

**WHITE LAKE TOWNSHIP
INTER-OFFICE MEMORANDUM
COMMUNITY DEVELOPMENT DEPARTMENT**

DATE: December 9, 2025

TO: Rik Kowall, Supervisor
Township Board of Trustees

FROM: Sean O'Neil, AICP
Community Development Director

**SUBJECT: Jax Car Wash
Preliminary site plan approval**
The property is described as parcel number 12-20-276-034, located on the northwest corner of Highland Road (M-59) and Bogie Lake Road, consisting of approximately 1.88 acres, currently zoned (PB) Planned Business District.

The above request is now ready for Township Board Consideration. The Planning Commission considered the matter at their regular meeting on December 4, 2025, when the **Planning Commission recommended approval** of the preliminary site plan. The request is now ready to be considered by the Township Board.

Please find enclosed the following related documents:

- ☐ Draft minutes from the Planning Commission meeting held on December 4, 2025.
- ☐ Review letter prepared by the Township Engineer, Michael Leuffgen, dated October 30, 2025
- ☐ Review letter prepared by the Township Planning Consultant, Matteo Passalacqua, dated October 29, 2025
- ☐ Review letter prepared by the Township Fire Marshal, dated October 22, 2025.
- ☐ Preliminary site plans and elevations, provided by the applicant.
- ☐ Public hearing notice.

Please place this matter on the next available Township Board agenda. Do not hesitate to contact me should you require additional information.

**WHITE LAKE TOWNSHIP
PLANNING COMMISSION
DECEMBER 4, 2025**

CALL TO ORDER

Chairperson Carlock called the meeting to order at 6:30 P.M. She then led the Pledge of Allegiance.

ROLL CALL

Present:

Pete Meagher
Scott Ruggles, Township Board Liaison
T. Joseph Seward
Debby Dehart
Merrie Carlock, Chairperson

Absent:

Mona Sevic
Robert Seeley, Vice Chair

Others:

Sean O'Neil, Community Development Director
Matteo Passalacqua, Carlisle Wortman
Kristin Kolb, Township Attorney
Hannah Kennedy-Galley, Recording Secretary

APPROVAL OF AGENDA

It was **MOVED** by Member Seward, seconded by Member Dehart to approve the agenda as presented. The motion carried with a voice vote: (5 yes votes).

APPROVAL OF MINUTES

A. September 18, 2025

It was **MOVED** by Member Meagher, seconded by Member Seward to approve the minutes as presented. The motion carried with a voice vote: (5 yes votes).

CALL TO THE PUBLIC (FOR ITEMS NOT ON THE AGENDA)

None.

PUBLIC HEARING

A. Edendale Crossing

Property Northwest corner of Bogie Lake Road and Cedar Island Road. Identified as parcel IDs: 12-29-476-016 through 12-29-476-024 (nine adjacent parcels total) Consisting of approximately 45.7 acres. Currently zoned R1-A (Single Family Residential) and AG (Agricultural).

Requests:

1) **Preliminary site plan approval recommendation**

2) Rezoning approval recommendation (R1-A & AG to PD (Planned Development)).

Applicant: PH Communities, LLC

Director O'Neil briefly reviewed the process for tonight's request regarding how it is processed by the Township. The Public Hearing is for the rezoning, which runs concurrently with the site plan approval process.

Mr. Passalacqua reviewed his letter.

Mr. Leuffgen reviewed the highlights of interest from his review letter.

Member Meagher asked Mr. Leuffgen about the extension of the water main on the western side of the property. Mr. Leuffgen said it is due to the ordinance's to be able to provide water connection for future use.

Jim Eppink, J Eppink Partners, spoke on behalf of the applicant. There are nine adjacent lots that would be combined into one parcel. He added that the Master Plan for the sites is designated as Neighborhood Residential. Preservation of trees and natural features are a point of concern. The sanitary sewer will be extended more than a mile from the southeast corner of the site. There will be a sidewalk pathway that will connect the development to the school complex. He added that multifamily would not be supported on the site, therefore all the lots will be single family products. He said the RCOC required a left-hand turn lane into the entrance of Bogie Lake, and to be extended north and south so the entire stretch of Bogie Lake Road becomes safer. Cedar Island will be paved past the project's entrance.

Meagher stated the absence of a greenbelt on the west boundary does not help screen the IT Corridor. Mr. Eppink stated that the ITC Corridor is 240' wide, and the homes that are adjacent to it would most likely not be buffered, even with dense plantings. Those lots will be extended with better landscaping.

Member Seward asked Mr. Eppink why the driveway is not going to be aligned with Mayfield Dr. Mr. Eppink said it was due to the water main loop, and the costs of the improvements to Cedar Island, the sewer, and the sidewalk extension. It would not make sense financially. The RCOC also may be installing a round-about at Cedar Island Road and Bogie Lake Road in the future.

Member Seward asked Mr. Eppink why the water isn't extended to the western edge of the site. Mr. Eppink said the sites to the west are newer and operating well.

Member Seward asked Mr. Eppink why the lots are not acre lots along Bogie Lake Road. Mr. Eppink said other than two lots on Bogie Lake Road, the majority on the frontage are 240' from the road and heavily landscaped.

Chairperson Carlock asked Director O'Neil if there required amount of park space in a Planned Development. Director O'Neil said around 20%.

Chairperson Carlock asked Mr. Eppink if the park would be maintained by the HOA. Mr. Eppink confirmed.

Chairperson Carlock opened the public hearing at 7:55 P.M.

Rob Paociotti, 6289 Caya Way, opposed the density proposed at the applicant's request. He also presented a petition with over 100 signatures opposing the project.

Gene Kula, 1203 Cedar Meadows Dr, opposed the applicant's request, stating it was not in line with the Master Plan's use for the area.

Alan Cartwright, 1225 Elliot Court North, shared concerns about traffic safety in the area. He added the left-hand turn lane does not suffice the issue of cars turning onto Cedar Island. He stated the utility and sidewalk extensions are not a community benefit and would be required anyway for development with the same proposed density.

Mary Earley, 5925 Pine Ridge Court, stated her opposition to the project, and stated the plan design was bad. The developers' need for money does not override the Township's character of being a great place to live. She stated issues with parking, the number of waivers requested, lighting, and the density.

Tony Madaffer, 1293 Bogie Lake Road, stated he is a proponent of White Lake growing, but he took issue with the layout. It is too dense and reminiscent of a trailer park. He has lived here for 35 years, and the traffic will be troublesome.

Steve Woodard, 953 Schyler, said he was a participant in giving community feedback for the project. He was expecting bigger acreage lots. He reiterated the trailer park look to the plan, and the proposed density is too large. He stated his opposition to the current layout of the project.

Sheri Meador, 2032 Carleton Court, moved to White Lake from Canton. She stated White Lake has a small town that feels less traffic. She stated White Lake will grow, but there are too many homes in the development, and the traffic is already problematic. She had no issue with houses going on the site, just in a less dense capacity. She added that the schools are packed as is with very large class sizes.

Clark Koby, 3133 N Mistwood Court, said his sub has bigger acreage lots that create a lot of space in between homes. The plan needs improvement before it is approved.

Chairperson Carlock closed the public hearing at 8:16 P.M.

Mr. Eppink stated the community did a wonderful job on its Master Plan, and that property was specifically targeted in the plan. Multiple family was suggested in the plan, but the applicant felt it wasn't appropriate. The plan proposes 16 units over what would be allowed for R1-D zoning. He added he is working with the school district closely. He reiterated that the plan was consistent with the Master Plan.

Member Meagher stated that the audience was clear about their issue with the density of the project.

Member Dehart stated she had issues with the proposed Planned Development zoning as the Planning Commission rezoned several of the included lots to R1-A not long ago.

Member Ruggles said that during the Master Plan process, he brought this area of the Township to the Planning Commission's attention. The property will not remain farmland forever, but the intention was

to develop the property as a mixed-use area with an attention to keeping a lot of green space in the area.

Member Seward stated the plan does not meet the intent of the Master Plan or the ordinance. He was not opposed to the Planned Development rezoning.

It was MOVED by Member Meagher, seconded by Member Seward, regarding Edendale Crossing, identified as parcel IDs: 12-29-476-016 through 12-29-476-024 (nine adjacent parcels total) to recommend the Township Board approve the rezoning request to Planned Development, subject to all staff and consultants' comments being addressed and a recommendation for preliminary plan approval to the Township Board. The motion carried with a roll call vote: (4 yes votes) (Meagher/yes, Ruggles/yes, Carlock/yes, Dehart/no, Seward/yes).

It was MOVED by Member Meagher, seconded by Member Seward, regarding Edendale Crossing, identified as parcel IDs: 12-29-476-016 through 12-29-476-024 (nine adjacent parcels total), to recommend the Township Board deny the preliminary site plan. The motion carried with a roll call vote: (5 yes votes) (Meagher/yes, Dehart/yes, Carlock/yes, Seward/yes, Ruggles/yes).

B. Jax Car Wash

Property located on the northwest corner of Bogie Lake Road and Highland Road (M-59). Identified as parcel ID 12-20-276-034. Consisting of approximately 1.88 acres. Currently zoned PB (Planned Business).

Requests:

1) Preliminary site plan approval recommendation

2) Planned business approval

Applicant: BMW KAR WASH, LLC

Mr. Passalacqua reviewed his letter.

Mr. Leuffgen highlighted his review letter for the Planning Commission.

Member Ruggles asked Director O'Neil how many car washes are at the intersection of Bogie Lake Road and Highland Road. Director O'Neil said two, but he was unsure if one was still in business. The proposed car wash would make three.

Member Dehart shared concerns about the proposed entrance to the site. The traffic north of Highland Road to get to the Taco Bell in the area is unsafe.

Todd Gesund, owner of Jax Car Wash, was present to speak. He explained the amenities the car wash would provide. There would be three lanes with pay stations, interior restrooms for customers, hand towel drying, and an interior mat drying room.

Jim Butler, PEA Group, said the plan was reviewed by RCOC and there would be a right in, right out porkchop at Bogie Lake Road.

Chairperson Carlock opened the public hearing at 9:10 P.M.

Steve Woodard, 953 Schuyler, stated his concerns with the driveway, and traffic stacking issues. He suggested flipping the circulation of the site for additional traffic safety. He wanted more information about the water reclamation.

Clark Koby, owner of Wash Me Car Wash, said he keeps his prices low and his customers appreciate it. He stated his concern wasn't about the driveway itself, but the entrance of off Bogie Lake Road needed to change. The intersection is dangerous, and stacking cars will add to the issue.

Chairperson Carlock closed the public hearing at 9:15 P.M.

Mr. Butler said flipping the site would require issues with circulation meeting the ordinance setbacks. The site is topographically challenging as well. He suggested making the porkchop deliberate by design. He said there is an internal reclamation system for the water that will reclaim up to 35 – 45% of the water that will be reused.

It was MOVED by Member Meagher, seconded by Member Ruggles, regarding Jax Car Wash, identified as parcel ID 12-20-276-034, to recommend the Township Board approve the preliminary site plan, subject to all staff and consultant review comments being addressed and for the Township Board to consider safety issues about the development's ingress/egress from Bogie Lake Road. The motion carried with a roll call vote: (4 yes votes).

(Ruggles/yes, Seward/yes, Carlock/yes, Dehart/no, Meagher/yes).

CONTINUING BUSINESS

None.

NEW BUSINESS

A. The Avalon

Properties located on the northwest corner of Highland Road (M-59) and Hill Road
Identified as parcel IDs 12-20-101-003 & 12-20-126-006. Consisting of an approximate combined 110.02 acres. Currently zoned PD (Planned Development)

Requests:

1) Final site plan approval

2) Planned development agreement approval recommendation

Applicant: White Lake Hill, LLC

Mr. Passalacqua reviewed his letter.

Mr. Leuffgen reviewed his letter. He added further engineering plans will need to be submitted by the applicant and reviewed before a pre-construction meeting can be held.

Member Ruggles asked how many phases there will be. Director O'Neil said it is being approved as one phase, but with several construction phases within in.

WHITE LAKE TOWNSHIP
PLANNING COMMISSION
DECEMBER 4, 2025

Director O'Neil said the PDA was drafted by the Township Attorney, and it expedites the review process for the agreement. He explained that the deviations are summarized as a narrative in the draft document.

Mark Ksassb, 31550 Northwestern Highway, was present on behalf of the project. He presented color renderings of the housing products. He added the intent is to start infrastructure construction in Spring 2026. The Community Benefit will be a dog park dedicated to the Township. He added the buffer on the northern, western, and eastern portions of the site was increased to 50'.

Jim Gailbraith, 31550 Northwestern Highway, stated there is a sister site he and Mr. Kassab developed in Commerce Township that has done very well. There will be more of the ranch style products on this site.

It was MOVED by Member Meagher, seconded by Member Dehart, regarding The Avalon, identified as parcel IDs 12-20-101-003 & 12-20-126-006, to approve the final site plan, subject to all staff and consultant comments being addressed and the Township Board's approval of the PDA. The motion carried with a roll call vote: (4 yes votes)
(Meagher/yes, Dehart/yes, Carlock/yes, Seward/no, Ruggles/yes)

It was MOVED by Member Meagher, seconded by Member Ruggles, regarding the Avalon, as parcel IDs 12-20-101-003 & 12-20-126-006, to recommend the Township Board approve the Planned Development agreement, subject to all staff and consultant comments being addressed and approval of the document by the Township attorney. The motion carried with a roll call vote: (4 yes votes).
(Meagher/yes, Dehart/yes, Carlock/yes, Seward/yes, Ruggles/yes).

OTHER BUSINESS

A. Approval of 2026 Meeting Dates

It was MOVED by Member Meagher, seconded by Member Seward, to approve the 2026 Planning Commission meeting dates with the omissions of January 1, 2026, and July 2, 2026, dates. The motion carried with a voice vote: (5 yes votes)

LIAISON'S REPORT

Member Ruggles said the Township Board met last month and approved the 2026 Township budget. The Board also approved the sale of the used tanker truck. The Township Tree Lighting festival will be tomorrow, December 5 at Fisk Farm, starting at 6 P.M.

COMMUNICATIONS

Director O'Neil stated that there are a few remaining items from the Phase One construction at Stanley Park that will need to be bonded for. Awards for Stanley Park Phase Two MNTRF will be announced later this month. The new Senior Planner, David Waligora, will be starting at the Township next month.

NEXT MEETING DATE: January 15, 2026

WHITE LAKE TOWNSHIP
PLANNING COMMISSION
DECEMBER 4, 2025

ADJOURNMENT

It was MOVED by Commissioner Seward, seconded by Commissioner Meagher to adjourn at 10:15 P.M. The motion carried with a voice vote: (5 yes votes).



INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

October 30, 2025

Sean O' Neil
Community Development Department
Charter Township of White Lake
7525 Highland Road
White Lake, Michigan 48383

RE: Jax Kar Wash- Preliminary Site Plan Review – 2nd Review

Ref: DLZ No. 2545-7861-10

Design Professional: PEA Group

Dear Mr. O' Neil,

Our office has performed a Preliminary Site Plan review for the above-mentioned revised plan dated October 9, 2025. The plans were reviewed for feasibility based on general conformance with the Township Engineering Design Standards.

General Site Information

This 1.88 acre site is located at the northwest corner of M-59 and Bogie Lake Road.

Site Improvement Information:

- Construction of an approximately 5,555 sf manned car wash.
- Associated paved and curbed parking area, including an ADA parking space.
- Water and sanitary sewer service.
- Storm water management facilities.

The following items should be noted with respect to Planning Commission review:

Please note that comments from our September 26, 2025 review are in *italics*. Responses to those comments are in **bold**. New comments are in standard font.

- a) *The plan shows that the western lot line is to be moved further east. Has this property transfer and updated property legal description been done and recorded with Oakland County? We defer to the Township regarding this item. We note that the property line shift and transfer of property to the adjacent parcel to the west will impact whether Jax will need to grant an off-site easement to the*

proposed Panera Bread (property to the west) for placement of a portion of Panera's parking on the Jax property. It will also impact the legal description for an access easement across the Jax southern drive (see below Comment c) for Panera's benefit. Comment remains. Design engineer has noted that the westerly property line is to be reconfigured. Confirmation of the reconfiguration shall be required at the time of Final Engineering Plan submittal.

- b) *Verify BM elevations for BMs 300 and 301. The elevations for these two benchmarks are approximately 2' higher than the identical benchmarks shown on the previous Cosmo's Car Wash plan for this parcel. Comment partially addressed. Design engineer has stated that the benchmarks for the former Cosmo's Car Wash had incorrect descriptions. Please place a PS seal and signature on Sheet C-1.0 as certification that a PS has prepared and reviewed the topographic survey.*
- c) *An access easement for the southern drive from the western property line drive connection to Bogie Lake Road will need to be provided/shown on the plan. Comment remains. A 27' wide easement is now shown on the plan. Provide easement document and exhibit at time of FEP submittal.*
- d) *The five (5) proposed parking spaces to the south indicate there will be five (5) employees maximum on site at one time. Is this number accurate and does it include persons drying vehicles after they exit the car wash as well as the person at the attendant booth? Does this number include on site management? Comment outstanding. Per design engineer, "Jax Kar Wash operates numerous locations throughout southeastern Michigan, five parking spaces is sufficient for their business operations." We defer to the Township whether the 5 spaces meet Township requirements for number of required employee spaces.*
- e) *Clarify why the two proposed parking spaces at the SE corner of the vacuum area have bumper blocks shown. Currently curbing is proposed so there would be no need for bumper blocks. We note there is also a bumper block detail shown on Sheet C-9.0. We also note that the architect's exterior rendering showing the ADA space up close, shows bumper blocks. Please check that all plans are consistent with what is intended for parking spaces. Comment partially addressed. The bumper blocks have been removed; however, please remove bumper block detail from Sheet C-9.0 and bumper blocks on the architects rendering, as stated in our original above comment.*
- f) *A one way drive to enter the vacuum area with a width of 13' is proposed. Zoning Ordinance 5.11 Q. v. requires a minimum 20' width for one way drives. Comment addressed. The one way drive lane is now shown as 21' wide.*
- g) *Provide fire truck turning radii plan that also demonstrates ingress, internal circulation, and egress of a standard 40' length fire truck on the site. Comment addressed. Fire truck turning radii plan has now been provided.*
- h) *Add note to plan indicating that applicant/ owner shall repair and /or clean up (a lot of grass growing in between existing sidewalk slabs) any of the existing sidewalks located along property frontages. We note there are several damaged sections of existing sidewalk along the Bogie Lake Road and M-59 frontages. Comment partially addressed. Notes regarding the above comment have been added to plan Sheet C-3.1; however, move arrow on note for Bogie Lake Road sidewalk. Currently arrow points to Bogie Lake Road.*

- i) *We defer to the Township regarding the requirement for sidewalk along Audbon Drive (Reference Zoning Ordinance Sections 5.20 and 5.21). We note that the proposed Panera Bread to the west Preliminary Site Plan showed a proposed sidewalk across their Audbon Drive frontage. **Comment remains.***
 - j) *ADA parking space will need to meet ADA standards in terms of slopes and dimensions; further details will be required at the time of Final Site Plan/Final Engineering Plan submittal. **Comment remains. Slopes and dimensions have been added to the Preliminary Site Plan. Grades shall be reviewed at the time of FSP/FEP submittal.***
 - k) *Provide ADA space dimensions in accordance with the requirements of Zoning Ordinance Section 5.11 O. iii. For van access. Dimensions shall be 8' parking space and 8' loading area. Currently a 12' wide space and 5.5' loading zone are shown. **Comment addressed. Van accessible dimensions per Township Zoning Ordinance have been added.***
 - l) *Move sidewalk ramp, adjacent to the proposed ADA space, to the north to align with the loading zone. **Comment partially addressed. Please clarify if the northernmost sidewalk portion is flush with the ADA loading area elevation. The intent for this area regarding the proposed grades and relative to the ramp is not clear. Additional grading will be required on the FEP to confirm compliance with ADA standards.***
 - m) *Preliminary grading of the site has been proposed and demonstrates general drainage patterns; a detailed grading review will be performed at time of Final Site Plan/Final Engineering Plan review to ensure positive drainage on entire site. **Comment remains as a notation.***
 - n) *An off-site grading and construction easement shall be required for off-site grading to the west. In addition, an off-site grading easement shall be required from Meijer for proposed off-site grading SE of the site. **Comment remains.***
 - o) *Sheet C-9.0-Chain Link Fence Detail- We defer to the Township as to whether the fence shall be decorative or whether chain link is acceptable. The fence shall be a minimum of 42" in height. Please reference White Lake Township Engineering Design Standards Section B.6. which states "Any portion of a retaining wall more than 30" high shall have provided at the top of said wall a decorative railing not less than 42"high (non-residential uses) meeting the requirements of Section 1012.3 of the Michigan Building Code." **Comment partially addressed. Fence is now indicated on Sheet C-3.1 to be a 42" high decorative fence. Please remove Chain Link Fence Detail on Sheet C-9.0.***
 - p) *Show pre versus post development storm drainage that is being routed to the existing storm sewer structure near the corner of Highland Road and Bogie Lake Road. **Comment addressed. Calculations have been provided, and it has been demonstrated that there is sufficient capacity in the existing storm sewer to accommodate developed flows.***
 - q) *The applicant will need to provide information detailing whether this site falls under the Meijer Storm Water Management Facilities Easement, Maintenance Agreement and Lien document or if a new agreement will be required for this development. Likely a new agreement will be required and supporting exhibits will need to be provided. **Comment partially addressed. Per the design engineer,***
-

the site falls within the Meijer Stormwater Management tributary area. **Comment regarding a new agreement is outstanding.**

- r) *Provide details on the FSP/FEP for the water quality units. The units will be required to remove 80% of TSS. **Comment remains.***
 - s) *The proposed north/south storm sewer connecting to existing Catch Basin Ex B is too close to the existing sanitary sewer manhole to the west. A minimum 10' horizontal separation is required. **Comment addressed. Storm sewer has been adjusted in this area such that there is now 10' horizontal separation between it and the sanitary sewer manhole.***
 - t) *The storm sewer between proposed CB2 and CB3 shall be upsized to 18" diameter. Otherwise, a restriction at CB3 will occur. **Comment addressed. Sewer has been upsized to 18" diameter.***
 - u) *Verify rim and invert information for the two existing storm sewer connection points. As built data all show these elevations at approximately 1' higher than those shown on the Jax plan. **Comment addressed. PEA confirms that the rim and invert elevations provided were field measured by their firm.***
 - v) *Show existing 54' wide sanitary sewer easement that is on the Meijer sign property located SE of the Jax site. **Comment remains. Design engineer states this will be added to the FSP/FEP.***
 - w) *The plan shows connection of the proposed sanitary sewer lead to the existing 18" diameter sanitary sewer along the M-59 frontage. The plan shows an existing sanitary sewer lead to the east(invert of approximately 970.00') of the area of the current proposed connection and we question why this lead is not being utilized. The existing 18" sewer is approximately 25' deep at the area where the current connection is proposed and connection to this sewer may result in potential construction trenching too close to the existing road. **Comment addressed. The proposed sanitary sewer is now shown as connecting to the existing lead.***
 - x) *The existing sanitary sewer diameter along M-59 and that which crosses Bogie Lake Road is mislabeled. The sewer diameter is 18". Please revise. **Comment addressed. Sewer diameter has been revised.***
 - y) *Currently a 500 gallon oil/water separator is proposed. Provide support documentation to demonstrate that this size separator will be sufficient to service the proposed car wash operation. In addition, is a water reclamation system proposed? If so, please show on plan. Lastly, is MH Structure A on the plan proposed to be a monitoring MH? **Comment partially addressed. An internal water reclamation system is proposed. MH Structure A is labeled as a monitoring manhole. Although the design engineer states Jax uses a 500 gallon oil/water separator, provide support documentation for the proposed 500 gallon capacity.***
 - z) *Provide cleanouts every 75' for proposed sanitary sewer lead. **Comment addressed. Cleanouts have been provided.***
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- aa) *We defer to the Township Fire Department regarding hydrant coverage.* **Comment remains as a notation.**
- bb) *Sheet C-1.0- Provide diameter of existing watermain along M-59 frontage.* **Comment addressed. Diameter has been provided.**
- cc) *Sheet C-6.0- Public Utility Easement note- Watermain easements shall be 20' wide.* **Comment addressed. Note has been updated.**
- dd) *Sheet C-6.0-Refer To section- None of these notes, design, or details are shown on Sheet C-9.0.* **Comment addressed. The note has been removed from this sheet.**

Recommendation

The majority of the above comments have been addressed, and we are recommending approval of the Preliminary Site Plan; any remaining comments shall be required to be addressed at the time of Final Site Plan/Final Engineering Plan submittal.

Please feel free to contact our office should you have any questions.

Sincerely,

DLZ Michigan



Michael Leuffgen, P.E.
Department Manager



Victoria Loemker, P.E.
Senior Engineer

Cc: Hannah Kennedy-Galley, Community Development, White Lake Township, *via email*
Aaron Potter, DPS Director, White Lake Township, *via email*
Jason Hanifen, Fire Marshall, White Lake Township, *via email*
Nick Spencer, Building Official, White Lake Township, *via email*

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Carlisle | Wortman
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

October 29, 2025

**Preliminary Site Plan / Planned Business Review
for
White Lake Charter Township, Michigan**

Applicant:	BMW KAR WASH, LLC
Project Name:	JAX Car Wash (Meijer Outlot)
Plan Date:	September 10, 2025
First Revision	October 9, 2025
Location:	Northwest corner of Bogie Lake Road and Highland Road (M-59) Parcel ID: 12-20-276-034
Action Requested:	Preliminary Site Plan / Planned Business Approval

PROJECT NARRATIVE

The applicant is requesting preliminary site plan approval to construct a 5,555 sqft automobile wash establishment (car wash) in an outlot of the Meijer Planned Business district. Automobile wash establishments are principal permitted uses in the PB zoning district.

The PB Planned Business District is primarily a commercial district intended to permit, with Township approval, private and/or public development in a coordinated and cohesive arrangement which may be more difficult to achieve under more conventional, piecemeal development designed to conform with standard zoning requirements. It is further intended that the PB District be located along major thoroughfares, such as M-59.

For PB developments, the Planning Commission holds a public hearing and recommends approval, conditional approval, or denial of the site plan to the Township Board. The Township Board then reviews the application and grants approval if the Board determines that the plan satisfies all requirements for preliminary plan approval. Development agreements are required for review prior to final site plan review by the Planning Commission. The Planning Commission approves or denies the final site plan and recommends approval or denial of the development agreement to the Township Board. The Township Board has final authority over the approval of the development agreement.

