

**Metro Transit - University Bridge Trolley Pole Replacement**

**KC001609**

**Section 00 90 00  
Addendum Number 2**

Prospective bidders are hereby notified that the bidding documents have been amended as hereinafter set forth:

<b>Ref.</b>	<b>Section and Page or Drawing</b>	<b>Location and Description of Change</b>
		<b>VOLUME 1 OF 3</b>
2.1	§00 26 10	<b>SUPPLEMENTAL REQUIREMENTS FOR ELECTRICAL</b> <b>DELETE</b> section in its entirety and <b>REPLACE</b> with revised section attached to this addendum.
		<b>VOLUME 3 OF 3</b>
2.2	ST1.01	<b>PLAN AND ELEVATION – 1</b> <b>DELETE</b> sheet 4 of 43 in its entirety and <b>REPLACE</b> with revised sheet 4 of 43 attached to this addendum.
2.3	ST5.04	<b>POLE SHAFT FOUNDATION DETAILS - 2</b> <b>DELETE</b> sheet 13 of 43 in its entirety and <b>REPLACE</b> with revised sheet 13 of 43 attached to this addendum.

**Attached To This Addendum:**

- §00 26 10 SUPPLEMENTAL REQUIREMENTS FOR ELECTRICAL, Addendum 2
- ST1.01 PLAN AND ELEVATION – 1, Addendum 2
- ST5.04 POLE SHAFT FOUNDATION DETAILS – 2, Addendum 2

This Addendum shall be attached to and form a part of the Contract Documents. All bidders are reminded to acknowledge this Addendum in the E-Procurement system before a bid can be accepted.

*Bidders are also reminded to review Clarification documents in the E-Procurement system for responses to timely submitted questions.*

Issued: 3/19/2026

## SECTION 26 00 10

### SUPPLEMENTAL REQUIREMENTS FOR ELECTRICAL

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. This Section specifies supplemental requirements generally applicable to the Work specified in Division 26. This Section is also referenced by related Work specified in other Divisions.

##### 1.02 REFERENCES

- A. Abbreviations and Acronyms for Electrical Terms and Units of Measure:
  - A: Ampere, unit of electrical current.
  - AWG: American wire gauge; see ASTM B258.
  - CAD: Computer-aided design or drafting.
  - CB: Circuit breaker.
  - CU or Cu: Copper.
  - DC or dc: Direct current.
  - GND: Ground.
  - kcmil or MCM: One thousand circular mils.
  - LED: Light-emitting diode.
  - WR: Weather resistant.
- B. Abbreviations and Acronyms for Electrical Single-Conductor and Multiple-Conductor Cable Types:
  - 1. THHN: Thermoplastic, heat-resistant cable with nylon jacket outer sheath.
  - 2. THHW: Thermoplastic, heat- and moisture-resistant cable.
  - 3. THWN: Thermoplastic, moisture- and heat-resistant cable with nylon jacket outer sheath.
  - 4. XHH: Cross-linked polyethylene, heat-resistant cable.
  - 5. XHHW: Cross-linked polyethylene, heat- and moisture-resistant cable.
- C. Abbreviations and Acronyms for Electrical Flexible Cord Types:
- D. Definitions:
  - 1. Cable: In accordance with NIST NBS Circular 37 and IEEE standards, in the United States for the purpose of interstate commerce, the definition of "cable" is (1) a conductor with insulation, or a stranded conductor with or without insulation (single-conductor cable); or (2) a combination of conductors insulated from one another (multiple-conductor cable).

2. Conductor: In accordance with NIST NBS Circular 37 and IEEE standards, in the United States for the purpose of interstate commerce, the definition of "conductor" is (1) a wire or combination of wires not insulated from one another, suitable for carrying an electric current; (2) (National Electrical Safety Code) a material, usually in the form of wire, cable, or bar, suitable for carrying an electric current; or (3) (general) a substance or body that allows a current of electricity to pass continuously along it.
3. Enclosure: The case or housing of an apparatus to protect the equipment from physical damage. Types of enclosures and enclosure covers include the following:
  - a. Fuse Box: A box having threaded openings or knockouts for conduit, EMT, or fittings.
  - b. Pull Box: A box with a blank cover that joins different runs of raceway and provides access for pulling or replacing the enclosed cables or conductors.
4. Luminaire: A complete lighting unit consisting of a light source such as a lamp, together with the parts designed to position the light source and connect it to the power supply. It may also include parts to protect the light source or the ballast or to distribute the light.
5. Sheath: A continuous metallic covering for conductors or cables.

