

AGENDA
PLANNING COMMISSION PUBLIC HEARING/REGULAR MEETING
CITY OF FARMINGTON HILLS
DECEMBER 19, 2024 @ 7:30 P.M.
FARMINGTON HILLS CITY HALL – CITY COUNCIL CHAMBER
31555 W. ELEVEN MILE ROAD, FARMINGTON HILLS, MICHIGAN 48336
Cable TV: Spectrum – Channel 203; AT&T – Channel 99
YouTube Channel: <https://www.youtube.com/user/FHChannel8>
www.fhgov.com (248) 871-2540

1. Call Meeting to Order
2. Roll Call
3. Approval of Agenda
4. Public Hearing

A. AMEND PLANNED UNIT DEVELOPMENT (PUD) PLAN 2, 2021, INCLUDING REVISED SITE PLAN 59-5-2022

LOCATION: 27400 Twelve Mile Road
PARCEL I.D.: 22-23-12-476-008
PROPOSAL: Construction of site-built one-family detached dwelling units within RA-1B One Family Residential District
ACTION REQUESTED: Recommendation to City Council
APPLICANT: Robertson Brothers Homes
OWNER: Evangelical Homes of Michigan

5. Regular Meeting

A. SITE PLAN 59-9-2024

LOCATION: 24300 Drake Road
PARCEL I.D.: 22-23-21-351-032
PROPOSAL: Construction of vehicle wash within B-3 General Business District
ACTION REQUESTED: Site plan approval
APPLICANT: BMW Kar Wash, LLC (Todd Gesund)
OWNER: Boxoffice Theaters, LLC

B. SITE PLAN 61-11-2024

LOCATION: 29403 and 29455 Grand River Avenue
PARCEL I.D.: 22-23-35-431-016 and -017
PROPOSAL: Construction of gasoline service station within B-3 General Business District
ACTION REQUESTED: Site plan approval
APPLICANT: SkilkenGold Development
OWNER: Shakir Alkhafaji

6. Approval of Minutes [November 21, 2024, Regular Meeting](#)

7. Public Comment

8. Commissioner/Staff Comments

9. Adjournment

Respectfully Submitted,

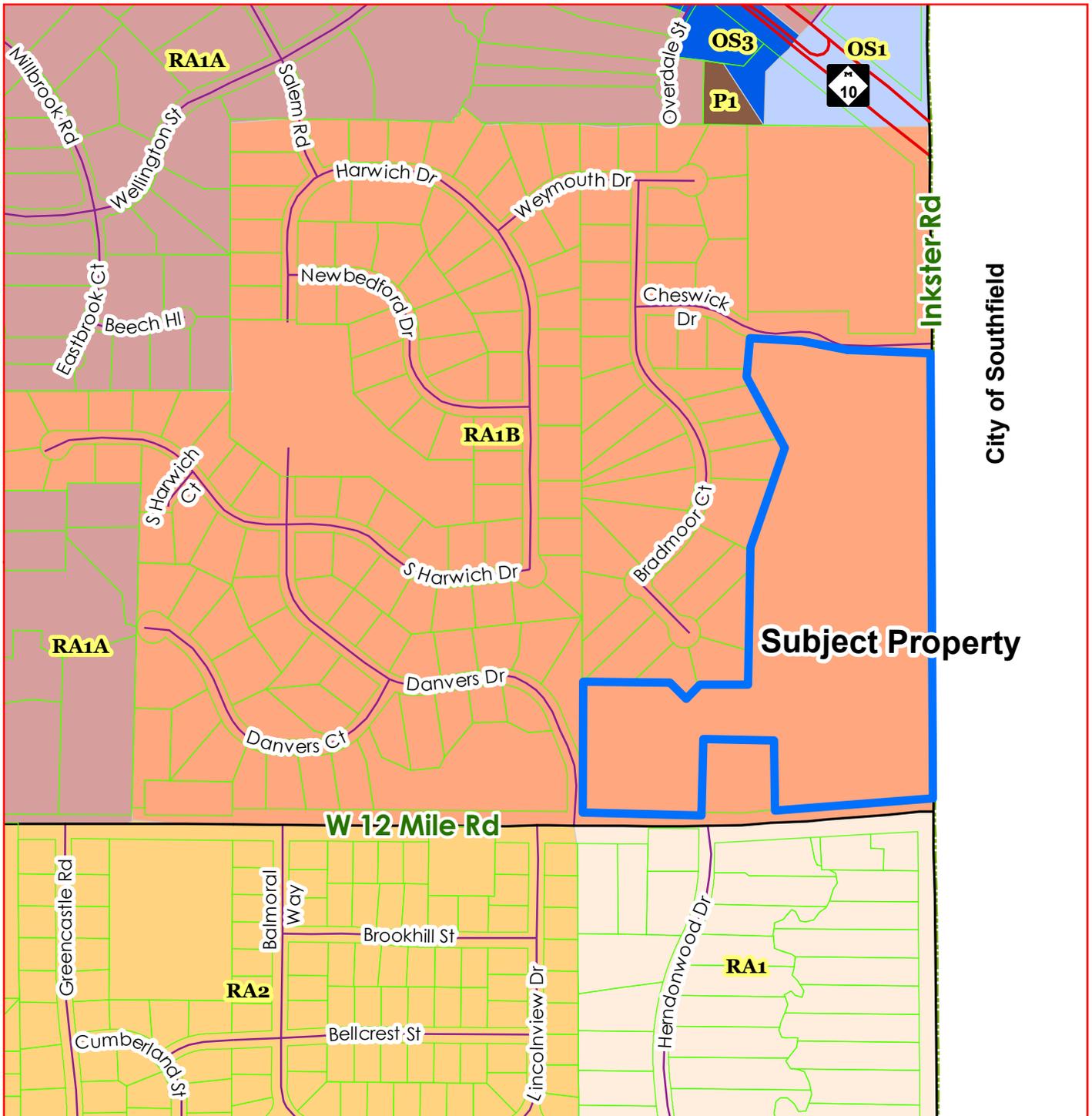
Kristen Aspinall, Planning Commission Secretary

Staff Contact:

Erik Perdonik, AICP
City Planner
Planning and Community Development Department
(248) 871-2540
eperdonik@fhgov.com

NOTE: Anyone planning to attend the meeting who has need of special assistance under the Americans with Disabilities Act (ADA) is asked to contact the City Clerk's Office at (248) 871-2410 at least two (2) business days prior to the meeting, wherein arrangements/accommodations will be made. Thank you.

**Amend PUD 2, 2021, SP 59-5-2024
 12-476-008, 27400 Twelve Mile Rd.
 Amend Plan to eliminate skilled nursing and
 add single family in RA-1B**



City of Southfield

Subject Property

- | | |
|------------------------------|---------------------------------------|
| Tax parcel | P-1 Vehicular Parking District |
| Minor roads | RA-1 One Family Residential District |
| Zoning Districts | RA-1A One Family Residential District |
| Zoning Districts | RA-1B One Family Residential District |
| OS-1 Office Service District | RA-2 One Family Residential District |
| OS-3 Special Office District | |



SOURCE: City of Farmington Hills, 2024
 Oakland County GIS, 2024

DISCLAIMER: Although the information provided by this map is believed to be reliable, its accuracy is not warranted in any way. The City of Farmington Hills assumes no liability for any claims arising from the use of this map.



**Amend PUD 2, 2021, SP 59-5-2024
12-476-008, 27400 Twelve Mile Rd.
Amend Plan to eliminate skilled nursing and
add single family in RA-1B**



- Tax parcel
- Minor roads

Planning Division



SOURCE: City of Farmington Hills, 2024
Oakland County GIS, 2024

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October 17, 2024

City of Farmington Hills
Planning Department

Re: Villas at Pebble Creek (Sarah Fisher) PUD 2nd Amendment
Vacant Property at the Northwest Corner of 12 Mile and Inkster Rd
City of Farmington Hills, MI

Robertson Brothers Homes is pleased to submit for a PUD Amendment to the approved Sarah Fisher redevelopment site located at the northwest corner of 12 Mile and Inkster Road. We are excited to announce that we have acquired the development rights for the entire Sarah Fisher site. Our updated proposal focuses on creating a high-quality community of detached ranch condominiums, eliminating the previously planned skilled nursing facility component. This new plan aims to deliver a cohesive, well-themed residential community with a much-needed single-level housing option. We have received approval from the Historic District Commission for a revised Certificate of Appropriateness, which includes preserving key historic features of the site and repurposing the chapel into a community space for residents.

The PUD had originally been approved for a 100-bed skilled nursing facility located on the southern 15 acres along with sixty-four (64) townhomes and thirty (30) detached condominium homes on the northern 15 acres. The plan was subsequently approved by the City Council for an amendment for a development with the skilled nursing facility and a residential community of fifty-one (51) new for-sale detached condominium ranch style homes with no townhomes. This second amendment now seeks to develop the site only as an enclave of seventy-five (75) detached ranch condominiums, to be named the Villas at Pebble Creek. We feel that each iteration of the plan has been an improvement and more in line with the surrounding neighborhood.

The vision for this community is centered on a philosophy of integration and connection, promoting pedestrian linkages throughout the development and encouraging outdoor activity and celebrating natural beauty. These pathways will seamlessly connect to the City's sidewalk system. The community will offer a high-quality series of detached condominium homes, with two floor plans featuring first-



floor master bedrooms and ranging in size from 1,834 to 2,050 square feet. An optional Cape Cod-style design will allow for the addition of two more bedrooms upstairs. We believe this development will be an attractive option for Farmington Hills residents looking to downsize from larger colonial homes while staying within their community. This will help the City retain these residents, preventing them from moving to neighboring areas. Additionally, as these residents downsize, their current homes will become available for families seeking properties within the Farmington public school district. As previously noted, the skilled nursing facility originally included in the plan has been completely removed and replaced with a lower-impact ranch home community.

The proposed first-floor primary bedroom, age-targeted homes have a significant reduction in impact to traffic and utility infrastructure over traditional single-family homes, due to the fact that the typical household profile will consist of only one or two residents. Fleis & Vandenbrink has provided a trip generation comparison to demonstrate the reduction in traffic volume with the proposed housing product compared to a traditional single family housing product.

Land Use	ITE Code	Amount	Units	Average Daily Traffic (vpd)	AM Peak Hour (vph)			PM Peak Hour (vph)		
					In	Out	Total	In	Out	Total
Single-Family Detached	210	75	DU	774	14	43	57	48	28	76
Senior Adult Housing-Detached	251	75	DU	464	10	21	31	21	14	35
Difference				-310	-4	-22	-26	-27	-14	-41

Over the past few years, we have held several meetings with neighboring property owners. Many of the neighbors had expressed concerns about using Cheswick at the northern end of the property as a secondary access point. We are pleased to report that, due to the integrated design of the development without the skilled nursing facility, there is no longer a need for any connection to Cheswick. Additionally, we have met with representatives from the Hickory Oaks neighborhood, walked the western perimeter of the site, and agreed in principle that the required landscape buffer between properties is unnecessary due to the separation from existing homes west of the creek and the existing lush vegetation on both the Sarah Fisher site and Hickory Oaks properties providing adequate screening. As a result, we have proposed to forego the landscape buffer along the western perimeter and, instead, will plant new trees along Cheswick to replace those that are dead or dying, along with substantial screening along Inkster Road.

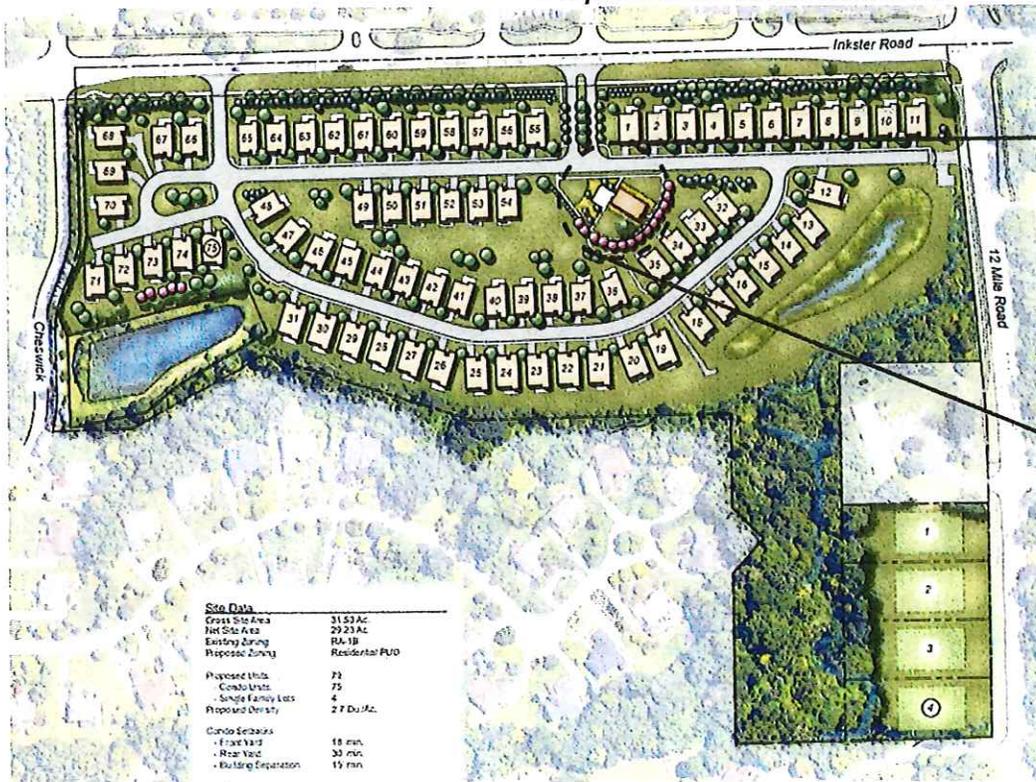
This adjustment will require a waiver from the tree buffer requirement, which we are requesting with this PUD Amendment.

The following is the previously approved plan compared to the new concept plan, and elevations of the proposed housing product.

Approved Plan



Proposed PUD Amendment Plan



Chapel Garden with Gathering Patio & Rain Gardens
40' Scale



The site plan has been thoughtfully designed to have the main entrance from Inkster terminate at the central community grounds, which will include the rehabbed chapel building that will be transformed as a community building amenity. There will be a significant amount of open space (39%) that will be maintained by the Homeowners Association. Sidewalks will be included along one side of the interior roads as is customary with this housing product, and a pathway has been included for easy access to the community building. The plan allows for plenty of parking for residents and guests, as each of the detached condominium homes include a 2-car garage with driveways and street parking.

Product Design

The new development will feature a selection of well-designed and appointed detached condominiums, with two options offering first-floor primary bedrooms:

Single-story ranches (1,834 to 2,050 sq. ft.)

Story-and-a-half Cape Cod homes to include an additional 300 sq. ft. upstairs



These homes are designed to appeal to Farmington Hills residents looking to downsize while remaining in their community, helping the city retain its population rather than losing residents to nearby areas. Furthermore, as these new homes become available there will be more opportunities for families seeking homes within the Farmington public school district.

The condominium designs will seamlessly blend traditional and modern aesthetics, incorporating high-quality materials such as brick, stone and HardieBoard. The plans feature a 3-foot or 5-foot garage stepback, minimizing the visual impact of garage doors and enhancing the overall curb appeal.

SAMPLE FLOOR PLAN AND INTERIOR PHOTOGRAPHS



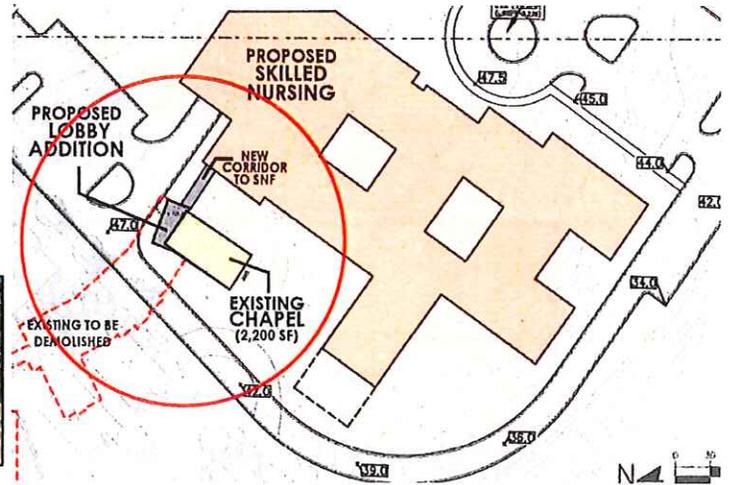
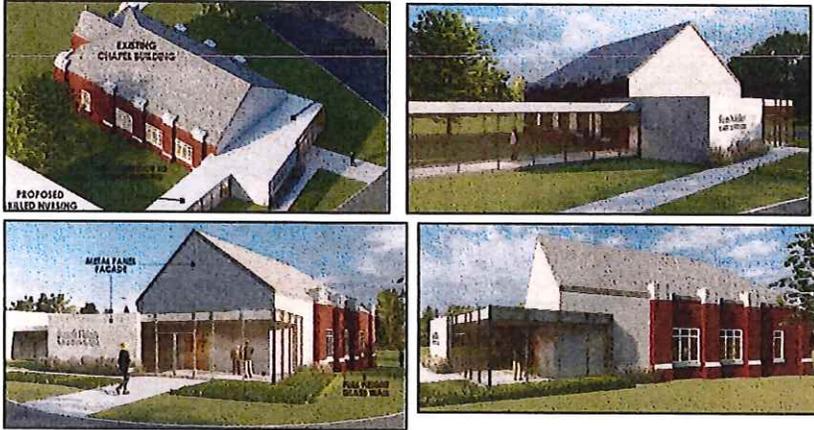
Historic District Elements

The original chapel rehabilitation plan included a metal panel exterior for the northern third of the building, along with a glass lobby addition and a covered corridor linking to the skilled nursing facility. With the change in use to a residential community space, the new proposal features a painted brick accent wall, vertical siding, and a glass entry. The chapel will now be a central feature at the community entrance from Inkster Road, replacing its former secondary position near a parking lot. The building will become a prominent part of the community's amenities and will be maintained by the Homeowners' Association.

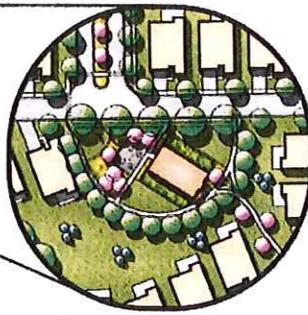
We are committed to meeting the Historic District Commission's preservation requirements. The chapel, entrance gates, and historic marker will remain, with the chapel being re-elevated on its eastern side with a more traditional façade. This will make it a more functional feature within the community, prominently located at the main entrance from Inkster Road. The building will be integrated into the community's common areas and maintained in perpetuity by the Homeowners' Association.

The following are the current approved plans and elevations, followed by the proposed amendments.

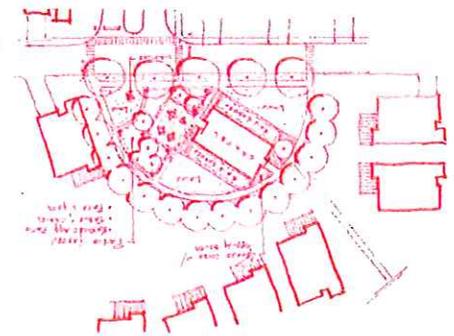
Approved Plans



Robertson Proposal



Chapel Garden with Gathering Patio & Rain Gardens
4/3 Scale





Schedule of Regulations and Modifications The Villas at Pebble Creek - Detached Condominium (75)			
	RA-1B Zoning District	Detached Ranch Condominium	Deviations
Min. Building Setbacks			
Front Setback (Bldg)	50'	18' to Livable 21' to Garage	32' / 29'
Side Minimum	15' Least / 30' Total	15' Total (including 2' cantilever projection)	15'
Rear Perimeter Setback	35'	30' to Building 20' to Deck	5' to Building
Minimum Lot Area	23,400 Square Feet	N/A	N/A
Minimum Lot Frontage	140'	N/A	N/A
Lot Coverage	35%	14.5% Overall	In Compliance
Principal Building Height to Midpoint	2 Stories/30 Feet	1.5 Stories / 30 Feet	In Compliance
Landscape Buffer	8 Trees and 6 Shrubs per 100'	None, due to Existing Vegetation Along Perimeter	8 Trees and 6 Shrubs per 100'

Schedule of Regulations and Modifications The Villas at Pebble Creek - Detached Single Family (4)			
	RA-1B Zoning District	Single Family	Deviations
Min. Building Setbacks			
Front Setback (Bldg)	50'	50'	In Compliance
Side Min. Principal	15' Least / 30' Total	15' Least / 30' Total	In Compliance
Rear Setback Principal	35'	100'	In Compliance
Minimum Lot Area	23,400 Square Feet	30,000 Square Feet	In Compliance
Minimum Lot Frontage	140'	111'	29'
Lot Coverage	35%	35%	In Compliance
Principal Building Height to Midpoint	2 Stories / 30 Feet	2 Stories / 30 Feet	In Compliance



Robertson Brothers Homes is pleased to present the revised plan for the Villas at Pebble Creek residential site plan (fka Sarah Fisher) for PUD Amendment consideration by the Planning Commission. We believe the development will ultimately become a point of pride for responsible development in a solid area, retain the historical significance of the property, and importantly will provide for housing needs in the community.

Please let me know if any additional information is required at this time.

Thank you.

Respectfully,

A handwritten signature in blue ink, appearing to read 'Tim Loughrin', is written over a light blue horizontal line.

Tim Loughrin | Vice President of Land Acquisition

Robertson Brothers Homes

6905 Telegraph Rd, Suite 200, Bloomfield Hills, MI 48301

Direct Dial: 248.282.1428 | Mobile: 248.752.7402

tloughrin@robertsonhomes.com

November 13, 2024

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

PUD Amendment/Site Plan/Landscape Plan/Tree Removal

Case: PUD 2, 2021
Site: 24700 12 Mile Rd (Parcel ID 22-23-12-476-008)
Applicant: Robertson Brothers
Application Date: 10/15/2024
Zoning: RA-1B One Family Residential District (26,000 square feet)

We have completed a review of the application for final PUD qualification referenced above and a summary of our findings is below. Items in **bold** require specific action by the Applicant.



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SUMMARY OF FINDINGS

Existing Conditions

1. **Zoning.** The site is currently zoned RA1B One Family Residential District (26,000 square feet).
2. **Existing site.** The site is 31.5 acres and is developed with an abandoned orphanage consisting of 15 buildings. Pebble Creek runs along the western edge of the property, and through the southern portion.
3. **Adjacent Properties.**

Direction	Zoning	Land Use
North	RA1B	Residential access street
East (Southfield)	RT Attached Single Family/OS Office Service	Townhomes/medical office
South	RA1	Single family homes
West	RA1B	Single family homes

4. **Site configuration and access.** The site is currently accessible from Inkster Road via five driveways.

PUD Amendment:

1. The applicant proposes to amend the PUD to remove the 100-bed skilled nursing facility that was part of the original approval and instead now proposes a fully residential project with 75 detached ranch homes. The chapel that was to be preserved in the approved PUD plan will still be preserved in this new plan, and will be part of a common park area in the center of the development.
2. Per Section 34-3.20.5.G, “Proposed amendments or changes to an approved PUD plan shall be submitted to the planning commission. The planning commission shall determine whether the proposed modification is of such minor nature as not to violate the area and density requirements or to affect the overall character of the plan, and in such event may approve or deny the proposed amendment. If the planning commission determines the proposed amendment is material in nature, the amendment shall be reviewed by the planning commission and city council in accordance with the provisions and procedures of this section as they relate to final approval of the Planned Unit Development.”
3. As the planning commission considers whether the amendment constitutes a minor or major amendment to the PUD, it should consider that the proposed signage is not ordinance-compliant and requires the approval of deviations from ordinance standards.
4. **This is a major amendment to the PUD, and the PC will set a public hearing on the amendment and make a recommendation to Council.**
5. The applicant has submitted a site plan for the new project.

PUD Qualification:

Under Section 34-3.20.2, the Planning Commission may make a determination that the site qualifies for a PUD based on the following criteria and procedures. **There is an approved PUD for this site; this new**

plan is an amendment to the approved plan that changes the use mix and number of units in the project.

Site Plan & Use:

1. **Summary of Proposed Use.** The approved PUD plan called for two primary use areas on the site: a 100-bed skilled nursing facility on the southern portion of the site, and 51 detached ranch homes on the northern portion. The residential portion has been substantially altered, however. The new plan removes the skilled nursing facility and presents an entirely residential plan, with 75 detached ranch homes targeted at seniors. Additionally, four individual single-family lots are proposed to be split off along 12 Mile Road for separate development. All buildings currently on the site will be removed, except for the existing historic chapel; the corner sign will also remain as a landmark.
2. **Land Use Plan.** The plan breaks down the land uses proposed for the property as follows (the areas dedicated to open space are no longer listed separately from the areas planned for development:
 - a. **Detached Residential (called Phase 1B):** 17.15 acres net
 - b. **Separate single-family lots:** 2.85 acres net
 - c. **Natural Preservation:** 11.5 acres. About 36.5% of the site is assigned to open space uses and preservation of the existing landscape.

The net density of the full site by unit is 2.7 dwelling units per acre (see below for comments on bedroom counts/ordinance density).

3. **Historic Designation.** The parcel is a designated historic site. The applicant proposes to demolish most of the buildings, preserving the existing chapel to be incorporated into the skilled nursing facility. The Historic District Commission has issued a notice to proceed, subject to the following:
 - a. Materials from demolished buildings will be stockpiled for future re-use.
 - b. The proponent will not proceed with any demolition until all other associated approvals are received.
 - c. Any building approved for demolition but left standing will remain subject to Historic District Commission review.
4. **Master Plan.** The master plan designates the site single family residential. The residential density map identifies this parcel as low density, which is consistent with current zoning. The 2009 Master Plan also identified this parcel as Special Residential Planning Area No. 3 and set the following goals and policies for the parcel:
 - Maintain the historic character of the site
The chapel and corner sign are proposed to remain, and the site's southwestern portion is proposed to remain in its natural state.
 - Arrive at a plan for development that will be compatible with abutting residential uses, including a suitable transition area of single-family to existing residential use
The plan proposes two uses: skilled nursing and detached single-family residential in the area closest to the adjacent neighborhood.
 - Pay special attention to traffic control because of intersection, topography of the roads and the proximity of the bridge on Twelve Mile Road

The site plan reduces the number of driveways to three and attempts to either align the new drives with driveways across Inkster or move them away from other driveways to avoid turning conflicts.

- Consider the PUD Option as a means to accommodate the complexities of the site
The applicant is seeking approval of a major amendment to an approved PUD.
- Work with the developer on suitable plans that will achieve the goals
The PUD process is designed to give the planning commission input into the design of the site.
- Feature the historic buildings on the site
One historic building is preserved in the plan.
- Protect the environment and drainage pattern of Pebble Creek, which is part of the Green River Corridor
Development is kept away from Pebble Creek, and the narrative refers to a plan to dedicate seven acres around the creek for conservation.
- Carefully control the location of access for traffic management purposes
Per the comment above, the applicant appears to have considered access management issues in the conceptual design. See comments below on access to the residential portion of the project.
- Emphasize vehicular access from Inkster Road because of grade changes and high traffic volume on Twelve Mile Road
All access is shown from Inkster on the site plan.
- Require widening of Inkster Road if there is any non-residential development
The applicant proposes a skilled nursing facility and detached residential development.
- Establish residential lots or other suitable transition abutting the existing lots to the west
The applicant suggests that smaller detached units and natural vegetative screening will serve as the transition to single family housing to the west.

The City's newly adopted master plan did not include this site as a special study area due to the previous approval of the PUD.

5. **Density.** The applicant is proposing 79 total units, four of which would be split off from the overall development on their own lots.
 - a. **Split lots.** The four split lots along 12 Mile Road are each 31,080 square feet with a lot width of 111 feet. While the minimum lot size of 26,000 square feet in the RA-1B district is met by these units, the 140-foot minimum lot width of the underlying district is not met. **This requires relief from ordinance standards under the PUD, which has been requested.**
 - b. **Residential.** The applicant proposes 75 detached single-family ranch units in the 17.15-acre residential use area of the plan. The underlying RA-1B district requires minimum lot size of 26,000 square feet, or 1.675 units per acre. Proposed density is 4.4 units/acre within the portion of the site devoted to the ranch units. **This exceeds the underlying permitted density and requires relief from ordinance standards. Note that the first approved version of this plan included 94 units in a 14-acre area (6.7 units/acre), and the most recently approved version had 51 units over 14 acres (3.6 units/acre).**

6. **Dimensional Standards of the RA-1B District (as applied to the 75-unit project; see above for dimensional standard notes for the four splits).**

Standard	Required	Proposed
Lot Size 34-3.1.2.D	23,400 sq ft min/26,000 sq ft min average	N/A – no individual lots proposed
Lot width 34-3.1.2.D	140 ft min	1673 ft
Lot coverage 34-3.1.2.D	35% max	14.5%
Front setback 34-3.1.2.D	50 ft	50 ft from 12 Mile & Inkster
Rear setback 34-3.1.2.D	35 ft	48 ft
Side setback 34-3.5.2.C	Front yard setback of district (yard abuts side yard) – 50 ft	50 ft from 12 Mile Road 30 ft from Cheswick Right-of-Way (relief needed)
Building height 34-3.1.2.D	Max. 30 ft	Detached Single-Family: 30 ft

7. **Mechanical Screening.** Mechanical equipment on the ground shall be screened per Section 34-5.1.4.D.
8. **Dumpster Enclosure.** Waste management for the residential units is proposed to be handled individually by unit, with curb-side pickup.
9. **Parking.** Each single-family unit has a two-car garage, as well as a two-car driveway.

Use	Standard	Proposed
Single-Family Homes	2 spaces per unit = 150 spaces	150 + spaces (two-car garages with driveways)

10. **Landscaping (34-5.14).**

Item	Required		Proposed/Comments	
Minimum distance from the property line (34-5.14.C.ii)	4 ft from the property line for trees and large shrubs		Compliant	
Minimum parking lot island area	Minimum of 180 square feet; 3 feet minimum radius at the trunk of the tree		Standard is met by all in-lot landscape areas	
Cost estimate	Not required		--	
Minimum size and spacing requirements (34-5.14.F)	Size	Center to center distance (max)		
	(Height/width)	groupings	rows	
• Evergreen Trees	8 ft. height	20 ft.	12 ft.	--
• Narrow Evergreen Trees	5 ft. height	10 ft.	5 ft.	--

Item	Required			Proposed/Comments
• Large Shrubs	30 in. height	10 ft.	5 ft.	--
• Small Shrubs	24 in. width	4 ft.	4 ft.	--
• Large Deciduous	3 in. caliper	30 ft.	-	Standard is met
• Small deciduous trees	2 in. caliper	15 ft.	-	--
• Hedge shrubs	24 in. height	3 ft.	3 ft.	Standard is met
Canopy Trees	Shall be large deciduous. PC may permit large evergreens			Standard is met
Minimum number of parking lot trees (34-5.14.4.C)	159,943 sq ft of hardscape (internal road)/2,800 = 57			57
Parking lot screening from public thoroughfare (34-5.14.5)	No parking lot present			N/A
Wall or Berm (34-5.15)	Required when abutting a residential district. (See 34-5.15)			None proposed; detached single-family use is closest to adjacent neighborhood.
Buffer to Single-Family (34-5.14.6) (no longer a buffer from multiple to single, but buffer was provided on last approved plan)	i. Two (2) large deciduous trees; ii. Four (4) small deciduous trees; iii. Six (6) large shrubs; iv. Two (2) evergreen trees. Multiplied by 0.8 for 35-foot buffer yard 800 linear feet: 13 large deciduous 26 small deciduous 39 large shrubs 13 evergreens			None provided and relief sought; see applicant's notes on pages two and three of the narrative
Tree replacement (34-5.18)	Per Section 34-5.18			See below

204 total deciduous, 150 total evergreens

11. **Tree Removal.** The submission package includes the required tree survey and inventory, as well as the required superimposed survey.

Removed	Required Replacements	Provided
Regulated Trees: 85	85	See total below
Landmark Trees: 60 with total dbh of 1,872 inches	1,872 x 0.25 = 468 inches 468/3 = 156 3-inch caliper trees	See total below
Total:	241	241

21 trees are listed with a health score too low to require replacement.

12. **Traffic Study.** We defer to the city's traffic engineer for a review of the trip generation analysis provided by the applicant.

13. **Lighting.**

- c. **Operation hours (34-5.16.3.B.v.).** Standards related to operating hours are met.

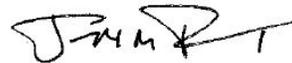
- b. **Illumination Levels.** Lighting is limited to building-mounted residential fixtures providing very low light levels near the driveway and primary entrance to each unit.
14. **Vehicle Circulation & Access.** Circulation is provided by an internal access road with a boulevarded connection to Inkster, plus a secondary access, also to Inkster. There is also a gated emergency access drive to 12 Mile Road. The previously approved connection to Cheswick has been removed from the plan.
15. **Pedestrian Circulation.** Sidewalks are provided on one side of the street through most of the development, **though they are not provided at the north end, where the road stubs and has a small loop.** The width of these sidewalks, which are curb-tight, is not provided on the plans.
16. **Relief Sought from Ordinance Standards:**
- d. Permit detached single-family at requested density of 75 units.
 - e. Permit reduced exterior side setback along Cheswick (30 feet).
 - f. Permit no installation of western buffer plantings.
 - g. 111-foot lot width for splits where 140 feet is required.

We are available to answer questions.

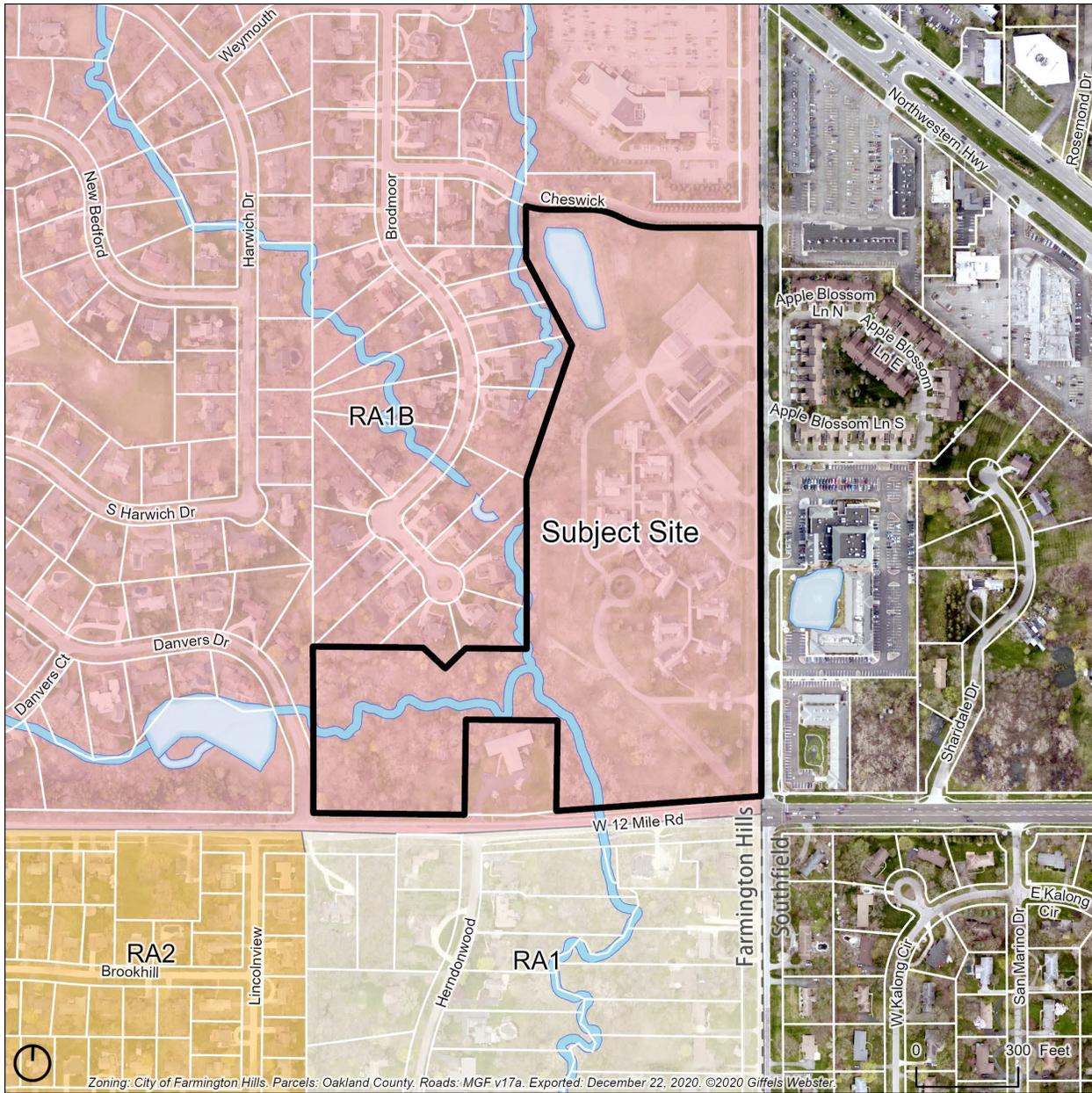
Respectfully,
Giffels Webster



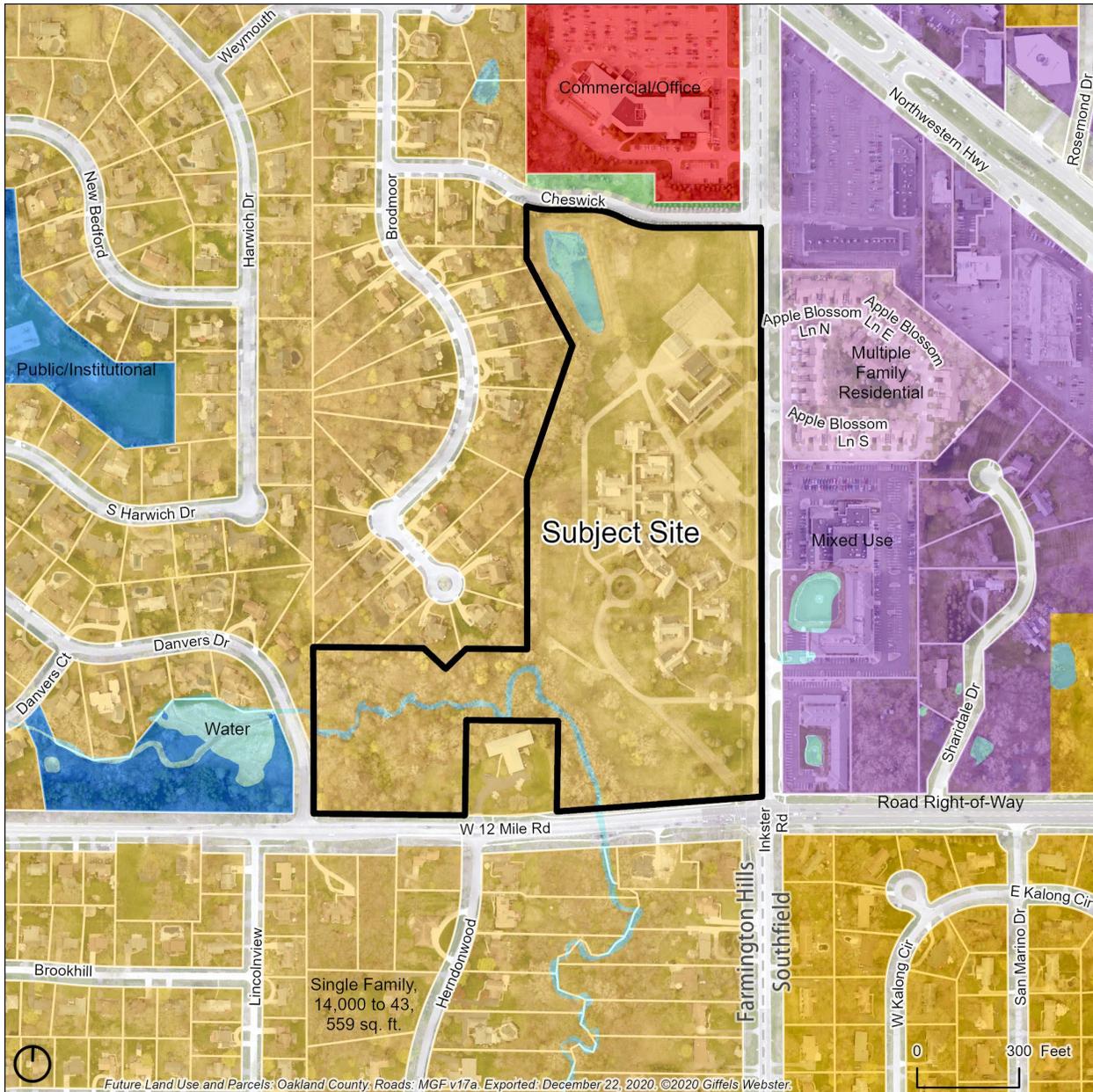
Jill Bahm, AICP
Partner



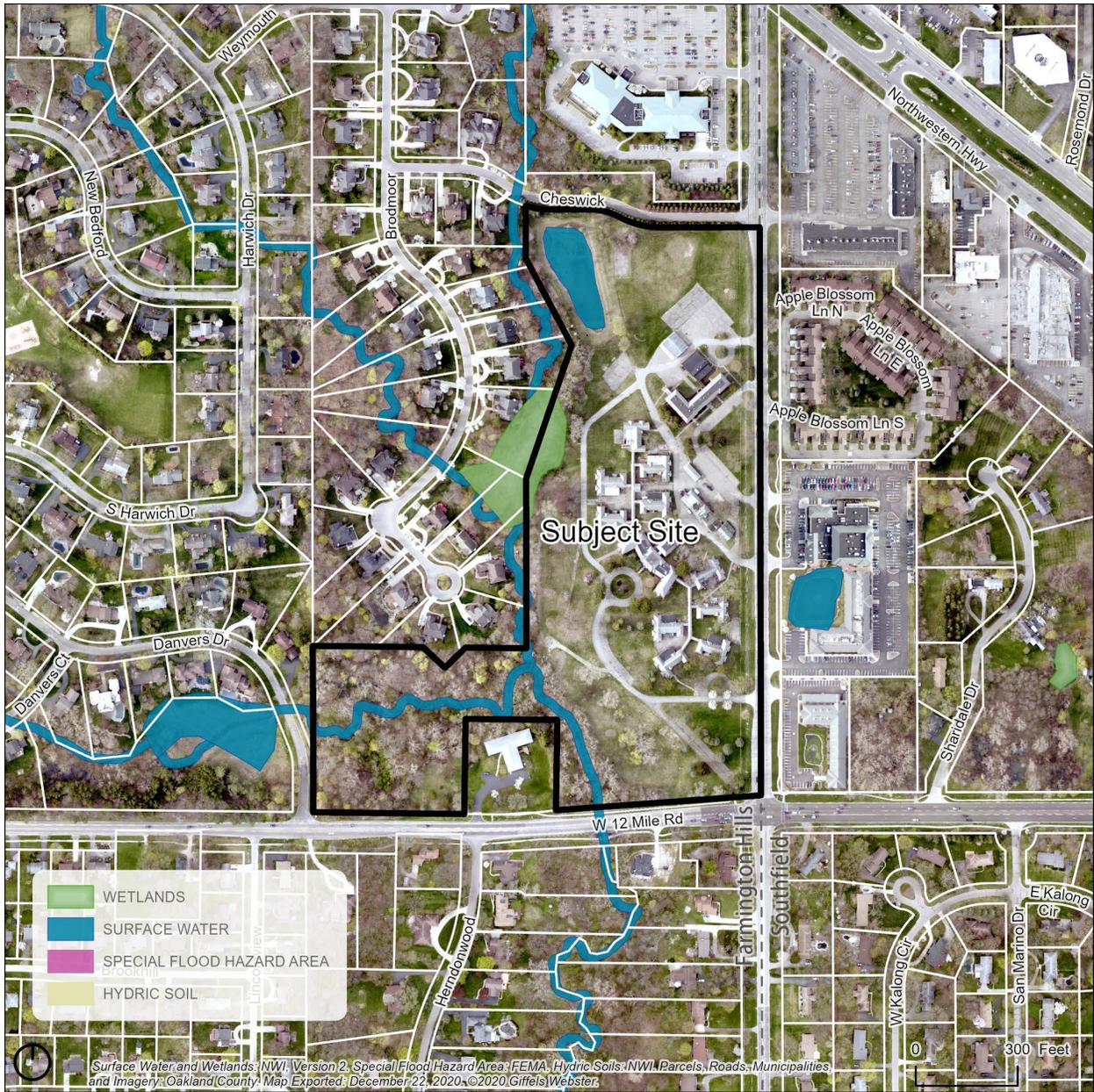
Joe Tangari, AICP
Principal Planner



Current zoning



Master Plan designations for this area.



Wetlands & surface water

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DEPARTMENT OF PUBLIC SERVICES
JACOB RUSHLOW, P.E., DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: November 12, 2024
TO: Planning Commission
FROM: James Cubera, Engineering 
SUBJECT: Sarah Fisher Home
Proposed Amended PUD2, 2021
27400 12 Mile Road
PJ#: 12-21-70
SP#: 59-05-2022
22-23-12-276-008

This office has performed a preliminary review of the above referenced proposed amended PUD plan submitted to the Planning Department on October 17, 2024. The plan is significantly different than the previously submitted one. Our preliminary comments are as follows:

1. A public sanitary sewer exists on site. It was utilized to service the previous development on the property. The proponent has indicated that they plan on abandoning portions of this public sewer, relocating other sections, and extending public sewer to service the new development. The proponent will be obligated to follow through with the appropriate abandonment procedures of the City, which include vacation of the existing easements as well as addressing proper abandonment procedures of the pipe system itself. This can be addressed during construction review. Formal easement abandonment must be completed before construction approval.

The plan identifies a relocation of a public sanitary pump station by others. It is our understanding that the proponent is working out the details of this as well as capacity concerns and financial obligations with the Oakland County WRC and City management. This needs to be finalized prior to moving forward.

Regarding the specifics of the site sanitary sewer layout our comments are similar to those of the last submittal.

They include

- A) Provide basement gravity sanitary sewer service to the proposed development.
- B) Extend public sanitary sewer with gravity basement service for any approved units on 12 Mile Road frontage (units 1-4 west of the Pebblecreek crossing).

- C) Provide a public sanitary sewer stub on the north side of 12 Mile east of the Pebblecreek crossing of 12 Mile Road with adequate depth to allow for this stub to be extended in the future to provide basement gravity service to the upstream service area of Farmington Hills properties on Inkster Road south of 12 Mile Road.
 - D) Provide a public sanitary sewer stub on the north side of 12 Mile Road in the 12 Mile Road ROW west of the Pebblecreek crossing of 12 Mile Road with a manhole at the Herndonwood intersection with adequate depth to allow for it to be extended in the future to provide basement gravity service to the upstream service area of properties on Herndonwood.
2. An 8" water main exists onsite. The proponent is showing a design that apparently abandons it and provides a new public water main. This is acceptable. Conceptually the new layout meets City standards. Other than a necessary extension to better service unit 68 if this layout moves forward it may be appropriate to move the northern loop to Inkster Road such that it extends between units 67 and 68. Additionally, it is necessary that the proponent more specifically identify in detail the watermain being abandoned, the easements being abandoned and the methods used to abandon it, cap it or reconnect portions of the existing watermain system.

Similar to the sanitary sewer, any water main abandonment must follow appropriate easement vacation procedures as well as pipe abandonment procedures of the City/County. All formal water main abandonments must occur before construction approval. This can be addressed during construction review.

3. The site plan identifies two curb cuts to Inkster Road with one proposed as a boulevard. We question whether a boulevard approach is necessary. The plans also identify an emergency connection to the proposed driveway servicing the pump station on 12 Mile Road. This is not something that we recommend. We will require that the proponent submit a traffic impact statement addressing this as well as the need for further lane improvements on Inkster Road. The proponent's Traffic Engineer must contact the City's Traffic Engineer to discuss what other issues need to be addressed.
4. Regarding the internal traffic layout, 50' turning radius must be provided at all roadway bends. We question whether this is being provided at the circle road servicing units 66 thru 75. Additionally, the proposed stub road extension servicing units 70 thru 72 at the north end of the site and the stub road for units 8 thru 12 at the south end of the site are not standard or acceptable designs. They create turn around and traffic safety issues particularly for fire and police as well as delivery vehicles. The plan should be revised to eliminate the stub roads.

Along with above unit 68 is provided little frontage on the private road and it should be repositioned such that it does not present itself as a hidden rear yard residence.

Regarding the private road system, it must be built to public standards and will be inspected accordingly.

5. Public sidewalk installation will be required along the entire Inkster Road frontage. This walk shall be placed such that the west walk line shall be one foot east of the ultimate 60' right-of-way.

For that portion of the 12 Mile Road frontage that does not have sidewalk (between Danvers Dr. and 27600 12 Mile Road) it shall also be placed one foot south of the ultimate 60' right-of-way including across the frontage of what is identified as being units 1-4 along 12 Mile Road west of the Pebblecreek crossing and extending offsite to the driveway servicing 27600 Twelve Mile Road.

6. With reference to these units 1-4 a curb cut access to 12 Mile Road needs to be identified at this time. It is recommended that they share one common curb cut with a marginal access road across the frontage. This is consistent with what was done on the Preserves of Meadowbrook units 58-61 on Eight Mile Road east of I-275. It is also recommended that these 4 units enter into an agreement with the property to the east to allow for a future shared access. This agreement can then be triggered when any future development at 27600 12 Mile Road occurs.

In lieu of the above, we question whether these 4 units can be absorbed into the interior development such that additional curb cuts to 12 Mile are avoided.

7. Storm water detention is required in accordance with City of Farmington Hills Engineering Standards. The plans identify a pond with a mechanical treatment structure. Within the last year the City has adopted the WRC standards for detention, restriction and storm water quality. These plans must conform to those requirements. Detailed calculations and support must be provided confirming the design. These will be reviewed during Engineering construction review.
8. Attached with this review are comments from the City's inhouse Environmental Engineer Tyler Sonoga. These must be addressed. Please note that he can be reached at 248-871-2533.
9. The onsite storm system will be reviewed during engineering review in more detail. It should be noted that all units must tie their sump lines into a gravity storm sewer directed ultimately to the detention pond.
10. The edge of this site at the west end and south end is within the 100-year floodplain. Any involvement with the 100-year floodplain will require a permit from EGLE.
11. Our office notes that an existing detention pond is shown at the northwest corner of the property. A review of the storm water agreement indicates that the maintenance of this pond appears to be with the Association for Hickory Oaks. Access to this pond through the proposed roadway network of this PUD must be provided. This will necessitate the providing of an access easement.

12. Along with the above we question whether it is feasible to incorporate this Hickory Oaks offsite pond with this new development's pond at the south end near 12 Mile Road such that there is only one larger pond. We ask that this be explored.
13. The ultimate right-of-way on Inkster Road is 120'. This includes 60' from the center of the section line both east and west of it. It is suggested that the proponent dedicate the ultimate 60' right-of-way on Inkster Road for that portion west of the section line.

For 12 Mile Road, it is unclear whether the 60' right-of-way on 12 Mile Road exists. Again, this would be 60' from the section line northward. This needs to be confirmed, otherwise the City suggests that this also be dedicated to the City at this time.

14. It is suggested that the proponent and their engineer meet with the City Engineering staff in person or via Zoom or some other virtual format to discuss this site in further detail.
15. We recommend that all engineering items be specifically addressed in the City PUD agreement before it is considered by City Council.



INTEROFFICE CORRESPONDENCE

DATE: November 11, 2024
TO: Planning Commission
FROM: Jason Baloga, Fire Marshal
SUBJECT: Amended PUD 2-2021/Site Plan 59-5-2022 (Sarah Fisher Mixed Use Campus)

Considerable change has occurred from the previous version of the PUD Plan. Upon review of the new plan, it appears that the following is in violation of Ordinance Chapter 12 Section 12-11: Fire Department Site Plan Review and Design Standards:

- Site Access: sites must be designed to accommodate fire apparatus with a 50' turning radius. The 50 fifty feet shall be measured to the center line of the roadway.

Once the above is satisfied, the Fire Department will have no objection contingent upon compliance with the following:

1. Generally dead ends longer than 100' shall not be allowed.
2. Specific gate detail shall be provided to the Fire Department and Engineering for review and approval for all gates proposed.
3. Chapter 12 Section 12-9 Street Obstructions:
 - a. Gate/Knox key yelp for emergency access is proposed on Twelve Mile and will require Fire and Engineering Department approvals. Please provide a detailed submittal to the Fire Department to ensure that International Fire Code, permit and acceptance testing is adhered to.
 - b. Gate design will affect minimum acceptable road width for emergency access off Twelve Mile.
4. The City of Farmington Hills and the Fire Department shall not be responsible for any damage which occurs to the gate.

5. Chapter 12 Section 12-11 (2) Hydrants: it appears that hydrants meet the minimum distance as required in the City Ordinance. Special attention shall be given to the following and discussed in detail during the Engineering review:
 - a. “Wherever practical, the hydrants shall be provided at intersections to provide ease of stretching fire hose in more than one direction.”
 - b. Watermain shall be looped according to Engineering specifications to ensure adequate water supply.
6. No parking fire lane signs shall be posted and strictly enforced.
7. Proponent may find it beneficial to provide residential sprinklers in residential homes to increase safety and increase public benefit.

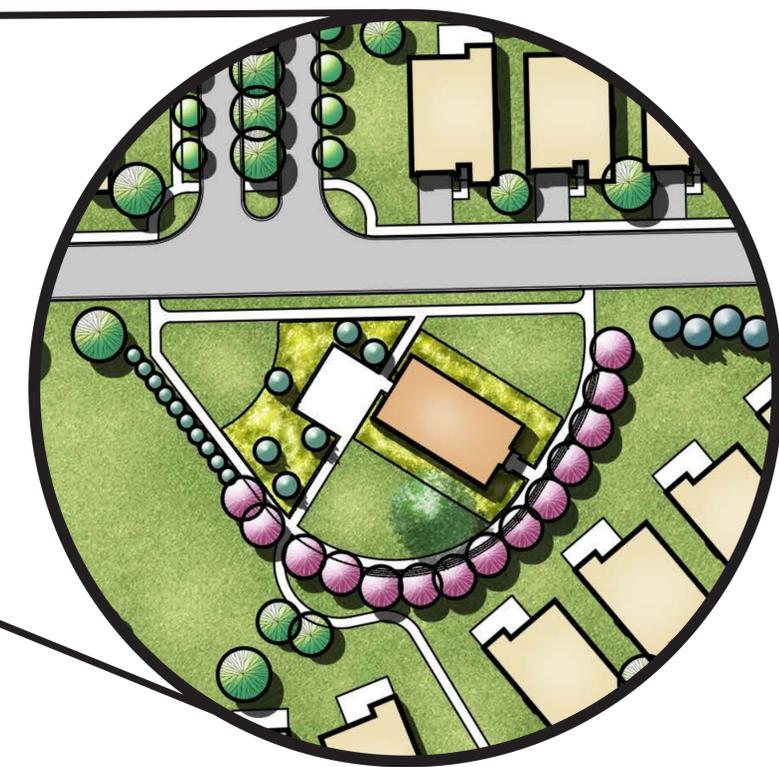
A handwritten signature in blue ink, appearing to read 'Jason Baloga', is positioned above the printed name.

Jason Baloga, Fire Marshal



Site Data:

Gross Site Area:	31.53 Ac.
Net Site Area:	29.23 Ac.
Existing Zoning:	RA-1B
Proposed Zoning:	Residential PUD
Proposed Units:	
- Condo Units:	75
- Single Family Lots:	4
Proposed Density:	2.7 Du./Ac.
Condo Setbacks:	
- Front Yard:	18' min.
- Rear Yard:	30' min.
- Building Separation:	15' min.
Lot Dimensions:	
- Lot Area:	31,080 sf min.
- Lot Width:	111' min.
- Lot Depth:	280' min.
- Lot Setbacks:	
Road Width:	
	20' / 27'
Road Length:	
- 20' width:	424 LF
- 27' width:	3,241 LF
Road Length per Unit:	46.39 LF/Du.
Total Open Space:	11.5 Ac. (39% of Site Area)

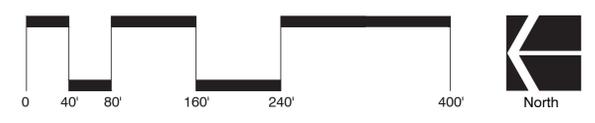


*Chapel Garden with Gathering Patio
 & Rain Gardens
 40 Scale*

Villas at Pebble Creek

Farmington Hills, Michigan
 Robertson Brothers Homes

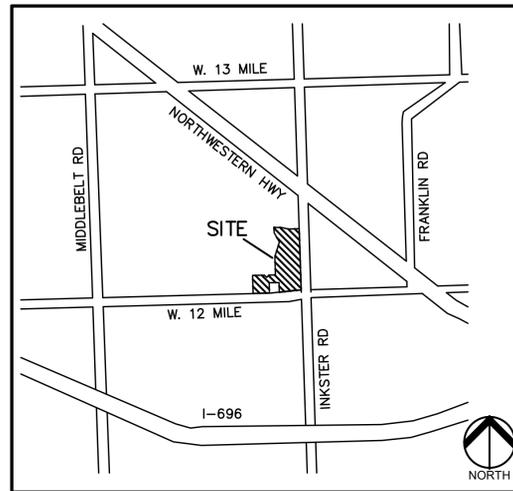
October 2024



MAJOR AMENDMENT TO PUD

THE VILLAS AT
Pebble Creek

PART OF THE SE 1/4 OF SECTION 12, T.01N., R.08E.
FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN



LOCATION MAP
NO SCALE

INDEX OF DRAWINGS	
NUMBER	TITLE
	COVER SHEET
C-1.0	BOUNDARY SURVEY
C-2.0	TOPOGRAPHIC SURVEY
C-3.0	PROPOSED LAND USE PLAN
C-4.1	GRADING PLAN - NORTH
C-4.2	GRADING PLAN - SOUTH
C-5.1	UTILITY PLAN - NORTH
C-5.2	UTILITY PLAN - SOUTH
C-5.3	UTILITY PLAN - WEST
C-6.0	PRELIMINARY DRAINAGE PLAN
C-7.0	FIRE TRUCK TURNING PLAN
C-8.1	EASEMENT PLAN - NORTH
C-8.2	EASEMENT PLAN - SOUTH
L-1.1	LANDSCAPE PLAN
L-1.2	LANDSCAPE PLAN
L-2.0	LANDSCAPE DETAILS
T-1.0	PROPOSED TREE PRESERVATION PLAN
T-1.1	PROPOSED TREE PRESERVATION PLAN
T-1.2	PROPOSED TREE PRESERVATION PLAN
T-1.3	PROPOSED TREE PRESERVATION PLAN
T-1.4	SUPERIMPOSED TREE PRESERVATION PLAN
T-1.5	SUPERIMPOSED TREE PRESERVATION PLAN
T-1.6	SUPERIMPOSED TREE PRESERVATION PLAN
24-35018	EXTERIOR PHOTOMETRIC PLAN
24-35018	EXTERIOR PHOTOMETRIC PLAN
24-35018	EXTERIOR PHOTOMETRIC PLAN
24-35018	EXTERIOR PHOTOMETRIC PLAN
	ARCHITECTURAL PLANS
A-3	RALEIGH - EMERSON ELEVATION
A-4	RALEIGH - EMERSON ELEVATION
A-3	RALEIGH - BARRINGTON ELEVATION
A-4	RALEIGH - BARRINGTON ELEVATION
A-3	RALEIGH - ALBANY ELEVATION
A-4	RALEIGH - ALBANY ELEVATION
FB-1	RALEIGH - BASEMENT PLAN
A-2	RALEIGH - FLOOR PLAN
A-3	WILMINGTON - ELEVATION A
A-4	WILMINGTON - ELEVATION A
A-3	WILMINGTON - ELEVATION B
A-4	WILMINGTON - ELEVATION B
A-3	WILMINGTON - ELEVATION E
A-4	WILMINGTON - ELEVATION E
A-2	WILMINGTON - FLOOR PLAN

DESIGN TEAM

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EMAIL: NBIRMEIN@PEAGROUP.COM



REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	10/15/2024



LEGEND

	EXISTING TREES
	EXISTING TREES TO BE REMOVED
	TREES TO BE SAVED WITH TREE PROTECTION FENCE

STANDARD TREES	
STANDARD TREES REMOVED:	85 (1:1 REPLACEMENT)

LANDMARK TREES	
LANDMARK TREES REMOVED:	60
LANDMARK TREE DBH REMOVED:	1872 (25% DBH REPLACEMENT)
REPLACEMENT DBH REQUIRED:	468 INCHES

TREE REPLACEMENT REQUIREMENTS:

WOODLAND TREES: REPLACE REMOVED TREES AT 1:1 = 85 TREES REMOVED, 85 TREES REQUIRED FOR REPLACEMENT.

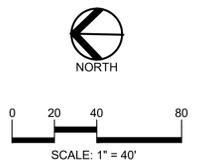
LANDMARK TREES (24" CAL. OR GREATER): 60 TREES REMOVED WITH A TOTAL OF 1872" CAL.

AT 25% REPLACEMENT = 468" CAL. REQUIRED FOR REPLACEMENT / 3" CAL. TREES = 156 TREES REQUIRED FOR REPLACEMENT.

241 TOTAL REPLACEMENT TREES REQUIRED
(SEE T-1.2 FOR TREE PRESERVATION LIST)

NOTE:

- TREES TO BE REMOVED MUST BE MARKED IN THE FIELD WITH RED PAINT OR FLAGS AND INSPECTED BY THE PLANNING OFFICE PRIOR TO ANY TREES BEING REMOVED.
- A TREE PERMIT MUST BE OBTAINED FROM THE PLANNING OFFICE PRIOR TO ANY TREES BEING REMOVED.



CAUTION!!
THE LOCATION AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED 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
ROBERTSON BROTHERS HOMES
6905 TELEGRAPH RD, STE 200
BLOOMFIELD HILLS, MI 48301

PROJECT TITLE
Double Creek
PART OF THE SE 1/4 OF SECTION 12, T.01N, R.06E, CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN

REVISIONS	

ORIGINAL ISSUE DATE:
OCTOBER 15, 2024

DRAWING TITLE
PROPOSED TREE PRESERVATION PLAN

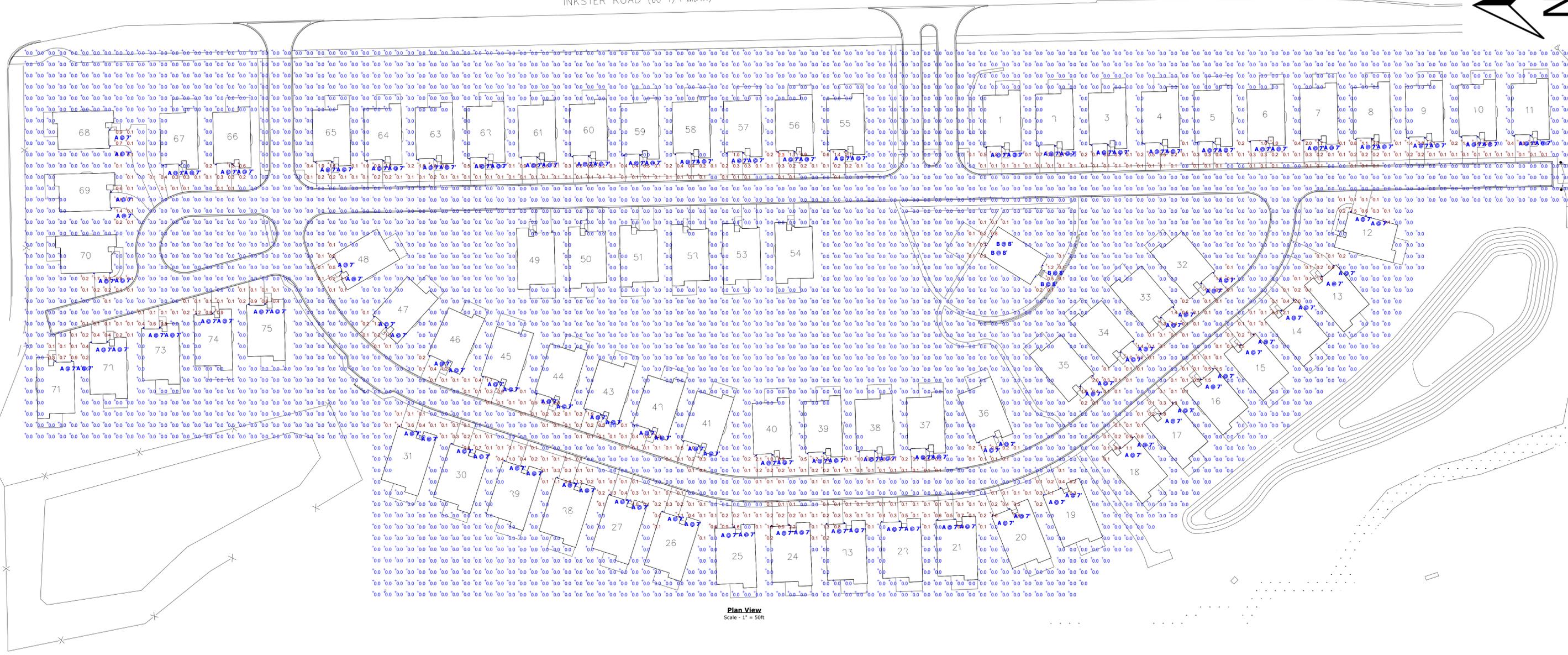
PEA JOB NO.	2015-204
P.M.	JBT
DN.	SS
DES.	NB
DRAWING NUMBER:	



S:\PROJECTS\2015\20150804 SRAW FISHER PLD - PAVING\SITE PLANS\T-1.0\TREE PRES-10204.dwg

TAG NO.	CODE	DBH	COMMON NAME	LATIN NAME	EXTRA TRUNKS	CLASS	CONDITION/ FACTOR					OVERALL RANK	SAVE / REMOVE	REPLACE	
							trunk	growth rate	structure	insects/ diseases	crowd dev				life exp.
1	NM	13	Norway Spruce	Acer platanoides		WOODLAND	4	3	2	5	1	2	17	S	-
2	CA	8	Crab Apple	Malus coronaria		WOODLAND	5	3	3	5	3	3	22	S	-
3	NM	14	Norway Spruce	Acer platanoides		WOODLAND	4	4	3	5	1	2	19	R	REPLACE
4	CA	6	Crab Apple	Malus coronaria		WOODLAND	2	4	2	5	1	2	16	S	-
5	NS	33	Norway Spruce	Picea abies		LANDMARK	5	4	5	4	5	4	27	S	-
6	NS	20	Norway Spruce	Picea abies		LANDMARK	5	4	4	5	4	3	25	S	-
7	WV	37	Weeping Willow	Salix babylonica		LANDMARK	3	3	1	1	2	2	11	R	-
8	EE	44	Siberian Elm	Ulmus pumila		LANDMARK	1	3	1	1	3	2	10	R	-
9	BS	16	Blue Spruce	Picea pungens		WOODLAND	4	1	2	3	1	1	13	R	-
10	BS	18	Blue Spruce	Picea pungens		WOODLAND	4	2	2	3	1	1	13	R	-
11	RP	24	Red Pine	Pinus resinosa		LANDMARK	3	3	4	1	4	2	17	R	REPLACE
12	BS	16	Blue Spruce	Picea pungens		WOODLAND	3	1	2	1	3	1	11	R	-
13	BS	21	Blue Spruce	Picea pungens		LANDMARK	3	2	2	3	3	1	14	R	-
14	BS	22	Blue Spruce	Picea pungens		LANDMARK	3	3	3	3	4	2	18	R	REPLACE
15	BS	25	Blue Spruce	Picea pungens		LANDMARK	5	4	4	3	4	3	23	R	REPLACE
16	BS	14	Blue Spruce	Picea pungens		WOODLAND	3	3	4	3	4	2	19	R	REPLACE
17	NS	15	Norway Spruce	Picea abies		WOODLAND	3	3	3	3	4	2	17	R	REPLACE
18	NS	13	Norway Spruce	Picea abies		WOODLAND	4	2	2	2	3	1	14	R	-
19	BS	12	Blue Spruce	Picea pungens		WOODLAND	3	3	3	3	1	1	14	R	-
20	NS	26	Norway Spruce	Picea abies		LANDMARK	3	2	3	3	3	2	16	R	REPLACE
21	BS	17	Blue Spruce	Picea pungens		WOODLAND	4	2	3	3	4	2	18	R	REPLACE
22	BW	26	Black Walnut	Juglans nigra		LANDMARK	3	3	2	1	4	2	14	R	-
24	PE	16	Peach	Prunus persica		WOODLAND	3	3	4	4	5	3	21	R	REPLACE
23	PE	16	Peach	Prunus persica		WOODLAND	3	3	4	4	4	3	21	R	REPLACE
25	BX	33	Box elder	Acer negundo		LANDMARK	1	1	3	1	2	1	9	R	-
26	PE	16	Peach	Prunus persica		WOODLAND	2	2	3	2	4	3	16	R	REPLACE
27	PE	16	Peach	Prunus persica		WOODLAND	4	3	5	4	5	3	24	R	REPLACE
28	B	26	Basswood	Tilia americana		LANDMARK	3	3	3	4	3	3	19	R	REPLACE
29	NS	24	Norway Spruce	Picea abies		LANDMARK	4	1	4	5	4	4	25	R	REPLACE
30	NS	33	Norway Spruce	Picea abies		LANDMARK	4	1	5	5	5	4	27	R	REPLACE
31	NS	24	Norway Spruce	Picea abies		LANDMARK	5	4	4	3	4	2	22	R	REPLACE
32	NS	19	Norway Spruce	Picea abies		LANDMARK	4	4	4	3	4	2	21	R	REPLACE
33	NS	30	Norway Spruce	Picea abies		LANDMARK	3	5	5	3	5	3	24	R	REPLACE
34	BS	19	Blue Spruce	Picea pungens		LANDMARK	3	3	3	2	3	2	16	R	REPLACE
35	BS	16	Blue Spruce	Picea pungens		WOODLAND	2	2	3	2	2	1	12	R	-
36	BS	19	Blue Spruce	Picea pungens		LANDMARK	3	3	3	3	2	1	13	R	-
37	CA	16	Crab Apple	Malus coronaria		LANDMARK	4	3	3	1	4	3	21	R	REPLACE
38	WV	24	Weeping Willow	Salix babylonica		LANDMARK	3	1	3	3	2	2	16	R	REPLACE
39	WV	32	Weeping Willow	Salix babylonica		LANDMARK	1	3	1	4	1	2	12	R	-
40	CA	10	Crab Apple	Malus coronaria		WOODLAND	4	2	5	4	4	2	21	R	REPLACE
41	CT	36	Cottonwood	Populus deltoides		LANDMARK	3	4	3	4	4	3	21	R	REPLACE
42	CT	32	Cottonwood	Populus deltoides		LANDMARK	5	4	4	5	4	3	25	R	REPLACE
43	CT	29	Cottonwood	Populus deltoides		LANDMARK	3	3	3	4	3	2	18	R	REPLACE
44	CT	28	Cottonwood	Populus deltoides		LANDMARK	5	3	5	5	3	3	24	R	REPLACE
45	CT	28	Cottonwood	Populus deltoides		LANDMARK	5	3	5	5	4	3	25	R	REPLACE
46	WV	26	Weeping Willow	Salix babylonica		LANDMARK	1	3	1	2	1	1	9	R	-
47	WV	30	Weeping Willow	Salix babylonica		LANDMARK	2	2	2	2	2	2	12	R	-
48	WV	38	Weeping Willow	Salix babylonica		LANDMARK	2	4	2	1	0	1	10	R	-
49	CT	33	Cottonwood	Populus deltoides		LANDMARK	3	2	2	4	4	5	18	R	REPLACE
50	CT	36	Cottonwood	Populus deltoides		LANDMARK	3	4	3	4	5	3	23	R	REPLACE
51	CT	35	Cottonwood	Populus deltoides		LANDMARK	3	3	4	3	5	3	23	R	REPLACE
52	B	25	Basswood	Tilia americana		LANDMARK	3	3	4	4	4	3	21	R	REPLACE
53	WO	37	White Oak	Quercus alba		LANDMARK	3	3	4	4	5	3	21	R	REPLACE
54	RM	16	Red Maple	Acer rubrum		WOODLAND	2	3	2	3	4	2	16	R	REPLACE
55	EE	10	Siberian Elm	Ulmus pumila		WOODLAND	3	5	4	4	4	5	25	R	REPLACE
56	BS	13	Blue Spruce	Picea pungens		WOODLAND	3	2	3	1	4	1	14	R	-
57	BS	20	Blue Spruce	Picea pungens		WOODLAND	3	1	4	3	3	2	16	R	REPLACE
58	WC	20	White Cedar	Thuja occidentalis		WOODLAND	5	3	4	4	5	3	23	R	REPLACE
59	WC	20	White Cedar	Thuja occidentalis		WOODLAND	2	3	4	3	4	2	18	R	REPLACE
60	NS	30	Norway Spruce	Picea abies		LANDMARK	5	3	3	3	5	2	21	R	REPLACE
61	NS	31	Norway Spruce	Picea abies		LANDMARK	4	4	4	4	5	3	24	R	REPLACE
62	NM	15	Norway Spruce	Acer platanoides		WOODLAND	5	4	5	5	5	3	27	S	-
63	NS	23	Norway Spruce	Picea abies		LANDMARK	4	5	5	3	5	4	26	R	REPLACE
64	NS	24	Norway Spruce	Picea abies		LANDMARK	3	2	3	3	5	4	18	R	REPLACE
65	NS	25	Norway Spruce	Picea abies		LANDMARK	4	1	4	4	5	3	24	R	REPLACE
66	NS	18	Norway Spruce	Picea abies		LANDMARK	3	3	5	3	5	2	21	R	REPLACE
67	SM	35	Silver Maple	Acer saccharinum		LANDMARK	4	3	3	4	5	3	21	R	REPLACE
68	SM	26	Silver Maple	Acer saccharinum		LANDMARK	5	4	4	4	5	3	25	R	REPLACE
69	SM	23	Silver Maple	Acer saccharinum		LANDMARK	3	3	4	2	5	2	19	R	REPLACE
70	SM	21	Silver Maple	Acer saccharinum		LANDMARK	3	3	2	3	2	1	14	R	-
71	SM	28	Silver Maple	Acer saccharinum		LANDMARK	5	4	3	3	3	2	21	R	REPLACE
72	EE	30	Siberian Elm	Ulmus pumila		LANDMARK	4	1	4	3	5	2	23	R	REPLACE
73	SM	25	Silver Maple	Acer saccharinum		LANDMARK	5	5	4	5	4	2	25	R	REPLACE
74	C	31	Catalpa	Catalpa speciosa		LANDMARK	3	2	5	4	5	2	21	R	REPLACE
75	SM	25	Silver Maple	Acer saccharinum		LANDMARK	3	3	5	4	5	2	22	R	REPLACE
76	NS	24	Norway Spruce	Picea abies		LANDMARK	4	4	5	4	5	3	25	R	REPLACE
77	BS	10	Blue Spruce	Picea pungens		WOODLAND	5	4	5	3	4	2	23	R	REPLACE

TAG NO.	CODE	DBH	COMMON NAME	LATIN NAME	EXTRA TRUNKS	CLASS	CONDITION/ FACTOR					OVERALL RANK	SAVE / REMOVE	REPLACE	
							trunk	growth rate	structure	insects/ diseases	crowd dev				life exp.
78	C	37	Catalpa	Catalpa speciosa		LANDMARK	3	5	5	4	5	2	22	R	REPLACE
79	SM	17	Silver Maple	Acer saccharinum		WOODLAND	5	4	4	4	5	2	23	R	REPLACE
80	WS	13	White Spruce	Picea glauca		WOODLAND	4	5	5	4	5	4	27	R	REPLACE
81	SM	30	Silver Maple	Acer saccharinum		LANDMARK	3	3	4	3	4	2	19	R	REPLACE
82	SM	37	Silver Maple	Acer saccharinum		LANDMARK	5	2	4	4	4	2	21	R	REPLACE
83	SM	58	Silver Maple	Acer saccharinum		LANDMARK	3	5	5	3	5	2	22	R	REPLACE
84	SM	22	Silver Maple	Acer saccharinum		LANDMARK	1	3	1	4	1	2	12	R	REPLACE
85	E	32	American Elm	Ulmus americana		LANDMARK	2	3	1	3	5	2	19	R	REPLACE
86	SM	32	Silver Maple	Acer saccharinum		LANDMARK	3	3	5	4	4	2	21	R	REPLACE
87	NS	21	Norway Spruce	Picea abies		LANDMARK	3	3	3	3	4	2	18	R	REPLACE
88	NS	22	Norway Spruce	Picea abies		LANDMARK	4	3	5	3	5	2	22	R	REPLACE
89	BS	22	Blue Spruce	Picea pungens		LANDMARK	5	3	3	3	4	2	20	R	REPLACE
90	BS	14	Blue Spruce	Picea pungens		WOODLAND	4	3	4	3	4	2	20	R	REPLACE
91	WC	15	White Cedar	Thuja occidentalis		WOODLAND	4	4	4	5	4	2	24	R	REPLACE
92	WC	10	White Cedar	Thuja occidentalis		WOODLAND	5	4	4	5	4	3	25	R	REPLACE
93	WC	11	White Cedar	Thuja occidentalis		WOODLAND	5	4	4	5	4	3	25	R	REPLACE
94	WC	8	White Cedar	Thuja occidentalis		WOODLAND	3	3	3	4	3	3	19	R	REPLACE
95	WC	9	White Cedar	Thuja occidentalis	x1 7"	WOODLAND	3	3	3	4	3	3	19	R	REPLACE
96	SM	17	Silver Maple	Acer saccharinum	x1 15"	WOODLAND	4	3	4	3	4	2	20	R	REPLACE
97	WS	15	White Spruce	Picea glauca		WOODLAND	4	4	5	4	5	4	21	R	REPLACE
98	NM	11	Norway Spruce	Acer platanoides		WOODLAND	4	4	4	5	4	4	25	R	REPLACE
99	SM	27	Silver Maple	Acer saccharinum		LANDMARK	4	4	3	5	4	2	22	R	REPLACE
100	CA	7	Crab Apple	Malus coronaria	x1 7"	WOODLAND	3	3	3	4	3	3	19	R	REPLACE
101	WC	9	White Cedar	Thuja occidentalis		WOODLAND	1	3	3	3	3	3	20	R	REPLACE
101A	WC	16	White Cedar	Thuja occidentalis		WOODLAND	1	4	3	3	3	3	20	R	REPLACE
101B	WC	7	White Cedar	Thuja occidentalis		WOODLAND	2	3	3	3	3	2	16	R	REPLACE
101C	WC	11	White Cedar	Thuja occidentalis		WOODLAND	4	4	3	4	3	3	21	R	REPLACE
101D	WC	14	White Cedar	Thuja occidentalis		WOODLAND	3	4	3	3	3	3	19	R	REPLACE
101E	WC	10	White Cedar	Thuja occidentalis		WOODLAND	4	3	4	3	3	3	20	R	REPLACE
101F	WC	7	White Cedar	Thuja occidentalis	x1 6"	WOODLAND	3	3	3	3	2	3	17	R	REPLACE
101G	WC	10	White Cedar	Thuja occidentalis		WOODLAND	3	4	3	3	3	3	19	R	REPLACE
101H	WC	10	White Cedar	Thuja occidentalis	x1 9"	WOODLAND	4	4	3	3	3	3	19	R	REPLACE
101I	WC	11	White Cedar	Thuja occidentalis		WOODLAND	4	4	5	4	3	3	21	R	REPLACE
101J	WC	7	White Cedar	Thuja occidentalis		WOODLAND	5								



Plan View
Scale - 1" = 50'

VILLAS AT PEBBLE CREEK
EXTERIOR PHOTOMETRIC PLAN
GASSER BUSH ASSOCIATES
WWW.GASSERBUSH.COM

- General Note**
- SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
 - SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
 - CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: GRADE

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT CONTROLS@GASSERBUSH.COM OR 734-266-6705.

