

**WHITE LAKE CHARTER TOWNSHIP
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING COMMISSION STAFF REPORT**

Meeting Date: August 20, 2026

Agenda Item: Special Land Use

Staff: David Waligora, AICP, Senior Planner

Property Address: 8320 Highland Road (BP Gas Station)

Parcel ID: Y-12-13-454-019

Applicant: Hadi Boussi

Applicant Address: 22243 W. Warren Avenue, Dearborn Heights, MI 48127

Property Owner: Abdelrahman Salem

Property Address: 8320 Highland Road, White Lake, MI 48386

Zoning: GB – General Business

Existing Use: Automobile Service Station / Gas Station

Request

The applicant is requesting Special Land Use approval to expand the existing automobile service station use at 8320 Highland Road through the installation of four (4) DC fast-charging electric vehicle spaces, charging equipment, a new pad-mounted transformer, and associated electrical infrastructure. The proposed improvements are located within the northeastern portion of the existing BP gas station site.



Proposed Request

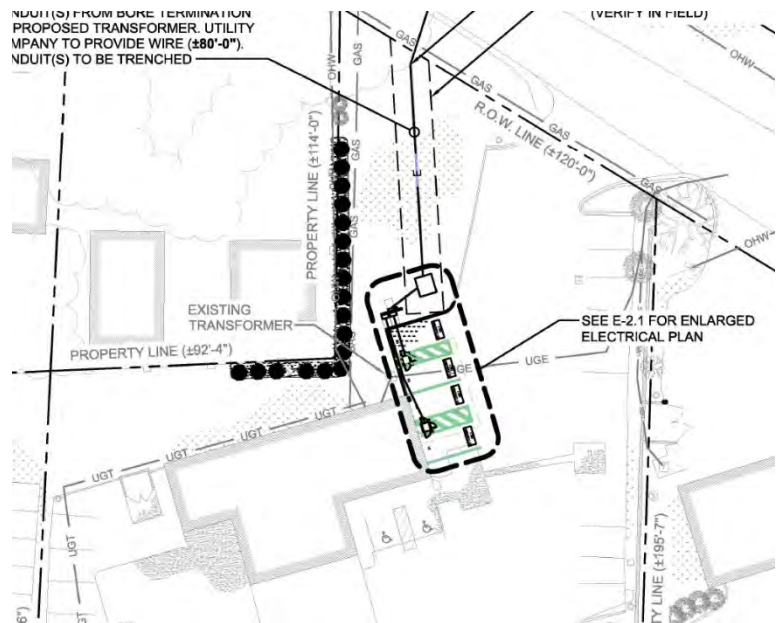
The applicant is requesting Special Land Use approval to expand the existing automobile service station use through the installation of four (4) direct current fast charging (DCFC) electric vehicle charging stations and associated electrical equipment. The proposed improvements would be located within the northeastern portion of the site, generally between the existing convenience store and Pontiac Lake Road.

The proposed improvements include four EV charging spaces, charging equipment, a new pad-mounted transformer and associated electrical infrastructure, along with modifications to the existing parking and circulation area necessary to accommodate the proposed improvements.

The application does not propose establishment of a new automobile service station. Rather, it represents an expansion of the longstanding automobile service station use. Available historical information indicates that automobile fueling has occurred on the property since at least the early 1960s, when the property operated as the Hudson Oil Station. The site was substantially redeveloped in approximately 1997, when the previous station was demolished and the property was developed generally in its present configuration.

The automobile service station predates the Township's current Special Land Use approval requirements. Staff has also been unable to locate a Special Land Use Permit or approved site plan associated with the 1997 redevelopment. Accordingly, no existing Special Land Use approval governing the current automobile service station has been identified in the Township's available records.

Because the applicant is now proposing an expansion of the automobile service station use, the Township is reviewing the use and proposed expansion under the current Special Land Use standards of the Zoning Ordinance. Finally, site plan review will be handled administratively.



Existing Features

The subject property is located at 8320 Highland Road and consists of Lots 21 and 22 of the Huron River Subdivision, totaling approximately 0.982 acres. The property is currently zoned GB, General Business, and is developed with an existing automobile service station/convenience store.

According to Township assessing records, the site contains a 2,846-square-foot, one-story commercial building classified as a mini-mart/convenience store.

The building was constructed in 1997 and has an average story height of approximately 14 feet.

The assessing records identify approximately 198.73 feet of total frontage and an average lot depth of approximately 215 feet. The site is located at the intersection of M-59 (Highland Road) and Pontiac Lake Road, with existing vehicular access to both roadways.

The site is currently improved with the convenience store building, gasoline fueling canopy and pumps, paved parking and circulation areas, and associated site improvements. The northeastern portion of the site contains additional parking and circulation area adjoining Pontiac Lake Road and the adjacent residential district.

Surrounding land uses generally consist of commercial development along the M-59 corridor and residential development to the north and northeast. M-59/Highland Road borders the property to the south, while Pontiac Lake Road borders the property to the east/northeast. Property immediately north/northeast of the site is zoned R1-C, Single-Family Residential, while commercial zoning and uses are generally located along the M-59 corridor to the east and west.



Site History / Existing Conditions

The subject property has a long history of automobile fueling use. Available historical information indicates that the property was in use as the **Hudson Oil Station** by at least the early 1960s, with curb cuts along Highland Road (M-59) established by approximately 1962. The automobile service station use therefore predates the Township's current Special Land Use requirements.

The site was substantially redeveloped in approximately **1997**, when the prior improvements were demolished and the service station was reconstructed generally in its present configuration. Around that time, an additional parcel appears to have been incorporated into the site to accommodate the northeastern parking and circulation area, and access to Pontiac Lake Road was established.

Staff reviewed available Township records for the 1997 redevelopment; however, **a Special Land Use Permit and/or approved site plan associated with that redevelopment was not located**. Accordingly, staff cannot confirm from the available records that the 1997 reconstruction received Special Land Use approval or identify any conditions that may have been attached to such an approval.

Historical Image from 1980



Section 4.10 – Automobile Service Station Standards

Although the subject property is zoned GB, General Business, the proposed expansion of the existing automobile service station is also reviewed for compliance with the specific automobile service station standards of Section 4.10. Staff reviewed the proposed improvements and existing site conditions against these standards as follows.

A. Entrance and Exit Drives

Section 4.10.A requires entrance and exit drives to be located at least 100 feet from any street intersection and at least 200 feet from any residential district.

The subject site contains longstanding access drives to both M-59 (Highland Road) and Pontiac Lake Road. These access points serve the existing automobile service station and are not proposed to be relocated, widened, or substantially modified as part of the EV charging project.

Although the existing driveway locations do not meet all current dimensional requirements of Section 4.10.A, staff considers these access points to be existing lawful nonconforming site conditions. The proposed EV charging facilities do not alter or increase the extent of these existing nonconformities.

Staff Finding: Legal nonconforming condition. No variance is required for the existing driveway locations as part of this application.

B. Minimum Street Frontage

Section 4.10.B requires a minimum of 200 feet of street frontage for an automobile service station.

Township assessing records identify approximately 198.73 feet of total frontage for the subject property. The existing lot configuration therefore falls approximately 1.27 feet short of the current requirement.

The proposed EV charging expansion does not alter the property boundaries, reduce the existing frontage, or otherwise increase the extent of the existing deficiency. Given the limited scope of the project and the fact that the site is not undergoing substantial redevelopment, staff considers the frontage deficiency to be an existing legal nonconforming site condition.

Staff Finding: Legal nonconforming condition. No variance is required for the existing frontage deficiency as part of this application.

C. Screening

Section 4.10.C requires a screen wall, obscuring fence, or land form buffer.

The site contains an existing approximately 6-foot-tall wood fence along the residential property line. The submitted plans describe the fence as weathered but structurally sound and propose that it remain. The applicant proposed additional plantings and shrubs in front of the existing fence, which are now shown on the site plan.

Given the limited scope of the proposed expansion and the fact that this application does not involve comprehensive redevelopment of the property, it is sufficient to satisfy the buffering requirement for this application.

Staff Finding: Complies as proposed.

D. Outdoor Lighting

Section 4.10.D requires outdoor lighting to be designed and shielded so that light does not project onto adjoining properties or public or private streets or rights-of-way. Outdoor lighting must also comply with the applicable performance standards of the Zoning Ordinance.

The proposed improvements will utilize fully shielded, wall-mounted lighting fixtures. Staff finds this approach acceptable provided the fixtures are downward-directed and installed so that illumination and glare are confined to the subject property.

Staff Finding: Complies subject to the use of fully shielded, downward-directed wall-mounted fixtures.

E. Steam Cleaning, Undercoating and Major Repair

Section 4.10.E prohibits steam cleaning, undercoating and major repair work.

The proposed EV charging expansion does not include any of these activities and does not propose an expansion of vehicle repair operations.

Staff Finding: Complies.

F. Setback of Fueling Equipment and Appurtenances

Section 4.10.F requires gasoline pumps, air and water hose stands, and other appurtenances to be set back at least 25 feet from existing or proposed street right-of-way lines.

The proposed EV charging equipment is located more than 25 feet from the applicable street right-of-way lines. The existing gasoline pumps and fueling canopy are not proposed to be relocated or modified as part of this application.

Staff Finding: Complies.

G. Vehicle Waiting Areas

Section 4.10.G requires adequate space to be available for vehicles that are required to wait.

The proposed project includes four dedicated EV charging spaces served by two DC fast chargers. The charging spaces are incorporated into the existing parking and circulation area adjacent to the convenience store. The site provides sufficient circulation area for vehicles entering and exiting the charging spaces, and the proposed configuration is not anticipated to result in vehicles waiting within the site's principal circulation routes or public rights-of-way.

Staff Finding: Complies.

H. Vehicle Storage

Section 4.10.H establishes screening and duration requirements for vehicles stored while awaiting service.

The proposed EV charging facilities are intended for temporary use by vehicles actively charging and do not involve the storage of vehicles awaiting repair or service. No expansion of vehicle storage activities is proposed.

Staff Finding: Not applicable to the proposed expansion.

Section 4.10 Recap

Staff finds that the proposed EV charging expansion is consistent with the applicable automobile service station standards of Section 4.10.

The existing driveway locations and approximately 198.73 feet of street frontage do not conform to the current dimensional standards of Sections 4.10.A and 4.10.B; however, these are longstanding existing site conditions that are not being altered or intensified by the proposed project. Staff therefore consider these conditions to be legal nonconforming site conditions for purposes of this limited expansion, and variance relief is not required as part of the present application.

The remaining applicable standards are either satisfied by the submitted plans or can be addressed through conditions of Special Land Use approval.

Special Land Use Standards – Section 6.10

Section 6.10 of the White Lake Township Zoning Ordinance requires the Planning Commission to make an affirmative finding for each of the following standards before approving a Special Land Use. Staff offers the following analysis based on the submitted plans and information available at the time of review.

i. Harmony with Surrounding Development and Zoning District

The subject property has operated as an automobile fueling/service station for several decades and is located within the GB, General Business District along the M-59 commercial corridor. The proposed installation of EV charging facilities represents an expansion and modernization of the existing automobile service station use rather than establishment of a substantially different land use.

The principal compatibility consideration is the relationship of the proposed charging facilities to the adjoining R1-C residential property. As discussed in greater detail under the nuisance standard below, staff has identified potential nighttime noise impacts associated with the proposed charging equipment. The applicant has also incorporated additional landscaping along the residential property line to supplement the existing fence and improve screening.

Staff Finding: Satisfied subject to conditions. The proposed expansion is generally compatible with the longstanding automobile service station and commercial character of the M-59 corridor, provided the recommended noise-related operating limitation and proposed residential buffering are maintained.

ii. Vehicular and Pedestrian Traffic

The subject property has existing vehicular access from both M-59 (Highland Road) and Pontiac Lake Road. The proposed EV charging facilities will utilize the existing access and circulation system and do not include the construction, relocation, or substantial modification of either driveway.

The proposed charging spaces are located adjacent to the existing convenience store and are integrated into the existing parking and circulation area. The work within the parking lot is limited primarily to installation of the charging facilities and associated electrical equipment, localized pavement modifications, and repair of deteriorated pavement and potholes.

The site does not currently contain a public sidewalk along Pontiac Lake Road. While Section 5.21 establishes sidewalk requirements for redevelopment, the present request represents a relatively limited expansion of an established automobile service station

and does not involve comprehensive redevelopment of the roadway frontages, driveway system, or principal parking areas. Given the limited scope of the proposed improvements and the number of longstanding existing site conditions, staff does not recommend requiring construction of the otherwise applicable sidewalk improvements as part of this application. Compliance with current sidewalk standards should instead be addressed as part of any future substantial redevelopment or remodel of the overall site.

Staff Finding: Satisfied for purposes of the Special Land Use standard. The proposed expansion will utilize the existing vehicular access and circulation system and is not anticipated to make vehicular or pedestrian traffic more hazardous than currently exists. Given the limited scope of the proposed improvements, staff is not recommending comprehensive pedestrian improvements as part of this application; those improvements can be addressed in conjunction with a future substantial redevelopment of the site.

iii. Nuisance Impacts, Including Noise and Lighting

The proposed EV charging equipment and associated transformer are located near residentially zoned property and therefore warrant particular review for potential noise and lighting impacts.

The principal stationary noise sources associated with the proposed expansion are the two DC fast chargers and the new pad-mounted transformer. The applicant's submitted equipment noise table identifies the chargers as producing 53 dBA at 13 feet and 47 dBA at 26 feet, while the transformer is identified at 48 dBA at 13 feet and 42 dBA at 26 feet.

Based on staff measurements from the submitted site plan, the nearest charger is located approximately 21.9 feet from the adjoining residential property line, the second charger approximately 34.7 feet, and the transformer approximately 25.7 feet from the property line. **Using the applicant's submitted sound data as a guide, the nearest charger alone is anticipated to generate approximately 48 to 49 dBA at the residential property line, which exceeds the Township's applicable 45 dBA nighttime noise standard.** The combined contribution of the two chargers and transformer would be greater than the contribution of the nearest charger alone.

The submitted noise information appears to address only the charging equipment and transformer. It does not quantify additional noise that may be generated by vehicles while actively using the DC fast chargers. Electric vehicles may operate battery cooling fans, coolant pumps, compressors, or other thermal-management systems during

charging. The level of vehicle-generated noise will vary by vehicle and operating conditions and cannot be reliably quantified from the information submitted. Accordingly, actual sound levels during charging events may exceed those attributable to the stationary equipment alone.

Based on the information currently submitted, staff does not believe the proposed charging operation can demonstrate compliance with the Township's nighttime noise standard. Staff therefore recommends that operation of the EV charging equipment be limited to 7:00 a.m. through 9:00 p.m., unless the applicant subsequently provides sufficient acoustical documentation and/or mitigation demonstrating compliance with the applicable nighttime noise standard at the adjoining residential property line.

The plans also propose new wall-mounted lighting associated with the EV charging area. Staff is comfortable with the use of fully shielded, downward-directed wall-mounted fixtures, provided the fixtures are designed and installed so that light is confined to the subject property and does not create glare or spillover onto adjoining residential property or public rights-of-way.

Staff Finding: Satisfied subject to conditions. The standard can be satisfied provided that the EV charging equipment is limited to operation between 7:00 a.m. and 9:00 p.m., unless nighttime noise compliance is otherwise demonstrated, and all proposed lighting consists of fully shielded, downward-directed wall-mounted fixtures.

iv. Buildings, Structures, Walls, Fences and Landscaping

The proposed EV charging equipment is located within the northeastern portion of the building near adjoining residential property. Because of this relationship, staff discussed additional screening and landscaping with the applicant during preliminary review of the project.

Additional plantings are proposed in front of the existing fence along the residential property line. The 6-foot-tall wood fence is identified as having a weathered appearance but being structurally sound and proposed to remain. The combination of the existing fence and the additional proposed landscaping is intended to improve visual screening between the charging area and the adjoining residences.

Staff Finding: Satisfied. The proposed location of the equipment, retention of the existing fence, and additional landscaping shown on the plan provide an appropriate level of screening for the scope of the proposed expansion.

v. Harmony with Adjacent Land Uses

The proposed EV charging facilities are functionally related to the existing automobile service station and are consistent with the longstanding commercial use of the property. The site is located along the M-59 commercial corridor, where vehicle-oriented commercial activity is already established.

