EQUAL) FROM CABANA TO HOUSE
REMOVE VEGETATION ON SITE AS REQUIRED.
ROOF DOWNSPOUT SPILLS INTO CATCH BASIN INLET CONNECTED TO STORM DRAIN (TYPICAL)
GENERATOR & POOL EQUIPMENT ON CONCRETE PADS PER BUILDER SPECS. PROVIDE EVERGREEN SCREENING AS REQUIRED.
PROPOSED 4" PVC SCHD. 40 SEWER LEAD @ MIN. 1.00% TO HOUSE LEAD.
PROPOSED 4" PVC SCHD.40 DRAIN PIPE @ MIN. 1.00% SLOPE
TRENCH DRAIN, INV. N. 769.24
TRENCH DRAIN, INV. N. 769.13
COVERED LANAI (EXCAV.), F.F.=773.35
PROPOSED 4' HT. CABLE FENCE PER CODE(S), TYPICAL
LANDSCAPE PLANTER, MAXIMUM 15" HEIGHT.
4" PVC SCHD.40 DRAIN PIPE @ MIN. 1.00% SLOPE (TYPICAL, DOWNSPOUT INLETS TO CATCH BASIN)
NOTE: AN EJECTOR PUMP SHALL BE REQUIRED FOR ANY BASEMENT PLUMBING.
NOTE: BURIED ELECTRIC UTILITIES EXIST ALONG THE FRONTAGE OF THE PROPERTY FROM THE SOUTH TO SERVICE THE WATER FACILITIES WITHIN QUARTON ROAD NORTH OF THE PROPERTY. THE BUILDER SHALL COORDINATE THE LOCATION OF ALL BURIED UTILITIES WITH THE APPROPRIATE AUTHORITIES AND ENSURE PROTECTION FOR ALL BURIED UTILITIES.
NOTE: PROVIDE APPROPRIATE COMPACTED BACKFILL FOR ALL UTILITIES UNDER OR WITHIN INFLUENCE OF PAVEMENT AREAS.
ROOF DOWNSPOUT SPILLS INTO CATCH BASIN INLET CONNECTED TO STORM DRAIN (TYPICAL)
PERFORATED DRAIN IN PEASTONE TRENCH LINED WITH FILTER FABRIC. DISCHARGE DRAIN TILE THRU FACE OF WALL.
4" PVC SCHD.40 DRAIN PIPE @ MIN. 1.00% SLOPE (TYPICAL, DOWNSPOUT INLETS TO MANHOLE AT STREET)
LANDSCAPE RETAINING WALL, MAXIMUM 22" HEIGHT.
LANDSCAPE RETAINING WALL, MAXIMUM 28" HEIGHT.
LANDSCAPE RETAINING WALL, MAXIMUM 21" HEIGHT.
PROVIDE 3' HT. CONCRETE CURB ALONG EDGE OF DRIVEWAY.
PROPOSED CONCRETE DRIVEWAY
PROPOSED 19 L.F. 12" C.S.P. #16GA @ 5.00%
PROPOSED 14 L.F. 12" C.S.P. #16GA @ 0.32%
24" DIA. CONCRETE CATCH BASIN INLET W/ 24" SUMP, RIM 765.50 INV. E. 762.24
SET 1/2" REBAR WITH CAP, #16724 IN PLACE OF DAMAGED MONUMENT FROM PAST ROAD WORK.
PROPOSED 101 L.F. 6" PVC SCHD.40 DRAIN PIPE @ MIN. 1.00% SLOPE
PROPOSED 4' HT. FENCE, PER APPLICABLE POOL CODE(S), TYPICAL
PROPOSED 4' HT. FENCE PER APPLICABLE POOL CODE(S), TYPICAL
A/C UNIT ON CONCRETE PAD PER BUILDER SPECS. PROVIDE EVERGREEN SCREENING AS REQUIRED.
PROPOSED GRAVEL WALKWAY AREA (TYPICAL)
ROOF DOWNSPOUT SPILLS INTO CATCH BASIN INLET CONNECTED TO STORM DRAIN (TYPICAL)
A/C UNITS ON CONCRETE PADS PER BUILDER SPECS. PROVIDE EVERGREEN SCREENING AS REQUIRED.
4" PVC SCHD.40 DRAIN PIPE @ MIN. 1.00% SLOPE (TYPICAL, DOWNSPOUT INLETS TO MANHOLE AT STREET)
PROPOSED GRAVEL WALKWAY AREA (TYPICAL)
ARCHITECTURAL PROJECTION
PROPOSED ELECTRIC SERVICE
CONNECT ELECTRICAL SERVICE TO DTE FEED (LOCATION TO BE DETERMINED BY DTE ENERGY; BUILDER TO COORDINATE)
SET 1/2" REBAR WITH CAP #16724
BUILDER TO REVIEW EXISTING FENCE FOR APPLICABLE POOL CODE(S).
PROPOSED 4' HT. FENCE PER APPLICABLE POOL CODE(S), TYPICAL
LANDSCAPE RETAINING WALL, MAXIMUM 25" HEIGHT.
EXISTING 8" STORM DRAIN
GAS SERVICE CROSSES EXISTING STORM SEWER, BURIED WIRES, WATER MAIN. BUILDER TO COORDINATE WITH GAS COMPANY & MAINTAIN MIN. 18" VERTICAL SEPARATION BETWEEN UTILITIES.
PROPOSED GAS SERVICE
EXISTING, UNDERGROUND WIRES (AS FLAGGED BY MISSDIG)
EXISTING SANITARY MANHOLE RIM 769.78 INV.N. 761.36
EXISTING 20' U.E.
EXISTING 15' U.E.

CHESTERFIELD AVENUE
80' WIDE RIGHT OF WAY
ASPHALT PAVEMENT

REVISIONS:
3-10-26 REVISED PER CITY BLDG DEPT.
3-16-26 REVISED PER SWRC
3-23-26 REVISED PER CITY BLDG DEPT.

CLIENT:
MR. RANDY NAJAR
NAJAR CUSTOM HOMES
775 INDUSTRIAL CT.
BLOOMFIELD HILLS, MI 48302
(248) 309-3860

SEAL:
STATE OF MICHIGAN
NATHAN PAUL ROBINSON
License No. 6201047489
REGISTERED PROFESSIONAL ENGINEER

JOB NO: 16-021
DATE: 2-25-26
DRAWN BY: N.P.R.

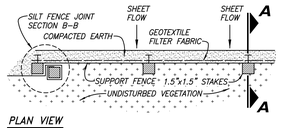
HORIZON ENGINEERING LLC
CIVIL ENGINEERING, SITE PLANNING & LAND DEVELOPMENT CONSULTING
P.O. Box 182158, Shelby Township, Michigan 48318
Phone 586.453.8097

PROJECT:
Part of Lot 1
"Quarton Heath"
#1573 CHESTERFIELD AVENUE
PARCEL NO. 19-26-126-020
PART OF THE NW. 1/4 OF SECTION 26, T.2N., R.10E., CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN

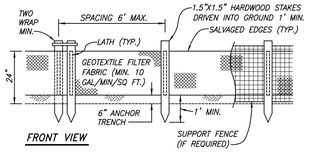
PLAN:
SITE PLAN & DRAINAGE PLAN

SHEET: 1 OF: 2

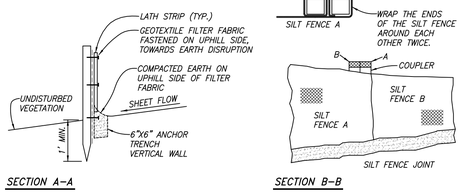
MUNICIPAL REVIEW NUMBERS:



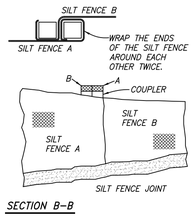
PLAN VIEW



FRONT VIEW



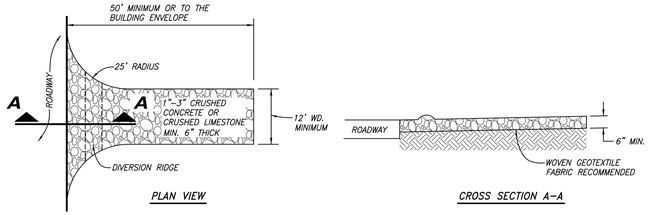
SECTION A–A



SECTION B–B

SILT FENCE DETAIL (MATERIAL: AMOCO PRO PEX 2130 OR APPROVED EQUAL)

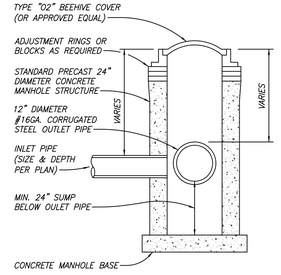
(NO SCALE)



PLAN VIEW CROSS SECTION A–A

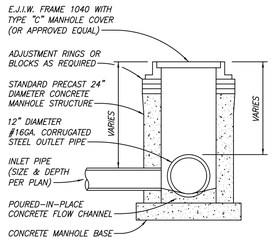
TEMPORARY STONE ACCESS DRIVE

(NO SCALE)



ON-SITE YARD AREA INLET DETAIL

(NO SCALE)

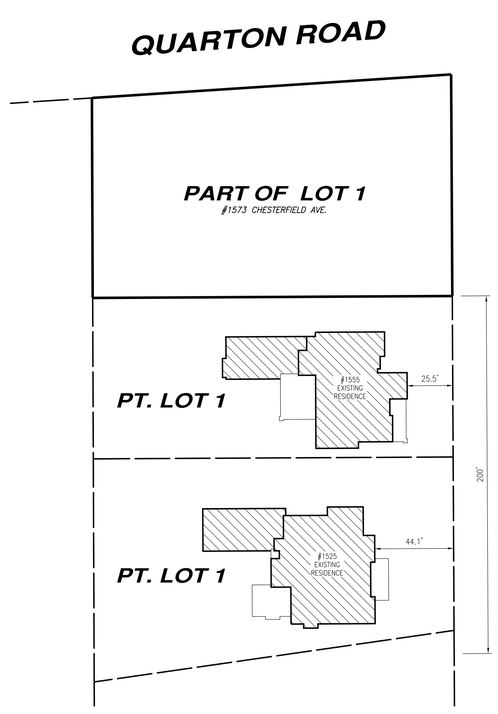


STREET RIGHT-OF-WAY STORM MANHOLE DETAIL

(NO SCALE)

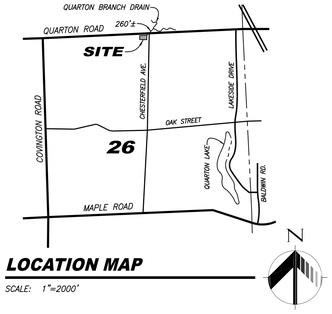
STREET RIGHT-OF-WAY STORM CATCH BASIN DETAIL

(NO SCALE)



FRONT SETBACK SURVEY

SCALE: 1" = 40'



LOCATION MAP

SCALE: 1"=2000'

PROPERTY DESCRIPTION

PART OF LOT 1 OF "QUARTON HEATH", A SUBDIVISION OF PART OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF SECTION 26, TOWN 2 NORTH, RANGE 10 EAST, BLOOMFIELD TOWNSHIP (NOW CITY OF BIRMINGHAM), OAKLAND COUNTY, MICHIGAN AS RECORDED IN LIBER 56 OF PLATS, PAGE 45 OF OAKLAND COUNTY RECORDS, BEING MORE PARTICULARLY DESCRIBED AS: BEGINNING AT THE NORTHWEST CORNER OF LOT 1 OF SAID "QUARTON HEATH"; THENCE SOUTH 00 DEGREES 13 MINUTES 39 SECONDS EAST 111.79 FEET ALONG THE WEST LINE OF SAID LOT 1; THENCE NORTH 89 DEGREES 41 MINUTES 42 SECONDS EAST 201.02 FEET TO A POINT ON THE EAST LINE OF SAID LOT 1; THENCE NORTH 00 DEGREES 18 MINUTES 18 SECONDS WEST 123.88 FEET ALONG THE EAST LINE OF SAID LOT 1 TO THE NORTHEAST CORNER OF SAID LOT 1; THENCE SOUTH 86 DEGREES 15 MINUTES 00 SECONDS WEST 201.23 FEET ALONG THE NORTH LINE OF SAID LOT 1 TO THE POINT OF BEGINNING.

SITE CRITERIA

- ADDRESS: #1573 CHESTERFIELD AVENUE
- PARCEL ID NO.: 19-26-126-020
- ZONING: R-1, SINGLE FAMILY RESIDENTIAL

- AVERAGE FRONT SETBACK REQUIRED = 34.80'
- REQUIRED REAR SETBACK = 30'
- REQUIRED MINIMUM COMBINED FRONT AND REAR SETBACK = 55'
- REQUIRED MINIMUM SIDE SETBACK = 5'
- REQUIRED MINIMUM SIDE SETBACK TO QUARTON ROAD = 10' TO HOUSE; 15' TO GARAGE.
- LOT WIDTH, MEASURED AT 50' FRONT SETBACK LINE = 121.79'
- REQUIRED MINIMUM SIDE SETBACK, ONE SIDE = 121.79' x 10% = 12.18'
- REQUIRED TOTAL SIDE SETBACK = 121.79' x 25% = 30.45'
- REQUIRED DISTANCE BETWEEN STRUCTURES = 30.45'

- PARCEL AREA: 23,678 S.F. (0.544 ACRE)
- LOT COVERAGE ALLOWED = 30% = 7,103 S.F.
- LOT COVERAGE PROPOSED = 7,098 S.F. (30.0%)
- OPEN SPACE REQUIRED = 40% = 9,471 S.F.
- OPEN SPACE PROPOSED = 10,206 S.F. (43.1%)
- FRONT YARD AREA = 4,275 S.F.
- FRONT YARD OPEN SPACE REQUIRED = 65% = 2,779 S.F.
- FRONT YARD OPEN SPACE PROPOSED = 2,947 S.F. (68.9%)

- AREA OF EARTH DISTURBANCE = 0.65 ACRE
- DISTANCE TO NEAREST BODY OF WATER = APPROXIMATELY 260 FEET TO THE QUARTON BRANCH DRAIN TO THE NORTHEAST (REFER TO LOCATION MAP).

BENCHMARKS

CITY BENCHMARK #18
ELEVATION = 776.36 (CITY DATUM)
TOP OF BRASS MONUMENT ON THE SOUTHEAST CORNER OF REDDING STREET AND CHESTERFIELD AVENUE.

SITE BENCHMARK
ELEVATION = 766.56 (CITY DATUM)
CATEWELL RIM LOCATED AT THE SOUTHWEST CORNER OF THE CHESTERFIELD AVENUE AND QUARTON ROAD INTERSECTION, AND APPROXIMATELY 14 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE SUBJECT PROPERTY.

NOTES

1. SURVEY AND TOPOGRAPHY IS AS PERFORMED AND PROVIDED BY AZTEC LAND SURVEYORS INC., JOB NO. 16–023, DATED APRIL 7, 2016, AND UPDATED AS NECESSARY TO CURRENT SITE CONDITIONS AS OF NOVEMBER 20, 2020.
2. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.
3. A CURRENT TITLE POLICY HAS NOT BEEN FURNISHED AT TIME OF SURVEY, THEREFORE EASEMENTS AND/OR ENCUMBRANCES AFFECTING SUBJECT PARCEL MAY NOT BE SHOWN.
4. RAIN GUTTER DOWNSPOUTS MUST BE CONSTRUCTED IN A MANNER THAT DIRECTS WATER FLOW TO THE FRONT OF SUBJECT PROPERTY WHENEVER POSSIBLE.
5. ALL TREES IN THE EXISTING RIGHT OF WAY MUST BE PROTECTED DURING TIME OF CONSTRUCTION.
6. ALL FOUNDATION DIMENSION AND FINISH FLOOR ELEVATIONS SHALL BE VERIFIED WITH THE FINAL APPROVED BUILDING PLANS PRIOR TO THE START OF CONSTRUCTION.
7. ALL BUILDING ROOF DOWNSPOUTS THAT SPILL INTO UNDERGROUND DRAINAGE SYSTEMS SHALL BE PROVIDED WITH AN AIR GAP BETWEEN THE END OF THE DOWNSPOUT AND THE RECEVING STORM DRAIN.

CONTRACTOR'S NOTE

The locations of existing underground utilities are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities before commencing work. He agrees to be fully responsible for any and all damages which might be occasioned by his failure to exactly locate and preserve any and all underground utilities.

3 WORKING DAYS
BEFORE YOU DIG CALL MISS DIG
1-800-482-7171
(TOLL FREE) for the location of underground utilities

The contractor shall be responsible for adhering to all applicable local, state, and federal standards, specifications, and guidelines for construction.

SOIL EROSION MAINTENANCE & SEQUENCE OF CONSTRUCTION

1. INSTALL ALL TEMPORARY SOIL EROSION CONTROL MEASURES AS PER PLAN.
2. INSTALL CONSTRUCTION FENCING PER CITY REQUIREMENTS.
3. REMOVE ALL STRUCTURES, PAVEMENTS, TREES, AND OTHER ITEMS, AS APPLICABLE, INDICATED ON THE SITE PLAN FOR REMOVAL.
4. BEGIN NEW BUILDING CONSTRUCTION.
5. INSTALL UNDERGROUND UTILITIES.
6. INSTALL DRIVEWAY AND PAVED AREAS.
7. COMPLETE BUILDING CONSTRUCTION AND ESTABLISH FINISH GRADE ON ALL DISTURBED AREAS AND STABILIZE WITH VEGETATIVE COVER.
8. REMOVE TEMPORARY SOIL EROSION CONTROL MEASURES.

NOTE: THE SOIL EROSION AND SEDIMENT CONTROL MEASURES WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY THE BUILDER: RANDY NAJJAR, SAPPHIRE LUXURY HOMES, (248) 930-9300. ANY DAMAGED SOIL EROSION MEASURES SHALL BE IMMEDIATELY REPAIRED.

SOIL EROSION NOTES

1. INSTALL SOIL EROSION CONTROL MEASURES PRIOR TO CONSTRUCTION AND EARTH MOVEMENT.
2. A TEMPORARY CRUSHED STONE ACCESS DRIVE SHALL BE PROVIDED FOR ACCESS TO THE SITE DURING CONSTRUCTION. ACCESS TO THE BUILDING SITE SHALL BE LARGE ENOUGH TO ACCOMMODATE FOR ALL CONSTRUCTION TRAFFIC. SITE ACCESS SHALL BE MAINTAINED THROUGHOUT ALL CONSTRUCTION PHASES.
3. MAINTAIN ALL CONTROL MEASURES UNTIL EARTH MOVEMENT IS COMPLETED.
4. CHESTERFIELD AVENUE SHALL BE CLEANED DAILY AFTER WORK IS COMPLETED AND AS DIRECTED BY THE CITY.
5. ALL UNDEVELOPED AREAS ON-SITE SHALL BE STABILIZED AT THE END OF CONSTRUCTION WITH LANDSCAPE MATERIALS (PLANTINGS AND MULCH BEDDING) AND SOD. ALL DISTURBED AREAS WITHIN THE STREET RIGHT-OF-WAY ALONG THE FRONTAGE OF THE SITE SHALL BE STABILIZED WITH SOD. ALL OTHER AREAS OFFSITE DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH SEED & MULCH.
6. RIGHT-OF-WAY MUST BE STABILIZED PRIOR TO FINAL GRADE INSPECTION.
7. ALL SWALE AREAS, ALL SLOPES GREATER THAN 1:5 AND 10' AROUND STORM STRUCTURES MUST BE STABILIZED PRIOR TO FINAL GRADE INSPECTION.
8. AFTER PERMANENT EARTH STABILIZATION IS COMPLETED, REMOVE EROSION CONTROL MEASURES.

WATER MAIN CROSSING NOTES

IF THE AVAILABLE VERTICAL SEPARATION BETWEEN THE EXISTING WATER MAIN AND THE PROPOSED SANITARY OR STORM SERVICE LATERAL WILL BE BETWEEN 6 AND 18 INCHES, THE CONTRACTOR SHALL INSTALL CITY-STANDARD STONE CHIP PIPE BEDDING MATERIAL IN THE EXCAVATION BETWEEN THE SPRINGLINE OF THE PIPES AND CONSOLIDATE THE STONE CHIPS AS MUCH AS POSSIBLE. STONE CHIP BEDDING MATERIAL SHALL HAVE 100% PASSING THE 1/2" SIEVE, AND NO MORE THAN 3% PASSING THE NO. 30 SIEVE (MDOT LIMESTONE AGGREGATE MIX NO. 29A IS AN ALLOWABLE SUBSTITUTE).

IF THE AVAILABLE VERTICAL SEPARATION BETWEEN THE EXISTING WATER MAIN AND THE PROPOSED SANITARY OR STORM SERVICE LATERAL IS BETWEEN 2 AND 6 INCHES, THE CONTRACTOR SHALL INSTALL FLOWABLE FILL (CONCRETE MIX CONSISTING OF PORTLAND CEMENT, FLY ASH, SAND AND WATER) BETWEEN THE SPINGLINES OF THE PIPES AT THE CROSSINGS. A SHEET OF NEOPRENE SHALL BE PLACED AROUND BOTH PIPES AS A SEPARATOR TO PREVENT THE CONCRETE FROM BONDING TO THE PIPES.

