

Director's Report

Project Name: Redevelopment at 9328 Highland
 Description: Preliminary Site Plan Approval
 Date on Agenda this packet pertains to: August 5th, 2021

- | | |
|--|---|
| <input type="checkbox"/> Public Hearing | <input type="checkbox"/> Special Land Use |
| <input checked="" type="checkbox"/> Initial Submittal | <input type="checkbox"/> Rezoning |
| <input type="checkbox"/> Revised Plans | <input type="checkbox"/> Other: _____ |
| <input checked="" type="checkbox"/> Preliminary Approval | |
| <input type="checkbox"/> Final Approval | |

Contact	Consultants & Departments	Approval	Denial	Approved w/Conditions	Comments
Sean O'Neil	Planning Director	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Per comments below.
DLZ	Engineering Consultant	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See letter dated 07/07/2021
McKenna & Associates	Planning Consultant	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See letter dated 07/15/2021
John Holland	WLT Fire Chief	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See letter dated 07/13/2021
Jeanine Smith	WLT Assessor	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See memo dated 07/12/2021



INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

July 7, 2021

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

RE: 9328 Highland Road- Commercial Building with Drive Thru- Preliminary Site Plan Review – 1st Review

Ref: DLZ No. 2145-7233-10

Design Professional: Stonefield Engineering & Design, LLC

Dear Mr. O' Neil,

Our office has performed a Preliminary Site Plan review for the above-mentioned plan dated July 1, 2021. The plans were reviewed for feasibility based on general conformance with the Township Engineering Design Standards.

General Site Information

This site is located on the north side of M-59 and west of Fisk Road. Total site acreage is approximately 1.176 acres.

Site Improvement Information:

- Construction of a dual use drive -thru restaurant and retail space building totaling 5,840 square feet. Previous Sonic Burger building on site to be razed.
- Associated reconfiguration and repaving of paved and curbed parking and maneuvering aisles including proposed drive-thru. Three ADA accessible parking spaces and associated loading spaces are also proposed.
- Existing 8' wide sidewalk along M-59 frontage is to remain.
- Site to be serviced by watermain and sanitary sewer.

4494 Elizabeth Lake Rd, Waterford, MI 48328 | OFFICE 248.681.7800 | ONLINE WWW.DLZ.COM

Akron Bridgeville Burns Harbor Chicago Cincinnati Cleveland Columbus Detroit Flint Fort Wayne Indianapolis Joliet Kalamazoo
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- Storm water runoff is proposed to be routed to the existing detention basin at the north end of the property. Storm sewer on property shall be rerouted and connected to the existing on site storm sewer near the western property line.

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

1. A separate connection for a sanitary sewer lead is proposed for the drive-thru restaurant. It needs to be clarified that all kitchen discharge lines are routed to the existing external grease trap. Please also clarify if existing oil and grease separator is properly sized for the new use.
 2. The existing watermain easement, where the hydrant and watermain is proposed to be removed, will need to be vacated.
 3. The existing storm sewer easements, where the existing storm sewer is to be removed, will need to be vacated.
 4. The existing detention basin on the northern portion of the site will need to be inspected and maintenance performed prior to a Certificate of Occupancy issuance for the site. Applicant shall provide documentation regarding the existing storm sewer and detention basin maintenance agreement to demonstrate this redevelopment is covered under the original agreement. Applicant will need to update agreements if necessary.
 5. The as-built plans for the previous Sonic restaurant indicate an existing storm water quality device in an unmarked location in the area where the existing storm sewer runs westerly at the western property line. The location and existing condition of this device will need to be verified or an alternate means of on site stormwater pretreatment will be required.
 6. The proposed plan does not cause an increase in impervious area; it has been reduced by approximately 300 square feet. Our office has no concerns with respect to increased storm water runoff from this property. Details regarding proposed storm sewer pipe sizing will be reviewed at the time of Final Engineering Plan submittal.
 7. We defer to the Fire Department with regard to items related to fire suppression including proposed hydrant location.
 8. The plan proposes a new benchmark be established at time of construction; a benchmark on NAVD 88 datum will be required to be established and shown on the Final Engineering Plan.
 9. The plan appears to propose 5 foot wide sidewalk in front of the building, ordinance requires 7 foot walks to account for vehicle overhang. This may be allowable as the plans propose either bumper blocks or handicap signs in front of the spaces which would prevent overhang. We defer further comment to the Planning Department or Planning Consultant.
-

10. The proposed storm sewer easement on the westernmost storm segment is shown over the subject property line, will this easement be granted by the adjacent property owner?

Recommendation

The plans are acceptable from an engineering feasibility standpoint subject to our comments listed above being 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: Justin Quagliata, Community Development, *via email*
Hannah Micallef, Community Development, *via email*
Aaron Potter, DPS Director, White Lake Township, *via email*
John Holland, Fire Marshall, White Lake Township, *via email*



MCKENNA

July 15, 2021

Planning Commission
Charter Township of White Lake 7525 Highland Road
White Lake, MI 48383

Subject: 9328 Highland Road
Preliminary Site Plan Review
Zoned: General Business (GB) District

Applicant(s): White Lake Retail Management, LLC

Location: North side of Highland Road, west of Fisk Road and east of Village Drive

Dear Planning Commissioners:

We have received an application for preliminary site plan review for tax parcel 12-23-201-010, dated July 1, 2021 consisting of approximately 1.18 acres, currently zoned General Business (GB). The lot is the site of the Sonic Restaurant (currently closed).



Source: Oakland County Property Gateway

HEADQUARTERS
235 East Main Street
Suite 105
Northville, Michigan 48167

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☎ 248.596.0930
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COMMENTS

1. **Existing Conditions.** The conditions of the site and the surrounding area are summarized below:

Location	Existing Land Use	Master Plan	Existing Zoning
Site	Sonic Drive Thru	Planned Business	General Business
North	Mobile Home Park	Mobile Home	Mobile Home Park
East	Fisk Corners	Planned Business	General Business
South	Residential	Planned Business	Local Business
West	Discount Tire	Planned Neighborhood	General Business

2. **Proposed Use.** The applicant is proposing to demolish the existing Sonic building and construct a 5,840 square foot building. The easterly portion will consist of 3,000 square feet of retail and the western portion will consist of 2,840 square feet for a restaurant with a drive thru. The applicant is proposing to remove the building and parking spaces, with the exception of the thirteen spaces along the Highland Road frontage and reconfiguring the ADA spaces in the front of the building. Fisk Corners Shopping Center is located to the east and Discount Tire is located to the west of the subject property. Retail and restaurant uses are permitted in the General Business District. A drive thru and outdoor dining, which are proposed, are special land uses; however, because the property has been previously approved for such uses, no public hearing or separate special land use approval is required. The applicant stated that they approximate three tables and twelve chairs for the outdoor dining. **Specifications on the number of tables and chairs should be made a part of the final site plan review plan.**

3. **Building Placement; Architecture and Design.** The site is of a conforming area and the building complies with all of the setback requirements for the General Business District with the exception of the lot width, which is required to be 200' but is actually 148.8' in width. Additionally, the developer is proposing to keep thirteen of the existing (previously approved) parking spaces that are located in the required front yard setback.

Applicable Requirement	Required by the Zoning Ordinance in the GB District	Proposed
Front Yard Setback	50 feet	89.2 feet
Side Yard Setback	15 feet	27 feet (west) 47.9 feet (east)
Rear Yard Setback	20 feet	158.8 feet
Building Height	35 feet or two stories	23 feet
Minimum Lot Area	1 acre	1.18 acres
Minimum Lot Width	200 feet	148.8 feet

The building consists of brick veneer on the lower (approximately) one-third of the building, EIFS on the upper two thirds of the building, a prefinished metal coping along the top of the building and windows along the front and on the west and east elevations for approximately 19 feet. A narrow band of EIFS in a contrasting color is also shown just below the metal coping. Four fabric awnings are proposed along each bay of windows and a sign area has been identified above the western most and eastern most bay of windows. Article 6, Section 8.E requires all nonresidential developments adjacent to M-59 to consist of primarily high quality, durable, low maintenance material, such as masonry, stone, brick, glass or equivalent materials. **The applicant needs to provide calculations for the amount of the façade that meets this requirement(at least 50%, preferably 70%) as well as the percentage of windows on the front façade (required to be at least 30%).**



4. **Site Circulation and Parking.** Fifty-three parking spaces are required and proposed. As mentioned earlier, thirteen spaces in the front will remain. The site currently has nine, 10' by 20' parking spaces in the rear, adjacent to the fence. They are proposing eleven, 9' by 19' spaces in this same area. The parking spaces on the east side of the site are proposed to be 17 feet long. The Zoning Ordinance allows for 17-foot spaces if they abut a sidewalk or landscaped area. These spaces abut a landscaped area, 4 feet deep. Eight stacking spaces for the drive thru are required and are shown on the site plan. Entry to the site is from a 25' cross access easement that runs the width of the property. Curb cuts on Discount Tire and Fisk Corners Shopping Center provide access to this site both in the front and rear, although no easement for the rear portion could be identified. A condition of the approval in 2008 was that the Township and the property owner enter into an agreement stating that the Sonic proprietor would voluntarily enter into a development agreement with the Township ensuring that no new driveways/curb-cuts would be pursued for the Sonic parcel now, or in the future, and that all driveways, parking, maneuvering lane and internal connections would be shared between these three parcels (to the east and west of the subject parcel). **The applicant needs to provide a copy of this agreement prior to final site plan review.**

Circulation is two way on the east side of the site and one way on the west side (to accommodate the drive thru traffic). No loading spaces are proposed, although the Zoning Ordinance requires one, 10' by 50' space with 15' height clearance. The applicant has indicated that loading and unloading will be done off hours. **The Planning Commission should determine if this is appropriate.**

5. **Landscaping and Screening.** Per Section 5.19(D) of the Zoning Ordinance, greenbelts are required between non-residential parking areas and the public right-of-way and shall be at least 20 feet wide and improved with one large deciduous or evergreen tree and eight shrubs for every 30 lineal feet, except that they may be substituted in part with a masonry screen wall, 30 inches in height, at the discretion of the Planning Commission, in which case, a five-foot greenbelt adjacent to the screen wall must be provided. The applicant states that the existing 16.9-foot greenbelt adjacent to Highland Road is an existing nonconformity. Five trees and 40 shrubs are required; the applicant is proposing 5 trees and 69 shrubs, which exceed the Zoning Ordinance requirements. It should be noted that these are all existing plant materials and approval should be subject to determination by the Planning Department as to the viability of these materials. A site inspection was conducted and it appears that the majority of the existing landscaped areas (with the exception of trees) are in poor condition.

A greenbelt is required on the west and east side lot lines. A four-foot-wide landscaped area (with boxwood shrubs) is proposed on the east lot line. No buffer is proposed on the west, although there is an existing shrub buffer on the Discount Tire site at this shared property line. Again, the applicant's plan states that this is an existing nonconformity. **The Planning Commission should determine if this is appropriate and give direction to the applicant.** Typically, landscape plans are not required at preliminary site plan review, therefore, any direction should be incorporated into the final site plan review landscape plan.

Section 5.19(E) of the Zoning Ordinance requires interior landscaping area, equal to at least 15 percent of the total lot area. One tree and five shrubs are required per 300 square feet of area. The landscape plan meets this requirement.

Section 5.19(G) requires 20 square feet of parking lot landscaping per parking space and one tree and three shrubs per one hundred square feet of required landscaping. The proposed landscape plan meets this requirement.



Three notes should be added to the landscape plan:

- A note guaranteeing a two-year guarantee and bond for such for all new plant materials; and
- A note that all landscaped areas that abut parking areas will be separated with a 6-inch curb; and
- A note that any landscaping materials that are in poor condition will be removed and replaced with materials that meet the Zoning Ordinance requirements

6. **Pedestrian Circulation.** Per Section 5.21 of the Zoning Ordinance, an eight (8) foot wide public sidewalk is required along Highland Road. Currently, there is a pathway along the frontage of the property. The applicant should indicate the width of this pathway on the final site plan.

7. **Lighting.** Section 5.18(G) of the Zoning Ordinance includes the standards for outdoor lighting. A photometric plan was submitted. The plan states that the maximum foot candles at the property line exceed the permitted maximum of 1-foot candle and a notation that this is an existing light level. **The Planning Commission should determine whether or not this level of light is acceptable because it is existing.** The highest light levels occur along the front lot line by an existing pole light and a (proposed) relocated area light. If any existing fixtures are relocated or replaced, they should be brought into compliance with ordinance standards,.

Nine, rubbed bronze anodized sconce fixtures are proposed on the building. Article 6, Section 6.8.E.vii of the Zoning Ordinance states *floodlights, wall pack units, and other types of unshielded lights, and lights where the lens or bulb is visible outside of the light fixture are not permitted.* The intent is wall-mounted decorative or architectural lighting must be fully shielded and directed downward – up-lighting or outward shining lighting are not permitted. **The petitioner should revise the proposed light fixtures with those that meet the Ordinance requirements.** Four wall packs are proposed; two on the rear elevation and one on each side elevation. These wall packs are in compliance with the Ordinance as they are directed downward.

8. **Signs.** Section 5.9 of the Zoning Ordinance regulates signs. The site plan indicates one monument style sign along the Highland Road frontage. The sign is 7'-6" in overall height and 5' wide. The base consists of brick veneer to match the building with a stone cap. The size of the actual sign area is 27.5 square feet per side, which is in compliance with the Zoning Ordinance.

The Zoning Ordinance permits two wall signs for this development. If a parcel has in excess of 250 feet of frontage, an additional wall sign may be permitted. Additionally, if a building has frontage on two thoroughfares, they can have additional signage. This parcel has 148 feet of frontage and does not have frontage on any thoroughfare other than Highland Road. The two side elevation wall signs are not permitted. **At final site plan review the applicant should provide detail on the wall sign calculations with respect to the front façade area and the area of the proposed wall signs. Lastly, the monument sign must have the address of the businesses on it in 6-inch high figures.**

9. **Trash Disposal.** The applicant is proposing to utilize the existing 9-foot by 22-foot trash enclosure. The enclosure consists of brick veneer on a concrete block screen wall on a 6-inch concrete slab. The enclosure gate is chain link gate fabric with cedar slats. The Zoning Ordinance requires *dumpster enclosures to be constructed of the same decorative masonry materials as the buildings to which they are accessory.* The enclosure is brick veneer; however, the brick is not the same as the brick on the building. **The Planning Commission should determine if this is appropriate, as it is existing.**



10. **Special Land Use Approval.** As stated earlier, the Sonic Restaurant received approval for two special land uses: drive thru operations and outdoor dining. A review of the standards as set forth in Articles 6.10 (General Standards for Special Land Uses) and Articles 4.17 and 4.18 (Drive Thru Window Service and Eating Establishments with Entertainment and/or Outdoor Dining, respectively) indicates that the continuation of these special land uses meets the requirements as stated in the Zoning Ordinance; subject to the following items:

- Applicant providing information as to the number of tables and chairs for the outdoor dining area; and
- Note added to the final site plan indicating that the outdoor dining will comply with the hours of operation for outdoor dining as stated in Article 4.18 A I; and
- Note added to the plan that the noise level from any outdoor speakers will not exceed 70dB at the lot line; and

RECOMMENDATION

Several items, as identified above need to be addressed prior to final site plan approval:

1. Specifications on the number of tables and chairs to be made a part of the final site plan.
2. The applicant needs to provide calculations for the amount of the façade that meets the Zoning Ordinance requirements as well as the percentage of windows on the front façade (required to be at least 30%).
3. Applicant to provide a copy of the development agreement that addresses the cross-access easements.
4. Determination by the Planning Commission as to the lack of a delineated loading zone.
5. Determination by the Planning Commission as to the lack of a buffer on the west side of the site.
6. A note on the plan regarding a two-year guarantee and bond for such for all new plant materials.
7. A note that all landscaped areas that abut parking areas will be separated with a 6-inch curb.
8. A note that any landscaping materials that are in poor condition will be removed and replaced with materials that meet the Zoning Ordinance requirements.
9. Dimension of existing pathway along Highland Road added to final site plan.
10. Determination by the Planning Commission as to the appropriateness of the existing level of lighting, which exceeds the Zoning Ordinance maximum for foot candles at the lot lines and internally within the site.
11. The petitioner should revise the proposed (wall sconce) light fixtures with those that meet the Ordinance requirements.
12. The applicant to provide detail on the wall sign calculations with respect to the front façade area and the area of the proposed wall signs.
13. Address of the businesses being added to the monument sign in letters at least 6 inches in height,
14. Determination by the Planning Commission as to the utilization of the existing trash dumpster enclosure.
15. Lastly, a site inspection showed that the white, metal fence in the rear of the site is in need of repair. A note should be added to the this affect on the final site plans.

Based on the above recommendations and determinations, we recommend that the Planning Commission approve the preliminary site plan review for 9328 Highland Road subject to the issues identified above and the submission of revised plans for final site plan review.



If you have any questions about this report or require additional information, please do not hesitate to contact us.

Respectfully submitted,

McKENNA

Kathleen Jackson
Senior Principal Planner

cc: Mr. Sean O'Neal, AICP
Mr. Justin Quagliata
Ms. Hannah Micallef



Site / Construction Plan Review

To: Sean O'Neil, Planning Department Director

Date: 7/13/2021

Project: 9328 Highland Rd.