The principal land use relationship requiring consideration is the adjoining residential property to the north and northeast. The proposed charging equipment has been positioned near the existing convenience store, and additional landscaping has been added along the residential property line to improve screening. Operational impacts are also addressed through the recommended limitation on charging activity between 9:00 p.m. and 7:00 a.m. unless compliance with the applicable nighttime noise standard is otherwise demonstrated.

Staff Finding: Satisfied subject to conditions. The proposed expansion is compatible with the physical and economic character of the surrounding area and with the existing commercial use of the property, provided the approved landscaping and recommended operational limitations are maintained.

vi. Density and Required Open Space

The proposed request does not involve residential development and therefore does not create any issue related to residential density.

The project consists of a limited expansion of an existing automobile service station within an already developed commercial site. The proposed improvements are concentrated within the existing developed area and do not materially alter the overall intensity of development on the property. Additional landscaping has been incorporated into the plan as part of the proposed improvements, particularly along the residential side of the site.

Because this application does not involve a comprehensive redevelopment of the property, staff is not recommending that the applicant reconstruct the entire site to current open-space and landscaping standards as part of this request.

Staff Finding: Satisfied. The proposed expansion does not increase residential density and does not materially reduce required open space or otherwise alter the overall development intensity of the site.

vii. Public Services and Facilities

The proposed EV charging expansion is limited in scope and is not anticipated to create a significant additional demand upon Township public services or facilities. The principal utility improvements associated with the project consist of the electrical infrastructure

necessary to serve the proposed charging stations, including the new pad-mounted transformer.

The applicant will be responsible for coordinating the proposed electrical improvements with the applicable utility provider and obtaining all required building, electrical, fire, and other permits prior to construction.

Staff Finding: Satisfied. The proposed expansion is not anticipated to create service or facility demands that cannot be accommodated by existing public services and utilities.

viii. Protection of the Natural Environment and Conservation of Natural Resources and Energy

The proposed improvements are located within an already developed commercial site and are largely confined to existing paved and disturbed areas. The project does not involve expansion into undeveloped portions of the property or significant alteration of existing natural features.

The proposed EV charging facilities will provide an additional vehicle fueling option that supports the use of electric vehicles and associated alternative energy infrastructure. The project also includes localized landscaping improvements and will be subject to applicable requirements for drainage, soil erosion control, utility installation, and restoration of disturbed areas.

Staff Finding: Satisfied. The proposed expansion is not expected to result in significant adverse impacts to the natural environment and is consistent with the intent of conserving energy resources through the provision of electric vehicle charging infrastructure.

ix. Public Convenience at the Proposed Location

The subject property is an existing automobile service station located at the intersection of M-59 (Highland Road) and Pontiac Lake Road. The proposed EV charging facilities would expand the range of vehicle fueling options available at an established automobile-oriented commercial site rather than requiring the development of a separate location for this service.

The proposed use is therefore well-suited to the existing function of the property and would provide an additional service to motorists traveling along the M-59 corridor and within the surrounding area.

Staff Finding: Satisfied. The proposed EV charging facilities are appropriately located at an existing automobile service station and would provide a convenient additional fueling option for the traveling public.

x. Public Health, Safety, and Welfare

The proposed expansion will utilize the existing access and circulation system of the automobile service station and is limited in scope to the installation of EV charging facilities, associated electrical equipment, localized pavement improvements, and landscaping.

Staff has reviewed the proposal with respect to circulation, parking, lighting, landscaping, screening, and the relationship of the proposed improvements to the adjoining residential property. The principal remaining health, safety, and welfare consideration is noise generated by the proposed chargers and transformer. As discussed previously, operation of the charging equipment should be limited to 7:00 a.m. through 9:00 p.m. unless the applicant demonstrates compliance with the applicable nighttime noise standard.

The project will also remain subject to applicable building, electrical, fire, utility, and other permitting requirements prior to construction.

Staff Finding: Satisfied subject to conditions. The proposed expansion can be operated in a manner protective of public health, safety, and welfare provided the recommended operating-hour limitation is observed and all applicable construction, electrical, fire, and utility requirements are satisfied.

xi. Property Values and Compatibility with Other Permitted Land Uses

The proposed EV charging facilities are consistent with the longstanding automobile service station use and the commercial character of the M-59 corridor. The primary compatibility consideration is the relationship of the proposed improvements to the adjoining residential properties.

The applicant has incorporated additional landscaping along the residential property line and will retain the existing 6-foot wood fence as part of the screening between the charging area and nearby residences. Operational impacts are further addressed through the recommended limitation on charging activity between 7:00 a.m. and 9:00 p.m. unless compliance with the applicable nighttime noise standard is otherwise demonstrated.

Staff Finding: Satisfied subject to conditions. With the proposed landscaping and screening improvements and the recommended operating-hour limitation, the

expansion is not expected to cause substantial injury to nearby property values or be detrimental to adjoining permitted land uses.

Planning Commission Consideration

The principal issue identified by staff is the potential for noise impacts on the adjoining residential property.

The applicant's submitted equipment data identifies the proposed DC fast chargers as producing 53 dBA at 13 feet and 47 dBA at 26 feet, while the proposed transformer is identified at 48 dBA at 13 feet and 42 dBA at 26 feet. Based on staff measurements from the submitted site plan, the nearest charger is approximately 21.9 feet from the residential property line, the second charger approximately 34.7 feet, and the transformer approximately 25.7 feet from the property line.

Based on the applicant's own sound data, the nearest charger alone is anticipated to generate approximately 48 to 49 dBA at the residential property line, exceeding the Township's applicable 45 dBA nighttime noise standard. The submitted noise information also does not quantify additional noise that may be generated by vehicles while actively charging, including battery cooling fans, compressors, pumps, and other thermal-management equipment.

The Planning Commission may wish to consider whether operation of the EV charging facilities should be limited to 7:00 a.m. through 9:00 p.m., unless the applicant can demonstrate through additional acoustical information or mitigation that the facility will comply with the applicable nighttime noise standard at the residential property line.

Section 6.11 – Planning Commission Action

In considering the application, the Planning Commission may incorporate its findings regarding the standards of Section 6.10 and any conditions of approval into its final action.

CHARTER TOWNSHIP OF WHITE LAKE

SITE PLAN AND PLAT REVIEW APPLICATION

White Lake Township Community Development Department, 7525 Highland Road, White Lake Michigan 48393 (248)698 3300 x163

APPLICANT AND PROPERTY INFORMATION

Applicant: Hadi Boussi
Phone: (313) 798-7651 Fax:
Address: 22243 W Warren Ave, Dearborn Hts, MI 48127
(Street) (City) (State) (Zip)
Applicant's Legal Interest in Property: Contractor acting with owner authorization
Property Owner: Abdelrahman Salem Phone: 248 633 5685
Address: 8320 Highland Rd. White Lake, MI 48386
(Street) (City) (State) (Zip)

PROJECT INFORMATION

Project Name: 8320 Highland Parcel I.D. No.: 12-13-454-019
Proposed Use: Addition of (4) EV Charging Stalls Current Zoning: GB
Existing Use: Gas Station Parcel Size: 0.98 Floor Area / No. of Units 2,846sf/1

TYPE OF DEVELOPMENT

☐ Subdivision ☐ Site Condominium ☒ Commercial
☐ Multiple Family ☒ Special Land Use ☐ Industrial
☐ Adult Entertainment

SITE PLAN SUBMITTAL CHECKLIST

☐ PDF File and Three (3) paper copies (sealed) as required by Zoning Ordinance 58
☐ Application Review Fees
PLANS WILL NOT BE ACCEPTED UNLESS FOLDED AND NO GREATER THAN 24" X 36" IN SIZE

REQUIRED SIGNATURES

 (Signature of Property Owner) 7/20/26 (Date)
 (Signature of Applicant) 7/20/26 (Date)

WHITE LAKE TOWNSHIP COMMUNITY DEVELOPMENT FEE SCHEDULE					
PROJECT NAME: GAS STATION - ELECTRIC CHARGER STATION					
PLANNING REVIEW			PLANNING COMMISSION		
Special Land Use/Cluster Option	\$500 + site plan fee	\$500.00	Residential	\$950	
Planned Development Agreement	\$125/hour		Commercial	\$950	\$950.00
Rezoning Request Review	\$650		Industrial	\$950	
Condominium Plan	\$375 plus site plan review		Planned Business/Development	\$1,200	
Additional reviews	\$125/hour		Special Meeting	\$1,200	
Site Plan			ZONING BOARD OF APPEALS (includes P.H. Notice & Mailing)		
Site Condominium	\$1,625		Residential	\$400	
Public, Institutional or Semi-Public Uses	\$1,625		Commercial	\$500	
Multi-Family Residential	\$1,625		Special Meeting	\$1,000	
Non-Residential (incl. 3 reviews)	\$1,625		WETLAND CONSULTANT		
PBD/PDD Plan Review with Rezoning	\$650 + Plus Review Fee		Wetland verification and reports (flagged 2-5 acres of wetland)	\$500	
PBD/PDD Plan Review(w/o Rezoning)	\$1,625		Each additional acre over 5 acres of wetland	\$100	
Sign Review	\$125		Preliminary wetland impact review or Final/Construction plan	\$1,000	
			Final Construction plan wetland impact review/permit issuance	\$1,000	
Subdivision Plat			PLANNING DEPARTMENT		
Tentative preliminary	\$1,625		Administrative site plan review	\$500	\$500.00
Final preliminary	\$1,625		Public Hearing/legal ads/300" mailing	\$300	\$300.00
Final plat	\$1,625		Pre-application meeting	Based on departmental attendance	
			ATTORNEY REVIEW		
Traffic Impact Study			PBD Agreement	\$600	
Abbreviated impact assessment - (such as Trip Generation Analysis)	\$150 Hour		Easement review (incl. 2 reviews)	\$450	
Full impact study	\$150 Hour		Master Deeds and Bylaws (incl. 2 reviews)	\$1000	
Scoping contents with applicant	\$150 Hour		Recording Fee	\$50	
FIRE DEPARTMENT			Covenants and Restrictions	\$450	
Site Plan Review	\$233	\$233.00	Hourly rate for additional reviews	\$150	
Construction Plan Review	\$233		Private Road Agreement	\$450	
<i>Ma Baydoun 0chargexusa.com</i>			ENGINEERING REVIEW		
			Preliminary Site Plan	\$2,500	
			Tentative preliminary plat	\$2,500	
			Final Site Plan/Construction plan and document review	Based on construction cost estimate	
			Final Preliminary plat/construction/final plat and legal documents	Based on construction cost estimate	
			Private Road review	\$2500	
			Total :		\$2,483.00
			10 % -Admin fee:		\$248.30
			TOTAL FEES DUE:		\$2,731.30

(The engineering review fee schedule was adopted by Board action July 19, 2005)

*CONSTRUCTION COSTS	ENGINEERING PLAN REVIEW FEE	DOCUMENT REVIEW FEE	TOTAL
Up to \$50,000	2.5% (\$500.00 minimum)	1.5% (\$500 minimum)	4.0% (\$1,000 min)
\$50,000 to \$100,000	2.0% (\$1,250 minimum)	1.0% (\$750 minimum)	3.0% (\$2,000 min)
\$100,000 to \$250,000	1.5% (\$2,000 minimum)	1.0% (\$1,000 minimum)	2.5% (\$3,000 min)
Over \$250,000	1.0% (\$3,750 minimum)	0.5% (\$2,500 minimum)	1.5% (\$6,250 min)

Applicable Fee Total

\$ _____
(enter total on page 3)

Note: A revised cost estimate and fee adjustment may be required as a result of design changes.

Submitted by: Hadi Boussi Date: 7/20/26

Print Name: Hadi Boussi

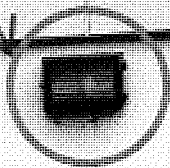
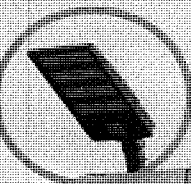
Make checks payable to White Lake Township.

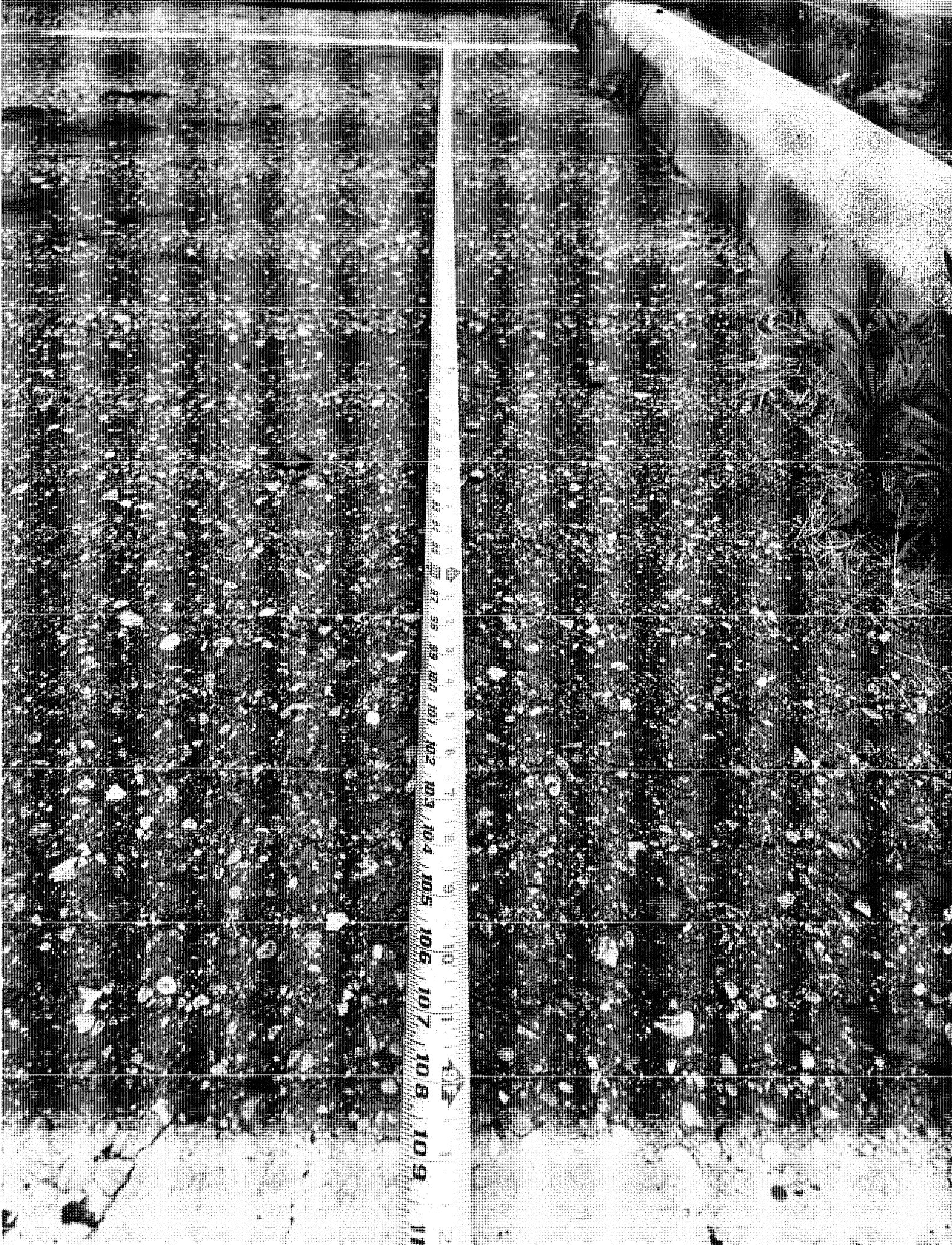
For the construction plan review, two (2) sets of engineer sealed plans are required along with the following items:

as attached

Storm sewer rational formula calculations	_____
Storm sewer discharge area map (on-site & off-site)	_____
Storm water detention/sedimentation basin calcs	_____
Construction plan checklist, completed	_____
Detailed engineers construction cost estimate, itemized	_____