### 1.03 COORDINATION

- A. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions:
  1. Notify Seattle City Lights for streetlights and King County Metro for OCS no fewer than 30 days in advance of proposed interruption of electrical service.
  2. Do not proceed with interruption of electrical service without Seattle City Lights written permission.
  3. Coordinate interruption with systems impacted by outage including, but not limited to, the following:
    - a. Exercising generators.
    - b. Emergency lighting.
- B. Arrange to provide temporary electrical power in accordance with requirements specified in Division 01.

### 1.04 PREINSTALLATION MEETINGS

- A. Electrical Preconstruction Conference: Schedule conference with Project Representative, not later than 10 days after notice to proceed. Agenda topics include, but are not limited to, the following:
  1. Electrical installation schedule.

2. Utility work coordination and class of service requests.
3. Commissioning activities.

#### ~~1.05~~ ~~SEQUENCING~~

~~A. Conduct and submit results of power system studies before submitting Product Data and Shop Drawings for electrical equipment.~~

#### ~~1.06~~ 1.05 ACTION SUBMITTALS

A. Coordination drawings.

#### ~~1.07~~ 1.06 INFORMATIONAL SUBMITTALS

- A. Electrical installation schedule.
- B. Qualification statements.
- C. Welding certificates.
- D. Delegated design drawings for structural masonry wall penetrations.

#### ~~1.08~~ 1.07 QUALITY ASSURANCE

- A. Qualifications: Prepare and submit qualification statements for the following entities performing Work on Project:
  - ~~a.1.~~ 1. Expertise in electrical engineering, lighting design, and structural requirements for exterior poles and standards.
    - ~~b.a.~~ a. Lighting Certified (LC) Professional by the National Council on Qualifications for the Lighting Professions (NCQLP).
2. EPM Specialist: Recognized experts possessing the following qualifications in accordance with SNFPA 70B:
  - a. Technical Competence: Person should, by education, training, and experience, be well-rounded in all aspects of electrical maintenance.
  - b. Administrative and Supervisory Skills: Person should be skilled in planning and development of long-range objectives to achieve specific results and should be able to command respect and solicit cooperation of persons involved in EPM Program development.
3. Welder: Installer possessing active qualifications specified in these Contract Documents with training and certification in accordance with AWS D1.1/D1.1M.
4. Medium-Voltage Cable Installer: Entity possessing active qualifications specified in these Contract Documents with training and manufacturer certification to install, splice, and terminate medium-voltage cable, in accordance with SCL.
5. Medium-Voltage Duct Installer: Entity possessing active qualifications specified in these Contract Documents with documented training and experience with installation

- of medium-voltage duct banks in accordance with electrical utility service provider's requirements.
6. Medium-Voltage Equipment Installer: Entity possessing active qualifications specified in these Contract Documents with documented training and experience with hazards and safety requirements associated with installation and operation of medium-voltage equipment in accordance with electrical utility service provider requirements.
    - a. Medium-voltage equipment Installer must be approved by King County Metro.
  7. Electrical Power Monitoring Installers: Installer possessing active qualifications specified in these Contract Documents and able to present unexpired certified Installer credentials issued by manufacturer prior to starting installation.
  8. Power Quality Specialist: Recognized experts possessing active credentials from a qualified electrical testing laboratory recognized by authorities having jurisdiction, and able to present unexpired NICET Level 4 credentials with documented experience in power quality testing for installations similar in complexity to this Project.
  9. Low-Voltage Electrical Testing and Inspecting Agency: Entities possessing active credentials from a qualified electrical testing laboratory recognized by authorities having jurisdiction.
    - a. On-site electrical testing supervisors must have documented certification and experience with testing electrical equipment in accordance with NETA testing standards.
  10. Medium-Voltage Electrical Testing and Inspecting Agency: Entities possessing active credentials from a qualified electrical testing laboratory recognized by authorities having jurisdiction.
    - a. On-site electrical testing supervisors must have documented certification and experience with testing electrical equipment in accordance with NETA testing standards.
  11. Structural Testing and Inspecting Agency: Entity possessing active qualifications with documented training and experience with testing structural concrete, seismic controls, and wind-load controls.

## **PART 2 PRODUCTS**

### **2.01 LUMINAIRE AND OTHER ACCESSORIES**

- A. Match metal color of pedestrian luminaire and accessories to the color of pole using color code: RAL 6021 PALE GREEN.

## 2.02 SUBSTITUTION LIMITATIONS FOR ELECTRICAL EQUIPMENT

- A. Substitution requests for electrical equipment will be entertained under the following conditions:
  - 1. Notification of Contractor's intent to request substitutions for convenience must be declared during the Electrical Preconstruction Conference so potential risks to system performance and construction schedule may be identified for Contractor's response in submission of the substitution request.
  - 2. For electrical equipment and systems, substitutions for cause are considered major construction risks. If it is possible that Contractor may need to request substitutions for cause because of equipment unavailability, or inability to meet construction schedule because of lead time, Contractor must declare the possibility during the Electrical Preconstruction Conference to permit establishing a mitigation plan for minimizing risks to system performance and construction schedule.