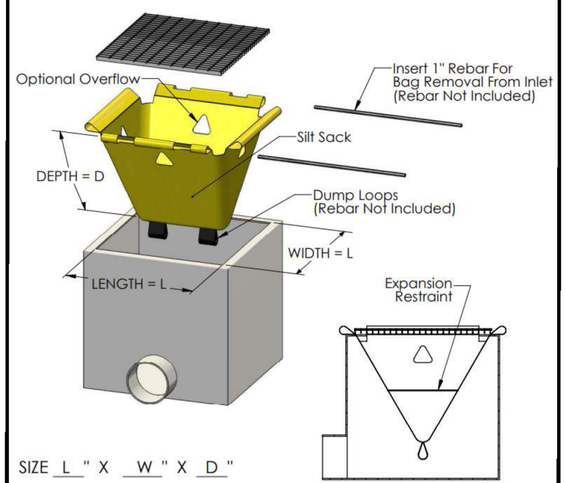
WHERE SANITARY OR STORM SERVICE LATERALS CROSS AN EXISTING WATER MAIN WITH LESS THAN 18 INCHES OF VERTICAL SEPARATION, A FULL LENGTH OF SERVICE PIPE SHALL BE USED AT THE CROSSING, CENTERED ON THE POINT OF CROSSING TO MAXIMIZE THE DISTANCE OF THE SEWER SERVICE PIPE JOINTS FROM THE WATER MAIN.

SOILS FROM COUNTY SOILS MAP

"54A" – MATHERTON SANDY LOAM, 0 TO 3 PERCENT SLOPES.

"60B" – URBAN LAND – MARLETTE COMPLEX, 0 TO 8 PERCENT SLOPES.

HIGH VISIBILITY SILTSACK



AVAILABLE IN HIGH FLOW/REGULAR FLOW DESIGNS TO FIT EVERY GRATE SIZE/SHAPE

ACF SILTSACK

FERGUSON WATERWORKS
CORPORATE OFFICE
2831 CARDWELL RD
RICHMOND, VA 23234
INFOGEO@FERGUSON.COM
WWW.FERGUSONGSS.COM

FOR ADDITIONAL INFORMATION PLEASE CONTACT FERGUSON SALES
INFOGEO@FERGUSON.COM OR VISIT WWW.FERGUSONGSS.COM

STREET CATCH BASIN INLET FILTER DETAIL

(NO SCALE)

"SILTSACK", OR APPROVED EQUAL, PER OAKLAND COUNTY WRC STANDARDS.

SedCatch® SedCage® - Yard Inlet Protection

LEGEND

SC	SedCage®

SIZING INSTRUCTIONS:

MEASURE THE DIAGONAL DIMENSION OF THE GRATE, SELECT A CAGE THAT IS AT LEAST 1" LARGER.

COMPATIBLE GRATES:

A SedCage® IS COMPATIBLE WITH ALL GRATES IN WHICH THE EDGES OF THE GRATE ARE SUPPORTED 3Y A LEDGE.

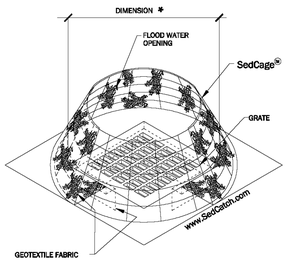
SIZES:

32" SedCage®
FITS SQUARE GRATES FROM 12" X 12" THROUGH 22" X 22"
FITS ROUND GRATES FROM 8" DIA. THROUGH 24" DIA.
FITS RECTANGULAR GRATES WITH A DIAGONAL BETWEEN 17" AND 31" ($c^2 = b^2 + e^2$)

42" SedCage®
FITS SQUARE GRATES FROM 19" X 19" THROUGH 29" X 29"
FITS ROUND GRATES FROM 19" DIA. THROUGH 30" DIA.
FITS RECTANGULAR GRATES WITH A DIAGONAL BETWEEN 28" AND 41" ($c^2 = b^2 + e^2$)

54" SedCage®
FITS SQUARE GRATES FROM 24" X 24" THROUGH 36" X 36"
FITS ROUND GRATES FROM 24" DIA. THROUGH 40" DIA.
FITS RECTANGULAR GRATES WITH A DIAGONAL BETWEEN 32" AND 53" ($c^2 = b^2 + e^2$)

62" SedCage®
FITS SQUARE GRATES FROM 27" X 27" THROUGH 42" X 42"
FITS ROUND GRATES FROM 28" DIA. THROUGH 48" DIA.
FITS RECTANGULAR GRATES WITH A DIAGONAL BETWEEN 44" AND 61" ($c^2 = b^2 + e^2$)
CUSTOM SIZES AVAILABLE



FLOOD WATER CLEAR OPENING:

32" SedCage	230 sq.in.
42" SedCage	515 sq.in.
54" SedCage	1075 sq.in.
62" SedCage	1320 sq.in.

US PATENT D 620,999, OTHER PATENTS PENDING

SedCatch® Environmental Products
www.SedCatch.com

1. INLET PROTECTION SHALL BE INSTALLED AT THE TIME THE STRUCTURE IS SET.
2. TO INSTALL: TUCK FABRIC UNDER GRATE.
3. REMOVE SEDIMENT IF IT ACCUMULATES TO ONE HALF THE HEIGHT OF THE SedCage®
4. THE AREA AROUND THE SedCage® SHOULD BE AS FLAT AS POSSIBLE TO INCREASE EFFECTIVENESS AND REDUCE MAINTENANCE REQUIREMENTS.
5. AS WITH ALL INLET PROTECTION DEVICES, CHECK TO SEE HOW DEEP THE WATER COULD RISE IF THE INLET WERE BLOCKED ENTIRELY. DO NOT INSTALL IN LOCATIONS THAT COULD CAUSE PROPERTY DAMAGE OR POSE A SAFETY HAZARD TO TRAFFIC.

REAR YARD INLET FILTER DETAIL

(NO SCALE)

"SEDCATCH" / "SEDCAGE", OR APPROVED EQUAL, PER OAKLAND COUNTY WRC STANDARDS.

REVISIONS:
3-10-26 REVISED PER CITY BLDG DEPT.
3-02-26 REVISED PER CITY BLDG DEPT.

CLIENT:
MR. RANDY NAJJAR
SAPPHIRE LUXURY HOMES
775 INDUSTRIAL CT.
BLOOMFIELD HILLS, MI 48302
(248) 930-9300

JOB NO: 16-021
DATE: 12-2-25
DRAWN BY: N.P.K.

SEAL:
STATE OF MICHIGAN
NATHAN PAUL ROBINSON
License No. 6201047489
LICENSED PROFESSIONAL ENGINEER

HORIZON ENGINEERING LLC
CIVIL ENGINEERING, SITE PLANNING & LAND DEVELOPMENT CONSULTING
P.O. Box 182158, Shelby Township, Michigan 48318
Phone 586.453.8097

PROJECT:
Part of Lot 1 "Quarton Heath"
#1573 CHESTERFIELD AVENUE
PARCEL NO. 19-26-126-020
PART OF THE NW. 1/4 OF SECTION 26, T.2N., R.10E., CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN

PLAN:
NOTES & DETAILS

SHEET: 2 OF: 2

MUNICIPAL REVIEW NUMBERS:

VARIANCE REQUEST

SIDE YARD SETBACK ALONG QUARTON ROAD.
REQUIRED = 83.06 FEET.
PROPOSED = 24.83 FEET.
VARIANCE REQUEST = 58.23 FEET.

QUARTON ROAD
WIDTH VARIES

60' RIGHT-OF-WAY

33' RIGHT-OF-WAY

200'

96.11'

#1935 QUARTON ROAD
EXISTING RESIDENCE

111.79'

201.23'

19.88' BALANCE

24.83'

MINIMUM SIDE YARD SETBACK BASED ON TOTAL REQUIRED SIDE YARD OF 25% OF LOT WIDTH = 121.79' x 25% = 30.45'

PROPOSED SIDE YARD SETBACK

30.00' MINIMUM REAR SETBACK

83.06' MINIMUM FRONT SETBACK (200' AVERAGE ALONG QUARTON)

58.23' VARIANCE REQUESTED

#1573 CHESTERFIELD AVE.
LOT AREA = 23,678 S.F.

REQUIRED SETBACK BASED ON 200' AVERAGE OF HOMES ALONG QUARTON ROAD

LOT WIDTH AT FRONT SETBACK LINE = 121.79'

123.88'

BUILDABLE ENVELOPE = 3,256 S.F.
LOT COVERAGE LEFTOVER = 13.7%

19.81'

28.01'

34.80' MINIMUM FRONT SETBACK (200' AVERAGE ALONG CHESTERFIELD)

201.02'

30.45' MINIMUM BETWEEN STRUCTURES

10.57'

19.88'

#1555 CHESTERFIELD AVE.
EXISTING RESIDENCE

64.92'

25.50'

90.00'

200'

#1523 CHESTERFIELD AVE.
EXISTING RESIDENCE

65.13'

44.10'

96.96'

124.71'

BLOOMFIELD TOWNSHIP

CITY OF BIRMINGHAM

CHESTERFIELD AVENUE
80' WIDE

310.00'

115.00'

70.00'

200'

46.43'

#1564 CHESTERFIELD AVE.
EXISTING RESIDENCE

#1665 QUARTON ROAD

EXISTING RESIDENCE IS GREATER THAN 200' FROM SUBJECT PROPERTY.

115.00'

0 10' 20' 40' 60'

N

PLAN SCALE: 1" = 20'

Setback Diagram "A"

REVISIONS:

CLIENT:
MR. RANDY NAJAR
SIGNATURE HOMES
775 INDUSTRIAL CT.
BLOOMFIELD HILLS, MI 48302
(248) 360-9360

JOB NO: 16-021
DATE: 4-4-16
DRAWN BY: N.P.E.

SEAL:
STATE OF MICHIGAN
NATHAN PAUL ROBINSON
License No. 6201047489
LICENSED PROFESSIONAL ENGINEER

HORIZON
ENGINEERING LLC
CIVIL ENGINEERING, SITE PLANNING & LAND DEVELOPMENT CONSULTING
P.O. Box 182158, Shelby Township, Michigan 48318
Phone 586.453.8097

PROJECT:
Part of Lot 1
"Quarton Heath"
#1573 CHESTERFIELD AVENUE
PARCEL NO. 19-26-126-020
PART OF THE N.W. 1/4 OF SECTION 26, T.2N., R.10E.,
CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN

PLAN:
SETBACK DIAGRAM "A"

SHEET:
1 OF: **1**

MUNICIPAL REVIEW NUMBERS:

VARIANCE REQUEST

SIDE YARD SETBACK ALONG QUARTON ROAD.
REQUIRED = 70.00 FEET.
PROPOSED = 24.83 FEET.
VARIANCE REQUEST = 45.17 FEET.

QUARTON ROAD
WIDTH VARIES

60' RIGHT-OF-WAY

201.23'

24.83'

19.88' BALANCE

MINIMUM SIDE YARD SETBACK BASED ON TOTAL REQUIRED SIDE YARD OF 25% OF LOT WIDTH = 121.79' x 25% = 30.45'

PROPOSED SIDE YARD SETBACK

30.00' MINIMUM REAR SETBACK

70.00' MINIMUM FRONT SETBACK (200' AVERAGE ALONG QUARTON)

45.17' VARIANCE REQUESTED

#1573 CHESTERFIELD AVE.
LOT AREA = 23,678 S.F.

111.79'

123.88'

LOT WIDTH AT FRONT SETBACK LINE = 121.79'

REQUIRED SETBACK BASED ON 200' AVERAGE OF HOMES ALONG QUARTON ROAD

BUILDABLE ENVELOPE = 5,038 S.F.
LOT COVERAGE LEFTOVER = 21.2%

32.90'

41.09'

34.80' MINIMUM FRONT SETBACK (200' AVERAGE ALONG CHESTERFIELD)

201.02'

30.45' MINIMUM BETWEEN STRUCTURES

10.57'

19.88'

EXISTING RESIDENCE IS OUT OF JURISDICTION

#1935 QUARTON ROAD
EXISTING RESIDENCE

BLOOMFIELD TOWNSHIP

CITY OF BIRMINGHAM

90.00'

#1555 CHESTERFIELD AVE.
EXISTING RESIDENCE

64.92'

25.50'

90.00'

200'

#1523 CHESTERFIELD AVE.
EXISTING RESIDENCE

65.13'

44.10'

96.96'

124.71'

CHESTERFIELD AVENUE
80' WIDE

33' RIGHT-OF-WAY

115.00'

70.00'

200'

310.00'

46.43'

#1564 CHESTERFIELD AVE.
EXISTING RESIDENCE

310.00'

#1665 QUARTON ROAD

115.00'

EXISTING RESIDENCE IS GREATER THAN 200' FROM SUBJECT PROPERTY.

0 10' 20' 40' 60'

N

PLAN SCALE: 1" = 20'

Setback Diagram "B"

REVISIONS:

CLIENT:
MR. RANDY NAJAR
SIGNATURE HOMES
775 INDUSTRIAL CT.
BLOOMFIELD HILLS, MI 48302
(248) 360-8860

JOB NO: 16-021
DATE: 4-4-16
DRAWN BY: N.P.R.

SEAL:
STATE OF MICHIGAN
NATHAN PAUL ROBINSON
License No. 6201047489
REGISTERED PROFESSIONAL ENGINEER

HORIZON
ENGINEERING LLC
CIVIL ENGINEERING, SITE PLANNING & LAND DEVELOPMENT CONSULTING
P.O. Box 182158, Shelby Township, Michigan 48318
Phone 586.453.8097

PROJECT:
Part of Lot 1
"Quarton Heath"
#1573 CHESTERFIELD AVENUE
PARCEL NO. 19-26-126-020
PART OF THE N.W. 1/4 OF SECTION 26, T.2N., R.10E.,
CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN

PLAN:
SETBACK DIAGRAM "B"

SHEET:
1 OF: **1**

MUNICIPAL REVIEW NUMBERS:

BIRMINGHAM MODEL HOME

1573 CHESTERFIELD AVENUE | BIRMINGHAM, MI 48009



SHEET INDEX

C1.0 COVER SHEET
A1.0 FOUNDATION PLAN
A1.1 FINISHED BASEMENT PLAN
A2.0 FIRST FLOOR PLAN
A2.1 ROOF PLAN
A3.0 FRONT & RIGHT ELEVATIONS
A3.1 REAR & LEFT ELEVATIONS
A4.0 BUILDING SECTIONS
A4.1 BUILDING SECTIONS
A5.0 WALL SECTIONS & DETAILS
A6.0 WALL TIE-DOWNS & DETAILS
A7.0 BRACED WALL PANEL LOCATION PLAN
A8.0 GENERAL NOTES

TOTAL FLOOR AREA	4,925 G.S.F.
TOTAL BASEMENT AREA	4,925 G.S.F.
FINISHED BASEMENT AREA	4,195 G.S.F
GARAGE AREA	615 G.S.F.
LANAI AREA	687 G.S.F.
PATIO AREA	112 G.S.F.

SAPPHIRE LUXURY HOMES
775 INDUSTRIAL CT.
BLOOMFIELD TOWNSHIP, MI 48302
Ph. 248.930.9300
sapphireluxuryhomes.com

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REGISTRATION SEAL

STATE OF MICHIGAN
CHRISTOPHER J. BOUCHER
ARCHITECT
LICENSE NO. 1301071320
REGISTERED ARCHITECT

PROJECT

BIRMINGHAM MODEL HOME
1573 CHESTERFIELD AVENUE
BIRMINGHAM, MI 48009

CLIENT
SAPPHIRE LUXURY HOMES
775 INDUSTRIAL CT
BLOOMFIELD TOWNSHIP, MI 48302

PRELIMINARY	○
BID	●
CONSTRUCTION/PERMIT	●

ISSUE DATE:	ISSUED FOR:
09-17-2024	REVIEW
12-11-2025	REVIEW
02-26-2026	PERMITS
03-10-2026	REVISION #1 (AHJ)
03-25-2026	REVISION #2 (AHJ)

DRAWN BY	C.J.B.
REVIEWED BY	R.N.

SHEET TITLE
COVER SHEET

SHEET NUMBER
C1.0

STRUCTURAL NOTES

THE CONTRACTOR SHALL CONTACT LOCAL UTILITY LOCATING SERVICES AS WELL AS MISS-DIG (811) TO MARK ALL UNDERGROUND LINES PRIOR TO EXCAVATION

VERIFY THE EXACT LOCATION, DEPTH, AND SIZE OF EXISTING SEWER, WATER, GAS, AND ELECTRICAL UTILITIES. REPORT ANY DISCREPANCIES OR CONFLICTS WITH PROPOSED FOOTINGS OR PLUMBING STACK LOCATIONS TO THE ARCHITECT/ENGINEER IMMEDIATELY

CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF EXCAVATION OR FOOTING PLACEMENT

ALL FOOTINGS SHALL REST ON FIRM, UNDISTURBED SOIL OR ENGINEERED FILL WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 1500 PSF UNLESS OTHERWISE SPECIFIED BY A GEOTECHNICAL REPORT

FOUNDATION WALLS SHALL BE REINFORCED WITH VERTICAL AND HORIZONTAL REBAR AS SPECIFIED IN THE STRUCTURAL DETAILS OR PER MRC 2015 TABLES FOR SOIL LATERAL LOAD

ALL EXTERIOR FOUNDATION WALLS BELOW GRADE SHALL BE DAMPPROOFED OR WATERPROOFED FROM THE FOOTING TO FINISHED GRADE

A MINIMUM 4" PERFORATED DRAIN PIPE SHALL BE INSTALLED AT THE FOOTING EXTERIOR, COVERED WITH A MINIMUM OF 12" OF CLEAN CRUSHED STONE AND FILTER FABRIC

FOUNDATION DRAINS SHALL BE SLOPED TO DRAIN BY GRAVITY TO DAYLIGHT OR DISCHARGE INTO AN APPROVED SUMP PIT WITH AN AUTOMATIC PUMP

BACKFILL SHALL NOT BE PLACED UNTIL FOUNDATION WALLS ARE PROPERLY CURED AND THE FIRST FLOOR DIAPHRAGM IS INSTALLED AND FASTENED TO BRACE THE WALLS

FINAL GRADE SHALL SLOPE AWAY FROM THE FOUNDATION AT A MINIMUM OF 6" WITHIN THE FIRST 10' TO ENSURE PROPER SURFACE DRAINAGE

ALL UNDERGROUND WASTE AND VENT PIPING SHALL BE SCHEDULE 40 PVC ASTM D2665; ALL JOINTS SOLVENT CEMENTED PER ASTM D2855

ALL UNDERGROUND WASTE LINES SHALL BE PRESSURE TESTED (10' WATER HEAD OR 5 PSI AIR) FOR 15 MINUTES MINIMUM PRIOR TO BACKFILL AND CONCRETE PLACEMENT

ALL UNDERGROUND WASTE LINE STUBS THROUGH THE SLAB SHALL BE PLUMB, SECURED AND PERMANENTLY CAPPED AND SEALED WITH SOLVENT-CEMENTED PVC CAPS

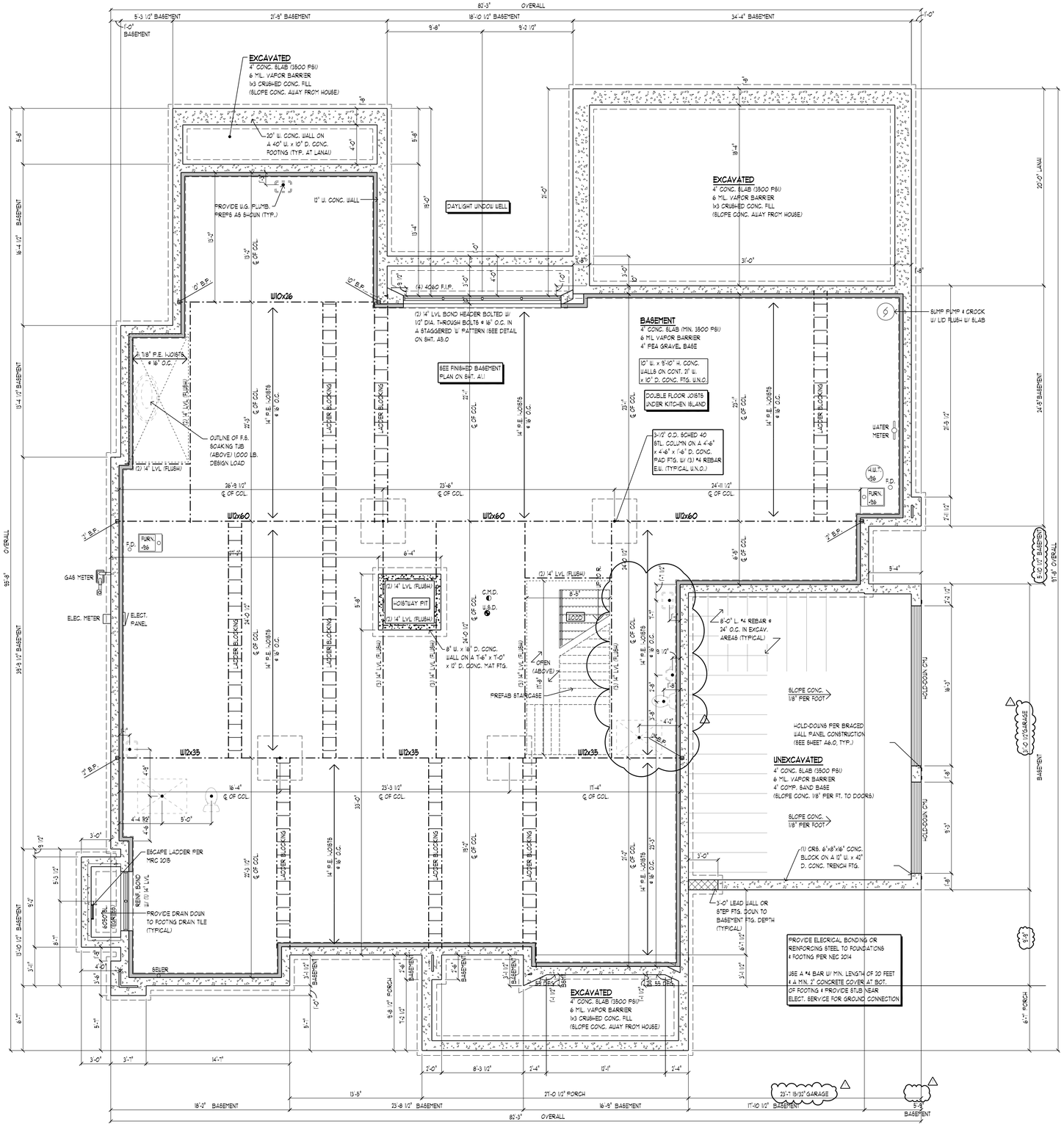
PROVIDE PIPE SLEEVES OR 1/4" CLOSED-CELL FOAM WRAP FOR ALL PVC PIPING PENETRATING THE CONCRETE SLAB TO ALLOW FOR EXPANSION

SUMP BASINS OR SEWAGE EJECTORS SHALL BE GAS-TIGHT, SET LEVEL ON CRUSHED STONE AND EQUIPPED WITH A CHECK VALVE AND DISCONNECT UNION

ALL TRENCHES BENEATH THE SLAB SHALL BE BACKFILLED WITH CLEAN GRAVEL OR SAND AND COMPACTED TO 95% DENSITY TO PREVENT SETTLEMENT

PROVIDE ALL NECESSARY SLEEVES FOR UTILITY PENETRATIONS (WATER, SEWER, ELECTRICAL) AS INDICATED ON THE DRAWINGS AND SEAL GAPS WITH NON-SHRINK GROUT

FOR NATURAL STONE AND/OR TILE FLOORING, ALL PRE-ENGINEERED FLOOR SYSTEMS SHALL BE DESIGNED FOR MAXIMUM DEFLECTION OF L/720 AT SPANS GREATER THAN 15'-0" AND A MAXIMUM MEMBER SPACING OF 16" O.C.