Existing Lighting near EV
chargers

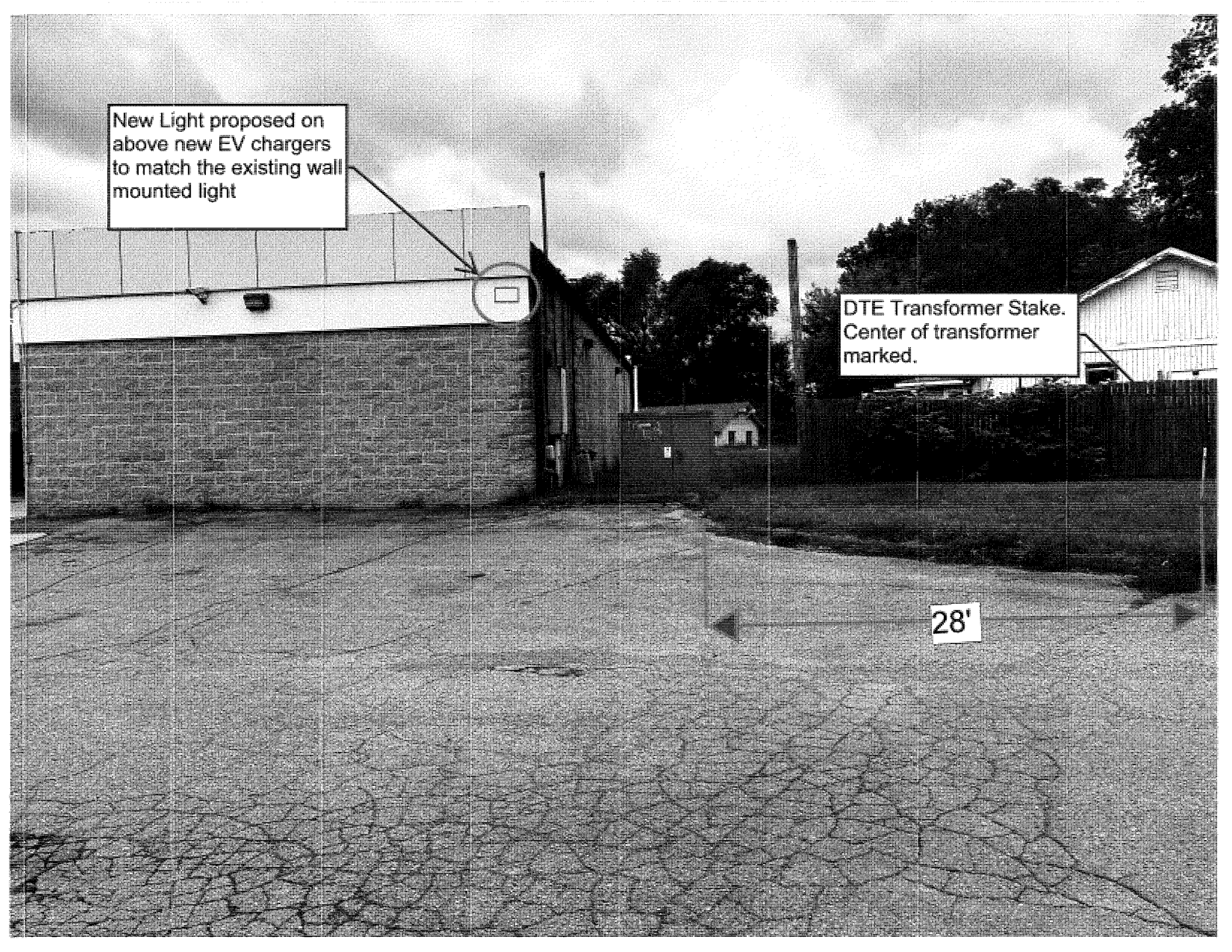




New Light proposed on
above new EV chargers
to match the existing wall
mounted light

DTE Transformer Stake.
Center of transformer
marked.

28'





8320 HIGHLAND

8320 HIGHLAND ROAD
WHITE LAKE, MI 48386

APPLICABLE CODES

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE FOLLOWING CODES:

BUILDING CODE:

2021 MICHIGAN BUILDING CODE (IBC 2021)

ELECTRICAL CODE:

2023 NATIONAL ELECTRICAL CODE (NEC 2023)

PROJECT DESCRIPTION

- PROPOSED INSTALLATION OF (2) 160kW DCFC CHARGERS TO SUPPLY (4) DEDICATED CHARGING STALLS

CONTACTS

APPLICANT:

CHARGE-X USA
22345 W. WARREN AVENUE
DEARBORN HEIGHTS, MI 48127
TEL: (313) 523-1333
www.chargexusa.com

A&E:

WT GROUP AEC, LLC
2000 CENTER DRIVE
SUITE B411
HOFFMAN ESTATES, IL 60192
CONTACT: KEVIN CUNNIE
TEL: (847) 287-2085

AERIAL MAP



LOCATION MAP



SHEET INDEX

SHEET NUMBER:	DESCRIPTION:
T-1	TITLE SHEET
T-2 - T-4	GENERAL NOTES
1 OF 1	SURVEY (BY OTHERS)
C-1	OVERALL PROPERTY PLAN
C-2	OVERALL SITE PLAN
C-3	ENLARGED SITE PLAN
C-4	SOIL EROSION CONTROL PLAN
C-4.1	WRC SOIL EROSION DETAILS
C-4.2	CONSTRUCTION DETAILS
C-5	FEMA FIRMETTE MAP
C-6	WETLANDS MAP
C-7 - C-9	SITE DETAILS
L-1	LANDSCAPING PLAN
L-2	LANDSCAPING DETAIL & NOTES
E-1	ONE-LINE DIAGRAM
E-2	OVERALL ELECTRICAL PLAN
E-2.1	ENLARGED ELECTRICAL PLAN
E-3	ELECTRICAL DETAILS
E-4 - E-5	ELECTRICAL EQUIPMENT SPECIFICATIONS
E-6	UTILITY DETAILS AND SPECIFICATIONS

REFERENCED MATERIALS

A SITE WALK WAS NOT PERFORMED FOR THIS SITE PER SCOPE OF WORK. EQUIPMENT LAYOUT AND PLANS SHOWN WITHIN THIS SET WERE TAKEN FROM AVAILABLE DOCUMENTS/DRAWINGS PROVIDED BY OTHERS.



Know what's below.
Call before you dig.

CALL AT LEAST THREE WORKING
DAYS BEFORE YOU DIG

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

DO NOT SCALE DRAWINGS



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8320 HIGHLAND ROAD
WHITE LAKE TOWNSHIP, MI 48386



EXPIRES: 03/02/28 SIGNED: 07/16/26

REVISIONS

REV.	ISSUED FOR	DATE	BY
A	FOR CLIENT REVIEW	03/18/26	JTB
0	REVISION	03/23/26	JTB
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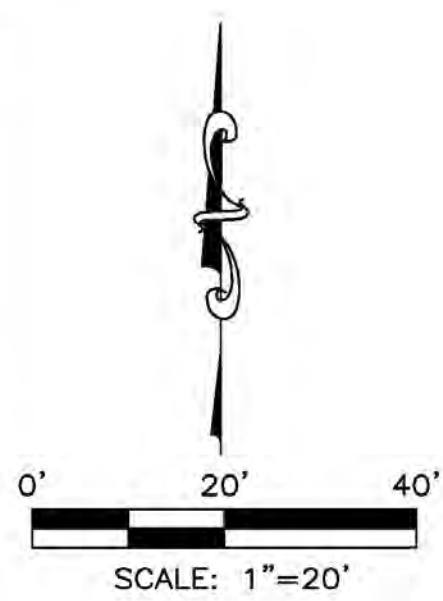
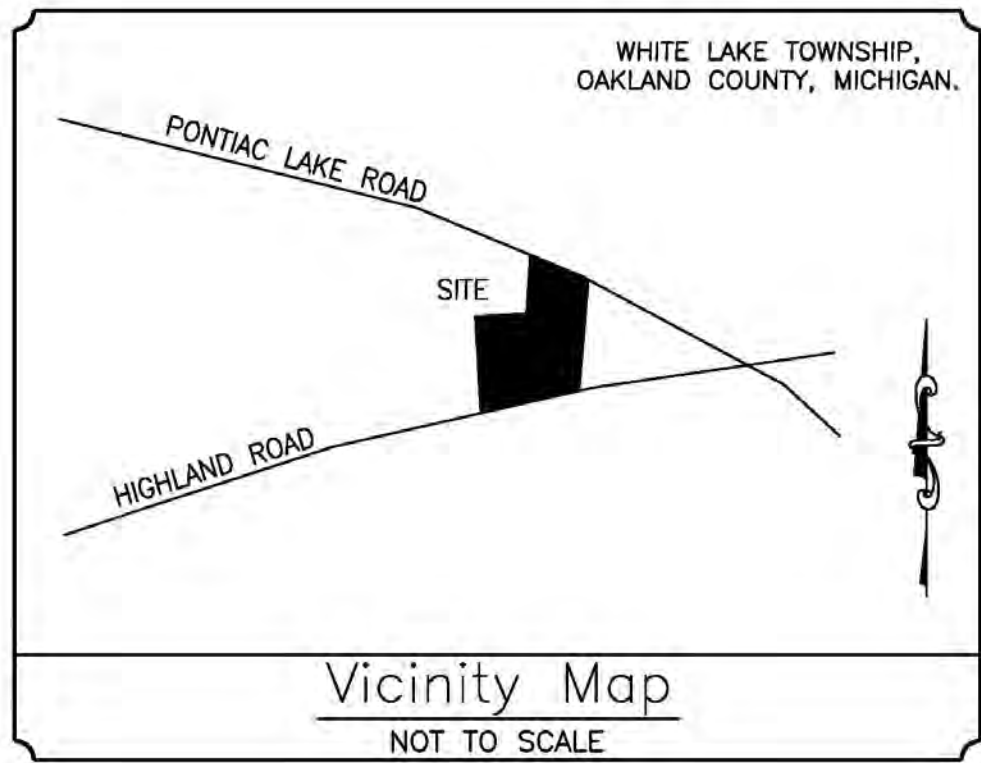
CHECK: JKR

DRAWN: JTB

JOB: T2600207

T-1

TITLE SHEET



ZONING INFORMATION

A ZONING REPORT WAS NOT PROVIDED BY THE CLIENT PER TABLE A 6(c) AND 6(b). THE ZONING CLASSIFICATION, SETBACK REQUIREMENTS, THE HEIGHT AND FLOOR SPACE AREA RESTRICTIONS, AND PARKING REQUIREMENTS ARE NOT SHOWN HEREON.

NOTES CORRESPONDING TO SCHEDULE B

A TITLE COMMITMENT WAS NOT PROVIDED

GENERAL NOTES

- 1) NO EVIDENCE OF EARTH MOVING OR BUILDING CONSTRUCTION/ADDITIONS WERE OBSERVED WHILE CONDUCTING THE FIELD WORK. (ITEM 16, TABLE A).
- 2) NO EVIDENCE OF PROPOSED STREET RIGHT OF WAY LINE CHANGES WERE PROVIDED BY THE CONTROLLING JURISDICTION. (ITEM 17, TABLE A).
- 3) THERE IS NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS. (ITEM 17, TABLE A).
- 4) THIS PARCEL HAS IMPROVED DIRECT ACCESS TO PONTIAC LAKE ROAD AND HIGHLAND ROAD (M-59), BOTH DEDICATED PUBLIC RIGHT OF WAYS.
- 5) THIS SURVEY MAP CORRECTLY REPRESENTS THE FACTS FOUND AT THE TIME OF THE SURVEY.
- 6) THERE ARE NO OBSERVED GAPS OR OVERLAPS BETWEEN THE BOUNDARY LINES OF THE PARCEL AS SHOWN ON THIS SURVEY MAP AND AS PROVIDED IN THE DESCRIPTION PRESENTED IN THE TITLE COMMITMENT.
- 7) THE BOUNDARY LINE DIMENSIONS AS SHOWN ON THIS SURVEY MAP FORM A MATHEMATICALLY CLOSED FIGURE WITHIN +/-0.1 FOOT.
- 8) THE BOUNDARY LINES OF THE PARCEL AS PROVIDED IN THE DESCRIPTION PRESENTED IN THE TITLE COMMITMENT ARE CONTIGUOUS WITH THE BOUNDARY LINES OF ALL ADJOINING STREETS, HIGHWAYS, RIGHTS OF WAY AND EASEMENTS, PUBLIC OR PRIVATE, AS DESCRIBED IN THEIR MOST RECENT RESPECTIVE DESCRIPTIONS OF RECORD.
- 9) EXCEPT AS OTHERWISE NOTED BELOW, IF THE OVERALL PARCELS CONSISTS OF TWO OR MORE DESCRIPTIONS, THERE ARE NO GAPS OR GORES BETWEEN SAID DESCRIPTIONS.
- 10) THIS PARCEL FRONTS ON BOTH PONTIAC LAKE ROAD AND HIGHLAND ROAD (M-59). (ITEM 14, TABLE A).
- 11) EASEMENTS AND EXCEPTIONS SHOWN HEREON WERE PROVIDED BY THE TITLE INSURANCE COMPANY, NO RESEARCH HAS BEEN CONDUCTED BY GEODETIC DESIGNS INC. TO IDENTIFY ANY ADDITIONAL EASEMENTS OR RECORD ENCUMBRANCES THAT MAY AFFECT THIS PARCEL.
- 12) ALL LINEAR DIMENSIONS SHOWN ARE IN INTERNATIONAL FEET AND DECIMALS THEREOF.
- 13) WHITE LAKE TOWNSHIP HAS NOT RESPONDED TO A REQUEST FOR MAPS OF UNDERGROUND WATER AND SANITARY AND THOSE ARE NOT SHOWN HEREON.

LEGEND

	Power Pole		Flag Pole		Storm Manhole
	Power Pole w/Light		Sign (As Noted)		Storm Catchbasin
	Light Pole		Well Head		Deciduous Tree
	Telephone Pole		Satellite Dish		Coniferous Tree
	Guy Wire		Tower		Sanitary Manhole
	Transformer		Water Valve		Sanitary Clean Out
	Electric Manhole		Fire Hydrant		Gas Valve
	Telephone Manhole		Water Manhole		Gas Manhole
	Telephone Pedestal		Water Meter Pit		Gas Meter
	Electric Meter		Water Meter		Gas Marker
	Cable Box		Indicates Handicapped Parking		Section Corner
	Air Conditioner Unit		Parking Count		Set 5/8" Bar & Cap
	Easement Identifier		Mailbox		Found Corner Monument
	Distance not to scale				Monitoring Well

ABBREVIATIONS

R = RECORDED	T-N = TOWN - NORTH	AVE. = AVENUE
M = MEASURED	R-E = RANGE - EAST	BLVD. = BOULEVARD
C = CALCULATED	SQ. FT. = SQUARE FEET	CT. = COURT
N = NORTH	NE = NORTHEAST	RD. = ROAD
E = EAST	SE = SOUTHEAST	ST. = STREET
S = SOUTH	SW = SOUTHWEST	PIN = PARCEL IDENTIFICATION NUMBER
W = WEST	NW = NORTHWEST	

DESCRIPTION

That part of Section 13, T3N, R8E, White Lake Township, Oakland County, Michigan being described as:

Lots 21 & 22, Huron River Subdivision, as recorded in Liber 57 of Plats, on Page 55, Oakland County Records.

BEARING BASIS

BEARINGS ARE BASED ON THE CENTERLINE OF PONTIAC LAKE ROAD RECORDED AS BEARING S°56'12"E.

FEMA 100 YEAR FLOODPLAIN

BY GRAPHIC PLOTTING ONLY, THIS PARCEL IS LOCATED IN ZONE X OF THE FLOOD INSURANCE RATE MAP NUMBER 26125C0337F WHICH BEARS AN EFFECTIVE DATE OF 9/29/2006.

SIGNIFICANT OBSERVATIONS

INFORMATION NOTED BELOW IS SIMPLY A STATEMENT OF FACT REGARDING THE LOCATION OF OBSERVED IMPROVEMENTS RELATIVE TO BOUNDARY, EASEMENT, AND SETBACK LINES, AND IS NOT A LEGAL OPINION, OPINION OF OWNERSHIP, OR DETERMINATION OF ENCROACHMENTS.	
BOUNDARY LINES	Δ DUMPSTER WALL CROSS PROPERTY LINE AS SHOWN
ROW & EASEMENTS	NONE OBSERVED
SETBACKS	NONE OBSERVED
PHYSICAL ACCESS BETWEEN ADJOINING PROPERTIES	NONE OBSERVED
USE OF ADJOINING PARCELS	NONE OBSERVED

CERTIFICATION

TO: RED E CHARGE:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2026 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 2, 3, 4, 5, 6a, 6b, 7a, 7b1, 7b2, 7c, 8, 9, 10a, 10b, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 of Table A thereof. The fieldwork was completed on May 28, 2026.