File #: Not shown

Date on Plans: 7/1/2021

The Fire Department has the following comments with regards to the 1st review of preliminary site plans for the project known as 9328 Highland Rd.

1. The access drive shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all weather driving capabilities.
2. The required turning radius shall accommodate the largest Fire Department apparatus (40')
3. The angle of approach/Departure to and from White Lake roads shall not exceed 8 degrees.
4. The proposed relocation of the existing fire hydrant on drawing C-5 has Fire Marshal approval.

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.

Memo

To: Sean O'Neil, Planning

From: Jeanine A Smith

Date: July 12, 2021

Re: Project Name: 9328 Highland Rd File No: Parcel Number:12-23-201-010

Comments: No comment

CHARTER TOWNSHIP OF WHITE LAKE

SITE PLAN AND PLAT REVIEW APPLICATION

White Lake Township Community development Department, 7525 Highland Road, White Lake Michigan 48383 (248)698.3300 x163

APPLICANT AND PROPERTY INFORMATION

Applicant: White Lake Retail Management LLC
Phone: 248-646-9999
Address: 30200 Telegraph Rd. Bingham Farms MI 48025
Applicant's Legal Interest in Property: Purchaser
Property Owner: Providential WL Properties LLC
Address: 9326 Highland Road, White Lake, MI

PROJECT INFORMATION

Project Name: 9328 Highland Road
Parcel I.D. No.: 12-23-201-010
Proposed Use: two tenant commercial building with drive-through
Current Zoning: GB & Wellhead Protection
Existing Use: Drive-in and drive-through restaurant
Parcel Size: 1.176 AC
Floor Area / No. of Units: 5,570 SF

TYPE OF DEVELOPMENT

Subdivision [] Site Condominium [] Commercial [x]
Multiple Family [] Special Land Use [x] Industrial []
Adult Entertainment []

SITE PLAN SUBMITTAL CHECKLIST

[] PDF File and One Paper Copy (sealed) as required by Zoning Ordinance 58
[] Application Review Fees

* PLANS WILL NOT BE ACCEPTED UNLESS FOLDED *

REQUIRED SIGNATURES

Signature of Property Owner: [Signature] Date: 06/30/2021
Signature of Applicant: Brandon Schram Date: 06/30/2021



SOURCE: USGS ONLINE MAPS

LOCATION MAP

SCALE: 1" = 2000'±

SITE DEVELOPMENT PLANS FOR 9328 HIGHLAND ROAD PROPOSED COMMERCIAL BUILDING WITH DRIVE-THROUGH

PARCEL ID: 12-23-20-010

9328 HIGHLAND ROAD

WHITE LAKE CHARTER TOWNSHIP, OAKLAND COUNTY, MICHIGAN

APPLICANT

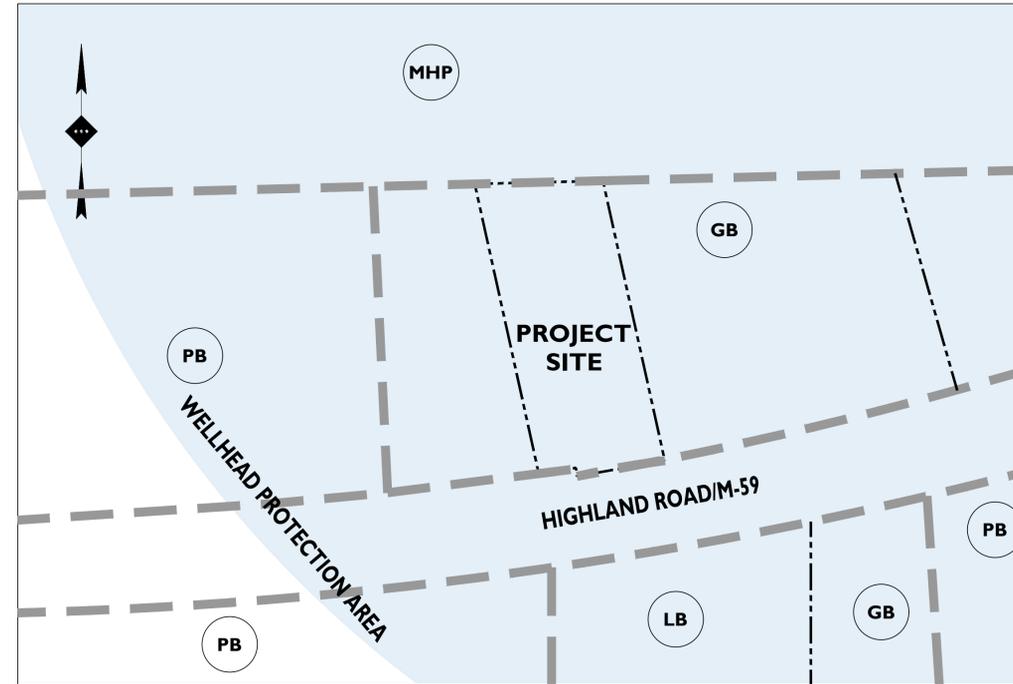
WHITE LAKE RETAIL MANAGEMENT LLC
30200 TELEGRAPH ROAD
BINGHAM FARMS, MI 48025
248-646-9999



SOURCE: GOOGLE EARTH PRO

AERIAL MAP

SCALE: 1" = 100'±



SOURCE: WHITE LAKE CHARTER TOWNSHIP ZONING MAP

ZONING MAP

SCALE: 1" = 100'±

PLANS PREPARED BY:



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PLAN REFERENCE MATERIALS:

- THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
 - SURVEY PREPARED BY KEM-TEC A GROUP OF COMPANIES, DATED: 05/11/2021
 - ARCHITECTURAL PLANS PREPARED BY DETROIT ARCHITECTURAL GROUP DATED: 05/24/2021
 - SONIC DRIVE-IN RESTAURANT CONSTRUCTION PLANS PREPARED BY KIEFT ENGINEERING, INC. DATED: 04/09/2009
 - AERIAL MAP OBTAINED FROM GOOGLE EARTH PRO DATED: 03/14/2020
 - LOCATION MAP OBTAINED FROM USGS ONLINE MAPS
- ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

SHEET INDEX

DRAWING TITLE	SHEET #
COVER SHEET	C-1
DEMOLITION PLAN	C-2
SITE PLAN	C-3
GRADING & DRAINAGE PLAN	C-4
UTILITY PLAN	C-5
LIGHTING PLAN	C-6
LANDSCAPING PLAN	C-7
CONSTRUCTION DETAILS	C-8 & C-9

ADDITIONAL SHEETS

DRAWING TITLE	SHEET #
ALTA/NSPS LAND TITLE SURVEY	I OF I
PRE VS POST DEVELOPMENT EXHIBIT	EX-1

ISSUE	DATE	BY	DESCRIPTION
1	07/11/2021	AE	FOR SITE PLAN SUBMISSION

NOT APPROVED FOR CONSTRUCTION

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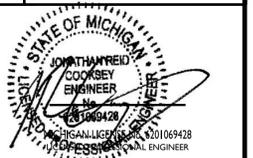
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Phone 248.247.1115

SITE DEVELOPMENT PLAN

9328 HIGHLAND ROAD
PROPOSED COMMERCIAL BUILDING
WITH DRIVE-THROUGH

PARCEL ID: 12-23-20-010
9328 HIGHLAND ROAD
WHITE LAKE CHARTER TOWNSHIP
OAKLAND COUNTY, MICHIGAN



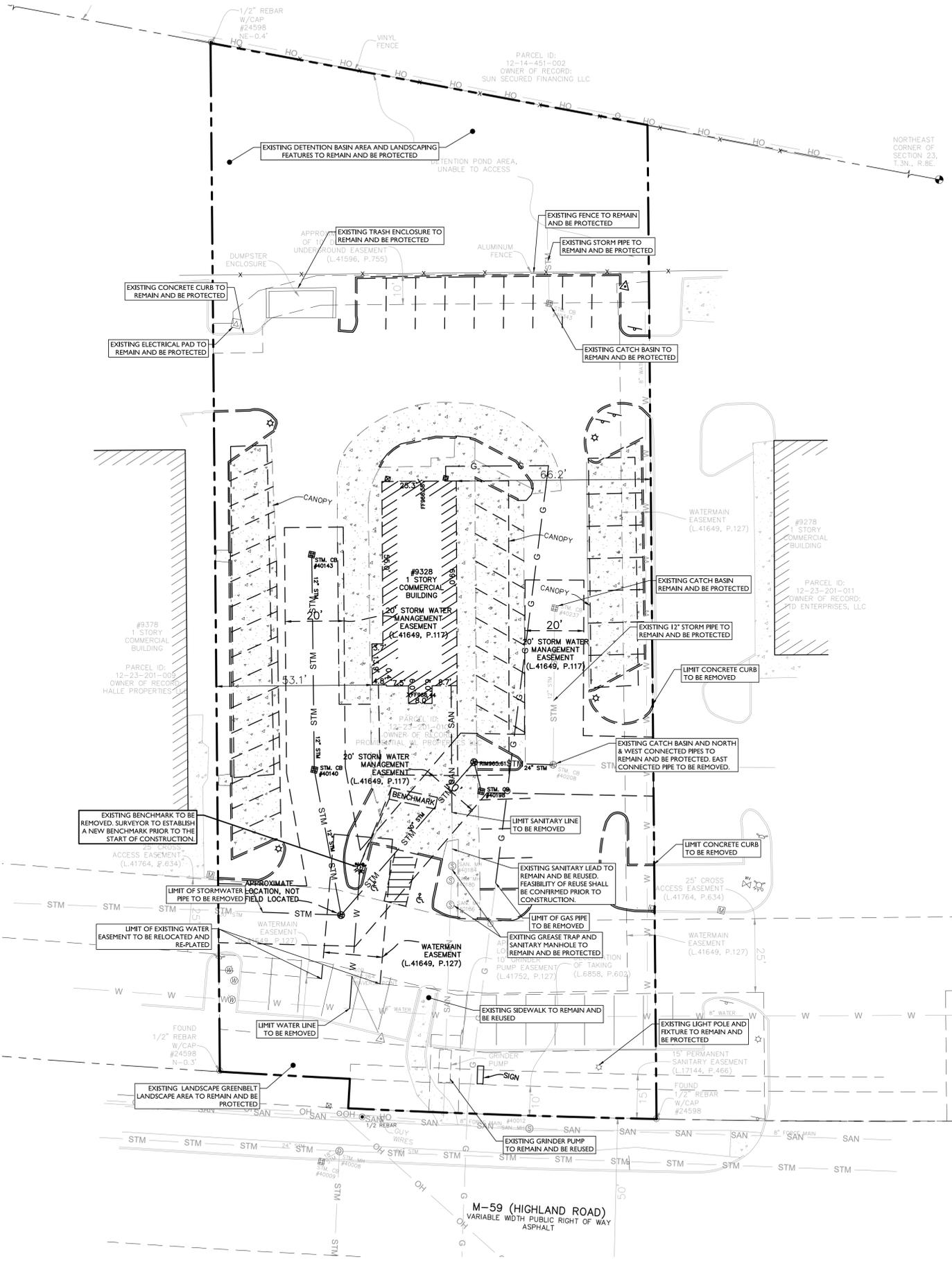
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SCALE: AS SHOWN PROJECT ID: M-19334

TITLE:
COVER SHEET

DRAWING:

C-1



SYMBOL	DESCRIPTION
---	FEATURE TO BE REMOVED / DEMOLISHED
G	GAS LINE TO BE REMOVED
STM	STORMWATER PIPE TO BE REMOVED
SAN	SANITARY LINE TO BE REMOVED
W	WATER LINE TO BE REMOVED
[Hatched Box]	CONCRETE TO BE REMOVED
[Hatched Box]	BUILDING TO BE REMOVED
[Circle with X]	STORMWATER DEVICES TO BE REMOVED
[Square with X]	UTILITY DEVICES TO BE REMOVED
[Circle]	SIGN TO BE REMOVED
[Star]	LIGHT POLE TO BE REMOVED

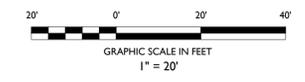
ALL SITE FEATURES WITHIN PROPERTY LINE INDICATED ON THIS PLAN ARE TO BE REMOVED / DEMOLISHED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN AND FIELD CONDITIONS

ALL SITE FEATURES OUTSIDE OF THE PROPERTY LINE INDICATED ON THIS PLAN ARE TO REMAIN AND BE PROTECTED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN AND FIELD CONDITIONS

- DEMOLITION NOTES**
1. THE WORK REFLECTED ON THE DEMOLITION PLAN IS TO PROVIDE GENERAL INFORMATION TOWARDS THE EXISTING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE ENTIRE PLAN SET AND ASSOCIATED REPORTS/REFERENCE DOCUMENTS INCLUDING ALL DEMOLITION ACTIVITIES AND INCIDENTAL TASKS NECESSARY TO COMPLETE THE SITE IMPROVEMENTS.
 2. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF DEMOLITION ACTIVITIES.
 3. EXPLOSIVES SHALL NOT BE USED UNLESS WRITTEN CONSENT FROM BOTH THE OWNER AND ANY APPLICABLE GOVERNING AGENCY IS OBTAINED. BEFORE THE START OF ANY EXPLOSIVE PROGRAM, THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL LOCAL, STATE, AND FEDERAL PERMITS. ADDITIONALLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SEISMIC TESTING AS REQUIRED AND ANY DAMAGES AS THE RESULT OF SAID DEMOLITION PRACTICES.
 4. ALL DEMOLITION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES ARE DISCONNECTED IN ACCORDANCE WITH THE UTILITY AUTHORITY'S REQUIREMENTS PRIOR TO STARTING THE DEMOLITION OF ANY STRUCTURE. ALL EXCAVATIONS ASSOCIATED WITH DEMOLISHED STRUCTURES OR REMOVED TANKS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO SUPPORT SITE AND BUILDING IMPROVEMENTS. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT DURING BACKFILLING ACTIVITIES TO OBSERVE AND CERTIFY THAT BACKFILL MATERIAL WAS COMPACTED TO A SUITABLE CONDITION.
 5. DEMOLISHED DEBRIS SHALL NOT BE BURIED ON SITE. ALL WASTE/DEBRIS GENERATED FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL RECORDS OF THE DISPOSAL TO DEMONSTRATE COMPLIANCE WITH THE ABOVE REGULATIONS.



Know what's below
Call before you dig.



DATE	ISSUE	BY	DESCRIPTION
07/01/2021	1	AF	FOR SITE PLAN SUBMISSION

NOT APPROVED FOR CONSTRUCTION

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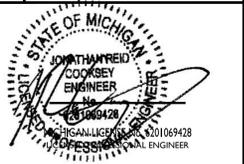
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Phone 248.247.1115

SITE DEVELOPMENT PLAN

9328 HIGHLAND ROAD

PROPOSED COMMERCIAL BUILDING WITH DRIVE-THROUGH

PARCEL ID: 12-23-20-010
9328 HIGHLAND ROAD
WHITE LAKE CHARTER TOWNSHIP
OAKLAND COUNTY, MICHIGAN



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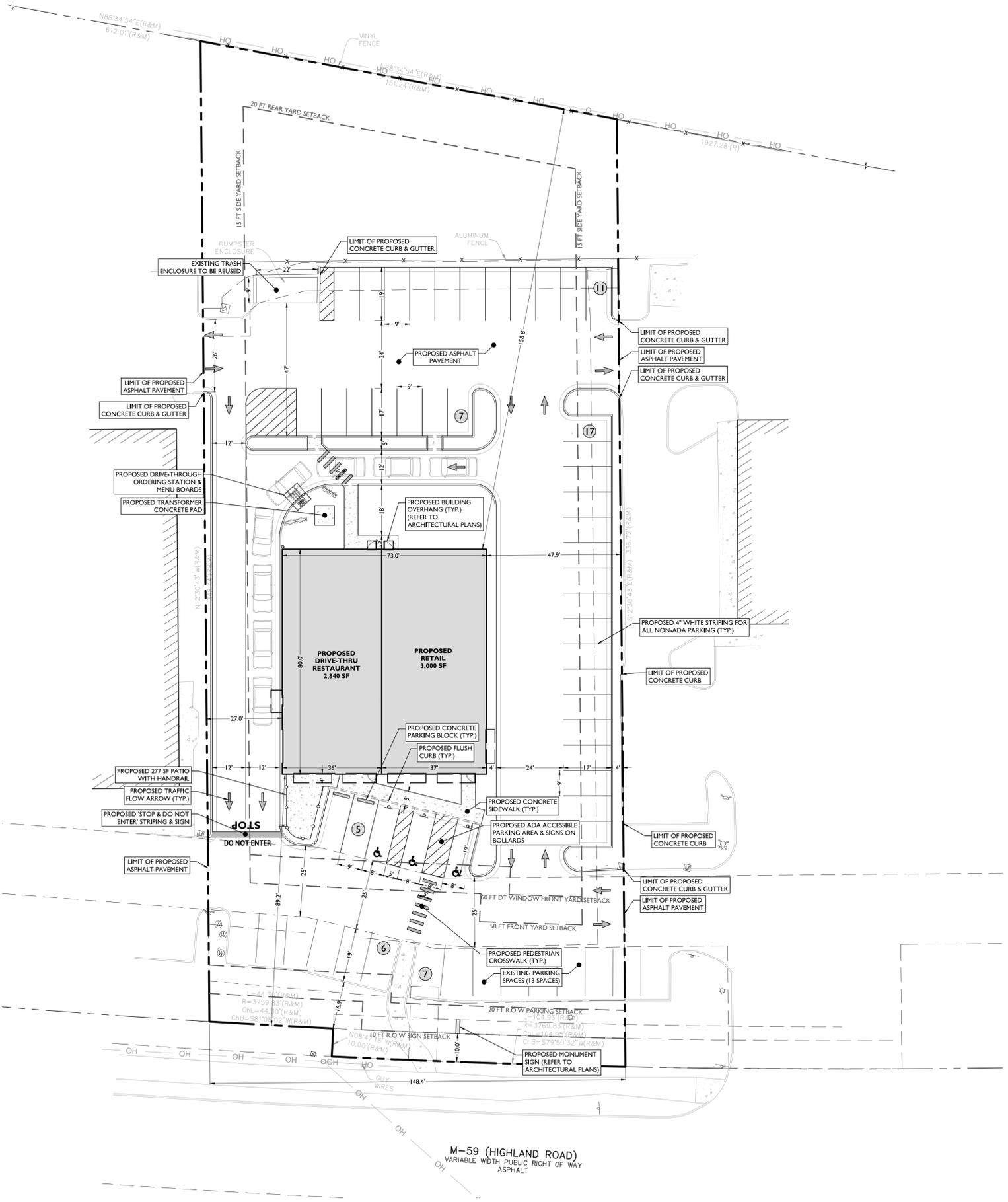
SCALE: 1" = 20' PROJECT ID: M-19334