FOUNDATION PLAN

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

SAPPHIRE
LUXURY HOMES
755 INDUSTRIAL CT
BLOOMFIELD TOWNSHIP, MI 48302
(248) 850-1000
sapphireluxuryhomes.com

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REGISTRATION SEAL

STATE OF MICHIGAN
CHRISTOPHER J. BOUCHER
ARCHITECT
License No. 1301061520
REGISTERED ARCHITECT

PROJECT

BIRMINGHAM MODEL HOME

1573 CHESTERFIELD AVENUE
BIRMINGHAM, MI 48009

CLIENT
SAPPHIRE LUXURY HOMES
775 INDUSTRIAL CT
BLOOMFIELD TOWNSHIP, MI 48302

PRELIMINARY ○
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DRAWN BY C.J.B.
REVIEWED BY R.N.

SHEET TITLE
FOUNDATION PLAN

SHEET NUMBER
A1.0

FINISHED BASEMENT NOTES

ALL CONSTRUCTION SHALL COMPLY WITH MICHIGAN RESIDENTIAL CODE 2015 (MRC 2015) AND ALL LOCAL MUNICIPAL AMENDMENTS

CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, UTILITIES, AND FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK.

THE BASEMENT IS TO BE FINISHED AS HABITABLE SPACE - ANY DEVIATIONS FROM THE APPROVED FLOOR PLAN REQUIRE BUILDING DEPARTMENT APPROVAL

VERIFY CABINET AND APPLIANCE LAYOUT AS WELL AS ASSOCIATED PLUMBING AND ELEC. REQUIREMENTS WITH THE BUILDER

MAINTAIN A MINIMUM FINISHED CEILING HEIGHT OF 7'-0" IN ALL HABITABLE SPACES - BEAMS, PIPES, AND DUCTS MAY PROJECT TO 6'-4" FROM THE FINISHED FLOOR

VERIFY LOCATIONS OF INSTALLED PLUMBING, ELECTRICAL AND MECHANICAL PIPING, CONDUIT AND DUCTWORK AND VERIFY COMPLIANCE WITH PROPOSED FLOOR PLAN AND ADJUST WALL LOCATIONS AS NECESSARY - NOTIFY ARCHITECT IF UTILITY LOCATIONS ADVERSELY AFFECT THE PROPOSED FLOOR PLAN

HVAC ROUGH-IN MUST BE OPTIMIZED FOR MAXIMUM VERTICAL CLEARANCE

ALL DUCTWORK AND MECHANICALS TO BE NESTED WITHIN JOIST BAYS OR SECURED TIGHT TO STRUCTURAL MEMBERS

NO PART OF THE MECHANICAL ASSEMBLY SHALL EXCEED THE 8'-6" FINISHED SOFFIT PLANE

THE BUILDER SHALL COORDINATE WITH THIS PLAN AND THE HVAC SUBCONTRACTOR TO ENSURE ALL DUCT RUNS ALIGN WITH PERIMETER BULKHEADS AND DO NOT OBSTRUCT RECESSED LIGHTING OR DECORATIVE CEILING TREATMENTS

AT LEAST ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING (EGRESS WINDOW) IS REQUIRED; IF A BEDROOM IS INCLUDED, THE EGRESS MUST BE LOCATED WITHIN THAT ROOM

EGRESS WINDOWS MUST PROVIDE A MINIMUM NET CLEAR OPENING OF 5.7 SQ. FT., A MINIMUM HEIGHT OF 24", AND A MINIMUM WIDTH OF 20"

WINDOW WELLS FOR EGRESS WINDOWS WITH A VERTICAL DEPTH GREATER THAN 44" SHALL BE EQUIPPED WITH A PERMANENTLY AFFIXED LADDER OR STEPS

PERIMETER SOFFITS WHICH HOUSE DUCTWORK SHALL BE 25 GA. COLD-FORMED METAL FRAMING (CFMF) AT 16" O.C. MINIMUM

INTERCONNECTED, HARDWIRED SMOKE ALARMS WITH BATTERY BACKUP MUST BE INSTALLED IN EACH BEDROOM AND IN THE IMMEDIATE VICINITY OUTSIDE OF BEDROOMS.CARBON MONOXIDE (CO) DETECTORS SHALL BE INSTALLED IN THE IMMEDIATE VICINITY OF ANY BEDROOMS AND IN ANY ROOM CONTAINING FUEL-BURNING APPLIANCES

ALL WOOD PLATES IN DIRECT CONTACT WITH CONCRETE OR MASONRY FOUNDATIONS SHALL BE PRESSURE TREATED (P.T.) LUMBER

INSTALL FIREBLOCKING AT THE TOP OF ALL STUD WALLS, AT 10' INTERVALS HORIZONTALLY AND AT ALL TRANSITIONS BETWEEN VERTICAL AND HORIZONTAL SPACES SUCH AS SOFFITS AND STAIR STRINGERS

INSTALL A MINIMUM 6-MIL POLY VAPOR BARRIER OR 1" RIGID FOAM INSULATION AGAINST THE FOUNDATION WALL PRIOR TO FRAMING PER LOCAL ENERGY CODES

DRAFT STOPPING IS REQUIRED IN FLOOR-CEILING ASSEMBLIES WHERE THE CONCEALED AREA EXCEEDS 1,000 SQ. FT.

ALL RECEPTACLES IN THE FINISHED BASEMENT MUST BE AFCI AND/OR GFCI PROTECTED AS REQUIRED BY THE CURRENT NATIONAL ELECTRICAL CODE (NEC)

PROVIDE AT LEAST ONE WALL-SWITCH-CONTROLLED LIGHTING OUTLET IN EVERY HABITABLE ROOM, HALLWAY, AND BATHROOM

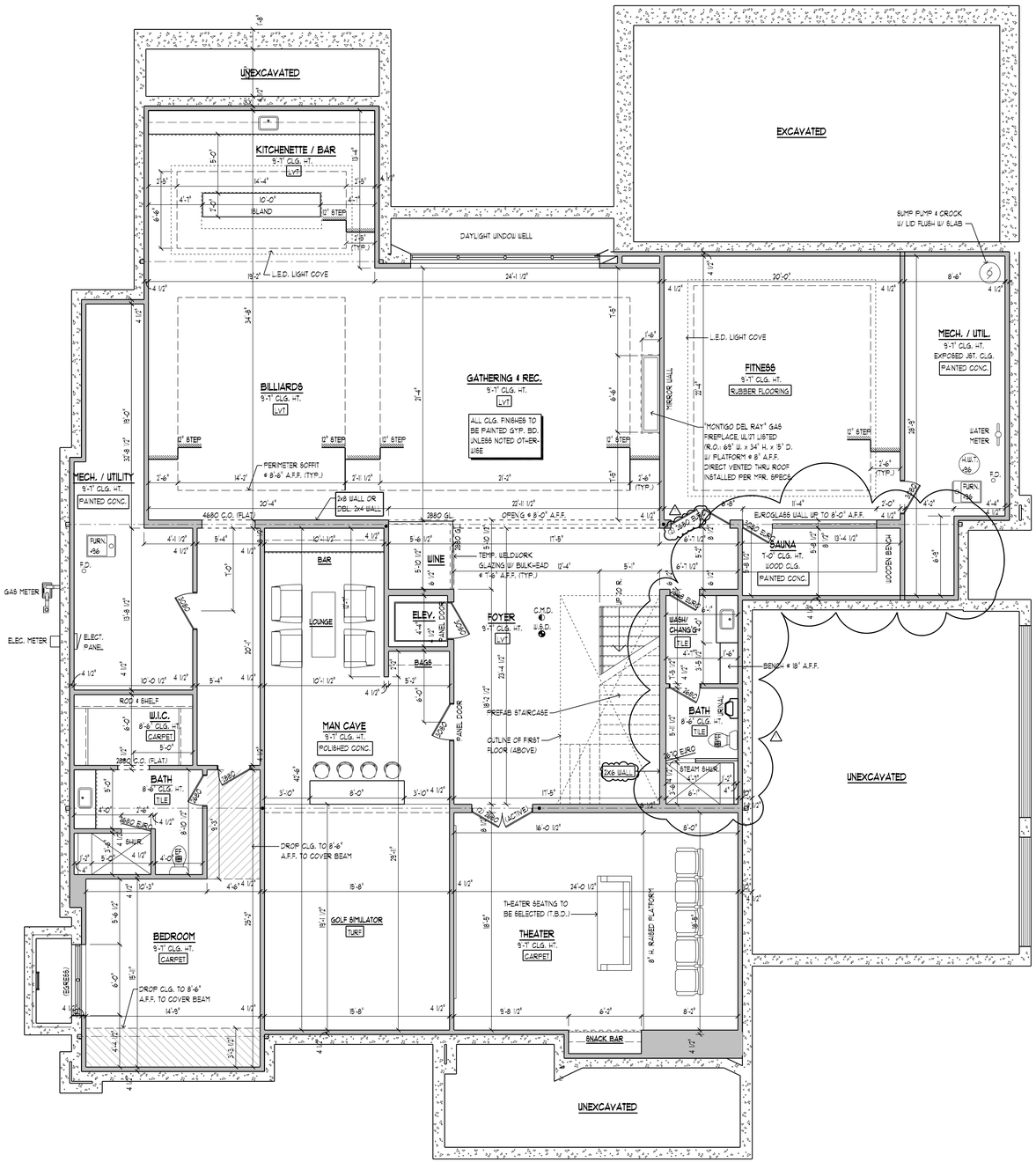
HVAC SYSTEMS MUST PROVIDE ADEQUATE SUPPLY AND RETURN AIR TO MAINTAIN A MINIMUM TEMPERATURE OF 68 DEG. FAHRENHEIT IN ALL FINISHED AREAS

ALL NEW PLUMBING LINES SHALL BE TESTED AT 5 PSI FOR 15 MINUTES OR BY A 10' WATER COLUMN PRIOR TO BEING COVERED BY WALL FINISHES

BASEMENT WALLS SHALL BE INSULATED TO A MINIMUM OF R-15 CONTINUOUS OR R-19 CAVITY (VERIFY SPECIFIC LOCAL CLIMATE ZONE REQUIREMENTS)

SEAL ALL PENETRATIONS THROUGH TOP AND BOTTOM PLATES (PLUMBING, ELECTRICAL, ETC.) WITH APPROVED FIRE-RATED FOAM OR CAULK

MAINTAIN A 30"X30" CLEAR WORKING SPACE IN FRONT OF THE FURNACE, WATER HEATER AND ELECTRICAL PANEL - DO NOT OBSTRUCT ACCESS TO MAIN WATER SHUT-OFFS OR CLEANOUTS



FINISHED BASEMENT PLAN

4,155 FIN. SQ. FT.

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

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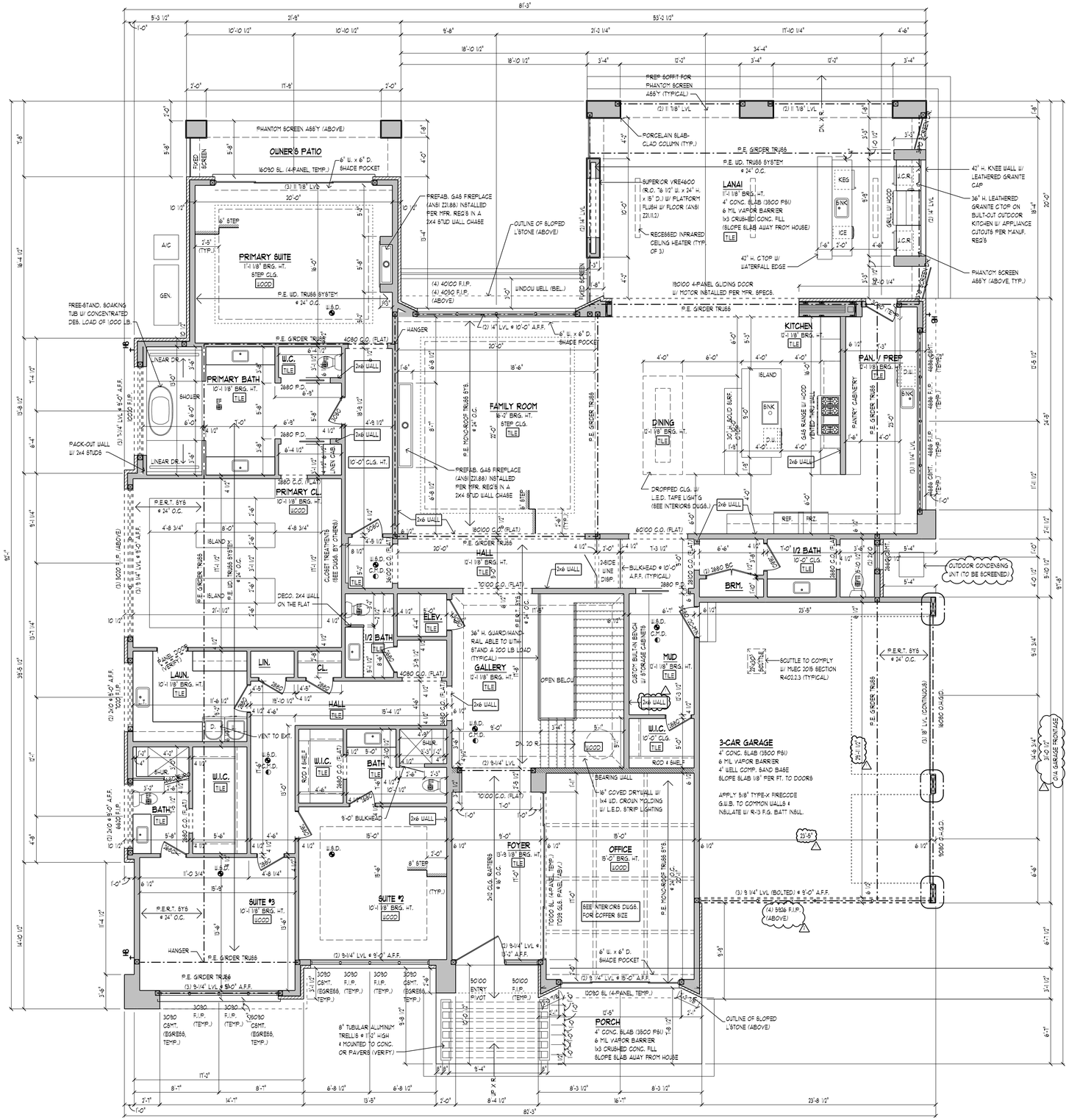
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03.10.2026	REVISION #1 (AH)
03.25.2026	REVISION #2 (AH)

DRAWN BY C.J.B.
REVIEWED BY R.N.

'FINISHED BASEMENT PLAN'
SHEET TITLE

A1.1
SHEET NUMBER



FIRST FLOOR PLAN

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

TOTAL FLOOR AREA: 4825 G.S.F.

DROP SUBFLOORING BETWEEN JOISTS IN ALL "TILED" AREAS

NOTE: EXTERIOR DIMENSIONS TAKEN FROM SHEATHING

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DRAWN BY	C.J.B.
REVIEWED BY	R.N.

SHEET TITLE
FIRST FLOOR PLAN

SHEET NUMBER
A2.0

ROOFING NOTES

ALL ROOF WORK SHALL COMPLY WITH 2018 MICHIGAN RESIDENTIAL CODE (MRC 2015)

CONTRACTOR SHALL UTILIZE OSHA-APPROVED FALL PROTECTION FOR STEEP-SLOPE CONDITIONS

ENTIRE ROOF DECK SHALL BE COVERED IN SYNTHETIC UNDERLAYMENT (ASTM D226 TYPE II)

PROVIDE A STANDARD SELF-ADHERING POLYMER-MODIFIED BITUMEN ICE AND WATER BARRIER AT EAVE AREAS

THE ICE AND WATER SHIELD/BARRIER SHALL EXTEND 24" INSIDE THE EXTERIOR WALL LINE FOR ROOF PITCHES 4:12 TO 8:12 FROM EDGE OF EAVE MINIMUM

THE ICE AND WATER SHIELD/BARRIER SHALL EXTEND 36" INSIDE THE EXTERIOR WALL LINE FOR ROOF PITCHES GREATER THAN 8:12 FROM EDGE OF EAVE MINIMUM

PROVIDE LAMINATED ARCHITECTURAL ASPHALT SHINGLES AND SHALL BE FASTENED IN A 6-NAIL PATTERN PER SHINGLE

ON PITCHES GREATER THAN 12:12, ALL SHINGLES SHALL BE HAND-SEALED WITH THREE (3) SPOTS OF ASPHALT CEMENT PER MANUFACTURER SPECIFICATIONS

INSTALL ICE/RAIL/STEERING FLASHING AT ALL VERTICAL INTERSECTIONS AT EXTERIOR WALLS

INSTALL ROOF-TO-WALL INTAKE VENTILATION (SHINGLE-OVER STYLE) AT ALL GABLE ROOF OR SIDEWALL INTERSECTIONS WHERE SOFFIT INTAKE IS UNAVAILABLE TO ENSURE CONTINUOUS AIRFLOW AND ENSURE ROOF-TO-WALL VENTING IS INSTALLED WITH CORRESPONDING STEP FLASHING AND COUNTER-FLASHING TO MAINTAIN WATERTIGHT INTEGRITY PER MANUFACTURER SPECIFICATIONS

INSTALL KICK-OUT FLASHING AT ALL ROOF-TO-WALL TERMINATIONS WHERE THE EAVE INTERSECTS A VERTICAL WALL TO DIVERT WATER AWAY FROM THE SIDING AND INTO THE GUTTER SYSTEM

PROVIDE A PAINTED METAL DRIP EDGE AT ALL EAVES AND GABLES AND SHINGLES TO LAP 1/2" OVER MAXIMUM ASPHALT CEMENT SEALANT AT SHINGLED AREAS

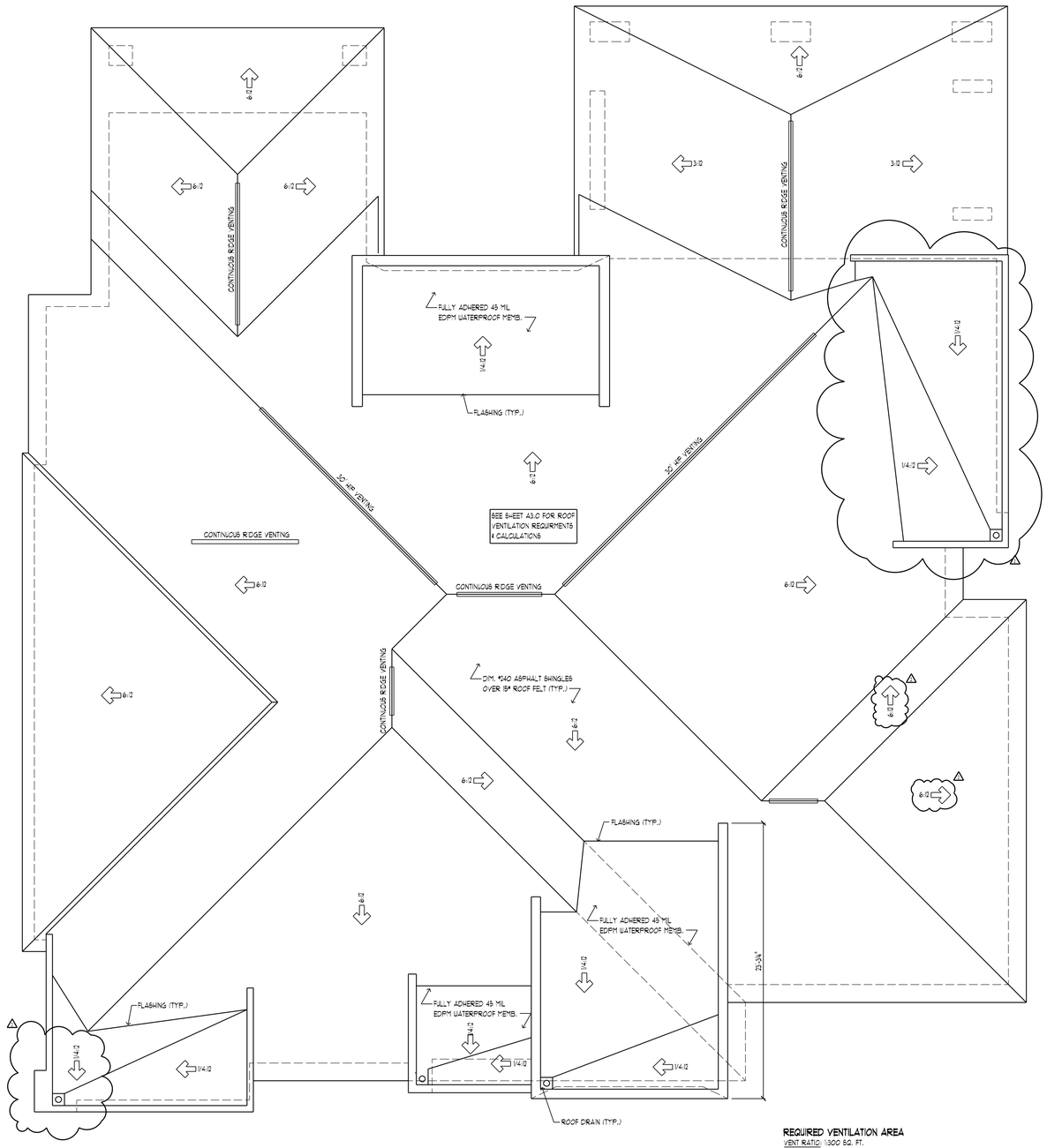
PROVIDE ATTIC VENTILATION PER MRC 2015 R806 AT A MINIMUM RATIO OF 1/300 OF THE AREA OF THE SPACE VENTILATED. 50% OF VENTILATION SHALL BE AT THE RIDGE AND 50% AT THE EAVES/SOFFIT (SEE REQUIRED VENTING CALCULATIONS ON SHEET C1.0)

