

A & W RESTAURANT - WELCH'S RESTAURANT INC.

TESLA SUPERCHARGER INSTALLATION

13520 NORTHWESTERN AVE.

FRANKSVILLE WI 53126

Preliminary NOT FOR CONSTRUCTION

ABBREVIATIONS

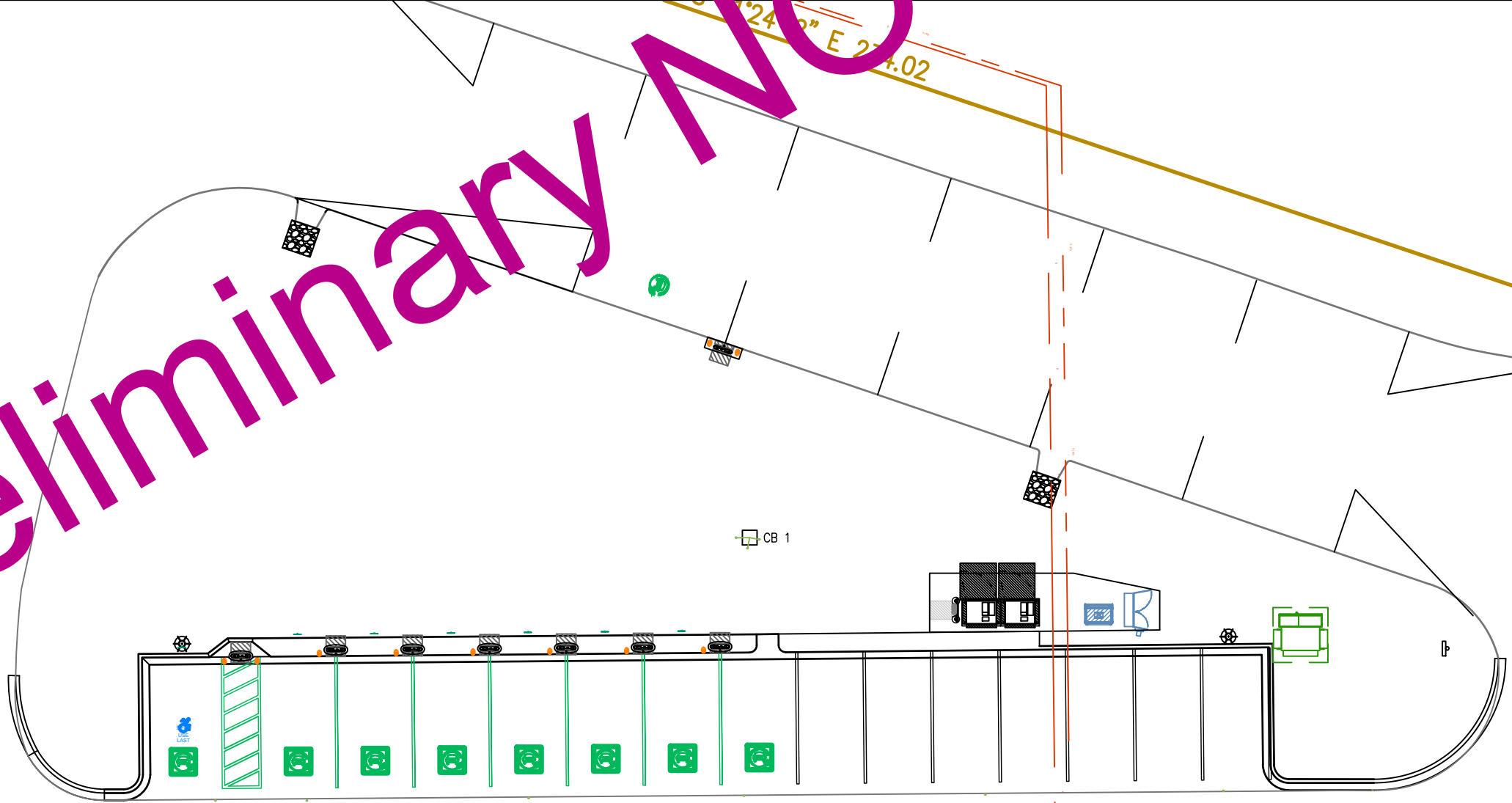
(N)	NEW
(E)	EXISTING
AC	ALTERNATING CURRENT
ADA	AMERICANS WITH DISABILITIES ACT
AHJ	AUTHORITY UNDER JURISDICTION
CLR	CLEAR
COMM	COMMUNICATION
CONC	CONCRETE
DC	DIRECT CURRENT
DIA	DIAMETER
EGC	EQUIPMENT GROUNDING CONDUCTOR
EMT	ELECTRICAL METALLIC TUBING
EQPT	EQUIPMENT
ERMS	ENERGY REDUCTION MAINTENANCE
ESS	ENERGY STORAGE SYSTEM
EV	ELECTRIC VEHICLE
GAB	GRADED AGGREGATE BASE
GALV	GALVANIZED
GEC	GROUNDING ELECTRODE CONDUCTOR
GFP	GROUND FAULT PROTECTOR
GND	GROUND
	CURRENT
IMP	CURRENT AT MAX POWER
INV	INVERTER
ISC	SHORT CIRCUIT CURRENT
KVA	KILOVOLT AMPERE
KW	KILOWATT
KWH	KILOWATT-HOUR
LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUNDFAULT
LV	LOW VOLTAGE
LVDC	LOW VOLTAGE DIRECT CURRENT
MAX	MAXIMUM
MIN	MINIMUM
MV	MEDIUM-VOLTAGE
NEC	NATIONAL ELECTRIC CODE
NRTL	NATIONALLY-RECOGNIZED TESTING LABORATORY
NTS	NOT TO SCALE
OC	ON CENTER
PL	PROPERTY LINES
PLC	POWER LINE COMMUNICATION
POC	POINT OF COMMON COUPLING
PSU	PRE-ASSEMBLED SUPERCHARGER UNIT
PVC	POLYVINYL CHLORIDE
RSD	RAPID SHUTDOWN
SCCR	SHORT CIRCUIT CURRENT RATING
SQ. IN.	SQUARE INCHES
SS	STAINLESS STEEL
SSBJ	SUPPLY SIDE BONDING JUMPER
STC	STANDARD TESTING CONDITIONS
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTEDWVWATT

SHEET INDEX

CP	Cover Page
GS	General Specifications
C100	Site Plan
C101	Excavation – Grading
C102	Concrete and Paving
C103	Parking Layout
C200	Charging Elevation
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C500	Site Details Erosion Control
C501	Site Details Concrete and Paving
C502	Charger Base Details
C503	TeslaV3 Post Base ADA-Detail
E100	Electrical Power Plan
E200	Electrical Elevation Plan
E400	Electrical Service Plan
E500	Electrical Details
E500	Electrical Details
E600	One Line Diagram

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AERIAL MAP



GENERAL NOTES

- GENERAL NOTES
1. ALL WORK SHALL COMPLY WITH ALL STATE AND LOCAL CODES AND ANY OTHER REGULATING AUTHORITIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK.
  2. PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FROM TESLA OF ANY DISCREPANCIES. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS SHALL BE CORRECTED AT THE SUBCONTRACTORS SOLE EXPENSE.
  3. SUBCONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING FOR APPROVAL BEFORE MAKING ANY CHANGES. DEVIATION FROM PLANS BEFORE WRITTEN APPROVAL PLACES LIABILITY ON THE SUBCONTRACTOR.
  4. ALL EQUIPMENT SHALL BE MOUNTED AS SHOWN. WHERE DETAILS ARE NOT PROVIDED, CONTRACTOR SHALL USE STANDARD CONSTRUCTION PRACTICES.
  5. ALL SURFACES SHALL BE PATCHED AND PAINTED AROUND NEW DEVICES AND EQUIPMENT TO MATCH EXISTING FINISHES.
  6. ANY METAL SHAVINGS FROM SITE WORK SHALL BE CLEANED FROM ALL SURFACES WHERE OXIDIZED OR CONDUCTIVE METAL SHAVINGS MAY CAUSE RUST, ELECTRICAL SHORT CIRCUITS, OR OTHER DAMAGE.
  7. APPROVALS FROM BUILDING INSPECTORS SHALL NOT CONSTITUTE AUTHORITY TO DEViate FROM THE DRAWINGS.
  8. NEW PAVEMENT INSTALLED AS PART OF THIS PROJECT SHALL MATCH EXISTING PAVEMENT SECTION. ASPHALT AND GAB DEPTHS SHALL BE MAINTAINED.
  9. CALL YOU BEFORE DIG. CONTACT DIGGERS HOTLINE AT (800) 242-8511 or [www.DiggersHotline.com](http://www.DiggersHotline.com) AT LEAST 2 WORKING DAYS BEFORE EXCAVATING.
  10. UNLESS OTHERWISE NOTED ON THE PLANS, FINISHED GROUND SURFACES SHALL BE GRADED TO DRAIN THE FINISHED SITE PROPERLY WITHIN 10- FEET OF ANY BUILDING FOUNDATION WITH A SLOPE OF 5% AWAY FROM ANY BUILDING OR STRUCTURE. ALL EXTERIOR HARDSCAPE WITHIN 10- FEET OF A BUILDING FOUNDATION SHALL BE INSTALLED WITH 2% MINIMUM SLOPE AWAY FROM ANY BUILDING OR STRUCTURE. DRAINAGE SWALES SHALL BE A 1.5% MINIMUM SLOPE. ALL GRADED SLOPES SHALL HAVE A MAXIMUM SLOPE OF 3H TO 1V (33%), UNLESS SHOWN OTHERWISE ON THE PLANS.
  11. LOT GRADING SHALL CONFORM AT THE PROPERTY LINES AND SHALL NOT SLOPE TOWARD PROPERTY LINES IN A MANNER WHICH WOULD CAUSE STORM WATER TO FLOW ONTO NEIGHBORING PROPERTY. HISTORIC DRAINAGE PATTERNS SHALL NOT BE ALTERED IN A MANNER TO CAUSE DRAINAGE PROBLEMS TO NEIGHBORING PROPERTY.
  12. CONTRACTOR TO FIELD VERIFY EXISTING DRAINAGE. IF THE EXISTING DRAINAGE SYSTEM IS DAMAGED DURING EXCAVATION. CONTRACTOR SHALL REPAIR AND/OR REROUTE DRAINAGE SYSTEM AND CONNECT TO EXISTING DRAINAGE FACILITY AS NECESSARY.
  13. EXISTING PUBLIC IMPROVEMENTS THAT ARE DAMAGED BY THE PROJECT CONSTRUCTION SHALL BE REPAIRED OR REPLACED.
  14. INSTALL REQUIRED EROSION CONTROL MEASURES PRIOR TO INSTALLATION.
  15. ALL EXISTING AND PROPOSED LOCATIONS ARE BASED OFF THE SURVEYOR'S ESTABLISHED BENCHMARK AND CONTROL.

ELECTRICAL NOTES

- ELECTRICAL NOTES
1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE AS AMENDED BY APPLICABLE STATE AND LOCAL CODES.
  2. ALL WIRING SHALL BE MANAGED IN A PROFESSIONAL, WORKMAN-LIKE MANNER AND MUST BE SUPPORTED, SECURED, AND PROTECTED TO PREVENT DAMAGE.
  3. "AC CIRCUIT CONDUCTORS SHALL BE IDENTIFIED BY PHASE AND SYSTEM PER ART 210.5 OR 215.12 UNLESS OTHERWISE REQUIRED BY ART 210.5(1) OR AHJ. COLOR-CODING OF POWER CONDUCTORS SHALL BE AS FOLLOWS:  
CONDUCTOR 277/480V 120/208V  
PHASE A BROWN BLACK  
PHASE B ORANGE RED  
PHASE C YELLOW BLUE  
NEUTRAL GRAY WHITE"
  4. "DC CIRCUIT CONDUCTORS SHALL BE IDENTIFIED PER ART 210.5 OR 215.12:  
CONDUCTOR STD COLOR ALT COLOR  
DC+ RED RED STRIPED  
DC- BLACK BLK STRIPED"
  5. TERMINATIONS OF AC, DC, AND COMMUNICATIONS CONDUCTORS SHALL BE PROFESSIONALLY AND LEGIBLY LABELED WITH CIRCUIT SCHEDULE IDENTIFIER, CONDUCTOR SIZE (AS APPLICABLE) AND TERMINATION FOR USE.
  6. ALL EQUIPMENT SHALL BE LISTED BY A NRTL IN COMPLIANCE WITH ART 110.3 & WI SPS 316.110
  7. UNDERGROUND CONDUCTORS & CABLES SHALL BE INSTALLED IN CONDUIT UON
  8. ALL WIRES SHALL BE PROVIDED WITH STRAP RELIEF AT ALL ENTRY INTO BOXES AS REQUIRED BY NRTL LISTING
  9. REFER TO MANUFACTURER'S CURRENT PLANNING & INSTALLATION MANUAL FOR TORQUE SPECS FOR ALL BOLTS AND TERMINAL CONNECTIONS.
  10. ALL CONDUCTOR TERMINATIONS ON BUSBARS OR TRANSFORMER SPADES SHALL BE MADE WITH HIGHPRESS CRIMP LUGS UON
  11. "ALL TERMINATIONS OF ALUMINUM CONDUCTORS SHALL BE PROPERLY INSTALLED WITH BEST PRACTICES INCLUDING BUT NOT LIMITED TO:  
12. -USE OF TERMINAL EQUIPMENT RATED FOR ALUMINUM AT THE CONDUCTOR TEMPERATURE, CURRENT, AND VOLTAGE  
13. -ALLOWANCE FOR MOVEMENT DUE TO THERMAL EXPANSION/CONTRACTION  
14. -PROPER CATHODIC PROTECTION OF ALUMINUM WITH ANTI-OXIDIZATION COMPOUND  
15. -USE OF CATHODIC DEVICES TO TORQUE AND MARK TERMINALS TO REQUIRED SETTINGS"
  16. DUCT SEAL COMPOUND SHALL BE APPLIED WHEREVER CONDUITS TRANSITION INDOOR/OUTDOOR OR UNDERGROUND/ABOVEGROUND REFER TO EQUIPMENT NOTES FOR ADDITIONAL DUCT SEAL REQUIREMENTS
  17. BELL ENDS SHALL BE INSTALLED WHEREVER CONDUIT ENTERS EQUIPMENT FROM UNDERGROUND AND WHEREVER POTENTIAL FOR DAMAGE TO CONDUITS IS PRESENT AT ANY POINT. BELL ENDS SHALL NOT PREVENT THE USE OF GROUNDING FITTINGS OR COUPLERS WHEN REQUIRED
  18. ALL JUNCTIONS WITHIN FLOOR-MOUNTED EQUIPMENT SHALL BE 3'-5' ABOVE FINISHED GRADE
  19. ALL CONDUITS EXPOSED TO VEHICULAR OR EQUIVALENT PHYSICAL DAMAGE SHALL BE RIGID GALVANIZED STEEL
  20. GROUND LUGS SHALL BE RATED FOR THEIR ENVIRONMENT AND CONDITION OF USE

SUPERCHARGER NOTES

- SUPERCHARGER NOTES
1. NEUTRAL MUST BE INCLUDED FOR PROPER OPERATION OF TESLA SUPERCHARGERS (EXCEPT FOR V4 SUPERCHARGERS)
  2. ALL CONDUIT FURNISHED AND INSTALLED BY CONTRACTOR ALL WIRING FURNISHED BY TESLA AND INSTALLED BY CONTRACTOR
  3. ALL BUSHINGS AND WIRING INTERNAL OF PROPOSED SERVICE EQUIPMENT PROVIDED BY MANUFACTURER. ANY MODIFICATIONS SHALL REQUIRE ENGINEERING APPROVAL PRIOR TO ANY CHANGES BEING MADE
  4. ALL ALUMINUM(AI) CONDUCTORS TO RECEIVE ANTHOXIDATION COATING DURING INSTALLATION ALL OTHER CONDUCTORS ARE COPPER UNLESS OTHERWISE NOTED.
  5. "THE FOLLOWING CHARGING CABINETS AND THE CHARGING POSTS USED ON THIS PROJECT COMPLY WITH THE FOLLOWING STANDARDS:  
-IEC 61851-23: 2014/EN 61851-23: 2014  
-UL 2202: 2009(R2012)  
-CAN CSA C22.2 NO 107.1.01(R2011)"
  6. "THE FOREMENTIONED STANDARDS IDENTIFY THE REQUIREMENTS MET BY THE EQUIPMENT, INCLUDING BUT NOT LIMITED TO:  
- PROTECTION AGAINST ELECTRIC SHOCK  
- OVERLOAD AND SHORT CIRCUIT PROTECTION  
- FAULT PROTECTION  
- DEGREES OF PROTECTION AGAINST ACCESS TO HAZARDOUS LIVE PARTS  
- THE INTERNAL COMPONENTS OF THE SYSTEM ARE PROPRIETARY ANY QUESTIONS CONCERNING ACTUAL INTERNAL PROTECTIVE DEVICES MUST BE COORDINATED DIRECTLY WITH TESLA"
  7. TESLA SUPERCHARGER SIGNAL WIRING RATED 1000V AND USED FOR POWER LIMITED CLASS 1 CIRCUITS SHALL BE PERMITTED TO RUN IN CONDUITS, CABLE TRAYS, WIRE WAYS, OR RACEWAYS ALONG WITH ASSOCIATED DC CONDUCTORS AS ALLOWED PER NEC 725.48(B)(1), 300.3(C)(1) and 620.36.
  8. SUPERCHARGER CABINET AC CONDUCTORS SIZED UNDER ENGINEERING SUPERVISION USING THERMAL MODELING SOFTWARE SPECIFICATIONS ABOUT THE TRENCHING REQUIREMENTS ARE SHOWN IN E-501
  9. FOR DC RUNS IN EXCESS OF 330 FEET, CONTACT TESLA
  10. UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC OR UL LISTED HDPE. THE ABOVEGROUND PORTION OF AN UNDERGROUND/ABOVEGROUND TRANSITION SHALL BE SCHEDULE 80 PVC OR UL LISTED HDPE
  11. ABOVEGROUND CONDUITS EXPOSED TO VEHICULAR OR EQUIVALENT PHYSICAL DAMAGE SHALL BE RMC. ABOVEGROUND CONDUITS NOT EXPOSED TO VEHICULAR OR EQUIVALENT DAMAGE SHALL BE PERMITTED TO BE EMT.
  12. WIRE SPLICES ARE NOT PERMITTED TO EXTEND WIRE RUN LENGTH CONTRACTOR IS RESPONSIBLE FOR RERUNNING FULL LENGTH OF WIRE IF RUN LENGTH IS MISCALCULATED
  13. SPECIAL INSPECTION IS REQUIRED FOR ALL POST-INSTALLED CONCRETE ANCHORS
  14. PLANT GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF PROJECT. ACCEPTANCE BY THE OWNER CONTRACTOR IS RESPONSIBLE FOR PLANT MAINTENANCE FOR THE FIRST GROWING SEASON
  15. IF EXISTING GRASS IS DAMAGED/REMOVED DURING CONSTRUCTION, CONTRACTOR SHALL APPLY SEED PER HYDROSEED METHOD RATING OF SEED SHALL BE PER DISTRIBUTOR BASED ON SPECIES TYPE TO MATCH EXISTING LANDSCAPE CONTRACTOR SHALL MATCH EXISTING LANDSCAPE; USE GRASS, RIVER ROCK, MULCH ETC AROUND EQUIPMENT, UNLESS OTHERWISE NOTED
  16. CONTRACTOR TO INSTALL WEED BARRIER IN FRONT OF SUPERCHARGER CABINETS AND SWITCHBOARD BARRIER TO EXTEND FULL WIDTH AND DEPTH OF NEC REQUIRED WORKING CLEARANCES
  17. FOR (N) ACCESSIBLE EV CHARGING AREA(S), CONTRACTOR TO FIELD VERIFY SLOPES ARE COMPLIANT PER ACCESSIBLE STALL DETAIL (REF ARCHITECTURAL OR STRUCTURAL SHEETS) REGRADE AND ADD ASPHALT OVERLAY, NEW FULL DEPTH ASPHALT, AND/OR ASPHALT MILLING IF REQUIRED EXISTING SPOT ELEVATIONS ARE APPROXIMATE PER SURVEY DATA AND ARE TO BE FIELD VERIFIED BY CONTRACTOR
  18. PAD EXTENTS AND FOOTING TO BE CONFIRMED BY CONTRACTOR PRIOR TO CONSTRUCTION
  19. ALL PRECAST FOUNDATIONS SHOULD HAVE 1" SEPARATION FILLED WITH ASPHALTIC MATERIAL, BETWEEN ALL PRECAST PADS AND MAINTENANCE PADS
  20. SWITCHBOARD DIMENSIONS AND ANCHOR LOCATIONS ARE LIABLE TO CHANGE CONTRACTOR TO VERIFY AGAINST VENDOR FINAL SHOP DRAWINGS