Alternates Note
THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.

Ordering Note
FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

Drawing Note
THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

Mounting Height Note
MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

Schedule

Symbol	Label	QTY	Manufacturer	Catalog	Description	LLF	Mounting Height
	A	138	VISUAL COMFORT	8590901-12	Small One Light Outdoor Wall Lantern	0.9	7'-0"
	B	4	VISUAL COMFORT	8720701EN3-12	Large One Light Outdoor Wall Lantern	0.9	8'-0"

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Overall/Grade		0.1 fc	2.3 fc	0.0 fc	N/A	N/A

Designer
BK
Date
10/16/2024
Scale
Not to Scale
Drawing No.
#24-35018



VILLAS AT PEBBLE CREEK
EXTERIOR PHOTOMETRIC PLAN
GASSER BUSH ASSOCIATES
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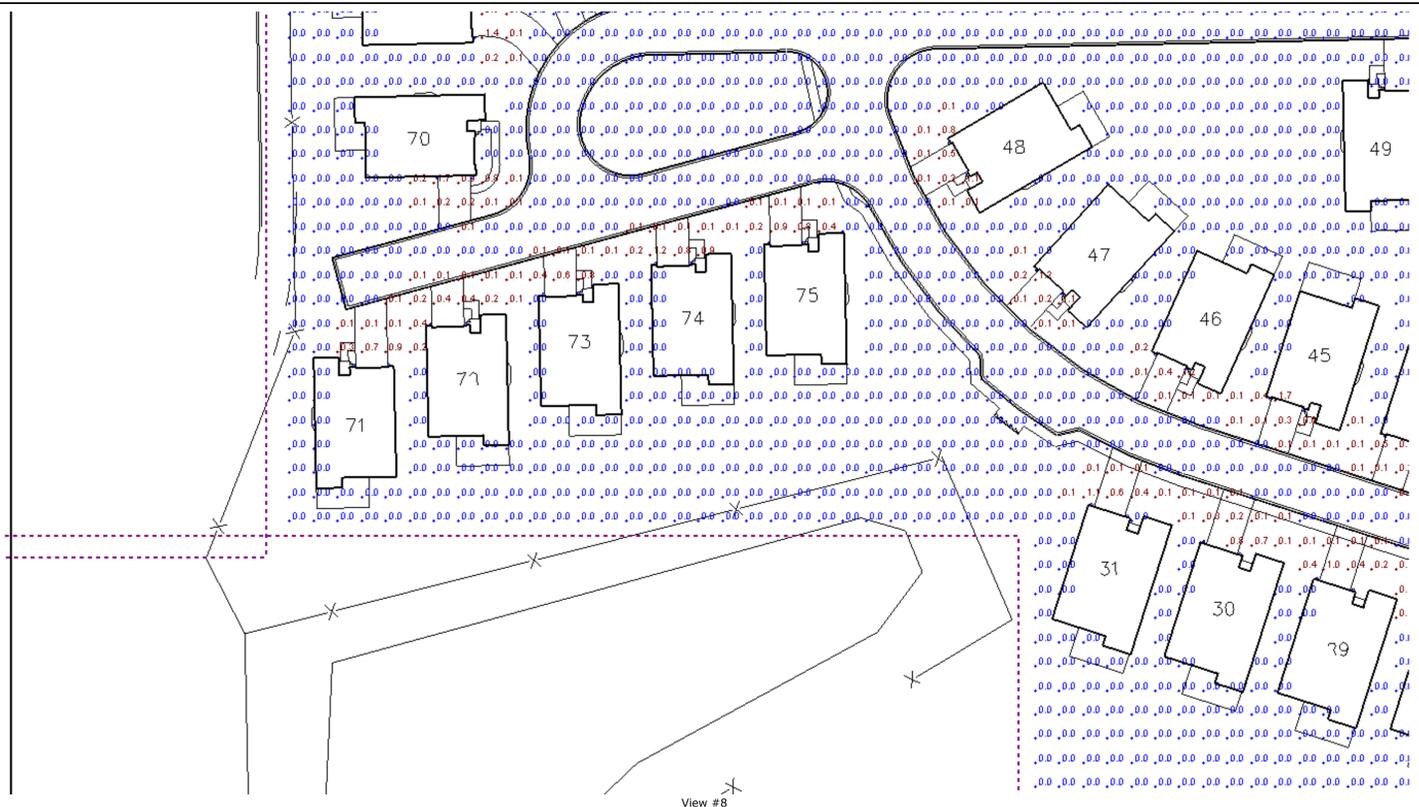


View #4

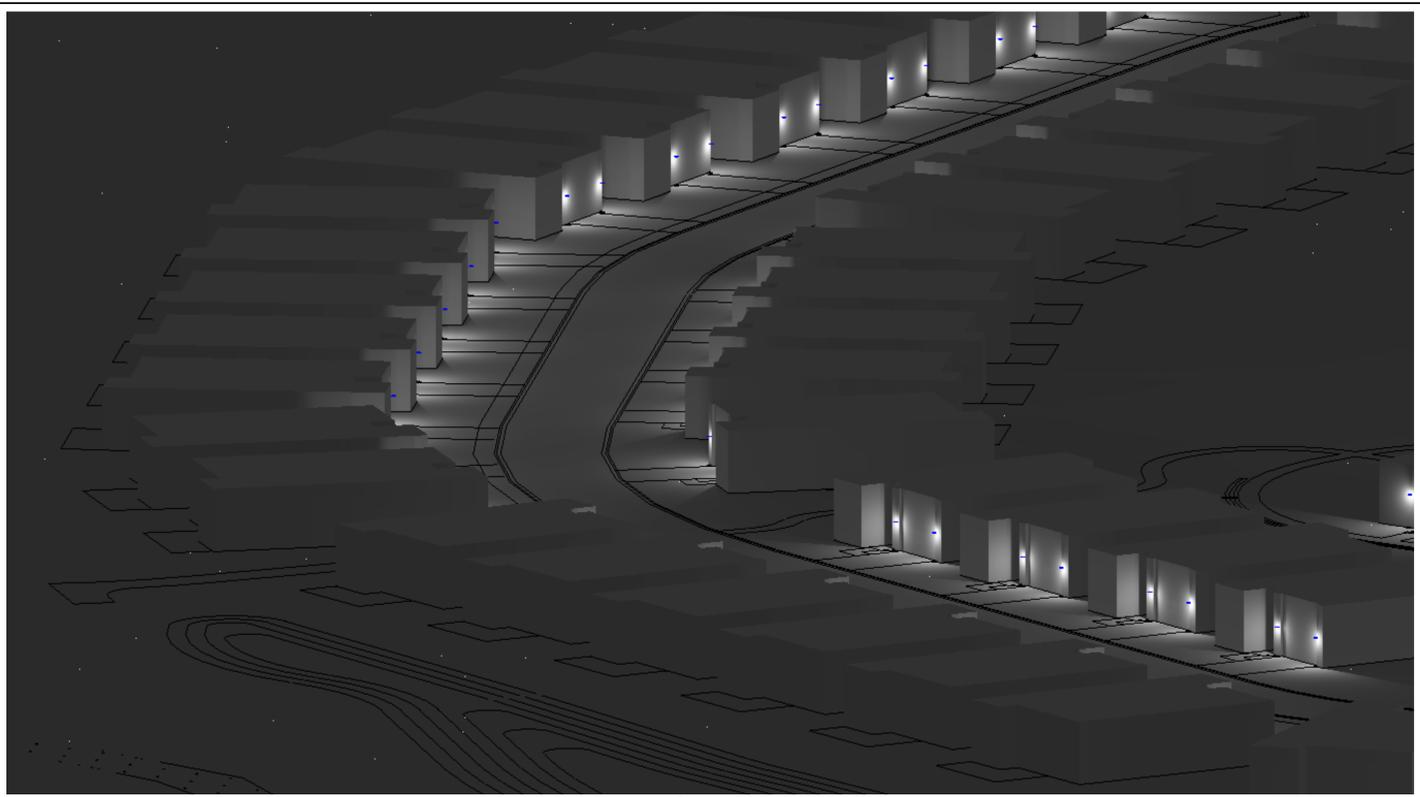
View #5

View #7

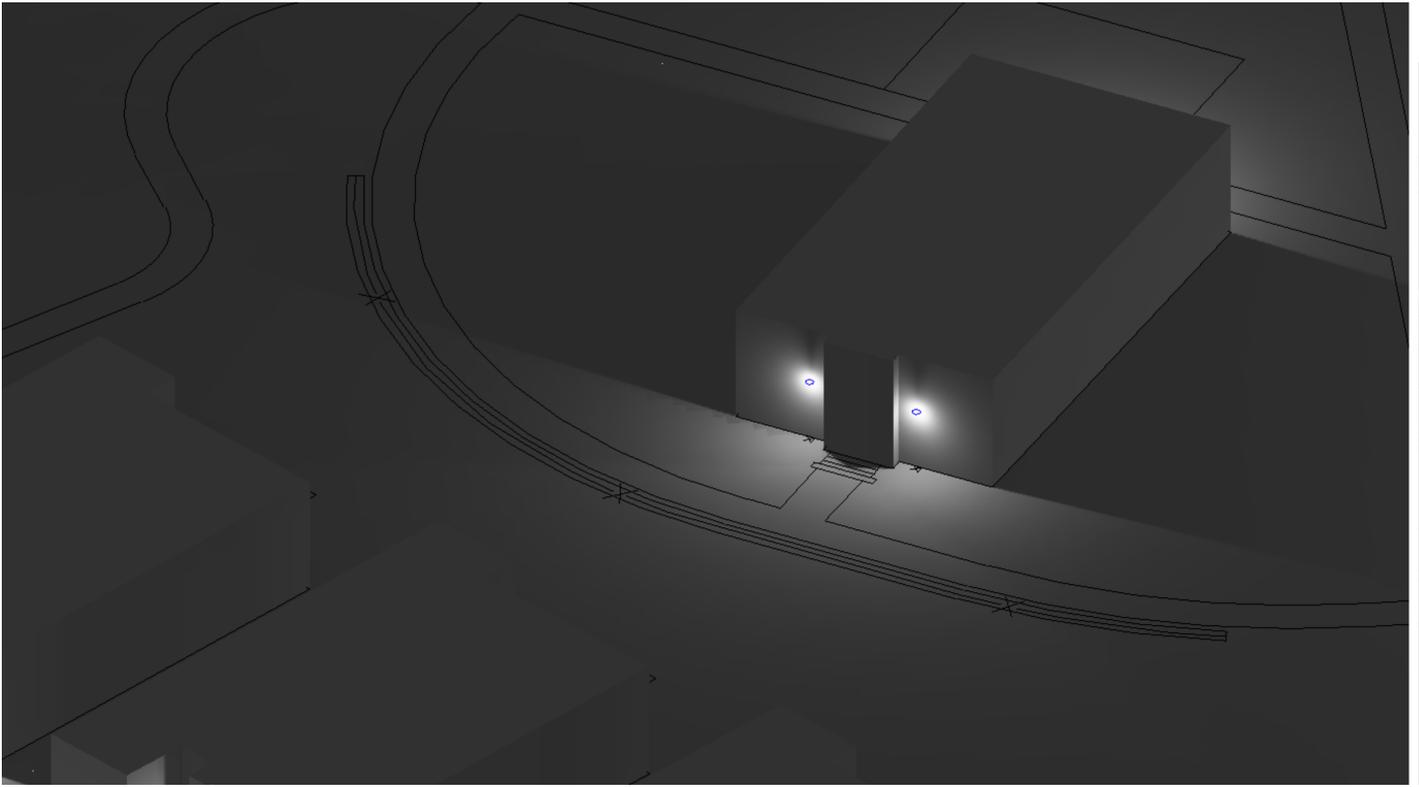
View #6



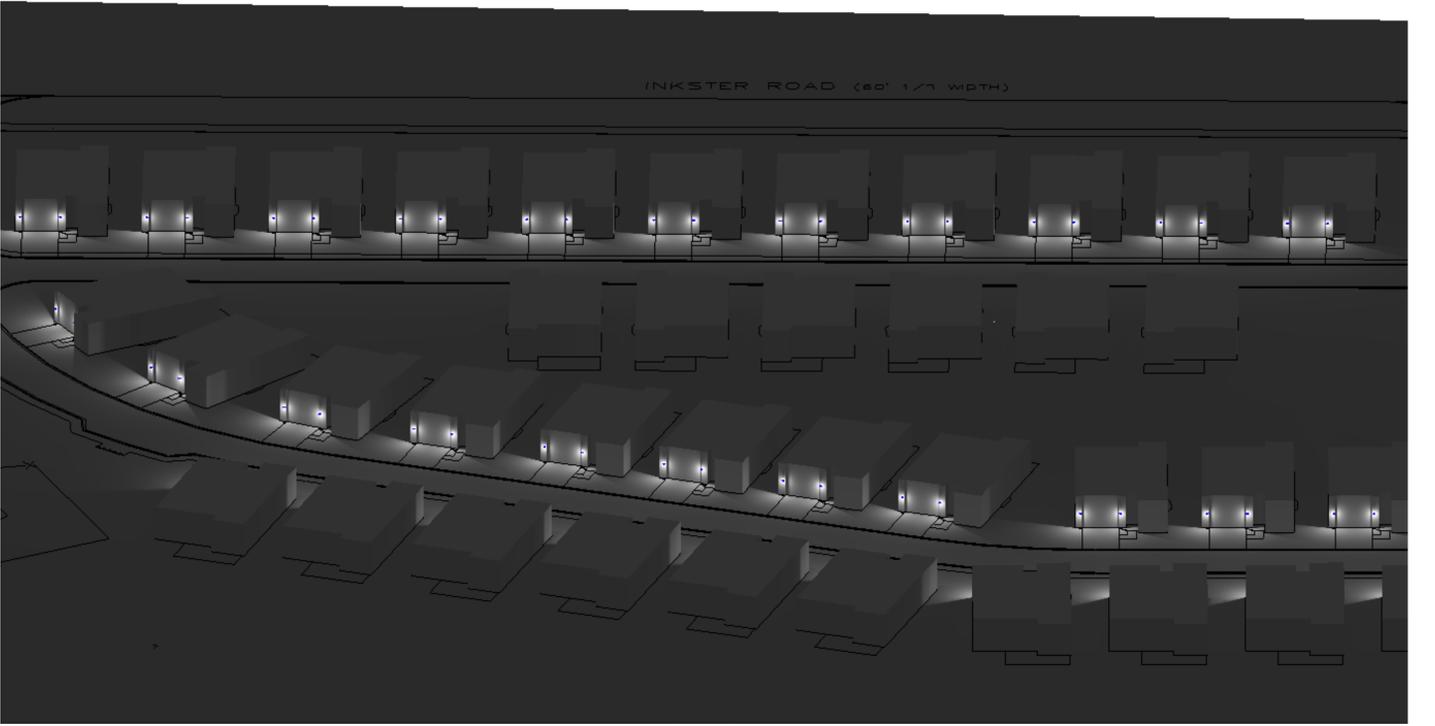
View #8



Rendered 1



Rendered 2



Rendered 3

8590901-12: Small One Light Outdoor Wall Lantern



Dimensions:

Width: 6.0"
Height: 10.25"
Weight: 2.51 lbs.
Extends: 7.375"
Wire: 6.5" (color:Black/White)
Mounting Proc.: Cap Nuts
Connection: Mounted To Box

Bulbs:

1 - Medium A19 60.0w Max. 120v Not included

Features:

- Easily converts to LED with optional replacement lamps
- Meets Title 24 energy efficiency standards
- Title 24 compliant if used with Joint Appendix (JA8) approved light bulbs listed in the California Energy Commission Appliance database.

Material List:

1 Body - Aluminum - Black

Safety Listing:

Safety Listed for Wet Locations

Instruction Sheets:

Trilingual (English, Spanish, and French) (990W8_90901-WL)

Collection:

The Wilburn outdoor fixtures are comprised of an oval form factor with grid overlay with an open bottom to cast an even glow.

A distinct industrial inspiration with an external cage detail finished in either Antique Bronze or Black finishes over Etched Seeded glass shades to complete the look.

Two finish options available: Antique Bronze and Black

Assortment includes: small, medium, large and extra large one-light lanterns; two-light flush mount; one-light post lantern and a one-light pendant

Wet Rated and Dark Sky Friendly

UPC #:785652076787

Finish: Black (12)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Fitter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Shade	Glass	Satin Etched	1				7.5	4.75				

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	6.5	5.0	1.0		2.38	

Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Fr. Class	UPS Ship
Individual	8590901-12	1	785652076787	17.5	10.25	10.25	1.06	4.1	0	Yes
Master Pack	8590901-12	0	10785652076784							No
NJ Pallet		50		48.0	40.0	77.0	85.56	205.0		No
NV Pallet		50		48.0	40.0	77.0	85.56	205.0		No

8720701EN3-12: Large One Light Outdoor Wall Lantern



Dimensions:

Width: 8.0"
Height: 24.62"
Weight: 9.35 lbs.
Extends: 6.75"
Wire: 6.5" (color:Black/White)
Mounting Proc.: Screw(s)
Connection: Mounted To Box
Watts: 9
Lumens: 800

Bulbs:

1 - LED Medium A19 9.0w Max. 120v included

Features:

- ENERGY STAR® Qualified
- This fixture features mouth-blown glass and slight variations are an inherent part of the handcrafting process.
- LED Bulbs are an efficient, versatile and durable light source that deliver exceptional performance.
- Meets Title 24 energy efficiency standards
- Title 24 compliant when used with included Joint Appendix (JA8) approved lamp.

Material List:

1 Body - Aluminum - Black

Safety Listing:

Safety Listed for Wet Locations

Instruction Sheets:

English (8518301 8618301 8620701 8718301 8720701)
 Trilingual (English, Spanish, and French) (ALBAN-WALL)

Collection:

Featured in the decorative Alban collection

1 T10 Medium 60 watt light bulb and 1 A19 Medium 60 watt light bulb

Etched opal glass shade

Easily converts to LED with optional replacement lamps

Meets Title 24 energy efficiency standards

UPC #:785652097911

Finish: Black (12)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Fitter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Shade	Glass	Etched Opal	1		5.0	5.0	21.12					

Backplate / Canopy Details:

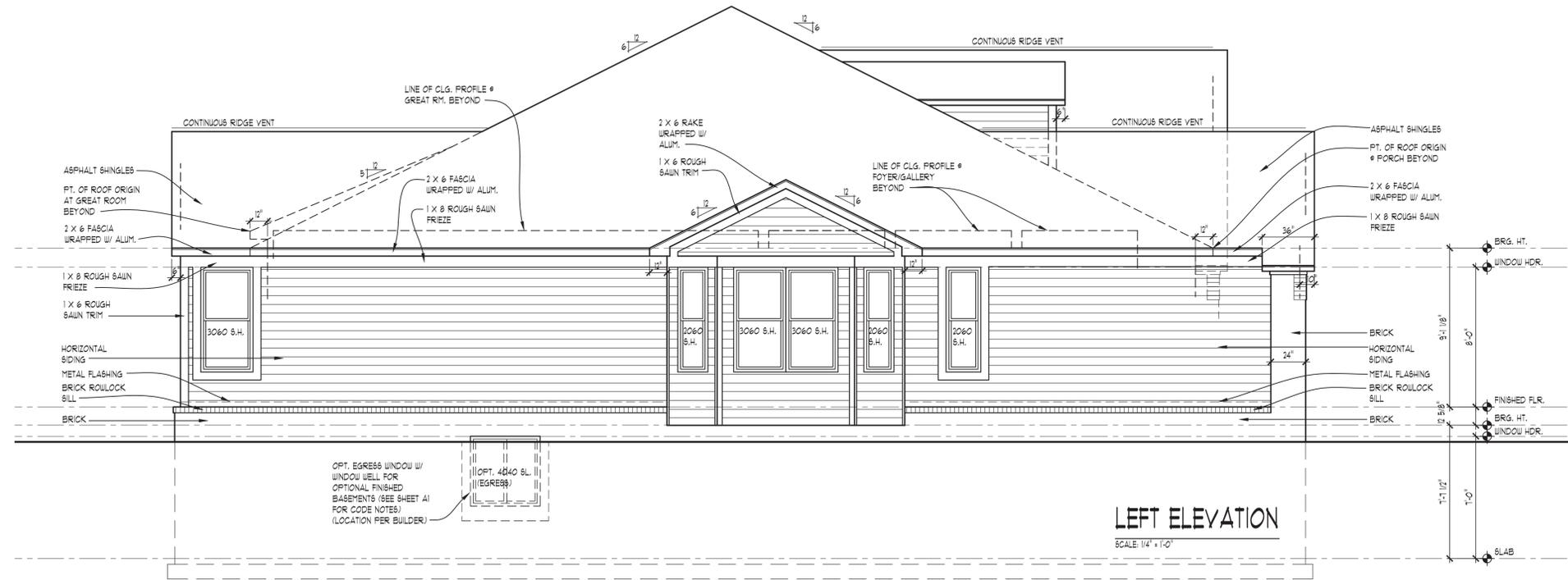
Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	24.62	8.0	0.75		12.31	

Replacement Bulb Data:

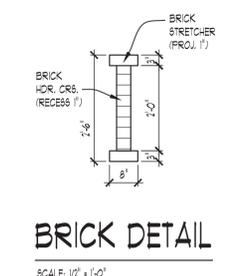
Product #	Type	Base	Watts	Watts Consumed	Volts	Hours	Lumens	Temp ("K)	CRI

Shipping Information:

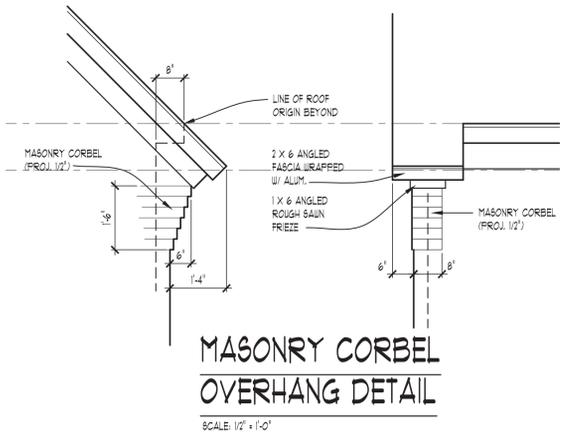
Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Fr. Class	UPS Ship
Individual	8720701EN3-12	1	785652097911	29.3	10.9	10.0	1.85	11.45	0	Yes
Master Pack	8720701EN3-12	0	10785652097918							No
NJ Pallet		36		48.0	40.0	77.0	85.56	412.2		No
NV Pallet		36		48.0	40.0	77.0	85.56	412.2		No



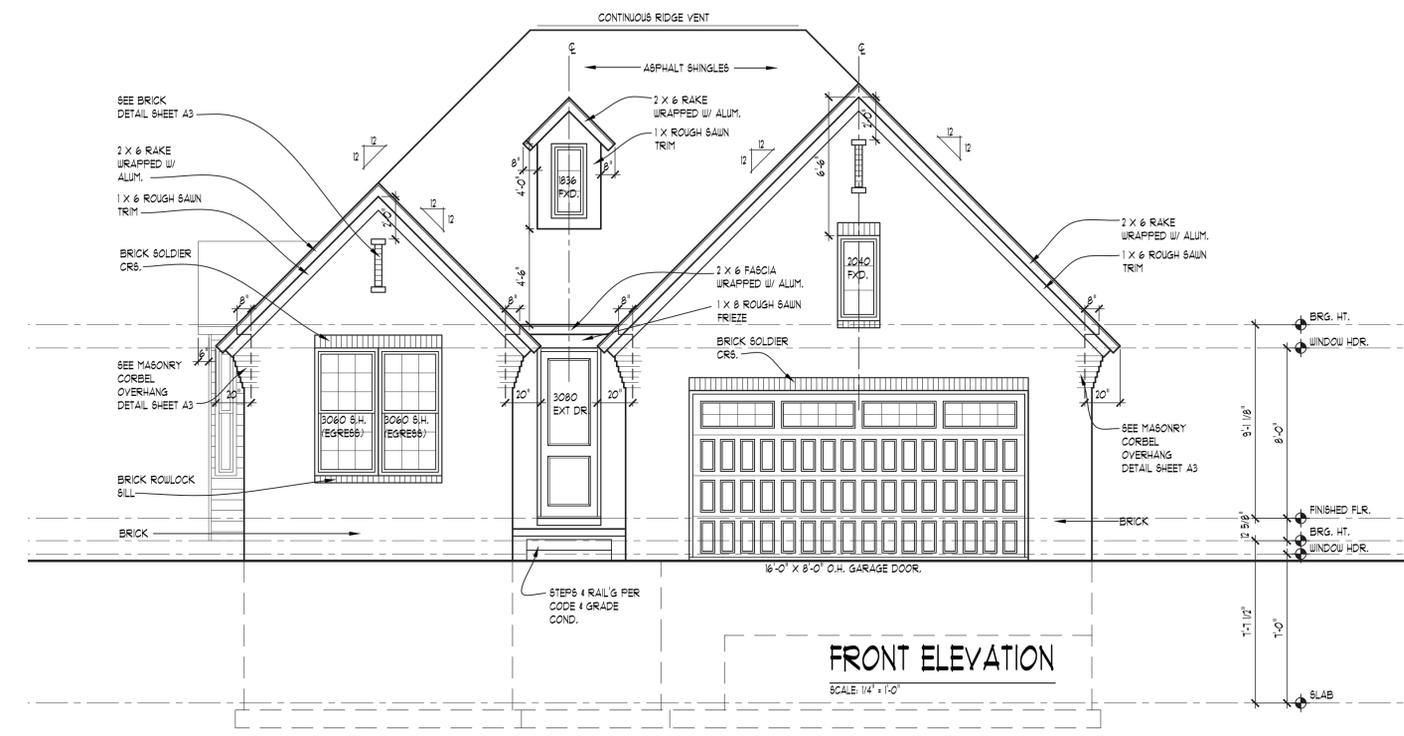
LEFT ELEVATION
SCALE: 1/4" = 1'-0"



BRICK DETAIL
SCALE: 1/2" = 1'-0"



MASONRY CORBEL OVERHANG DETAIL
SCALE: 1/2" = 1'-0"



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

ELEVATION NOTES

- ALL ROOF SADDLES TO BE PLYWOOD SHEATHED WITH ICE & WATER SHIELD AND SHINGLES.
- PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS
- FIREPLACE FLUE TO BE DETERMINED PER MANUFACTURER'S SPECIFICATION
- METAL FLASHING AS REQUIRED BY CODE.
- ROOF & SOFFIT VENTS AS REQUIRED BY CODE.
- PROVIDE GUTTERS & DOWNSPOUTS FOR DRAINAGE OF ROOF WATER. DOWNSPOUTS ARE TO BE LOCATED SO THAT THE DISCHARGE WILL NOT SPILL ON OR FLOW ACROSS ANY PORCHES, WALKS OR DRIVES.
- CARPENTER TO VERIFY THICKNESS OF MASONRY PRIOR TO BUILDING BRICK RACK

NOTE:
OVERHANG DIMENSIONS (O.H.) ARE FROM SHEATHING U.N.O.

TYPICAL WINDOW DESIGNATION

NOTE:
GENERAL REFERENCE FOR ROUGH OPENING SIZES ONLY. CONSULT WITH WINDOW MANUFACTURER FOR EXACT WINDOW SIZES & REQUIREMENTS.

NOTE:
ALL CASEMENT VENTING TO BE VERIFIED W/ BUILDER/ HOMEOWNER PRIOR TO ORDERING WINDOWS

NOTE:
WINDOW MANUFACTURER TO VERIFY ALL WINDOW GRID PATTERNS WITH HOME OWNER.



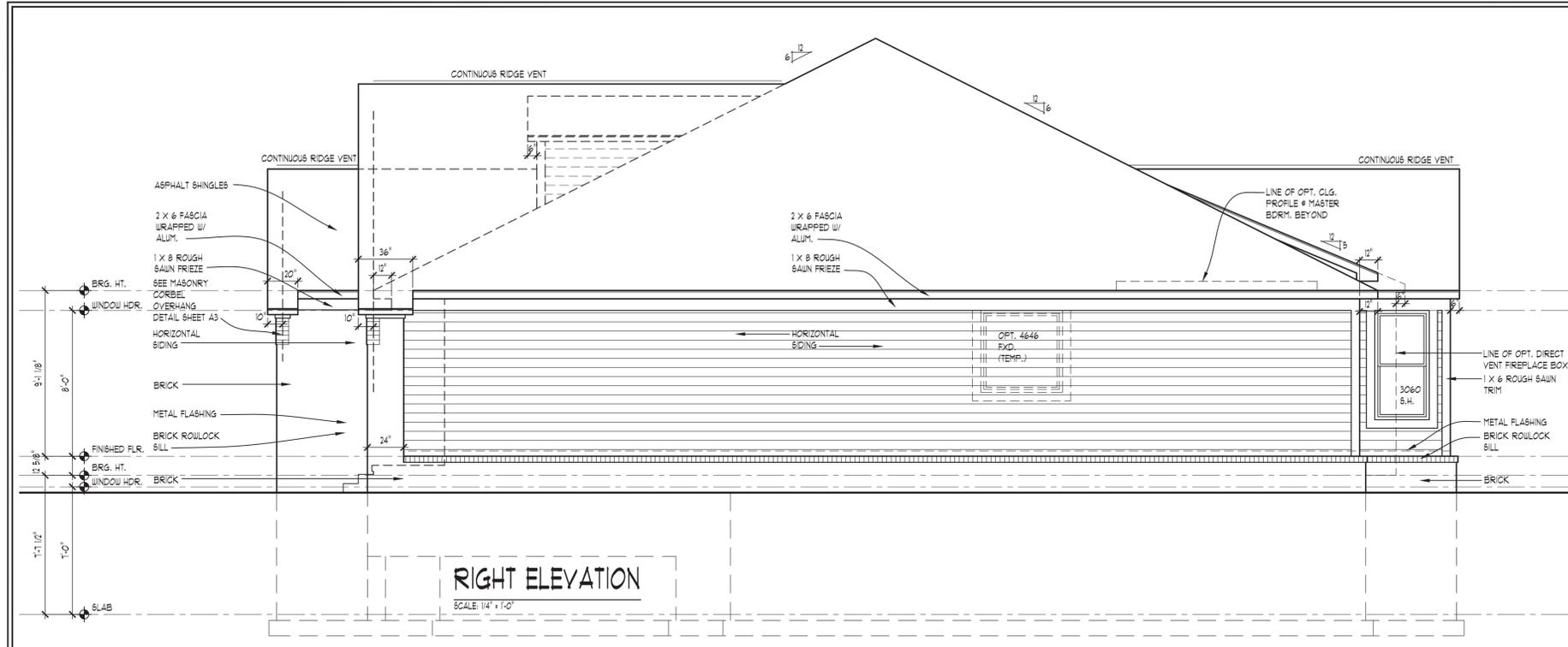
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CLIENT / PROJECT
ROBERTSON
BROTHERS
BREWSTER VILLAGE
RALEIGH PLAN
EMERSON
ELEVATION
GARAGE RIGHT

JOB No. 18-233
DRAWN: DM
CHECKED: DM
REVIEW 3-25-20
FINAL: 3-27-20
REVISION 8-25-20
REVISION 11-19-20
REVISION 2-4-21
REVISION 4-20-21
REVISION 5-11-21
REVISION 6-28-21

SCALE:
PER PLAN
SHEET #
A-3



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

ELEVATION NOTES

- ALL ROOF SADDLES TO BE PLYWOOD SHEATHED WITH ICE & WATER SHIELD AND SHINGLES.
- PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS
- FIREPLACE FLUE TO BE DETERMINED PER MANUFACTURER'S SPECIFICATION
- METAL FLASHING AS REQUIRED BY CODE.
- ROOF & SOFFIT VENTS AS REQUIRED BY CODE.
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- CARPENTER TO VERIFY THICKNESS OF MASONRY PRIOR TO BUILDING BRICK RACK

TYPICAL WINDOW DESIGNATION

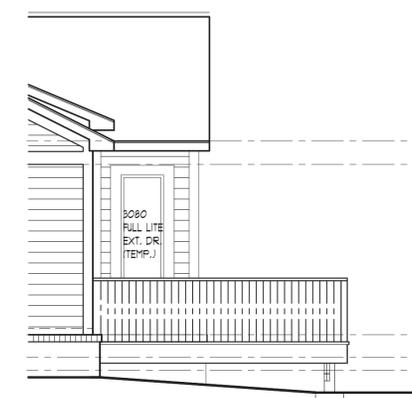
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NOTE:
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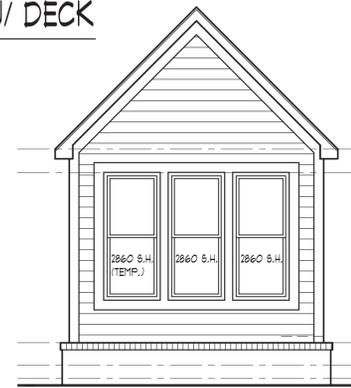
NOTE:
WINDOW MANUFACTURER TO VERIFY ALL WINDOW GRID PATTERNS WITH HOME OWNER.

NOTE:
OVERHANG DIMENSIONS (O.H.) ARE FROM SHEATHING U.N.C.

NOTE:
ALL WINDOW SILLS OVER 6'-0" ABOVE EXTERIOR GRADE OR SURFACE BELOW TO BE MINIMUM 24" ABOVE FINISHED FLOOR OR HAVE BASH LIMITERS PER CODE REQUIREMENTS



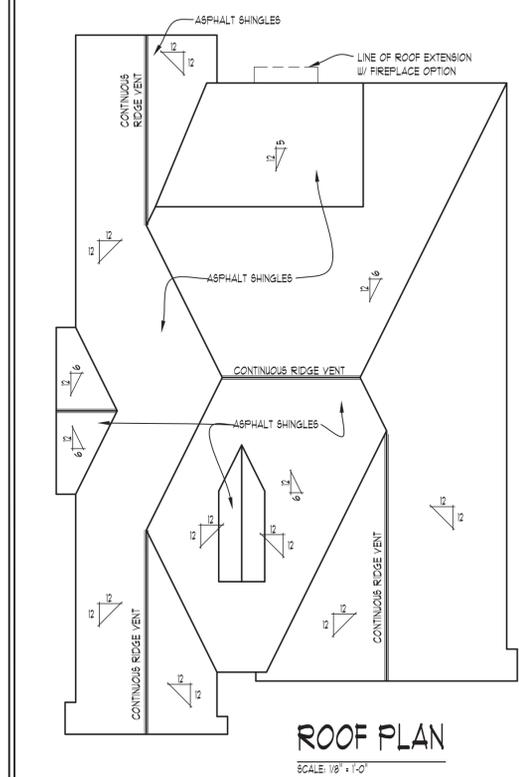
PARTIAL RIGHT ELEVATION W/ OPTIONAL DOOR W/ DECK
SCALE: 1/4" = 1'-0"



W/ OPT. WINDOWS
SCALE: 1/4" = 1'-0"

ATTIC VENTILATION CALCULATIONS:

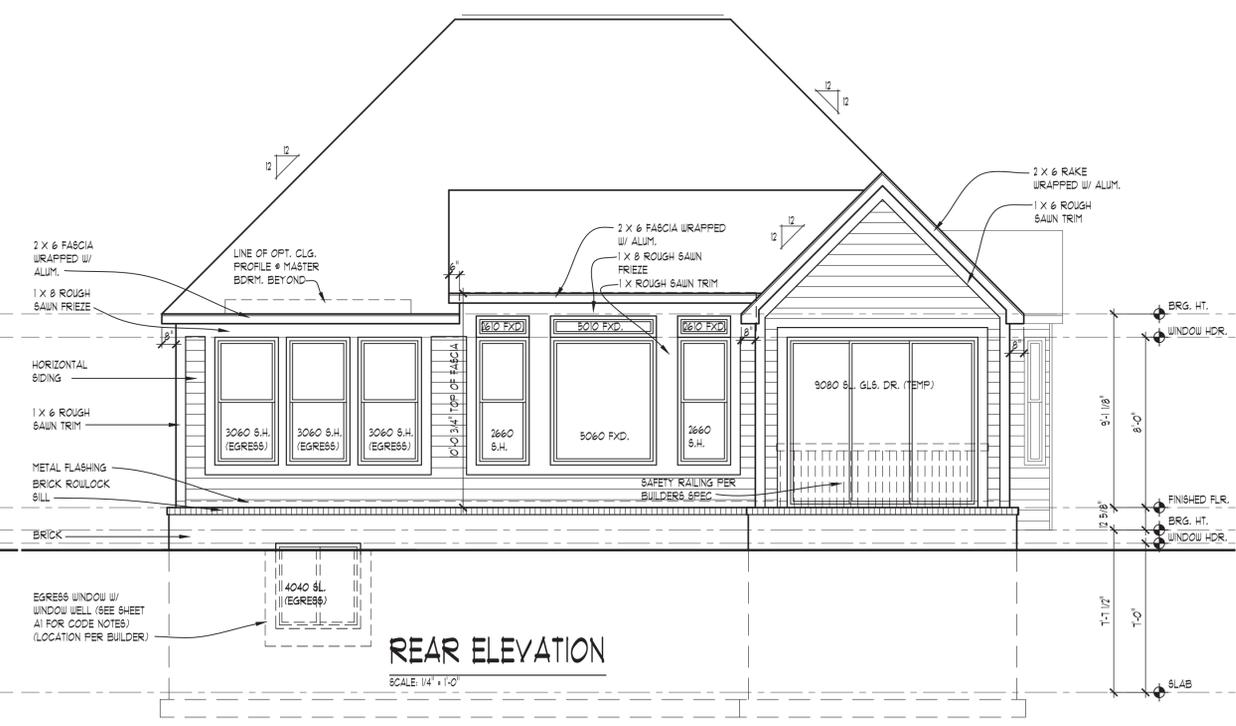
AREA OF ATTIC OVER HEATED SPACE = 1834 SQ. FT.
1834/180 = 10.2 (SQ. FT. REQ'D)
122' X 144" = 1761' (SQ. INCH CONVERSION)
RIDGE VENTING:
1761' X 0.45 = 793' (SQ. INCHES REQ'D)
793' / 18" = 44' (LINEAR FT. OF RIDGE VENT REQ'D)
EAVE OR CORNICE VENTING:
1761' X 0.35 = 617' (SQ. INCHES REQ'D)



ROOF PLAN
SCALE: 1/8" = 1'-0"



REAR ELEVATION W/ OPTIONAL FIREPLACE
SCALE: 1/4" = 1'-0"



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



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GARAGE RIGHT

JOB No.	18-233
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REVISION	11-19-20
REVISION	2-4-21
REVISION	4-20-21
REVISION	5-11-21
REVISION	5-28-21

SCALE:
PER PLAN
SHEET #
A-4

ELEVATION NOTES

- ALL ROOF SADDLES TO BE PLYWOOD SHEATHED WITH ICE & WATER SHIELD AND SHINGLES.
- PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS
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- METAL FLASHING AS REQUIRED BY CODE.
- ROOF & SOFFIT VENTS AS REQUIRED BY CODE.
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- CARPENTER TO VERIFY THICKNESS OF MASONRY PRIOR TO BUILDING BRICK RACK

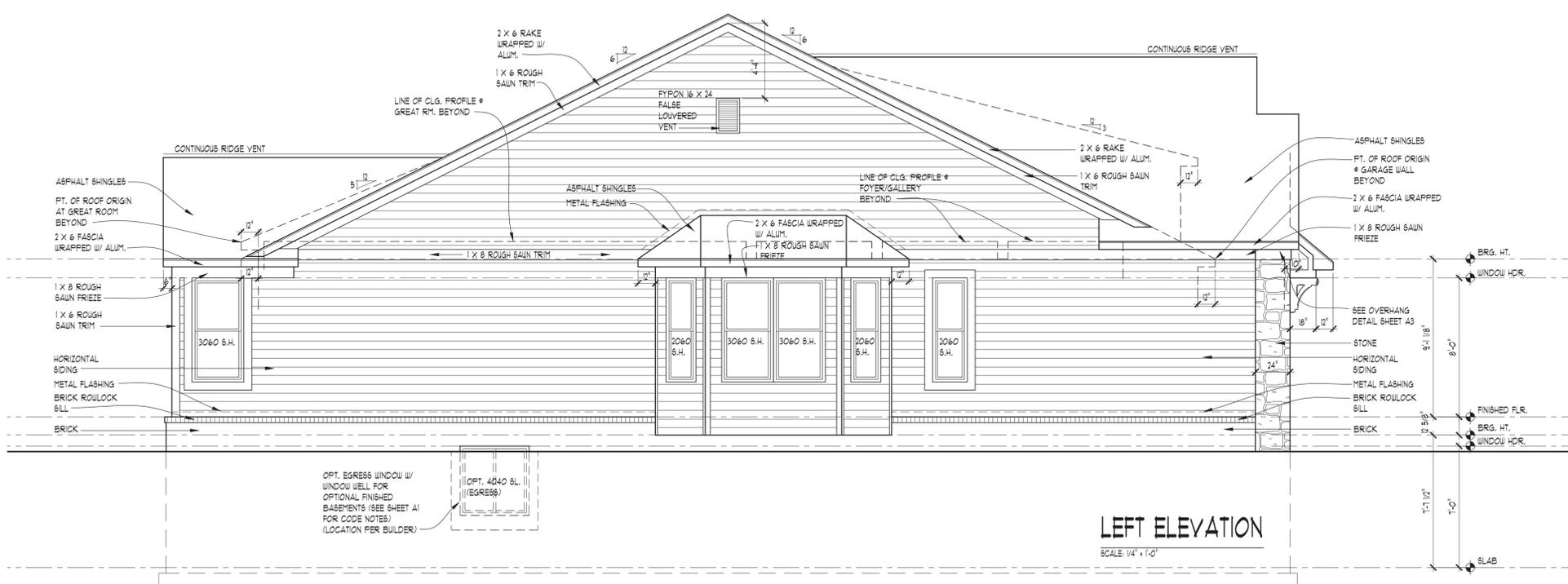
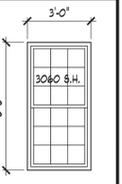
NOTE:
OVERHANG DIMENSIONS (O.H.) ARE FROM SHEATHING U.N.O.

TYPICAL WINDOW DESIGNATION

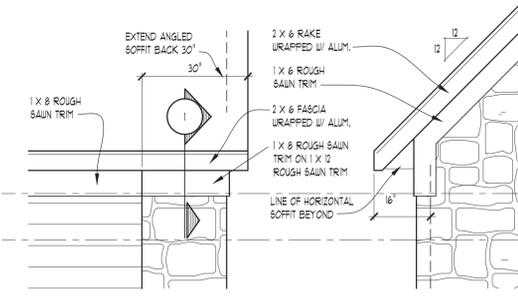
NOTE:
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NOTE:
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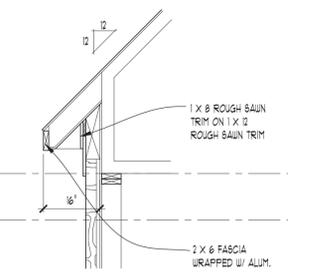
NOTE:
WINDOW MANUFACTURER TO VERIFY ALL WINDOW GRID PATTERNS WITH HOME OWNER.



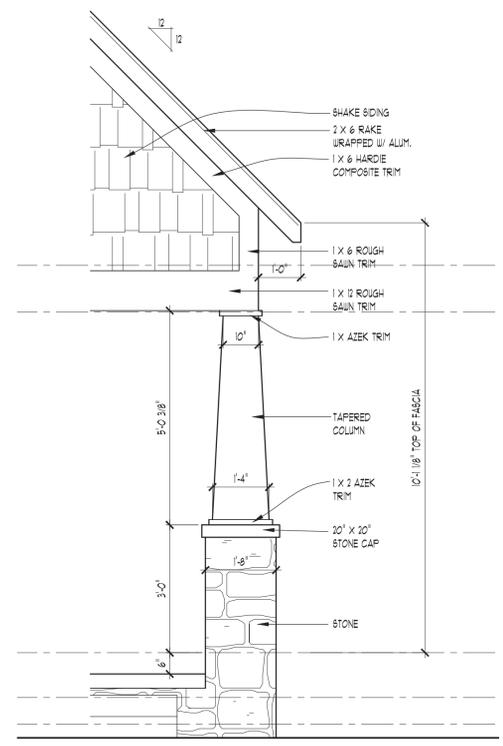
LEFT ELEVATION
SCALE: 1/4" = 1'-0"



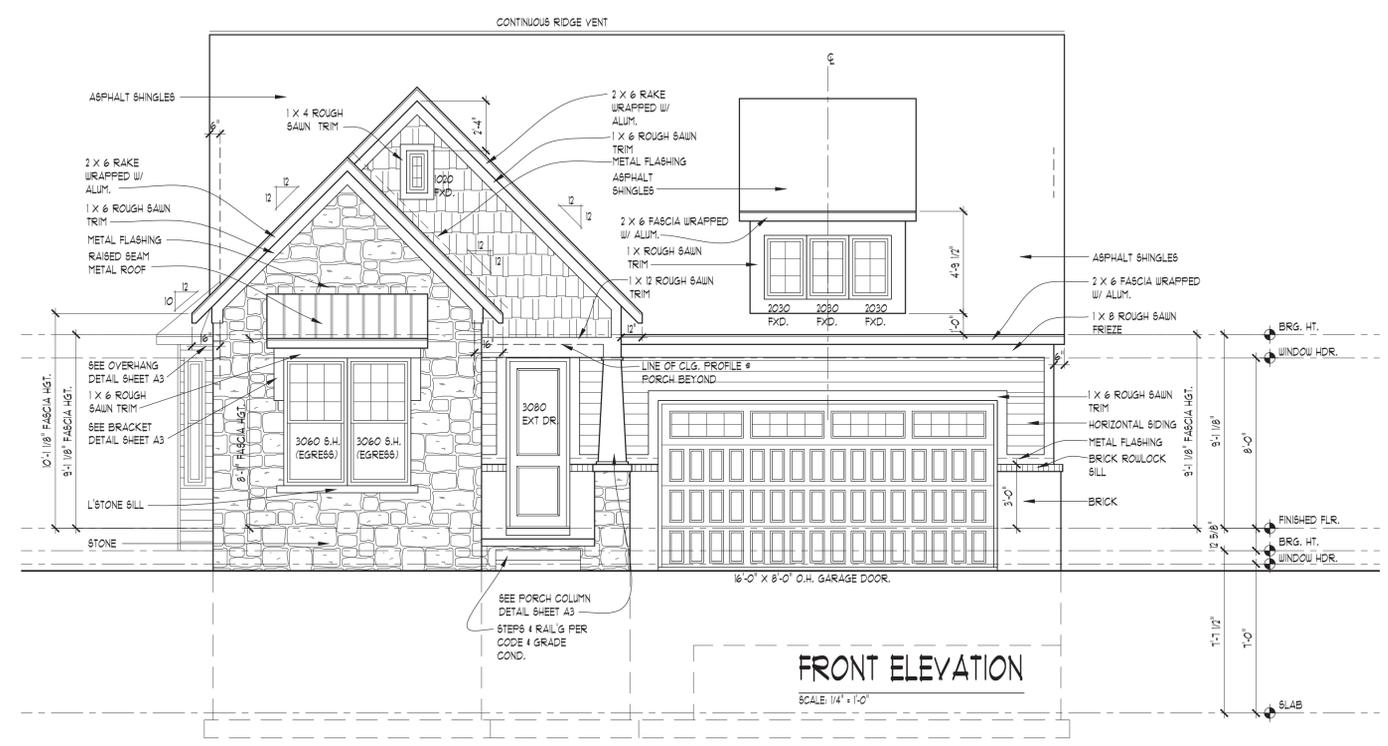
OVERHANG DETAIL #1
SCALE: 1/2" = 1'-0"



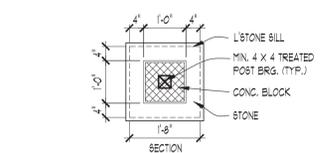
SECTION
SCALE: 1/2" = 1'-0"



BRACKET DETAIL
SCALE: 1" = 1'-0"



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



PORCH COLUMN DETAIL
SCALE: 1/2" = 1'-0"



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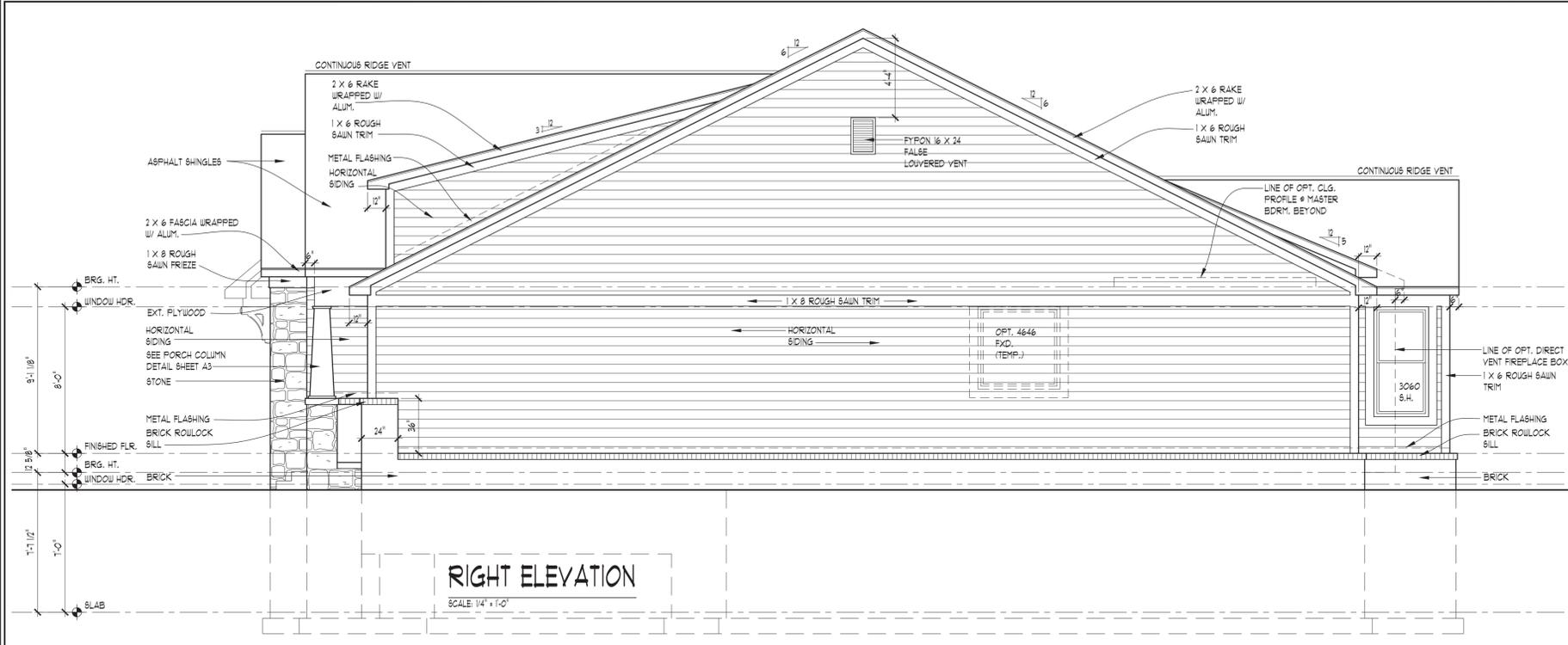
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CLIENT / PROJECT
ROBERTSON BROTHERS
BREWSTER VILLAGE
RALEIGH PLAN
BARRINGTON ELEVATION
GARAGE RIGHT

JOB No.	18-233
DRAWN:	DM
CHECKED:	DM
REVIEW	1-24-19
FINAL:	3-27-20
REVISION	8-25-20
REVISION	11-19-20
REVISION	2-4-21
REVISION	4-20-21
REVISION	5-11-21
REVISION	6-28-21

SCALE:
PER PLAN

SHEET #
A-3



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

ELEVATION NOTES

- ALL ROOF SADDLES TO BE PLYWOOD SHEATHED WITH ICE & WATER SHIELD AND SHINGLES.
- PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS
- FIREPLACE FLUE TO BE DETERMINED PER MANUFACTURER'S SPECIFICATION
- METAL FLASHING AS REQUIRED BY CODE.
- ROOF & SOFFIT VENTS AS REQUIRED BY CODE.
- PROVIDE GUTTERS & DOWNSPOUTS FOR DRAINAGE OF ROOF WATER. DOWNSPOUTS ARE TO BE LOCATED SO THAT THE DISCHARGE WILL NOT SPILL ON OR FLOW ACROSS ANY PORCHES, WALKS OR DRIVES.
- CARPENTER TO VERIFY THICKNESS OF MASONRY PRIOR TO BUILDING BRICK RACK

TYPICAL WINDOW DESIGNATION

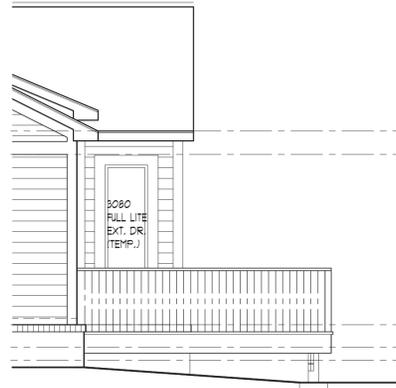
NOTE:
GENERAL REFERENCE FOR ROUGH OPENING SIZES ONLY. CONSULT WITH WINDOW MANUFACTURER FOR EXACT WINDOW SIZES & REQUIREMENTS.

NOTE:
ALL CASEMENT VENTING TO BE VERIFIED W/ BUILDER/ HOMEOWNER PRIOR TO ORDERING WINDOWS

NOTE:
WINDOW MANUFACTURER TO VERIFY ALL WINDOW GRID PATTERNS WITH HOME OWNER.

NOTE:
OVERHANG DIMENSIONS (O.H.) ARE FROM SHEATHING U.N.C.

NOTE:
ALL WINDOW SILLS OVER 6'-0" ABOVE EXTERIOR GRADE OR SURFACE BELOW TO BE MINIMUM 24" ABOVE FINISHED FLOOR OR HAVE BASH LIMITERS PER CODE REQUIREMENTS



PARTIAL RIGHT ELEVATION W/ OPTIONAL DOOR W/ DECK
SCALE: 1/4" = 1'-0"



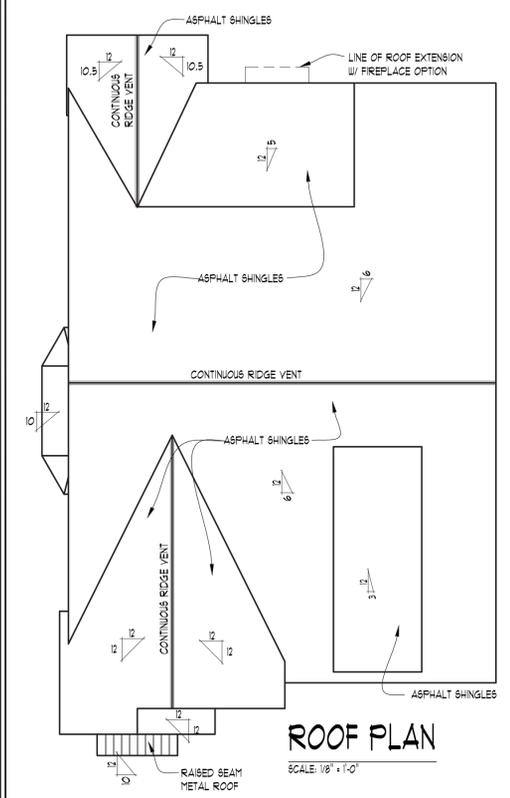
W/ OPT. WINDOWS
SCALE: 1/4" = 1'-0"

ATTIC VENTILATION CALCULATIONS:

AREA OF ATTIC OVER HEATED SPACE = 1834 SQ. FT.
 1834/180 = 10.2 (SQ. FT. REQ'D)
 10.2 X 144 = 1467 (SQ. INCH CONVERSION)

RISE VENTING:
 1761" X 0.45 = 789" (SQ. INCHES REQ'D)
 789" / 18 = 44" (LINEAR FT. OF RIDGE VENT REQ'D)

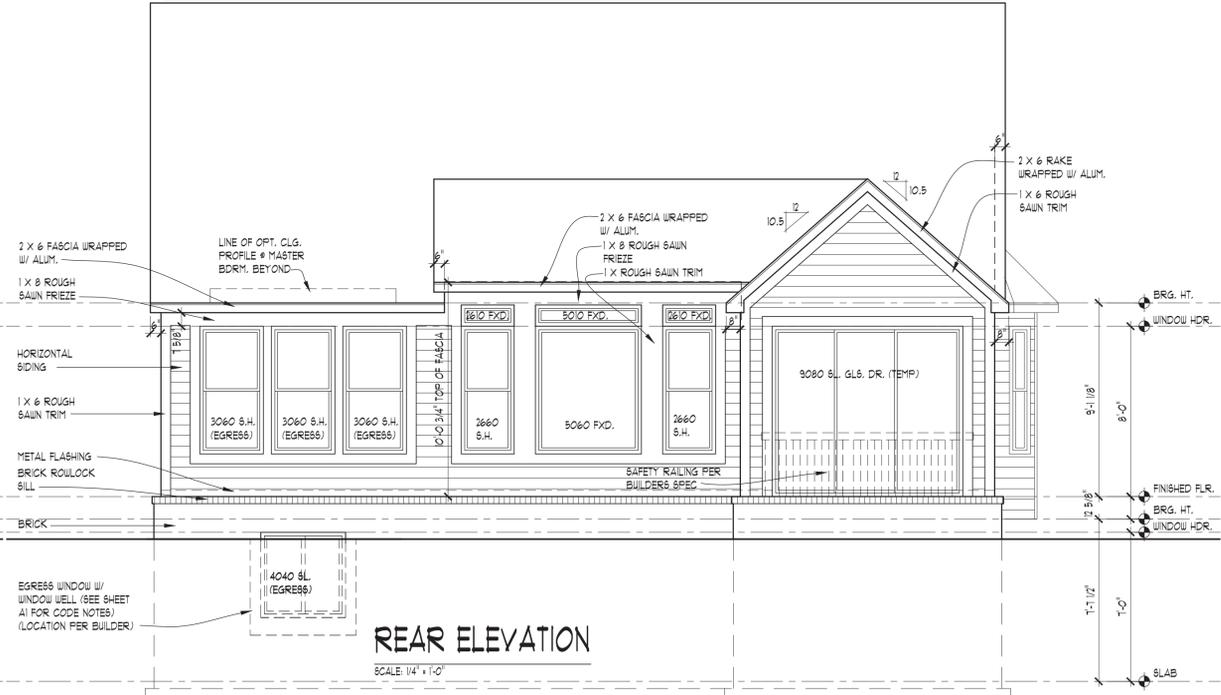
EAVE OR CORNICE VENTING:
 1761" X 0.35 = 568" (SQ. INCHES REQ'D)



ROOF PLAN
SCALE: 1/8" = 1'-0"



REAR ELEVATION W/ OPTIONAL FIREPLACE
SCALE: 1/4" = 1'-0"



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



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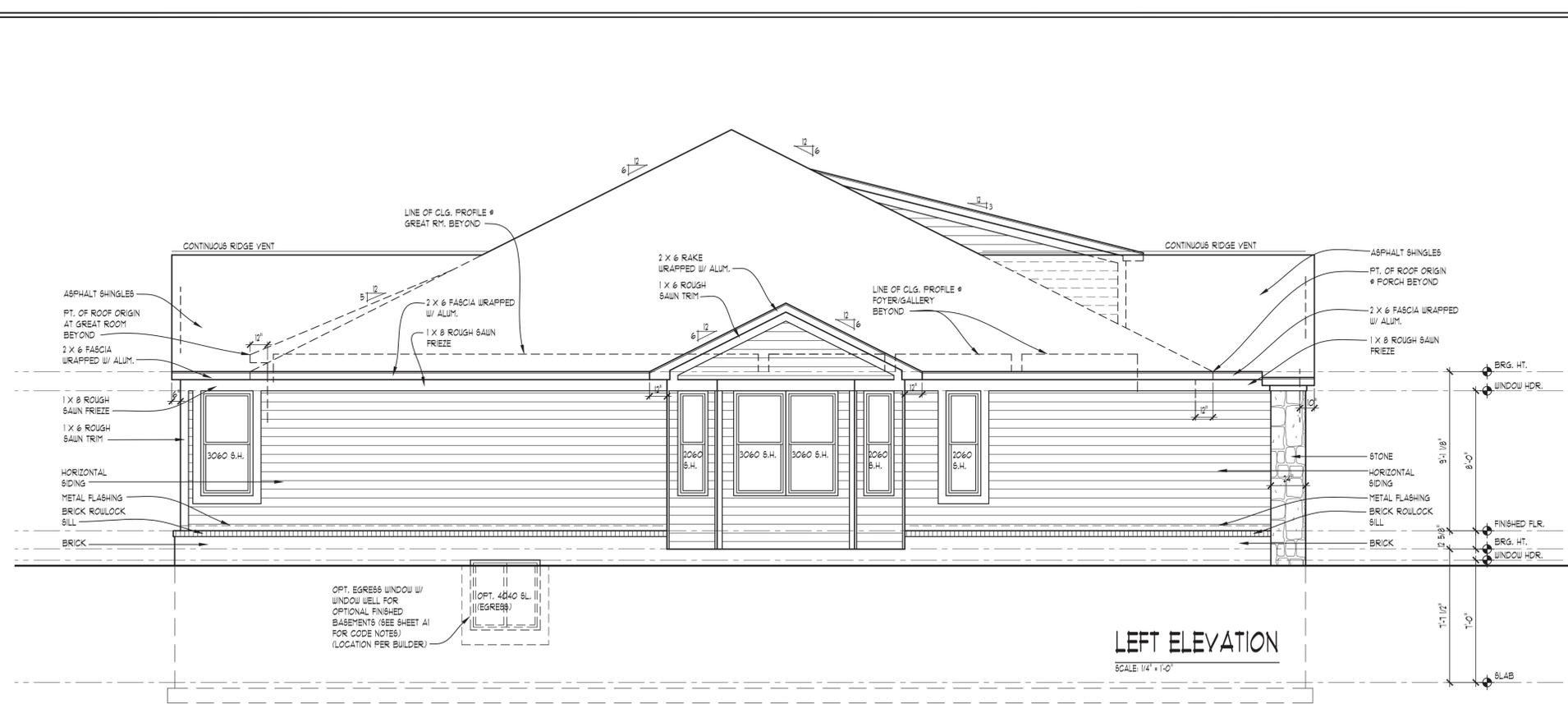
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 CALL MKS DDO AT 800-485-7271 3 DAYS PRIOR TO ANY EXCAVATION
 CONSTRUCTION. THE SOLE RESPONSIBILITY OF THE PROFESSIONAL

CLIENT / PROJECT
 ROBERTSON BROTHERS VILLAGE
 BREWSTER VILLAGE
 RALEIGH PLAN
 BARRINGTON ELEVATION
 GARAGE RIGHT

JOB No.	18-233
DRAWN:	DM
CHECKED:	DM
REVIEW	1-24-19
FINAL:	3-27-20
REVISION	8-25-20
REVISION	11-19-20
REVISION	2-4-21
REVISION	4-20-21
REVISION	5-11-21
REVISION	6-28-21

SCALE:
PER PLAN

SHEET #
A-4



LEFT ELEVATION

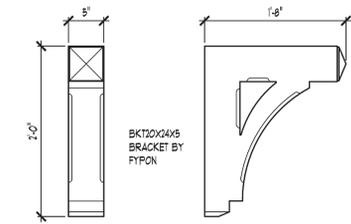
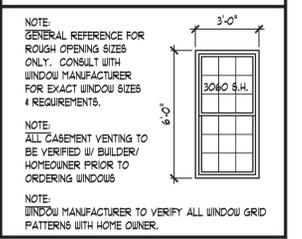
SCALE: 1/4" = 1'-0"

ELEVATION NOTES

- ALL ROOF SADDLES TO BE PLYWOOD SHEATHED WITH ICE & WATER SHIELD AND SHINGLES.
- PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS
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- ROOF & SOFFIT VENTS AS REQUIRED BY CODE.
- PROVIDE GUTTERS & DOWNSPOUTS FOR DRAINAGE OF ROOF WATER. DOWNSPOUTS ARE TO BE LOCATED SO THAT THE DISCHARGE WILL NOT SPILL ON OR FLOW ACROSS ANY PORCHES, WALKS OR DRIVES.
- CARPENTER TO VERIFY THICKNESS OF MASONRY PRIOR TO BUILDING BRICK RACK

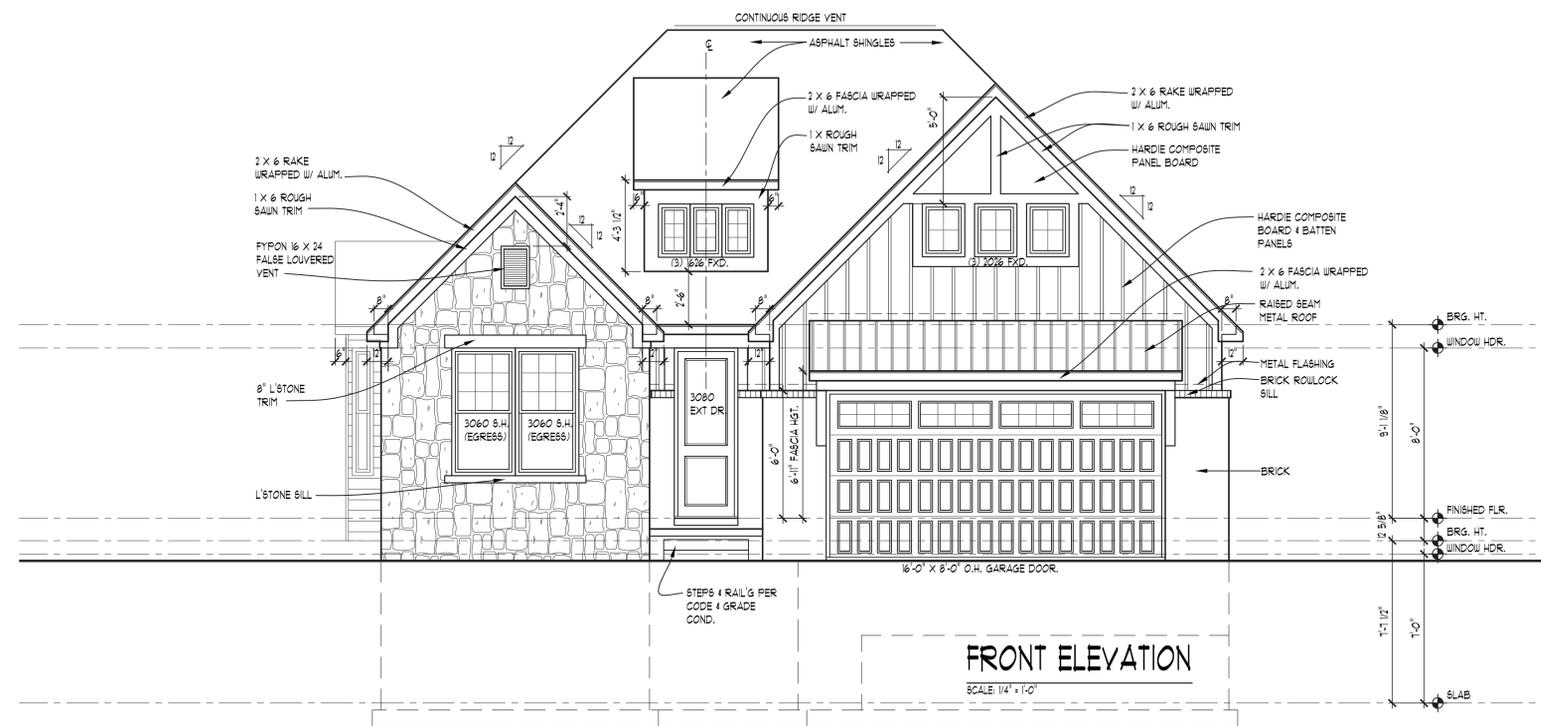
NOTE:
OVERHANG DIMENSIONS (O.H.) ARE FROM SHEATHING U.L.C.