HIP VENTING NOT PERMITTED FOR ROOF PITCHES GREATER THAN 8:12. SEAL HIPS WITH ROLLED CLOSURES OR HIGH-PROFILE CAP SHINGLES OVER SELF-ADHERED UNDERLAYMENT

PROVIDE RIDGE VENTING AT ALL RIDGES WITH A NET-FREE VENTING AREA (N.F.V.A.) OF 18 SQ. IN. PER LINEAR FOOT BY "GAF COBRA SNOWCOUNTRY" OR "OC VENTSURE RIGID ROLL" OR APPROVED EQUIVALENT

ROOFING FASTENING SCHEDULE

MATERIAL	FASTENER TYPE	MIN. LENGTH	SPACING/PATTERN
ASPHALT SHINGLES	0.124 HOT-DIPPED GALVANIZED ROOFING NAIL	1 1/2" TO 1 3/4"	6 NAILS PER SHINGLE (HIGH-WIND PATTERN)
STANDING SEAM METAL PANELS	#10 OR #12 "WOODGRIP" SCREW	3"	24" O.C. FIELD/6" O.C. PERIMETERS
RIDGE AND HIP CAPS	#8 OR #14 "WOODGRIP" SCREW	2 1/2" TO 3"	12" O.C. (MUST PENETRATE ROOF STRUCT.)
DRIP EDGE AND FLASHING	0.121" HOT-DIPPED GALVANIZED ROOFING NAIL	1 1/4"	8" TO 12" O.C. (STAGGERED PATTERN)



ROOF PLAN

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

NOTES:
1. FLASH ALL VALLEYS
2. ON ROOF PITCHES 4:12 AND UNDER, PROVIDE (2) LAYERS UNDERLAYMENT.
3. PORCH & GARAGE ROOFS TO BE SEALED OFF FROM ROOF OVER HABITABLE SPACE.
4. PROVIDE CONTINUOUS ICE & WATER SHIELD FROM EAVE UP TO 2'-0" PASSED INTERIOR SIDE OF WALL.

A TOTAL NET FREE VENTILATION AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF SPACE TO BE VENTILATED EXCEPT THAT THE TOTAL AREA IS PERMITTED TO BE REDUCED TO 1/300 PROVIDED AT LEAST 50% AND NOT MORE THAN 80% OF THE REQD VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE THE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQD VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. AS AN ALTERNATIVE, THE NET-FREE CROSS-VENTILATION AREA MAY BE REDUCED TO 1/300 WHEN A VAPOR BARRIER HAVING A TRANSMISSION RATE NOT EXCEEDING 1 PERM IS INSTALLED ON THE WARM SIDE OF THE CEILING.

REQUIRED VENTILATION AREA

VENT RATIO: 1/300 SQ. FT.
ATTIC AREA: 6,846 SQ. FT. (1/150 SQ. FT.) = 6,996 SQ. FT.
VENT AREA: 6,996 SQ. FT. X 144 = 1,007,424 SQ. IN. / 300 = 3,358 SQ. IN.
50% SOFFIT AND 50% RIDGE VENTING = 1,678 SQ. IN. EACH

VENTILATION AREA TO BE PROVIDED:
LINEAR RIDGE VENTS @ 18 SQ. IN. PER FOOT = 94' (MIN.) REQUIRED
TOTAL LINEAR RIDGE VENTS PROVIDED = 97 X 18 SQ. IN. = 1,746 SQ. IN
TOTAL VENTING AT ROOF: (1,746 SQ. IN (PROVIDED)) 1,678 SQ. IN (MIN.) (COMPLIES)
TOTAL VENTING AT SOFFIT: PROVIDE 1,746 SQ. IN. AT SOFFITS / 18 SQ. IN. PER VENT = 97 VENTS

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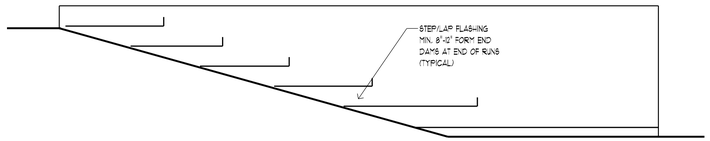
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DRAWN BY C.J.B.
REVIEWED BY R.N.

SHEET TITLE
ROOF PLAN

SHEET NUMBER
A2.1



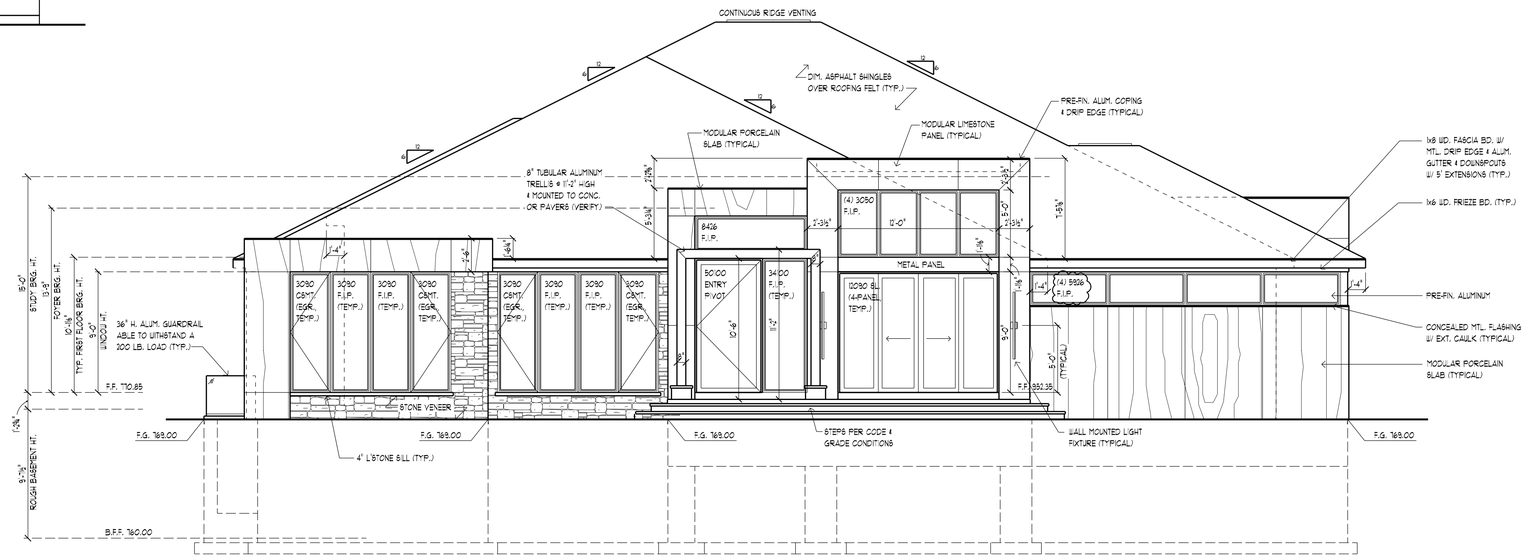
SLOPED GRADE ELEVATION

SCALE: NOT TO SCALE

ALLOWABLE SPANS FOR LINTELS SUPPORTING MASONRY VENEER
TABLE R703.8.3.1 MRC 2015

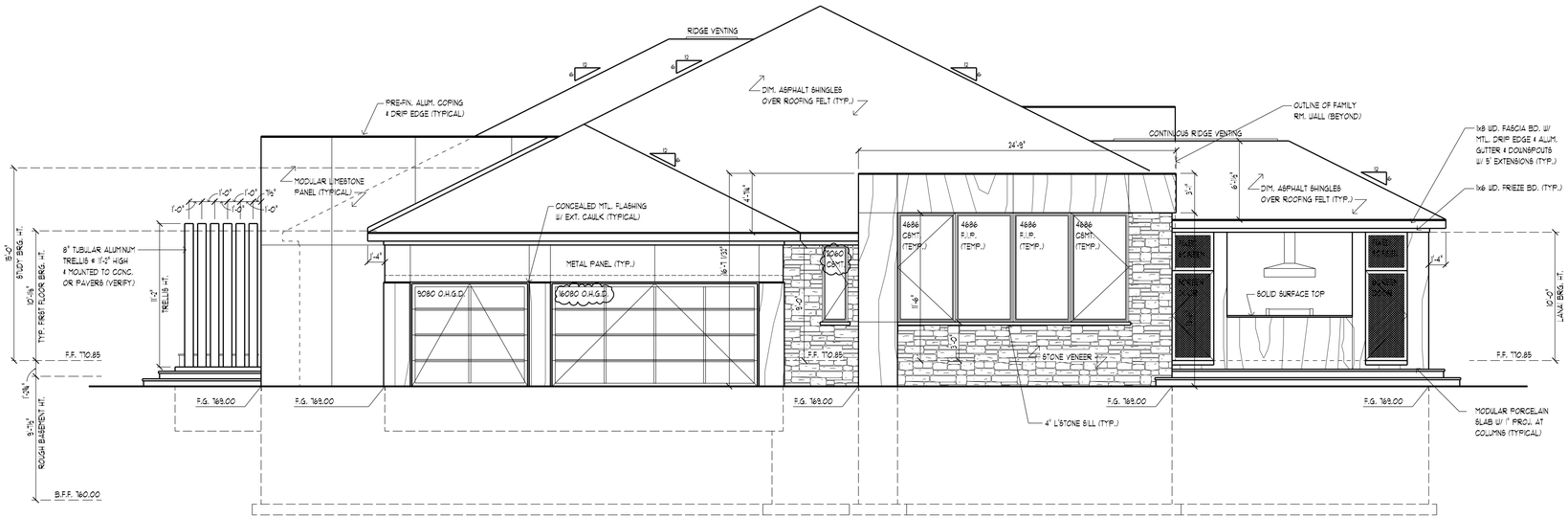
SIZE OF STEEL ANGLE (INCHES) [a,c,d]	NO STORY ABOVE	ONE STORY ABOVE	TWO STORY ABOVE	NO. OF 1/2-INCH OR EQUIV. REINFORCING BARS IN REINF. LINTEL [b,d]
3 X 3 X 1/4	6'-0"	4'-6"	3'-0"	1
4 X 3 X 1/4	8'-0"	6'-0"	4'-6"	1
5 X 3-1/2 X 5/16	10'-0"	8'-0"	6'-0"	2
6 X 3-1/2 X 5/16	14'-0"	9'-6"	7'-0"	2
(2) 6 X 3-1/2 X 5/16	20'-0"	17'-0"	9'-6"	4

a. LONG LEG OF THE ANGLE SHALL BE PLACED IN A VERTICAL POSITION
b. DEPTH OF REINFORCED LINTELS SHALL BE NOT LESS THAN 8 INCHES IN ALL CELLS OF HOLLOW MASONRY LINTELS SHALL BE GROUTED SOLID. REINFORCING BARS SHALL EXTEND NOT LESS THAN 8 INCHES INTO THE SUPPORT
c. STEEL MEMBERS INDICATED ARE ADEQUATE TYPICAL EXAMPLES; OTHER STEEL MEMBERS MEETING STRUCTURAL DESIGN REQUIREMENTS SHALL BE PERMITTED TO BE USED
d. EITHER STEEL ANGLE OR REINFORCED LINTEL SHALL SPAN OPENING



FRONT ELEVATION

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



RIGHT ELEVATION

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

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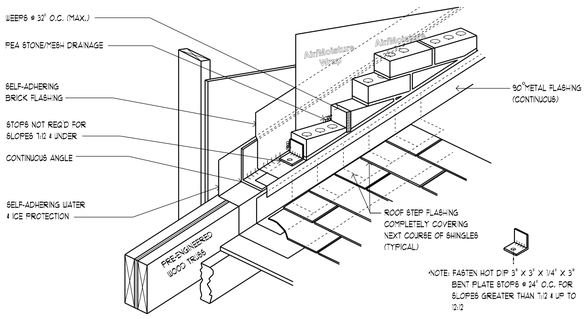
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REVIEWED BY R.N.

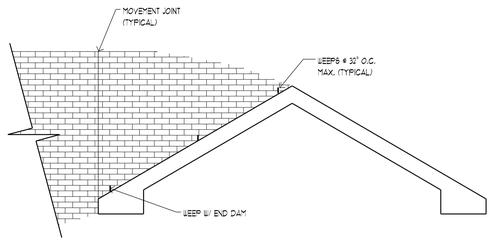
SHEET TITLE
FRONT & RIGHT ELEVATIONS

SHEET NUMBER
A3.0



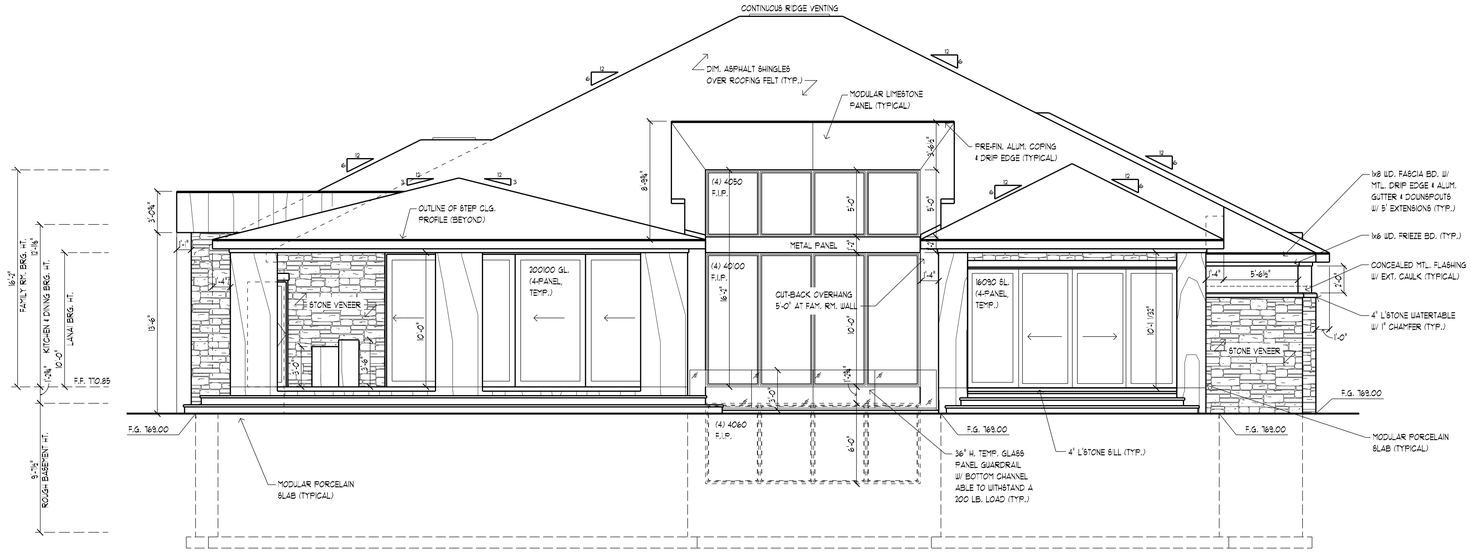
RAKE TRUSS FLASHING DETAIL

SCALE: NOT TO SCALE



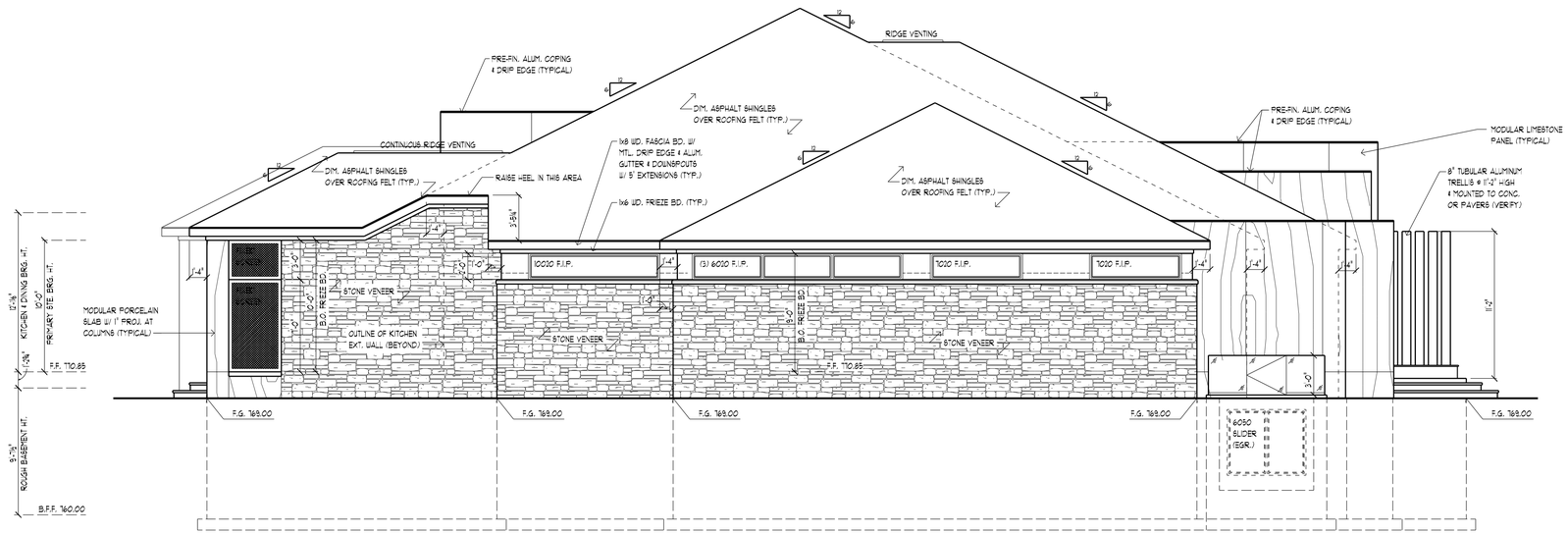
BRICK RAKE

(BRICK VENEER OVER SLOPED ROOF)
SCALE: NOT TO SCALE



REAR ELEVATION

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



LEFT ELEVATION

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

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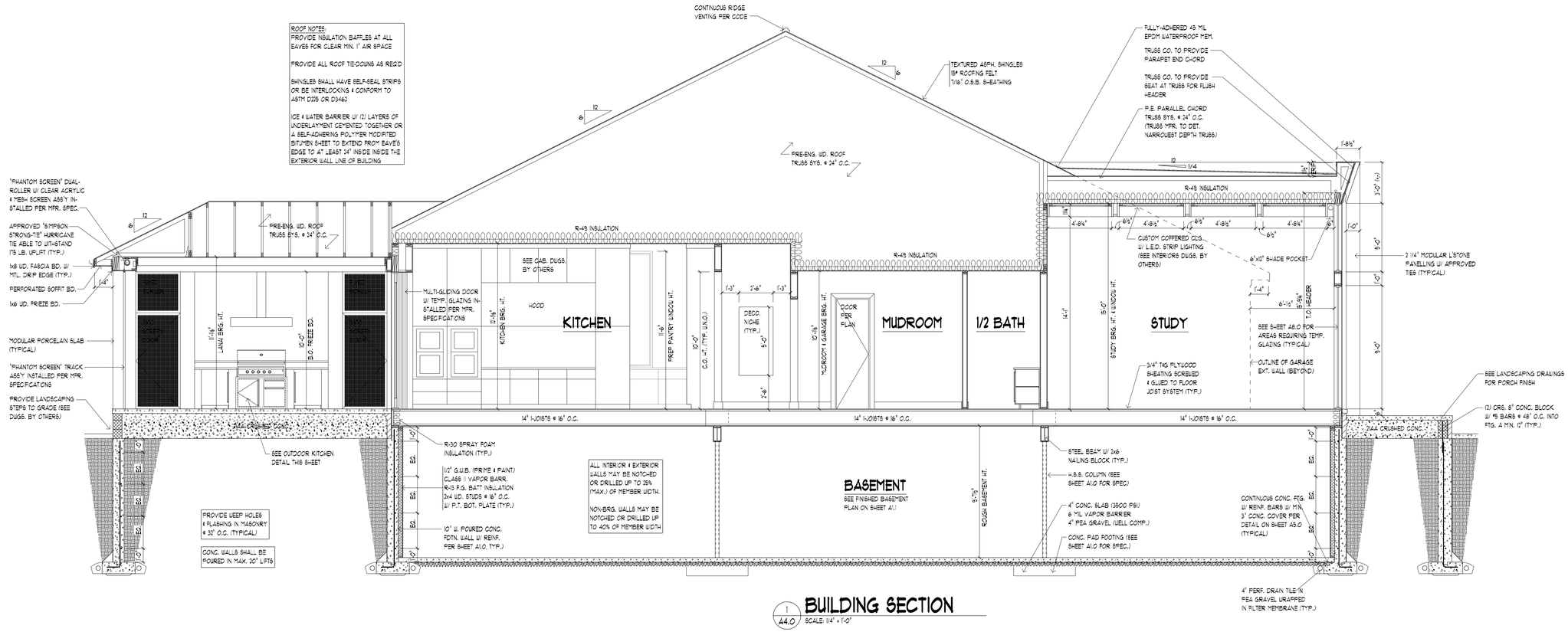
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DRAWN BY C.J.B.
REVIEWED BY R.N.