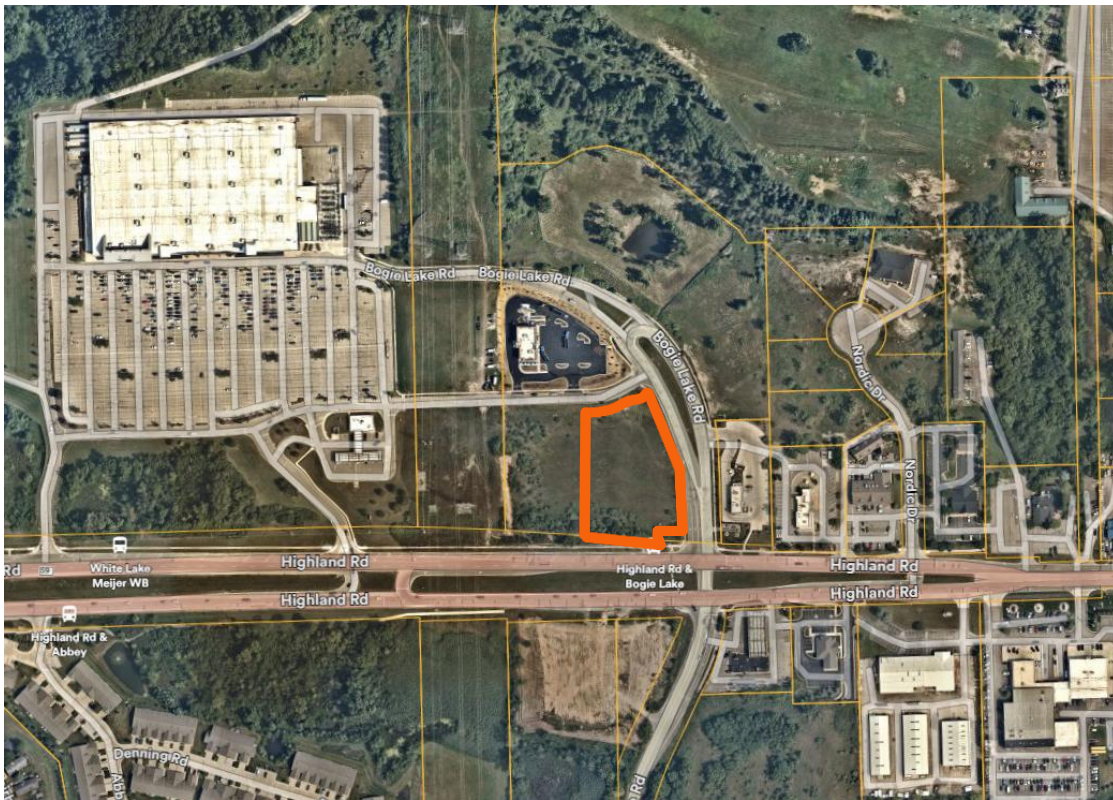
Items to be Address: None

Benjamin R. Carlisle, *President* John L. Enos, *Vice President* Douglas J. Lewan, *Principal*
David Scurto, *Principal* Sally M. Elmiger, *Principal* R. Donald Wortman, *Principal* Craig Strong, *Principal*
Paul Montagno, *Principal* Megan Masson-Minock, *Principal* Laura Kreps, *Senior Associate*
Richard K. Carlisle, *Past President/Senior Principal*

SITE DESCRIPTION

Lot Area:	1.88 gross acres (81,920 square feet)
Frontage:	Approx. 384 feet along Bogie Lake / Approx. 193 feet along Highland Road (M-59) - Proposed
Address:	6001 Highland Road
Current Use:	Vacant

Aerial image of the site

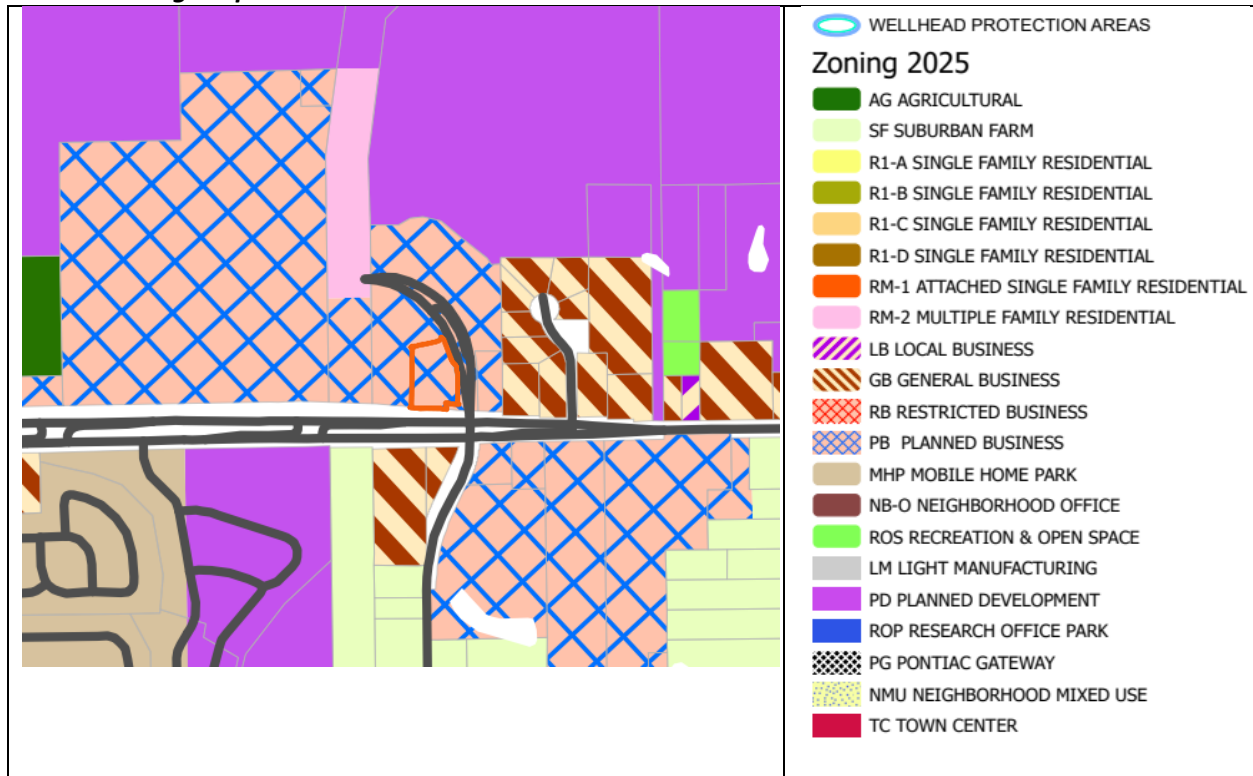


Source: NearMap July 2025

	North	East	South	West
Surrounding Zoning	<i>PB, Planned Business</i>	<i>PB, Planned Business</i>	<i>GB, General Business</i>	<i>PB, Planned Business</i>
Surrounding Land Uses	<i>Commercial</i>	<i>Commercial</i>	<i>Vacant</i>	<i>Vacant</i>
Future Land-Use Map	<i>Commercial Corridor</i>	<i>Commercial Corridor</i>	<i>Commercial Corridor</i>	<i>Commercial Corridor</i>

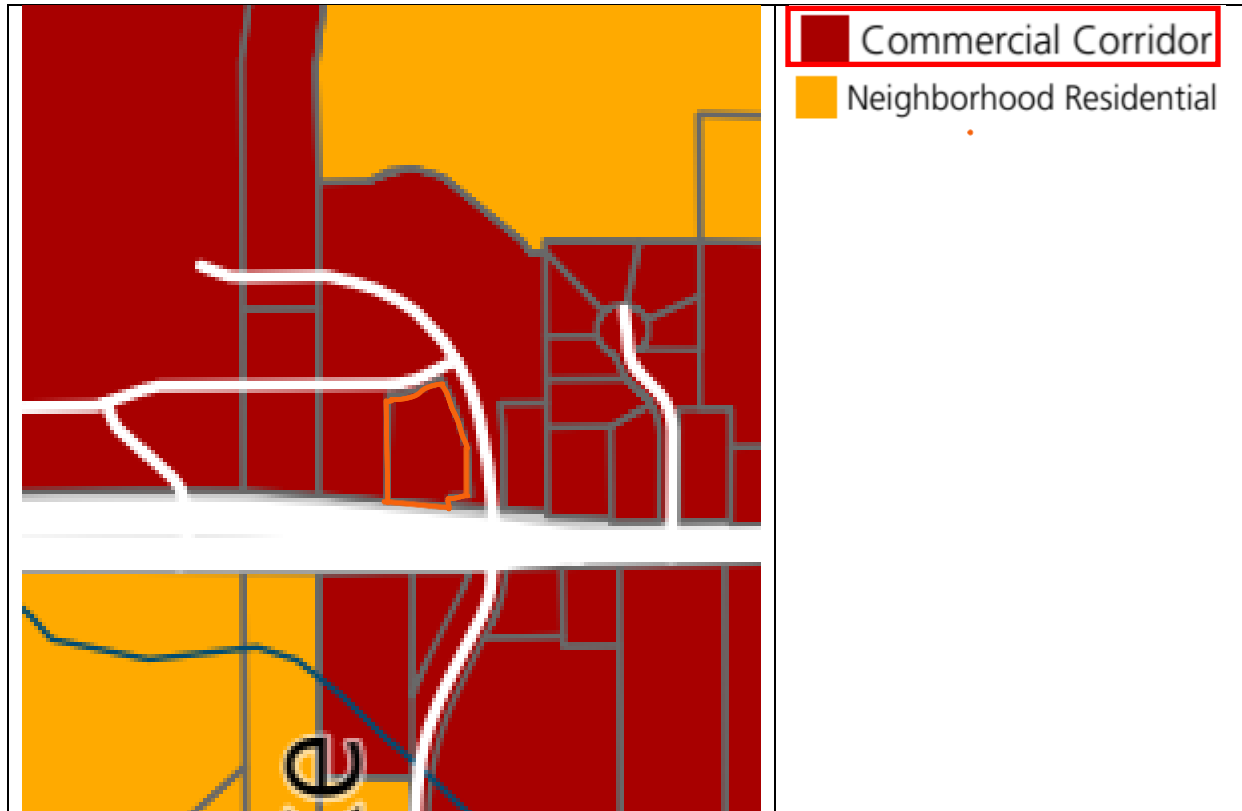
Current Zoning	<p>PB, Planned Business</p> <p><i>The PB Planned Business District is primarily a commercial district intended to permit, with Township approval, private and/or public development in a coordinated and cohesive arrangement which may be more difficult to achieve under more conventional, piecemeal development designed to conform with standard zoning requirements. To that end it becomes possible to permit greater flexibility in the types of land uses, land use arrangements and development requirements than would otherwise apply. It is further intended that the PB District be located along major thoroughfares, such as M-59, as opposed to locations in residential neighborhood areas where conflicts of land uses may arise more easily.</i></p> <p><i>Development standards, as approved in a development plan, in this district shall result in a project that is superior to one constructed under standard zoning requirements and shall be mutually acceptable to the applicant(s) and the Township. Therefore, any PB Plan shall be substantially consistent with the Township Master Plan, desirable principals of land use planning, zoning ordinance standards and other applicable development requirements. In order to achieve these objectives, approval of a PB development requires approval of both a Site Plan and PB Agreement which sets forth specific physical, functional, amenity and design features and other related requirements considered essential to the development.</i></p>
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Current Zoning Map



Future Land Use	Commercial Corridor <i>Description: "Provides regional goods and services to residents and non-residents. Includes large box stores and drive thrus."</i> <i>Example of Uses: "Large grocery, outlet, mixed-use, restaurants"</i>
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Future Land Use Map



Sheet C-3.0 proposes a new western lot line. This proposal reduces the current lot size and allocates more land to the neighboring lot to the west. The site plan for the lot to the west does not reflect what was approved by the Planning Commission in January of 2025. This review will be conducted as if the lot modification is approved however a modified site plan may be required for the neighboring lot to the west.

The zoning and Master Plan compatibility of the development is assessed in the Planned Business portion of this review.

Item to be Addressed: *Western lot line modification approval will be required for final site plan approval and may require a modified site plan for the development directly west of the site.*

PLANNED BUSINESS

Standards for PB projects are outlined in Section 6.7 of the zoning ordinance. This portion of the report will review those standards to identify any potential issues with the proposed development.

Required information

The site plan provides required information for review.

Design Standards

Pedestrian pathways are recommended along all frontage streets and sidewalk connections to all uses within the development, to parking lots and to sidewalks fronting the road right-of-way. While recommended, Section 5.21 and 5.22 require these pathways and shall be reviewed in the Access and Circulation portion of this report.

All current and proposed uses within the PB are complementary and do not require extensive buffering.

The proposed building is to scale with the other outlot developments. Sides visible from roadways are similar to the building's main faced. Articulation is provided via the building's main facades as well as color variation. Developments along Highland Road (M-59) must meet architectural requirements which are reviewed in Architecture and Layout portion of this report.

Access to the site and utility assessments will be evaluated later in this report.

Compatibility to Master Plan

As noted earlier in this report, the proposed project area is designated as Commercial Corridor on the 2024 Master Plan Future Land Use map. Examples of uses in this district specifically list large grocery stores with outlots. Car washes primary operations do not provide goods but do provide services and are not uncommon for outlot development.

The Goals and Objectives portion of the Master Plan offers insight on the future vision residents have for the Township. One of the top goals identified by residents related to site development is providing multi-modal transportation. Few alternate transit options exist in the Township, however the site has the opportunity to offer pedestrian connections to neighboring developments.

Land Use

Car washing and vacuuming are the only uses identified for the site which is permissible in the PB district.

Dimensional and Density Standards

No parallel plan was provided to show the development of the site under a specific zoning district. However, no dimensional or density deviations are being proposed so a parallel plan is not necessary. The Planning Commission will need to determine if the 10 foot side setback being proposed is acceptable.

Community Benefit

A community benefit is required as part of any PB or PD development. The applicant response letter dated October 15, 2025 states a contribution to the Corridor Improvement Authority Fund is being offered as the community benefit.

Items to be Addressed:

- 1) *A draft development agreement will be required during final site plan review.*
- 2) *The Planning Commission will need to determine if the 10 foot side setback being proposed is acceptable.*
- 3) *The Planning Commission will need to determine if the contribution to the CIA is a sufficient community benefit.*

COMMUNITY IMPACT STATEMENT

Section 3.1.10 and 6.6 of the zoning ordinance outline the need for a Community Impact Statement (CIS) for Planned Development and Business projects. A waiver may be requested from providing a CIS if a development is not perceived to have a noticeable impact on Township services or residents. The application response letter dated October 15, 2025 states the applicant is requesting a waiver from providing a CIS due to the sites size.

Items to be Addressed: *Planning Commission to consider the request to waive the requirement that a CIS be provided by the applicant.*

NATURAL RESOURCES

Topography:	Sheet C-1.0 shows the existing site topography. The gently slopes from north to south with the highest point being 991.1 feet and the lowest point being 979.1.
Wetlands:	Sheet C-1.0 shows that there are no wetlands onsite. EGLE wetland mapper confirms no wetlands are present on the lots.
Woodland:	There are no major woodlands on site. There are small tree and shrub clusters on the southern edge of the site along Highland Road. A few single trees and shrubs a scattered throughout the site.
Soils:	Sheet C-3.0 states that the site consists of 50B – udipsammments and undulating.
Water:	Site does not contain any natural water bodies. Sheet C-1.0 states the site is not within any floodplain.



Source: Google Maps 2025

Items to be Addressed: Any concerns cited from Township Engineering.

AREA, WIDTH, HEIGHT, SETBACKS

Lot calculations and setbacks are provided on Sheet C-3.0. Standard bulk and lot regulations for the PB zoning district are set forth in Section 3.1.16 and Section 3.11.

Planned Business District Standards

Planned Business	Required	Proposed PB	Compliant
Building Setbacks			
Front	60 feet	137.5 feet (M-59) 133.7 feet (Bogie Lake Road) 64.7 feet (Audbon Drive)	Yes
Side	TBD	10 feet	TBD
Rear	N/A	N/A	N/A
Wetland	N/A	N/A	N/A
Building Height			
	35 feet or 2 stories	22.5 feet / 1 story	Yes
Lot Standards			
Minimum Lot Area	10 acres	1.88 gross acres	No (see note below)
Minimum Lot Width	TBD	193 feet (M-59)	TBD
Maximum Lot Coverage	TBD	7.65%	TBD
Maximum Depth to Width	4 to 1	Less than 4 to 1	Yes

A minimum lot area of 10 acres is required in the PB District. While the lot area does not meet the minimum requirement, the Meijer outlots were contemplated at the time of the initial development. A waiver from the minimum area requirement is not necessary.

As noted earlier in this review, the site plan proposes a new location for the western lot line.

Per Section 3.11.D, the site has three front yards.

Items to be Addressed: None

ACCESS & CIRCULATION

Vehicle Access & Circulation

Access to public roads in the Township are either the jurisdiction on Michigan Department of Transportation (MDOT) or Road Commission of Oakland County (RCOC). The Planning Commission may waive standards for access per Section 6.4.F however permits will be required from RCOC for the proposed access points. Below is a review of the proposed access points per the standards of the zoning ordinance.

A shared access drive is proposed with the retail development directly west of the car wash. Cross site circulation is encouraged, however the site plan dated December 9, 2024 for the lot directly west of the car wash (parcel ID 12-20-276-035) does not offer an option for this connection. The applicant should confirm cross connection is feasible with adjacent property owner or remove the connection from the site plan. If cross connection is sought by both property owners, a revised site plan will be required for parcel ID 12-20-276-035.

Bogie Lake Intersection

The site is accessed via a single two way 27 foot wide drive on Bogie Lake Road. Vehicles will be able to turn right into the car wash stacking area or proceed forward to access the vacuum stations. A 25 mph speed limit requires that the proposed access drive should be 130 feet from driveways on the same side or opposite side of the road as well as intersections. The proposed access drive is approximately 150 feet from the M-59/Bogie Lake Road intersection and 332 feet from the Bogie Lake Road/Audbon Drive intersection.

No traffic study was provided with the application. The applicant states the location of the access drive is ideal for reasonable access to the site. We note the site's limitations in accessing Bogie Lake or Audbon drive however traffic looking to enter from northbound Bogie Lake Road will need to wait for traffic heading southbound to clear. This may be prolonged if the light for traffic heading south is red. A similar issue may present when exiting traffic is attempting to turn left onto Bogie Lake Road to head into the Meijer development.

Non-Motorized Access and Circulation

Sections 5.20 and 5.21 provide requirements for site sidewalks and pathways. Existing sidewalks run along Highland Road (M-59) and Bogie Lake road. The widths of these walkways are not provided. The applicant

shall be required to repair/replace any broken sections of concrete within the frontage sidewalks adjacent to the site along Bogie Lake Road and Highland Road (M-59), as determined by the Township Engineering Consultant. The applicant response letter dated October 15, 2025 acknowledges this responsibility.

The frontage along Audbon drive requires a six foot wide sidewalk. This sidewalk should align with the sidewalk proposed along Audbon Drive relating to the new retail center to the west.

Internal, seven foot wide sidewalks are shown along western vacuum parking spaces.

Public Transit

Public Transit access is available via the SMART Bus Highland Road Route 759. The line runs east/west between Oakland University and Bogie Lake Road along Highland Road (M-59). The accessible Westbound stop is located at the Highland Road (M-59) and Sunny Beach Boulevard intersection. The accessible eastbound stop is located along Highland Road (M-59) at the White Lake Marketplace development. The route operates from approximately 6:00am until 11:00pm on weekdays and 9:00am until 6:00pm on Saturdays.

White Lake Township is also served by the Western Oakland Transportation Authority which provides schedule transportation for Township residents with specific needs.

Items to be Addressed:

- 1) *Township Engineering concerns.*
- 2) *Township Public Safety concerns.*
- 3) *Applicant should confirm cross connection is feasible with adjacent property owner or remove the connection from the site plan. If cross connection is sought by both property owners, a revised site plan will be required for parcel ID 12-20-276-035.*
- 4) *The Applicant shall be required to repair/replace any broken sections of concrete within the frontage sidewalks adjacent to the site along Bogie Lake Road and Highland Road (M-59), as determined by the Township Engineering Consultant.*
- 5) *A six foot wide sidewalk is required along Audbon Drive and should align with the development to west's new sidewalk.*
- 6) *Consideration should be given to relocating the access drive per potential traffic conflicts with Bogie Lake Road / Highland Road (M-59) intersection traffic.*

PARKING & LOADING

Section 5.11 outlines requirements for off-street parking. Automobile car wash is required to have one spot for each employee plus stacking spaces as indicated in 5.11.M.i in the Zoning Ordinance, which requires seven times the maximum capacity of the auto wash. Sheet C-3.0 shows that there are five spaces for internal washed cars thus requiring 35 stacking spaces.

The applicant has provided five employee parking spaces, 35 stacking spaces prior to entering the car wash, and two stacking spaces for exiting the car wash. There will also be 20 vacuum spaces of which one will be handicap accessible. These meet the amount of parking spaces required in the Zoning Ordinance.

Sheet C-3.1 shows the dimensions of the parking and stacking spaces. The parking spaces will be nine feet wide and 18 feet long. The stacking spaces will be 12.5 feet wide by 20 feet long. The vacuum spaces will be 12 feet wide and 19 feet long with 29 feet wide maneuvering lane. There will be one barrier free access space that will be 16 feet wide and 19 feet long. These meet the requirements for parking space dimensions in the Zoning Ordinance.

There will be one loading space at the south side of the parking lot that will be 10 feet wide and 50 feet long. This meets the requirements of Section 5.11.P.i. in the Zoning Ordinance.

Items to be Addressed: None

ESSENTIAL SERVICES & UTILITIES

The site is served by water or sewer. Sheet C-6.0 provides a preliminary utility layout. Section 4.11.D requires site drainage to be designed in a manner that does not create runoff into neighboring properties or roadways. We defer to township engineering to assess the proposed utility systems.

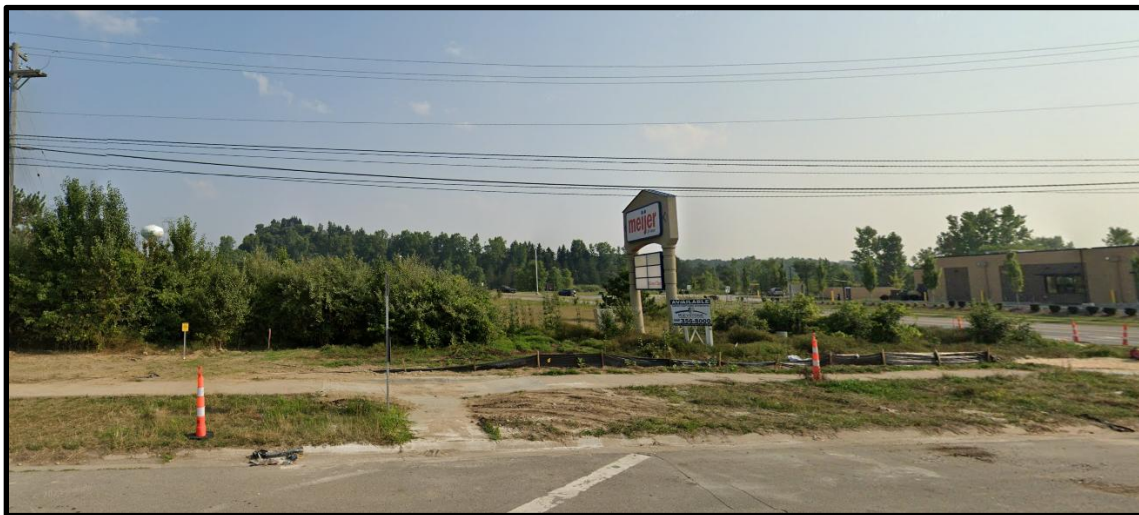
No circulation plan was provided for emergency vehicles. We defer to Township Public Safety to determine the feasibility of site design and hydrant placement.

Items to be Addressed:

- 1) *Any cited concerns of Township Engineering.*
- 2) *Any cited concerns of Township Public Safety.*

LANDSCAPING & SCREENING

The applicant has provided a preliminary landscape plan on Sheets L-1.0, and L-1.1. Landscaping plans are approved during final site plan. Below is a review of the proposed plan with items to be addressed at final site plan review. Below is a screenshot from August 2025 showing the current conditions.



Source: Google Street View 2025

Section 5.19.D provides requirements for screening along property lines as it relates to adjacent districts and is reviewed below.

Greenbelts

Property Line	Required	Provided	Compliant
North (ROW)	159.33 feet – 5 large deciduous or evergreen trees and 42 shrubs	8 large deciduous or evergreen trees, and 42 shrubs.	Yes
East (ROW)	384.48 feet – 13 large deciduous or evergreen trees and 103 shrubs	13 large deciduous and evergreen trees, and 103 shrubs	Yes
South (ROW)	231.6 feet – 8 large deciduous or evergreen trees and 62 shrubs	8 large deciduous and evergreen trees, and 62 shrubs	Yes
West	332.2 feet – 11 large deciduous or evergreen trees and 88 shrubs	1 large deciduous or evergreen trees, and 88 shrubs.	No

The applicant is not compliant with the greenbelt standards on the west side of the site. A waiver has been requested for additional trees per the existence of underground utility lines.

Interior Landscaping

Section 5.19 E. provides the requirements for interior landscaping which requires at least fifteen percent (15%) of the total lot area to be landscaped and one (1) deciduous or evergreen tree and five (5) shrubs are required to be planted for every three hundred (300) square feet.

The site is 73,735 square feet, and 15% of that is 11,060 square feet. The applicant needs to provide 37 deciduous or evergreen trees, and 185 shrubs. The applicant is in compliance with the interior landscaping standards. There is a note on Sheet L-1.0 stating that the interior shrubs will be detailed at the final site plan review.

Minimum Plant Size and Species

Section 5.19 H. provides the requirements for minimum plant size. All plant sizes meet standards. The Plant Schedule on Sheet L-1.0 has the Nikko Deutzia, Grey Owl Juniper, Abbotswood, and Dense Anglo-Japanese Yew at 24 inches in height. The plant species are in compliance with the zoning ordinance.

Trash Receptacle, Transformer, and Mechanical Equipment Screening

Sheet C-9.0 shows the details of the dumpster enclosure. The enclosure will be located at the southern end of the building next to the car wash exit. The proposed enclosure meets the Standards of Section 5.19 N. in the Zoning Ordinance.

The transformer pad will be screened by eight ornamental trees that will be three feet in height. No information was provided about the height of the electrical transformer. Proposed screening will need to be as tall as the equipment in order to comply.

Items to be Addressed:

- 1) Planning Commission to consider waiver to allow for one deciduous or evergreen tree along the western greenbelt instead of the required eight trees.*
- 2) Bushes must be thirty (30) inches in height or spread.*
- 3) Height of screening for transformer should be added to the landscape plan.*

PERFORMANCE STANDARDS

The performance standards are outlined in Section 5.18. The applicant has provided a photometric site plan on the last sheet in the drawing set. Lighting is reviewed and approved during final site plan review. Site footcandle limits for commercial uses is 0.5 fc. The site is proposing an average of 0.6 fc. This will need to be modified, or a waiver will be required. Additional footcandle measurements will be needed for walkways, building, and parking areas. Light pole distance from property lines will be required on the plan to confirm the proposed height of the poles is acceptable.

If there is a speaker system, then it needs to meet the requirements of Section 5.18.A. in the Zoning Ordinance.

Items to be Addressed:

- 1) Site footcandle limits for commercial uses is 0.5 fc. The site is proposing an average of 0.6 fc. This will need to be modified or a waiver will be required.*
- 2) Additional footcandle measurements will be needed for walkways, building, and parking areas.*
- 3) Light pole distance from property lines will be required on the plan to confirm the proposed height of the poles is acceptable.*

SIGNAGE

Sheet L-3 provides specifications for monument signage proposed at the Bogie Lake Road and Cedar Island Road entrances. Stone veneer is the predominant finish for the sign. Signs are administratively reviewed by the Township.

Items to be Addressed: None.

ARCHITECTURE & LAYOUT

The building's north, east, and south facades share similar architectural features with varied articulation. Proposed exterior building materials are horizontal siding, painted CMU block, brick, and painted metal coping. While brick is proposed, it is not the dominant material.

Garage doors are not permitted to face streets. The Planning Commission will need to consider a waiver for the north and south façade garage doors. Windows are provided on all three front facades. Front facades must offer at least 30% window coverage. The south elevation offers 14.4% window coverage, the North elevation offers 25.2% window coverage, and the East elevation offers 13.9% window coverage.

The west elevation or side of the building is visible from the street and has been updated in revised drawings to offer architectural cues similar to that of the north and south facades.