TYPICAL WINDOW DESIGNATION



BRACKET DETAIL

SCALE: 1" = 1'-0"



FRONT ELEVATION

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



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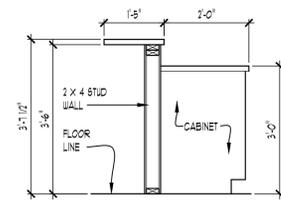
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CLIENT / PROJECT
ROBERTSON BROTHERS
BREWSTER VILLAGE
RALEIGH PLAN
ALBANY ELEVATION
GARAGE RIGHT

JOB No. 18-233
DRAWN: DM/PS
CHECKED: DM
REVIEW 1-24-19
FINAL: 3-27-20
REVISION 11-2-20
REVISION 11-19-20
REVISION 2-4-21
REVISION 4-20-21
REVISION 5-11-21
REVISION 6-28-21

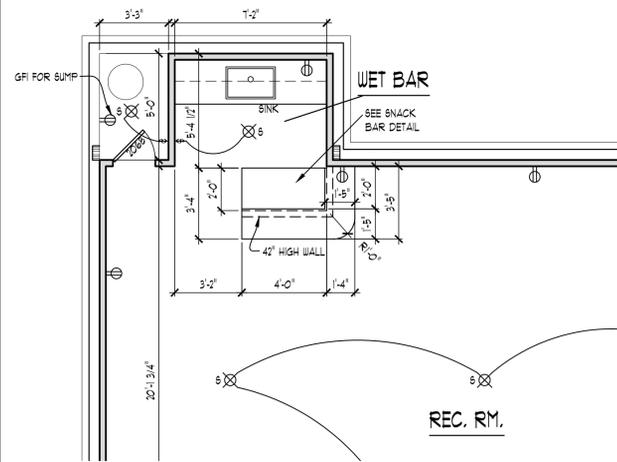
SCALE:
PER PLAN

SHEET #
A-3



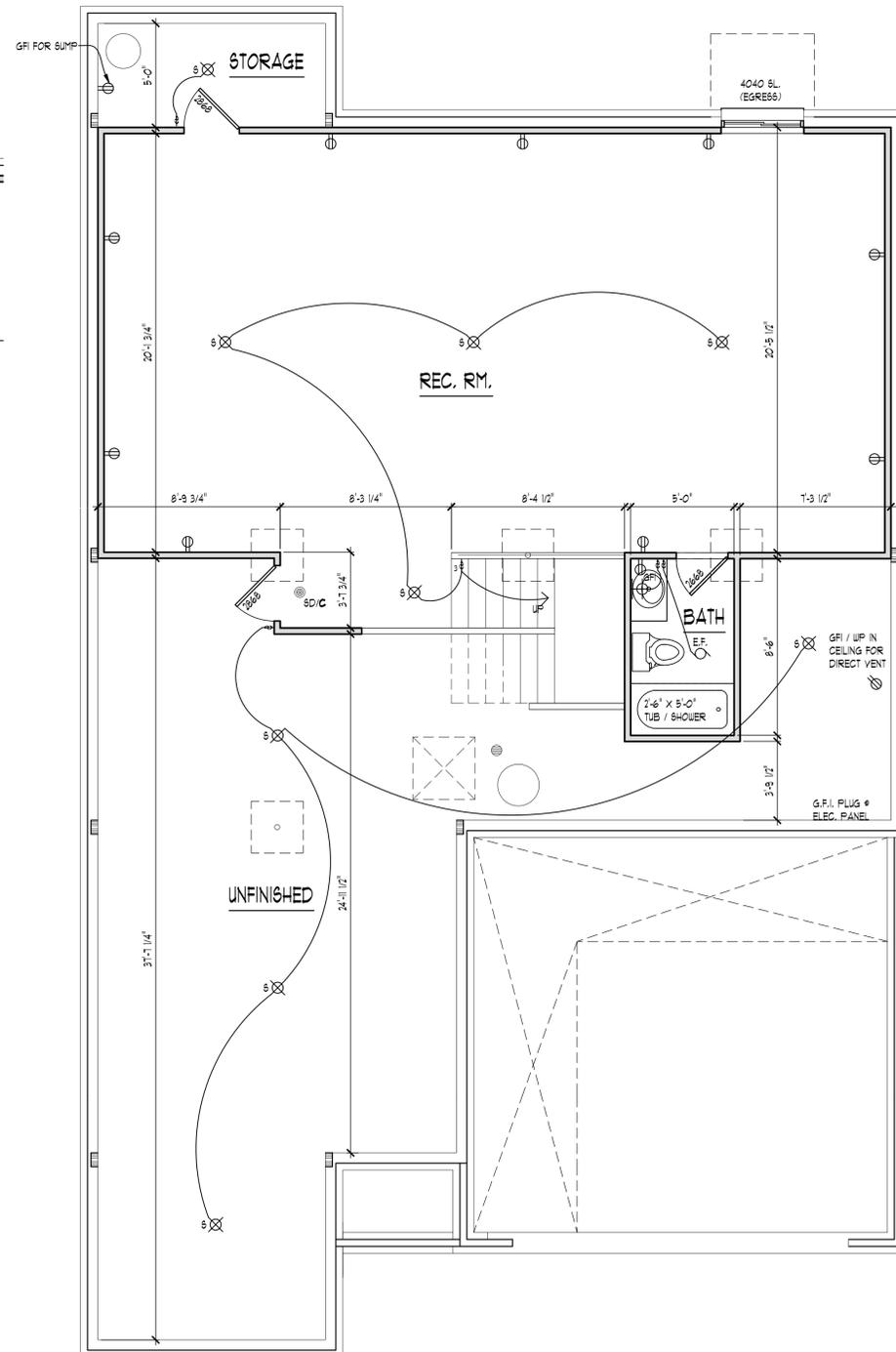
SNACK BAR DETAIL

SCALE: 1/2" = 1'-0"



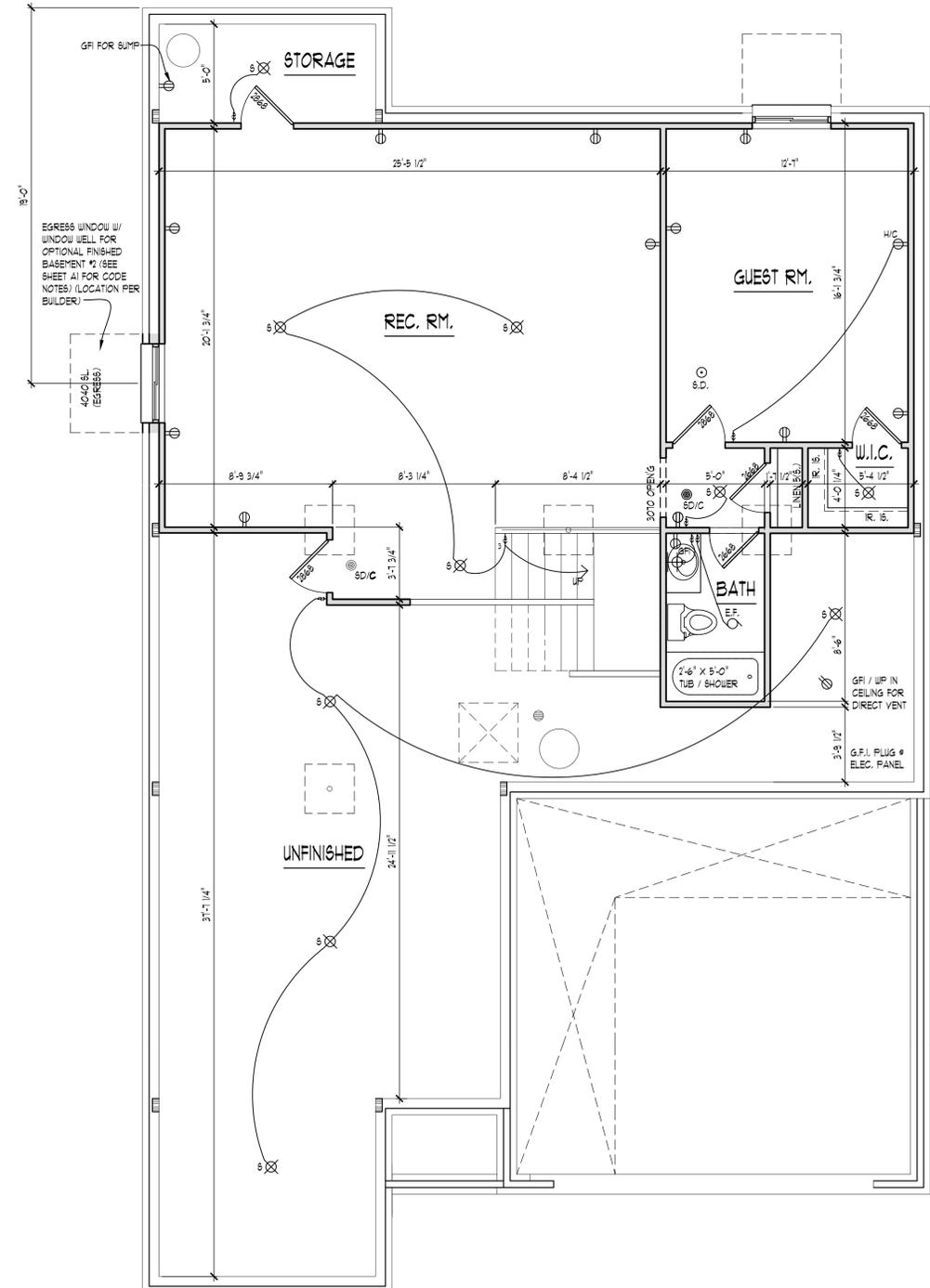
**FINISHED BASEMENT PLAN W/
OPTIONAL SNACK BAR**

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



FINISHED BASEMENT PLAN OPTION #1

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



FINISHED BASEMENT PLAN OPTION #2

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

FIN. BSMT. OPTION #1	936 S.F.
FIN. BSMT. OPTION #2	936 S.F.
W/ OPT. WET BAR	400 S.F.



DESIGN
CREATIVE COLLABORATIVE

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CONTRACTORS ARE SOLE RESPONSIBLE OF THE PERMITS/HOOKS.

CLIENT / PROJECT
ROBERTSON
BROTHERS
BREWSTER VILLAGE
RALEIGH PLAN
ALBANY ELEVATION
GARAGE RIGHT

JOB No.	18-233
DRAWN:	DM/PS
CHECKED:	DM
REVIEW	1-24-19
FINAL:	3-27-20
REVISION	2-4-21
REVISION	4-20-21
REVISION	5-11-21
REVISION	6-28-21
REVISION	8-5-21
REVISION	1-18-22

SCALE:
PER PLAN

SHEET #
FB-1

PLAN NOTES

INTERIOR WALLS:
1/2" GYPSUM WALL BOARD ON EACH SIDE OF 2x4 WOOD STUDS @ 16" O.C. 3 1/2" THICK TYPICAL (UNLESS NOTED OTHERWISE). ALL DIMENSION TAKEN FROM STUD EDGES

EXTERIOR WALLS:
SIDING AND/OR MASONRY WITH AIRSPACE, MOISTURE BARRIER PAPER (HOUSE WRAP) ON 1/8" O.S.B. SHEATHING ON 2x4 WOOD STUDS @ 16" O.C. OR AS NOTED. INSULATION TO BE INSTALLED TO MEET THE SIMULATED PERFORMANCE ALTERNATIVE METHOD IN ACCORDANCE WITH 2015 IRC SECTION N105 BASED ON CLIMATE ZONE 5A 1/2" GYPSUM WALL BOARD (GLUE & SCREWS). WALL TO BE 4" THICK WITH SIDING AND 8" THICK WITH MASONRY (TYPICAL UNLESS NOTED OTHERWISE). ALL DIMENSION TAKEN FROM FRAMING (FLOOR PLANS) OR FOUNDATION CORNERS (FOUNDATION PLAN)

1. OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH 20-MINUTE FIRE RATED DOORS (OR EQUIVALENT PER 2015 IRC SECTION R302.5.1).
2. VENT ALL EXHAUST FANS TO EXTERIOR.
3. WHEN POSSIBLE DIRECT ALL FLUES AND VENTS THAT PENETRATE ROOF BEHIND MAIN RIDGE.
4. INSTALL WATER SUPPLY AND DRAIN BOX (GREY BOX) AT WASHING MACHINE LOCATION.
5. USE MOISTURE RESISTANT DRYWALL AT ALL AREAS SUSCEPTIBLE TO MOISTURE.
6. ALL FIRST FLOOR INTERIOR DOORS TO BE FRAMED 6'-8" TALL, UNLESS NOTED OTHERWISE. VERIFY W/ BUILDER
7. PROVIDE GUARDRAIL AT STAIRS DURING CONSTRUCTION.
8. PROVIDE SQUASH BLOCKS UNDER ALL BEARING CONDITIONS.
9. GARAGE WALLS TO BE 2x6 STUDS IF OVER 10'-0" TALL.

NOTE:
S.D. ○
S.D.C. ●
ALL SMOKE & CARBON MONOXIDE DETECTORS INTERCONNECTED W/ BATTERY BACK-UP PER CODE.

NOTE:
DOOR & WINDOW LOCATIONS:
ALL DOORS & WINDOWS ARE ASSUMED TO BE EITHER IN THE CENTER OF THE WALL MASS OR MIN. 4 INCHES FROM PERPENDICULAR WALL FOR CASING UNLESS NOTED OTHERWISE

NOTE:
VERIFY DROPPED FLOOR AREAS FOR TILE WITH BUILDER

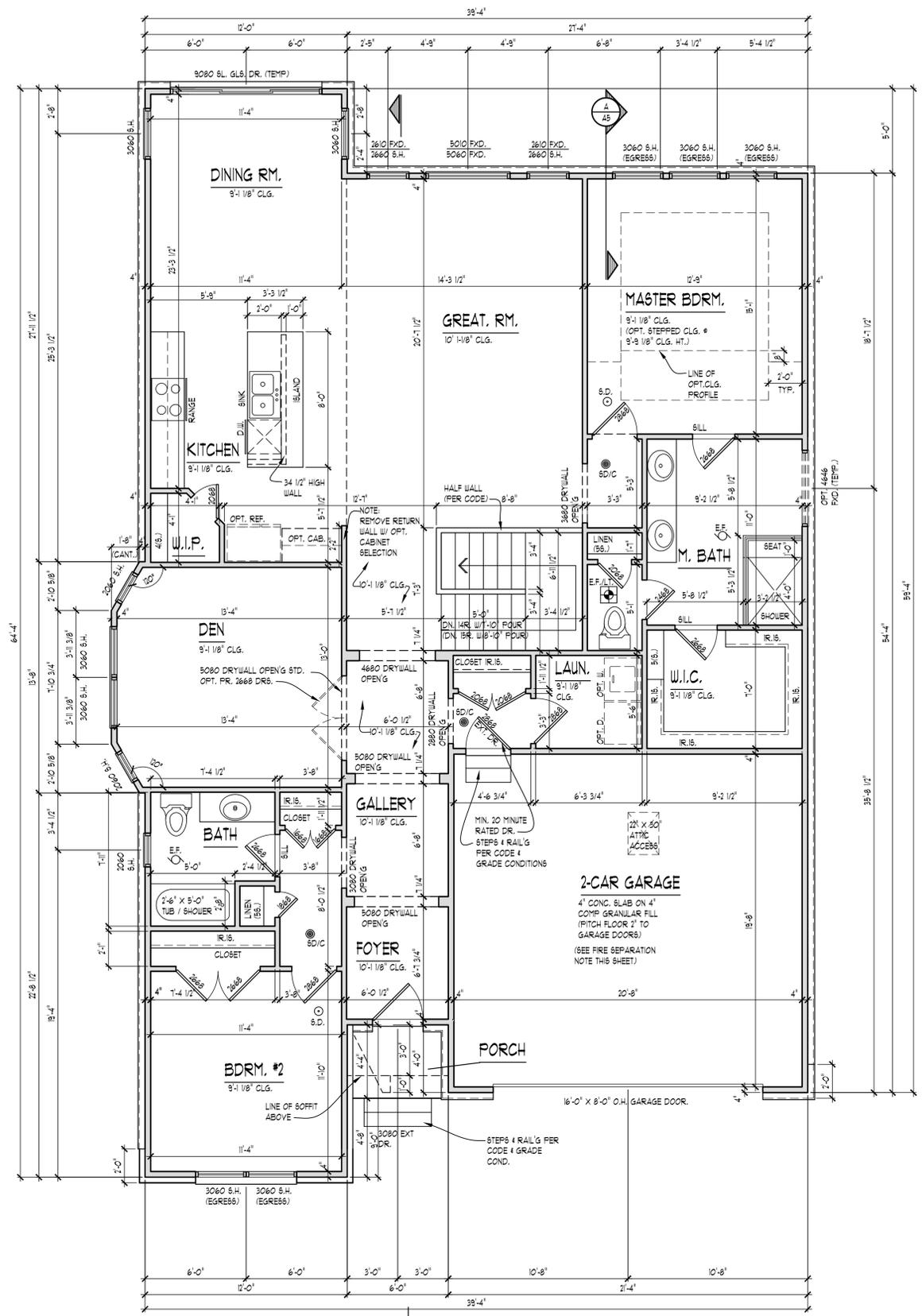
FIREPLACE NOTE
ALL FIREPLACE DIMENSIONS & ROUGH OPENINGS TO BE VERIFIED W/ MANUFACTURER SPECS INCLUDING BUT NOT LIMITED TO WIDTH, DEPTH, HEIGHT, CHIMNEY CLEARANCES, ETC. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL SPECS TO CARPENTER PRIOR TO FRAMING

FIRE SEPARATION NOTE
FIRE SEPARATION (R302.6)
GARAGE SPACE BENEATH HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8-INCH TYPE X GYPSUM BOARD OR EQUIVALENT. WHERE THE SEPARATION IS A FLOOR-CEILING ASSEMBLY, THE STRUCTURE SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED BY NOT LESS THAN 1/2-INCH GYPSUM BOARD OR EQUIVALENT. ALL OTHER GARAGE SPACE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 1/2-INCH GYPSUM BOARD APPLIED TO THE GARAGE SIDE. DROF CLG. UNDER FLR. ABV. (ENCLOSE MECHANICAL AND STRUCTURAL ELEMENTS) VERIFY W/ BLDG.

NOTE:
PROVIDE MIN. (1) 2 X 4 HEADER AT ALL INTERIOR & EXTERIOR DOOR & WINDOW OPENINGS (UNLESS NOTED OTHERWISE).

NOTE:
PROVIDE MIN. (1) JACK STUD & (1) KING STUD AT EACH END OF ALL HEADERS (UNLESS NOTED OTHERWISE).

NOTE:
PROVIDE MIN. (1) JOIST OR LADDER FRAMING UNDER ALL UPPER FLOOR PARALLEL PARTITIONS



FIRST FLOOR PLAN

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

AREA SUMMARY:
OVERALL FLOOR AREA:
FIRST FLOOR 1834 S.F.



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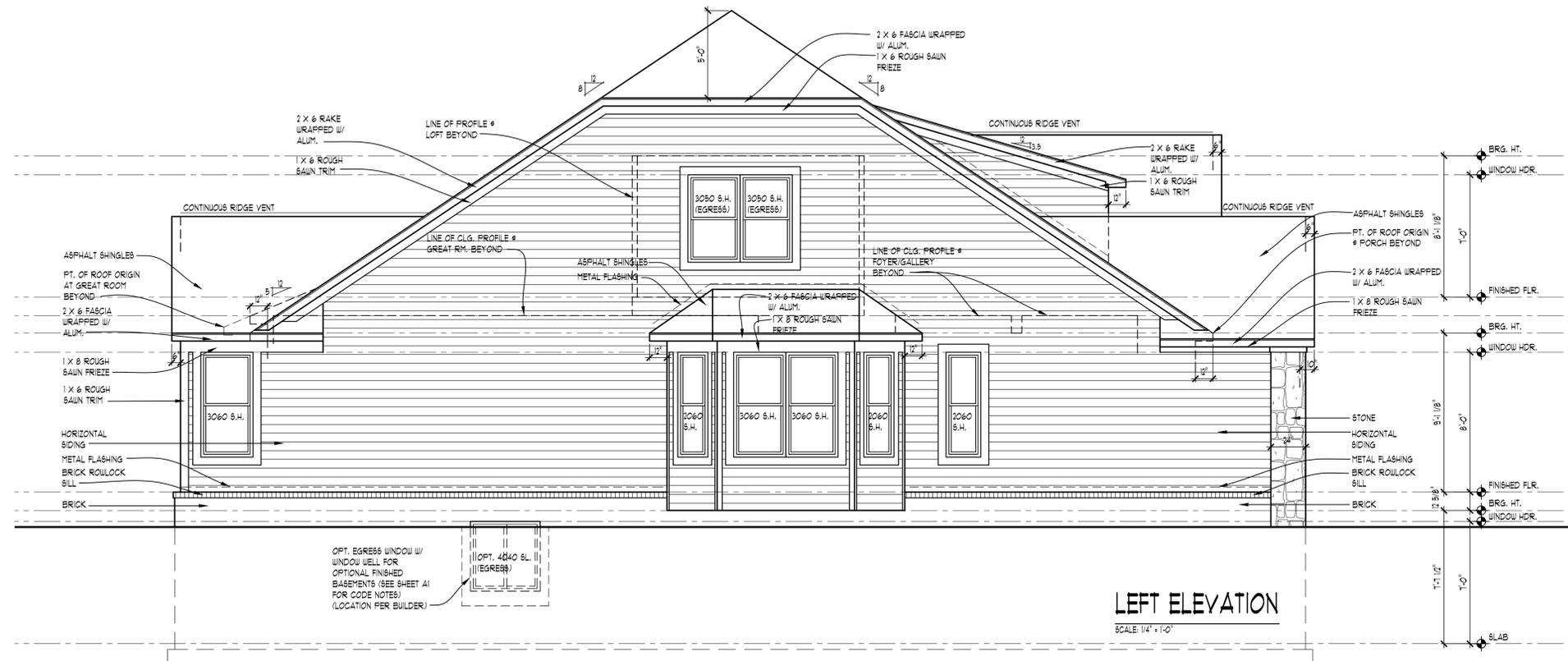
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CONSTRUCTION & THE SOLE RESPONSIBILITY OF THE FIRM/HOUSEHOLD.

CLIENT / PROJECT
ROBERTSON
BROTHERS
BREWSTER VILLAGE
RALEIGH PLAN
ALBANY ELEVATION
GARAGE RIGHT

JOB No.	18-233
DRAWN:	DM/PS
CHECKED:	DM
REVIEW	1-24-19
FINAL:	3-27-20
REVISION	2-4-21
REVISION	4-20-21
REVISION	5-11-21
REVISION	6-28-21
REVISION	8-15-21
REVISION	1-18-22

SCALE:
PER PLAN

SHEET #
A-2



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

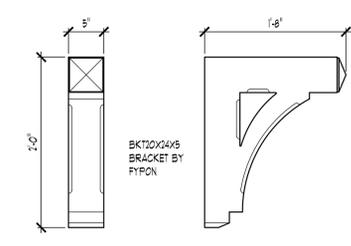
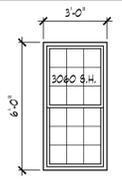
ELEVATION NOTES

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- PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS
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- PROVIDE GUTTERS & DOWNSPOUTS FOR DRAINAGE OF ROOF WATER. DOWNSPOUTS ARE TO BE LOCATED SO THAT THE DISCHARGE WILL NOT SPILL ON OR FLOW ACROSS ANY PORCHES, WALKS OR DRIVES.
- CARPENTER TO VERIFY THICKNESS OF MASONRY PRIOR TO BUILDING BRICK RACK

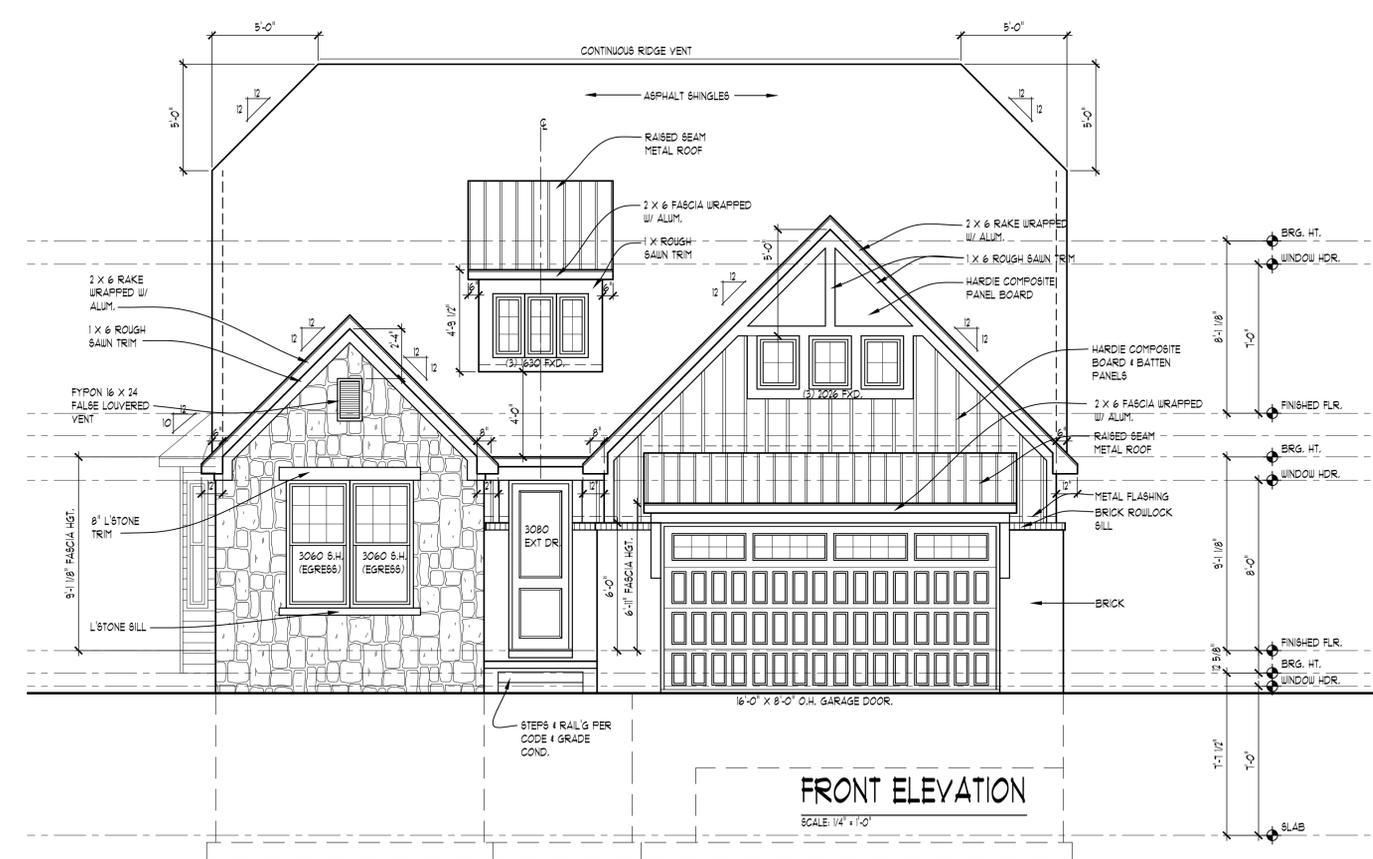
NOTE:
OVERHANG DIMENSIONS (O.H.) ARE FROM SHEATHING U.N.C.

TYPICAL WINDOW DESIGNATION

NOTE:
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NOTE:
ALL CASEMENT VENTING TO BE VERIFIED BY BUILDER/HOMEOWNER PRIOR TO ORDERING WINDOWS
NOTE:
WINDOW MANUFACTURER TO VERIFY ALL WINDOW GRID PATTERNS WITH HOME OWNER.



BRACKET DETAIL
SCALE: 1" = 1'-0"



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



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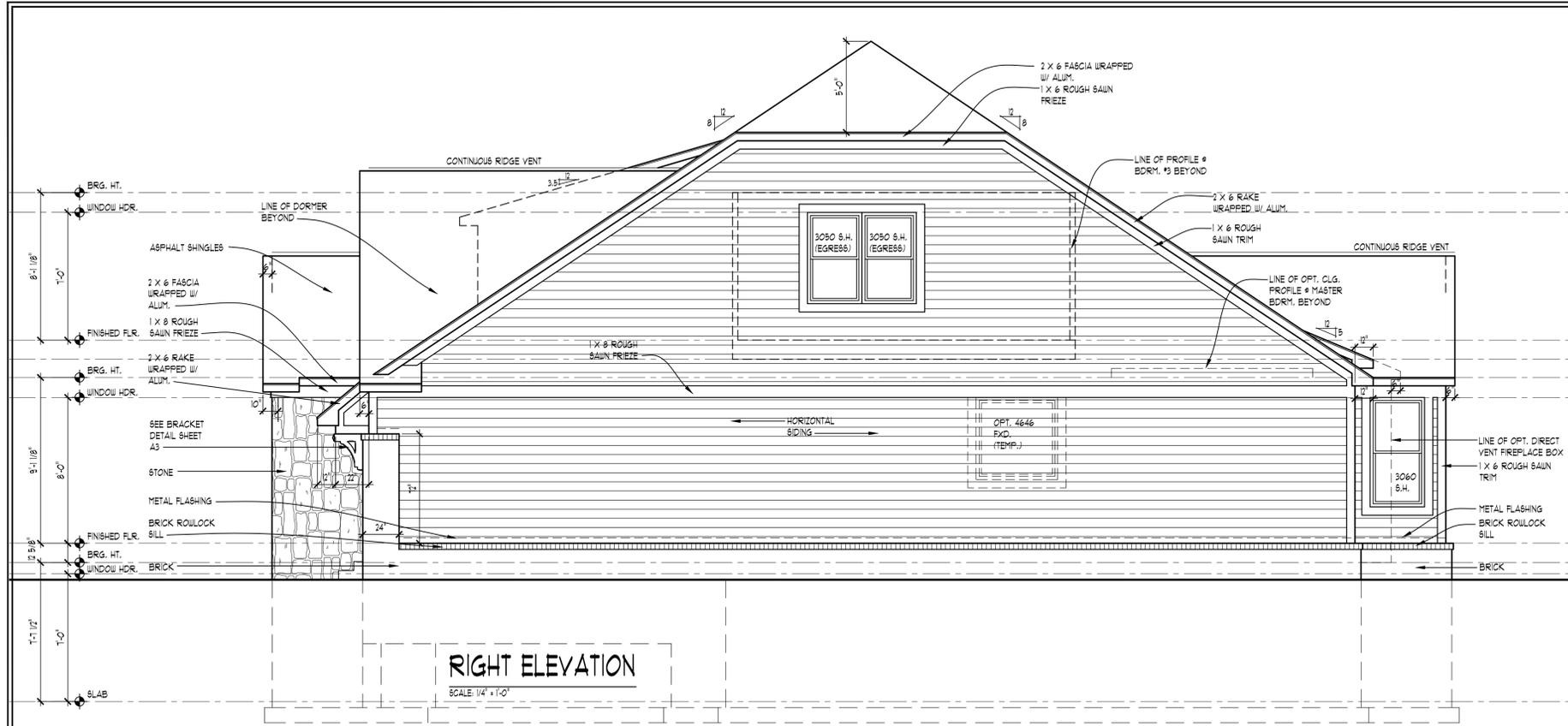
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CLIENT / PROJECT
ROBERTSON
BROTHERS
BREWSTER VILLAGE
NORTHVILLE, MI.
WILMINGTON
ELEVATION A
GARAGE RIGHT

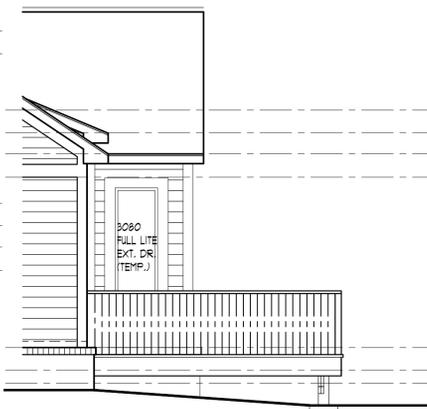
JOB No. 1972-21
DRAWN: PAPP'S
CHECKED: DM
REVIEW 8-6-21
FINAL: 8-10-21
REVISION -

SCALE:
PER PLAN

SHEET #
A-3

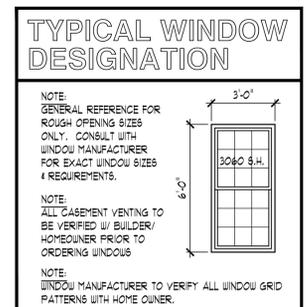


RIGHT ELEVATION
SCALE: 1/4" = 1'-0"



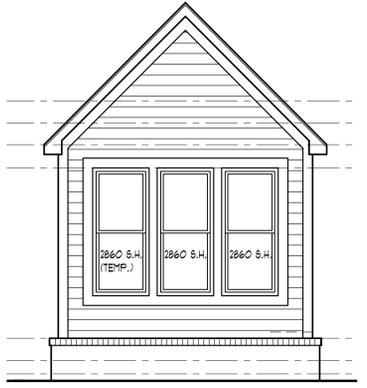
**PARTIAL RIGHT ELEVATION
W/ OPTIONAL DOOR REQUIRED
W/ SMALL DECK**
SCALE: 1/4" = 1'-0"

- ELEVATION NOTES**
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 - PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS
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NOTE:
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NOTE:
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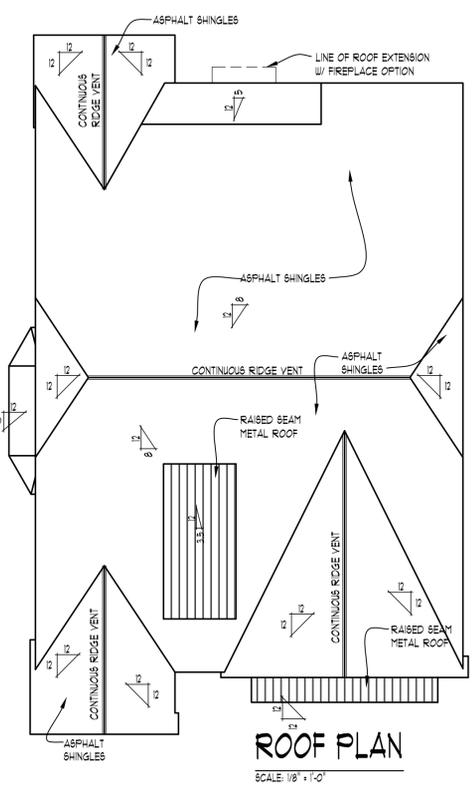
W/ OPT. WINDOWS
SCALE: 1/4" = 1'-0"

ATTIC VENTILATION CALCULATIONS:

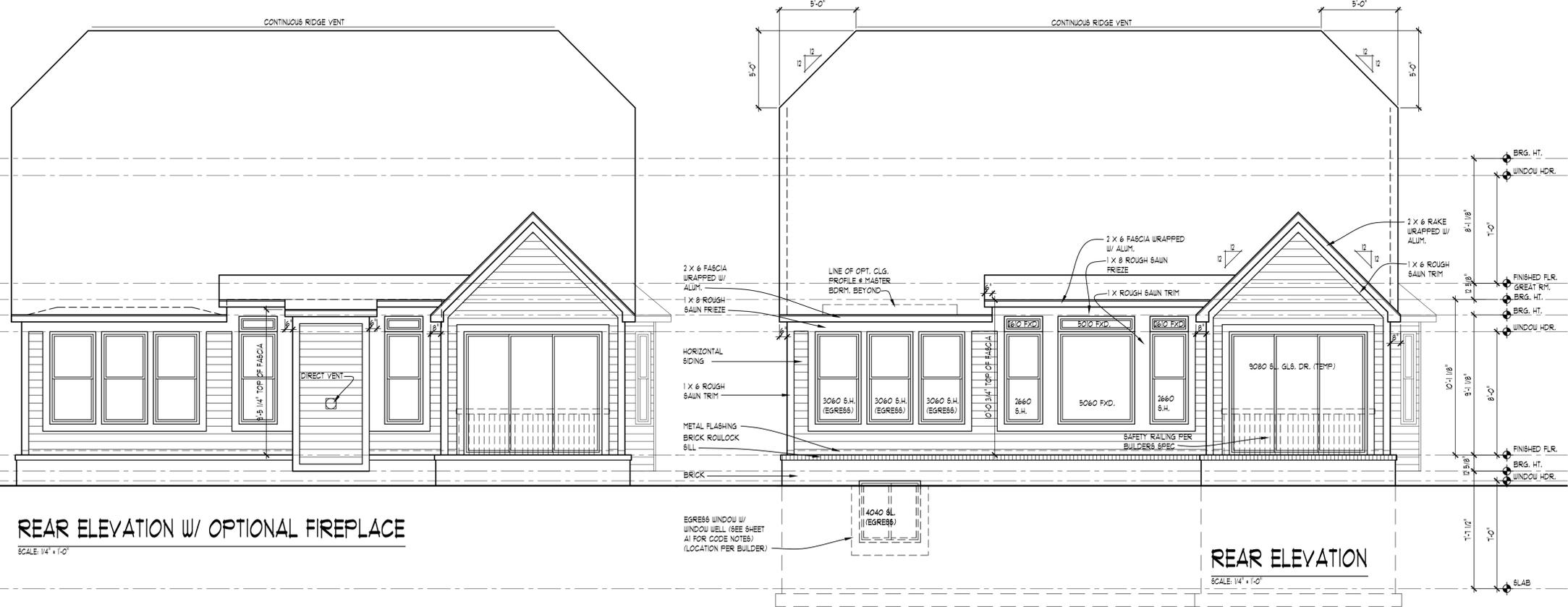
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1834/180 = 10.2 (SQ. FT. REQ'D)
112' X 144' = 161' (SQ. INCH CONVERSION)

RIDGE VENTING:
161' X 0.45 = 73' (SQ. INCHES REQ'D)
73' / 18" = 41' (LINEAR FT. OF RIDGE VENT REQ'D)

EAVE OR CORNICE VENTING:
161' X 0.35 = 56' (INCHES REQ'D)



ROOF PLAN
SCALE: 1/8" = 1'-0"



REAR ELEVATION W/ OPTIONAL FIREPLACE
SCALE: 1/4" = 1'-0"

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



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CONSTRUCTION & THE SOLE RESPONSIBILITY OF THE PRIME CONTRACTOR.

CLIENT / PROJECT
ROBERTSON
BROTHERS
BREWSTER VILLAGE
NORTHVILLE, MI.
WILMINGTON A
ELEVATION A
GARAGE RIGHT

JOB No. 1972-21
DRAWN: PAPP'S
CHECKED: DM
REVIEW 8-6-21
FINAL: 8-10-21
REVISION

SCALE:
PER PLAN

SHEET #
A-4

ELEVATION NOTES

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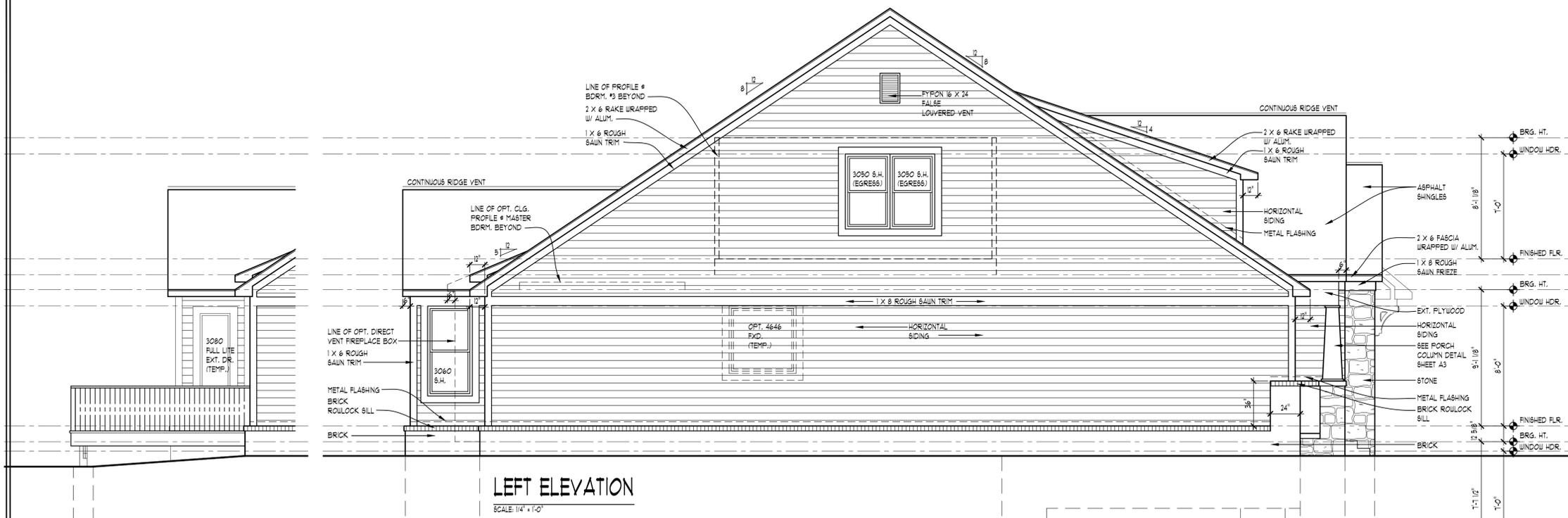
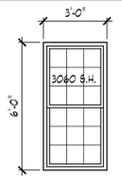
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TYPICAL WINDOW DESIGNATION

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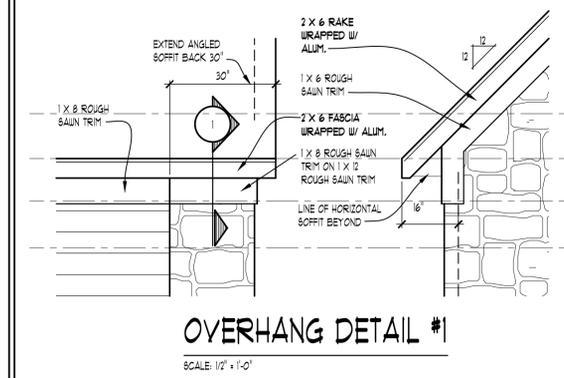
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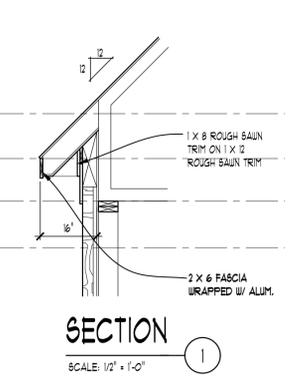


LEFT ELEVATION
SCALE: 1/4" = 1'-0"

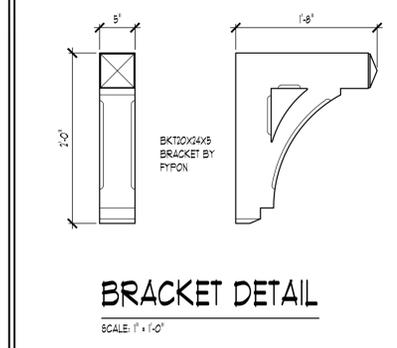
PARTIAL RIGHT ELEVATION
W/ OPTIONAL DOOR REQUIRED
W/ SMALL DECK
SCALE: 1/4" = 1'-0"



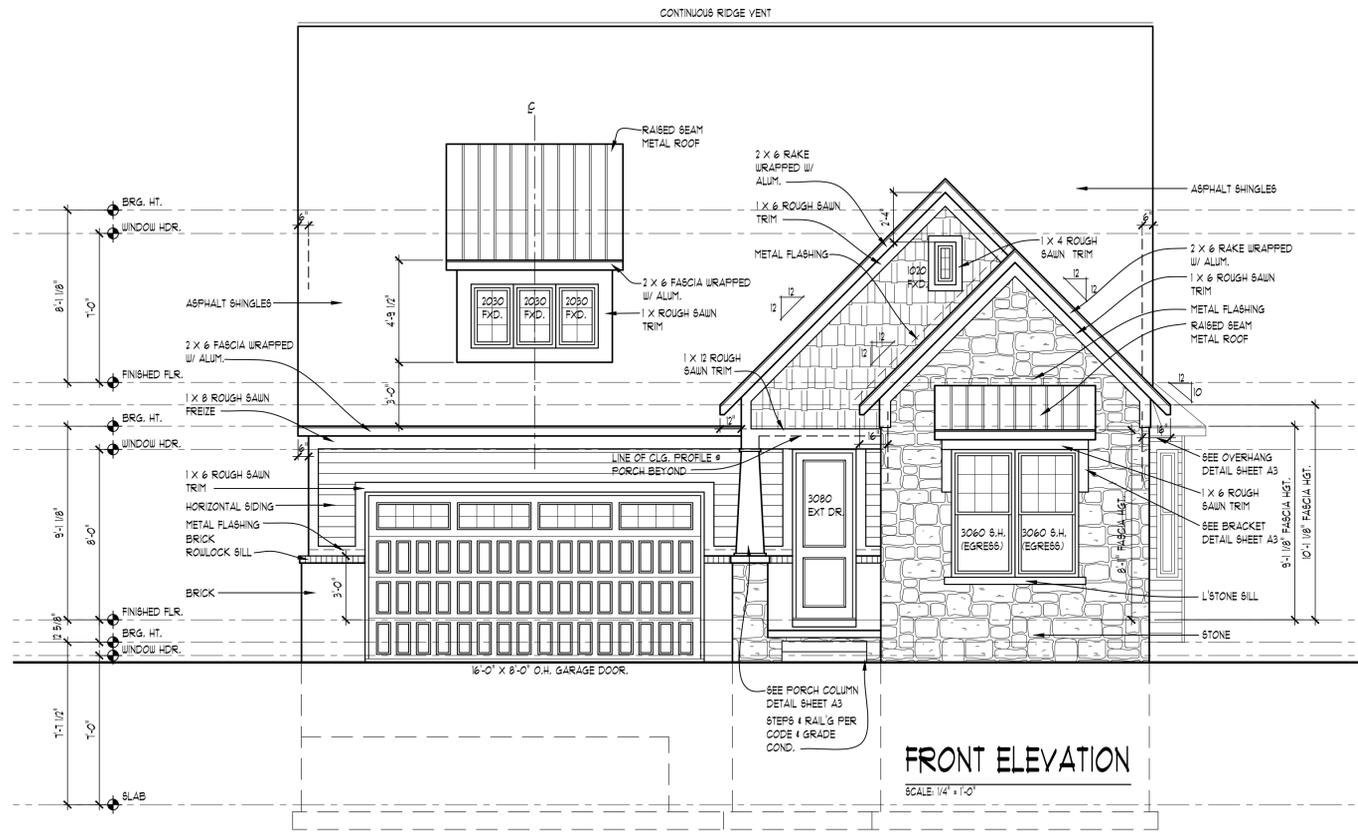
OVERHANG DETAIL #1
SCALE: 1/2" = 1'-0"



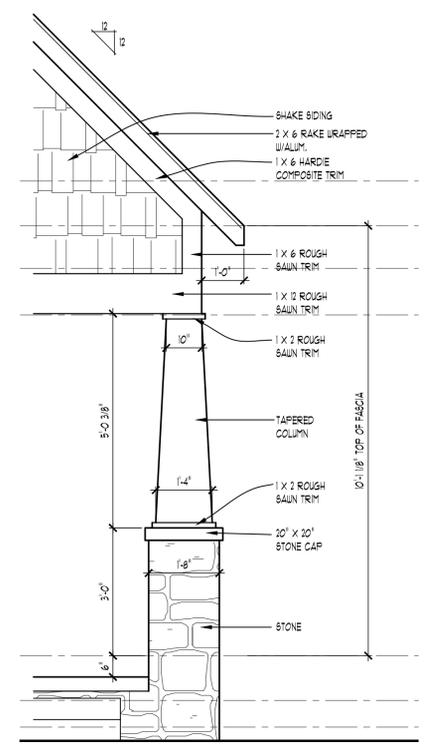
SECTION
SCALE: 1/2" = 1'-0"



BRACKET DETAIL
SCALE: 1" = 1'-0"



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



PORCH COLUMN DETAIL
SCALE: 1/2" = 1'-0"



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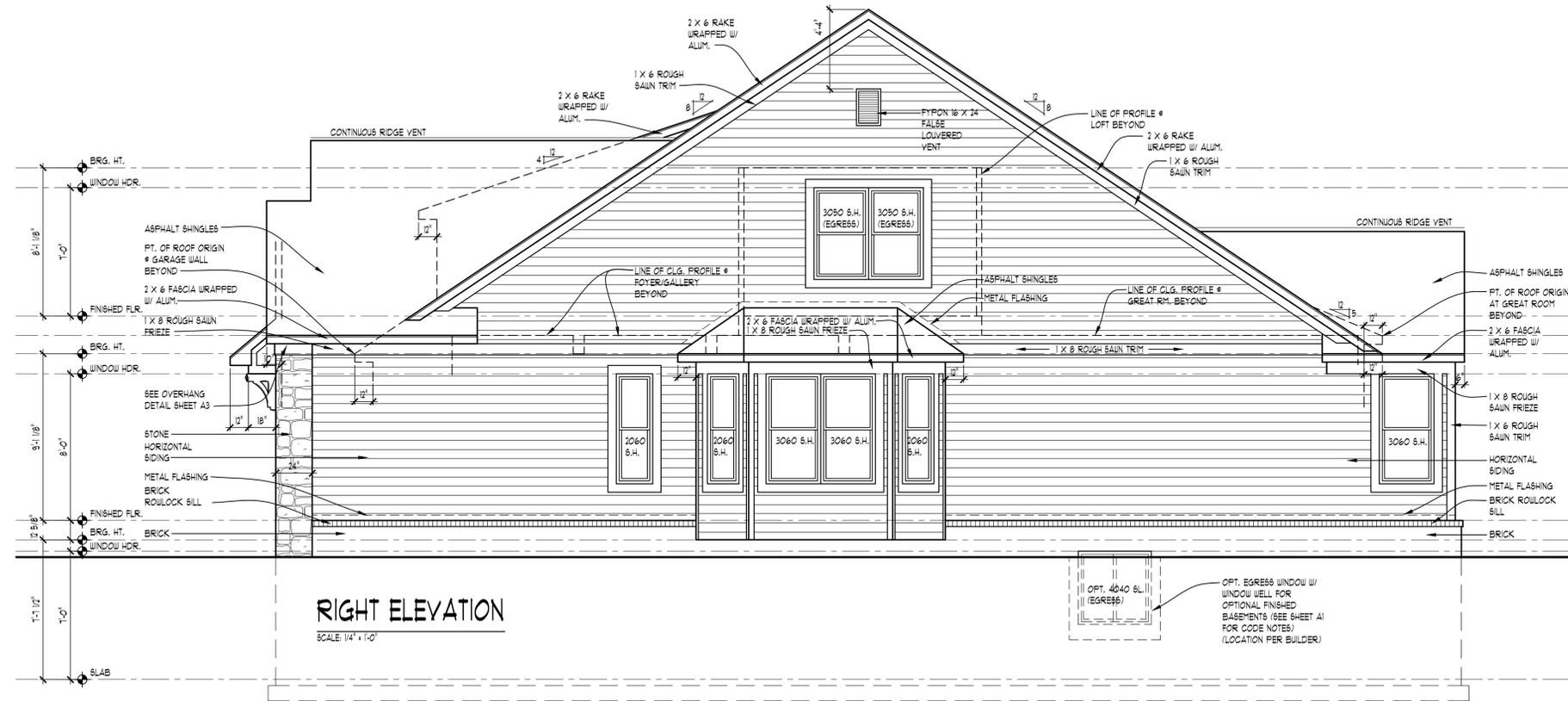
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CONSTRUCTION. THE SOLE RESPONSIBILITY OF THE PROFESSIONAL

CLIENT / PROJECT
ROBERTSON
BROTHERS
BROTHER VILLAGE
NORTHVILLE, MI.
WILMINGTON, MI.
ELEVATION B
GARAGE LEFT

JOB No. 1972-21
DRAWN: NA
CHECKED: -
REVIEW 12-13-21
FINAL: -
REVISION -

SCALE:
PER PLAN

SHEET #
A-3



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

ELEVATION NOTES

- ALL ROOF SADDLES TO BE PLYWOOD SHEATHED WITH ICE & WATER SHIELD AND SHINGLES.
- PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS
- FIREPLACE FLUE TO BE DETERMINED PER MANUFACTURER'S SPECIFICATION
- METAL FLASHING AS REQUIRED BY CODE.
- ROOF & SOFFIT VENTS AS REQUIRED BY CODE.
- PROVIDE GUTTERS & DOWNSPOUTS FOR DRAINAGE OF ROOF WATER. DOWNSPOUTS ARE TO BE LOCATED SO THAT THE DISCHARGE WILL NOT SPILL ON OR FLOW ACROSS ANY PORCHES, WALKS OR DRIVES.
- CARPENTER TO VERIFY THICKNESS OF MASONRY PRIOR TO BUILDING BRICK RACK

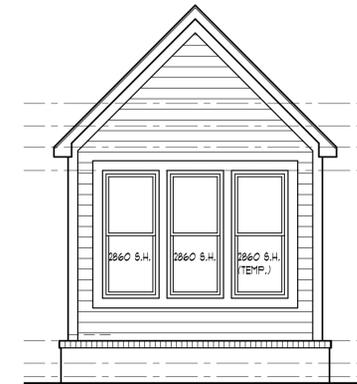
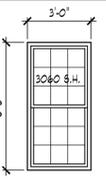
NOTE:
OVERHANG DIMENSIONS (O.H.) ARE FROM SHEATHING U.N.C.

TYPICAL WINDOW DESIGNATION

NOTE:
GENERAL REFERENCE FOR ROUGH OPENING SIZES ONLY. CONSULT WITH WINDOW MANUFACTURER FOR EXACT WINDOW SIZES & REQUIREMENTS.

NOTE:
ALL CASEMENT VENTING TO BE VERIFIED W/ BUILDER/ HOMEOWNER PRIOR TO ORDERING WINDOWS

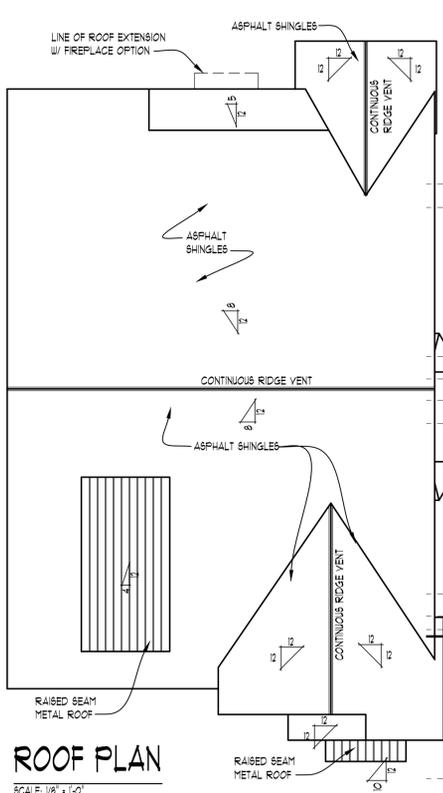
NOTE:
WINDOW MANUFACTURER TO VERIFY ALL WINDOW GRID PATTERNS WITH HOME OWNER.



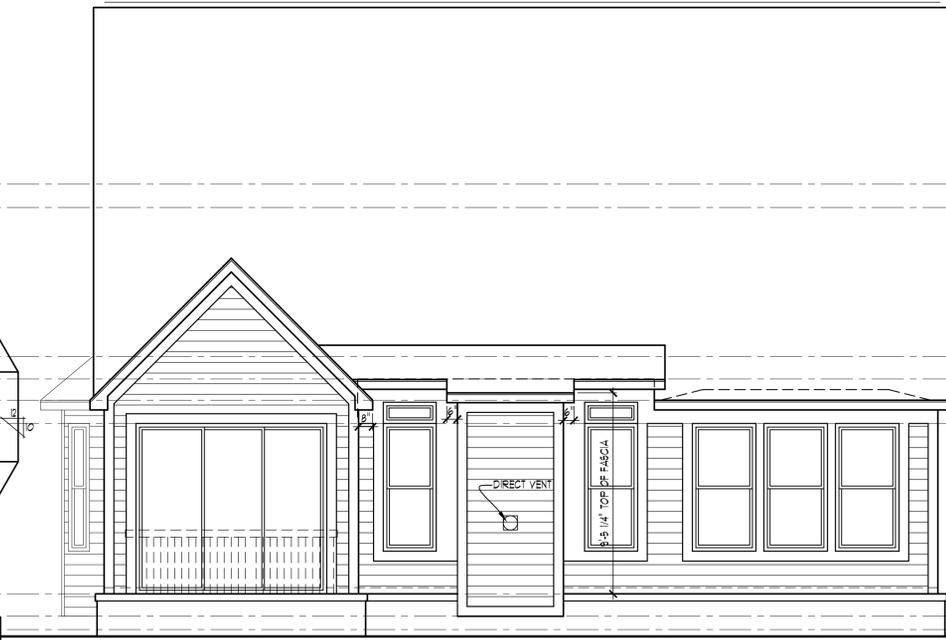
W/ OPT. WINDOWS
SCALE: 1/4" = 1'-0"

ATTIC VENTILATION CALCULATIONS:

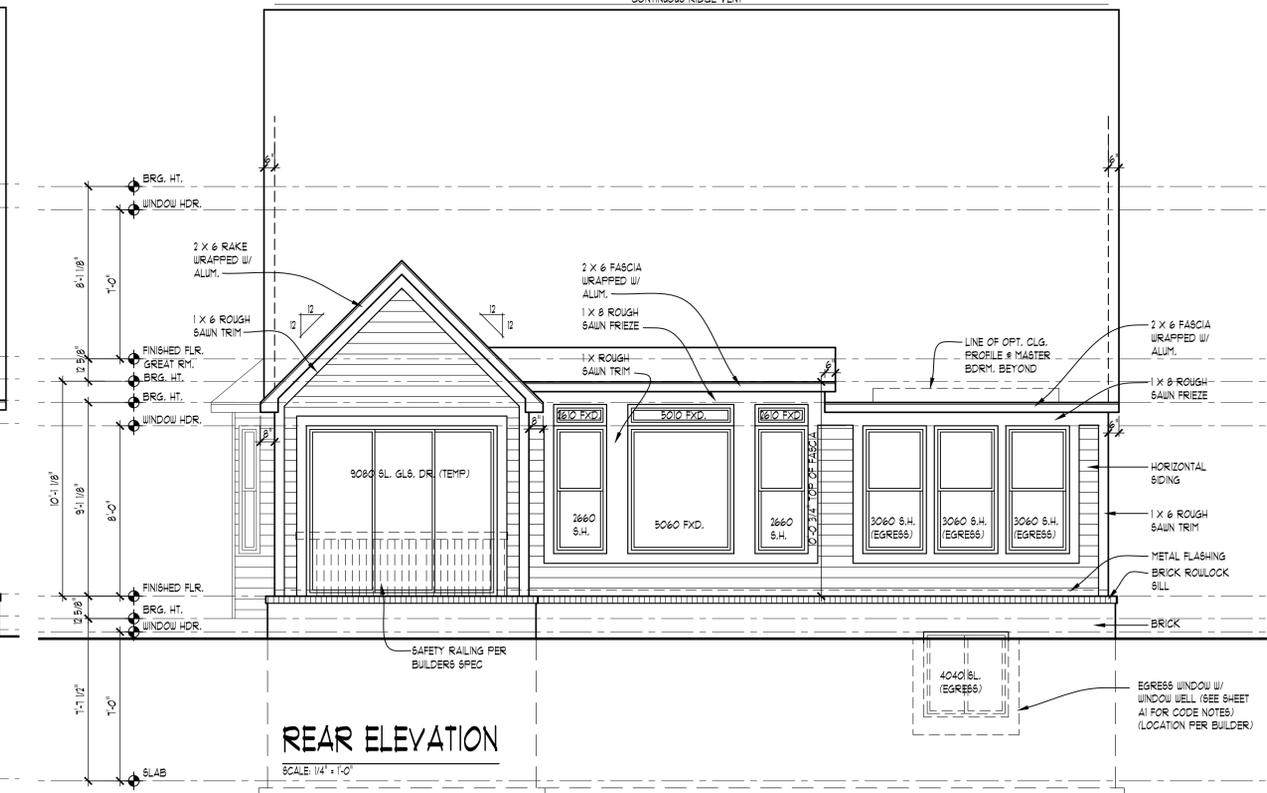
AREA OF ATTIC OVER HEATED SPACE = 1834 SQ. FT.
 $1834/180 = 10.2$ (SQ. FT. REQ'D)
 $12.2 \times 144" = 1757"$ (SQ. INCH CONVERSION)
 RIDGE VENTING:
 $1757 \times 0.25 = 439"$ (SQ. INCHES REQ'D)
 $1757 / 18 = 97.6$ (LINEAR FT. OF RIDGE VENT REQ'D)
 EAVE OR CORNICE VENTING:
 $1757 \times 0.35 = 615"$ (SQ. INCHES REQ'D)



ROOF PLAN
SCALE: 1/8" = 1'-0"



REAR ELEVATION W/ OPTIONAL FIREPLACE
SCALE: 1/4" = 1'-0"



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



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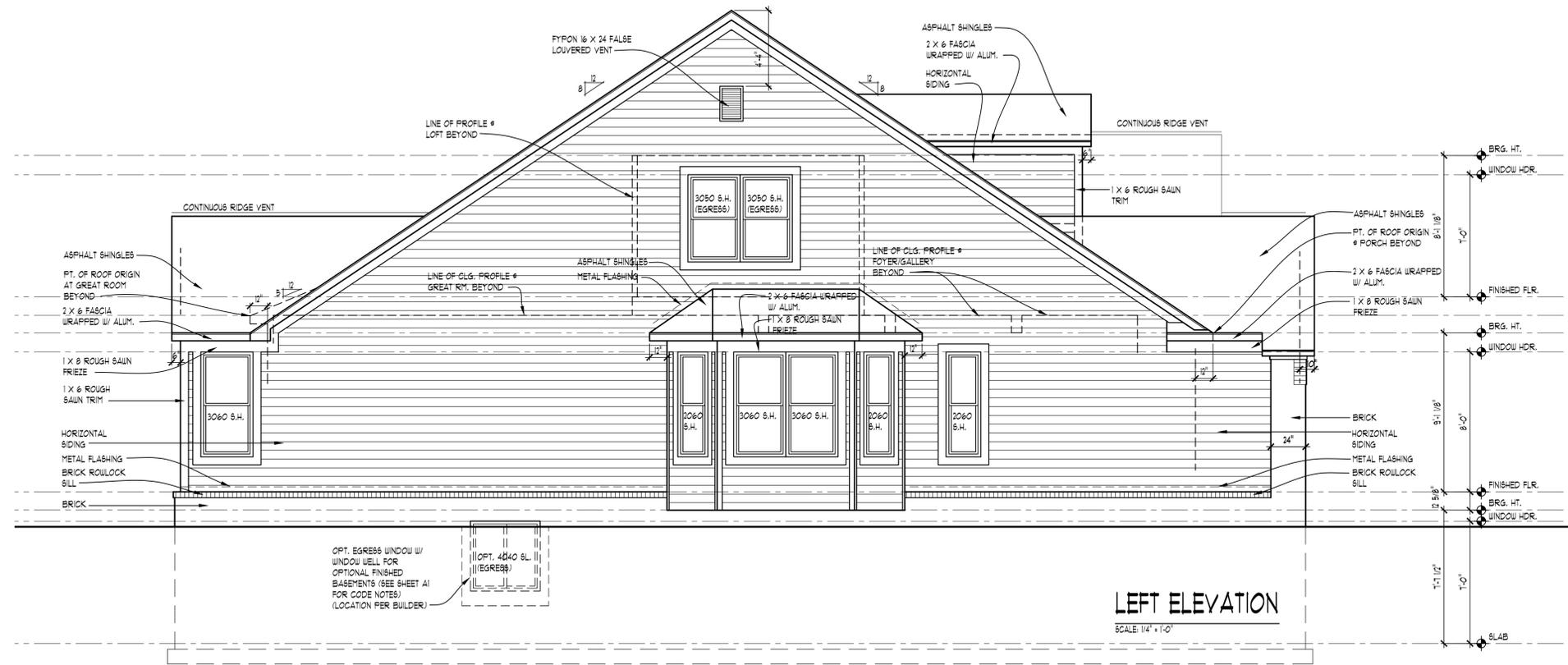
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CLIENT / PROJECT
 ROBERTSON
 BROTHERS
 BREWSTER VILLAGE
 NORTHVILLE, MI.
 WILMINGTON
 ELEVATION B
 GARAGE LEFT

JOB No. 1972-21
DRAWN: NA
CHECKED: -
REVIEW 12-13-21
FINAL: -
REVISION -

SCALE:
 PER PLAN

SHEET #
 A-4

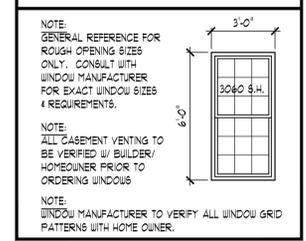


ELEVATION NOTES

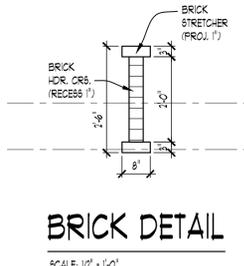
1. ALL ROOF SADDLES TO BE PLYWOOD SHEATHED WITH ICE & WATER SHIELD AND SHINGLES.
2. PROVIDE ICE & WATER SHIELD MIN. 6'-0" COVERAGE AT ALL VALLEYS
3. FIREPLACE FLUE TO BE DETERMINED PER MANUFACTURER'S SPECIFICATION
4. METAL FLASHING AS REQUIRED BY CODE.
5. ROOF & SOFFIT VENTS AS REQUIRED BY CODE.
6. PROVIDE GUTTERS & DOWNSPOUTS FOR DRAINAGE OF ROOF WATER. DOWNSPOUTS ARE TO BE LOCATED SO THAT THE DISCHARGE WILL NOT SPILL ON OR FLOW ACROSS ANY PORCHES, WALKS OR DRIVES.
7. CARPENTER TO VERIFY THICKNESS OF MASONRY PRIOR TO BUILDING BRICK RACK

NOTE:
OVERHANG DIMENSIONS (O.H.) ARE FROM SHEATHING U.L.C.

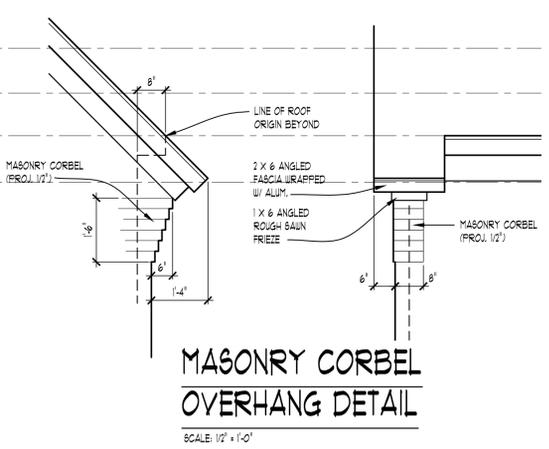
TYPICAL WINDOW DESIGNATION



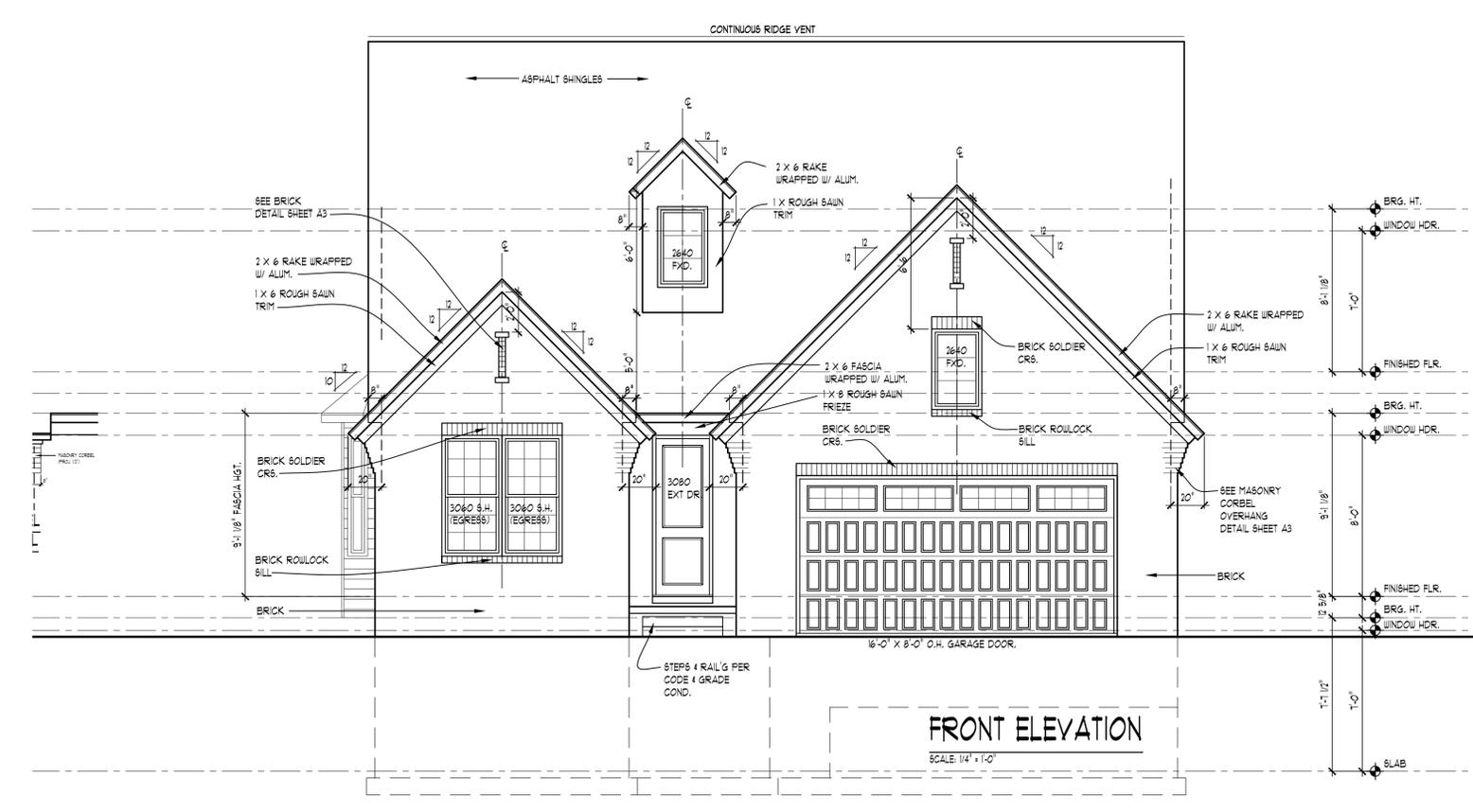
NOTE:
ALL WINDOW SILLS OVER 6'-0" ABOVE EXTERIOR GRADE OR SURFACE BELOW TO BE MINIMUM 24" ABOVE FINISHED FLOOR OR HAVE BASH LIMITERS PER CODE REQUIREMENTS



BRICK DETAIL
SCALE: 1/2" = 1'-0"



MASONRY CORBEL OVERHANG DETAIL
SCALE: 1/2" = 1'-0"



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



DESIGN
CREATIVE COLLABORATIVE

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CLIENT / PROJECT
ROBERTSON
BROTHERS
BREWSTER VILLAGE
NORTHVILLE, MI.
WILMINGTON E
ELEVATION E
GARAGE RIGHT

JOB No. 1972-21
DRAWN: DM/PS
CHECKED: DM
REVIEW -
FINAL: 2-17-22
REVISION -

SCALE:
PER PLAN

SHEET #
A-3

NOTE:
 PROVIDE MIN. (2) 2 X 4 HEADER AT ALL INTERIOR & EXTERIOR DOOR & WINDOW OPENINGS (UNLESS NOTED OTHERWISE).