APPLICABLE CODES

WI SPS 361-365 BUILDING CODE  
& 2021 INTERNATIONAL BUILDING CODE  
2017 NATIONAL ELECTRIC CODE

PROJECT TEAM

PROJECT DESIGNER:  
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PROJECT SCOPE

- INSTALLATION OF:
- (2) V3.5 SUPERCHARGER CABINETS
  - (8) V3 SUPERCHARGER POSTS
  - (1) SWITCHBOARD
  - (1) UTILITY METRING ENCLOSURE
  - ASSOCIATED AC AND DC EQUIPMENT
  - CAST IN PLACE EQUIPMENT PADS AND WALKWAYS
  - NEW PARKING STRIPING, SIGNAGE AND ADA ACCESS FEATURES

General Notes



A	Issued for Review	12/25/25
No.	Revision/Issue	Date

Firm Name and Address  
Pieper Electric Inc.  
5477 W Westridge Ct.  
New Berlin WI 53151

Project Name and Address  
A&W Restaurant - Tesla Supercharging  
Welch's Restaurant Inc.  
13520 Northwestern Avenue  
Franksville WI 53126

Project  
Cover Page  
Date  
12/2/25  
Scale  
See title block  
Sheet

CP



GENERAL CONSTRUCTION NOTES

1. ALL WORK SHALL COMPLY WITH ALL STATE AND LOCAL CODES AND ANY OTHER REGULATING AUTHORITIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK.
2. PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE DESIGN PROFESSIONAL OF ANY DISCREPANCIES. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS SHALL BE CORRECTED AT THE SUBCONTRACTORS SOLE EXPENSE.
3. SUBCONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO PIEPER ELECTRIC INC. FOR APPROVAL BEFORE MAKING ANY CHANGES. DEVIATION FROM PLANS BEFORE WRITTEN APPROVAL FROM TESLA PLACES LIABILITY ON THE SUBCONTRACTOR.
4. ALL EQUIPMENT SHALL BE MOUNTED AS SHOWN. WHERE DETAILS ARE NOT PROVIDED, CONTRACTOR SHALL USE BEST CONSTRUCTION PRACTICES.
5. ALL SURFACES SHALL BE PATCHED AND PAINTED AROUND NEW DEVICES AND EQUIPMENT TO MATCH EXISTING FINISHES.
6. ANY METAL SHAVINGS FROM SITE WORK SHALL BE CLEANED FROM ALL SURFACES WHERE OXIDIZED OR CONDUCTIVE METAL SHAVINGS MAY CAUSE RUST, ELECTRICAL SHORT CIRCUITS, OR OTHER DAMAGE.
7. APPROVALS FROM BUILDING INSPECTORS SHALL NOT CONSTITUTE AUTHORITY TO DEVIATE FROM THE DRAWINGS.
8. NEW PAVEMENT INSTALLED AS PART OF THIS PROJECT SHALL MATCH EXISTING PAVEMENT SECTION. EXISTING PAVEMENT DEPTHS SHALL BE MAINTAINED.
9. THE EXISTING TOPOGRAPHIC SURVEY IS BASED ON INFORMATION FURNISHED BY LANDOWNER. ALL CONTRACTORS ARE RESPONSIBLE FOR LOCATING EXISTING CONDITION IMPROVEMENTS PER THESE PLANS.
- 10.THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THE PLAN ARE BASED ON FIELD SURVEYS. DUE TO THE LIMITATIONS IN TECHNOLOGY AND GROUND CONDITIONS, NOT ALL UNDERGROUND UTILITIES ARE ABLE TO BE LOCATED. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO STARTING CONSTRUCTION.
- 11.ALL PROPERTY LINES, RIGHT OF WAYS, CENTERLINES, DIMENSIONS, GRADES, AND UTILITY LOCATIONS SHOWN ON THESE PLANS WERE BASED ON EXISTING DATA FURNISHED BY LANDOWNER AND RACINE COUNTY GIS MAPPING SYSTEM. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
- 12.THE CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF TESLA PRIOR TO THE COMMENCEMENT OF WORK.
- 13.ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND FEDERAL, STATE AND LOCAL JURISDICTION CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- 14.UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- 15.PLANs ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM PIEPER ELECTRIC INC. PRIOR TO PROCEEDING WITH THE WORK.
- 16.DETAILED ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND APPROVED BY PIEPER ELECTRIC INC. PRIOR TO PROCEEDING WITH WORK.
- 17.THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 18.IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS,
- 19.THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY PIEPER ELECTRIC PRIOR TO PROCEEDING.
20. PIEPER ELECTRIC INC. SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
21. CONSTRUCTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE.
22. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGE TO PARTS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
23. THE CONTRACTOR SHALL CONTACT UTILITIES LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES.
24. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
25. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY PIEPER ELECTRIC INC. OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
26. FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY AN INDEPENDENT TESTING LAB. THIS WORK TO BE COORDINATED BY THE CONTRACTOR.
27. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT, LOCAL PERMITTING AGENCY AND EPA REQUIREMENTS.
28. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES DEEMED NECESSARY TO PROTECT AGAINST VANDALISM OR THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.

29. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING FROM OWNER. UTILITY OUTAGES DUE TO FORCE MEJURE OR OUT OF THE CONTROL OF PIEPER ELECTRIC INC. OR SUBCONTRACTORS WILL NOT BE DEEMED AS AN INTERRUPTOIN.
30. GRANULAR BACKFILL: SHALL MEET THE FOLLOWING GRADATION PER THE TABLE BELOW:  

SIEVE SIZETOTAL PERCENT PASSING1 1/2 INCH (37.5 MM)1001 INCH (25.0 MM)75 TO 1003/4 INCH (19.00 MM)80 TO 1003/8 INCH (9.5 MM)35 TO 75NO. 4 (4.75 MM)30 TO 60NO. 30 (0.600 MM)7 TO 30NO. 200 (0.75 MM)3 TO 15
31. GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SW OR SW-SM).
32. UNSUITABLE MATERIAL: HIGH AND MODERATELY PLASTICS SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.
33. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES PER APPLICABLE PLAN PREPARED BY CONTRACTOR. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ALL TIMES.
34. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES

GENERAL FOUNDATION NOTES

1. DETERMINATION OF FINAL BEARING ELEVATIONS, TOPSOIL AND EXCAVATION STRIPPING DEPTH, INSPECTION OF ALL SUBSOIL EXPOSED DURING STRIPPING, SITE GRADING, EXCAVATION OPERATIONS, APPROVAL OF FILL MATERIALS, DENSITY TESTING OF FILLS TO ENSURE PLACEMENT PER SPECIFICATION REQUIREMENTS, INSPECTION OF FOUNDATION BEARING SURFACES, AND VERIFICATION OF ALLOWABLE BEARING PRESSURES ARE THE TESTING LABORATORY'S RESPONSIBILITY.
2. ALL FOUNDATIONS ARE TO REST ON FIRM UNDISTURBED SOIL OR COMPACTED FILL FREE FROM ORGANIC MATTER. IF POOR SOIL CONDITIONS ARE ENCOUNTERED AT FOUNDATION DEPTHS SHOWN, NOTIFY OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH CONSTRUCTION.
3. CONTRACTOR SHALL COMPACT SUBGRADE. SEE FROST/NO FROST DESIGN NOTES ON THIS SHEET.
4. FOUNDATIONS HAVE BEEN DESIGNED BASED ON AN ASSUMED ALLOWABLE SOIL BEARING CAPACITY OF 1500 PSF UNLESS NOTED OTHERWISE.
5. INUNDATION AND LONG-TERM EXPOSURE OF BEARING SURFACES WHICH WILL RESULT IN DETERIORATION OF BEARING FORMATIONS, SHALL BE PREVENTED. FOOTING SHALL BE PLACED IMMEDIATELY FOLLOWING FOOTING EXCAVATIONS AND BEARING SURFACE INSPECTION.
6. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
7. GROUNDWATER ASSUMED TO BE BELOW EXCAVATION DEPTH. IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION ON SITE, CONTRACTOR SHALL PROVIDE FOR ANY SITE DRAINAGE AND DE-WATERING REQUIRED.
8. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING PUBLIC AND PRIVATE UTILITIES PRIOR TO EXCAVATION. IF NECESSARY, UTILITIES SHALL BE RELOCATED PRIOR TO FOUNDATION INSTALLATION.

CONCRETE

1. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301-10, "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE" AND ACI 302, 305 AND 306 UNLESS NOTED OTHERWISE.
2. ALL DETAILING, FABRICATION AND PLACING OF CONCRETE SHALL CONFORM TO ACI 318-14, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND THE LATEST ACI "MANUAL OF STANDARD PRACTICE FOR DETAIL REINFORCED CONCRETE STRUCTURES" UNLESS NOTED OTHERWISE.
- SAFETY AND PERFORMANCE OF THE STRUCTURE ARE THE RESPONSIBILITY OF THE CONTRACTOR INSOFAR AS THEY ARE AFFECTED BY THE LOCATION AND DETAILS OF CONSTRUCTION JOINTS. SHOP DRAWINGS OF THE PROPOSED CONSTRUCTION JOINT LOCATIONS AND DETAILS ARE TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.
4. MAXIMUM SIZE OF AGGREGATE SHALL NOT EXCEED SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR 1/3 CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING. MAXIMUM SIZE MAY BE INCREASED TO 2/3 CLEAR DISTANCE PROVIDED WORKABILITY AND METHODS OF CONSOLIDATION SUCH AS VIBRATING WILL PREVENT HONEYCOMBS OR VOIDS.
5. ALL CONCRETE UNLESS NOTED OTHERWISE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS AS FOLLOWS: ALL CONCRETE - 2500 PSI. ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 6% (+1%) AIR ENTRAINMENT.
6. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60.
7. WELDED WIRE FABRIC REINFORCING SHALL CONFORM TO ASTM A1064 AND BE FURNISHED IN FLAT SHEETS AND INSTALLED ON CHAIRS OR PRECAST CONCRETE BLOCKS.
8. NO TACK WELDING OF REINFORCING IN THE FIELD IS PERMITTED.
9. PROVIDE CORNER BARS AT ALL LOCATIONS WHERE REINFORCEMENT CHANGES DIRECTION.
- 10.PROVIDE STRAIGHT AND DIAGONAL BARS AT EDGES OF ALL OPENINGS.
- 11.REINFORCING EMBEDMENT AND LAP SPLICES (INCHES) FOR 4500 PSI CONCRETE  
OTHER TOP\*BAR SIZEANCHORAGESPLICEANCHORAGESPLICE#315191924# 419252533#524313141# 629373749 HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE BELOW BAR
- 12.NON-SHRINK GROUT SHALL MEET A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 6000 PSI.
- 13.CONCRETE FOUNDATIONS SHOULD BE SUPPORTED ON A 6-INCH COMPATED LAYER OF APPROVED FREE-DRAINING GRANULAR MATERIAL.
- 14.APPROVED MATERIAL SHOULD BE COMPATED OVER THE FULL WIDTH OF THE INFILL AREA UNTIL VISIBLE DEFORMATION OF THE BACKFILL CEASES.

TRAFFIC CONTROL NOTES

1. DURING THE CONSTRUCTION PERIOD, SIDEWALKS, SHOULDERS, TRAVEL LANE(S), OR STREETS MAY HAVE TO BE TEMPORARILY CLOSED OR RESTRICTED FOR THE UNLOADING/LOADING OF EQUIPMENT OR AS A RESULT OF CONSTRUCTION ACTIVITIES THEMSELVES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE DIRECTLY WITH THE LOCAL GOVERNING AUTHORITIES ON ANY SUCH CLOSURES AND MUST OBTAIN WRITTEN PERMISSION FROM THE APPROPRIATE AUTHORITIES PRIOR TO IMPLEMENTING SUCH CLOSURES OR RESTRICTIONS. ANY CLOSURE OR RESTRICTION MUST COMPLY WITH THE STATE MANUAL OF UNIFORM CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS (LATEST EDITION AND REVISION), AND WITH ANY AND ALL ADDITIONAL APPLICABLE CITY, VILLAGE, OR COUNTY REQUIREMENTS. THE CONTRACTOR SHALL PREPARE AND SUBMIT A FORMAL TRAFFIC CONTROL/MOT PLAN TO THE LOCAL GOVERNING AUTHORITIES IF REQUESTED. ALL REQUIRED CONSTRUCTION TRAFFIC MAINTENANCE DEVICES SHALL BE PROVIDED, ERECTED AND MAINTAINED, AND ULTIMATELY REMOVED BY THE CONTRACTOR.
2. THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY ACCESS TO ALL ABUTTING PROPERTIES AND INTERSECTING STREET AT ALL TIMES DURING THE CONSTRUCTION OF THE IMPROVEMENTS ANTICIPATED. DRIVEWAYS MUST BE MAINTAINED AND ALL TRENCHES SHALL BE BACKFILLED AT THE END OF EACH WORKDAY. PER THE STATE MUTCD AND OTHER APPLICABLE APPROPRIATE GOVERNING REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFEGUARDS SUCH AS BARRICADES, SATISFACTORY BARRIERS, CONES, SIGNAGE, BARRELS, MESSAGE BOARDS, LIGHTING, FLAGMEN, LAW ENFORCEMENT OFFICERS, ETC. TO AVOID DAMAGE AND/OR INJURY TO VEHICLES AND PERSONS TRAVELING THE CONSTRUCTION AREA.

INSPECTIONS

1. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND OVERSEEING OF ALL INSPECTIONS REQUIRED BY THE AUTHORITY HAVING JURISDICTION. INSPECTIONS MUST BE COMPLETED PRIOR TO FINAL APPROVAL AND ACCEPTANCE.

PAVEMENT MARKING NOTES

2. ALL PAVEMENT MARKING SPACE STRIPING AND MARKINGS ON ASPHALT TO BE WHITE PAVEMENT PAINT, UNLESS STATED OTHERWISE FOR EV CHARGING SPACES.
3. ALL PAVEMENT MARKINGS WITHIN ADA AREAS ADA AND LOGOS SHALL BE PAINTED WHITE SQUARE BACKGROUND WITH BLUE ADA ACCESSIBILITY LOGO.
4. ALL PAVEMENT MARKINGS WITHIN EV CHARGING SPACES WITH LOGOS SHALL BE PAINTED WHITE SQUARE BACKGROUND WITH GREEN EV CHARGING LOGO AS SHOWN ON DETAIL DRAWINGS.
5. MARKING (STRIPING) PAINT FOR PARKING SPACES, TRAFFIC ARROWS, ADA PARKING AND SYMBOLS, ETC., PER LOCAL REQUIREMENTS AND AS FOLLOWS:

a. PAVEMENT MARKINGS PAINT SHALL BE WATER BASE FAST DRYING 100% ACRYLIC TYPE: WATER BASE TO MEET FEDERAL SPECIFICATION TTP-01952B. FOR COLD WEATHER APPLICATION PAINT PRODUCT SHALL BE IN ACCORDANCE WITH ASTM-D2369, D1394, D3723, D1475, D562 AND D711.
6. PROVIDE A NON-SLIP AGGREGATE ADDITIVE TO MARKING PAINT USED AT ADA ACCESS RAMPS.
7. APPLY 2 COATS WITHIN THE SAME DAY, UTILIZING STRAIGHT EDGES WHITE ON ASPHALT EXCEPT WHEN MATCHING ADJACENT OR EXISTING COLOR WHEN THE PAVING IS AN EXPANSION OR SEGMENT OF A LARGER LOT.

LANDSCAPE NOTES

GENERAL

1. PLANT GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF PROJECT ACCEPTANCE BY THE OWNER.
2. ALL DISTURBED AND PROPOSED LANDSCAPE PLANTING BED AREAS SHALL BE RESTORED TO MATCH EXISTING CONDITIONS.

MATERIALS

1. LAWN SEED MIX: ALL SEED SHALL BE FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH THE ASSOCIATE OF OFFICIAL AND SEED ANALYSIS RULES FOR TESTING SEEDS FOR PURITY AND GERMINATION TOLERANCE.

a. ALL AREAS TO BE SEEDED SHALL RECEIVE SEED MIX SELECTED PER HARDINESS ZONE BELOW AND MATCHED TO EXISTING. SITE MEETS THE SPECIFICATIONS OF THE FOLLOWING SEED MIX:

i. ZONES 3, 4 & 5: APPROVED BLUE GRASS BLEND
2. WOOD CELLULOSE FIBER MULCH: DEGRADABLE GREEN DYED WOOD CELLULOSE FIBER OR 100% RECYCLED LONG FIBER PULP, FREE FROM WEEDS OR OTHER FOREIGN MATTER TOXIC TO SEED GERMINATION AND SUITABLE FOR HYDRO-MULCHING.
3. LANDSCAPE GRASS SEED AREAS SHALL UTILIZE A FIBER MAT MADE FROM BIODEGRADABLE FIBERS WITH MESH OR NETTING FOR SUPPORT. THE FIBER MAT SHALL BE PLACED ON SEEDED AREAS WITHIN 12 HOURS OF SEEDING AND BE OF THE CORRECT SHAPE AND TYPE FOR SEEDED AREAS. PROVIDE STAPLES OR FASTENERS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO MAINTAIN PROPER EROSION CONTROL DURING THE GERMINATION AND ROOT DEVELOPMENT PERIOD OF GRASS SEED.
4. HYDROSEEDING SHALL BE APPLIED SHALL CONTAIN SPECIFIED SEED, COMMERCIAL FERTILIZER AND FIBER MULCH IN WATER WITH A TACKIFIER LIQUID CONCENTRATE THAT CREATES A CRUST PERMEABLE TO WATER AND AIR.

a. HYDROSEEDING SHALL BE APPLIED USING EQUIPMENT SPECIFICALLY DESIGNED FOR HYDROSEED APPLICATION THAT CREATES A BLENDED HOMOGENEOUS SLURRY SUITABLE FOR APPLICATION.

b. HYDROSEED SHALL BE DEPOSITED AT A 2500LB/ACRE DRY WEIGHT. WITH A SEED SOWING RATE OF 5 POUNDS PER 1000 SQUARE FEET.