SHEET TITLE
REAR & LEFT ELEVATIONS

SHEET NUMBER
A3.1



1 A4.0 **BUILDING SECTION**

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

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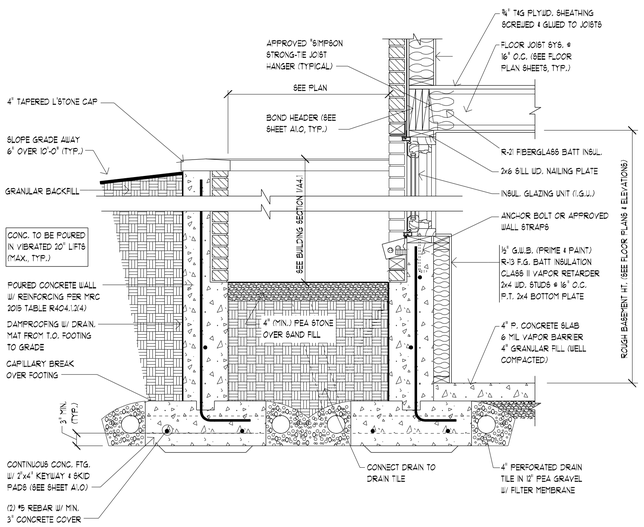
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REVIEWED BY R.N.

SHEET TITLE
BUILDING SECTIONS

SHEET NUMBER
A4.0



DAYLIGHT WINDOW WELL

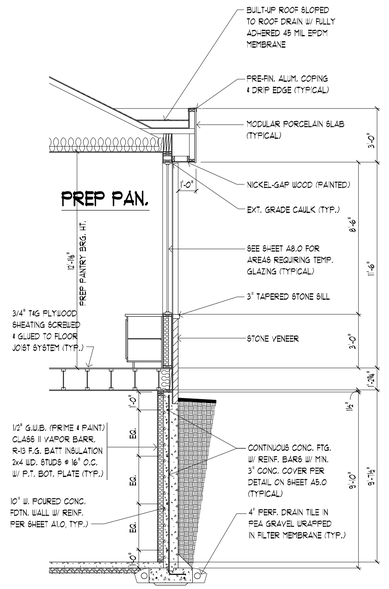
SCALE: 3/4" = 1'-0"

ROOF NOTES:
PROVIDE INSULATION BAFFLES AT ALL EAVES FOR CLEAR MIN. 1" AIR SPACE

PROVIDE ALL ROOF TIE-DOWNS AS REQ'D

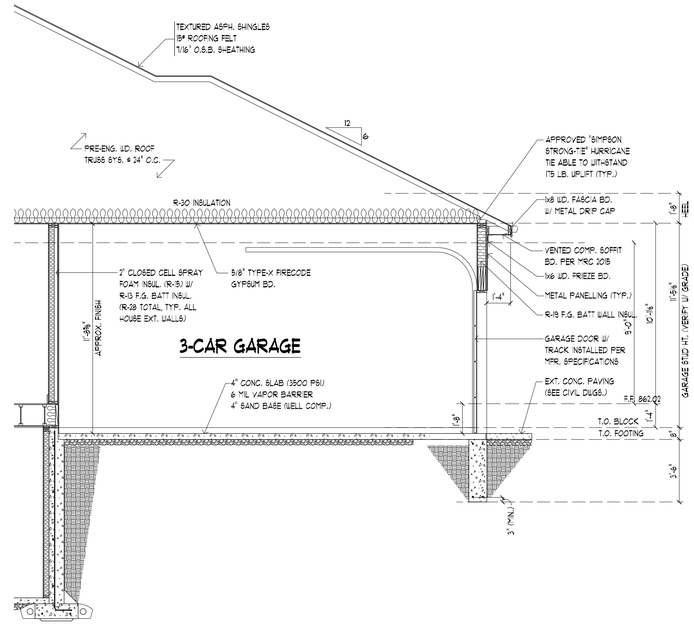
SHINGLES SHALL HAVE SELF-SEAL STRIPS OR BE INTERLOCKING & CONFORM TO ASTM D225 OR D3462

ICE & WATER BARRIER W/ (2) LAYERS OF UNDERLAYMENT CEMENTED TOGETHER OR A SELF-ADHERING POLYMER MODIFIED BITUMEN SHEET TO EXTEND FROM EAVES EDGE TO AT LEAST 24" INSIDE INSIDE THE EXTERIOR WALL LINE OF BUILDING



2 A4.1 WALL SECTION

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



3 A4.1 PARTIAL BUILDING SECTION

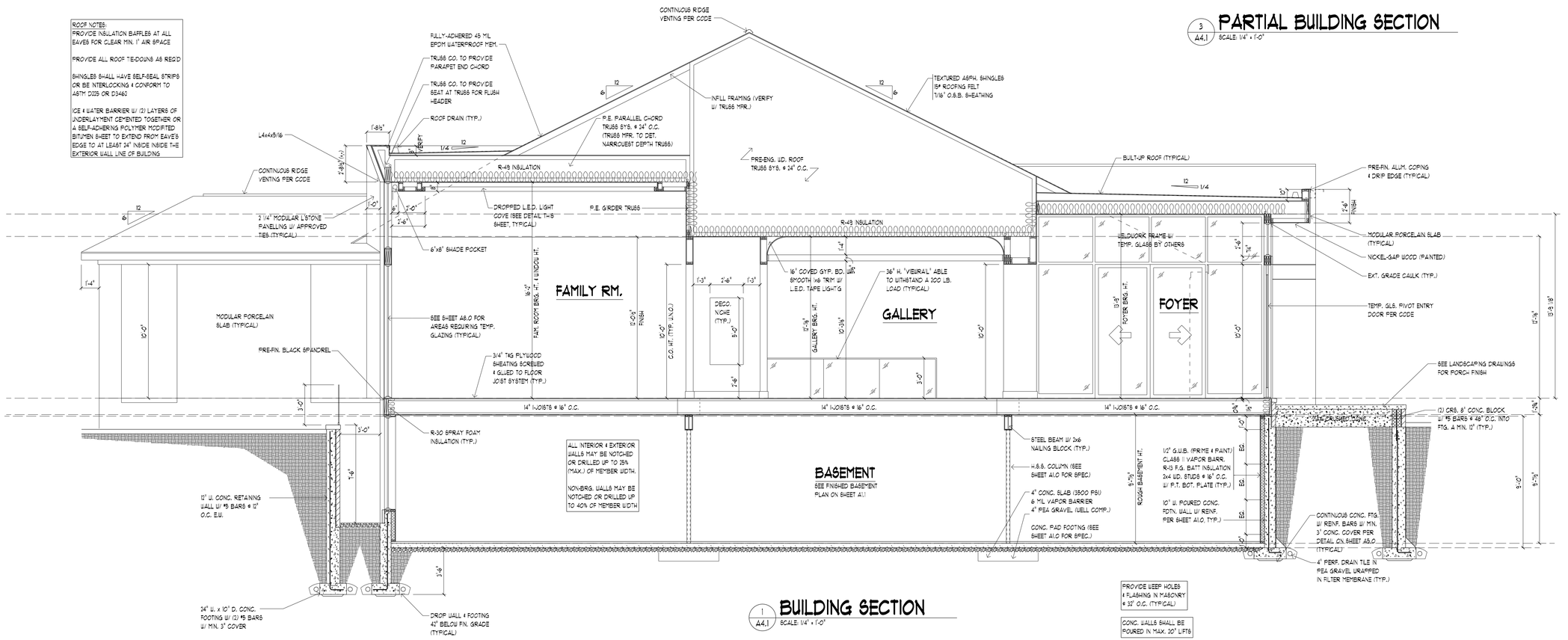
SCALE: 1/4" = 1'-0"

ROOF NOTES:
PROVIDE INSULATION BAFFLES AT ALL EAVES FOR CLEAR MIN. 1" AIR SPACE

PROVIDE ALL ROOF TIE-DOWNS AS REQ'D

SHINGLES SHALL HAVE SELF-SEAL STRIPS OR BE INTERLOCKING & CONFORM TO ASTM D225 OR D3462

ICE & WATER BARRIER W/ (2) LAYERS OF UNDERLAYMENT CEMENTED TOGETHER OR A SELF-ADHERING POLYMER MODIFIED BITUMEN SHEET TO EXTEND FROM EAVES EDGE TO AT LEAST 24" INSIDE INSIDE THE EXTERIOR WALL LINE OF BUILDING



1 A4.1 BUILDING SECTION

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

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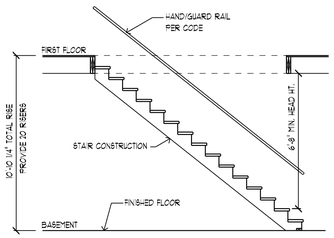
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ISSUE DATE:	ISSUED FOR:
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DRAWN BY C.J.B.
REVIEWED BY R.N.

SHEET TITLE
BUILDING SECTIONS

SHEET NUMBER
A4.1



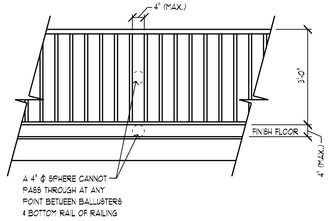
DIAGRAMATTIC STAIR SECTION

SCALE: NOT TO SCALE

HEADROOM: THE MINIMUM HEADROOM IN ALL PARTS OF A STAIRWAY SHALL NOT BE LESS THAN 80 INCHES (3032 MM) MEASURED VERTICALLY FROM THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM.

TREADS AND RISERS: MAXIMUM RISER HEIGHT SHALL BE 8 1/4 INCHES (210MM). MINIMUM TREAD DEPTH SHALL BE 9 INCHES (229 MM) MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT THE RIGHT ANGLE TO THE TREAD'S LEADING EDGE.

DIMENSIONAL UNIFORMITY: THERE SHALL NO BE VARIATION EXCEEDING 3/8 INCH (10MM) IN THE DEPTH OF ADJACENT TREADS OF IN THE HEIGHT OF ADJACENT RISERS. THE TOLERANCE BETWEEN THE LARGEST AND THE SMALLEST RISER OR BETWEEN THE LARGEST AND SMALLEST TREAD SHALL NOT EXCEED 3/8 INCH (10 MM) IN A FLIGHT OF STAIRS.



TYP. GUARDRAIL DETAIL

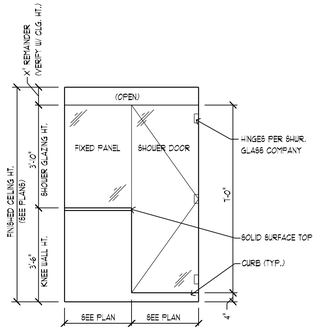
SCALE: NOT TO SCALE

HANDRAIL DETAILS: HANDRAIL-GRIPPING SURFACES SHALL BE CONTINUOUS, WITHOUT INTERRUPTION BY NEWEL POST, OTHER STRUCTURAL ELEMENTS OR OBSTRUCTIONS. A HANDRAIL AND ANY WALL OR OTHER SURFACE ADJACENT TO THE HANDRAIL SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. THE CLEAR SPACE BETWEEN THE HANDRAIL AND THE ADJACENT WALL SURFACE SHALL NOT BE LESS THAN 1-1/2 INCHES (38 MM). MAX SPACING BETWEEN RAILS IS 4". STAIR RAILINGS SHALL NOT BE BUILT IN A MATTER THAT WILL ALLOW A CLIMBING LADDER AFFECT.

TYPE I HANDRAIL
ALL HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION WITH AN OUTSIDE DIAMETER OF 1-1/4" (32 MM) AND NOT GREATER THAN 2" (51 MM).

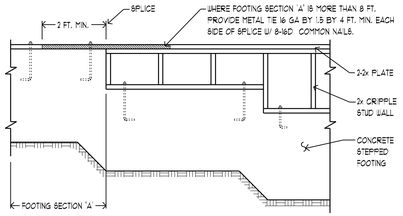
ANY OTHER SHAPE WITH A PERIMETER OF AT LEAST 4 INCHES (100 MM), BUT NOT GREATER THAN 6-1/4 INCHES (158 MM) WITH THE LARGEST CROSS-SECTIONAL DIMENSION NOT EXCEEDING 2-1/4 INCHES (57 MM).

TYPE II HANDRAIL
HAND RAILS WITH A PERIMETER GREATER THAN 6-1/4" (160 MM) SHALL PROVIDE A GRASPABLE FINGER RECESS AREA ON BOTH SIDES OF THE PROFILE. THE FINGER RECESS SHALL BEGIN WITHIN A DISTANCE OF 3/4" (19 MM) MEASURED VERTICALLY FROM THE TALLEST PORTION OF THE PROFILE AND ACHIEVE A DEPTH OF AT LEAST 5/16" (8 MM) WITHIN 7/8" (22 MM) BELOW THE WIDEST PORTION OF THE PROFILE.



SHOWER DOOR DETAIL

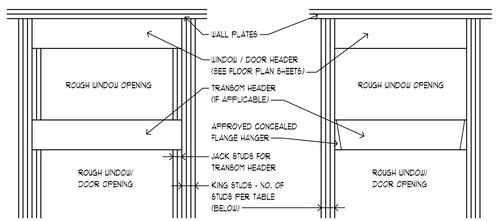
SCALE: NOT TO SCALE



STEPPED FOUNDATION CONSTRUCTION

SCALE: NOT TO SCALE

FIGURE R602.11.2 - MRC 2015

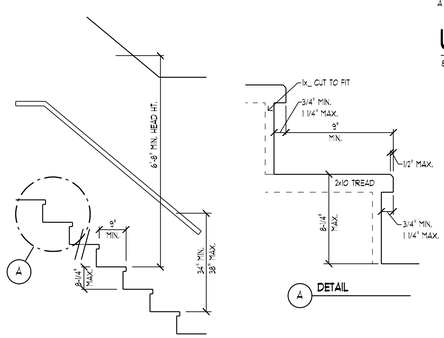


OPENING WIDTH	NO. OF KING STUDS ON EA. SIDE
3'-0"	1
4'-0"	2
5'-0"	2
6'-0"	3
7'-0"	3
8'-0"	4

NOTE:
A MINIMUM OF ONE WALL STUD SHALL BE CONTINUOUS TO WALL PLATE AT EACH SIDE OF ROUGH OPENING

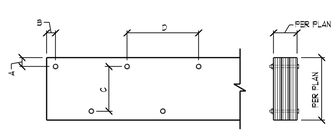
WINDOW AND DOOR END STUD DETAIL

SCALE: NOT TO SCALE



TYP. STAIR DETAIL

SCALE: NOT TO SCALE



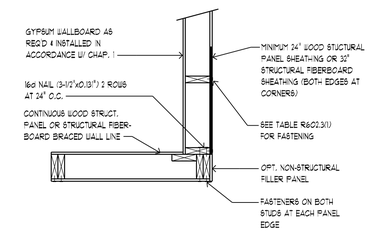
A MINIMUM: 2"
B MINIMUM: 2 1/2"
C MINIMUM: 12"
D MINIMUM: 24"

BEAMS 7 INCHES WIDE SHALL BE ASSUMED TO BE EITHER TOP LOADED ONLY OR EQUALLY LOADED ON EACH SIDE

BOLTS ARE ASSUMED TO BE GRADE A307, GRADE 2 OR HIGHER

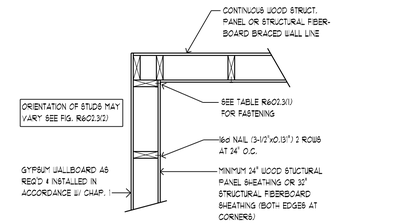
ALL CONNECTORS SHALL BE 1/2" H.D.G. TROUGH BOLTS W/ NUTS AND WASHERS

BOLTED LVL DETAIL



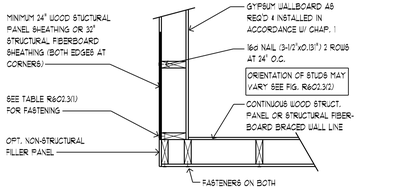
TYP. GARAGE CORNER

SCALE: NOT TO SCALE



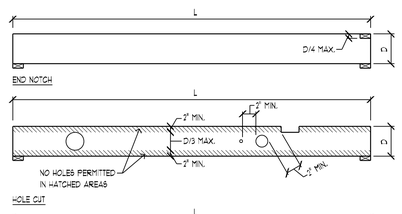
TYP. INSIDE CORNER

SCALE: NOT TO SCALE



TYP. OUTSIDE CORNER

SCALE: NOT TO SCALE

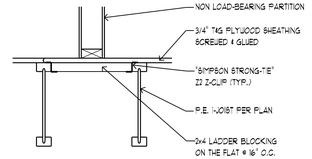


JOIST SIZE	NOTCH (U x D)	HOLE DIAMETER (D/3)
2x8	2 3/8" x 1 1/8"	2 3/8"
2x10	3" x 1 1/2"	3"
2x12	3 3/4" x 1 7/8"	3 3/4"

NOTES:
1. ALL SIZES INDICATED ARE MAXIMUM AND INCLUDE ANY OVER-CUT BEYOND OPENING
2. SEE MANUFACTURER'S REQUIREMENTS FOR ENGINEERED LUMBER

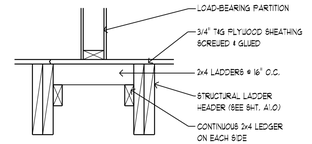
JOIST CUTTING & NOTCHING DETAILS

SCALE: NOT TO SCALE



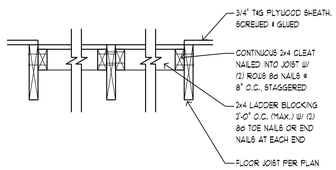
LADDER BLOCKING

SCALE: NOT TO SCALE



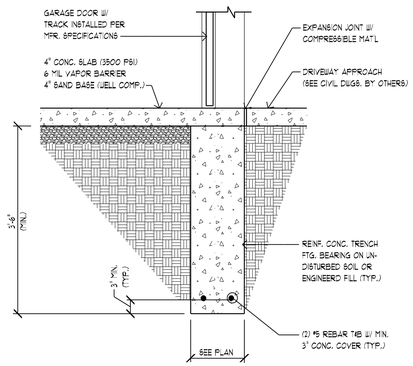
STRUCTURAL LADDER

SCALE: NOT TO SCALE



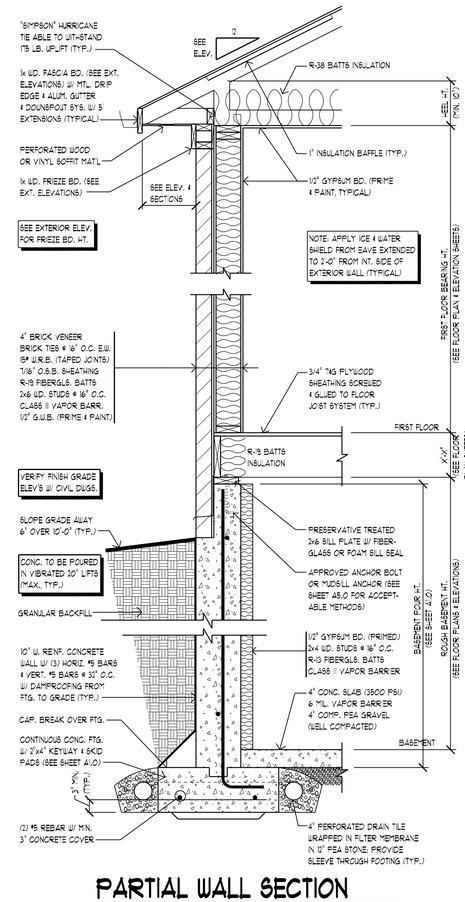
DROPPED SUBFLOOR DETAIL

SCALE: NOT TO SCALE



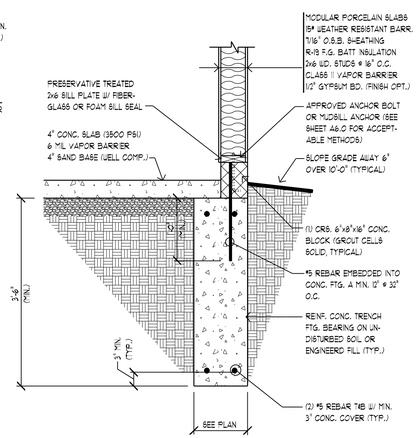
PARTIAL WALL SECTION

SCALE: 3/4" = 1'-0" TYP. O.H. GARAGE DOOR



PARTIAL WALL SECTION

SCALE: 3/4" = 1'-0" TYP. EXTERIOR WALL W/ SIDING



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03-25-2026	REVISION #2 (AH/J)

DRAWN BY C.J.B.
REVIEWED BY R.N.