NOTE:
 PROVIDE MIN. (1) JACK STUD & (1) KING STUD AT EACH END OF ALL HEADERS (UNLESS NOTED OTHERWISE).

NOTE:
 PROVIDE MIN. (1) JOIST OR LADDER FRAMING UNDER ALL UPPER FLOOR PARALLEL PARTITIONS

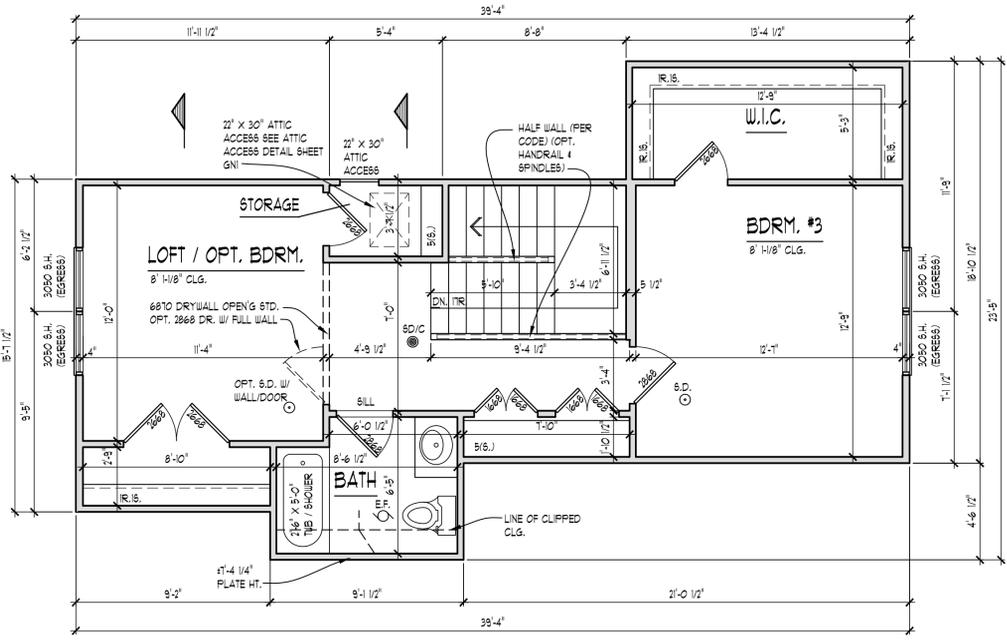
NOTE:
 S.D. ○
 S.D./C ●
 ALL SMOKE & CARBON MONOXIDE DETECTORS INTERCONNECTED W/ BATTERY BACK-UP PER CODE.

NOTE:
 DOOR & WINDOW LOCATIONS:
 ALL DOORS & WINDOWS ARE ASSUMED TO BE EITHER IN THE CENTER OF THE WALL MASS OR MIN. 4 INCHES FROM PERPENDICULAR WALL FOR CASING UNLESS NOTED OTHERWISE

NOTE:
 VERIFY DROPPED FLOOR AREAS FOR TILE WITH BUILDER

FIREPLACE NOTE
 ALL FIREPLACE DIMENSIONS & ROUGH OPENINGS TO BE VERIFIED W/ MANUFACTURER SPECS INCLUDING BUT NOT LIMITED TO WIDTH, DEPTH, HEIGHT, CHIMNEY CLEARANCES, ETC. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL SPECS TO CARPENTER PRIOR TO FRAMING

FIRE SEPARATION NOTE
 FIRE SEPARATION (R302.6)
 GARAGE SPACE BETWEEN HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8-INCH TYPE X GYPSUM BOARD OR EQUIVALENT. WHERE THE SEPARATION IS A FLOOR-CEILING ASSEMBLY, THE STRUCTURE SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED BY NOT LESS THAN 1/2-INCH GYPSUM BOARD OR EQUIVALENT. ALL OTHER GARAGE SPACE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 1/2-INCH GYPSUM BOARD APPLIED TO THE GARAGE SIDE. DROP CLG. UNDER FLR. ABV. (ENCLOSE MECHANICAL AND STRUCTURAL ELEMENTS) VERIFY W/ BLDG.



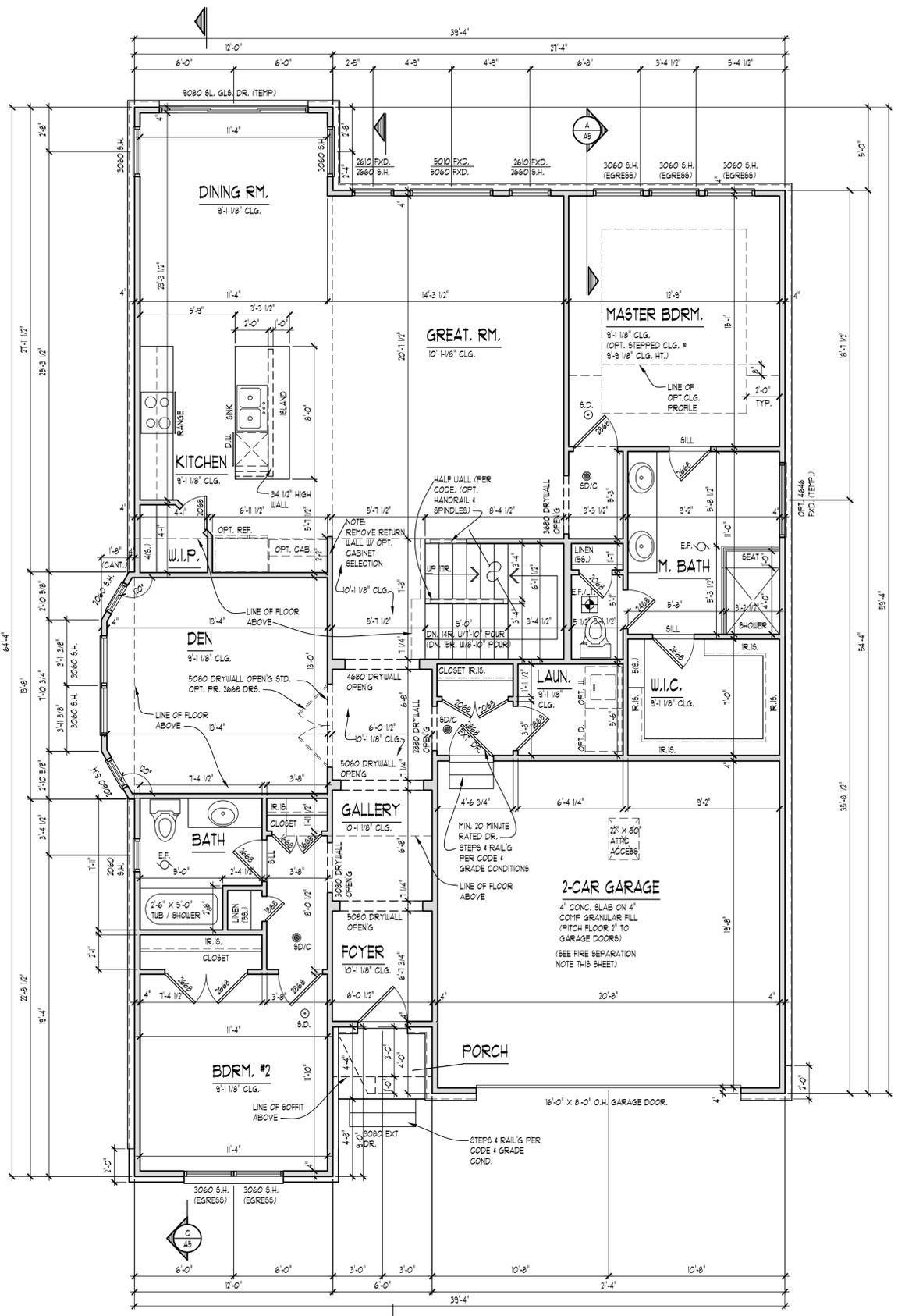
SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"

PLAN NOTES

INTERIOR WALLS:
 1/2" GYPSUM WALL BOARD ON EACH SIDE OF 2X4 WOOD STUDS @ 16" O.C. @ 3 1/2" THICK TYPICAL (UNLESS NOTED OTHERWISE). ALL DIMENSION TAKEN FROM STUD EDGES

EXTERIOR WALLS:
 SIDING AND/OR MASONRY WITH AIRSPACE, MOISTURE BARRIER PAPER (HOUSE WRAP) ON 1/16" O.S.B. SHEATHING ON 2X4 WOOD STUDS @ 16" O.C. OR AS NOTED. INSULATION TO BE INSTALLED TO MEET THE SIMULATED PERFORMANCE ALTERNATIVE METHOD IN ACCORDANCE WITH 2018 MRC SECTION N103 BASED ON CLIMATE ZONE 5A. 1/2" GYPSUM WALL BOARD (GLUE & SCREW). WALL TO BE 4" THICK WITH SIDING AND 8" THICK WITH MASONRY (TYPICAL UNLESS NOTED OTHERWISE). ALL DIMENSION TAKEN FROM FRAMING (FLOOR PLANS) OR FOUNDATION CORNERS (FOUNDATION PLAN)

- OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH 20-MINUTE FIRE RATED DOORS (OR EQUIVALENT) PER 2018 MRC SECTION R302.5.1.
- VENT ALL EXHAUST FANS TO EXTERIOR.
- WHEN POSSIBLE DIRECT ALL FLUES AND VENTS THAT PENETRATE ROOF BEHIND MAIN RIDGE.
- INSTALL WATER SUPPLY AND DRAIN BOX (GREY BOX) AT WASHING MACHINE LOCATION.
- USE MOISTURE RESISTANT DRYWALL AT ALL AREAS SUSCEPTIBLE TO MOISTURE.
- ALL FIRST FLOOR INTERIOR DOORS TO BE FRAMED 6'-8" TALL, UNLESS NOTED OTHERWISE. VERIFY W/ BUILDER
- PROVIDE GUARDRAIL AT STAIRS DURING CONSTRUCTION.
- PROVIDE SQUASH BLOCKS UNDER ALL BEARING CONDITIONS.
- GARAGE WALLS TO BE 2X6 STUDS F OVER 10'-0" TALL.



FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"

AREA SUMMARY:

OVERALL FLOOR AREA:	1834 S.F.
FIRST FLOOR	1834 S.F.
SECOND FLOOR	598 S.F.
TOTAL	2432 S.F.



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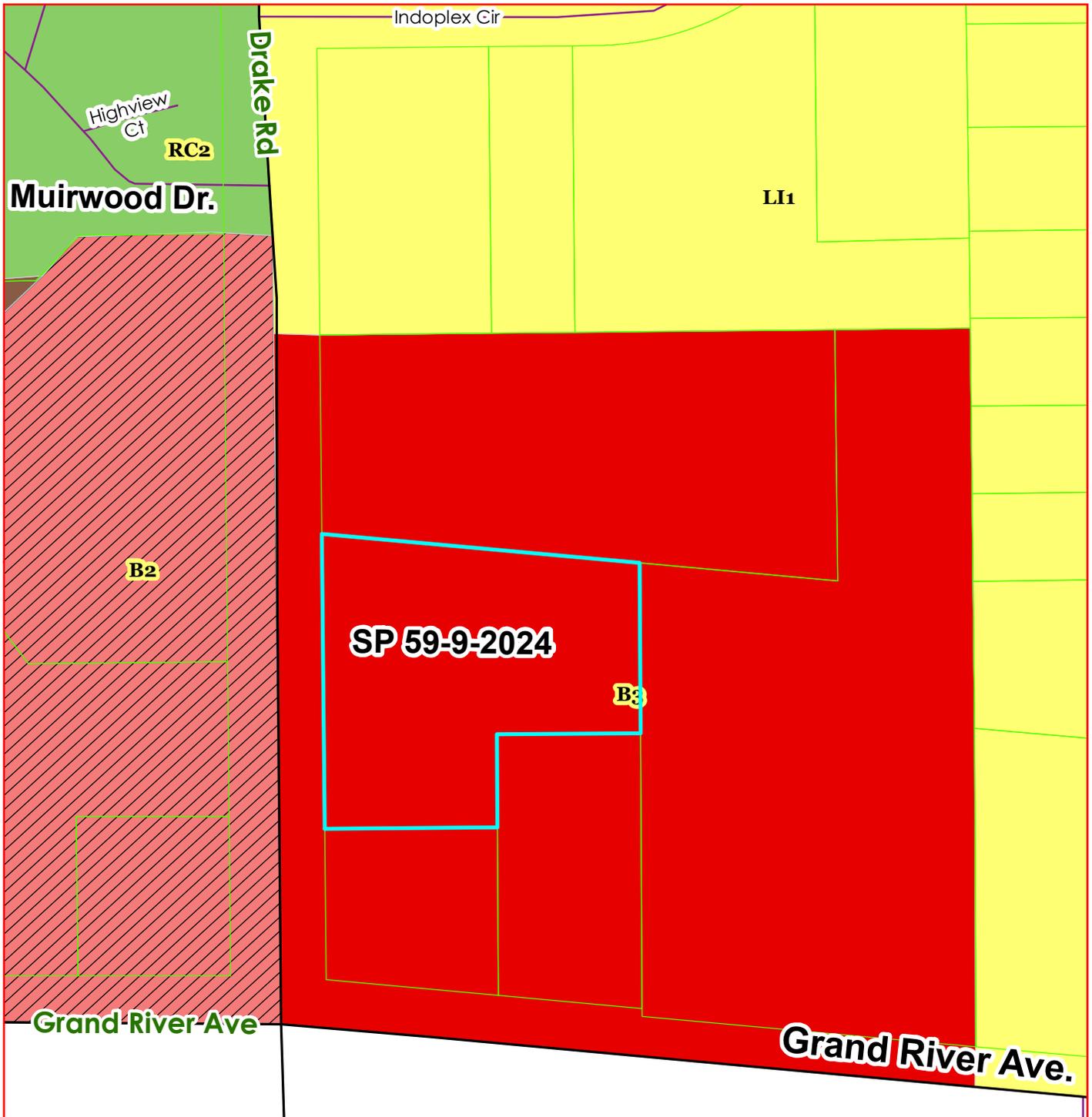
CLIENT / PROJECT
 ROBERTSON
 BROTHERS
 BREWSTER VILLAGE
 NORTHVILLE, MI.
 WILMINGTON A
 ELEVATION A
 GARAGE RIGHT

JOB No.	1972-21
DRAWN:	PAP/PS
CHECKED:	DM
REVIEW	8-6-21
FINAL:	8-10-21
REVISION	-

SCALE:
 PER PLAN

SHEET #
 A-2

Site Plan 59-9-2024, B-3
24300 Drake Rd., 21-351-032
New commercial building
BMW Kar Wash



Tax parcel	B-3 General Business District
Minor roads	LI-1 Light Industrial District
Zoning Districts	P-1 Vehicular Parking District
Zoning Districts	RC-2 Multiple Family Residential
B-2 Community Business District	

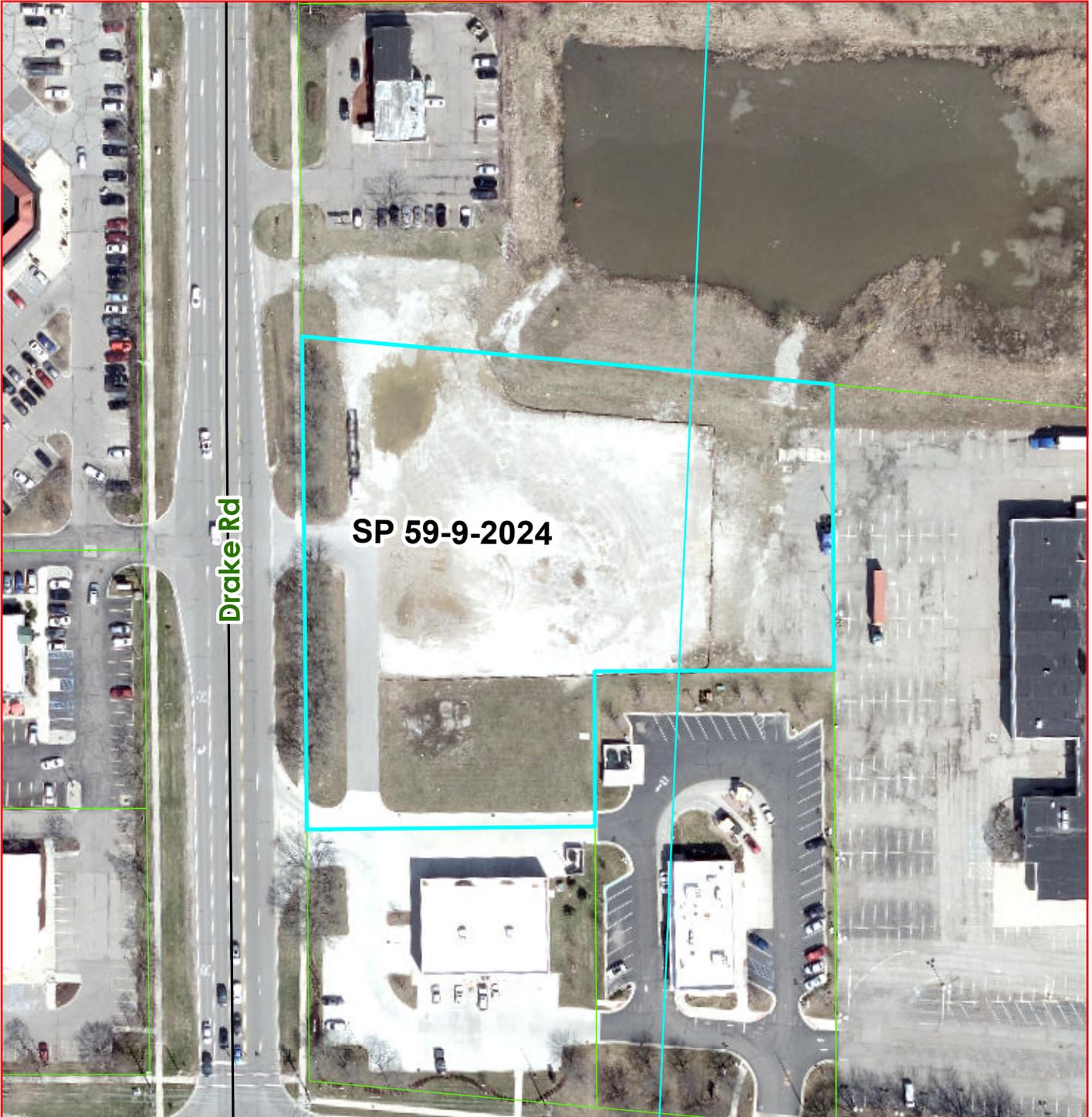


SOURCE: City of Farmington Hills, 2024
 Oakland County GIS, 2024

DISCLAIMER: Although the information provided by this map is believed to be reliable, its accuracy is not warranted in any way. The City of Farmington Hills assumes no liability for any claims arising from the use of this map.



**Site Plan 59-9-2024, B-3
24300 Drake Rd., 21-351-032
New commercial building
BMW Kar Wash**



Drake Rd

SP 59-9-2024



Planning Division

SOURCE: City of Farmington Hills, 2024
Oakland County GIS, 2024

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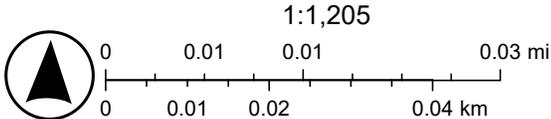
Tax parcel

24300 Drake Rd., early 2024



10/2/2024, 1:26:39 PM

 Tax parcels



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December 11, 2024

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

Site Plan Review

Case: SP59-9-24
Site: 24300 Drake (23-21-351-032)
Applicant: BMW Kar Wash, LLC
Plan Date: September 18, 2024; Revised November 18, 2024
Zoning: B-3 General Business

We have completed a review of the application for site plan approval and a summary of our findings is below. Items in **bold** require specific action. Items in *italics* can be addressed administratively.



SUMMARY OF FINDINGS

Summary of Proposal. The applicant proposes to construct a new 6,140 SF automated car wash facility, with 17 vacuum spaces with frontage along Drake Rd. between Grand River Avenue and Indoplex Circle. The plans involve maintaining the existing curb cut along Drake, with additional marginal access to the site from access drives connecting to the businesses to the south and east. A stub street connecting to the north is also proposed.

Summary of issues.

For Planning Commission consideration:

- Dead end off-street parking aisles are discouraged. Such parking aisles with more than 8 spaces are required to have sufficient space for vehicles to turnaround. Two-way access provides a means for vehicles to turnaround. The planning commission shall review this parking configuration and confirm whether it meets this requirement.
- A hedge is only provided along the northern half of the Drake Road frontage. The site includes existing trees along the road frontage which has a partial screening effect, but may not adequately mitigate the impact as effectively as a knee wall or hedge. Planning Commission should review and confirm.

For administrative review:

- Easement agreements shall be provided to allow for the proposed connections with adjacent lots.
- Applicant shall describe location of required 260 sf loading space
- Rooftop equipment is not addressed on the plans; ground-mounted mechanical equipment is also required to be screened including the HVAC shown along the north elevation.
- The drive lane does not meet the required 25 foot turning radius.
- The two egress stacking spaces beyond the washing bay should be depicted on the plans
- The bypass and drive-through/pay lane exceed the required average to minimum illumination ratio
- Building-mounted entrance fixtures exceed 2,000 lumens per door

Existing Conditions

1. **Zoning.** The site is 2.7 acres and zoned B-3.
2. **Existing site.** The site is currently vacant. There is an asphalt drive lane into the site, but the majority of the site is dirt/gravel.
3. **Adjacent properties.**

Direction	Zoning	Land Use	Future Land Use
North	B-3	Car Rental	Grand River Corridor
South	B-3	Retail/ Drive-Thru	Grand River Corridor
East	B-3	Auto Sales	Grand River Corridor
West	B-2	Grocery Store/ Shopping Center	Commercial



4. **Existing site configuration and access.** The site is currently accessed through a single curb cut on Drake Road (between Grand River Ave. and Indoplex Circle). There is a marginal access drive to the property to the south.

Site Plan & Use:

1. **Use.** A car wash is a principally permitted use in the B-3 district, subject to PC approval and the standards of Section 4.40 (see below).
2. **Proposed site configuration and access.** The plans involve maintaining the existing curb cut along Drake, serving as the main entry point to the site. Additional marginal access drives connect to the properties south and east. A stub street connecting to the north was also provided. *Easement agreements shall be provided to allow for the proposed connections with adjacent lots.*
3. **Dimensional Standards (B-3 district).** See footnotes after the table for remarks on compliance issues.

Item	Required	Proposed/Comments
Standards of Sec. 34-3.1.25.E		
Min. lot size	None specified	2.7 Acres
Min. lot width	None specified	370' ¹
Front Setback (west)	25 ft	86.55'
Rear Setback (east)	20 ft	154.46'
Side Setback (north)	10 ft	50.54'
Side Setback (south)	10 ft	121.2'
Building Height	50 feet	24'3"
Front Yard Open Space	50%	>50%

Item	Required	Proposed/Comments
Other dimensional standards		
Yard landscaping (34-3.5.2.A)	For all uses except one-family detached residential units, landscaping of all yards abutting a street shall be provided	See landscaping comments below.
Minimum parking setback (34-3.5.2.J)	10 feet	Compliant
Loading space (34-3.5.2.N)	10 feet of loading space per front foot of building = 260 sq ft	<i>Applicant shall describe location of required loading</i>
Rooftop equipment (34-3.5.2.U.)	Rooftop equipment shall be screened in accordance with Section 34-5.17.	<i>Rooftop equipment is not addressed on the plans; ground-mounted mechanical equipment is also required to be screened including the HVAC shown along the north elevation.</i>
Landscape area abutting street or freeway (34-3.5.2.V.)	A landscaped area not less than ten (10) feet deep	Compliant

4. **B-3 Required Conditions (34-311.)**

a. **All Uses shall also be subject to the conditions of sections 34-3.22 on marginal access drives, provided however, that: (See review of marginal access drive below).**

- i. The edge of the marginal access drive shall be located 10 feet from the future street ROW. *Compliant.*
- ii. The front yard setback shall be a minimum of 60 feet from the future right-of-way. *Compliant.*
- iii. The front yard open space may be reduced to twenty-five percent of the required 60 foot setback area. *Compliant.*

b. **All uses permitted shall require review and approval of the site plan by the PC**

5. **Marginal Access Drive. (34-3.22).** The applicant provides a marginal access drive between this site and the neighboring sites to the south, east, and north. *The marginal access and cross-access drives must be covered by a dedicated easement recorded prior to the issuance of an occupancy permit.*

6. **Pedestrian Access. (34-3.24).** Pedestrian access is provided between the sidewalk and building and throughout the parking entrances. A sidewalk also runs along the entire front of the property.

7. **Use Standards for Vehicle Washes (34-4.40).**

Required	Proposed/Comments
All washing facilities shall be within a completely enclosed building.	compliant
Vacuuming and drying areas may be located outside the building but shall not be in the required front yard.	compliant
All cars required to wait for access to the facilities shall be provided space off the street right-of-way.	compliant

Access points shall be located at least two hundred (200) feet from the intersection of any two (2) streets	compliant
All off-street parking and waiting areas shall be hard surfaced and dust free.	compliant
One traffic lane shall be provided as means of exiting the facility without having to enter the car wash building; such lane shall be in addition to those which would be used by customers obtaining gasoline and waiting in line for the carwash. Such lane shall not be counted as part of the required reservoir parking space.	compliant
All buildings, vehicular stacking space, vacuuming or other outside use area, except employee parking, shall have a minimum setback of one hundred (100) feet from a residential district, unless the district is separated by a major or secondary thoroughfare.	Compliant; no adjacent residential

8. Off Street Parking Requirements (34-5.2)

Requirement	Calculations	Provided
Auto wash (automatic)- One for each employee	3 employees	5 spaces
Barrier-Free Spaces	1 space (van accessible)	1 space
Stacking	3 vehicles in advance of the washing bay and 2 vehicles beyond the washing bay for drying	Complies ¹
Other drive -through standards	Drive-through lanes located adjacent to a street shall be buffered by a minimum 10 foot wide landscaped planting adjacent to the right-of-way as specified in 34-5.14.	See landscaping standards below.
	Drive-through lanes shall have a minimum centerline turning radius of twenty-five (25) feet.	<i>The turning radius is only 20' (car wash entrance and exit)</i>
	Drive-through lanes shall be striped, marked, or otherwise distinctively delineated	Provided

¹Sheet C-4.0 Shows ingress stacking spaces, but the two required egress spaces beyond the washing bay shall also be depicted.

9. **Off-street parking dimensions (34-5.3.3.A & B).**

Item	Required	Proposed/Comments
Maneuvering lane width	20 ft.	24'
Parking space width	9 ft.	9 ft
	Note: vacuum spaces proposed at 12' width	
Parking space length	20 ft. for minimum required (May include a maximum two-foot unobstructed vehicle overhang area at the front of the parking space.) 17 ft. for additional parking (May include a maximum one-foot unobstructed vehicle overhang area at the front of the parking space)	20 ft
Screening	The off-street parking lot shall be provided with screening as required by Section 34-5.15	See landscaping comments below
Dead-End Aisles	Dead-end off-street parking aisles are discouraged, especially in connection with business uses. Such aisles should be no more than eight (8) spaces deep and should, in any case, be used only when there is no reasonable alternative. If more than eight (8) spaces deep, the layout shall provide a means for vehicles to turn around if all spaces are occupied.	Including the vacuum spaces, the aisles include more than 8 spaces. However, two-way access is provided to allow a means for turning around.

10. **Off-Street Loading (34-5.4).** 10 SF of required loading per each foot of building frontage (26'). *The applicant shall identify the required 260 sf loading space on the site.*

11. **Acceleration-Deceleration-Passing Lanes (34-5.6.2.)** Driveways providing ingress and egress to all three-lane paved major or secondary thoroughfares shall be provided with paved acceleration and deceleration lanes. If in the opinion of the director of public services no useful purpose would be served or if unusual difficulty would be encountered by reason of grade changes, intersections, bridges, or other land restrictions, the director may waive or modify the requirements of this section. *We defer to engineering to address this issue.*

12. **Site Landscaping (34-5.14)**

Item	Required	Proposed/Comments
Minimum distance from the property line (34-5.14.C.ii)	4 ft from the property line for trees and large shrubs	Compliant

Item	Required			Proposed/Comments
Minimum parking lot island area	Minimum of 180 square feet; 3 feet minimum radius at the trunk of the tree			N/A
Cost estimate	Not required			--
Minimum size and spacing requirements at planting (34-5.14.F)	Size	Center to center distance (max)		
	(Height/width)	groupings	rows	
• Evergreen Trees	8 ft. height	20 ft.	12 ft.	N/A
• Narrow Evergreen Trees	5 ft. height	10 ft.	5 ft.	N/A
• Large Shrubs	30 in. height	10 ft.	5 ft.	N/A
• Small Shrubs	24 in. width	4 ft.	4 ft.	N/A
• Large Deciduous	3 in. caliper	30 ft.	-	Compliant
• Small deciduous trees	2 in. caliper	15 ft.	-	Compliant
• Hedge shrubs	24 in. height	3 ft.	3 ft.	Compliant
Canopy Trees	Shall be large deciduous. PC may permit large evergreens			Large deciduous provided
Minimum number of parking lot trees (34-5.14.4.C)	1 per every 2,800 square feet of paved surface area: 35,536.58 SF of Pavement= 13 trees			13 trees provided
Parking lot screening from public thoroughfare (34-5.14.5)	A planted hedge of small shrubs, or A masonry wall or berm of 2 feet high			Hedge is only provided along northern half of drake road frontage. The site includes existing trees along the road frontage which has a partial screening effect, but may not adequately mitigate the impact as effectively as a knee wall or hedge. Planning Commission should review and confirm.
Wall or Berm (34-5.15)	Required when adjacent residential			Not required
Tree replacement (34-5.18)	0 required			No existing trees will be removed. 10 trees proposed to be maintained.

13. **Lighting (Section 34-5.16).**

- i. **Operation hours (34-5.16.3.B.v.)** Notes regarding compliance with these standards are included on the photometric plan.
- ii. **Illumination Levels.** The fixtures appear to meet cutoff requirements.

Item	Required	Proposed/Comments
Maximum height (34-5.16.3.A.)	30 feet maximum	25 ft.
Building Lighting (34-5.16.3.A. iii.)	Relevant building elevation drawings showing all fixtures and the portions of the walls to be illuminated	Provided
Average to minimum illumination ratio (34-5.16.3.C)	4:1	<i>6.0:1- Bypass Lane 5.8:1- Drive-Through/ Pay Lane</i>
Maximum illumination at the property line	0.3 fc	Compliant
Illumination Levels- Hardscape areas (e.g., parking areas, sidewalks)	2.5 lumens per sq ft of hardscape area 35,536 sf of hardscape= 88,840 lumens	65,117
Illumination Levels Building Entrances – within 20 ft of door	2,000 lumens per door	<i>Building-mounted entrance fixtures exceed 2,000 lumens per door</i>

14. **Pedestrian Connection (Sec. 34-5.19).** A pedestrian connection to the Drake sidewalk is provided.

We are available to answer questions.

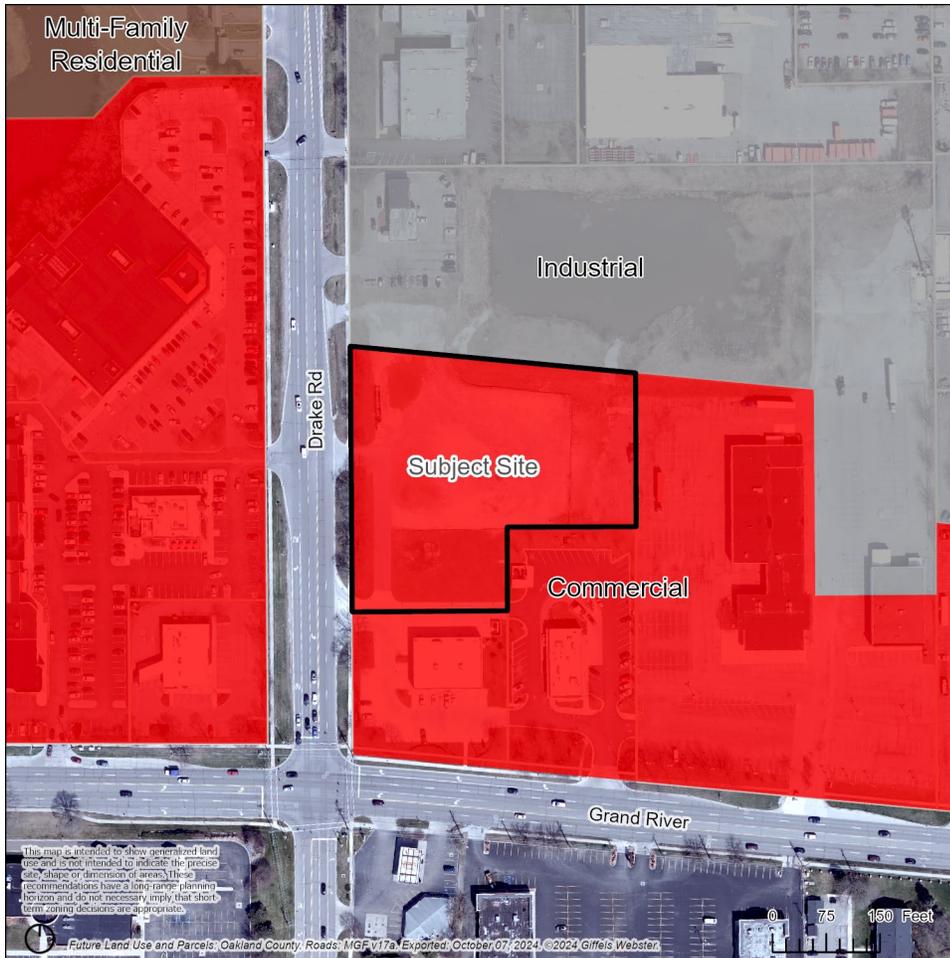
Respectfully,

Giffels Webster



Joe Tangari, AICP
Principal Planner

Julia Upfal, AICP
Senior Planner



Future Land Use





DEPARTMENT OF PUBLIC SERVICES
JACOB RUSHLOW, P.E., DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: December 4, 2024
TO: Planning Commission
FROM: James Cubera, City Engineer
SUBJECT: REVISED SP 59-09-2024 
Jax Kar Wash
24300 Drake Road
PJ#21-24-60, 22-23-21-351-032

This office has performed a preliminary review of the above referenced site plan submitted to the Planning Department on November 18, 2024. Our preliminary comments are as follows:

1. A 16" water main exists along the Drake Road frontage of this site. In addition, an 8" water main exists along the south property line of the site. The site plan proposes to tap and loop these watermains with an 8" line. This is appropriate. Offsite easements to the south may be necessary.
2. An 8" public sanitary sewer exists along the west property line as well as the south property line within the confines of this site. The proponent has identified tapping the sanitary sewer along the Drake Road frontage. This is acceptable.
3. A 5 foot wide sidewalk currently exists along the Drake Road frontage of this site. Therefore, no additional sidewalk requirements will be in effect.
4. The site now proposes to provide a new curb cut to Drake Road and utilize the existing curb cut to the south thru a ring road system. This is acceptable. Note that acceleration and deceleration tapers may be warranted. An engineering traffic study must be provided to address this need. It is our understanding that this is being prepared. It is suggested that the proponent's engineer contact the City Traffic Engineer to discuss the specific needs of the study.

Of particular note, the plan now provides a two way road stub to the north to the Enterprise Car property and to the east to the old Serra Motors property. The extension of an interior ring road system is being provided. This is appropriate. Note that ring road access rights must be provided to all involved properties.

With respect to the two vacant green areas, one to the east and one to the south, private access to the ring road appears to be provided.

5. This site utilizes the community detention pond located immediately north of the proposed car wash. The plans may need to rework the south slope line. This needs to be reviewed and addressed as existing grades drop off at the north property line. It is unclear if the slope will be impacted. Details of this must be provided during construction review. Additionally, the plans must address how the existing spillways are impacted.
6. The plans have not identified the access point to the detention basin. It should be in the neighborhood of the northeast property corner. A design of this must be provided for review. It must provide for proper and reasonable access.
7. The existing detention facility is in need of maintenance. This must be addressed prior to any construction permits. The pond that is being utilized for this site currently holds water and is in a state of disrepair. Prior to any construction permitted, it needs to be brought up to original condition of when it was built.
8. Storm water quality improvements for this site must be addressed. The plans identify a proposed storm water quality unit at the northeast corner of the site. This will be reviewed during construction review. Recently the City adopted the WRC stormwater standards. These new requirements may will impact the stormwater quality unit proposed as well as the detention/restriction system in general. Attached are additional comments from our Environmental Engineer. Any questions on these needs to be referred to Tyler Sonoga at 248-871-2533.
9. As stated above, the City is concerned with the property line grades along the north property line. A detailed plan must be provided to ensure that they are being maintained. If retaining walls will be proposed, they need to be identified and substantiated as to their necessity as well as their structural integrity.
10. Private utilities run through the site, most notably a 24" storm sewer. Private easements must be identified in advance of any construction approval.
11. We have previously met with the proponent. Many of our concerns have been addressed.



DEPARTMENT OF PUBLIC SERVICES
KAREN MONDORA, P.E., DIRECTOR

City of Farmington Hills
Environmental Review

Project Name: Jax Kar Wash

Address: 24300 Drake Road
Project Job #: 21-24-60 SP #59-9-2024
Plan Dated: 11-18-2024

Plan Received: 11-22-2024
Review #: 1
Review Date: 12-9-2024

As requested, I have conducted a plan review of the above reference engineering plans. I have the following comments:

1. Storm water quality must be provided for the entire site in accordance with the newly adopted Oakland County Water Resources stormwater standards.
2. Infiltration practices should be used to the maximum extent practicable and will count as part of the required water quality volume. Infiltration tests need to be performed in planned pervious areas to determine if the soils will allow infiltration. Any infiltration provided can be subtracted from water quality unit calculations.
3. As a part of the Oakland County Water Resources stormwater standards, the plans must include a long-term operations and maintenance plan, the land use summary page in the standards, a stormwater design narrative, a certificate of outlet, and GIS data. Please see page I-21 and I-22 on the stormwater standards.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Tyler Sonoga'.

Tyler Sonoga
Civil/Environmental Engineer
Department of Public Services

cc: City of Farmington Hills, J. Cubera



INTEROFFICE CORRESPONDENCE

DATE: December 4, 2024
TO: Planning Commission
FROM: Jason Baloga, Fire Marshal
SUBJECT: Revised Site Plan 59-9-2024 (24300 Drake)

The Fire Department has no objection to approval of this Site Plan contingent upon compliance with the following requirements:

1. Site shall accommodate fire apparatus with a fifty-foot (50') turning radius.
2. The minimum clearance between the finished roadway surface and any overhead obstruction shall be 13'6".
3. It was discussed with the Proponent that an 8' access road was not adequate and that they would adhere to Farmington Hills City Ordinance Chapter 12 Section 12-11(1)a; the minimum drive width of fourteen (14) feet.
4. Gate shall be subject to Engineering approval in accordance with the International Fire Code requirements D.103.5 Fire apparatus Road Gates (12'),
5. City of Farmington Hills shall not be responsible for any damage which may occur to proposed gate.
6. Building shall be maintained in accordance with the minimum Fire Prevention Code requirements.

A handwritten signature in blue ink, appearing to read "Jason Baloga".

Jason Baloga, Fire Marshal

JB/al

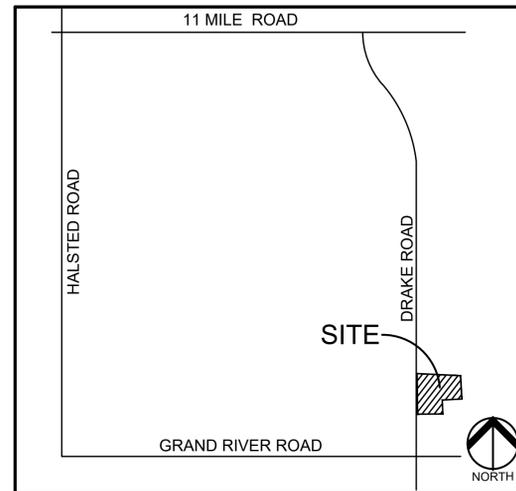
PRELIMINARY SITE PLANS

JAX KAR WASH - FARMINGTON HILLS

24300 DRAKE ROAD
FARMINGTON HILLS, MI



PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL



LOCATION MAP
NO SCALE

INDEX OF DRAWINGS	
NUMBER	TITLE
C-0.0	COVER SHEET
C-1.0	TOPOGRAPHIC SURVEY
C-3.0	PRELIMINARY SITE PLAN
C-3.1	FIRE TRUCK MANEUVERING PLAN
C-4.0	PRELIMINARY GRADING PLAN
C-6.0	PRELIMINARY UTILITY PLAN
C-9.0	NOTES AND DETAILS
L-1.0	LANDSCAPE PLAN
L-1.1	LANDSCAPE DETAILS
L-2.1	LANDSCAPE SPECIFICATIONS
L-2.2	LANDSCAPE SPECIFICATIONS
V1	PHOTOMETRIC LAYOUT
1 OF 1	EXTERIOR RENDERING
PE-1A	ELEVATIONS
PE-1B	VACUUM STATION ELEVATIONS
PPF-1	FLOOR PLAN

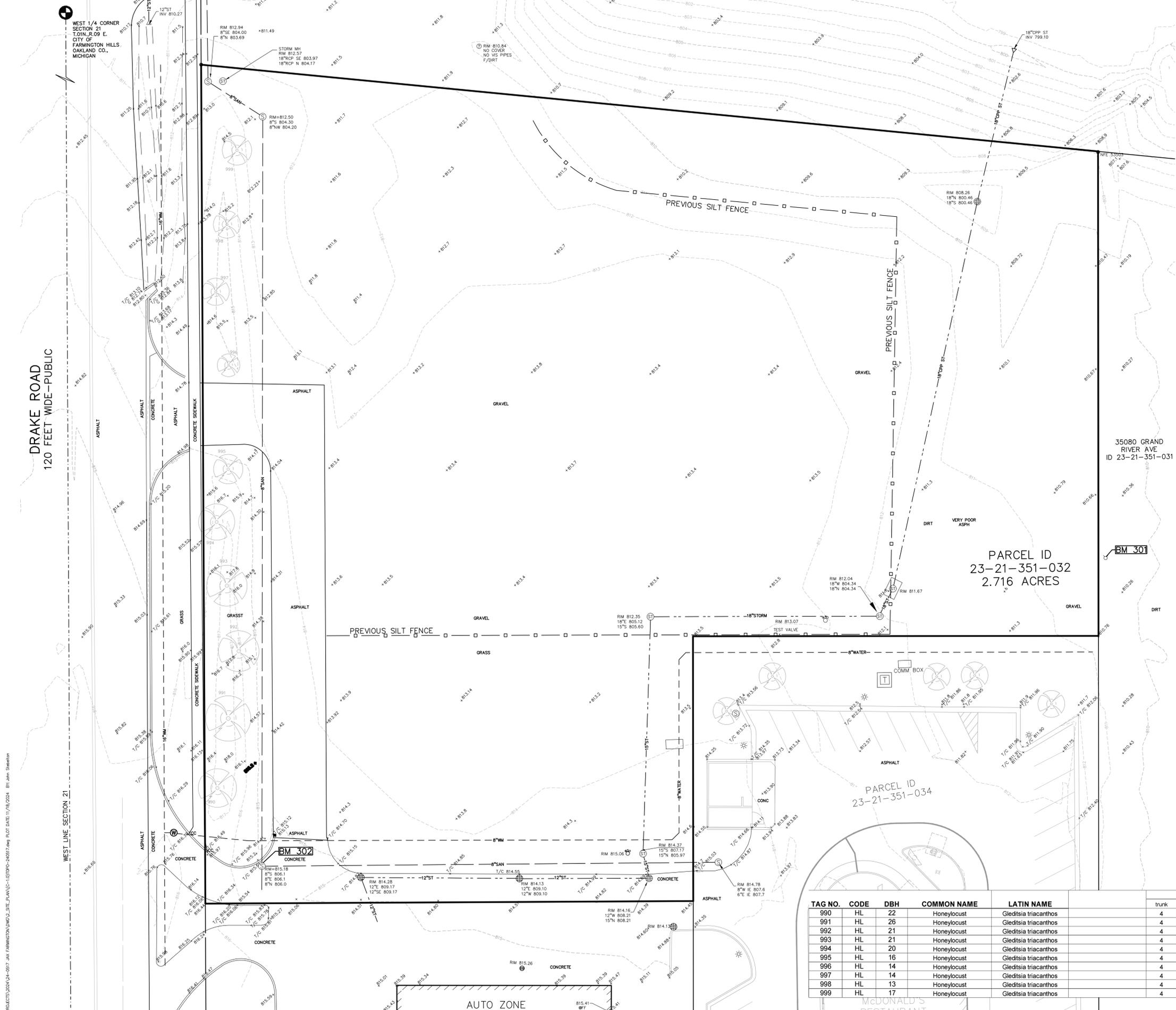
DESIGN TEAM

DEVELOPER	CIVIL ENGINEER
BMW KAR WASH, LLC 26777 CENTER PARK BOULEVARD SUITE: 150 SOUTHFIELD, MI 48076 CONTACT: TODD GESUND PHONE: 248.314.5565 EMAIL: TODD@JAXKARWASH.NET	PEA GROUP 1849 POND RUN AUBURN HILLS, MI 48326 CONTACT: JAMES P. BUTLER, PE PHONE: 844.813.2949 EMAIL: JBUTLER@PEAGROUP.COM
ARCHITECT	LANDSCAPE ARCHITECT
F.A. STUDIO 28281 EVERGREEN ROAD, SUITE #123 SOUTHFIELD, MI 48076 CONTACT: DAVID BRINKMEIER PHONE: 248.619.2354 EMAIL: DBRINKMEIER@FASTUDIO.COM	PEA GROUP 7927 NEMCO WAY, STE. 115 BRIGHTON, MI 48116 CONTACT: JANET EVANS, PLA PHONE: 844.813.2949 EMAIL: JEVANS@PEAGROUP.COM



REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	9/18/2023
LAYOUT REVISIONS	11/18/2024

NOT FOR CONSTRUCTION



- LEGEND:**
- OH-ELEC-W-O- EX. OH. ELEC. POLE & GUY WIRE
 - UG-CATV- EX. U.G. CABLE TV & PEDESTAL
 - UG-COM- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
 - UG-ELEC- 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. DEC. TREE, CONIFEROUS TREE & SHRUB
 - ⊕ EX. TREE TAG & TREE LINE
 - ⊕ EX. SPOT ELEVATION
 - ⊕ EX. CONTOUR
 - ⊕ EX. WETLAND
 - ⊕ IRON FOUND / SET
 - ⊕ NAIL FOUND / NAIL & CAP SET
 - ⊕ BRASS PLUG SET
 - ⊕ MONUMENT FOUND / SET
 - ⊕ SECTION CORNER FOUND
 - R M C RECORDED / MEASURED / CALCULATED

- REFERENCE DRAWINGS:**
- WATER MAIN HAVE NOT RECEIVED AS OF 9/9/24
 - SANITARY SEWER HAVE NOT RECEIVED AS OF 9/9/24
 - STORM SEWER HAVE NOT RECEIVED AS OF 9/9/24
 - ELECTRIC HAVE NOT RECEIVED AS OF 9/9/24
 - TELEPHONE HAVE NOT RECEIVED AS OF 9/9/24
 - GAS HAVE NOT RECEIVED AS OF 9/9/24
 - CATV HAVE NOT RECEIVED AS OF 9/9/24
 - FLOOD PLAIN FEMA F.I.R.M. MAP 26125C0632F DATED 9/29/06

BENCHMARKS:
(NAVD88)

BM #301
ARROW ON HYDRANT, 400' NORTH OF NORTH CURB OF GRAND RIVER, 130' WEST OF WEST BUILDING LINE TO EXISTING CAR DEALERSHIP (VACANT).
ELEV. - 813.71

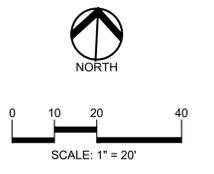
BM #302
N. RIM OF A SANITARY MANHOLE APPROXIMATELY 75+ FEET EAST OF THE DOUBLE YELLOW LINE OF DRAKE ROAD, 54+ FEET NORTH OF THE NORTH LINE OF THE AUTOZONE BUILDING.
ELEV. - 815.18

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X'. AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26125C0632F DATED SEPTEMBER 29, 2006.

LEGAL DESCRIPTION:
(PER OAKLAND COUNTY)

PARCEL ID 23-21-351-032
Land in the SW 1/4 of Section 21, T.01N., R.08E., Oakland County, Farmington Hills, Michigan, described as follows:

BEG AT PT DIST N 00-01-00 W 50-52 FT & S 84-15-36 E 60-30 FT & N 00-01-00 W 199-23 FT FROM SW SEC COR. TH N 00-01-00 W 370-77 FT, TH S 84-15-36 E 400 FT, TH S 00-13-30 W 214-38 FT, TH N 89-46-30 W 180 FT, TH S 00-13-30 W 117-03 FT, TH S 89-59-00 W 216-59 FT TO BEG



CAUTION!!
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CLIENT
BMW KAR WASH, LLC
26777 CENTER PARK BOULEVARD
SUITE: 150
SOUTHFIELD, MICHIGAN 48076

PROJECT TITLE
JAX KAR WASH - FARMINGTON HILLS
24300 DRAKE ROAD
FARMINGTON HILLS, MI



REVISIONS

NO.	DATE	DESCRIPTION
1	11-18-24	LAYOUT REVISIONS

ORIGINAL ISSUE DATE:
SEPTEMBER 18, 2024

DRAWING TITLE
TOPOGRAPHIC SURVEY

PEA JOB NO.	24-0517
P.M.	JPB
DN.	CNR
DES.	JKS
DRAWING NUMBER:	

TAG NO.	CODE	DBH	COMMON NAME	LATIN NAME	CONDITION/FACTOR						OVERALL RANK
					trunk	growth rate	structure	insects/ diseases	crown dev	life exp.	
990	HL	22	Honeylocust	Gleditsia triacanthos	4	4	3	4	3	3	21
991	HL	26	Honeylocust	Gleditsia triacanthos	4	5	3	4	3	3	22
992	HL	21	Honeylocust	Gleditsia triacanthos	4	5	3	4	3	3	22
993	HL	21	Honeylocust	Gleditsia triacanthos	4	5	3	4	3	3	22
994	HL	20	Honeylocust	Gleditsia triacanthos	4	5	3	4	3	3	22
995	HL	16	Honeylocust	Gleditsia triacanthos	4	3	2	4	1	2	16
996	HL	14	Honeylocust	Gleditsia triacanthos	4	4	2	4	2	2	18
997	HL	14	Honeylocust	Gleditsia triacanthos	4	4	3	4	3	3	21
998	HL	13	Honeylocust	Gleditsia triacanthos	4	4	3	4	3	3	21
999	HL	17	Honeylocust	Gleditsia triacanthos	4	5	3	4	3	3	22

NOT FOR CONSTRUCTION

C-1.0

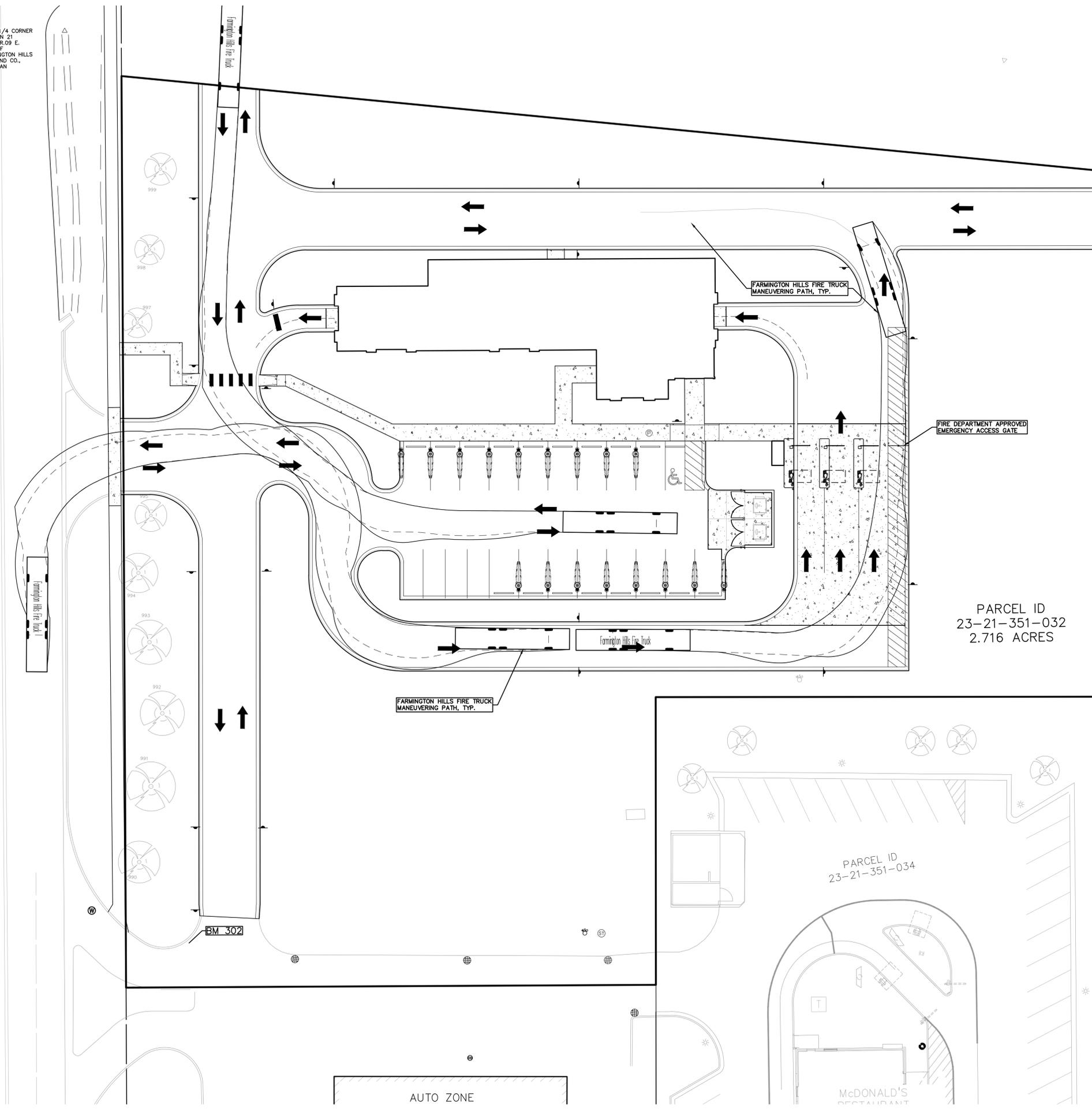
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DRAKE ROAD
120 FEET WIDE - PUBLIC

WEST LINE - SECTION 21

WEST 1/4 CORNER
SECTION 21
T.01N., R.09 E.
CITY OF
FARMINGTON HILLS
OAKLAND CO.,
MICHIGAN



PARCEL ID
23-21-351-032
2.716 ACRES

35080 GRAND
RIVER AVE
ID 23-21-351-031

BM 301

BM 302

FARMINGTON HILLS FIRE TRUCK
MANEUVERING PATH, TYP.

FARMINGTON HILLS FIRE TRUCK
MANEUVERING PATH, TYP.

FIRE DEPARTMENT APPROVED
EMERGENCY ACCESS GATE

PARCEL ID
23-21-351-034

McDONALD'S
RESTAURANT

AUTO ZONE

LEGEND:

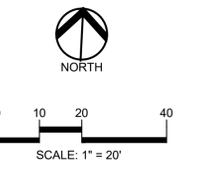
	CONCRETE PAVEMENT
	ASPHALT PAVEMENT
	GRAVEL
	WETLAND
	CONCRETE CURB AND GUTTER
	REVERSE GUTTER PAN
	SETBACK LINE
	SIGN
	LIGHTPOLE
	FENCE
	GUARD RAIL

SIGN LEGEND:

'STOP' SIGN	1
'BARRIER FREE PARKING' SIGN	2
'VAN ACCESSIBLE' SIGN	3
'DO NOT ENTER' SIGN	4
'NO PARKING FIRE LANE' SIGN	5

REFER TO DETAIL SHEET FOR SIGN DETAILS

PEA GROUP
t: 844.813.2949
www.peagroup.com



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CLIENT
BMW KAR WASH, LLC
26777 CENTER PARK BOULEVARD
SUITE: 150
SOUTHFIELD, MICHIGAN 48076

PROJECT TITLE
JAX KAR WASH - FARMINGTON HILLS
24200 DRAKE ROAD
FARMINGTON HILLS, MI



REVISIONS

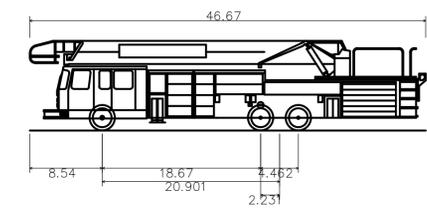
LAYOUT REVISIONS	11-18-24
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ORIGINAL ISSUE DATE:
SEPTEMBER 18, 2024

DRAWING TITLE
FIRE TRUCK MANEUVERING PLAN

PEA JOB NO.	24-0517
P.M.	JPB
DN	CNR
DES.	JKS

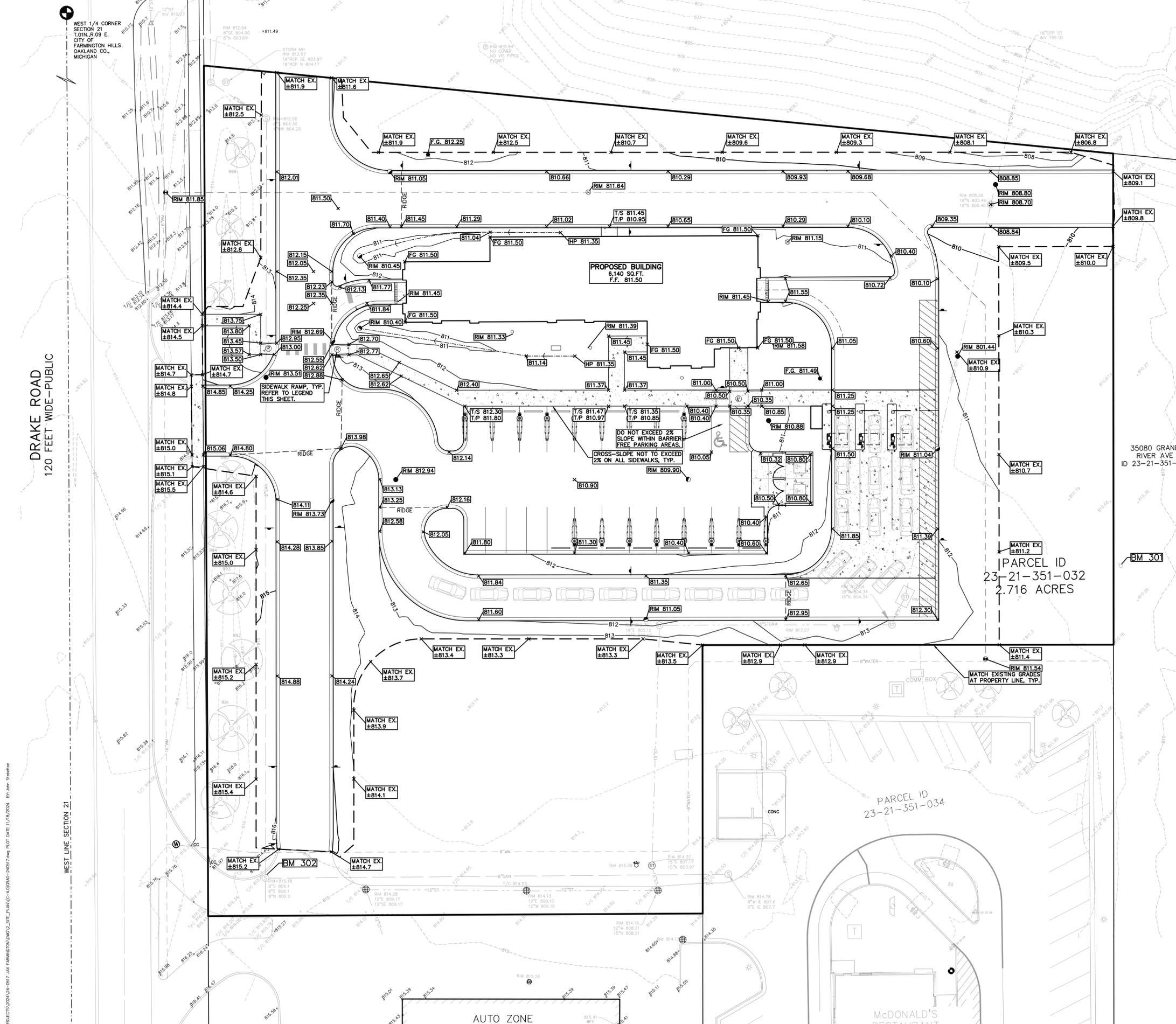
DRAWING NUMBER:



Farmington Hills Fire Truck	46.670ft
Overall Length	8.500ft
Overall Width	10.519ft
Overall Body Height	0.950ft
Min Body Ground Clearance	8.500ft
Track Width	5.00s
Lock-to-Lock Time (Forward)	2.00s
Lock-to-Lock Time (Reverse)	42.500ft
Curb to Curb Turning Radius	

NOT FOR CONSTRUCTION

C-3.1



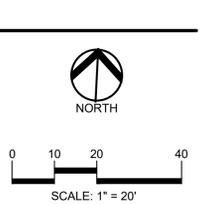
SIDEWALK RAMP LEGEND:
 SIDEWALK RAMP TYPE R
 SIDEWALK RAMP TYPE P
 CURB DROP

GRADING LEGEND:
 EXISTING SPOT ELEVATION
 PROPOSED SPOT ELEVATION:
 TYPICALLY TOP OF PAVEMENT
 IN PAVED AREAS, GUTTER GRADE
 IN CURB LINES.
 EXISTING CONTOUR
 PROPOSED CONTOUR
 PROPOSED REVERSE GUTTER PAN
 PROPOSED RIDGE LINE
 PROPOSED SWALE/DITCH

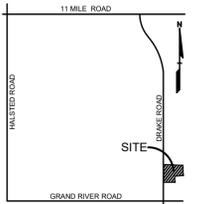
ABBREVIATIONS
 T/C = TOP OF CURB
 T/P = TOP OF PAVEMENT
 T/S = TOP OF SIDEWALK
 T/W = TOP OF WALL
 G = GUTTER GRADE
 F.G. = FINISH GRADE
 RIM = RIM ELEVATION
 BW = BOTTOM OF WALL

EARTHWORK BALANCING NOTE:
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

BENCHMARKS:
 (NAVD88)
 BM #301
 ARROW ON HYDRANT, 400' NORTH OF NORTH CURB OF GRAND RIVER, 130' WEST OF WEST BUILDING LINE TO EXISTING CAR DEALERSHIP (VACANT).
 ELEV. - 813.71



CAUTION!!
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CLIENT
BMW KAR WASH, LLC
 26777 CENTER PARK BOULEVARD
 SUITE 150
 SOUTHFIELD, MICHIGAN 48076

PROJECT TITLE
JAX KAR WASH - FARMINGTON HILLS
 24300 DRAKE ROAD
 FARMINGTON HILLS, MI



REVISIONS

LAYOUT REVISIONS	11-18-24

ORIGINAL ISSUE DATE:
 SEPTEMBER 18, 2024

DRAWING TITLE
PRELIMINARY GRADING PLAN

PEA JOB NO.	24-0517
P.M.	JPB
DN	CNR
DES.	JKS
DRAWING NUMBER:	C-4.0

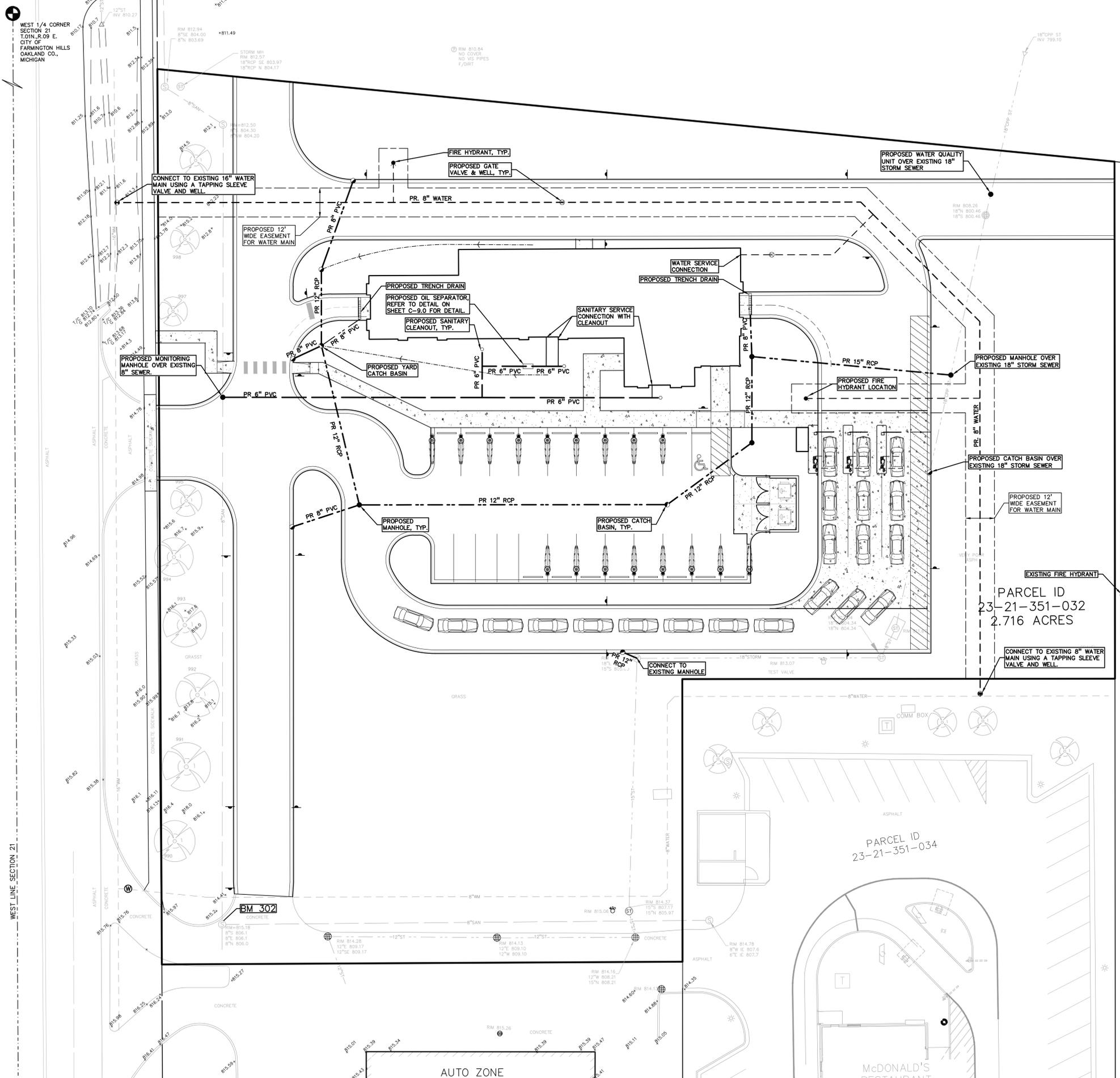
NOT FOR CONSTRUCTION

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120 FEET WIDE-PUBLIC

WEST LINE_SECTION 21



UTILITY LEGEND:

- OH-ELEC-W-○- EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV-□- EX. U.G. CABLE TV & PEDESTAL
- UG-COMM-□- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC-□- 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
- PROPOSED WATER MAIN
- PROPOSED HYDRANT AND GATE VALVE
- PROPOSED TAPPING SLEEVE, VALVE & WELL
- PROPOSED POST INDICATOR VALVE
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER CLEANOUT & MANHOLE
- PROPOSED CATCH BASIN, INLET & YARD DRAIN

STORMWATER MANAGEMENT NOTE:
 STORMWATER MANAGEMENT FOR THE PROPOSED SITE IS HANDLED BY THE EXISTING DETENTION BASIN LOCATED OFF-SITE. THE PROPOSED DEVELOPMENT WILL INSTALL AN INLINE STORM WATER QUALITY UNIT PRIOR TO DISCHARGE OFF-SITE.