TITLE:
DEMOLITION PLAN

DRAWING:

C-2

W:\P\191151-1400-0238 HIGHLAND ROAD, WHITE LAKE, MI\PROJECTS\2016\2016-03-23\2016-03-23.DWG



LAND USE AND ZONING		
PARCEL ID: 12-23-201-010		
GENERAL BUSINESS DISTRICT (GB) & WELLHEAD PROTECTION OVERLAY DISTRICT		
PROPOSED USE	PERMITTED USE	SPECIAL LAND USE (*)
FAST FOOD RESTAURANT	PERMITTED USE	
DRIVE-THRU WINDOW SERVICE	PERMITTED USE	
OUTDOOR DINING	PERMITTED USE	
RETAIL STORE	PERMITTED USE	
ZONING REQUIREMENT	REQUIRED	PROPOSED
MINIMUM LOT AREA	43,560 SF (1.00 AC)	51,219 SF (1.18 AC)
MINIMUM LOT WIDTH	300 FT	148.8 FT (EN)
MAXIMUM BUILDING HEIGHT	35 FT (2 STORIES)	23.0 FT
MINIMUM FRONT YARD SETBACK	50 FT	89.2 FT
MINIMUM DT WINDOW FRONT YARD SETBACK	60 FT	89.2 FT
MINIMUM SIDE YARD SETBACK	15 FT	27.0 FT
MINIMUM REAR YARD SETBACK	20 FT	158.8 FT
MINIMUM FREESTANDING SIGN R.O.W. SETBACK	10 FT	10.0 FT
MINIMUM R.O.W. PARKING SETBACK	20 FT	16.9 (EN)

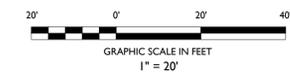
(EN) EXISTING NON-CONFORMITY
 (*) SPECIAL LAND USE APPROVED WITH PREVIOUS SONIC DEVELOPMENT

OFF-STREET PARKING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 5.11.M	RETAIL STORE: 1 SPACE PER 200 SF (3,000 SF) / (200 SF) = 15 SPACES RESTAURANT WITH DRIVE-THRU⁽¹⁾ 1 SPACE PER 75 SF (2,840 SF) / (75 SF) = 38 SPACES TOTAL: 15 + 38 = 53 SPACES	53 SPACES
§ 5.11.M.F	STACKING SPACES: 8 STACKING SPACES REQUIRED	8 SPACES
§ 5.11.M.E	STACKING SPACE DIMENSIONS: 9 FT X 20 FT	12 FT X 20 FT
§ 5.11.P	LOADING SPACE REQUIRED: 2,000 SF - 20,000 SF REQUIRES 1 SPACE	TO OCCUR OFF HOURS
§ 5.11.Q	90° PARKING SPACES⁽²⁾ 9 FT X 19 FT WITH 24 FT AISLE	9 FT X 17 FT WITH 24 FT AISLE

- (1) § 5.11.B - IF THE OUTDOOR SEATING IS BETWEEN 26%-50% OF THE INDOOR SEATING THE RESTAURANT MAY BE REQUIRED TO PROVIDE UP TO 125% OF THE PARKING REQUIRED FOR THE INDOOR SPACE
- (2) § 5.11.Q - PARKING SPACE LENGTH CAN BE REDUCED TO 17 FT WHEN ABUTTING A LANDSCAPED AREA OR SIDEWALK 8 FT WIDE

SYMBOL	DESCRIPTION
---	PROPERTY LINE
- - - -	SETBACK LINE
---	SAWCUT LINE
---	PROPOSED CURB
---	PROPOSED FLUSH CURB
○	PROPOSED SIGNS / BOLLARDS
■	PROPOSED BUILDING
□	PROPOSED CONCRETE
○	PROPOSED HANDRAIL
—	PROPOSED BUILDING DOORS

- GENERAL NOTES**
- THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
 - ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
 - THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
 - THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
 - THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
 - THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
 - THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
 - SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC, BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.
 - CONTRACTOR TO PROVIDE A SMOOTH TRANSITION BETWEEN ANY PROPOSED AND EXISTING CONCRETE CURB, ASPHALT, & CONCRETE PAVEMENT.



DATE	ISSUE	BY	DESCRIPTION
07/01/2021	1	AF	FOR SITE PLAN SUBMISSION

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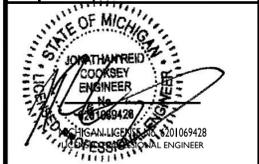
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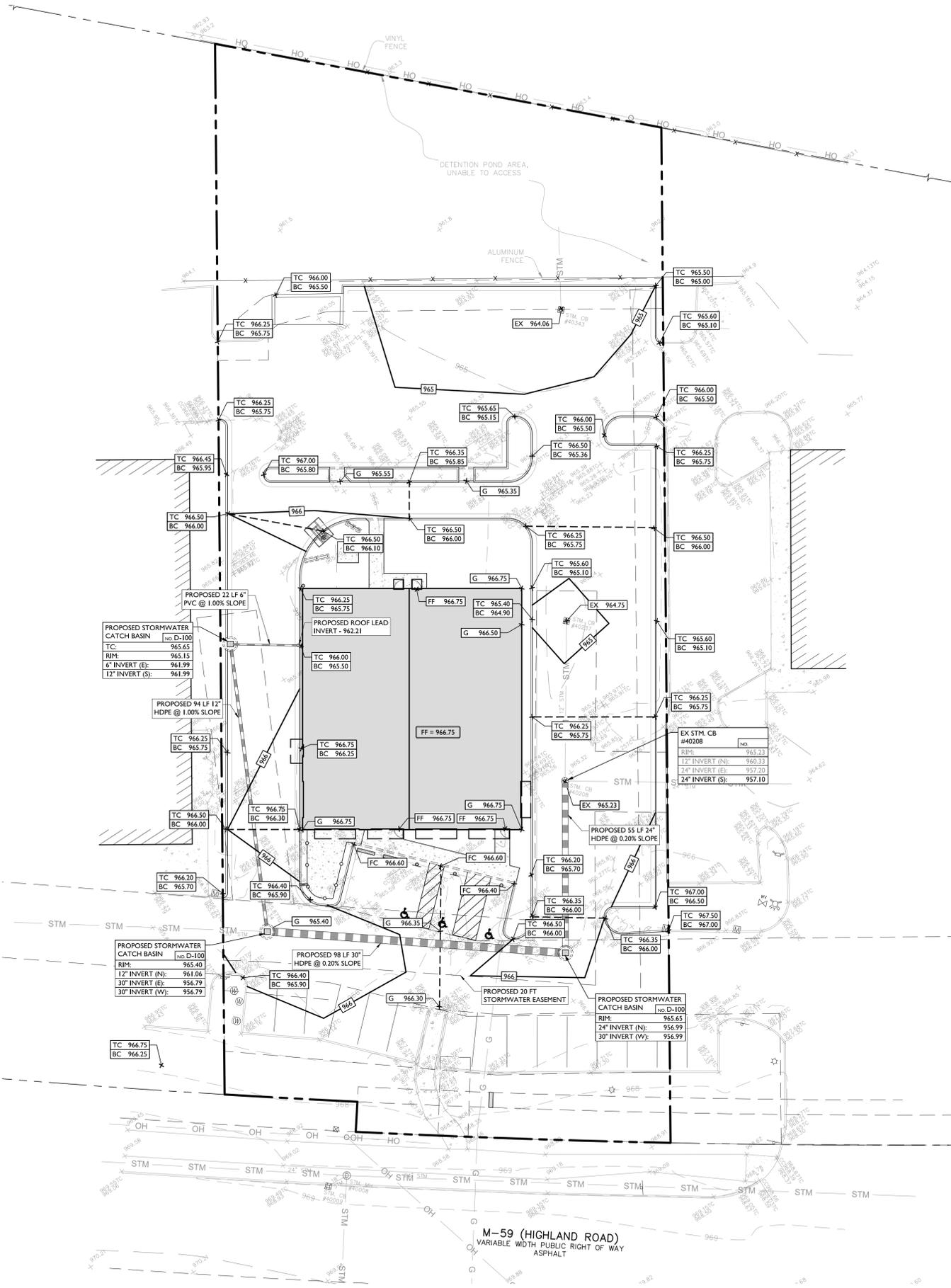


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SCALE: 1" = 20' PROJECT ID: M-19334

TITLE: **SITE PLAN**

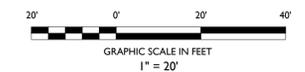
DRAWING: **C-3**



SYMBOL	DESCRIPTION
---	PROPERTY LINE
100	PROPOSED GRADING CONTOUR
---	PROPOSED GRADING RIDGELINE
X G 100.00	PROPOSED GRADE SPOT SHOT
X TC 100.50 BC 100.00	PROPOSED TOP OF CURB / BOTTOM OF CURB SPOT SHOT
X FC 100.00	PROPOSED FLUSH CURB SPOT SHOT
X FF 100.00	PROPOSED FINISHED FLOOR SPOT SHOT
(Circle with 'S')	PROPOSED STORMWATER STRUCTURES
---	PROPOSED STORMWATER PIPE

- GRADING NOTES**
- ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL ENGINEER. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE.
 - THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
 - PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CURBS.
 - THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL, COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.
 - MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:
 - CURB GUTTER: 0.50%
 - CONCRETE SURFACES: 1.00%
 - ASPHALT SURFACES: 1.00%
 - A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IF THIS CONDITION CANNOT BE MET.
 - FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SLUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

- ADA NOTES**
- THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.
 - THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP. AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALK-UP ATM, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL, THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00%. IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP, FOR ALTERATIONS, A CURB RAMP FLARE SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURB RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
 - ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
 - A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.
 - THE CONTRACTOR SHALL ENSURE A MAXIMUM OF 1/4" INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN 1/4" INCHES AND 1/2" INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN 1/4" INCH.



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07/11/2021	1	AF	FOR SITE PLAN SUBMISSION

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SITE DEVELOPMENT PLAN

9328 HIGHLAND ROAD

PROPOSED COMMERCIAL BUILDING WITH DRIVE-THROUGH

PARCEL ID: 12-23-20-010
9328 HIGHLAND ROAD
WHITE LAKE CHARTER TOWNSHIP
OAKLAND COUNTY, MICHIGAN

STATE OF MICHIGAN
JAMES W. COCKEY
REGISTERED PROFESSIONAL ENGINEER
No. 2481069428
EXPIRES 12/31/2024

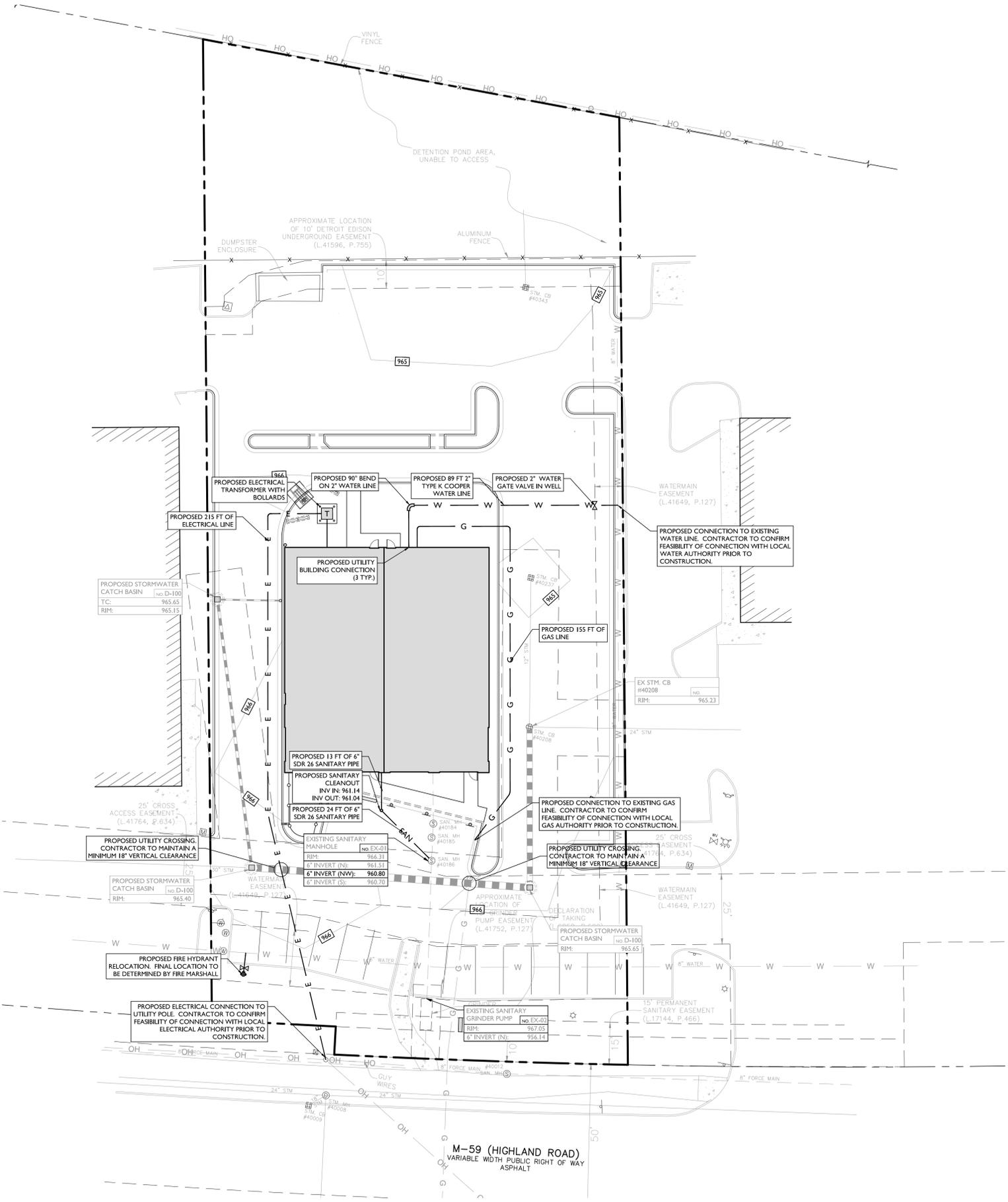
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SCALE: 1" = 20' PROJECT ID: M-19374

TITLE:
GRADING & DRAINAGE PLAN

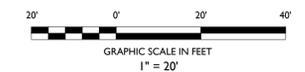
DRAWING:
C-4

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SYMBOL	DESCRIPTION
---	PROPERTY LINE
— SAN —	PROPOSED SANITARY LATERAL
— W —	PROPOSED DOMESTIC WATER SERVICE
— E —	PROPOSED ELECTRIC CONDUITS
— G —	PROPOSED GAS LINE
⊗	PROPOSED VALVE
⤵	PROPOSED WATER BEND
○	PROPOSED SANITARY CLEANOUT
⊞	PROPOSED TRANSFORMER ON CONCRETE PAD WITH BOLLARDS
⊕	PROPOSED FIRE HYDRANT

- DRAINAGE AND UTILITY NOTES**
1. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
 2. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
 3. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
 4. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 5. ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 6. THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
 7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
 8. CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UP-GRADEMENT.
 9. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
 10. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.