Items to be Addressed:

- 1) *Planning Commission to consider whether proposed exterior construction materials are appropriate.*
- 2) *Planning Commission to consider waiving the prohibition of garage doors facing Highland Road and Audbon Drive.*

SUMMARY

The Planned Business preliminary site plan is substantially complete. Included below is a list of potential conditions the Planning Commission could apply for preliminary site plan approval. Also included are waivers the Planning Commission and Township Board will need to consider, and items that may be addressed at final site plan.

Waivers / Modifications / Determinations

- 1) *The Planning Commission will need to determine if the 10 foot side setback being proposed is acceptable.*
- 2) *The Planning Commission will need to determine if the contribution to the CIA is a sufficient community benefit.*
- 3) *Planning Commission to consider whether proposed exterior construction materials are appropriate.*
- 4) *Planning Commission to consider waiving the prohibition of garage doors facing Highland Road and Audbon Drive.*
- 5) *Planning Commission to consider the request to waive the requirement that a CIS be provided by the applicant.*
- 6) *Consideration should be given to relocating the access drive per potential traffic conflicts with Bogie Lake Road / Highland Road (M-59) intersection traffic.*

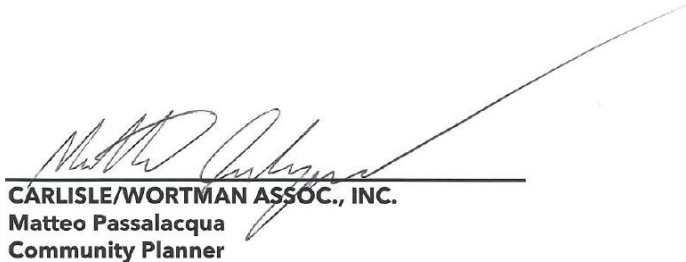
Preliminary Site Plan Potential Conditions

- 1) *The applicant should confirm cross connection is feasible with adjacent property owner or remove the connection from the site plan. If cross connection is sought by both property owners, a revised site plan will be required for parcel ID 12-20-276-035.*
- 2) *The Applicant shall be required to repair/replace any broken sections of concrete within the frontage sidewalks adjacent to the site along Bogie Lake Road and Highland Road (M-59), as determined by the Township Engineering Consultant.*
- 3) *A six foot wide sidewalk is required along Audbon Drive and should align with the development to west's new sidewalk.*
- 4) *Any cited concerns of Township Engineering.*
- 5) *Any cited concerns of Township Public Safety.*

Items to be addressed at Final Site Plan Review

- 1) *Western lot line modification approval will be required for final site plan approval and may require a modified site plan for the development directly west of the site.*
- 2) *A draft development agreement will be required during final site plan review.*
- 3) *Planning Commission to consider waiver to allow for one deciduous or evergreen tree along the western greenbelt instead of the required eight trees.*
- 4) *Bushes must be thirty (30) inches in height or spread.*
- 5) *Height of screening for transformer should be added to the landscape plan.*
- 6) *Site footcandle limits for commercial uses is 0.5 fc. The site is proposing an average of 0.6 fc. This will need to be modified or a waiver will be required.*
- 7) *Additional footcandle measurements will be needed for walkways, building, and parking areas.*
- 8) *Light pole distance from property lines will be required on the plan to confirm the proposed height of the poles is acceptable.*

Respectfully,



CARLISLE/WORTMAN ASSOC., INC.
Matteo Passalacqua
Community Planner



Fire Department
Charter Township of White Lake

7420 Highland Road
White Lake, MI 48383
Office (248) 698-3993
www.whitelaketwp.com/fire

Site / Construction Plan Review

To: Sean O'Neil, Planning Department Director

Date: 10-22-2025

Project: Jax Kar Wash

Job #: 25-0885

Date on Plans: 10-10-2025

The Fire Department has the following comments with regards to the 2nd review of preliminary site plans for the project known as Jax Kar Wash

1. The Fire Department has no further comments at this time.

Jason Hanifen
Fire Marshal
Charter Township of White Lake
(248)698-3993
jhanifen@whitelaketwp.com

Plans are reviewed using the International Fire Code (IFC), 2015 Edition and Referenced NFPA Standards.

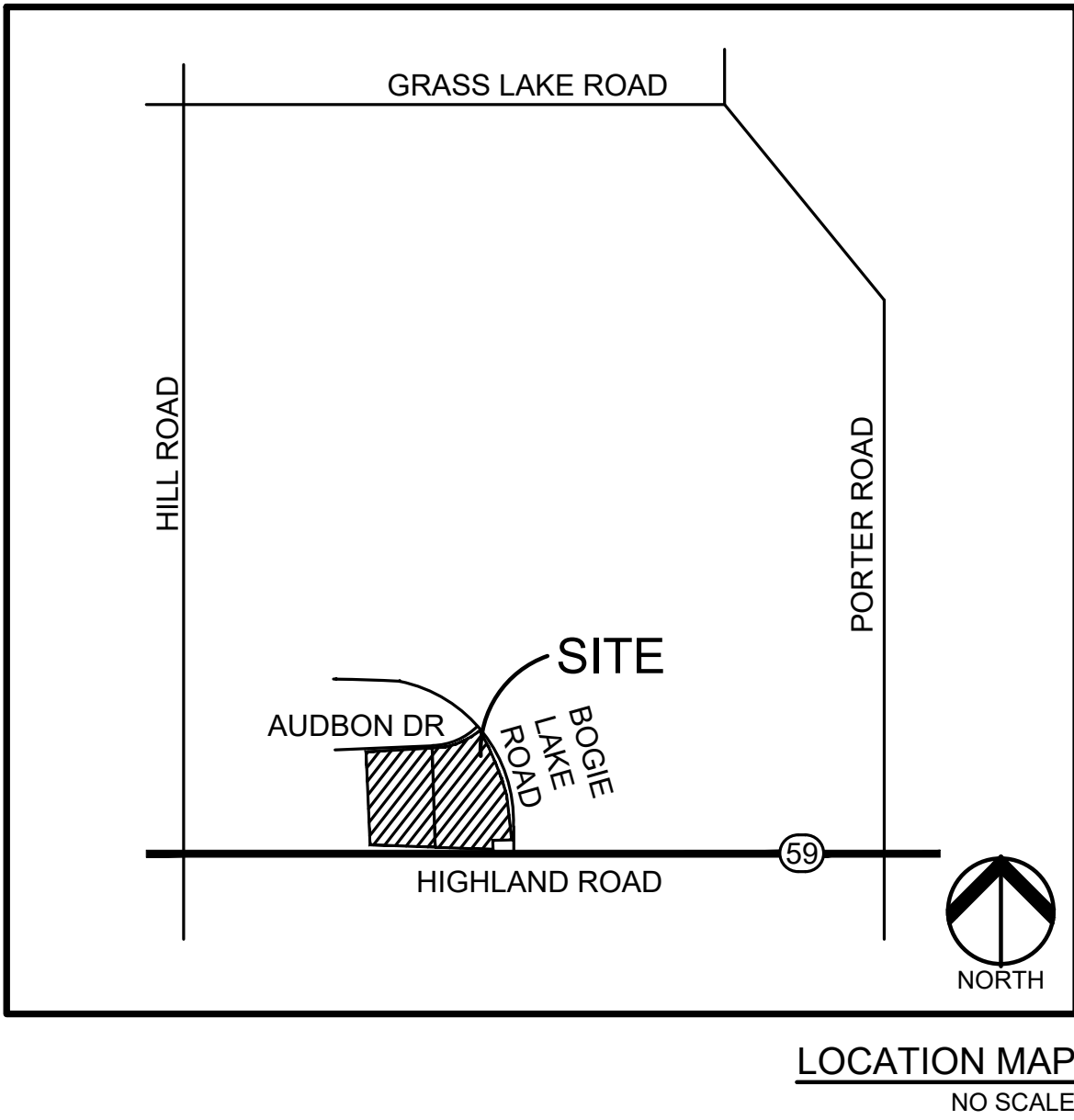
PRELIMINARY SITE PLANS

JAX KAR WASH

HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN



PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL



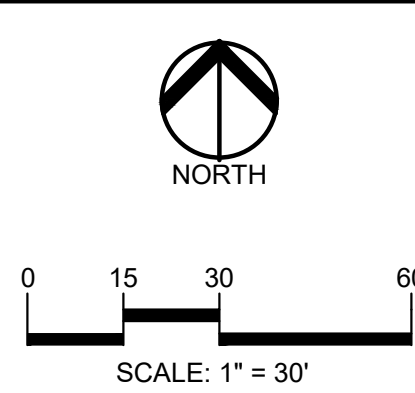
INDEX OF DRAWINGS	
NUMBER	TITLE
	COVER SHEET
C-1.0	TOPOGRAPHIC SURVEY
C-3.0	OVERALL SITE PLAN
C-3.1	PRELIMINARY SITE PLAN
C-3.2	FIRE TRUCK MANEUVERING PLAN
C-4.0	PRELIMINARY GRADING PLAN
C-6.0	PRELIMINARY UTILITY PLAN
C-8.0	STORM WATER MANAGEMENT PLAN
C-9.0	NOTES AND DETAILS
L-1.0	PRELIMINARY LANDSCAPE PLAN
L-1.1	LANDSCAPE DETAILS
PFP-2	OVERALL FLOOR PLAN
PE-2	ELEVATIONS
1 OF 1	PHOTOMETRIC SITE PLAN

DESIGN TEAM

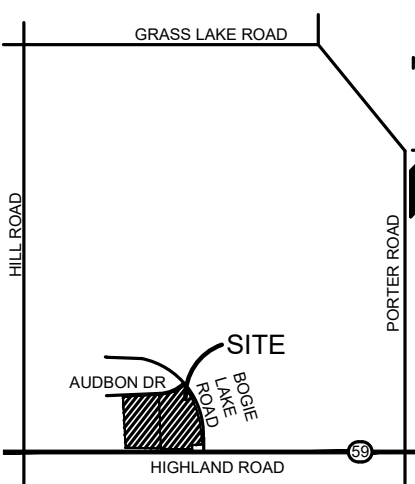
APPLICANT	CIVIL ENGINEER
BMW KAR WASH, LLC 26777 CENTRAL PARK, S-180 SOUTHFIELD, MI 48034 CONTACT: TODD GESUND PHONE: 7248-514-5565 EMAIL: TODD@JAXKARWASH.NET	PEA GROUP 1849 POND RUN AUBURN HILLS, MI 48326 CONTACT: JAMES P. BUTLER, PE PHONE: 844.813.2949 EMAIL: JBUTLER@PEAGROUP.COM
ARCHITECT	LANDSCAPE ARCHITECT
F.A. STUDIO 26261 EVERGREEN ROAD SOUTHFIELD, MI CONTACT: DAVID BRINKMEIER PHONE: 248.619.2354 EMAIL: DBRINKMEIER@FA.STUDIO	PEA GROUP 7927 NEMCO WAY, STE. 115 BRIGHTON, MI 48116 CONTACT: JANET EVANS, PLA PHONE: 844.813.2949 EMAIL: JEVANS@PEAGROUP.COM

PEA
GROUP

REVISIONS	
DESCRIPTION	DATE
TWP. COMMENTS	10/9/2025



CAUTION!!
THE LOCATIONS 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
BMW KAR WASH LLC
2677 CENTRAL PARK BLVD., SUITE 180
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH
WHITE LAKE, MICHIGAN



REVISIONS
TWP. COMMENTS 10-9-25

ORIGINAL ISSUE DATE:
SEPTEMBER 10, 2025

DRAWING TITLE
TOPOGRAPHIC SURVEY

PEA JOB NO. 25-0885
P.M. JPB
DN. SWS
DES. SWS

DRAWING NUMBER:

C-1.0

LEGAL DESCRIPTION:
(PER SURVEY OAKLAND)
(TAX PARCEL #12-20-276-040)
T3N. R8E. SEC 20 PART OF NE 1/4 BEG AT PT DIST N 00-31-08 E 198.92 FT & N 89-58-09 E 519.78 FT & S 87-30-16 E 513.36 FT FROM CEN OF SEC, TH N 00-39-06 E 312.07 FT, TH E 222.10 FT, TH S 01-30-56 W 332.20 FT, TH N 84-42-00 W 189.40 FT, TH ALG CURVE TO LEFT, RAD 592.158 FT, CHORD BEARS N 84-52-11 W 28.38 FT, DIST OF 28.38 FT TO BEG 1.82 A 1-16-25 FR 037

LEGAL DESCRIPTION:
(PER SURVEY OAKLAND)
(TAX PARCEL #12-20-276-034)
T3N. R8E. SEC 20 PART OF NE 1/4 BEG AT PT DIST N 00-31-08 E 198.92 FT & N 89-58-09 E 519.78 FT & S 87-21-59 E 541.74 FT & S 84-42-00 E 189.40 FT FROM CEN OF SEC, TH N 01-30-56 E 332.20 FT, TH N 90-00-00 E 15.98 FT, TH ALG CURVE TO LEFT, RAD 233 FT, CHORD BEARS N 75-11-17 E 119.13 FT, DIST OF 120.47 FT, TH N 60-22-37 E 36.86 FT, TH ALG CURVE TO RIGHT, RAD 966.50 FT, CHORD BEARS S 19-25-09 E 233.59 FT, DIST OF 234.17 FT, TH S 03-10-30 E 150.32 FT, TH N 88-29-04 W 63.50 FT, TH S 01-30-56 W 30.03 FT, TH N 84-42-00 W 194.54 FT TO BEG 1.88 A 10-7-14 FR 032

- LEGEND:**
- OH-ELEC - WIRE - 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
 - EX. MAILBOX, SIGN & LIGHT POLE
 - 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
 - RECORDED / MEASURED / CALCULATED

REFERENCE DRAWINGS:

WATER MAIN
COSMOS CAR WASH, DRAINAGE PLAN, KHA, JOB NO. 190125008, DATED 8/30/22
MEUER OFF-SITE SANITARY SEWER EXT., SDA, JOB NO. WH00-006, DATED 2/11/03
MEUER UTILITY PLAN, SSOE, INC., JOB NO. 95-6165-10, SHT C400B

SANITARY SEWER
COSMOS CAR WASH, DRAINAGE PLAN, KHA, JOB NO. 190125008, DATED 8/30/22
MEUER OFF-SITE SANITARY SEWER EXT., SDA, JOB NO. WH00-006, DATED 2/11/03
MEUER UTILITY PLAN, SSOE, INC., JOB NO. 95-6165-10, SHT C400B

STORM SEWER
COSMOS CAR WASH, DRAINAGE PLAN, KHA, JOB NO. 190125008, DATED 8/30/22
MEUER OFF-SITE SANITARY SEWER EXT., SDA, JOB NO. WH00-006, DATED 2/11/03
MEUER UTILITY PLAN, SSOE, INC., JOB NO. 95-6165-10, SHT C400B

ELECTRIC
COSMOS CAR WASH, DRAINAGE PLAN, KHA, JOB NO. 190125008, DATED 8/30/22
MEUER OFF-SITE SANITARY SEWER EXT., SDA, JOB NO. WH00-006, DATED 2/11/03
MEUER UTILITY PLAN, SSOE, INC., JOB NO. 95-6165-10, SHT C400B

TELEPHONE
COSMOS CAR WASH, DRAINAGE PLAN, KHA, JOB NO. 190125008, DATED 8/30/22
MEUER OFF-SITE SANITARY SEWER EXT., SDA, JOB NO. WH00-006, DATED 2/11/03
MEUER UTILITY PLAN, SSOE, INC., JOB NO. 95-6165-10, SHT C400B
VERIZON, GEORESULT, EMAIL, DATED 8/15/25

GAS
MEUER OFF-SITE SANITARY SEWER EXT., SDA, JOB NO. WH00-006, DATED 2/11/03
MEUER UTILITY PLAN, SSOE, INC., JOB NO. 95-6165-10, SHT C400B
DTE TRANSMISSION, NO. 6281, DATED 8/1/25
CE QS MAP 03-58-20-1, DATED 8/7/25

CATV
COMCAST, EMAIL DATED 8/16/25
FEMA F.I.R.M. MAP 26125C0318F, DATED 9/29/06

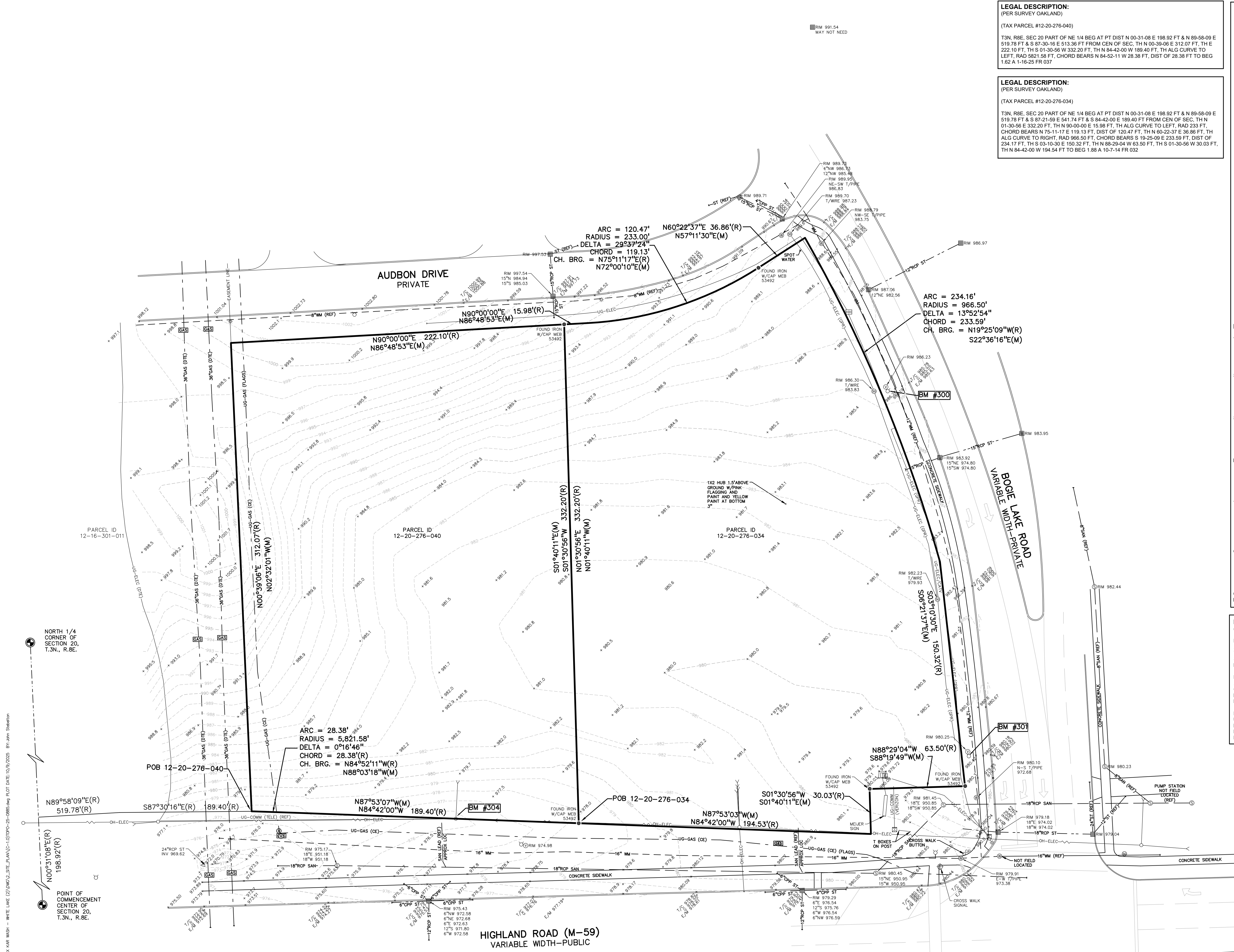
FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26125C0318F, DATED SEPTEMBER 29, 2006.

BENCHMARKS:
(GPS DERIVED - NAVD89)

BM #300
ARROW ON HYDRANT BEING ±17' SOUTHWESTERLY FROM THE WESTERLY BACK OF CURB OF BOGIE LAKE ROAD AND ±147' SOUTHEASTERLY FROM THE CENTERLINE OF AUDBON DRIVE. ELEV. - 988.47

BM #301
ARROW ON HYDRANT BEING ±16' WEST FROM THE WESTERLY BACK OF CURB OF BOGIE LAKE ROAD AND ±87' NORTH FROM THE NORTHERLY BACK OF CURB OF HIGHLAND ROAD (M-59). ELEV. - 982.42

BM #304
UTILITY POLE ±48' NORTHWEST FROM HYDRANT LOCATED 19' DIRECTLY NORTH FROM SIDEWALK ON NORTHSIDE OF HIGHLAND ROAD (M-59). ELEV. - 976.38



S:\PROJECTS\2025\25-0885 JAX KAR WASH - WHITE LAKE (2)DWG\3_SITE_PLAN (C-1)DWG.dwg PLOT DATE: 10/9/2025 BY: jom Station

LEGAL PROPOSED TO BE AMENDED

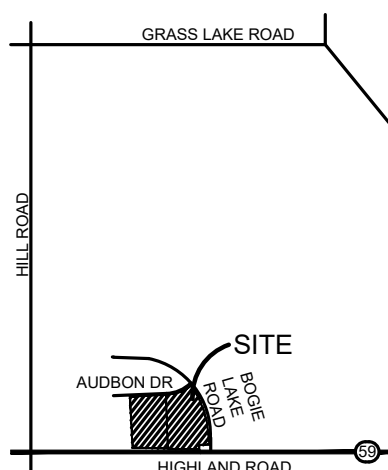
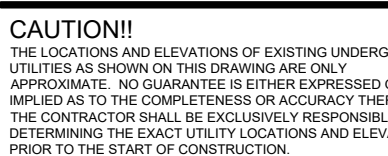
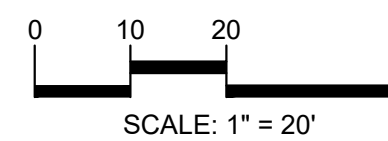
LEGAL PROPOSED TO BE AMENDED

FOR - UNDERSAMMELN UNDIULATING



DRAWING NUMBER:

C-3.0



CLIENT
BMW KAR WASH LI
26777 CENTRAL PARK BLVD, SUITE
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH
WHITE LAKE, MICHIGAN



REVISIONS

TWP. COMMENTS	10
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ORIGINAL ISSUE DATE:
SEPTEMBER 10, 2025

DRAWING TITLE

**PRELIMINARY
SITE PLAN**

PFA JOB NO 25-0

RM

DN	A
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










DN.	5
555	

DES.

DRAWING NUMBER:

C-3.1

LEGEND:

	CONCRETE PAVEMENT						
<table border="1"><tr><td>STD</td><td>HEAVY</td><td>R.O.W.</td></tr><tr><td>DUTY</td><td>DUTY</td><td>ONLY</td></tr></table>	STD	HEAVY	R.O.W.	DUTY	DUTY	ONLY	
STD	HEAVY	R.O.W.					
DUTY	DUTY	ONLY					
	ASPHALT PAVEMENT						
<table border="1"><tr><td>STD</td><td>HEAVY</td><td>DEEP</td></tr><tr><td>DUTY</td><td>DUTY</td><td>STRENGTH</td></tr></table>	STD	HEAVY	DEEP	DUTY	DUTY	STRENGTH	
STD	HEAVY	DEEP					
DUTY	DUTY	STRENGTH					
	GRAVEL						
	WETLAND						
	CONCRETE CURB AND GUTTER						
	REVERSE GUTTER PAN						
	SETBACK LINE						
	SIGN						
	LIGHTPOLE						
	FENCE						
	GUARD RAIL						

SIGN LEGEND:

'NO PARKING FIRE LANE' SIGN	1
'STOP' SIGN	2
'BARRIER FREE PARKING' SIGN	3
'VAN ACCESSIBLE' SIGN	4
'DO NOT ENTER' SIGN	5
'BY-PASS LANE' SIGN	6

REFER TO DETAIL SHEET FOR SIGN DETAILS

SIDEWALK RAMP LEGEND:

SIDEWALK RAMP 'TYPE R' (R)
CURB DROP ONLY (X)
REFER TO LATEST MDOT R-28
STANDARD RAMP AND DETECTABLE
WARNING DETAILS

GENERAL NOTES:

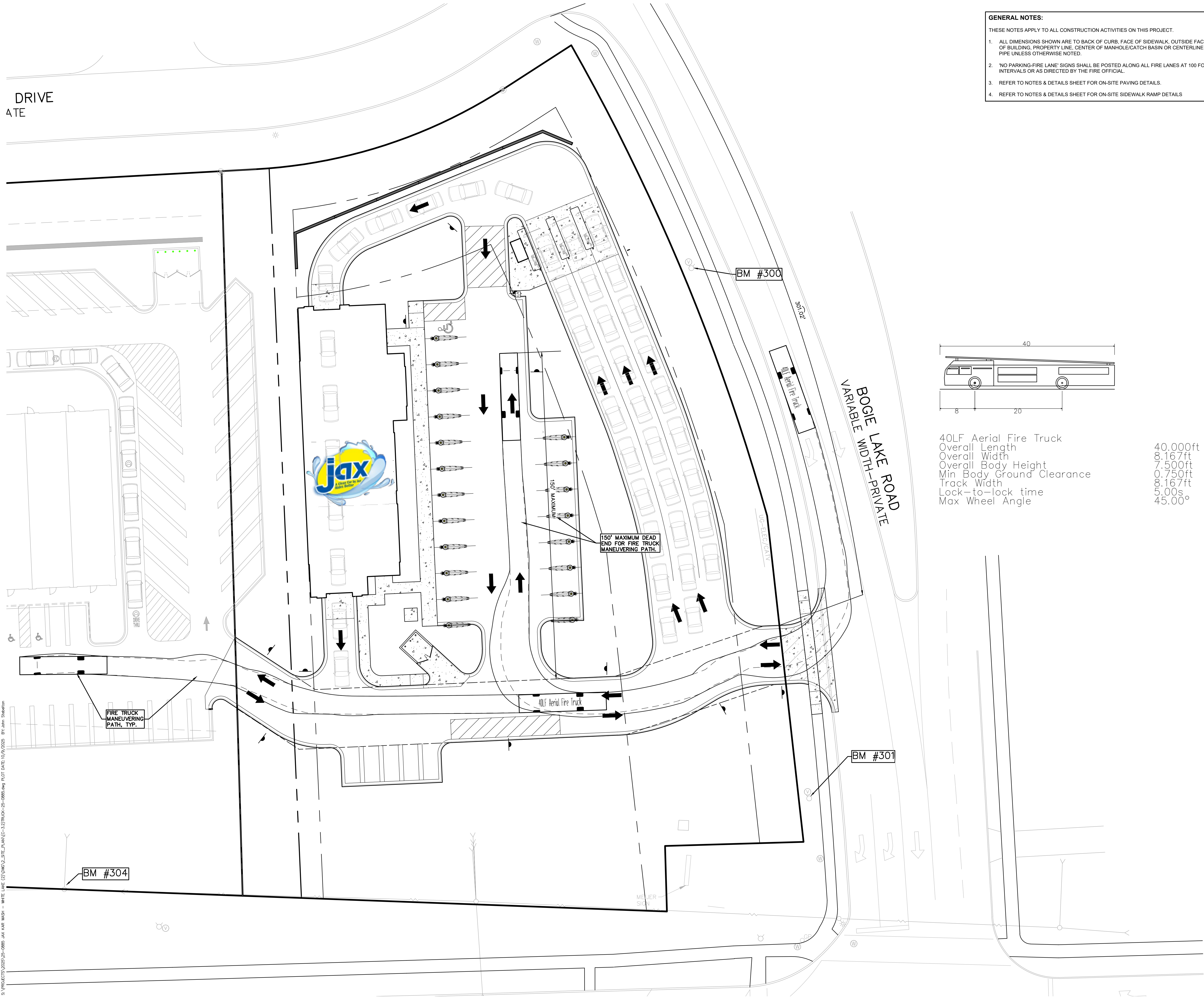
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT

1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
2. "NO PARKING-FIRE LANE" SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 100 FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
3. REFER TO NOTES & DETAILS SHEET FOR ON-SITE PAVING DETAILS.
4. REFER TO NOTES & DETAILS SHEET FOR ON-SITE SIDEWALK RAMP DETAILS

\\PROJECTS\2025\25-0685 JAX KAR WASH - WHITE LAKE (2)\DWG\2_SITE_PLAN\C-3.1\DWG-25-0685.dwg PLOT DATE: 10/9/2025 BY: John Stebbins

NOT FOR CONSTRUCTION

C-3.1



- GENERAL NOTES:**
- THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.
1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
 2. 'NO PARKING-FIRE LANE' SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 100 FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
 3. REFER TO NOTES & DETAILS SHEET FOR ON-SITE PAVING DETAILS.
 4. REFER TO NOTES & DETAILS SHEET FOR ON-SITE SIDEWALK RAMP DETAILS

LEGEND:

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

SIGN LEGEND:

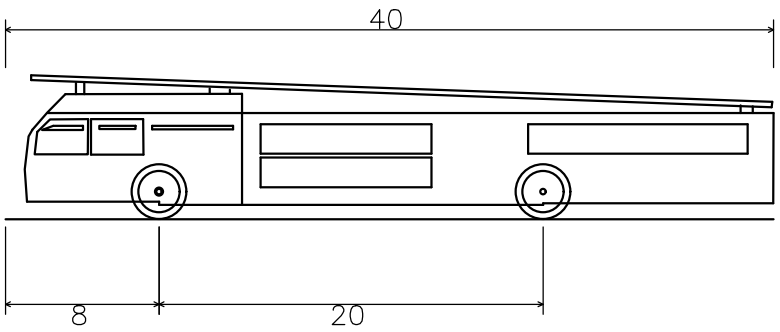
'NO PARKING FIRE LANE' SIGN	1
'STOP' SIGN	2
'BARRIER FREE PARKING' SIGN	3
'VAN ACCESSIBLE' SIGN	4
'DO NOT ENTER' SIGN	5
'BY-PASS LANE' SIGN	6

REFER TO DETAIL SHEET FOR SIGN DETAILS

SIDEWALK RAMP LEGEND:

SIDEWALK RAMP 'TYPE R'	R
CURB DROP ONLY	X

REFER TO LATEST MDOT R-28
STANDARD RAMP AND DETECTABLE
WARNING DETAILS



40LF Aerial Fire Truck
Overall Length 40.000ft
Overall Width 8.167ft
Overall Body Height 7.500ft
Min Body Ground Clearance 0.750ft
Track Width 8.167ft
Lock-to-lock time 5.00s
Max Wheel Angle 45.00°

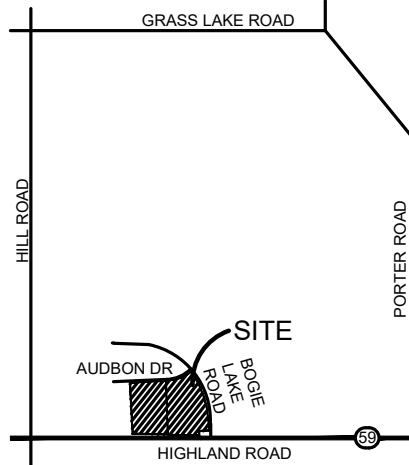
PEA GROUP
t: 844.813.2949
www.peagroup.com

NORTH

0 10 20 40
SCALE: 1" = 20'

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

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. 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 CENTRAL PARK BLVD, SUITE 180
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH
WHITE LAKE, MICHIGAN



REVISIONS
TWP. COMMENTS 10-9-25

ORIGINAL ISSUE DATE:
SEPTEMBER 10, 2025

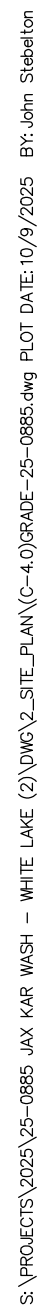
DRAWING TITLE
**FIRE TRUCK
MANEUVERING
PLAN**

PEA JOB NO. 25-0885
P.M. JPB
DN. SWS
DES. SWS
DRAWING NUMBER:

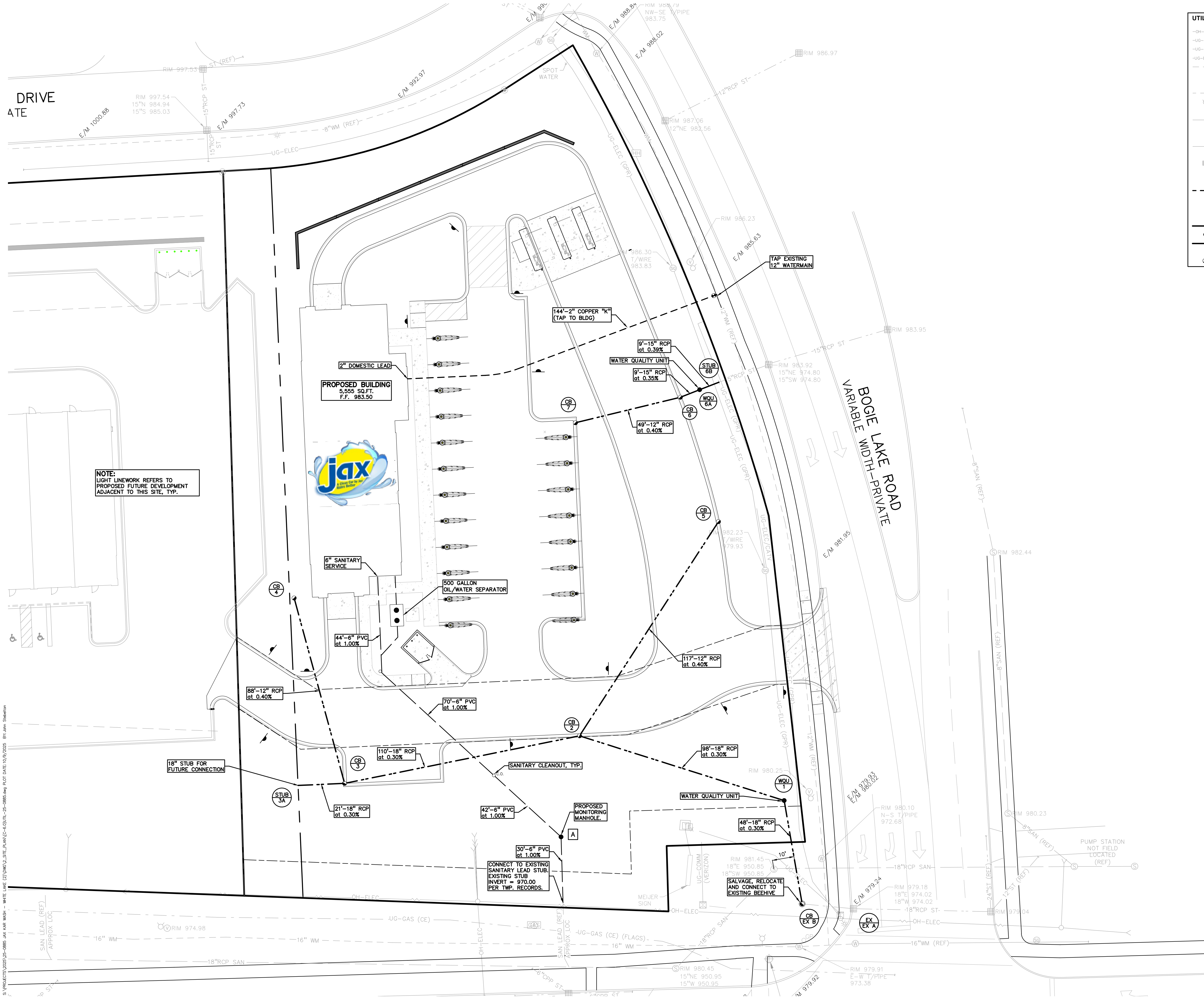
NOT FOR CONSTRUCTION

C-3.2

S:\PROJECTS\2025\25-0885-JAX KAR WASH - WHITE LAKE (2)DWG\3_SITE_PLAN(C-32)TRUCK-25-0885.dwg PLOT DATE: 10/9/2025 BY: John Sieteman



C-4.0



UTILITY LEGEND:

OH-ELEC-W-O	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 SANITARY CLEANOUT & MANHOLE
	PROPOSED STORM SEWER
	PROPOSED STORM SEWER CLEANOUT & MANHOLE
	PROPOSED CATCH BASIN, INLET & YARD DRAIN

NOTE:
CONTRACTOR TO VERIFY ALL QUANTITIES. ANY DEVIATIONS TO THE PLAN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF PEA GROUP FOR VERIFICATION, PRIOR TO BIDDING.

PREMIUM TRENCH BACKFILL NOTE:
ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45' LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

PUBLIC UTILITY EASEMENTS:
ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAIN SHALL BE LOCATED IN A 20' WIDE EASEMENT.

**WHITE LAKE TOWNSHIP
STORM SEWER FRAME AND
COVER NOTES**

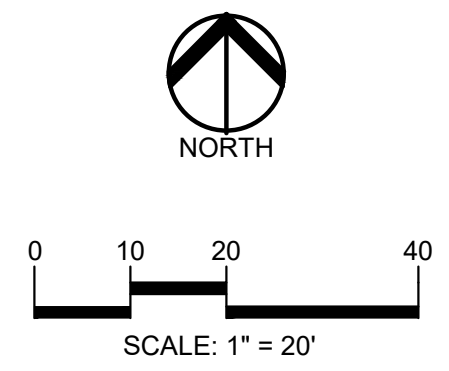
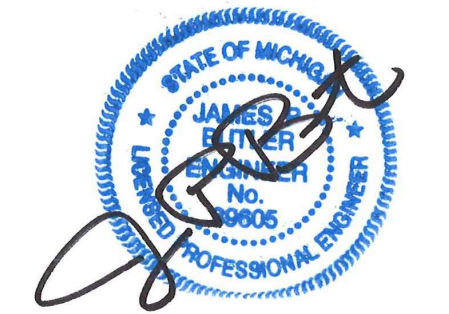
CATCH BASIN - CURB
FRAME: EJ 7045
COVER: MDOT TYPE "K"

CATCH BASIN - MOUNTABLE CURB
FRAME: EJ 7065
COVER: TYPE "M1"

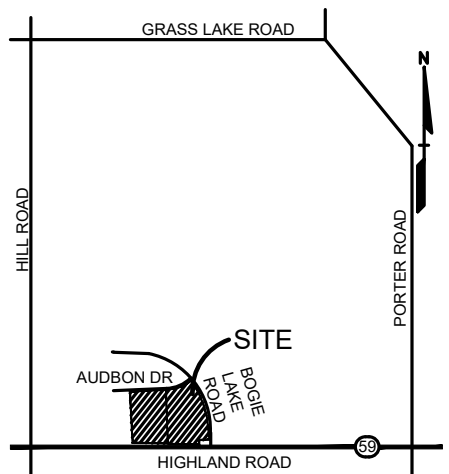
CATCH BASIN - PAVEMENT
FRAME: EJ 5100Z
COVER: TYPE "M1" 5105 GRATE

CATCH BASIN - YARD
FRAME: MDOT EJ 1040-02

MANHOLE
FRAME: EJ 1060
COVER: MDOT TYPE "A"



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CLIENT
BMW KAR WASH LLC
26777 CENTRAL PARK BLVD, SUITE 180
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH
WHITE LAKE, MICHIGAN

REVISIONS	
TWP. COMMENTS	10-9-25

ORIGINAL ISSUE DATE:
SEPTEMBER 10, 2025

DRAWING TITLE
**PRELIMINARY
UTILITY PLAN**

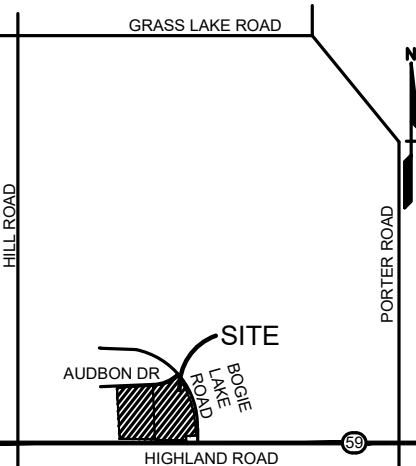
PEA JOB NO.	25-0885
P.M.	JPB
DN.	SWS
DES.	SWS
DRAWING NUMBER:	



0 20 40 80
SCALE: 1" = 40'



CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE AS TO 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
2677 CENTRAL PARK BLVD, SUITE 180
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH
WHITE LAKE, MICHIGAN



REVISIONS
TWP. COMMENTS 10-9-25

ORIGINAL ISSUE DATE:
SEPTEMBER 10, 2025

DRAWING TITLE
**STORM
WATER
MANAGEMENT
PLAN**

PEA JOB NO. 25-0885

P.M. JPB

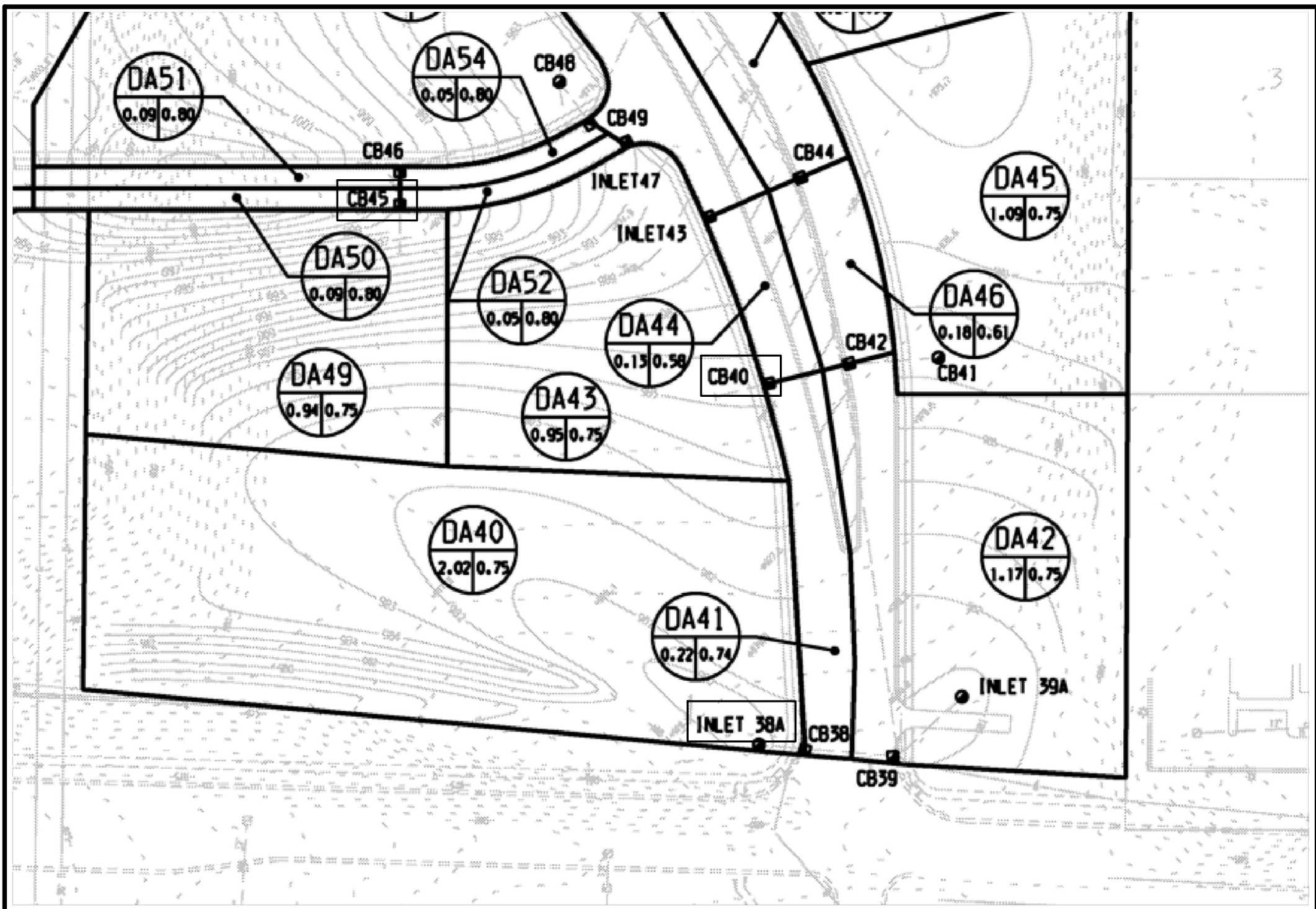
DN. SWS

DES. SWS

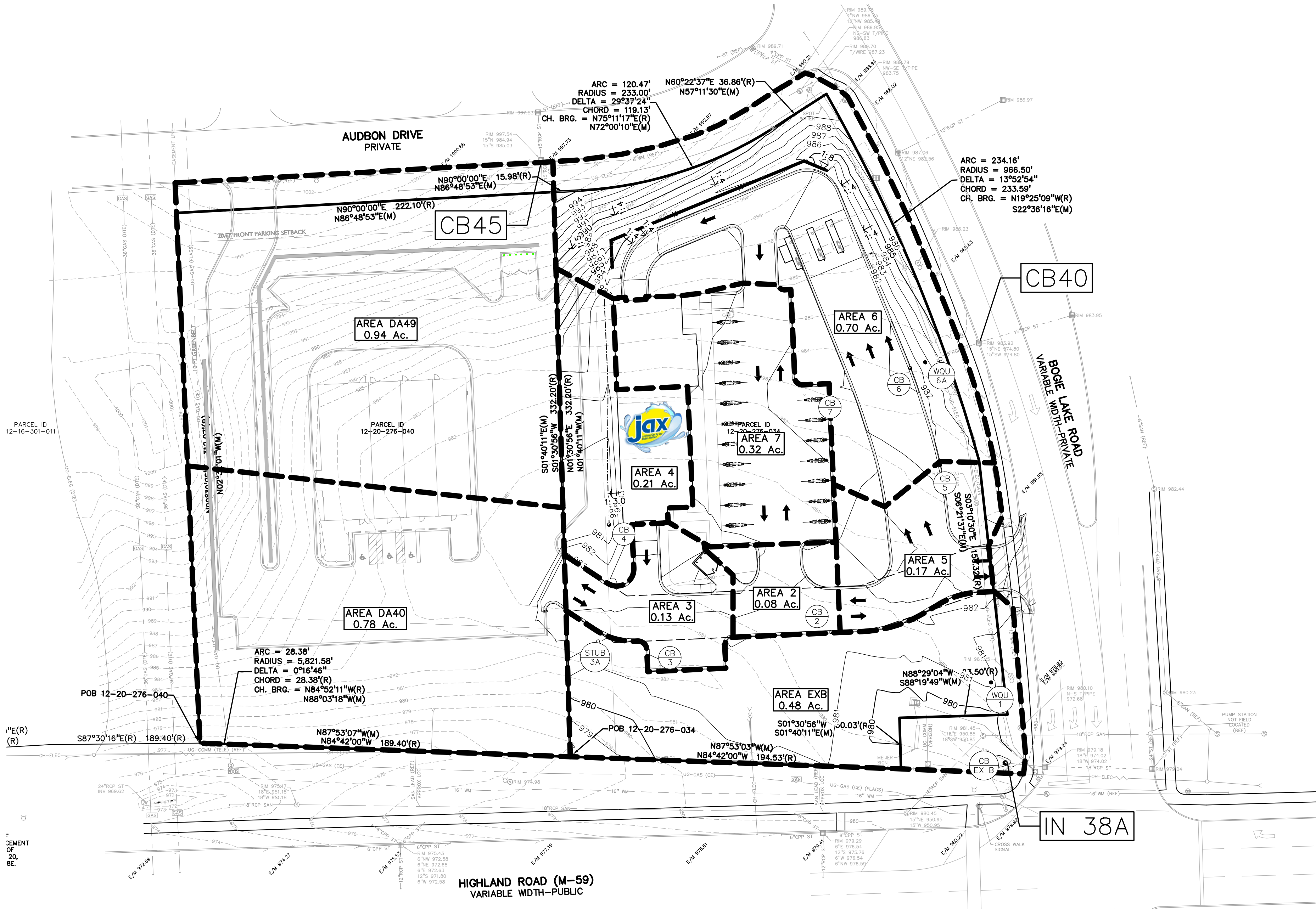
DRAWING NUMBER:

C-8.0

NOT FOR CONSTRUCTION



PRE-DEVELOPMENT DRAINAGE MAP
NOT TO SCALE



POST-DEVELOPMENT DRAINAGE MAP
SEE SHEET FOR SCALE

STORM WATER RUNOFF PRE AND POST CALCULATIONS											
time concentration (t) = 15 min 10 yr intensity (I) = 30.2p ^{0.22} /(Tc + 9.17) ^{0.81} = 3.80 in/hr p = 10 years						time concentration (t) = 15 min 10 yr intensity (I) = 30.2p0.22/(Tc + 9.17)0.81 = 3.80 in/hr p = 10 years					
PRE-DEVELOPMENT						POST-DEVELOPMENT					
* per existing MEIJER-227 plans						* per existing MEIJER-227 plans					
OUTLET	* EXISTING CAPACITY (CFS)	AREA NUMBER	AREA (ACRE)	C-VALUE	Q = CIA (CFS)	OUTLET	* EXISTING CAPACITY (CFS)	AREA NUMBER	AREA (ACRE)	C-VALUE	Q = CIA (CFS)
CB45	*3.11	DA49	0.94	0.75	2.68	CB45	*3.11	DA49	0.94	0.75	2.68
INLET 38A	*6.58	DA40	2.02	0.75	5.75	INLET 38A	*6.58	DA40	0.78	0.75	2.21
								2	0.08	0.78	0.24
								3	0.13	0.88	0.43
								4	0.21	0.53	0.42
								5	0.17	0.68	0.44
								EXB	0.48	0.30	0.54
							capacity >	Total	1.84	0.61	4.28
CB40	*4.1	DA43	0.95	0.75	0.71	CB40	*4.1	DA43	0	-	-
								6	0.70	0.52	1.39
								7	0.32	0.90	1.08
							capacity >	Total	1.02	0.64	2.47

S:\PROJECTS\2025-25-0885-JAX KAR WASH - WHITE LAKE (2)DWG\2_SITL_PLAN (C-9)NOTE-25-0885.dwg PLOT DATE:10/9/2025 BT: tom Station

GENERAL NOTES:

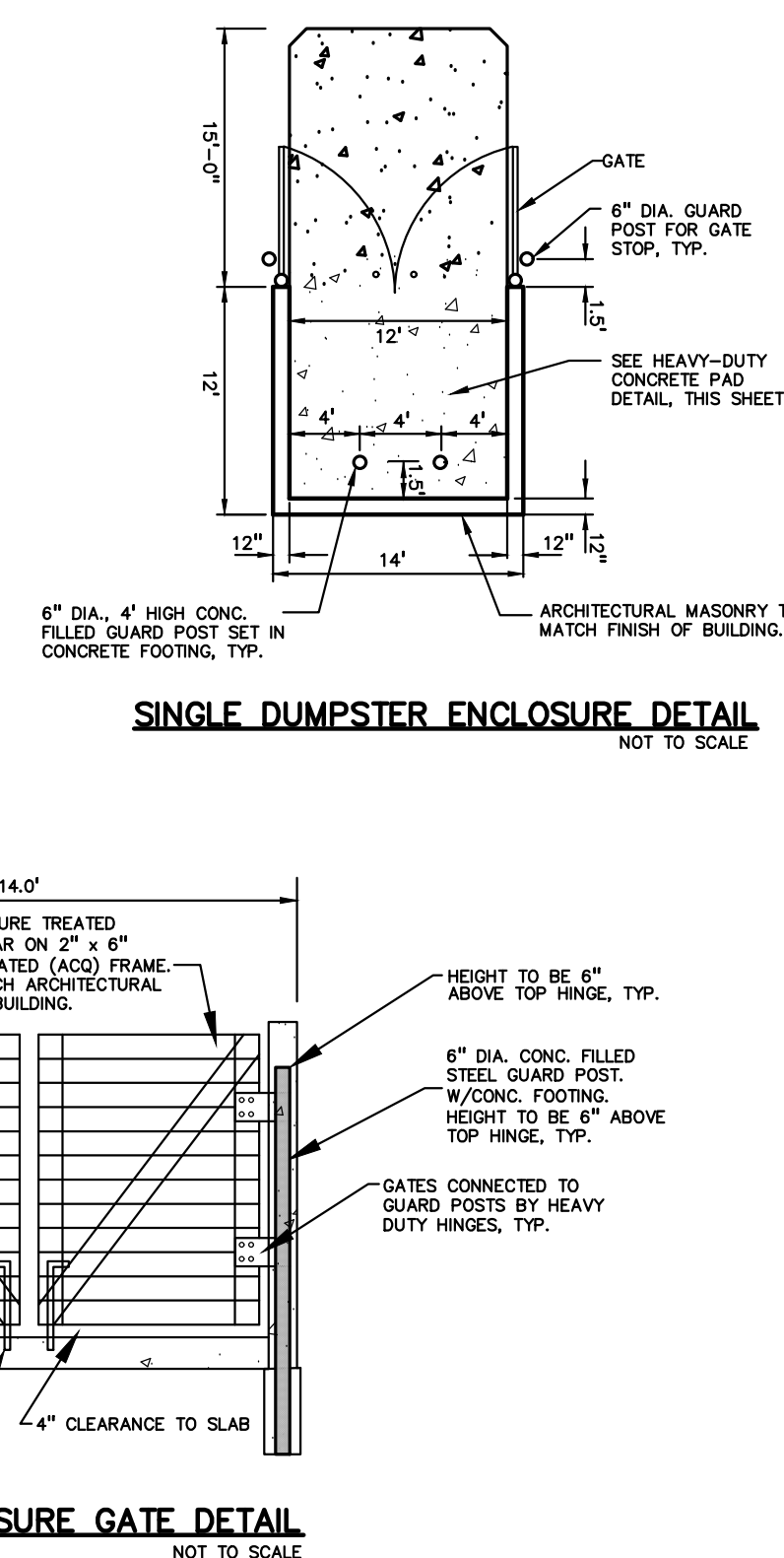
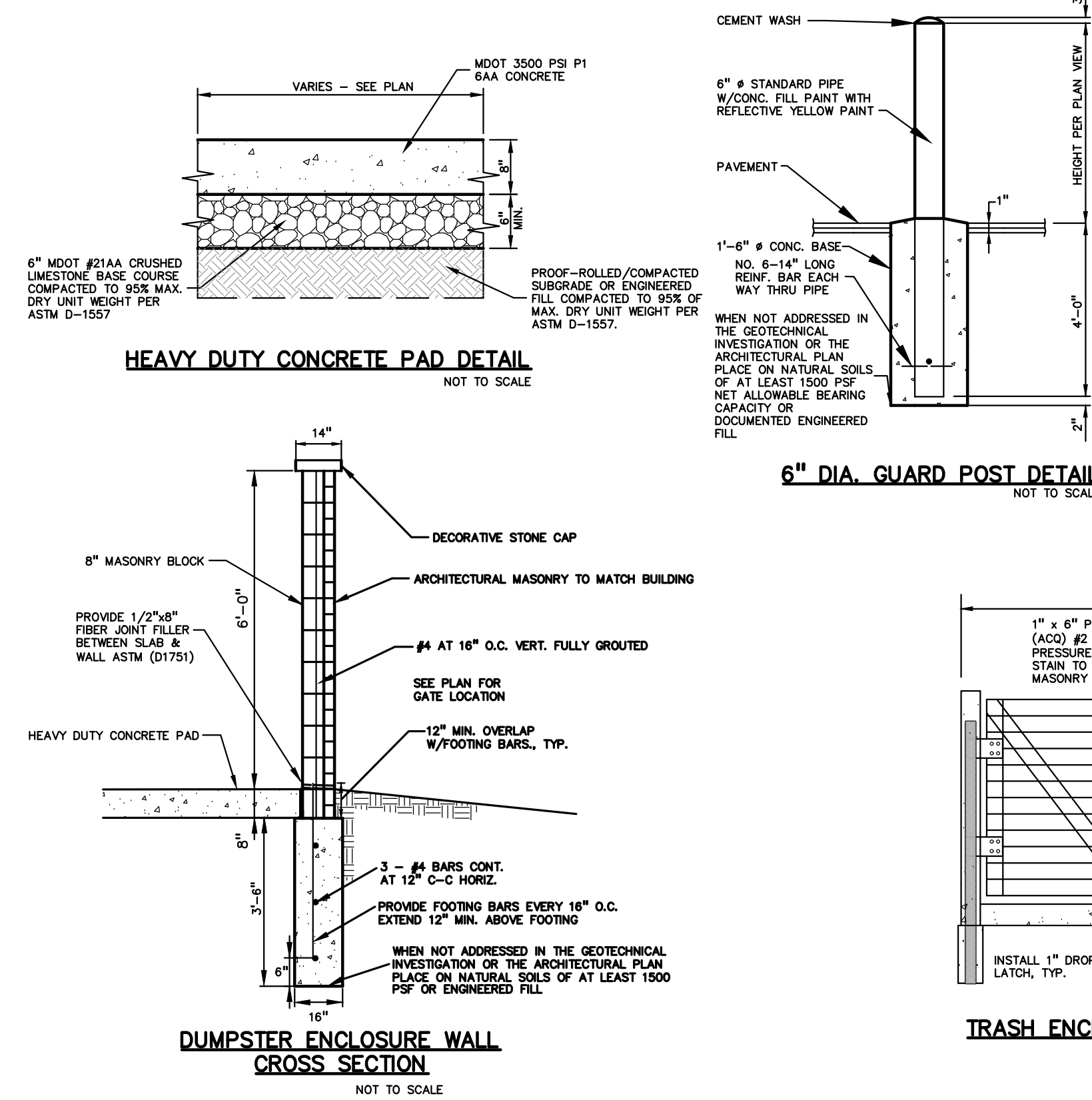
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

- ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT OSHA, MDOT AND MUNICIPALITY STANDARDS AND REGULATIONS.
- THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.
- UNLESS OTHERWISE AGREED UPON BETWEEN THE OWNER AND CONTRACTOR, THE CONTRACTOR SHALL PAY ALL MUNICIPAL, COUNTY, AND STATE PERMIT, INSPECTION, AND/OR TESTING FEES. THE CONTRACTOR SHALL ALSO PROVIDE THE NECESSARY BONDS AND INSURANCE REQUIRED TO COMPLETE THE PROJECT.
- THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
- CONTRACTOR SHALL VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL, HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE AT THE CONTRACTOR'S EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR.
- ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
- ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, TOWNSHIP AND STATE SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.
- THE USE OF CRUSHED CONCRETE IS PROHIBITED ON THE PROJECT WITHIN 100 FEET OF ANY WATER COURSE (STREAM, RIVER, COUNTRY DRAIN, ETC.) AND LAKE, REGARDLESS OF THE APPLICATION OR LOCATION OF THE WATER COURSE OR LAKE RELATIVE TO THE PROJECT LIMITS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND/OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

GENERAL GRADING AND EARTHWORK NOTES:

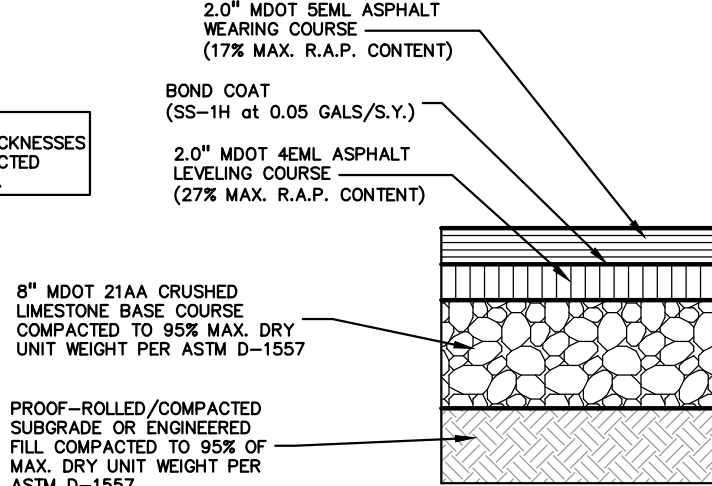
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT

- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.
- ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
- THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE SITE BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.
- ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE AUTHORIZED PUBLIC AGENCY OF JURISDICTION. AN EROSION CONTROL PERMIT MUST BE SECURED FROM THE COUNTY PRIOR TO CONSTRUCTION.
- ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS INVESTIGATION AND REPORT.
- REFER TO SOIL EROSION CONTROL PLAN FOR ADDITIONAL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES.
- THE DETENTION BASIN SIDE SLOPES AND ALL SLOPE EXCEEDING 1:4 MUST BE STABILIZED BY SODDING OR BY PLACING A MULCH BLANKET PEGGED IN PLACE OVER SEED.
- ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A MINIMUM OF 3" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL, IN THE OPINION OF THE THIRD PARTY TESTING COMPANY, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL.
- ON-SITE FILL CAN BE USED IF THE SPECIFIED COMPACTION REQUIREMENTS CAN BE ACHIEVED. IF ON-SITE SOIL IS USED, IT SHOULD BE CLEAN AND FREE OF FROZEN SOIL, ORGANICS, OR OTHER DELETERIOUS MATERIALS.
- THE FINAL SUBGRADE/EXISTING AGGREGATE BASE SHOULD BE THOROUGHLY PROOFROLLED USING A FULLY LOADED TANDEM AXLE TRUCK OR FRONT END LOADER UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHOULD BE REINFORCED USING GEORGRIDS OR REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
- SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FILL AREAS OR BELOW SUBGRADE IN CUT AREAS WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING.
- SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED AS RECOMMENDED IN THE GEOTECHNICAL ENGINEERING REPORT FOR THE PROJECT.
- ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.



ASPHALT MIX DESIGN CHART					
COMMERCIAL ADT 0-300	COMMERCIAL ADT 301-1000	COMMERCIAL ADT 1001-3400	COMMERCIAL ADT 3401	APPLICATION RATE (LB/YD) 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		

NOTE:
ALL SPECIFIED THICKNESSES ARE FINAL COMPACTED THICKNESSES, TYP.

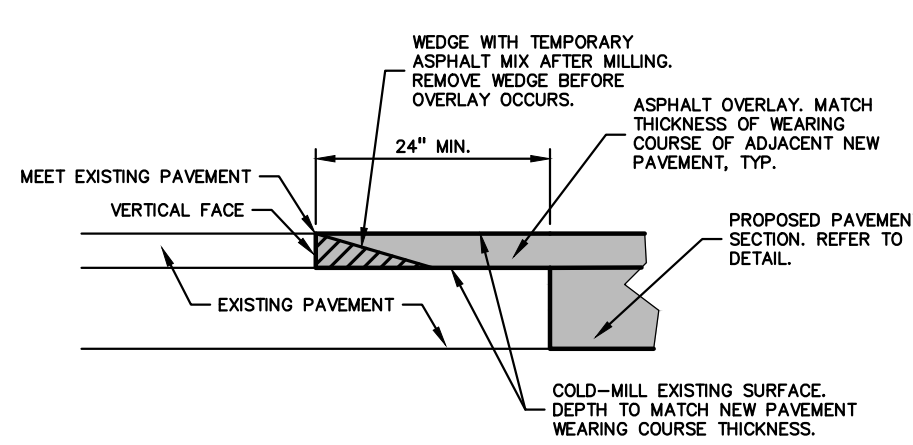


STANDARD DUTY ASPHALT DETAIL
(NOT FOR USE IN THE RIGHT-OF-WAY)

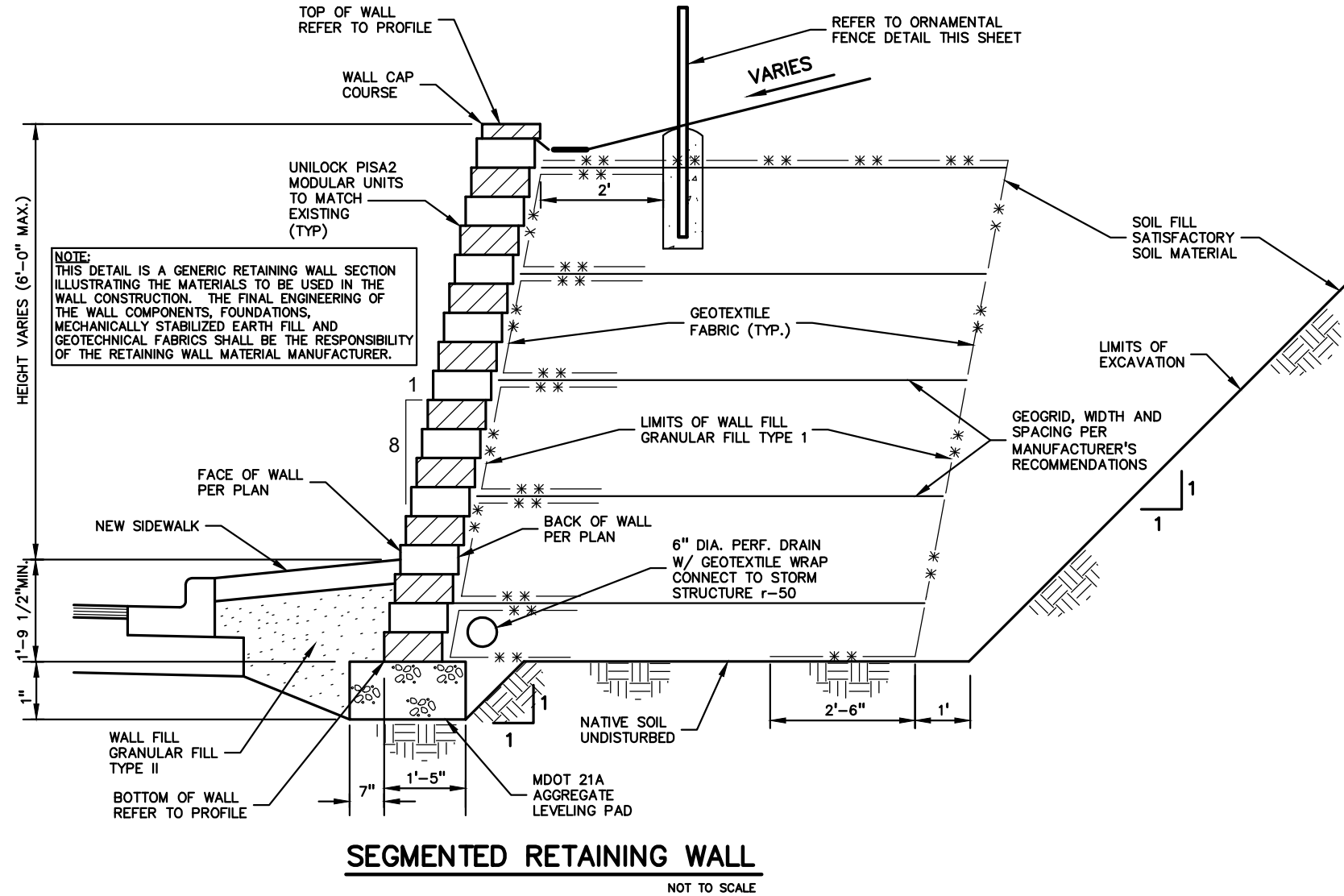
AGGREGATE BASE NOTE:
THIS PAVEMENT SECTION DESIGN ASSUMES THE USE OF MDOT 21AA CRUSHED LIMESTONE BASE MATERIAL THAT MEETS THE REQUIREMENTS OF MDOT STANDARD SPECIFICATION SECTION 902 FOR AGGREGATES. IF CRUSHED CONCRETE AGGREGATE BASE IS PROPOSED IN LEU OF THE SPECIFIED CRUSHED LIMESTONE MATERIAL, PEA GROUP WILL REQUIRE A MINIMUM 25% INCREASE IN BASE THICKNESS. HOWEVER, IF TESTING DOCUMENTATION IS PROVIDED TO PEA 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 MATERIAL NOTES:
HOT-MIX ASPHALT MIXTURES UTILIZING RECYCLED ASPHALT PAVEMENT (RAP) MUST MEET MDOT SPECIAL PROVISION 1225P(6). THE UNDER 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 TYP 1" AFTER 2" REQUIREMENTS (RAP CONTENT UP TO 27% MAXIMUM). TEN (3) MIXES ARE NOT ACCEPTABLE ON THIS PROJECT. AN ASPHALT MIX DESIGN FOR ALL SPECIFIED MIXES SHOULD BE FORWARDED TO PEA GROUP FOR REVIEW PRIOR TO CONSTRUCTION.

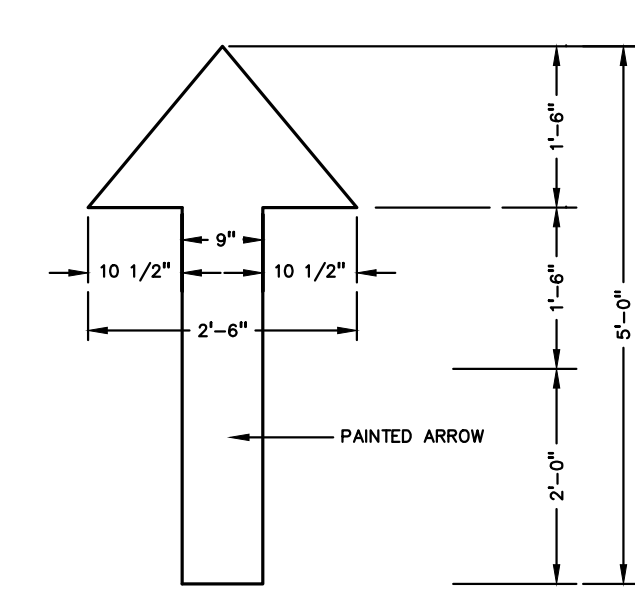
- NOTES:
- FENCE MANUFACTURER: AMERISTAR (OR APPROVED EQUAL) PHONE #: 888.333.3422 PRODUCT: MONTAGE PLUS MAJESTIC 3 RAIL COMMERCIAL FINISH: POWDER COAT/BLACK
 - FENCING TO MEET STATE & LOCAL CODES
 - INSTALLATION PER MANUFACTURER'S RECOMMENDATION
 - SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION FOR APPROVAL



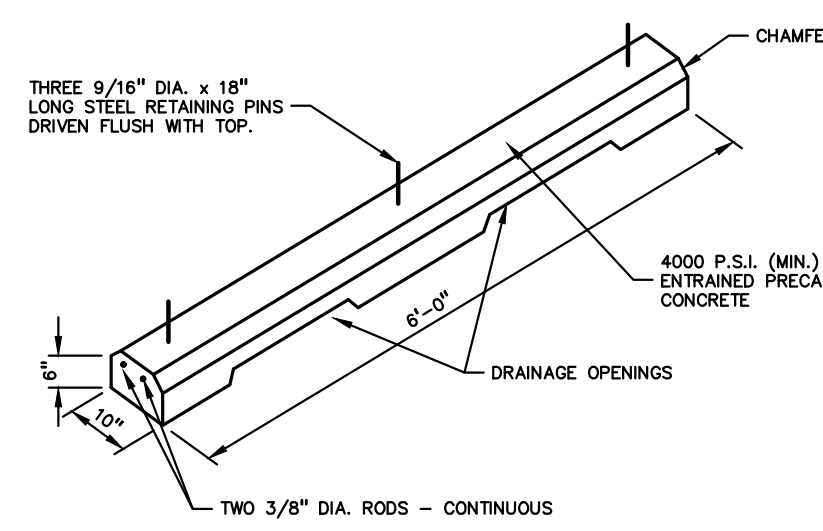
BUTT JOINT DETAIL
NOT TO SCALE



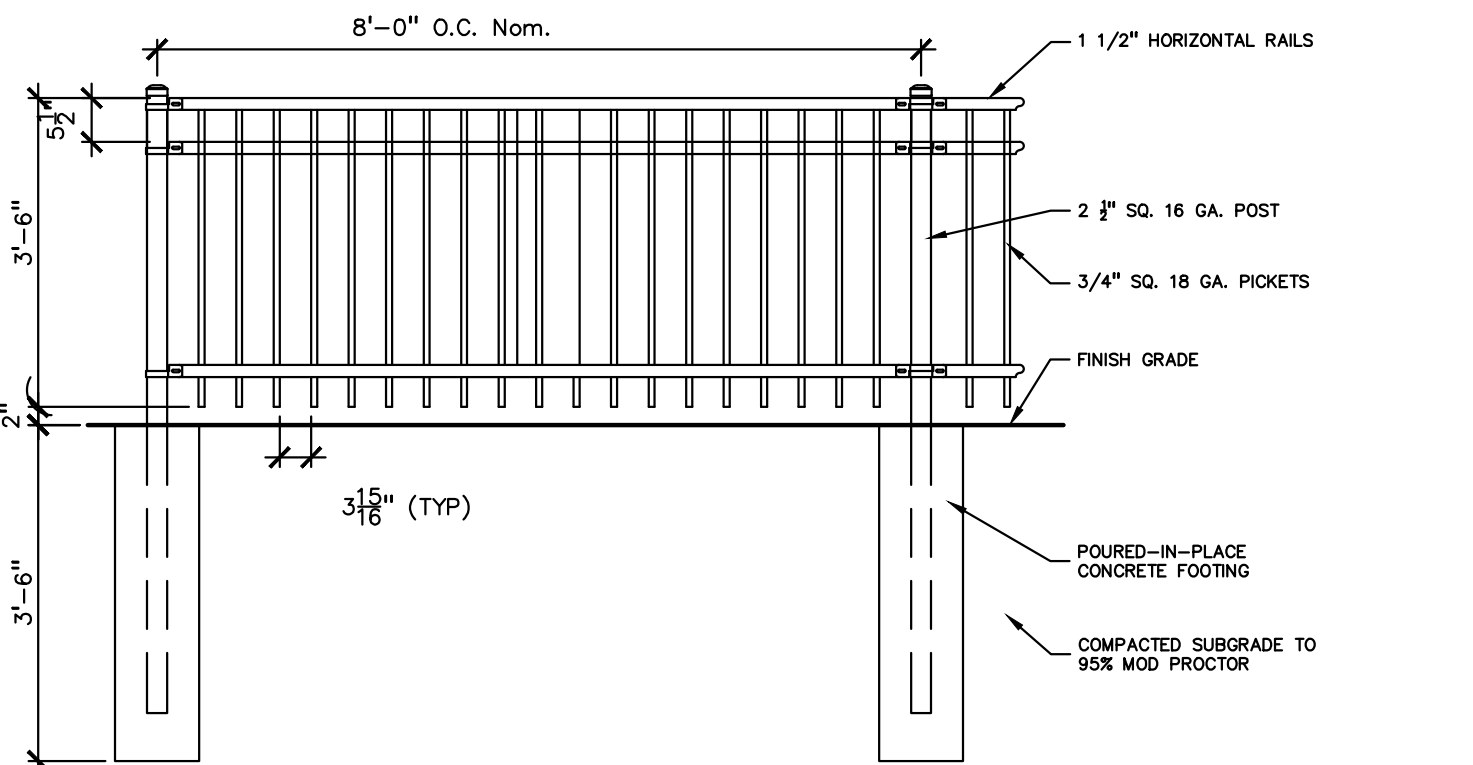
SEGMENTED RETAINING WALL
NOT TO SCALE



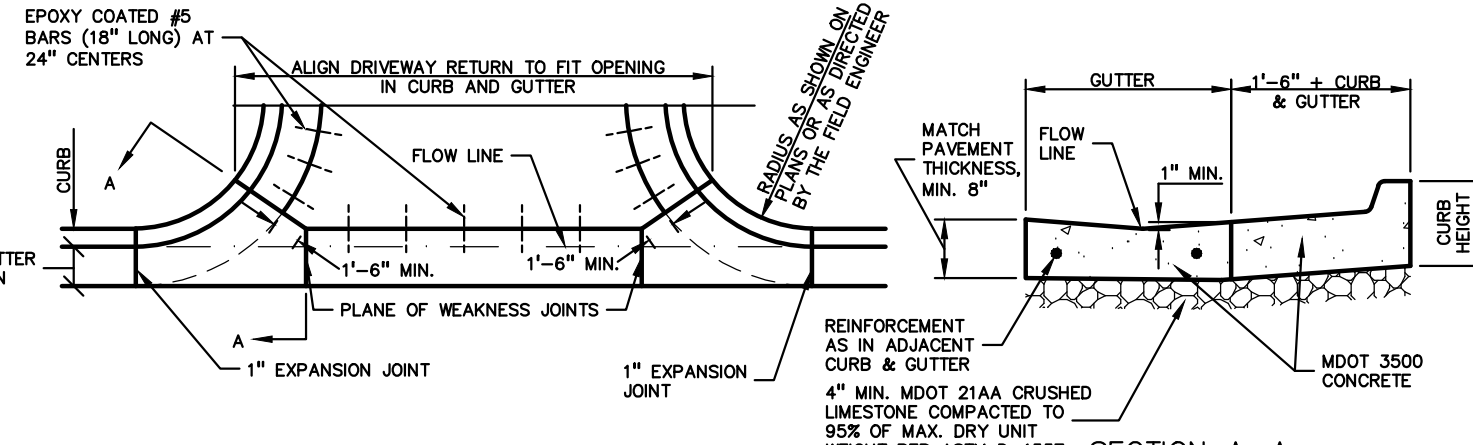
PAINTED DIRECTIONAL ARROW
NOT TO SCALE



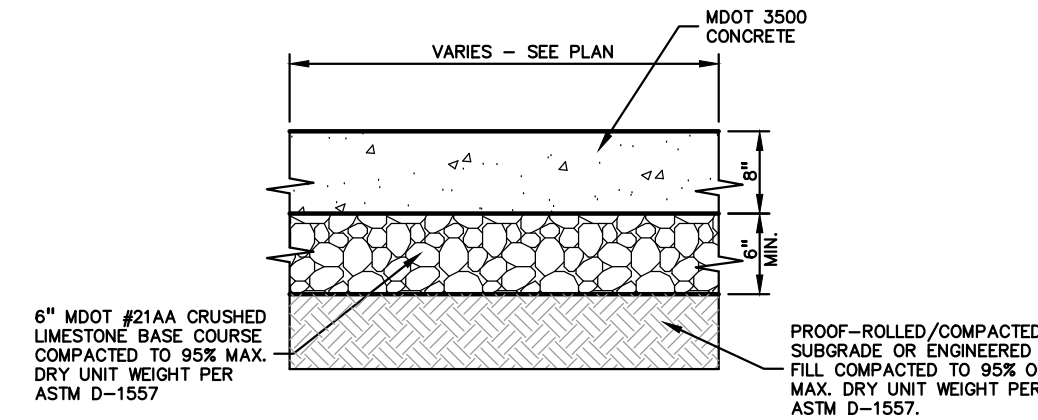
CONCRETE PARKING BUMPER
NOT TO SCALE



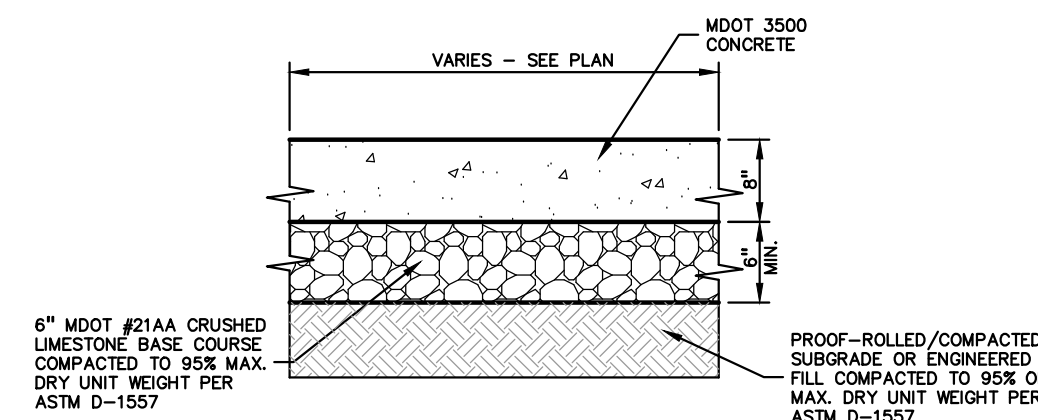
ORNAMENTAL FENCE DETAIL
NOT TO SCALE



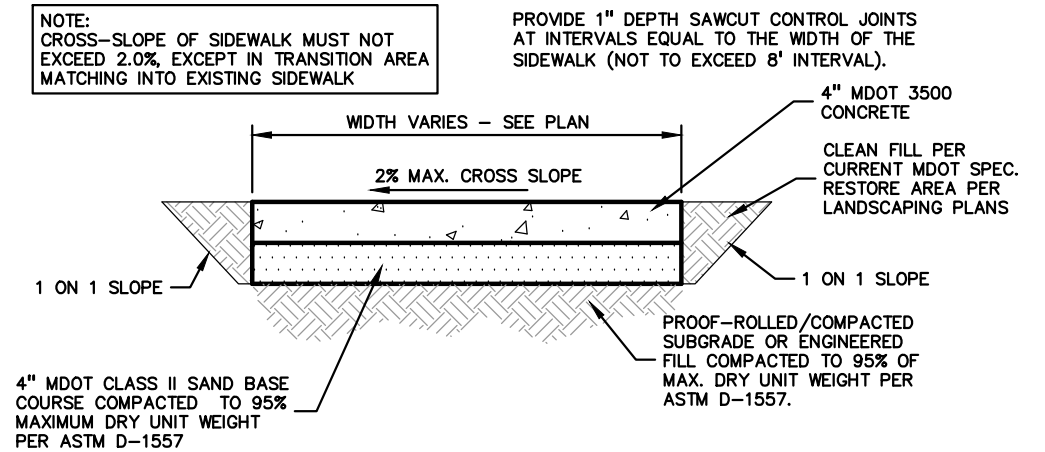
MDOT DRIVEWAY OPENING-DETAIL 'M'
NOT TO SCALE