PEA GROUP
 t: 844.813.2949
 www.peagroup.com

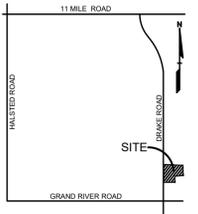
STATE OF MICHIGAN
 JOHN K STEBELTO
 LICENSE No. 6201311659
 PROFESSIONAL ENGINEER

NORTH

0 10 20 40
 SCALE: 1" = 20'

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

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CLIENT
BMW KAR WASH, LLC
 26777 CENTER PARK BOULEVARD
 SUITE: 150
 SOUTHFIELD, MICHIGAN 48076

PROJECT TITLE
JAX KAR WASH - FARMINGTON HILLS
 24300 DRAKE ROAD
 FARMINGTON HILLS, MI



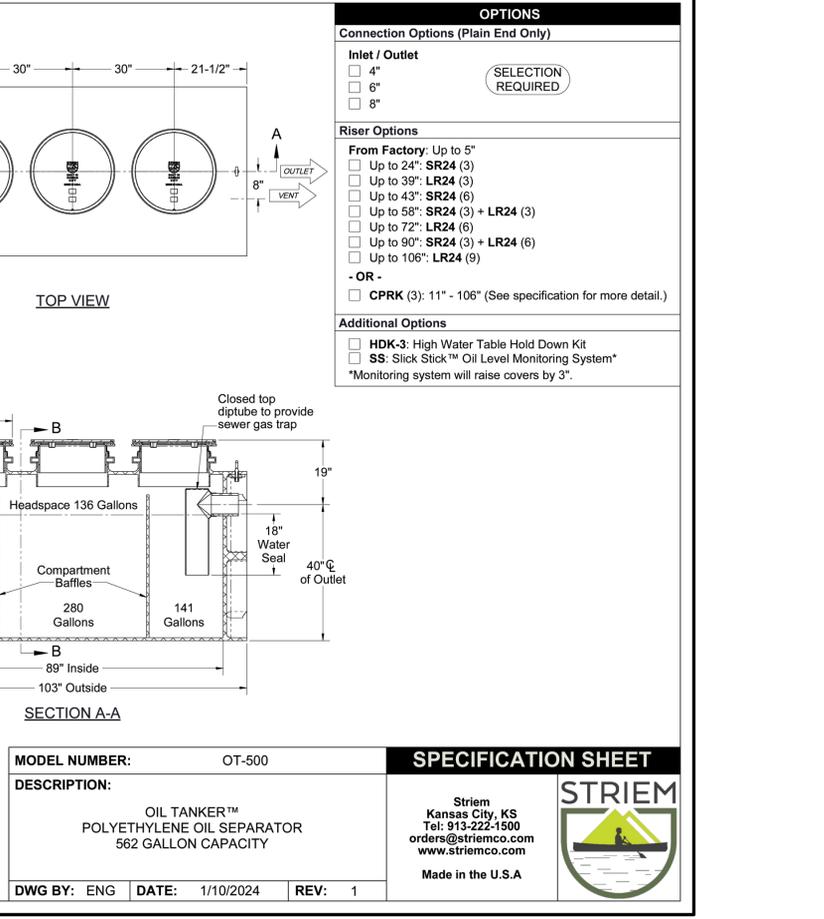
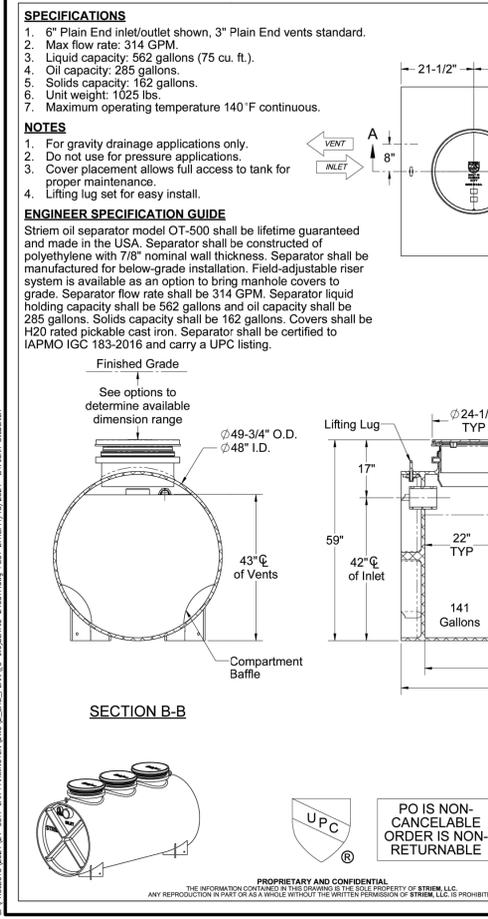
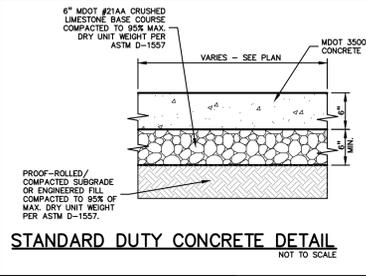
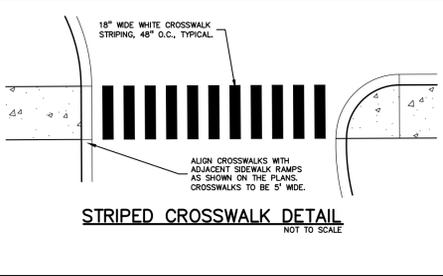
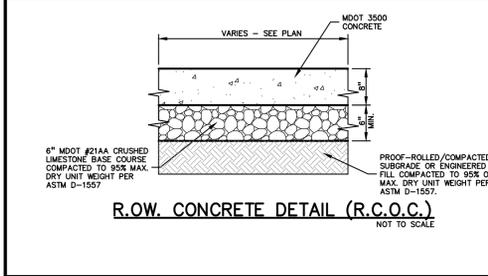
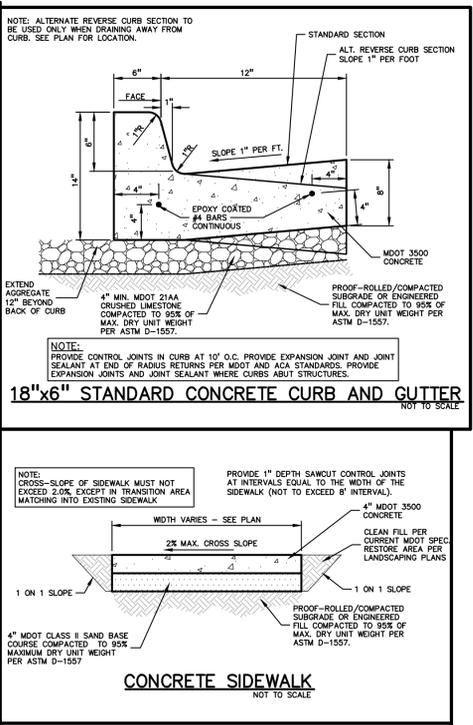
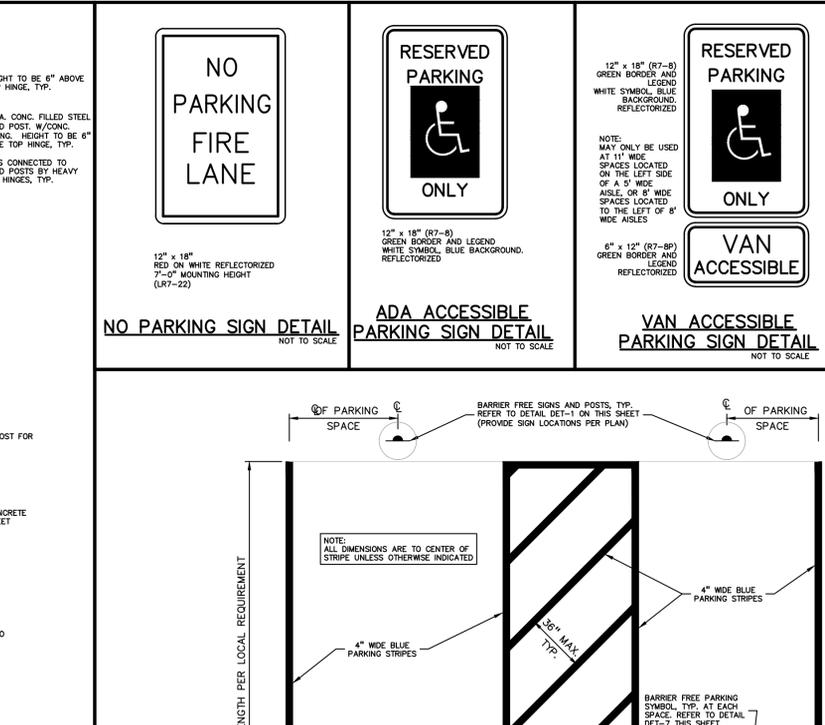
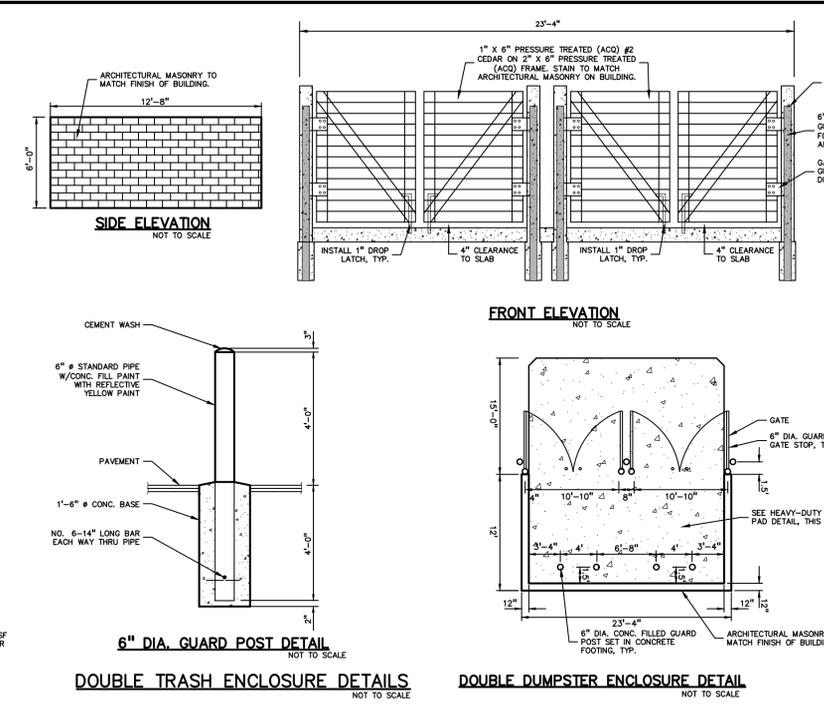
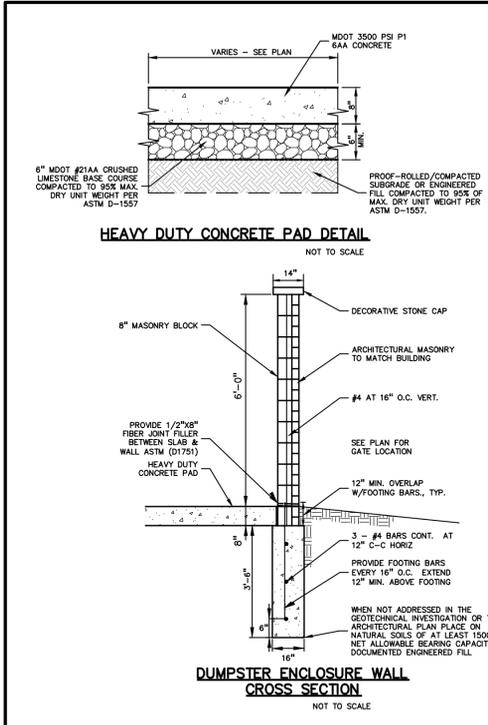
REVISIONS
 LAYOUT REVISIONS 11-18-24

ORIGINAL ISSUE DATE:
 SEPTEMBER 18, 2024
 DRAWING TITLE
PRELIMINARY UTILITY PLAN

PEA JOB NO. 24-0517
 P.M. JPB
 DN. CNR
 DES. JKS
 DRAWING NUMBER:

C-6.0

NOT FOR CONSTRUCTION



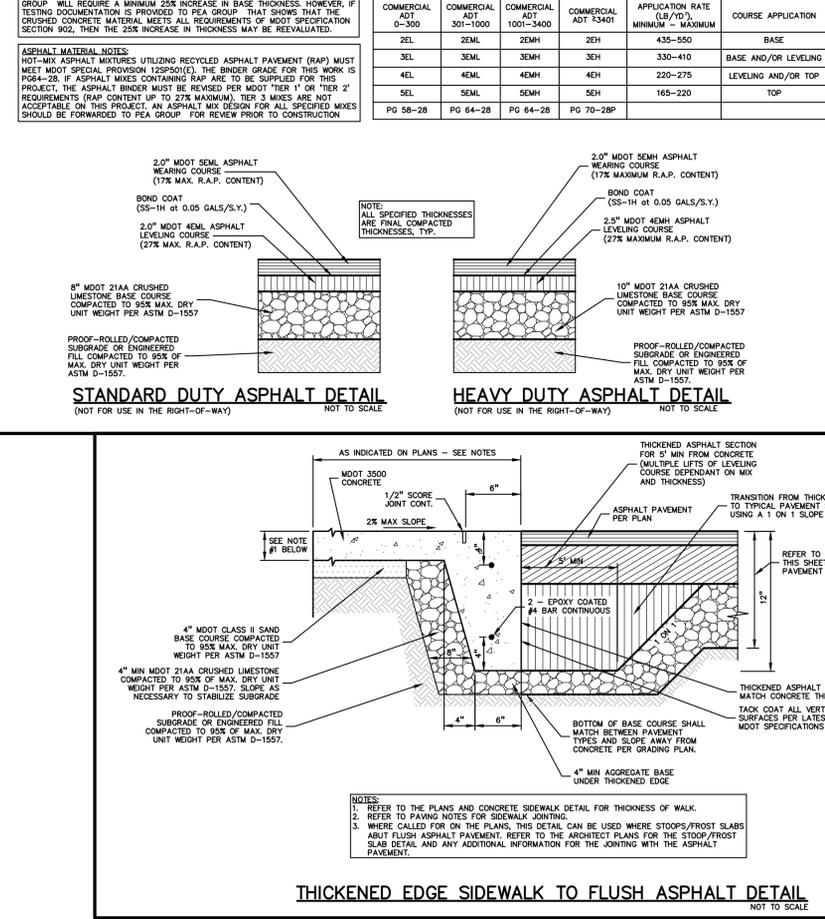
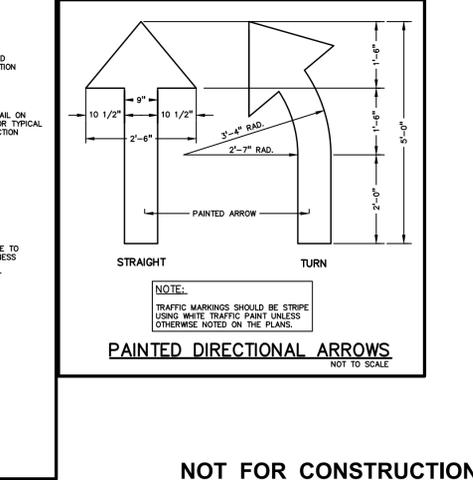
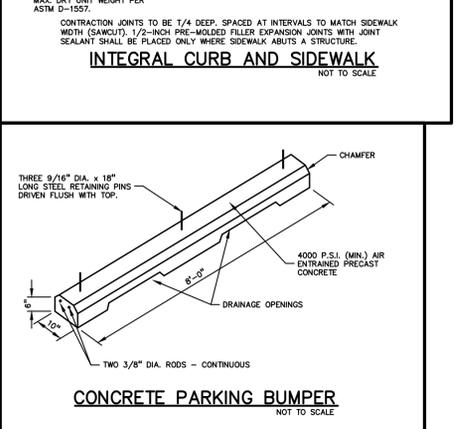
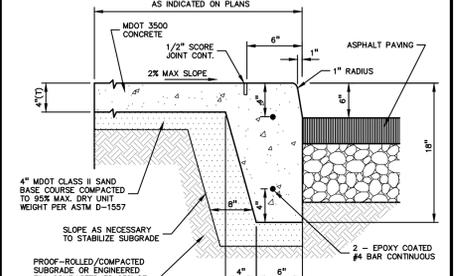
AGGREGATE BASE NOTE: THIS PAVEMENT SECTION DESIGN ASSUMES THE USE OF MDOT 21AA CRUSHED LIMESTONE BASE MATERIAL THAT MEETS THE REQUIREMENTS OF MDOT STANDARD SPECIFICATION SECTION 902 FOR AGGREGATES. IF CRUSHED CONCRETE AGGREGATE BASE IS PROPOSED IN LIEU OF THE SPECIFIED CRUSHED LIMESTONE MATERIAL, PE2 GROUP WILL REQUIRE A MINIMUM 25% INCREASE IN BASE THICKNESS. HOWEVER, IF TESTING DOCUMENTATION IS PROVIDED TO PE2 GROUP THAT SHOWS THAT THE CRUSHED CONCRETE MATERIAL MEETS ALL REQUIREMENTS OF MDOT SPECIFICATION SECTION 902, THEN THE 25% INCREASE IN THICKNESS MAY BE REEVALUATED.

ASPHALT MIX DESIGN CHART

COMMERCIAL ADT 0-300	COMMERCIAL ADT 301-1000	COMMERCIAL ADT 1001-3400	COMMERCIAL ADT 3401	APPLICATION RATE (LB/YD ²) MINIMUM - MAXIMUM	COURSE APPLICATION
2EL	2EML	2EMH	2EH	435-550	BASE
3EL	3EML	3EMH	3EH	330-410	BASE AND/OR LEVELING
4EL	4EML	4EMH	4EH	220-275	LEVELING AND/OR TOP
5EL	5EML	5EMH	5EH	165-220	TOP
PG 58-28	PG 64-28	PG 64-28	PG 70-28P		

ASPHALT MATERIAL NOTES: HOT-MIX ASPHALT MIXTURES UTILIZING RECYCLED ASPHALT PAVEMENT (RAP) MUST MEET MDOT SPECIFICATION 12SP50(E). THE BINDER GRADE FOR THIS WORK IS PG64-28. IF ASPHALT MIXES CONTAINING RAP ARE TO BE SUPPLIED FOR THIS PROJECT, THE ASPHALT BINDER MUST BE REVISED PER MDOT TIER 1 OR TIER 2 REQUIREMENTS (RAP CONTENT UP TO 27% MAXIMUM). TIER 3 MIXES ARE NOT ACCEPTABLE ON THIS PROJECT. AN ASPHALT MIX DESIGN FOR ALL SPECIFIED MIXES SHOULD BE FORWARDED TO PE2 GROUP FOR REVIEW PRIOR TO CONSTRUCTION.

STANDARD DUTY ASPHALT DETAIL and HEAVY DUTY ASPHALT DETAIL showing cross-sections of asphalt pavement with 2.0\"/>



PEA GROUP
t: 844.813.2949
www.peagroup.com

STATE OF MICHIGAN
JOHN K STEBELTO
LICENSED PROFESSIONAL ENGINEER
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SCALE: 1" = 20'

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PROJECT TITLE
JAX KAR WASH - FARMINGTON HILLS
24300 DRAKE ROAD
FARMINGTON HILLS, MI

REVISIONS
LAYOUT REVISIONS 11-18-24

ORIGINAL ISSUE DATE:
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DRAWING TITLE
NOTES AND DETAILS

PEA JOB NO. 24-0517
P.M. JPB
D.N. CNR
DES. JKS
DRAWING NUMBER:
C-9.0

PROPRIETARY AND CONFIDENTIAL
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MODEL NUMBER: OT-500
DESCRIPTION: OIL TANKER™ POLYETHYLENE OIL SEPARATOR 562 GALLON CAPACITY
DWG BY: ENG DATE: 1/10/2024 REV: 1

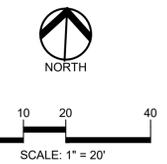
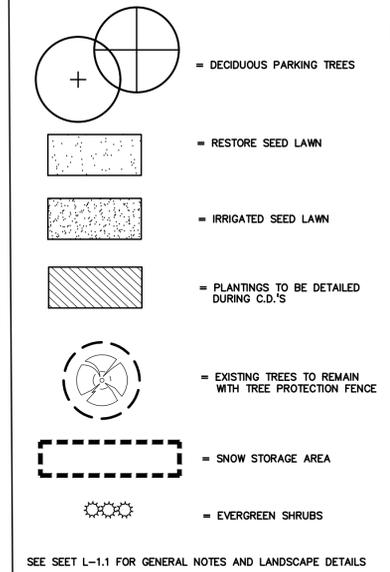
SPECIFICATION SHEET
Striem
Kansas City, KS
Tel: 913-222-1500
orders@striemco.com
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Made in the U.S.A.

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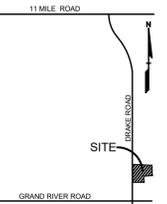
PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	DESIGNATION	REMARKS
DECIDUOUS TREES								
ACA3	3	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	3" CAL.	B&B	PER PLAN	NATIVE	MALE ONLY
GB3	3	GINKGO BILOBA	MAIDENHAIR TREE	3" CAL.	B&B	PER PLAN	NON-NATIVE	
SR3	2	SYRINGA RETICULATA 'IVORY SILK'	IVORY SILK JAPANESE TREE LILAC	3" CAL.	B&B	PER PLAN	NON-NATIVE	
UF3	5	ULMUS X FRONTIER	FRONTIER ELM	3" CAL.	B&B	PER PLAN	NON-NATIVE	
	13	SUBTOTAL:						
SHRUBS								
TM24	23	TAXUS X MEDIA 'DENSIFORMIS'	DENSE ANGLO-JAPANESE YEW	24" HT.	CONT.	42" O.C.	NON-NATIVE	
	23	SUBTOTAL:						

KEY:



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24300 DRAKE ROAD
FARMINGTON HILLS, MI



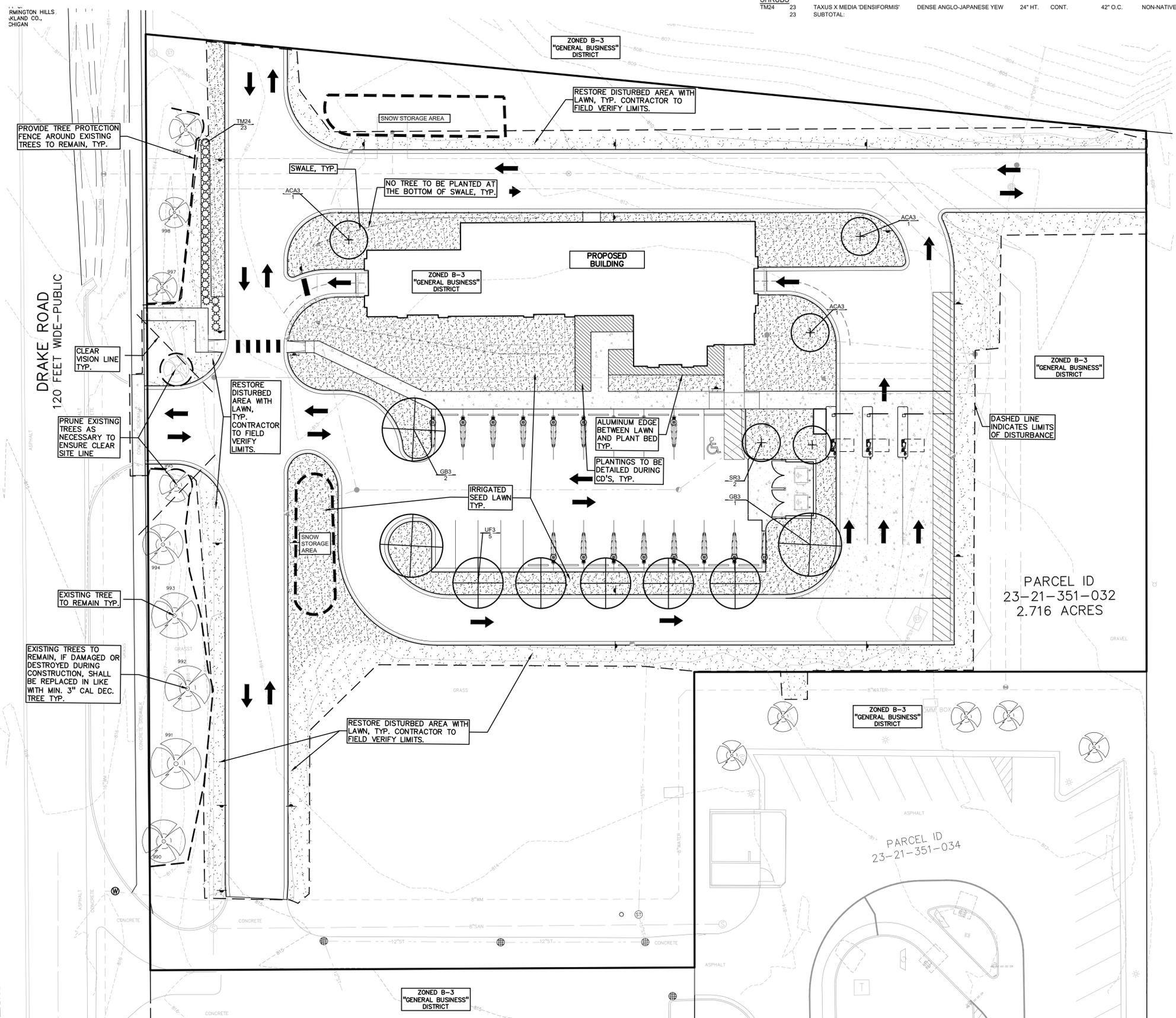
REVISIONS
LAYOUT REVISIONS 11-18-24

ORIGINAL ISSUE DATE:
SEPTEMBER 18, 2024

DRAWING TITLE
LANDSCAPE PLAN

PEA JOB NO. 24-0517
P.M. JPB
DN. CAL
DES. JLE
DRAWING NUMBER:

L-1.0



LANDSCAPE CALCULATIONS:
PER THE CITY OF FARMINGTON HILLS ZONING ORDINANCE (EXISTING ZONING B-3 COMMUNITY BUSINESS DISTRICT)

PARKING LOT LANDSCAPE
REQUIRED: 1, 3" CAL. DEC. CANOPY TREE FOR EVERY 2,800 SF OF PAVEMENT. (180 SF MIN. PARKING LOT ISLAND; SEPARATE PARKING LOT FROM PUBLIC THOROUGHFARE W/CONTINUOUS 2' HT. HEDGE/WALL OR BERM ALONG R.O.W.) 35,536.58 SF AREA OF P.V.M.T. EXP./ 2,800 = 13 TREES REQUIRED
REQUIRED: 13 DEC TREES
PROVIDED: 13 PROPOSED DEC TREES

GREENBELT BUFFER
REQUIRED: NONE PER CITY ORDINANCE
PROVIDED:
DRAKE ROAD: 10 EXISTING TREES (OUTSIDE CONSTRUCTION LIMITS) AND SHRUB HEDGE PER CITY COMMENTS
BUFFER/SCREENING BETWEEN USES = B
REQUIRED: PLANTINGS AND 6' HT. WALL OR BERM BETWEEN B-2/B-3 DISTRICT AND RC-2 DISTRICT
NO BUFFER NECESSARY DUE TO SAME ZONING SURROUNDING SITE

REPLACEMENT TREES (WITH 3" DEC. TREE OR 10' HT. EVG) (TREE FUND AT \$ 400.00 RATE PER TREE)
REQUIRED:
REGULATED TREES REMOVED: REPLACE 1:1
LANDMARK TREES REMOVED: REPLACE DBH x 0.25
PROVIDED: NONE REQUIRED OR PROVIDED, NO TREES REMOVED.
ALL 10 EXISTING TREES ARE HONEY LOCUST, DBH RANGING FROM 15"-21", AND IN GOOD CONDITION

NOTES PER FARMINGTON HILLS:

- The following notes must be included on the plan:
 - A Tree Permit must be obtained from the Planning Office prior to all tree removal activity involving trees six inches (6") or more DBH in accordance with the City of Farmington Hills Zoning Chapter 34-5.9.
 - Trees must be planted no closer than six feet (6') to public utilities.
 - All required landscape material indicated on approved plans will be required through the life of the project and must be replaced if removed or dead.
 - 4 foot (4') high wood snow fencing or other rigid material is to be erected around the drip line of all trees to be saved in accordance with the City of Farmington Hill Zoning Ordinance Chapter 34-5.18.
 - Required landscape material shall satisfy American Association of Nurseryman Standards and be:
 - a. Nursery grown.
 - b. State Department of Agriculture inspected.
 - c. No. 1 grade with straight unscarred trunk and well developed uniform crown (park grade trees will not be accepted).
 - d. Planted per City of Farmington Hills details and specifications and in accordance with City of Farmington Hills Chapter 34-5.14.
 - e. Guaranteed for one year.
 - f. Replacement trees shall have shade potential and other characteristics comparable to the trees proposed for removal.

S:\PROJECTS\2024\24-0517_JAX FARMINGTON\DWG\3_SITE_PLAN\1-0_LANDSCAPE-240517.dwg PLOT DATE: 11/18/2024 BY: Charlotte L. Espérance

EXTERIOR PLANTS

1.0 GENERAL
1.1 SUMMARY
1.1.1 Includes But Not Limited To
1. Furnish and install landscaping plants as described in Contract Documents.
1.2 QUALITY ASSURANCE
1.2.1 Plant names indicated, comply with "Standardized Plant Names" as adopted by the latest edition of the American Joint Committee of Horticultural Nomenclature.
1.2.2 Comply with sizing and grading standards of the latest edition of "American Standard for Nursery Stock".
1.2.3 All plants shall be nursery grown under climatic conditions similar to those in the locality of the project for a minimum of two years.
1.2.4 Stock furnished shall be at least the minimum size indicated.
1.2.5 Provide "specimen" plants with a special height, shape, or character of growth.
1.2.6 Plants may be inspected and approved at the place of growth for compliance with specification requirements for quality, size, and variety.
1.2.7 Approval of plant selection at the place of growth shall not impair the right of inspection and rejection upon delivery at the site or during progress of the work.
1.2.8 Provide percolation testing by filling plant pits with water and monitoring length of time for water to completely percolate into soil.
1.2.9 Before proceeding with work, check and verify dimensions and quantities.
1.2.10 Plant totals are for convenience only and are not guaranteed.
1.3 SUBMITTALS
1.3.1 Provide and pay for material testing.
1.3.2 Submit the following material samples to Landscape Architect:
1.3.3 Submit the following materials certification to Landscape Architect:
1.4 DELIVERY, STORAGE, AND HANDLING
1.4.1 Deliver fertilizer materials in original, unopened and undamaged containers showing weight, analysis, and name of manufacturer.
1.4.2 Take all precautions customary in good trade practice in preparing plants for moving.
1.4.3 Spray deciduous plants in foliage with an approved "Anti-Desiccant" immediately after digging to prevent dehydration.
1.4.4 Dig, pack, transport, and handle plants with care to ensure protection against injury.
1.4.5 Inspection certificates required by law shall accompany each shipment invoice or order to stock on approval.
1.4.6 Protect all plants from drying out.
1.4.7 Water heeled in plantings daily.
1.4.8 No plant shall be bound with rope or wire in a manner that could damage or break the branches.
1.4.9 Cover plants transported on open vehicles with a protective covering to prevent wind burn.
1.4.10 Frozen or muddy topsoil is not acceptable.
1.5 PROJECT CONDITIONS
1.5.1 See Landscape Preparation Section.
1.5.2 Work notification: notify Landscape Architect at least seven working days prior to installation of plant material.
1.5.3 Protect existing utilities, paving, and other facilities from damage caused by landscaping operations.
1.5.4 A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the proposal form.
1.5.5 An irrigation system will be installed prior to planting.
1.5.6 The Landscape Subcontractor shall inspect existing soil conditions in all areas of the site where his operations will take place.
1.6 WARRANTY
1.6.1 See Landscape Maintenance and Warranty Standards.
1.7 PRODUCTS
1.8 MATERIALS
1.8.1 Plants: Provide plants typical of their species or variety, with normal, densely developed branches and vigorous, fibrous root systems.

4. Plants planted in rows shall be matched in form, (see specimen stock).
5. Plants larger than those specified in the plant list may be used when acceptable to the Landscape Architect.
6. No pruning wounds shall be present with a diameter of more than 1" and such wounds must show vigorous bark on all edges.
7. Evergreen trees shall be unheared and branched to the ground.
8. Shrubs and small plants shall meet the requirements for spread and height indicated on the drawings.
9. Plant materials shall be subject to approval by the Landscape Architect as to size, health, quality, and character.
10. Bare root trees are not acceptable.
11. Provide plant materials from licensed nursery or grower.
12.2 Bare root plants: dug with adequate fibrous roots, to be covered with a uniformly thick coating of mud by being puddled immediately after they are dug or packed in moist straw or peat moss.
12.3 Container grow stock: grown in a container for sufficient length of time for the root system to have developed to hold its soil together, firm, and whole.
1. No plants shall be loose in the container.
2. Container stock shall not be root bound.
3. Single stemmed or thin plants will not be accepted.
4. Side branches shall be generous, well twigged, and the plant as a whole well bushed to the ground.
5. Plants shall be in a moist, vigorous condition, free from dead wood, bruises or other root or branch injuries.
12.4 Collected stock consists of plants growing under natural conditions in soils and climate as exist at location to be planted, in locations lending themselves to proper collecting practices.
12.5 Specimen stock: all specimen designated plantings are to be nursery grown, fully developed, excellent quality, and typical example of the species.
1. Matched plantings should be obtained from the same nursery and, preferably, from the same row or line.
2.16 Topsoil for planting mix: fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well drained arable site.
2.17 Peat moss: brown to black in color, weed and seed free granulated row peat.
1. Provide ASTM D2607 sphagnum peat moss with a ph below 6.0 for ericaceous plants.
2.18 Planting mixture Type A - trees: standard planting backfill shall be a mixture of 1/2 native soil (excavated from plant pits), 1/4 topsoil, and 1/4 sand.
2.19 Planting mixture Type B for perennial flowers, groundcover beds, and ericaceous plants: planting backfill shall be a mixture of 1/3 screened topsoil, 1/3 sand and 1/3 peat.
2.110 Planting mixture Type C for annual flower beds: same as Type "B".
2.111 Planting mixture Type D for Bioretention Soil Mix, for use with shrubs and perennials in a biowetland garden or bioretention area.
1. Maximum clay content: 15%
2. Clay and silt content: 25%-40%
3. Nutrient content: 15-30 mg/kg
4. Hydraulic Conductivity: 1-4 inches per hour
5. Organic Matter Content: 2%-5%
2.112 Planting mixture Type E for Planter Soil Mix, Metro Mix 900 in 3 cubic foot bags or approved equal.
2.113 Plant fertilizer Type A to be "Drimature" applied per manufacturer recommendations.
2.114 Plant fertilizer Type B to be "14-14-14".
2.115 Bone Meal - 5 lbs. per cubic yard of soil mixes.
2.116 Lime to be ground dolomitic limestone, ninety-five percent (95%) passing #100 mesh screen.
2.117 Sand to be clean, coarse, ungraded conforming to ASTM-C-3 for fine aggregates.
2.118 Anti-Desiccant: protective film emulsion providing a protective film over plant surfaces; permeable to permit transpiration.
2.119 Shredded bark mulch shall be double processed, dark shredded hardwood bark that is clean, free of debris and sticks.
2.120 Water: free of substances harmful to plant growth.
2.121 Stakes for staking :(3) Three Hardwood, 2" x 2" x 8'-0" long.
2.122 Guying/staking material: With 2"-3" wide fabric straps, connect from tree to stake.
2.123 Tree wrap: standard waterproofed tree wrapping paper, 2-1/2" wide, made of 2 layers of crepe kraft paper weighing not less than 30 lbs. per ream.
2.121 Twine: two-ply jute material.
2.2 MEASUREMENTS
2.2.1 Measure height and spread of specimen plant materials with branches in their normal positions as indicated on Drawings or Plant List.
2.2.2 The measurements for height shall be taken from the ground level to the average height of the top of the plant and not the longest branch.
2.2.3 Measurement should be average of plant, not greatest diameter.
2.2.4 Plants properly trimmed and transplanted should measure some in every direction.
2.2.5 Measure caliper of trees 6 inches above surface of ground.
2.2.6 Where caliper or other dimensions of plant materials are omitted from Plant List, plant materials shall be normal stock for type listed.
2.2.7 Plant materials larger than those specified may be supplied, with prior written approval of Landscape Architect, and:

1. If complying with Contract Document requirements in all other respects.
2. If at no additional cost to Owner.
3. If sizes of roots or balls are increased proportionately.
2.2.8 The height of the trees, specified by height, measured from the crown of the roots to the top of the top branch, shall not be less than the minimum size designated on the drawings.
3.0 EXECUTION
3.1 INSPECTION
3.1.1 Landscape Architect or General Contractor's representative must approve proposed planting areas and conditions of installation.
3.1.2 Individual plant locations shall be staked on the project site by the Landscape Contractor and approved by the Landscape Architect before any planting pits are dug.
3.1.3 Accurately stake plant material according to the Drawings.
3.2 TIME OF PLANTING
3.2.1 Evergreen material: Plant Evergreen materials between September 1 and October 15 or in spring before new growth begins.
3.2.2 Deciduous material: Plant deciduous materials in a dormant condition.
3.2.3 Planting times other than those indicated must be acceptable to the Landscape Architect.
3.3 PREPARATION
3.3.1 General: See Landscape Preparation Section
3.3.2 Vegetation Removal
1. Strip existing grass and weeds, including roots from all bed areas leaving the soil surface one (1") inch below finish grade.
2. Herbicide: as required to prepare area for new planting applied to all ground cover, evergreen and shrubby beds and all mulch areas before application of pre-emergence herbicide, per manufacturer's recommendations.
3. Pre-Emergence Herbicide: applied per manufacturer recommendations to same area where "herbicide" has been applied and to planting bed areas, after area is cleared of dead vegetation.
4. Herbicides to be applied by licensed applicator as required by the State.
5. Excavate circular plant pits with vertical sides, except for plants specifically indicated to be planted in beds.
6. Roughen sides of excavations.
7. Provide pre-mixed planting mixture Type "A" for use around the balls and roots of all deciduous and evergreen tree plantings.
3.3.3 Percolation Testing of Plant Beds
Provide percolation testing by filling plant pits with water and monitoring length of time for water to completely percolate into soil.
1. Dig a hole at least 12" in diameter by 12" in depth, with straight sides, in excavated plant beds.
2. Fill hole with water and let it sit overnight.
3. Refill hole the next day.
4. Measure the water level by laying a straight edge across the top of the hole, then use a tape measure or yardstick to determine the water level.
3.3.4 Ground Cover Beds, Perennial Flower Beds, and Ericaceous Plant Beds
1. Excavate existing soil to 12" depth over entire bed area and remove soil from site.
3.3.5 Mass Shrub Beds / Hedge Beds:
1. Excavate existing soil to 18" depth over entire bed area and remove soil from site.
3.3.6 Annual Flower Beds:
1. Excavate existing soil to 8" depth over entire bed area and remove soil from site.
3.4 INSTALLATION
3.4.1 Planting shall be performed only by experienced workman familiar with planting procedures under the supervision of a qualified supervisor.
3.4.2 Planting pits shall be round, with vertical sides and flat bottoms, and sized in accordance with outlines and dimensions shown on the planting details.
3.4.3 See drawings for planting details.
3.4.4 If obstructions are encountered that are not indicated, do not proceed with planting operations until alternative plant locations have been selected and approved in writing by the Landscape Architect.
3.4.5 Set plant material in the planting pit to proper grade and alignment.
3.4.6 After balled and burlapped plants are set, tamp planting mixture around of balls and fill all voids and remove air pockets.
3.4.7 Remove all burlap, ropes, and wires from top 1/3 of balls.
3.4.8 Space ground cover plants in accordance with indicated dimensions.
3.4.9 Spread and arrange roots of bare rooted plants in their natural position.
3.4.10 Water immediately after planting.
3.4.11 Apply pre-emergent herbicide to bed areas per manufacturer's recommendations before mulching.
3.5 MULCHING

3.5.1 Mulch trees and shrub planting pits and shrub beds with shredded hardwood bark mulch 3" deep to drip-line immediately after planting.
3.5.2 Mulch shall not be placed in contact with trunks or stems.
3.5.3 Mulch ground cover beds with shredded bark mulch 2" to 3" deep prior to planting.
3.5.4 Plant ground cover through mulch.
3.6 WRAPPING, GUYING, AND STAKING
3.6.1 Inspect trees for injury to trunks, evidence of insect infestation and improper pruning before wrapping.
3.6.2 Wrap trunks of all trees spirally from bottom to top with specified tree wrap and secure in place.
3.6.3 Stake deciduous trees under 4" caliper.
3.6.4 Stake/guy all trees immediately after installation.
3.6.5 Guy deciduous trees 4" caliper and over.
3.6.6 All work shall be acceptable to the Landscape Architect/Owner's representative.
3.7 PRUNING
3.7.1 Remove or cut back broken, damaged, and unsymmetrical growth of new wood.
3.7.2 Multiple leader plants: preserve the leader which will best promote the symmetry of the plant.
3.7.3 Prune evergreens only to remove broken or damaged branches.
3.8 MAINTENANCE
3.8.1 See Landscape Maintenance and Warranty Standards.
3.9 CLEANING
3.9.1 Perform cleaning during installation of the work and upon completion of the work.

END OF SECTION
LANDSCAPE MAINTENANCE AND WARRANTY STANDARDS

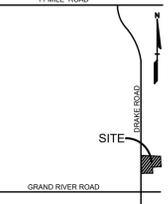
1.0 GENERAL
1.1 SUMMARY
1.1.1 Includes But Not Limited To
1. Provide maintenance for new landscaping as described in Contract Documents.
2. The requirements of the Section include a one (1) year warranty period from date of acceptance of installation performed by the General Contractor's Representative and Landscape Architect.
2.0 PRODUCTS - Not Used
3.0 EXECUTION
3.1 PERFORMANCE
3.1.1 Acceptance of Installation
1. At the completion of all landscape installation, or pre-approved portions thereof, the Landscape Subcontractor shall request in writing an inspection for Acceptance of Installation in which the Landscape Subcontractor, Landscape Architect, and General Contractor's Representative shall be present.
a. Following the acceptance inspection a punch list will be issued by the Landscape Architect.
b. Upon completion of all punch list items, the Landscape Architect and/or General Contractor's Representative shall reinspect the project and issue a written statement of Acceptance of Installation and establish the beginning of the Project Warranty Period.
c. At the time of acceptance all plant material shall be of vigorous health and planting bed and mulch rings are weed free.
d. It is the responsibility of the Landscape Subcontractor to make the written request for inspection of installation in a timely fashion.
e. If there is plant material less prior to the Landscape Subcontractor's written request for inspection of installation, the Landscape Contractor shall make all replacements of this dead material at no additional cost.
2. Landscape work may be inspected for acceptance in parts agreeable to the General Contractor's Representative and Landscape Architect provided work offered for inspection is complete, including maintenance as required.
3. For work to be inspected for partial acceptance, the Landscape Subcontractor shall provide a drawing outlining work completed and supply a written statement requesting acceptance of this work completed to date.
3.1.2 Project Warranty
1. The Project Warranty Period begins upon written preliminary acceptance of the project installation by the Landscape Architect and General Contractor's representative.
2. The Landscape Subcontractor shall guarantee trees, shrubs, ground cover beds and seeded or sodded areas through construction and for a period of one (1) year after date of Acceptance of Installation against defects including death and unsatisfactory growth, except for defects resulting from neglect, abuse or damage by others or unusual phenomena or incidents which are beyond Landscape Subcontractor's control.
3.1.3 Maintenance During One (1) Year Project Warranty
1. To insure guarantee standards, the following maintenance procedures for trees, shrubs, and ground covers shall be executed during construction and for the full Project Warranty Periods.
a. Landscape Subcontractor shall be responsible for only one (1) replacement of any plant materials during the one (1) year Project Warranty Period.
b. Prior to any replacements, Landscape Subcontractor shall review individual plants in question with Landscape Architect to determine reason for plant demise.
c. Maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting sources, adjusting and repairing tree-stabilization devices, resulting from dieback or vertical position, and performing other operations as required to establish healthy, viable plantings.
d. Fill in, as necessary, soil subsidence that may occur because of settling or other processes.
3.1.4 Maintenance of Seeded Lawn Areas
1. The Landscape Subcontractor shall maintain seeded lawn areas.
a. Water, fertilize, weed, and apply chemicals until a dense lawn of permanent grasses, free from lumps and depressions or any bare spots, none of which is larger than one (1) foot of area up to a maximum of 3% of the total seeded lawn area is established.
b. Seeded lawn that fails to show a uniform growth and/or germination shall be reseeded until a dense cover is established, regardless of what season the seed was installed.
2. The Landscape Subcontractor shall maintain and mow all lawn areas for until acceptance of installation (typically 3 mows).
3. The Owner assumes cutting responsibilities following the Acceptance of Installation of the seeded lawn.
4. At conclusion of Project Warranty Period and after receiving Written Final Acceptance by General Contractor's representative and Landscape Architect, the Owner shall assume all seeded lawn maintenance responsibilities.
3.1.5 Maintenance of Sodded Lawn Areas
1. The Landscape Subcontractor shall maintain sodded lawn areas.
a. Water, fertilize, spot weed, apply herbicides, fungicides, insecticides and rodent until a full uniform, smooth stand of sod is knitted to topsoil, and accepted by the Landscape Architect or his or her representative.
2. Water sod thoroughly, as required to establish proper rooting.
3. Repair, rework, and resod all areas that have washed out or are eroded.
4. Mow lawn areas once as soon as sod has rooted sufficiently and knitted to the topsoil.
3.1.6 Final Acceptance Upon Conclusion of the Warranty Period
1. At the conclusion of the Project Warranty Period the Landscape Subcontractor shall request a project inspection for final acceptance in which the Landscape Contractor, Landscape Architect and Owner's Representative shall be present.
2. After the inspection for final acceptance, a punch list will be issued by the Landscape Architect.
NOTE: The Owners may at their option elect to utilize a Construction Manager in lieu of a General Contractor for all matters pertaining to these specifications and the site work.

e. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease.
f. The contractor will be responsible for irrigation system operation, watering schedules, watering amounts and general monitoring of irrigation system throughout construction, maintenance, and warranty period.
2. Replacements must meet the standards specified on the Landscape plans and in the specifications, i.e. quality, species of plant material and planting procedures to receive approval of replacement materials by Landscape Architect.
3. Costs for replacements are assumed part of bid quotations and therefore will not result in an additional cost to General Contractor or Landscape Architect.
4. Areas damaged as a result of replacement operation are to be restored by Landscape Subcontractor at no cost to the General Contractor or Landscape Architect.
5. The Landscape Subcontractor shall be responsible for watering all plantings through the warranty period and shall keep guy wires taut, raise tree balls which settle, furnish and apply sprays as necessary to keep the plantings free of disease and insects until the end of the warranty period.
6. The Landscape Subcontractor shall remove and replace trees, shrubs or other plants found to be dead or in unhealthy condition.
a. Rejected plants and materials shall be removed promptly.
b. Replacements shall be made during the following normal planting schedule.
c. Trees and shrubs which are in doubt shall be replaced, unless, in the opinion of the Landscape Architect, it is advisable to extend Project Warranty Period for full growing Season.
7. The Landscape Contractor shall apply anti-desiccants on evergreen trees and evergreen shrub beds within 150' of major streets and drives, no later than December 1, during the one (1) year project warranty.
8. The first spring after plant installation the contractor shall check all trees to insure twine has rotted from around the trunk.
9. All stakes, guy wires, tree wrap paper, dead twigs and branches shall be removed from trees and plant materials at the end of this warranty period.

1.11.1 Includes But Not Limited To
1. Provide maintenance for new landscaping as described in Contract Documents.
2. The requirements of the Section include a one (1) year warranty period from date of acceptance of installation performed by the General Contractor's Representative and Landscape Architect.
2.0 PRODUCTS - Not Used
3.0 EXECUTION
3.1 PERFORMANCE
3.1.1 Acceptance of Installation
1. At the completion of all landscape installation, or pre-approved portions thereof, the Landscape Subcontractor shall request in writing an inspection for Acceptance of Installation in which the Landscape Subcontractor, Landscape Architect, and General Contractor's Representative shall be present.
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c. At the time of acceptance all plant material shall be of vigorous health and planting bed and mulch rings are weed free.
d. It is the responsibility of the Landscape Subcontractor to make the written request for inspection of installation in a timely fashion.
e. If there is plant material less prior to the Landscape Subcontractor's written request for inspection of installation, the Landscape Contractor shall make all replacements of this dead material at no additional cost.
2. Landscape work may be inspected for acceptance in parts agreeable to the General Contractor's Representative and Landscape Architect provided work offered for inspection is complete, including maintenance as required.
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3.1.2 Project Warranty
1. The Project Warranty Period begins upon written preliminary acceptance of the project installation by the Landscape Architect and General Contractor's representative.
2. The Landscape Subcontractor shall guarantee trees, shrubs, ground cover beds and seeded or sodded areas through construction and for a period of one (1) year after date of Acceptance of Installation against defects including death and unsatisfactory growth, except for defects resulting from neglect, abuse or damage by others or unusual phenomena or incidents which are beyond Landscape Subcontractor's control.
3.1.3 Maintenance During One (1) Year Project Warranty
1. To insure guarantee standards, the following maintenance procedures for trees, shrubs, and ground covers shall be executed during construction and for the full Project Warranty Periods.
a. Landscape Subcontractor shall be responsible for only one (1) replacement of any plant materials during the one (1) year Project Warranty Period.
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4. At conclusion of Project Warranty Period and after receiving Written Final Acceptance by General Contractor's representative and Landscape Architect, the Owner shall assume all seeded lawn maintenance responsibilities.
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2. Water sod thoroughly, as required to establish proper rooting.
3. Repair, rework, and resod all areas that have washed out or are eroded.
4. Mow lawn areas once as soon as sod has rooted sufficiently and knitted to the topsoil.
3.1.6 Final Acceptance Upon Conclusion of the Warranty Period
1. At the conclusion of the Project Warranty Period the Landscape Subcontractor shall request a project inspection for final acceptance in which the Landscape Contractor, Landscape Architect and Owner's Representative shall be present.
2. After the inspection for final acceptance, a punch list will be issued by the Landscape Architect.
NOTE: The Owners may at their option elect to utilize a Construction Manager in lieu of a General Contractor for all matters pertaining to these specifications and the site work.



CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED 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
BMW KAR WASH, LLC
26777 CENTER PARK BOULEVARD
SUITE: 150
SOUTHFIELD, MICHIGAN 48076

PROJECT TITLE
JAX KAR WASH - FARMINGTON HILLS
24300 DRAKE ROAD
FARMINGTON HILLS MI



Table with 2 columns: REVISIONS, LAYOUT REVISIONS, 11-18-24

ORIGINAL ISSUE DATE:
SEPTEMBER 18, 2024

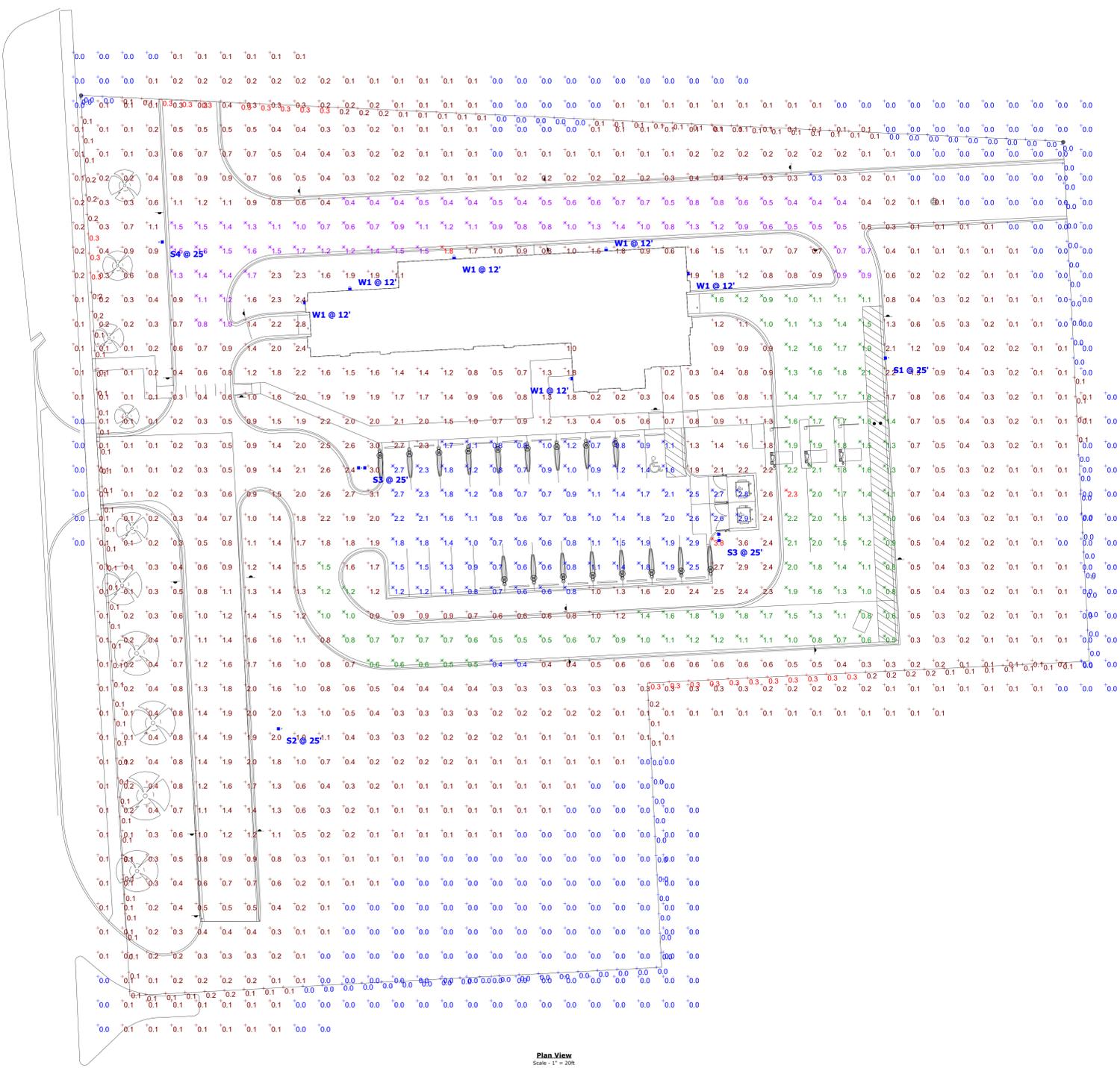
DRAWING TITLE
LANDSCAPE SPECIFICATIONS

Table with 2 columns: PEA JOB NO., P.M., DN., DES., DRAWING NUMBER. Values: 24-0517, JPB, CAL, JLE

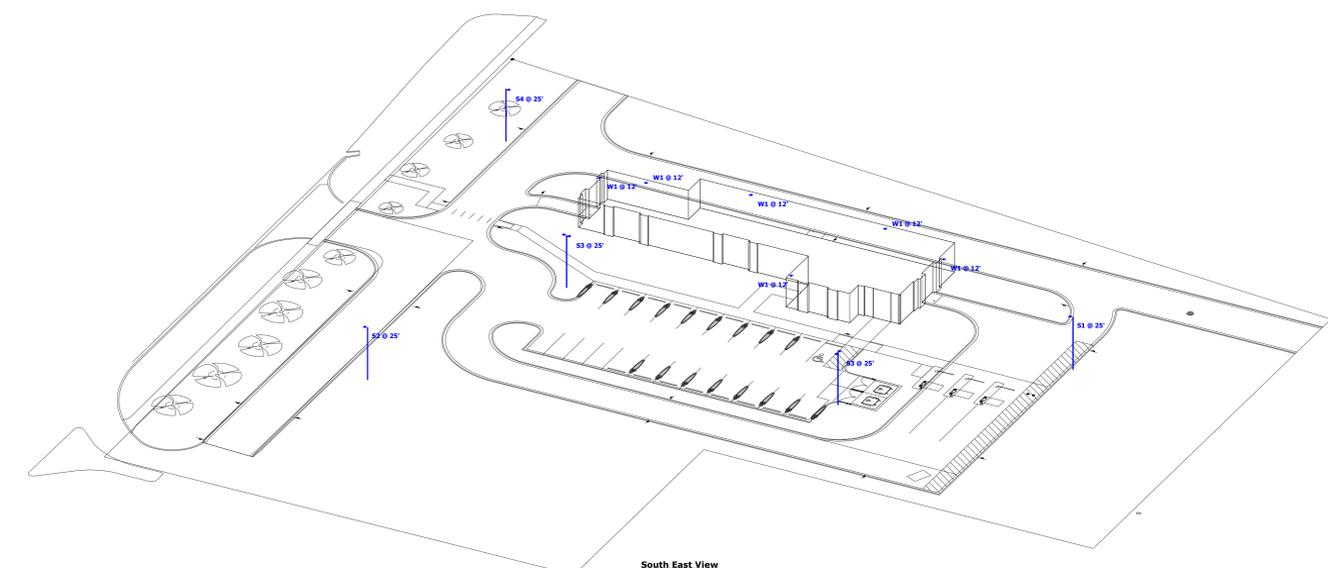
L-2.2

NOT FOR CONSTRUCTION

S:\PROJECTS\2024\24-0517 - JAX FARMINGTON\02_LAYOUT\2-01 LANDSCAPE_SPECS-24-0517.dwg PLOT DATE: 11/19/2024 BY: Charlotte L. Engerich



Plan View
Scale = 1" = 20'



South East View

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Bypass Lane	✖	0.9 fc	1.8 fc	0.3 fc	6.0:1	3.0:1
Drive Through/ Pay Lane	✖	1.3 fc	2.3 fc	0.4 fc	5.8:1	3.3:1
Overall	+	0.6 fc	3.8 fc	0.0 fc	N/A	N/A
Parking/Vacuums	✖	1.4 fc	3.8 fc	0.6 fc	6.3:1	2.3:1
Boundary	+	0.1 fc	0.3 fc	0.0 fc	N/A	N/A

Schedule	Symbol	Label	QTY	Manufacturer	Catalog	Description	Lamp Output	LLF	Input Power	Mounting Height
	□	S1	1	Lithonia Lighting	DSX1 LED P3 40K 70CRI T4M	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 70 CRI Type 4 Medium	13968	0.9	102.17	25'
	□	S2	1	Lithonia Lighting	DSX1 LED P3 40K 70CRI T2M	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 70 CRI Type 2 Medium	13605	0.9	102.17	25'
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	□	S4	1	Lithonia Lighting	DSX1 LED P2 40K 70CRI TFTM	D-Series Size 1 Area Luminaire P2 Performance Package 4000K CCT 70 CRI Forward Throw	9977	0.9	67.79	25'
	⌈	W1	6	Lithonia Lighting	WDGE2 LED WITH P2 - 40K 70CRI T3M	WDGE2 LED WITH P2 - PERFORMANCE PACKAGE, 4000K, 70CRI, TYPE 3 MEDIUM OPTIC	2327	0.9	18,981	12' 5

ADDITIONAL NOTES

- EXTERIOR LIGHTING SHALL NOT OPERATE DURING DAYLIGHT HOURS.
- BUILDING FAÇADE AND LANDSCAPE LIGHTING SHALL BE TUNED OFF BETWEEN MIDNIGHT OR ONE HOUR AFTER CLOSE OF BUSINESS, WHICHEVER IS LATER, AND 6:00AM OR OPENING, WHICHEVER IS EARLIER.
- ALL OTHER EXTERIOR LIGHTING SHALL BE REDUCED TO NO GREATER THAN 70% OF MAXIMUM FROM MIDNIGHT OR ONE HOUR AFTER CLOSE OF BUSINESS, WHICHEVER IS LATER, AND 6:00AM OR OPENING, WHICHEVER IS EARLIER.
- USE OF OCCUPANCY SENSORS TO TURN OFF OR REDUCE LIGHTING WITHIN 15 MINUTES OF ZERO OCCUPANCY IS RECOMMENDED.

General Note

1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
2. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
3. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0"

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705.

Alternates Note

THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.

Ordering Note

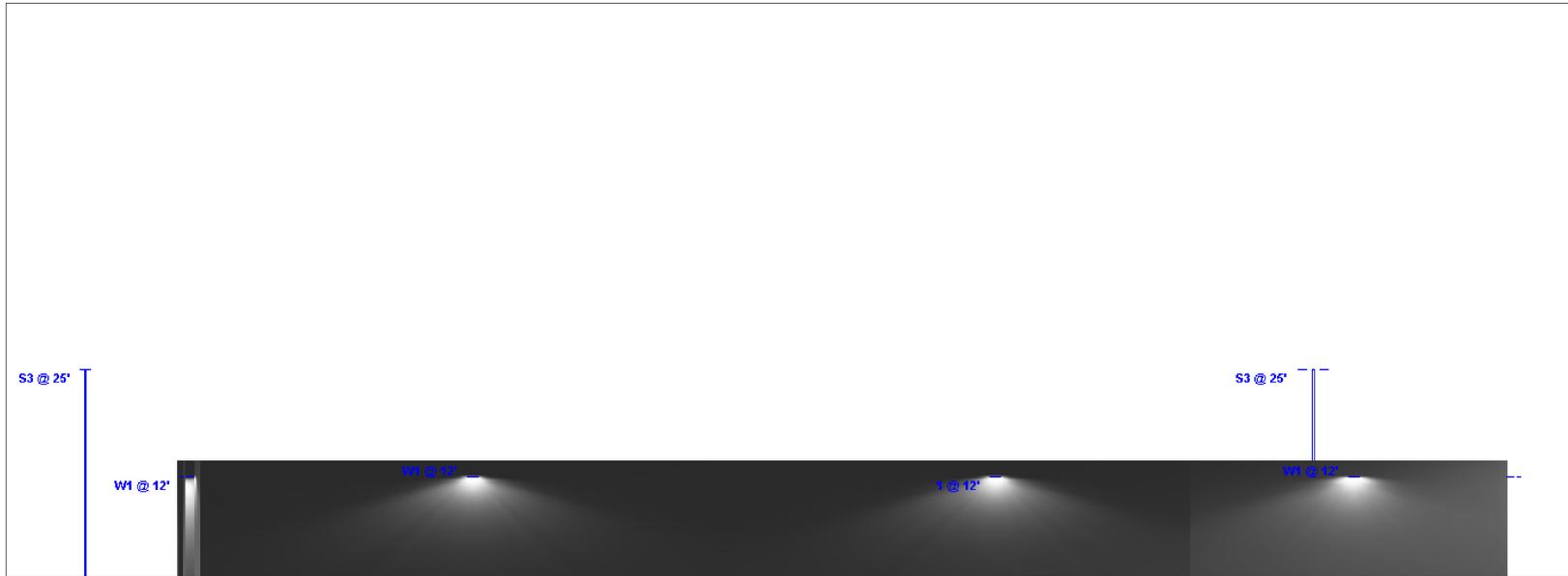
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Drawing Note

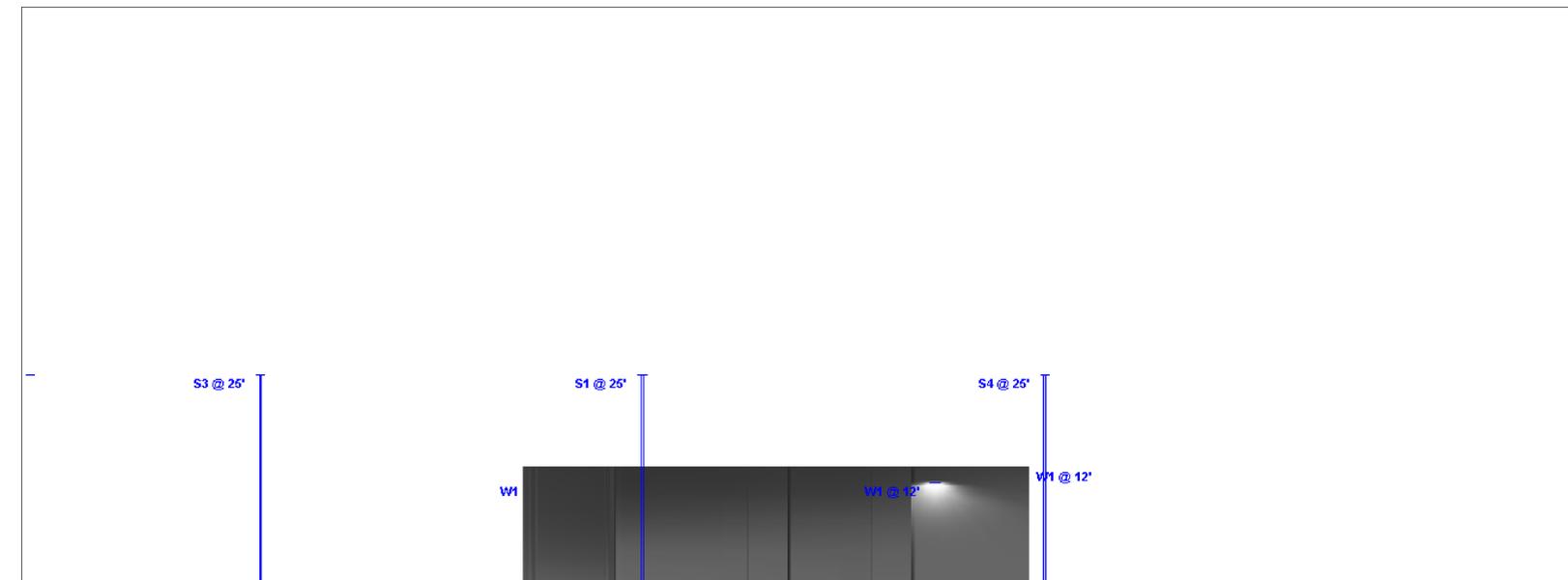
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Mounting Height Note

MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.



North



East

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Bypass Lane	✖	0.9 fc	1.8 fc	0.3 fc	6.0:1	3.0:1
Drive Through/ Pay Lane	✖	1.3 fc	2.3 fc	0.4 fc	5.8:1	3.3:1
Overall	+	0.6 fc	3.8 fc	0.0 fc	N/A	N/A
Parking/Vacuums	✖	1.4 fc	3.8 fc	0.6 fc	6.3:1	2.3:1
Boundary	+	0.1 fc	0.3 fc	0.0 fc	N/A	N/A

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog	Description	Lamp Output	LLF	Input Power	Mounting Height
□	S1	1	Lithonia Lighting	DSX1 LED P3 40K 70CRI T4M	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 70 CRI Type 4 Medium	13968	0.9	102.17	25'
□	S2	1	Lithonia Lighting	DSX1 LED P3 40K 70CRI T2M	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 70 CRI Type 2 Medium	13605	0.9	102.17	25'
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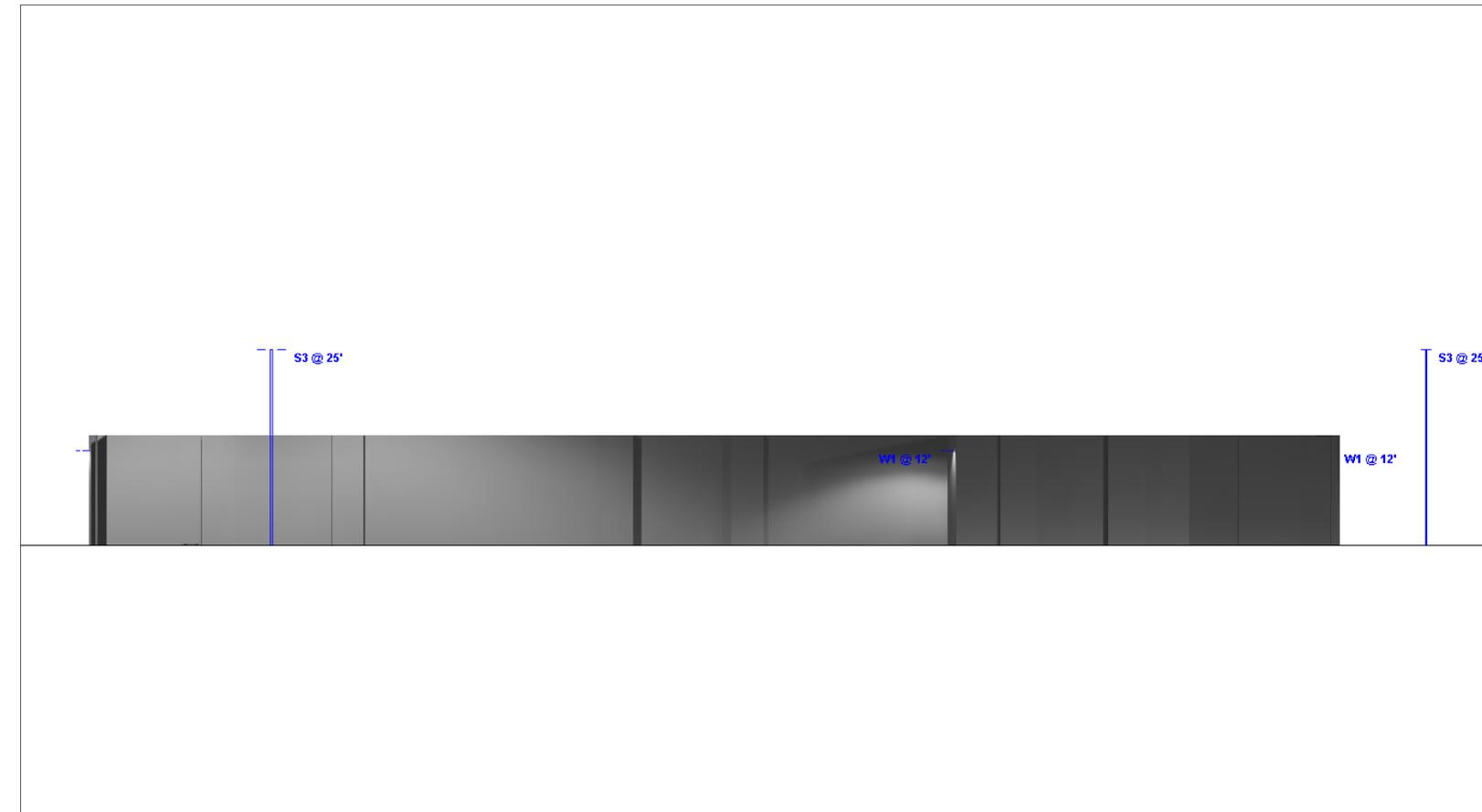
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West



South

D-Series Size 1 LED Area Luminaire

Specifications

Length: 30.0" (762mm)
 Width: 12.0" (305mm)
 Height: 12.0" (305mm)
 Weight: 15.0 lbs (6.8 kg)

Introduction

The modern styling of the D-Series features a highly efficient, modern LED luminaire with a high performance, high efficacy, long life LED technology into a high performance, high efficacy, long life luminaire.

The advanced performance results in a luminaire with excellent uniformity, greater pole spacing and lower power density. D-Series luminaire is recommended for use in parking applications with typical average beam of 400' and average service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED P3 40K 70CRI T4M 30x12x12 SPN 12x12x12 P3H 4000K

Symbol	Label	Quantity	Manufacturer	Catalog	Description	Lamp Output	LLF	Input Power	Mounting Height
S1		1	Lithonia Lighting	DSX1 LED P3 40K 70CRI T4M	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 70 CRI Type 4 Medium	13968	0.9	102.17	25'
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W1		6	Lithonia Lighting	WDGE2 LED P2 40K 70CRI T3M	WDGE2 LED WITH P2 - PERFORMANCE PACKAGE, 4000K, 70CRI, TYPE 3 MEDIUM OPTIC	2327	0.9	18,981.5	12'

WDGE2 LED Architectural Wall Scape Precision Reflective Optic

Specifications

Depth: 3.0" (76mm)
 Height: 12.0" (305mm)
 Width: 12.0" (305mm)
 Weight: 1.5 lbs (0.7 kg)

Introduction

WDGE2 LED is a precision reflector luminaire with a precision reflective optic that provides a high quality, uniform light distribution. The luminaire is designed for use in architectural wall scape applications. The luminaire is available in a variety of mounting heights and beam spreads.

