



**EV INFRASTRUCTURE PLAN**

151 TAYLOR STREET  
LITTLETON, MA 01460

LEGEND	
ITEM	DESCRIPTION
— — —	PROPERTY LINE
— — —	SETBACK LINE
— — —	BUFFER LINE
— — —	EASEMENT LINE
— — —	NHESP BOUNDARY LINE
— — —	FEMA FLOOD BOUNDARY LINE
— — —	WETLAND BOUNDARY LINE
— — —	EXISTING UNDERGROUND POWER CONDUIT LINE
— — —	EXISTING UNDERGROUND ELECTRIC LINE
— — —	W
— — —	EXISTING WATER LINE
— — —	SO
— — —	EXISTING STORM & DRAINAGE LINE
— — —	SS
— — —	EXISTING SANITARY SEWER LINE
— — —	EXISTING SPEED BUMP
— — —	EXISTING LIGHT POLE
— — —	EXISTING BOLLARD
X — —	EXISTING FENCE LINE
— — —	EXISTING FIRE HYDRANT
— — —	EXISTING GUARD RAIL
— — —	EXISTING SIGN
— — —	EXISTING STRUCTURE
— — —	EXISTING TREE
— — —	EXISTING TREE LINE
— — —	EXISTING L2 ELECTRIC VEHICLE CHARGING STATION
— — —	L2 LIMITS OF DISTURBANCE = +18.400 SF (±0.42 AC)
— — —	LOW LIMITS OF WORK = +3,150 SF (±0.72 AC)
— — —	EXISTING PARKING STRIPING TO BE REMOVED
— — —	PERVIOUS AREA REMOVAL
— — —	FULL-DEPTH CONCRETE PAVEMENT / CURBING REMOVAL
— — —	FULL-DEPTH ASPHALT PAVEMENT REMOVAL
— — —	ASPHALT / CONCRETE PAVEMENT CUT LINE
— — —	STORMWATER FLOW DIRECTION ARROW
— — —	SF
— — —	SILT FENCE
— — —	EE EROSION EEL / FILTER SOCK
— — —	IP INLET PROTECTION
— — —	TP TREE PROTECTION
— — —	CW CONCRETE WASHOUT AREA
— — —	CONDUIT AND CONDUCTOR FEEDER CALLOUT
— — —	EV VAN STALL PARKING COUNT
— — —	POWER CONDUIT - UNDERGROUND
— — —	EXISTING UTILITY MANHOLE
— — —	UTILITY SWITCHING CABINET - PAD MOUNTED
— — —	UTILITY METER
— — —	UTILITY TRANSFORMER - PAD MOUNTED
— — —	ELECTRICAL MANHOLE
— — —	480V LV SWITCHBOARD - PAD MOUNTED
— — —	LV TRANSFORMER - PAD MOUNTED
— — —	LV PANEL - UNISTRUT MOUNTED (U.O.N.)
— — —	NEMA 3R JUNCTION BOX
— — —	L3 DC FAST CHARGING STATION (DGF)
— — —	L2 EVCS - POST-MOUNTED W/ JUNCTION BOX
— — —	EMBEDDED BOLLARD
— — —	POST INSTALLED BOLLARD
— — —	ENVIRONMENTAL SHEET NUMBER
— — —	PARKING STRIPING (SEE PLANS FOR REVISED PARKING LAYOUT)
— — —	REGRADE & RESTORE CONCRETE CURBING
— — —	CONCRETE PAD / REGRADE & RESTORE CONCRETE PAVEMENT
— — —	REGRADE & RESTORE ASPHALT PAVEMENT
— — —	PS REGRADE AND RESTORE PERVIOUS / LANDSCAPE AREA


PROJECT NOTES	
1. THIS PROJECT PROPOSES LEVEL 2 CHARGERS AND DC FAST CHARGERS (LEVEL 3) AS SHOWN IN THE EV CHARGING QUANTITIES BY TYPE TABLE ABOVE. THESE CHARGERS ARE PROPOSED TO SERVE A PRIVATE FLEET.	2. EV CHARGING MANUFACTURER WILL BE NHTSA, SIEMENS, PHIRONG, OR OWNER-APPROVED ALTERNATIVE.
GEOTECHNICAL NOTE	
THESE DRAWINGS WERE PRODUCED WITHOUT THE BENEFIT OF A CURRENT GEOTECHNICAL REPORT. CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS TO BE IN CONFORMANCE WITH THE CURRENT GEOTECHNICAL REPORT AND NOTIFY ENGINEER AND PROJECT TEAM OF ANY DISCREPANCIES PRIOR TO THE SCHEDULING OF ANY SITE DISTURBANCE ACTIVITIES. CONTRACTOR SHALL COORDINATE UPDATES TO THE GEOTECHNICAL REPORT AS REQUIRED OR SHALL EMPLOY THE GEOTECHNICAL RECOMMENDATIONS OF THE PREVIOUSLY APPROVED PLAN.	
SETBACK NOTE	
CONTRACTOR TO VERIFY THAT LOCATIONS OF ALL PROPOSED EV ELECTRICAL EQUIPMENT AND INFRASTRUCTURE ARE IN COMPLIANCE WITH ALL LOCAL CODES, SETBACKS, AND BUFFERS.	
DEMOLITION NOTES	
1. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE INFORMATION PROVIDED BY AMAZON AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. IN THE EVENT OF ANY DISCREPANCY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR MARKING ON SITE LOCATIONS OF EXISTING UTILITIES.	
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED AN AERIAL UTILITY LINES OR CONDUITS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 72 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.	
3. ALL EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME THE DRAWINGS WERE PREPARED. THE CONTRACTOR SHALL NOT ASSUME THAT THE INFORMATION PROVIDED IS ACCURATE. IT IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE HE COMMENCES ANY WORK. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR MARKING ON SITE LOCATIONS OF ALL DAMAGE DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE CONTRACTOR'S WORK. THE CONTRACTOR SHALL NOT BE HELD LIABLE FOR ANY DAMAGE SUSTAINED OR COST INCURRED DUE TO SHORE, BRACE, SWING OR RELOCATE A UTILITY. THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED BY THE CONTRACTOR AND THOSE PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.	
4. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, AND EROSION CONTROL PLANS AND INSPECTION REPORTS (SWPPP).	
5. ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE INFORMATION PROVIDED BY AMAZON AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR MARKING ON SITE LOCATIONS OF EXISTING UTILITIES PRIOR TO COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND CONTRACTOR TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WILL NOT CONSIDER PRIOR TO CONSIDERATION OF THE AFFECTED ITEM.	
6. QUANTITIES SHOWN HERE ARE APPROXIMATE AND ARE PROVIDED FOR CONVENIENCE ONLY AND NOT FOR BID PURPOSES. CONTRACTOR SHALL VERIFY QUANTITIES NECESSARY TO DEMO FACILITIES SHOWN.	
PAVING NOTES	
1. PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA STANDARDS.	
2. ALL ACCESSIBLE RAMPS, CURB RAMPS, STREETS, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS, LATEST EDITION. CONCRETE PAVEMENTS SHALL BE SMOOTH, DENSE, AND DURABLE. PARKING STALLS, HANDICAPPED PARKING SYMBOLS, AND MISCELLANEOUS STRIPING WITHIN PARKING LOT AND AROUND BUILDING AS SHOWN ON THE PLANS. ALL PAINT AND PAVEMENT MARKINGS SHALL ADHERE TO ADA OWNER STANDARDS.	
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4. THE CONTRACTOR SHALL NOT USE CONCRETE PAVEMENTS WITH A THICKNESS LESS THAN 4 INCHES.	
5. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA) EXIST AND FROM EVERY DOOR AND ALONG SIDEWALKS. ACCESSIBLE PARKING SPACES AND ACCESS AISLES, AND ACCESSIBLE ROUTES IN NO CASE SHALL EXCEED 90 FEET. IN NO CASE SHALL THE SLOPE OF ANY ACCESSIBLE PAVEMENT EXCEED 1:12. ACCESSIBLE AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.	
6. DURING CONSTRUCTION, THE CONTRACTOR SHALL REMOVE AND REPLACE OR A MINIMUM 2' WIDE SECTION FOR CONSTRUCTION AND PLACEMENT OF CONCRETE FORMS WHERE ADJACENT TO NEW CONCRETE. CONTRACTOR SHALL MATCH EXISTING ASPHALT SECTION.	
DISTURBANCE NOTE	
FOR THE PURPOSE OF THIS PLAN, THE LIMITS OF WORK (LOW) REFER TO THE APPROXIMATE BOUNDARY WITHIN WHICH THE INSTALLATION OF THE EV INFRASTRUCTURE WILL OCCUR. THE LIMITS OF DISTURBANCE (L2) IS THE BOUNDARY WITHIN WHICH ALL CONSTRUCTION, CLEARING, EXCAVATION, GRADING, AND RELATED ACTIVITIES SHALL OCCUR. THE LOW ENCOMPASSES THE L2Q SHOWN ON THIS PLAN.	
EXISTING UTILITY NOTE	
THE EXISTING UTILITIES SHOWN ON THE PLAN ARE BASED UPON RECORD DRAWINGS PROVIDED BY AMAZON AND ARE ILLUSTRATIVE IN NATURE. THE CONTRACTOR SHALL FIELD DETERMINE THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. REPORT DISCREPANCIES AND POTENTIAL CONFLICTS WITH PROPOSED INFRASTRUCTURE TO ENGINEER PRIOR TO CONSTRUCTION.	

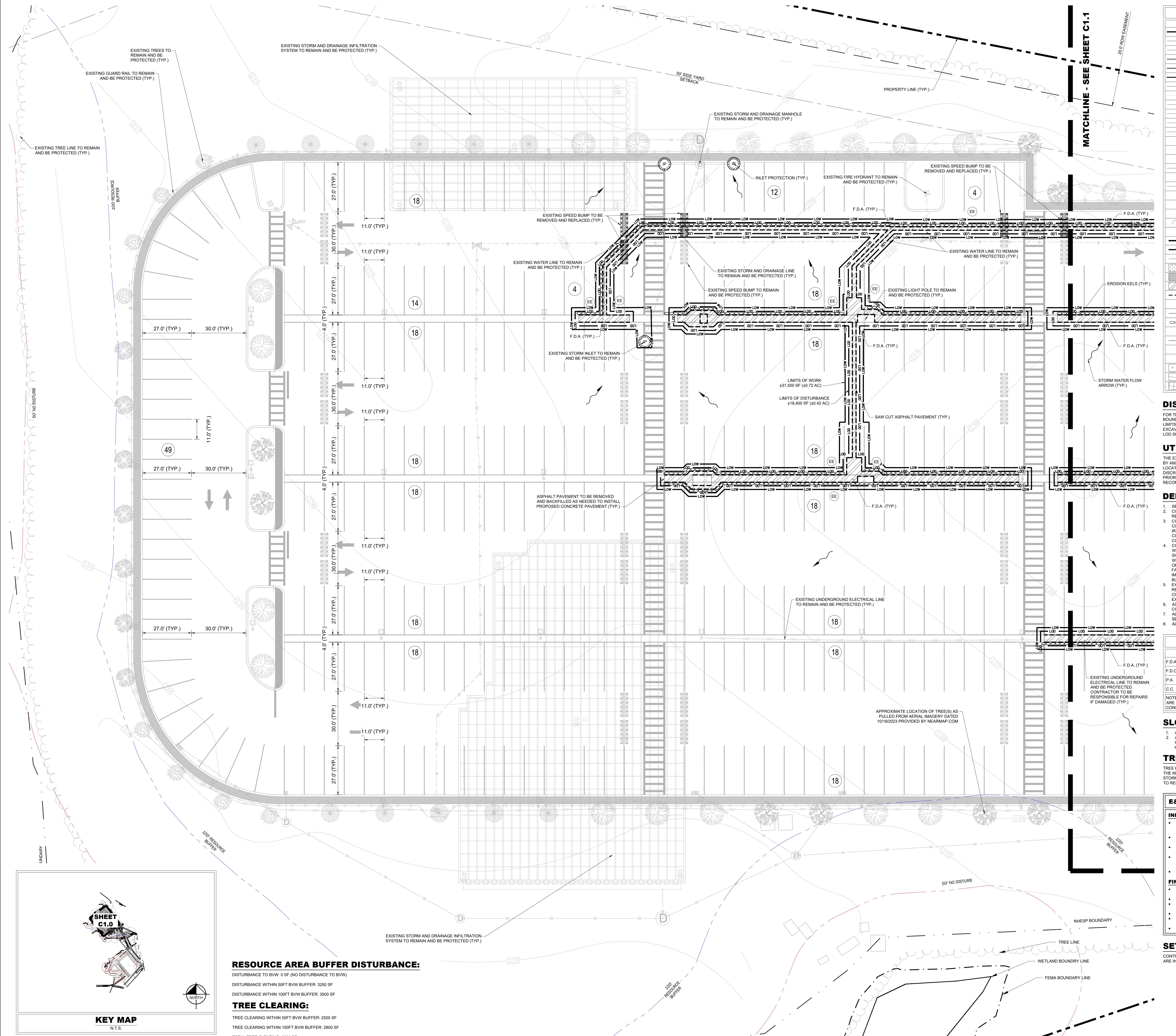
EV PARKING DATA TABLE		
TYPE	REQUESTED QTY.	PROPOSED QTY.
L2 STALLS	151 STALLS	161 STALLS
L3 STALLS	4 STALLS	4 STALLS
NOTE: ALL QUANTITIES REPRESENT THE NUMBER OF L2 & L3 STALLS.		

EV CHARGER QUANTITIES BY TYPE		
CHARGER TYPE	SINGLE CHARGERS	DUAL CHARGERS
L2s	5 EVCS	78 EVCS
L3s	N/A	2 DCFC
NOTE: ALL QUANTITIES REPRESENT THE NUMBER OF SINGLE AND DUAL CHARGERS INSTALLED		

VAN PARKING DATA TABLE	
TOTAL EXISTING VAN STALLS	450 STALLS
TOTAL PROPOSED VAN STALLS	445 STALLS
CHANGE	1 VAN STALL(S) TO BE DEDICATED TO EV INFRASTRUCTURE

ELECTRICAL NOTES	
<b>PART ONE - GENERAL</b>	
1. THE WORK ALL SHALL BE NEW UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE THE WORK SHOWN ON THE DRAWINGS AND SPECIFIED FOR THE INDIVIDUAL SECTIONS OF WORK. THE WORK IS DEFINED AS ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES PROVIDED TO THE CONTRACTOR BY THE CONTRACTOR, ITS SUBCONTRACTORS, AND OTHERS FOR THE PROPER INSTALLATION AND OPERATION OF THE COMPLETE SYSTEMS, WHICH SHALL BE PROVIDED BY THIS CONTRACTOR WHETHER OR NOT SPECIFICALLY INDICATED OR NOTED.	
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PERFORMANCE OF THE PERSONNEL, SUPPLIERS, AND SUB-CONTRACTORS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF ALL WORK AS MAY BE REQUIRED TO ACCOMMODATE OR SUPPORT THE ELECTRICAL WORK. EXAMPLES: PAINTING, STRUCTURAL SUPPORTS, CUTTING AND PATCHING, EXCAVATION AND BACKFILL, CONCRETE PADS, ROOF JACKS, ETC. REQUIRING THIS CONTRACTOR'S END-TO-END SUPPORT. THE CONTRACTOR IS SOLELY RESPONSIBLE TO PERFORM SUCH WORK FOR THE PROPER INSTALLATION AND OPERATION OF COMPLETE ELECTRICAL SYSTEMS.	
3. MINIMUM REQUIREMENTS: THESE SPECIFICATIONS ESTABLISH THE MINIMUM REQUIREMENTS FOR THE WORK AND MATERIALS, PROVIDED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PERFORMANCE OF THE WORK AND MATERIALS AS SPECIFIED IN THESE SPECIFICATIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PERFORMANCE OF THE WORK AND MATERIALS AS SPECIFIED IN THESE SPECIFICATIONS.	
4. GENERAL CONDITIONS: ALL GENERAL CONDITIONS, SPECIAL REQUIREMENTS OR GENERAL REQUIREMENTS OF THE CONSTRUCTION SPECIFICATIONS ARE MADE PART OF THIS SPECIFICATION AND HAVE THE SAME FORCE AND EFFECT AS IF DENVERED.	
5. DEFINITIONS:	
AHJ: AUTHORITY HAVING JURISDICTION	
ASSEMBLY: AN INSTALLATION OR SYSTEM OF MULTIPLE COMPONENTS REQUIRING MULTIPLE CONNECTIONS.	
EQUAL: ACCEPTED BY THE ENGINEER AS EQUAL.	
FFQE: FURNISHINGS, FIXTURES, AND EQUIPMENT - PROVIDED BY OTHERS AT JOBSITE. RECEIVE, PROTECT, STORE, ASSEMBLE, INSTALL AND CONNECT TO PROVIDE MINIMUM OF 6X STRUCTURAL BACKING.	
GENERAL: AUTHORITY HAVING JURISDICTION	
CODES: ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED CODE PER THE AHJ INCLUDING THE NEC, IEC, NFPA, AND LOCAL AND STATE REGULATIONS.	
AMZ STANDARDS: ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST AMAZON SPECIFICATIONS AND STANDARDS.	
PERMITS: PAY ALL FEES AND OBTAIN ALL PERMITS AND INSPECTIONS REQUIRED FOR THE WORK.	
DRAWINGS: DRAWINGS ARE PROVIDED AS IS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE ACCURACY, TYPE, SIZE, ARRANGEMENT, AND LOCATIONS OF MATERIALS AND EQUIPMENT. WORK INCLUDES CERTAIN COMPONENTS, APPURTEMENTS, AND RELATED SPECIALTIES THAT MAY NOT BE PROVIDED. PROVIDE ALL NECESSARY ITEMS TO COMPLETE THE WORK ACCORDING TO INDUSTRY STANDARDS. IT IS THE INTENT OF THE DRAWINGS TO PROVIDE THE DRAWINGS AS REFERENCE FOR THE FINISHED WORK, TESTED, AND READY FOR OPERATION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PERFORMANCE OF THE WORK AND MATERIALS AS SHOWN ON THE DRAWINGS.	
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AMZ STANDARDS: ALL WORK SHALL BE DONE IN ACCORDANCE	





# LEGEND

ITEM	DESCRIPTION
— — — — —	PROPERTY LINE
— — — — —	SETBACK LINE
— — — — —	BUFFER LINE
— — — — —	EASEMENT LINE
— · · — — —	NHESP BOUNDARY LINE
— · — — — —	FEMA FLOOD BOUNDARY LINE
— — — — —	WETLAND BOUNDARY LINE
— — — — —	EXISTING UNDERGROUND POWER CONDUIT LINE
— UGE — — —	EXISTING UNDERGROUND ELECTRIC LINE
— — — — W — —	EXISTING WATER LINE
— SD — — —	EXISTING STORM AND DRAINAGE LINE
— SS — — —	EXISTING SANITARY SEWER LINE
	EXISTING SPEED BUMP
	EXISTING LIGHT POLE
	EXISTING BOLLARD
— X — — X — —	EXISTING FENCE LINE
	EXISTING FIRE HYDRANT
	EXISTING GUARD RAIL
	EXISTING SIGN
	EXISTING STRUCTURE
	EXISTING TREE
	EXISTING TREE LINE
	EXISTING L2 ELECTRIC VEHICLE CHARGING STATION
— LOD — — —	LIMITS OF DISTURBANCE = ±18,400 SF (±0.42 AC)
— LOW — — —	LIMITS OF WORK = ±31,500 SF (±0.72 AC)
— — — — —	EXISTING PARKING STRIPING TO BE REMOVED
	PERVIOUS AREA REMOVAL
	FULL-DEPTH CONCRETE PAVEMENT / CURBING REMOVAL
	FULL-DEPTH ASPHALT PAVEMENT REMOVAL
— — — — —	ASPHALT / CONCRETE PAVEMENT SAW CUT LINE
	STORMWATER FLOW DIRECTION ARROW
— SF — — —	SILT FENCE
	EROSION EEL / FILTER SOCK
	INLET PROTECTION
— TP — — TP — —	TREE PROTECTION
	CONCRETE WASHOUT AREA
	BORING LOCATION INDICATOR
	REGRADE & RESTORE PERVIOUS AREA - BUFFER DISTURBANCE
	REGRADE & RESTORE PERVIOUS AREA - TREE CLEARING
	REGRADE & RESTORE PERVIOUS AREA - BUFFER & TREE CLEARING

**STURBANCE NOTE:**

THE PURPOSE OF THIS PLAN, THE LIMITS OF WORK (LOW) REFER TO THE APPROXIMATE BOUNDARY WITHIN WHICH THE INSTALLATION OF THE EV INFRASTRUCTURE WILL OCCUR. THE LOD (LINE OF DISTURBANCE) IS THE BOUNDARY WITHIN WHICH ALL CONSTRUCTION, CLEARING, EARTHMOVING, GRADING, AND RELATED ACTIVITIES SHALL OCCUR. THE LOW ENCOMPASSES THE PROPERTY OWNED BY THE PROPERTY OWNER SHOWN ON THIS PLAN.

**EXISTING UTILITIES** SHOWN ON THE PLAN ARE BASED UPON RECORD DRAWINGS PROVIDED BY THE CITY AND ARE ILLUSTRATIVE IN NATURE. THE CONTRACTOR SHALL FIELD DETERMINE THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. REPORT DISCREPANCIES AND POTENTIAL CONFLICTS WITH PROPOSED INFRASTRUCTURE TO ENGINEER PRIOR TO CONSTRUCTION. REFER TO DEMOLITION SECTION OF GEOTECH REPORT FOR FURTHER RECOMMENDATIONS.

## **MOLITION NOTES:**

EE ADDITIONAL DEMOLITION NOTES ON SHEET G1.0.

ONTRACTOR SHALL PHASE WORK SO THAT EMPLOYEE ACCESS TO BUILDING ENTRANCES  
EMAIN OPEN AT ALL TIMES.

ONTRACTOR TO LOCATE ALL PRIVATE AND PUBLIC UTILITIES ON SITE WITHIN WORK AREAS.

ONTRACTOR TO TAKE EXTRA CAUTION TO AVOID DAMAGE TO ELECTRICAL, TELEPHONE,  
RIGATION, AND OTHER CONDUITS TYPICALLY FOUND IN THE UPPER FEW FEET OF GROUND.

ONTRACTOR SHALL REPLACE ANY DAMAGED OR DESTROYED UTILITIES AT NO ADDITIONAL  
COST TO THE OWNER.

ONTRACTOR TO REMOVE TREE ROOTS AS NECESSARY TO PERFORM REPAIRS INDICATED.

HEN ROOT CUTTING IS UNAVOIDABLE, A CLEAN SHARP CUT SHALL BE MADE TO AVOID  
REDDING OR SMASHING. ROOT CUTS SHOULD BE MADE BACK TO A LATERAL ROOT.

HENEVER POSSIBLE, TREE ROOTS SHOULD BE CUT BETWEEN LATE FALL AND BUD  
PENING, WHEN ROOT ENERGY SUPPLIES ARE HIGH AND CONDITIONS ARE LEAST  
AVORABLE FOR DISEASE CAUSING AGENTS. EXPOSED ROOTS SHALL BE COVERED  
MEDIATELY TO PREVENT DEHYDRATION. ROOTS SHALL BE COVERED WITH SOIL OR  
URLAP AND KEPT MOIST.

XISTING ASPHALT / CONCRETE PAVEMENT SHALL REQUIRE THE REMOVAL AND  
EPLACEMENT OF A MINIMUM 2' WIDE SECTION FOR CONSTRUCTION AND PLACEMENT OF  
ONCRETE FORMS WHERE ADJACENT TO NEW CONCRETE. CONTRACTOR SHALL MATCH  
XISTING ASPHALT SECTION.

SPHALT PAVEMENT TO BE REMOVED AND BACKFILLED AS NEEDED TO INSTALL PROPOSED  
ONCRETE EQUIPMENT PAD(S) / PAVEMENT WHERE APPLICABLE.

LL OTHER CONCRETE AND ASPHALT REPAIRS SHALL BE COMPLETED PRIOR TO BEGINNING  
EAL COAT OPERATIONS.

LL DIMENSIONS ARE TO THE FACE OF CURB UNLESS NOTED OTHERWISE.

## DEMOLITION QUANTITIES TABLE

ID	DESCRIPTION	QTY.
A.	FULL-DEPTH REMOVAL OF ASPHALT PAVEMENT	±5,700 SF
C.	FULL-DEPTH REMOVAL OF EXISTING CONCRETE PAVEMENT	±30 SF
	REMOVAL OF PERVIOUS AREA	±650 SF
	REMOVAL OF CONCRETE CURBING	±20 LF

E. THE DEMOLITION QUANTITIES SHOWN ARE FOR THE CONVENIENCE OF THE CLIENT AND  
TO BE CONSIDERED APPROXIMATE. ACTUAL QUANTITIES FOR BIDDING AND  
CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR.

## **OPE STABILIZATION NOTE:**

ALL 3:1 OR STEEPER SLOPES TO BE STABILIZED WITHIN 7 DAYS.  
ALL DISTURBED AREAS TO BE LOAMED AND SEEDED WITH "NEW ENGLAND SEMI-SHADE  
GRASS AND FORBS MIX" BY NEW ENGLAND WETLAND PLANTS, 15 PEARL LANE, SOUTH  
HADLEY, MA 01075 OR APPROVED EQUAL.

# **EE PROTECTION NOTE:**

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PROTECTION FENCING IS TO REMAIN IN PLACE UNTIL FINAL INSPECTION AND SIGN-OFF ON  
MASTER BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY BY THE URBAN FORESTER.  
WATER SIGN-OFF AND REMOVAL OF EROSION CONTROL MEASURES IS NOT JUSTIFICATION  
MOVE TREE PROTECTION FENCING.

# **CONSTRUCTION SEQUENCE**

**TIAL E&S**

CONTRACTOR TO INSTALL CONSTRUCTION ENTRANCES, SILT FENCE, TREE PROTECTION FENCING, FIBER ROLLS, AND CONCRETE WASHOUTS ON-SITE PRIOR TO DEMOLITION BEGINNING.

SILT FENCE IS TO BE INSTALLED AROUND ALL BIORETENTION AREAS TO PROTECT FROM SOIL COMPACTION DURING CONSTRUCTION.

AFTER PERIMETER MEASURES ARE INSTALLED, CONTRACTOR SHALL SCHEDULE PRE-CONSTRUCTION MEETING WITH AHJ.

CONTRACTOR TO CONTACT AHJ TO OBTAIN STORMWATER PERMIT. THE CONTRACTOR SHALL CONTACT APPROPRIATE PARTY FOR INSPECTION OF EROSION CONTROL DEVICES.


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
**AL E&S**  
CONTRACTOR TO CLEAR, GRUB, EXC.

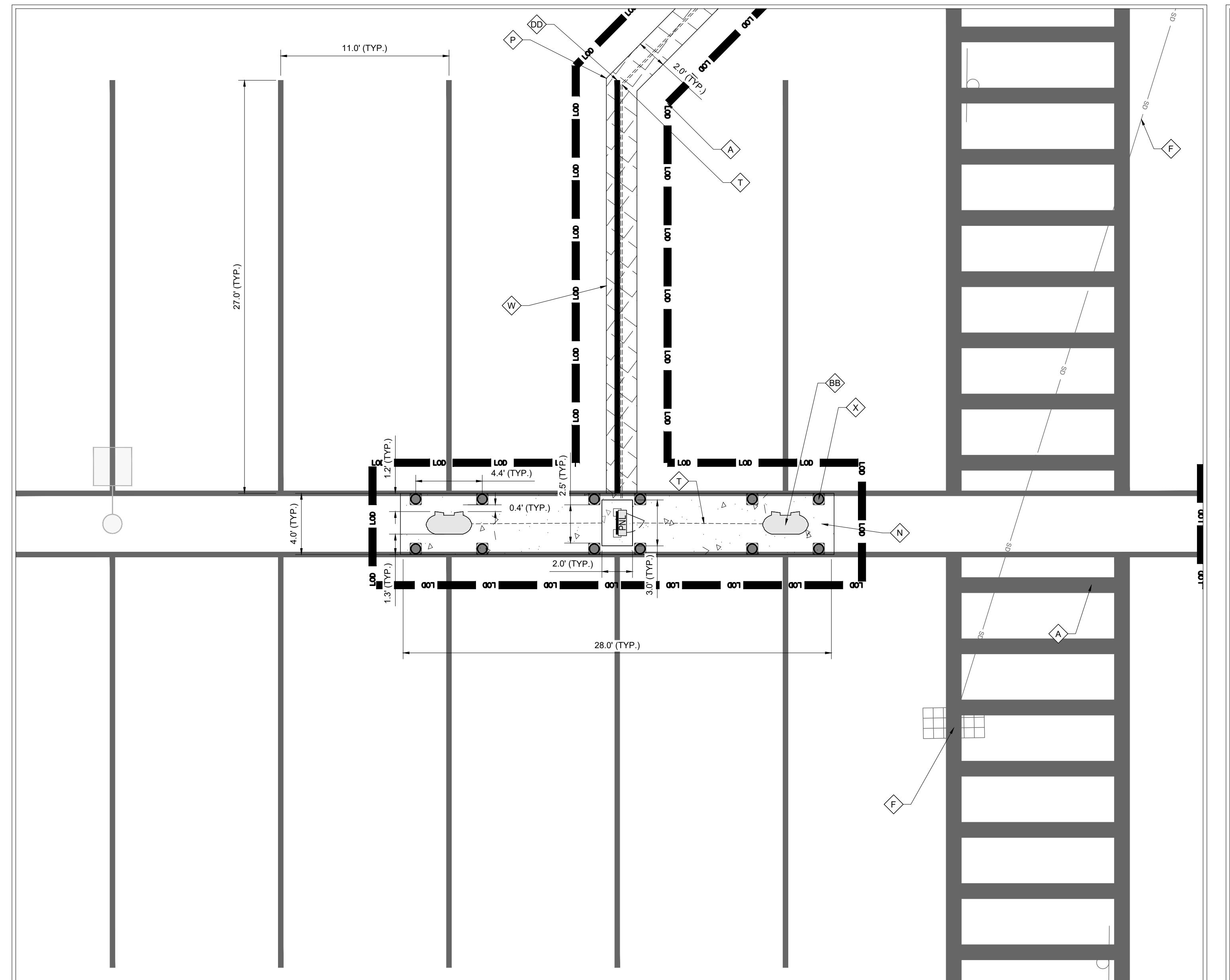
- GRADE REMAINING SITE.
- INSTALL PROPOSED UTILITIES.
- CONSTRUCT REMAINING SITE ACCORDING TO THE APPROVED PLANS, OR AS INSTRUCTED BY THE EROSION CONTROL INSPECTOR.
- PERMANENTLY STABILIZE SITE.
- UPON PERMANENT SITE STABILIZATION, REMOVE ALL TEMPORARY EROSION & SEDIMENT CONTROL MEASURES.
- FINISH INSTALLING PERMANENT STORMWATER BMP'S SHOWN ON PLANS.

COMPLIANCE WITH ALL LOCAL CODES, SETBACKS, AND BUFFERS.



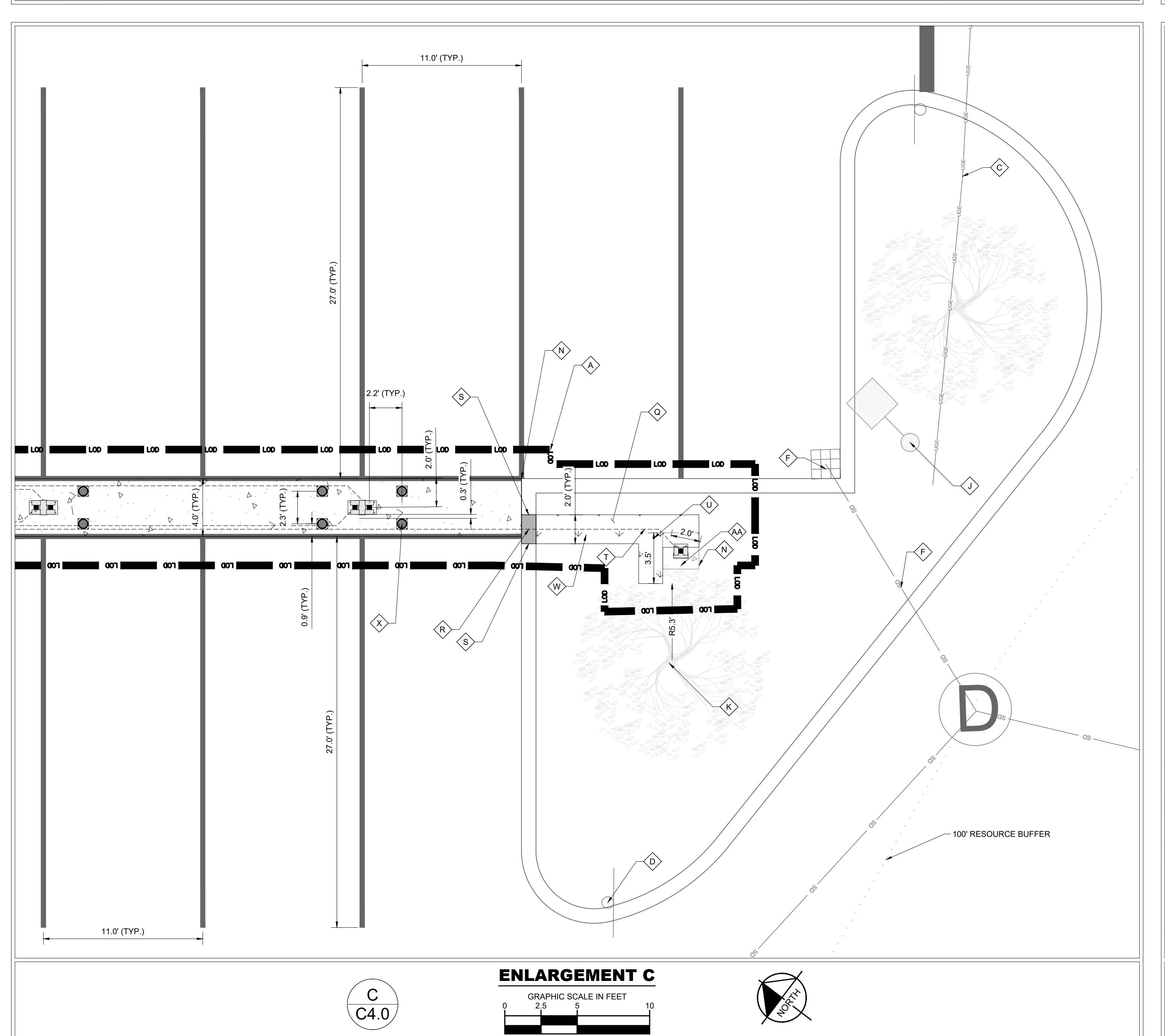






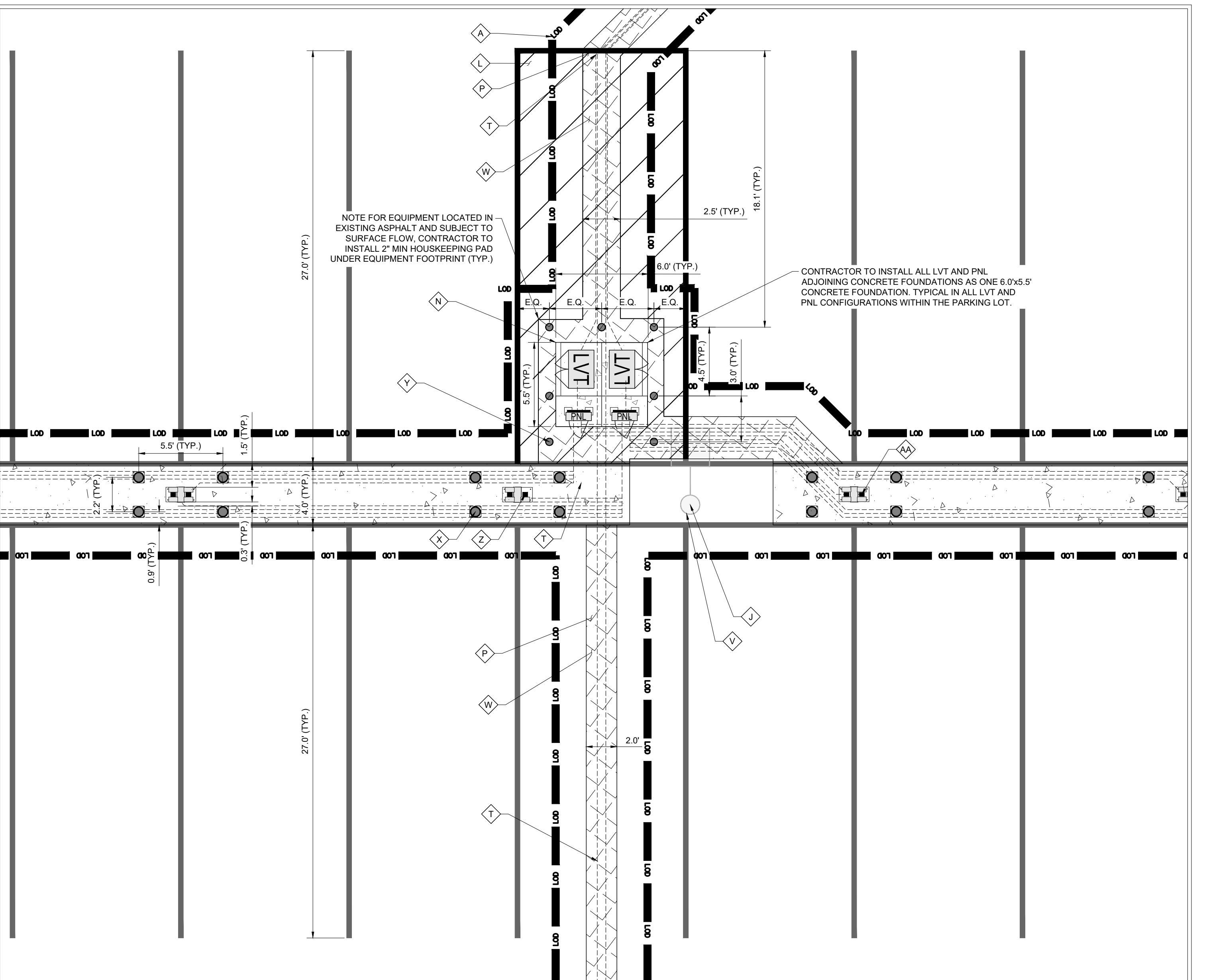
ENLARGEMENT A

A  
C4.0



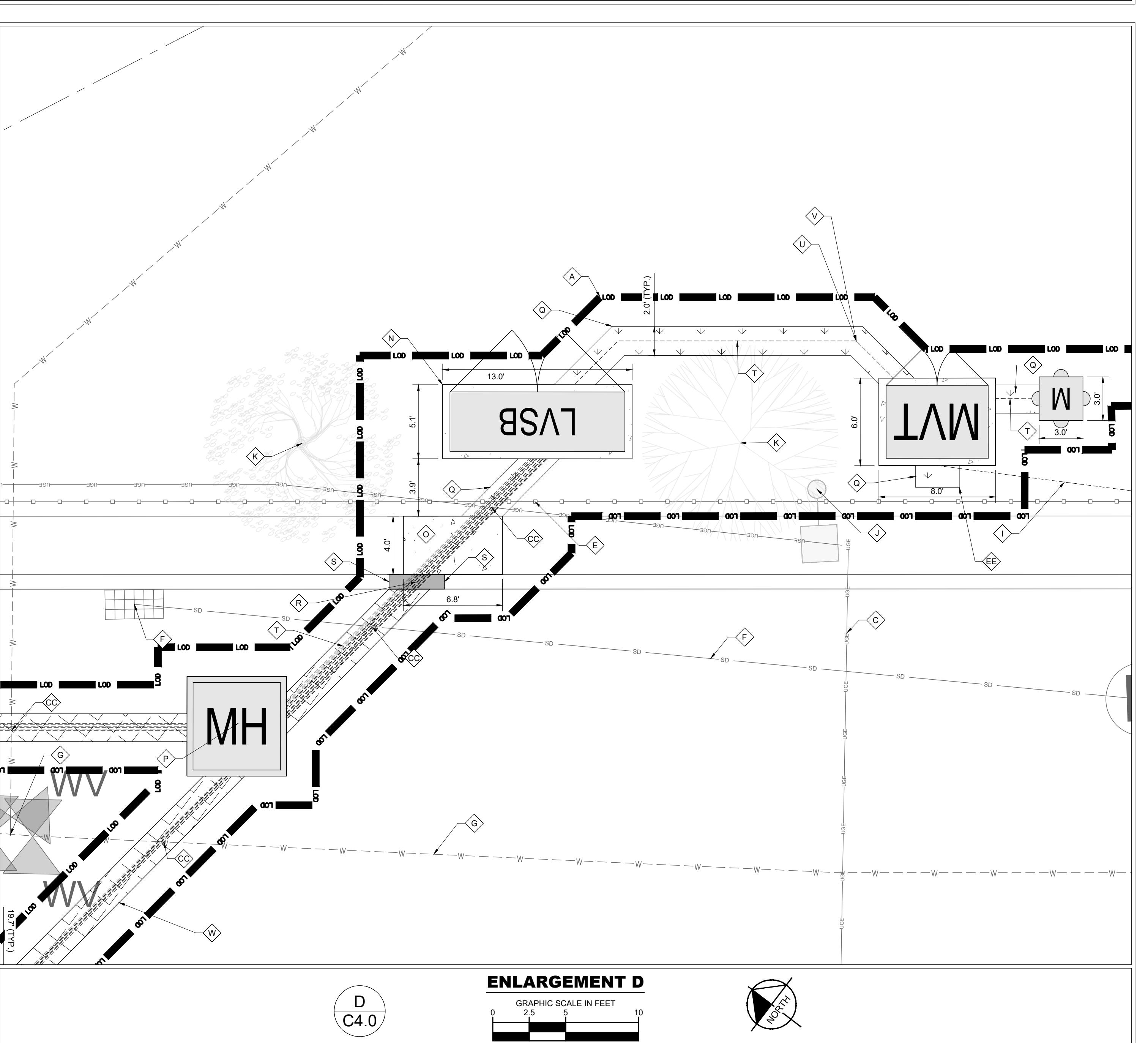
ENLARGEMENT C

C  
C4.0



ENLARGEMENT B

B  
C4.0



ENLARGEMENT D

D  
C4.0

LEGEND	
ITEM	DESCRIPTION
LOD	LIMITS OF DISTURBANCE = ±18,400 SF (±0.42 AC)
RELOCATED TREE	RELOCATED TREE
ENLARGEMENT SHEET NUMBER	ENLARGEMENT SHEET NUMBER
PARKING STRIP (SEE PLANS FOR REVISED PARKING LAYOUT)	PARKING STRIP (SEE PLANS FOR REVISED PARKING LAYOUT)
REGRADE & RESTORE CONCRETE CURBING	REGRADE & RESTORE CONCRETE CURBING
CONCRETE PAD / REGRADE & RESTORE CONCRETE PAVEMENT	CONCRETE PAD / REGRADE & RESTORE CONCRETE PAVEMENT
REGRADE & RESTORE ASPHALT PAVEMENT	REGRADE & RESTORE ASPHALT PAVEMENT
REGRADE & RESTORE PERVIOUS AREA	REGRADE & RESTORE PERVIOUS AREA
REGRADE & RESTORE PERVIOUS AREA - BUFFER DISTURBANCE	REGRADE & RESTORE PERVIOUS AREA - BUFFER DISTURBANCE
REGRADE & RESTORE PERVIOUS AREA - TREE CLEARING	REGRADE & RESTORE PERVIOUS AREA - TREE CLEARING
REGRADE & RESTORE PERVIOUS AREA - BUFFER & TREE CLEARING	REGRADE & RESTORE PERVIOUS AREA - BUFFER & TREE CLEARING

#### DISTURBANCE NOTE:

FOR THE PURPOSE OF THIS PLAN, THE LIMITS OF WORK (LOD) REFER TO THE APPROXIMATE BOUNDARY WITHIN WHICH THE INSTALLATION OF THE EV INFRASTRUCTURE WILL OCCUR. THE LIMITS OF WORK (LOD) IS THE BOUNDARY WITHIN WHICH ALL CONSTRUCTION, CLEARING, EXCAVATION, GRADING, AND RELATED ACTIVITIES SHALL OCCUR. THE LOD ENCOMPASSES THE LOD SHOWN ON THIS PLAN.

#### CONSTRUCTION NOTES:

1. SEE PAVING AND ADDITIONAL CONSTRUCTION NOTES ON SHEET G1.0.  
2. CONTRACTOR TO BORE AND/OR HAND-TRENCH CONDUITS AS REQUIRED PER NEC.  
3. EXISTING UTILITY LOCATIONS TO BE PROTECTED AS DESCRIBED IN THIS PLAN.  
4. CONTRACTOR TO RETURN ALL AREAS OF DISTURBANCE BACK TO EXISTING GRADE AND UP TO OR BETTER THAN EXISTING CONDITIONS.  
5. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS NOTED OTHERWISE.

#### PAVEMENT MARKING NOTES:

1. CONTRACTOR SHALL TAKE HELD MEASUREMENTS OR OTHERWISE ESTABLISH A SURVEY OF THE EXISTING STRIPPING AND WORK AREAS IN ORDER TO ESTABLISH ALL EXISTING PAVEMENT MARKINGS WITH FULL COORDINATION OF NEW MARKINGS PROPOSED ON THIS PLAN.  
2. UNLESS OTHERWISE INDICATED ON THIS PLAN, THE CONTRACTOR SHALL ESTABLISH PAVEMENT MARKINGS FOR ALL FIRE LANES, DIRECTIONAL ARROWS, STOP BARS, CURBS, SIDEWALK, LIGHT POLE BASES, SIGN BASES AND PARKING STALLS TO MATCH THE EXISTING FEATURES.  
3. CONTRACTOR TO USE APPROPRIATE PAINT COLORS TO MATCH THE EXISTING FEATURES. ADA BARER FREE AREAS TO COMPLY WITH ALL LOCAL AND FEDERAL ADA STANDARDS. PAVER COLOR TO MATCH EXISTING PAVEMENT. CONTRACTOR SHALL USE PAINTER PAINT MANUFACTURER. PAINT COLORS SHALL CLOSELY MATCH THE FEDERAL STANDARD 5956 COLOR NUMBER AS FOLLOWS: BLUE-COLOR 15180, WHITE-COLOR 37925 AND YELLOW-COLOR 3635.  
4. IN AREAS NOT BEING RESURFACED BUT REQUIRING RESTRIPPING, CONTRACTOR SHALL REMOVE EXISTING STRIPPING BY EITHER SAND BLASTING, WATER BLASTING, OR BY ANOTHER APPROVED METHOD. CONTRACTOR SHALL REMOVE THE EXISTING STRIPPING AND CHARGE FOR REMOVAL OF THE EXISTING ASPHALT. CONTRACTOR SHALL SEAL COLOR THE AREA PRIOR TO RESTRIPPING. CONTRACTOR TO SUBMIT STRIPPING REMOVAL METHOD TO PROPERTY MANAGER AND ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

#### KEYNOTE LEGEND

ID	DESCRIPTION
A	LIMITS OF DISTURBANCE = ±18,400 SF (±0.42 AC)
B	RELOCATED TREE
C	EXISTING UNDERGROUND ELECTRICAL LINE TO REMAIN AND BE PROTECTED (TYP.)
D	EXISTING SIGN POST TO REMAIN AND BE PROTECTED (TYP.)
E	EXISTING GUARDRAIL TO BE REPLACED AS NECESSARY (TYP.)
F	EXISTING STORMWATER INFRASTRUCTURE TO REMAIN AND BE PROTECTED (TYP.)
G	EXISTING WATER INFRASTRUCTURE TO REMAIN AND BE PROTECTED (TYP.)
H	EXISTING SSWR INFRASTRUCTURE TO REMAIN AND BE PROTECTED (TYP.)
I	EXISTING ELECTRICAL CONDUIT BORE LINE (TYP.)
J	EXISTING LIGHT POLE TO REMAIN AND BE PROTECTED (TYP.)
K	EXISTING TREE TO REMAIN AND BE PROTECTED (TYP.)
L	EXISTING PARKING STALL(S) TO BE DEDICATED TO EV INFRASTRUCTURE
M	EXISTING L2 ELECTRIC VEHICLE CHARGING STATION TO REMAIN AND BE PROTECTED
N	CONCRETE EQUIPMENT PAD
O	REGRADE & RESTORE CONCRETE SIDEWALK (TYP.)
P	REGRADE & RESTORE ASPHALT PAVEMENT
Q	REGRADE & RESTORE PERVIOUS AREA
R	RESTORE CURBING TO MATCH EXISTING CONDITIONS
S	IE INTO EXISTING CURBING
T	UNDERGROUND POWER CONDUIT (TYP.)
U	CONDUIT TO BE ROUTED AROUND EXISTING TREE
V	CONDUIT TO BE ROUTED AROUND EXISTING LIGHT POLE
W	POWER CONDUIT TRENCH (TYP.)
X	POST-INSTALLED BOLLARD (TYP.)
Y	EMBEDDED BOLLARD (TYP.)
Z	PAD-MOUNTED SINGLE L2 EVCS
AA	PAD-MOUNTED DUAL L2 EVCS (TYP.)
BB	PAD-MOUNTED DUAL L3 DC FAST CHARGER (TYP.)
CC	UNDERGROUND UTILITY CROSSING. (MAINTAIN 12' MINIMUM SEPARATION)
DD	3X3 BORE PIT
EE	EXISTING STORM INFILTRATION SYSTEM INSPECTION PORT TO REMAIN & BE PROTECTED

#### RESOURCE AREA BUFFER DISTURBANCE:

DISTURBANCE TO BVW: 0 SF (NO DISTURBANCE TO BVW)