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New Berlin WI 53151

Project Name and Address  
A&W Restaurant - Tesla Supercharging  
Welch's Restaurant Inc.  
13520 Northwestern Avenue  
Franksville WI 53126

Project GENERAL SPECIFICATIONS
Date 12/2/25
Scale See title block
Sheet

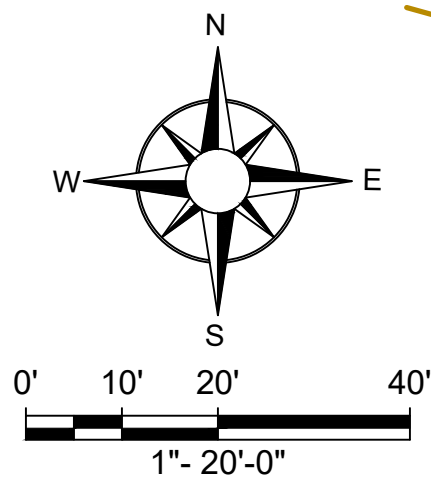
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12/2/25

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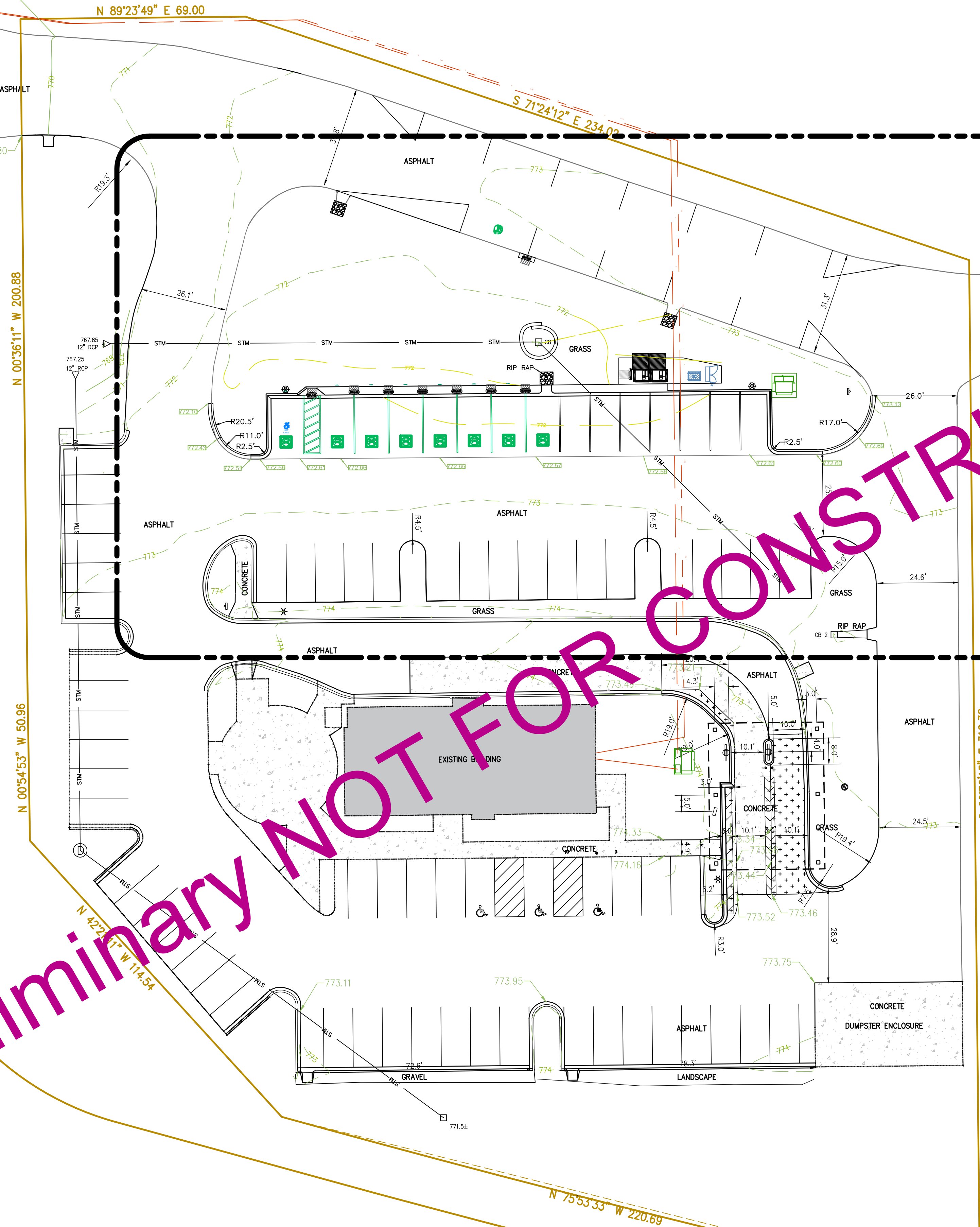
NE FRONTAGE ROAD

Preliminary NOT FOR CONSTRUCTION

# Site Plan

1"- 20'-0"

1



1  
C101

**DIGGERS HOTLINE**  
Call 811 or (800) 242-8511  
www.DiggersHotline.com

UTILITY NOTE:  
EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR CONSTRUCTION RELATED ACTIVITIES. CONTRACTOR SHALL CALL "DIGGERS HOTLINE" IPRIOR TO CONSTRUCTION TO AVOID DAMAGE, INTERFERENCE, OR INTERRUPTION OF UTILITY SERVICES.

General Notes



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Project  
Site Plan  
Date  
12/2/25  
Scale  
See title block  
Sheet

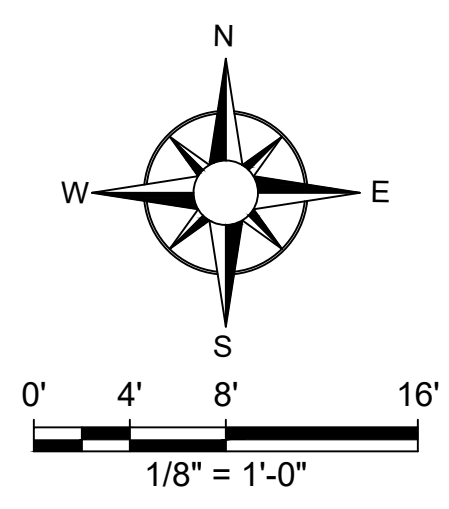
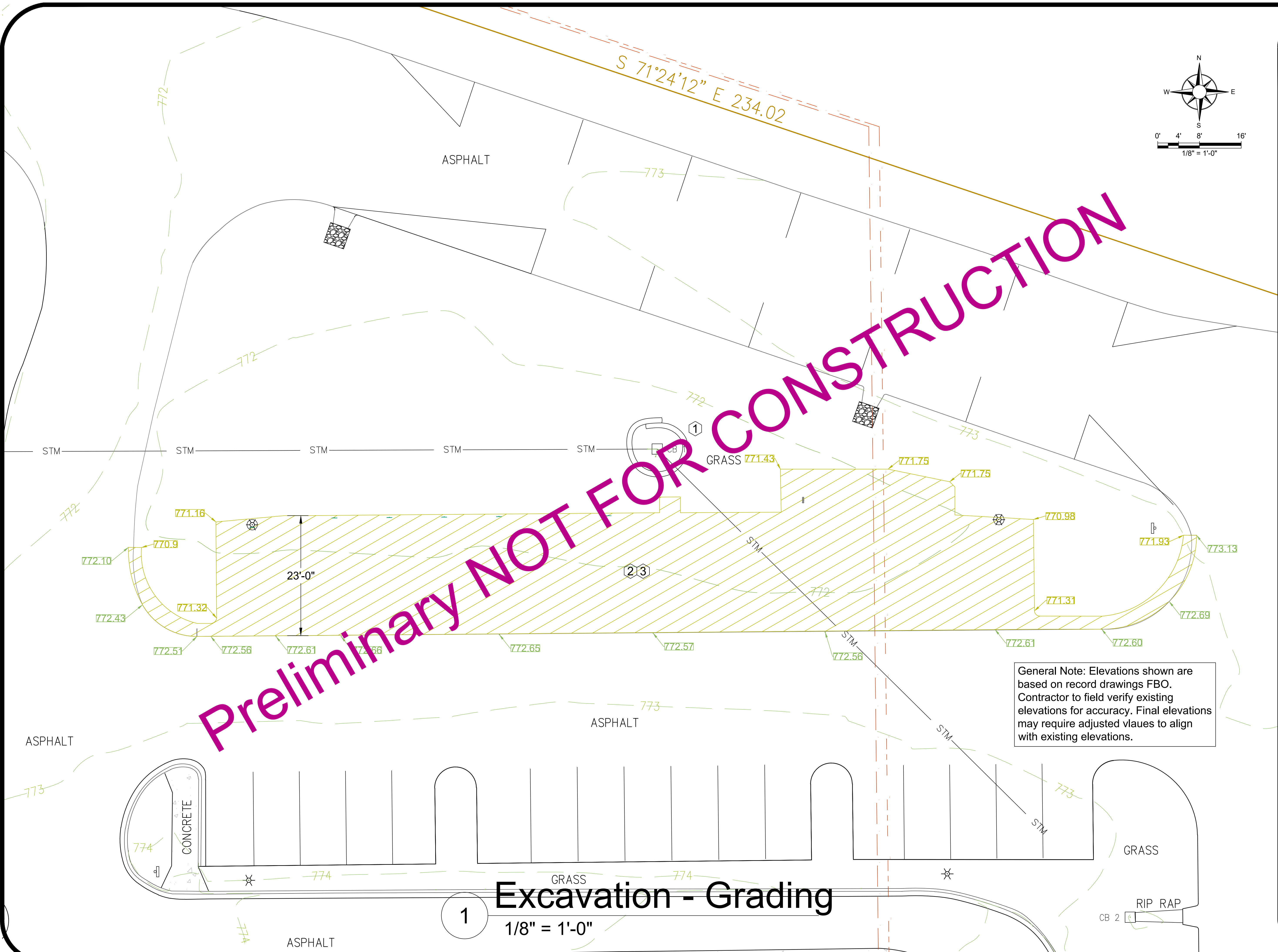
C100



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12/2/25

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- General Notes
1. Provide erosion control wattle and sediment filter at catch basin see detail sheet 1/C500 & 2/C500
  2. Remove topsoil and retain on site for landscape restoration. Provide straw wattles at storage pile to prevent topsoil erosion.
  3. All excavation spoils to be removed from site.
  4. Provide 10" compacted dense aggregate base for asphalt paving.



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Project  
Excavation - Grading  
Date  
12/2/25  
Scale  
See title block  
Sheet

C101



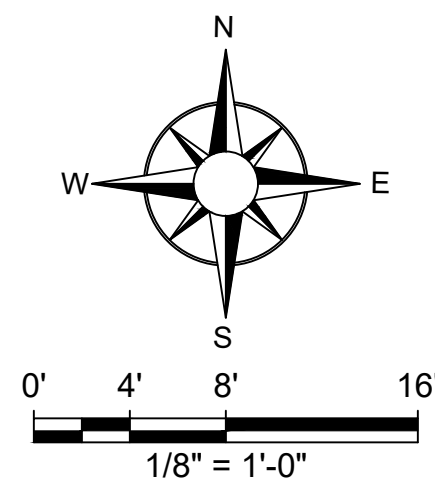
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General Note: Elevations shown are based on record drawings FBO. Contractor to field verify existing elevations for accuracy. Final elevations may require adjusted vlaues to align with existing elevations.



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Franksville WI 53126

Project  
Concrete & Paving  
Date  
12/2/25  
Scale  
See title block  
Sheet

C100

1

## Concrete & Paving

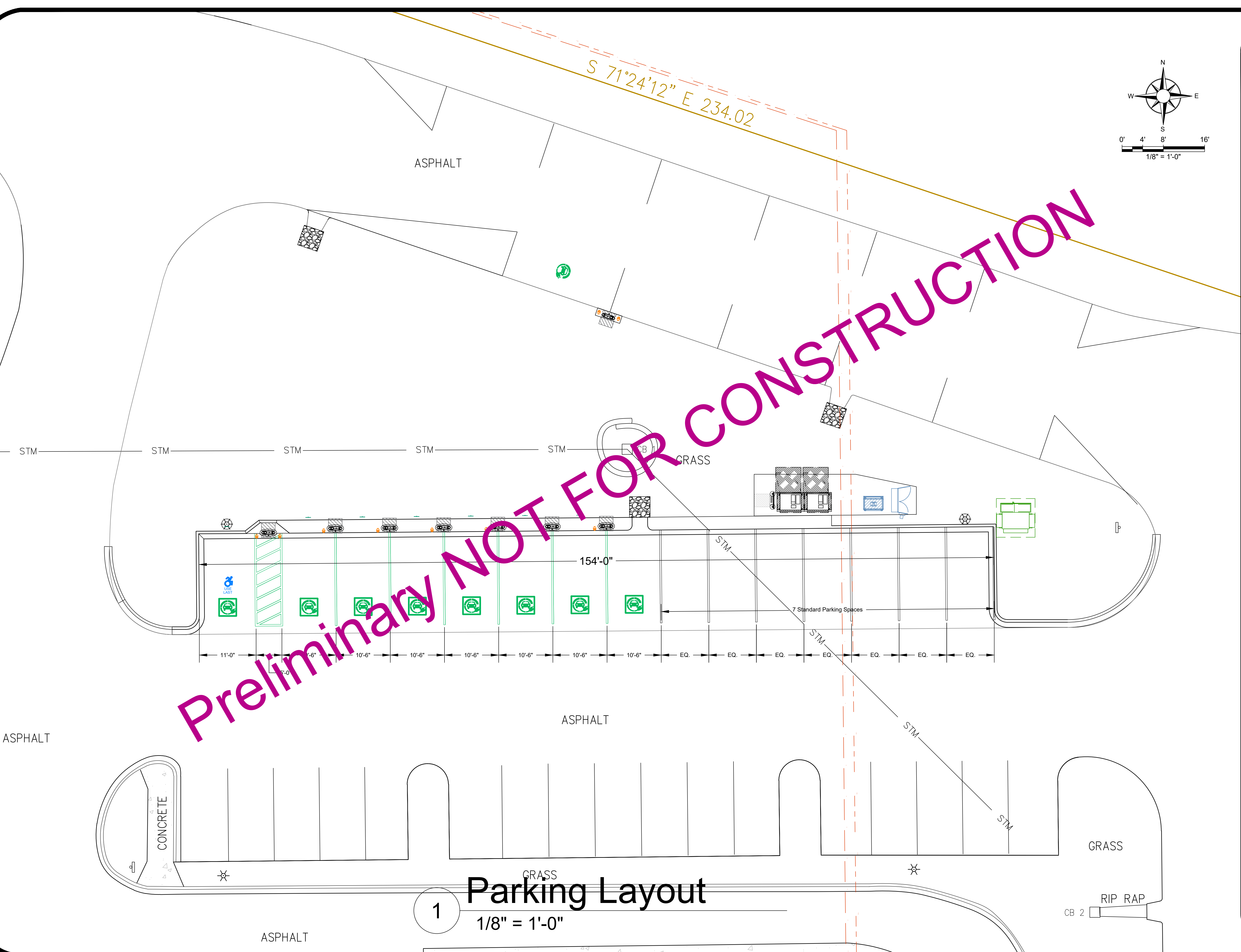
1/8" = 1'-0"



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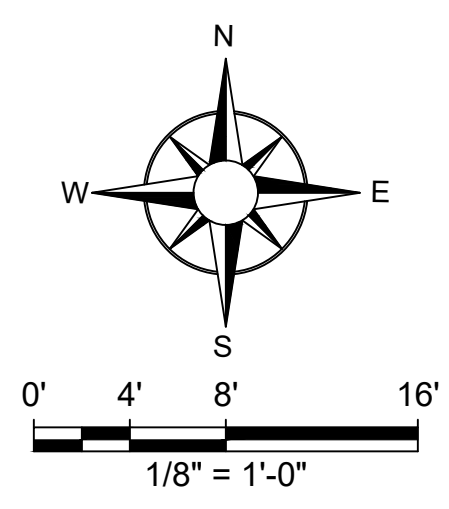


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1

# Parking Layout

1/8" = 1'-0"



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Project  
Parking Layout  
Date  
12/2/25  
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Sheet

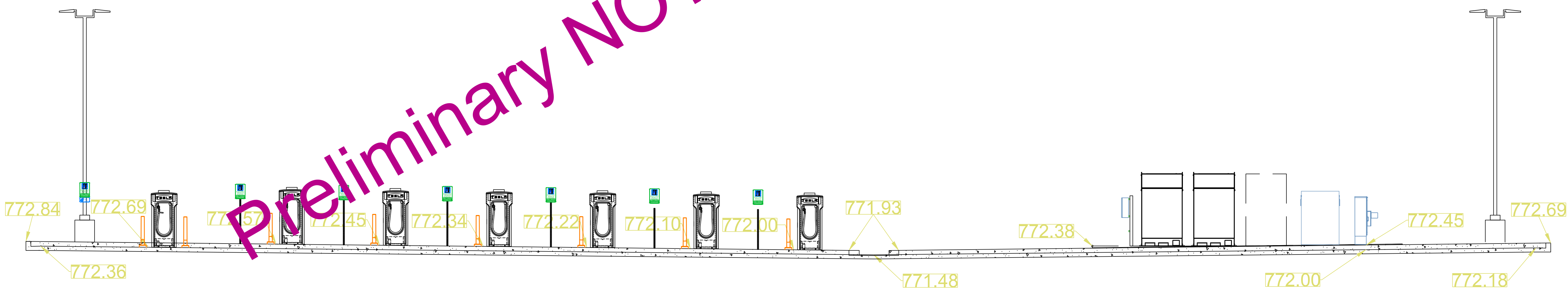
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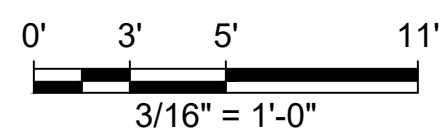
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1 Charging Elevation  
3/16" = 1'-0"



General Notes



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Project  
Charging Elevation  
Date  
12/2/25  
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See title block  
Sheet

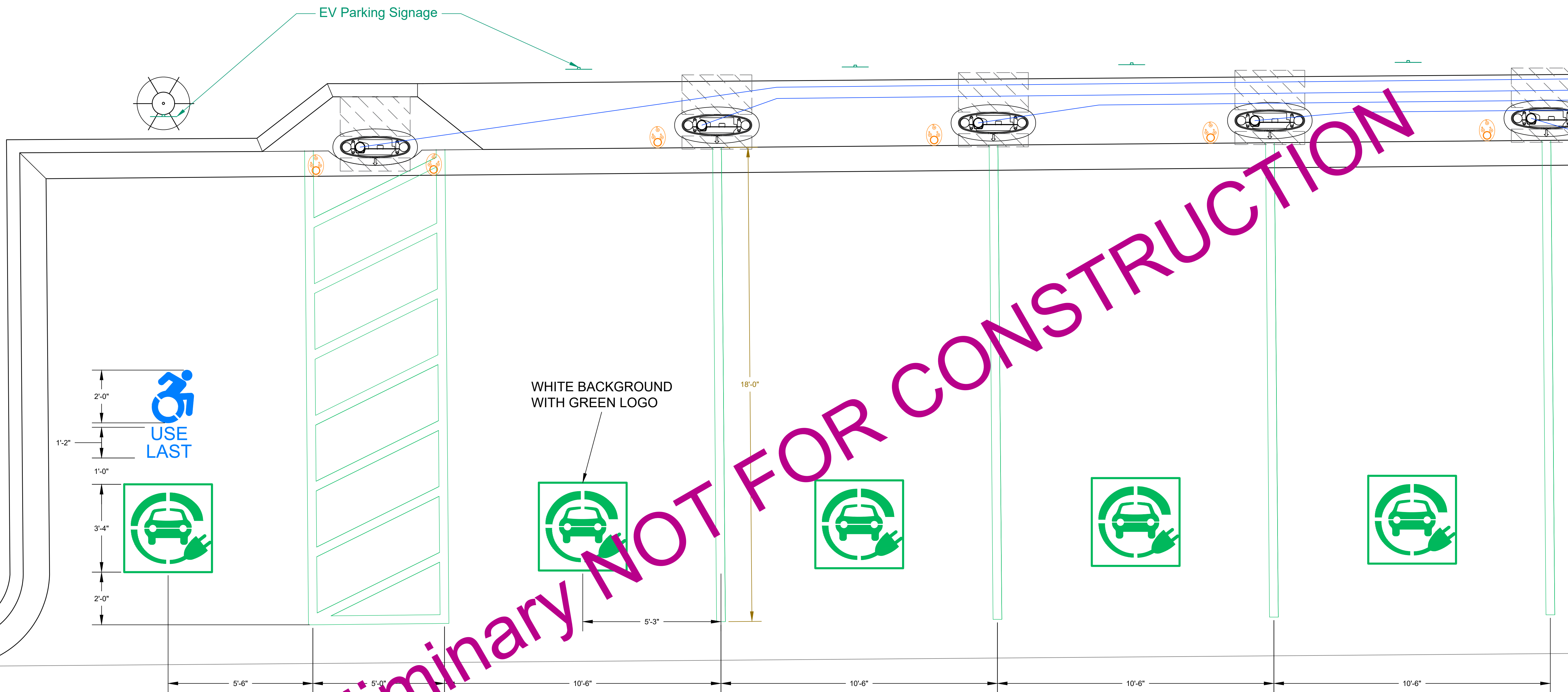
C200



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1 Parking Detail  
1/2" = 1'-0"