## PART 3 EXECUTION

### 3.01 PREPARATION

- A. Electrical Installation Schedule: At preconstruction meeting, and periodically thereafter as dates change, provide schedule for electrical installation Work to the King County Project Representative, but not limited to, milestone dates for the following activities:
  - 1. Preinstallation meetings.
  - 2. Utility service outages.
  - 3. Utility service inspection and activation.
  - 4. System startup, testing, and commissioning activities for major electrical equipment.
  - 5. Requests for special inspections.
  - 6. Requests for inspections by authorities having jurisdiction.
- B. Coordination Drawings for Structural Supports: Show coordination of structural supports for equipment and devices, including restraints and bracing for control of seismic and wind loads, with other systems, equipment, and structural supports in the vicinity.
- C. Coordination Drawings for Conduit Routing: Conduit routing plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of items involved:
  - 1. Structural members in paths of conduit groups with common supports.

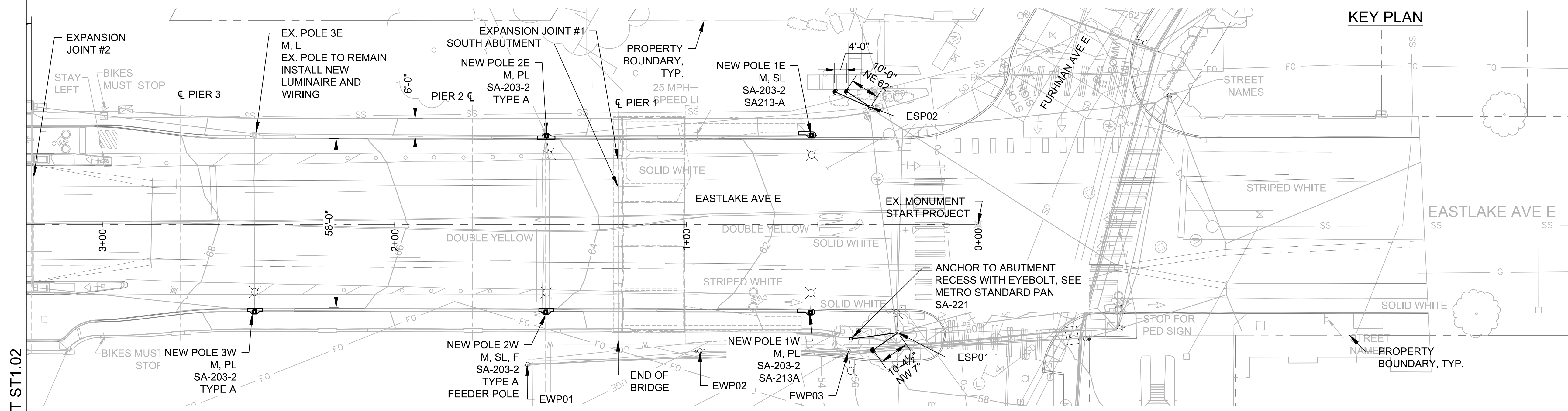
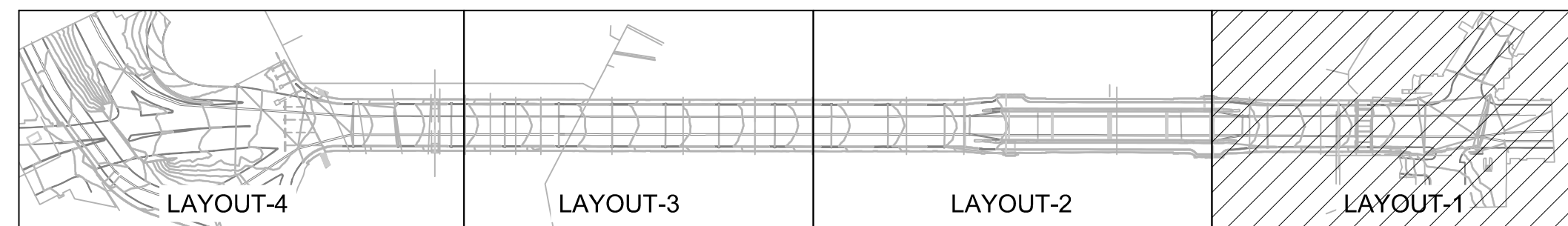
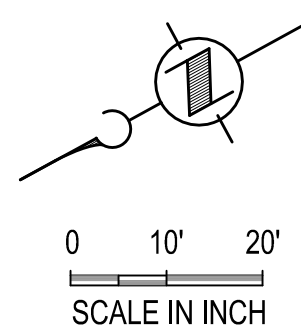
### 3.02 INSTALLATION OF ELECTRICAL WORK

- A. Unless more stringent requirements are specified in the Contract Documents or manufacturers' written instructions, comply with NFPA 70 and NECA NEIS 1 for installation of Work specified in Division 26.