SHEET TITLE
WALL SECTIONS & DETAILS

SHEET NUMBER
A5.0

WALL BRACING METHODS

METHOD	MATERIAL	MIN. THICKNESS	CONNECTION METHOD(S)
(ALL EXTERIOR WALLS)			
CS-WSP / WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON 2" NAILS @ 6" SPACING (P/APNEL EDGES) 12" SPACING (INTERMEDIATE)
(ADJACENT TO GARAGE DOORS INDICATED ON PLAN)			
PFG	PORTAL FRAME AT GARAGE DOOR	SEE SEC. R602.10.6.3	SEE SEC. R602.10.6.3

WIND SPEED	115 MPH
EXPOSURE CATEGORY	CAT - B
SEISMIC CATEGORY	A

WALL BRACING
THIS BUILDING HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2015 MICHIGAN RESIDENTIAL CODE. THIS SHEET REFERENCES FASTENING TABLES AND SPECIFIC CODE SECTIONS. A COPY OF THE CURRENT CODE BOOK IS TO BE RETAINED BY THE GENERAL CONTRACTOR AND MADE AVAILABLE FOR USE AND REFERENCE BY ALL TRADES WHEN FRAMING THIS BUILDING. ALL CONSTRUCTION SHALL CONFORM TO ALL THE REQUIREMENTS OF THE REFERENCED CODE.

ADDITIONAL SECTIONS AND DETAILS HAVE BEEN PROVIDED IN THIS SET. ANY CONFLICTS BETWEEN THE INFORMATION PROVIDED AND THE CURRENT CODE, THE MOST STRINGENT SHALL APPLY.

THIS SHEET DEPICTS LOAD PATH AND TIE-DOWNS TO BE USED IN CONJUCTION WITH WALL BRACING REQUIREMENTS SET FORTH BY THE 2015 MICHIGAN RESIDENTIAL CODE.

FOUNDATION ANCHOR SYSTEM
GENERAL CONTRACTOR SHALL DETERMINE FOUNDATION ANCHOR SYSTEM.

ANCHOR BOLTS ARE REQUIRED TO BE PLACED IN THE MIDDLE THIRD OF SILL PLATES.

FOUNDATION CONTRACTOR SHALL INSTALL SILL PLATE ANCHORS OF TYPE CHOSEN W/ CORRECT SPACING AND EMBEDMENT DEPTH AS REQUIRED BY CODE OR MANUFACTURER'S WRITTEN SPECIFICATIONS.

WHERE ANCHOR SYSTEM DOES NOT MEET CODE FOR MINIMUM & MAXIMUM DIMENSIONS, ADDITIONAL BOLTS SHALL BE INSTALLED FOR CORRECTIONS

ALTERNATE FOR G-185 GALVANIZED MATERIALS SHALL BE STAINLESS STEEL OF GAUGES AS SPECIFIED BY THE MANUFACTURER.

NOTE TO PLAN REVIEWER
TRUSS TIE-DOWN SIZES & TYPES ARE A DEFERRED SUBMITTAL ITEM TO BE PROVIDED WITH TRUSS SHOP DRAWINGS BY OTHERS.

FINAL SIZE OF TRUSS TIES TO BE DETERMINED BY TRUSS ENGINEER OR BUILDER'S STRUCTURAL ENGINEER.

BUILDING DESIGNER'S ASSUMPTION
ROOF TRUSSES TO CLEAR-SPAN UNLESS NOTED OTHERWISE.

FLOOR TRUSSES TO CLEAR-SPAN BETWEEN BEARING WALLS AS SHOWN. ONE PIECE MULTIPLE SPAN TRUSSES ARE ALLOWED W/ APPROVAL OF BUILDING DESIGNER. DETAILS INDICATING AIR SPACES FOR SOUND CONTROL SHALL NOT BE VIOLATED W/ TRUSS MEMBERS.

ROOF & FLOOR TRUSSES IN FIRERATED SYSTEMS SHALL MEET OR BE LESS THAN THE MAXIMUM SPACING & MEET OR EXCEED MIN. DEPTH REQUIREMENTS AS LISTED IN TEST REPORTS (i.e. UL). TRUSS PLATES SHALL MEET CRITERIA LISTED IN TEST REPORTS.

WIND LOADS ARE BEING TRANSFERRED THROUGH EXTERIOR WALLS WITH TRUSS CONNECTION POINTS & THROUGH INTERIOR SHEAR WALLS WHERE INDICATED ON PLANS. WHERE ROOF SHEATHING IS INDICATED TO TRANSFER TO INTERIOR SHEAR WALL TRUSS CHORDS, SUCH TRUSS CHORDS SHALL BE SIZED FOR NAILING PATTERNS AS INDICATED TO DIAPHRAGM TRUSS & TRANSFER LOADS.

ALL GABLE-END TRUSSES SHALL BE SHEATHED W/ 1/16" O.S.B. SHEATHING. VERTICAL REINFORCING OF WEB MEMBERS TO BE DESIGNED BY TRUSS DESIGNER TO PREVENT WITHDRAWAL LOADS OCCURING IN TRUSS PLATES. LATERAL BRACING OF TOP & BOTTOM TRUSS CHORDS TO BE TRANSFERRED THROUGH ROOF & CEILING SHEATHINGS.

DIAGONAL BRACING IS DESIGNED BY TRUSS DESIGNER AND SHALL REMAIN IN PLACE TO PREVENT RACKING OF TRUSS LATERAL LOADING.

SEE COVER SHEET C1.0 FOR REQUIRED LIVE & DEAD LOAD DESIGN CRITERIA.

BUILDING DESIGNER IS NOT RESPONSIBLE FOR TRUSS CHORD MEMBERS SUBJECT TO DESIGN DEFICIENCIES. REINFORCING, IF REQUIRED, IS THE RESPONSIBILITY OF THE TRUSS DESIGNER.

ANY DIFFERENCES BETWEEN CODE REQUIREMENTS AND TRUSS INDUSTRIES STANDARDS, THE MORE STRINGENT CODE SHALL APPLY.

IT IS IMPORTANT FOR THE TRUSS DESIGNER/FABRICATOR TO TAKE GREAT CARE & ATTENTION IN THE BANDING, SHIPPING & DELIVERY PROCESS TO ENSURE THE THE TRUSSES ARE NOT DAMAGED. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROPER STORAGE METHODS FOR TRUSSES PRIOR TO DELIVERY & ERECTION.

FLOOR TRUSSES (IF APPLICABLE TO PROJECT)
THE TRUSS DESIGNER SHALL PROVIDE SIZE & LOCATION OF STIFF BACK BRACING IN FLOOR TRUSSES TO COMPLY W/ DEFLECTION CRITERIA INDICATED ON DRAWINGS. SEE COVER SHEET C1.0 FOR DESIGN LOADING & DEFLECTION CRITERIA.

THE 23/32" STRUCTURAL FLOOR SHEATHING SHALL BE INSTALLED & IS INTENDED TO BECOME THE PERMANENT BRACING FOR THE TRUSS TOP CHORD. THE 1/2" MIN. GYPSUM BOARD SHALL BE INSTALLED AND IS INTENDED TO BECOME THE PERMANENT BRACING FOR TEH TRUSS BOTTOM CHORD.

ALL TEMPORARY BRACING REQUIRED BY THE TRUSS DESIGNER SHALL REMAIN AS PART OF THE PERMANENT BRACING SYS.

POINT LOADS FROM ABOVE REQUIRING SOLID BLOCKING SHALL BE DESIGNED W/ VERTICAL BLOCKS FABRICATED IN PLACE TO ALLOW LOAD TO CONTINUE THROUGH TO BEARING BELOW.

BOND FLOOR TRUSSES SHALL BE DESIGNED TO TRANSFER LATERAL WALL LOADS TO BEARING BELOW.

TRUSS SPACING SHALL BE DETERMINED BY TRUSS DESIGNER FOR LOAD & DEFLECTION CRITERIA INDICATED ON DRAWINGS.

FLOOR TRUSSES IN AREAS RECEIVING CERAMIC TILE OR OTHER SIMILAR MATERIAL SHALL BE SPACED IN A MAXIMUM OF 16" O.C. OR HAVE LADDER BLOCKING INSTALLED AT 16" O.C. BETWEEN TRUSSES (TRUSS DESIGNER'S OPTION). SEE CONSTRUCTION DRAWINGS FOR ALL SUCH LOCATIONS. MAXIMUM DEFLECTION CRITERIA FOR SUCH MATERIALS SHALL BE SPECIFIED BY THE PRODUCT MANUFACTURER OR INDUSTRY STANDARDS.

THE TRUSS DESIGNER UNDERSTANDS THAT THE BUILDING DESIGNER HAS NO KNOWLEDGE OF THE CRITERIA & ASSUMPTIONS MADE IN THE DESIGN OF THE TRUSSES FOR THIS BUILDING, THEREFORE, TRUSS CHORD MEMBERS & PLATES SIZING TO ACCOMMODATE THE STATED REQUIRED BRACING REMAINS THE RESPONSIBILITY OF THE TRUSS DESIGNER.

NOTES TO TRUSS DESIGNER, TRUSS FABRICATOR & CARPENTER/TRUSS INSTALLER
LATERAL BRACING SHALL BE SHOWN IN DIAGRAMS OR "WIB-91" PUBLICATION PROVIDED BY TRUSS FABRICATOR.

a. SEE TABLE WIB-91 SUMMARY SHEET FRAME 3 "PITCHED TRUSS CHORD TEMPORARY BRACING" FOR MAXIMUM SPACING SEE TABLE WIB-91 SUMMARY SHEET FRAME 4 "BOTTOM CHORD TEMPORARY BRACING" FOR MAXIMUM SPACING
b. BRACING MEMBER SHALL BE A MINIMUM OF 10'-0" LONG W/ A LAP OF ONE TRUSS BAY AT EACH END
c. TEMPORARY BRACING SIZES FOR ROOF TRUSSES SHALL BE SPECIFIED BY TRUSS DESIGNER FOR INSTALLATION TO INTERIOR CHORD FACE OF TRUSSES.
d. SEE TABLE WIB-91 SUMMARY SHEET FRAME 3 "PITCHED TRUSS TOP CHORD TEMPORARY BRACING" FOR MAXIMUM SPACING OF DIAGONAL MEMBERS.
e. SEE TABLE WIB-91 SUMMARY SHEET FRAME 4 "BOTTOM TRUSS CHORD TEMPORARY BRACING" FOR MAXIMUM SPACING OF DIAGONAL BRACING.
f. SEE TABLE WIB-91 SUMMARY SHEET FRAME 4 FOR DIAGONAL BRACING AT LATERAL BRACED LINES & MAXIMUM SPACING

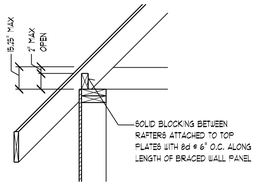
TRUSS DESIGNER SHALL PROVIDE COPIES OF ALL FIELD CORRECTIONS AND/OR REPAIR DIAGRAMS AND WRITTEN DIRECTIONS MADE DURING FIELD CONSTRUCTION.

DRAFTSTOPPING
DRAFTSTOPPING SHALL BE PROVIDED IN CONCEALED SPACES OF OPEN WEB TRUSS FLOOR AND/OR CEILING ASSEMBLIES WHICH HAVE USUABLE SPACE ABOVE & BELOW. THE CONCEALED SPACE MAY NOT EXCEED 1,000 SQUARE FEET.

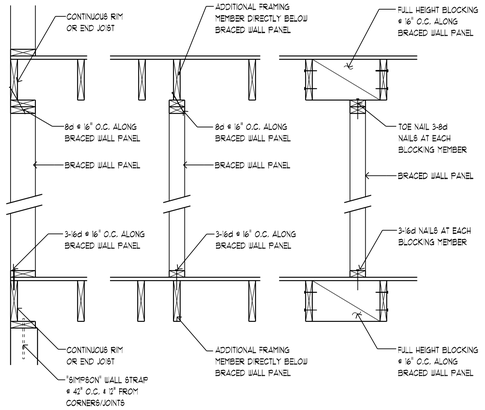
FIRERATED TRUSS SYSTEMS (IF APPLICABLE TO PROJECT)
TRUSS DESIGNER IS TO REVIEW ALL FIRERATED ASSEMBLIES INDICATED ON THE DRAWINGS. THE TRUSS DESIGN DRAWINGS SHALL PROVIDE CHORD MEMBERS AND INDICATE WHERE ANY BRIDGING, BLOCKING OR STIFFENERS ARE TO BE INSTALLED AS REQUIRED BY THE TESTED ASSEMBLY.

ALL METAL TRUSS PLATES USED IN THE FABRICATION OF THE TRUSSES SHALL BE AS SPECIFIED IN THE TESTED ASSEMBLY. ANY LOAD REDUCTION IN CAPACITY OF PLATES SHALL BE COMPLIED WITH.

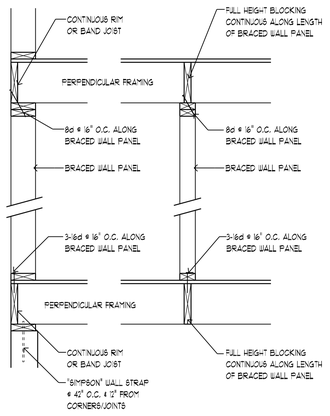
WHERE PROPRIETARY PLATES, MATERIALS OR PROCESSES ARE LISTED AS A PART OF THE FIRERATED DESIGN, THE TRUSS FABRICATOR SHALL OBTAIN MATERIALS OR CERTIFICATION OF COMPLIANCE WITH THE SYSTEM FROM THE PROPRIETARY HOLDER.



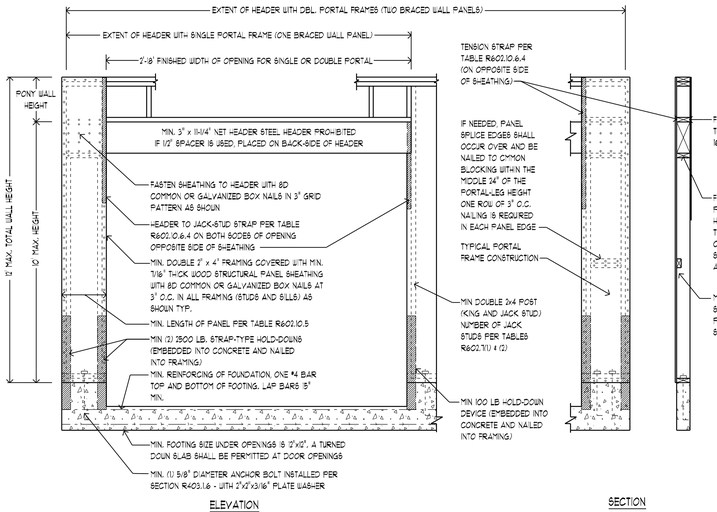
BRACED WALL PANEL CONNECTION TO PERP RAFTERS
SCALE: NOT TO SCALE — FIGURE R602.10.8.2(1) - MRC 2015



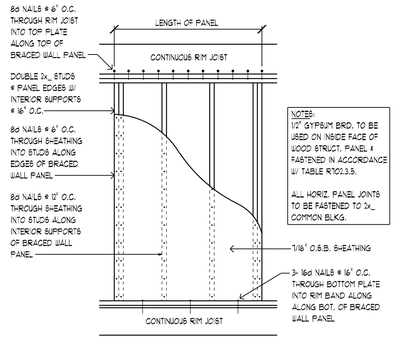
BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING
SCALE: NOT TO SCALE — FIGURE R602.10.8(2) - MRC 2015



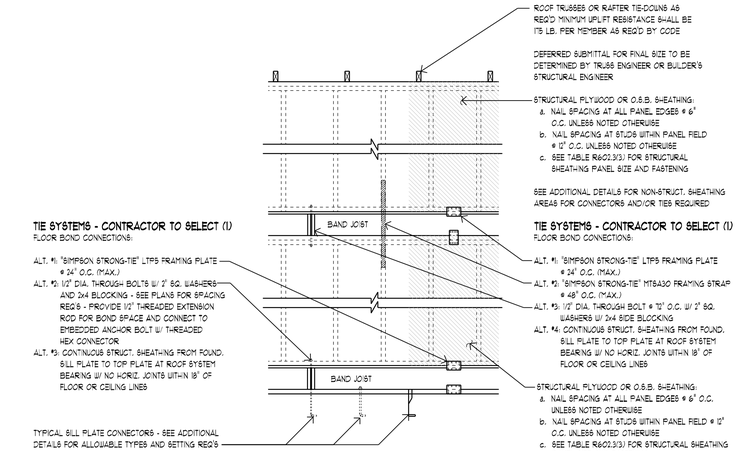
BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING
SCALE: NOT TO SCALE — FIGURE R602.10.8(1) - MRC 2015



METHOD PFH - PORTAL FRAME WITH HOLD-DOWNS
SCALE: NOT TO SCALE — FIGURE R602.10.6.2 - MRC 2015



WOOD STRUCTURAL PANEL DETAIL
SCALE: NOT TO SCALE — FIGURE R602.10.6.3 - MRC 2015



LOAD PATH TIE-DOWNS AT STRUCTURAL SHEATHING
SCALE: NOT TO SCALE

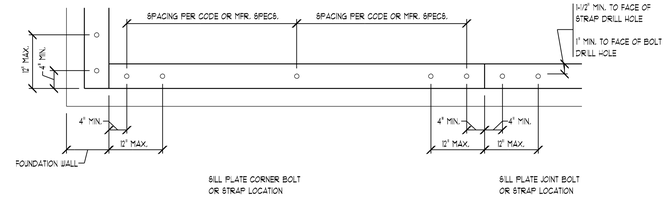
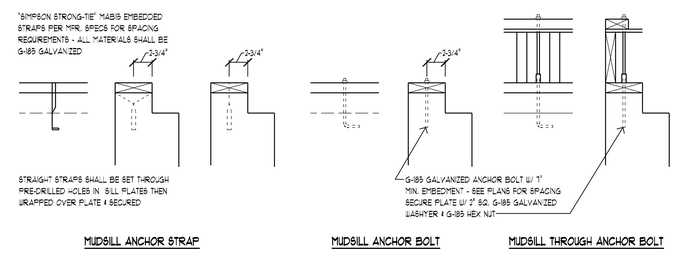
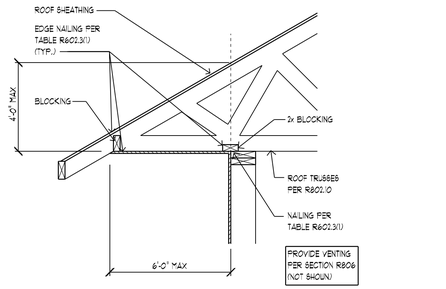


PLATE JOINT CORNER ANCHOR LOCATION
SCALE: NOT TO SCALE



CONCRETE ANCHOR EMBEDMENT METHODS
SCALE: NOT TO SCALE



BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES
SCALE: NOT TO SCALE — FIGURE R602.10.8.2(2) - MRC 2015

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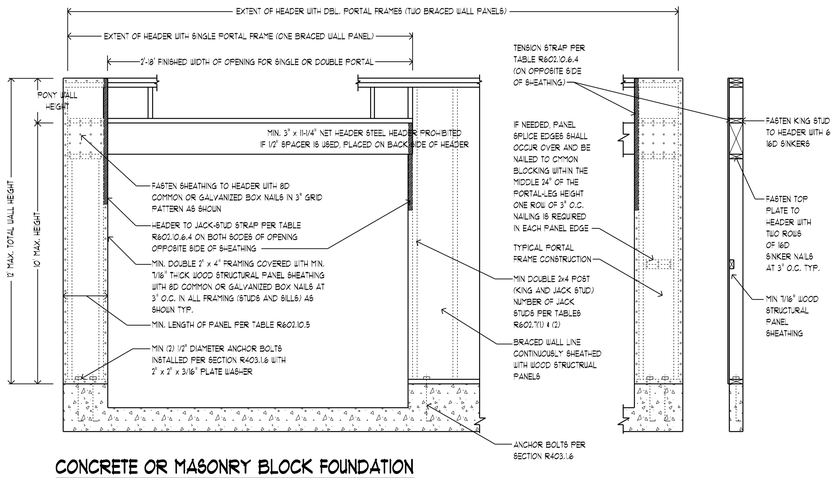
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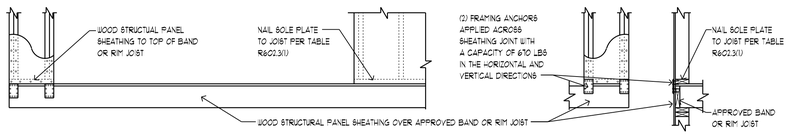
DRAWN BY C.J.B.
REVIEWED BY R.N.

SHEET TITLE
WALL - TIE DOWNS & DETAILS

SHEET NUMBER
A6.0



CONCRETE OR MASONRY BLOCK FOUNDATION



OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION

(WHERE PORTAL SHEATHING DOES NOT LAP OVER BAND OR RIM JOIST)

METHOD CS-PF CONT. SHEATHED PORTAL FRAME PANEL CONST.