DISTURBANCE WITHIN 50FT BVW BUFFER: 3250 SF

DISTURBANCE WITHIN 100FT BVW BUFFER: 3500 SF

TOTAL TREE CLEARING: 2800 SF

#### TREE CLEARING:

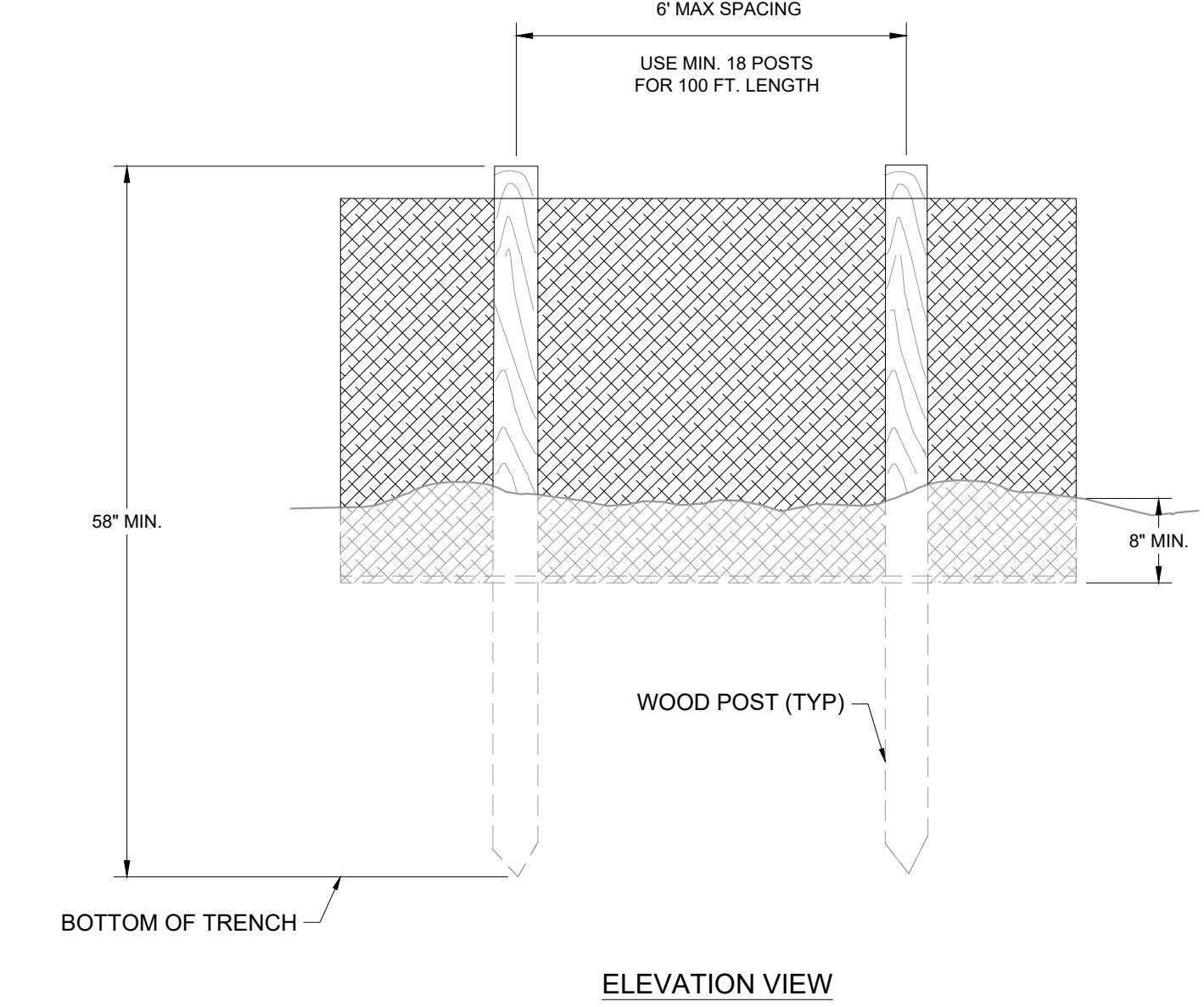
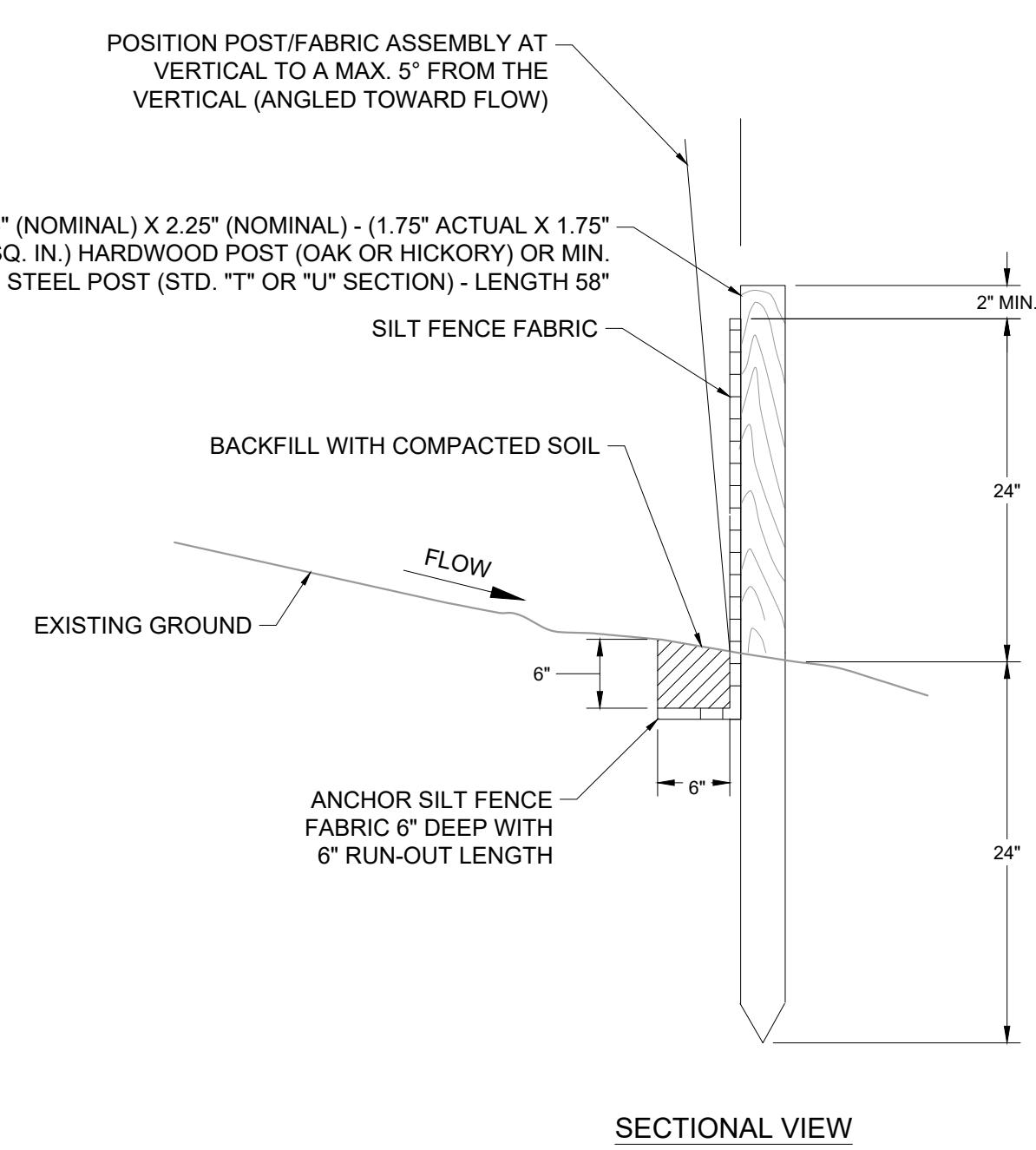
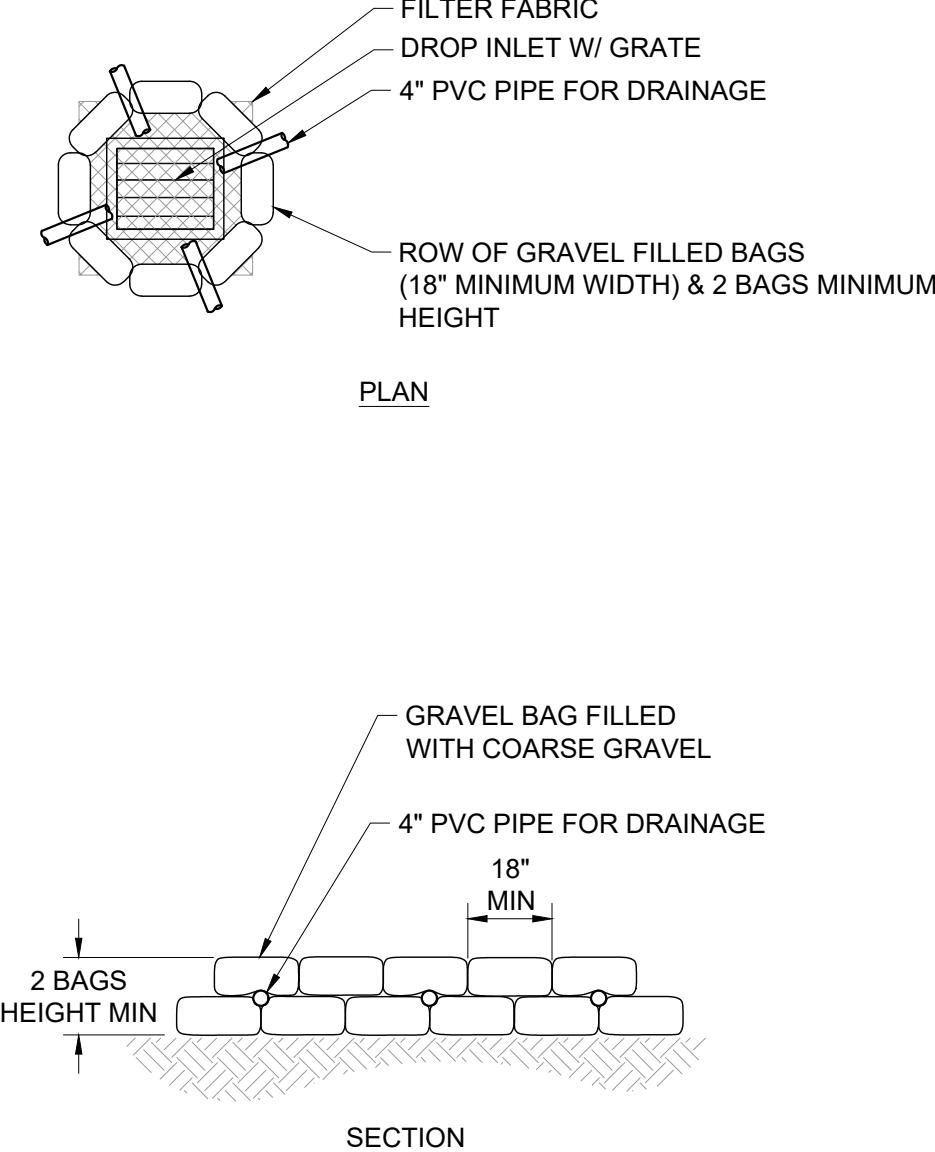
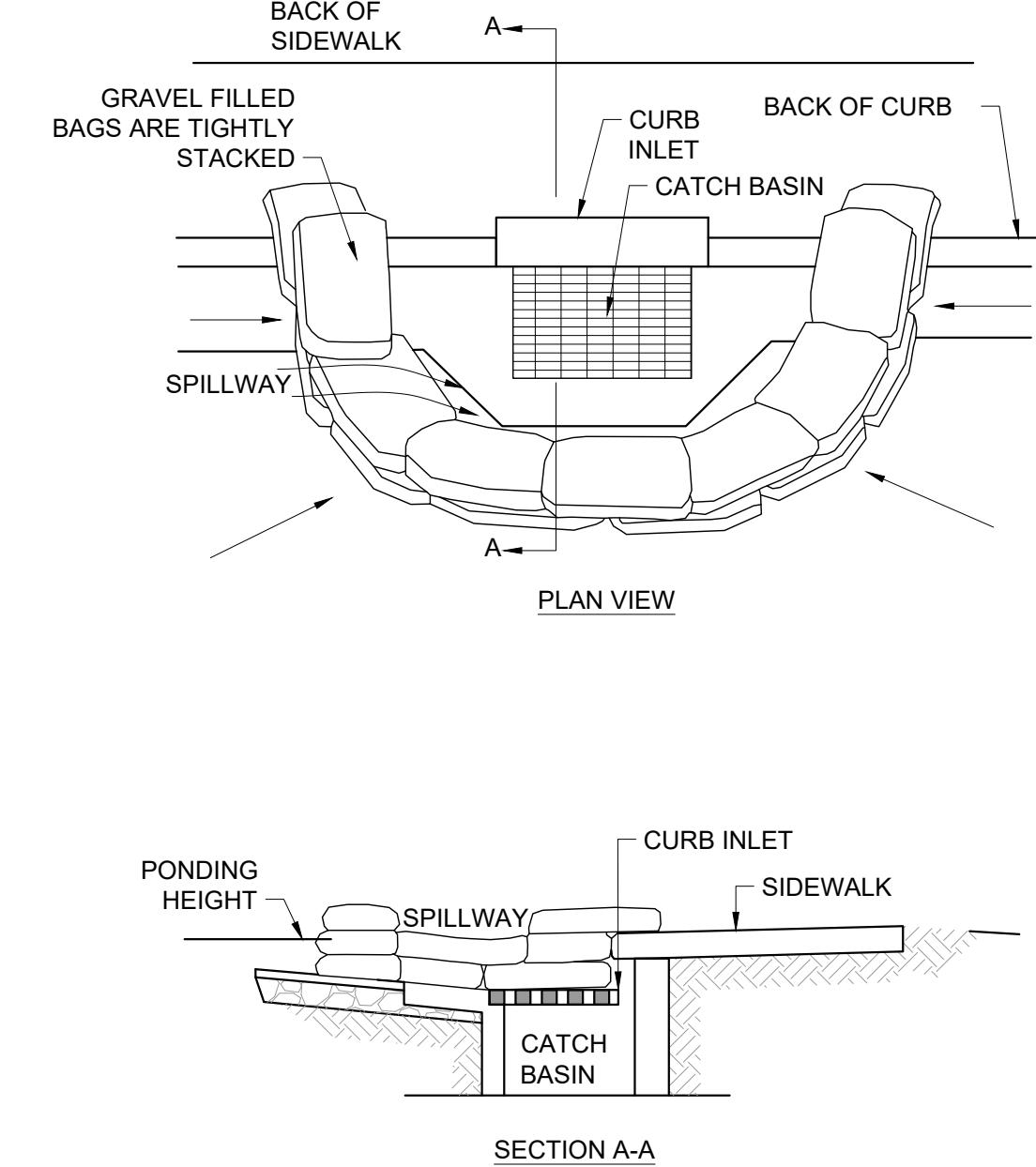
TREE CLEARING WITHIN 50FT BVW BUFFER: 2500 SF

TREE CLEARING WITHIN 100FT BVW BUFFER: 2800 SF

TOTAL TREE CLEARING: 2800 SF

VAN PARKING DATA TABLE	
TOTAL EXISTING VAN STALLS	450 STALLS
TOTAL PROPOSED VAN STALLS	445 STALLS
CHANGE	1 VAN STALL(S) TO BE DEDICATED TO EV INFRASTRUCTURE

REVISIONS	OVERALL TREE PLANTING PLAN	DATE	BY
No.		10/02/2024	FM
DESIGNED BY:			I.KC
DRAWN BY:			J.WG
CHECKED BY:			AA
DATE:			07/19/2024
KIMLEY-HORN PROJECT NO. 115319667			
CIVIL PLAN - ENLARGEMENTS			
SEE PLAN SYMBOL AND LINETYPE DESCRIPTIONS ON SHEET G1.0			
SHEET NUMBER C4.0			



NOTES:

1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. GRAVEL BAG MATERIAL: POLYPROPYLENE, POLYETHYLENE OR POLYIMIDE WOVEN FABRIC, MINIMUM UNIT WEIGHT 4 OUNCES PER SQUARE YARD, MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70%.
3. GRAVEL BAG SHALL BE FILLED WITH 3/4" ROCK OR 1/4" PEA GRAVEL.
4. PLACE SEVERAL LAYERS OF SAND BAGS (12" MINIMUM HIGH) OVERLAPPING THE BAGS AND PACKING THEM TIGHTLY TOGETHER.
5. LEAVE GAP OF ONE BAG ON THE TOP ROW TO SERVE AS A SPILLWAY.
6. PLACE FILTER FABRIC OVER WIRE MESH. FILTER FABRIC SHALL BE MANUFACTURED FROM UV RESISTANT POLYPROPYLENE, NYLON, POLYESTER, OR ETHYLENE FABRIC WITH AN EQUIVALENT OPENING SIZE NOT GREATER THAN 20 SIEVE AND WITH A MINIMUM FLOW RATE OF 40 GALLONS/MINUTE/SQ. FT.
7. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

#### CURB INLET SEDIMENT BARRIER

SCALE  
N.T.S.

1 DROP INLET SEDIMENT BARRIER

SCALE  
N.T.S.

2 SILT FENCE INSTALLATION

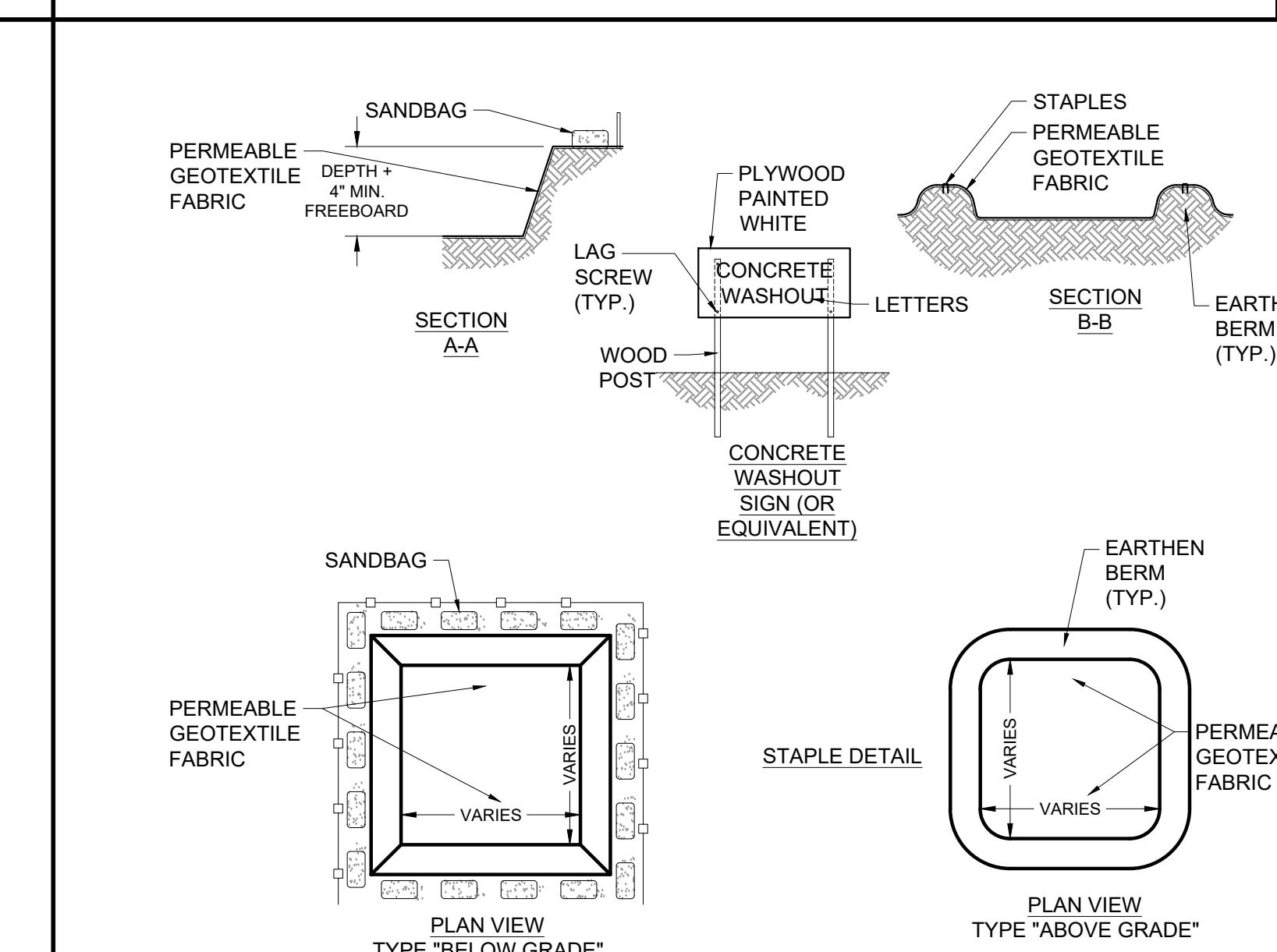
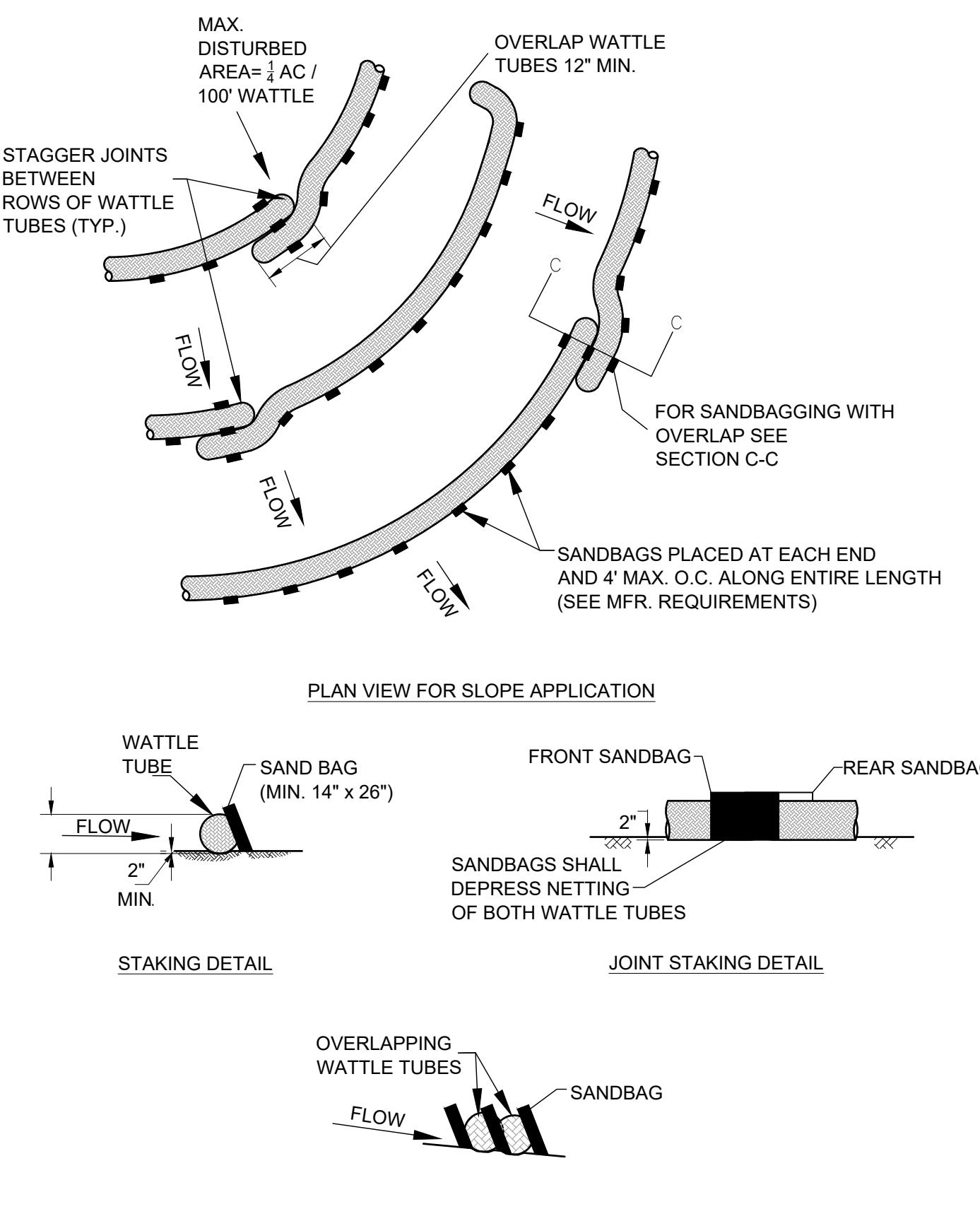
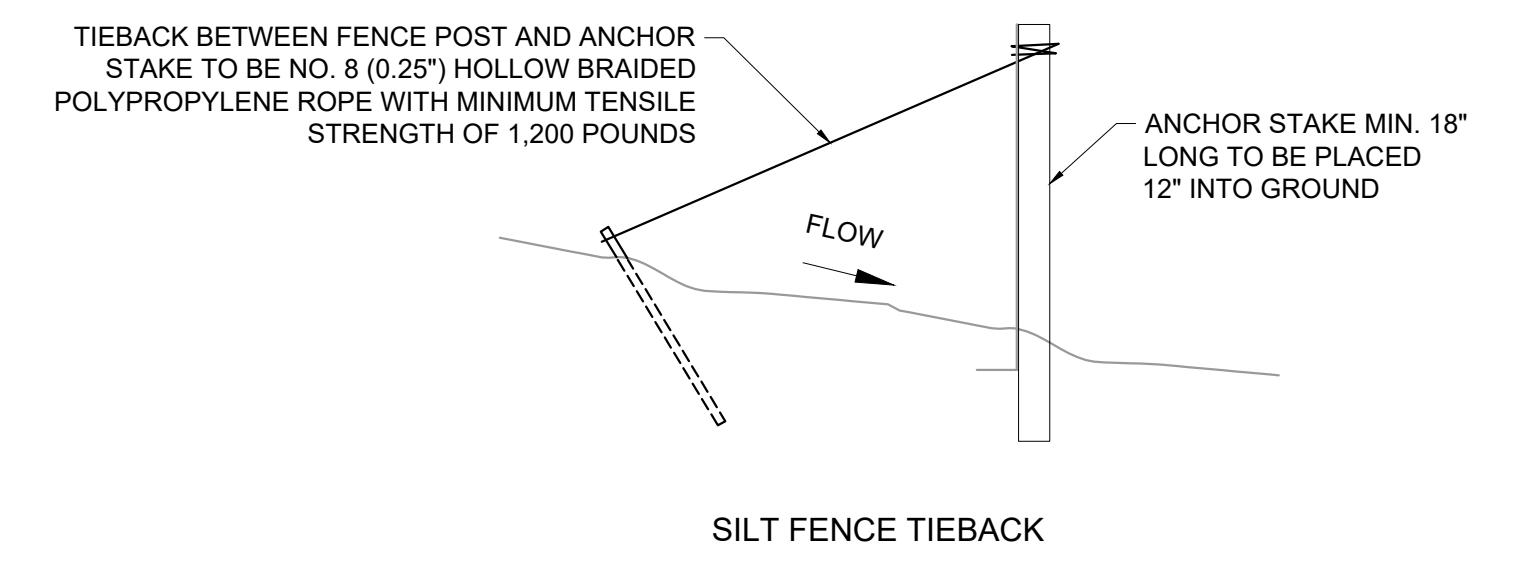
## EV INFRASTRUCTURE PLAN

### DK01 EV

151 TAYLOR STREET  
LITTLETON, MA 01460

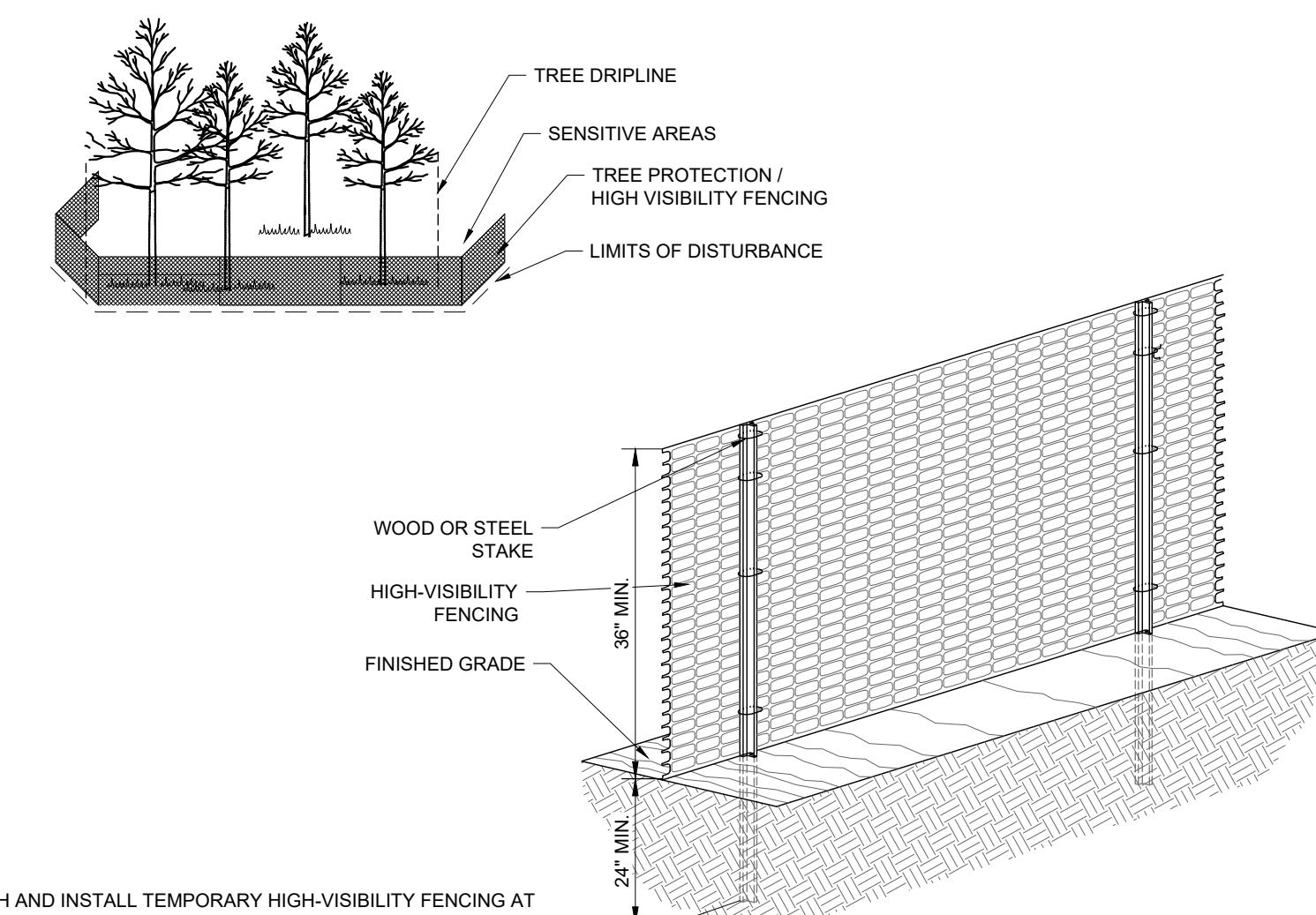
404 WYMAN ST, SUITE 385, WALTHAM, MASSACHUSETTS 02451  
Main: 781-328-0676 www.kimley-horn.com

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NOTES:

1. GEOTEXTILE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF GEOTEXTILE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE EROSION CONTROL PLAN. COLLECTED MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR WHEN CAPACITY NEARS 50%.



PERMANENT STABILIZATION MEASURES SHALL BE  
DONE IN ACCORDANCE WITH LOCAL EROSION AND  
SEDIMENT CONTROL REQUIREMENTS

#### CONSTRUCTION ENTRANCE

SCALE  
N.T.S.

4 CONSTRUCTION ENTRANCE

SCALE  
N.T.S.


7 PERMANENT STABILIZATION

SCALE  
N.T.S.

8 NOT USED

REVISIONS	OVERALL TREE PLANTING PLAN	DATE	BY
0		10/02/2024	FM
1			
2			
3			
4			
5			
6			
7			
8			
9			

DESIGNED BY:	I.KC
DRAWN BY:	J.WG
CHECKED BY:	AA
DATE:	07/19/2024
KIMLEY-HORN PROJECT NO.	115319667
E&S DETAILS	
Sheet Number	
C6.0	



#### SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS SHALL BE PROVIDED PER 2021 INTERNATIONAL BUILDING CODE (IBC) CHAPTER 17.
2. OWNER WILL ENGAGE A SPECIAL INSPECTOR AND QUALIFIED TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS, AND PREPARE TEST REPORTS.
3. THE GENERAL CONTRACTOR SHALL ASSIST AND COOPERATE WITH AN INDEPENDENT TESTING LABORATORY (TO BE RETAINED BY THE OWNER) WHICH SHALL CONDUCT ALL THE SPECIFIED TESTS REQUIRED FOR THE PROJECT AND REPORT THE RESULTS OF THESE TESTS DIRECTLY AND PROMPTLY TO THE ENGINEER FOR HIS REVIEW.
4. CONTRACTOR SHALL NOTIFY SPECIAL INSPECTOR AND TESTING AGENCY 48 HOURS IN ADVANCE OF ITEMS REQUIRED FOR SPECIAL INSPECTION.
5. ALL SPECIAL INSPECTION MONTHLY REPORTS SHALL BE SIGNED AND SEALED BY AN ENGINEER LICENSED IN THE STATE OF THE PROJECT, WHO HAS RESPONSIBLE CHARGE OF THE SPECIAL INSPECTIONS PROGRAM.
6. A SPECIAL INSPECTIONS MEETING SHALL BE HELD ON SITE WITH ENGINEER OF RECORD, CONSTRUCTION COORDINATOR, INDEPENDENT TESTING AGENCY, AND SPECIAL INSPECTOR TO CLARIFY ALL SPECIAL INSPECTION REQUIREMENTS PRIOR TO BEGINNING TO WORK.

#### CONCRETE AND REINFORCEMENT

1. CAST-IN-PLACE CONCRETE SHOULD BE  $f_c = 4,500$  PSI MIN (CLASS F2),  $w/c = 0.45$  MAX, AND TARGET AIR CONTENT OF  $6\% \pm 1.5\%$ , UNLESS NOTED OTHERWISE. MAXIMUM AGGREGATE SIZE IS 1".
2. REINFORCING SHOULD CONFORM TO ASTM A615, GRADE 60,  $F_y = 60,000$  PSI.
3. HOOKS AND BENDS FOR REINFORCING BARS SHOULD CONFORM TO THE REQUIREMENTS OF THE ADOPTED ACI 318.
4. ALL BEND DIMENSIONS FOR REINFORCING STEEL SHOULD BE OUT-TO-OUT OF BARS. ALL PLACEMENT DIMENSIONS FOR REINFORCING STEEL SHOULD BE TO CENTER OF BARS UNLESS NOTED OTHERWISE.
5. ALL REINFORCING SHOULD HAVE 2" CLEAR COVER UNLESS NOTED OTHERWISE.
6. ALL EXPOSED CONCRETE CORNERS SHOULD BE CHAMFERED 3/4".
7. TRIM ALL REINFORCING 2" CLEAR OF OPENINGS. USE #4X4 CENTERED ON CORNER OF OPENINGS.

#### POST-INSTALLED ANCHORS

1. UNLESS OTHERWISE INDICATED ON PLANS, POST-INSTALLED ANCHORS SHOULD CONSIST OF THE FOLLOWING ANCHOR TYPES, OR APPROVED EQUAL: HILTI KH-EZ 55316
2. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT AND CURRENT BUILDING CODE.

#### FOUNDATIONS

1. FOUNDATIONS ARE DESIGNED USING PRESUMPTIVE SOIL VALUES IN ACCORDANCE WITH THE 2021 INTERNATIONAL BUILDING CODE.
2. ALL FOOTING EXCAVATIONS SHOULD BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE.
3. IBC PRESUMPTIVE VERTICAL BEARING CAPACITY: 1,500 PSF
4. IBC PRESUMPTIVE LATERAL BEARING CAPACITY: 100 PSF
5. CONTRACTOR SHOULD ENGAGE A GEOTECHNICAL TESTING LABORATORY LICENSED IN THE STATE OF THE PROJECT TO CONFIRM SOIL PREPARATION AND SPECIFY PROCEDURES AND SPECIFY COMPACTION REQUIREMENTS NECESSARY TO OBTAIN THE DESIGN SOIL PROPERTIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ENGINEER OF RECORD IF ASSUMED SOIL PROPERTIES CANNOT BE OBTAINED ON SITE.

#### PROJECT GENERAL NARRATIVE AND REQUIREMENTS

1. THESE CONSTRUCTION DOCUMENTS ARE SPECIFICALLY APPLICABLE TO FOUNDATIONS SUPPORTING THE COMPONENTS LISTED BELOW. THE INFORMATION IN THIS TABLE MAY VARY DEPENDING ON FINAL CLIENT PROCUREMENT DECISIONS. CONTRACTOR AND CLIENT TO CONFIRM FINAL PROCUREMENT SELECTIONS WITH ENGINEER PRIOR TO CONSTRUCTION.

COMPONENT NAME	COMPONENT DIMENSIONS (WxHxD, FT)	COMPONENT WEIGHT (LBS)	EQUAL EQUIVALENT UNIFORM AREA LOAD (PSF)
SWITCHGEAR	19'x8'x9'x6'-0"	17,900	152.99
MV TAP SWITCH	8'-8 1/2" x 4' x 5 1/2" x 6'-4 1/2"	6,400	115.43
MV TRANSFORMER	6'x7'x8'-1" x 8'-3"	14,500	292.93

2. EQUIPMENT YIELDING MAXIMUM EQUIVALENT UNIFORM AREA LOAD WAS USED IN DESIGN OF EQUIPMENT PADS.
3. FOUNDATION DESIGN IS BASED ON THE DESIGN CRITERIA.
4. IF THE PROJECT IS LOCATED IN AN AREA CLASSIFIED AS SITE CLASS E OR F, A SITE-SPECIFIC GEOTECHNICAL ANALYSIS IS REQUIRED AND THE ENGINEER OF RECORD SHOULD BE CONTACTED IMMEDIATELY.
5. THE CONTRACTOR'S SCOPE OF WORK FOR THIS PROJECT SHOULD INCLUDE ALL COORDINATION, MATERIALS, LABOR, AND OVERHEAD NECESSARY FOR COMPLETION OF THE FOLLOWING:
  - A. ALL STRUCTURES ARE DESIGNED TO ACT AS A STRUCTURAL UNIT UPON COMPLETION. CONTRACTOR SHOULD DESIGN AND PROVIDE NECESSARY BRACING, TEMPORARY SUPPORTS, AND SHORING TO RESIST FORCES ON THE STRUCTURE DURING CONSTRUCTION.
  - B. VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO STARTING WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
  - C. VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO STARTING WORK.
  - D. CONTRACTOR MUST EXERCISE EXTREME CARE DURING THE EXCAVATION AND CONSTRUCTION FOR NEW STRUCTURE TO AVOID DAMAGE TO EXISTING STRUCTURES. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL MEANS AND METHODS REQUIRED TO FACILITATE CONSTRUCTION OF THE WORK AND ENSURING THE SAFETY, STABILITY AND INTEGRITY OF ADJACENT STRUCTURES AND FACILITIES.
  - E. CONTRACTOR MUST ENGAGE A GEOTECHNICAL ENGINEER TO FIELD VERIFY SOIL PARAMETERS NOTED IN THE FOUNDATION NOTES AND CONCRETE CLASS NOTED UNDER CONCRETE NOTES.