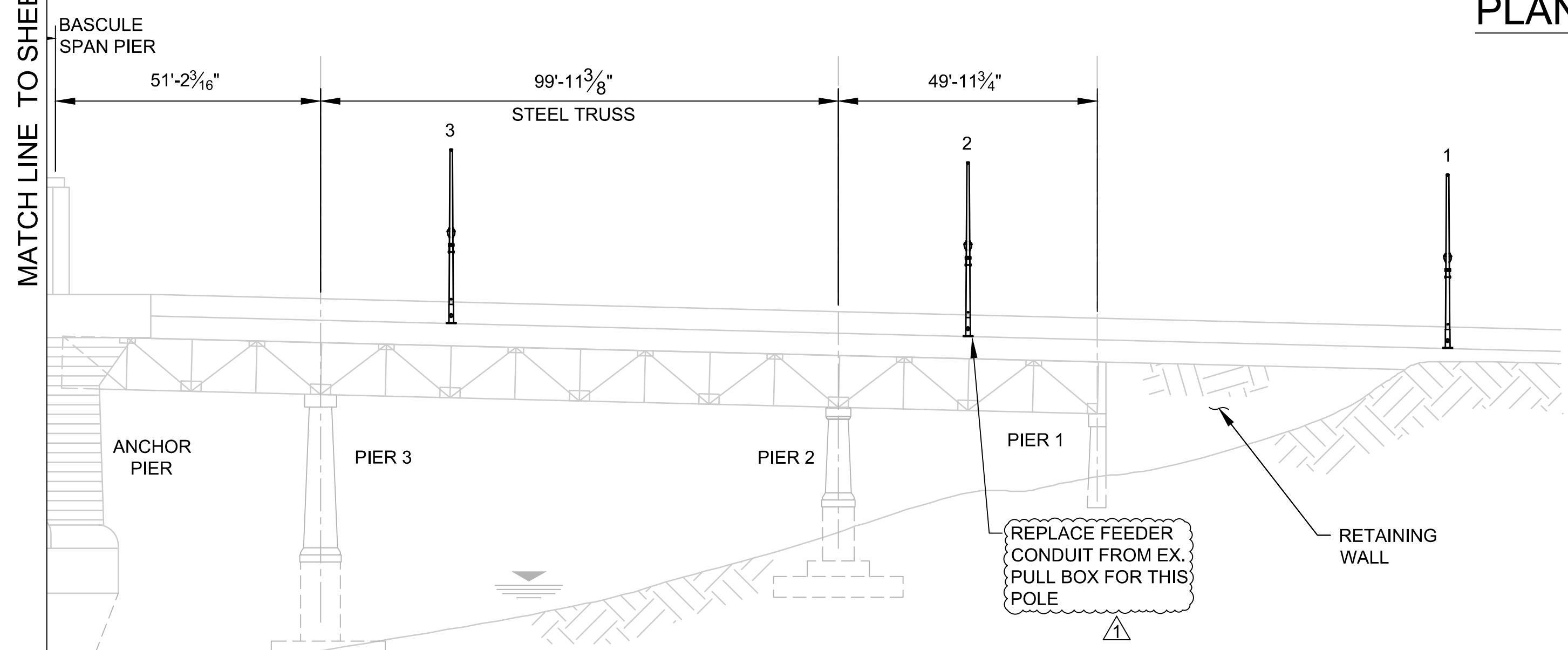
### 3.03 FIELD QUALITY CONTROL

- A. Administrant for Medium-Voltage Electrical Tests and Inspections:
  - 1. Engage qualified medium-voltage electrical testing and inspecting agency to administer and perform tests and inspections.
- B. Administrant for Low-Voltage Electrical Tests and Inspections:
  - 1. Engage qualified low-voltage electrical testing and inspecting agency to administer and perform tests and inspections.
- C. Administrant for Power-Limited Electrical Tests and Inspections:
  - 1. Engage qualified power-limited electrical testing and inspecting agency to administer and perform tests and inspections.
- D. Administrant for Field Tests and Inspections of Lighting Installations:
  - 1. Engage qualified lighting testing and inspecting agency to administer and perform tests and inspections.