DATE	ISSUE	BY	DESCRIPTION
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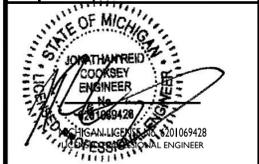
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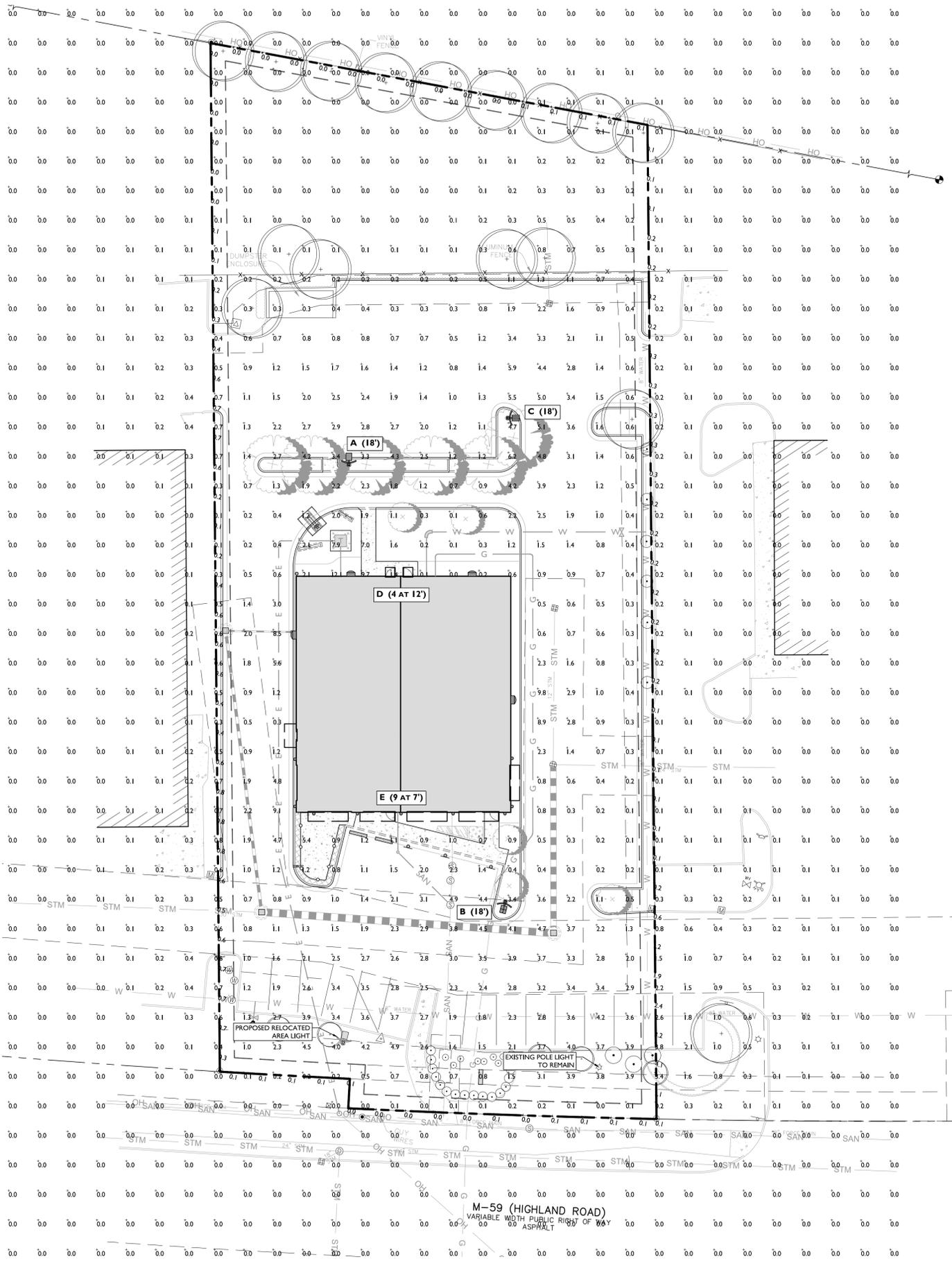


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SCALE: 1" = 20' PROJECT ID: M-19334

TITLE: **UTILITY PLAN**

DRAWING: **C-5**



SYMBOL	DESCRIPTION
A (XX')	PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
A (EX)	EXISTING LIGHTING FIXTURE
+XX	PROPOSED LIGHTING INTENSITY (FOOTCANDELS)

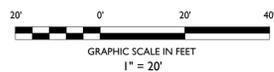
PROPOSED LUMINAIRE SCHEDULE							
SYMBOL	LABEL	QUANTITY	LIGHTING	DISTRIBUTION	LLF	MANUFACTURER	IES FILE
	A	1	EATON PREVAIL LED AREA LIGHT - C25 TYPE IV - 4000 K - 87 W (WITH HOUSE SIDE SHIELD)	TYPE IV	0.9	EATON	PRV-C25-D-UNV-T4-BZ-7030-HSS
	B	1	EATON PREVAIL LED AREA LIGHT - C25 TYPE III - 4000 K - 87 W (WITH HOUSE SIDE SHIELD)	TYPE III	0.9	EATON	PRV-C25-D-UNV-T3-BZ-7030-HSS
	C	1	EATON PREVAIL LED AREA LIGHT - C40 TYPE III - 4000 K - 143 W (WITH HOUSE SIDE SHIELD)	TYPE III	0.9	EATON	PRV-C40-D-UNV-T3-BZ-7030-HSS
	D	4	EATON CROSSTOUR MAXX LED FULL CUTOFF WALL PACK - 4000 K - 58 W	DOWN	0.9	EATON	XTOR6B-W
	E	9	OXYGEN OUTDOOR LED SCNCE - 4000 K - 13 W	DOWN	0.9	OXYGEN	3-712-222 Leda

LIGHTING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 5.18.G.iii	LIGHT FIXTURE PROPERTY LINE SETBACK: 5 FT	PROVIDED
§ 5.18.G.iii	GLARE AT PROPERTY LINE NO GLARE 5 FT ABOVE GROUND	PROVIDED
§ 5.18.G.iii	MAXIMUM PROPERTY LINE LEVELS: MAXIMUM 1 FC	4.2 FC (EN)
§ 5.18.G.via	MAXIMUM PARKING LOT FIXTURE HEIGHT: ≤ 25 FT FROM PROPERTY LINE - 16 FT 26 - 60 FT FROM PROPERTY LINE - 20 FT 61 - 100 FT FROM PROPERTY LINE - 25 FT	18 FT 18 FT 18 FT
§ 5.18.G.viii	MAXIMUM FOOT CANDLE AVERAGE: GENERAL - 0.5 FC DRIVEWAY - 2.0 FC PARKING - 2.0 FC WALKS - 1.0 FC	1.4 FC (M) 1.9 FC 1.9 FC 0.9 FC

(W) WAIVER
(EN) EXISTING NON-CONFORMITY

GENERAL LIGHTING NOTES

- THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH AS WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
- WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
- UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
 - LIGHT EMITTING DIODES (LED): 0.90
 - HIGH PRESSURE SODIUM: 0.72
 - METAL HALIDE: 0.72
- THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS.
- THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.



DATE	ISSUE	BY	DESCRIPTION
07/01/2021	1	AF	FOR SITE PLAN SUBMISSION

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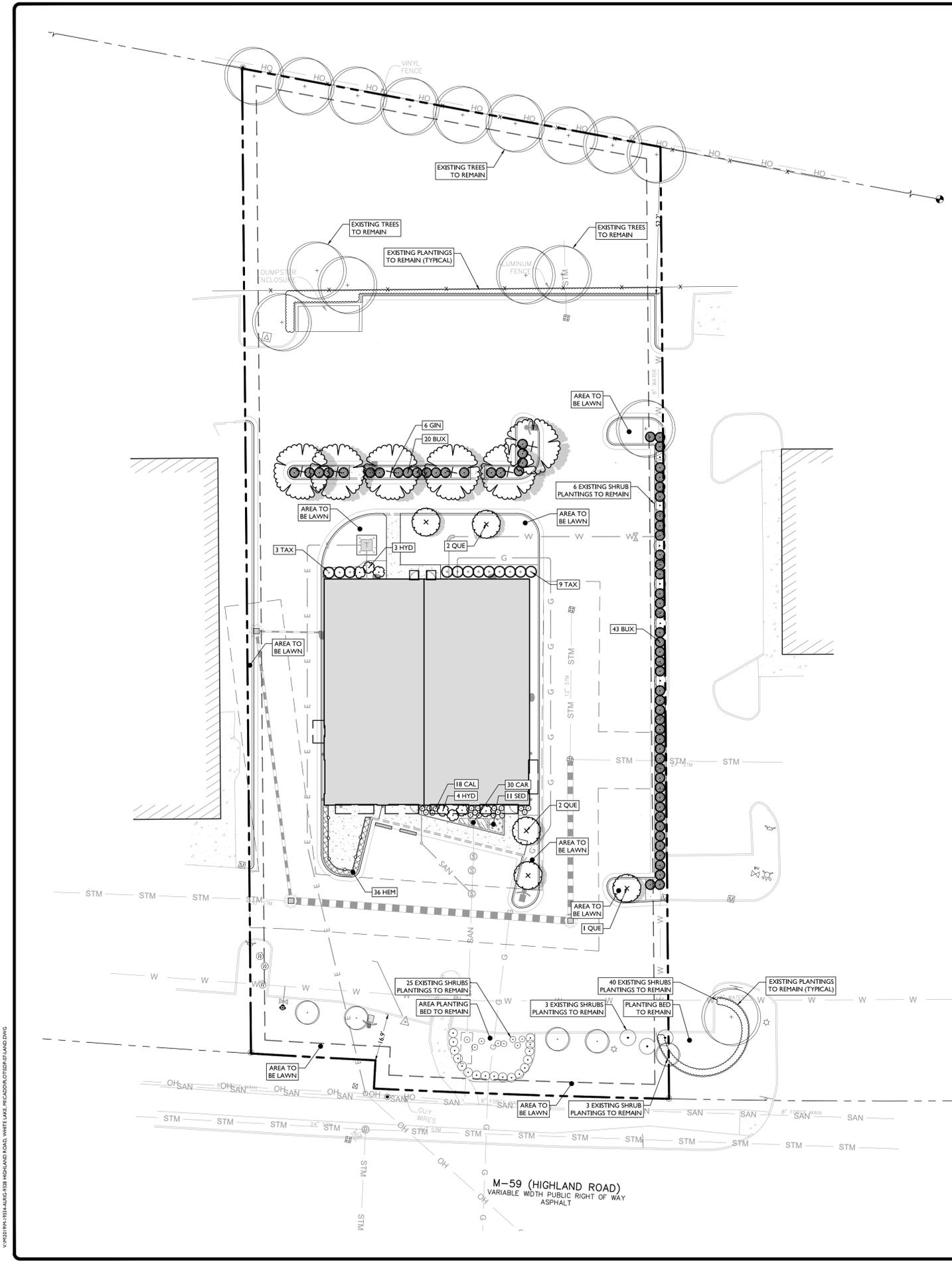
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SCALE: 1" = 20' PROJECT ID: M-19334

TITLE: LIGHTING PLAN

DRAWING: C-6

V:\P\19334\19334-HIGHLAND-ROAD-WHITE-LAKE-PROPOSED-COMMERCIAL-LIGHTING



MAINTENANCE REQUIREMENT SCHEDULE												
MAINTENANCE TASK	MONTH											
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
SITE INSPECTION			X				X				X	
DEBRIS AND WEED CONTROL - AS NEEDED			X	X	X	X	X	X	X	X		
IRRIGATION MAINTAINANCE				X						X		
MULCHING				X								
SEASONAL PLANTINGS					X	X	X	X	X	X	X	
MOWING OF TURF			X	X	X	X	X	X	X	X	X	
MOWING OF WILDFLOWERS												X
PRUNING			X	X							X	
FERTILIZER AND AMENDMENTS			X	X	X	X	X	X	X	X	X	
INSECT AND DISEASE CONTROL					X	X	X	X	X	X	X	
PLANTING RENOVATION			X							X		
LANDSCAPE STRUCTURES INSPECTION				X								
LIGHTING MAINTAINANCE			X							X		
PAVED SURFACE MAINTAINANCE				X								

PLANT SCHEDULE							
DECIDUOUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING
	GIN	6	GINKGO BILOBA 'AUTUMN GOLD'	AUTUMN GOLD MAIDENHAIR TREE	2.5' - 3' CAL	88B	AS SHOWN
	QUE	5	QUERCUS X WAREI 'NADLER'	KINDRED SPIRIT OAK	2.5' - 3' CAL	88B	AS SHOWN
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING
	HYD	7	HYDRANGEA MACROPHYLLA 'ENDLESS SUMMER'	BAILMER HYDRANGEA	18" - 24"	POT	AS SHOWN
EVERGREEN SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING
	BLUX	63	BLUXUS MICROPHYLLA JAPONICA 'WINTER GEM'	WINTER GEM JAPANESE BOXWOOD	18" - 24"	88B	AS SHOWN
	TAX	17	TAXUS X MEDIA 'DENSIFORMIS'	DENSE ANGLo-JAPANESE YEW	30" - 36"	88B	AS SHOWN
GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING
	CAL	18	CALAMAGROSTIS X ACUTIFLORA	FEATHER REED GRASS	1 GAL.	POT	
GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING
	CAR	30	CAREX MORROWII 'ICE DANCE'	ICE DANCE JAPANESE SEDGE	1 GAL.	POT	12" o.c.
PERENNIALS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING
	HEM	36	HEMEROCALLIS X 'STELLA DE ORO'	STELLA DE ORO DAYLILY	1 GAL.	POT	18" o.c.
	SED	11	SEDUM X 'AUTUMN JOY'	AUTUMN JOY SEDUM	1 GAL.	POT	18" o.c.

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE.

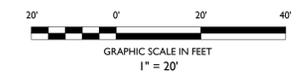
LANDSCAPING AND BUFFER REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 5.19.C.I	SCREENING REQUIREMENTS BUFFER STRIP (B): 20 FT WIDTH 5 FT VISUAL BARRIER 1 DECIDUOUS OR EVERGREEN TREE PER 15 FT (151 LF) (1 TREE / 15 LF) = 10 TREES 4 SHRUBS PER 15 FT (151 LF) (4 SHRUBS / 15 LF) = 40 SHRUBS 1 (149 LF) (1 TREE / 30 LF) = 5 TREES 4 SHRUBS PER 15 FT (149 LF) (8 SHRUBS / 30 LF) = 40 SHRUBS	51 FT (*) PROVIDED (*) 10 TREES (*) PROVIDED (*) PROVIDED (*) 16.90 FT (**)
§ 5.19.C.I	GREENBELT: 20 FT 1 DECIDUOUS OR EVERGREEN TREE PER 30 FT (149 LF) (1 TREE / 30 LF) = 5 TREES 4 SHRUBS PER 15 FT (149 LF) (8 SHRUBS / 30 LF) = 40 SHRUBS	5 TREES (**) 68 SHRUBS (**)
§ 5.19.E	INTERIOR LANDSCAPE REQUIREMENTS MINIMUM 15% OF THE TOTAL LOT AREA (51,219 TOTAL LOT) (0.15) = 7,683 SF 1 TREE PER REQUIRED INTERIOR LANDSCAPE AREA PER 300 SF (7,683 LF) (1 TREE / 300 SF) = 26 TREES 5 SHRUBS PER REQUIRED INTERIOR LANDSCAPE AREA PER 300 SF (7,683 LF) (5 SHRUBS / 300 SF) = 128 SHRUBS	17,399 SF 30 TOTAL TREES 147 SHRUBS
§ 5.19.G	PARKING LOT LANDSCAPING PARKING LOT LANDSCAPING PER SPACE: 20 SF (53 SPACES) (20 SF) = 1,060 SF PARKING LOT LANDSCAPING 1 TREE PER REQUIRED PARKING LOT LANDSCAPING PER 100 SF (1,060 LF) (1 TREE / 100 SF) = 11 TREES 3 SHRUBS PER REQUIRED INTERIOR LANDSCAPE AREA PER 100 SF (1,060 LF) (3 SHRUBS / 100 SF) = 32 SHRUBS NO ISLANDS LESS THAN 50 SF	2,976 SF 11 TREES 32 SHRUBS COMPLIES

(EN) EXISTING NON-COMFORMITY
(*) EXISTING BUFFER STRIP TO BE MAINTAINED
(**) EXISTING GREENBELT TREES AND SHRUBS TO BE MAINTAINED

IRRIGATION NOTE:
IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA. PRIOR TO CONSTRUCTION, DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO VERIFY MAXIMUM ON SITE DYNAMIC WATER PRESSURE AVAILABLE MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITHIN HARDSCAPE AREAS.

LANDSCAPING NOTES

- THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPE AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
- THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH.
- THE MAXIMUM SLOPE ALLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1 SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
- THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN AREA OF LANDSCAPING DISTURBANCE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
- THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPING AREAS.