David J. VanDenBerghe
DAVID J. VANDENBERGHE
PROFESSIONAL SURVEYOR #4001051489

Registration No. 4001051489
Within the State of Michigan

"ALTA/NSPS LAND TITLE SURVEY"

PREPARED BY:



GEODETIC DESIGNS, INC.
2300 N. GRAND RIVER AVE.
LANSING, MI 48906
PHONE: (517) 908-0008
FAX: (517) 908-0009
WWW.GEODETICDESIGNS.COM

RED E CHARGE

8320 Highland Road
White Lake, MI
Parcel #12-13-454-019

DATE: May 28, 2026	SCALE: 1" = 20'
DRAWN BY: DJV	JOB NUMBER: S092-2026
CHECKED BY: DJV	SHEET 1 OF 1

UNDERGROUND UTILITY NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD OBSERVATIONS AND/OR EXISTING DRAWINGS AS PROVIDED BY THE FACILITY OWNER. THE UNDERGROUND UTILITIES SHOWN MAY NOT COMPRISE ALL SUCH UTILITIES ON OR NEAR THE SURVEYED PARCEL, EITHER IN SERVICE OR ABANDONED. THE LOCATION OF BURIED UTILITIES ARE SHOWN TO INDICATE THAT A UTILITY EXISTS, BUT MAY REQUIRE SUB-SURFACE INVESTIGATION TO DETERMINE THE EXACT LOCATION.

This Survey is solely for the benefit of the parties set forth in the Surveyor's Certification. Geodetic Designs Incorporated disclaims any duty or obligation towards any party that is not identified in the Surveyor's Certification.

Geodetic Designs Incorporated will not include the providers of any third party reports in the Surveyor's Certification.

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GENERAL NOTES:

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

PROPERTY INFORMATION	
JURISDICTION:	WHITE LAKE TOWNSHIP
ZONING:	GB
SUBDIVISION:	HURON RIVER
LOT AREA:	±0.9599 ACRES
OWNER:	ANA PROPERTY, LLC 8320 HIGHLAND ROAD WHITE LAKE TOWNSHIP, MI 48386

DISTANCES TO EXISTING BODIES OF WATER	
DIRECTION	
NORTH (PONTIAC LAKE)	±290'-0"
SOUTH (CEDAR CREEK)	±2575'-0"
EAST (INLET TO PONTIAC LAKE)	±660'-0"
WEST (UNNAMED PONDS)	±2690'-0"

LATITUDE AND LONGITUDE: 42.660101°, -83.449880°
SOURCE: GOOGLE MAPS, DATED 03/18/2026

NOTE:
TYPICAL PARKING SPACE MINIMUM
DIMENSION FOR 90° PARKING STALL:
• 9'-0" WIDTH
• 18'-0" DEPTH

NOTE:
THIS SITE PLAN IS BASED ON A SURVEY PROVIDED
BY GEODETIC DESIGNS, INC., DATED 05/28/2026.
CONTRACTOR SHALL FIELD VERIFY EXISTING
CONDITIONS PRIOR TO COMMENCEMENT OF
CONSTRUCTION.

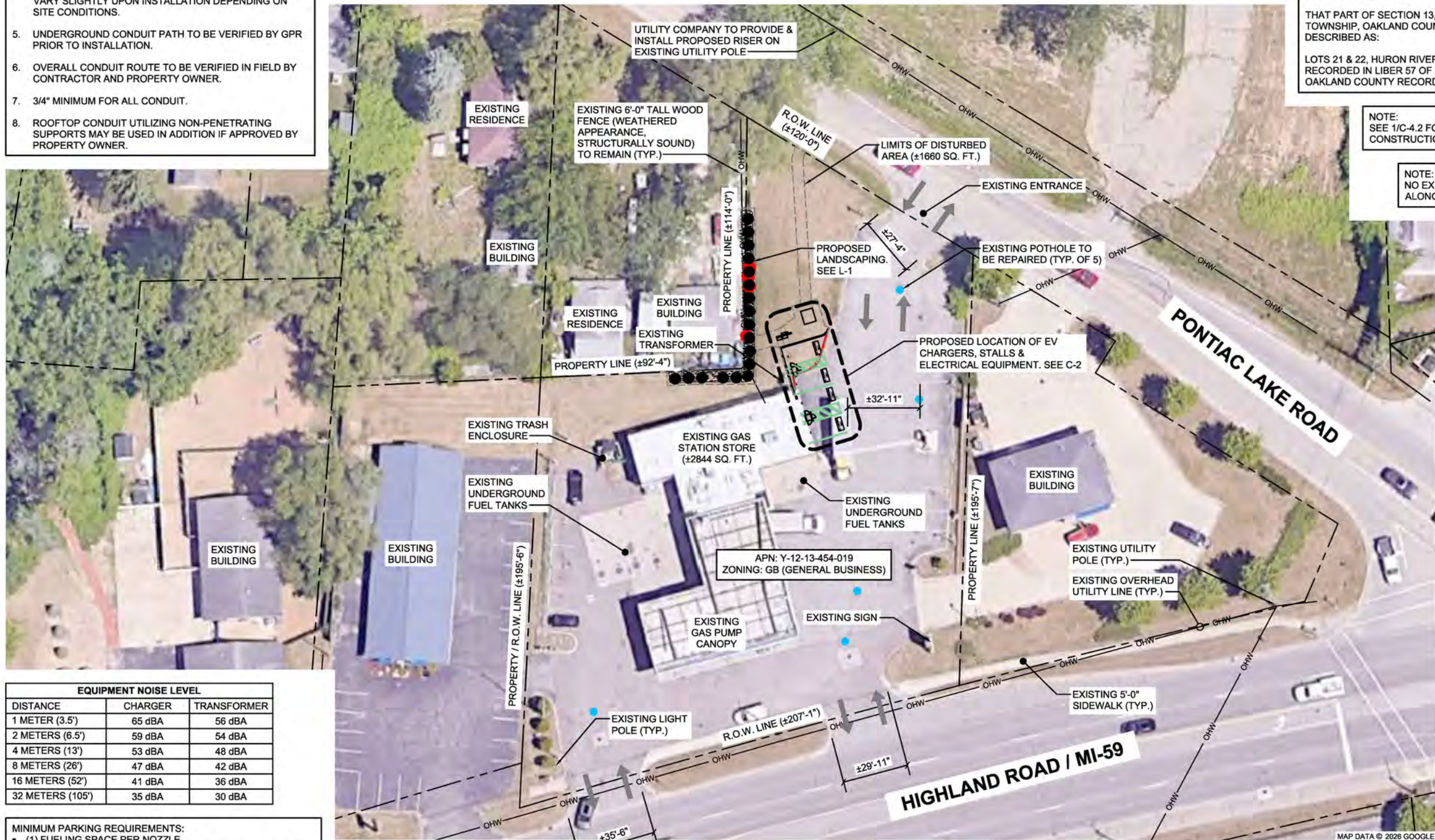
FLOOD STATEMENT:
BY GRAPHIC PLOTTING ONLY, THIS PARCEL IS
LOCATED IN ZONE X OF FLOOD INSURANCE RATE
MAP NUMBER 26125C0337F WHICH BEARS AN
EFFECTIVE DATE OF 09/29/2006.

LEGAL DESCRIPTION:
THAT PART OF SECTION 13, T3N, R8E, WHITE LAKE
TOWNSHIP, OAKLAND COUNTY, MICHIGAN BEING
DESCRIBED AS:

LOTS 21 & 22, HURON RIVER SUBDIVISION, AS
RECORDED IN LIBER 57 OF PLATS, ON PAGE 55,
OAKLAND COUNTY RECORDS.

NOTE:
SEE 1/C-4.2 FOR SEQUENCE OF
CONSTRUCTION & COST ESTIMATES.

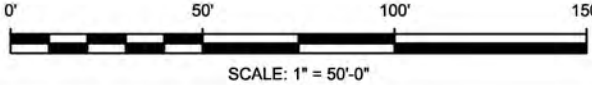
NOTE:
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EQUIPMENT NOISE LEVEL		
DISTANCE	CHARGER	TRANSFORMER
1 METER (3.5')	65 dBA	56 dBA
2 METERS (6.5')	59 dBA	54 dBA
4 METERS (13')	53 dBA	48 dBA
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MINIMUM PARKING REQUIREMENTS:
• (1) FUELING SPACE PER NOZZLE
• (1) PARKING SPACE PER 200 SQ. FT. OF GROSS FLOOR AREA

BUILDING SQUARE FOOTAGE	EXISTING REGULAR PARKING STALLS	EXISTING ADA PARKING STALLS	EXISTING PARKING STALLS CONVERTED TO EV PARKING STALLS	NEW EV PARKING STALLS	TOTAL PARKING STALLS (INCLUDING EV STALLS)	TOTAL PARKING STALLS (EXCLUDING EV STALLS)
±2844	17	2	3	1	20	16



OVERALL PROPERTY PLAN

SCALE: 1" = 50'-0"

1



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CHECK: JKR

DRAWN: JTB

JOB: T2600207

C-1

OVERALL PROPERTY PLAN

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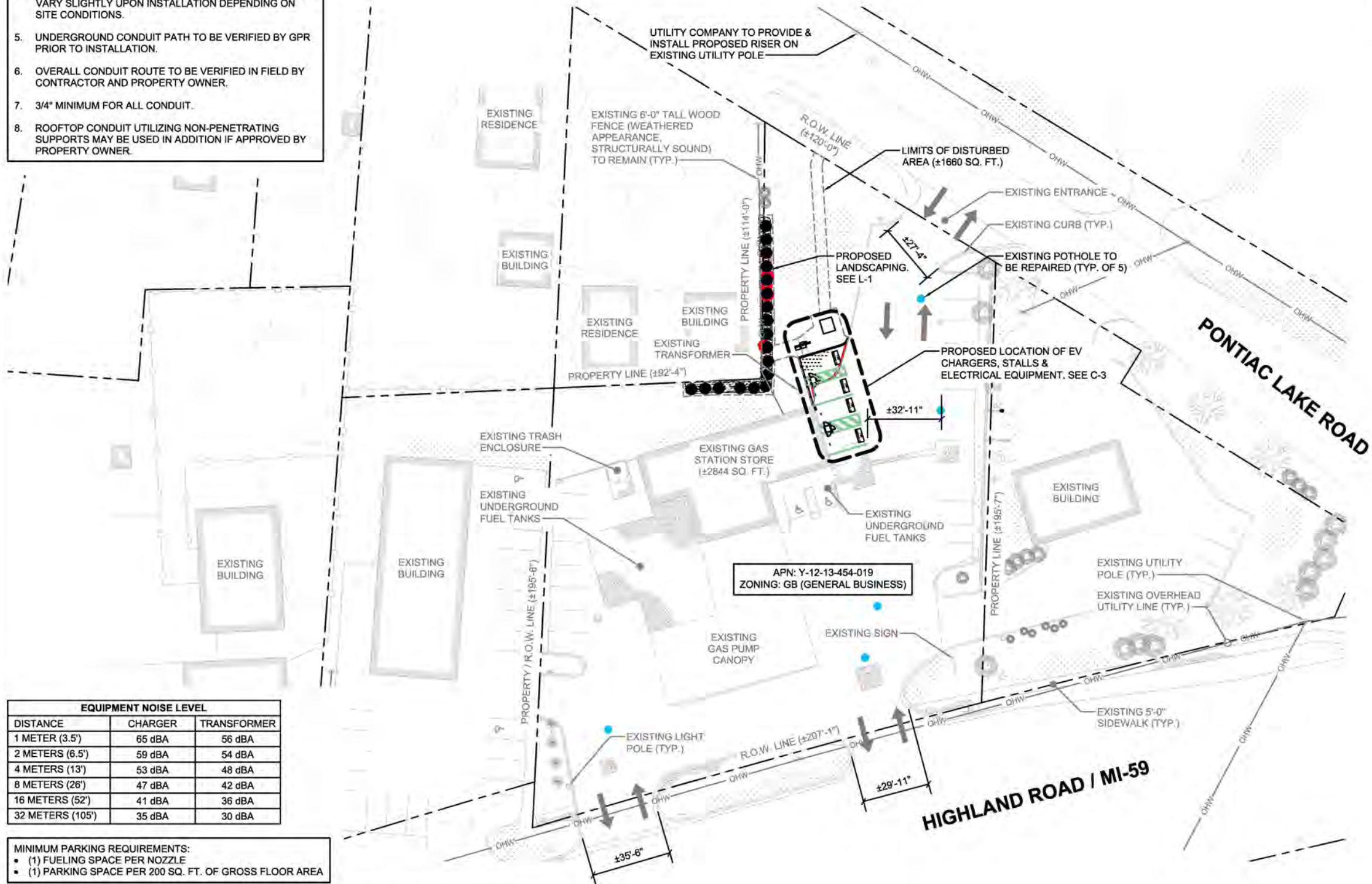
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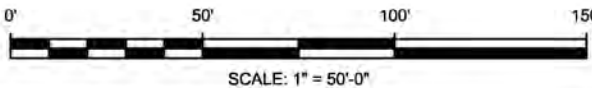
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EQUIPMENT NOISE LEVEL		
DISTANCE	CHARGER	TRANSFORMER
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OVERALL SITE PLAN

SCALE: 1" = 50'-0"

1



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DRAWN: JTB

JOB: T2600207

C-2

OVERALL SITE PLAN

NOTE:
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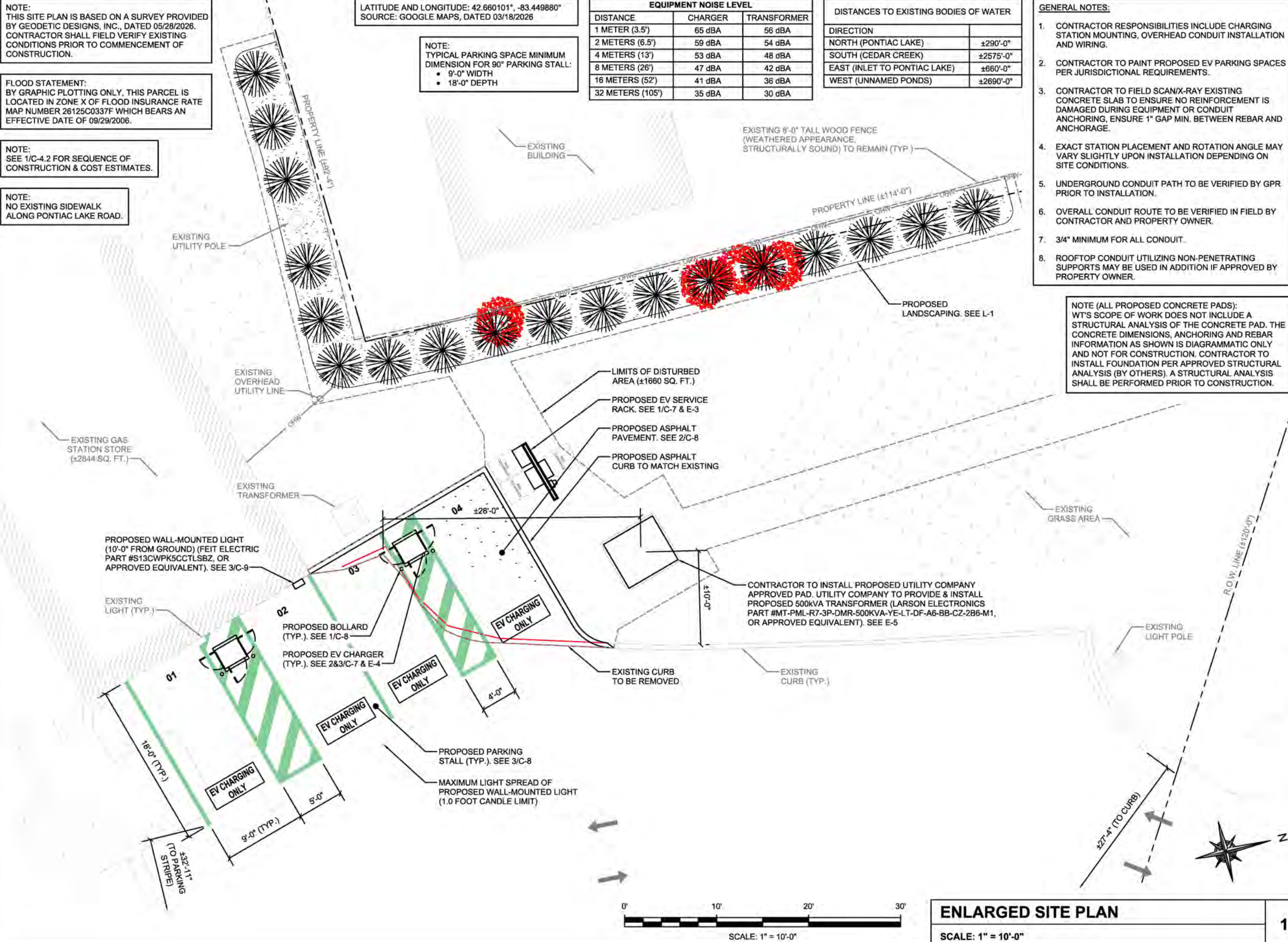
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NOTE (ALL PROPOSED CONCRETE PADS):
WT'S SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL ANALYSIS OF THE CONCRETE PAD. THE CONCRETE DIMENSIONS, ANCHORING AND REBAR INFORMATION AS SHOWN IS DIAGRAMMATIC ONLY AND NOT FOR CONSTRUCTION. CONTRACTOR TO INSTALL FOUNDATION PER APPROVED STRUCTURAL ANALYSIS (BY OTHERS). A STRUCTURAL ANALYSIS SHALL BE PERFORMED PRIOR TO CONSTRUCTION.