**END OF SECTION**



**PLAN**



**ELEVATION**

**NOTES:**

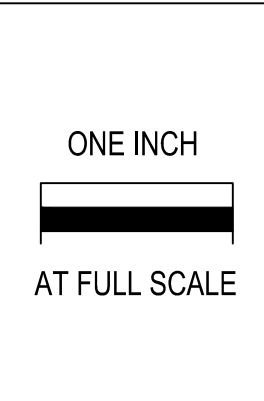
- SEE SHEETS 2 AND 3 FOR GENERAL NOTES.
- POLES NUMBER 1 TO NUMBER 16 WILL BE REPLACED IN-PLACE AT BOTH SIDES OF THE BRIDGE, EXCEPT POLES 3E AND 12E. THE TOTAL NUMBER OF REPLACEMENT POLES IS 30. POLES 1E, 1W AND 16W ARE ON THE GROUND, ALL OTHER REPLACEMENT POLES ARE ON THE BRIDGE STRUCTURE.
- POLES S1 AND S2 ARE NEW AND MOUNTED ON THE EXISTING SUPERBENT BETWEEN PIERS 14 AND 15.
- SEE SHEET ST6.01 FOR POLE SCHEDULE.
- EXISTING STEEL POLES ESP01 AND ESP02 TO BE GUYED BY TEMPORARY SIDEWAY GUY, OR DOWN GUY ANCHORS, OR ABUTMENT EYEBOLTS. LOCATIONS SHOWN IN THE PLAN ARE APPROXIMATE. CONTRACTOR MUST FIELD VERIFY TO AVOID UTILITY CONFLICTS AND ADJUST WITHIN 2 FEET RADIUS OF PROPOSED LOCATION. NOTIFY KING COUNTY PROJECT REPRESENTATIVE IF UTILITY CONFLICTS OCCUR. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITY FROM ANCHOR CONSTRUCTION.

**LEGEND**

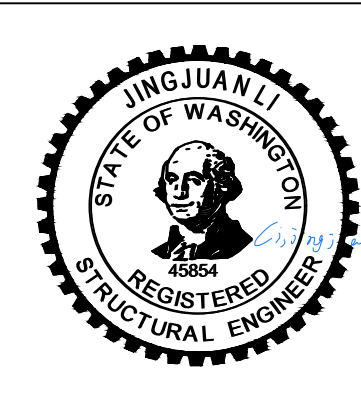
- 2W, M, L SA-203-2 TYPE A: REPLACEMENT POLE NUMBER
- M, L: METRO OCS AND CITY OF SEATTLE LIGHTING JOINT USE POLE
- SA-203-2: POLE TYPE
- TYPE A: FOUNDATION TYPE
- POLE BASE CONSTRUCTION AREA

2/3/2027 KCM University Pole Replacement CADD SHEET 47 ST1.01 ST1.04 PLAN AND ELEVATION.dwg | Layout: ST1.01  
 PLOTTED: Mar 17, 2025 10:45:56am By: Jiana Wok  
 XREFS: KCM University Bridge Trolley\_2D BaseMap; KCM University Bridge Trolley\_Topog; KCTDC-BORDER-RHC Engineering IMAGES;