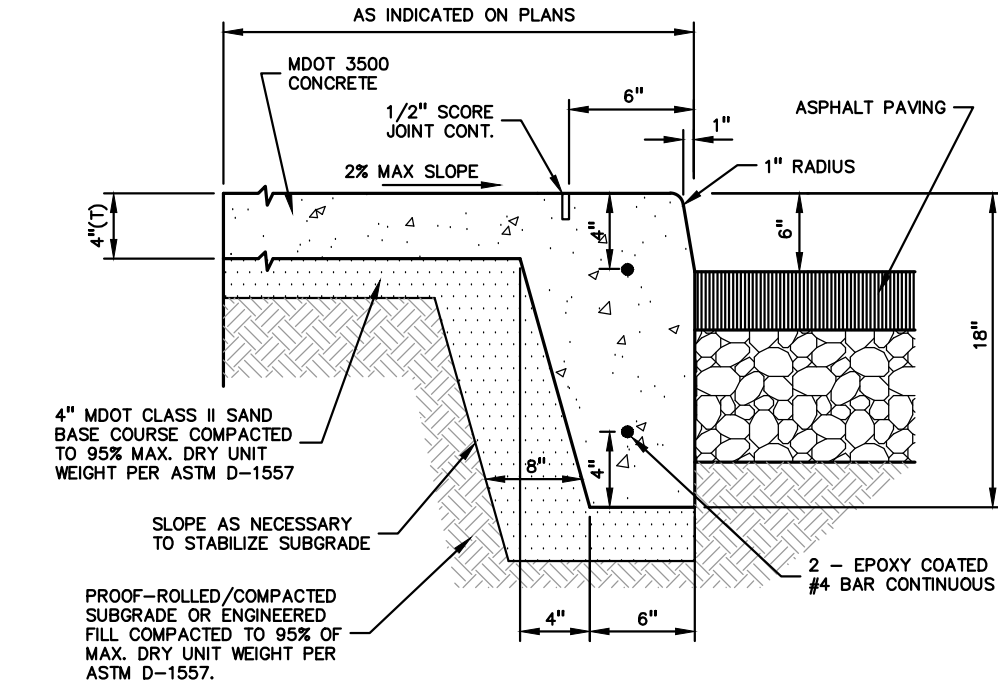
R.O.W. CONCRETE DETAIL
NOT TO SCALE



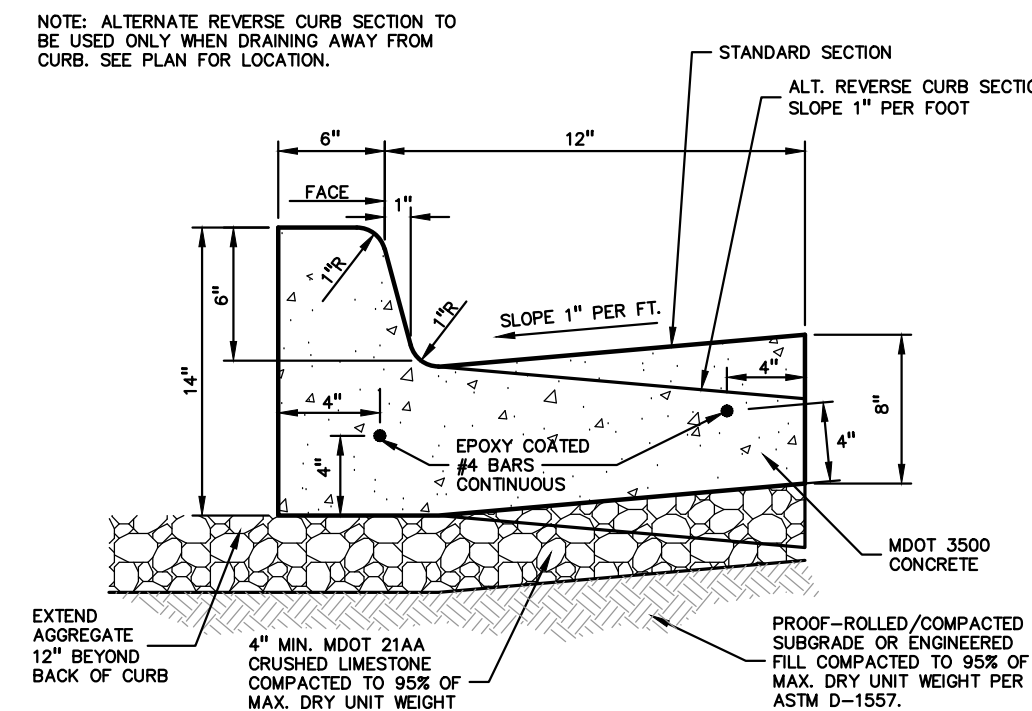
STANDARD DUTY CONCRETE DETAIL
NOT TO SCALE



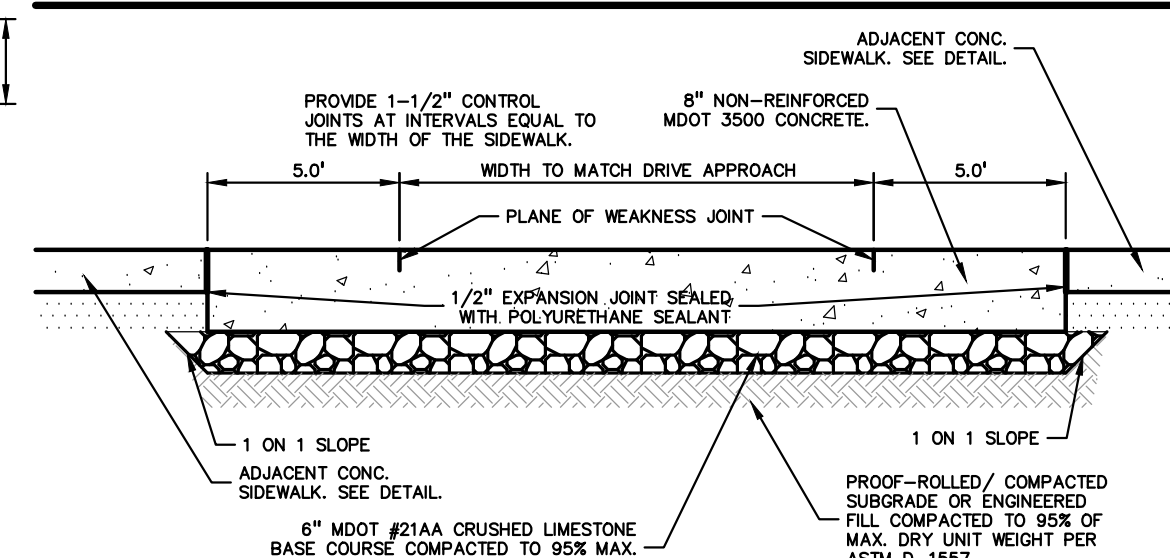
CONCRETE SIDEWALK
NOT TO SCALE



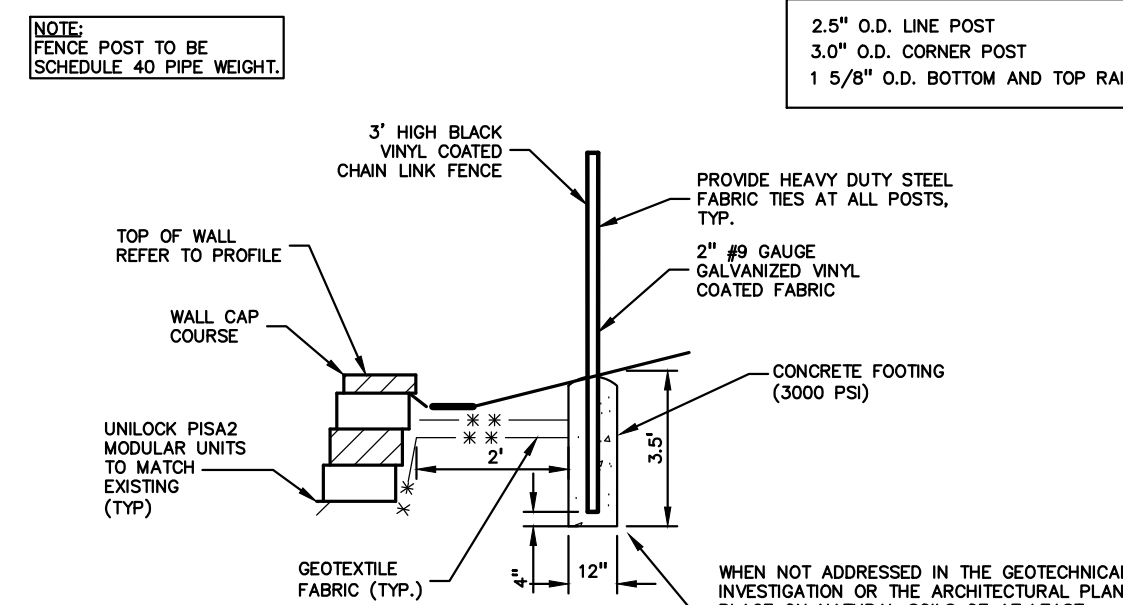
INTEGRAL CURB AND SIDEWALK
NOT TO SCALE



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



THICKENED SIDEWALK AT DRIVE APPROACH DETAIL
NOT TO SCALE



CHAIN LINK FENCE DETAIL
NOT TO SCALE

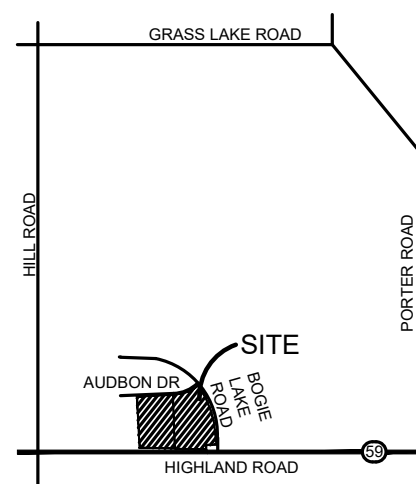
PEA GROUP
t: 844.813.2949
www.peagroup.com



0 10 20 40
SCALE: 1" = 20'



CAUTION!!
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CLIENT
BMW KAR WASH LLC
2677 CENTRAL PARK BLVD, SUITE 180
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH
WHITE LAKE, MICHIGAN



REVISIONS

TWP. COMMENTS 10-9-25

ORIGINAL ISSUE DATE:
SEPTEMBER 10, 2025

DRAWING TITLE
NOTES AND DETAILS

PEA JOB NO. 25-0885
P.M. JPB
DN. SWS
DES. SWS
DRAWING NUMBER:

C-9.0

NOT FOR CONSTRUCTION

S:\PROJECTS\2025\25-0885 JAX KAR WASH - WHITE LAKE (2)DWG\3_SITE_PLAN\1-00_LANDSCAPE-25-0885.dwg PLOT DATE: 10/29/2025 BY: Charlotte L'Esperance

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	DESIGNATION	REMARKS
DECIDUOUS TREES								
ARS2.5	3	ACER RUBRUM 'SCARSEN'	SCARLET SENTINEL MAPLE	2.5" CAL.	B&B	PER PLAN	NATIVE	
CBFF2.5	4	CARPINUS BETULUS 'FRANS FONTAINE'	FRANS FONTAINE HORNBEEAM	2.5" CAL.	B&B	PER PLAN	NON-NATIVE	
CA2.5	2	CARPINUS CAROLINIANA	AMERICAN HORNBEEAM	2.5" CAL.	B&B	PER PLAN	NATIVE	
GBM2.5	4	GINKGO BILBOBA 'MAGYAR'	MAGYAR MAIDENHAIR TREE	2.5" CAL.	B&B	PER PLAN	NON-NATIVE	
NS2.5	2	NYSSA SYLVATICA	TUPELO	2.5" CAL.	B&B	PER PLAN	NATIVE	
QBM2.5	7	QUERCUS BICOLOR 'BONNIE AND MIKE'	BEACON® OAK	2.5" CAL.	B&B	PER PLAN	NATIVE	
SR2.5	8	SYRINGA RETICULATA 'IVORY SILK'	IVORY SILK JAPANESE TREE LILAC	2.5" CAL.	B&B	PER PLAN	NON-NATIVE	
TA2.5	4	TILIA AMERICANA 'AMERICAN SENTRY'	AMERICAN SENTRY LINDEN	2.5" CAL.	B&B	PER PLAN	NATIVE	
	34	SUBTOTAL:						
EVERGREEN TREES								
PGD8	4	PICEA GLAUCA 'DENSATA'	BLACK HILLS SPRUCE	8" HT.	B&B	PER PLAN	NATIVE	
PO8	6	PICEA OMORIKA	SERBIAN SPRUCE	8" HT.	B&B	PER PLAN	NON-NATIVE	
	10	SUBTOTAL:						
ORNAMENTAL TREES								
AL8	3	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	8" HT.	B&B	PER PLAN	NATIVE	MULTI-TRUNK
CC2	3	CERCIS CANADENSIS	EASTERN REDBUD	2" CAL.	B&B	PER PLAN	NATIVE	
CCF8	2	CERCIS CANADENSIS 'FOREST PANSY'	FOREST PANSY EASTERN REDBUD	8" HT.	B&B	PER PLAN	NATIVE	MULTI-TRUNK
MM2.5	6	MALUS X 'JARMIN'	MARILEE® CRABAPPLE	2.5" CAL.	B&B	PER PLAN	NON-NATIVE	
	14	SUBTOTAL:						
SHRUBS								
AL30	61	ARONIA MELANOCARPA 'UCONNAM165'	LOW SCAPE MOUND® BLACK CHOKEBERRY	30"HT.	B&B OR CONT.	24" O.C.	NATIVE	
DK30	15	DEUTZIA GRACILIS 'NIKKO'	NIKKO DEUTZIA	30" HT.	B&B OR CONT.	36" O.C.	NON-NATIVE	
DK36	97	KORDIA® ORANGE DIERVILLA	KORDIA® ORANGE DIERVILLA	36" HT.	B&B OR CONT.	4" O.C.	NON-NATIVE	
IVH30	27	ITEA VIRGINICA 'HENRY'S GARNET'	HENRY'S GARNET SWEETSPIRE	30" HT.	B&B OR CONT.	5" O.C.	NON-NATIVE	
JX30	42	JUNIPERUS X 'GREY OWL'	GREY OWL JUNIPER	24" SPRD	CONT.	PER PLAN	ADAPTED NATIVE	
PF30	38	POTENTILLA FRUTICOSA 'ABBOTTSWOOD'	ABBOTTSWOOD BUSH CINQUEFOIL	30"HT.	B&B OR CONT.	36" O.C.	NATIVE	
TM30	15	TAXUS X MEDIA 'DENSIFORMIS'	DENSE ANGLO-JAPANESE YEW	30" HT.	B&B OR CONT.	42" O.C.	NON-NATIVE	
TH36	8	TAXUS X MEDIA 'HICKSI'	HICKS ANGLO-JAPANESE YEW	3" HT.	B&B OR CONT.	30" O.C.	NON-NATIVE	
	303	SUBTOTAL:						

NOTES PER WHITE LAKE TOWNSHIP ZONING ORDINANCE.

ALL REQUIRED LANDSCAPE AREAS IN EXCESS OF 200 SF SHALL BE IRRIGATED. IRRIGATION PLANS TO BE PROVIDED DURING CD, PLANS BY OTHERS.

ALL REQUIRED IRRIGATION SYSTEMS SHALL INCLUDE A RAIN SENSOR OR SIMILAR MEASURE TO ENSURE IRRIGATION DOES NOT OCCUR DURING OR SHORTLY AFTER PRECIPITATION EVENTS.

SHREDDED HARDWOOD MULCH SHALL BE DOUBLE SHREDDED QUALITY.

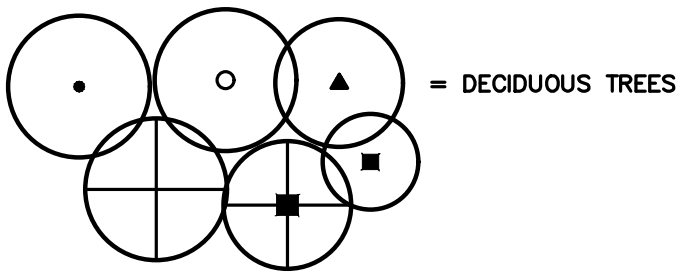
PINE TREES ARE PROHIBITED IN WHITE LAKE TWPS.

TREES SHALL NOT BE PLANTED CLOSER THAN 4' FEET FROM THE PROPERTY LINE.

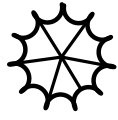
ALL LANDSCAPE PLANTINGS SHALL BE GUARANTEED FOR 2 YEARS. THOSE WHICH ARE DISEASED OR DEAD MUST BE REPLACED IN CONFORMANCE WITH THE APPROVED LANDSCAPE PLAN. THE PLANTS MUST BE REPLACED WITH PLANTINGS OF THE SAME SIZE AS THOSE WHICH WERE REMOVED.

A CASH BOND OR STANDBY LETTER OF CREDIT IN AN AMOUNT EQUAL TO 125% OF THE COST TO INSTALL ANY INCOMPLETE IMPROVEMENTS AND 100% OF ANY INSTALLED IMPROVEMENTS MUST BE POSTED FOR TWO YEARS DURING WHICH THE GUARANTEE IS IN EFFECT. THE COMMUNITY DEVELOPMENT DIRECTOR OR HIS DESIGNEE SHALL REVIEW THE AMOUNT OF THE GUARANTEED FOR REASONABLENESS PRIOR TO APPROVAL.

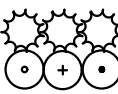
KEY:



= DECIDUOUS TREES



= EVERGREEN TREES



= SHRUBS



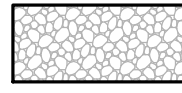
= IRRIGATED SEED LAWN
IRRIGATION PLANS BY OTHERS



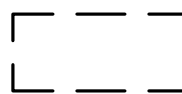
= RESTORE LAWN



= INTERIOR SHRUBS (185)
TO BE DETAILED DURING CD DWGS



= RIVER ROCK OVER FABRIC
SEE DETAIL SHEET L-1.1



= SNOW STORAGE AREA

LETTER DESIGNATION FOR ORNANCE TREES

G = GREENBELT TREES
IL = INTERIOR LANDSCAPE TREES

IRRIGATION PLANS(WITH RAIN SENSOR) TO BE PROVIDED DURING CD, PLANS BY OTHERS

LANDSCAPE CALCULATIONS:

PER WHITE LAKE TOWNSHIP ZONING ORDINANCE
ZONING, PB – PLANNED BUSINESS

GREENBELT= G
1 LARGE DEC OR EVG TREE AND 8 SHRUBS PER 30 LF

REQUIRED:
WEST GREENBELT 332.2 LF / 30 = 11.07 DEC OR EVG TREES
11.1 X 8 = 88.8 = 88 SHRUBS

AUDBON DR. 159.33 LF / 30 = 5.3 = 5 DEC OR EVG TREES
5.3 X 8 = 42.4 = 42 SHRUBS

HIGHLAND RD. 231.6 LF / 30 = 7.7 = 8 DEC OR EVG TREES
7.7 X 8 = 61.6 = 62 SHRUBS

BOGIE LAKE RD. 384.48 LF / 30 = 12.8 = 13 DEC OR EVG TREES
12.8 X 8 = 102.5 = 103 SHRUBS

PROVIDED:
WEST GREENBELT: 1 DEC TREE AND 88 SHRUBS. REQUESTING WAIVER FOR ADDITIONAL TREES DUE TO UTILITIES ON WEST SIDE OF BUILDING.
AUDBON DR.: 8 DEC OR EVG TREES AND 42 SHRUBS
HIGHLAND RD.: 8 PROPOSED DEC OR EVG TREES AND 62 SHRUBS
BOGIE LAKE RD.: 13 PROPOSED DEC OR EVG TREES AND 103 SHRUBS

INTERIOR LANDSCAPE= IL
15% OF TOTAL LOT AREA MUST BE LANDSCAPED.
1 DEC, EVG, OR ORN TREE AND 5 SHRUBS PER 300 SF REQUIRED AREA

REQUIRED: 73,735 SF(W/N ROW) X 15% = 11,060 SF
11,060 SF / 300 SF = 37 DEC, ORN, OR EVG TREES
37 X 5 = 185 SHRUBS

PROVIDED: 37 DEC, ORN OR EVG TREES, AND 185 SHRUBS TO BE DETAILED DURING CD DRAWINGS

PARKING LOT LANDSCAPE PARKING AREAS WITH MORE THAN 10 SPACES AND USED FOR COMMERCIAL / OFFICE SPACE NEEDS 20 SF PER SPACE.
1 LARGE DEC TREE OR 1 ORN TREE AND 3 SHRUBS REQUIRED PER 100 SF REQUIRED PARKING AREA LANDSCAPE.

PROVIDED: NONE, SINCE LESS THAN 10 PARKING SPACES

GENERAL PLANTING NOTES:

- LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING SITE CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISS DIG 1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCING.
- ALL PLANT MATERIAL TO BE PREMIUM GRADE NURSERY STOCK AND SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARD FOR NURSERY STOCK. ALL LANDSCAPE MATERIAL SHALL BE NORTHERN GROWN, NO. 1. GRADE.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.
- THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
- ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
- ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER; TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
- ALL MULTI STEM TREES SHALL BE HEAVILY BRANCHED AND HAVE SYMMETRICAL CROWNS. ONE SIDED TREES OR THOSE WITH THIN OR OPEN CROWNS SHALL NOT BE ACCEPTED.
- ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS.
- ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.
- NO MACHINERY IS TO BE USED WITHIN THE DRIP LINE OF EXISTING TREES; HAND GRADE ALL LAWN AREAS WITHIN THE DRIP LINE OF EXISTING TREES.
- ALL TREE LOCATIONS SHALL BE STAKED BY LANDSCAPE CONTRACTOR AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE PLANT MATERIAL, IF INCLUDED IN CONTRACT.
- IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS.
- ALL PLANTING BEDS SHALL RECEIVE 3" DOUBLE SHREDDED HARDWOOD BARK MULCH WITH PRE EMERGENT, SEE SPECIFICATIONS. SHREDDED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED.
- ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED TOPSOIL.
- SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.
- FOR NON-LAWN SEED MIX AREAS, AS NOTED ON PLAN, BRUSH MOW ONCE SEASONALLY FOR INVASIVE SPECIES CONTROL.
- CONTRACTOR SHALL NOT INSTALL PLANTS UNDER BUILDING OVERHANG AND SHALL NOTIFY LANDSCAPE ARCHITECT IF DRAWINGS CONFLICT WITH BUILDING OVERHANGS.
- TREES SHALL NOT CONFLICT/ BLOCK PROPOSED REGULATORY/ DIRECTION SIGNAGE, MONUMENT SIGNS, ADDRESS OR LIGHT POLES. SHIFT TREES AS NECESSARY TYP.

NOT FOR CONSTRUCTION

PEA
GROUP

t: 844.813.2949

www.peagroup.com

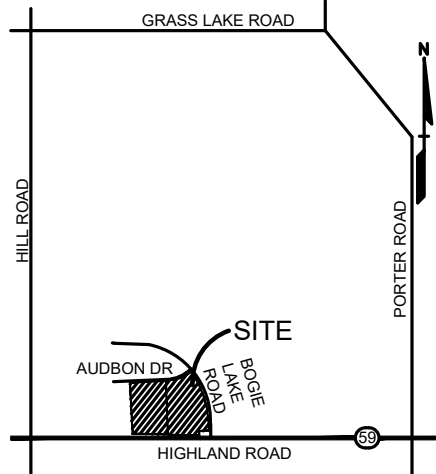


NORTH

0 15 30 60
SCALE: 1" = 30'