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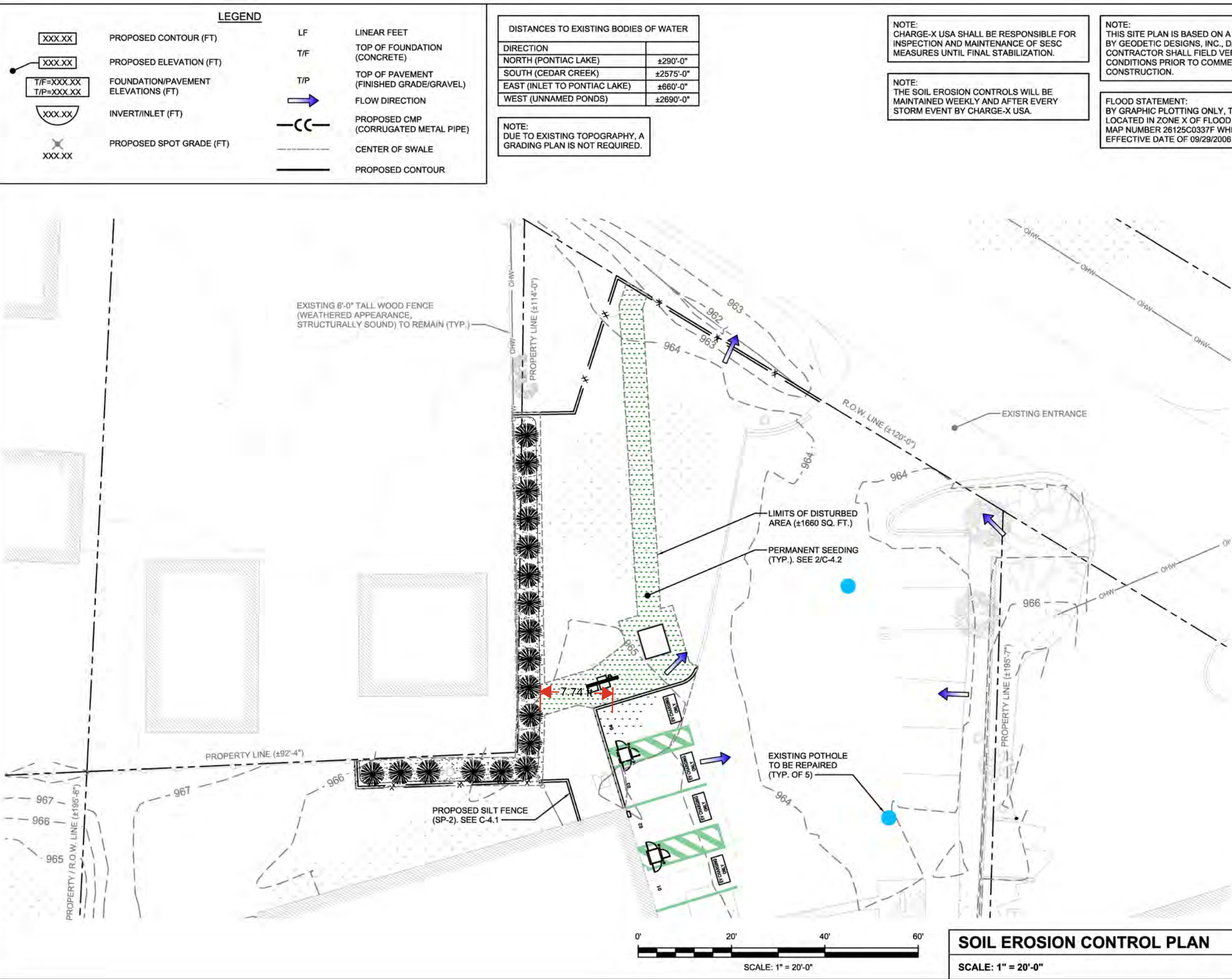
C-3

ENLARGED SITE PLAN

ENLARGED SITE PLAN

SCALE: 1" = 10'-0"

1



NOTE:
DUE TO EXISTING TOPOGRAPHY, A
GRADING PLAN IS NOT REQUIRED.

NOTE:
THE SOIL EROSION CONTROLS WILL BE
MAINTAINED WEEKLY AND AFTER EVERY
STORM EVENT BY CHARGE-X USA.

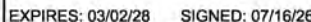
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C-4
SOIL EROSION
CONTROL PLAN

National Flood Hazard Layer FIRMette

83°27'18"W 42°39'50"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000 83°26'41"W 42°39'23"N

Basemap Imagery Source: USGS National Map 2023



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE) Zone A, V, A99
 - With BFE or Depth Zone AE, AO, AH, VE, AR
 - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD**
 - 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
 - Future Conditions 1% Annual Chance Flood Hazard Zone X
 - Area with Reduced Flood Risk due to Levee. See Notes, Zone X
 - Area with Flood Risk due to Levee Zone D
- OTHER AREAS**
 - NO SCREEN Area of Minimal Flood Hazard Zone X
 - Effective LOMRs
 - Area of Undetermined Flood Hazard Zone D
- GENERAL STRUCTURES**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
- OTHER FEATURES**
 - Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transect
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary
 - Coastal Transect Baseline
 - Profile Baseline
 - Hydrographic Feature
- MAP PANELS**
 - Digital Data Available
 - No Digital Data Available
 - Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/8/2026 at 5:39 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



FEMA FIRMETTE MAP

SCALE: NONE

1



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C-5

FEMA FIRMETTE MAP



April 8, 2026

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper



WETLANDS MAP

SCALE: NONE

1



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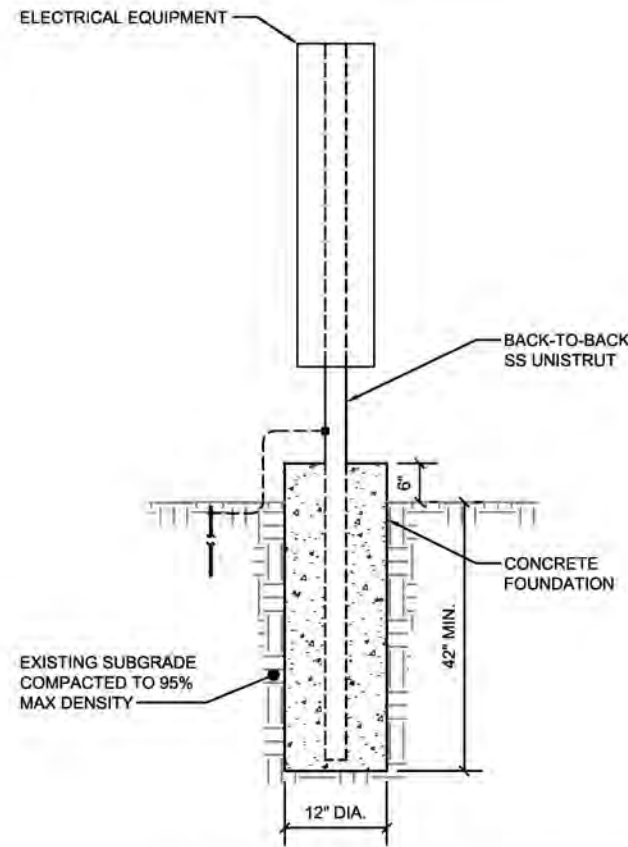
CHECK: JKR

DRAWN: JTB

JOB: T2600207

C-6

WETLANDS MAP



EQUIPMENT RACK & FOUNDATION DETAIL

SCALE: NONE

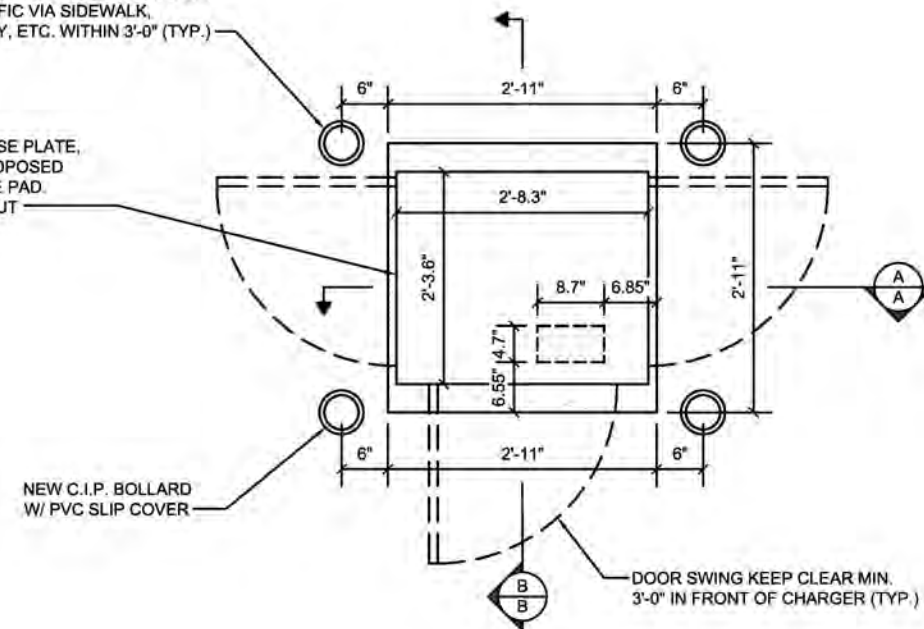
1

INCLUDE REAR BOLLARDS ONLY WHEN BACK OF CHARGER IS EXPOSED TO CAR OR PEDESTRIAN TRAFFIC VIA SIDEWALK, STREET, ALLEYWAY, ETC. WITHIN 3'-0" (TYP.)

NEW CHARGER BASE PLATE, CENTERED ON PROPOSED 35"x 35" CONCRETE PAD. SEE E-4 FOR LAYOUT

NEW C.I.P. BOLLARD W/ PVC SLIP COVER

DOOR SWING KEEP CLEAR MIN. 3'-0" IN FRONT OF CHARGER (TYP.)



CHARGER EQUIPMENT PAD PLAN

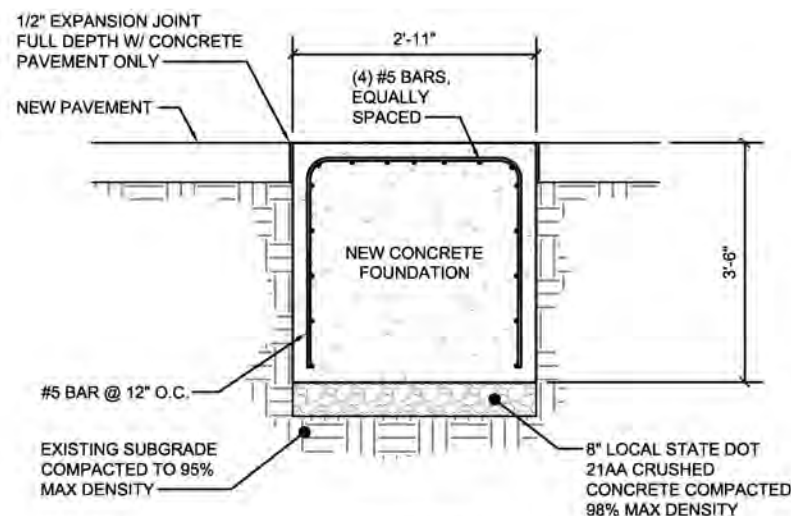
SCALE: NONE

2

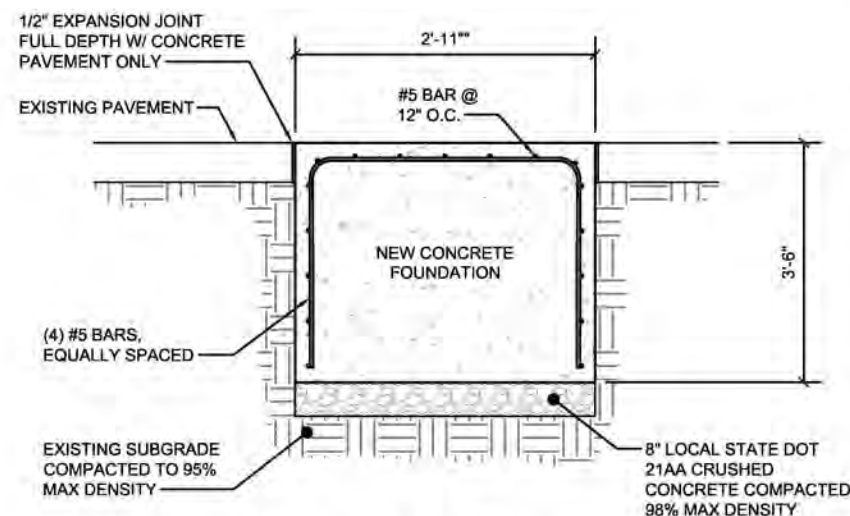
NOTE (ALL PROPOSED CONCRETE PADS):
WT'S SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL ANALYSIS OF THE CONCRETE PAD. THE CONCRETE DIMENSIONS, ANCHORING AND REBAR INFORMATION AS SHOWN IS DIAGRAMMATIC ONLY AND NOT FOR CONSTRUCTION. CONTRACTOR TO INSTALL FOUNDATION PER APPROVED STRUCTURAL ANALYSIS (BY OTHERS). A STRUCTURAL ANALYSIS SHALL BE PERFORMED PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES:

1. PROVIDE 3" MIN. CLEAR SPACE FROM EDGE OF PAD FOR ALL MOUNTING ANCHORS OR PENETRATIONS.
2. ALL CONCRETE TO USE LOCAL STATE DOT CONCRETE MIX 4000HP, 4000 PSI



SECTION "A-A"



SECTION "B-B"

CHARGER EQUIPMENT PAD SECTION

SCALE: NONE

3



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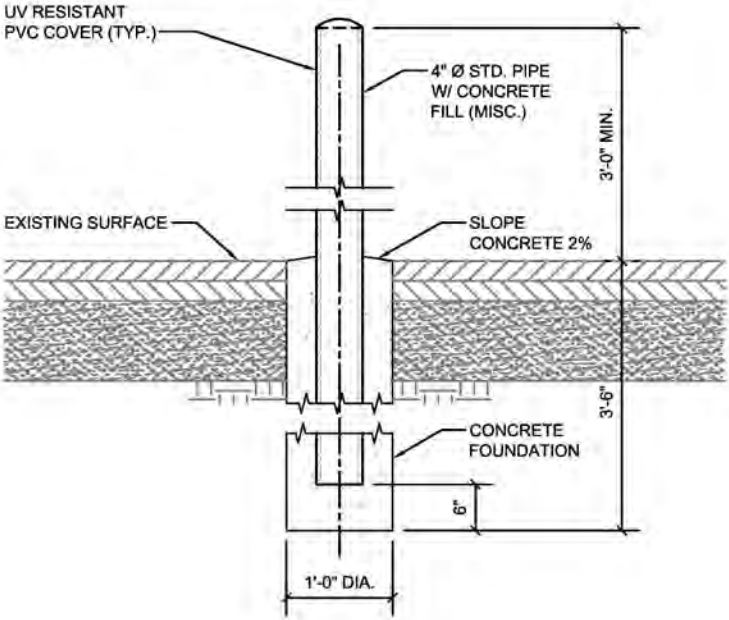
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C-7

SITE DETAILS

NOTE:
ALL BOLLARDS ARE TO BE PRIMED AND COVERED WITH 1/4" IDEAL SHIELD PVC COVER, OR APPROVED EQUAL. COLOR TO BE COORDINATED WITH OWNER.