Ordering Information

EXAMPLE: WDGE2 LED P2 40K 70CRI T3M 12x12x12 SPN 12x12x12 P2H 4000K

Symbol	Label	Quantity	Manufacturer	Catalog	Description	Lamp Output	LLF	Input Power	Mounting Height
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Bypass Lane	✖	0.9 fc	1.8 fc	0.3 fc	6.0:1	3.0:1
Drive Through/ Pay Lane	✖	1.3 fc	2.3 fc	0.4 fc	5.8:1	3.3:1
Overall	+	0.6 fc	3.8 fc	0.0 fc	N/A	N/A
Parking/Vacuums	✖	1.4 fc	3.8 fc	0.6 fc	6.3:1	2.3:1
Boundary	+	0.1 fc	0.3 fc	0.0 fc	N/A	N/A

Schedule

Symbol	Label	QTY	Manufacturer	Catalog	Description	Lamp Output	LLF	Input Power	Mounting Height
S1		1	Lithonia Lighting	DSX1 LED P3 40K 70CRI T4M	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 70 CRI Type 4 Medium	13968	0.9	102.17	25'
S2		1	Lithonia Lighting	DSX1 LED P3 40K 70CRI T2M	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 70 CRI Type 2 Medium	13605	0.9	102.17	25'
S3		2	Lithonia Lighting	DSX1 LED P3 40K 70CRI T2M	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 70 CRI Type 2 Medium	13605	0.9	204.34	25'
S4		1	Lithonia Lighting	DSX1 LED P2 40K 70CRI TFTM	D-Series Size 1 Area Luminaire P2 Performance Package 4000K CCT 70 CRI Forward Throw	9977	0.9	67.79	25'
W1		6	Lithonia Lighting	WDGE2 LED P2 40K 70CRI T3M	WDGE2 LED WITH P2 - PERFORMANCE PACKAGE, 4000K, 70CRI, TYPE 3 MEDIUM OPTIC	2327	0.9	18,981.5	12'

ADDITIONAL NOTES

- EXTERIOR LIGHTING SHALL NOT OPERATE DURING DAYLIGHT HOURS.
- BUILDING FAÇADE AND LANDSCAPE LIGHTING SHALL BE TUNED OFF BETWEEN MIDNIGHT OR ONE HOUR AFTER CLOSE OF BUSINESS, WHICHEVER IS LATER, AND 6:00AM OR OPENING, WHICHEVER IS EARLIER.
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General Note

1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
2. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
3. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0"

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Alternates Note

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Ordering Note

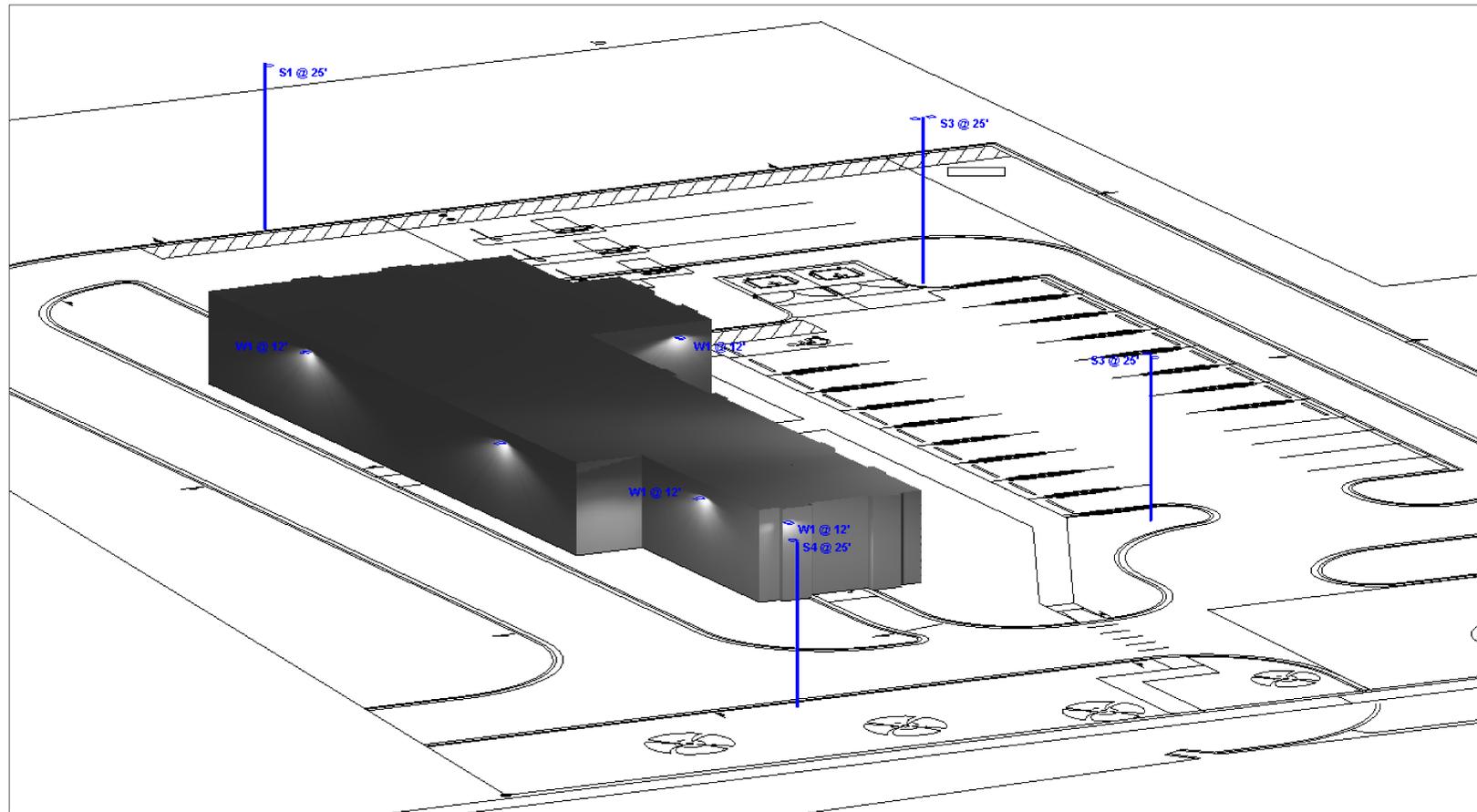
FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

Drawing Note

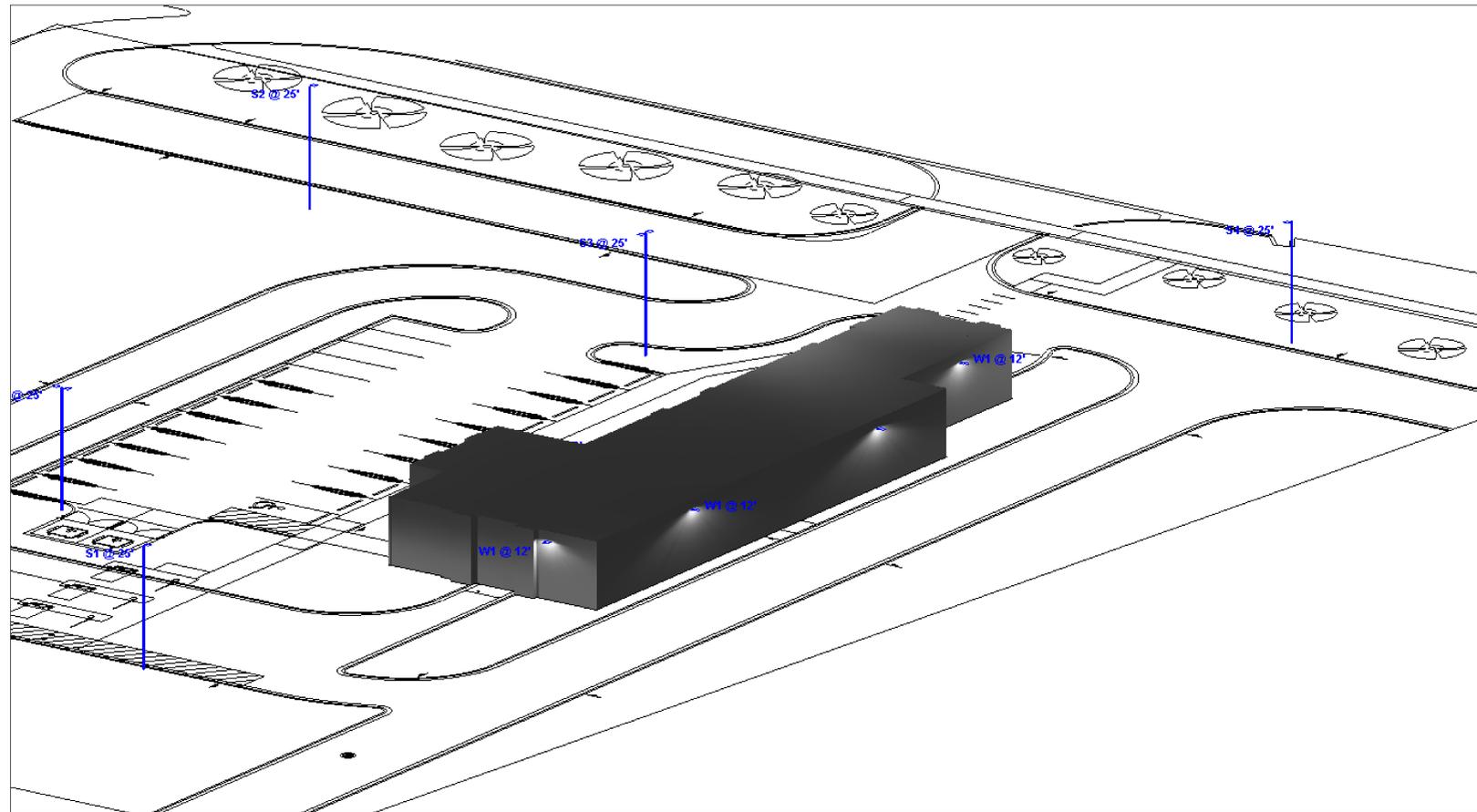
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View #5



View #6

D-Series Size 1 LED Area Luminaire

Specifications

Length: 1200 mm
 Width: 600 mm
 Height: 120 mm
 Weight: 15.5 kg

Introduction

The modern styling of the D-Series features a highly advanced, dual beam architecture with the benefits of the latest in LED technology into a single performance light fixture. Single beam.

The advanced performance results in a light with excellent uniformity, greater pole spacing and lower power density. D-Series outdoor lighting applications include parking lots, walkways, and general area lighting applications with typical average beam angle of 120° and maximum service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED P3 40K 70CRI T2M SPN ALUMINA P3H-FIN-DIMM

Order Code	Manufacturer	Part Number	Color	Beam Angle	Mounting Height
DSX1	Lithonia Lighting	DSX1 LED P3 40K 70CRI T2M	4000K	120°	25'
DSX2	Lithonia Lighting	DSX1 LED P3 40K 70CRI T2M	4000K	120°	25'
DSX3	Lithonia Lighting	DSX1 LED P3 40K 70CRI T2M	4000K	120°	25'
DSX4	Lithonia Lighting	DSX1 LED P2 40K 70CRI TFTM	4000K	120°	25'

WDGE2 LED Architectural Wall Source Precision Refractive Optic

Specifications

Depth: 90 mm
 Height: 110 mm
 Weight: 1.5 kg

Introduction

WDGE2 LED is a precision refractive optic designed for architectural wall source applications. It features a precision refractive optic that provides a uniform, glare-free beam of light. The fixture is designed for use in a variety of architectural applications, including parking lots, walkways, and general area lighting.

Ordering Information

EXAMPLE: WDGE2 LED P2 40K 70CRI T3M ALUMINA P3H-FIN-DIMM

Order Code	Manufacturer	Part Number	Color	Beam Angle	Mounting Height
WDGE2	Lithonia Lighting	WDGE2 LED P2 40K 70CRI T3M	4000K	120°	12'

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Bypass Lane	✖	0.9 fc	1.8 fc	0.3 fc	6.0:1	3.0:1
Drive Through/ Pay Lane	✖	1.3 fc	2.3 fc	0.4 fc	5.8:1	3.3:1
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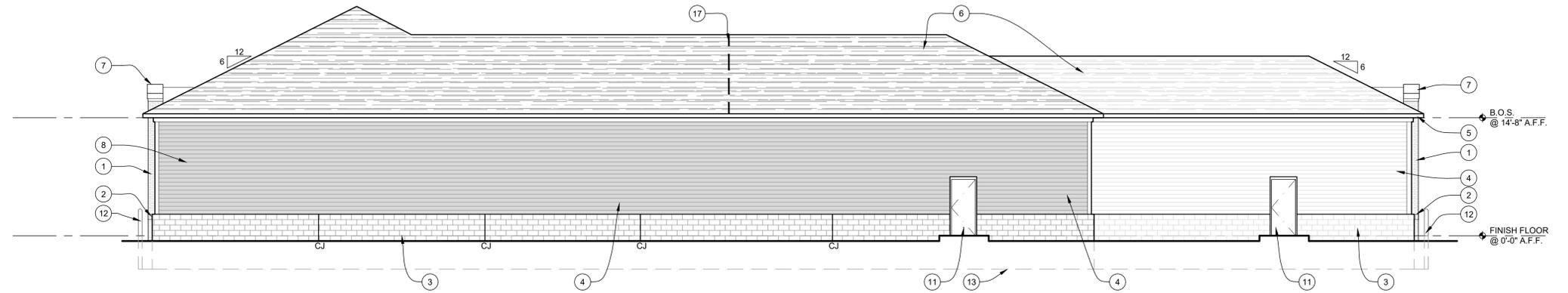
Proposed Exterior Renderings for:



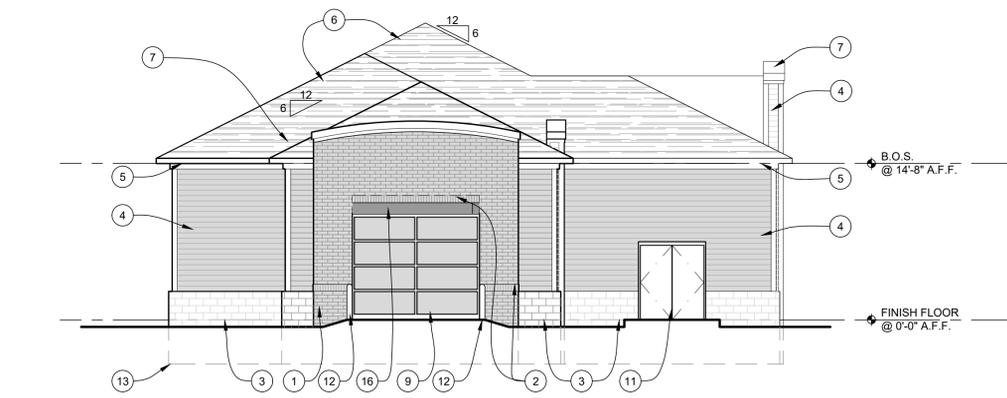
Cunningham-Limp
Building Better Communities

F.A.studio
design to inspire

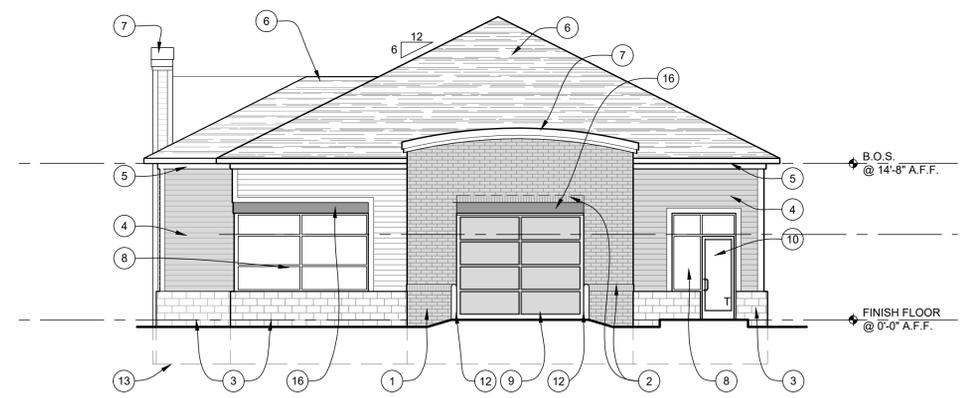
EXTERIOR MATERIAL SCHEDULE	
1	4" UTILITY BRICK
2	1/2" RECESSED BRICK SOLDIER COURSE
3	8" SPLIT-FACE CMU BLOCK
4	HORIZONTAL LAP SIDING W/ TRIM
5	1X6 FASCIA BOARD OVER 1X TRIM BOARD
6	ASPHALT SHINGLES
7	PRE-FINISHED METAL COPING
8	1" TINTED LOW 'E' INSUL. GLAZING IN CLEAR ANOD. ALUM. THERMAL BREAK FRAMES.
9	12W x 10H GLASS SECTIONAL INSULATED OVERHEAD GRADE DOOR w/ MOTOR OPERATED OPENER & INSULATED
10	CLEAR ANOD. ALUM. ENTRY DOOR W/ TEMPERED GLASS
11	HOLLOW METAL DOOR & FRAME
12	6" DIA. CONC. FILLED STEEL GUARD POSTS
13	CONCRETE TRENCH FOOTING BELOW
14	DASHED LINE DENOTED PROPOSED SIGNAGE LOCATION
15	1" TINTED INSUL. SPANDREAL IN CLEAR ANOD. ALUM. THERMAL BREAK FRAMES.
16	PRE-FINISHED ARCHITECTURAL METAL ROOFING. COLOR: JAX BLUE
17	TYP. VACUUM STATIONS TO BE PAINTED A NEUTRAL COLOR (HOSE / VACUUM ARM / VERTICAL POST)



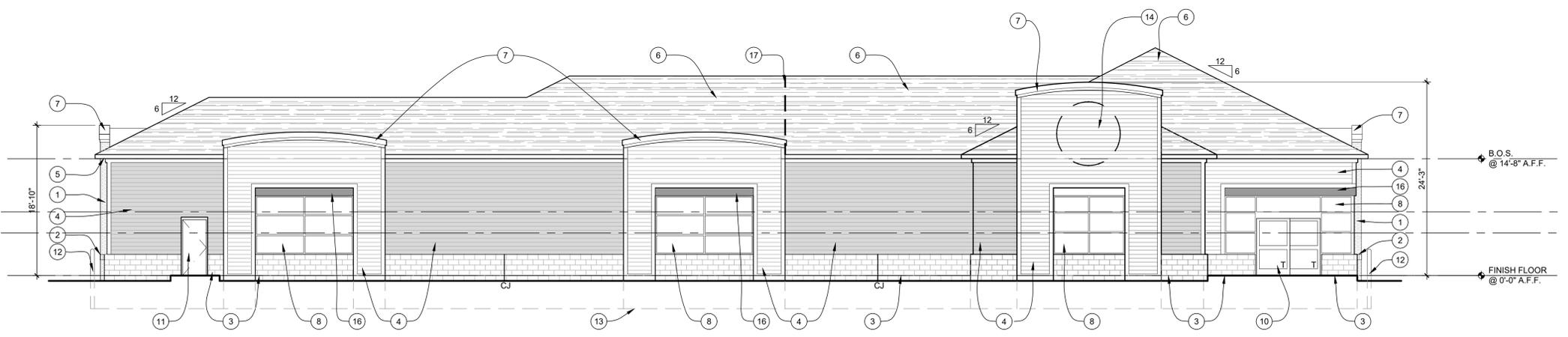
NORTH ELEVATION
SCALE: 1/8" = 1'-0" 4



WEST ELEVATION
SCALE: 1/8" = 1'-0" 3



EAST ELEVATION
SCALE: 1/8" = 1'-0" 2



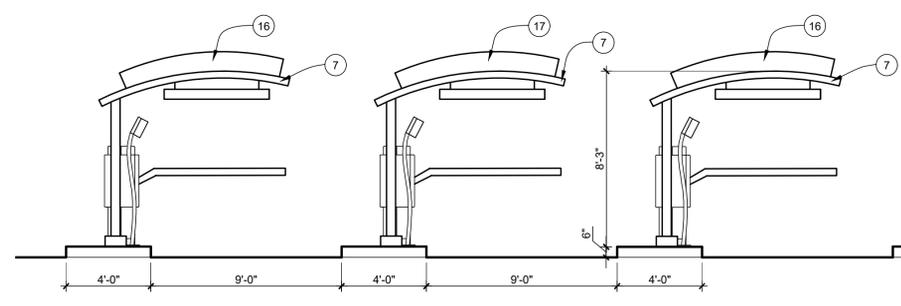
SOUTH ELEVATION
SCALE: 1/8" = 1'-0" 1



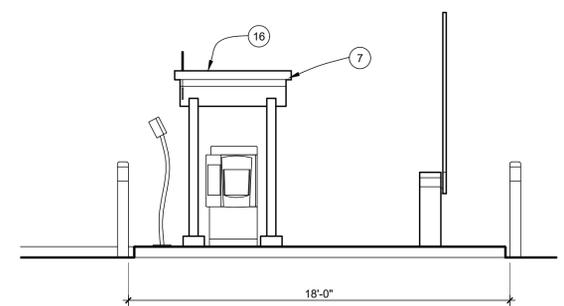
PROJECT NAME:
JAX KAR WASH
FARMINGTON HILLS, MI

DATE:	ISSUED FOR:
9-17-24	PRELIM. SITE PLAN
11-11-24	PRELIM. SITE PLAN
DRAWING DATE: 11-11-24	
PROJECT NUMBER: 24078	
SHEET NUMBER: PE-1A	

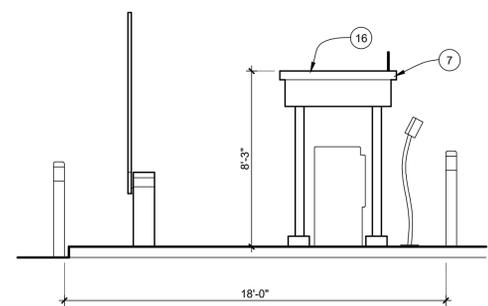
EXTERIOR MATERIAL SCHEDULE	
1	4" UTILITY BRICK
2	1/2" RECESSED BRICK SOLDIER COURSE
3	8" SPLIT-FACE CMU BLOCK
4	HORIZONTAL LAP SIDING W/ TRIM
5	1X6 FASCIA BOARD OVER 1X TRIM BOARD
6	ASPHALT SHINGLES
7	PRE-FINISHED METAL COPING
8	1" TINTED LOW 'E' INSUL. GLAZING IN CLEAR ANOD. ALUM. THERMAL BREAK FRAMES.
9	12"W x 10"H GLASS SECTIONAL INSULATED OVERHEAD GRADE DOOR w/ MOTOR OPERATED OPENER & INSULATED
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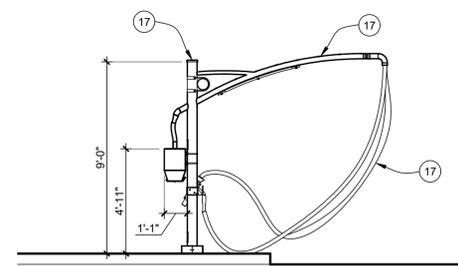
SOUTH ELEVATION
SCALE: 1/4" = 1'-0"
3



EAST ELEVATION
SCALE: 1/4" = 1'-0"
2



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

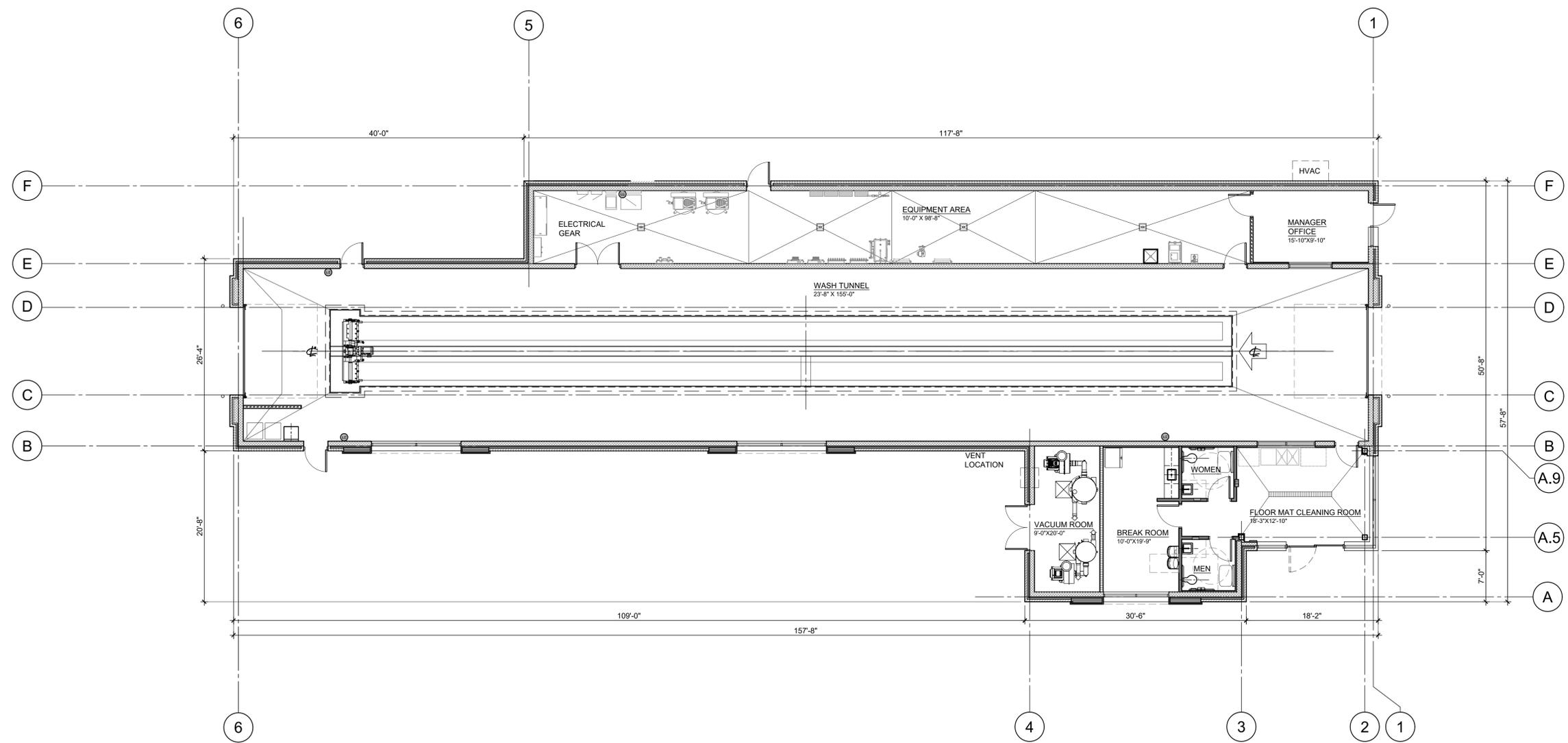


TYP. VACUUM STATION ELEVATION
SCALE: 1/4" = 1'-0"
4



PROJECT NAME:
JAX KAR WASH
FARMINGTON HILLS, MI

ISSUED FOR:	DATE:
PRELIM. SITE PLAN	9-17-24
PRELIM. SITE PLAN	11-11-24
DRAWING DATE:	11-11-24
PROJECT NUMBER:	24078
SHEET NUMBER:	PE-1B



PRELIMINARY OVERALL FLOOR PLAN
SCALE: 1/8" = 1'-0"



PROJECT NAME:
JAX KAR WASH
FARMINGTON HILLS, MI

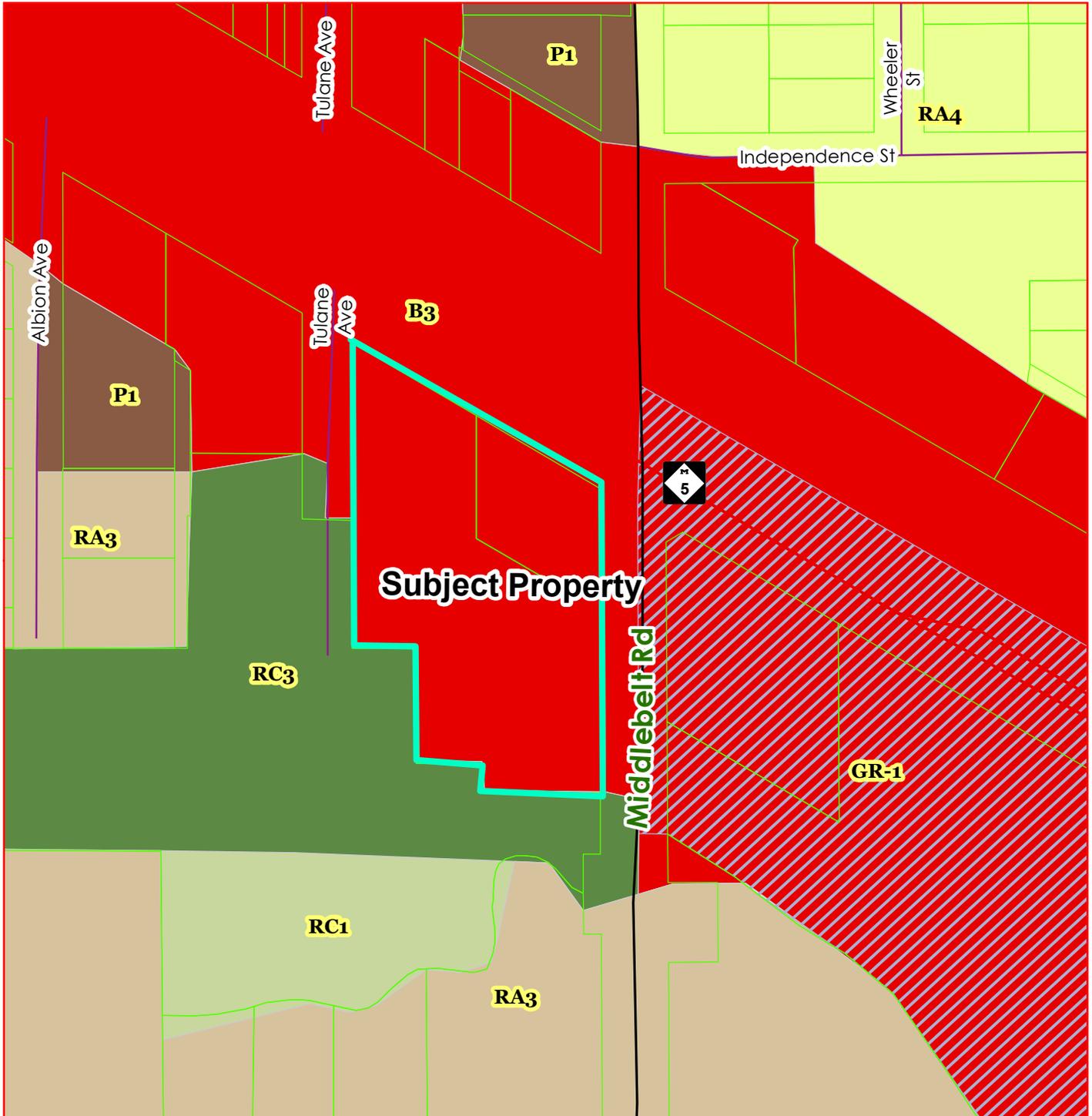
DATE:	ISSUED FOR:
9-17-24	PRELIM. SITE PLAN
11-11-24	PRELIM. SITE PLAN

DRAWING DATE:
11-11-24

PROJECT NUMBER:
24078

SHEET NUMBER:
PFP-1

SP 61-11-2024
 23-35-431-017, 016
 29455 & 29403 Grand River Ave.
 New fuel station with drive-through restaurant



Tax parcel	P-1 Vehicular Parking District
Minor roads	RA-3 One Family Residential District
Zoning Districts	RA-4 One Family Residential District
Zoning Districts	RC-1 Multiple Family Residential
B-3 General Business District	RC-3 Multiple Family Residential
GR-1 Grand River Overlay District	

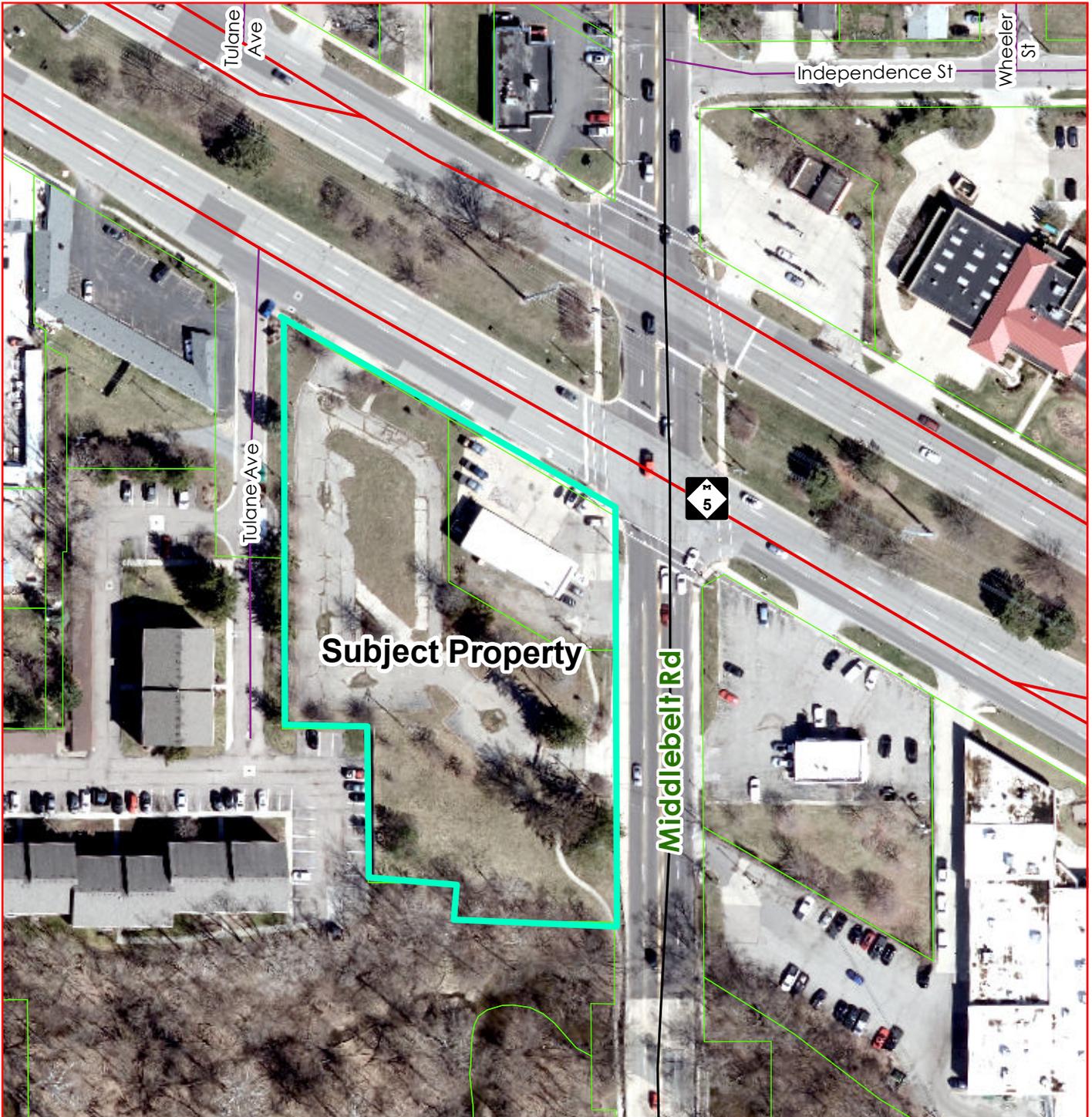


SOURCE: City of Farmington Hills, 2024
 Oakland County GIS, 2024

DISCLAIMER: Although the information provided by this map is believed to be reliable, its accuracy is not warranted in any way. The City of Farmington Hills assumes no liability for any claims arising from the use of this map.



SP 61-11-2024
23-35-431-017, 016
29455 & 29403 Grand River Ave.
New fuel station with drive-through restaurant



- Tax parcel
- Minor roads

Planning Division



SOURCE: City of Farmington Hills, 2024
Oakland County GIS, 2024

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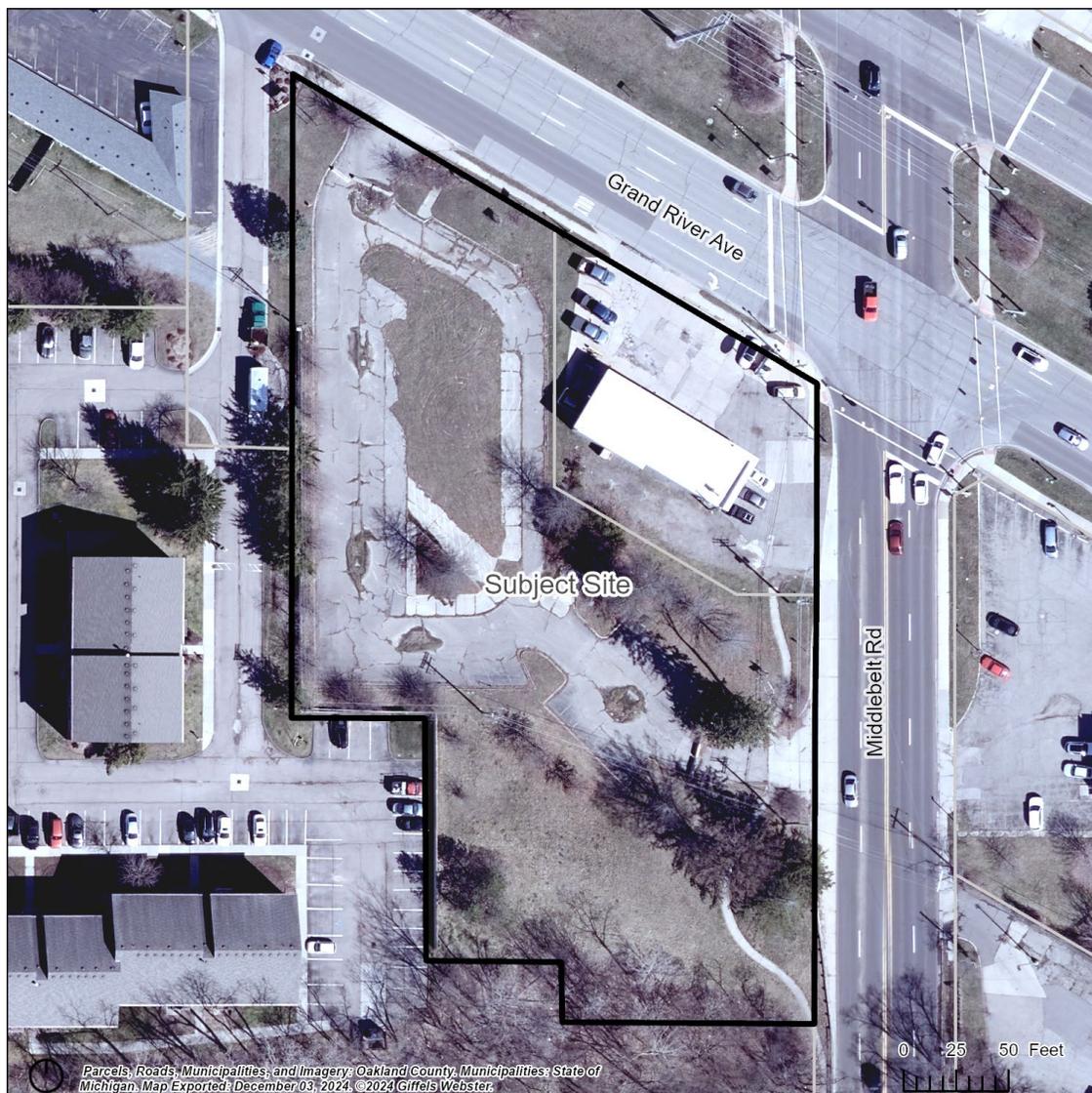
December 10, 2024

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

Site Plan Review

Case: SP 61-11-2024
Site: 29455 and 29403 Grand River (22-23-36-431-016, 22-23-35-431-017)
Applicant: SkilkenGold Development
Plan Date: 11/04/2024
Zoning: B-3 General Business

We have completed a review of the application for site plan approval and a summary of our findings is below. Items in **bold** require specific action. Items in *italics* can be addressed administratively.



SUMMARY OF FINDINGS

Summary of Proposal. The applicant proposes to demolish an existing commercial building and construct a new fueling station with 6 pumps/ 12 fueling positions, with the front of the building oriented toward Middlebelt. The 6,132 sf proposed Sheetz store will include a convenience store and restaurant. No drive-through service is included as a part of this proposal.

Summary of Issues.

For Planning Commission consideration:

- Canopy trees are required throughout the paved area, but were only provided along the perimeter of the parking lot. The Planning Commission shall consider whether this arrangement is sufficient to meet this requirement.

Ordinance compliance:

- Loading space shall be identified on the plans (970 sf required)
- The dumpster enclosure must be relocated to an interior side or rear yard location. The ordinance also requires it to be located as far as practicable from adjacent residential. The height of the bins within the enclosure shall be provided. Enclosure height must be 1 foot above the dumpster height.
- The freestanding monument sign on Grand River Avenue appears to be within the driveway clearance triangle.

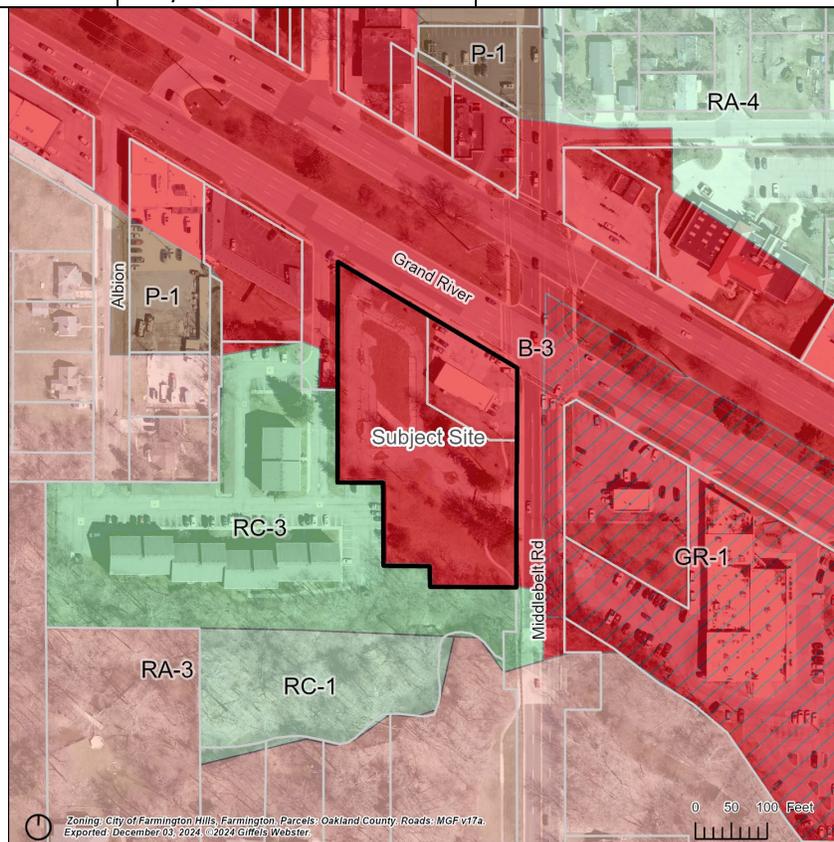
For administrative review:

- Setback calculations shall be updated in accordance with 3.5.2.L and noted on the plans for the West and South property lines adjacent to residential.
- A note shall be added to the plans stating that the parking/storage of motor vehicles, trailers, campers, or other such conveyances shall be prohibited (except for those needed for operation of the use)
- Employee information is required to calculate parking, but the number of spaces provided (40) far exceeds what is required without the employee calculation (29). The application notes 30-40 employees, but does not specify the number on the largest shift.
- Sheet A-200 indicates that there will be three wall-mounted signs with the Sheetz logo, while Sheet A-300 indicates there are two Sheetz logo signs and one Made to Order sign. The applicant shall correct this discrepancy.
- Sheet A-200 labels the entry signs as “pole-mounted” signs, but Sheet A-600 details these signs to be monument signs. The applicant shall correct this discrepancy.
- Canopy mounted signs may not be taller than 8”. The proposed canopy sign exceeds this requirement.
- Sign illumination in footcandles shall be provided.
- The site plan includes a screening wall and brick knee wall, referencing sheet A100 for details. However, only knee wall details are provided. Screening wall details are required.
- Evergreen trees are located less than the minimum spacing of 20’ from deciduous trees.
- The buffer yard trees were calculated based on a 30’ spacing, but the ordinance requires a 20’ spacing for rows.

Existing Conditions

1. **Zoning.** The site is 1.9 acres (parcel -017 is 1.6 acres, parcel -016 is 0.3 acres) and zoned B-3.
2. **Existing site.** The site is currently developed with a 2,257 SF vacant automotive service facility (oil changes). Pavement from a previous use is also present.
3. **Adjacent properties.**

Direction	Zoning	Land Use
North	B-3	Commercial
South	RC-3	Multiple-Family Residential
West	RC-3	Multiple-Family Residential
West	B-3	Commercial
East	B-3/ GR-1	Commercial



4. **Site configuration and access.** The site is currently comprised of two separate parcels. Each parcel has two curb cuts, each with access on both Middlebelt and Grand River Avenue. The proposed plan closes two of these curb cuts (the two closest to the intersection), resulting in one access point on each right-of-way.

Site Plan & Use:

1. **Use.** A gas station and carryout restaurant are both principally permitted uses in the B-3 district, subject to PC approval and the standards of Sections 4.27 and 4.28 (see below).
2. **Dimensional Standards (B-3 district).** See footnotes after the table for remarks on compliance issues.

Item	Required	Proposed/Comments
Standards of Sec. 34-3.1.25.E		
Min. lot size	None specified	1.9 acres
Min. lot width	None specified	290'
Front Setback- East	25 ft (from Middlebelt)	>45 ft to canopy ¹
Side Setback- North	25 ft (from Grand River)	51.7 ft to canopy/67+ to building ¹
Side Setback – South (Residential)	20 ft / 30.6 ft (3.5.2.L) ²	36.1 ft/Compliant
Rear Setback – West (residential/ non-residential)	20 ft/ 23.9 ft (3.5.2.L) ²	25.1 ft
Building Height	50 feet	26 ft to top of cupola
Front Yard Open Space	50%	Compliant
Other dimensional standards		
Yard landscaping (34-3.5.2.A)	For all uses except one-family detached residential units, landscaping of all yards abutting a street shall be provided	See landscaping comments below.
Minimum parking setback (34-3.5.2.J)	10 feet	Compliant
Loading space (34-3.5.2.N)	10 feet of loading space per front foot of building = 970 sq ft	None Proposed
Rooftop equipment (34-3.5.2.U.)	Rooftop equipment shall be screened in accordance with Section 34-5.17.	A roof equipment screen was proposed (note #11 on Sheet A300)
Landscape area abutting street or freeway (34-3.5.2.V.)	A landscaped area not less than ten (10) feet deep	Compliant.

1) *Precise front setback distances to the building and canopy should be added to the plans.*

2) Residential setbacks shall be calculated in accordance with 3.5.2.L, which requires residential setbacks to be 20 feet or 10% of lot depth as measured from the residential district, whichever is greater (limited to a maximum of 50 feet). *The applicant should correctly note these setbacks on the plans for the West and South property lines.*

3. **Fast Food or Carryout Restaurants (34-4.27)**

Standards apply to B-1, B-2, and B-4 Districts only

4. **Gasoline Stations (34-4.28)**

Standards for gas stations in the B-3 district. Per Section 34-4.28, gas stations in the B-3 district shall meet the following standards:

In all districts:

- A. Adequate space shall be provided for the ingress, egress, and maneuvering of delivery trucks and emergency vehicles on the site. The analysis shall be based on radii and standards in the latest edition of A Policy of Geometric Design of Highways and Streets by the American Association of State Highway and Transportation Officials. Use of AutoTURN software or the

equivalent is highly recommended for this analysis. This information shall be depicted on a site plan and approved in accordance with Section 34-6.1.

This standard appears to be met. We defer to the fire department for their review of truck turning.

- B. Up to fifty (50) percent of fueling positions may be considered toward fulfilling the parking requirement for the gas station, except that fueling positions shall not be counted as spaces required for service bays.

See review of parking requirements

In the B-1, B-3 and ES districts, gasoline service stations where no repair work is done, other than incidental service, but not including steam cleaning or undercoating, vehicle body repair, painting, tire recapping, engine rebuilding, auto dismantling, upholstering, auto glass work and such other activities whose external effects could adversely extend beyond the property line, shall be permitted subject further to the following conditions:

This station has no auto service.

- B. In the B-1, B-3 and ES districts:
 - i. The curbcuts for access to a service station shall not be permitted at such locations that will tend to create traffic hazards in the streets immediately adjacent thereto. Entrances shall be no less than twenty-five (25) feet from a street intersection (measured from the road right-of-way) or from adjacent residential districts.
This standard is met.
 - ii. The minimum lot area shall be fifteen thousand (15,000) square feet, and so arranged that ample space is available for motor vehicles which are required to wait. Gasoline service stations having no facilities for repair or servicing of automobiles (including lubricating facilities) may be permitted on lots of ten thousand (10,000) square feet, subject to all other provisions herein required.
This standard is met.
 - iii. Gasoline service stations which do not have a property line abutting a residential district shall not have service bay openings facing the public thoroughfare.
N/A
 - iv. The parking of motor vehicles or the storage of trailers, campers or other such conveyances on the gasoline service station property shall be prohibited, except for those necessary to the operation of a gasoline service station.
This standard appears to be met, but should be confirmed with a note on the plan.
 - v. Off-street loading and unloading space shall be provided in the ratio of at least ten (10) square feet per front foot of building but may be located in any required yard notwithstanding Section 34-5.4.
None proposed.
- C. In the B-3 and ES districts, automobile car washes may be permitted as an accessory use.
N/A

5. Dumpster (34-5.1.2.D).

Item	Required	Proposed/Comments
Location	Rear yard or interior side yard	Located in front yard
Screening	Permanent building wall or earth mound not less than 6 feet or 1 foot above the enclosed dumpster whichever is greater	<i>The height information of all bins within the enclosure was not provided. More information required.</i>
Setback	20 feet from any residential property and far as practicable from adjoining residential district	Although setback more than 20 feet, dumpster is adjacent to shared residential property line

- Mechanical Equipment (34-5.1.4.D).** The plans include a roof equipment screen consistent with the proposed building materials.
- Minimum parking (34-5.2.11.C.i/x).** It appears that the site plan includes more parking spaces than required.

Requirement	Calculations	Provided
Retail store: One (1) for each one hundred seventy-five (175) square feet of usable floor area	2,383 SF= 14 spaces	40 spaces + 6 (50% of fueling positions) <i>More information required.</i>
Fast food restaurant: 1 per 30 SF UFAX	450 SF= 15 spaces	
Self-service gas station: One (1) space plus one (1) space for each employee on the largest working shift. Additional parking shall be provided for any accessory retail use as required for such use	<i>Employee information required, however 7 spaces are labeled "employee parking"</i>	
Barrier-Free Spaces	2 spaces (1 van accessible)	2 spaces

8. **Off-street parking dimensions (34-5.3.3.A & B.).**

Item	Required	Proposed/Comments
Maneuvering lane width	20 ft.	Compliant
Parking space width	9 ft.	9 ft
Parking space length	20 ft. for minimum required (May include a maximum two-foot unobstructed vehicle overhang area at the front of the parking space.) 17 ft. for additional parking (May include a maximum one-foot unobstructed vehicle overhang area at the front of the parking space)	20 ft

- Signs (34-5.5).** The applicant provided sign details, but the plans show some discrepancies. *Sheet A-200 indicates that there will be three wall-mounted signs with the Sheetz logo, while Sheet A-300 indicates there are two Sheetz logo signs and one Made to Order sign. Sheet A-200 labels the entry signs as "pole-mounted" signs, but Sheet A-600 details these signs to be monument signs. The applicant shall correct these discrepancies.* The following review is based upon the sign details provided on Sheets A-300 to A-600.

The wall mounted signs include two 16.5 SF Sheetz logo signs and one 21.47 SF “Made to Order” sign. The maximum area of all signs is 10% of the establishment façade, or:

Middlebelt: 17’10 1/8”x 96’7 1/2” = 1,724.15 sf 10%=172.41sf

Grand River 17’10 1/8”x 61’11 1/2” = 1,105.57 sf 10%= 110.5sf

The signs provided meet the maximum area and number for wall signs.

The applicant proposed one 13 SF canopy signs (1’ 7 5/8” x 8’). Canopy-mounted signs, referred to in the ordinance are required to have letters shall be less than 8” and 80% of the total awning width; *although the proposed Sheetz logo is less than 80% of the canopy width, the logo is taller than 8”.*

The applicant proposed two freestanding monument signs with electronic price displays and a Sheetz logo sign.

One monument sign along each right of way is permitted. *The monument signs are 8’ tall with 47.15 sf of total face area. The ordinance permits 64 SF of freestanding sign face area. Sign illumination (in footcandles) shall be provided.*

10. **Acceleration-Deceleration-Passing Lanes (34-5.6.2.)** Driveways providing ingress and egress to all three-lane paved major or secondary thoroughfares shall be provided with paved acceleration and deceleration lanes. If in the opinion of the director of public services no useful purpose would be served or if unusual difficulty would be encountered by reason of grade changes, intersections, bridges, or other land restrictions, the director may waive or modify the requirements of this section. *We defer to engineering to address this issue.*
11. **Circulation.** See notes about Sheet C1-A above.
12. **Corner Clearance (34-5.10).** *The proposed freestanding sign on Grand River appears to be within the driveway clearance area and must be relocated.*
13. **Landscape Development (34-5.14)** *Landscaping is broadly compliant, but some locational and spacing issues must be addressed.*

Item	Required			Proposed/Comments
Minimum distance from the property line (34-5.14.C.ii)	4 ft from the property line for trees and large shrubs			<i>The Eastern Redbud on the southeastern portion of the site does not meet this standard; additionally, the row of 8 nyssa sylvatica along Middlebelt north of the driveway appears to show the trunks in the sidewalk.</i>
Minimum parking lot island area	Minimum of 180 square feet; 3 feet minimum radius at the trunk of the tree			N/A
Cost estimate	Not required			--
Minimum size and spacing requirements at planting (34-5.14.F)	Size	Center to center distance (max)		
	(Height/width)	groupings	rows	
• Evergreen Trees	8 ft. height	20 ft.	12 ft.	Standard is met
• Narrow Evergreen Trees	5 ft. height	10 ft.	5 ft.	N/A
• Large Shrubs	30 in. height	10 ft.	5 ft.	N/A

Item	Required			Proposed/Comments
• Small Shrubs	24 in. width	4 ft.	4 ft.	Standard is met
• Large Deciduous	3 in. caliper	30 ft.	-	Standard is met
• Small deciduous trees	2 in. caliper	15 ft.	-	Standard is met
• Hedge shrubs	24 in. height	3 ft.	3 ft.	Standard is met
Distance between plant materials	Spacing shall be provided in accordance with 34-5.14.3.g			<i>Evergreen trees are less than 20 feet from deciduous trees.</i>
Canopy Trees	Shall be large deciduous and distributed evenly throughout the paved area			Large deciduous provided, but <i>only along exterior parking lot perimeter.</i>
Minimum number of parking lot trees (34-5.14.4.C)	1 per every 2,800 square feet of paved surface area 48,730 sf/ 2,800= 17 trees required			Compliant
Parking lot screening from public thoroughfare (34-5.14.5)	A planted hedge of small shrubs, or A masonry wall or berm of 2 feet high			Provided (wall and shrubs)
Wall or Berm (34-5.15)	Required when abutting a residential district. (See 34-5.15)			<i>The site plan includes a screening wall and brick knee wall, referencing sheet A100 for details. However, only knee wall details are provided. Screening wall details required.</i>
Buffer Yard	515 LF of buffer yard 30 ft grouping spacing= 17 trees			<i>Provided</i> <i>2 existing trees and 15 new trees proposed</i>
Tree replacement (34-5.18)	6inch DBH= 1 to 1 basis (12 deciduous and 3 evergreen= 15 trees required) Landmark trees= 25% of dbh removed (46 dbh of deciduous = 12 caliper inches required = 4 trees, 58 dbh of evergreen = 15 caliper inches required = 5 trees)			Compliant: 58 total trees required on the site, 58 provided

14. Lighting (Section 34-5.16).

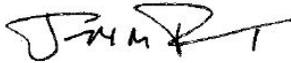
Item	Required	Proposed/Comments
Max footcandles at property line	0.3	Lighting should be adjusted to reduce light levels at all points on residential property lines to 0.3 fc or lower.
Average:minimum ratio	4:1	4.78:1; revise
Max mounting height	30 ft	All fixtures compliant
Max ambient light	2.5 lumens/sq ft hardscape 200 lumens/door	Unable to determine from information provided.

- Lighting is shown along the edge of the canopy and the edge of the building. **This lighting is not permitted to be directly visible, and clarification is needed as to whether it is recessed or exposed. The southern elevation of the building faces residentially zoned property, and consideration should be given to removing this lighting on that side of the building.**
- The ordinance requires canopy lighting to be recessed or flush-mounted. *The proposed lighting meets this standard. However, the canopy is tilted, and the application should ensure that all lighting on its underside is recessed such that glare will not project onto the roadway or neighboring sites.*
- Fixtures mounted within 50 ft of a residential property line or right-of-way boundary shall be fitted with a shielding reflector on the side facing the property line or right-of-way. *The applicant shall note compliance with this standard on the plans—external glare shields and house-side shields are shown on the cut sheets.*
- Since the business does not close, no alternative lighting for nighttime hours are required.

15. **Pedestrian Connection (Sec. 34-5.19).** Pedestrian connections are provided to both the Grand River and Middlebelt sidewalks.

We are available to answer questions.

Respectfully,
Giffels Webster



Joe Tangari, AICP
Principal Planner



Julia Upfal, AICP
Senior Planner

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DEPARTMENT OF PUBLIC SERVICES
JACOB RUSHLOW, P.E., DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: December 5, 2024
TO: Planning Commission
FROM: James Cubera, City Engineer 
SUBJECT: SP 61-11-2024
29455 Grand River Avenue at Middlebelt Rd Intersection Sheetz Gas Station

This office has performed a preliminary review of the above referenced site plan submitted to the Planning Department on November 13, 2024. Our preliminary comments are as follows:

1. Many utilities and easements run thru this site. The plans need to identify these on the utility plan in order for us to determine if utility relocation and easement vacation procedures are warranted. Note that the easements cannot encroach on the canopy for the gas pumps.
2. A 10" sanitary sewer runs thru the northern portion of this site. It is available for service. The plans identify providing a sewer lead off of it. Note that the old sewer lead must be properly capped and abandoned.
3. An 8" public watermain with a hydrant exists along the east property line predominantly in the Tulane ROW. It is available for service. The 30" watermain along the west side of Middlebelt Road is not available as it is a transmission line.
4. A public sidewalk exists along the south side of Grand River Avenue and on the west side of Middlebelt Road. Much of the existing Middlebelt Road sidewalk appears to meander parallel to Middlebelt Road but on private property. It must be relocated in its entirety such that the west walkline is one foot east of the ultimate 60' ROW line.
5. The plans identify a 36 foot wide curb cut on Grand River Avenue and a 40 foot wide curb cut on Middlebelt Road. These seem fairly wider than necessary and for the Middlebelt approach we question whether its location should be shifted further south and whether tapers are necessary.

The proponent will be obligated to submit a traffic impact statement/study addressing the above as well as how the traffic generated by this site will impact the major roads and what can be done to limit the impact.

It is suggested that the proponent's traffic consultant contact the City's traffic engineer to discuss the specific needs that the study must address.

6. It is noted that 24" storm outfall pipe runs thru this property. It must be maintained.
7. The plans identify an underground storm detention system. This is acceptable. It will be reviewed in detail during construction review. Note that storm water detention and discharge restriction must be provided for as well as storm water quality improvements and that the City recently adopted the Oakland County WRC drainage standards on this. The proponent will be obligated to comply with it.
8. This site is within the 100 year floodplain at the south end of the site. The proponent needs to contact EGLE to see if they will require permits.
9. Attached are comments from the City's Environmental Engineer, Tyler Sonoga. These must be addressed. If any questions, he can be reached at 248-871-2533.
10. The ultimate ROW on Middlebelt Road is 120 feet with that being both 60 feet east and west of the section line. It is unclear if this is existing and it is suggested that the proponent dedicate the ultimate 60 feet of ROW if it does not exist already.
11. The proponent has previously met with the City Staff and several of our comments have been discussed.



DEPARTMENT OF PUBLIC SERVICES
KAREN MONDORA, P.E., DIRECTOR

City of Farmington Hills
Environmental Review

Project Name: Sheetz

Address: 29455 Grand River
Project Job #: 35-24-124, SP# 61-11-2024
Plan Dated: 11-04-2024

Plan Received: 11-25-2024
Review #: 1
Review Date: 12-5-2024

As requested, I have conducted a plan review of the above reference engineering plans. I have the following comments:

1. Storm water quality must be provided for the site in accordance with the newly adopted Oakland County Water Resources stormwater standards.
2. Infiltration practices should be used to the maximum extent practicable and will count as part of the required water quality volume. Infiltration tests need to be performed and layout should be considered to direct stormwater to infiltration practices.
3. As a part of the Oakland County Water Resources stormwater standards, the plans must include a long-term operations and maintenance plan, the land use summary page in the standards, a stormwater design narrative, and GIS data. Please see page I-21 and I-22 on the stormwater standards.
4. As a gas station is a high-risk zone for contaminants and illicit discharges other than sediment, prior to stormwater entering the detention pond, an oil water separator should be installed and included on the maintenance plan.

Respectfully submitted,

A handwritten signature in black ink that reads 'Tyler Sonoga'.

Tyler Sonoga
Civil/Environmental Engineer
Department of Public Services

cc: City of Farmington Hills, J. Cubera

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FIRE

FARMINGTON HILLS



INTEROFFICE CORRESPONDENCE

DATE: December 4, 2024
TO: Planning Commission
FROM: Jason Baloga, Fire Marshal
SUBJECT: Site Plan 61-11-2024 (Grand River/Middlebelt – Sheetz)

The Fire Department has no objection to approval of this Site Plan contingent upon compliance with the following requirements:

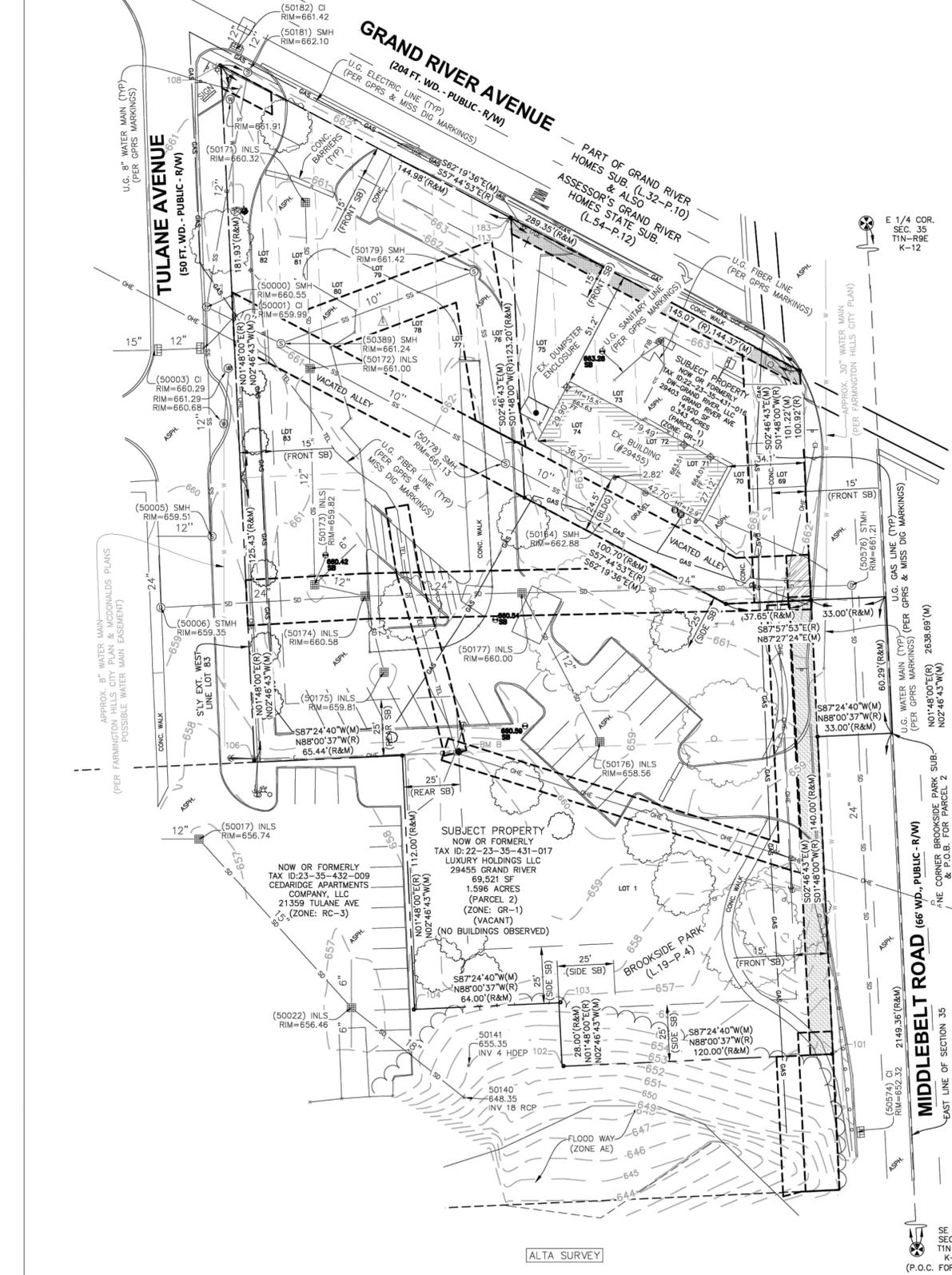
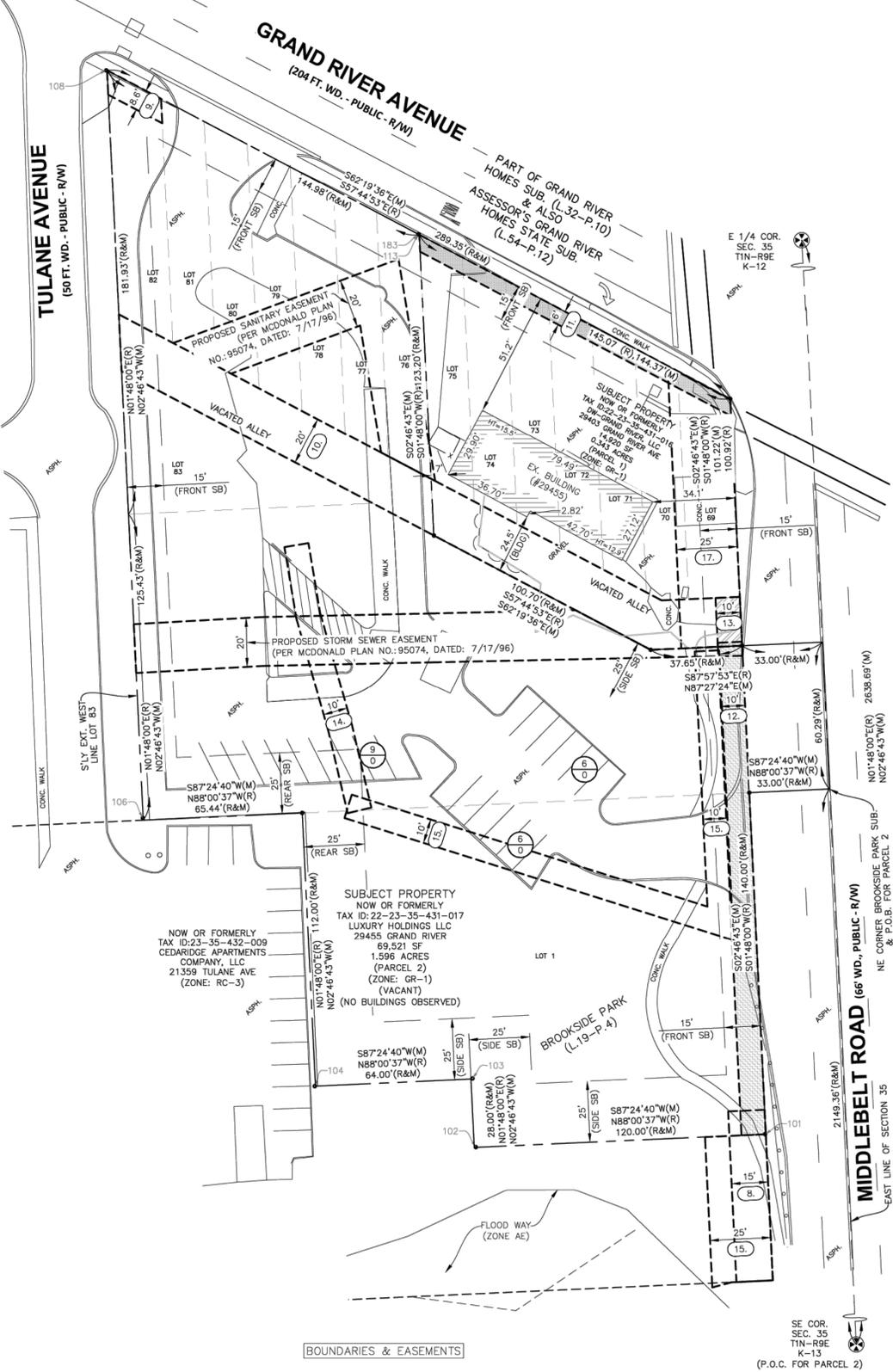
*NOTE: If the proponent finds it impractical to comply with the minimum Fire Department Site Plan Review and Design Standards, please contact the Fire Marshal to discuss the Alternate Protection provision outlined in Chapter 12 Section 12-11(4).

1. Site shall meet site access requirements in Chapter 12 Section 12-11(1) of the City Code; sites shall be designed to accommodate fire apparatus with a 50' turning radius. This will also be verified by the Engineering Department.
2. Underground storage tanks and hazardous materials shall be regulated according to State of Michigan requirements as well as City of Farmington Hills adopted Ordinance and Code requirements.
3. CO₂ monitoring shall be required according to International Fire Code requirements.
4. Propane exchange shall be permitted through the Building Department.
5. Pumps shall **only** dispense fuel with attendant present.
6. Fire lanes shall be posted and strictly enforced.
7. The minimum clearance between the finished roadway surface and any overhead obstructions shall be 13' 6".
8. Proponent shall consider adding a standby generator or other means of backup power so fuel may be dispensed during a power failure.

9. Building shall be maintained in accordance with minimum Fire Prevention Code requirements.
10. The Proponent shall familiarize yourself and follow Farmington Hills City Ordinance Chapter 12, Article IV "Hazardous Materials" Section 12-67; Outdoor and indoor hazardous materials.



Jason Baloga, Fire Marshal



NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
101	346845.26	13401335.12	653.62	FD REBAR T-BAR CAPPED
102	346839.97	13401216.19	652.61	FD REBAR NO CAP
103	346868.07	13401214.82	656.66	FD REBAR NO CAP
104	346864.88	13401149.94	657.85	FD REBAR T-BAR PS 21566
106	346974.68	13401079.27	659.82	FD REBAR
108	347280.80	13401064.23	662.05	FD REBAR T-BAR PS 21566
113	347213.60	13401192.69	662.69	FD REBAR T-BAR
114	347475.33	13401337.85	663.38	CONC MON
115	344839.74	13401465.76	656.59	CONC MON
183	347213.60	13401192.58	662.68	FD REBAR



EXISTING LEGEND

	BOLLARD		ACCESS COVER		TRAFFIC SIGNAL POLE
	CONTROL BENCHMARK		FUEL TANK LID		TRAFFIC MANHOLE
	CONTROL POINT		MISC LID		YARD LIGHT
	CONTROL MONUMENT		MONITOR WELL		SANITARY CLEANOUT
	CONTROL SET		GAS MARKER		SANITARY MANHOLE
	CONTROL IRON PIPE		GAS METER		VENT PIPE
	CONTROL REBAR		GAS VALVE		STEAM MANHOLE
	ROW MONUMENT		OIL MARKER		STORM CLEANOUT
	FLAG POLE		AC UNIT		STORM CURB INLET
	MAIL BOX		AREA LIGHT		STORM INLET
	UTILITY POLE		ELECTRICAL SIGNAL		STORM ROOF DRAIN
	POST		DUCT BANK		STORM DRAIN MANHOLE
	SOIL BORING		ELECTRICAL BOX		STORM YARD DRAIN
	WETLAND FLAG		ELECTRICAL HAND HOLE		FIRE DEPT CONNECTION
	HANDICAP SYMBOL		ELECTRICAL METER		FIRE HYDRANT
	LEFT/RIGHT TURN ARROW		ELECTRICAL MANHOLE		IRRIGATION VALVE
	SIGN		ELECTRICAL MARKER		POST INDICATOR VALVE
	CABLE MANHOLE		ELECTRICAL RISER		WELL
	CABLE PEDESTAL		ELECTRICAL TRANSFORMER		WATER METER
	SATELLITE DISH		ELECTRICAL VAULT		WATER MANHOLE
	CALL BOX		ELECTRICAL TRANSFORMER		WATER VALVE
	TELEPHONE PEDESTAL		GUY POLE/WIRE		TREE / STUMP
	TELEPHONE HAND HOLE		POWER POLE		
	TELEPHONE MARKER		PEDESTRIAN PUSHBUTTON		
	TELEPHONE MANHOLE				
	FIBER OPTIC MAKER				
	BUILDING		TOE OF SLOPE		
	SWALE		TOP OF BANK		
	FENCE LINE		UNDERGROUND FIBER OPTIC		
	SANITARY SEWER		UNDERGROUND CABLE		
	STORM DRAIN		OVERHEAD CABLE		
	WATER LINE		UNDERGROUND TELEPHONE		
	TREE LINE		UNDERGROUND FUEL		
			UNDERGROUND GAS		
			OVERHEAD ELECTRICAL		

STRUCTURE SCHEDULE

STRUCTURE:	RIM ELEV.:	PIPES:
(50001) CBS	659.99	IE=655.98(12" Reinforced Concrete Pipe W)
(50003) CBS	660.29	IE=655.80(15" Reinforced Concrete Pipe W) IE=655.80(12" Reinforced Concrete Pipe E)
(50006) STMH	659.35	IE=648.82(24" Reinforced Concrete Pipe N) IE=648.82(24" Reinforced Concrete Pipe E)
(50017) CBS	656.74	IE=649.49(12" Reinforced Concrete Pipe W) IE=649.42(15" Reinforced Concrete Pipe SE)
(50022) CBS	656.46	IE=648.64(15" Reinforced Concrete Pipe NW) IE=652.58(6" HDPE S) IE=648.64(18" Reinforced Concrete Pipe SE) IE=652.59(6" HDPE N)
(50171) CBS	660.32	IE=656.67(12" Reinforced Concrete Pipe S)
(50172) CBS	661.00	IE=655.67(12" Reinforced Concrete Pipe S) IE=656.55(12" Reinforced Concrete Pipe N)
(50173) CBS	659.82	IE=655.24(12" Reinforced Concrete Pipe E) IE=655.69(6" HDPE NE)
(50174) CBS	660.58	IE=647.68(24" Reinforced Concrete Pipe W) IE=655.04(12" Reinforced Concrete Pipe W) IE=647.68(24" Reinforced Concrete Pipe E)
(50175) CBS	659.81	IE=656.00(12" Reinforced Concrete Pipe N)
(50176) CBS	658.56	IE=654.76(12" Reinforced Concrete Pipe NW)
(50177) CBS	660.00	IE=647.43(24" Reinforced Concrete Pipe W) IE=654.23(12" Reinforced Concrete Pipe SE) IE=647.43(24" Reinforced Concrete Pipe E)
(50182) CBS	661.42	IE=658.09(12" Reinforced Concrete Pipe NE)
(50574) CBS	652.32	NOT INVENTORIED AT TIME OF SURVEY
(50576) STMH	661.21	IE=646.51(24" Reinforced Concrete Pipe W) IE=646.51(24" Reinforced Concrete Pipe S)

* (50174) = POSSIBLE 12" SE CONNECTION (PER FARMINGTON HILLS CITY PLAN)

STRUCTURE:	RIM ELEV.:	PIPES:
(50000) SAN	660.55	IE=652.78(12" S) IE=652.74(12" N) IE=652.78(10" SE)
(50005) SAN	659.51	IE=652.92(12" W) IE=652.78(12" N)
(50164) SAN	662.88	IE=654.06(10" NW)
(50178) SAN	661.13	IE=653.43(10" N) IE=653.51(10" SE)
(50179) SAN	661.42	IE=653.35(10" W) IE=653.35(10" S)
(50181) SAN	662.10	IE=652.02(12" S) IE=651.98(12" NE)
(50389) SAN	661.24	IE=653.07(10" NW) IE=653.27(10" SE) IE=653.37(10" E)

* (50164) = BOLTED CLOSED
* (50178) = POSSIBLE 10" NW CONNECTION (PER FARMINGTON HILLS CITY PLAN)

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THE LOCATIONS AND DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OF ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR VERIFYING THE EXACT DEPTHS, LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

THIS SURVEY PREPARED FOR:

Kimley-Horn
KIMLEY-HORN OF MICHIGAN, INC.