No.	REVISION	BY	APP'D	DATE
		TL	JL	3/17/2026
	ADDENDUM #2			



**RHC ENGINEERING**  
 WWW.RHCENGINEERING.COM  
 720 3RD AVE SUITE 1400  
 SEATTLE WA 98104  
 PH: 206.623.5984



DESIGNED: J. LI	APPROVED: G. FRANCO
DRAWN: T. LOZADA	PROJECT NO: 1127254
CHECKED: G. CHEN	CONTRACT NO: -



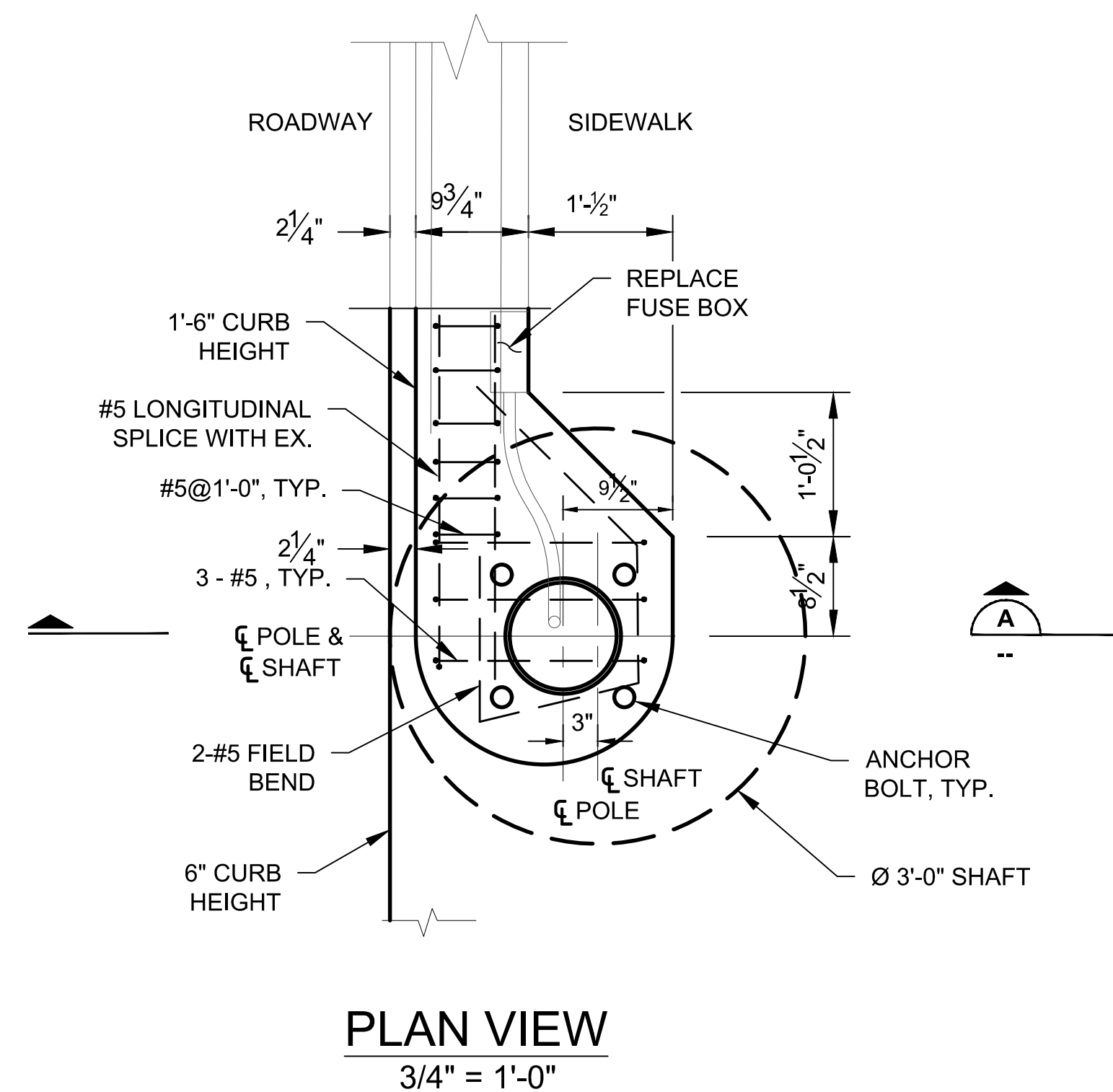
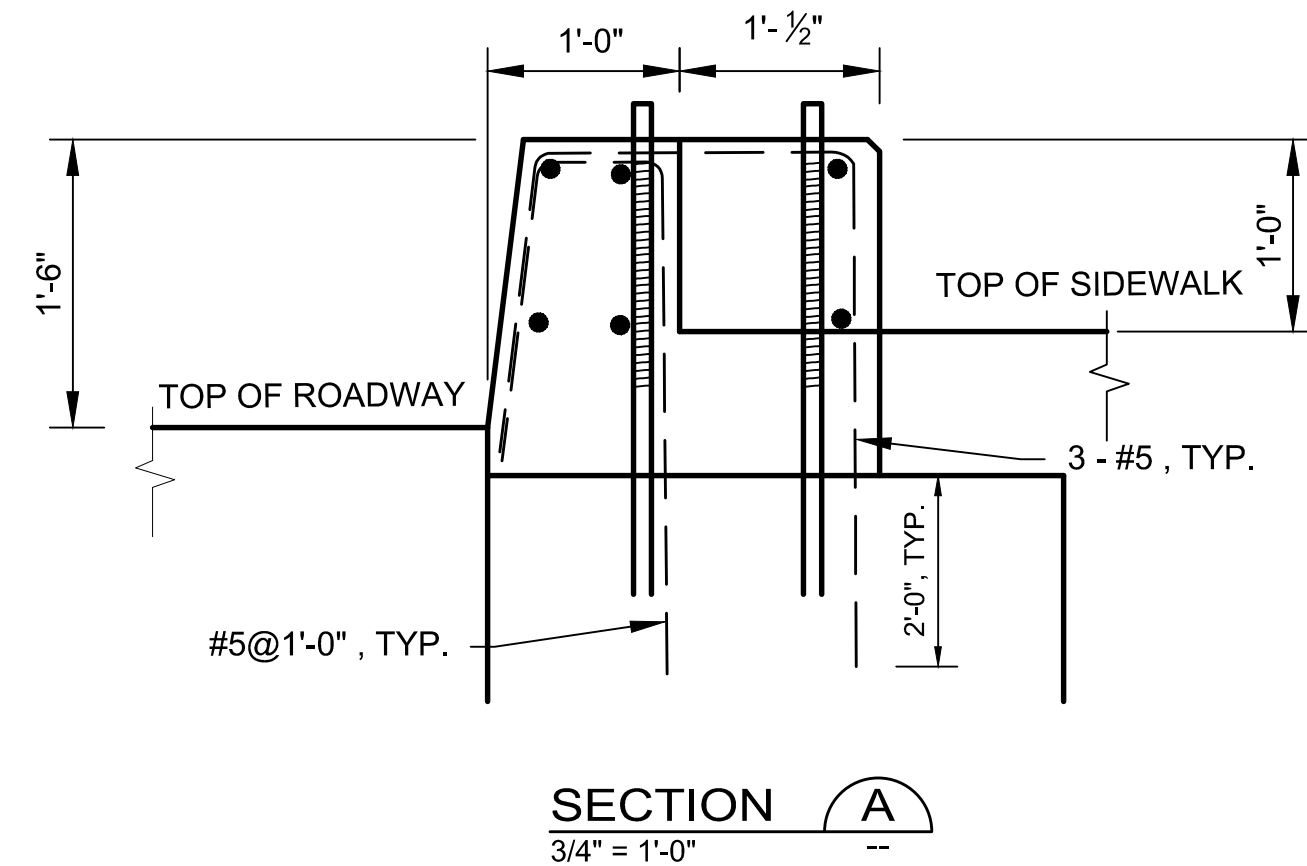
METRO TRANSIT CAPITAL DIVISION  
 TROLLEY OVERHEAD SYSTEM  
 UNIVERSITY BRIDGE TROLLEY POLE REPLACEMENT

**PLAN AND ELEVATION - 1**

DATE: DECEMBER 2, 2025
DRAWING NO: ST1.01
SHEET NO. OF 4 43

FOUNDATION DETAIL SCHEDULE															
ANCHOR BASE FOUNDATION									ANCHOR BOLT AND ANCHOR PLATE DIMENSIONS (INCHES)						
FOUNDATION TYPE	POLE My STANDARD/MAXIMUM (KIP-FT)	PIER EMBEDMENT DEPTH (D)		PIER DIAMETER	REBAR REQUIREMENTS		BOLT CIRCLE ANCHOR	BOLT PROJ ANCHOR (P)	ANCHOR BOLT DIAMETER (A)	PLATE THICKNESS (B)	PLATE WIDTH (C)	PLATE HOLE (D)	CENTER HOLE (E)	CORNER RADIUS (F)	BOLT CIRCLE (G)
		4 BLOWS PER FT	2 BLOWS PER FT		VERTICAL*	CONTINUOUS TIES									
SA-213-A	110 / 180	9	14	3'-0"	8 - #8	#3	15"	8 1/2"	1 1/2	3/8	16X16	1 5/8	10 1/2	1 1/2	15

\* ADD (1) #8 VERTICAL BAR FOR GROUNDING.  
 \*\* USE 2 BLOWS PER FOOT IN ABSENCE OF GEOTECHNICAL SOIL DATA.

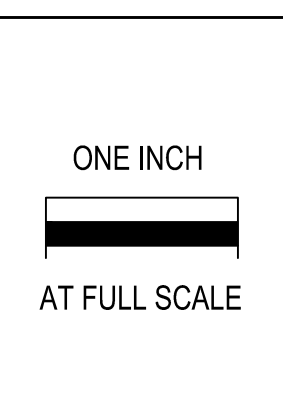


**SHAFT FOUNDATION NOTES**

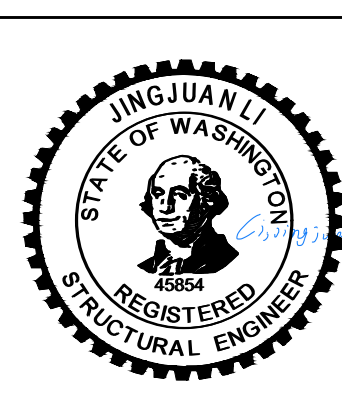
- CONCRETE AND REINFORCING STEEL
  - ALL WORK SHALL BE DONE PER SEATTLE SIDEWALK AND STREET PAVING AND RESTORATION RULES AND REGULATIONS IF IN STREET RIGHT OF WAY.
  - CONCRETE SHALL BE CITY OF SEATTLE CLASS 4000P, AND WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
  - ALL REINFORCING BARS SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A706 GRADE 60.
  - MINIMUM CLEAR CONCRETE COVER SHALL BE 3 INCHES.
  - REINFORCING DETAILS AND FABRICATION SHALL BE AS RECOMMENDED IN ACI 315 "DETAILS & DETAILING OF CONCRETE REINFORCEMENT."
  - CONCRETE IS NOT ALLOWED TO FREE FALL MORE THAN 5 FEET DURING PLACEMENT. CONCRETE MUST BE PLACED WITHIN EITHER A CONCRETE PUMP OR WITH THE USE OF A TREMIE TO AVOID FREE FALLING MORE THAN 5 FEET.
- ANCHOR PLATES, BOLTS, NUTS AND WASHERS
  - ANCHOR BOLTS INCLUDING NUTS AND FLAT WASHERS SHALL CONFORM TO ASTM F1554 GRADE 105 CLASS 2A INCLUDING SUPPLEMENTARY REQUIREMENTS S2, S3 AND S4. THREADS SHALL CONFORM TO THE ANSI STANDARD B1.1 FOR UNC THREAD. ANCHOR BOLTS SHALL HAVE MINIMUM 18 INCHES OF THREAD ON EXPOSED END AND 12 INCHES OF THREAD ON THE EMBEDDED END.
  - ANCHOR PLATES SHALL CONFORM TO ASTM A36.
- GALVANIZING
  - ANCHOR PLATES, ANCHOR BOLTS, ANCHOR BOLT NUTS AND WASHERS SHALL BE HOT-DIP GALVANIZED IN CONFORMANCE TO ASTM A153 OR ASTM A123.
- SOIL
  - EMBEDMENT DEPTH IS ADEQUATE FOR THREE TIMES THE WORKING MOMENT IN COHESIVE SOILS OF C=1000 PSF AND φ=0° OR BETTER AND COHESIONLESS SOILS OF C=0 PSF AND φ=26° OR BETTER.
- SUBMITTALS
  - REINFORCING STEEL SHOP DRAWINGS AND CERTIFICATE OF COMPLIANCE.
  - CONCRETE MIX PROPORTIONS, ADMIXTURES AND SLUMP.
  - ANCHOR PLATE, ANCHOR BOLT, ANCHOR BOLT NUTS AND WASHERS CERTIFICATES OF COMPLIANCE.
  - A TEST REPORT SHALL BE PROVIDED IN ACCORDANCE WITH ASTM F1554-99 AND SUPPLEMENTARY REQUIREMENTS.
- INSPECTION
  - CONCRETE SHALL NOT BE PLACED UNTIL THE KING COUNTY PROJECT REPRESENTATIVE HAS INSPECTED THE EXCAVATION, THE GROUNDING, THE ANCHOR BOLTS, AND THE PLACEMENT OF THE REINFORCING BAR CAGE.
- ANCHOR BOLT SETTING
  - COVER EXPOSED ANCHOR BOLT THREADS AND NUTS WITH AT LEAST 3 LAYERS OF PLASTIC TAPE BEFORE PLACING CONCRETE.
  - ANCHOR BOLT TEMPLATE SHALL BE USED TEMPORARILY AT THE TOP OF ANCHOR BOLTS FOR ACCURATE POSITIONING AND ALIGNING.
- CONDUIT
  - CONDUIT FROM FOUNDATION SHALL BE SCHEDULE 80 PVC. CONDUIT BENDS SHALL HAVE A MINIMUM RADIUS OF 12".
- SEE SHEET ST5.03 FOR SHAFT DETAILS.

Z:\210127\KC University Pole Replacement\CADD\SH504\SH504-04 SHAFT FOUNDATION DETAILS.dwg | Layout: ST5.04  
 PLOTTED: Mar 18, 2024 05:03:30pm By: Jane Work  
 XREFS: KC-DCC-BORDER-RHC Engineering IMAGES

No.	REVISION	BY	APPD	DATE
	ADDENDUM #2	TL	JL	3/18/2026



**RHC ENGINEERING**  
 WWW.RHCENGINEERING.COM  
 720 3RD AVE SUITE 1400  
 SEATTLE WA 98104  
 PH: 206.623.5984



DESIGNED: J. LI	APPROVED: G. FRANCO
DRAWN: T. LOZADA	
CHECKED: G. CHEN	PROJECT NO: 1127254
	CONTRACT NO: -



METRO TRANSIT CAPITAL DIVISION  
 TROLLEY OVERHEAD SYSTEM  
 UNIVERSITY BRIDGE TROLLEY POLE REPLACEMENT

**POLE SHAFT FOUNDATION  
 DETAILS - 2**

DATE: DECEMBER 2, 2025
DRAWING NO: ST5.04
SHEET NO. OF 13 43