CAUTION!!
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CLIENT

BMW KAR WASH LLC
26777 CENTRAL PARK BLVD, SUITE 180
SCOTTSDALE, MICHIGAN 48064

PROJECT TITLE

JAX KAR WASH
WHITE LAKE, MICHIGAN



REVISIONS

TWP. COMMENTS 10-9-25

ORIGINAL ISSUE DATE:
SEPTEMBER 10, 2025

DRAWING TITLE

**PRELIMINARY
LANDSCAPE
PLAN**

PEA JOB NO. 25-0885

P.M. JPB

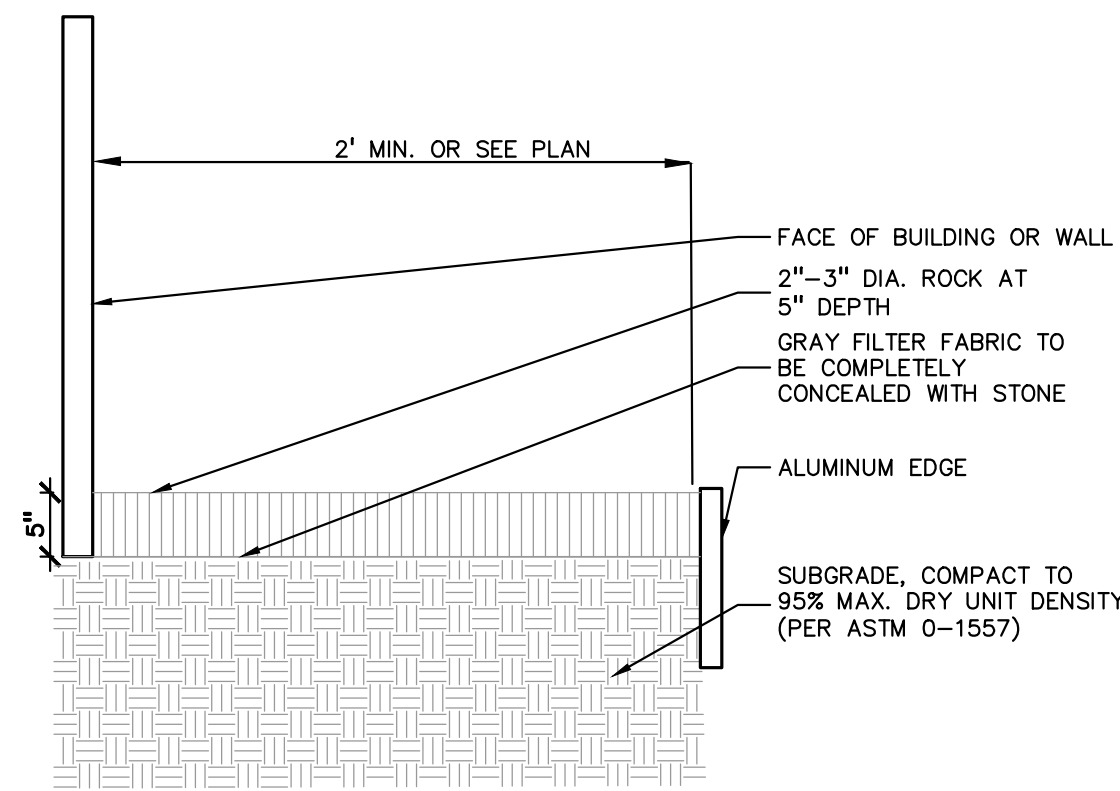
DN. TC

DES. JLE

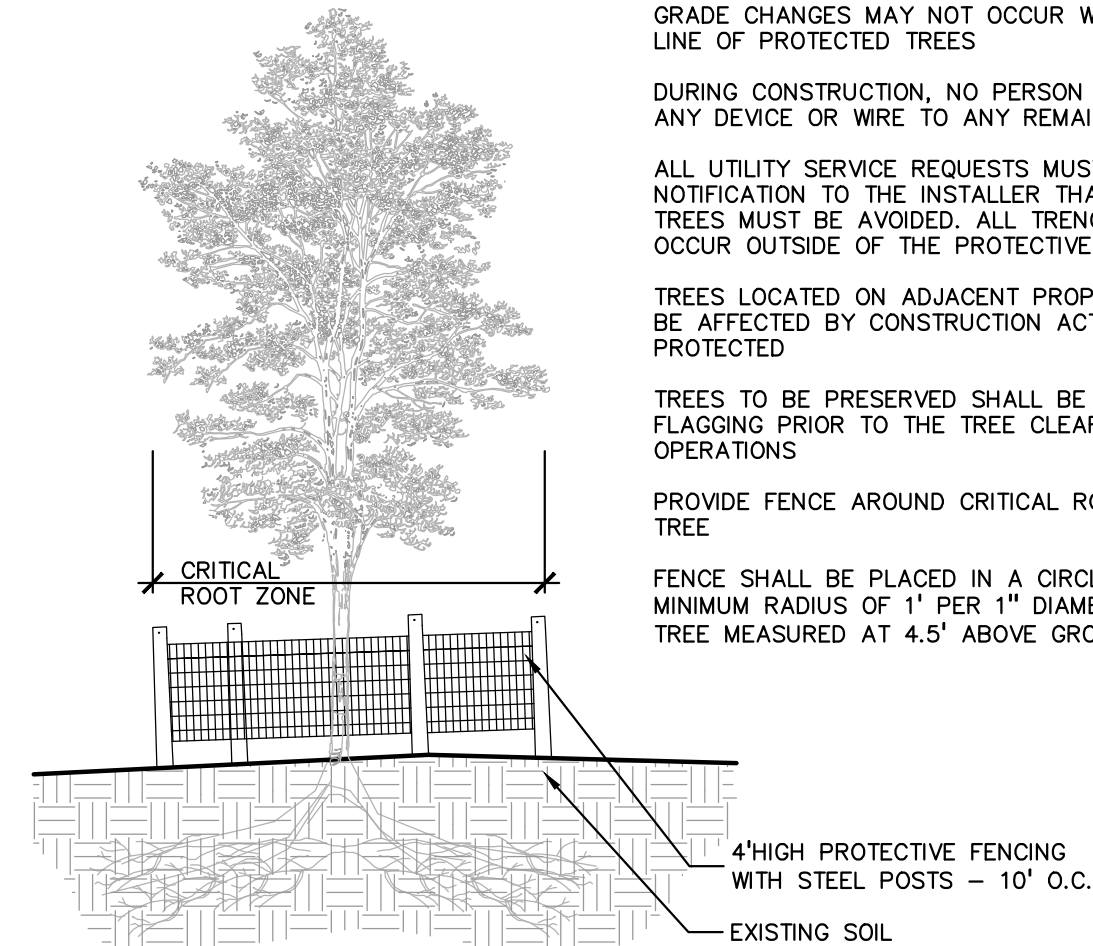
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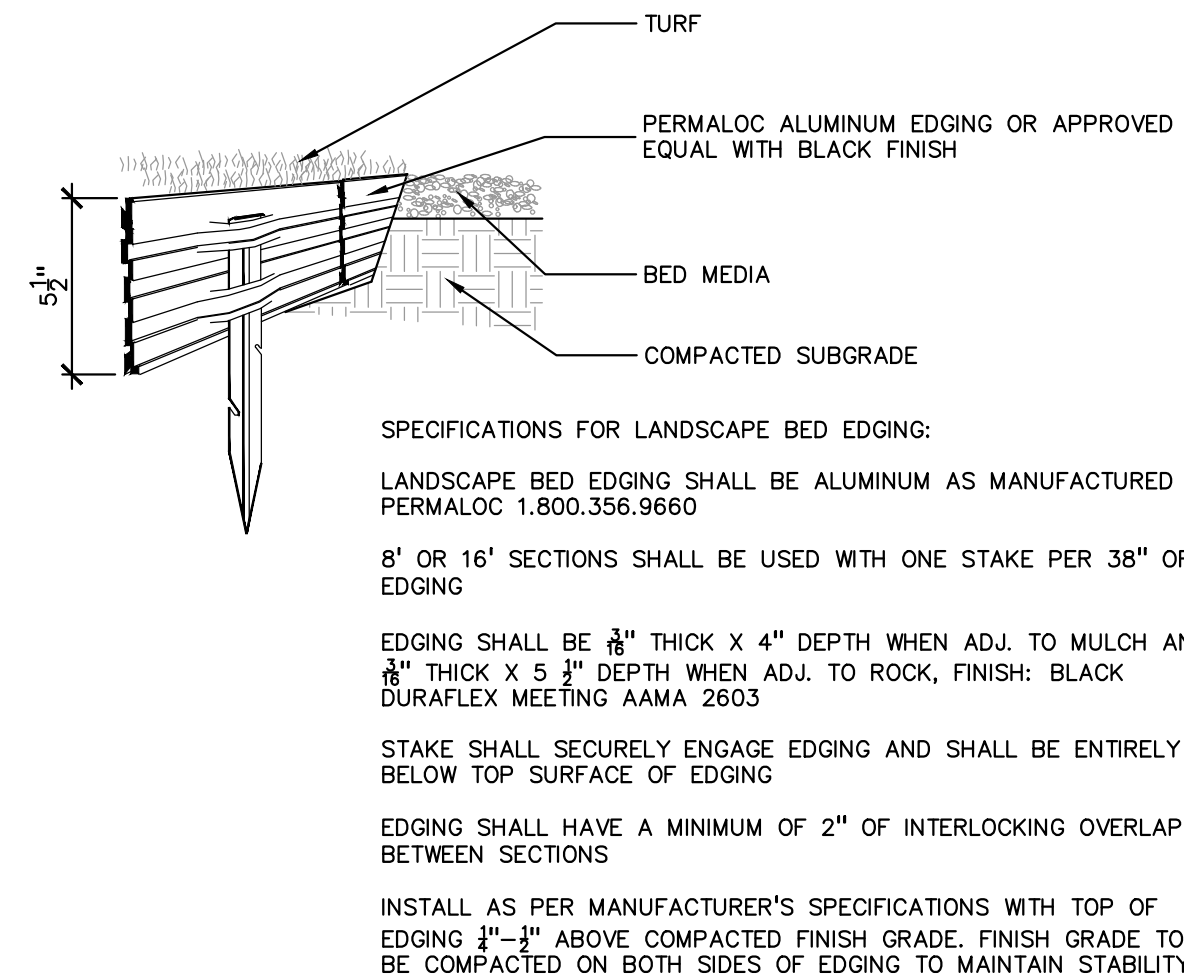
HIGHLAND ROAD (M-59)
VARIABLE WIDTH-PUBLIC



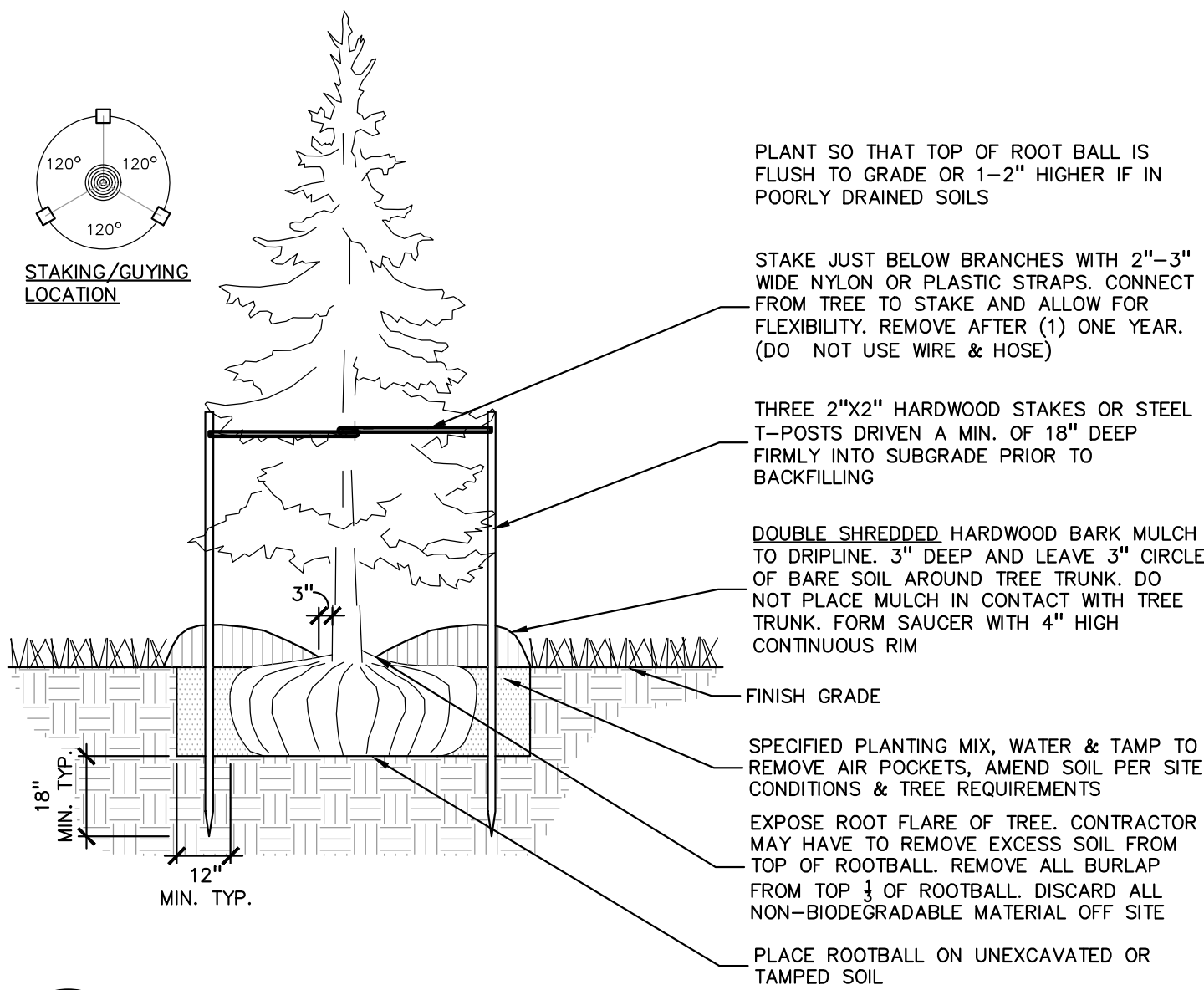
6 ROCK EDGE DETAIL
SCALE: 1 1/2" = 1'-0"



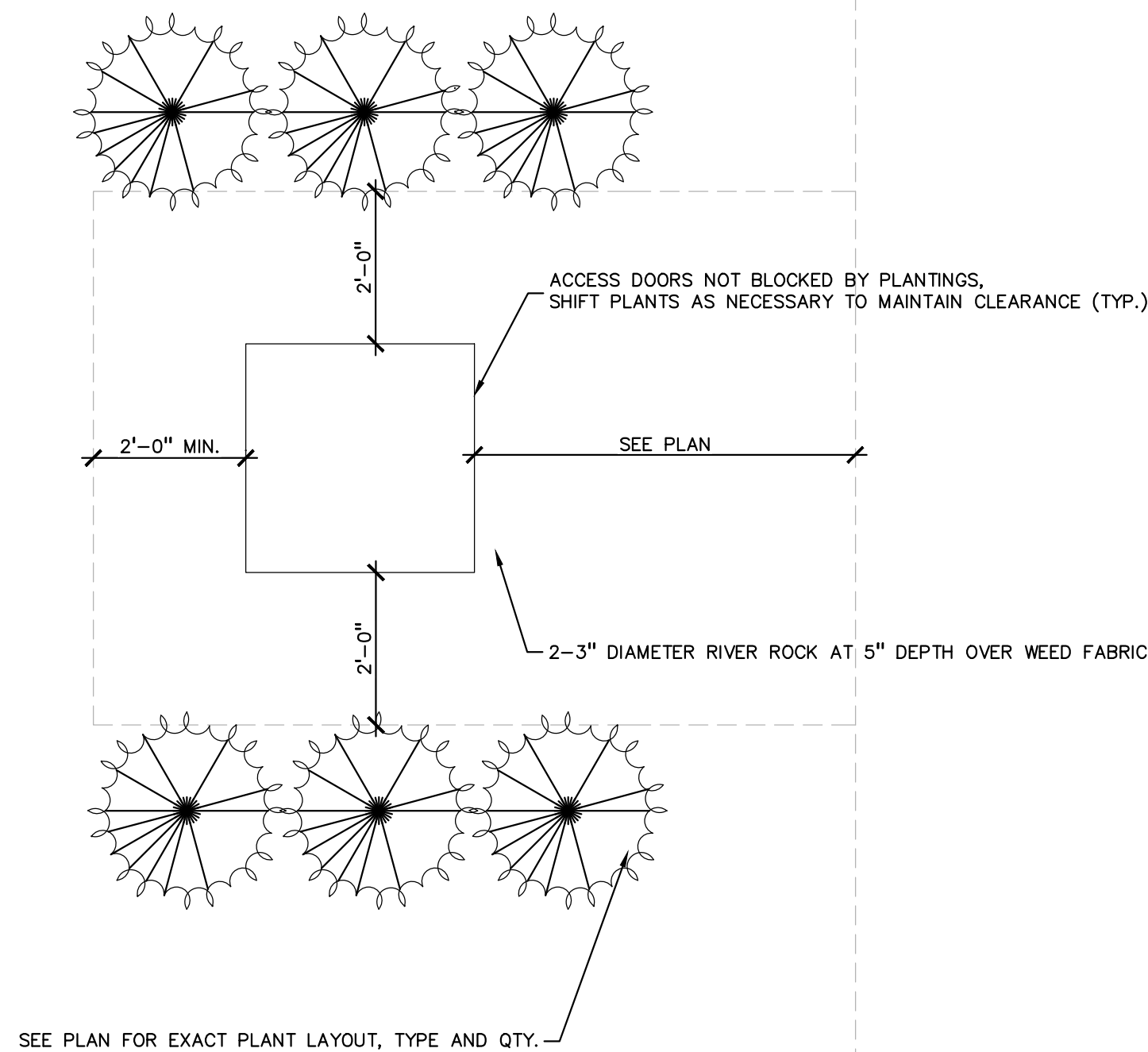
3 TREE PROTECTION DETAIL
SCALE: 1" = 3'-0"



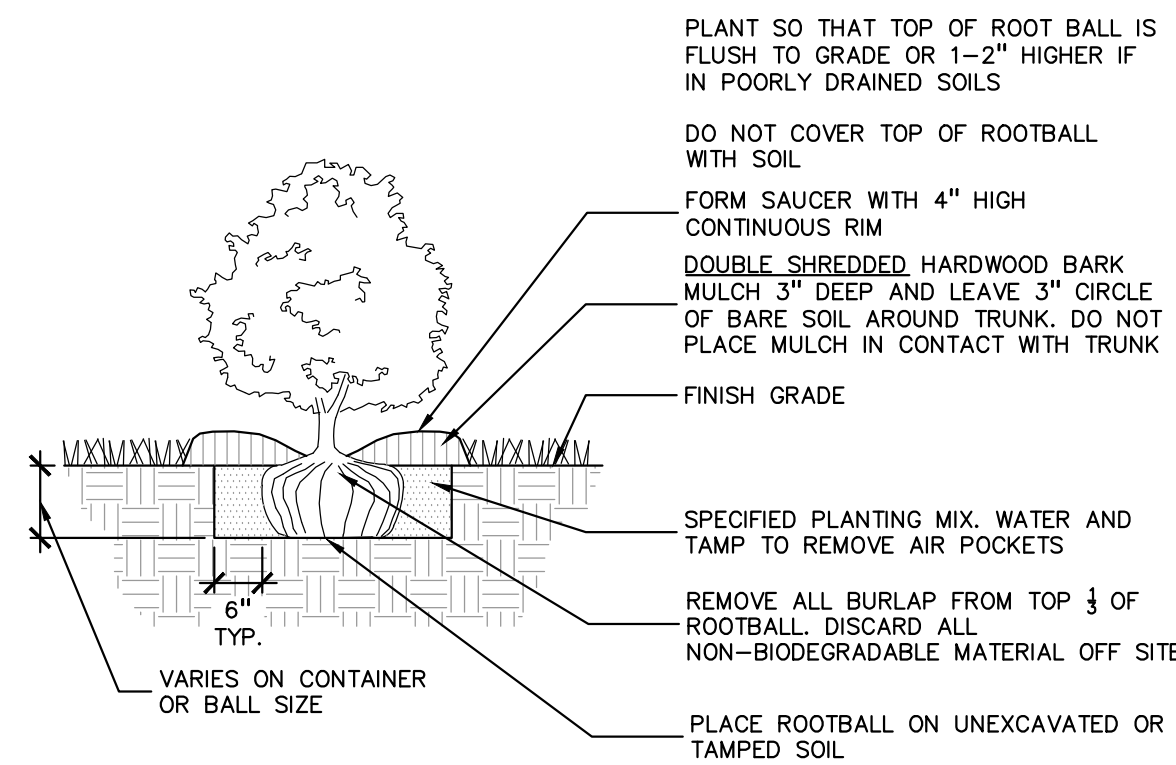
5 ALUMINUM EDGE DETAIL
SCALE: 1/2" = 1'-0"



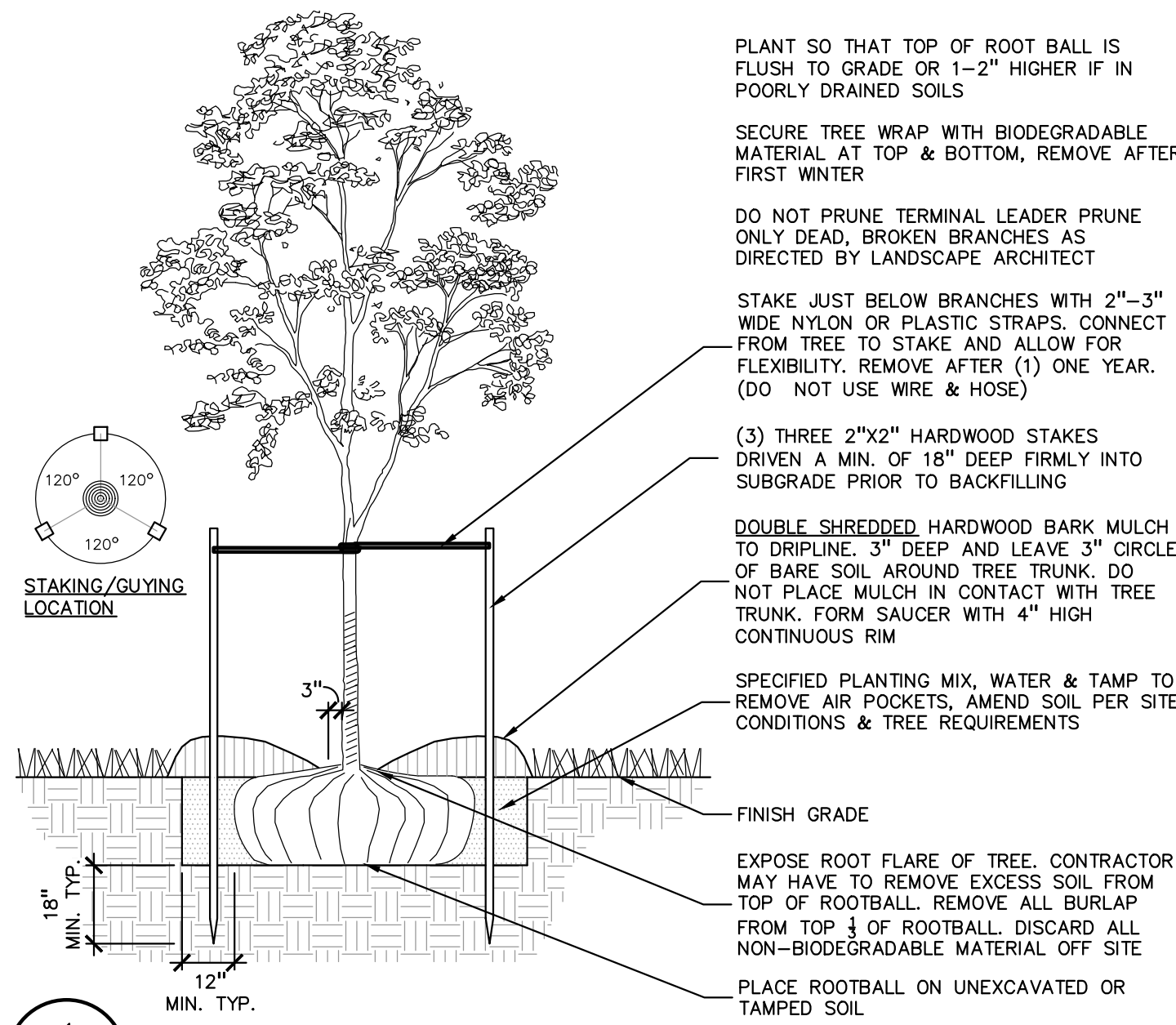
2 EVERGREEN TREE PLANTING DETAIL
SCALE: 1" = 3'-0"



7 TRANSFORMER SCREEN DETAIL
NOT TO SCALE



4 SHRUB PLANTING DETAIL
SCALE: 1" = 2'-0"



1 DECIDUOUS TREE PLANTING DETAIL
SCALE: 1" = 3'-0"

TREE PROTECTION WILL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE

NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN; INCLUDING, BUT NOT LIMITED TO PLACING SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT OR SOIL DEPOSITS WITHIN DRIP LINES

GRADE CHANGES MAY NOT OCCUR WITHIN THE DRIP LINE OF PROTECTED TREES

DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY REMAINING TREE

ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING

TREES LOCATED ON ADJACENT PROPERTY THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED

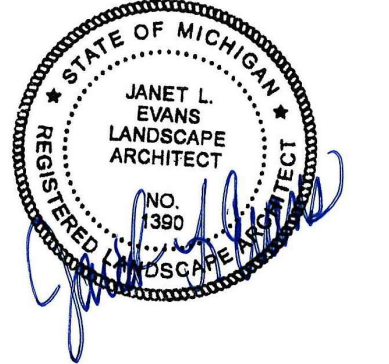
TREES TO BE PRESERVED SHALL BE IDENTIFIED WITH FLAGGING PRIOR TO THE TREE CLEARING OPERATIONS

PROVIDE FENCE AROUND CRITICAL ROOT ZONE OF TREE

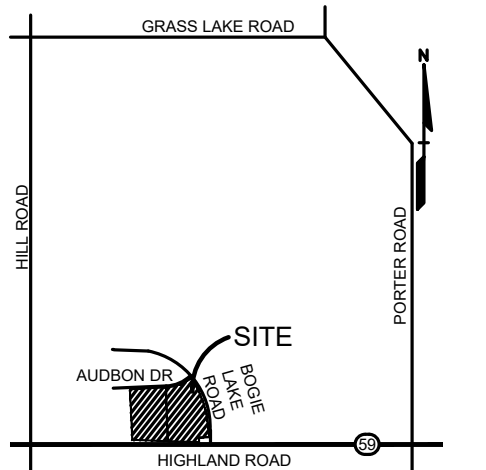
FENCE SHALL BE PLACED IN A CIRCLE WITH A MINIMUM RADIUS OF 1' PER 1" DIAMETER OF THE TREE MEASURED AT 4.5' ABOVE GROUND

PEA GROUP

t: 844.813.2949
www.peagroup.com



CAUTION!!
THE LOCATIONS 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
BMW KAR WASH LLC
26777 CENTRAL PARK BLVD, SUITE 180
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH
WHITE LAKE, MICHIGAN



REVISIONS
TWP. COMMENTS 10-9-25

ORIGINAL ISSUE DATE:
SEPTEMBER 10, 2025

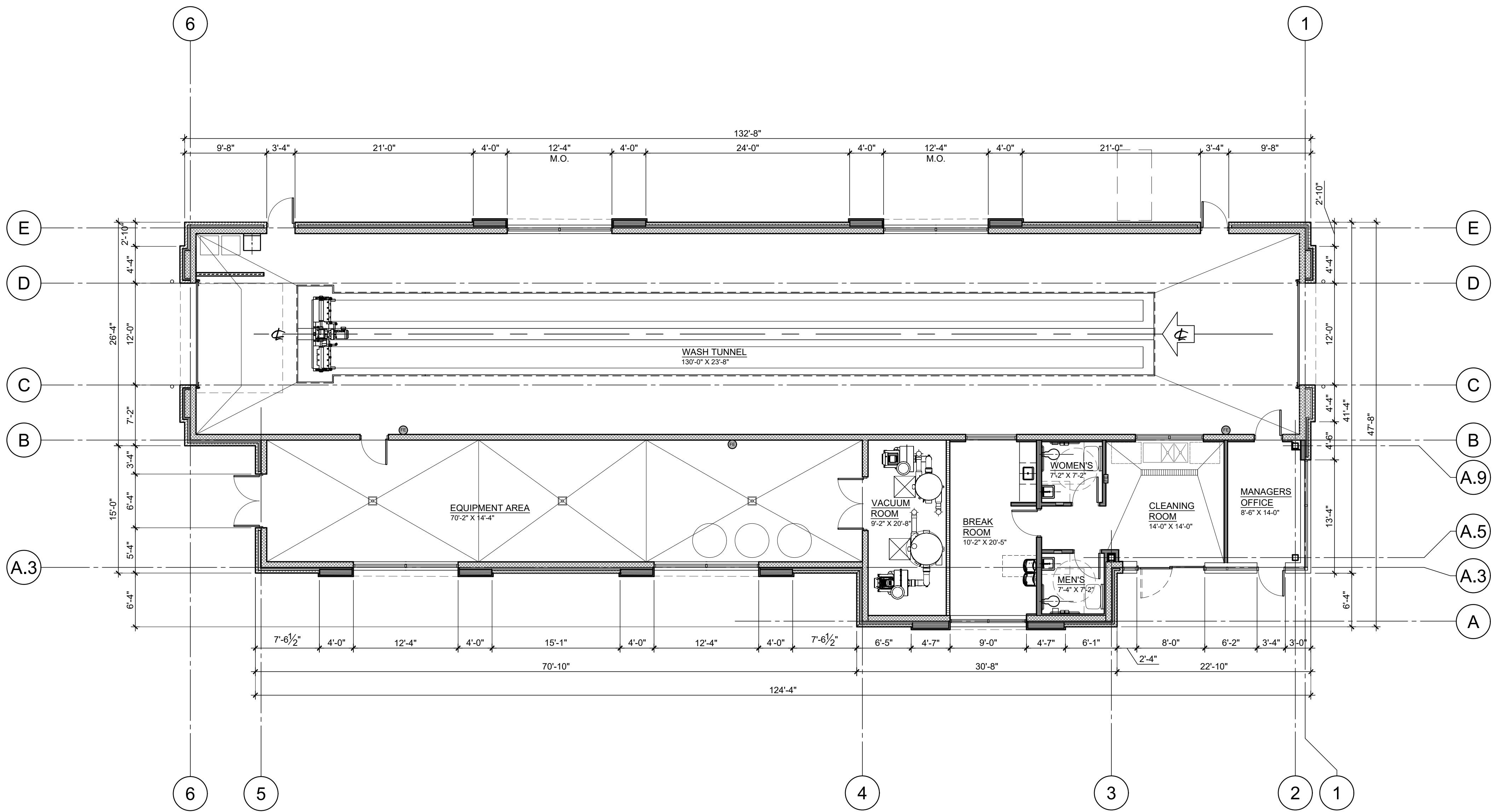
DRAWING TITLE
LANDSCAPE DETAILS

PEA JOB NO. 25-0885
P.M. JPB
DN. TC
DES. JLE

DRAWING NUMBER:

NOT FOR CONSTRUCTION

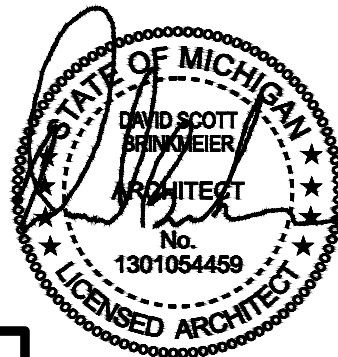
L-1.1



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



1

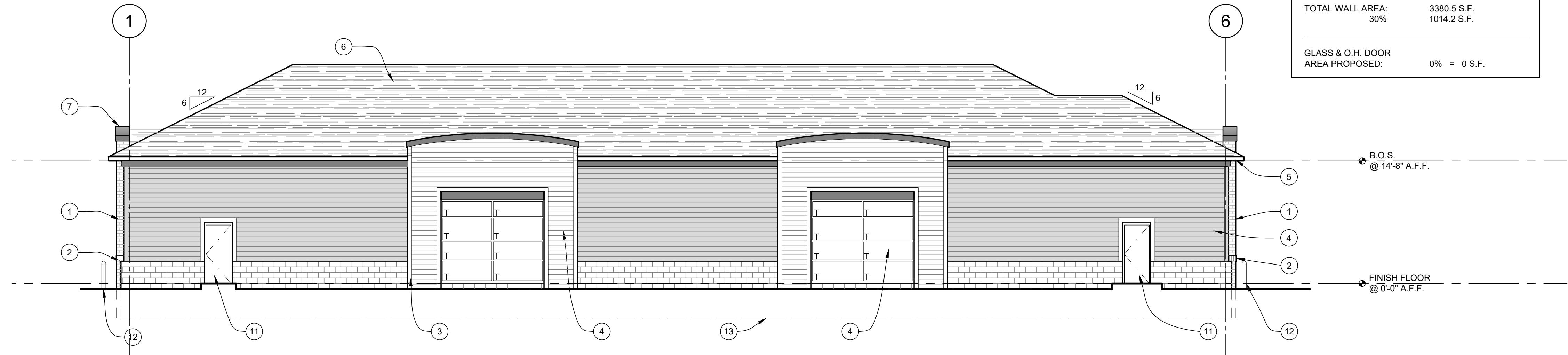


PROJECT NAME:
JAX KAR WASH
WHITE LAKE TWP, MI 48383

DATE:	ISSUED FOR:
9-5-25	SITE PLAN APPROVAL
10-9-25	SITE PLAN RE-SUBMITTAL

DRAWING DATE:	10-9-25
PROJECT NUMBER:	25073
SHEET NUMBER:	PFP-2

F.A.studio
design to inspire
25261 Evergreen Road, Suite #123
Southfield, MI 48076 | 248.619.2354



WEST ELEVATION

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

A-101

4

GLASS CALCULATIONS

TOTAL WALL AREA: 3380.5 S.F.
30% 1014.2 S.F.