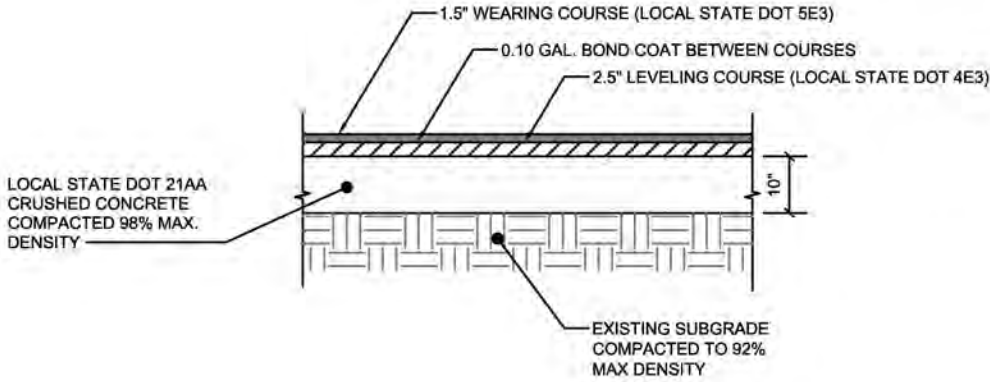


CAST-IN-PLACE (C.I.P.) BOLLARD DETAIL

SCALE: NONE

1

- NOTES:
1. ASPHALT SHALL BE SAW CUT FULL DEPTH AND REMOVED WITH A CLEAN EDGE. ALL BROKEN OR DETERIORATED ADJACENT SURFACES SHALL BE REMOVED AND REPLACED AS PART OF THIS PROJECT.
 2. ALL ADJACENT EDGED SHALL BE HOT ROLLED OVERLAPPED JOINTS WITH LIKE IN KIND CONCRETE WEAR COURSE. ALL SURFACES SHALL BE CLEANED, DRY, AND FREE OF DEBRIS BEFORE APPLYING BOND COMPOUND COAT.



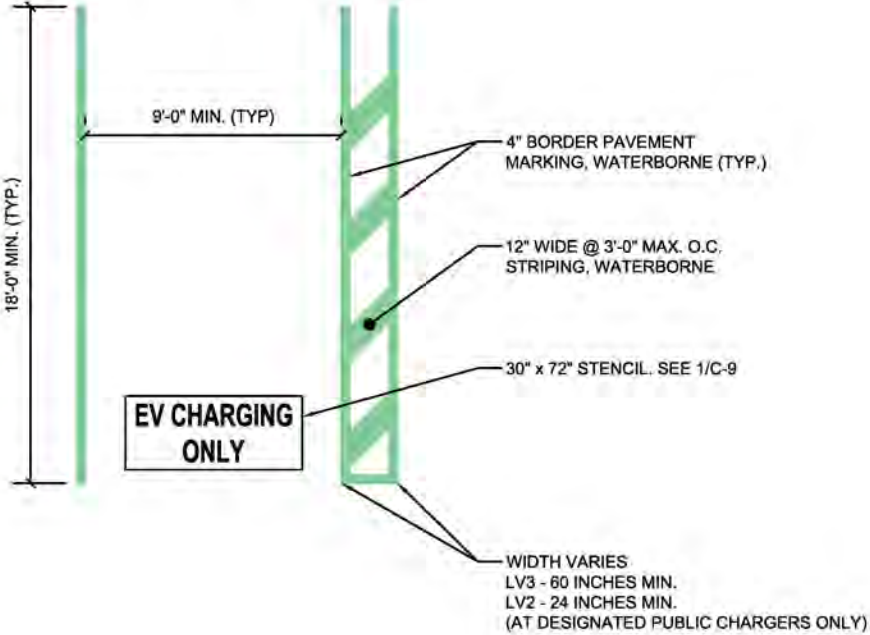
ASPHALT PAVEMENT DETAIL

SCALE: NONE

2

NOTE:
ALTERNATE PATCH - TO BE USED AT OWNER'S DISCRETION.

CUSTOMER PARKING ONLY
SIGN. CHARGING SPACE
SHALL BE UNRESTRICTED



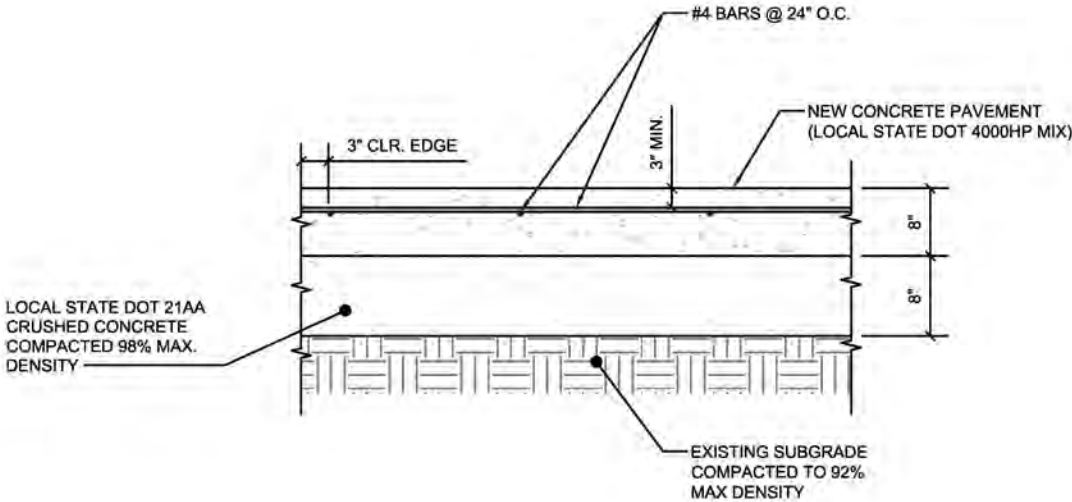
PARKING SPACE PAVEMENT MARKINGS

SCALE: NONE

3

NOTE:
ALL NEW PAVEMENT MARKINGS TO BE GREEN OR AS APPROVED BY OWNER.

NOTE:
ONLY FOR USE ON CONCRETE AND ASPHALT PAVEMENT WHEN APPLICABLE.



CONCRETE PAVEMENT DETAIL

SCALE: NONE

4



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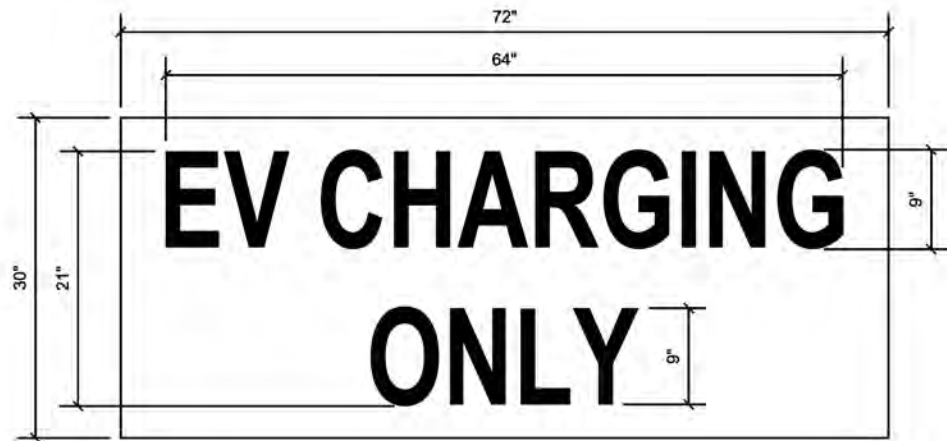
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C-8
SITE DETAILS

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NOTE:
CHARGE-X USA TO PROVIDE SIGNS
IN CHARGER SHIPPING CRATES.

EV STENCIL DETAIL

SCALE: NONE

1

NOT USED

SCALE: NONE

2

NOTE:
FOOT CANDLE LIMIT FOR GAS STATION/
CONVENIENCE STORE APRON = 1.0



8000/6000/4000 Lumens Adjustable White Commercial
Wall Pack Light

Features

- Adjustable brightness and color temperature
- IP65 wet location rated, suitable for use in open-air decks and patios
- Dusk to dawn turns on automatically at night and off during the day, for added convenience
- **Special Features:** Dusk to Dawn, Switch Activated, All Weather Resistant



Specifications

Item Number	Item Length (In)	Item Width (In)	Item Height (In)
S13CWPK5CCTLSBZ	7.5	14.4	9.6
Bulb Finish	Fixture Type	Fixture Finish	Fixture Lens Material
Bronze	Security	Aluminum	Clear
Fixture Color	Technology	Brightness (LUMENS)	Color Accuracy (CRI)
Bronze	LED - SMD	8000	80
Color Temperature (CCT)	Life Hours	Life Years	Voltage (V)
3000 3500 4000 5000 6500	50000	45.7	120-277
Energy Used (Wattage)	Battery Operated	Pack Quantity	Bulbs Included
86	No	1	Yes
Smart	Portable	Dimmable	Hardwire
No	No	0-10	Yes
Enclosed Fixture Rated	Safety Location	CEC Compliant	
No	Wet	Not Regulated	

Felit Electric Company | 4901 Gregg Road | Pico Rivera, CA 90660 | felit.com

SITE LIGHTING DETAIL

SCALE: NONE

3



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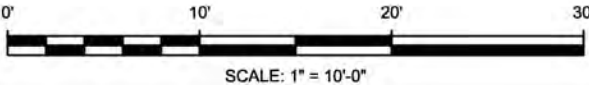
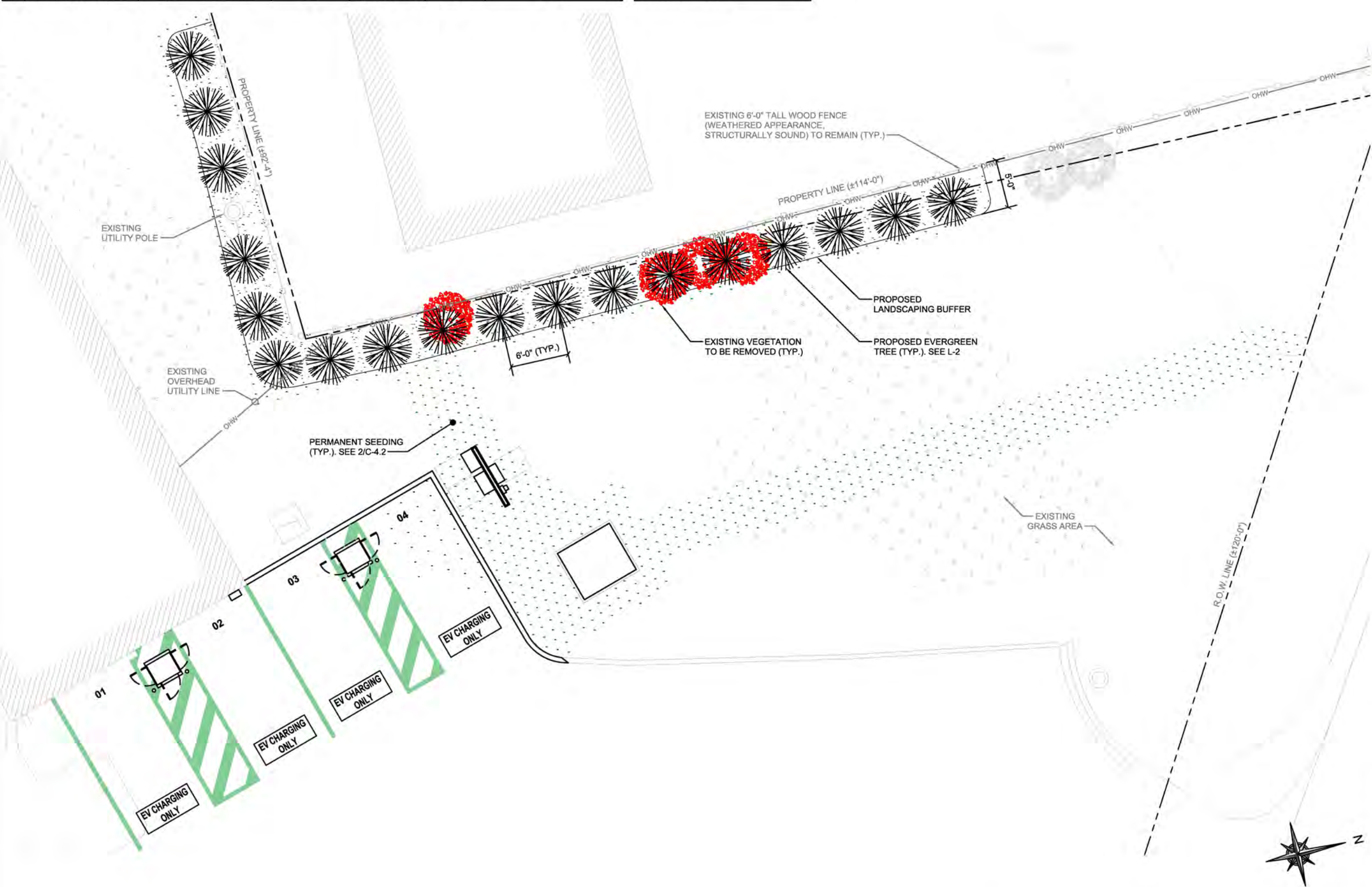


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JOB: T2600207

C-9
SITE DETAILS

LANDSCAPE CHART						
QTY.	COMMON NAME	SCIENTIFIC NAME	HT. AT INSTALL	SPACING	ROOTBALL	OVERALL PROJECTED HEIGHT
18	MISSION ARBORVITAE	thuja occidentalis 'mission'	6'-0"	6'-0" O.C. MAX	B/B	10'-0"

NOTE:
LAND OWNER WILL BE RESPONSIBLE
FOR MAINTAINING AND WATERING ALL
LANDSCAPING ON SITE.



LANDSCAPING PLAN

SCALE: 1" = 10'-0"

1

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L-1
LANDSCAPING PLAN

ALL PLACEMENT OF LANDSCAPING SHALL MEET THE FOLLOWING CONDITIONS:

1. ALL PLANT MATERIAL SHALL BE PLANTED IN A MANNER WHICH IS NOT TO INTERFERE WITH OVERHEAD WIRES OR BE INTRUSIVE TO UTILITIES OR PAVEMENT.
2. NO TREES OR OTHER LANDSCAPING SHALL BE LOCATED CLOSER THAN 10 FEET TO A FIRE HYDRANT OR OTHER ABOVE GROUND UTILITIES.
3. NO LANDSCAPING SHALL INTERFERE WITH SITE REQUIREMENTS FOR SAFE INGRESS AND EGRESS.