#### DESIGN CRITERIA

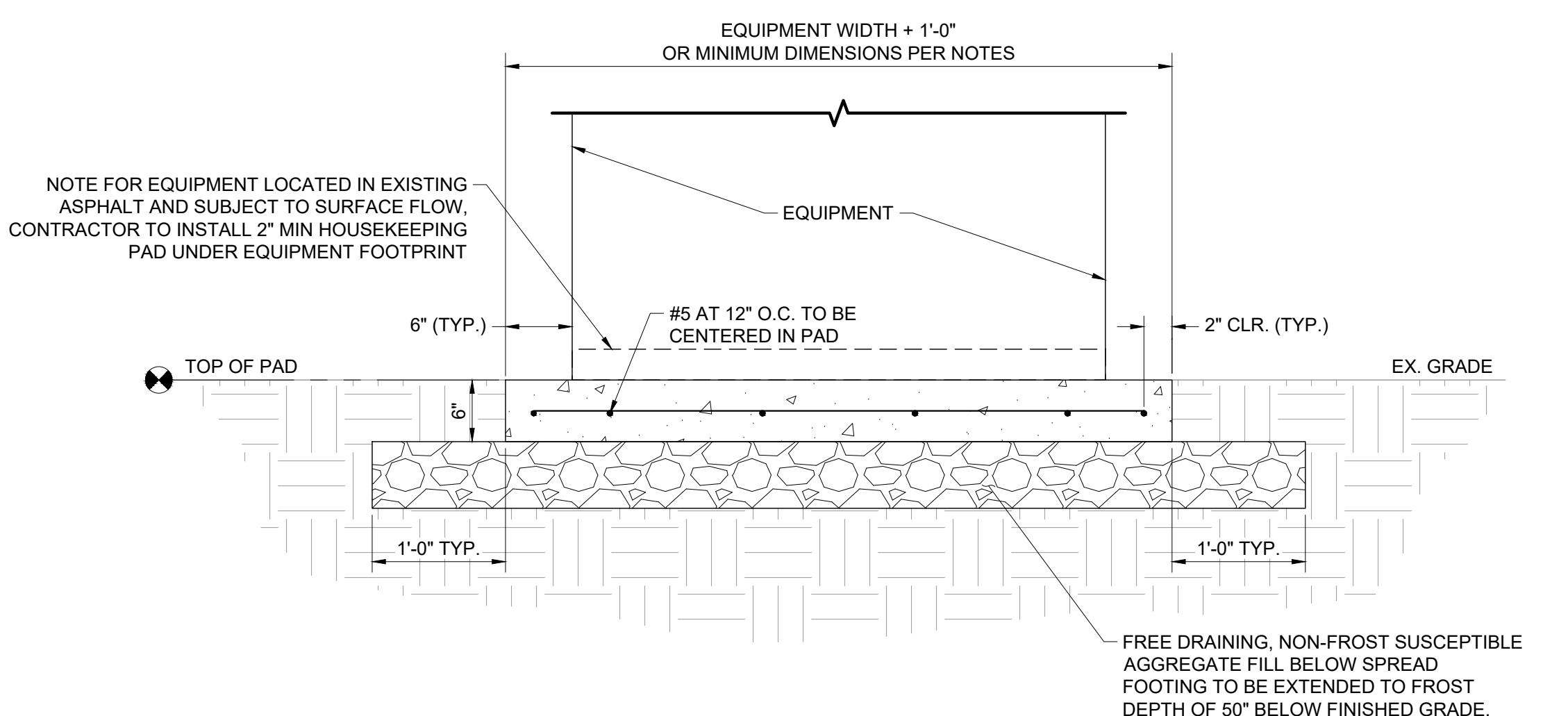
1. DESIGN CRITERIA IS BASED ON THE CONTROLLING GEOGRAPHICAL LOADINGS CONSIDERING CLIENT-PROVIDED PROJECT LOCATIONS IN THE UNITED STATES.
2. THE DESIGN CRITERIA PERTAINING TO EACH SPECIFIC SITE WILL DIFFER FROM THE DESIGN CRITERIA LISTED BELOW. THE DESIGN CRITERIA LISTED BELOW IS CONSERVATIVE RELATIVE TO THE SITE-SPECIFIC DESIGN WITH THE CONSIDERATION OF PROJECT GENERAL NARRATIVE AND REQUIREMENTS OF NOTE 4, ABOVE.
3. BUILDING CODE: 2021 INTERNATIONAL BUILDING CODE
4. DESIGN LOADS:
  - RISK CATEGORY = II
  - DEAD LOAD: SELF WEIGHT OF MATERIAL
  - WIND: DESIGN WIND SPEED (3 SEC. GUST) = 130 MPH (ULTIMATE)  
WIND EXPOSURE = C
  - SEISMIC: SEISMIC IMPORTANCE FACTOR, IE = 1.0  
MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS:  
 $S_{60} = 0.309g$   
 $S_{90} = 0.416g$
  - SITE CLASS = D, DEFAULT  
DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS:  
 $S_{60} = 0.113g$   
 $S_{90} = 0.113g$
  - SEISMIC DESIGN CATEGORY = C  
RESPONSE MODIFICATION COEFFICIENT (R<sub>d</sub>) = 3.0
5. FROST DEPTH = 50"

#### CONSTRUCTION NOTES

1. FOUNDATION DIMENSIONS ARE BASED ON STANDARD EQUIPMENT SIZING AND WILL REQUIRE 6" CLEAR FROM EDGE OF EQUIPMENT TO EDGE OF PAD ON ALL SIDES. IF THE PROCURED EQUIPMENT IS LARGER IN SIZE THAN WHAT THE PAD WILL ALLOW, ENGINEER OF RECORD SHOULD BE CONTACTED AND LARGER PAD WILL BE REQUIRED.
2. TOP OF EQUIPMENT PAD IS INTENDED TO BE LEVEL. GC TO COORDINATE PAD EMBEDMENT DEPTH WITH ACTUAL SITE GRADE PLANS.
3. SOIL COMPACTION AND SUBGRADE REQUIREMENTS TO BE COMPLETED BASED ON THE LATEST GEOTECHNICAL REPORT WHICH WAS NOT PROVIDED TO THE ENGINEER AS PART OF THIS DESIGN.
4. WHEN EMBEDDED BOLLARDS ARE REQUIRED FOR SITE LAYOUT, CONTRACTOR SHALL PLACE BOLLARD(S) IN ACCORDANCE WITH PROVISIONS ON DETAIL 6 - THIS SHEET. FOUNDATIONS TO BE SPACED WITH A MINIMUM OF 6' BETWEEN EDGE OF FOUNDATION

#### STRUCTURAL NOTES

SCALE N.T.S. 1 BOLLARD - EMBEDDED



#### FOUNDATION FOR LV TRANSFORMER AND LVSB

SCALE N.T.S. 2 NOT USED

#### FOUNDATION FOR SWITCHGEAR, MV TRANSFORMER, AND MV SWITCH

SCALE N.T.S. 4 NOT USED

#### NOTES:

1. CONTRACTOR TO ENSURE PLACEMENT OF BOLLARD DOES NOT INTERFERE WITH ANY EQUIPMENT DOOR OPENINGS OR RESTRICT ACCESS TO SERVICE EQUIPMENT.
2. CONTRACTOR TO ENSURE BOLLARD PLACEMENT DOES NOT OBSTRUCT EQUIPMENT CLEARANCE REQUIREMENTS.
3. THIS DETAIL SHALL ONLY BE USED BOLLARD INSTALLATIONS WITHIN AN EXTERIOR PARKING LOT.
4. **THIS BOLLARD IS NOT RATED FOR VEHICULAR IMPACT.**


1. CONTRACTOR SHALL X-RAY CONCRETE SLAB TO FIELD VERIFY EXISTING REINFORCEMENT LOCATIONS PRIOR TO DRILLING. CONTRACTOR SHALL TAKE GREAT CARE TO ENSURE AT LEAST 3" GAP BETWEEN ANCHORS AND EXISTING REINFORCEMENT AND STRESSING TENDONS.
2. CONTRACTOR TO ENSURE BOLLARD PLACEMENT DOES NOT OBSTRUCT 3' DOOR SWING ON BOTH SIDES OF MEDIA STATION.
3. IMPACT-RATED BOLT DOWN BOLLARDS TO BE USED FOR PROTECTION FOR CHARGERS AND ABOVE-GROUND SOLUTIONS ONLY.

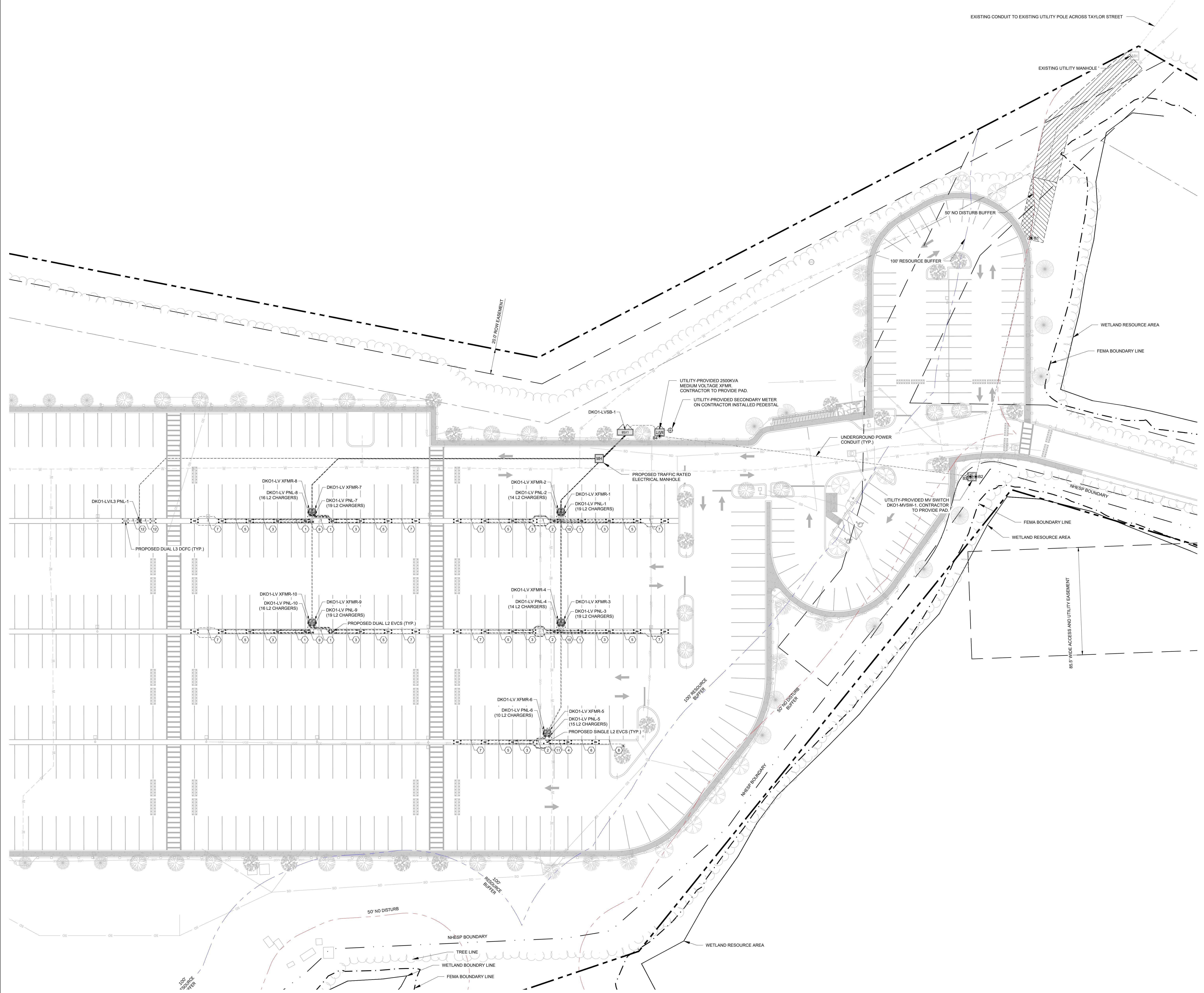
#### STRUCTURAL DETAILS

SCALE N.T.S. 6 BOLLARD - POST INSTALLED

SCALE N.T.S. 7 NOT USED

REVISIONS	OVERALL TREE PLANTING PLAN	DATE	BY
No. 1		10/02/2024	FM
DESIGNED BY:			I.KC
DRAWN BY:			J.WG
CHECKED BY:			AA
DATE:			07/19/2024
KIMLEY-HORN PROJECT NO. 115319687			
STRUCTURAL DETAILS			
SHEET NUMBER			
8			C8.0





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# DKO1-EV EV INFRASTRUCTURE PLAN

151 TAYLOR STREET  
LITTLETON, MA 01460

LITTLETON, MA 01460

# Kimley Horn

1400 BOSTON AVENUE, SUITE 100, WALTHAM, MASSACHUSETTS 02451  
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Main: 781-328-0676 | [www.kimley-horn.com](http://www.kimley-horn.com)  
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OVERALL TREE PLANTING PLAN  
SIGNED BY: \_\_\_\_\_  
DRAFTED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
KIMLEY-HORN P.C.  
115319

7	8	9	10	11

7	8	9	10
LKCB			
JWG			
AA			
07/19/2024			
T NO.			

## ELECTRICAL PLA

## CUITING

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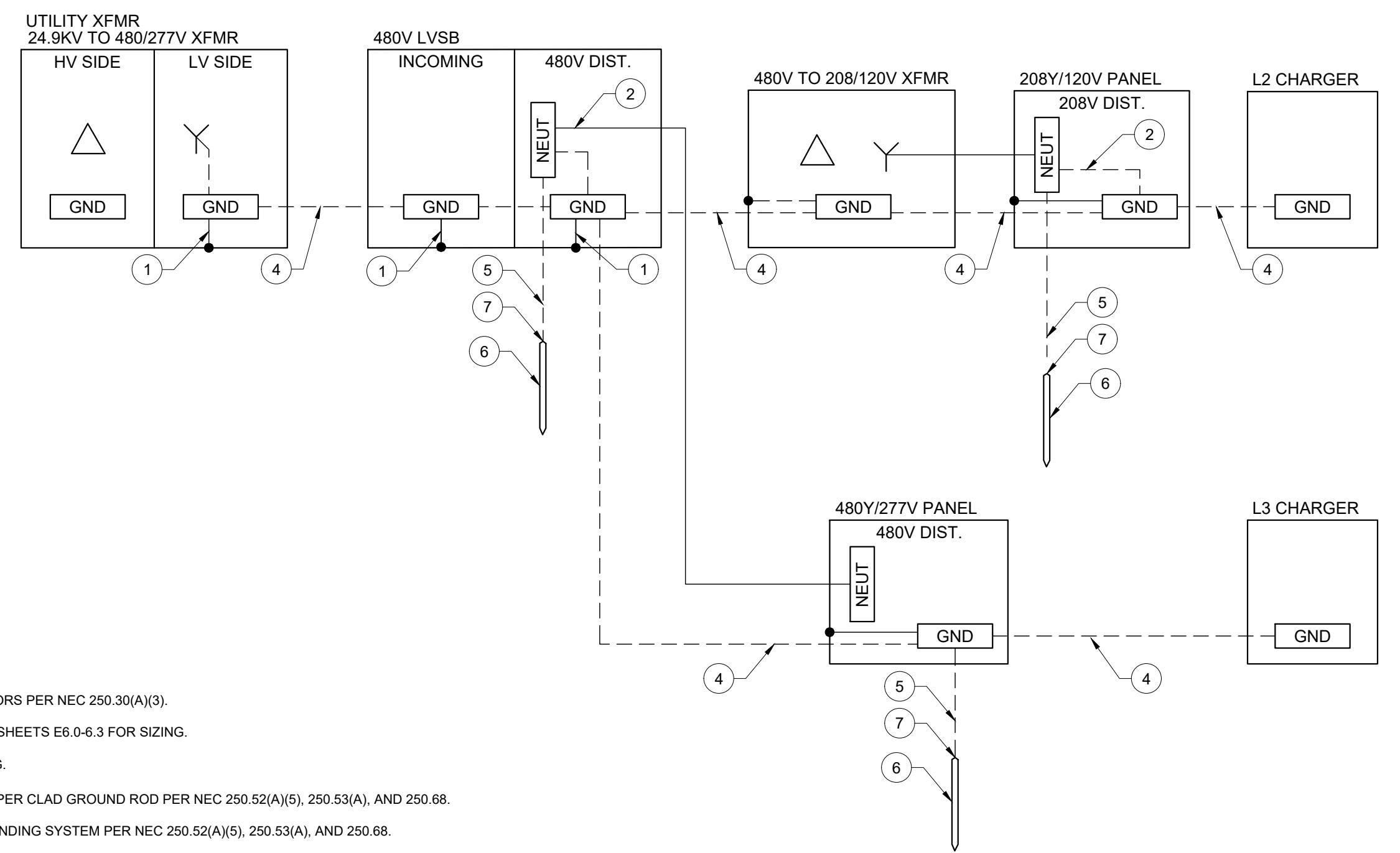
SHEET N  
**E3**