1000 TOWN CENTER, SUITE 1000,
SOUTHFIELD, MI 48034
PHONE: 313-273-1990
WWW.KIMLEY-HORN.COM

ALTA/NPS LAND TITLE SURVEY

29455 GRAND RIVER AVENUE (VACANT LAND)
TAX ID: 22-23-35-431-017
PART OF SE 1/4, SEC 35, T1N-R9E
CITY OF FARMINGTON HILLS, OAKLAND CO., MI

DATE: _____

PLAN SUBMITTALS/REVISIONS: _____

ORIGINAL ISSUE DATE: 6/21/2024

PROJECT NO: 24-086

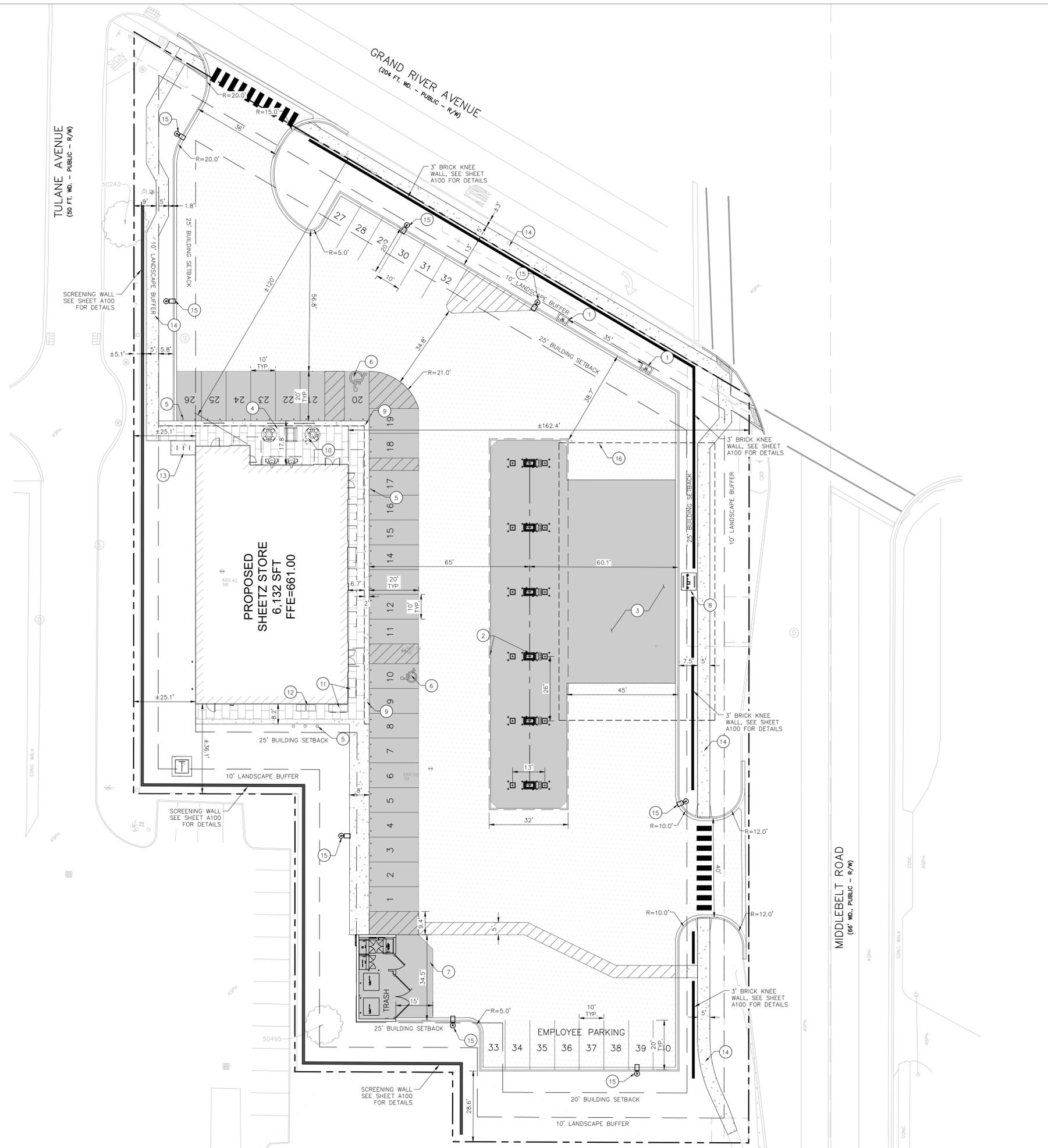
SCALE: 1" = 30'

FIELD: AJS, RZ
DRAWN BY: DC
DESIGN BY:
CHECK BY: MB

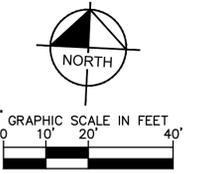
V1.1

NOT FOR CONSTRUCTION

Drawing name: K:\DEL_D\268593003_Sheen Gold Sheet - Grand River Farmington Hills MI\2 Design\CAD\ParSheets\C3.0 - SITE PLAN.dwg SP Nov 07, 2024 10:30am by: Lauren Razzano
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



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PAVING LEGEND

	HEAVY DUTY ASPHALT PAVEMENT
	HEAVY DUTY CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	BRICK PAVER WALK
	CURB AND GUTTER

- ### KEY NOTES
- AIR STATION, PER SHEETZ, STANDARD DETAIL
 - FUEL STATIONS AND CANOPY
 - UNDERGROUND STORAGE TANK AREA
 - PATIO AREA
 - STOREFRONT BUMPER POST, PER SHEETZ STANDARD DETAIL, TYP.
 - ADA PARKING SPACE
 - CONCRETE DUMPSTER PAD, PER SHEETZ STANDARD DETAIL
 - UNDERGROUND STORAGE TANK VENT PAD, PER SHEETZ STANDARD DETAIL
 - WALK TO BE CONSTRUCTED FLUSH WITH PAVEMENT PER SHEETZ STANDARD DETAIL
 - OUTDOOR SEATING
 - ICE MERCHANDISER
 - PROPANE LOCKER
 - BIKE RACK
 - 5' CONCRETE SIDEWALK
 - LIGHT POLE, FOR COORDINATION ONLY, REFER TO PHOTOMETRIC PLAN FOR DETAILS
 - APPROXIMATE LIMITS OF EXCAVATION FOR INSTALLATION OF UNDERGROUND STORAGE TANKS, TYP.

SITE DATA TABLE

PARCEL INFORMATION:
 PARCEL 1:
 ADDRESS: 29455 GRAND RIVER
 ID: 23-35-43-10-17

PARCEL 2:
 ADDRESS: 29403 GRAND RIVER
 ID: 23-35-43-10-16

SITE AREA: 1.939 ACRES (84,462 SF.) NET AND GROSS

ZONING:

	EXISTING:	PROPOSED:
	B-3	B-3

PROPOSED USE: GAS STATION/RESTAURANT

BUILDING INFORMATION:
 BUILDING FOOTPRINT AREA = 6,139 SF
 BUILDING LOT COVERAGE = 7.27%

SETBACK REQUIREMENTS:

	BUILDING REQUIRED	PROPOSED
FRONT:	25'	120'
SIDE:	25'	25.1'
REAR:	20'	25'
RESIDENTIAL:	20'	25'

LANDSCAPE BUFFER:

	REQUIRED	PROPOSED
FRONT:	10'	13'
SIDE:	10'	15.9'
REAR:	10'	28.6'

PARKING CALCULATIONS:
 RETAIL = 1 FOR EVERY 175 SQ FT OF USABLE FLOOR AREA
 RESTAURANT = 1 FOR EVERY 30 SQ FT OF USABLE FLOOR AREA
 GAS STATION = 1/2 FOR EVERY PUMP
 TOTAL PARKING REQUIRED = 2,383 USABLE FLOOR AREA / 175 = 14
 + 450 USABLE FLOOR AREA / 30 = 15
 + 6 GAS PUMPS / 2 = 3
 = 32 SPACES

TOTAL PROPOSED PARKING SPACES = 40 SPACES INC. 2 H/C SPACES

SHEETZ

SITE PLAN

SHEETZ FARMINGTON HILLS GRAND RIVER AND MIDDLEBELT

NO.	REVISIONS	DATE	BY

SCALE: AS NOTED
 DESIGNED BY: TES
 DRAWN BY: LDF
 CHECKED BY: JA

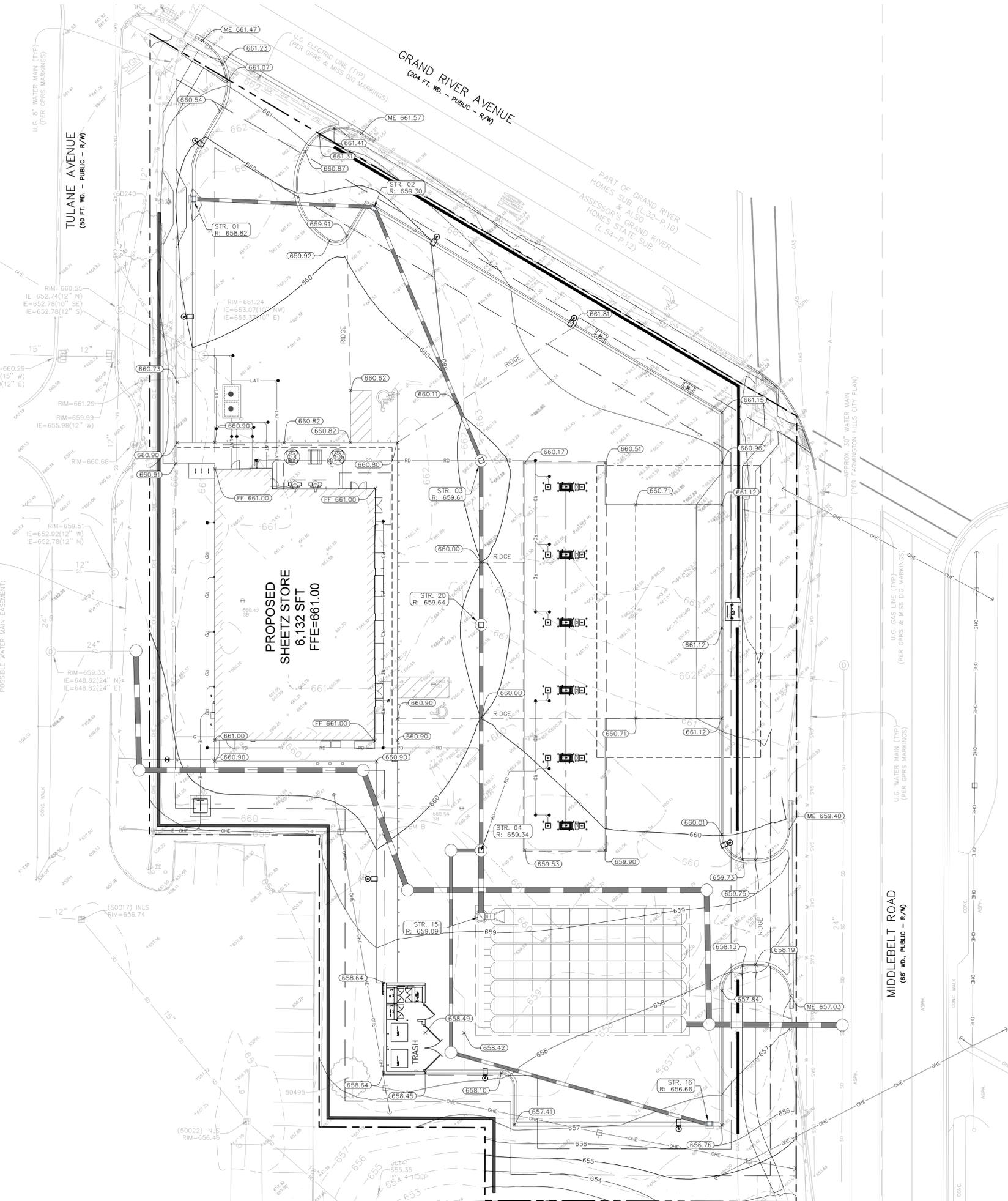
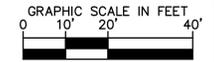
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Drawing name: K:\DEI_DVS\268593003_Sheet_C3.0 - Grand River Farmington Hills MI\2 Design\CAD\Drawings\C4.0 - GRADING PLAN.dwg Grading Nov 05, 2024, 3:46pm by: Lauren Falorcano
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GRADING LEGEND

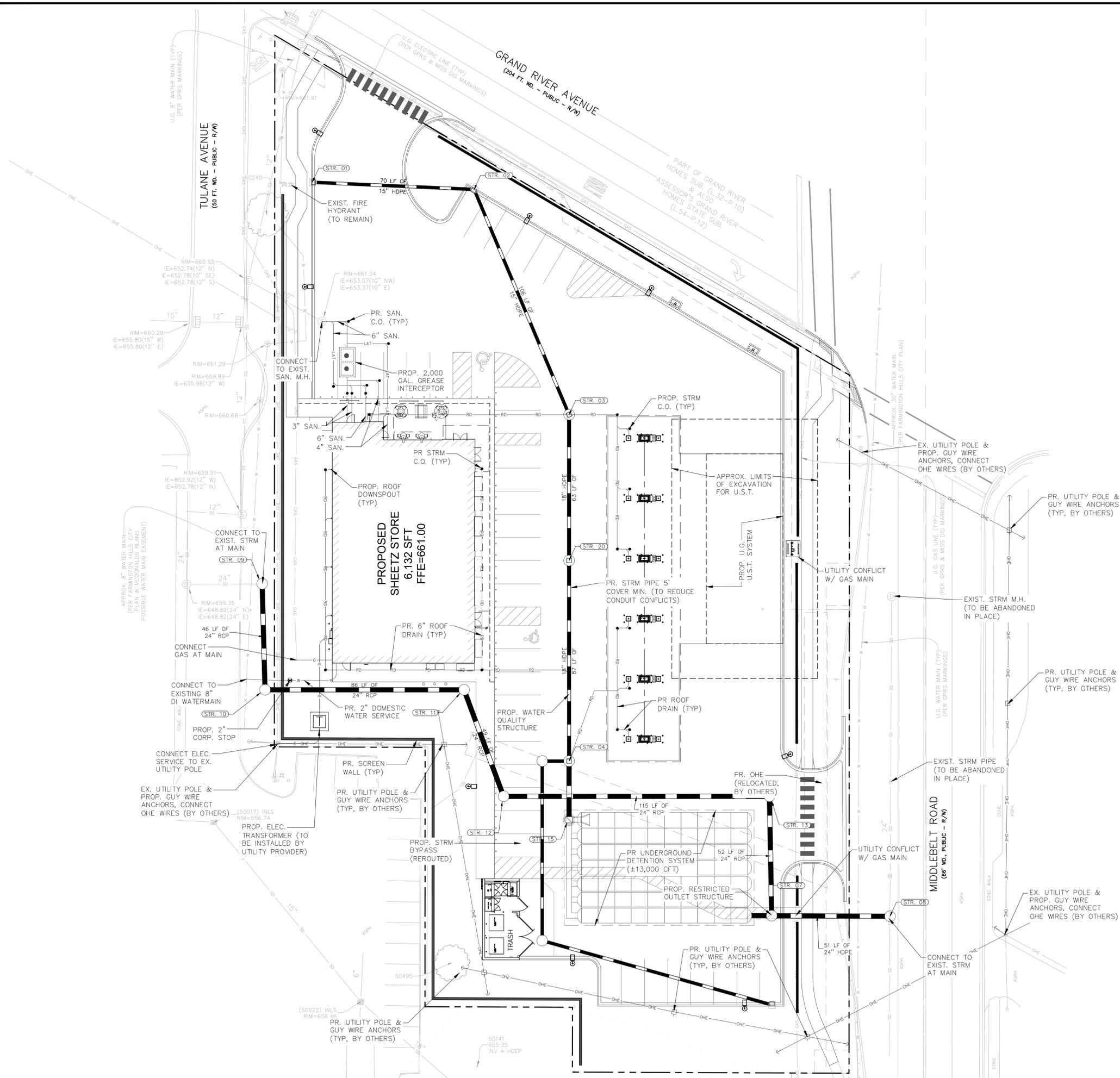
	FINISHED GRADE SPOT ELEVATION
	TOP OF CURB / BOTTOM OF CURB SPOT ELEVATION
	FLOW LINE SPOT ELEVATION
	MATCH EXISTING SPOT ELEVATION
	FINISHED FLOOR SPOT ELEVATION
	FINISHED GRADE NEAR BUILDING SPOT ELEVATION
	TOP OF WALL SPOT ELEVATION
	BOTTOM OF WALL SPOT ELEVATION
	RIM ELEVATION
	STRUCTURE ID & RIM ELEVATION
	STRUCTURE ID & INVERT ELEVATION
	PROPOSED CONTOUR
	RIDGE LINE
	SLOPE AND FLOW DIRECTION
	100-YEAR OVERLAND OVERFLOW ROUTE
	DETENTION BASIN 100-YEAR EMERGENCY
	PROPOSED SWALE
	PROPOSED STORM SEWER
	PROPOSED STORM STRUCTURES
	PROPOSED SANITARY MANHOLE
	PROPOSED STORM/SANITARY CLEANOUT
	PROPOSED WATER STRUCTURES
	PROPOSED LIGHT POLES
	PROPOSED TRANSFORMER PAD

GRADING NOTES

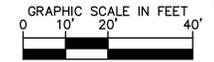
- CONTRACTOR TO VERIFY ALL EXISTING TOPOGRAPHY AND STRUCTURES ON THE SITE AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
- ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO EDGE OF PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
- NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
- MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
- MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES UNLESS OTHERWISE NOTED.
- WHEN NATURAL FLOW OF DRAINAGE IS AWAY FROM CURB, CONTRACTOR TO INSTALL REVERSE GUTTER PITCH.
- MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.
- ALL STOOPS OR PEDESTRIAN EGRESS POINTS FROM THE BUILDING(S) SHALL BE NO GREATER THAN 2% FOR THE FIRST 5'.

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DATE	BY			
SHEETZ				
PRELIMINARY GRADING PLAN				
SHEETZ FARMINGTON HILLS GRAND RIVER AND MIDDLEBELT				
ORIGINAL ISSUE: 11/04/2024 KHA PROJECT NO. 268593003 SHEET NUMBER				
C3.0				

Drawing name: K:\DEL_DVS\268593003_Sheen Gold Sheet - Grand River Farmington Hills Mx Design\CAD\DWG\Sheets\C4.0 - UTILITY PLANS.dwg Utility Plan Nov 05, 2024 3:47pm by: laurinczarano
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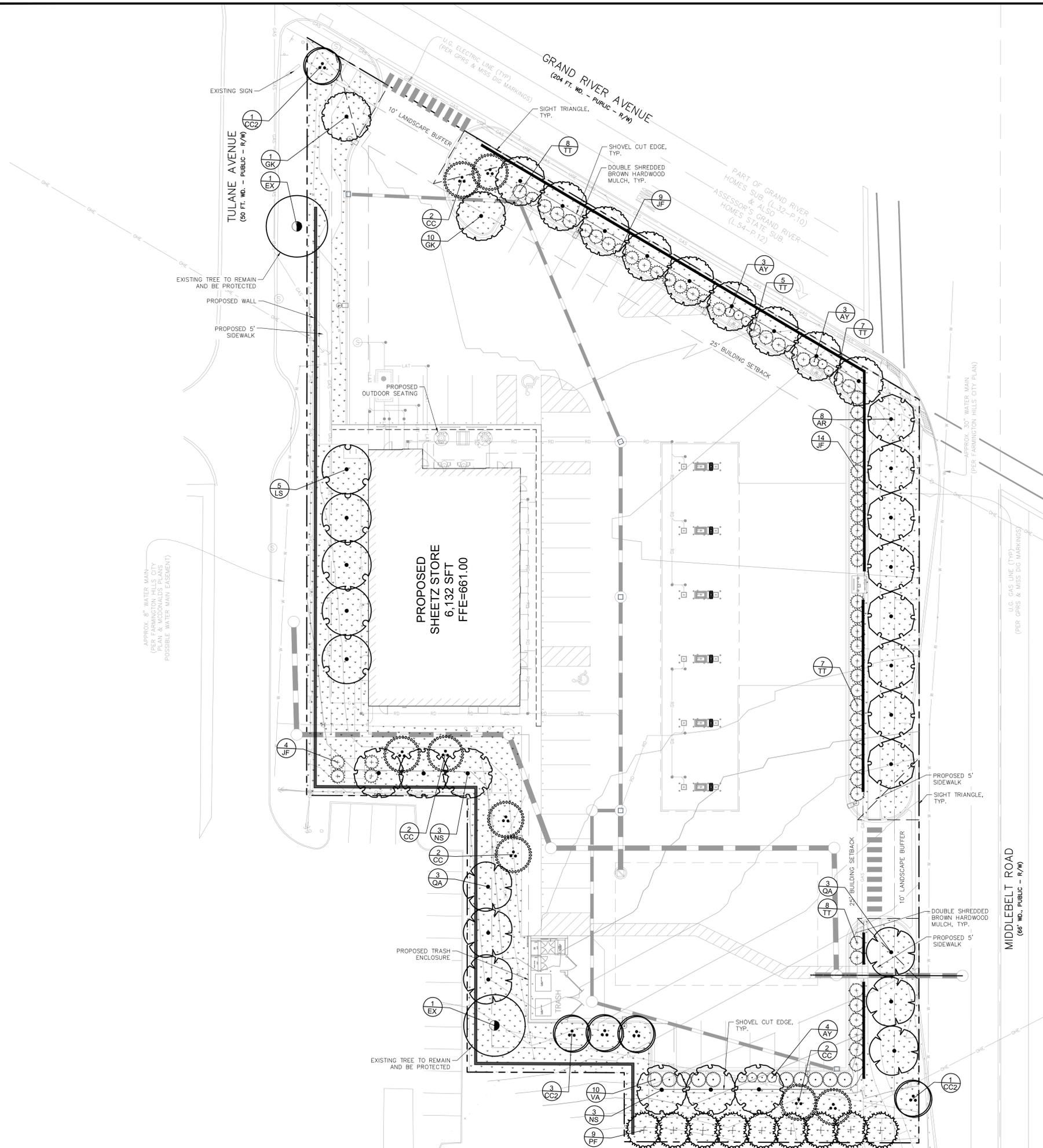
UTILITY LEGEND

	PROPOSED UNDERGROUND ELECTRIC LINE
	PROPOSED GAS LINE (BY GAS COMPANY)
	PROPOSED PHONE LINE
	PROPOSED ROOF DRAIN LINE
	PROPOSED UNDERDRAIN
	PROPOSED SWALE
	PROPOSED STORM SEWER LINE
	STRUCTURE ID
	PROPOSED STORM STRUCTURES
	PROPOSED SANITARY SEWER LINE
	PROPOSED SANITARY LATERAL LINE
	PROPOSED SANITARY MANHOLE
	PROPOSED STORM/SANITARY CLEANOUT
	PROPOSED WATER LINE
	PROPOSED FIRE PROTECTION LINE
	PROPOSED WATER VALVE BOX, PIV. METER, FIRE HYDRANT, FIRE DEPT. CONN. & VAULT
	PROPOSED WATER BENDS & TEE
	PROPOSED LIGHT POLE
	PROPOSED TRANSFORMER PAD (BY OTHERS)

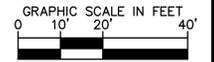
- ### UTILITY NOTES
- #### GENERAL UTILITY NOTES
- PROPOSED SANITARY SEWER SERVICE TO BE SDR-35, ASTM D-3034 OR APPROVED EQUIVALENT.
 - PROPOSED 2" WATER SERVICE TO BE TYPE "K" COPPER OR APPROVED EQUIVALENT. RESPONSIBILITY TO BE DETERMINED FOR TAP AND METER INSTALLATION.
 - PROPOSED 6" ROOF DRAINS ARE TO BE A MINIMUM SLOPE OF 1.00%.
 - MAINTAIN 18" OF VERTICAL CLEARANCE (OUTSIDE OF PIPE TO OUTSIDE OF PIPE) BETWEEN UTILITIES.
 - ASSUMED FOUR (4) 4" SCHEDULE 40 CONDUITS ARE NECESSARY FOR ELECTRICAL SERVICE FROM TRANSFORMER TO BUILDING. TO BE CONFIRMED IN ENGINEERING DESIGN WITH SERVICE TEAM.
 - PROPOSED GAS SERVICE AND METER ASSUMED TO BE 2.5". CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR INSTALLATION.
 - CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
 - ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
 - CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE ENGINEER FROM THE APPROPRIATE GOVERNING AUTHORITY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.
 - CONTRACTOR TO CALL MISS DIG (1-800-482-7171) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
 - PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/ DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE MUNICIPALITY SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN PLANS.
 - CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED TO, ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.
 - CONTRACTOR TO AVOID DISRUPTION OF ANY ADJACENT TENANT'S TRAFFIC OPERATIONS DURING INSTALLATION OF UTILITIES.
 - ALL DIMENSIONS ARE TO CENTERLINE OF PIPE OR CENTER OF MANHOLE UNLESS NOTED OTHERWISE.
 - SEE ARCHITECTURAL AND MEP PLANS FOR EXACT UTILITY CONNECTION LOCATIONS AT BUILDING.
 - LIGHT POLES SHOWN FOR COORDINATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE SITE LIGHTING PLANS BY OTHERS FOR MORE INFORMATION.
 - SEE DETAILS FOR LOCATING STORM STRUCTURES WITHIN THE CURB LINE.
 - STORMWATER FACILITIES MUST BE FUNCTIONAL BEFORE BUILDING CONSTRUCTION BEGINS.

 <small>3000 SOUTHFIELD AVENUE, SUITE 400 SOUTHFIELD, MI 48075 WWW.KIMLEY-HORN.COM</small>		PRELIMINARY UTILITY PLAN SHEETZ FARMINGTON HILLS GRAND RIVER AND MIDDLEBELT
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Drawing name: K:\021_03\268593003_Sheets_Gold_Sheet - Grand River Farmington Hills MI\3 Design\CADD\Plant\Sheet1.L10 - LANDSCAPE PLAN.dwg - PLAN - Nov 05, 2024, 3:47pm - by Laurent Estroff
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PLANT SCHEDULE

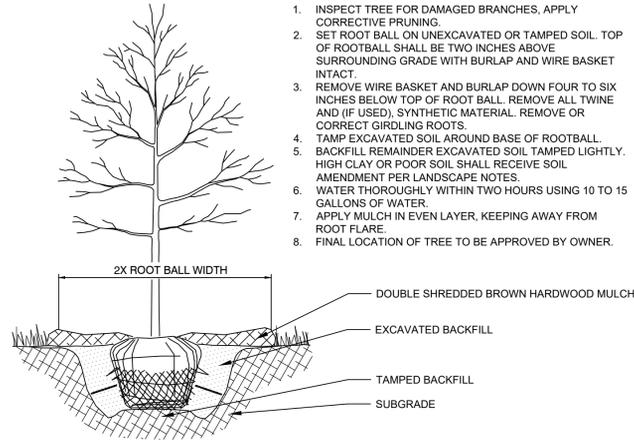
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
EVERGREEN TREES						
	PF	9	PINUS FLEXILIS 'VANDERWOLF'S PYRAMID' VANDERWOLF'S PYRAMID LIMBER PINE	B & B		10' HT. MIN.
LARGE DECIDUOUS TREES						
	AR	8	ACER RUBRUM RED MAPLE	B & B		3" CAL. MIN.
	EX	2	EXISTING TREE TO REMAIN IF REMOVED OR DAMAGED, CONTRACTOR TO REPLACE IN KIND			
	GK	11	GYMNOCLADUS DIOICUS KENTUCKY COFFEETREE	B & B		3" CAL. MIN.
	LS	5	LIQUIDAMBAR STYRACIFLUA SWEET GUM	B & B		3" CAL. MIN.
	NS	6	NYSSA SYLVATICA TUPELO	B & B		3" CAL. MIN.
	QA	6	QUERCUS ALBA WHITE OAK	B & B		3" CAL. MIN.
ORNAMENTAL TREES						
	CC2	5	CERCIS CANADENSIS EASTERN REDBUD	B & B		3" CAL. MIN.
	CC	8	CRATAEGUS CRUS-GALLI COCKSPUR HAWTHORN	B & B		3" CAL. MIN.
DECIDUOUS SHRUBS						
	AY	10	ARONIA MELANOCARPA 'IROQUOIS BEAUTY' TM IROQUOIS BEAUTY BLACK CHOKEBERRY	-	SEE PLAN	24" HT. MIN.
	VA	10	VIBURNUM DENTATUM 'CHRISTOM' BLUE MUFFIN® ARROWWOOD VIBURNUM	-	SEE PLAN	24" HT. MIN.
EVERGREEN SHRUBS						
	JF	27	JUNIPERUS CHINENSIS 'SEA GREEN' SEA GREEN JUNIPER	-	SEE PLAN	24" HT. MIN.
	TT	35	TAXUS X MEDIA 'TAUNTONII' TAUNTON'S ANGLO-JAPANESE YEW	-	SEE PLAN	24" HT. MIN.
GROUND COVERS						
	TS		TURF SOD BY NEW LAWN SOD FARM BLUE PANTHER MIXTURE OR EQUAL			

NO.	REVISIONS	DATE	BY
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SCALE: AS NOTED	DESIGNED BY: TES	DRAWN BY: LDF	CHECKED BY: JA
<h2 style="margin: 0;">LANDSCAPE PLAN</h2>			
<h3 style="margin: 0;">SHEETZ FARMINGTON HILLS GRAND RIVER AND MIDDLEBELT</h3>			
<small>ORIGINAL ISSUE: 11/04/2024 KHA PROJECT NO. 268593003 SHEET NUMBER</small>			
<h1 style="margin: 0;">L1.0</h1>			

NOTE: ALL LANDSCAPE AREAS SHALL HAVE DEWITT WEED BARRIER UNDER BROWN DOUBLE SHREDDED HARDWOOD MULCH

NOTES:

1. INSPECT TREE FOR DAMAGED BRANCHES, APPLY CORRECTIVE PRUNING.
2. SET ROOT BALL ON UNEXCAVATED OR TAMPED SOIL. TOP OF ROOTBALL SHALL BE TWO INCHES ABOVE SURROUNDING GRADE WITH BURLAP AND WIRE BASKET INTACT.
3. REMOVE WIRE BASKET AND BURLAP DOWN FOUR TO SIX INCHES BELOW TOP OF ROOT BALL. REMOVE ALL TWINE AND (IF USED), SYNTHETIC MATERIAL. REMOVE OR CORRECT GIRDLING ROOTS.
4. TAMP EXCAVATED SOIL AROUND BASE OF ROOTBALL.
5. BACKFILL REMAINDER EXCAVATED SOIL, TAMPED LIGHTLY. HIGH CLAY OR POOR SOIL SHALL RECEIVE SOIL AMENDMENT PER LANDSCAPE NOTES.
6. WATER THOROUGHLY WITHIN TWO HOURS USING 10 TO 15 GALLONS OF WATER.
7. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE.
8. FINAL LOCATION OF TREE TO BE APPROVED BY OWNER.

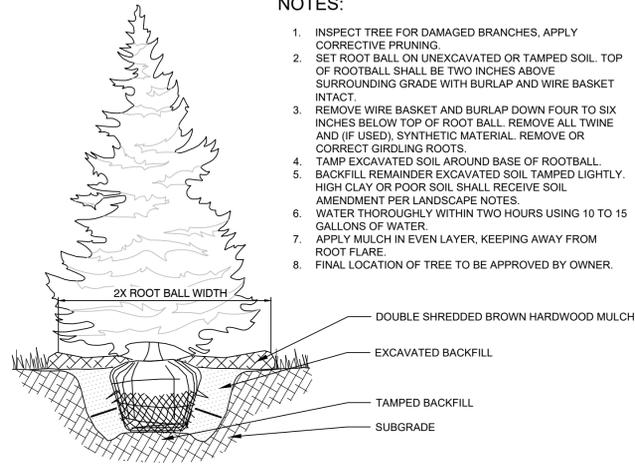


1 TREE PLANTING

NTS

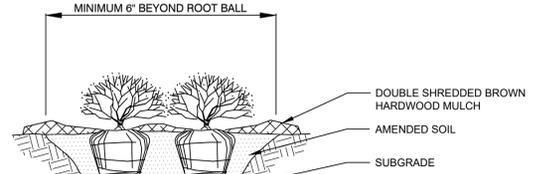
NOTES:

1. INSPECT TREE FOR DAMAGED BRANCHES, APPLY CORRECTIVE PRUNING.
2. SET ROOT BALL ON UNEXCAVATED OR TAMPED SOIL. TOP OF ROOTBALL SHALL BE TWO INCHES ABOVE SURROUNDING GRADE WITH BURLAP AND WIRE BASKET INTACT.
3. REMOVE WIRE BASKET AND BURLAP DOWN FOUR TO SIX INCHES BELOW TOP OF ROOT BALL. REMOVE ALL TWINE AND (IF USED), SYNTHETIC MATERIAL. REMOVE OR CORRECT GIRDLING ROOTS.
4. TAMP EXCAVATED SOIL AROUND BASE OF ROOTBALL.
5. BACKFILL REMAINDER EXCAVATED SOIL, TAMPED LIGHTLY. HIGH CLAY OR POOR SOIL SHALL RECEIVE SOIL AMENDMENT PER LANDSCAPE NOTES.
6. WATER THOROUGHLY WITHIN TWO HOURS USING 10 TO 15 GALLONS OF WATER.
7. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE.
8. FINAL LOCATION OF TREE TO BE APPROVED BY OWNER.



2 EVERGREEN TREE PLANTING

NTS



NOTES:

1. APPLY CORRECTIVE PRUNING.
2. SET ROOT BALL OR CONTAINER ON UNEXCAVATED OR TAMPED SOIL. TOP OF ROOTBALL (CONTAINER) SHALL BE ONE INCH ABOVE SURROUNDING GRADE. FOR LARGER SHRUBS WITHIN PLANTING BED DIG A DEEPER PIT ONLY FOR THOSE SHRUBS.
3. REMOVE BURLAP FROM TOP HALF THE LENGTH OF ROOTBALL, TWINE AND (IF USED) SYNTHETIC MATERIAL SHALL BE REMOVED FROM PLANTING BED. FOR CONTAINER GROWN SHRUBS, REMOVE CONTAINER AND LOOSEN ROOTS PRIOR TO INSTALLATION.
4. REMOVE OR CORRECT GIRDLING ROOTS.
5. PLUMB AND BACKFILL WITH AMENDED SOIL PER LANDSCAPE NOTES. WATER THOROUGHLY WITHIN TWO HOURS.
6. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE. MULCH LIMITS FOR SHRUBS EXTEND TO ALL LIMITS OF PLANTING BED. SEE PLANS FOR BED LAYOUTS.

3 SHRUB PLANTING

NTS

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING MATERIALS AND PLANTS SHOWN ON THE LANDSCAPE PLAN. THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES, ADJACENT LANDSCAPE, PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION OR DURING THE SPECIFIED MAINTENANCE PERIOD. CALL FOR UTILITY LOCATIONS PRIOR TO ANY EXCAVATION.
2. THE CONTRACTOR SHALL REPORT ANY DISCREPANCY IN PLAN VS. FIELD CONDITIONS IMMEDIATELY TO THE LANDSCAPE ARCHITECT, PRIOR TO CONTINUING WITH THAT PORTION OF WORK.
3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.
5. ALL PLANTS TO BE SPECIMEN GRADE, WELL BRANCHED, HEALTHY, FULL, PRE-INOCULATED AND FERTILIZED. PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, AND SCARS. PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES. PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES. TRUNKS WILL BE WRAPPED IF NECESSARY TO PREVENT SUN SCALD AND INSECT DAMAGE. THE LANDSCAPE CONTRACTOR SHALL REMOVE THE WRAP AT THE PROPER TIME AS PART OF THIS CONTRACT.
6. THE OWNER'S REPRESENTATIVE MAY REJECT ANY PLANT MATERIALS THAT ARE DISEASED, DEFORMED, OR OTHERWISE NOT EXHIBITING SUPERIOR QUALITY.
7. ALL NURSERY STOCK SHALL BE GUARANTEED, BY THE CONTRACTOR, FOR ONE YEAR FROM DATE OF FINAL INSPECTION. THE GUARANTEE BEGINS ON THE DATE OF THE LANDSCAPE ARCHITECT'S OR OWNERS WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING.
8. PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
9. PRUNE PLANTS AS NECESSARY- PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
10. TOPSOIL SHALL BE PROVIDED AND GRADED BY THE GENERAL CONTRACTOR UP TO 6 INCHES BELOW FINISHED GRADE IN TURF AREAS AND 18 INCHES IN PLANTING AREAS.
11. PLANTING AREA TOPSOIL SHALL BE AMENDED WITH 25% SPHAGNUM PEATMOSS, 5% HUMUS AND 70% PULVERIZED SOIL FOR ALL NON TURF SEED MIX AREAS, SHRUB, ORNAMENTAL GRASS, PERENNIAL AND ANNUAL BEDS.
12. SEED/SOD LIMIT LINES ARE APPROXIMATE. CONTRACTOR SHALL SEED/SOD ALL AREAS WHICH ARE DISTURBED BY GRADING WITH THE SPECIFIED SEED/SOD MIXES.
13. EDGING TO BE A SPADED EDGE UNLESS INDICATED OTHERWISE ON THE PLANS. SPADED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. A SPADED BED EDGE SHALL SEPARATE MULCH BEDS FROM TURF OR SEEDED AREAS. A SPADED EDGE IS NOT REQUIRED ALONG CURBED EDGES.
14. CONTRACTOR SHALL INSTALL DOUBLE SHREDDED BROWN HARDWOOD MULCH AT A 3" DEPTH TO ALL TREES, SHRUB, PERENNIAL, AND GROUND COVER AREAS. TREES PLACED IN AREA COVERED BY TURF SHALL RECEIVE A 4 FT WIDE MAXIMUM TREE RING WITH 3" DEPTH SHREDDED HARDWOOD MULCH.
15. INSTALLATION OF TREES WITHIN PARKWAYS SHALL BE COORDINATED IN THE FIELD WITH LOCATIONS OF UNDERGROUND UTILITIES. TREES SHALL NOT BE LOCATED CLOSER THAN 5' FROM UNDERGROUND UTILITY LINES AND NO CLOSER THAN 10' FROM UTILITY STRUCTURES.
16. DO NOT DISTURB THE EXISTING PAVING, LIGHTING, OR LANDSCAPING THAT EXISTS ADJACENT TO THE SITE UNLESS OTHERWISE NOTED ON PLAN.
17. ALL DISTURBED AREAS TO BE SODDED OR SEEDED, UNLESS OTHERWISE NOTED. SOD/SEED SHALL BE LOCAL HARDY TURF GRASS MIX UNLESS, OTHERWISE NOTED.
18. PLANT QUANTITIES SHOWN ARE FOR THE CONVENIENCE OF THE OWNER AND JURISDICTIONAL REVIEW AGENCIES. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES AS DRAWN.
19. THE CONTINUED MAINTENANCE OF ALL REQUIRED LANDSCAPING SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY ON WHICH SAID MATERIALS ARE REQUIRED. ALL PLANT MATERIALS REQUIRED BY THIS SECTION SHALL BE MAINTAINED AS LIVING VEGETATION AND SHALL BE PROMPTLY REPLACED IF THE PLANT MATERIAL HAS DIED PRIOR TO FINAL ACCEPTANCE. PLANTING AREAS SHALL BE KEPT FREE OF TRASH, LITTER, AND WEEDS AT ALL TIMES.

6 LANDSCAPE NOTES

NTS

ZONING ORDINANCE	FARMINGTON HILLS, MI - LANDSCAPE CODE REQUIREMENTS	REQUIRED	PROPOSED
34-5.14.4.C - PARKING LOT LANDSCAPE REQUIREMENTS			
PAVED AREAS: ONE LARGE DECIDUOUS TREE SHALL BE PROVIDED FOR EACH TWO THOUSAND EIGHT HUNDRED (2,800) SQUARE FEET OF THE PAVED SURFACE AREA ON THE ZONING LOT; PROVIDED THAT NO FEWER THAN TWO (2) TREES ARE PROVIDED, REGARDLESS OF SURFACE AREA	PAVED AREA: 48,730 SF 48,730 SF / 2,800 = 17.4 17 LARGE DECIDUOUS PAVED AREA TREES REQUIRED	17 LARGE DECIDUOUS PAVED AREA TREES PROVIDED	
34-5.14.5 - PARKING LOT SCREENING			
PARKING LOT SCREENING: ALL PARKING LOTS SHALL BE SEPARATED FROM A PUBLIC THOROUGHFARE BY A PLANTED HEDGE OF SMALL SHRUBS AS DEFINED IN SUBSECTION 34-5.14.3.F.v, OR BY A MASONRY WALL OR BERM A MINIMUM OF TWO (2) FEET HIGH	2' MINIMUM HIGH HEDGE OR MASONRY WALL REQUIRED ALONG GRAND RIVER AVENUE AND MIDDLEBELT ROAD	2' MINIMUM HIGH HEDGE PROVIDED ALONG GRAND RIVER AVENUE AND MIDDLEBELT ROAD	
34-5.15.1 - WALLS AND BERMS			
BUFFER YARD: WHENEVER A WALL OR BERM IS REQUIRED IN A B-1, B-2, B-3, B-4, ES AND LI-1 DISTRICT, DECIDUOUS TREES SHALL BE PLANTED IN THE GROUND ADJACENT TO THE WALL ON THE NONRESIDENTIAL SIDE WITH SIZE AND SPACING IN ACCORDANCE WITH SECTION 34-5.14	WESTERN AND SOUTHERN PROPERTY BOUNDARY: 515 LF 515 LF / 30 = 17.2 17 LARGE DECIDUOUS BUFFER YARD TREES REQUIRED	2 EXISTING TREES TO REMAIN, 15 LARGE DECIDUOUS BUFFER YARD TREES PROVIDED	
34-5.18 - TREE PROTECTION, REMOVAL, AND REPLACEMENT			
AS A CONDITION OF GRANTING A TREE PERMIT, THE APPLICANT WILL BE REQUIRED TO REPLACE TREES BEING REMOVED HAVING SIX (6) INCHES OR MORE DBH AT A 1:1 RATIO WHEN LANDMARK TREES ARE PERMITTED TO BE REMOVED, REPLACEMENT TREES SHALL BE PROVIDED TO A MINIMUM OF TWENTY-FIVE (25) PERCENT OF DBH OR CALIPERS, SHALL BE PROVIDED EITHER INDIVIDUALLY OR ON A CUMULATIVE BASIS TO MEET THE TWENTY-FIVE (25) PERCENT DBH REQUIREMENT	12 DECIDUOUS TREES OF 6" OR MORE DBH REMOVED 12 DECIDUOUS REPLACEMENT TREES REQUIRED 3 EVERGREEN TREES OF 6" OR MORE DBH REMOVED 3 EVERGREEN REPLACEMENT TREES OF 10' HEIGHT OR MORE REQUIRED 46" DBH OF DECIDUOUS LANDMARK TREES REMOVED (5) 3" CALIPER DECIDUOUS LANDMARK REPLACEMENT TREES REQUIRED 58" DBH EVERGREEN LANDMARK TREE REMOVED (6) 10' HEIGHT EVERGREEN LANDMARK REPLACEMENT TREES REQUIRED	12 DECIDUOUS REPLACEMENT TREES PROVIDED 3 EVERGREEN REPLACEMENT TREES PROVIDED (5) 3" CALIPER DECIDUOUS LANDMARK TREES PROVIDED (6) 10' HEIGHT EVERGREEN LANDMARK REPLACEMENT TREES PROVIDED	

Drawing name: K:\EST_D\368593003_Sheets_Gold_Sheet - Grand River Farmington Hills MI\3 Design\CADD\Planting\11.0 - LANDSCAPE PLANTS NOTES DETAILS - Nov 05, 2024, 3:47pm by: Laurent Fabre
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DRAWN BY: LDF
CHECKED BY: JA

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ANN ARBOR, MI 48106-1550
PHONE: 734-497-5550
WWW.KIMLEY-HORN.COM

SHEETZ

LANDSCAPE FARMINGTON HILLS GRAND RIVER AND MIDDLEBELT NOTES & DETAILS

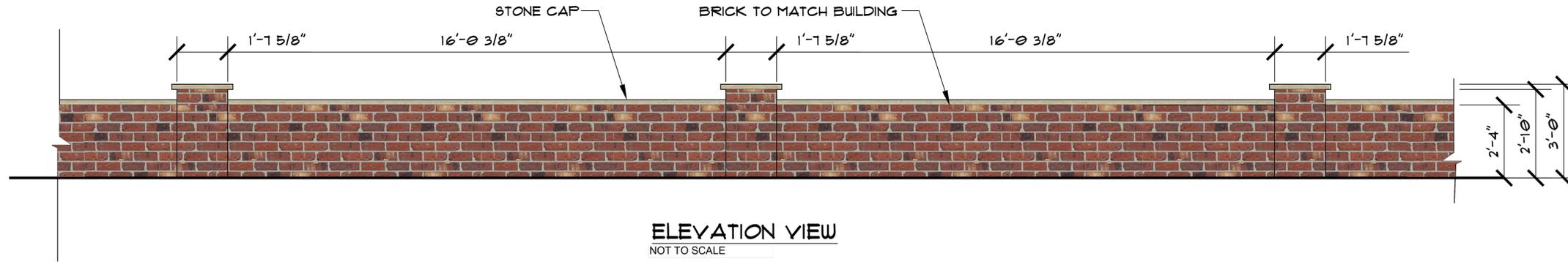
SHEETZ FARMINGTON HILLS GRAND RIVER AND MIDDLEBELT

ORIGINAL ISSUE: 11/04/2024
KHA PROJECT NO. 268593003
SHEET NUMBER **L1.1**

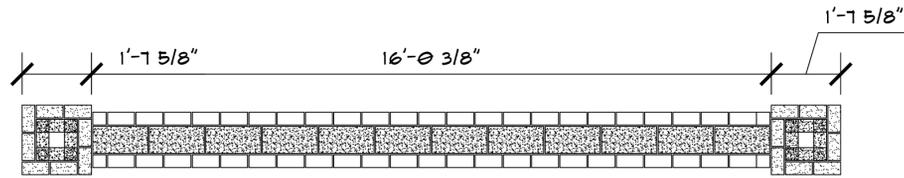
REVISIONS
DATE

Drawing name: K:\DET\DES\268593003_Sheen Gold Sheet - Grand River Farmington Hills MI\2 Design\CAD\PlanSheets\CS0 - WALL DETAILS.dwg - Logcat1 - Nov 05, 2024, 3:47pm by: Lauren Falorano
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

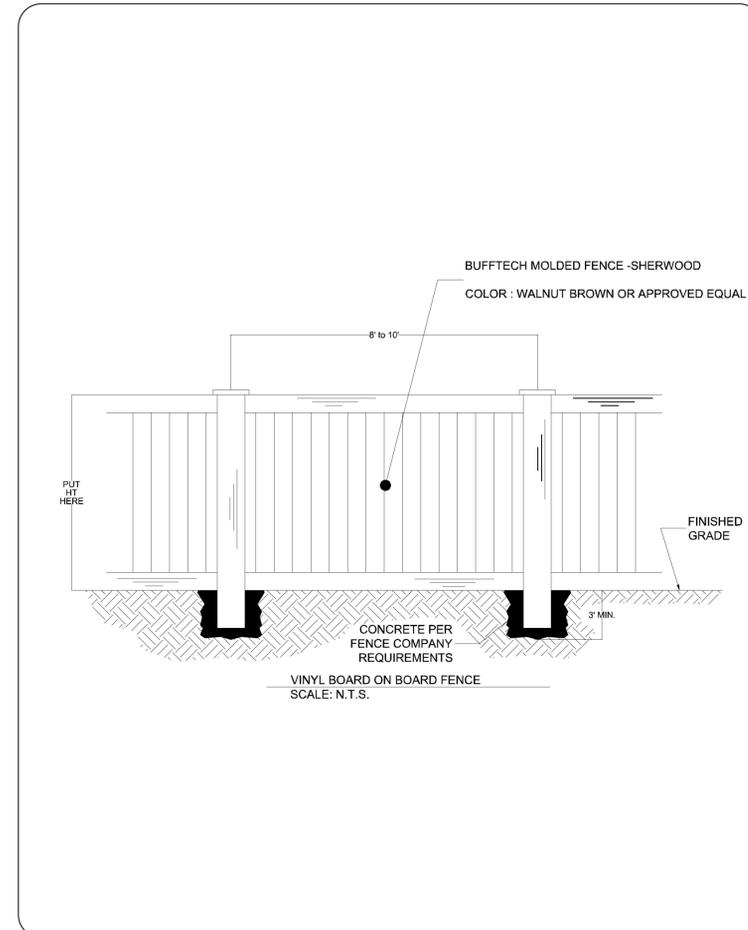
BRICK KNEE WALL DETAIL



ELEVATION VIEW
NOT TO SCALE



PLAN VIEW
NOT TO SCALE



DATE	BY	DESCRIPTION



PRIVACY FENCE DETAIL

SCALE:
DATE: 2/2/2024
DRAWN BY: DAH
40

No.	REVISIONS	DATE	BY

Kimley-Horn
 of Michigan, Inc.
 3000 WALKER AVENUE, SUITE 200
 SOUTHFIELD, MI 48075
 TEL: 248.348.2200
 WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
 DESIGNED BY: TES
 DRAWN BY: LDF
 CHECKED BY: JA



WALL DETAILS

SHEETZ
 FARMINGTON HILLS
 GRAND RIVER AND
 MIDDLEBELT

ORIGINAL ISSUE:
 DATE: 11/04/2024
 KHA PROJECT NO.
 268593003

SHEET NUMBER
A100



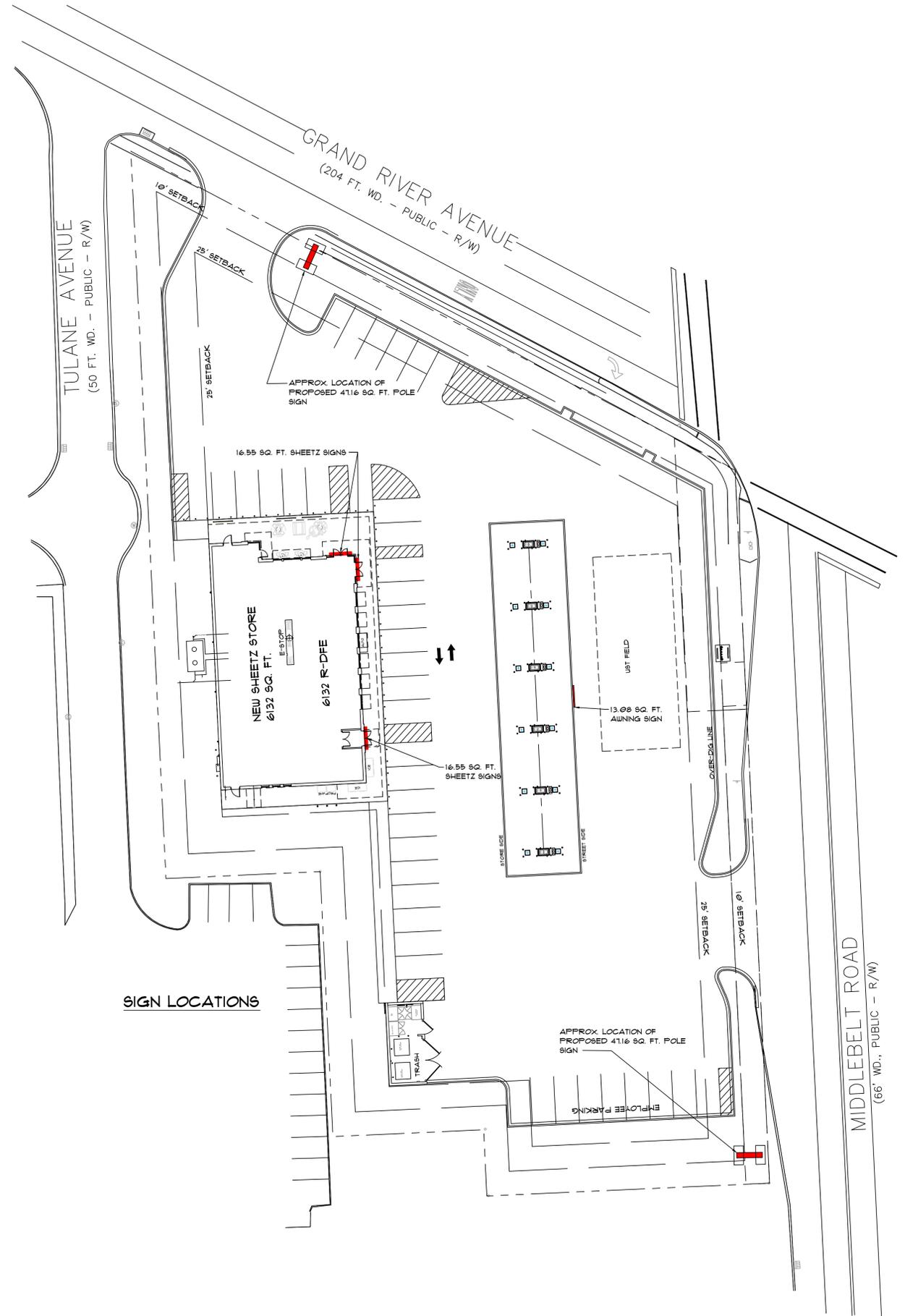
SHEETZ, INCORPORATED
 5700 SIXTH AVENUE
 ALTOONA, PA 16602
 (814) 946-3611

NEW SHEETZ STORE "FARMINGTON HILLS"

SWC OF GRAND RIVER AVENUE
 AND MIDDLEBELT ROAD
 FARMINGTON, MICHIGAN

SIGNAGE SQUARE FOOTAGE BREAKDOWN

BUILDING ELEVATIONS	SHEETZ SIGN = 16.55 SQ. FT. X 3 = 49.65 SQ. FT.		
	TOTAL = 49.65 SQ. FT.	49.65 SQ. FT.	
GAS PRICE MONUMENT SIGN	SHEETZ SIGN = 16.17 SQ. FT. X 1 = 16.17 SQ. FT.		
	GAS PRICE SIGN = 30.99 SQ. FT. X 1 = 30.99 SQ. FT.		
	TOTAL = 47.16 SQ. FT. X 2	94.32 SQ. FT.	
GAS CANOPY AWNING	SHEETZ SIGN AREA = 13.08 SQ. FT. X 1 = 13.08 SQ. FT.		
	FUEL OFFERING FLAG AREA = 2.76 SQ. FT. X 12 = 33.12 SQ. FT.		
	TOTAL = 46.20 SQ. FT.	46.20 SQ. FT.	
TOTAL SITE SIGN AREA =		190.17 SQ. FT.	



G:\Sheetz\contract\MI-214652-Farmington Hills-Grand River\Signage\MI-Farmington-214652-Coversheet.dwg, 8/1/2024 9:34:05 AM, DWG To PDF.p3

PROJECT NAME:
NEW SHEETZ STORE

**FARMINGTON HILLS
GRAND RIVER AVE**

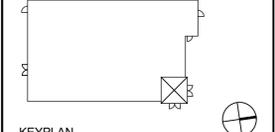
Int. of Grand River Avenue
and Middlebelt Road
Farmington Hills, MI 48336

OWNER:
SHEETZ, INC.

5700 SIXTH AVE.
ALTOONA, PA 16602

CONSULTANT

PROFESSIONAL



KEYPLAN

ISSUE: **07.29.2024**
SITE ID NO: 214652
AUTHOR BY: RJK
REVIEW BY: RJH
VERSION: 6132R_v1.6

EXTERIOR
ELEVATIONS

A300

PRELIMINARY ELEVATIONS



1 FRONT ELEVATION
1/4" = 1'-0"

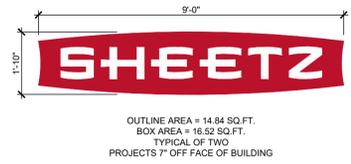
- TYPICAL EXTERIOR ELEVATION NOTES:**
- ALL LIGHTS SHOWN ABOVE AND/OR BELOW DOORS OR WINDOWS ARE TO BE CENTERED ON THE DOOR OR WINDOW UNLESS NOTED OTHERWISE.
 - FIXTURES/EQUIPMENT BETWEEN TWO DOORS OR WINDOWS ARE TO BE CENTERED EQUALLY.
 - EXTERIOR SEALANT FOR STONE SHALL COMPLY WITH SECTION 07 9005 JOINT SEALANTS, GENERAL BUILDING FASCIADE WEATHER SEALANT AND SHALL MATCH THE COLOR OF THE STORE.

EXTERIOR ELEVATION KEYNOTES:

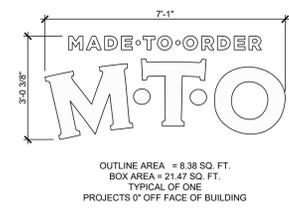
- BRICK VENEER, COLOR: 680 BY CONTINENTAL BRICK COMPANY. SEE MASONRY SPEC
- CAST STONE SILL, COLOR: CRAB ORCHARD. SEE MASONRY SPEC
- ANCHORED CAST STONE MASONRY VENEER, COLOR: CRAB ORCHARD. SEE MASONRY SPEC
- EXTERIOR LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS
- ARCHITECTURAL CANOPY, COLOR: REGAL RED, PREMIUM TWO-COAT KYNAR FINISH
- BRICK PAVER WALKWAY
- LIGHTED CURVED FASCIA CANOPY ATTACHMENT
- METAL COPING, COLOR: DARK BRONZE
- WALL MOUNTED BUILDING SIGN, SEE SHEET A200.
- STANDING SEAM METAL ROOF, COLOR: BRITE RED
- ROOF EQUIPMENT SCREEN, COLOR: DARK BRONZE
- GUTTER, COLOR TO MATCH CUPOLA COLOR
- DOWNSPOUT, COLOR: DARK BRONZE
- DRIVE-THRU WINDOW (IF APPLICABLE)
- METAL STANDING SEAM SHED STYLE AWNING AND FRAME ASSEMBLY, ROOF COLOR: BRITE RED, FRAME COLOR: DARK BRONZE
- BRICK SOLDIER COURSE, COLOR: 680 BY CONTINENTAL BRICK COMPANY. SEE MASONRY SPEC
- BRICK ROWLOCK COURSE, COLOR: 680 BY CONTINENTAL BRICK COMPANY. SEE MASONRY SPEC
- CONTROL JOINT, SEE MASONRY SPEC
- STEEL ROOF LADDER AND CRANKY POST, COLOR: DARK BRONZE
- STANDARD THROUGH WALL SCUPPER WITH CONDUCTOR HEAD & DOWNSPOUT, COLOR: DARK BRONZE
- OVERFLOW SCUPPER
- ALUMINUM STOREFRONT SYSTEM, SEE A600
- EXTERIOR HOSE BIB, REFER TO PLUMBING DRAWINGS
- OUTDOOR FURNITURE
- ELECTRICAL RECEPTACLE, REFER TO ELECTRICAL DRAWINGS
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- EMERGENCY WATER CONNECTION, REFER TO PLUMBING DRAWINGS
- SEAMLESS ALUM PANEL SYSTEM WITH EXPOSED FASTENERS, COLOR: DARK BRONZE
- PROPANE LOCKER
- ICE MERCHANTISER
- RTI FILLPORT
- STEEL BOLLARD, COLOR: DARK BRONZE
- CO2 FILLPORT
- DECORATIVE ALUMINUM FENCE, COLOR: DARK BRONZE
- AUTOMATIC DOOR PUSH PLATE AND BOLLARD, BOLLARD COLOR: DARK BRONZE
- GAS METER AND RISER, REFER TO CIVIL UTILITY PLAN, COLOR: DARK BRONZE
- MTO GRAPHIC DECAL, SEE SHEET A200.
- LIGHT CHANNEL AT PARAPET COPING, SEE ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR MORE INFORMATION.



2 LEFT ELEVATION
1/4" = 1'-0"



A WALL MOUNTED "SHEETZ" BUILDING SIGN
1/2" = 1'-0"



B WALL MOUNTED "MTO" DECAL
1/2" = 1'-0"

PROJECT NAME:
NEW SHEETZ STORE

**FARMINGTON HILLS
GRAND RIVER AVE**

Int. of Grand River Avenue
and Middlebelt Road
Farmington Hills, MI 48336

OWNER:
SHEETZ, INC.

5700 SIXTH AVE.
ALTOONA, PA 16602

CONSULTANT

PROFESSIONAL

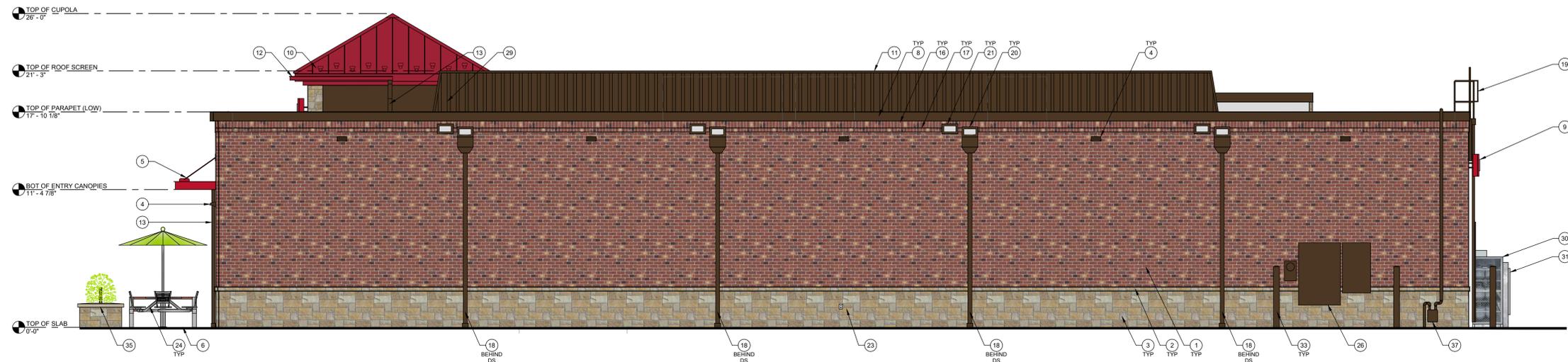
KEYPLAN

ISSUE:	07.29.2024
SITE ID NO:	214652
AUTHOR BY:	RJK
REVIEW BY:	RJH
VERSION:	6132R_v1.6

EXTERIOR
ELEVATIONS

A301

PRELIMINARY ELEVATIONS



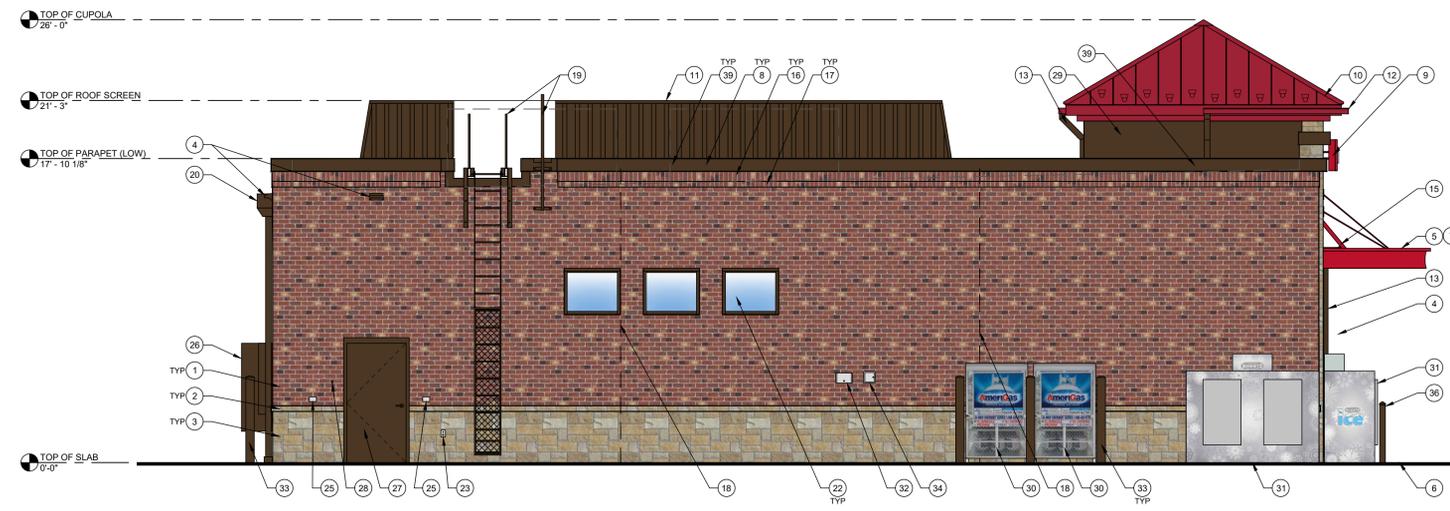
3 REAR ELEVATION
1/4" = 1'-0"

TYPICAL EXTERIOR ELEVATION NOTES:

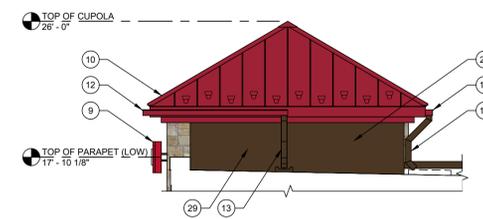
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EXTERIOR ELEVATION KEYNOTES:

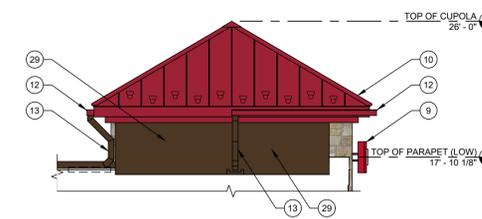
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4 RIGHT ELEVATION
1/4" = 1'-0"



5 CUPOLA ELEVATION FROM ROOF
1/4" = 1'-0"



6 CUPOLA ELEVATION FROM ROOF
1/4" = 1'-0"

PROJECT NAME:
NEW SHEETZ SITE

FARMINGTON HILLS

SWC of Grand River Avenue
& Middlebelt Road
Farmington Hills, Michigan

OWNER:
SHEETZ, INC.