INSTALLATION STANDARDS:

1. PLANT MATERIAL SHALL CONFORM WITH THE CURRENT AMERICAN STANDARDS FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSEYMEN FOR THAT TYPE OF TREE OR SHRUB AT THE TIME OF INSTALLATION.
2. ALL TREES SHALL BE GROWN IN A NURSERY LOCATED IN THE STATE OF MICHIGAN.
3. ALL PLANT MATERIAL SHALL BE INSTALLED FREE OF DISEASE AND IN A MANNER THAT ENSURES THE AVAILABILITY OF SUFFICIENT SOIL AND WATER TO SUSTAIN HEALTHY GROWTH.
4. ALL TAGS, WIRES, PLASTIC TIES AND ROPE SHALL BE CUT FROM EACH TREE TO PREVENT GIRDLING OF THE TREE. THE BURLAP SHALL BE PULLED BACK FROM THE UPPER THIRD OF THE ROOTBALL. IF A PLASTIC 'BURLAP' IS USED, IT SHALL BE REMOVED IN ITS ENTIRETY FROM THE ROOTBALL.
5. ALL PLANT MATERIAL SHALL BE PLANTED WITH A MINIMUM OF DEPTH OF THREE (3) INCHES OF MULCHED MATERIAL AND A DIAMETER OF THREE (3) FEET AROUND THE BASE OF THE TREE.
6. TREES SHALL BE STAKED WITH POSTS AND NOT STAKES IN AREAS OF HIGH WIND FOR ONE TO THREE YEARS TO ALLOW THE GROWTH OF PROPOSED ROOTS TO STABILIZE. ALL ROPES SHALL BE COVERED TO PREVENT CUTTING INTO THE BARK.
7. ANY EXCESS SOIL, CLAY, OR CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE PLANTING SITE, PRIOR TO PLANTING OF INDIVIDUAL TREES AT FINAL GRADE.
8. THE JURISDICTION, AT ITS DISCRETION, HAS THE RIGHT TO RETAIN A PROFESSIONAL LANDSCAPE ARCHITECT OR ARBORIST TO REVIEW SUBMITTED LANDSCAPE PLAN AND THE PROFESSIONAL LANDSCAPE ARCHITECT OR ARBORIST WILL SUBMIT A WRITTEN REPORT TO THE PLANNING AND ZONING COMMISSION. ALL EXPENSES INCURRED BY THE JURISDICTION FOR THE USE OF THE LANDSCAPE ARCHITECT OR ARBORIST SHALL BE REIMBURSED BY THE DEVELOPER.

PLANTING SEASONS:

1. PLANTS MUST BE PLANTED DURING THE FOLLOWING DATES: APRIL 1ST TO MAY 15TH AND SEPTEMBER 1ST TO OCTOBER 1ST.
2. THE PLANTING PERIODS INDICATED MAY BE EXTENDED DUE TO WEATHER CONDITIONS OR OTHER FACTORS, WHICH MUST BE APPROVED BY THE LANDSCAPE ARCHITECT/ENGINEER.
3. THE CONTRACTOR WILL BE RELIEVED FOR HIS GUARANTEE RESPONSIBILITY SHOULD THE OWNER REQUIRE PLANT MATERIAL INSTALLATIONS TO BE COMPLETED DURING OTHER TIMES THAN THE PLANTING PERIODS INDICATED.

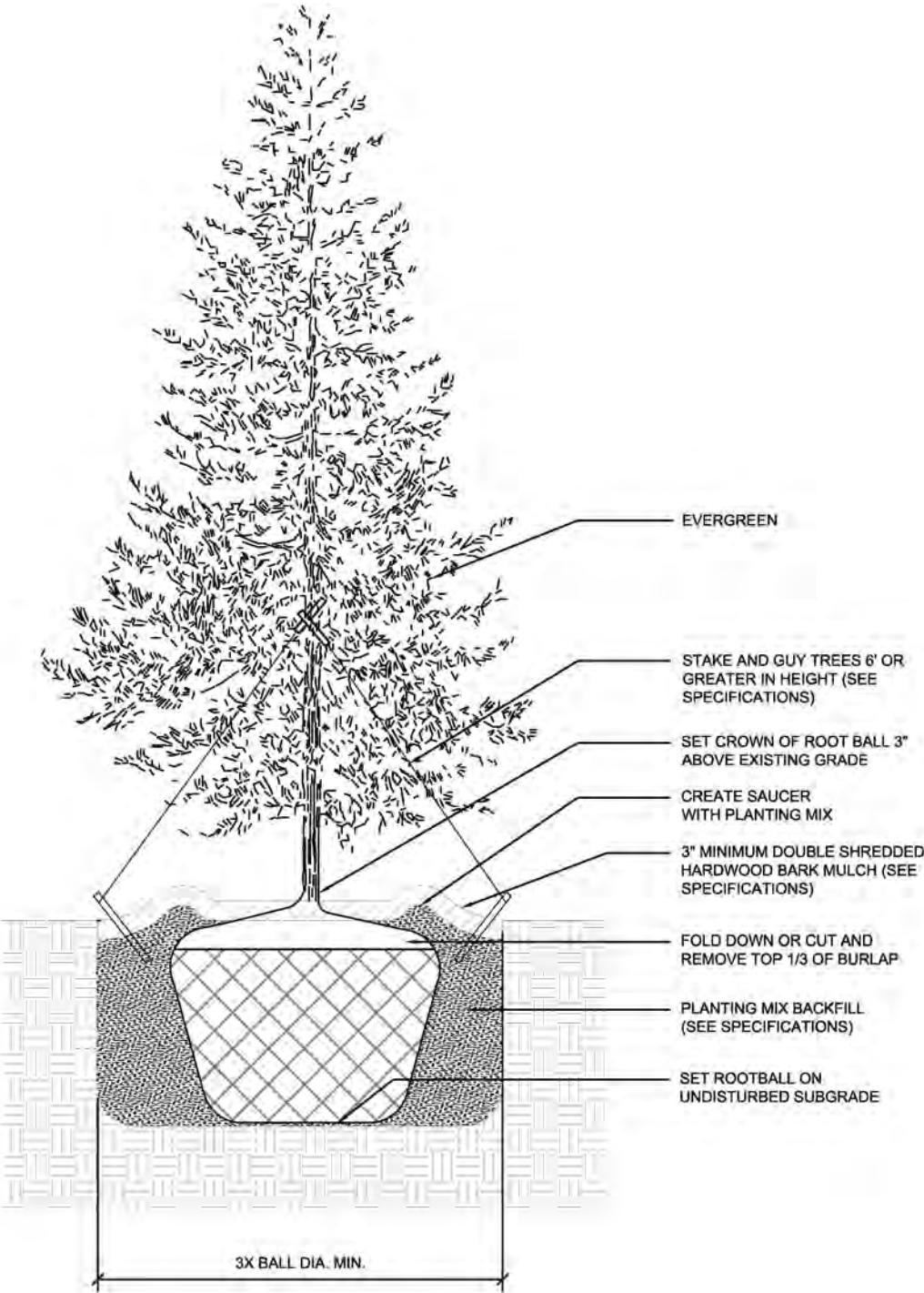
PLANTING:

1. ALL SHADE TREES, ORNAMENTAL TREES, EVERGREEN TREES AND SHRUBS SHALL BE PLANTED IN HOLES EXCAVATED AT LEAST 3x THE WIDTH OF THE DIAMETER OF THE BALL OR CONTAINER AND DEEP ENOUGH SO THAT THE TOP OF THE BALL OR SOIL IN THE CONTAINER IS AT OR JUST ABOVE EXISTING GRADE.
2. ALL TWINE OR ROPE MUST BE CUT AND REMOVED AND THE BURLAP FOLDED AWAY FROM THE TOP OF THE BALL. THE EXCAVATION MUST BE BACKFILLED WITH THE PLANTING MIXTURE AND WATERED. ANY SETTLEMENT WILL BE FILLED WITH PLANTING MIXTURE.
3. A 4" DEEP SAUCER, SIMILAR TO THE DIAMETER OF THE PLANTING HOLE SHALL BE CREATED USING PLANTING MIX.
4. PLANTING MIX TO CONSIST OF 1/3 TOP SOIL, 1/3 SOIL FROM EXCAVATION, AND 1/3 MUSHROOM COMPOST (OR 1/3 PEAT MOSS).

CLEAN UP:

1. ALL DEBRIS GENERATED DURING THE INSTALLATION OF PLANT MATERIALS MUST BE REMOVED FROM THE SITE.
2. ALL PAVEMENTS AND WALKS MUST BE SWEEPED AFTER EACH DAYS WORK. UPON COMPLETION OF THE WORK, ALL PAVEMENTS MUST BE WASHED TO REMOVE ALL MUD OR DIRT.

NOTE:
ALL MATERIALS SURROUNDING THE TREE
ROOT BALL, INCLUDING WIRING, ARE TO BE
REMOVED PRIOR TO PLANTING OF TREES.



NOTES

SCALE: NONE

1

LANDSCAPING DETAIL

SCALE: NONE

2



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L-2
LANDSCAPING DETAIL &
NOTES

LEGEND

 TRENCHING ROUTE

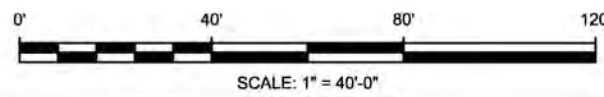
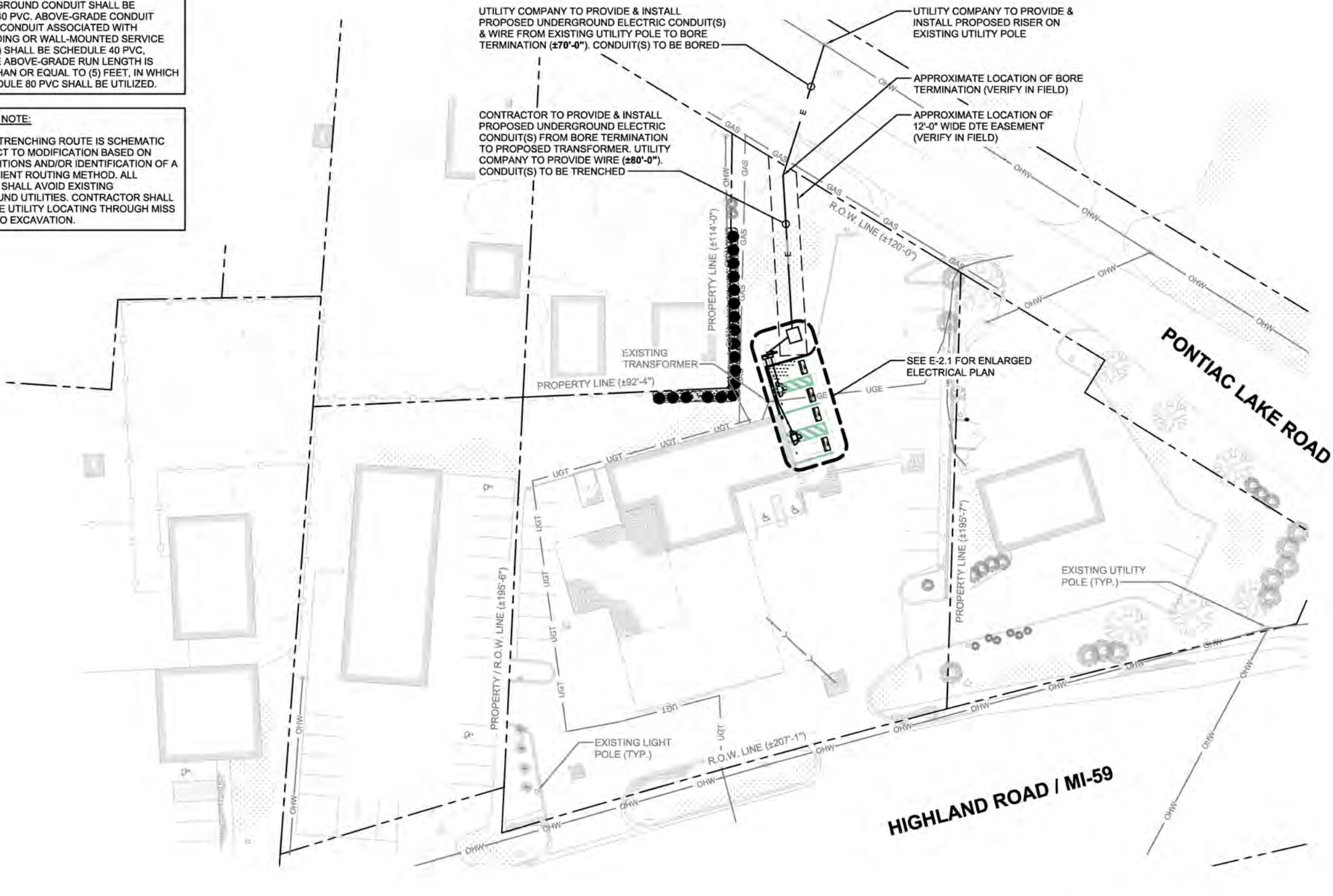
PENDING UTILITY COORDINATION

CONDUIT NOTE:

ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC. ABOVE-GRADE CONDUIT (INCLUDING CONDUIT ASSOCIATED WITH FREE-STANDING OR WALL-MOUNTED SERVICE EQUIPMENT) SHALL BE SCHEDULE 40 PVC, UNLESS THE ABOVE-GRADE RUN LENGTH IS GREATER THAN OR EQUAL TO (5) FEET, IN WHICH CASE SCHEDULE 80 PVC SHALL BE UTILIZED.

TRENCHING NOTE:

PROPOSED TRENCHING ROUTE IS SCHEMATIC AND SUBJECT TO MODIFICATION BASED ON FIELD CONDITIONS AND/OR IDENTIFICATION OF A MORE EFFICIENT ROUTING METHOD. ALL TRENCHING SHALL AVOID EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL COORDINATE UTILITY LOCATING THROUGH MISS DIG PRIOR TO EXCAVATION.



OVERALL ELECTRICAL PLAN

SCALE: 1" = 40'-0"

1

LEGEND

— GAS — GAS LINE

— OHW — OVERHEAD UTILITY LINE

— S — STORM SEWER LINE

— UGE — UNDERGROUND ELECTRIC LINE

— UGT — UNDERGROUND TELCO LINE





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E-2
OVERALL
ELECTRICAL PLAN

 TRENCHING ROUTE

PENDING UTILITY COORDINATION

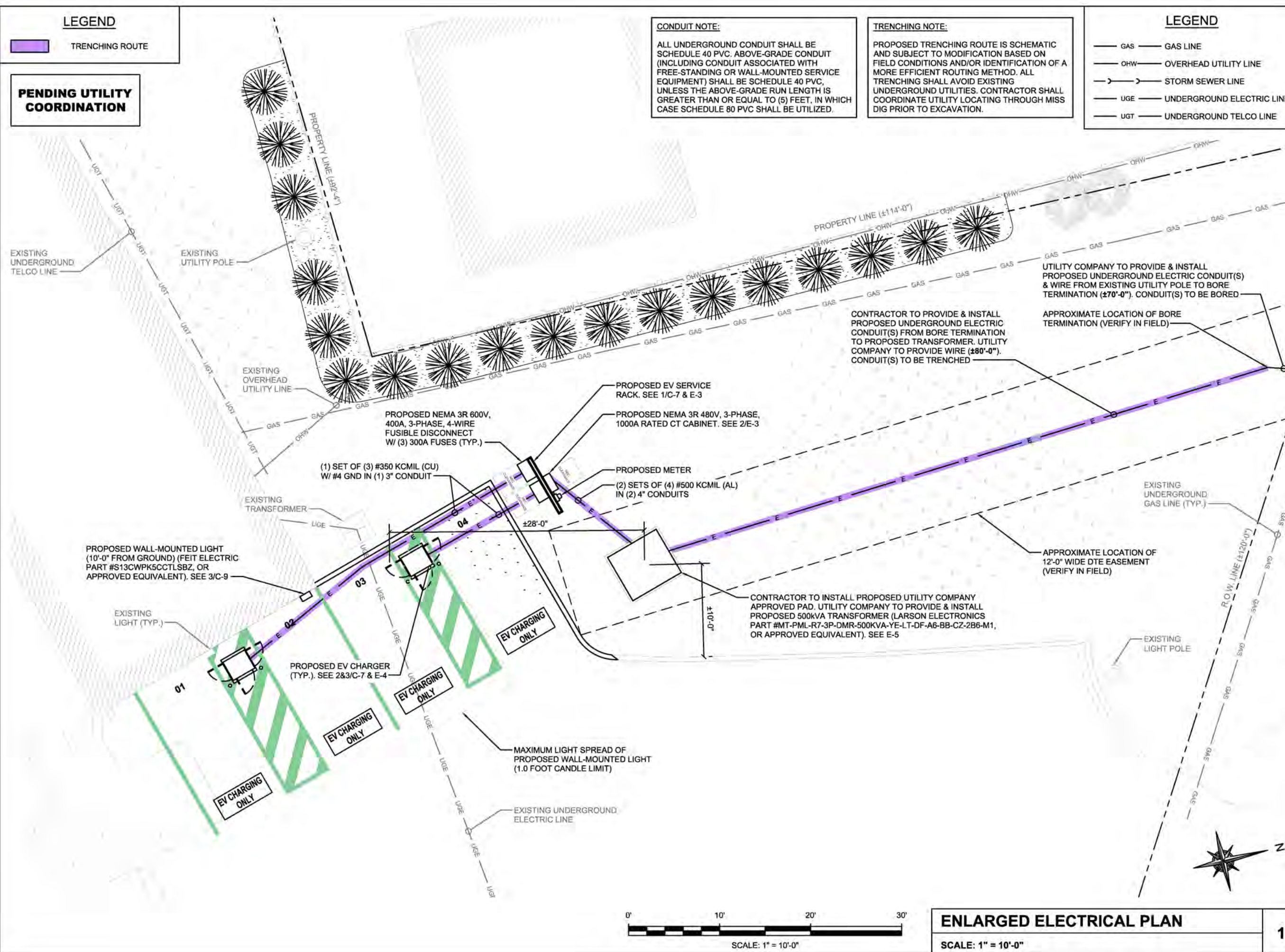
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TRENCHING NOTE:

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AND SUBJECT TO MODIFICATION BASED ON
FIELD CONDITIONS AND/OR IDENTIFICATION OF A
MORE EFFICIENT ROUTING METHOD. ALL
TRENCHING SHALL AVOID EXISTING
UNDERGROUND UTILITIES. CONTRACTOR SHALL
COORDINATE UTILITY LOCATING THROUGH MISS
DIG PRIOR TO EXCAVATION.