SCALE: NOT TO SCALE

FIGURE R602.10.6.4 - MRC 2015

TABLE R602.3(2) - ALTERNATIVE ATTACHEMENTS TO TABLE R602.3(1)

FOR WOOD STRUCTURAL PANELS: SUBFLOOR, ROOF & WALL SHEATHING TO FRAMING AND PARTICLE BOARD WALL SHEATHING TO FRAMING

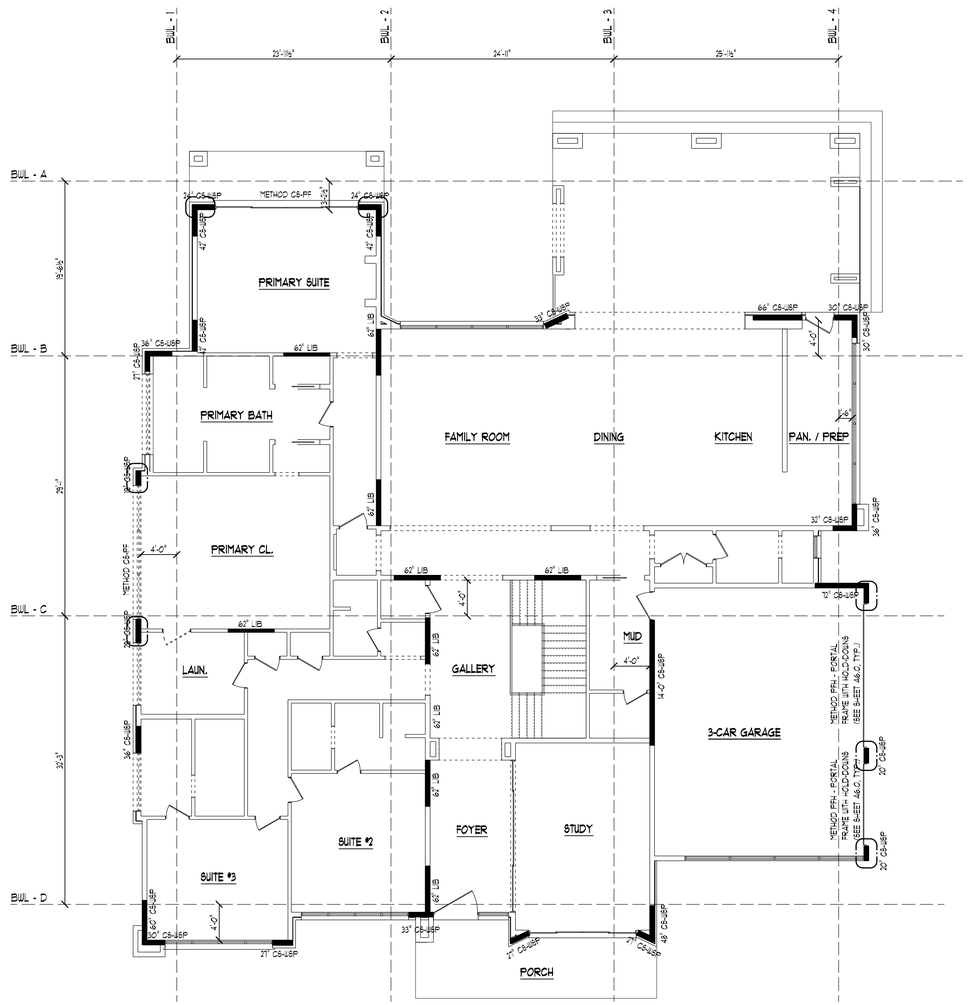
NOM. THICKNESS	FASTENER & LENGTH	SPACING OF FASTENERS: EDGES (in)	SPACING OF FASTENERS: INTERMEDIATE SUPPORTS (in)
UP TO 1/2"	STAPLE 15 ga. 1-3/4"	4	8
	0.097-0.099 NAIL 2-1/4"	3	6
	STAPLE 16 ga. 1-3/4"	3	6
19/32" & 5/8"	0.113 NAIL 2"	3	6
	STAPLE 15 & 16 ga 2"	4	8
	0.097-0.099 NAIL 2-1/4"	4	8
23/32" & 3/4"	STAPLE 14 ga. 2"	4	8
	STAPLE 15 ga. 1-3/4"	3	6
	0.097-0.099 NAIL 2-1/4"	4	8
	STAPLE 16 ga. 2"	4	8
1"	STAPLE 14 ga. 2-1/4"	4	8
	0.113 NAIL 2-1/4"	3	6
	STAPLE 15 ga. 2-1/4"	4	8
	0.097-0.099 NAIL 2-1/2"	4	8

TABLE R602.3(3) - REQUIREMENTS FOR WOOD STRUCTUAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES

MINIMUM NAIL: SIZE	MINIMUM NAIL: PENETRATION (inches)	MINIMUM WOOD STRUCTURAL PANEL SPAN RATING	MINIMUM NOMINAL PANEL THICKNESS (inches)	MAXIMUM WALL STUD SPACING (inches)	PANEL NAIL SPACING: EDGES (inches, o.c.)	PANEL NAIL SPACING: FIELD (inches, o.c.)	ULTIMATE DESIGN WIND SPEET V-ult (mph): WIND EXPOSURE CATEGORY B	C	D
6d COMMON (2.0" x 0.113")	1.5	24/0	3/8	16	6	12	140	115	110
8d COMMON (2.5" x 0.131")	1.75	24/16	7/16	16	6	12	170	140	135
				24	6	12	140	115	110

TABLE R602.10.2.1 INTERMITTENT BRACING METHODS

METHOD	MATERIAL	MINIMUM THICKNESS	CONNECTION CRITERIA
LIB	LET-IN BRACING	1x4 WOOD OR APPROVED METAL STRAPS AT 45° TO 60° ANGLES	WOOD: (2) 8d NAILS PER STUD METAL: PER MANUFACTURER
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON (2"x0.113") NAILS AT 6" SPACING (PANEL EDGES) AND AT 12" SPACING (INTERMEDIATE SUPPORTS) OR 1/8 GA. x 1-3/4" STAPLES: AT 3" SPACING (PANEL EDGES) AT 6" (INTERMEDIATE SUPPORTS)
GB	GYPSUM BOARD	1/2"	NAILS AT 7" SPACING AT PANEL EDGES INCLUDING TOP AND BOTTOM PLATES: FOR EXTERIOR SHEATHING NAIL SIZE, SEE TABLE R602.3(1); FOR INTERIOR GYPSUM BOARD NAIL SIZE, SEE TABLE 702.3.5



FIRST FLOOR BRACED WALL PANEL REQUIREMENTS (CS)

BWL NO.	1	2	3	4	A	B	C	D
METHOD	CS-USP	CS-USP, LIB	CS-USP	CS-USP	METHOD CS-PF	CS-USP, LIB	LIB	CS-USP
BWL SPACING	25'-0"	25'-0"	25'-0"	25'-0"		25'-0"	25'-0"	40'-0"
ADJ. FACTORS	1.10 x 1.45	1.10 x 1.45	1.10 x 1.45	1.10 x 1.45		1.10 x 1.45	1.00 x 1.45	1.00 x 1.45
REQD BRACING	6'-4"	17'-5"	6'-4"	6'-4"		17'-5"	11'-7"	8'-5"
PROVIDED	21'-3"	29'-4"	18'-0"	13'-10"		18'-1"	21'-6"	17'-0"

TABLE R602.10.3(1) MRC 2015 AT 115 MPH WND. SPEED:
METHOD CS-USP AT 15'-0" BWL SPACING = 2.75
METHOD CS-USP AT 25'-0" BWL SPACING = 4.00
METHOD CS-USP AT 40'-0" BWL SPACING = 6.00
METHOD LIB AT 25'-0" BWL SPACING = 8.00
(ALL FIRST FLOOR WALLS SUPPORTING ROOF)

TABLE R602.10.3(2) MRC 2015 WND. ADJUSTMENT FACTORS:
WALL HEIGHT ADJUSTMENT = 1.00 (10 FEET)
WALL HEIGHT ADJUSTMENT = 1.10 (12= FEET)
BRACED WALL LINES (PER PLAN DIRECTION) = 1.45 (4)

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DRAWN BY C.J.B.
REVIEWED BY R.N.

SHEET TITLE

BRACED WALL PANEL LOCATION PLAN

SHEET NUMBER

A7.0

GENERAL NOTES AND SPECIFICATIONS

CONTRACTOR TO REVIEW THESE NOTES AND SPECIFICATIONS TO DETERMINE PROPER APPLICATION TO THIS PROJECT.

MICHIGAN RESIDENTIAL CODE 2015 DESIGN DATA

GROUND SNOW LOAD	25 PSF
WIND SPEED	115 MPH
WIND EXPOSURE	CATEGORY - B
SEISMIC CATEGORY	A
WEATHERING RISK	SEVERE
FROST LINE DEPTH	3'-6" MINIMUM
TERMITE RISK	SLIGHT TO MODERATE
DECAY RISK	NONE TO SLIGHT
WINTER DESIGN TEMP.	BY LOCAL AUTHORITY
FLOOD HAZARDS	BY LOCAL AUTHORITY

GENERAL

THIS BUILDING HAS BEEN DESIGNED IN ACCORDANCE WITH THE MICHIGAN RESIDENTIAL CODE 2015. A COPY OF THE CODE BOOK SHOULD BE RETAINED BY THE BUILDER/CONTRACTOR FOR REFERENCE BY THE ON SITE CONSTRUCTION PERSONAL. ALL CONSTRUCTION SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT CODE.

MECHANICAL SYSTEM DESIGN IS BY OTHERS. DESIGN AND INSTALLATION SHALL COMPLY WITH CHAPTERS 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, AND 24 AND ALL OTHER APPLICABLE CHAPTERS OF THE MICHIGAN RESIDENTIAL CODE 2015.

PLUMBING SYSTEM DESIGN IS BY OTHERS. DESIGN AND INSTALLATION SHALL COMPLY WITH CHAPTERS 25, 26, 27, 28, 29, 30, 31, 32 AND 33 AND ALL OTHER APPLICABLE CHAPTERS OF THE MICHIGAN RESIDENTIAL CODE 2015.

ELECTRICAL SYSTEM DESIGN IS BY OTHERS. DESIGN AND INSTALLATION SHALL COMPLY WITH CHAPTERS 34, 35, 36, 37, 38, 39, 40, 41, 42 AND 43 AND ALL OTHER APPLICABLE CHAPTERS OF THE MICHIGAN RESIDENTIAL CODE 2015. ELECTRICAL AND LIGHTING PLANS PROVIDED BY THE ARCHITECT ARE FOR GENERAL GUIDE AND LAYOUT OF RECEPTACLES, SWITCHES AND LIGHTING ONLY FOR THE OWNER AND/OR THEIR LICENSED ELECTRICIAN'S REFERENCE ONLY. THE ARCHITECT DOES NOT SUPPLY DEMAND LOADS, CIRCUITRY DESIGNATIONS, PANEL/SYSTEM INFORMATION AND EQUIPMENT SPECIFICATIONS UNLESS CONTRACTED TO DO SO.

THESE NOTES ARE FOR GENERAL REFERENCE. WHERE CONFLICTS EXIST BETWEEN THESE NOTES AND CURRENT CODES THE MORE STRINGENT REQUIREMENTS SHALL PREVAIL.

MATERIALS OR CONSTRUCTION PROCEDURES WHICH ARE PROHIBITED BY LAW OR SHALL CAUSE A HARMFUL EFFECT TO THE NATURAL ENVIRONMENT OR TO THE HEALTH OF ANY PERSON ON THE SITE DURING CONSTRUCTION AND/OR DURING OCCUPANCY SHALL NOT BE USED IN THIS PROJECT.

ALL TRADES SHALL CONFORM WITH ALL APPLICABLE FEDERAL, STATE, LOCAL AND OSHA CODES, RULES AND REGULATIONS. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY. DIMENSIONS OF INTERIOR WALLS ON PLANS SHALL BE 4 1/2" (FINISHED GYPSUM BOARD STUD DIMENSIONS) UNLESS NOTED OTHERWISE.

HABITABLE SPACE VS. NON-HABITABLE SPACE

HABITABLE SPACE IS DEFINED AS A SPACE WITHIN A DWELLING UNIT FOR GATHERING, SITTING, SLEEPING, EATING OR COOKING. NON-HABITABLE SPACE IS DEFINED AS A TEMPORARILY OCCUPIED, CIRCULATION OR TRANSITION SPACE WITHIN A DWELLING UNIT SUCH AS FOYERS, BATHROOMS, TOILET ROOMS, CLOSETS, HALLWAYS, PANTRIES, STORAGE AND UTILITY ROOMS, AND OTHER SIMILAR SPACES.

MECHANICAL

CATEGORY IV CONDENSING APPLIANCES SHALL HAVE AN AUXILIARY DRAIN PAN WHERE DAMAGE TO ANY BUILDING COMPONENT WILL OCCUR AS A RESULT OF STOPPAGE IN THE CONDENSATE DRAINAGE SYSTEM UNLESS COMPLYING WITH THE LISTED EXCEPTION OF SECTION M1413.2.

AIR REMOVED BY ALL MECHANICAL EXHAUST SYSTEMS (INCLUDING BATH EXHAUSTS) SHALL BE DISCHARGED TO THE OUTDOORS. AIR SHALL NOT BE EXHAUSTED INTO AN ATTIC, SOFFIT, RIDGE VENT OR CRAWL SPACE.

ELECTRICAL

ALL BRANCH CIRCUITS THAT SUPPLY 120 VOLT, SINGLE PHASE, 15 AND 20 AMPERE OUTLETS INSTALLED IN SLEEPING ROOMS SHALL BE PROTECTED BY A COMBINATION TYPE OR BRANCH/FEEDER TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT UNLESS THE INSTALLATION COMPLIES WITH ONE OF THE EXCEPTIONS LISTED IN THE CODE.

RECEPTACLES SHALL BE INSTALLED SUCH THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE OF ANY WALL SPACE IS MORE THAN 6 FEET FROM A RECEPTACLE

ON BATHROOM WALLS, THERE MUST BE A RECEPTACLE AT LEAST WITHIN 3 FEET OF THE OUTSIDE EDGE OF THE SINK BASIN.

IN KITCHENS, ELECTRICAL OUTLETS SHOULD BE PLACED NO FARTHER THAN 48 INCHES APART, SO THAT NO POINT ON THE COUNTERTOP IS MORE THAN 24 INCHES AWAY FROM A RECEPTACLE. ANY COUNTERTOP 12 INCHES WIDE OR MORE SHOULD HAVE AN OUTLET ON THE WALL BEHIND THE COUNTERTOP. OUTLETS SHOULD NOT BE POSITIONED HIGHER THAN 20 INCHES ABOVE COUNTERTOPS.

GENERAL-PURPOSE OUTLET RECEPTACLES SHOULD HAVE A RATING THAT IS APPROPRIATE FOR THE AMPERAGE OF THE CIRCUIT THEY SERVE.

GROUND FAULT INTERRUPTER (GFI) RECEPTACLES ARE REQUIRED IN THE FOLLOWING AREAS:

A. OVER COUNTERTOPS IN KITCHENS
B. DISHWASHERS
C. BATHROOMS
D. LAUNDRY AREAS
E. UNFINISHED BASEMENTS
F. CRAWL SPACES
G. GARAGES AND OTHER ACCESSIBLE OUTDOOR LOCATIONS
H. REAR SWIMMING POOLS, SPAS, AND OTHER WATER FEATURES

RECEPTACLES SHALL NOT BE PLACED HIGHER THAN 60 INCHES ABOVE FINISHED FLOOR AND SHALL NOT BE PLACED LOWER THAN 12 INCHES ABOVE FINISHED FLOOR UNLESS IT IS A DESIGNATED FLOOR RECEPTACLE (SEE BELOW).

ISLANDS AND PENINSULAR COUNTERTOPS THAT ARE 12 IN. OR WIDER AND 24 IN. OR LONGER MUST HAVE A "POP-UP" RECEPTACLE.

AT LEAST ONE (1) RECEPTACLE IS REQUIRED IN ROOMS FOR EACH 216 SQUARE FEET OF FLOOR SPACE OR MAJOR PORTION THEREOF.

FLOOR MOUNTED RECEPTACLES SHALL HAVE A METAL BOX, GASKET SEAL, COVER PLATE WITH A MOISTURE PROTECTION.

CORRIDOR AND STAIRWAY LIGHTING

ELECTRICAL CONTRACTOR SHALL PROVIDE FIXTURES WITH ADEQUATE ILLUMINATION TO MEET THE REQUIRED FOOT CANDLE LEVELS AT FLOOR AND STAIR TREADS PER MRC 2015.

EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE TOP LANDING OF THE STAIRWAY.

CONTRACTOR MAY PROVIDE ADDITIONAL FIXTURES NOT SHOWN OR RELOCATE FIXTURES SHOWN ON THE PLAN TO MEET THESE REQUIREMENTS.

THERE SHALL BE A WALL SWITCH AT EACH FLOOR LEVEL TO CONTROL THE LIGHTING WHERE THE STAIRWAY HAS (6) OR MORE RISERS. THE ILLUMINATION OF EXTERIOR STAIRWAYS SHALL BE CONTROLLED FROM INSIDE THE UNIT AND SHALL NOT BE LESS THAN ONE (1) FOOT-CANDLE.

ALL LIGHT FIXTURES INSTALLED IN THE INSULATED CEILING SHALL BE IC-RATED (INSULATION CONTACT) AND AT-RATED (AIR-TIGHT).

WINDOWS AND GLAZING

ALL BASEMENTS GREATER THAN 200 S.F. SHALL HAVE AT LEAST ONE OPERABLE EMERGENCY ESCAPE/RESCUE WINDOW OR EXTERIOR DOOR.

ALL SLEEPING ROOMS SHALL HAVE A MINIMUM OF ONE (1) OPERABLE ESCAPE AND RESCUE WINDOW MEETING THE REQUIREMENTS OF SECTION R310. WINDOW CONTRACTOR SHALL PROVIDE EGRESS HARDWARE NECESSARY TO ALLOW WINDOWS TO MEET APPLICABLE EGRESS REQUIREMENTS.

WHERE THE OPENING OF OPERABLE WINDOWS ARE LOCATED MORE THAT 72" ABOVE THE FINISHED GRADE OR SURFACE BELOW, THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE A MIN. OF 24" ABOVE THE FINISHED FLOOR OF THE ROOM IN WHICH THE WINDOW IS LOCATED UNLESS ONE OF THE LISTED EXCEPTIONS HAS BEEN MET.

WINDOWS SHALL BE INSTALLED AND FLASHED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION SPECIFICATIONS. WRITTEN INSTALLATION INSTRUCTIONS SHALL BE PROVIDED BY THE MANUFACTURER FOR EACH WINDOW. INSTALLATION INSTRUCTIONS SHALL NOT BE REMOVED UNTIL THE WINDOW INSTALLATION HAS BEEN INSPECTED AND APPROVED BY THE BUILDING INSPECTOR.

FIXED GLASS SIZES SHOWN ARE FOR REFERENCE ONLY. GLAZING CONTRACTOR SHALL FIELD MEASURE ALL ROUGH OPENINGS FOR FIXED GLASS PRIOR TO FABRICATION.

OPERATING SASHES ARE SHOWN FOR BASIC SIZING ONLY. FINAL SIZE FOR ROUGH OPENING AND GLAZING SIZES SHALL BE PER SELECTED WINDOW MANUFACTURER'S SPECIFICATIONS.

PROVIDE ALL SAFETY GLAZING IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES IN THE FOLLOWING AREAS/SCENARIOS:

A. DOORS AND SIDELITES INCLUDING DOORWALLS AND FRENCH DOORS
B. TUB AND/OR SHOWER ENCLOSURES AND WINDOWS OVER TUBS
C. GLAZING IN SKYLITES
D. GLAZING IN WINDOWS WITHIN 24 INCHES OF A DOOR WHEN FULLY OPEN ON THE SAME WALL AS THE WINDOW
A. INDIVIDUAL PANE OF MORE THAN 9 SQ. FT.
B. BOTTOM EDGE OF GLAZING LESS THAN 18" ABOVE THE FLOOR
C. TOP EDGE OF GLAZING MORE THAN 36" ABOVE THE FLOOR
D. ONE OR MORE WALKING SURFACES WITHIN 36" HORIZONTALLY OF THE PLANES OF GLAZING

GARAGE SEPARATIONS

THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 5/8" TYPE-X GYPSUM BOARD APPLIED TO THE GARAGE SIDE. WHERE THE SEPARATION IS A FLOOR/CEILING ASSEMBLY, THE STRUCTURE SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED BY NOT LESS THAN 1/2" GYPSUM BOARD OR EQUIVALENT.

OPENINGS FROM A GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD OR HONEYCOMB CORE STEEL NOT LESS THAN 1 3/8" THICK AND SHALL BE 20-MINUTE RATED. DOORS MUST BE EQUIPPED WITH A LATCH DEVICE AND BE WEATHER-STRIPPED.

DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILING SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAUGE SHEET METAL STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENING INTO THE GARAGE.

DOORS

REFER TO FLOOR PLAN(S) FOR DOOR SIZES AND HINGE/SWING DIRECTIONS. PROVIDE A BASE MOLDING OR HINGE STOP AS REQ'D. ALL OTHER DOOR HEIGHTS AND SPECIFICATIONS SUCH AS CONSTRUCTION, STYLE AND MATERIAL SHALL BE COORDINATED W/ OWNER AND/OR CONTRACTOR.

PAN FLASHING IS REQUIRED AT ALL DOOR AND WINDOW SILLS WHEN FLASHING DETAILS ARE NOT PROVIDED BY THE WINDOW MFR.

STAIRS

ALL STAIR CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF MRC SECTION R311 FOR TREADS AND NOSINGS.

ENCLOSED ACCESSIBLE SPACE UNDER THE STAIR SHALL HAVE WALLS, UNDER STAIR SURFACE AND ANY SOFFITS TO BE PROTECTED ON THE ENCLOSED SIDE WITH 1/2" GYPSUM BOARD.

LANDINGS

THERE SHALL BE A FLOOR OR LANDING ON EACH SIDE OF EACH EXTERIOR DOOR, WHERE A STAIRWAY OF 2 OR FEWER RISERS IS LOCATED ON THE EXTERIOR SIDE OF A DOOR, OTHER THAN THE REQUIRED EXIT DOOR, A LANDING IS NOT REQUIRED FOR THE EXTERIOR SIDE.