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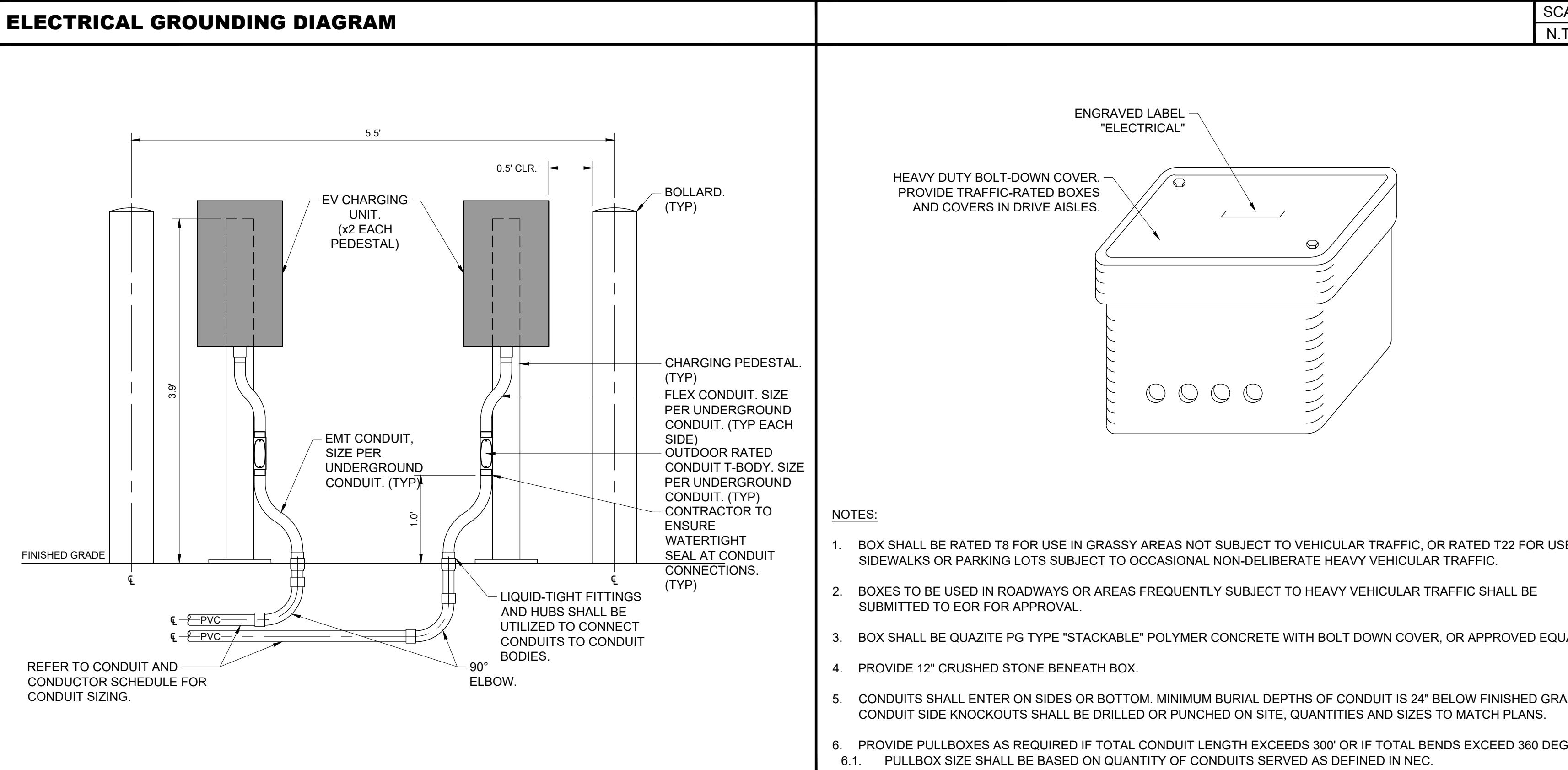
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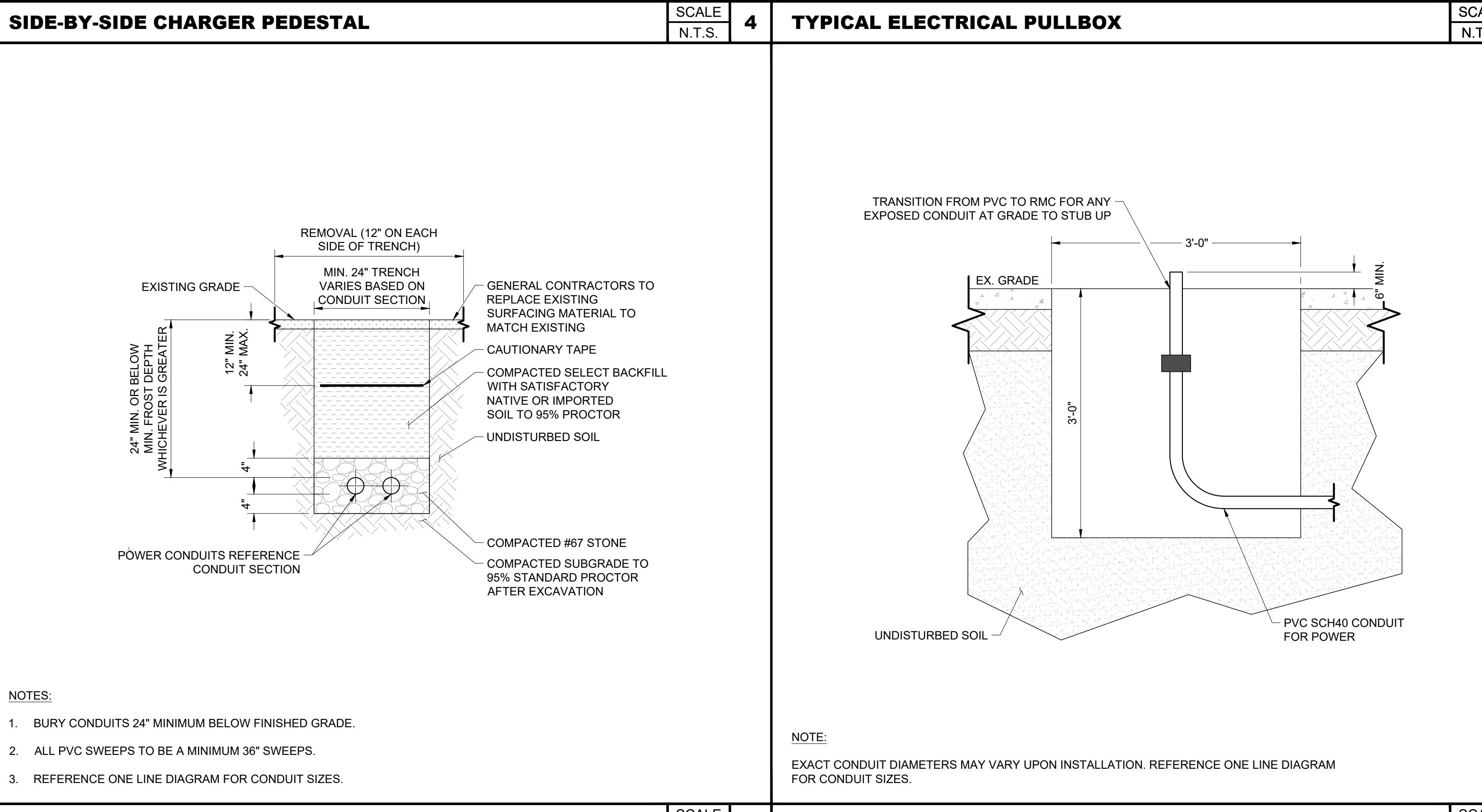
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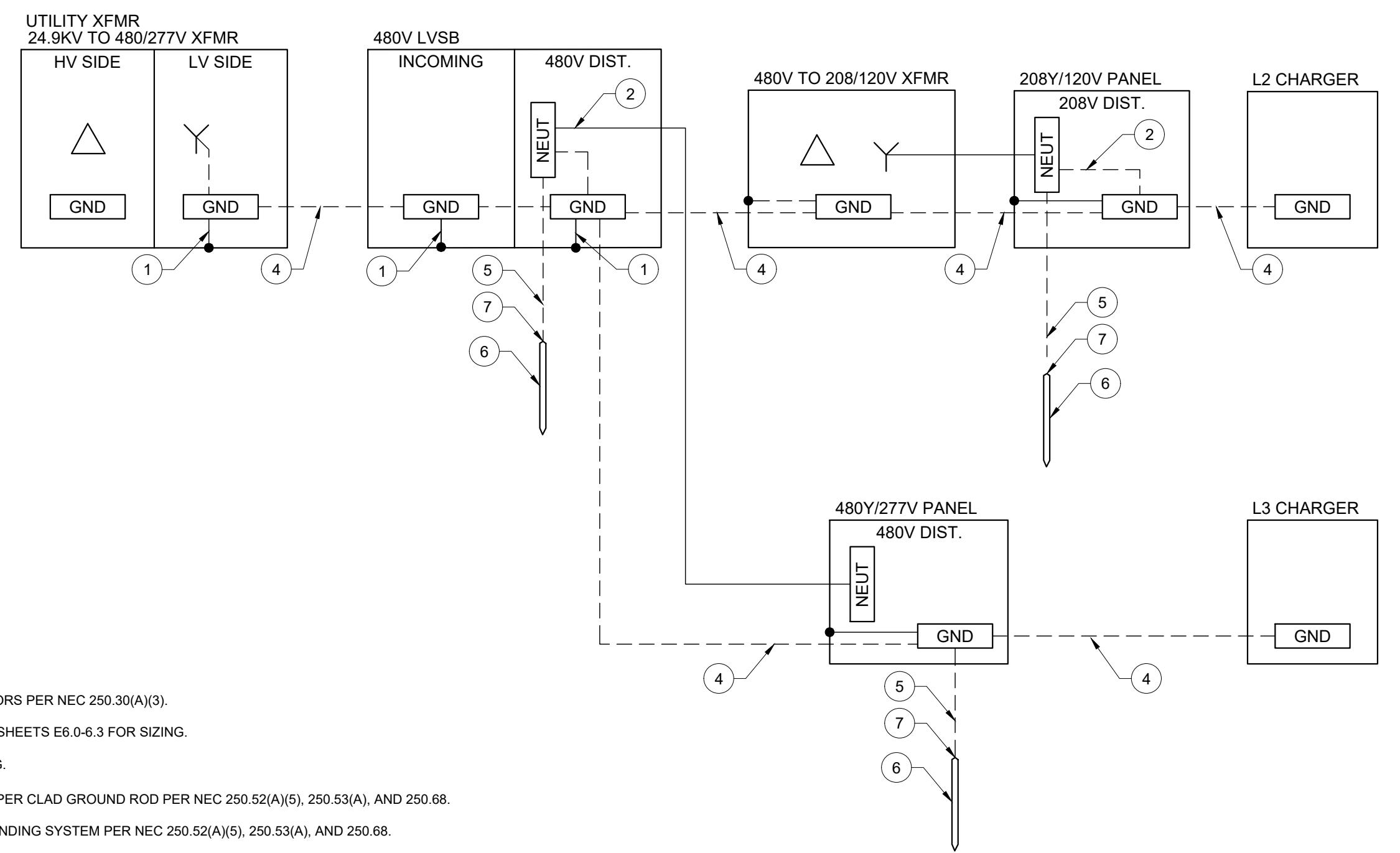
ELECTRICAL GROUNDING DIAGRAM