5700 SIXTH AVE.
ALTOONA, PA 16602

CONSULTANT

PROFESSIONAL

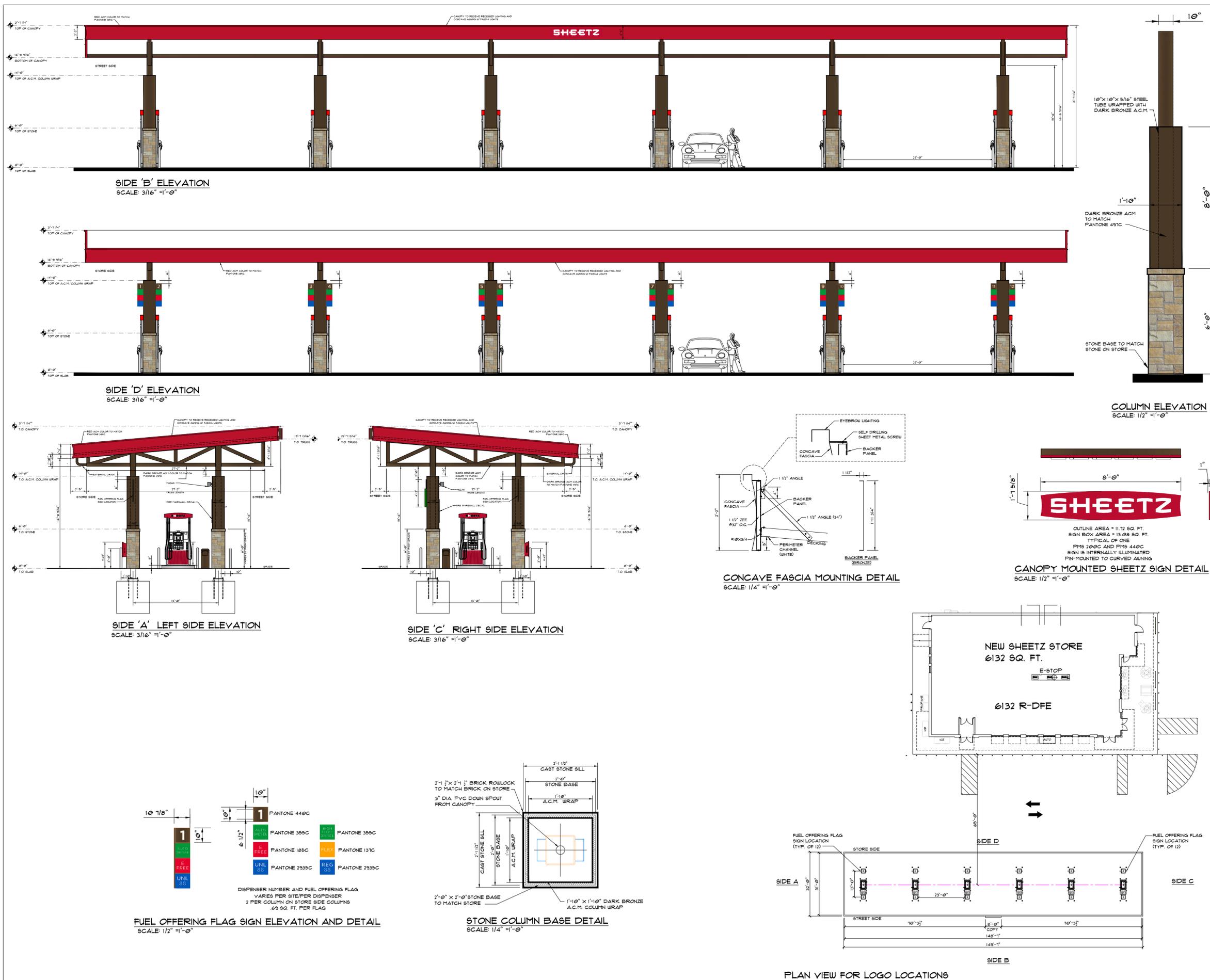
KEYPLAN

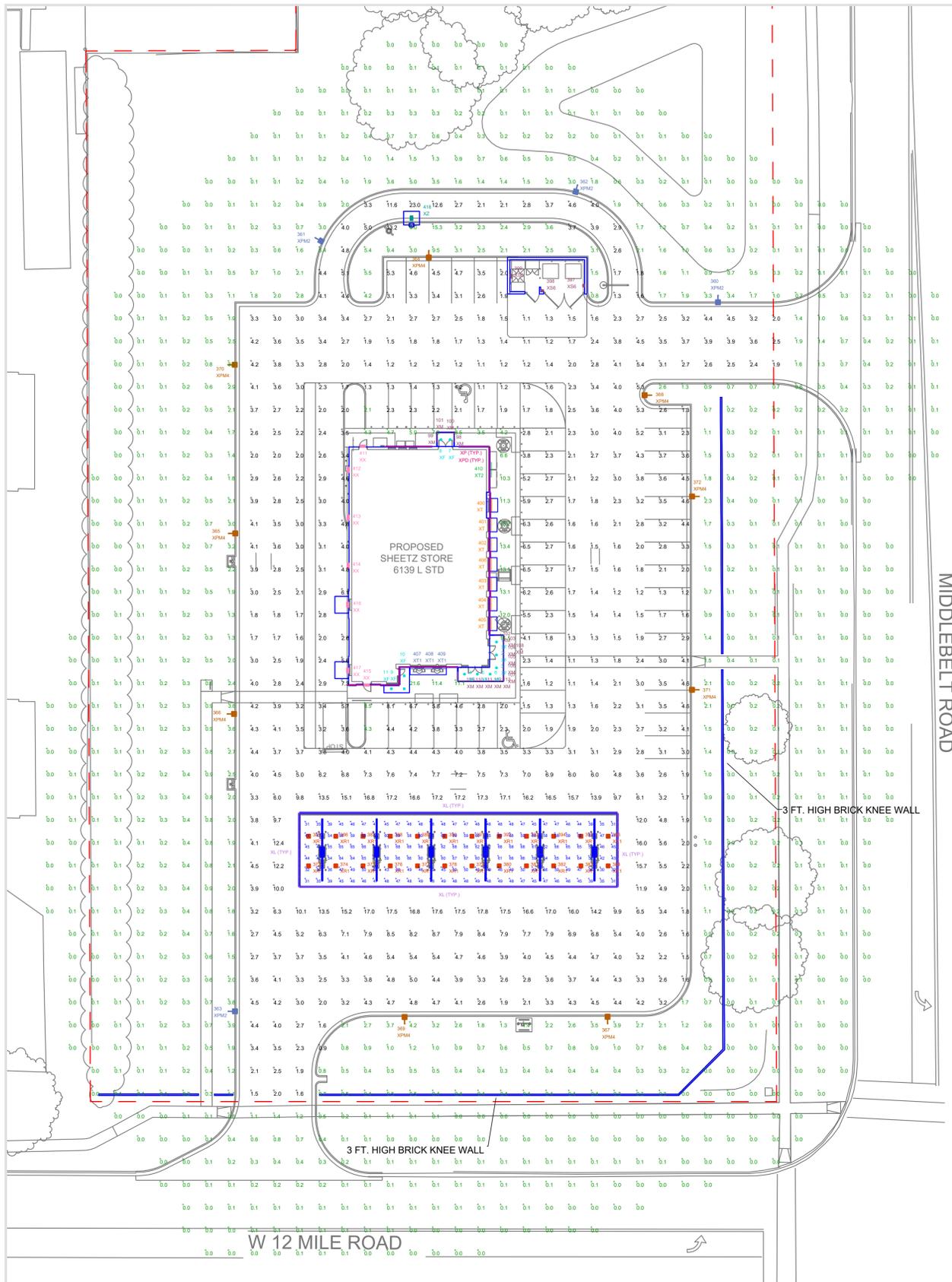


ISSUE: **07/31/2024**
PROJECT NO:
AUTHOR BY: MLC
REVIEW BY:
SHEET TITLE

GAS AWNING
CONCAVE FASCIA

A400





MIDDLEBELT ROAD



NORTH
GRAPHIC SCALE



THIS SITE IS LOCATED IN A REGION WHERE LIGHTING IS REGULATED BY LOCAL ORDINANCES

NOTE:
- ALL AREA LIGHTS ON NEW 20 FT. POLE MOUNTED ON 3 FT. CONCRETE BASE
- XT AND XT1 FIXTURE HEAD TO BE LOCKED IN PLACE AIMING AWAY FROM BUILDING

LUMINAIRE LOCATION SUMMARY			
LUM NO.	LABEL	MTG. HT.	TILT
1-11	XF	11.33	0
12	XL	18.25	5
13	XL	18.599	5
14	XL	18.948	5
15	XL	19.297	5
16	XL	19.646	5
17	XL	19.995	5
18	XL	20.344	5
19	XL	20.693	5
20	XL	18.25	5
21	XL	18.599	5
22	XL	18.948	5
23	XL	19.297	5
24	XL	19.646	5
25	XL	19.995	5
26	XL	20.344	5
27	XL	20.693	5
28-62	XL	18.075	0
63-97	XL	20.875	0
98-113	XM	12	0
114-197	XP	18	0
198-208	XP	19	0
209-277	XP	18	0
278-309	XPD	18	0
310-312	XPD	19	0
313-359	XPD	18	0
360-363	XPM2	23	0
364-372	XPM4	23	0
373-384	XR1	18.83	0
385-398	XR1	17.71	0
397-399	XS6	6.5	0
400-406	XT	13.5	0
407-409	XT1	13.5	0
410	XT2	15	0
411-414	XX	15.42	0
415	XX	11.33	0
416-417	XX	9.33	0
418	XZ	11	0

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
PAVED AREA	4.19	23.0	0.9	4.66	25.56
UNDEFINED	0.64	21.6	0.0	N.A.	N.A.
UNDER CANOPY	51.58	68	30	1.72	2.27

LUMINAIRE SCHEDULE										
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
	11	XF	Single	1037	1.000	B1-U0-G0	13	143	LF Illumination LLC (Ledi)	BULLET MINI-5911-1AA-T-13C-9240-M-DMU-BLACK COLOR 90CRI
	86	XL	SINGLE	136	1.000	N.A.	4.12	354.32	Blair Companies	LINEAR STRIP LIGHT (BY OTHERS, SHOWN FOR CONTRIBUTION)
	16	XM	SINGLE	136	0.700	N.A.	4.12	65.92	Blair Companies	LB-110-00-XX-025-RD[1]FR4-15
	164	XP	Single	305	1.000	N.A.	3.66	600.24	P-LED	STREET WRAP FLEX BACK BEND 4000K
	82	XPD	Single	25	1.000	N.A.	0.305	25.01	P-LED	STREET WRAP FLEX BACK BEND 4000K
	4	XPM2	Single	10450	1.020	B2-U0-G2	97	388	Cree Lighting	OSQ-ML-C-DA-XX + OSQM-C-16L-40K7-3B-UL-NM-XX
	9	XPM4	Single	9575	1.020	B2-U0-G2	97	873	Cree Lighting	OSQ-ML-C-DA-XX + OSQM-C-16L-40K7-4B-UL-NM-XX
	24	XR1	Single	15700	1.010	B3-U3-G2	127	3048	Cree Lighting	CP5-20L-50K9-DF-UL-DM-XX-Q9-HZ
	3	XS6	Single	914	1.000	B0-U3-G2	11.472	34.416	FC Lighting	FCW3132-UNV-4K-CRI85-18L-BRE
	7	XT	Single	1840	1.000	N.A.	20	140	SPI Lighting Inc.	SEW12146 5FT L20W AN08 120-277V 4000K SMA PSE OAP6
	3	XT1	Single	1472	1.000	N.A.	16	48	SPI Lighting Inc.	SEW12146 4FT L16W AN08 120-277V 4000K SMA PSE OAP6
	1	XT2	Single	2208	1.000	N.A.	24	24	SPI Lighting Inc.	SEW12146 6FT L24W AN08 120-277V 4000K SMA PSE OAP12
	7	XX	Single	1921	1.000	B1-U0-G0	16	112	WILLIAMS OUTDOOR	WMM-H-L17/840-TL-DBZ-CGL-DIM-UNV (BRONZE COLOR 80CRI)
	1	XZ	SINGLE	13946	1.040	B3-U0-G1	132	132	CREE, INC.	BXCT9020&CAN-228-SL-RM-06-E-UL-XX-700 (BRIGHT RED FINISH, ORDERED SEPARATELY)



REV.	BY	DATE	DESCRIPTION
R1	JAN	10/16/24	REVISED PER UPDATED SITE PLAN

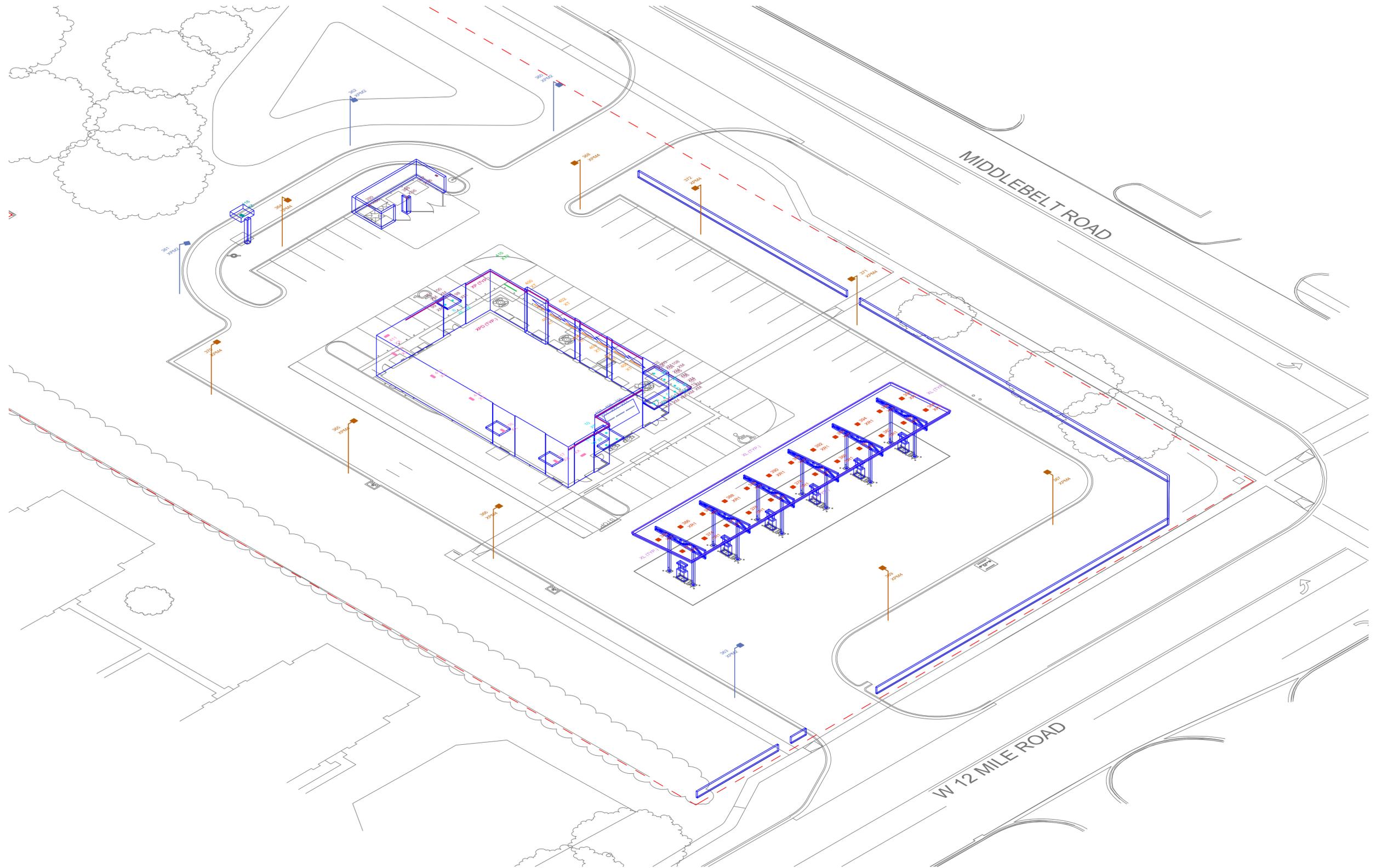
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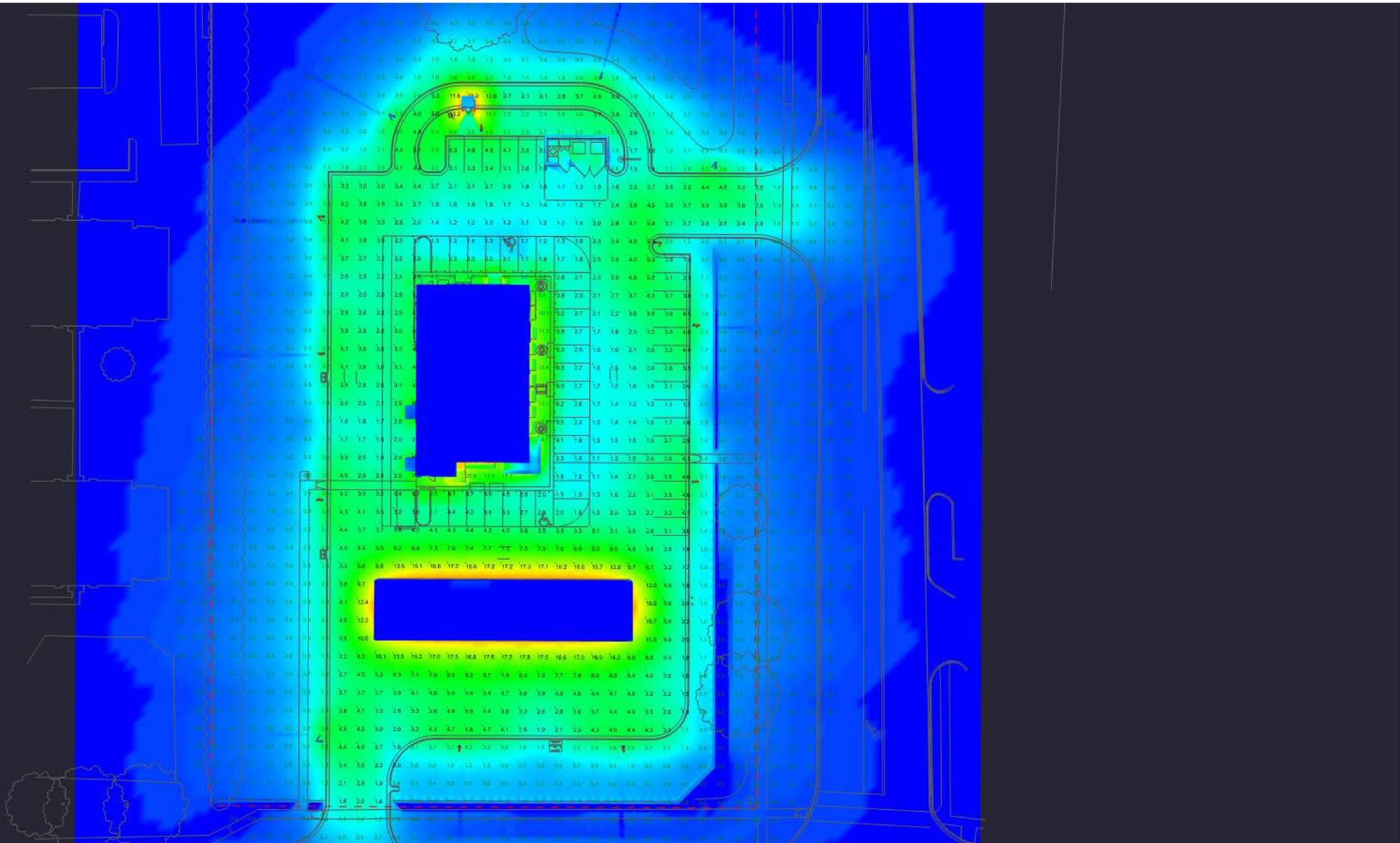
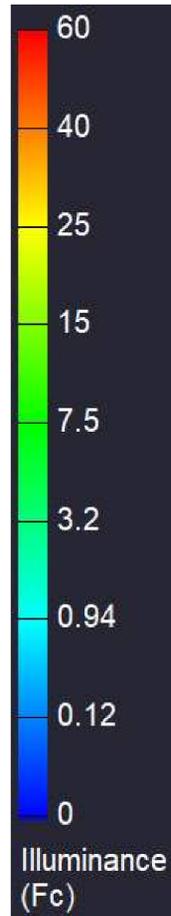
SCALE: 1" = 30'
LAYOUT BY: JAN
DWG SIZE: D
DATE: 06/17/24

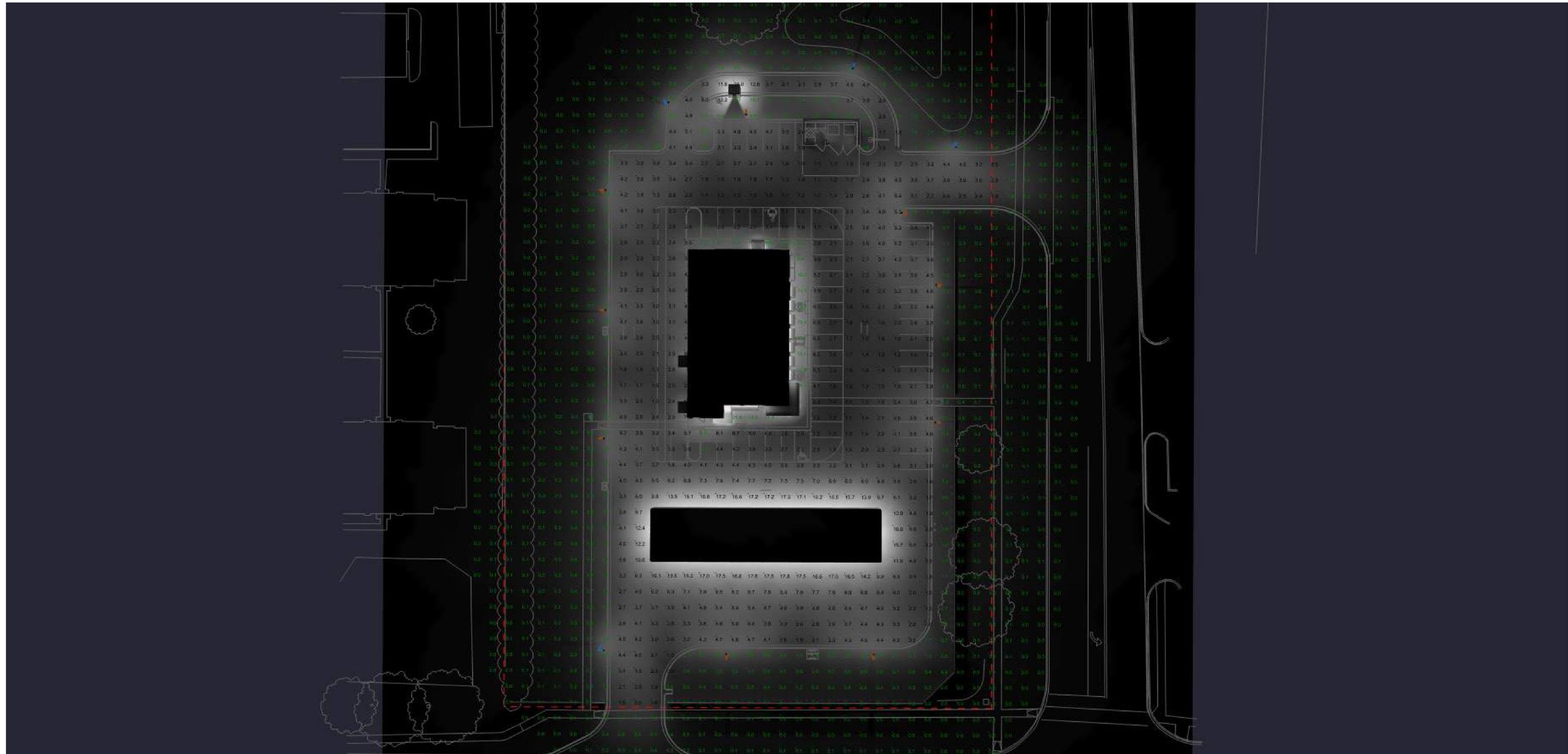
PROJECT NAME:
SHEETZ
FARMINGTON HILLS, MI
DRAWING NUMBER:
RL-9686-S1-R1



DOWNLIGHT	
	
STREET WRAP	
	
AREA	
	
CANOPY	
	
WALL MOUNTED	
	
WALL MOUNTED	
	
WALL MOUNTED	
	
CANOPY	
	







**CITY OF FARMINGTON HILLS
PLANNING COMMISSION MEETING
31555 W ELEVEN MILE ROAD
FARMINGTON HILLS, MICHIGAN
NOVEMBER 21, 2024, 7:30 P.M.**

CALL MEETING TO ORDER

The Planning Commission Regular Meeting was called to order by Chair Trafelet at 7:30 p.m.

ROLL CALL

Commissioners present: Aspinall, Brickner, Trafelet, Varga, Countegan

Commissioners Absent: Grant, Mantey, Ware, Stimson

Others Present: City Planner Perdonik, Planning Consultants Tangari and Upfal (Giffels Webster), Engineering Division representative Natasha Sonck, City Attorney Schultz

APPROVAL OF THE AGENDA

MOTION by Countegan, support by Aspinall, to approve the agenda as published.

Motion passed unanimously by voice vote.

PUBLIC HEARING

A. AMEND PLANNED UNIT DEVELOPMENT (PUD) 1, 2015

LOCATION: 28050 Grand River Avenue
PARCEL I.D.: 22-23-36-404-010
PROPOSAL: Construction of freestanding and wall signs within B-3, General Business District, and SP-2, Special Purpose District
ACTION REQUESTED: Recommendation to City Council
APPLICANT: Signworks of Michigan, Inc.
OWNER: Robert Mount

Chair Trafelet introduced this request to amend PUD 1, 2015, Corewell Health Hospital.

Applicant Presentation

Claire McCready, Senior Project Manager, Signworks of Michigan, Inc., was present on behalf of this request to amend PUD 1, 2015. Ann Frass, Signworks owner, was also present, as was Derk Pronger, President, Corewell Health Farmington Hills.

As mentioned during the discussion on October 17th, the proposed signage is among the most critical in the City. The hospital is an essential institution, serving as the largest employer in Farmington Hills and one of the city's most significant sources of revenue.

Corewell is requesting approval for the following changes to the Planned Unit Development (PUD) Agreement:

1. Height Adjustment for the Main Entrance Monument Sign:

The applicant proposes replacing the existing monument sign, which is currently 10'8" tall and 7' wide, with a new sign measuring 12' tall and 6' wide, for a total of 72 square feet. This update would make the sign 1 foot narrower and 1 foot 4 inches taller than the current version. Both modifications will improve visibility for vehicular traffic.

2. Replacement of the Main Wall Sign:

The applicant also seeks approval to update the wall sign identifying the hospital on the building. The current sign, which reads "Beaumont," would be replaced with signage displaying "Corewell Health, Farmington Hills Hospital."

Ms. McCreedy noted that the existing locations for both signs are structurally sound and provide optimal visibility for vehicular traffic.

Consultant comments

Planning Consultant Tangari explained that the Corewell Health Hospital property is subject to PUD 1-2015, which requires any amendments to the Development Agreement—no matter how minor—to be treated as major amendments. Such amendments necessitate a public hearing process, with ultimate approval resting with the City Council. The focus of this amendment is solely on signage, with no other site modifications requested.

- For the monument sign, the applicant is requesting to modify the deviation that is permitted under the PUD Agreement, with a 1'4" increase in height from the currently approved deviation. This request is the sole reason for holding the public hearing tonight.
- For the wall sign on the ground floor south elevation, the size of the sign is being reduced from the current 73.33sf to 40.15sf. The PUD Agreement already permits the requested deviation of 15.15sf, as the new sign is smaller than the one it is replacing.

MOTION by Countegan, support by Aspinall, to RECOMMEND TO CITY COUNCIL that the application to amend Planned Unit Development 1, 2015, dated September 19, 2024, submitted by Signworks of Michigan, Inc., BE APPROVED, because the plans are consistent with the goals, objectives, and policies of the Master Plan and applicable provisions of the Planned Unit Development Option in Section 34-3.20 of the Zoning Ordinance.

Motion passed unanimously by voice vote.

B. PUD PLAN 2, 2024, INCLUDING SITE PLAN 56-8-2024

LOCATION:	South side of Thirteen Mile Road, just west of Middlebelt Road
PARCEL I.D.:	22-23-11-201-001, -002, -004, -005, -006, -020, and -021
PROPOSAL:	Construction of multiple-family dwellings within RA-1, One Family Residential District
ACTION REQUESTED:	Recommendation to City Council
APPLICANT:	Steven Schafer
OWNERS:	Detroit Baptist Manor and MOBI Investments

Aaron and Steven Shafer, Shafer Development, were present on behalf of this application for a Planned Unit Development to construct multiple-family dwellings within RA-1, One Family Residential District.

Applicant presentation

Overview

Aaron Schafer gave an overview of this proposed development:

- The 12.04 acre site is located on the south side of 13 Mile between Middlebelt Road and Orchard Lake Road. The development site is directly east of the Baptist Manor facility. To the north is Westgate Subdivision, and to the south is Holly Hill Farms.
- The project is a planned unit development, with two different residential communities within a single PUD:
 - The Mulberry Way townhouse site (5.9 acres) will feature 40 two-story, for sale units, directly east of property owned by the Baptist Manor
 - The Tabernacle community will feature 36 one-story age-restricted rental ranch homes, on property owned by and directly adjacent to the Baptist Manor.

Timeline

- January 2024 the property was put under contract
- April 18, 2024 Applicant secured PUD qualification from the Planning Commission
- October 17, 2024 Applicant presented to the Planning Commission, who set a date for tonight's public hearing.

Community outreach

- February 2024 – present. Met multiple times with both the Westgate and Holly Hill Farms Homeowners Associations.
 - February 2, 2024 – Westgate HOA
 - February 6, 2024 – Holly Hill Farms HOA
 - March 3, 2024 – Westgate Annual HOA Neighborhood Meeting
 - March 26, 2024 – Holly Hill Farms HOA
 - April 9, 2024 – Holly Hill Farms Neighborhood Meeting
 - September 23, 2024 – Westgate HOA
 - October 11, 2024 – Holly Hill Farms HOA

Background work regarding the site

Since the April and October Planning Commission meetings, Schafer Development has completed the following:

- Assisted the Baptist Manor team in selecting an architect to design their ranch units
- Engaged with Civil Engineering Firm Nowak & Fraus to prepare the Site Plan/PUD Package
- Incorporated Giffels Webster, Engineering and Fire Department Review Letter(s) feedback into Site Plan/PUD Package
- Engaged with Wetlands Consultant ASTI and conducted on-site pre-application meeting with EGLE (Michigan Department of Environment, Great Lakes, and Energy) to verify no wetland permits are required for this project.

Special planning area – flex residential

- The site has been designated as a special planning area since the adoption of the 2009 Master Plan.
 - This designation recognizes that the thoroughfare frontage along 13 Mile Road, particularly between Orchard Lake and Middlebelt, is less desirable for single-family residential lots.
 - Homes in this area back directly onto 13 Mile Road, which experiences significantly higher traffic levels compared to nearby neighborhoods like Westgate and Holly Hill Farms, which are set farther back from the thoroughfare.
 - The special planning area designation encourages cluster development to preserve as much natural vegetation as possible.
- On the 2024 Future Land Use Map, the property is identified as "flex residential," which:
 - Supports creative redevelopment approaches for challenging sites.
 - Allows for a maximum building height of three stories.
 - Emphasizes the preservation of open space and natural buffers to adjacent established communities.
 - This project includes a substantial southern perimeter setback of approximately 60 to 70 feet from Holly Hill Farms, the adjacent development to the south.
 - The development prioritizes preserving as many existing trees as possible to maintain natural buffers and open space.

Site plan updates:

- Road Design Updates: A key point in Mr. Cubera's Engineering review letter was the recommendation to eliminate the "road to nowhere" located in the southwestern corner of the Baptist Manor property. The design has been revised to replace this road with a more cohesive horseshoe-shaped ring road.
- Entrance Configuration: The review letter also suggested consolidating two separate entrances into a single combined boulevard. The updated site plan now reflects this change, with the boulevard aligned with Westgate Road to improve traffic flow and site access.
- Potential Secondary Access: The updated plan also considers the addition of a secondary access point for emergency services along 13 Mile Road. This secondary access, potentially located near the Tabernacle property, could feature a breakaway gate or chain for exclusive use by fire and life safety personnel. The developers will collaborate with City Engineering on this issue.
- Stormwater Management Improvements: The initial site plan included three stormwater basins, but further analysis determined that one basin in the northeast corner of the property could be upsized to meet the site's needs. This revision reduces the total number of basins to two, avoiding the need for a basin near a single-family residence, a concern raised in a review letter and by a neighbor.
- Stub street request: The engineering review letter included a request to provide a stub-street to the east, connecting to four single-family lots adjacent to the property near the corner of 13 Mile Road and Middlebelt. However, the topography of the eastern lots presents significant challenges, including steep elevations that make further expansion impractical. Additionally, two of the four adjacent lots have recently been sold, and the new owners plan to maintain the properties as single-family residential, further supporting the decision not to extend the development eastward. The decision to upsized the stormwater

basin in the northeast corner of the property, reducing the number of basins on-site, has further limited available space for a road extension.

Landscape plan updates:

The landscape plan was designed based on multiple site walks with and feedback from neighboring residents and the homeowners' associations. Buffering, natural screening, and overall landscape design were identified as top priorities.

- **Tree Planting Details:**
 - There will be over 140 new trees planted across the property, with a focus on filling gaps along the southern property line where a forested tree stand exists. Evergreen trees will be added along the southern property line to provide consistent screening for adjacent properties.
 - Along the southern perimeter and portions of the eastern and western property lines, 89 new trees are proposed to enhance the existing canopy and address gaps identified during site walks.
- **Tree Count and Ordinance Compliance:** While the design maximizes tree placement throughout the site, the plan is 34 trees short of the ordinance requirements. The applicant proposed three options to address this shortfall:
 1. Requesting a waiver (not preferred by the applicant or the City), or
 2. Donating funds representing the 34 trees to the City's tree fund, or
 3. With the City's permission, collaborating with neighbors along Holly Hill Farms to plant the 34 trees in their rear yards, addressing concerns about development near their properties.
- **Commitment to the neighbors:** Shafer Development is willing to work directly with affected neighbors to ensure their concerns are addressed.

Architectural and Design Overview

- Shafer Development is under contract with M/I Homes for the development of the 40 townhomes, and renderings showed a representative sample of this new product, which will be 3 bedroom, 2-1/2 bath 2,200sf units, with 2-car garages.
- While architectural plans for the Baptist Manor portion of the development are still being finalized, the developers are committed to ensuring that exterior materials and masonry will complement both communities. Maintaining a cohesive aesthetic for the development along 13 Mile Road remains a priority.

Traffic Impact Study

- As requested in the Giffels Webster review comments prior to the October meeting, a traffic impact study has been conducted by Fleis & VandenBrink and submitted to the City. The traffic study recommended a right-turn deceleration taper along eastbound 13 Mile Road at the site driveway.
- The Engineering review letter suggested relocating the boulevard slightly further west to avoid left-hand turning conflicts with Westgate. The developer is open to this suggestion.

Planning Consultant Comments

Referencing the November 14, 2024 Giffels Webster review letter, Planning Consultant Tangari highlighted the following information:

- The April motion qualifying this project for a Planned Unit Development is included in the packets.
- The proposed development complies with RC-1 district standards for both the number of units and bedrooms.
- Regarding Master Plan and Zoning Standards: The site is designated as "flex residential" in the Master Plan, and the development meets all dimensional standards of the underlying RA-1 district, including setbacks and height requirements, for both the Tabernacle and Mulberry Park portions of the site.
- Curbside pickup of trash is planned, with no dumpster enclosures included.
- Lighting Plan: The only proposed lighting consists of residential wall sconces with frosted glass, directed toward the ring road. The photometric plan shows that light is concentrated on the ground and driveways in front of the units, ensuring minimal light spillage.
- Tree Preservation and Screening: The plan preserves significant tree coverage along the southern property line and 13 Mile Road frontage, with additional trees added to fill gaps. The southern screening is particularly dense, although its adequacy remains a point for discussion, as this has been a major concern.
- Tree Shortfall and Ordinance Relief: The 34-tree shortfall has been acknowledged and discussed.
- The only ordinance relief being sought under the Planned Unit Development is to permit attached units at RC-1 density. All other standards appear to be met.

Commission clarifying questions

Chair Trafelet raised safety concerns for pedestrians walking by the retention pond in the northeast corner of the site, which was very close to the road. Would fencing be installed?

Steven Shafer responded that the slope of the basin, which determines the need for fencing, has not yet been finalized. However, they would commit to addressing safety concerns during detailed engineering. If fencing is not required, alternative protective measures, such as split rail fencing or landscaping, will be implemented.

Chair Trafelet asked if the project could be moved closer to 13 Mile Road to increase the setback on the southern property line.

Mr. Shafer explained that the current placement maximizes the southern setback in response to concerns from neighboring residents, while adhering to engineering constraints, including the required 64-foot road right-of-way.

In response to further comments, Mr. Shafer explained that the detention basins have been designed to capture all stormwater runoff from the site, ensuring that no flooding will occur on neighboring properties, including Holly Hill Farms. The basins meet current, stringent stormwater standards, and should help to mitigate existing runoff issues. Additionally, the site grading plan redirects water away from Holly Hill Farms and toward the street, significantly reducing the runoff currently affecting neighboring areas during rain events.

Public Hearing

Pam Gerard, resident, asked if any of the proposed dwellings were ADA compliant.

In response, Mr. Shafer said the Tabernacle single story homes will be accessible. The two-story townhomes will not be accessible.

Isaac Dunn, resident, said he lived directly east of the development. He asked the distance between the enlarged detention basin and his property. Would there be a complete tree line separating his property from this development?

In response, Steven Shafer said he could not immediately answer the distance question regarding the detention pond but he would talk to Mr. Dunn after the meeting. The setback for that area is 45'. There were trees proposed at the property line, and they would work with Mr. Dunn regarding potentially planting additional trees offsite.

Louise Lieberman, Southbrook Street, expressed appreciation that the developers had been willing to talk with residents. She remained concerned regarding density, traffic, and the need for an animal relocation plan.

Eric Schmidt, Woodbrook Court, opposed the proposed development, citing concerns about its impact on the natural environment and quality of life in the neighborhood. While acknowledging the developers' efforts to mitigate impacts, Schmidt emphasized that the construction would disrupt the area through noise pollution and loss of green space, ultimately detracting from the neighborhood's character. He questioned the long-term viability of the proposed landscaping and asked that the proposal be denied.

Lindsey and Zack Matych, Woodbrook Street, opposed this development. Ms. Matych cited concerns over extensive tree removal, loss of privacy, and excessive density beyond the standards of both RA-1 zoning and the recommendations of the 2024 Master Plan. She said the plan fails to preserve natural vegetation, including landmark trees, and does not provide the deep buffering necessary to protect adjacent neighborhoods as outlined in the Master Plan. She argued that the project creates environmental, traffic, and drainage issues while compromising the privacy and well-being of neighboring residents. She stated that the proposal does not align with zoning ordinances, city objectives, or Master Plan goals, calling it aesthetically undesirable and detrimental to the character of the historic neighborhood.

Spencer Krauss, Westgate, expressed deep concern about the increased traffic hazards the proposed development may cause, particularly at the Westgate entrance which he already finds dangerous when turning left. As a parent, he emphasized the safety risks to his children, citing aggressive traffic conditions and the potential for accidents with the addition of the new development. Krauss urged the Commission to conduct thorough traffic studies to ensure the community's safety.

Amy Brooklyn Peterson, Westgate, emphasized the importance of preserving the natural tree line along 13 Mile Road and ensuring substantial and well-maintained landscaping. She raised concerns about wildlife preservation, overflow parking, and traffic management, noting the area's significance for local species and the challenges residents already face with traffic.

As no other public indicated they wished to speak, Chair Trafelet closed the public hearing and brought the matter back to the Planning Commission for discussion and/or a motion.

Commission discussion and action

In response to public comments, Commissioner Countegan clarified that the project had previously been qualified under the applicable Planned Unit Development criteria. The property in question is privately owned, and the owner has the right to develop it. The Commission's role is limited to regulating and overseeing development within the framework of the Zoning Ordinance and Master Plan.

MOTION by Brickner, support by Varga, that the Planning Commission recommend to City Council that Planned Unit Development Plan 2, 2024, including Site Plan 56-8-2024, both dated September 4, 2024, submitted by Steven Schafer, BE APPROVED, because the plans are consistent with the goals, objectives, and policies of the Master Plan and applicable provisions of the Planned Unit Development Option in Section 34-3.20 of the Zoning Ordinance, SUBJECT TO:

- **Modifications of Zoning Ordinance requirements as indicated on the proposed plan.**
- **Resolution of outstanding issues in the November 14, 2024 Giffels Webster review letter.**

Motion passed unanimously by voice vote.

The Chair declared a 5 minute recess at 8:34pm and reconvened the meeting at 8:39pm.

C. PUD PLAN 1, 2024, INCLUDING SITE PLAN 54-7-2024

LOCATION:	27815 and 28025 Middlebelt Road
PARCEL I.D.:	22-23-11-477-013, -014, and -109
PROPOSAL:	Construction of gasoline service station with drive-through restaurant within RC-2, Multiple-Family Residential District
ACTION REQUESTED:	Recommendation to City Council
APPLICANT:	SkilkenGold Real Estate Development
OWNER:	HRA Farmington Hills, LLC

Applicant Presentation

Alex Siwicki, 39300 W. 12 Mile Road, Sheetz, was present on behalf of this request for a positive recommendation to City Council of a Planned Unit Development in order to construct a gasoline station with drive-through restaurant at 27815 and 28025 Middlebelt Road. Mr. Siwicki provided the following information:

Project Overview:

- Proposed 6,139-square-foot Sheetz facility to include a restaurant, convenience store, and gas station on a 3.83-acre site.
- Site includes six fuel pumps (12 stations) and a convenience drive-through.

Actions/Improvements Made Following September 19 meeting:

Based on continued conversations with neighbors and staff reviews, the following modifications have been made since the September 19 meeting:

- Additional evergreen buffering to the west and north.
- Pedestrian access enhancements.
- Installation of a six-foot vinyl fence along western and northern property lines.
- Replacement of all sidewalks on 12 Mile and Middlebelt Roads.

Design Features:

- High-quality, four-sided architecture utilizing brick and stone.
- A decorative three-foot knee wall along Middlebelt and 12 Mile Roads.
- Increased open space and reduced impervious surfaces.
- Enhanced landscaping, including evergreen trees for buffering.

Compliance with Zoning and PUD Standards:

- The proposal meets all use standards for a convenience store, gasoline station, and drive-through restaurant.
 - Regarding the standard requiring separation of a drive-through restaurant from residential properties by a roadway, Sheetz believes that the intent of this standard—to ensure sufficient space between a drive-through and residential areas—is met. The plans demonstrate significant distance between the drive-through restaurant and nearby residential properties, providing ample space that could accommodate a roadway if necessary.
- Increased setbacks: Increases of 50% from Middlebelt, 38% from 12 Mile, 17% from the west, and 33% from the north (75' increase) compared to existing development.
- Parking spaces reduced by 63% (reduction of 75 spaces to 44 total spaces), with pavement area decreased by 19%, creating 16,000 square feet of additional green space over the existing site.

PUD Compliance Criteria:

- At its June 20th meeting, the Planning Commission determined that the plan meets PUD criteria and qualifies for a PUD. Additionally, the developer believes they meet 7 of the 8 objectives outlined under Section 34-3.20.2.E.i through viii, when only 1 is required.
- Offers community benefits such as enhanced buffering, landscaping, pedestrian access, and architectural standards exceeding traditional zoning requirements.

Community Benefits Highlighted:

- High quality four-sided architecture utilizing brick and stone.
- Preservation and addition of 16,000sf of green space.
- Improved site aesthetics with enhanced landscaping, reduced impervious areas, and a decorative knee wall.
- Replacement of deteriorating structures with a high-quality, state-of-the-art facility.
- Pedestrian and bike-friendly features, including bike racks and sidewalk improvements.

Company Overview:

- Sheetz, founded in 1952, is a family-owned and operated company with 760 stores nationwide, emphasizing quality, innovation, and community engagement. The company operates without franchises.
- The Sheetz model includes a full-service kitchen, a Sheetz Brothers Coffee Bar, and a variety of convenience items. The facility will feature 30 interior dining seats, outdoor seating, and free Wi-Fi, fostering a welcoming environment for customers to dine, work, or socialize.
- Drive-through orders are managed via intuitive touch-screen menus, eliminating noise and enhancing customer experience.

Economic and employment opportunities:

- The \$8.5 million project will bring 30-35 local full-time jobs to Farmington Hills with competitive benefits, including medical, dental, vision, paid time off, parental leave, and tuition reimbursement. Sheetz is recognized as one of Fortune's "100 Best Companies to

Work For" over the past decade and is ranked as the second-best retailer to work for in the U.S.

- The company engages in local philanthropy, including donations to schools, athletic programs, and community organizations.
- The project will utilize local contractors and engineering firms, increase tax assessments, and contribute to the area's property values.

Hours of Operation

The proposed Sheetz will operate as a 24-hour one-stop shop.

Planning Consultant Comments

Referencing the November 14, 2024 Giffels Webster memorandum, Planning Consultant Upfal provided the planner's review for this application for Planned Unit Development, in order to construct a Sheetz facility at 27815 and 28025 Middlebelt Road.

- The site is located at 12 Mile and Middlebelt Roads, formerly Ginopolis restaurant. Current structures include a commercial building and a residential house.
- Surrounding uses include single-family residential (north and east), offices (east), and a gas station (east).
- The PUD was qualified at the June 20 meeting. In its motion, the Planning Commission found the proposal met 4 of the 8 objectives outlined under Section 34-3.20.2.E.i through viii; only 1 is necessary.
- Proposal includes:
 - 12 fueling positions and six pumps.
 - A 24-hour convenience store with carry-out food service, drive-through, and outdoor dining.
 - 44 parking spaces (required: 38).

Key Planning Considerations:

Future Land Use and Zoning:

- Future land use map designates the corner parcel as commercial and the rear portion as multiple-family residential.
- The Master Plan acknowledges the growing demand for drive-through facilities. However, drive-throughs are not conducive to pedestrian movement, as they are designed to move people through a site without leaving their cars. The Planning Commission should carefully evaluate this aspect when considering approval.
- PUD allows for uses not typically permitted in RC-2 zoning, requiring Planning Commission discretion regarding compliance with commercial district standards.
- Dimensional and Site Standards:
 - The reviewed use standards were based on commercial district requirements, not RC-2 zoning. All dimensional standards are met, exceeding setback requirements and providing pedestrian access. The project reduces impervious surfaces compared to current conditions but includes departures from ordinance standards, including:
 - Excessive maneuvering lane width (35 feet; required: 20 feet).
 - Lack of a required bypass lane for the drive-through.
 - Dumpster enclosure is proposed in the street side yard, which is inconsistent with zoning requirements.
- Parking and Loading:

- 44 parking spaces provided; 38 required.
- Loading space proposed in the interior side yard, facing apartments, which deviates from the preferred rear yard location.
- Parking of motor vehicles and storage throughout the site is prohibited, except during non-operating hours for truck loading.
- Signage Standards:
 - Deviations from RC-2 zoning signage requirements include:
 - Exceeding wall sign allowance of 25 square feet with two signs (16.52 sq. ft. each) and one (21.47 sq. ft.). Applicant indicated intent to remove the third sign, pending clarification.
 - Canopy-mounted signs exceed allowable dimensions and height.
- Landscaping and Buffering:
 - Landscaping standards are largely met.
 - Screening requirements for residential adjacency require Planning Commission review for a possible waiver.
- Lighting Standards:
 - Several deviations noted, including:
 - Pole height: Proposed 23 feet exceeds the 15-foot limit for RC-2 but complies with commercial standards (30 feet).
 - Canopy lighting tilt: Angled 5% outward, which is non-compliant with flush-mount standards.
 - Illumination levels: Exceeds allowable limits, particularly at doorways and paved areas. Doorway illumination is 3,111 lumens per door, vs. 2,000 lumens permitted in commercial districts and 1,000 lumens in residential.
 - Total lumens: 628,227 lumens far exceed the RC-2 maximum of 74,943.75 lumens, and the commercial standard of 149,887.5 lumens.
 - Consultant Upfal recommended reducing color temperature to below 3,500 K to minimize disruption to sleep cycles.
- Tree Replacement:
 - One additional tree is required to meet replacement standards.

Conclusion and Recommendations:

There are numerous deviations requested for signage, lighting, parking, and loading, as detailed in the staff report, along with items needing additional Planning Commission consideration (pages 11-12 of the review). The Planning Commission is encouraged to evaluate these deviations, particularly those related to lighting, dumpster placement, and impervious surfaces, as part of the PUD approval process, and in the context of the PUD objectives and overall community benefit.

Commission questions

In response to questions, Mr. Siwicki provided the following further information and assurances:

- The proposed 6' vinyl wall will be along the entirety of the western and northern property lines in lieu of the required 6' masonry wall. A masonry wall would require substantial footers that would damage the root system of existing mature trees.
- Mr. Siwicki agreed to keep light poles to the residential standard of 15' high, although more light poles will be needed as a result.

- There will be no light shed onto the neighbor's properties except for the driveways, and that will be minimal.
- Mr. Siwicki said they would shield the lights per ordinance, and could adhere to the commercial standard of 149,887.5 lumens
- Sheetz will add a bypass lane to the drive-through.
- Sheetz was willing to convert the 5 spaces by the ordering area to landbanked parking, reducing the parking spaces from 44 to 39, which was only one space more than the allowed 38 spaces.
- While the dumpster location as proposed in the street side yard along 12 Mile Road represents a deviation from ordinance standards, the alternative location on the other side of the exit of the drive-through lane would put the dumpster closer to the residential neighbors.
- In response to a question regarding the compatibility of the 24-hour operation with the surrounding residential uses, Mr. Siwicki said that the continuous operation was non-negotiable. However, the effect of the 24-hour operation was mitigated by the additional fencing and landscaping.

Public Hearing

Chair Trafelet opened the meeting for public comment.

PG, Farmington Hills resident, opposed the Sheetz proposal, highlighting concerns about the company's recent federal fines for discriminatory hiring practices. The site, formerly home to a historic restaurant, would be better suited for a fine dining establishment or coffee bar instead of a gas station.

Dennis Layton (phonetic), Farmington Hills resident, opposed the Sheetz proposal. He cited an oversaturation of gas stations in the area and noted the lack of successful 24-hour food establishments, both locally and in surrounding cities, as evidence that such operations are unsustainable. He raised concerns about potential late-night safety issues.

Sam Dorchin (phonetic), Farmington Hills resident directly behind the proposed development, opposed the requested PUD. He highlighted the presence of two struggling gas stations nearby, the area's quiet and viable character, and his professional perspective as an architect that the proposed facility is incompatible with the neighborhood.

Dion DeGennaro, New Castle Road, represented his mother who resides across the street from the proposed development. They opposed the project as incompatible with the surrounding residential neighborhoods, noncompliant with several zoning requirements, with lighting levels that far exceed residential and business standards. He questioned the developer's claim of green space preservation as a community benefit, noting the space would remain regardless of the project.

Ken Polk, Farmington Hills resident, said he was a retired lieutenant medic with 40 years of experience in a neighboring metropolitan fire department. He opposed the project, citing safety concerns related to 24-hour operations. Based on his professional experience, 24 hour operations increase impaired driving incidents, injuries, and fatalities.

Faye Nemer, representing the Middle East and North African (MENA) Chamber of Commerce, spoke in opposition to the proposed Sheetz development, emphasizing its negative impact on small, locally owned businesses in the area. She described the proposed 3.3-acre site as more akin to a truck stop that does not fit the character of the community. Nemer cited a local survey conducted among 1,990 residents aged 21 and older, which revealed that 77% of respondents from the directly impacted zip code (48334) oppose the development. Nemer challenged Sheetz's claims of job creation and economic benefit, arguing that the development would cannibalize revenue from local businesses and reallocate, rather than create, jobs. She also noted that Sheetz sources products and fuel from out of state, further draining the local economy. She criticized the notion of Sheetz as a family-based business, pointing to its status as a \$7.5 billion corporate entity. Nemer urged the Planning Commission to reject the proposal, a decision that would be in alignment with community sentiment and local economic priorities.

Michael Madigan, Farmington Hills resident, opposed the Sheetz proposal, referencing the company's testimony to Congress about the safety risks of 24/7 operations, including increased shoplifting, robberies, and violent crimes. He contrasted the proposed residential-adjacent site with other Sheetz locations in commercial or rural areas, emphasizing this proposal's incompatibility with the surrounding residential community.

Amy Brooklyn Peterson, Farmington Hills resident, opposed the Sheetz proposal, emphasizing that the area already has seven gas stations within a one-mile radius. She urged the Planning Commission to prioritize the desires of residents over corporate interests and questioned the use of commercial zoning standards for a proposal in a predominantly residential area. Peterson also warned that the project could encourage loitering late at night, further detracting from the neighborhood's character.

Brian Ventura, Farmington Hills resident (WoodCreek) and professional engineer, opposed the Sheetz proposal, citing the numerous ordinance deviations, particularly regarding lighting, and emphasizing the negative impact on the surrounding residential area. He highlighted the incompatibility of a 24/7 operation with the quiet, peaceful nature of the neighborhood and raised concerns about increased crime, noise, and light pollution.

Kathleen Hayes Parvin, Farmington Hills resident, opposed the Sheetz development, as a 24/7 operation is incompatible with the neighborhood. Additional gas stations and fast food options are unnecessary. Ms. Parvin urged the Planning Commission to prioritize the voices of residents and stated that Sheetz is not suitable for the community.

Tim Parvin, Farmington Hills resident, opposed the Sheetz development, drawing parallels to a 1990s decision where a big-box store was denied due to traffic and neighborhood concerns, resulting in a more compatible use of the land. He pointed out that the area already has ample gas stations and questioned the need for another station given societal shifts away from fossil fuels. The project is incompatible with the neighborhood and would negatively impact the community.

Margaret Keyes Howard, Farmington Hills resident (Sylvan Circle), opposed the Sheetz development. She emphasized the neighborhood's support for small businesses and its character as a family- and pedestrian-friendly community. She expressed concerns about the safety of children and families who frequently walk the area, particularly near school bus stops, and criticized the lack of aesthetic appeal and cleanliness of Sheetz locations she had recently visited in Maryland.

Marilyn Joseph, Farmington Hills resident, opposed the proposed development. She cited Sheetz's acknowledgment of increased shoplifting, armed robberies, and violent crimes associated with its 24-hour operations. She also referenced citations from the U.S. Environmental Protection Agency for fuel storage violations and a lawsuit from the U.S. Equal Employment Opportunity Commission for discriminatory hiring practices.

Joe Noune, Farmington Hills resident (Berrywood Lane), opposed the Sheets development. He expressed concerns about the potential sale of alcohol at the proposed Sheetz convenience store and the likelihood of increased crime as affirmed by police officers he consulted. He emphasized the importance of a secure barrier between the development and the neighboring condominiums.

Robert Dall (phonetic), Farmington Hills resident, opposed the proposed Sheetz development. He had driven to Romulus to see the Sheetz facility there, and he described it as more suited to an interstate location than a residential neighborhood. He noted the oversaturation of gas stations within a mile of the site, counting eight existing locations.

Sheila Schoenberg, Farmington Hills resident (Berrywood Lane), opposed the Sheetz development, stating it would disrupt the quiet, residential nature of the neighborhood, particularly for its many elderly residents. The project would negatively impact the community's aesthetics and quality of life, citing concerns about excessive lighting and unattractiveness.

Shane Stephan, Farmington Hills resident (Beachwood Hills Condominiums), opposed the Sheetz development, citing concerns about increased crime, noise, and excessive lighting, which he described as making the area resemble an airport. He criticized the company's poor maintenance record, referencing online reviews showing overflowing trash at their locations.

Joan Gebhardt, Farmington Hills resident (Pine Knolls Condominiums), expressed concerns about the financial stability of Sheetz. She highlighted the risks of failure associated with newly installed gas stations, noting that if Sheetz were to fail, the site could face long-term abandonment due to the need for environmental remediation.

Mike Yandora, Farmington Hills resident (Moran Street), supported the Sheetz development. He cited past positive experiences with Sheetz during his travels. The property in question has been vacant for five years without any other offers or plans for development. He dismissed impervious surface issues as irrelevant due to the area's clay soil conditions and defended Sheetz against allegations of discriminatory hiring.

Steve Bridges, Farmington Hills resident, supported the Sheetz development, viewing the redevelopment of the long-vacant Ginopolis site as an opportunity to address urban decay. Bridges emphasized the value Sheetz would bring to the community, including 24-hour services, taxable revenue, good-paying jobs, and the revitalization of an unused site.

Johnene Koganti, Farmington Hills resident (WoodCreek Subdivision), voiced concerns about the increased traffic and safety risks associated with the Sheetz proposal, particularly when there are three nearby schools that require parents to drive children to school. She questioned the assertion that the development would only capture existing traffic, suggesting it could become a destination and exacerbate existing congestion. She echoed neighbors' concerns about excessive lighting, crime, and overall neighborhood impact.

Keith Henry Jr., President of the Orion Court Homeowners Association, spoke in opposition to the proposed Sheetz development, citing concerns about its impact on safety, environmental sustainability, and property values in nearby neighborhoods. The primary goals of HOA presidents include ensuring the safety of residents and visitors, protecting property, enhancing property values, and maintaining community privacy. Highlighting the effort invested in sustaining property values above \$500,000, he expressed strong opposition to the proposed development.

George Senawi, Farmington Hills resident (Orion Court), opposed the Sheetz development, citing potential safety risks for children in the neighborhood, including increased traffic and the likelihood of people congregating in the gas station parking lot. The project would bring heavy truck traffic, and he questioned the lack of detailed plans for traffic and site design. He urged the Commission to consider the project's impact on the peaceful, safe environment that has characterized the community.

Joseph Wade, President of the Timbercrest Condominium Association representing 165 homeowners, opposed the proposed Sheetz facility at 12 Mile and Middlebelt. He emphasized the development's large size, potential for increased traffic accidents, and negative impact on property values. Mr. Wade urged the Commission to consider more beneficial uses for the site that align with the area's norms and values.

Richard Olenzek, Farmington Hills resident (Holly Hill Farms), raised concerns about increased traffic and safety issues associated with the proposed Sheetz development. He highlighted the company's business model, which uses billboard advertising to attract travelers seeking low-cost fuel, 24-hour food, and other conveniences, potentially drawing additional traffic from already accident-prone exits such as Orchard Lake and 12 Mile.

Laura Gee (phonetic), Farmington Hills resident (Berrywood Lane) asked several clarifying questions regarding the property and the process being followed tonight. She raised concerns about the potential impact of the Sheetz development on property values, increased traffic congestion, and the compatibility of the project with the character of the surrounding community.

Jonathan Hommes, Farmington Hills resident (WoodCreek), voiced opposition to the proposed Sheetz development, citing concerns about its 24-hour operation and lighting levels, which he described as inconsistent with the character of the area. He questioned the necessity of another gas station in this area, warning it could lead to the closure of existing stations and create long-term environmental challenges related to buried fuel tanks and site remediation.

Joan Williams, Farmington Hills resident (Timbercrest), opposed the proposed Sheetz development, emphasizing that it is not a good fit for the Farmington Hills community. She referenced past issues with 24-hour operations, such as a former 7-Eleven, and highlighted concerns about the disruption to the neighborhood's quiet character.

Syed Razvi, Farmington Hills resident (Orion Court), opposed the proposed Sheetz facility, citing concerns about the impact on neighborhood safety. He addressed increased traffic, noise and light pollution, crime risks associated with a 24-hour operation, and the potential for local gas stations to be abandoned if unable to compete.

Hank Murawski, Farmington Hills resident (Village Lane), urged the Commission to deny the proposed Sheetz PUD, emphasizing that the development would disrupt the area's current character. He highlighted the stark contrast between the quiet, unlit nature of the 12 Mile and Middlebelt area and the proposed 24-hour, highly illuminated gas station and food complex. Mr. Murawski supported the community's concerns, noting the inevitability of traffic, crime, and other issues, and reinforced the validity of the objections raised by other residents.

Seeing that no other public indicated they wished to speak, Chair Trafelet closed the public hearing.

Applicant response

Mr. Siwicki addressed concerns raised by residents and provided the following key points:

Safety Measures:

- Sheetz locations prioritize safety with advanced security procedures and systems, creating spaces for activities like custody exchanges and online marketplace deals.
- Sheetz has built a reputation for safety over its 70-year history.

Environmental Protections:

- Nearly 100% compliance rate with EPA standards, exceeding inspection requirements with state-of-the-art systems and third party inspections at 4X the rate than required.
- Dedicated environmental protection teams ensure rigorous standards are met.

Traffic Impact:

- Convenience stores primarily serve existing traffic rather than generating additional traffic, as supported by traffic studies. Convenience stores are not a destination.
- The proposed site does not cater to semi-truck traffic and is not designed as a truck stop. The lot is not big enough for a semi-truck to park or maneuver comfortably. It would take 30 minutes for a semi to fuel up at the pump.

Market Competition:

- Sheetz introduces competition in the convenience industry, providing diverse offerings beyond fuel, such as made-to-order food and grocery items.

- Mr. Sawicki downplayed concerns about potential closures of existing gas stations, citing Sheetz's history of coexistence with competitors in other markets.

Light, Noise, Site Enhancements and Community Benefits:

- Significant improvements include increased green space, enhanced landscaping, buffer zones, pedestrian access, and new construction investments, all of which will reduce the effect of light and noise on the surrounding neighborhoods.
- The proposed PUD provides benefits such as architectural standards and noise mitigation that exceed traditional rezoning options.

Commission Discussion

Signage and Billboards:

- Commissioner Countegan inquired about the potential use of billboards to direct traffic to the site. Could a PUD agreement limit billboard signage off site? Would the applicant agree to this limitation?
- Mr. Siwicki indicated that off-site signage is not part of Sheetz's business strategy but deferred to the Sheetz marketing department.
- Applicant Attorney Pat Lennon, Honigman LLP, expressed surprise at the billboard question, noting uncertainty about the Planning Commission's authority to impose such restrictions. That said, Mr. Lennon indicated a willingness to discuss the matter prior to City Council review.
- City Attorney Schultz clarified that the inquiry was intended as a negotiation point and not a directive.

Zoning history of site

The site was zoned B-2 during the time Ginopolis was open. After the restaurant closed, the property was rezoned to RC-2 to accommodate a proposed senior apartment project, which did not move forward. If the property were rezoned back to B-2, a drive-through use would not be permitted. The current proposal is a request for a Planned Unit Development, which allows flexibility for property development. The proposed use mirrors what is on the other corners of the intersection, and the PUD, with City approval, could allow a drive-through use.

Master Plan Considerations:

The City's Master Plan designates the site for future commercial, with a small portion of the northerly portion within the multifamily category. The proposal aligns with the Master Plan's commercial designation part of the site.

Alcohol Sales:

Mr. Siwicki confirmed they would sell packaged alcohol for off-premises consumption only, subject to state licensing.

Traffic Study:

A traffic study has been completed and provided to the City.

Competition Concerns:

The Commission noted that one of the gas station owners at 12 Mile and Middlebelt owns multiple stations in the area, providing context regarding the competitive landscape.

Environmental and Design Considerations:

- The B2 zoning previously in place would not have permitted a drive-through use.
- The proposed PUD provides for enhanced design elements, including increased green space and buffers, which were discussed earlier in the meeting.

Commissioner Countegan said that he would make a recommending motion to City Council. All Planned Unit Developments and their formal agreements between developer and the City, are ultimately decided at the Council level.

In the current instance, key considerations included:

- **History of the Site:** The site was previously used commercially and designated for future commercial use in the Master Plan.
- **Redevelopment Benefits:** The proposal offers redevelopment of a long-vacant, declining property, with increased green space and reduced parking.
- **Compatibility:** Similar uses exist at nearby intersections.
- **Lighting Plan:** The motion will require that the project must meet commercial zoning lumen standards, with no spillover illumination on neighboring properties. The applicant is to work with staff to optimize 15' lighting pole height and placement to minimize impacts.
- **Vinyl Fencing:** The vinyl fence at the required height is preferred over a wall to preserve natural features and minimize tree disturbance.
- **Parking Spaces:** Five parking spaces are to be land banked as green space until needed.
- **Bypass Lane:** The project will include the required bypass lane for the drive-through. The bypass lane is an ordinance requirement as well as an engineering standard.

After discussion and amendment, the following motion was offered:

MOTION by Countegan, support by Varga, to RECOMMEND TO CITY COUNCIL that Planned Unit Development Plan 1, 2024, including Site Plan 54-7-2024, both dated July 17, 2024, submitted by SkilkenGold Real Estate Development, BE APPROVED, because the plans are consistent with the goals, objectives, and policies of the Master Plan and applicable provisions of the Planned Unit Development Option in Section 34-3.20 of the Zoning Ordinance, SUBJECT TO:

- **All outstanding issues in the Giffels Webster review letter be resolved.**
- **All engineering standards be met relative to the development of the plans.**
- **Five parking spaces close to the drive-through pick-up location as discussed this evening be landbanked.**
- **Applicant to work with staff to determine the number of 15-foot poles that will sufficiently provide the lighting requirements for the site, to minimize the lighting effect on surrounding properties.**
- **Lighting lumens to meet the commercial lighting standard of 149,887.5 lumens total, and 2,000 lumens at doorways.**
- **Bypass lane be provided for the drive-through restaurant, per ordinance standard.**

And with the following finding:

- **The vinyl fencing as shown on the plans this evening at the required height is acceptable, and therefore the requirement for a masonry wall is waived.**

Motion discussion:

Chair Trafelet opposed the motion, citing incompatibility with the surrounding residential area due to the 24-hour operation. The Planning Consultant’s review letter specifically mentioned that the 24-hour operation could be a consideration at this location.

Roll call vote:

Ayes – Countegan, Aspinall, Varga, Brickner

Nay – Trafelet

Motion passed 4-1.

The Chair called a break at 10:53pm and reconvened the meeting at 11:08pm.

REGULAR MEETING

A. LOT SPLIT 5, 2024 (FINAL) (PUD 5, 1993)

LOCATION:	Southeast intersection of Twelve Mile Road and Investment Drive
PARCEL I.D.:	22-23-17-201-014
PROPOSAL:	Split one (1) parcel into two (2) parcels within OS-4, Office Research District
ACTION REQUESTED:	Lot Split approval (final)
APPLICANTS:	Farmington Hills VI Corporate Investors, L.L.C., and Farmington Hills VII Corporate Investors, L.L.C.
OWNERS:	Farmington Hills VI Corporate Investors, L.L.C., and Farmington Hills VII Corporate Investors, L.L.C.

Chair Trafelet introduced this item, noting that the next agenda item was tied to this one.

Applicant presentation

Chris Kojaian, Kojaian Companies, was present on behalf of this application for lot split approval. Mr. Kojaian provided the following information:

- The lot split will create a new parcel to facilitate the development of a daycare facility as an amenity for the Farmington Hills Corporate Campus.
- This facility is expected to benefit both the community and the corporate tenants, such as Motorola, Allstate, and Comerica.

City Planner comments

City Planner Perdonik gave the following background to this request:

- The requested lot split complies with all applicable zoning ordinances and requires no waivers or variances.
- The lot split mirrors a previous Planning Commission approved lot split for the same site, originally intended for a restaurant/retail development.
- While the intended use has changed, the lot split itself remains unchanged from the prior approval.

MOTION by Aspinall, support by Varga, that Lot Split 5, 2024 (Final), dated October 18, 2024, submitted by Farmington Hills VI Corporate Investors, LLC, and Farmington Hills VII Corporate Investors, LLC, BE APPROVED, because it appears to meet the applicable provisions of Chapter 34, "Zoning," and Chapter 27, "Subdivision of Land," of the City Code and will result in land parcels generally compatible with surrounding parcels in the vicinity; and that the City Assessor be so notified.

Motion passed unanimously by voice vote

B. SITE PLAN 60-10-2024 (PUD 5, 1993)

LOCATION: Southeast intersection of Twelve Mile Road and Investment Drive
PARCEL I.D.: 22-23-17-201-014
PROPOSAL: Construction of day care center within OS-4, Office Research District
ACTION REQUESTED: Site Plan approval
APPLICANT: Cunningham Limp
OWNER: Farmington Hills VI Corporate Investors, LLC

Planning Consultant Comments

Referencing the November 14, 2024 Giffels Webster memorandum, Planning Consultant Tangari gave the background and review for this request for site plan approval at the southeast intersection of Twelve Mile Road and Investment Drive (PUD 5, 1993).

- This request does not require a PUD amendment as the existing agreement for PUD 5, 1993 permits childcare uses.
- The applicant is proposing a childcare center within the larger, office-focused PUD. The development consists of one 10,000-square-foot building.
- The site plan complies with all dimensional standards. However, the dumpster is located in a front yard; this is not permitted under the ordinance.

Applicant Presentation

Chris Kojaian, Kojaian Companies, was present on behalf of this application for site plan approval. Mr. Kojaian provided the following information:

- The proposed childcare center, operated by The Learning Experience, will serve children aged six weeks to six years and focus on both childcare and education.
- Regarding the dumpster, they proposed reducing the number of dumpsters to one and relocating it at a 45-degree angle behind the setback line to comply with zoning requirements.

MOTION by Varga, support by Aspinall, that Site Plan 60-10-2024, dated October 18, 2024, submitted by Cunningham Limp, BE APPROVED, because it appears to meet all applicable requirements of the Zoning Chapter, SUBJECT TO addressing each of the outstanding items identified in Giffels Webster's review.

Motion passed unanimously by voice vote.

C. SITE PLAN 55-8-2024

LOCATION: 29707 Ten Mile Road and 29580 Moran Street
PARCEL I.D.: 22-23-26-226-003, -008, and -009
PROPOSAL: Building addition to existing church within RA-1, One Family Residential District, and RA-3, One Family Residential District
ACTION REQUESTED: Site Plan approval
APPLICANT: Hisham Turk, Turk Architects
OWNER: Tawheed Center, Osman Habib (President)

Planning Consultant comments

Referencing the November 14, 2024 Giffels Webster memorandum, Planning Consultant Upfal highlighted the following points:

- The applicant is proposing a 38,000sf addition to an existing 33,800sf mosque (the Tawheed Center) to include additional lobby area and a gymnasium with second story mezzanine. In addition, they will be converting existing space into a 224-seat auditorium/conference center. The expansion includes two additional parcels of land, and when combined this will result in the creation of a through-lot with frontage on both W. Ten Mile (between Middlebelt and Creekside Dr) and Moran St.
- In addition to the building modifications, the plans propose modifications to parking and circulation, including the addition of new parking facilities. An existing single-family home will be demolished to accommodate the proposed expansion.

Summary of Items to be addressed by the Planning Commission:

1. The plans do not show the required wall or berm. An existing wood privacy fence exists, but zoning regulations require a wall or berm around places of worship. The applicant requested a waiver to extend the existing wood fence instead of constructing a wall.
2. The average:minimum illumination calculation for parking lot lighting is 8.65:1, which exceeds the requirement of 4:1. Planning Commission may grant a waiver from this requirement when deemed necessary and appropriate for public safety.

Summary of Items to be addressed administratively:

1. The height of the existing building, which is located in the RA-3 district, is nonconforming. A small portion of the addition occurs in the RA-3 district, which would expand this nonconformity; the portion in the RA-1 district is a maximum height of 28.75 feet and is compliant. *The applicant may only proceed with a variance or modification to the design.*
2. There are existing trees that appear to be within the corner clearance triangle at the driveway. These shall be identified and a note shall be added stating that all trees within the corner clearance triangle will be trimmed up to a height of 6' or more.
3. Deciduous trees do not meet the size requirements for large deciduous trees. Spacing information is not provided, and height is not provided for shrubs.
4. None of the trees are proposed at a large enough size to meet the requirements for large deciduous trees, but large deciduous trees are required to meet the canopy tree requirement.

Planning Commission discussion

- Regarding the non-conforming height, City Planner Perdonik clarified that the building's

nonconformance is not attributed to zoning changes but may have resulted from past oversight. To proceed, the Planning Commission must deny the application, allowing the applicant standing to seek a variance from the ZBA.

- Regarding the fence/waiver discussion, Commissioner Countegan noted past approvals where the fence was deemed acceptable.

The Commission discussed the height request. The Planning Commission has sometimes approved a site plan conditioned upon a variance being granted, saving the applicant from having to return to the Commission if they are able to receive ZBA approval. There appeared to be consensus to follow this pattern for this request.

In response to questions, Hisham Turk, Turk Architects, explained that they wanted to extend the current wood fence.

After discussion and amendment, the following motion was offered:

MOTION by Countegan, support by Bruckner, that Site Plan 55-8-2024, dated October 14, 2024, submitted by Hisham Turk, Turk Architects, BE APPROVED, because it appears to meet all applicable requirements of the Zoning Chapter, SUBJECT TO:

- **Resolution of outstanding items in the November 14, 2024 Giffels Webster review.**
- **Project must receive a height variance from the Zoning Board of Appeals or modify the design so the height variance is not necessary.**

With the following finding:

- **The Planning Commission waives the wall requirement so that the applicant can extend the wooden fence as shown on the plans.**

Motion passed unanimously by voice vote.

D. AMEND PUD PLAN 2, 2021, INCLUDING REVISED SITE PLAN 59-5-2022

LOCATION: 27400 Twelve Mile Road
PARCEL I.D.: 22-23-12-476-008
PROPOSAL: Construction of site-built one-family detached dwelling units within RA-1B, One Family Residential District
ACTION REQUESTED: Schedule for Public Hearing
APPLICANT: Robertson Brothers Homes
OWNER: Evangelical Homes of Michigan

Planning Consultant comments

Referencing the November 13, 2024 Giffels Webster memorandum, Planning Consultant Tangari highlighted the following:

- The applicant proposes to amend the PUD to remove the 100-bed skilled nursing facility that was part of the original approval and instead now proposes a fully residential project with 75 detached ranch homes. The chapel that was to be preserved in the approved PUD plan will still be preserved in this new plan and will be part of a common park area in the center of the development.

- This is a major amendment to the PUD, and the Planning Commission will set a public hearing on the amendment and make a recommendation to Council.
- The review memorandum provides site plan review which will be more thoroughly presented at the public hearing.

Requested deviations include:

- a. Permit detached single-family at requested density of 75 units.
- b. Permit reduced exterior side setback along Cheswick (30 feet).
- c. Permit no installation of western buffer plantings.
- d. 111-foot lot width for splits where 140 feet is required.

City Planner Perdonik added the following:

- Per the Fire Department, the turning radius of the spur drive does not meet the 50-foot requirement.
- The front yard of unit 68 faces the side of the unit next door.
- Why are there sidewalks on only one side of the street?
- In order to minimize curb cuts along 12 Mile Road, the Engineering Division has suggested the possibility of a shared access drive for the 4 lots located on 12 Mile.

Applicant Presentation

Tim Loughrin, Robert Brothers Homes, provided the following information:

- Regarding the request for no installation of western buffer plantings, the existing natural buffer on the west side is sufficient and the applicant is requesting to reallocate those plantings to Inkster Road. A letter of support from the adjacent HOA was provided. Robertson Brothers has also offered to replace 10 trees on public land along Cheswick.
- The home lots exceed ordinance area requirements, even though at 111 feet wide they do not meet lot width requirements.
- They will work with engineering and the Fire Department regarding the turning radius. They believe they meet the 50-foot requirement, but if necessary they can reduce the island by Cheswick and Inkster to make sure the 50 feet are provided.
- Additional landscaping will be added to Unit 68.

Other issues:

- Robertson Brothers will work with Engineering regarding the request for gravity sewer systems; the applicant prefers low-pressure systems for those 4 properties, especially noting the new lift station that is being installed on the property.
- Regarding lot access on 12 Mile Road, Robertson Brothers prefers individual curb cuts for the four lots but expressed willingness to impose turnarounds or shared access as required.
- Regarding the chapel renovation, the chapel will be converted into a residential-style community building. Planned modifications include removing the glass entryway and updating the building's design to integrate with the neighborhood. The applicant has been before the Historic District Commission regarding this change.
- Robertson Brothers intends to apply for Brownfield funding to address asbestos removal and environmental remediation.

MOTION by Brickner, support by Countegan, that the proposed Amendment to PUD Plan 2, 2021, including revised site plan 59-5-2022, submitted by Robertson Brothers Homes, be set for public hearing for the Planning Commission's next available regular meeting agenda.

Motion passed unanimously by voice vote.

APPROVAL OF MINUTES

Approval of October 17, 2024 Regular Meeting

MOTION by Brickner, support by Aspinall, to approve the October 17 2024 Regular Planning Commission meeting minutes as submitted.

Motion passed unanimously by voice vote.

PUBLIC COMMENT

None

COMMISSIONER/STAFF COMMENTS

None

ADJOURNMENT

Motion by Aspinall, support by Varga, to adjourn the meeting.

Motion passed unanimously by voice vote.

The meeting was adjourned at 11:47pm.

Respectfully submitted,
Kristen Aspinall,
Planning Commission Secretary

/cem