General Notes



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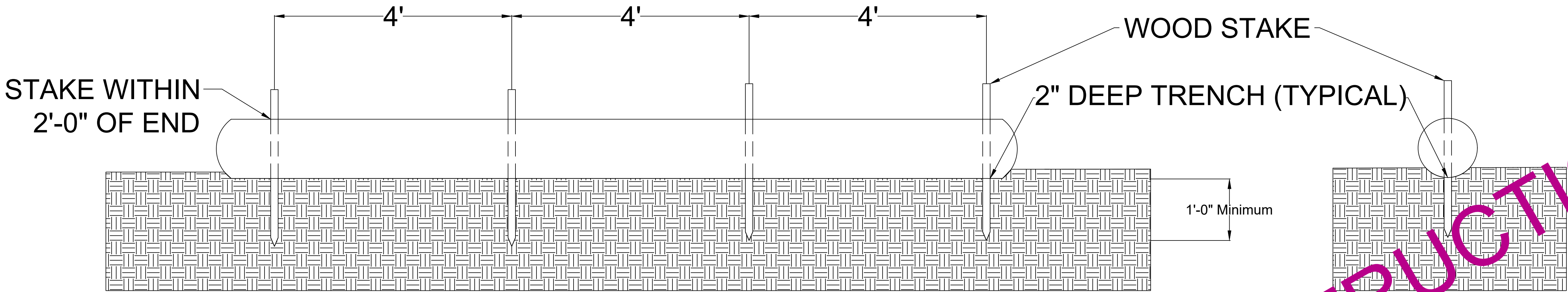
Project Name and Address  
A&W Restaurant - Tesla Supercharging  
Welch's Restaurant Inc.  
13520 Northwestern Avenue  
Franksville WI 53126

Project  
Parking Detail  
Date  
12/2/25  
Scale  
See title block  
Sheet

C400



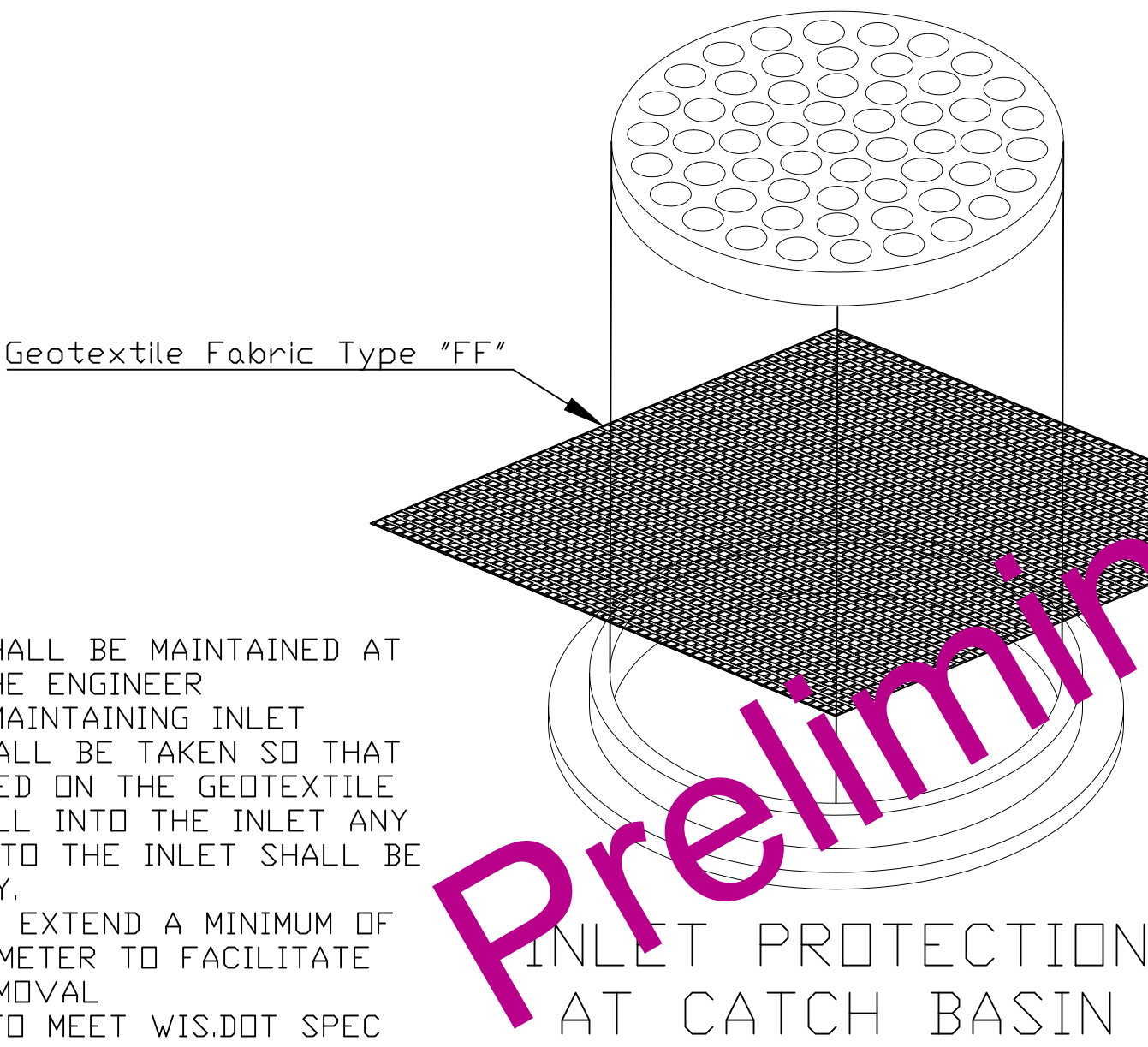
WATTLE STAKING PATTERN



WATTLE CROSS SECTION:  
ON SOIL OR GRASS AREA

Erosion Control Details

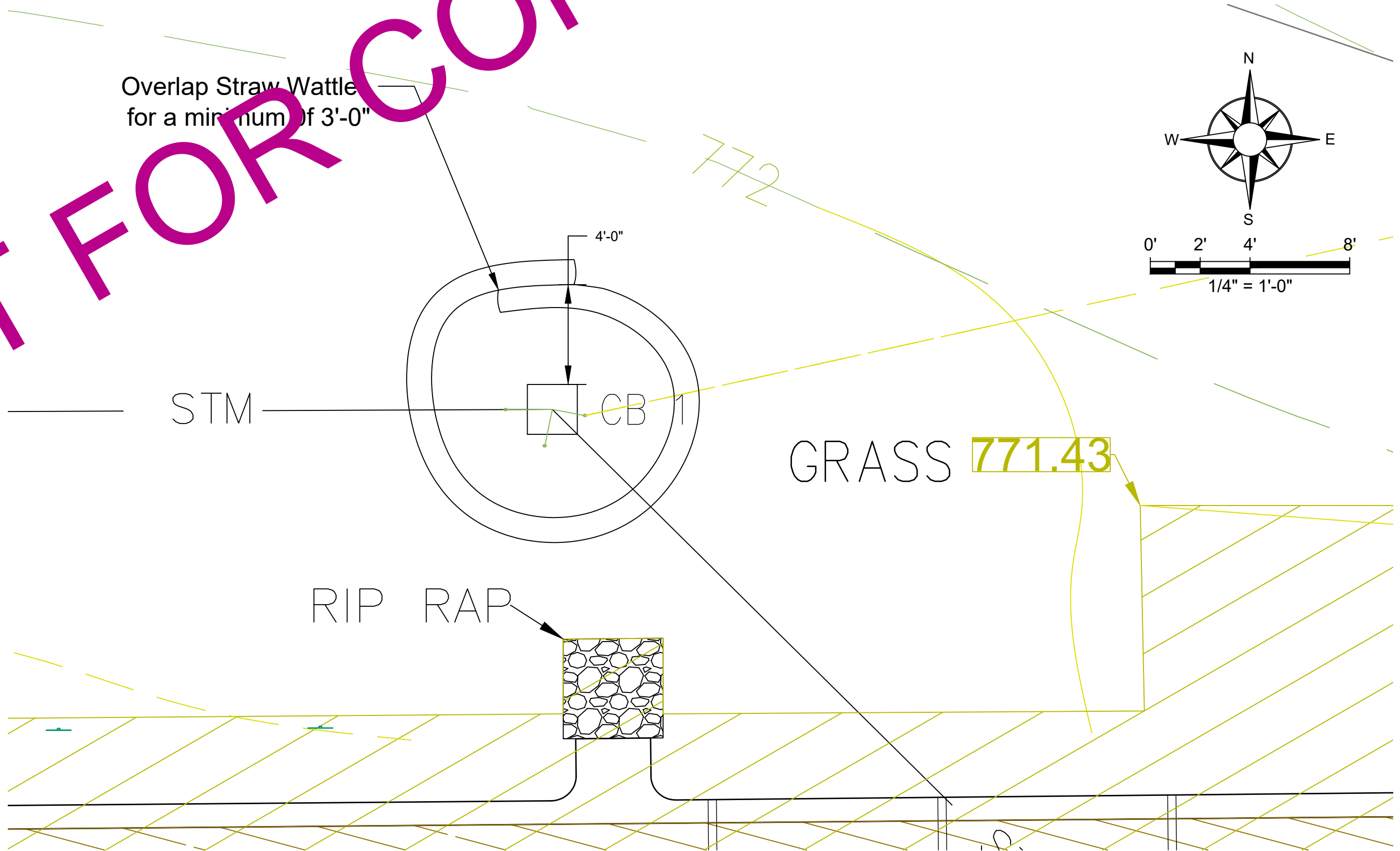
1  
1" = 1' - 0"



- NOTES:
1. INLET PROTECTION SHALL BE MAINTAINED AT THE DIRECTION OF THE ENGINEER
  2. WHEN REMOVING OR MAINTAINING INLET PROTECTION CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
  3. FINISHED SIZE SHALL EXTEND A MINIMUM OF 10' AROUND THE PERIMETER TO FACILITATE MAINTENANCE AND REMOVAL
  4. GEOTEXTILE FABRIC TO MEET WIS.DOT SPEC TYPE "FF"

Erosion Control at Catch Basin

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



Erosion Control at Catch Basin

3  
1/4" = 1'-0"



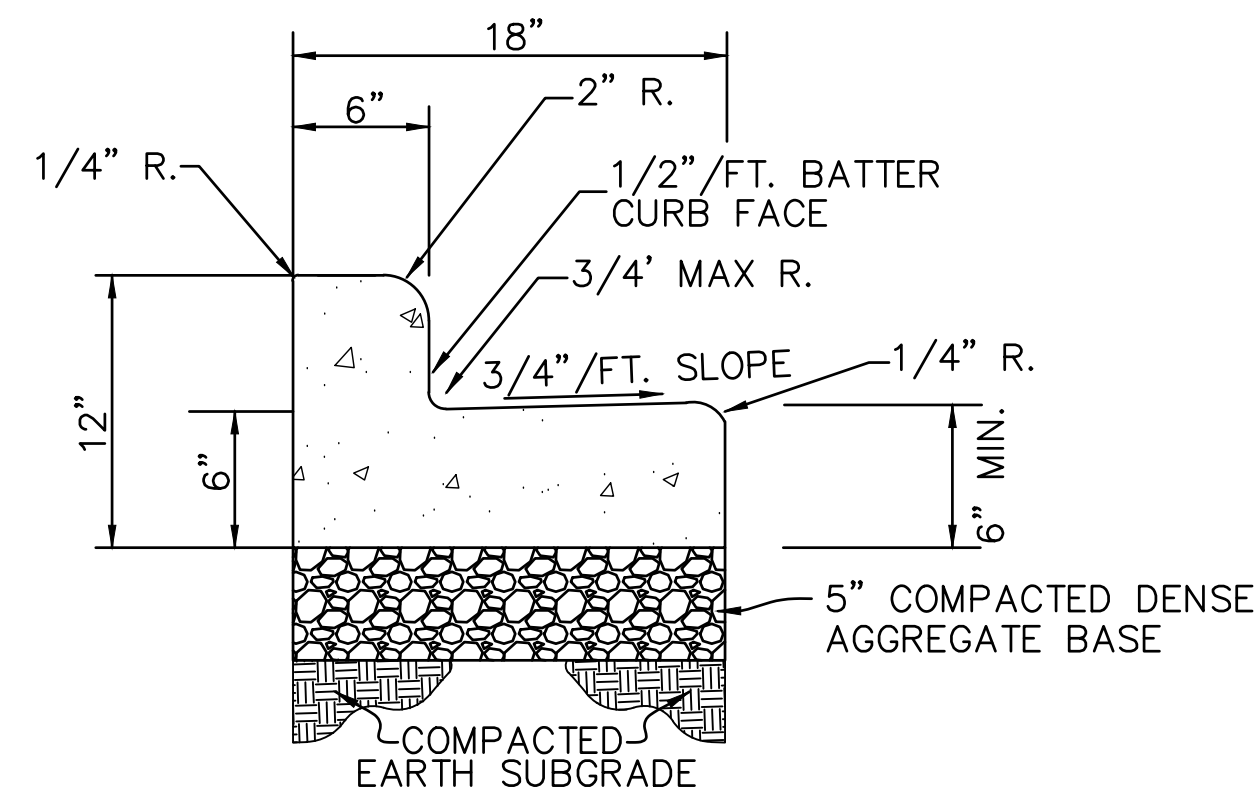
Firm Name and Address  
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Project Name and Address  
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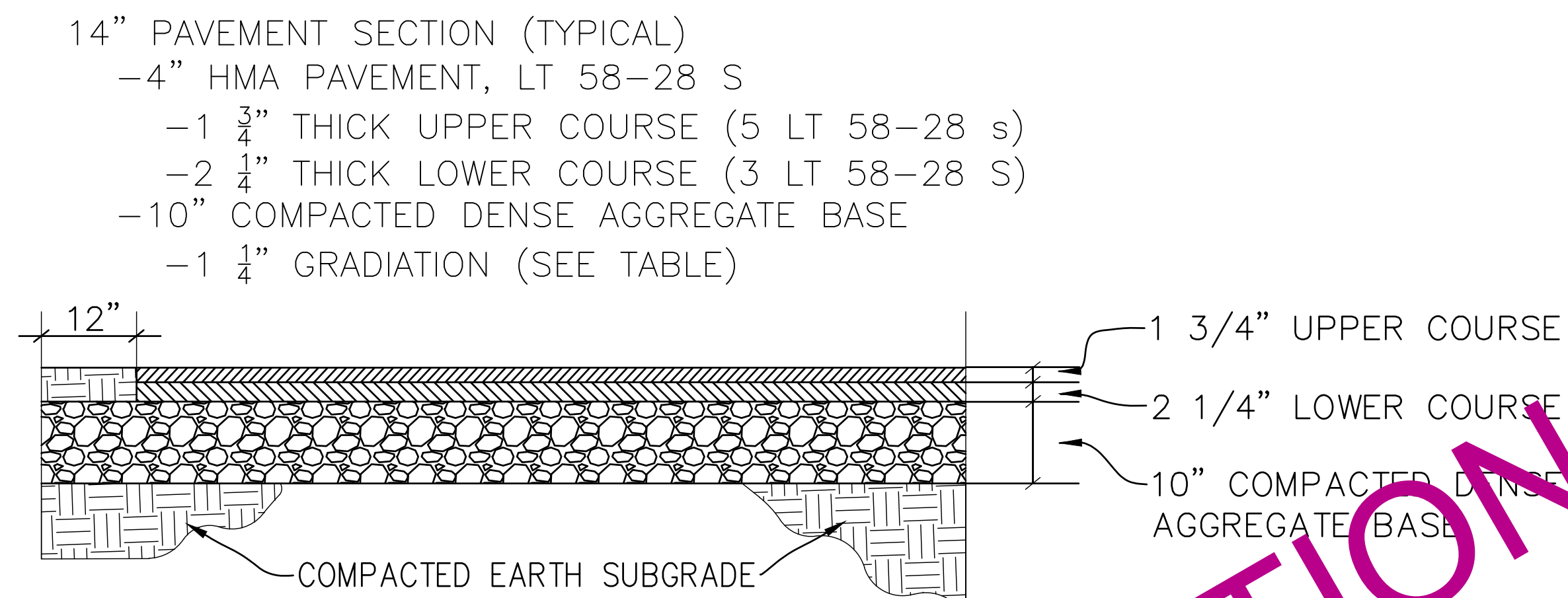
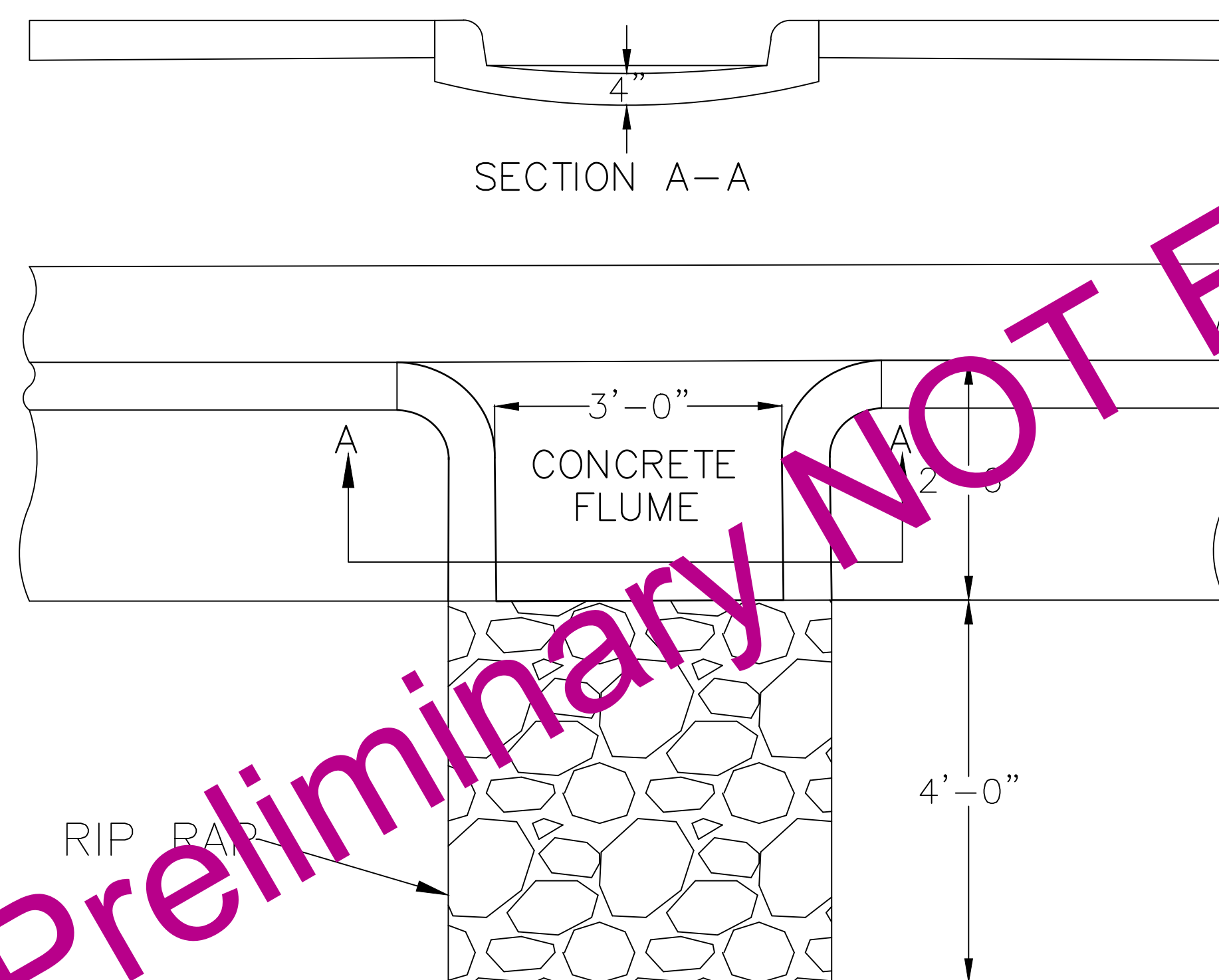
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Date  
12/2/25  
Scale  
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Sheet