SIDE-BY-SIDE CHARGER PEDESTAL

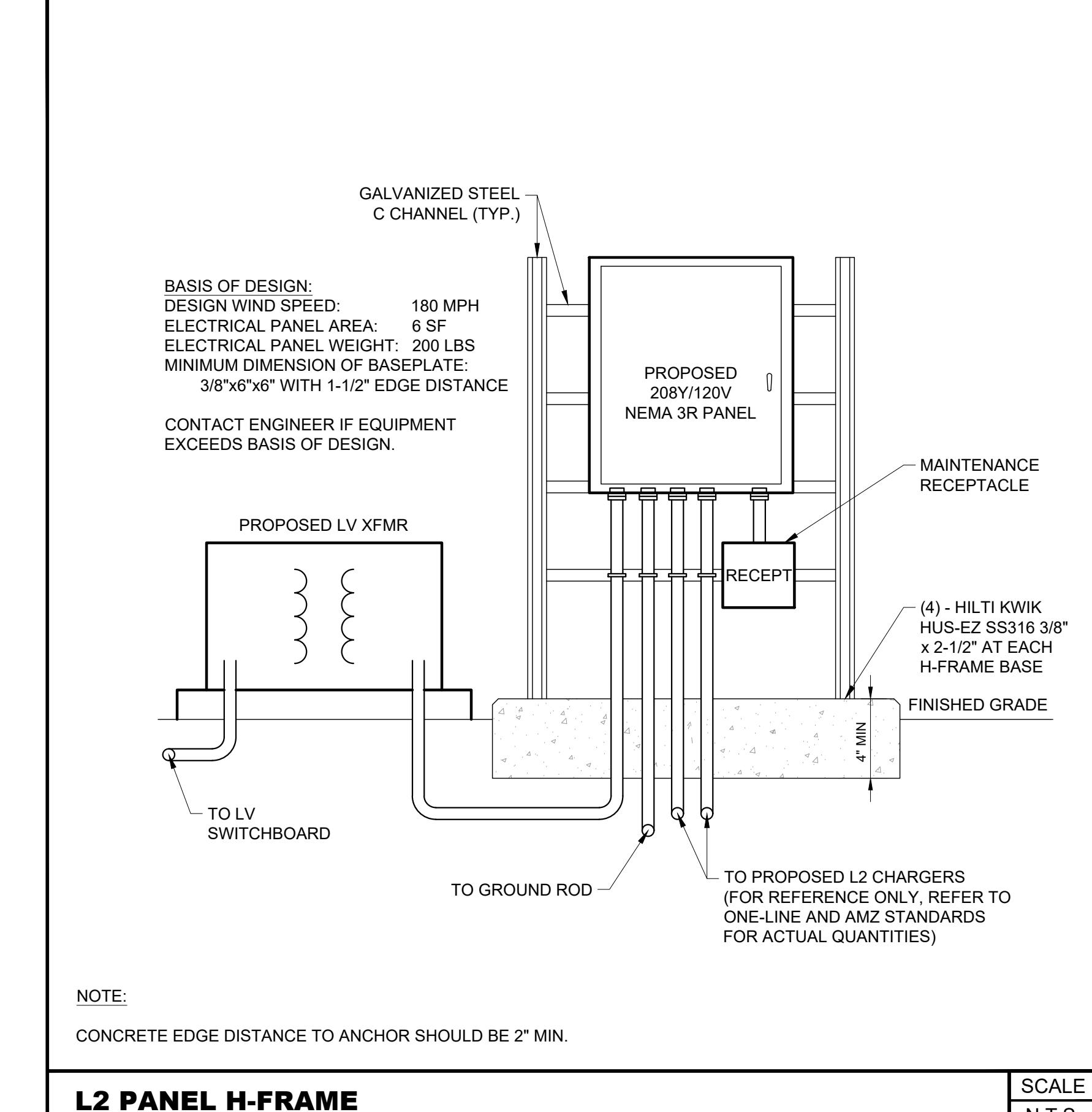


POWER TRENCH



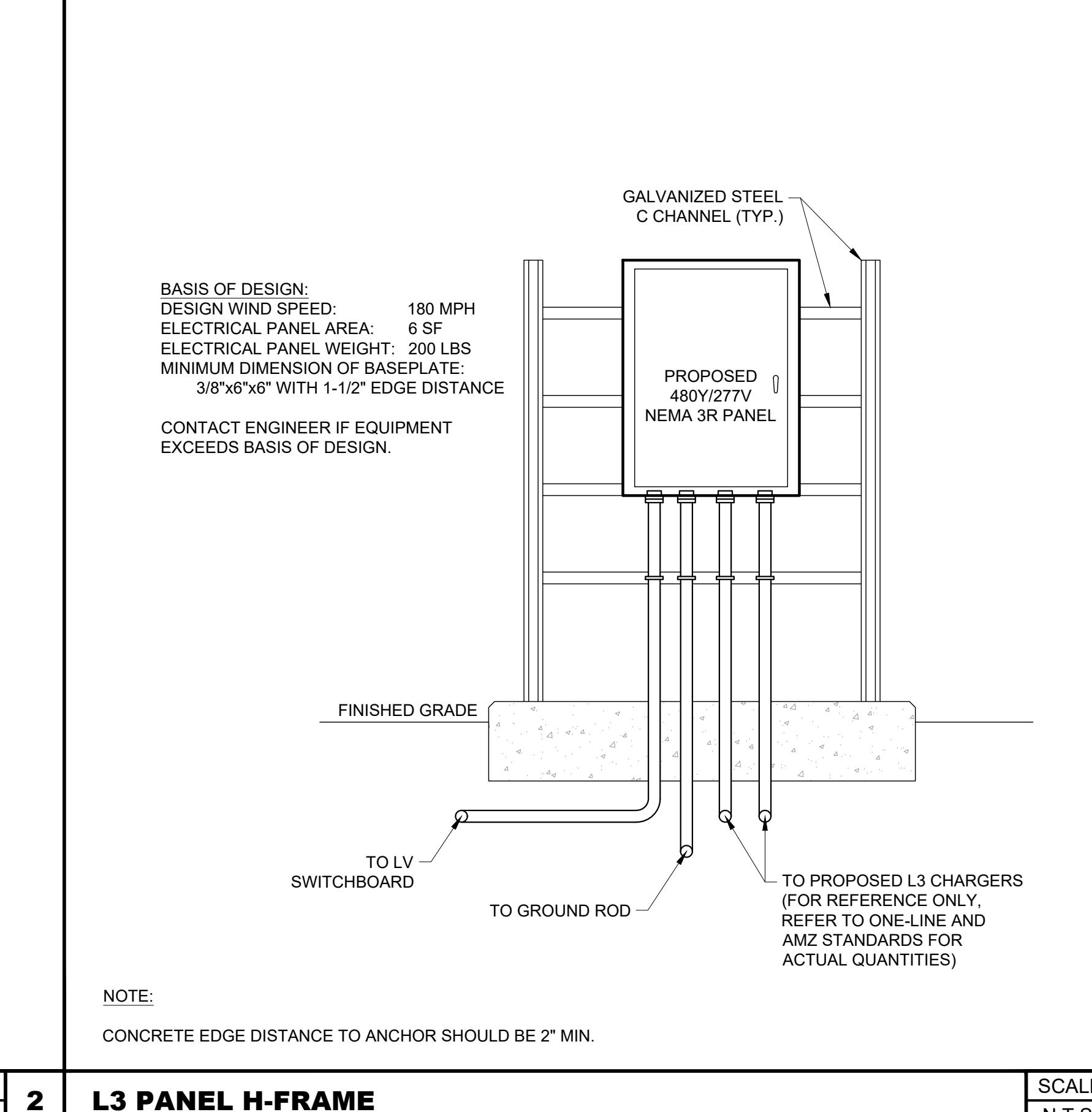
BORE PIT

SCALE N.T.S. 7



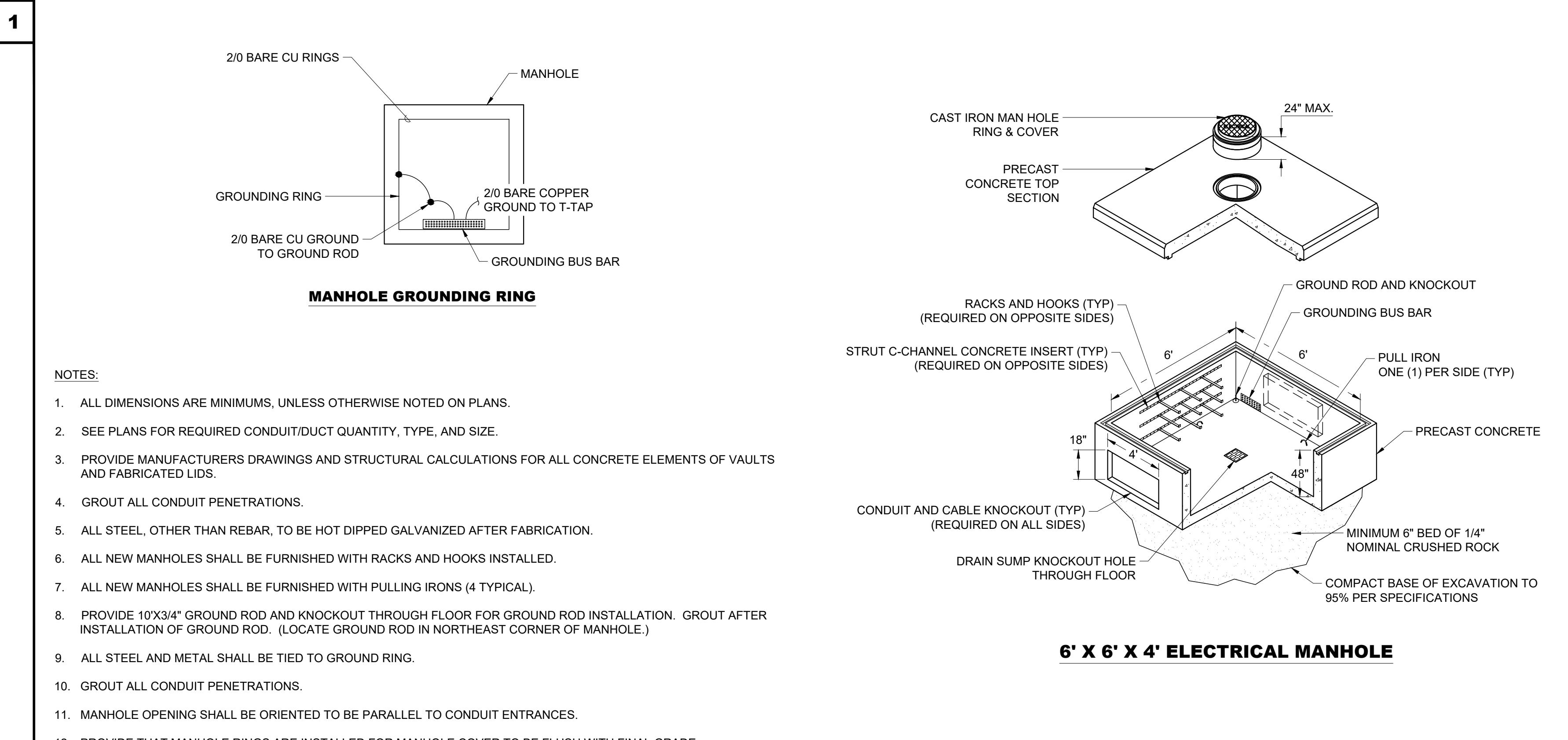
L2 PANEL H-FRAME

SCALE N.T.S. 2



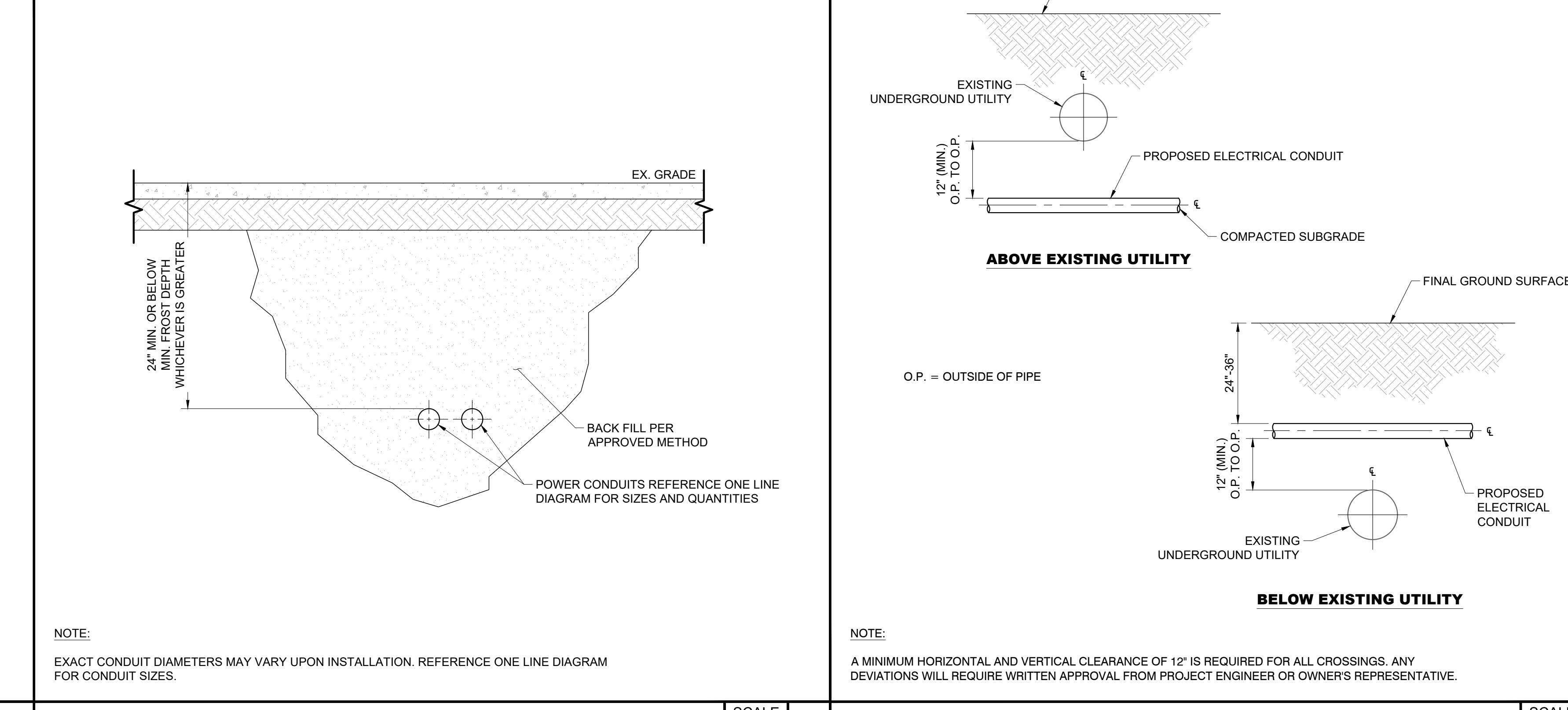
L3 PANEL H-FRAME

SCALE N.T.S. 3



6' X 6' ELECTRICAL MANHOLE

SCALE N.T.S. 5

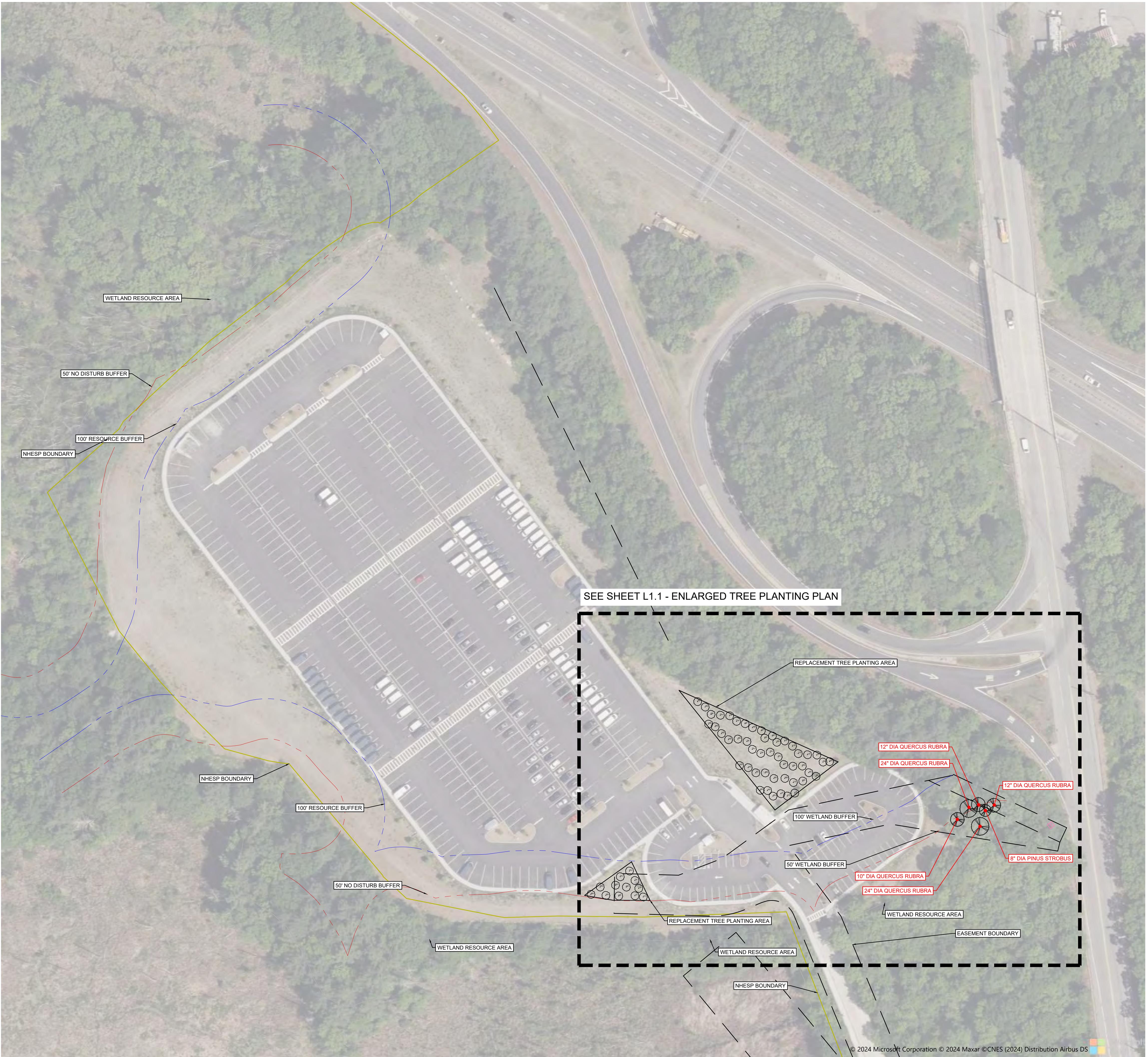


BORE SECTION

SCALE N.T.S. 8





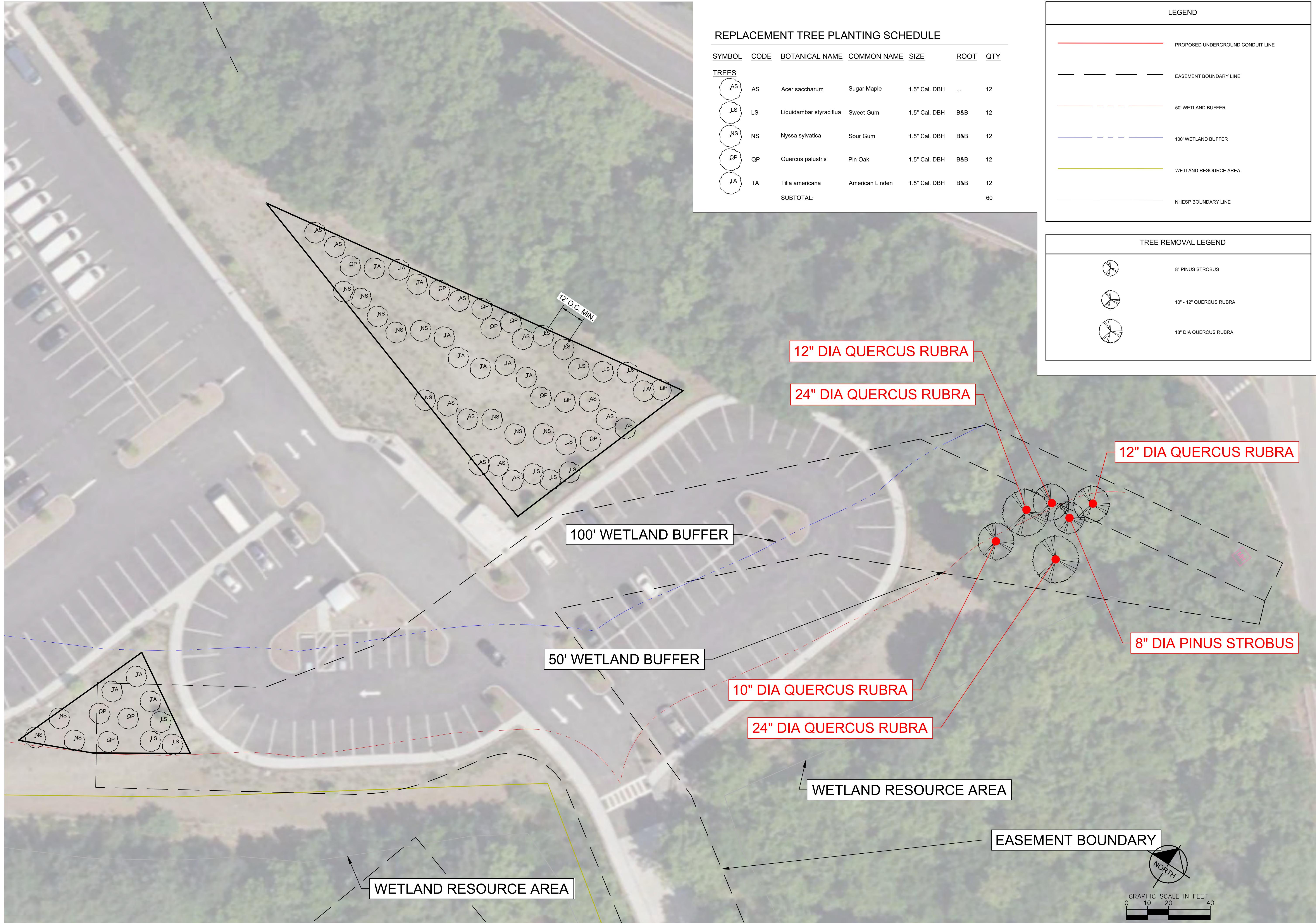


LEGEND	
	PROPOSED UNDERGROUND CONDUIT LINE
	EASEMENT BOUNDARY LINE
	50' WETLAND BUFFER
	100' WETLAND BUFFER
	WETLAND RESOURCE AREA
	NHESP BOUNDARY LINE

TREE REMOVAL LEGEND	
	8' PINUS STROBUS
	10' - 12' QUERCUS RUBRA
	18' DIA QUERCUS RUBRA

NOTES											
<ul style="list-style-type: none"> <li>TREE CLEARING WITHIN THE 50' WETLAND BUFFER IS 2,250 SF</li> <li>TREE CLEARING WITHIN THE 100' WETLAND BUFFER IS 2,500 SF</li> <li>6 TOTAL TREES OVER 6" DBH TO BE REMOVED, TOTALING 90" DBH TO BE REMOVED (SEE CALLOUTS ON PLAN)</li> <li>TREES WILL BE REPLANTED ON THE WESTERN PART OF THE SITE AS SHOWN (SEE ENLARGEMENT PLAN ON THE NEXT SHEET)</li> <li>THERE WILL BE A TOTAL OF 60 REPLACEMENT TREES PLANTED, RESULTING IN A TOTAL OF 90" DBH TO BE REPLANTED</li> <li>EACH TREE WILL BE 1.5" CAL. DBH AT PLANTING (60 REPLACEMENT TREES x 1.5" DBH PER TREE = 90" DBH REPLACEMENT)</li> <li>THE PROPOSED TREES WILL INCLUDE:</li> </ul> <table border="0"> <tr> <td>• ACER SACCHARUM</td> <td>SUGAR MAPLE</td> </tr> <tr> <td>• LIQUIDAMBAR STYRACIFLUA</td> <td>SOUR GUM</td> </tr> <tr> <td>• NYSSA SYLVATICA</td> <td>PIN OAK</td> </tr> <tr> <td>• QUERCUS PALUSTRIS</td> <td>AMERICAN LINDEN</td> </tr> <tr> <td>• TILA AMERICANA</td> <td></td> </tr> </table> <p>SEE PLANT SCHEDULE ON NEXT SHEET FOR INFORMATION AND PLACEMENT MINIMUM TREE SPACING SHALL BE 12' O.C.</p>	• ACER SACCHARUM	SUGAR MAPLE	• LIQUIDAMBAR STYRACIFLUA	SOUR GUM	• NYSSA SYLVATICA	PIN OAK	• QUERCUS PALUSTRIS	AMERICAN LINDEN	• TILA AMERICANA		DA
• ACER SACCHARUM	SUGAR MAPLE										
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• QUERCUS PALUSTRIS	AMERICAN LINDEN										
• TILA AMERICANA											

DK01_EV EV INFRASTRUCTURE PLAN	AERIAL TREE EXHIBIT	KHA PROJECT 11539867
		DATE 08/27/2024
MASSACHUSETTS	SCALE: AS SHOWN	
	DESIGNED BY: N/A	
	DRAWN BY: KN	
TOWN OF LITTLETON	CHECKED BY: DA	
EXHIBIT 1		
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