A LANDING AT AN EXTERIOR DOOR SHALL NOT BE MORE THAN 1-3/4" BELOW THE TOP OF THE TRESHOLD. THE WIDTH OF EACH LANDING SHALL NOT BE LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A MIN. DIMENSION OF 36" MEASURED IN THE DIRECTION OF TRAVEL.

A FLOOR LANDING IS NOT REQUIRED AT THE TOP OF AN INTERIOR FLIGHT OF STAIRS, INCLUDING STAIRS IN AN ENCLOSED GARAGE, PROVIDED A DOOR DOES NOT SWING OVER THE STAIRS.

HANDRAILS SHALL HAVE A MINIMUM AND MAXIMUM HEIGHT OF 34" AND 38", RESPECTIVELY MEASURED VERTICALLY FROM THE NOSING OF THE STAIR. HANDRAIL(S) SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIR, EXCEPT AS ALLOWED BY MRC SECTION R311.7.12 THE HANDGRIP PORTION OF THE HANDRAIL SHALL COMPLY WITH MRC SECTION R311.7.7.3 FOR TYPE I OR TYPE II HANDRAILS (SEE DETAILS ON SHEET A5.0).

FINISHED SURFACES SUCH AS PORCHES OR LANDINGS WITHIN 30" OF FLOOR OR GRADE DO NOT REQUIRE A GUARD, BUT UNLESS DIRECTED BY THE LOCAL BUILDING OFFICIAL.

GUARD RAIL

BALUSTERS SHALL BE SPACED SO THAT A SPHERE WITH A DIAMETER OF 4" CANNOT PASS THROUGH ANY OPENING. GUARD-RAILS AT PORCHES, BALCONIES, OR RAISED FLOOR SURFACE WITH A HEIGHT DIFFERENTIAL OF 30" OR MORE ABOVE THE FINISHED FLOOR OR GRADE SHALL BE A MINIMUM OF 36" HIGH.

INTERIOR GUARDRAILS SHALL BE 36" HIGH MINIMUM.

SMOKE ALARMS AND CARBON MONOXIDE DETECTORS

EACH SLEEPING ROOM SHALL BE PROVIDED WITH A MINIMUM OF ONE(1) SMOKE ALARM (LOCAL FIRE DEPT. APPROVED AND UNDERWRITER'S LABORATORIES (UL) TESTED AND LABELED) AND ONE SMOKE ALARM INSTALLED IN COMMON AREA (HALL OR CORRIDOR) ADJACENT TO THE SLEEPING ROOMS (WITHIN 10 FEET OF ALL BEDROOM DOORS).

PROVIDE A MINIMUM OF ONE (1) SMOKE ALARM ON EACH FLOOR. THE SMOKE ALARM IS TO BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES. THE SMOKE ALARM SHALL BE WIRED IN SUCH A WAY THAT THE ACTIVATION OF ONE (1) ALARM WILL ACTIVATE ALL THE ALARMS IN THE DWELLING UNIT. ALL SMOKE ALARMS SHALL BE EQUIPPED WITH A BATTERY BACKUP.

INSTALLATION OF AT LEAST (1) OPERATIONAL AND APPROVED CARBON MONOXIDE DEVICE WITHIN EACH RESIDENCE. ONE DEVICE SHALL BE LOCATED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE VICINITY OF THE BEDROOMS WHICH MAY INCLUDE (1) DEVICE NEAR ALL ADJACENT BEDROOMS. IN AREAS WITH IN THE DWELLING ADJACENT TO AN ATTACHED GARAGE AND IN AREAS ADJACENT TO ANY FUEL BURNING APPLIANCES, THEY SHALL BE INSTALLED IN ACCORDANCE WITH THIS CODE AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

SMOKE ALARMS SHALL NOT BE INSTALLED IN THE FOLLOWING SCENARIOS.

A. LESS THAN 3'-0" HORIZONTALLY FROM DOOR OR OPENING OF BATHROOM WITH TUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF REQUIRED SMOKE ALARM WITHIN VICINITY OF BEDROOM.
B. LESS THAN 20'-0" HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. (IONIZATION SMOKE ALARM)
C. LESS THAN 10'-0" HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. (IONIZATION SMOKE ALARM W/ ALARM SILENCING SWITCH)
D. LESS THAN 6'-0" HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. (PHOTOELECTRIC SMOKE ALARM)

THE RESIDENCE OWNER OR OCCUPANT OF A RENTAL UNIT IS RESPONSIBLE FOR THE PROPER OPERATION, TESTING AND MAINTENANCE OF THE EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS PROVIDED WITH THE EQUIPMENT. THE OPERATION INSTRUCTIONS SHOULD BE DELIVERED TO THE OWNER/OCCUPANT ON THE FIRST DATE OF OCCUPANCY.

FOAM PLASTICS

ALL FOAM PLASTICS OR FOAM PLASTIC CORED MATERIAL USED IN BUILDING CONSTRUCTION SHALL HAVE SURFACE BURNING CHARACTERISTICS OR A THERMAL BARRIER AS DESCRIBED IN SECTION R316 UNLESS NOTED OTHERWISE.

PROJECT SITE DEVELOPMENT

THE CIVIL ENGINEER OR SITE PLANNER SHALL COMPLY WITH MRC SECTION R403.1.7 FOR SLOPE CLEARANCE FROM FOOTINGS AS WELL AS PROPER SITE DRAINAGE TO SWALES, CATCH BASINS AND STORM DRAINS. THE SITE SHALL BE GRADED WITH A MINIMUM SLOPE OF 6" OVER A DISTANCE OF 10'-0" AWAY FROM THE FOUNDATION.

FOUNDATIONS

ALL CONCRETE WORK AND PLACEMENT SHALL COMPLY WITH THE MOST RECENT CRSI AND ACI STANDARDS AND SPECIFICATIONS.

ALL POURED CONCRETE WALL AND TRENCH FOOTING DEPTHS SHALL BE 3'-6" MINIMUM BELOW FINISHED GRADE AND BEAR ON UNDISTURBED SOIL OR ENGINEERED FILL SPECIFIED BY A LICENSED GEOTECHNICAL ENGINEER.

PROVIDE A 4" MINIMUM THICK CONCRETE SLAB FOR PROPOSED BASEMENT, SLAB-ON-GRADE AND GARAGE SLAB FOUNDATIONS UNLESS NOTED OTHERWISE.

PLACEMENT OF CONCRETE ON FROZEN SUBGRADE IS NOT PERMITTED. IF POURING CONCRETE IN FRIGID WEATHER CONDITIONS/SEASONS, PROTECT THE SLAB FROM FREEZING UNTIL ADEQUATE STRENGTH IS ACHIEVED.

SEE TABLE BELOW FOR COMPRESSIVE STRENGTH VALUES AT 28 DAYS POST-POUR MINIMUM FOR VARIOUS CONCRETE SLABS AND FOUNDATIONS.

SLOPE SLABS IN GARAGES 1/4" PER FOOT TOWARD GARAGE DOOR(S) UNLESS NOTED OTHERWISE. COORDINATE WITH GARAGE MOISTURE EXPECTATIONS AND CURLING RISK.

STRUCTURAL DESIGN STRENGTHS FOR CONCRETE AND REINFORCING

CONCRETE

CLASS	STRENGTH AT 28 DAYS (PSI)	LOCATION
A	3,000	SLABS AND WALLS NOT EXPOSED TO WEATHER
B	3,000	FOOTINGS AND FOUNDATION WALLS
C	3,500	SLABS AND WALLS EXPOSED TO WEATHER (AIR-ENTRAINED)

REINFORCING BARS — ASTM A615/A615M-01B (F_y = 60 KSI)
WELDED WIRE FABRIC — ASTM A185-01

STRUCTURAL STEEL — ASTM 307-02
ANCHOR RODS — ALTERNATE: F554-99 GR36

MASONRY
NORMAL WEIGHT — f'_m = 900 PSI

PROVIDE 4" MINIMUM CLEAN, COMPACTED GRANULAR BASE: SAND, GRAVEL CRUSHED STONE, OR SIMILAR APPROVED PER MRC R506.2.2. PROOF-ROLL BASE PRIOR TO PLACEMENT.

FOR SLAB-ON-GRADE FOUNDATIONS, PROVIDE A 15 MIL ASTM E1745 CLASS-A VAPOR BARRIER PLACED DIRECTLY BENEATH SLAB. OVERLAP AND TAPE SEAMS 6" MINIMUM PER MANUFACTURER SPECIFICATIONS. ASSURE AND CONFIRM AIRTIGHTNESS AND PROTECT THE BARRIER FROM PUNCTURE AND REPAIR ALL OPENINGS AROUND DAMAGED AREAS AND PENETRATIONS PRIOR TO POURING.

VAPOR BARRIERS ARE OPTIONAL UNDER GARAGE SLABS. IF DESIRED, PROVIDE A 10 MIL VAPOR BARRIER MINIMUM AND TAPE SEAMS AND OVERLAP 6" MINIMUM. ASSURE AND CONFIRM AIR TIGHTNESS AND PROTECT THE BARRIER FROM PUNCTURE.

COORDINATE ALL SLEEVES, CONDUITS, PLUMBING AND ELECTRICAL PRIOR TO POUR AND SEAL PENETRATIONS THROUGH THE VAPOR BARRIER.

FINISH SLAB SMOOTH, LEVEL, AND FREE OF RIDGES, WAVES, AND DEPRESSIONS. APPLY CURING COMPOUND OR WET CURE FOR A MINIMUM OF 7 DAYS.

PROVIDE 1/2" PREMOLDED EXPANSION JOINTS AT ALL COLD JOINTS (SLAB AGAINST CONCRETE BLOCK OR WALLS) AND SEAL TOP OF JOINTS WITH SUITABLE FLEXIBLE SEALANT WHERE EXPOSED.

IF DESIRED FOR ADDED CONCRETE COMPRESSIVE STRENGTH, PROVIDE 6X6 W2.9XW2.9 WELDED WIRE FABRIC, CENTERED IN SLAB DEPTH UNLESS NOTED OTHERWISE. REINFORCEMENT TO BE SUPPORTED ON CHAIRS.

SAW-CUT CONTROL JOINTS WITHIN 6 TO 12 HOURS AFTER FINISHING OR AS SOON AS SLAB WILL NOT RAVEL. CUT JOINTS 1/4 OF SLAB DEPTH MINIMUM AND SPACE 8 TO 12 FEET APART AT RE-ENTRANT CORNERS, AROUND COLUMNS, OPENINGS AND CHANGES IN GEOMETRY.

PROVIDE CONTINUOUS 2"X24" K.P.R. RIGID FOAM UNDER SLAB PERIMETER AND DOUBLE FOOTING PER DETAILS IN THESE DRAWINGS.

ALL BACKFILL SHALL BE SANDY OR GRANULAR IF EXCAVATED SPOILS ARE NOT WELL-DRAINING AND SHALL NOT BE PLACED AGAINST WALL UNTIL A POURED CONCRETE WALL UNTIL IT HAS SUFFICIENT STRENGTH AND HAS BEEN ANCHORED TO THE FLOOR ABOVE OR PROPERLY BRACED.

ALL POURED CONCRETE FOUNDATION WALLS SHALL HAVE THREE (3) ROWS OF REINFORCING BARS MINIMUM 1'-0" FROM TOP AND BOTTOM OF WALL AND EQUAL SPACING THEREAFTER (IF MORE THAN THREE ROWS). CONTINUOUS CONCRETE FOOTINGS SHALL BE AT LEAST 2X THE POURED WALL THICKNESS UNLESS SPECIFIED OTHERWISE IN THESE DRAWINGS.

REINFORCED CONCRETE WALLS AND TRENCH FOOTINGS SHALL HAVE CORNER BARS AT ALL INTERSECTIONS OF THE SAME SIZE AND SPACING AS THE MAIN HORIZONTAL REINFORCING. PROVIDE (2) #5 DIAGONAL BARS AT CORNERS OF WALL OPENINGS.

SOILS

IN THE EVENT SOIL TESTS ARE NOT PROVIDED, THE SOIL BEARING CAPACITY USED BY THE ARCHITECT IS ASSUMED TO BE 1500 PSF. IF ANY OTHER MATERIALS OR LOWER BEARING CAPACITY ARE ENCOUNTERED, NOTIFY THE ARCHITECT IMMEDIATELY FOR RE-EVALUATION OF FOOTING SIZES.

COMPACT SUBGRADE TO UNIFORM DENSITY AND REMOVE SOFT OR ORGANIC SOILS FROM THE PROPOSED FOUNDATION AND EXCAVATED AREA(S). IF THESE TYPES OF SOILS ARE DISCOVERED IN THE EXCAVATION AREA, NOTIFY THE ARCHITECT IMMEDIATELY FOR RE-EVALUATION OF FOUNDATION DESIGN. A LICENSED GEOTECHNICAL ENGINEER MAY BE REQ'D FOR FURTHER SOIL TESTING.

GROUNDING ELECTRODE SYSTEM

BUILDER TO PROVIDE AND COORDINATE A 20'-0" LONG, #4 REBAR CONCRETE-ENCASED ELECTRODE ROD INTO FOOTING AND UP THROUGH POURED WALL NEAR THE ELECTRICAL SERVICE LOCATION FOR PROPER ELECTRICAL GROUNDING. LOCATION TO BE DETERMINED BY THE CONTRACTOR IN THE FIELD.

DAMPPROOFING AND WATERPROOFING

DAMPPROOFING AND WATERPROOFING SHALL COMPLY WITH MRC SECTION R406.

PROVIDE CONTINUOUS 4" MIN. DIAMETER PERFORATED DRAIN TILE ALONG EACH SIDE OF BASEMENT WALL FOOTINGS. DRAIN TILES SHALL DISCHARGE BY GRAVITY OR MECHANICAL MEANS INTO AN APPROVED DRAINAGE SYSTEM. PROVIDE PEA GRAVEL 12" BEYOND THE EDGE OF THE FOOTING, 6" OF COVER, AND 2" BELOW ALL DRAIN TILES. IDEAL SOIL CONDITIONS ARE ASSUMED BY THE ARCHITECT AND MAY DEVIATE BASED ON EXISTING SOIL CONDITIONS. ADDITIONAL TESTING MAY BE REQUIRED.

ALL CONCRETE AND MASONRY FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSE HABITABLE OR USABLE SPACE SHALL BE DAMPPROOFED OR WATERPROOFED FROM THE TOP OF THE FOOTING TO THE GRADE LINE.

CONCRETE MASONRY UNIT (CMU) WALLS SHALL HAVE A MINIMUM OF 3/8" PORTLAND CEMENT PARGING APPLIED TO THE EXTERIOR SIDE OF THE WALL PRIOR TO DAMPPROOFING WITH A BITUMINOUS COATING.

IN AREAS WHERE A HIGH-WATER TABLE OR OTHER SEVERE SOIL-WATER CONDITIONS ARE KNOWN TO EXIST, EXTERIOR FOUNDATION WALLS SHALL BE WATERPROOFED.

SUMP PUMPS

PROVIDE SUMP PUMPS IN BASEMENTS AS RECOMMENDED BY SOILS ENGINEER OR AS REQUIRED BY THE LOCAL CODE OFFICIAL AND THE SITE DEVELOPMENT DRAWINGS BY OTHERS.

MINIMUM SIZE SHALL BE 18" IN DIAMETER AND 24" IN DEPTH AND SHALL PROVIDE A RADON GAS SEALED REMOVABLE COVER.

MASONRY VENEER

BRICK VENEER SHALL MEET ASTM C216 (SOLID UNITS) OR ASTM C652 (HOLLOW UNITS).

ALL MASONRY VENEERS SHALL BEAR ON A FOOTING AND BE ANCHORED TO THE SUB-STRUCTURE WITH A PROPER HOT-DIPPED GALVANIZED OR ADJUSTABLE TIE/ANCHORING SYSTEM COMPLIANT WITH THE VENEER SYSTEM SPECIFIED IN THESE DRAWINGS.

PROVIDE WEEP HOLES AT 32" O.C. MAXIMUM AT THE FIRST COURSE OF BRICK VENEER ABOVE GRADE AND ALL THROUGH-WALL FLASHING AS WELL AS ABOVE LINTELS. STEP FLASHING AND PROVIDE END DAMMING AT SLOPING GRADE CONDITIONS PER DETAILS IN THESE DRAWINGS. A FLASHING INSPECTION IS REQUIRED PRIOR TO THE INSTALLATION OF A FULL WALL OF BRICK PRIOR TO RESUMING ANY MASONRY VENEER INSTALLATION.

ADHESIVE-BACKED MASONRY VENEER

ADHESIVE-BACKED MASONRY VENEER SHALL COMPLY WITH ICC-ES AC51 AND ASTM C1780 INSTALLATION STANDARDS AS WELL AS THE MANUFACTURER'S PUBLISHED SPECIFICATIONS FOR FASTENERS, MORTAR AND SUBSTRATES FOR ASSY. FASTENERS, IF REQUIRED FOR ACCESSORIES, SHALL BE CORROSION-RESISTANT.

REMOVE DUST, FORM RELEASE AGENTS, EFFLORESCENCE AND ANY LOOSE MATERIAL PRIOR TO INSTALLATION.

PROVIDE TWO LAYERS OF WEATHER RESISTIVE BARRIER (W.R.B.) BEHIND VENEER UNLESS SUBSTRATE IS CMU OR CONCRETE WHERE NOT REQUIRED BY MANUFACTURER.

WEATHER RESISTIVE BARRIER(S) (W.R.B.) SHALL COMPLY WITH IBC/IRC REQUIREMENTS AND INTEGRATE WITH FLASHING AT ALL PENETRATIONS, WINDOWS AND TRANSITIONS.

INSTALL CORROSION-RESISTANT FLASHINGS AT ALL HORIZONTAL PROJECTIONS, HEAD JOINTS, TERMINATIONS AND TRANSITIONS.

PROVIDE A WEEP SCREED AT BASE OF WALL PER LOCAL BUILDING CODE AND MANUFACTURERS' SPECIFICATIONS.

SEAL ALL EDGES AND PENETRATIONS WITH MANUFACTURER-APPROVED SEALANT.

MAINTAIN REQUIRED CLEARANCES:

A. 2" MINIMUM ABOVE FINISHED GRADE
B. 4" MINIMUM ABOVE SOIL/LANDSCAPE
C. 1/2" MINIMUM ABOVE PAVING OR HARDSCAPE

VERTICAL JOINTS IN STONE PIECES SHALL BE STAGGERED AND BLENDED TO AVOID STONE PATTERN REPETITION.

PROVIDE CONTROL JOINTS ALIGNED WITH BUILDING MOVEMENT JOINTS.

BRIDGING OF EXPANSION JOINTS IS NOT PERMITTED. TERMINATE VENEER CLEANLY AT MOVEMENT BREAKS.

USE MANUFACTURER-APPROVED TRIMS, CORNER PIECES, SILLS, WATERTABLES AND ACCESSORIES AS FOREIGN MATERIALS MAY VOID MANUFACTURER WARRANTIES.

CLEAN FINISHED SURFACES PER MANUFACTURER SPECIFICATIONS. ACIDS OR HARSH CLEANING SOLVENTS ARE NOT PERMITTED.

VERIFY ALL FASTENER, MORTAR TYPE AND MATERIAL INSTALLATION METHODS, PROCEDURES AND REQUIREMENTS WITH THE EXACT SELF-ADHERED VENEER STONE SYSTEM MANUFACTURER'S PUBLISHED SPECIFICATIONS AND INSTALLATION PROCEDURES.

GUTTERS AND DOWNSPOUTS

PROVIDE 5" K-STYLE PRE-FINISHED ALUMINUM GUTTERS SLOPED 1/16" PER FOOT TOWARD DOWNSPOUTS AND FASTEN TO FASCIA AT 33" O.C. MAXIMUM. DOWNSPOUTS ARE TO BE LOCATED SO THE DISCHARGE WILL NOT SPILL ON OR FLOW ACROSS ANY PORCHES, WALKWAYS OR DRIVEWAYS. CONNECT DOWNSPOUTS TO STORM SYSTEM.

DOWNSPOUT LOCATIONS AND DOWNSPOUT DISCHARGE TYPES AND LOCATIONS TO BE DETERMINED BY THE CONTRACTOR BASED ON EXISTING AND PROPOSED SITE CONDITIONS.

STEEL

ALL STEEL COLUMNS AND EXTERIOR LINTELS SHALL BE SHOP COATED WITH RUST-INHIBITIVE PAINT ON ALL SURFACES (INSIDE AND OUTSIDE) UNLESS MADE OF CORROSION-RESISTANT STEEL.

STEEL COLUMNS SHALL BE RESTRAINED AT THE BOTTOM TO PREVENT LATERAL DISPLACEMENT. STEEL COLUMNS SHALL BE OF SIZE NOTED ON THE DRAWINGS.

FLOOR FRAMING

WOOD FLOOR FRAMING SHALL COMPLY WITH MRC CHAPTER 5 EXCEPT WHERE MORE SPECIFIC STRINGENT REQUIREMENTS ARE SPECIFIED IN THESE DRAWINGS. ALL LUMBER GRADES AND STANDARDS ARE BASED ON "NDS-1997" DESIGN SPECIFICATIONS.

ALL FLOOR JOISTS SHALL BE HEM-FIR #2 KD OR BETTER; FIBER BENDING STRESS OF 1075 PSI (REPETITIVE MEMBER) WITH A MODULUS OF ELASTICITY OF 1,300,000 PSI.

FLOOR SYSTEM DESIGN LOAD CRITERIA

FIRST FLOOR LOADING:		SECOND FLOOR LOADING:		WOOD DECK LOADING	
LIVE LOAD	40 PSF	LIVE LOAD	40 PSF	LIVE LOAD	50 PSF
DEAD LOA