 GAS GAS LINE
 OHW OVERHEAD UTILITY LINE
 SWS STORM SEWER LINE
 UGE UNDERGROUND ELECTRIC LINE
 UGT UNDERGROUND TELCO LINE



ENLARGED ELECTRICAL PLAN

SCALE: 1" = 10'-0"

15

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E-2.1
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ELECTRICAL PLAN

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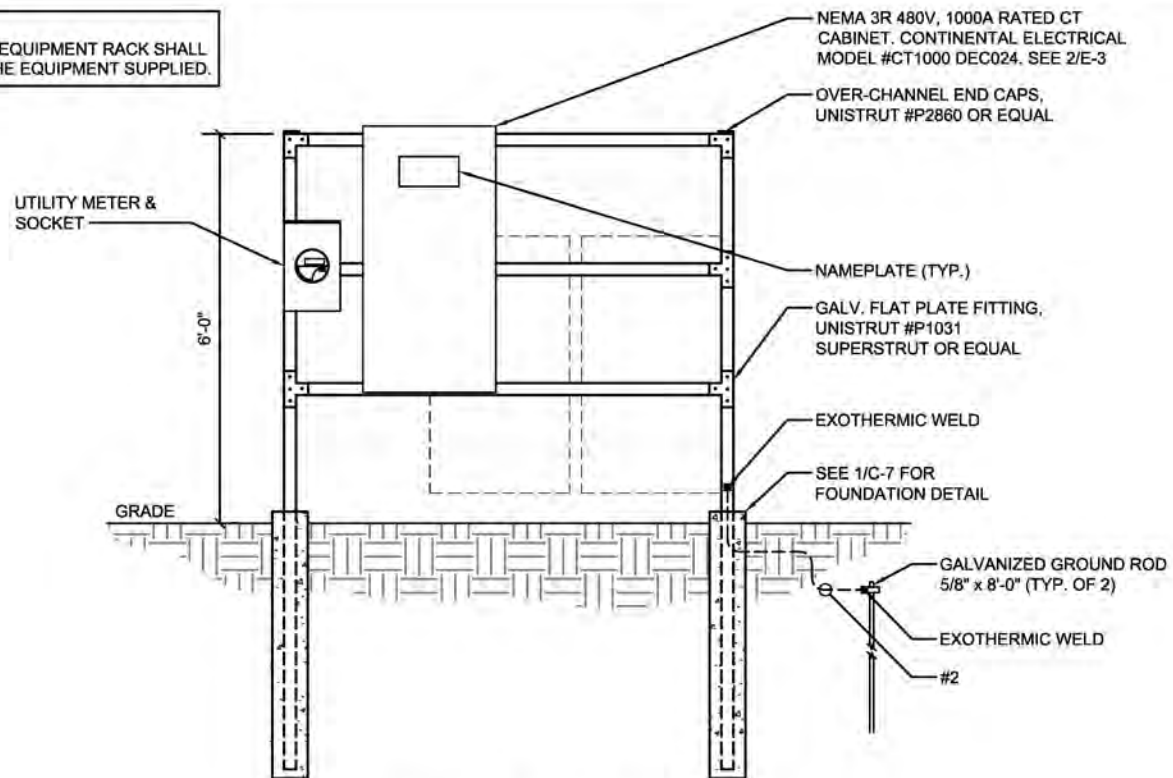
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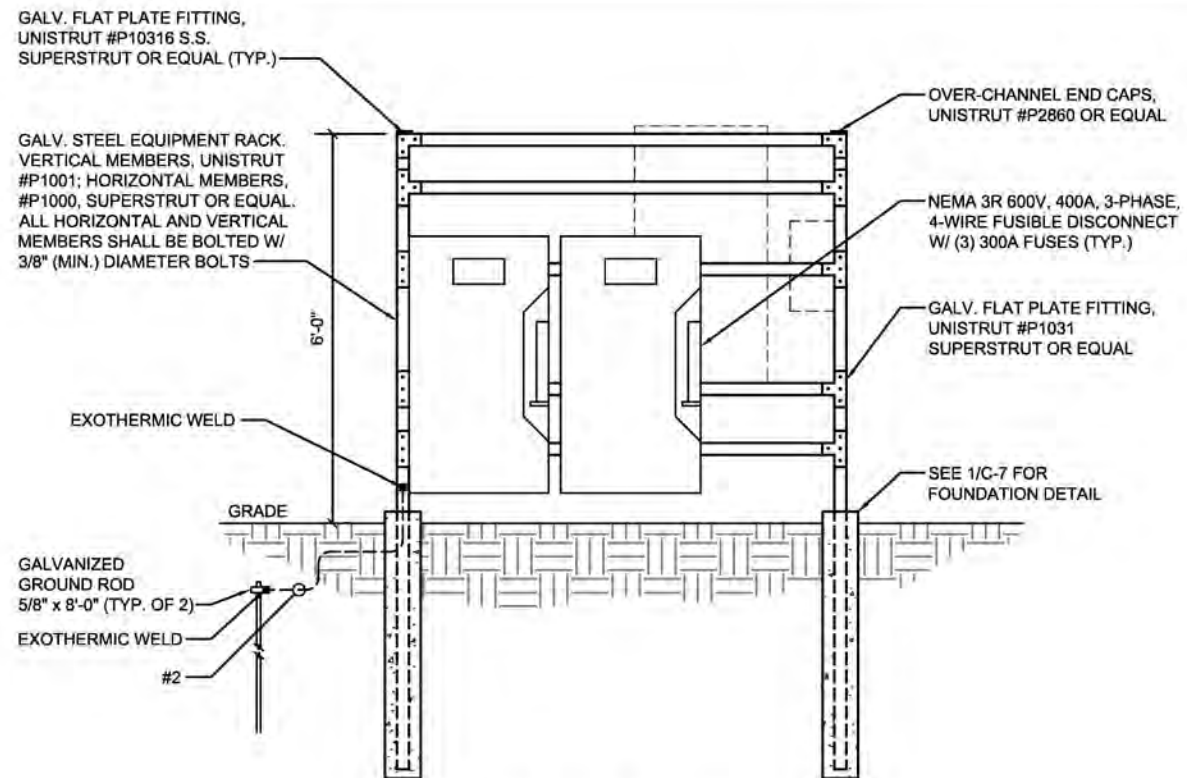


Center Drive, Suite B411
Framan Estates, IL 60192
224.293.6333
wfgroupapec.com

NOTE:
EXACT WIDTH OF THE EQUIPMENT RACK SHALL
BE DETERMINED BY THE EQUIPMENT SUPPLIED.



FRONT VIEW



REAR VIEW

EQUIPMENT RACK DETAIL

SCALE: NONE

1

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MODEL #CT1000 DECO24
CURRENT TRANSFORMER CABINET

RATINGS:
1000 AMPS
600 VAC
42K AIC SYM

STANDARD DIMENSIONS
24" X 48" X 10"



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- LIFT-OFF DOOR
- AVAILABLE WITH OUR U.L. LISTED BUS RUISER
- PADLOCK & SEAL PROVISIONS
- EXPANDED 36" WIDE UNIT AVAILABLE - (SPECIFY EXPANDED LEFT OR RIGHT SIDE GUTTER)

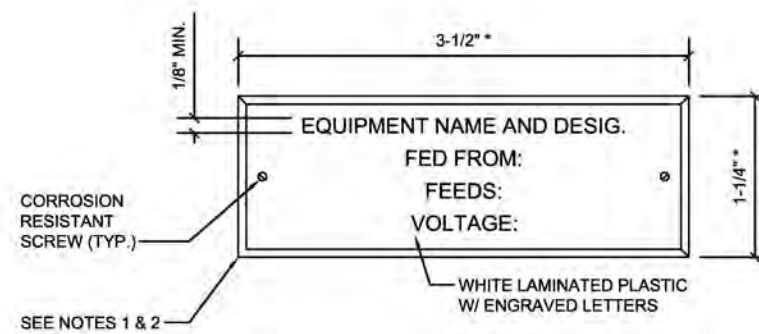


JANUARY 2000

CT CABINET SPECIFICATIONS

SCALE: NONE

2



* SMALLER SIZES MAY BE USED AS INDICATED; SEE SPECIFICATIONS

NOTES:

1. NAMEPLATES SHALL BE PROVIDED FOR ALL NEW BRANCH CIRCUITS IN NEW DISTRIBUTION PANELS AND RECEPTACLE PANELS.
2. NAMEPLATES SHALL BE PROVIDED FOR NEW BRANCH CIRCUITS AND/OR MODIFICATIONS TO EXISTING SWITCHGEARS, DISTRIBUTION PANELS, AND RECEPTACLE PANELS.

NAMEPLATE DETAIL

SCALE: NONE

3



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EXPIRES: 03/02/28 SIGNED: 07/16/26

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A	FOR CLIENT REVIEW	03/18/26	JTB
0	REVISION	03/23/26	JTB
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2	REVISION	06/12/26	JTB
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E-3

ELECTRICAL DETAILS

AUTEL

MAXICHARGER™ DC FAST 60KW-240KW WITH 20KW INCREMENTS



- FLEXIBLE POWER MODULE DESIGN
- MULTIPLE CABLE & CHARGING CONNECTOR OPTIONS
- 27-INCH TOUCHSCREEN DISPLAY
- SMART CLOUD PORTAL WITH REMOTE DIAGNOSTICS
- DYNAMIC LOAD BALANCING
- ISO 15118 PLUG & CHARGE

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AUTEL

SPECIFICATIONS MAXICHARGER DC FAST 60KW-240KW WITH 20KW INCREMENTS

PARAMETERS	DCFC 60KW-120KW	DCFC 140KW-240KW
MAX. INPUT AC CURRENT	100A	100A
MAX. INPUT AC VOLTAGE	277VAC	277VAC
MAX. OUTPUT DC CURRENT	1000A	1000A
MAX. OUTPUT DC VOLTAGE	500VDC	500VDC
MAX. CHARGING POWER	60KW	240KW
MAX. CHARGING CURRENT	1000A	1000A
MAX. CHARGING VOLTAGE	500VDC	500VDC
MAX. CHARGING TIME	100min	100min
MAX. CHARGING DISTANCE	100m	100m
MAX. CHARGING TEMPERATURE	0°C to 40°C	0°C to 40°C
MAX. CHARGING HUMIDITY	10% to 90%	10% to 90%
MAX. CHARGING ALTITUDE	0m to 3000m	0m to 3000m
MAX. CHARGING SPEED	100km/h	100km/h
MAX. CHARGING RANGE	100km	100km
MAX. CHARGING TIME	100min	100min
MAX. CHARGING DISTANCE	100m	100m
MAX. CHARGING TEMPERATURE	0°C to 40°C	0°C to 40°C
MAX. CHARGING HUMIDITY	10% to 90%	10% to 90%
MAX. CHARGING ALTITUDE	0m to 3000m	0m to 3000m
MAX. CHARGING SPEED	100km/h	100km/h
MAX. CHARGING RANGE	100km	100km

FC

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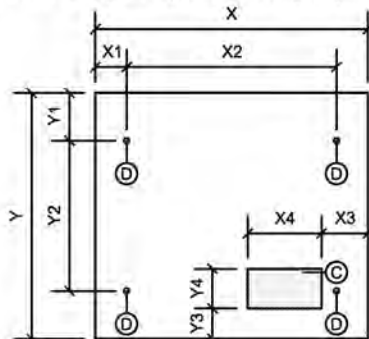
CHARGER SPECIFICATIONS

SCALE: NONE

1

PARAMETER	SPECIFICATIONS			
	MAXICHARGER DC FAST 120		MAXICHARGER DC FAST 160	
	in.	mm	in.	mm
X	32.3	820	32.3	820
Y	25.2	640	29.1	740
X1	3.7	95	3.7	95
X2	24.8	630	24.8	630
X3	5.5	140	5.5	140
X4	8.7	220	8.7	220
Y1	3.7	94.3	5.7	144.3
Y2	17.7	450	17.7	450
Y3	5.2	131	3.6	91.5
Y4	4.7	120	4.7	120

- PLACE THE DRILLING TEMPLATE ON THE CONCRETE SURFACE, ALIGNING THE MARKED AREA (C). MARK THE FOUR MOUNTING HOLES (D) AND REMOVE THE DRILLING TEMPLATE. DRILL HOLES WITH DEPTH OVER 4.3 INCHES (110 mm) AND 4/5 INCH (20 mm) IN DIAMETER. CLEAN ANY DEBRIS.



CHARGER BASE

SCALE: NONE

2

4.1.1 LOCATION REQUIREMENTS

- THE MAXICHARGER REQUIRES AN INSTALLATION SPACE OF 95.3 x 80.8 INCHES (2420 x 1950 mm, FOR MAXICHARGER DF 120) OR 103.2 x 80.7 INCHES (2620 x 2050 mm, FOR MAXICHARGER DF 160) IN ORDER TO ENSURE THE NORMAL OPERATION AND AIRFLOW AROUND THE MAXICHARGER. THE SPACE IS CALCULATED AS FOLLOWS:

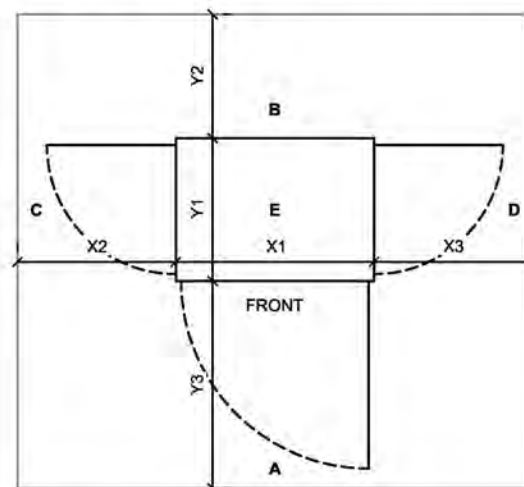


FIGURE 4-1 LOCATION REQUIREMENTS

- A. FRONT SIDE OF THE MAXICHARGER
- B. REAR SIDE OF THE MAXICHARGER
- C. LEFT SIDE OF THE MAXICHARGER
- D. RIGHT SIDE OF THE MAXICHARGER
- E. CABINET

TABLE 4-1 SPACE REQUIREMENTS FOR MAXICHARGER DF 120

PARAMETER	SPECIFICATION	
	in.	mm
X1	32.3	820
X2	31.5	800
X3	31.5	800
Y1	23.6	600
Y2	19.7	500
Y3	33.5	850

TABLE 4-2 SPACE REQUIREMENTS FOR MAXICHARGER DF 160

PARAMETER	SPECIFICATION	
	in.	mm
X1	32.3	820
X2	35.4	900
X3	35.4	900
Y1	27.6	700
Y2	19.7	500
Y3	33.5	850

CHARGER CLEARANCES

SCALE: NONE

3

NOTE:
CHARGER BASES ARE THE SAME
FOR 160KW THRU 240KW CHARGERS.

CHARGE-X

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E-4
ELECTRICAL EQUIPMENT
SPECIFICATIONS