C500

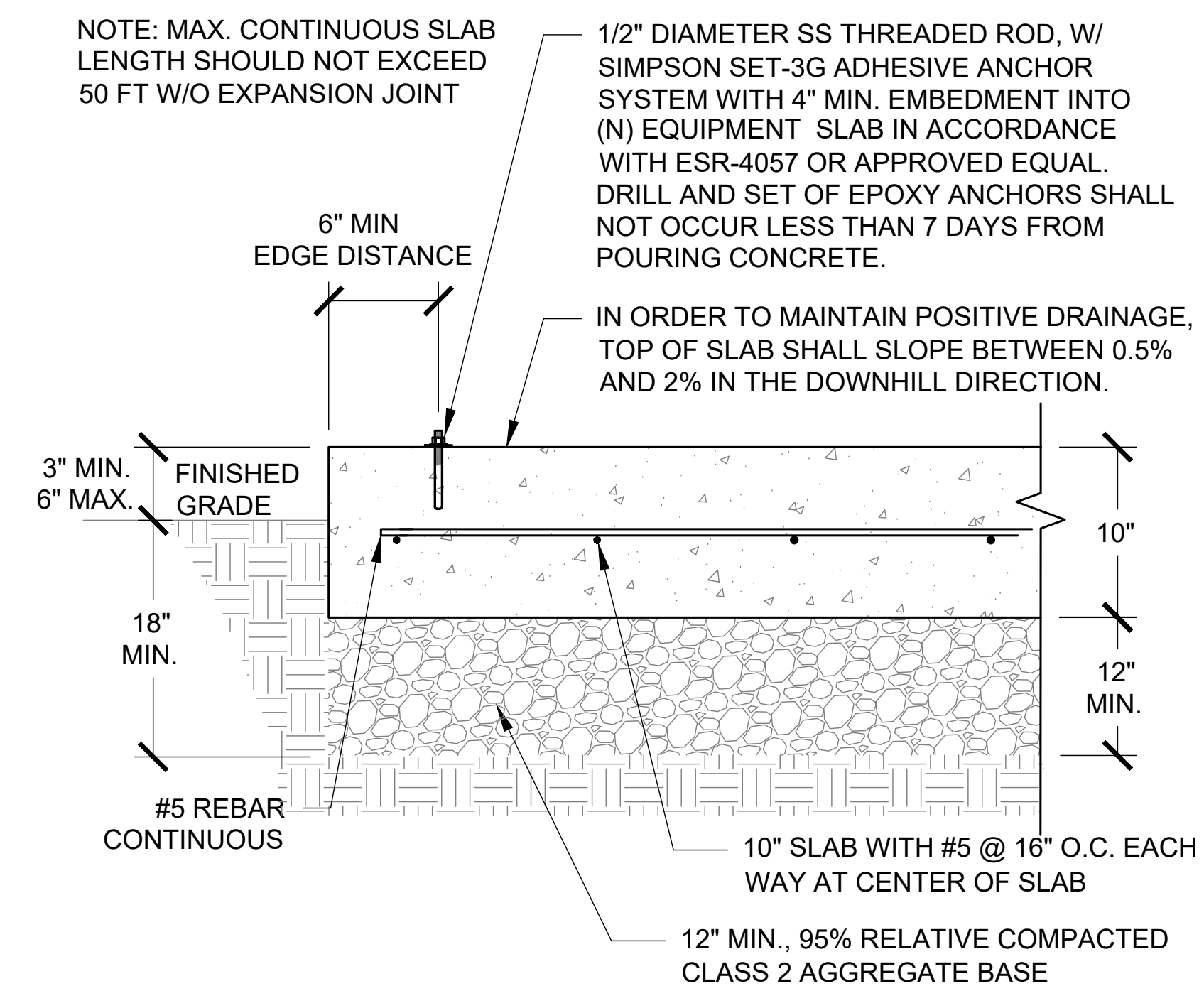




# 1 Curb Detail



## 2 Pavement Section Detail



USES FOR VARIOUS AGGREGATE BASE CLASSIFICATIONS						
BASE TYPE	CRUSHED STONE	CRUSHED GRAVEL	CRUSED CONCRETE	RECLAIMED ASPHALT	REPROCESSED MATERIAL	BLENDED MATERIAL
Dense 3/4-inch	yes	yes	yes	no	yes <sup>[1]</sup>	yes
Dense 1 1/4"	yes	yes	yes	yes	yes	yes
Dense 3"	yes	yes	yes	no	yes <sup>[2]</sup>	yes
Open-graded	yes	yes	no	no	no	no

Open-graded	yes	yes	no	no	no	no
<p>[1] The contractor may provide reprocessed material or blended material as 3/4-inch base only if the material contains 50-percent or less reclaimed asphalt by weight.</p> <p>[2] Ensure that material is substantially free of retained asphalt.</p>						



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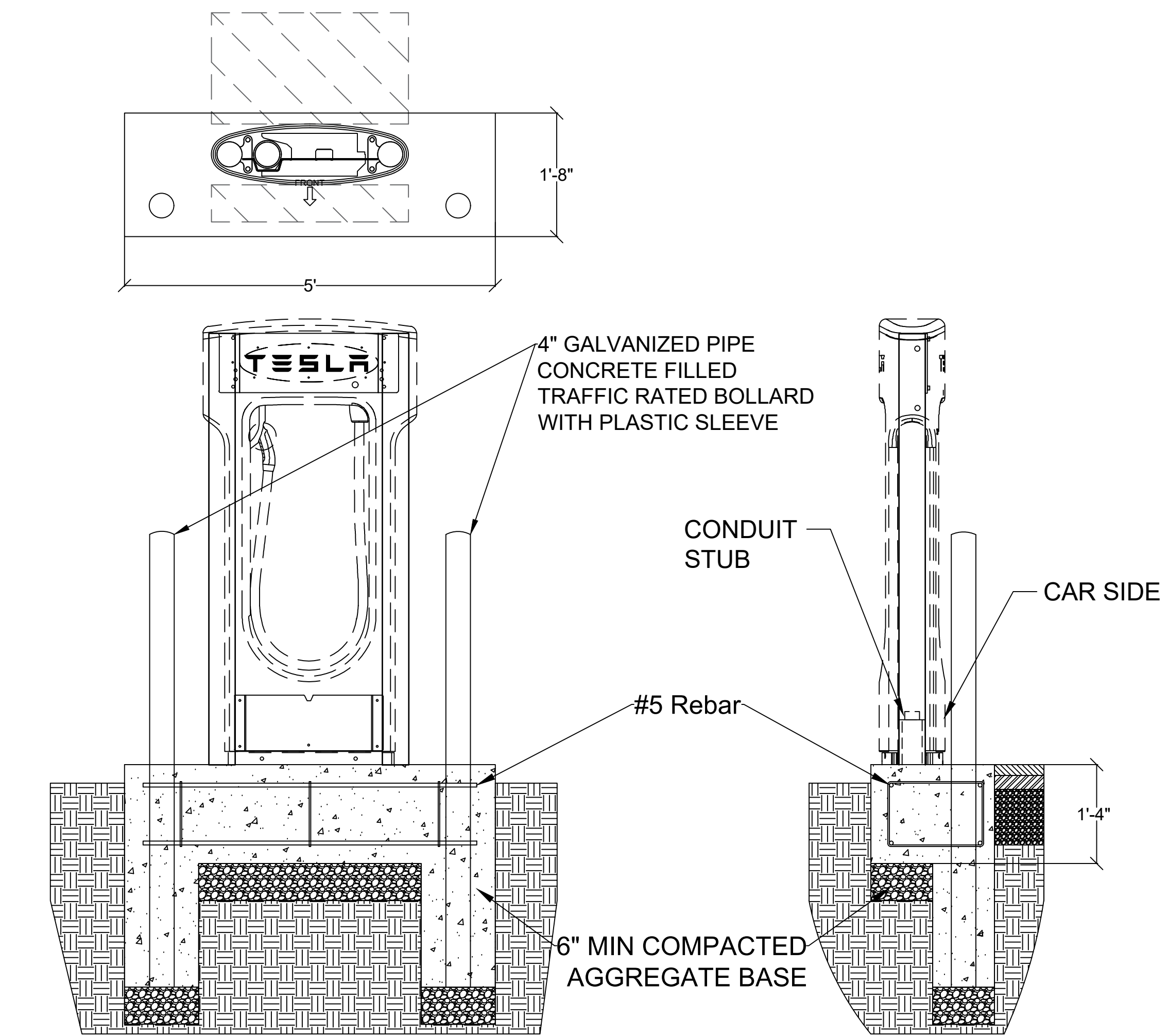
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Date	12/2/25
Scale	See title block
Sheet	



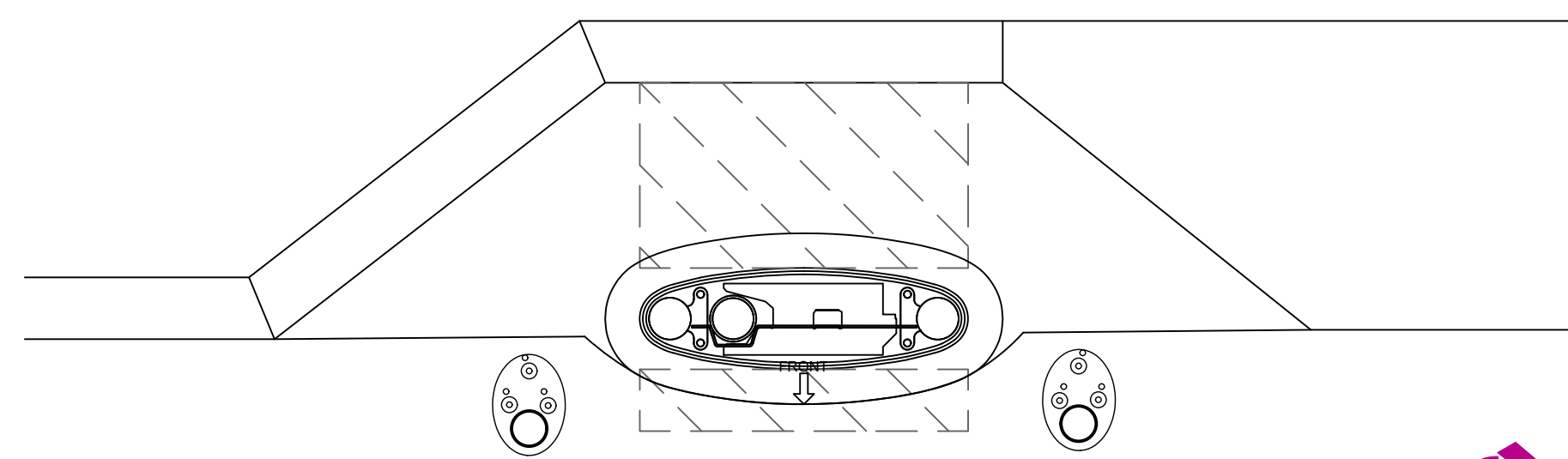
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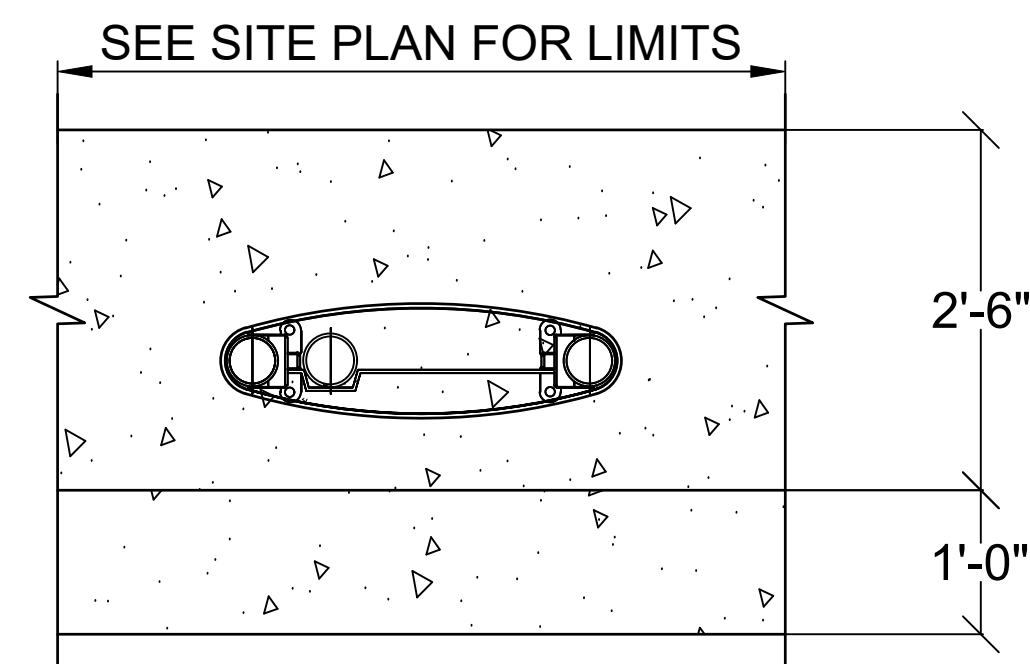
Tom Kennedy



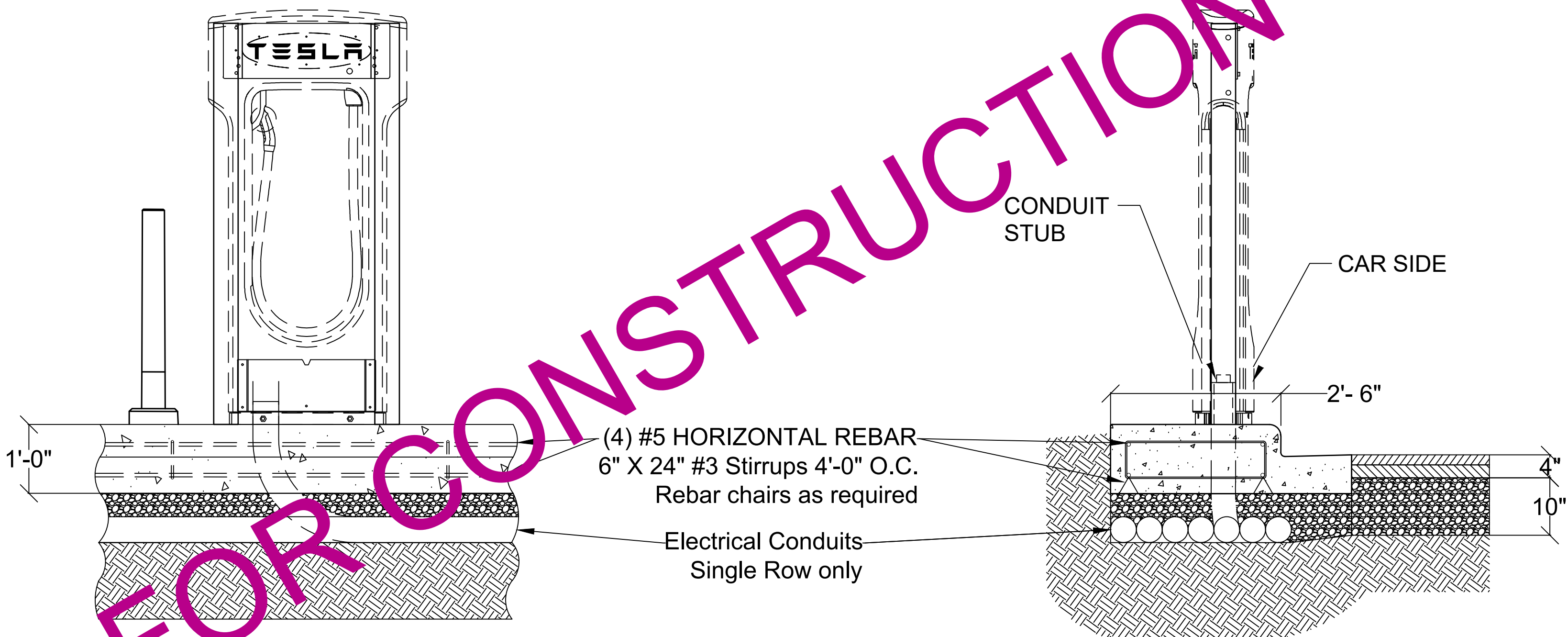
CHARGER BASE AT TRAILER PARKING



CHARGER BASE AT ADA PARKING



CHARGER BASE AT CONTINUOUS CURB



- REINFORCING STEEL NOTES**
1. REINFORCING BAR TO BE ASTM A615 GRADE 60
  2. ALL REINFORCING TO HAVE MINIMUM CONCRETE COVER PER ACI SPECIFICATIONS
  3. ALL CONCRETE MATERIALS AND WORKMANSHIP SHALL CONFORM TO ACI 318-14 AND APPLICABLE BUILDING CODE
- ANCHORING NOTES**
1. ANCHORS (4)  $\frac{5}{8}$ " DIAMETER HILTI KWIK BOLT TZ STAINLESS STEEL ANCHORS. 3-1/8" EFFECTIVE EMBEDMENT MIN. 6" EDGE DISTANCE MIN.
  2. FASTENERS (2) TOTAL  $\frac{5}{8}$ " NUTS AND (2) TOTAL  $\frac{5}{8}$ " WASHER MATERIAL TYPE TO MATCH ANCHOR MATERIAL (2)  $\frac{5}{8}$ " NUT AND WASHER ABOVE BOLLARD FLANGE (1) BELOW



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Project  
Charger Base Details  
Date  
12/2/25  
Scale  
See title block  
Sheet

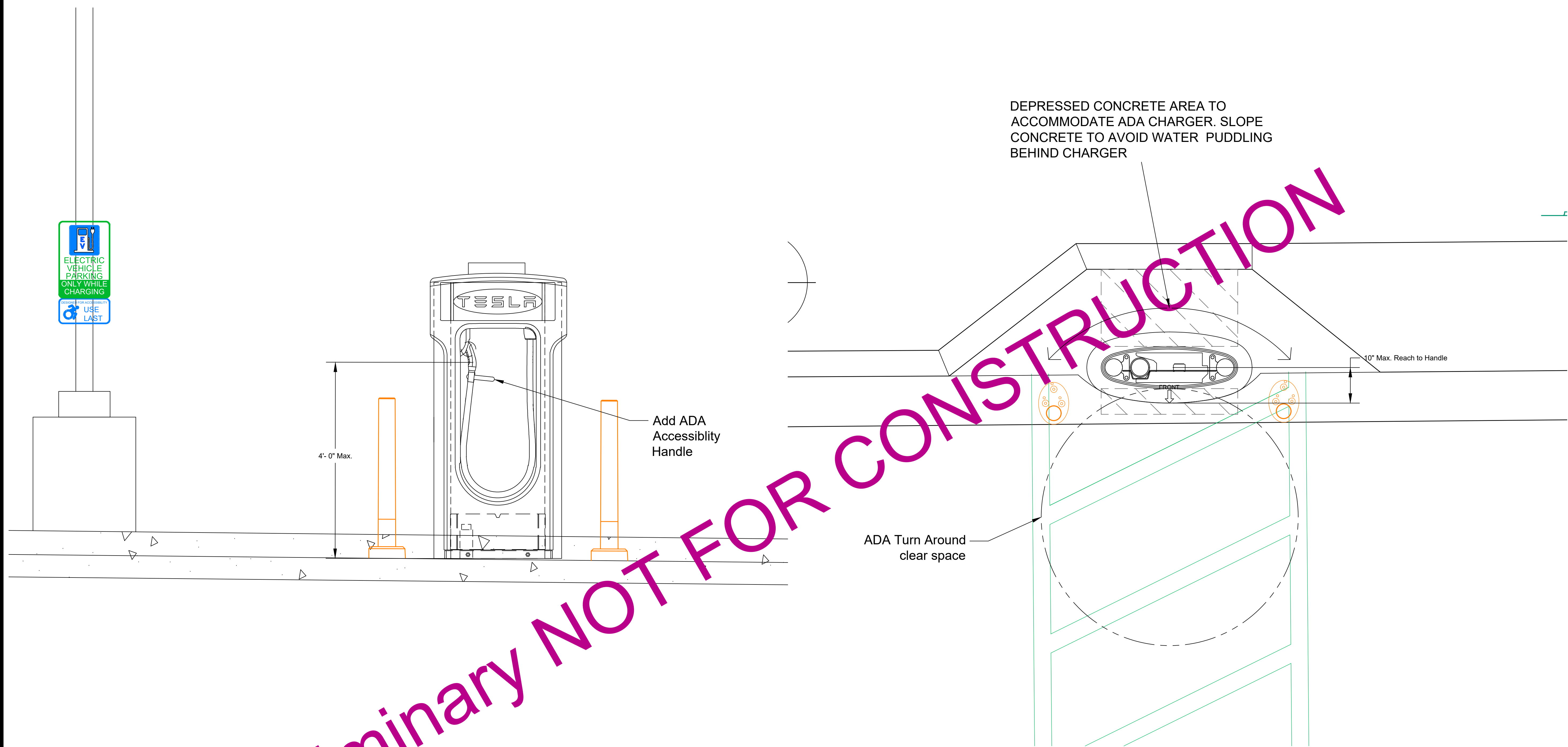
C502



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1 Tesla V3 Post Base ADA Detail  
1" = 1'-0"