DATE	ISSUE	BY	DESCRIPTION
07/01/2010	1	AF	FOR SITE PLAN SUBMISSION

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SITE DEVELOPMENT PLAN

9328 HIGHLAND ROAD

PROPOSED COMMERCIAL BUILDING WITH DRIVE-THROUGH

PARCEL ID: 12-23-20-010
9328 HIGHLAND ROAD
WHITE LAKE CHARTER TOWNSHIP
OAKLAND COUNTY, MICHIGAN

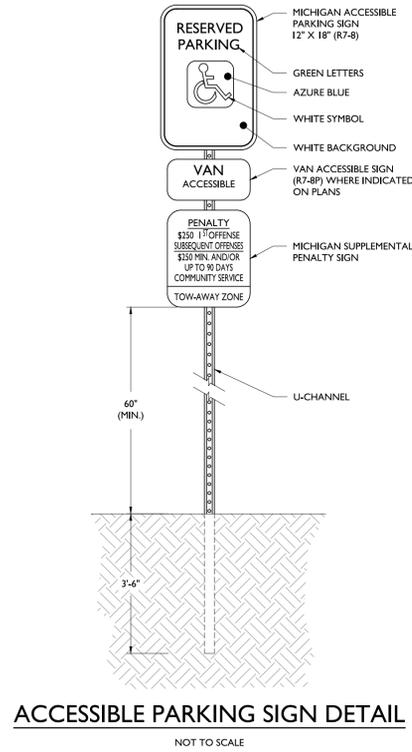


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SCALE: 1" = 20' PROJECT ID: M-19334

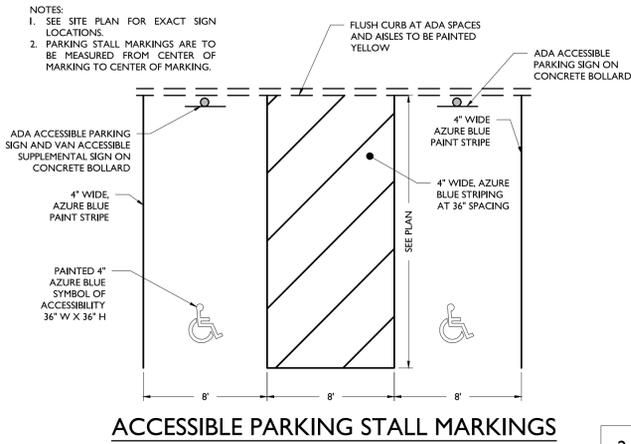
TITLE: **LANDSCAPING PLAN**

DRAWING: **C-7**



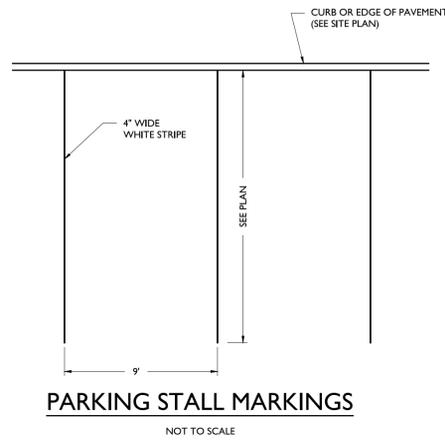
ACCESSIBLE PARKING SIGN DETAIL

NOT TO SCALE



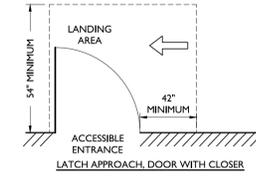
ACCESSIBLE PARKING STALL MARKINGS

NOT TO SCALE



PARKING STALL MARKINGS

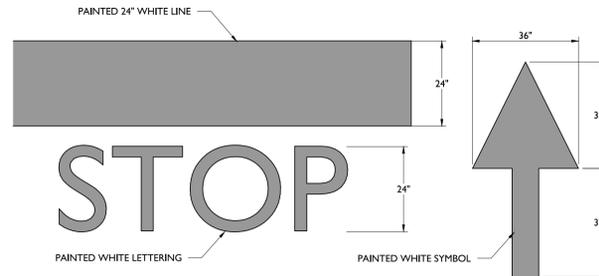
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ACCESSIBLE ENTRANCE LANDING DETAIL

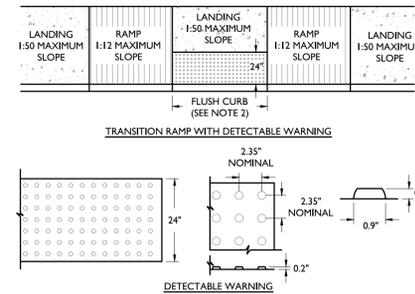
NOT TO SCALE

- NOTES:
1. MAXIMUM SLOPE ON LANDING SHALL BE 1:50 IN ALL DIRECTIONS
 2. DIMENSIONS SHOWN HERE ARE THE MINIMUM DIMENSIONS REQUIRED FOR AN ADA COMPLIANT LANDING AT THE ACCESSIBLE ENTRANCE. REFER TO SITE PLAN FOR SITE SPECIFIC DIMENSIONS THAT MAY SPECIFY A LARGER LANDING AREA.
 3. CONTRACTOR SHALL CONTACT THE ENGINEER BEFORE CONSTRUCTION IF THE ACCESSIBLE ENTRANCE ON SITE DOES NOT MATCH THE SCENARIO SHOWN ABOVE.



STOP BAR & ARROW DETAILS

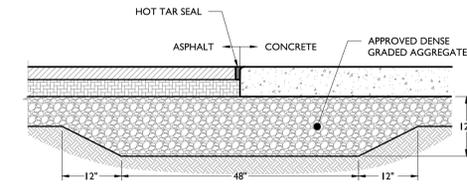
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TRANSITION RAMP DETAIL

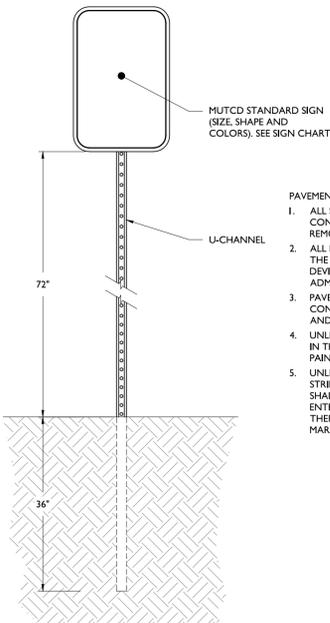
NOT TO SCALE

- NOTES:
1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 2%
 2. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36". SEE PLAN FOR EXACT WIDTH.
 3. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
 4. VISUAL CONTRAST: THERE SHALL BE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND AN ADJOINING SURFACE.
 5. DETECTABLE WARNING STRIP REQUIRED WHERE RAMP DIRECTS PEDESTRIAN TRAFFIC TOWARDS VEHICLE TRAVEL WAY. WARNING STRIP SHALL BE CAST-IN-PLACE.
 6. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL.



CONCRETE TO ASPHALT TRANSITION DETAIL

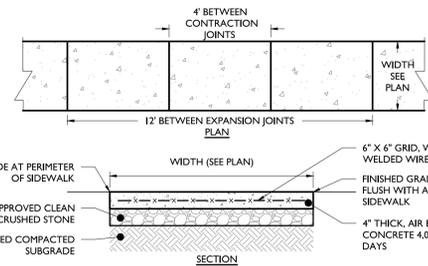
NOT TO SCALE



SIGN POST DETAIL

NOT TO SCALE

- PAVEMENT STRIPING & MARKINGS NOTES:
1. ALL SIGNING AND STRIPING IN EXISTING CONDITION IN CONFLICT WITH THE PROPOSED DESIGN PLAN SHALL BE REMOVED.
 2. ALL PROPOSED SIGNING AND STRIPING SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
 3. PAVEMENT STRIPING AND MARKINGS SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL, COUNTY AND STATE REQUIREMENTS.
 4. UNLESS OTHERWISE SPECIFIED, ALL STRIPING AND MARKINGS IN THE PUBLIC RIGHT-OF-WAY SHALL BE OF THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.
 5. UNLESS OTHERWISE SPECIFIED, ON SITE PARKING STALL STRIPING, FIRE LANE STRIPING AND DIRECTIONAL ARROWS SHALL BE EPOXY PAINT. ON SITE STOP BARS, "DO NOT ENTER" BARS, AND ASSOCIATED LETTERING SHALL BE THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.



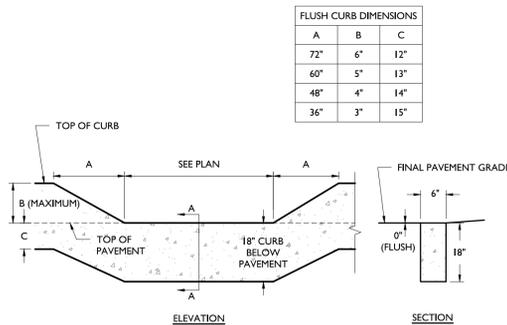
REINFORCED CONCRETE WALKWAY DETAIL

NOT TO SCALE

- NOTES:
1. MAXIMUM CROSS SLOPE SHALL BE 1/4" PER FOOT.
 2. 1/2" EXPANSION JOINTS SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE.
 3. 1" DEEP BY 1/2" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT 4' INTERVALS.
 4. EXPANSION JOINT SHALL BE PROVIDED WHERE ADJACENT TO A BUILDING.

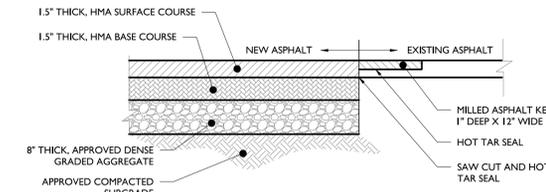
M.U.T.C.D. NUMBER	TEXT	COLOR		SIZE OF SIGN (WIDTH X HEIGHT)	TYPE OF MOUNT
		LEGEND	BACKGROUND		
STOP SIGN (R1-1)		RED	WHITE	36" x 36"	GROUND

- NOTE:
1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), EXCEPT AS NOTED.
 2. ALL SIGNS SHALL BE MOUNTED AS TO NOT OBSTRUCT THE SHAPE OF "STOP" (R1-1) AND "YIELD" (R1-2) SIGNS.



FLUSH CURB DETAIL

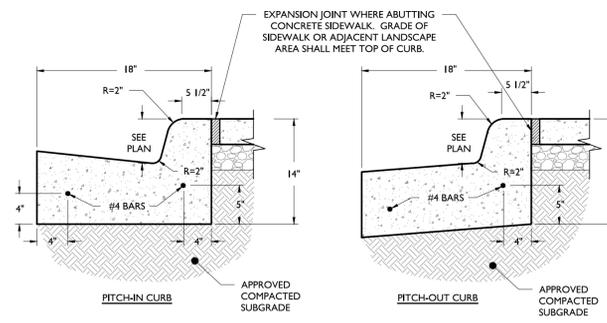
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FULL DEPTH ASPHALT PAVEMENT DETAIL

NOT TO SCALE

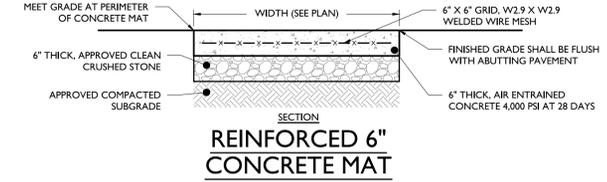
- NOTE:
1. HMA MIX AND DENSE GRADED AGGREGATE SHALL CONFORM TO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
 2. REFER TO GEOTECHNICAL REPORT FOR RECOMMENDED PAVEMENT THICKNESS.



CONCRETE CURB AND GUTTER DETAIL

NOT TO SCALE

- NOTES:
1. CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
 2. TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE.
 3. HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
 4. 14" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.

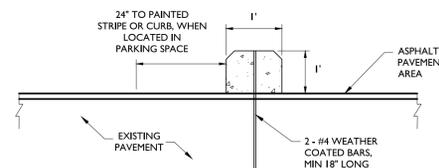


REINFORCED 6" CONCRETE MAT

NOT TO SCALE

- NOTES:
1. 1/2" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
 2. 1" DEEP BY 1/2" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
 3. CONCRETE SHALL RECEIVE BROOM FINISH.
 4. ALL EXPOSED CORNERS TO HAVE 1/2" CHAMFER.

NOT TO SCALE



CONCRETE WHEEL STOP DETAIL

NOT TO SCALE

- NOTES:
1. ON CONCRETE PAVEMENT, SECURE WHEEL STOP WITH EPOXY BONDING AGENT.
 2. WHEEL STOP SHALL BE 6' LONG.
 3. WHEEL STOP SHALL BE PREFABRICATED CONCRETE.

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9328 HIGHLAND ROAD
PROPOSED COMMERCIAL BUILDING
WITH DRIVE-THROUGH

PARCEL ID: 12-23-20-010
9328 HIGHLAND ROAD
WHITE LAKE CHARTER TOWNSHIP
OAKLAND COUNTY, MICHIGAN



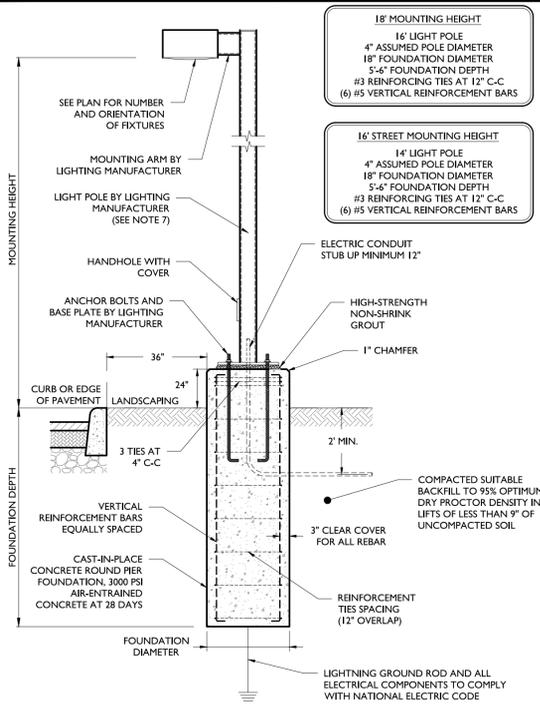
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SCALE: AS SHOWN PROJECT ID: M-19334

TITLE:
CONSTRUCTION DETAILS

DRAWING:

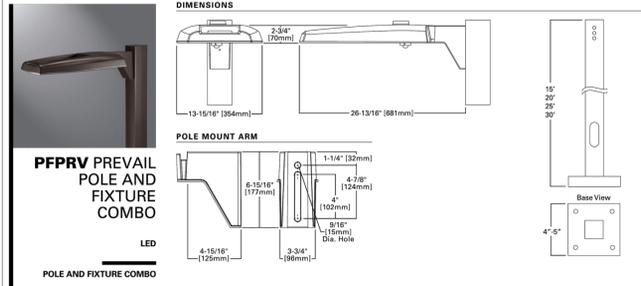
C-8



LIGHT POLE INSTALLATION DETAIL
NOT TO SCALE

- NOTES:
- MINIMUM SOIL BEARING PRESSURE OF 1500 PSF, SOIL FRICTION ANGLE OF 30 DEGREES, AND SOIL DRY UNIT WEIGHT OF 120 PCF SHALL BE CONFIRMED IN THE FIELD BY A QUALIFIED PROFESSIONAL.
 - CAST-IN-PLACE CONCRETE SHALL BE CONSOLIDATED USING VIBRATOR.
 - ALL REBAR TO BE NEW GRADE 60 STEEL.
 - PRE-CAST PIERS ACCEPTABLE UPON WRITTEN APPROVAL OF SHOP DRAWING BY ENGINEER.
 - CONCRETE TO BE INSTALLED A MINIMUM OF 7 DAYS PRIOR TO INSTALLING LIGHT POLE. POURED CONCRETE MIX REQUIRED TO OBTAIN 80% OF DESIGN STRENGTH PRIOR TO INSTALLING LIGHT POLE.
 - CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" (WITHIN 1" TOLERANCE).
 - POLE SHALL BE RATED FOR 10 MPH HIGHER THAN MAXIMUM WIND SPEED 3FT ABOVE GROUND FOR THE AREA BASED ON ANS/ASCE 7-93.
 - POLE TO BE TERMINATED AT A FORM.
 - WORK SHALL CONFORM TO ALL BEST PRACTICES FOR APPROPRIATE TEMPERATURE AND WEATHER CONDITIONS.
 - CONTRACTOR TO TEMPORARILY SUPPORT ADJACENT SOIL AND STRUCTURES DURING EXCAVATION IF REQUIRED.

Lumark



Nominal Power (Watts)	57W	87W	143W	163W	25°C	> 91.30%	> 194,000
Input Current @ 120V (A)	0.43	0.80	1.09	1.32	40°C	> 87.98%	> 134,000
Input Current @ 277V (A)	0.19	0.35	0.48	0.57			
Type III	Lumens	7,111	13,183	17,144	20,050		
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4		
Type IV	Lumens	7,888	13,140	12,087	19,984		
	BUG Rating	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5		

ORDERING INFORMATION

Sample Number: PPRV-1-C25-T3-15-NAB

Series 1 ¹	Number of Fixtures	Light Engine	Distribution	Pole Height	Maximum Wind Zone (MPH)	Options (Add as Suffix)	Accessories (Order Separately)
PPPRV-Prevail Pole and Fixture Combo	1-1 2-2 3-3 4-4	C15-1 LED1 7100 C25-1 LED1 15100 C40-1 LED1 35000 Nominal Lumens	T3-Type III T4-Type IV	15-15 20-20 25-25 30-30	B-00 B-100	NAB-No Anchor Bolts (Used when ordered separately) HSS-Houses Side Shield † MS/DIM-L3B-Integrated Sensor for Dimming Operation, 0' - 12' Mounting Height PERI-NEMA 3P/N Twistlock Photocontrol Receptacle † PERI-NEMA 7P/N Twistlock Photocontrol Receptacle †	H5/VERD-House Side Shield †

NOTES: 1 4000K CCT, standard bronze, 120-277V, 0-10V dimming. 2 Standard mount arm included with fixture. Supplied with straight steel shaft, anchor bolts, template, base cover and hardware. 3 HSS not available with C50 lumen package. Ordered as an option, it will come factory installed. Ordered as a field-installable accessory, must order quantity one per installed LED. 4 Not available with MSP options.