GLASS & O.H. DOOR
AREA PROPOSED: 0% = 0 S.F.

GLASS CALCULATIONS

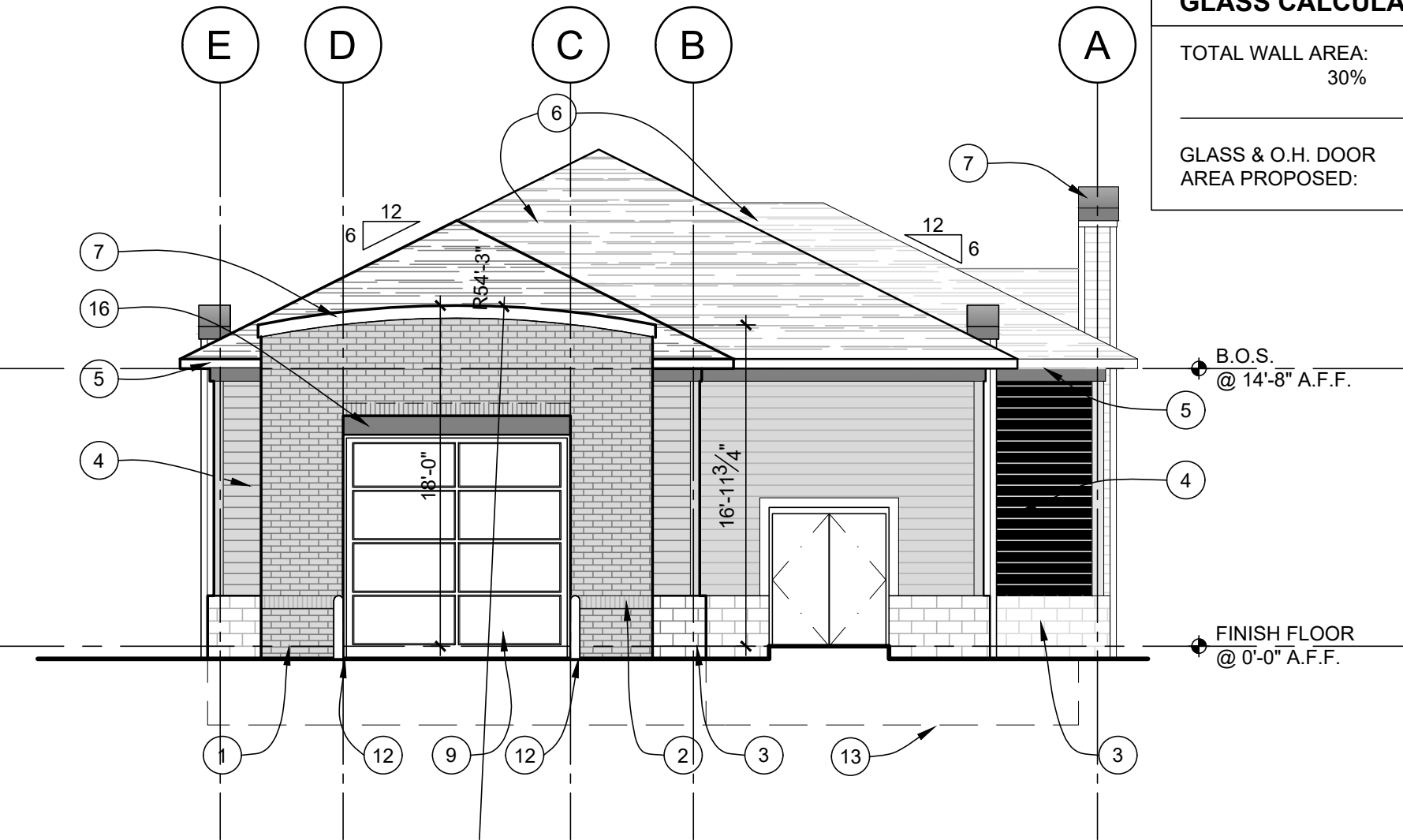
TOTAL WALL AREA: 1063.3 S.F.
30% 318.9 S.F.

GLASS & O.H. DOOR
AREA PROPOSED: 14.4% = 153.3 S.F.

GLASS CALCULATIONS

TOTAL WALL AREA: 1068.6 S.F.
30% 320.6 S.F.

GLASS & O.H. DOOR
AREA PROPOSED: 25.2% = 269.1 S.F.

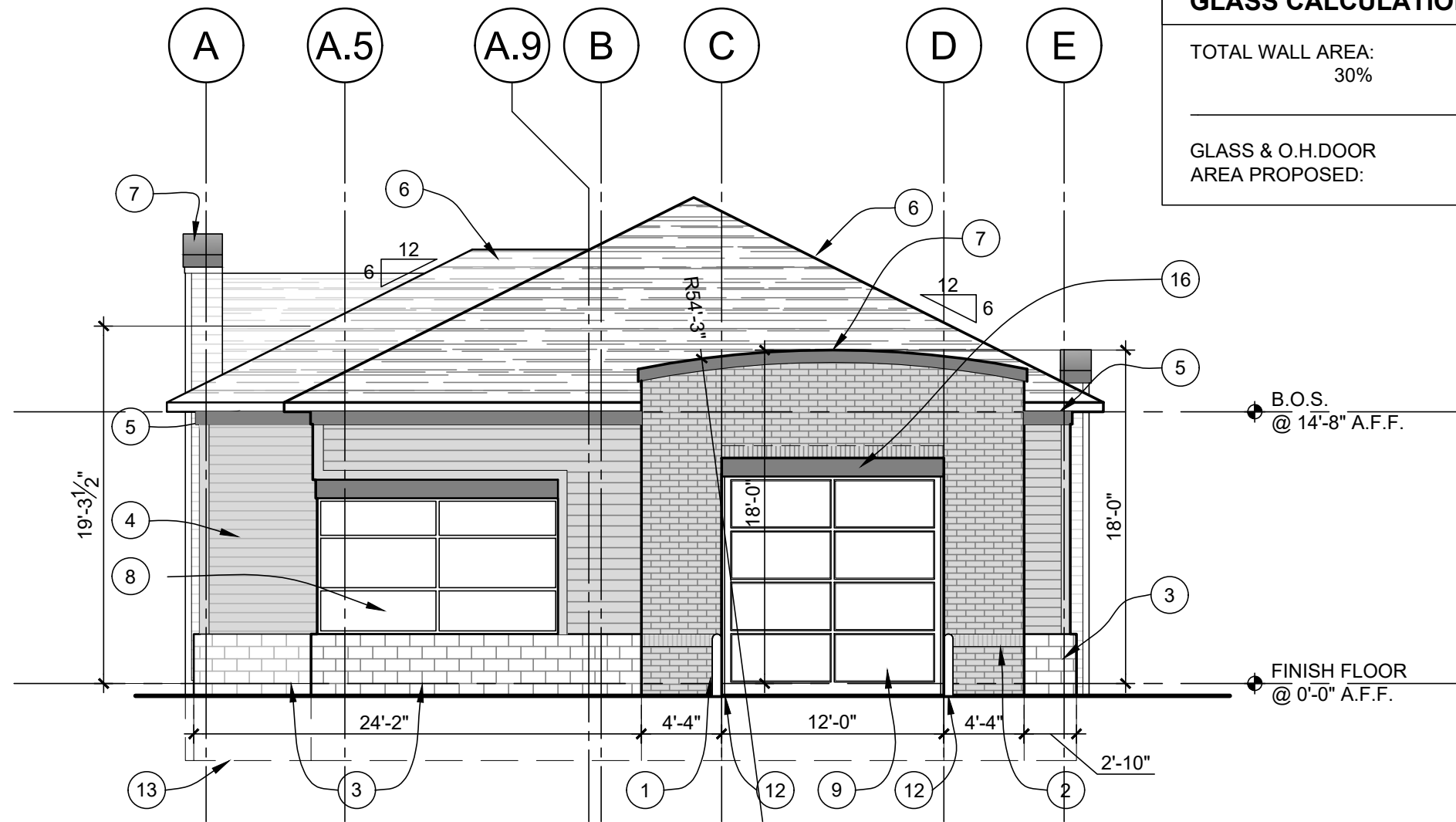


SOUTH ELEVATION

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

A-101

3

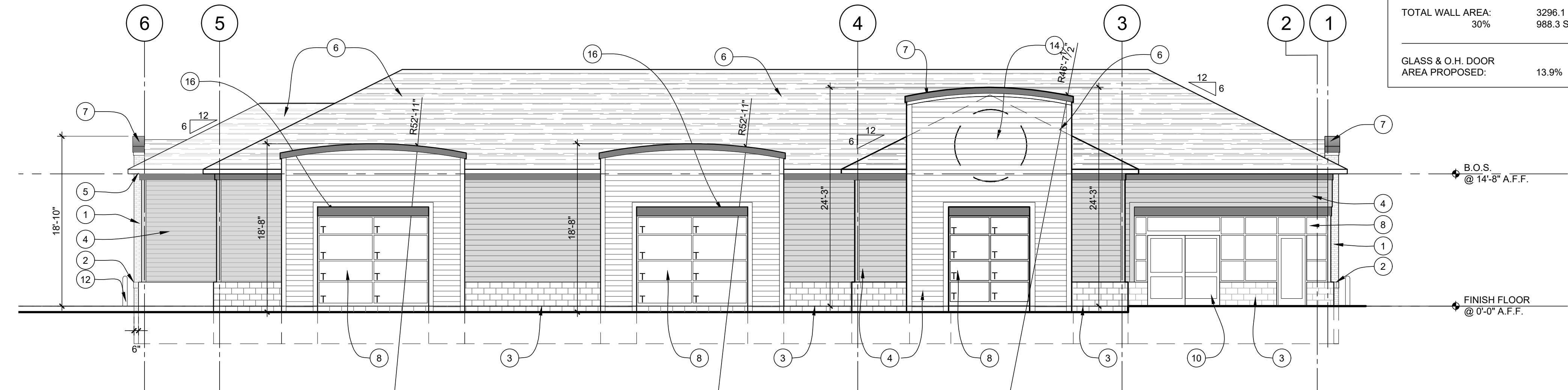


NORTH ELEVATION

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

A-101

2



EAST ELEVATION

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

A-101

1

GLASS CALCULATIONS

TOTAL WALL AREA: 3296.1 S.F.
30% 988.3 S.F.

GLASS & O.H. DOOR
AREA PROPOSED: 13.9% = 459.5 S.F.

EXTERIOR MATERIAL SCHEDULE

1	4" UTILITY BRICK
2	½" RECESSED BRICK SOLDIER COURSE
3	8" SPLIT-FACE CMU BLOCK
4	HORIZONTAL LAP SIDING W/ TRIM
5	1X6 FASCIA BOARD WRAPPED IN ALUMINUM (JAX BLUE)
6	ASPHALT SHINGLES
7	PRE-FINISHED METAL COPING (JAX BLUE)
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 (TEMPERED GLASS)
10	CLEAR ANOD. ALUM. ENTRY DOOR W/ TEMPERED GLASS
11	HOLLOW METAL DOOR & FRAME (PAINT TO MATCH ADJACENT WALL COLOR)
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	ALUMINUM COMPOSITE METAL PANEL SYSTEM (A.C.M.) SEE EXTERIOR COLOR SCHEDULE FOR MORE INFO.
17	DASHED LINE DENOTES 5/8" GYP. BD. DRAFT STOP ON FACE OF ROOF TRUSS BEYOND.

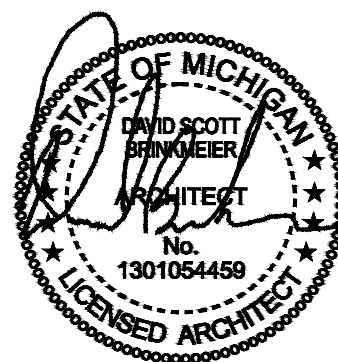
EXTERIOR COLOR SCHEDULE

COLOR GRAPHIC	DESCRIPTION	MATERIAL REF. I.D.
	ACM - COLOR 1 MANUFACTURER: REYNOBOND COLOR: JAX BLUE, OWNER TO VERIFY.	16
	HORIZONTAL LAP SIDING W/ TRIM COLOR - 1 MANUFACTURER: HARDIE PLANK LAP SIDING COLOR: TIMBER BARK	4
	HORIZONTAL LAP SIDING W/ TRIM COLOR - 2 MANUFACTURER: HARDIE PLANK PRODUCT: HORIZONTAL LAP SIDING COLOR: COBBLE STONE	4
	CMU MANUFACTURER: NATIONAL BLOCK COMPANY COLOR: CHUKAR	3
	UTILITY BRICK MANUFACTURER: TBD COLOR: TBD	1
	UTILITY BRICK SOLDIER COURSE MANUFACTURER: TBD COLOR: TBD	2
	ASPHALT SHINGLES MANUFACTURER: MALARKEY ROOFING PRODUCTS COLOR: WEATHERED WOOD PLUS	6

TEMPERED GLAZING NOTES

"T" DENOTES AREAS ON ELEVATIONS

- GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24 INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION & WHERE THE BOTTOM EXPOSED EDGE OF GLAZING IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE SHALL BE TEMPERED.
- GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL WHICH MEETS ALL OF THE FOLLOWING CONDITIONS SHALL BE TEMPERED:
 - EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQUARE FEET
 - EXPOSED BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR
 - EXPOSED TOP EDGE GREATER THAN 36 INCHES ABOVE THE FLOOR
 - ONE OR MORE WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY OF THE PLANE OF THE GLAZING.
- ALL GLAZING IN SWINGING DOORS IS TO BE TEMPERED.



PROJECT NAME:

JAX KAR WASH
WHITE LAKE TWP, MI 48383

DATE: 9-5-25
ISSUED FOR: SITE PLAN APPROVAL
10-9-25
SITE PLAN RE-SUBMITTAL

DRAWING DATE:
10-8-24

PROJECT NUMBER:
25073

SHEET NUMBER:
PE-2



Proposed Exterior Renderings for:




F.A.studio
design to inspire



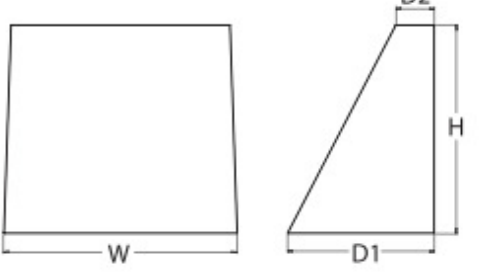
Proposed Exterior Renderings for:



F.A.studio
design to inspire



WDGE1 LED Architectural Wall Sconce



Depth (D1): 5.5"
Depth (D2): 1.5"
Height: 8"
Width: 9"
Weight: 9 lbs (without options)

Specifications

The WDGE1 family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution.

WDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.

WDGE LED Family Overview									
Luminaire	Standard EM, °FC	Cold EM, -20°C	Sensor	Lumens (4000K)					
				P1	P2	P3	P4	P5	P6
WDGE1 LED	4W	---	---	---	1,200	2,000	---	---	---
WDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	---
WDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	---	---
WDGE4 LED	---	---	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE1 LED P2 40K 80CRI VF MVOLT SRM PE DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE1 LED	P1	27K 2700K	80CRI	VF Visual comfort forward throw	MVOLT	Shipped included
	P2	30K 3000K	90CRI	VW Visual comfort wide	347V	SRM Surface mounting bracket
		35K 3500K				Indirect Canopy/Ceiling/Washer bracket (dry/damp locations only)
		40K 4000K				Shipped separately
		50K 5000K				AWS 3-Retch Architectural wall spacer

Options

EWHT Emergency battery backup, Certified in CA File 20 MA0285 (4W, 0°C min)

PE Photocell, Button Type

DS Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)

DWG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)

BCE Bottom conduit entry for back box (PBWB). Total of 4 entry points.

BAA Bay Area/California Act Compliant

Accessories

WDGEAWT10000 WDGE1 10000 Architectural Wall Spacer (specify finish)

WDGE1PBWB00000 WDGE1 surface-mounted back box (specify finish)

NOTES

1. SRM not available in 90CRI.


2. 347V not available with EWHT, DS or PE.

3. EWHT not available with PE or DS.

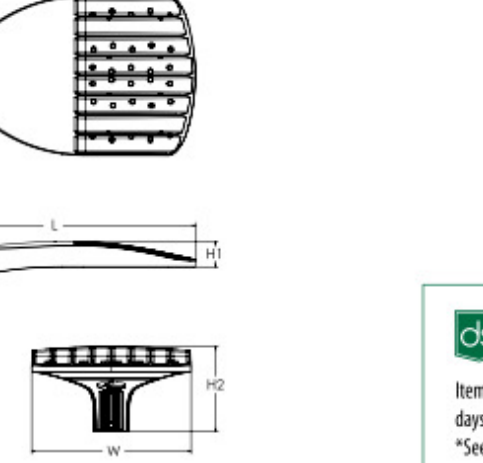
4. PE not available with DS.

5. Not qualified for D.L.C. Not available with EWHT.

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com WDGE1 LED Rev. 11/21/22



D-Series Size 0 LED Area Luminaire



Length: 26.18" (66.5 cm)
Width: 14.06" (35.7 cm)
Height H1: 2.26" (5.7 cm)
Height H2: 7.46" (18.9 cm)
Weight: 23 lbs (10.4 kg)

Specifications

EPA: 0.44 ft² (0.41 m²)

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 100,000 hours.

Ordering Information									
Series	LEDs	Color temperature ¹	Color Rendering Index ²	Distribution	Voltage	Mounting			
DSX0 LED	Forward optics	(this section 70CRI only)		TSM Type V medium	MVOLT (120V-277V) ³	Shipped included			
		P1 P5	30K 3000K				70CRI	SPA Square pole mounting (88 drilling, 5.5" min. 50 pole)	
		P2 P6	40K 4000K				70CRI	SPA Round pole mounting (88 drilling, 5.5" min. 50 pole)	
		P3 P7	50K 5000K				70CRI	SPA Round pole mounting (88 drilling, 5.5" min. 50 pole)	
	Related optics	P4	---	---	TSM Type II medium	---	---		
		P10 ⁴ P12 ⁴	27K 2700K	80CRI	TSLG Type IV low glare ⁵	240 VAC	SPA Square pole mounting (88 drilling, 5.5" min. 50 pole)		
		P11 ⁴ P13 ⁴	30K 3000K	80CRI	TSLG Type IV medium	277 VAC	SPA Square pole mounting (88 drilling, 5.5" min. 50 pole)		
			35K 3500K	80CRI	TSLG Type IV high	347 VAC	SPA Square pole mounting (88 drilling, 5.5" min. 50 pole)		
			40K 4000K	80CRI	TSLG Type IV high	480 VAC	SPA Square pole mounting (88 drilling, 5.5" min. 50 pole)		
			50K 5000K	80CRI	TSLG Type IV high	---	---		

Control options

Shipped installed

PER7 Seven-pin receptacle only (controls ordered separately)⁶

PAO Field adjustable output^{1,7}

BL30 Bi-level switched dimming, 50%⁸

PR High-flow, medium/ambient sensor, 8-40" mounting height, ambient sensor enabled at 20' ± 1" ± 1"

PER MEMA two-lock receptacle only (controls ordered separately)⁷

PBS Five-pin receptacle only (controls ordered separately)⁷

Other options

Shipped installed

LRB Recessed shield (black finish standard)⁹

LRO Left-recessed optics¹⁰

RRO Right-recessed optics¹⁰

CCE Coastal Construction¹¹

HA 50% ambient operation¹²

BAA Bay Area/California Act and/or Bay Area/California Act Qualified

SE Single-bay (120, 277, 347V)¹³

DE Double-bay (208, 240, 480V)¹³

Shipped separately

EGSR External Glare Shield (reversible, field install required, matches housing finish)

BSDB Best Spikes (field install required)

Finish system

DDBKD Dark Bronze

DLBKD Black

DNAKD Natural Aluminum

DWBKD White

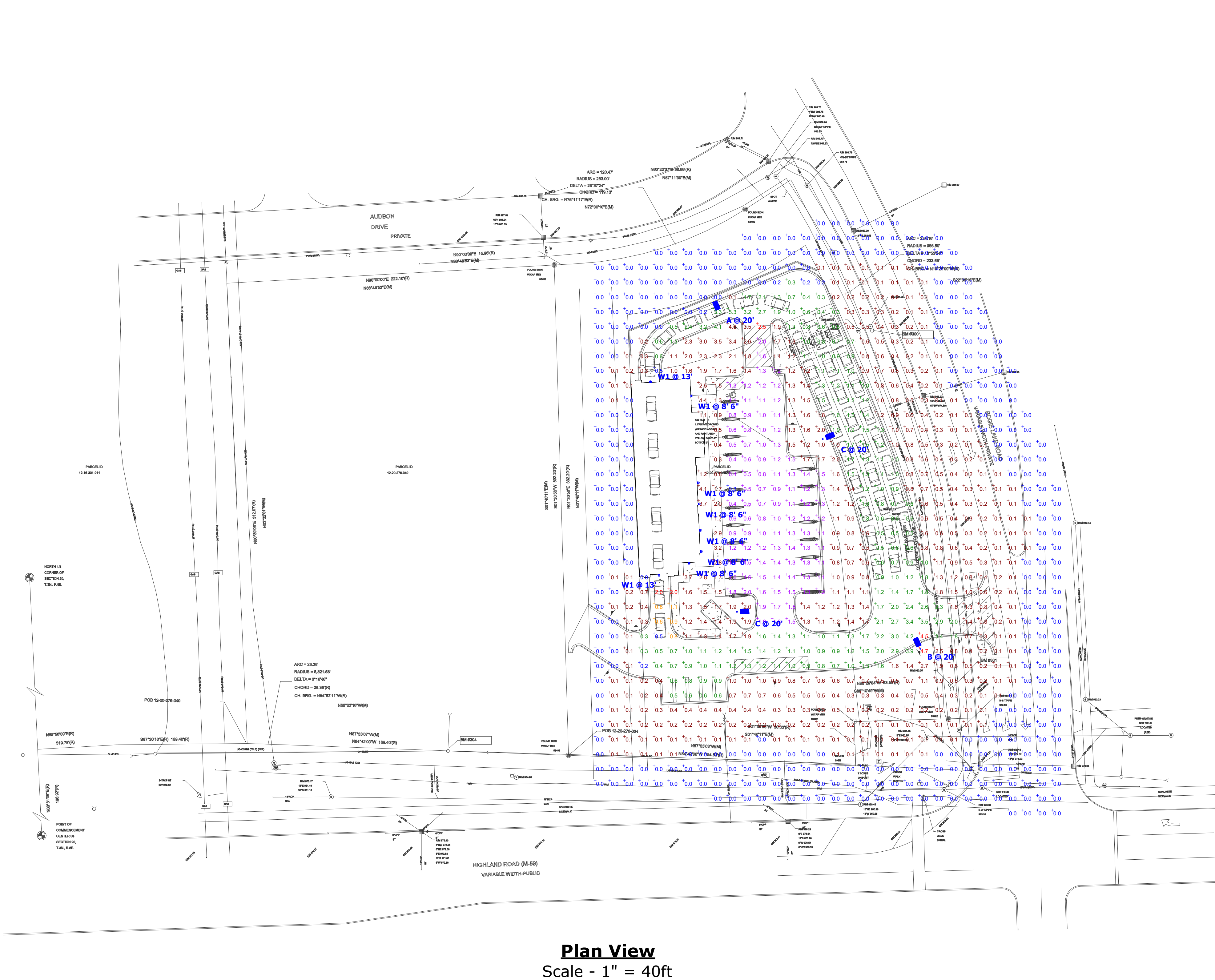
DBBKD Textured dark bronze

DBLKD Textured black

DNATKD Textured natural aluminum

DWHBKD Textured white

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com DSX0 LED Rev. 04/20/25 Page 1 of 9



Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
OVERALL	+	0.6 fc	4.7 fc	0.0 fc	N/A	N/A	0.1:1
SITE CIRCULATION	+	1.3 fc	4.5 fc	0.2 fc	22.5:1	6.5:1	0.3:1
VACUUM AREA	+	1.2 fc	2.5 fc	0.3 fc	8.3:1	4.0:1	0.5:1
CAR WASH ENTRANCE/EXIT	+	1.0 fc	2.0 fc	0.5 fc	4.0:1	2.0:1	0.5:1

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF
A		1	Lithonia Lighting	DSX0 LED P7 40K 80CRI BLK4	D-Series Size 0 Area Luminaire P7 Performance Package 4000K CCT 80 CRI Type 4 Extreme Backlight Control	LED	1	14006	0.9
B		1	Lithonia Lighting	DSX0 LED P7 40K 80CRI TTFM	D-Series Size 0 Area Luminaire P7 Performance Package 4000K CCT 80 CRI Forward Throw	LED	1	19053	0.9
C		2	Lithonia Lighting	DSX0 LED P7 40K 80CRI TSW	D-Series Size 0 Area Luminaire P7 Performance Package 4000K CCT 80 CRI Type 5-Wide	LED	1	19784	0.9
W1		8	Lithonia Lighting	WDGE1 LED P0 40K 80CRI VW	WDGE1 LED WITH P0 - PERFORMANCE PACKAGE, 4000K, 80CRI, VISUAL COMFORT WIDE OPTIC	LED	1	760	0.9

Ordering Note

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

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 REQUIRMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT CONTROLS@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.

WHITE LAKE TOWNSHIP NOTICE OF PUBLIC HEARING

Notice is hereby given the Planning Commission of the Charter Township of White Lake will hold a public hearing on **Thursday, December 4th, 2025, at 6:30 P.M.** at the White Lake Township Annex, 7527 Highland Road, White Lake, Michigan, 48383 to consider an additional building to be constructed within the **Planned Business District**.

Property described as parcel number 12-20-276-034, located at the northwest corner of Highland Road (M-59) and Bogie Lake Road, consisting of approximately 1.88 acres, currently zoned (PB) Planned Business.

The purpose of this public hearing is to receive public comment on the proposed preliminary site plan for the above Planned Business zoned property, consisting of a 5,555 square foot automobile wash establishment.

Persons interested are requested to be present. Pertinent information relative to this request is on file at the Community Development Department and may be examined at any time during regular business hours of 8 a.m. to 5 p.m. Persons interested may visit the Community Development Department, contact the Community Development Department by telephone at 248-698-3300, ext. 2, or attend the Public Hearing on the date specified. Written comments are also welcome at 7525 Highland Road, White Lake, Michigan, 48383. Individuals with disabilities requiring auxiliary aids or services should contact the Clerk's Office at least 5 days before the hearing.

Sean O'Neil, AICP
Community Development Director