General Notes



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Project  
ADA Details  
Date  
12/2/25  
Scale  
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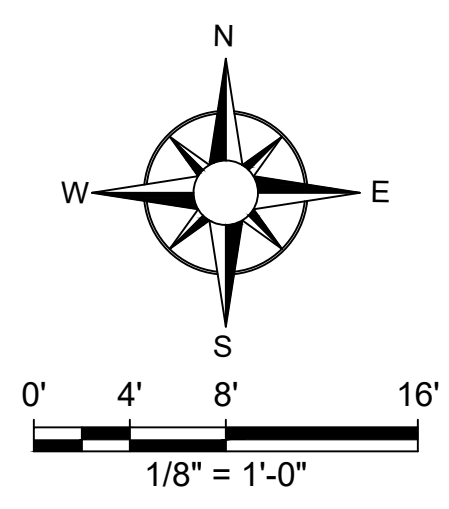
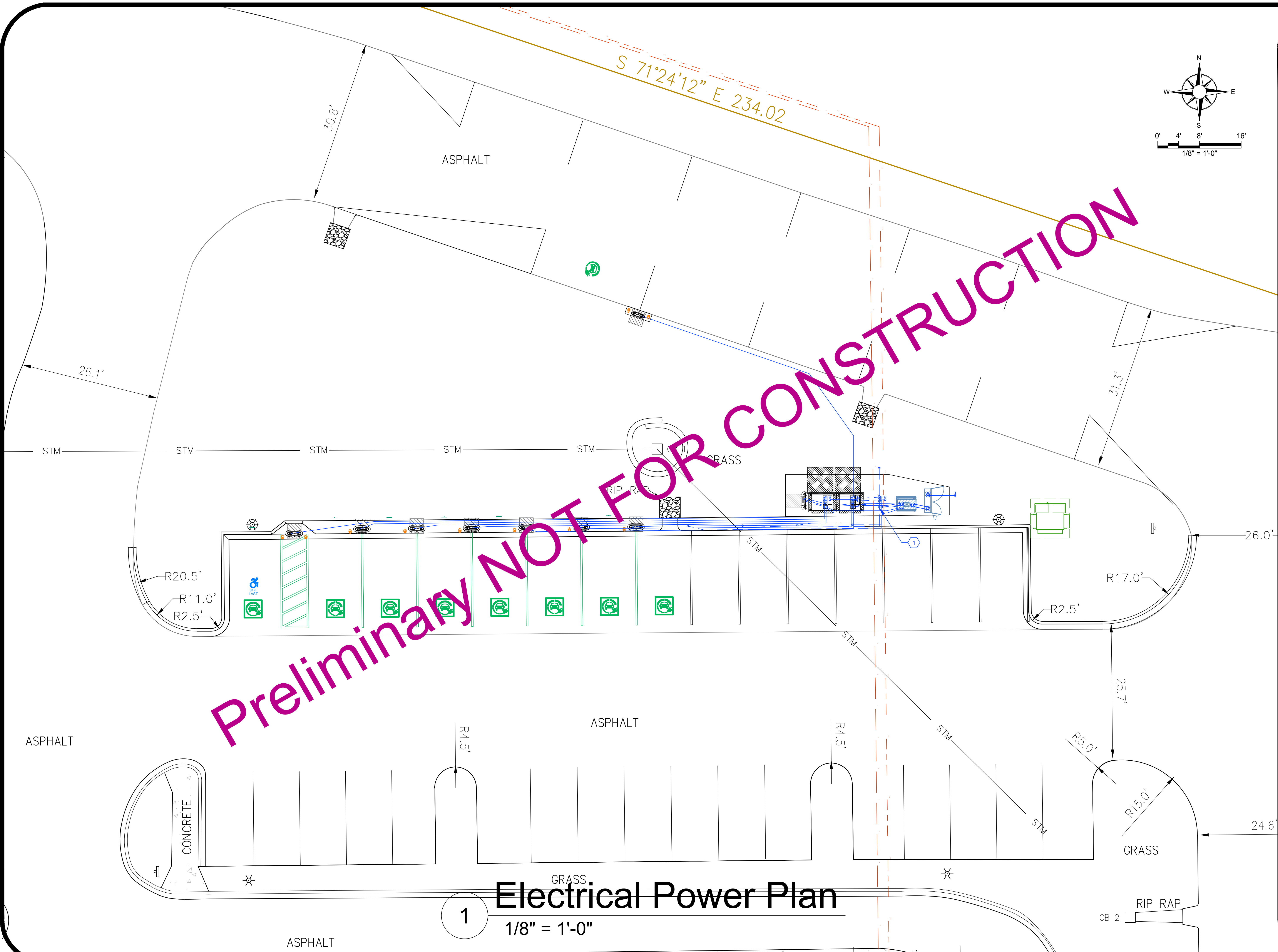
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C503



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General Notes

1. Spare Conduit for Future Expansion of an additional power cabinet and charger posts. Conduit sizes to match typical sizes for installed posts and power cabinet.



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Project  
Electrical Power Plan  
Date  
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Scale  
See title block  
Sheet

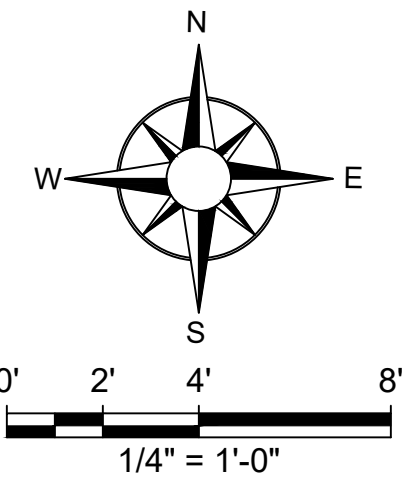
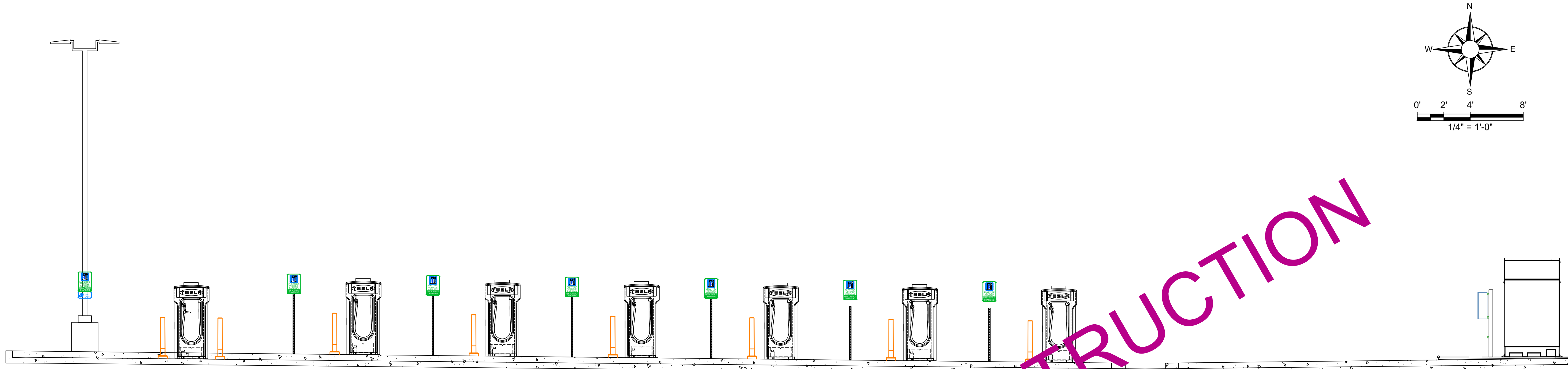
E100



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12/2/25

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1

# Electrical Elevation Plan

1/4" = 1'-0"

## General Notes



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Project  
Electrical Elevation Plan  
Date  
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Scale  
See title block

Sheet

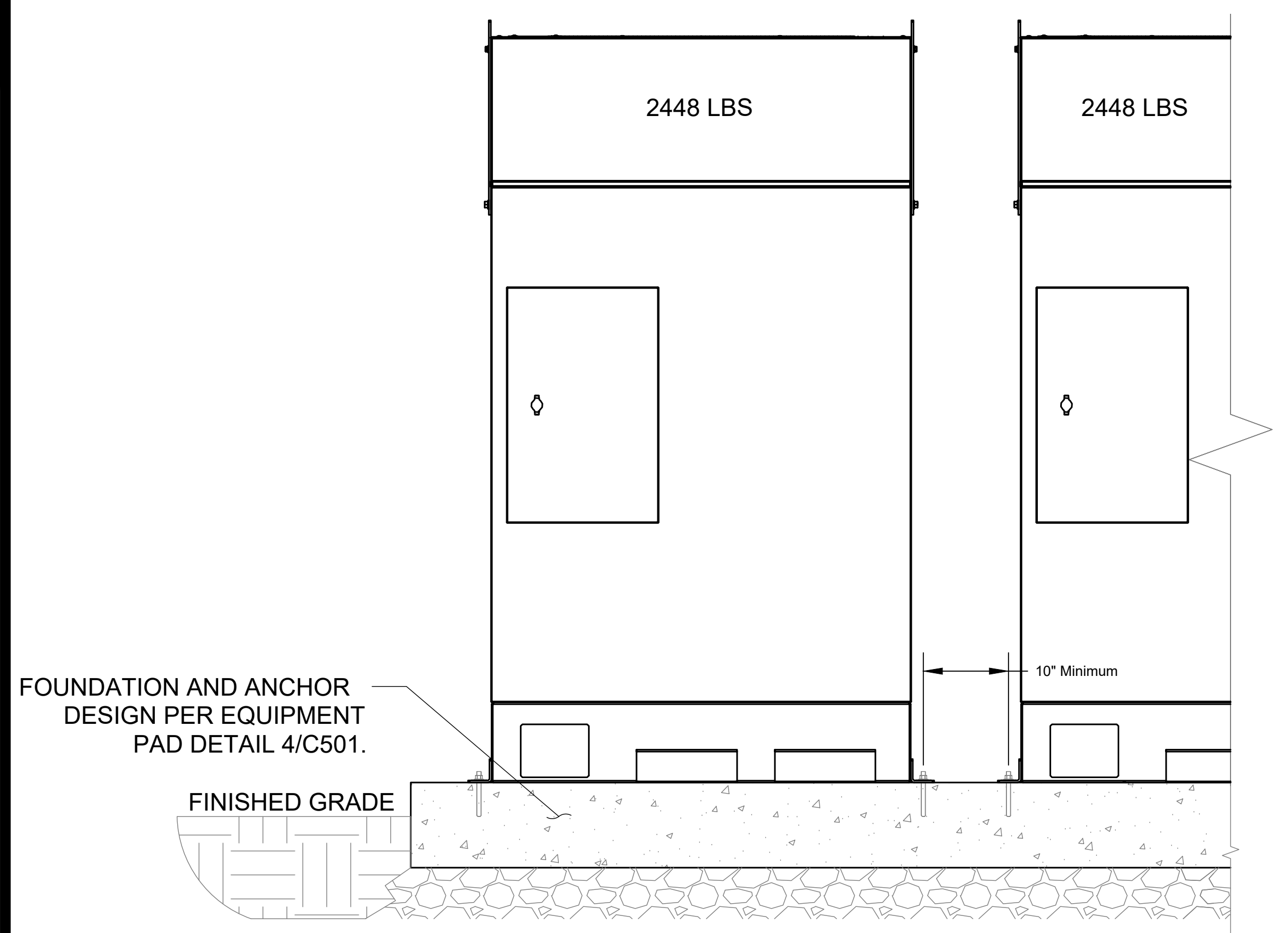
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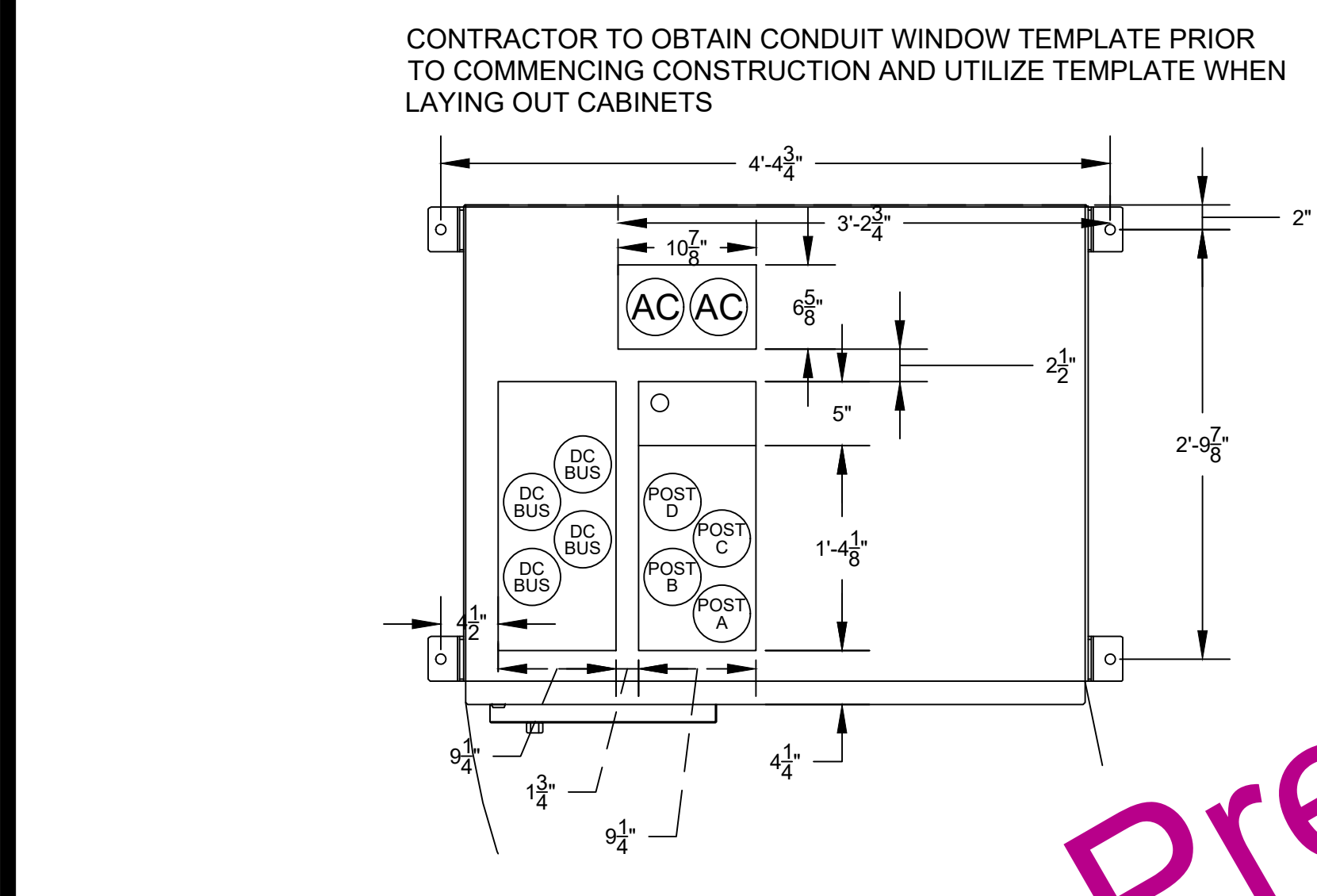
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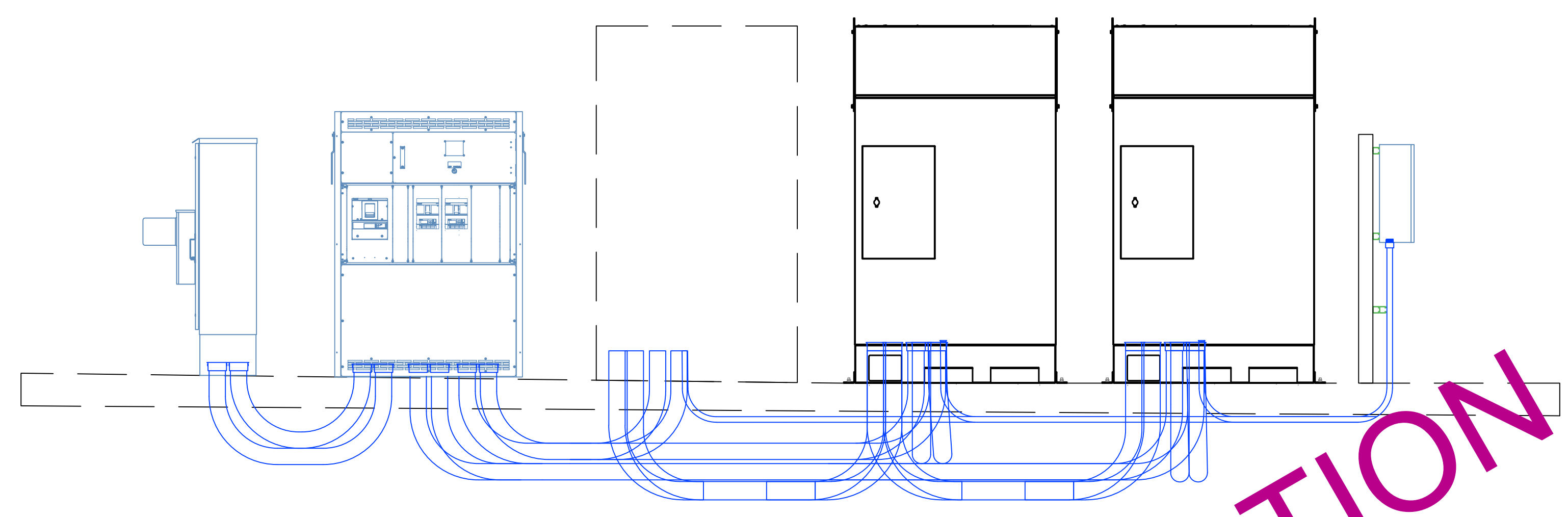
Tom Kennedy



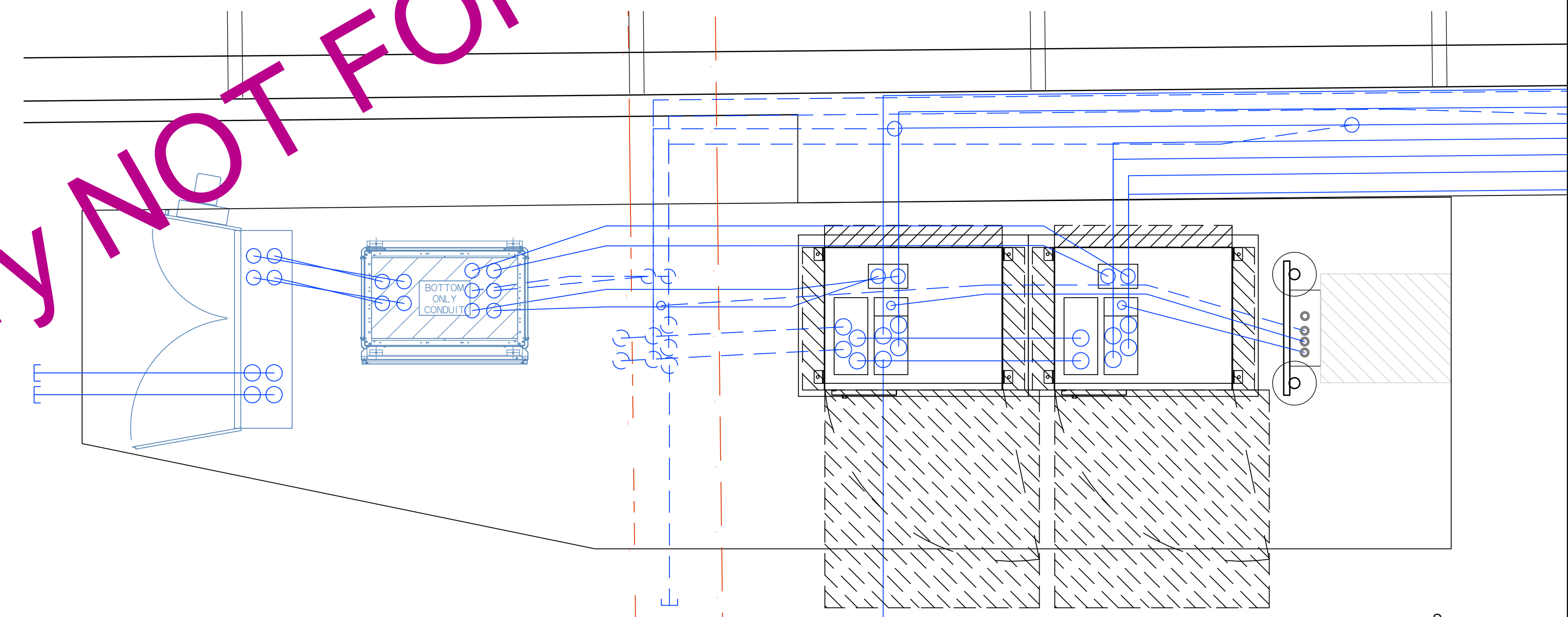
1 Supercharger Cabinet Detail  
1" = 1'- 0"