EATON
Powering Business Worldwide

Edison
1211 Highway 36 South
Parsippany, NJ 07054
P: 732-586-6000
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

TD560029EN
October 16, 2019 11:08 AM

SPECIFICATIONS FOR FIXTURES 'A', 'B' & 'C'

NOT TO SCALE

Lumark

DESCRIPTION
The patented Lumark Crosstour™ MAXX LED wall pack series of luminaires provides low-profile architectural style with super bright, energy-efficient LEDs. The rugged die-cast aluminum construction, back box with secure lock hinges, stainless steel hardware along with a sealed and gasketed optical compartment make Crosstour impervious to contaminants. The Crosstour MAXX wall luminaire is ideal for wall/ surface, inverted mount for facade/canopy illumination, perimeter and site lighting. Typical applications include pedestrian walkways, building entrances, multi-use facilities, industrial facilities, perimeter parking areas, storage facilities, institutions, schools and loading docks.

SPECIFICATION FEATURES
Construction
Low-profile LED design with rugged one-piece, die-cast aluminum back box and hinged removable door. Matching housing styles incorporate both a full cutoff and refractive lens design. Full cutoff and refractive lens models are available in 50W, 81W and 102W. Patent pending secure lock hinge feature allows for safe and easy tool-less electrical connections with the supplied push-in connectors. Back box includes four 1/2" NPT threaded conduit entry points. The back box is secured by four lag bolts (supplied by others). External fin design extracts heat from the fixture surface. One-piece silicone gasket seals door and back box. Not recommended for car wash applications.

Optical
Silicone sealed optical LED chamber incorporates a custom engineered reflector providing high-efficiency illumination. Full cutoff models integrate an impact-resistant molded refractive optical lens assembly meeting requirements for Dark Sky compliance. Refractive lens models incorporate a molded lens

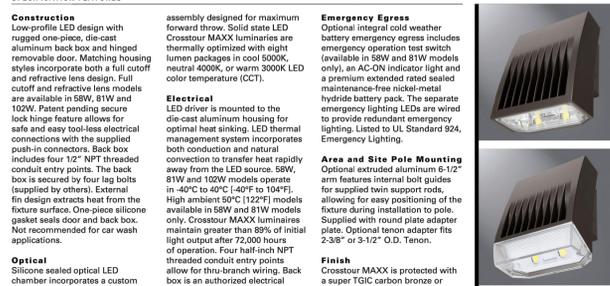
assembly designed for maximum forward throw. Solid state LED Crosstour MAXX luminaires are thermally optimized with eight lumen packages in cool 5000K, neutral 4000K, or warm 3000K LED color temperature (CCT).

Emergency Egress
Optional integral cold weather battery emergency egress includes emergency operation test switch (available in 50W and 81W models only), an AC-ON indicator light and a premium extended rated sealed maintenance-free nickel-metal hydride battery pack. The separate emergency lighting LEDs are wired to provide redundant emergency lighting. Listed to UL Standard 924, Emergency Lighting.

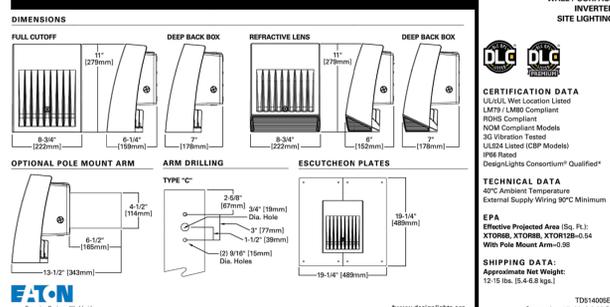
Area and Site Pole Mounting
Optional extruded aluminum 6-1/2" arm features internal bolt guides for supplied twin support rods, allowing for easy positioning of the fixture during installation to pole. Supplied with round plate adapter plate. Optional tension adapter fits 2-3/8" or 3-1/2" O.D. Tension.

Finish
Crosstour MAXX is protected with a die-cast aluminum housing for optimal heat sinking. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LED source. 50W, 81W and 102W models operate in 40°C to 40°C (104°F to 104°F). High ambient 50°C (122°F) models available in 50W and 81W models only. Crosstour MAXX luminaires maintain greater than 89% of initial light output after 72,000 hours of operation. Four half-inch NPT threaded conduit entry points allow for thru-branch wiring. Back box is an authorized electrical wiring compartment. Integral LED electronic driver incorporates surge protection, 120-277V 50/60Hz, 480V 60Hz, or 347V 60Hz electrical operation. 480V is compatible for use with 480V Wye systems only.

Warranty
Five-year warranty.



APPLICATIONS: WALL / SURFACE INVERTED SITE LIGHTING



SPECIFICATIONS FOR FIXTURES 'D'

NOT TO SCALE

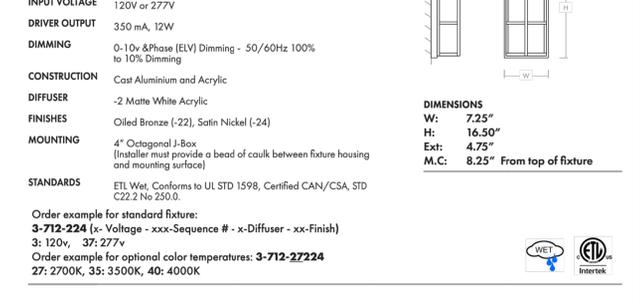
LEDA Outdoor

120v: **3-712-2xx**
277v: **37-712-2xx**

FIXTURE TYPE _____ LOCATION _____
PROJECT _____ DATE _____



APPLICATIONS: WALL / SURFACE INVERTED SITE LIGHTING



SPECIFICATIONS FOR FIXTURES 'E'

NOT TO SCALE

NO.	DATE	BY	DESCRIPTION
1	07/01/2021	AE	FOR SITE PLAN SUBMISSION

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607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

SITE DEVELOPMENT PLAN

9328 HIGHLAND ROAD

PROPOSED COMMERCIAL BUILDING WITH DRIVE-THROUGH

PARCEL ID: 12-23-20-010
9328 HIGHLAND ROAD
WHITE LAKE CHARTER TOWNSHIP
OAKLAND COUNTY, MICHIGAN

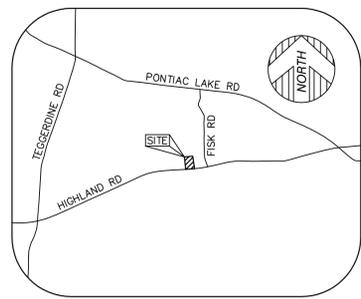
STATE OF MICHIGAN
JAMES W. COOKSEY
REGISTERED PROFESSIONAL ENGINEER
No. 241069428
EXPIRES 12/31/2024
MICHIGAN LICENSE NO. 241069428
EXPIRES 12/31/2024
REGISTERED PROFESSIONAL ENGINEER

STONEFIELD
engineering & design

SCALE: AS SHOWN PROJECT ID: M-19334

TITLE:
CONSTRUCTION DETAILS

DRAWING:
C-9



VICINITY MAP
(NOT TO SCALE)

PARKING

HANDICAP PARKING = 2 STALLS
STANDARD PARKING = 60 STALLS

PARCEL AREA

51,219± SQUARE FEET = 1.176± ACRES

BASIS OF BEARING

NORTH 88°34'54" EAST, BEING THE NORTH LINE OF SECTION 23, AS DESCRIBED.

BENCHMARK

TURN ARROW ON HYDRANT, 61'± SOUTH OF THE SOUTHWEST CORNER OF BUILDING #9328. ELEVATION = 988.05' (NAVD 88)

SURVEYOR'S NOTE

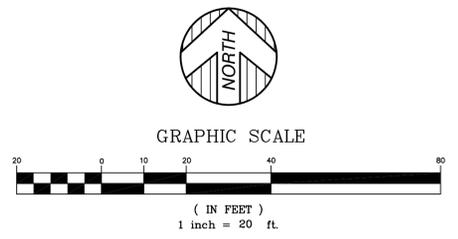
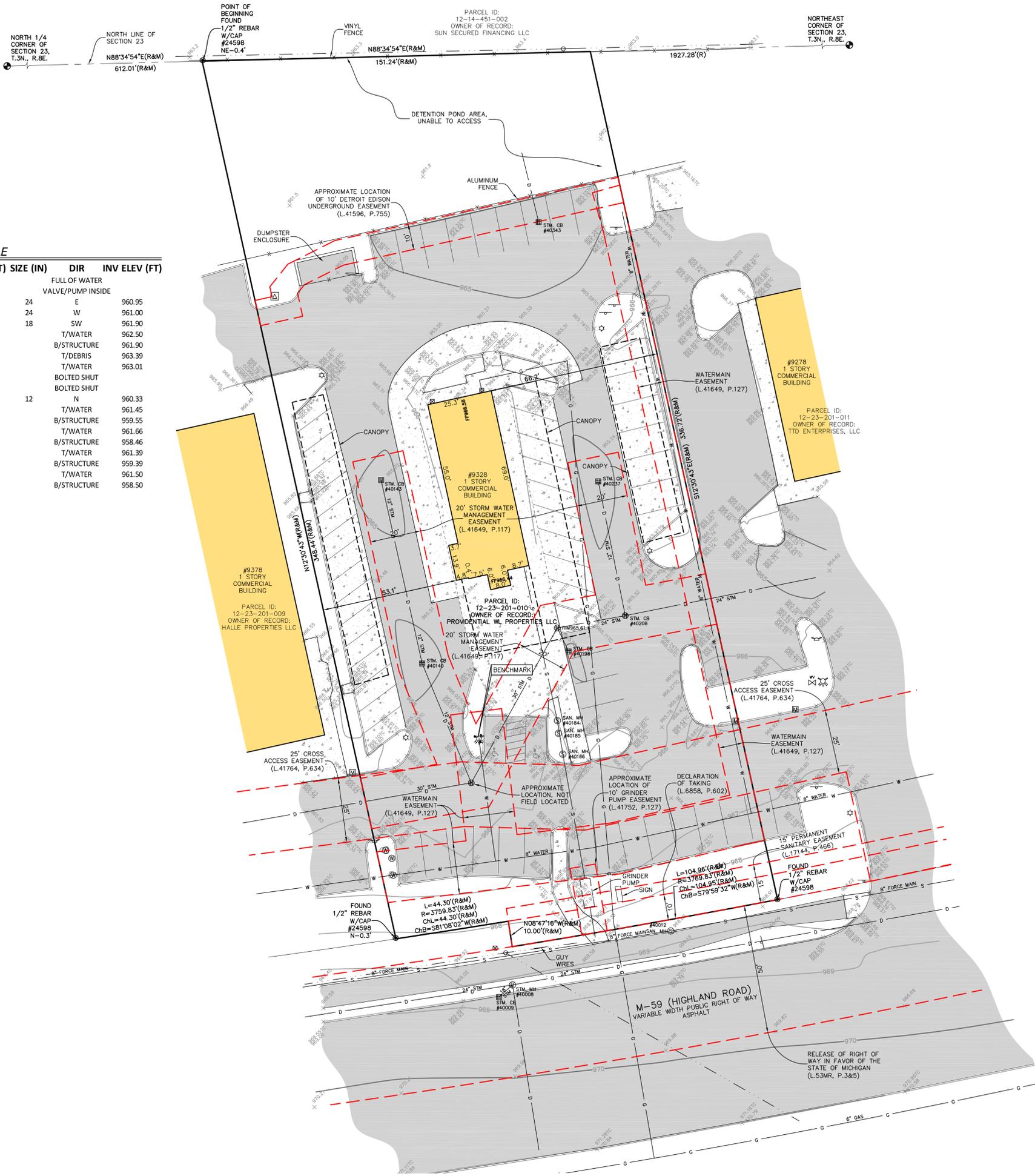
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.

LEGEND

●	FOUND MONUMENT (AS NOTED)
⊙	FOUND SECTION CORNER (AS NOTED)
(R&M)	RECORD AND MEASURED DIMENSION
(R)	RECORD DIMENSION
(M)	MEASURED DIMENSION
X 0.00	GROUND ELEVATION
⊠	ELECTRIC METER
⊠	TRANSFORMER
○	UTILITY POLE
⊠	GAS METER
⊠	SANITARY MANHOLE
⊠	ROUND CATCH BASIN
⊠	SQUARE CATCH BASIN
⊠	STORM DRAIN MANHOLE
⊠	FIRE HYDRANT
⊠	FIRE DEPARTMENT CONNECTION
⊠	WATER GATE MANHOLE
⊠	BOLLARD
⊠	LIGHTPOST/LAMP POST
⊠	MAIL BOX
⊠	SINGLE POST SIGN
⊠	HANDICAP PARKING
---	PARCEL BOUNDARY LINE
---	ADJOINER PARCEL LINE
---	SECTION LINE
---	EASEMENT (AS NOTED)
---	BUILDING
---	BUILDING OVERHANG
---	CONCRETE CURB
---	RAISED CONCRETE
---	PARKING
---	EDGE OF CONCRETE (CONC.)
---	EDGE OF ASPHALT (ASPH.)
X	FENCE (AS NOTED)
---	WALL (AS NOTED)
---	OVERHEAD UTILITY LINE
G	GAS LINE
S	SANITARY LINE
D	STORM LINE
W	WATER LINE
---	MINOR CONTOUR LINE
---	MAJOR CONTOUR LINE
█	BUILDING AREA
█	ASPHALT
█	CONCRETE

MANHOLE SCHEDULE

NUM	TYPE	RIM (FT)	SIZE (IN)	DIR	INV ELEV (FT)
40012	SANITARY MH	968.79		FULL OF WATER	
		968.79		VALVE/PUMP INSIDE	
40008	STORM MH	969.40	24	E	960.95
		969.40	24	W	961.00
		969.40	18	SW	961.90
40009	STORM CB	968.80		T/WATER	962.50
		968.80		B/STRUCTURE	961.90
40198	STORM CB	964.74		T/DEBRIS	963.39
40186	SANITARY MH	966.31		T/WATER	963.01
40184	SANITARY MH	966.01		BOLTED SHUT	
40185	SANITARY MH	966.04		BOLTED SHUT	
40208	STORM CB	965.23	12	N	960.33
40237	STORM CB	964.75		T/WATER	961.45
		964.75		B/STRUCTURE	959.55
40343	STORM CB	964.06		T/WATER	961.66
		964.06		B/STRUCTURE	958.46
40143	STORM CB	964.59		T/WATER	961.39
		964.59		B/STRUCTURE	959.39
40140	STORM CB	964.50		T/WATER	961.50
		964.50		B/STRUCTURE	958.50



PROPERTY DESCRIPTION

LAND SITUATED IN THE TOWNSHIP OF WHITE LAKE, COUNTY OF OAKLAND, STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:
PART OF THE NORTHEAST 1/4 OF SECTION 23, TOWN 3 NORTH, RANGE 8 EAST, WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE NORTH LINE OF SECTION 23 NORTH 88 DEGREES 34 MINUTES 54 SECONDS EAST 612.01 FEET FROM THE NORTH 1/4 CORNER OF SECTION 23, THENCE CONTINUING ALONG SAID LINE NORTH 88 DEGREES 34 MINUTES 54 SECONDS EAST 151.24 FEET; THENCE SOUTH 12 DEGREES 30 MINUTES 43 SECONDS EAST 336.72 FEET TO A POINT ON A CURVE ON THE NORTH LINE OF M-59 BEING 100 FEET WIDE; THENCE ALONG SAID NORTH LINE ON A CURVE TO THE RIGHT 104.96 FEET TO A POINT ON A CURVE, SAID CURVE HAVING A RADIUS OF 3769.83 FEET, CENTRAL ANGLE OF 01 DEGREE 35 MINUTES 43 SECONDS, A CHORD BEARING AND DISTANCE OF SOUTH 79 DEGREES 59 MINUTES 32 SECONDS WEST 104.95 FEET; THENCE NORTH 08 DEGREES 47 MINUTES 16 SECONDS WEST 10.00 FEET TO A POINT ON A CURVE; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT 44.30 FEET AND ON THE NORTH LINE OF M-59 SAID CURVE HAVING A RADIUS OF 3769.83 FEET, CENTRAL ANGLE OF 00 DEGREES 40 MINUTES 20 SECONDS AND CHORD BEARING AND DISTANCE OF SOUTH 81 DEGREES 08 MINUTES 02 SECONDS WEST 44.30 FEET; THENCE NORTH 12 DEGREES 30 MINUTES 43 SECONDS WEST 348.44 FEET TO THE POINT OF BEGINNING.

TITLE REPORT NOTE

- ONLY THOSE EXCEPTIONS CONTAINED WITHIN THE FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT NO. TC13-89464, DATED 04/08/2021, AND RELISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.
- RELEASE OF RIGHT OF WAY IN FAVOR OF THE STATE OF MICHIGAN, AND THE TERMS, CONDITIONS AND PROVISIONS CONTAINED THEREIN, RECORDED IN LIBER 53MR, PAGE 3 AND LIBER 53 MR, PAGE 5. (AS SHOWN)
 - DECLARATION OF TAKING, AND THE TERMS, CONDITIONS AND PROVISIONS CONTAINED THEREIN, RECORDED IN LIBER 6858, PAGE 602. (AS SHOWN)
 - EASEMENT IN FAVOR OF THE COUNTY OF OAKLAND, AND THE TERMS, CONDITIONS AND PROVISIONS CONTAINED THEREIN, RECORDED IN LIBER 17144, PAGE 466. (DOES NOT CROSS SUBJECT PROPERTY)
 - RECIPROCAL EASEMENT AGREEMENT, AND THE TERMS, CONDITIONS AND PROVISIONS CONTAINED THEREIN, RECORDED IN LIBER 41260, PAGE 72. (SEE DOCUMENT FOR TERMS AND CONDITIONS)
 - TERMS, CONDITIONS AND PROVISIONS CONTAINED IN STORM WATER FACILITIES, EASEMENT, MAINTENANCE AGREEMENT AND LIEN RECORDED IN LIBER 40323, PAGE 80 AND STORM WATER MAINTENANCE FACILITIES, EASEMENT, MAINTENANCE AGREEMENT RECORDED IN LIBER 47635, PAGE 836. (BLANKET EASEMENT OVER SUBJECT PROPERTY; SEE DOCUMENT FOR TERMS AND CONDITIONS)
 - DETROIT EDISON UNDERGROUND EASEMENT (RIGHT OF WAY) IN FAVOR OF THE DETROIT EDISON COMPANY, AND THE TERMS, CONDITIONS AND PROVISIONS CONTAINED THEREIN, RECORDED IN LIBER 41596, PAGE 755. (APPROXIMATE LOCATION AS SHOWN)
 - RECIPROCAL EASEMENT AGREEMENT, AND THE TERMS, CONDITIONS AND PROVISIONS CONTAINED THEREIN, RECORDED IN LIBER 41764, PAGE 634. (AS SHOWN)
 - GRINDER PUMP AND EASEMENT AGREEMENT, AND THE TERMS, CONDITIONS AND PROVISIONS CONTAINED THEREIN, RECORDED IN LIBER 41752, PAGE 127. (APPROXIMATE LOCATION AS SHOWN)
 - EASEMENT FOR UTILITIES IN FAVOR OF THE CHARTER TOWNSHIP OF WHITE LAKE, AND THE TERMS, CONDITIONS AND PROVISIONS CONTAINED THEREIN, RECORDED IN LIBER 41649, PAGE 127. (AS SHOWN)
 - TERMS, CONDITIONS AND PROVISIONS CONTAINED IN STORM WATER FACILITIES, EASEMENT, MAINTENANCE AGREEMENT AND LIEN RECORDED IN LIBER 41649, PAGE 117. (AS SHOWN)
 - MATTERS AS SHOWN ON SURVEY RECORDED IN LIBER 40820, PAGE 117. (15' SANITARY EASEMENT AS SHOWN PER SURVEY, DOCUMENT LIBER 17144, PAGE 466 NOT PROVIDED)
 - RESTRICTIVE COVENANT, AND THE TERMS, CONDITIONS AND PROVISIONS CONTAINED THEREIN, RECORDED IN LIBER 41260, PAGE 72. (SEE DOCUMENT FOR TERMS AND CONDITIONS)
 - RECIPROCAL EASEMENT AGREEMENT AND THE TERMS, CONDITIONS AND PROVISIONS CONTAINED THEREIN, RECORDED IN LIBER 40682, PAGE 855. (BLANKET EASEMENT OVER SUBJECT PROPERTY; SEE DOCUMENT FOR TERMS AND CONDITIONS)
 - NOTICE OF COMMENCEMENT RECORDED JULY 15, 2009 IN LIBER 41335, PAGE 206. (SEE DOCUMENT FOR TERMS AND CONDITIONS)

SURVEYOR'S CERTIFICATION

TO ALRIG USA ACQUISITIONS LLC AND FIRST AMERICAN TITLE INSURANCE COMPANY:
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, MONTHLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 4, 5, 7A, 8, 9, 11A, AND 11B OF TABLE A, THEREOF. THE FIELD WORK WAS COMPLETED ON 04/30/2021.
DATE OF PLAT OR MAP: 05/11/2021
ANTHONY T. SYCKO, JR., P.S.
PROFESSIONAL SURVEYOR
MICHIGAN LICENSE NO. 47976
22556 GRATIOT AVE., EASTPOINTE, MI 48021
TSycko@kemttec-survey.com



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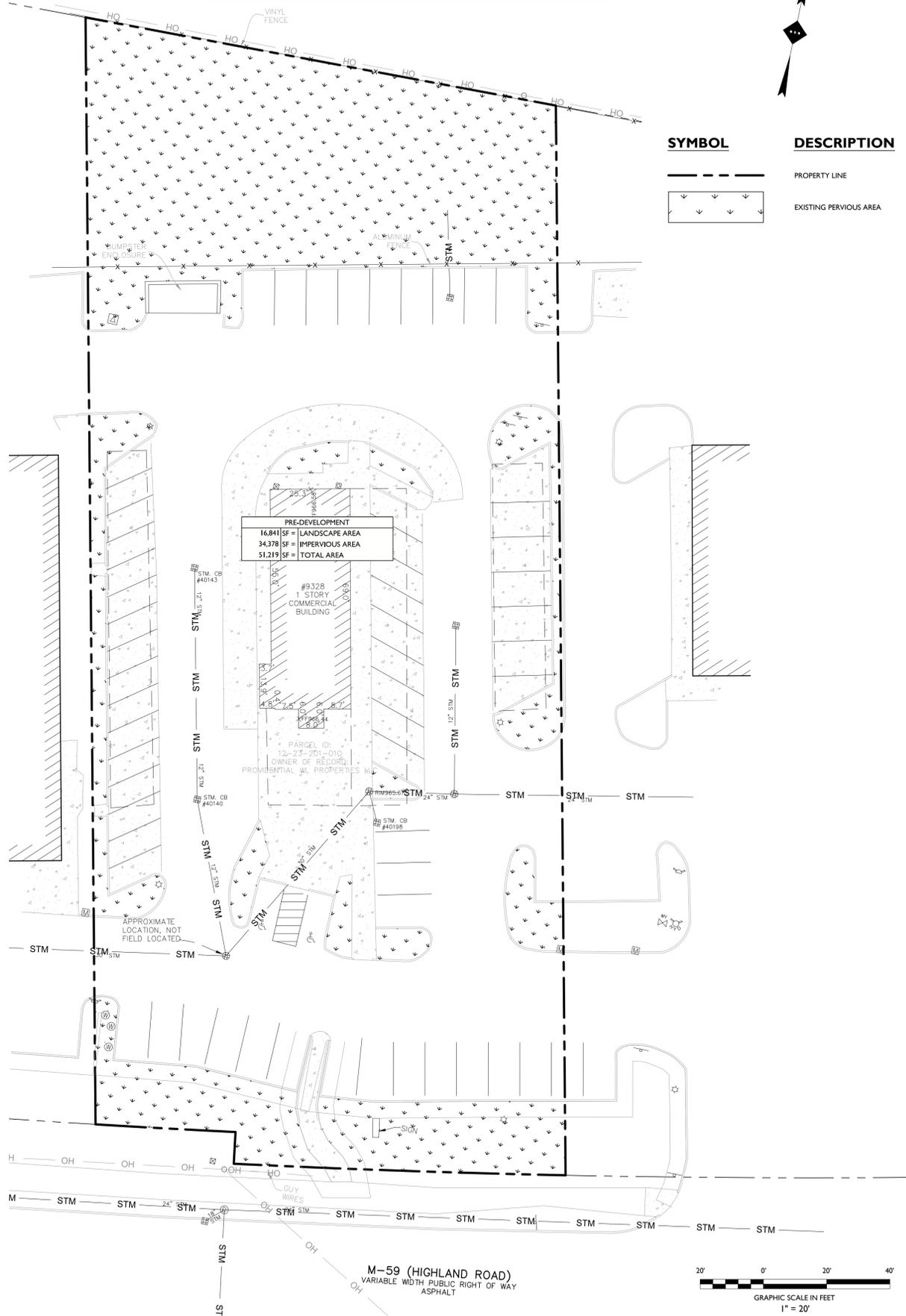
ALTA / NSPS LAND TITLE SURVEY
PREPARED FOR: STONEFIELD ENGINEERING & DESIGN
9328 HIGHLAND ROAD, WHITE LAKE, MICHIGAN,
PART OF SECTION 23,
TOWN 3 NORTH, RANGE 8 EAST

NO.	DATE	BY	REVISION
1	05/11/2021	CMC	
2	05/11/2021	ATS	
3	MAY 11, 2021		

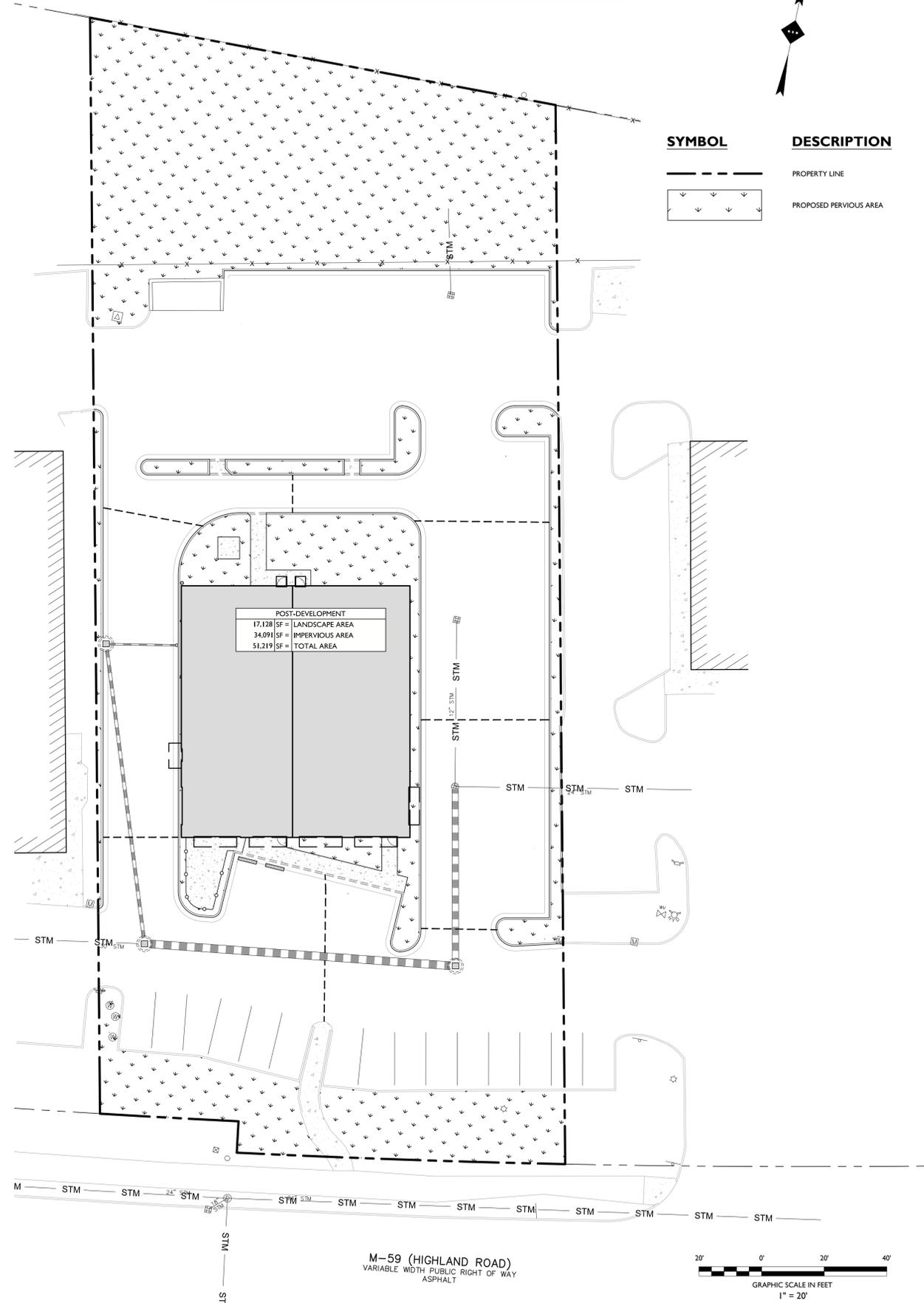
SCALE: 1" = 20'

1 OF 1 SHEETS

PRE-DEVELOPMENT CONDITIONS



POST-DEVELOPMENT CONDITIONS



NOT APPROVED FOR CONSTRUCTION

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Phone 248.247.1115

SITE DEVELOPMENT PLAN

9328 HIGHLAND ROAD

PROPOSED COMMERCIAL BUILDING WITH DRIVE-THROUGH

PARCEL ID: 12-23-20-010
9328 HIGHLAND ROAD
WHITE LAKE CHARTER TOWNSHIP
OAKLAND COUNTY, MICHIGAN



STONEFIELD
engineering & design

SCALE: 1" = 20' PROJECT ID: M-19334

TITLE: PRE VS POST DEVELOPMENT EXHIBIT

DRAWING: EX-I

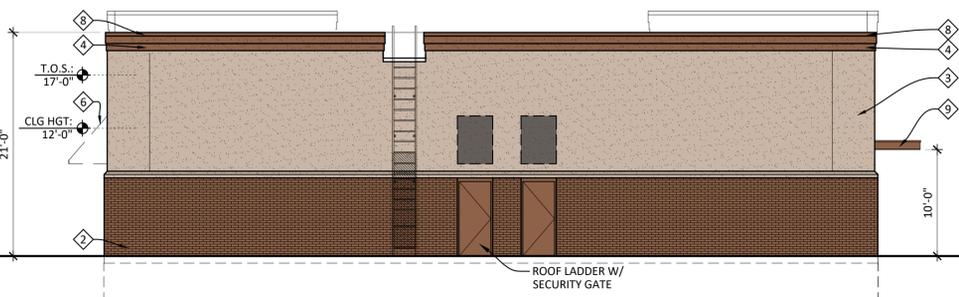
ISSUE	DATE	BY	DESCRIPTION
1	07/11/2021	AF	FOR SITE PLAN SUBMISSION



PRELIMINARY SOUTH ELEVATION

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

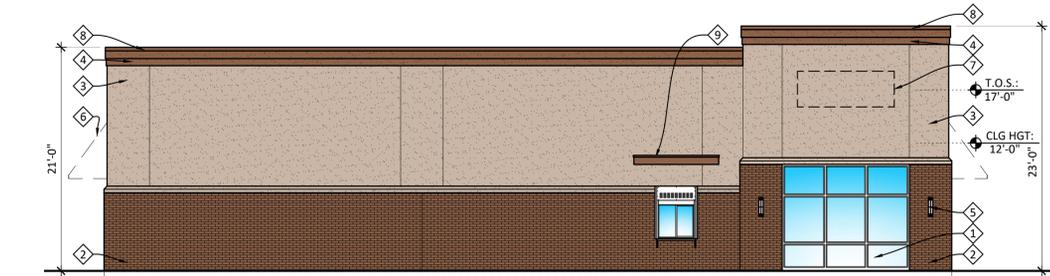
5



PRELIMINARY NORTH ELEVATION

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

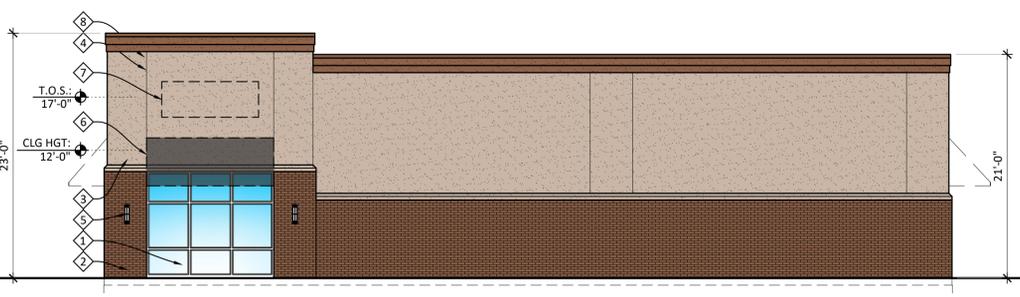
4



PRELIMINARY WEST ELEVATION

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

3



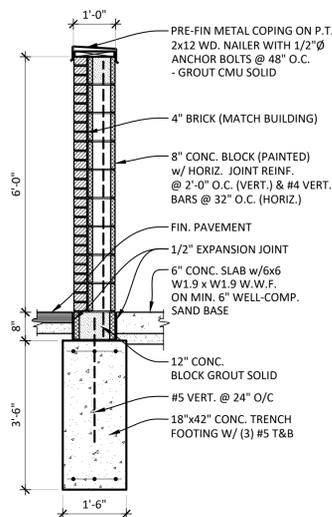
PRELIMINARY EAST ELEVATION

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

2

EXTERIOR FINISH KEY

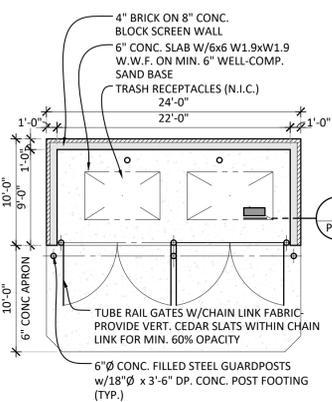
- 1** STOREFRONT
THERMALLY BROKEN ALUM. FRAME
W/INSULATED GLAZING
MFR: TBD COLOR: DARK BRONZE ANODIZED
- DENOTES SPANDREL GLAZING
- 2** BRICK VENEER
MFR: MERIDIAN BRICK
COLOR: SADDLE MODULAR (BROWN)
- 3** E.I.F.S. #1
MANUF.:
COLOR: TAN
- 4** E.I.F.S. #2
MANUF.:
COLOR: BROWN
- 5** LIGHTING
SCONCE FIXTURE - RUBBED
BRONZE ANODIZED
- 6** FABRIC AWNING
MFR: SUNBRELLA
COLOR: PER TENANT
- 7** SIGNAGE
SIGNAGE ALLOWED: VERIFY MAX. SQ. FT. W/
ORDINANCE. SIGNAGE SHALL BE SUBMITTED
PER TENANT.
- 8** PREFINISHED METAL COPING
MFR: FIRESTONE
COLOR: BROWN
- 9** CANOPY
COLOR: BROWN