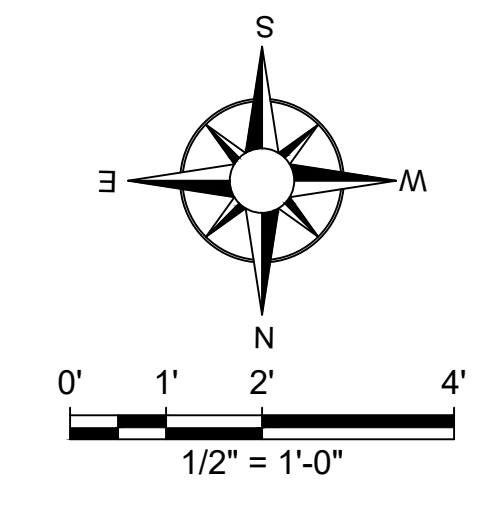
3 Supercharger Cabinet Detail  
1" = 1'- 0"



2 Electrical Service Plan - Elevation  
1/2" = 1'-0"



4 Electrical Service Plan  
1/2" = 1'-0"



Preliminary NOT FOR CONSTRUCTION

General Notes

**PIEPERPOWER**

No.	Revision/Issue	Date
A	Issued for Review	12/25/25

Firm Name and Address  
Pieper Electric Inc.  
5477 W Westridge Ct.  
New Berlin WI 53151

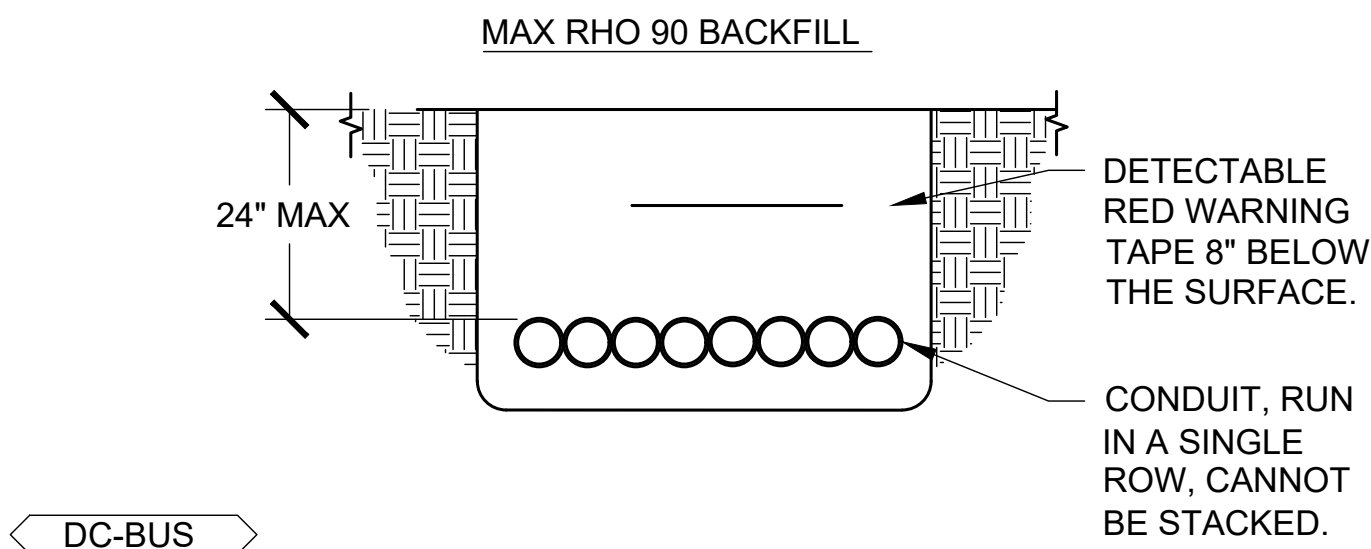
Project Name and Address  
A&W Restaurant - Tesla Supercharging  
Welch's Restaurant Inc.  
13520 Northwestern Avenue  
Franksville WI 53126

Project  
Electrical Service Plan  
Date  
12/2/25  
Scale  
See title block  
Sheet

E400

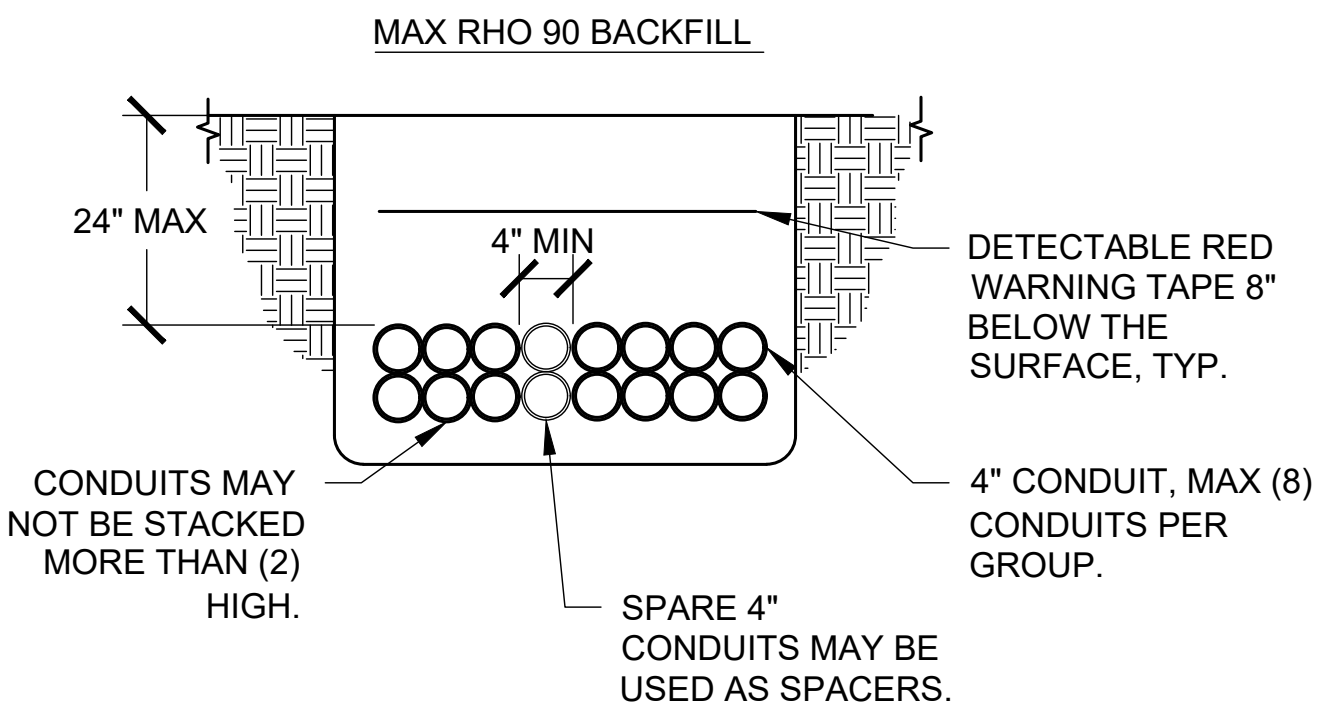


- TRENCHING NOTES
- THE TRENCH DESIGNS FOR ALL VEHICLE CHARGING CIRCUITS REQUIRING RHO VALUES ARE THE RESULT OF A THERMAL ANALYSIS OF THE CONDUCTORS UNDER LOAD. FOR PROPER PROTECTION THEY MUST BE FOLLOWED.
  - APPROVED BACKFILL REQUIRES DOCUMENTATION TAHT SPECIFIES TESTED RHO VALUES. USE THE SPECIFIED BACKFILL LISTED BELOW FOR TEST NATIVE SOIL CONDITIONS TO CONFIRM MAX DEFINED RHO VALUES. MINIMUM 2" OF APPROVED BACKFILL COVERAGE AROUND CONDUITS REQUIRED.
  - RHO 60 BACKFILL - CONCRETE BACKFILL WITH A MIN 28 DAY COMPRESSIVE STRENGTH OF 3000PSI MUST BE USED TO ACHIEVE MAX RHO 60.
  - RHO 90 BACKFILL - LOW STRENGTH FLUIDIZED THERMAL (SLURRY) BACKFILL WITH MIN. 28 DAY COMPRESSIVE STRENGTH OF 150 PSI MUST BE USED TO ACHIEVE MAX RHO 90.
  - RHO 120 BACKFILL - NATIVE SOILS / SAND.
  - FOR TRENCHES WITH MIXED CIRCUIT TYPES APPLY THE CONDUIT SPACING FOR THE CIRCUIT TYPE WITH THE LARGER SPACING REQUIREMENT.
  - CONDUIT ARE PERMITTED TO HAVE GREATER THAN 24" COVER FOR SHORT DISTANCES. WHERE REQUIRED TO CROSS UNDER UTILITY LINES, TO ALLOW FOR NEC REQUIRED MIN. RADIUS FOR CONDUIT STUB UPS INTO PAD MOUNTED EQUIPMENT, TO AVOID (E)OBSTRUCTIONS, ETC.



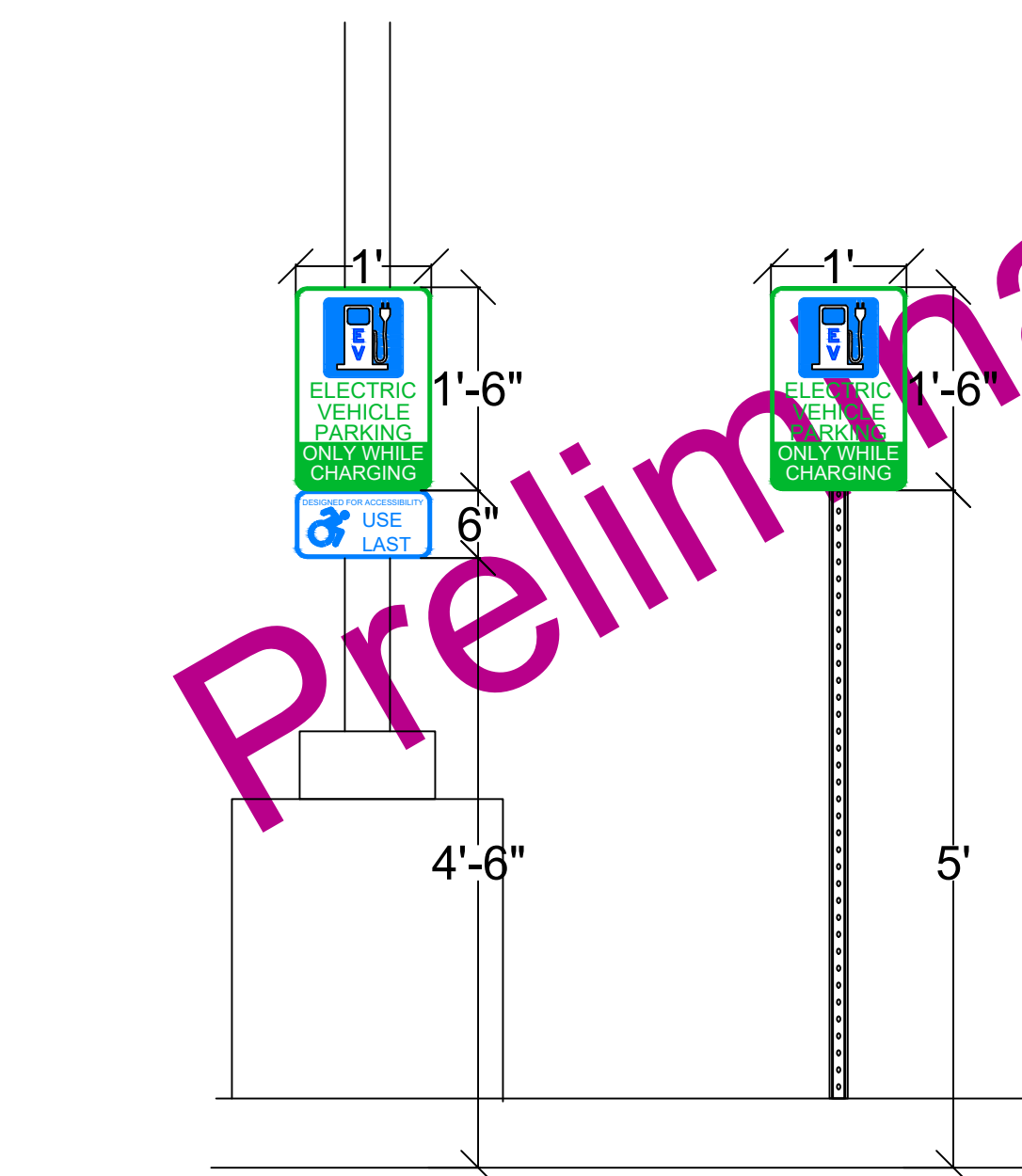
A "DC-BUS" CIRCUITS TRENCH - MAX RHO 90

NTS



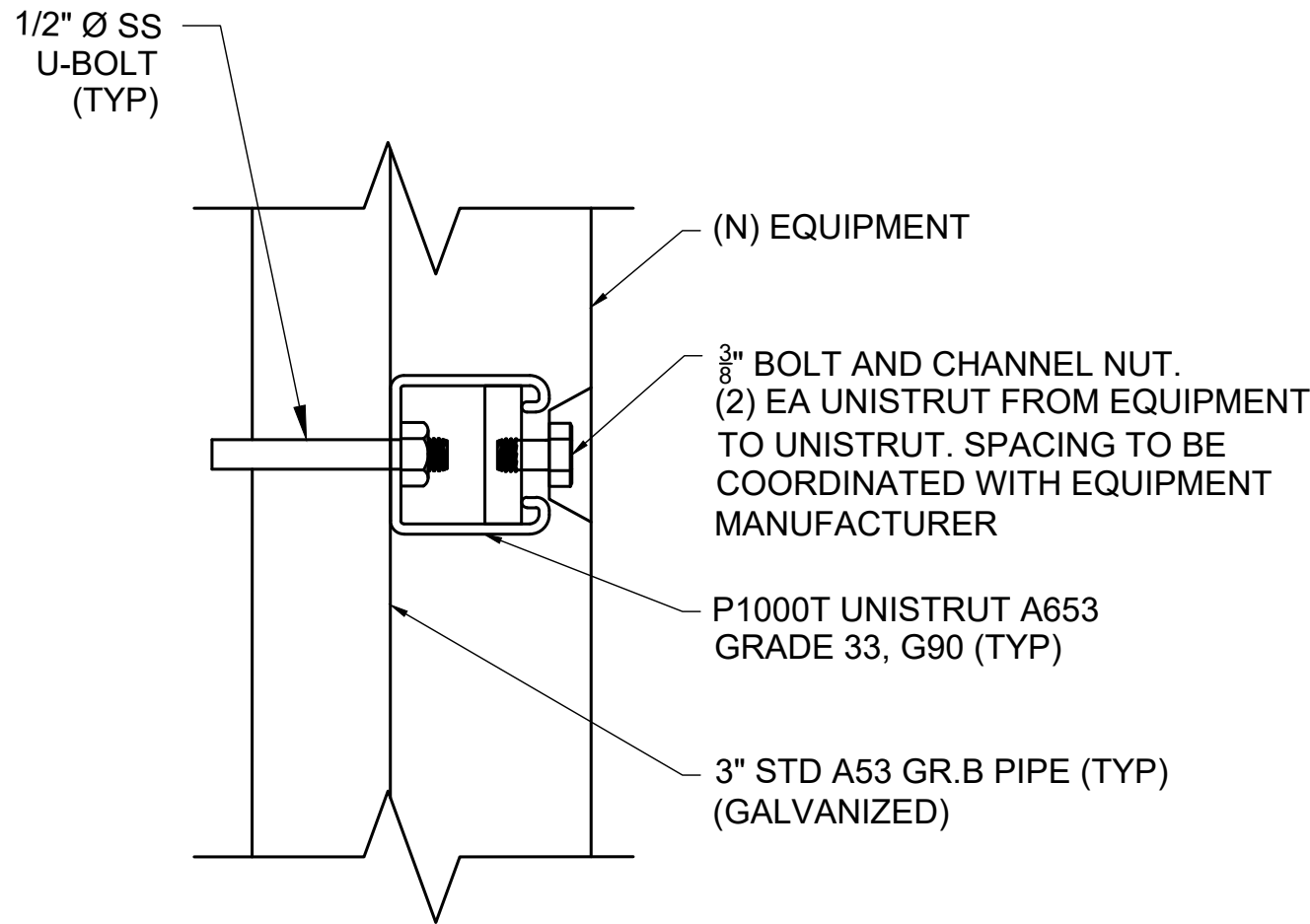
B "AC-SPR" CIRCUIT TRENCH - 4" CONDUITS

NTS



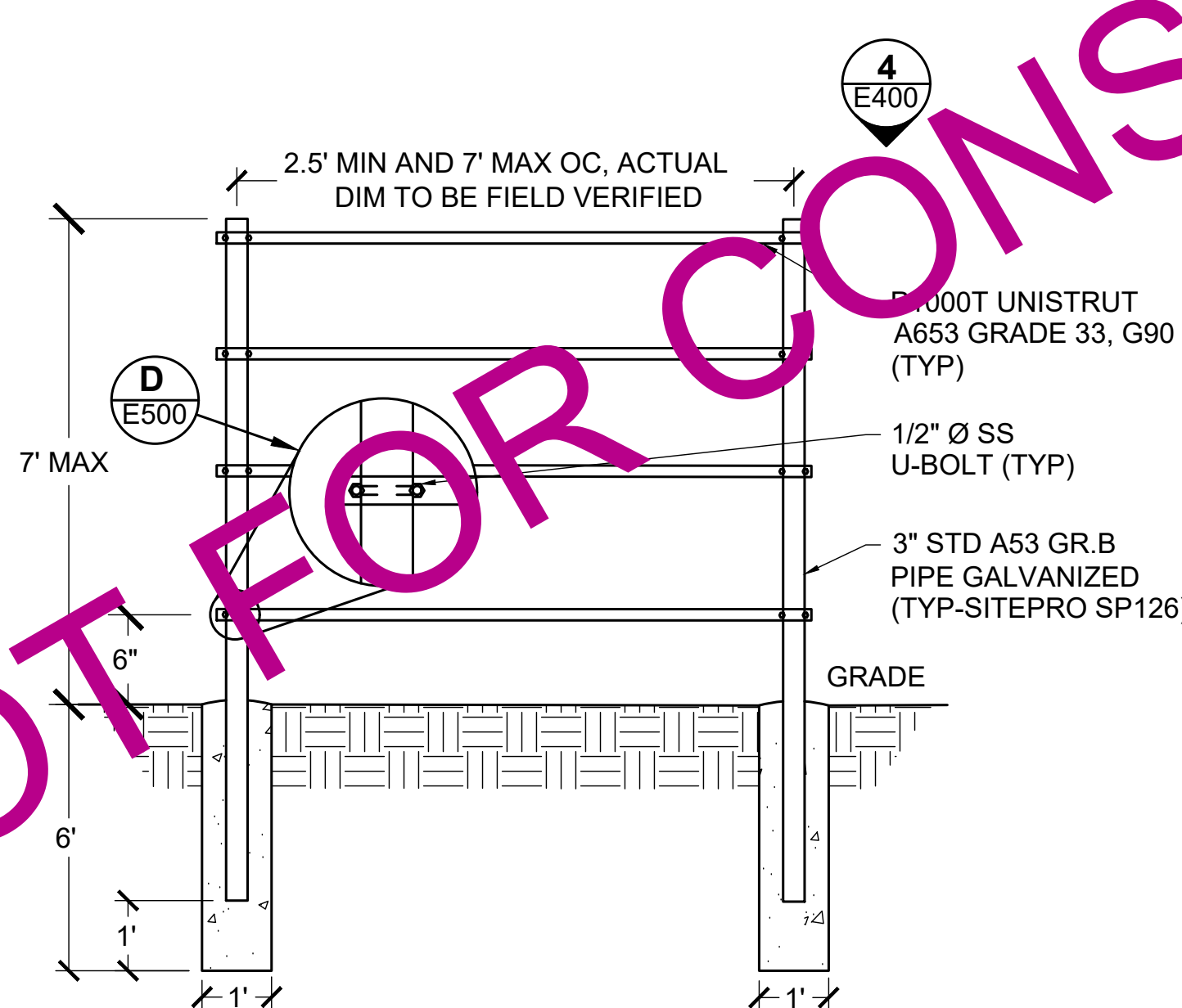
C Sign Details

3/4"= 1'- 0"



D EQUIPMENT RACK, STRUT MOUNTED EQUIPMENT

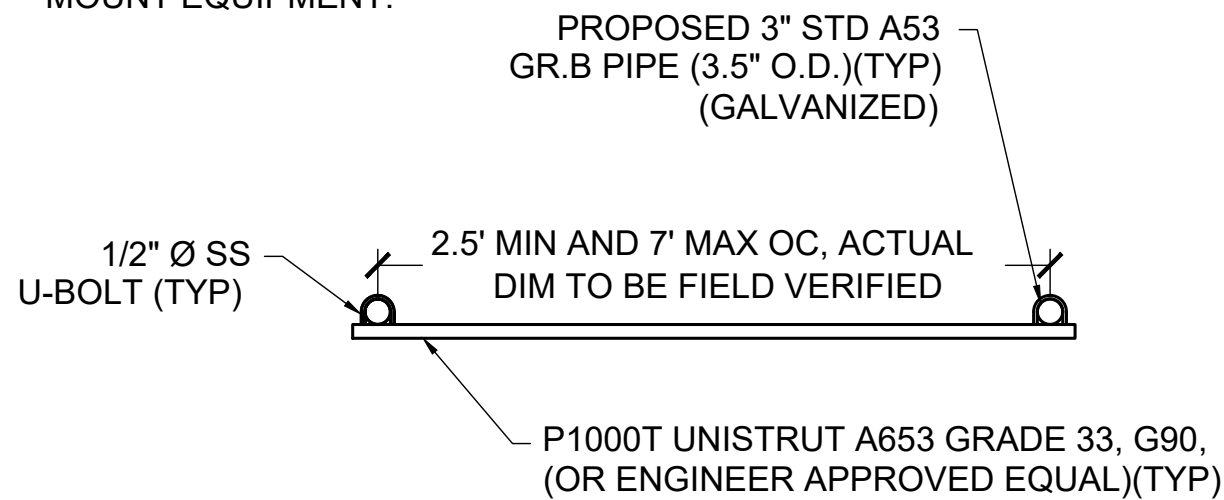
NTS



E EQUIPMENT RACK, STRUT (FRONT ELEVATION)

NOTES

- UNISTRUT CHANNELS SHALL BE G90 GALVANIZED, FITTINGS, NUTS, AND BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL PER MANUFACTURER SPECIFICATIONS.
- ADJUST MIDDLE UNISTRUT CHANNELS AS NEEDED TO MOUNT EQUIPMENT.



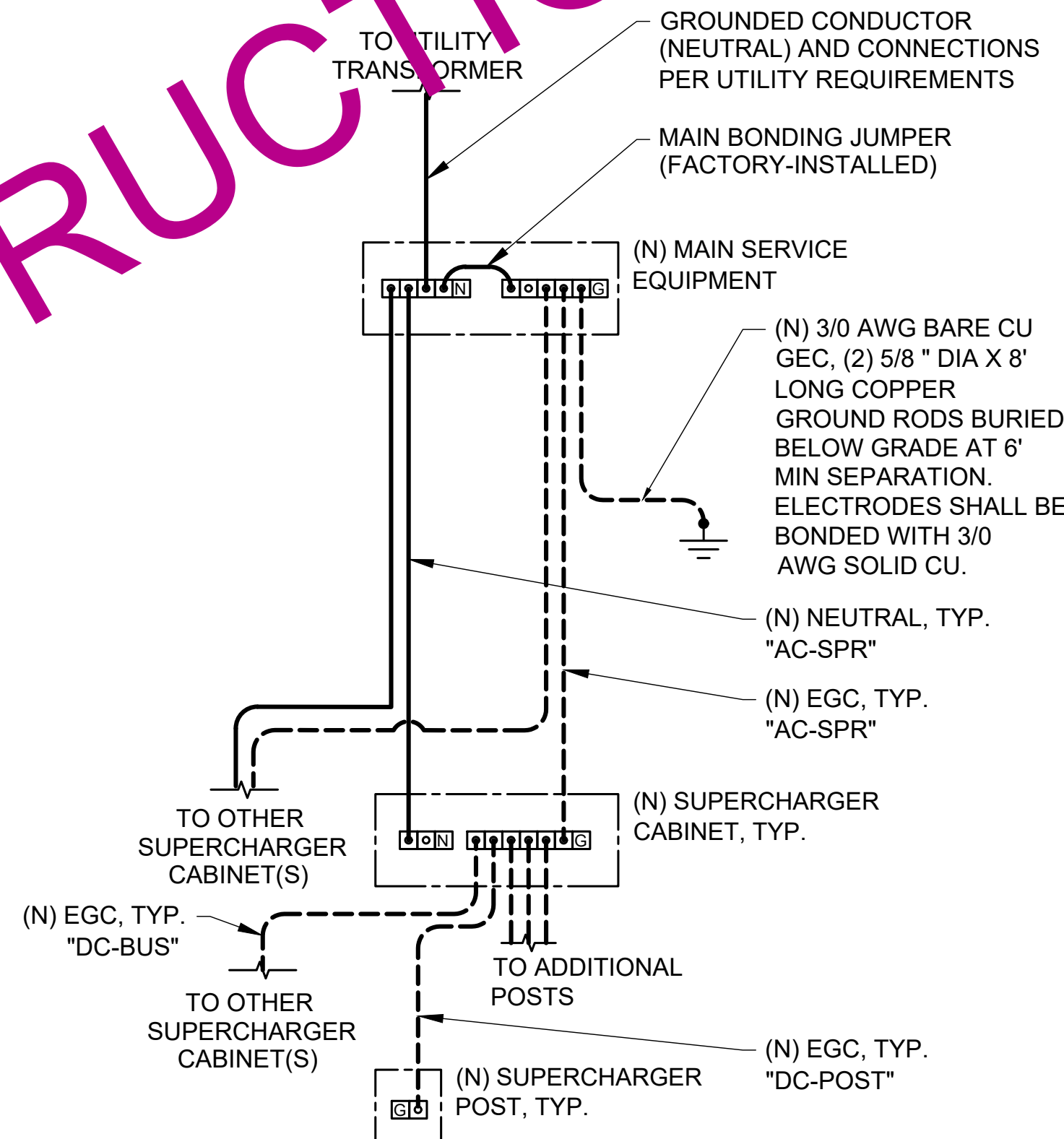
F EQUIPMENT RACK, STRUT (PLAN VIEW)

NOTES

- REFER TO ONE-LINE DIAGRAM FOR SPECIFIC CIRCUIT IDENTIFIERS BETWEEN EQUIPMENT.
- REFER TO AC & DC CIRCUIT SCHEDULES FOR NEUTRAL/GROUND SIZING PER CIRCUIT.

LEGEND

- NEUTRAL BUSBAR
- GROUND BUSBAR
- PRIMARY OR SECONDARY COMMON TERMINAL, AS APPLICABLE
- TERMINAL ON NEUTRAL OR GROUND BUSBAR
- IRREVERSIBLE SPLICE OR CRIMP PER NEC 250.64(C)
- NEC 250.2(A)-COMPLIANT GROUNDING ELECTRODE



G GROUNDING DIAGRAM



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Welch's Restaurant Inc.  
13520 Northwestern Avenue  
Franksville WI 53126

Project  
Electrical Details  
Date  
12/2/25  
Scale  
See title block  
Sheet

E500

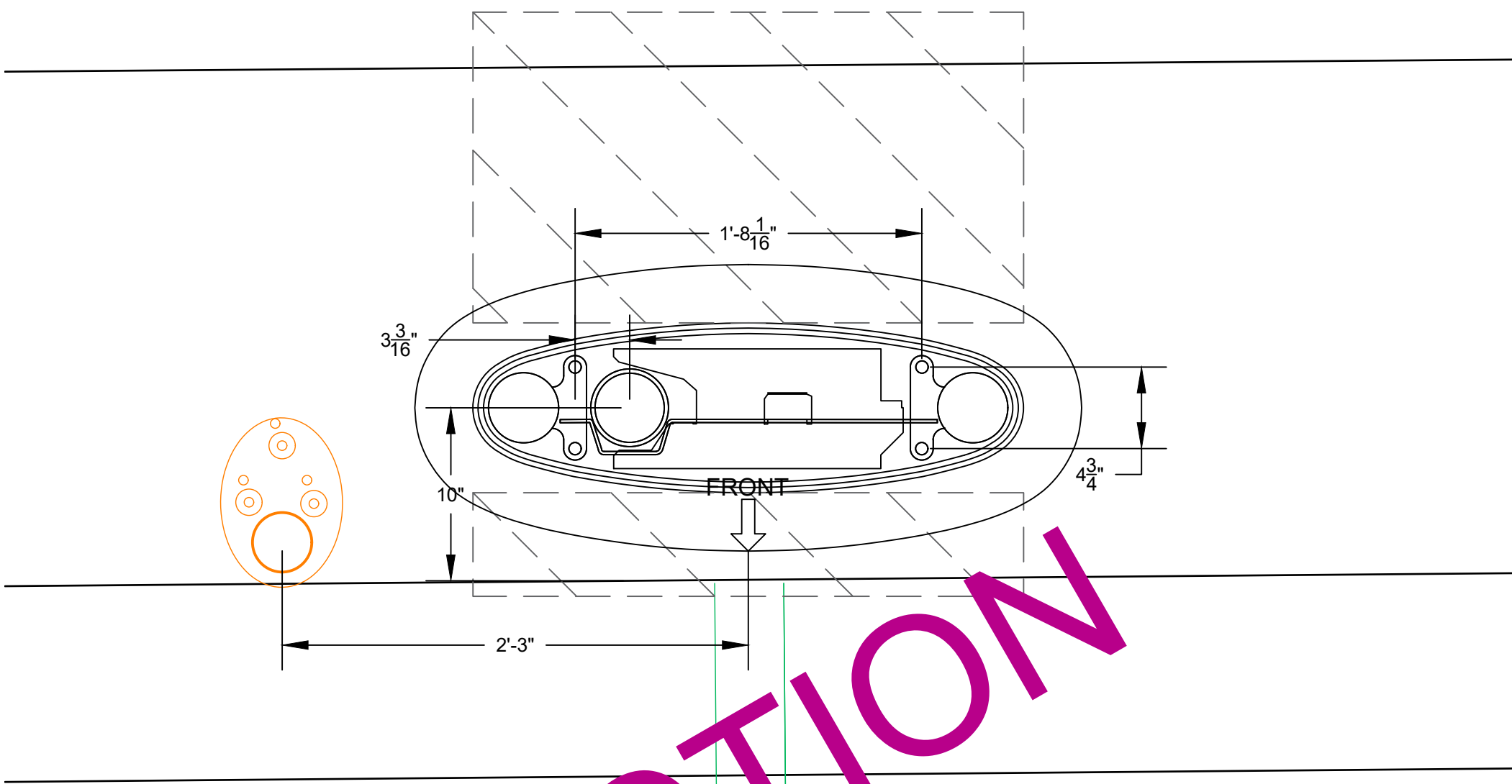


A&W\_EV\_Charging\_Design\_90%IFR20251202.dwg

12/2/25

Tom Kennedy

SPACE LEFT FOR ADDED  
CONDUCTOR CONNECTIONS AND  
INTERNAL POST AND  
SUPERCHARGER CONNECTIONS.



Ⓐ Tesla V3 Post Base  
1 1/2" x 1'-0"

Preliminary NOT FOR CONSTRUCTION

1

Electrical Details

NTS



A	Issued for Review	12/25/25
No.	Revision/Issue	Date

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12/2/25  
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E501



A&W\_EV\_Charging\_Design\_90%IFR20251202.dwg

12/2/25

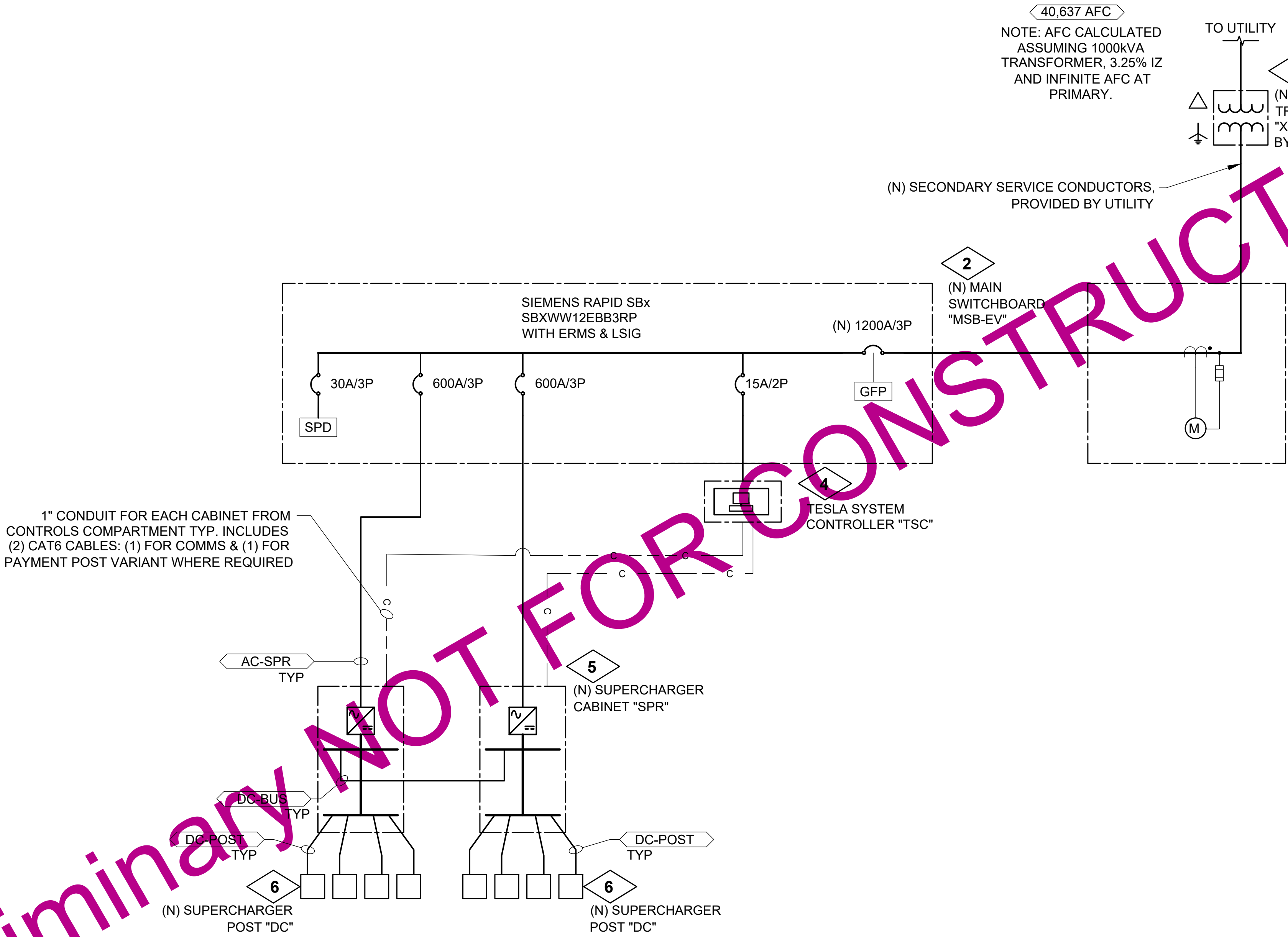
Tom Kennedy

## LOAD SCHEDULE

SWITCHBOARD "SB-1" LOAD SCHEDULE					
CKT NO	TRIP AMPS	DESCRIPTION	VOLT-AMPS		
			A	B	C
1	600	SUPERCHARGER #1	129,000	-	-
	"	"	-	129,000	-
	"	"	-	-	129,000
2	600	SUPERCHARGER #2	129,000	-	-
	"	"	-	129,000	-
	"	"	-	-	129,000
3	15	MONITORING	200	-	-
	"	"	-	200	-
TOTALS			258 kVA	258 kVA	258 kVA
			932 A	932 A	932 A

## EQUIPMENT NOTES

1	(N) UTILITY TRANSFORMER "XR-1" • SIZE & PRIMARY VOLTAGE PER UTILITY • SECONDARY 480Y/277V
2	(N) MAIN SWITCHBOARD "SB-1" • 480/277 VAC, 1600A • 1200A MAIN BREAKER, 100%-RATED, LSIG AND ERMS • 65 KAIC • NEMA 3R
3	(N) UTILITY METER • METER # WEM-1204-13PM
4	(N) TESLA SYSTEM CONTROLLER • EXTERNALLY MOUNTED AS A STANDALONE UNIT.
5	(N) SUPERCHARGER CABINET "SPR" • (2) SUPERCHARGER CABINETS • 480VAC, 3PH, 4W • 465A MAX AC INPUT • DC OUTPUT TO (4) CHARGE POSTS MAX EACH SUPERCHARGER CABINET • 85 kA SCCR
6	(N) SUPERCHARGER POST "DC" • 250KW • (8) SUPERCHARGER POSTS • 0 VDC - 500 VDC



## SYSTEM PLACARDS

TESLA SUPERCHARGER  
13520 Northwestern Ave,  
Franksville, WI 53126  
USA

ATTACH ON FRONT OF  
SWITCHBOARD

TESLA EV SYSTEM  
DISCONNECT

ATTACH ON SWITCHBOARD MAIN  
DISCONNECT

## AC CIRCUIT SCHEDULE

CIRCUIT #	CONDUCTOR METAL UON	# OF CONDUITS	# PHASE CONDUCTORS PER CONDUIT	PHASE CONDUCTOR SIZE	NEUTRAL CONDUCTOR SIZE	EGC	SSBJ	MAX CIRCUIT LENGTH	WIRE TYPE	CONDUIT TYPES	MIN CONDUIT SIZE (IN)
AC-SPR	AL	2	3	500 KCMIL	350 KCMIL	2/0 AWG (AL) OR 1 AWG (CU)	-	400'	XHHW-2	PVC	3 1/2"

## DC CIRCUIT SCHEDULE

CIRCUIT #	CONDUCTOR METAL UON	# OF CONDUITS	# POWER CONDUCTORS PER CONDUIT	POWER CONDUCTOR SIZE	EGC	SIGNAL WIRE	DC MID	MAX CIRCUIT LENGTH	WIRE TYPE	CONDUIT TYPES	MIN CONDUIT SIZE (IN)
DC-POST	AL	1	4	600 KCMIL (two +, two -)	2/0 AWG (AL)	TESLA PROVIDED	-	330'	XHHW-2 (1000V)	PVC	4
DC-BUS	AL	2	2	600 KCMIL	1/0 AWG (CU)	-	3/0 AWG	300'	XHHW-2 (1000V)	PVC	3

## LEGEND

—	BUSSING	—	WYE TRANSFORMER WINDING
—	CONDUCTORS	—	GROUNDING WYE TRANSFORMER WINDING
— c —	SHIELDED CAT6 CABLE	—	EQPT. ENCLOSURES
—	CIRCUIT BREAKER	—	METER
—	SWITCH	—	AC-DC OR DC-AC CONVERTER
—	FUSE	—	LIGHT WITH MOTION AND PHOTO SENSOR
—	CURRENT TRANSFORMER	—	WIFI CONNECTION
—	POWER TRANSFORMER	—	
—	DELTA TRANSFORMER WINDING	—	
—	DELTA HIGH-LEG TRANSFORMER WINDING	—	

PLACARD NOTES:  
PLACARDS TO BE MADE OF RED PHENOLIC PLASTIC W/ 1" WHITE LETTERING. ATTACH PLACARDS WITH RIVETS OR SELF-TAPPING SCREWS

ADDITIONAL PLACARDS REQUIRED FOR ARC FLASH LABELS

# One Line Diagram

## NTS



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