TRASH ENCLOSURE DETAIL

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

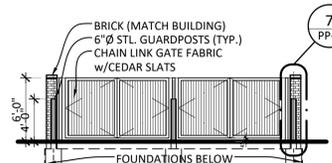
7



PLAN

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

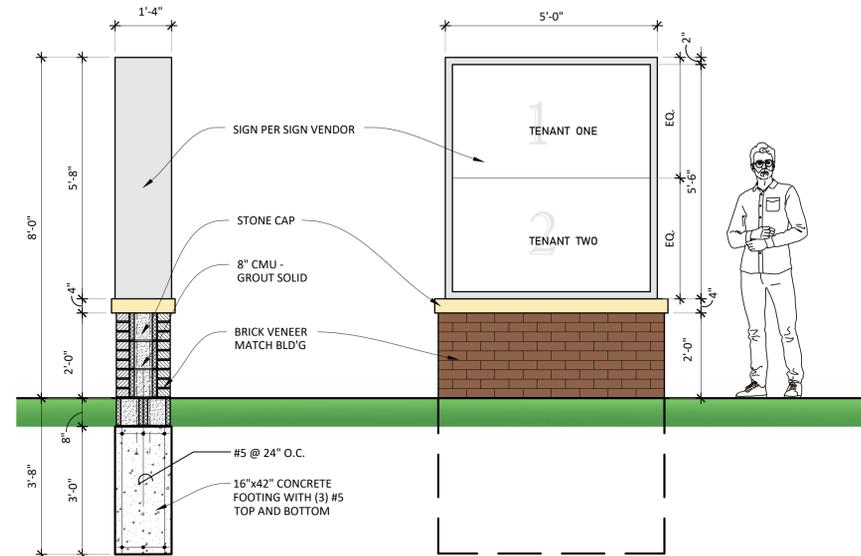
8



ELEVATION

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

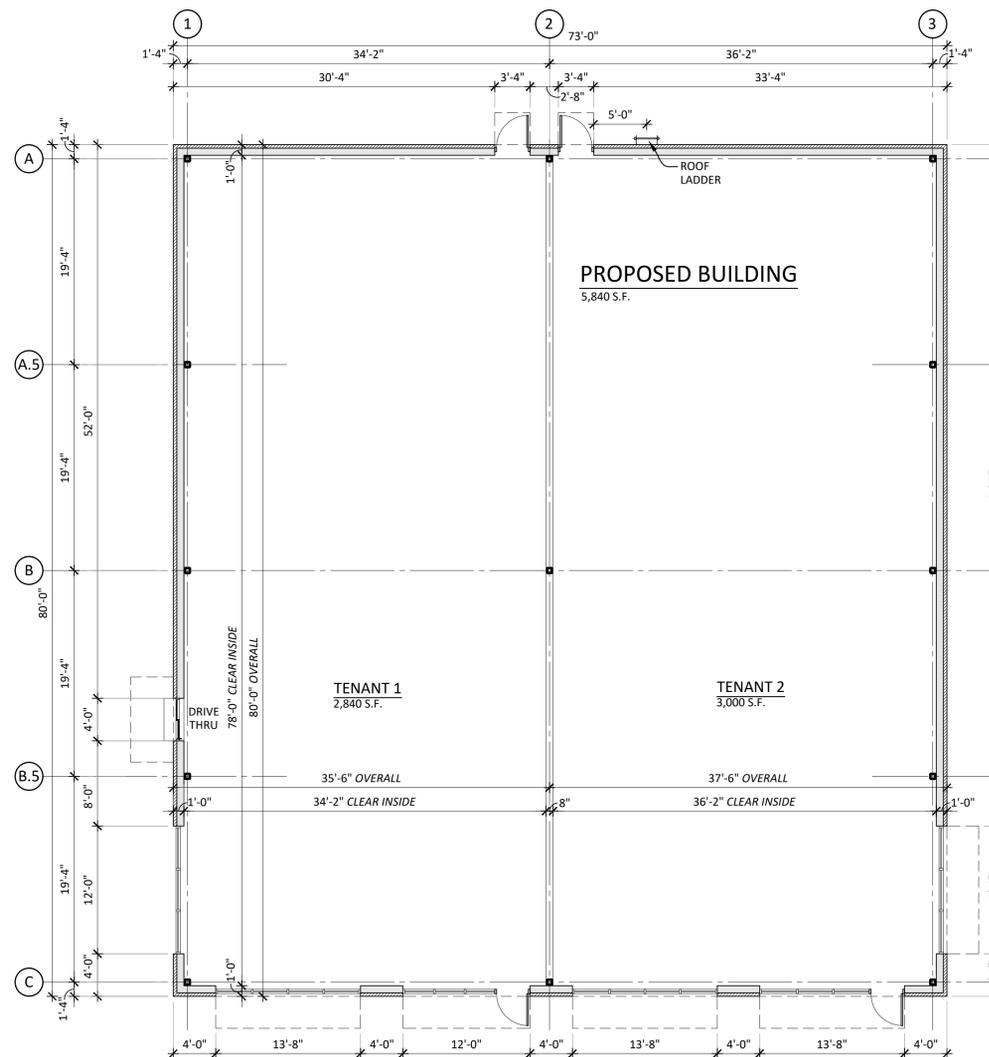
9



MONUMENT SIGN

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

6



PROPOSED FLOOR PLAN

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

1

Proposed

MULTI-TENANT

9328 HIGHLAND RD
 WHITE LAKE, MI 48386

REV	DATE	ISSUED FOR REVIEW	ISSUED
07-01-21		ISSUED FOR REVIEW	

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DRAWN BY: TJG
 CHECKED BY: VW
 IN CHARGE: VW

SHEET NAME:
 PRELIMINARY FLOOR PLAN
 AND EXTERIOR ELEVATIONS

JOB NO:
 20-160

SHEET NO:
 PP-3



PERMIT INFORMATION

Michigan.gov/EGLEpermits

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has prepared a list of key questions to help identify what EGLE permits, licenses, or approvals of a permit-like nature may be needed. By contacting the appropriate offices indicated, you will help reduce the possibility that your project or activity will be delayed due to the untimely discovery of additional permitting requirements later in the construction process. While this list covers the existence of permits and approvals required from EGLE, it is not a comprehensive list of all legal responsibilities. A useful way to learn whether other requirements will apply is to go through the Self-Environmental Assessment in the Michigan Guide to Environmental, Health, and Safety Regulations, online at: Michigan.gov/EHSguide. Please call the Environmental Assistance Center at 800-662-9278 to talk with any of the EGLE programs noted below.

How Do I Know that I Need a Construction Permit?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
1) Will your business involve the installation or construction of any process equipment that has the potential to emit air contaminants (e.g. dry sand blasting, boilers, standby generators)? Air Quality Permit to Install, Air Quality Division (AQD), Permit Section	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
2) Does the project involve renovating or demolishing all or portions of a building? Notification is required for asbestos removal and required for all demolitions even if the structure never contained asbestos. Asbestos Notification, AQD, Asbestos Program , 517-284-6777	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>
3) Please consult the Permitting at the Land and Water Interface Decision Tree document to evaluate whether your project needs a land and water management permit (i.e., Does the project involve filling, dredging, placement of structures, draining, or use of a wetland?). Land and Water Featured Programs (Water Resources Division - WRD) - Joint Permit Application , 517-284-5567: <ul style="list-style-type: none"> a. Does the project involve construction of a building or septic system in a designated Great Lakes high risk erosion area? b. Does the project involve dredging, filling, grading, or other alteration of the soil, vegetation, or natural drainage, or placement of permanent structures in a designated environmental area? c. Does the project propose any development, construction, silvicultural activities or contour alterations within a designated critical dune area? d. Does the project involve construction of a dam, weir or other structure to impound flow? 	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
4) Does the project involve an earth change activity (including land balancing, demolition involving soil movement, and construction) or does the project involve construction which will disturb one or more acres that come into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water? Soil Erosion and Construction Storm Water , 269-567-3515, or Local Agency	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
5) Does the project involve the construction or alteration of a water supply system or sewage disposal system for a manufactured housing project? Drinking Water & Environmental Health Division (DWEHD), 517-284-6524	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
6) Does the project involve construction or alteration of any sewage collection or treatment facility? WRD, Part 41 Construction Permit Program (staff), 906-228-4527, or EGLE District Office	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
7) Public Swimming Pool Construction (Spas/Hot Tubs) Permits: Will your business involve the construction or modification of a public swimming pool, spa or hot tub? Public Swimming Pool Program , 517-284-6541, or EGLE District Office	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
8) Does the project involve the construction or modification of a campground? DWEHD, Campgrounds program , 517-284-6529	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>

9) Does the project involve construction of a facility that landfills, transfers, or processes of any type of solid non-hazardous waste on-site, or places industrial residuals/sludge into or onto the ground? Materials Management Division (MMD), Solid Waste , 517-284-6588, or EGLE District Office	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
10) Does the project involve the construction of an on-site treatment, storage, or disposal facility for hazardous waste? MMD, Hazardous Waste Section, Treatment, Storage and Disposal , 517-284-6562	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
Who Regulates My Drinking (Potable) Water Supply?		
11) I am buying water from my community water supply (i.e. city of Detroit or Grand Rapids), Contact Local Water Utility , 517-284-6512	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>
12) I have a Non-Community Water Supply (Type II) Guide , Contact (District or County) Local Health Department , 517-485-0660	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
13) I am a community water supply (Type I) Community Water Supply, DWEHD District Office Community Water Supply Program , 517-284-6512	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
14) Do you desire to develop a withdrawal of over 2,000,000 gallons of water per day from any source including groundwater, inland surface water, or the Great Lakes and their connecting waterways? WRD, Great Lakes Shorelands Unit, Water Use Program, 517-284-5563	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
Who Regulates My Wastewater Discharge System?		
15) NPDES: Does the project involve the discharge of any type of wastewater to a storm sewer, drain, lake, stream, or other surface water? WRD, EGLE District Office , or National Pollutant Discharge Elimination (NPDES) Permit Program , 517-284-5568	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
16) Does the facility have industrial activity that comes into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water? WRD, Permits Section , or EGLE District Office , 517-284-5588	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
17) Does the project involve the discharge of wastewaters into or onto the ground (e.g. subsurface disposal or irrigation)? WRD, Groundwater Permits Program , 517-290-2570	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
18) Does the project involve the drilling or deepening of wells for waste disposal? Oil, Gas and Minerals Division (OGMD), 517-284-6841	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
What Operational Permits Are Relevant to My Operation and Air Emissions?		
19) Renewable Operating Permit: Does your facility have the potential to emit any of the following: 100 tons per year or more of any criteria pollutant; 10 tons per year or more of any hazardous air pollutant; or 25 tons per year or more of any combination of hazardous air pollutants? AQD, Permit Section , 517-284-6634	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
20) Does your facility have an electric generating unit that sells electricity to the grid and burns a fossil fuel? AQD, Acid Rain Permit Program , 517-780-7843	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
What Operational Permits Are Relevant to My Waste Management?		
21) Does the project involve landfilling, transferring, or processing of any type of solid non-hazardous waste on-site, or placing industrial residuals/sludge into or onto the ground? MMD , 517-284-6588 or EGLE District Office	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
22) Does the project involve the on-site treatment, storage, or disposal of hazardous waste? MMD, Hazardous and Liquid Waste , 517-284-6562	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
23) Does the project require a site identification number (EPA number) for regulated waste activities (used oil, liquid waste, hazardous waste, universal waste, PCBs)? (Hazardous Waste Program Forms & License Applications) MMD, EGLE District Office , 517-284-6562	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>

24) Does the project involve the receipt, possession, manufacture, use, storage, transport, transfer, release, or disposal of radioactive material in any form? MMD, Radioactive Material and Standards Unit , 517-284-6581	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
25) Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background? MMD Radioactive Material and Standards Unit , 517-284-6581	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
26) Does the project involve the generation of medical waste or a facility that treats medical waste prior to its disposal? MMD, Medical Waste Regulatory Program , 517-284-6594	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
What Sector-Specific Permits May be Relevant to My Business?		
Transporters		
27) Does the project involve the <i>transport</i> of some other facility's non-hazardous liquid waste? MMD, Transporter Program , 517-284-6562	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
28) Does the project involve the <i>transport</i> of hazardous waste? MMD, Transporter Program , 517-284-6562	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
29) Do you engage in the business of transporting bulk water for drinking or household purposes (except for your own household use)? DWEHD, Water Hauler Information , 517-284-6527	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
30) Does the project involve <i>transport</i> of septic tank, cesspool, or dry well contents or the discharge of septage or sewage sludge into or onto the ground? DWEHD, Septage Program , 517-284-6535	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
31) Do you store, haul, shred or process <i>scrap tires</i> ? MMD, Scrap Tire Program , 517-284-6586	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
Sectors		
32) Is the project a <i>dry cleaning</i> establishment utilizing perchloroethylene or a flammable solvent in the cleaning process? AQD, Dry Cleaning Program , 517-284-6780	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
33) Does your <i>laboratory</i> test potable water as required for compliance and monitoring purposes of the Safe Drinking Water Act? Laboratory Services Certifications , 517-284-5424	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
34) Does the project involve the operation of a <i>public swimming pool</i> ? DWEHD, Public Swimming Pools Program , 517-284-6529	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
35) Does the project involve the operation of a <i>campground</i> ? DWEHD, Campgrounds , 517-284-6529	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
What Permits Do I Need to Add Chemicals to Lakes and Streams?		
36) Are you applying a chemical treatment for the purpose of aquatic nuisance control (pesticide/herbicide etc.) in a water body (i.e. lake, pond or river)? WRD, Aquatic Nuisance Control , 517-284-5593	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
37) Are you applying materials to a water body for a water resource management project (i.e. mosquito control treatments, dye testing, or fish reclamation projects)? WRD, Surface Water Assessment Section , 517-331-5228	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>

Why would I be subject to Oil, Gas and Mineral Permitting?	
38) Do you want to operate a central production facility (applies to oil and gas production facilities where products of diverse ownership are commingled)? OGMD, Petroleum Geology and Production Unit , 517-284-6826	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
39) Does the project involve the removal of sand from a sand dune area within two (2) miles of a Great Lakes shoreline? OGMD, Minerals and Mapping Unit, Sand Dune Mining Program , 517-284-6826	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
40) Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background? MMD, Radioactive Protection Programs , 517-284-6581	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
Petroleum & Mining , OGMD, 517-284-6826	
41) Does the project involve the diversion and control of water for the mining and processing of low-grade iron ore?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
42) Does the project involve the surface or open-pit mining of metallic mineral deposits?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
43) Does the project involve the mining of nonferrous mineral deposits at the surface or in underground mines?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
44) Does the project involve mining coal?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
45) Does the project involve changing the status or plugging of a mineral well?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
46) Does the project involve the drilling or deepening of wells for brine production, solution mining, storage, or as test wells?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
Permits & Bonding , OGMD, 517-284-6841	
47) Do you want to change the status of an oil or gas well (i.e. plug the well)?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
48) Does the project involve drilling of oil, gas, brine disposal, secondary recovery, or hydrocarbon storage wells?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>

If you need further assistance, please fill out the information below and email the form to EGLE-assist@Michigan.gov.

Requester Information

First and Last Name:

Requester Phone:

E-mail: