ELECTRIC DEPARTMENT

CONSTRUCTION STANDARDS

2021

Published March 25, 2021

Truckee Donner Public Utility District
11570 Donner Pass Road – Truckee, CA - 96161

Truckee Donner Public Utility District
Electric Construction Standards

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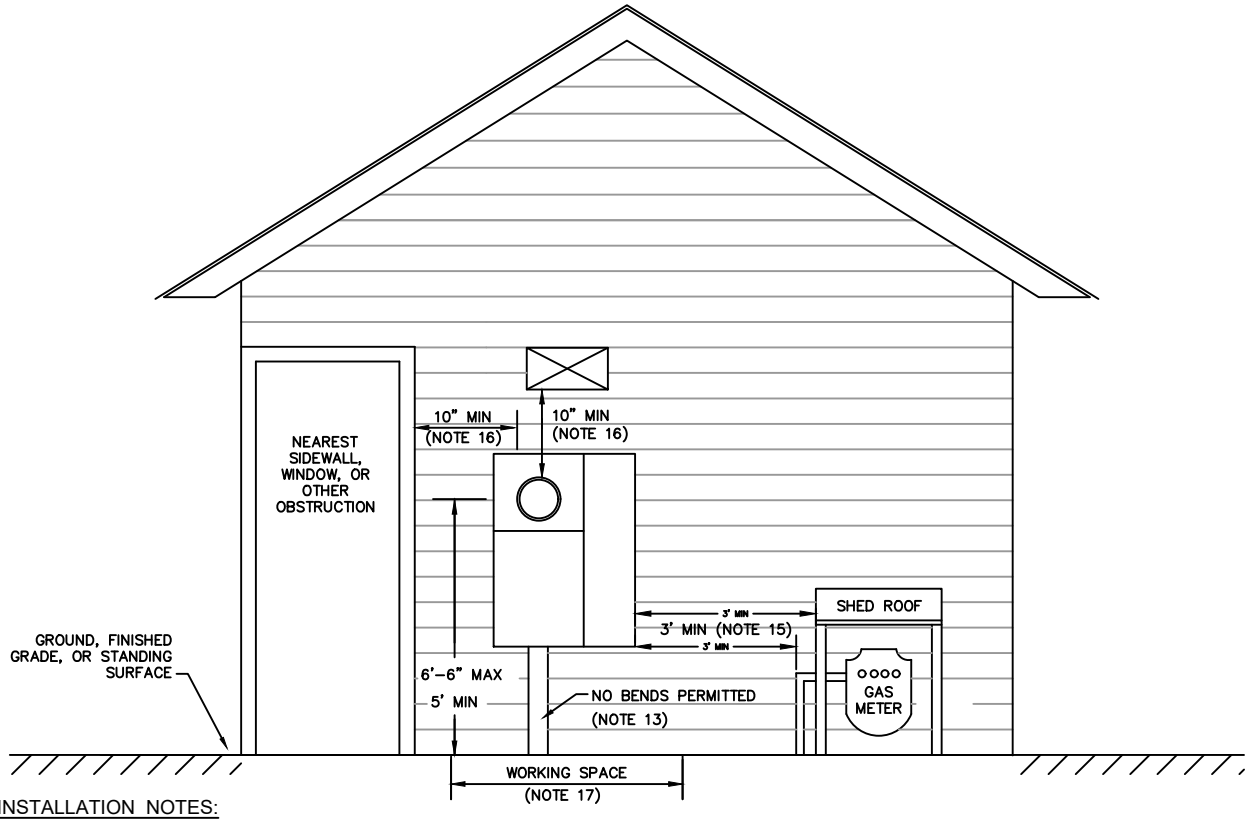


INSTALLATION NOTES:

1. ALL METER SOCKETS SHALL BE TDPUD APPROVED AND ELECTRIC UTILITY SERVICE EQUIPMENT REQUIREMENTS COMMITTEE (EUSERC) COMPLIANT.

2. ALL METER SOCKETS SHALL BE RING TYPE. RINGLESS SOCKETS ARE NOT ACCEPTABLE.

3. METER SOCKETS SHALL BE LEVEL, PLUMB, AND SECURELY FASTENED TO THE STRUCTURE.

4. ALL METER SOCKETS WITHOUT A METER INSTALLED SHALL BE COVERED AND SEALED WITH A TRANSPARENT COVER PLATE.

5. TERMINALS SHALL BE MARKED WITH A CONDUCTOR RANGE FOR ALUMINUM OR COPPER CONDUCTORS. WHEN ALUMINUM CONDUCTORS ARE USED, THE SOCKET SHALL BE APPROVED AND CLEARLY MARKED FOR THAT USE BY MANUFACTURER.

6. CUSTOMER WIRING, GROUNDING ELECTRODE CONDUCTOR, OR GROUNDING CONDUCTORS, OTHER THAN CONDUIT BONDING JUMPERS, SHALL NOT PASS THROUGH OR TERMINATE IN ANY SEALABLE SECTION.

7. COMMERCIAL (NON-RESIDENTIAL USE) METER PANELS MUST MEET THE FOLLOWING REQUIREMENTS:
   A. ALL COMMERCIAL SERVICES USE SHALL HAVE TDPUD APPROVED EUSERC COMPLIANT MANUAL TEST-BYPASS FACILITIES.
   B. ALL COMMERCIAL SERVICES OVER 200 AMPS REQUIRE CURRENT TRANSFORMER (CT) METERING.
   C. REMOTE METERS ARE NOT PERMITTED
   D. LABELING SHALL COMPLY WITH STANDARD M-0.

8. A SERVICE DISCONNECT IS NOT PERMITTED ON THE SUPPLY SIDE OF SINGLE METER SOCKETS OR MULTI-METER SOCKET PANELS CONTAINING SIX OR LESS METER SOCKETS.

9. A SERVICE DISCONNECT IS REQUIRED FOR MULTI-METER PANELS CONTAINING MORE THAN SIX METERS, PER NATIONAL ELECTRIC CODE (NEC).

10. RESIDENTIAL REQUIREMENTS:
   A. SERVICES GREATER THAN 400 AMPS REQUIRE A CT-RATED METER AND APPROPRIATE SWITCHGEAR.
   B. TEST BYPASS FACILITIES ARE NOT ALLOWED ON RESIDENTIAL SERVICES.
   C. LABELING SHALL COMPLY WITH STANDARD M-0.

M-1-1.DWG

TRUCKEE DONNER Public Utility District

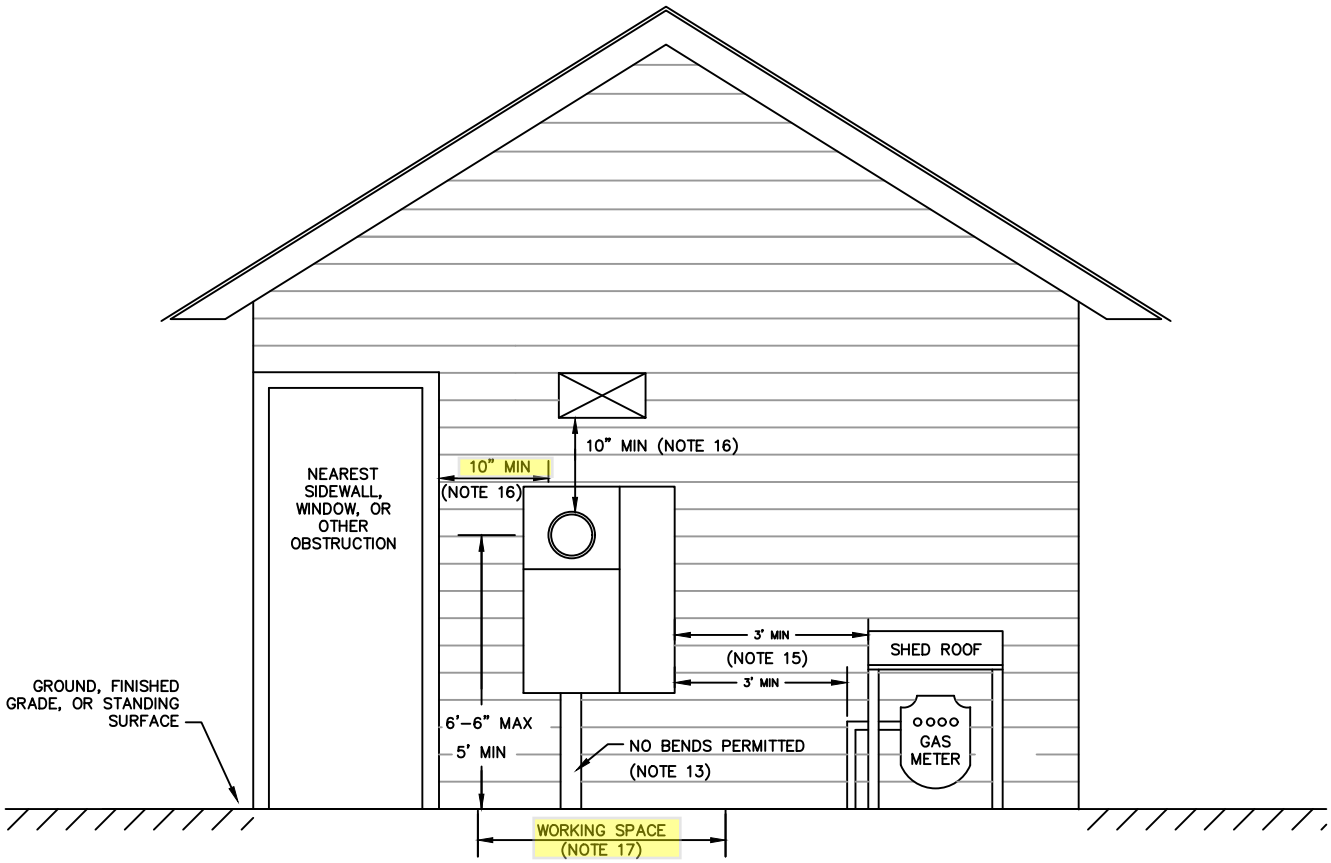
ELECTRIC DEPARTMENT

Metering

General Requirements

All Meter Locations, Page 1 of 2

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Metering	Secondary	**M-1.1**



INSTALLATION NOTES:

11. ALL METERING EQUIPMENT AND ENCLOSURES SHALL BE READILY ACCESSIBLE BY DISTRICT PERSONNEL DURING NORMAL BUSINESS HOURS FOR METER READING, MAINTENANCE, TESTING, INSTALLATION, OR REMOVAL.

12. METERS SHALL BE INSTALLED ON THE GABLE END OF A STRUCTURE, IN A COVERED ENTRY OR OTHER SIMILARLY PROTECTED LOCATION. INSTALLATIONS ON THE SHED SIDE OF THE ROOF ARE NOT ACCEPTABLE. ALL METER LOCATIONS ARE SUBJECT TO DISTRICT APPROVAL.

13. RISER CONDUIT SIZE SHALL BE MINIMUM 3" AND NO BENDS PERMITTED IN RISER CONDUT. COMMERCIAL UNDERGROUND SERVICE RISER CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS). RESIDENTIAL UNDERGROUND SERVICE RISER CONDUITS SHALL BE SCHEDULE 80 PVC OR RGS, AS DETERMINED BY TDPUD PERSONNEL. RGS CONDUIT SHALL BE PROPERLY BONDED, IF USED.

14. ALL METER EQUIPMENT EXPOSED TO WEATHER SHALL BE RAINTIGHT IN ACCORDANCE WITH NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA) 3R MINIMUM STANDARD.

15. THERE SHALL BE A MINIMUM 3 FEET HORIZONTAL CLEARANCE FROM THE METER AND SERVICE ENTRANCE PANEL TO NATURAL GAS OR PROPANE PIPES AND FACILITIES.

16. A MINIMUM 10" CLEARANCE SHALL BE MAINTAINED BETWEEN THE METER AND ADJACENT WALLS CEILINGS, OR SIMILAR OBSTRUCTIONS.

17. WORKING SPACE IN FRONT OF METERING EQUIPMENT (INCLUDING CURRENT TRANSFORMER ENCLOSURES) SHALL BE AT LEAST 30" WIDE, 36" DEEP AND 78" HIGH FOR VOLTAGES LESS THAN 250V. FOR VOLTAGES BETWEEN 250-600V, THE WORKING SPACE REQUIRED INCREASES TO 30" WIDE, 42" DEEP AND 78" HIGH. PLANTS, SHRUBS, TREES AND OTHER OBSTRUCTIONS ARE NOT ALLOWED IN THIS SPACE.

18. ALL CLEARANCE REQUIREMENTS SHALL BE MET SIMULTANEOUSLY.

M-1-2.DWG

TRUCKEE DONNER Public Utility District

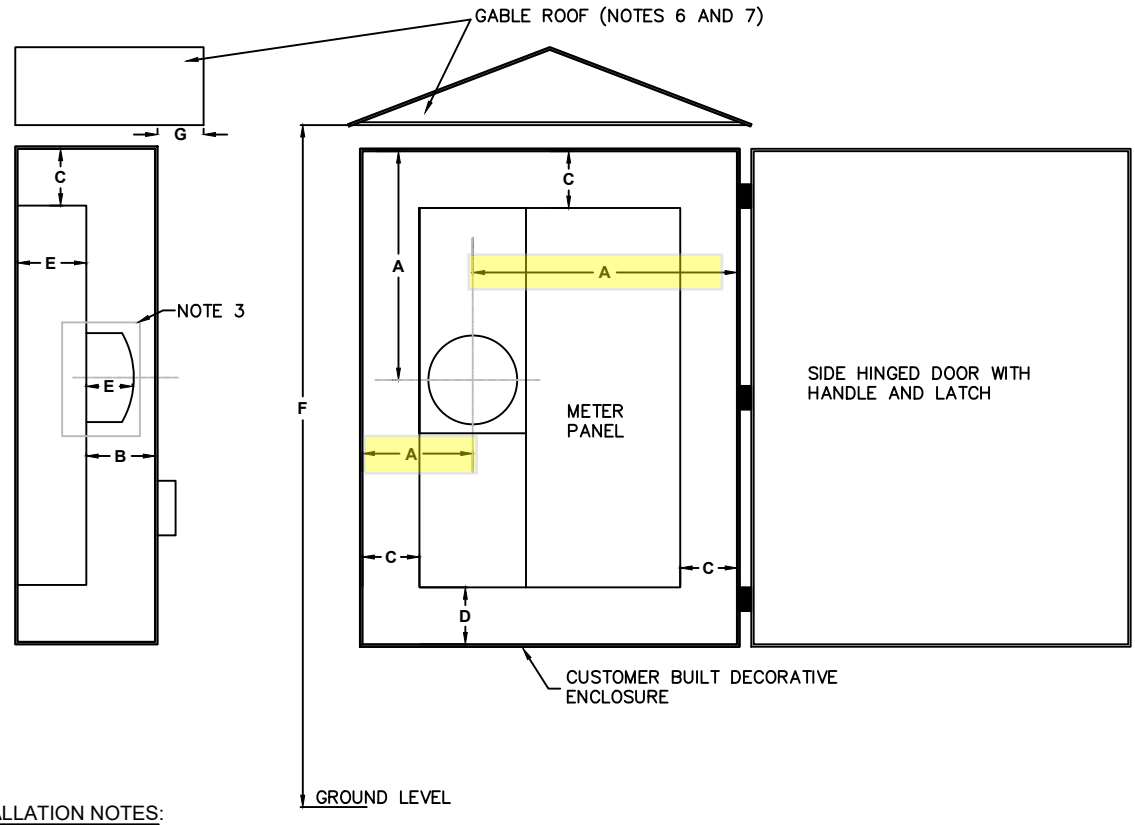
ELECTRIC DEPARTMENT

Metering

General Requirements

All Meter Locations, Page 2 of 2

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Metering	Secondary	**M-1.2**



INSTALLATION NOTES:

1. DECORATIVE ENCLOSURES ARE PERMITTED ON RESIDENTIAL METERS ONLY AND REQUIRE DISTRICT NOTIFICATION AND APPROVAL PRIOR TO INSTALLATION. THE FOLLOWING CONDITIONS SHALL BE REQUIRED FOR APPROVAL.

2. ALL METERS, METER EQUIPMENT, AND ENCLOSURES SHALL BE READILY ACCESSIBLE BY DISTRICT PERSONNEL DURING NORMAL BUSINESS HOURS FOR METER READING, MAINTENANCE, TESTING, INSTALLATION, OR REMOVAL. METER LOCATIONS ARE SUBJECT TO APPROVAL BY THE DISTRICT. SEE STANDARDS M-0, M-1.1 AND M-1.2 FOR ADDITIONAL REQUIREMENTS.

3. ENCLOSURE DOOR SHALL OPEN A FULL 90 DEGREES AT A MINIMUM AND BE SIDE-HINGED. A HASP TYPE LATCH IS PREFERRED FOR SECURING THE ACCESS DOOR TO THE ENCLOSURE. THE ACCESS DOOR SHALL REMAIN UNLOCKED AT ALL TIMES TO ALLOW UNRESTRICTED ACCESS BY THE DISTRICT.

4. ACCESS DOOR ON SIDE OF ENCLOSURE MAY BE REQUIRED FOR METER INSTALLATION. CONFIRM REQUIREMENTS WITH DISTRICT PERSONNEL BEFORE INSTALLATION.

5. THE DECORATIVE ENCLOSURE SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CUSTOMER OR THE DISTRICT SHALL REQUIRE ITS REMOVAL.

6. FUTURE METERING REQUIREMENTS MAY NECESSITATE CUSTOMER MODIFICATION OF THE ENCLOSURE.

7. ROOF, IF REQUIRED, SHALL BE OF THE GABLE DESIGN AND MUST EXTEND THE FULL DEPTH OF THE ENCLOSURE. THE ROOF SHALL BE A MINIMUM OF 78" FROM GROUND IF THE ROOF EXTENDS MORE THAN 6" FROM THE FRONT OF ENCLOSURE.

8. CLEARANCE REQUIREMENTS (ALL CLEARANCES SHALL BE MET SIMULTANEOUSLY):
   "A" - CLEARANCE FROM CENTER OF METER TO ANY WALL OF ENCLOSURE: 10" MINIMUM
   "B" - CLEARANCE DEPTH FROM FRONT OF PANEL TO CLOSED DOOR: 6" MINIMUM TO 9" MAXIMUM
   "C" - CLEARANCE FROM PANEL EDGE TO SIDE OR TOP WALLS OF ENCLOSURE: 5" MINIMUM
   "D" - CLEARANCE FROM PANEL EDGE TO BOTTOM WALL OF ENCLOSURE: 5" MINIMUM, 18 INCHES MAXIMUM
   "E" - PANEL AND METER DEPTH: 4" MINIMUM
   "F" - HEIGHT OF LOWEST EDGE OF ROOF SHALL BE 78" MINIMUM IF "G" EXCEEDS 6"
   "G' - DEPTH OF ROOF OVERHANG: COORDINATE WITH TDPUD PERSONNEL. SEE "F"

M-1A.DWG

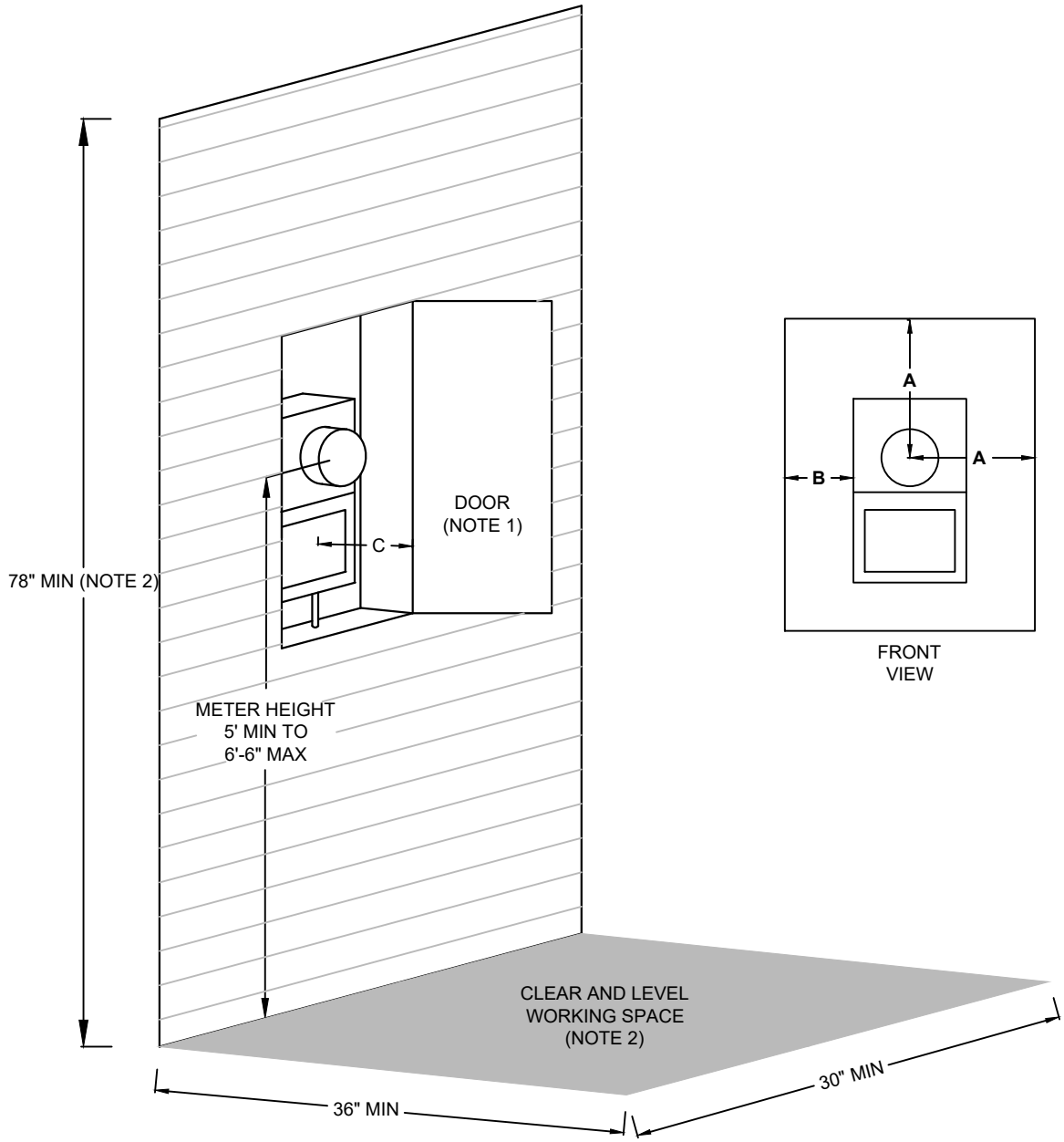
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Metering

Decorative Residential Meter Enclosures

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Metering	Secondary	M-1A



FRONT
VIEW

INSTALLATION NOTES:

1. DOOR SHALL OPEN A MINIMUM OF 90 DEGREES.

2. WORKING SPACE SHALL COMPLY WITH REQUIREMENTS IN STANDARD M-1.2.

3. CLEARANCE REQUIREMENTS (ALL CLEARANCES SHALL BE MET SIMULTANEOUSLY):
   "A" - 10" MINIMUM
   "B" - 5" MINIMUM
   "C" - 6" MINIMUM TO 9" MAXIMUM DEPTH FROM FRONT OF PANEL TO FACE OF FRAMING

M-1B.DWG

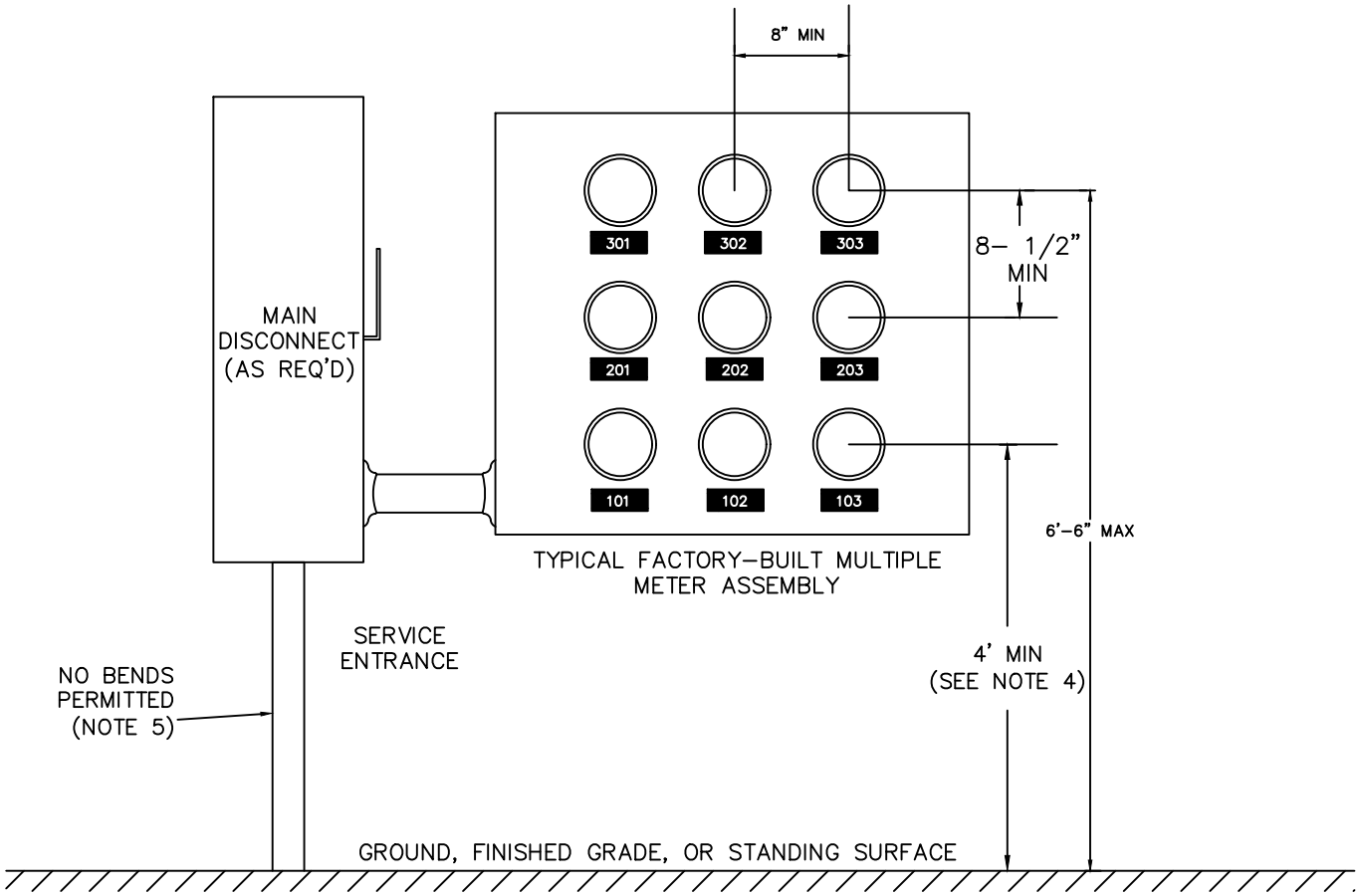
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Metering

Recessed Residential Meter Enclosures

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Metering	Secondary	M-1B



INSTALLATION NOTES:

1. LABELING SHALL COMPLY WITH STANDARD M-0.

2. ELECTRIC SERVICE SHALL NOT BE ESTABLISHED BY THE DISTRICT UNTIL ALL OF THE FOLLOWING REQUIREMENTS ARE MET:
   A. THE TOWN OF TRUCKEE HAS APPROVED THE ADDRESS AND/OR UNIT NUMBERS
   B. DOCUMENTATION OF THE TOWN'S APPROVAL HAS BEEN PROVIDED TO THE DISTRICT
   C. METER LABELING IS COMPLETE (SEE NOTE 1.) AND APPROVED BY THE DISTRICT

3. ALL METERS, METER EQUIPMENT, AND ENCLOSURES SHALL BE READILY ACCESSIBLE BY DISTRICT PERSONNEL DURING NORMAL BUSINESS HOURS FOR METER READING, MAINTENANCE, TESTING, INSTALLATION, OR REMOVAL.METER LOCATIONS ARE SUBJECT TO APPROVAL BY THE DISTRICT (SEE STANDARD M-1 FOR ADDITIONAL REQUIREMENTS.) ALL OUTDOOR LOCKABLE SWITCHGEAR DOORS SHALL HAVE A TDPUD APPROVED DUAL LOCKING MECHANISM PER EUSERC REQUIREMENTS.

4. MAY BE REDUCED TO 3 FEET TO PREVENT THE HIGHEST METER IN THE STACK FROM EXCEEDING THE 6'-6" MAXIMUM HEIGHT REQUIREMENT.

5. RISER CONDUIT SIZE SHALL BE MINIMUM 3" AND NO BENDS PERMITTED IN RISER CONDUT. COMMERCIAL UNDERGROUND SERVICE RISER CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS). RESIDENTIAL UNDERGROUND SERVICE RISER CONDUITS SHALL BE SCHEDULE 80 PVC OR RGS, AS DETERMINED BY TDPUD PERSONNEL. RGS CONDUIT SHALL BE BONDED, IF USED.

M-2.DWG

TRUCKEE DONNER Public Utility District

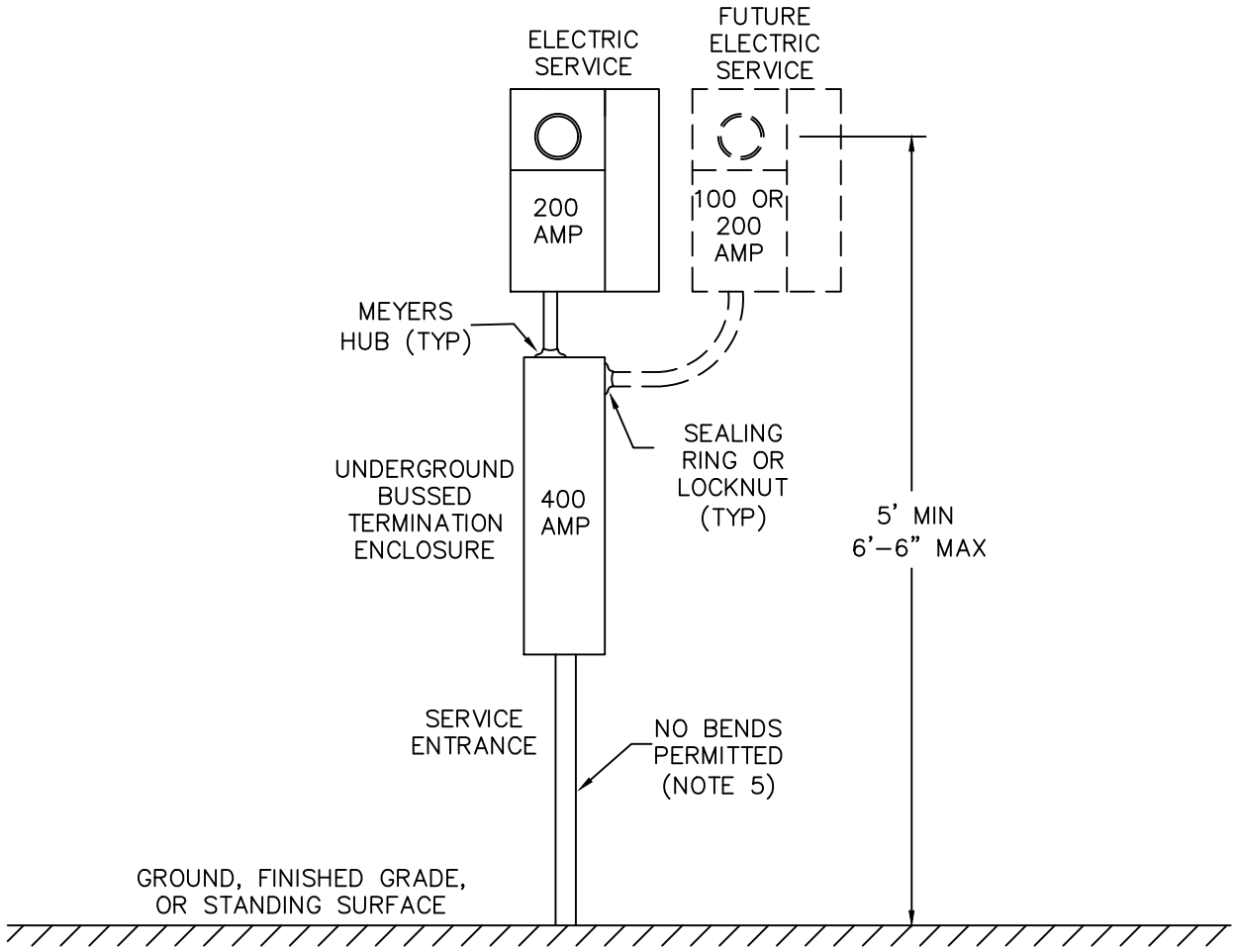
ELECTRIC DEPARTMENT

Metering

Clearance Requirements

Multiple Meter Assembly

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Metering	Secondary	**M-2**



INSTALLATION NOTES:

1. ALL SERVICE ENTRANCE EQUIPMENT SHALL BE APPROVED BY TDPUD AND MEET ELECTRIC UTILITY SERVICE EQUIPMENT REQUIREMENTS COMMITTEE (EUSERC) REQUIREMENTS.

2. COMMERCIAL METER PANELS SHALL HAVE A MANUAL TEST-BYPASS IN ACCORDANCE WITH EUSERC REQUIREMENTS.

3. ALL METERS, METER EQUIPMENT, AND ENCLOSURES SHALL BE READILY ACCESSIBLE BY DISTRICT PERSONNEL DURING NORMAL BUSINESS HOURS FOR METER READING, MAINTENANCE, TESTING, INSTALLATION, OR REMOVAL. METER LOCATIONS ARE SUBJECT TO APPROVAL BY THE DISTRICT. SEE STANDARD M-1 FOR ADDITIONAL REQUIREMENTS.

4. COMMERCIAL SERVICES OVER 200A REQUIRE CT-RATED METER.

5. RISER CONDUIT SIZE SHALL BE MINIMUM 3" RIGID GALVANIZED STEEL (RGS). NO BENDS PERMITTED IN RISER CONDUT. RGS SHALL BE BONDED.

6. LABELING SHALL COMPLY WITH STANDARD M-0.

M-3.DWG

TRUCKEE DONNER Public Utility District

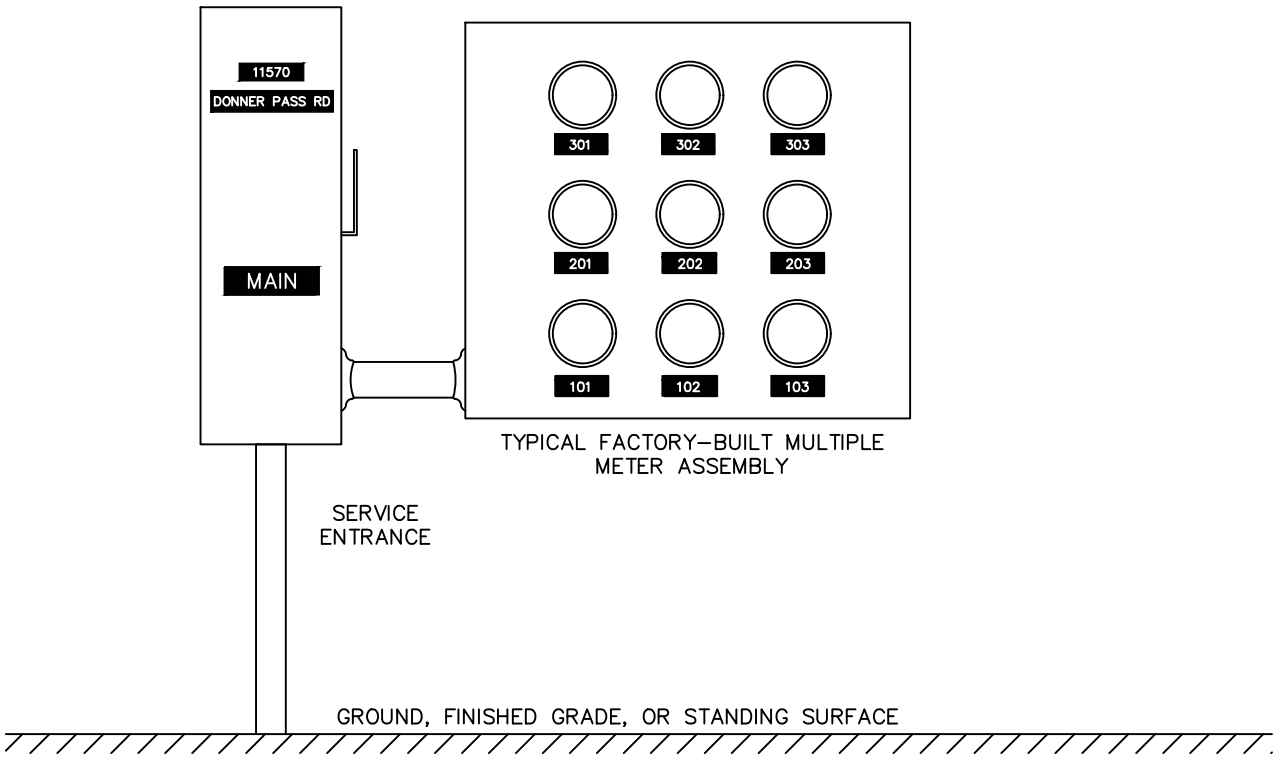
ELECTRIC DEPARTMENT

Metering

Commercial Panels

Up to 2 Services, Typical

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Metering	Secondary	**M-3**



LABELING REQUIREMENTS:

1. ELECTRIC SERVICE WILL BE ESTABLISHED ONLY AFTER ALL LABELING REQUIREMENTS ARE MET.

2. ALL LABELS SHALL BE PERMANENTLY AFFIXED TO THE METER PANEL AND/OR THE EXTERIOR DOOR OF THE SWITCHGEAR.

3. LABELS SHALL BE ATTACHED WITH RIVETS OR THREADED NUTS WITH BOLTS.
   A. SELF-TAPPING SCREWS ARE NOT ACCEPTABLE.

4. LABELS SHALL BE ENGRAVED ON PHENOLIC OR METAL PLATES.
   A. LETTERS SHALL BE A MINIMUM 1" IN HEIGHT.
   B. HANDWRITTEN OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

5. SINGLE FAMILY HOMES: SERVICE SHALL BE LABELED WITH THE STREET ADDRESS.

6. SINGLE UNIT COMMERCIAL: SERVICE SHALL BE LABELED WITH THE STREET ADDRESS.

7. MULTI-UNIT COMMERCIAL AND RESIDENTIAL MUST COMPLY WITH THE FOLLOWING:
   A. ALL METER PANELS AND SERVICE ENTRANCES SHALL BE PERMANENTLY LABELED.
   B. SERVICE ENTRANCE SHALL BE LABELED WITH THE STREET ADDRESS.
   C. ALL METER SOCKETS SHALL BE PERMANENTLY LABELED TO INDICATE THE PART OF THE PREMISES THEY SERVE WITH THE UNIT NUMBER AND/OR STREET ADDRESS, AS APPROPRIATE.
   D. WHERE UNIT BREAKERS ARE INDEPENDENT FROM THE UNIT METERS, THE BREAKERS SHALL ALSO BE PERMANENTLY LABELED.

8. ADDRESSES AND/OR UNIT NUMBERS SHALL BE APPROVED BY THE TOWN.

M-0.DWG

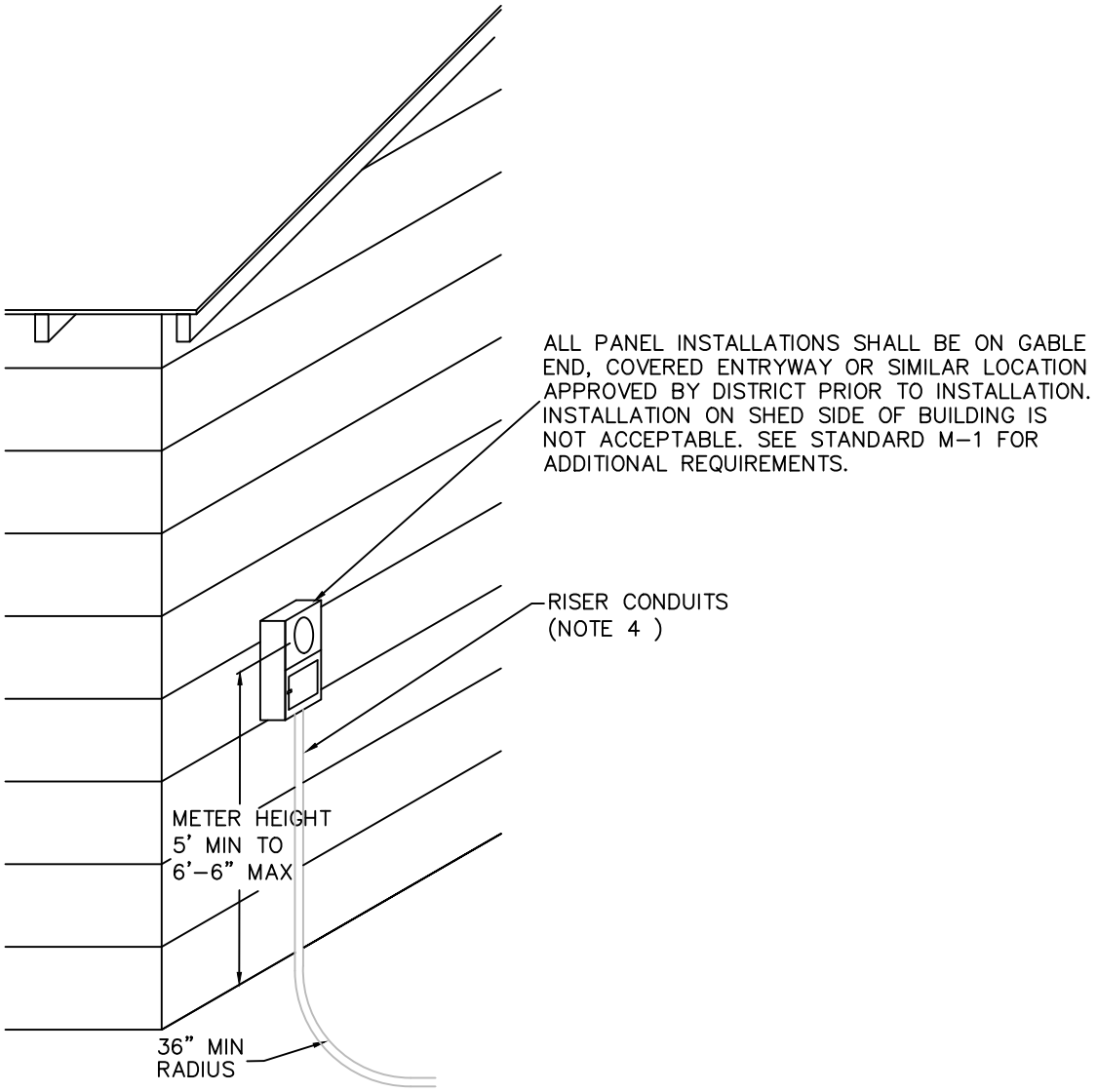
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Metering

Labeling Requirements

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Metering	Secondary	**M-0**



INSTALLATION NOTES:

1. CONNECTION FEE ALLOWS UP TO 125' OF UNDERGROUND CABLE. ADDITIONAL LENGTH SHALL BE BILLED AT DISTRICT COST.

2. CUSTOMER SHALL FURNISH AND INSTALL THE SERVICE ENTRANCE CONDUIT.

3. REFER TO STANDARDS M-1.1, M-1.2, M-1A, M-2 AND M-3 FOR ADDITIONAL REQUIREMENTS.

4. RISER CONDUIT SIZE SHALL BE MINIMUM 3" AND NO BENDS PERMITTED IN RISER CONDUT.
   A. COMMERCIAL UNDERGROUND SERVICE RISER CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS).
   B. RESIDENTIAL UNDERGROUND SERVICE RISER CONDUITS SHALL BE SCHEDULE 80 PVC OR RGS, AS DETERMINED BY TDPUD PERSONNEL.
   C. RGS SHALL BE BONDED, IF USED.

US-1.DWG

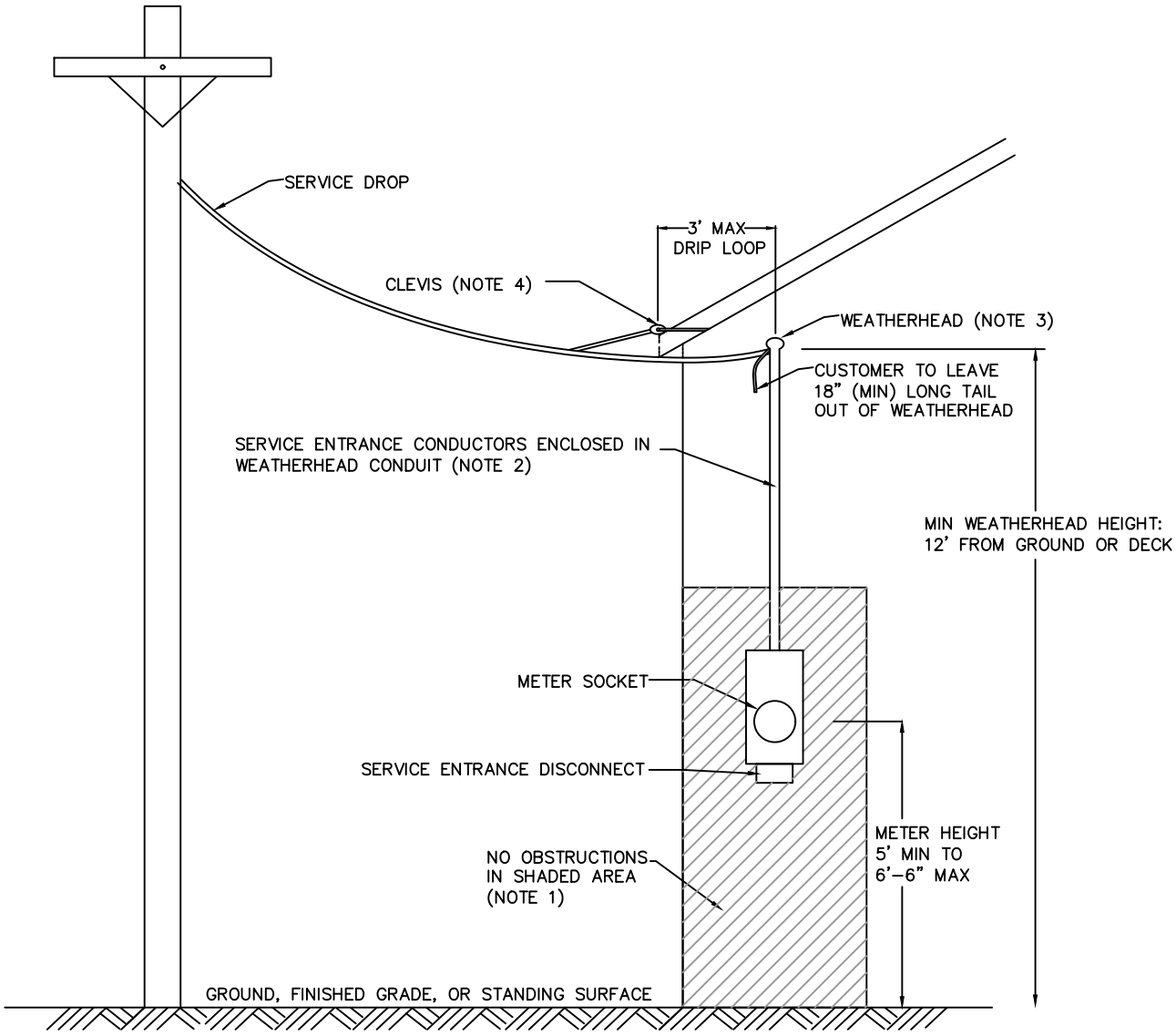
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Underground Service Entrance

Conduit Requirements

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Underground	Secondary	US-1



INSTALLATION NOTES:

1. REFER TO STANDARDS M-1.1, M-1.2 AND M-1A FOR CLEARANCE AND OTHER REQUIREMENTS.

2. WEATHERHEAD CONDUIT SHALL BE SCHEDULE 80 PVC OR RIGID GALVANIZED STEEL (RGS). RGS SHALL BE BONDED, IF USED. ELECTRICAL METAL TUBING (EMT) IS NOT PERMITTED.

3. WEATHERHEAD SHALL HAVE A MINIMUM 36" CLEARANCE TO ANY WINDOW. WEATHERHEAD AND ASSOCIATED CONNECTIONS SHALL NOT BE ENCLOSED AND SHALL REMAIN VISIBLE AT ALL TIMES.

4. COORDINATE CLEVIS INSTALLATION WITH TDPUD PERSONNEL. DISTRICT WILL PROVIDE $\frac{5}{8}$" ALL-THREAD BOLT AND ASSOCIATED HARDWARE, FOR INSTALLATION BY CUSTOMER.

OHS-1.DWG

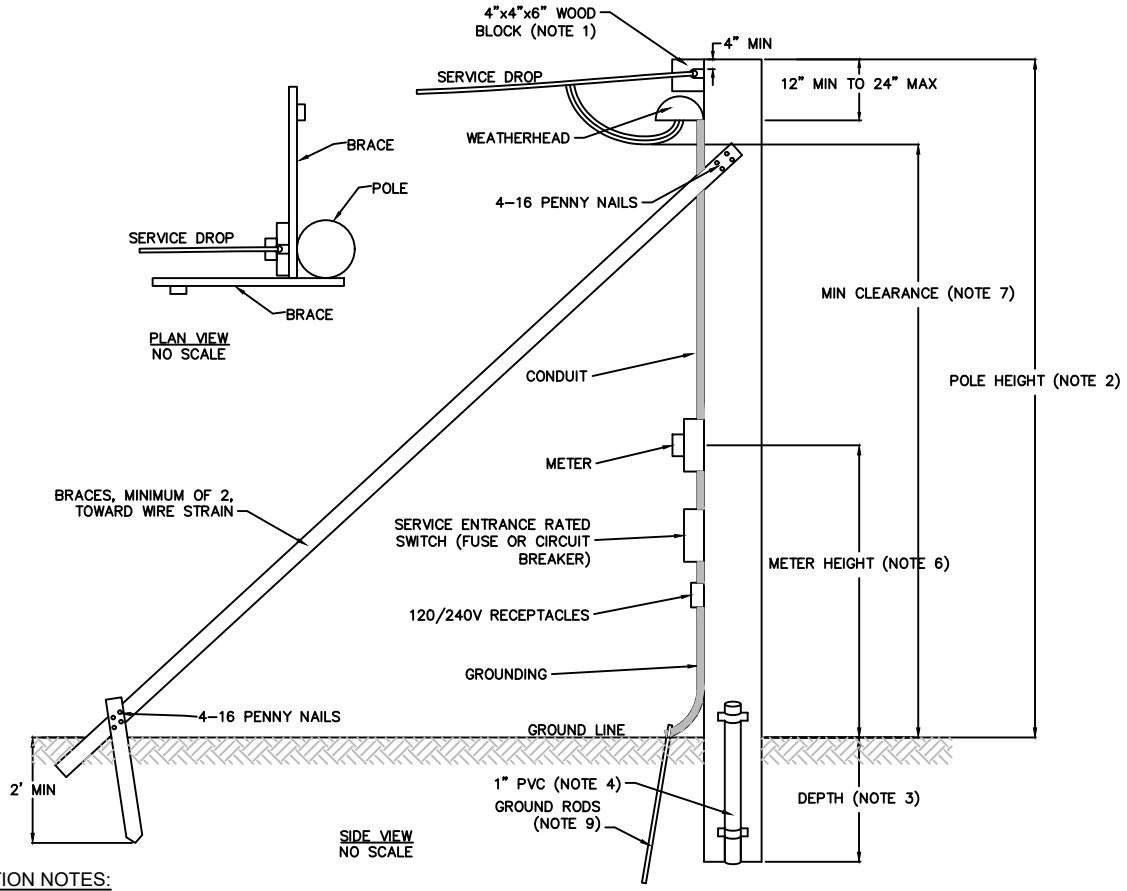
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Typical Service Drop Installation

Overhead Secondary Connections

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Overhead	Secondary	OHS-1



INSTALLATION NOTES:

1. WOOD BLOCK NOT REQUIRED WITH PVC CONDUIT AND WEATHERHEAD OR ON GROUNDED METAL POLE.

2. INSTALL TIMBER OR POLE TO MEET MINIMUM G.O. 95 CLEARANCE REQUIREMENTS (SEE STANDARD GC-1). POLE HEIGHT SHALL BE 12'-6" MINIMUM TO 25' MAXIMUM.

3. REQUIRED SETTING DEPTHS ARE AS FOLLOWS:
   16' TIMBER (MINIMUM DIMENSION 4"x6")- 3'-6"
   20' POLE - 4'
   25' POLE - 4'-6"
   30' POLE - 5'

4. A 5' LONG 1" DIAMETER PVC PIPE SHALL BE STRAPPED TO POLE BASE TO ALLOW DISTRICT PERSONNEL TO VERIFY SETTING DEPTH.

5. RISERS SHALL BE STRAPPED TO POLE WITH A MINIMUM OF 3 CONDUIT STRAPS FOR THE FIRST 10' SECTION OF 2" CONDUIT.

6. METER HEIGHT SHALL BE 5' MINIMUM TO 6'-6" MAXIMUM.

7. DRIP LOOP SHALL HAVE A MINIMUM CLEARANCE OF 12' ABOVE GRADE.

8. TEMPORARY SERVICES ARE NOT PERMITTED ON TREES OR OTHER LIVE GROWTH.

9. INSTALL TWO (2) GROUND RODS PER SERVICE LOCATION. GROUND RODS SHALL BE AT LEAST 6' APART. INSTALL CONTINUOUS BONDING JUMPER BETWEEN BOTH GROUND RODS AND THE SERVICE EQUIPMENT.

OTP-1.DWG

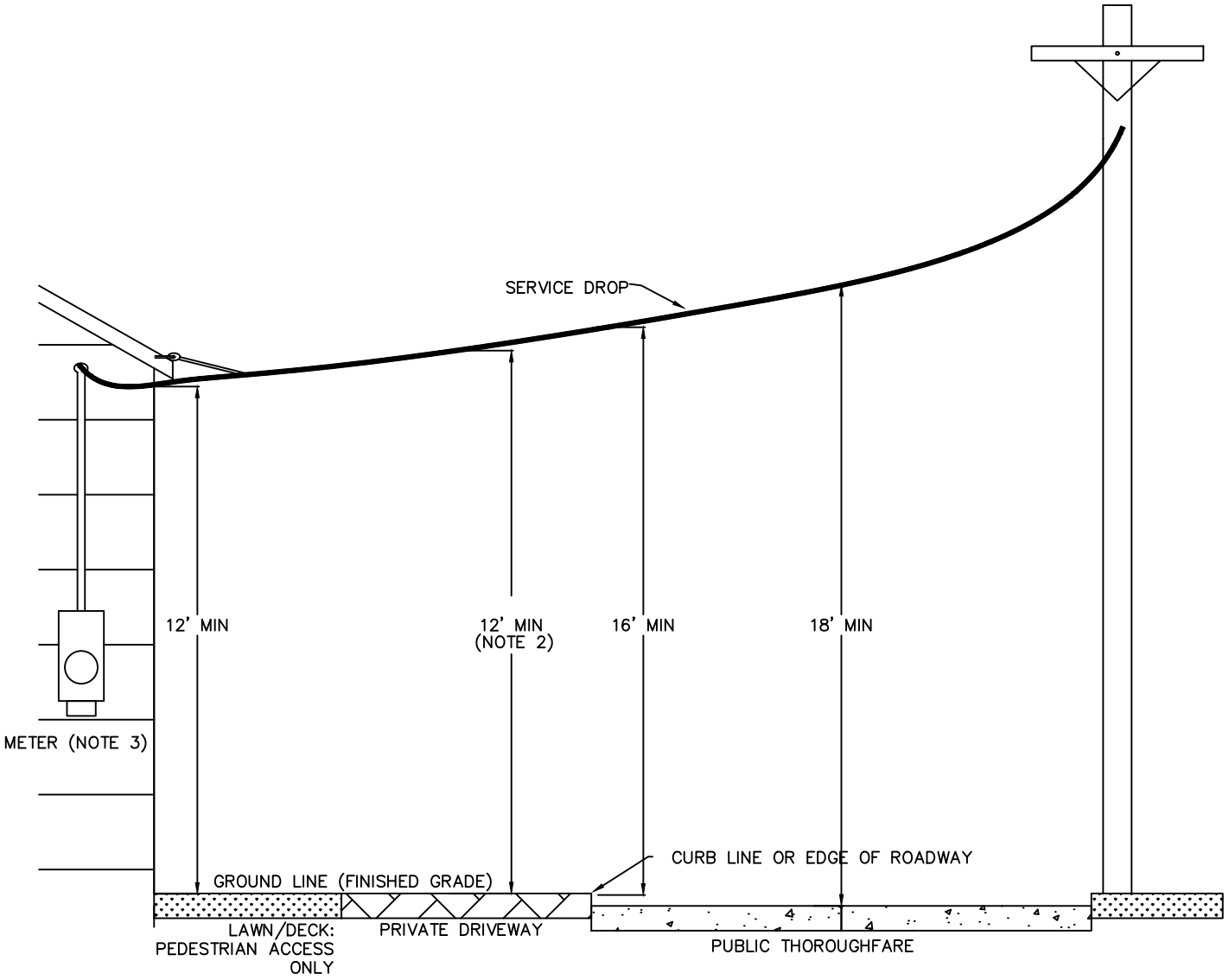
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Temporary Power Pole

Overhead Secondary

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Overhead	Secondary	OTP-1



INSTALLATION NOTES:

1. ALL CLEARANCES SHALL MEET REQUIREMENTS OF CALIFORNIA G.O. 95, RULE 54.8.B
2. CLEARANCE OVER DRIVEWAY TYPICALLY VARIES BETWEEN 12 TO 16 FEET
3. REFER TO STANDARDS M-1.1, M-1.2, M-1A, M-1B, AND OHS-1 FOR METER CLEARANCE AND OTHER REQUIREMENTS

GC-1.DWG

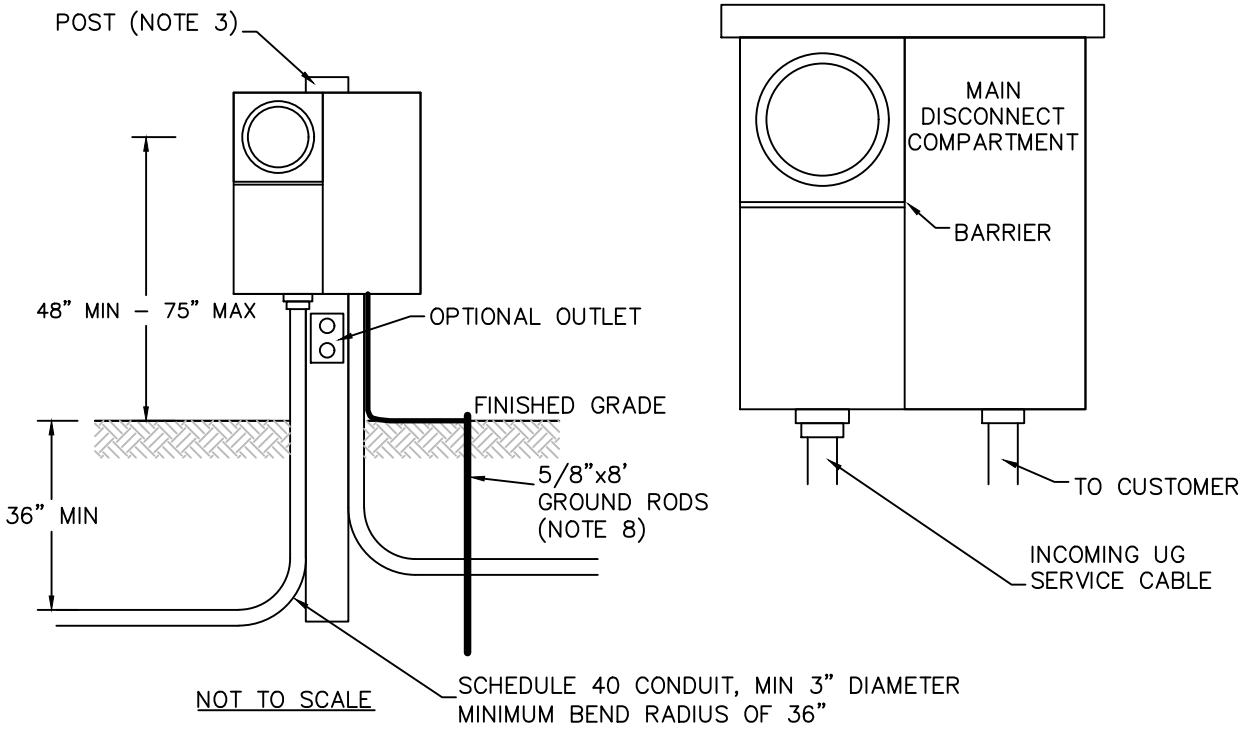
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Minimum Ground Clearances

Overhead Supply Service Drops

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Overhead	Secondary	**GC-1**



GENERAL NOTES:

1. ALL METER SOCKETS SHALL BE APPROVED BY TDPUD AND MEET ELECTRIC UTILITY SERVICE EQUIPMENT REQUIREMENTS COMMITTEE (EUSERC) REQUIREMENTS.

2. ALL METER SOCKETS SHALL HAVE BE RING TYPE. RINGLESS SOCKETS ARE NOT ACCEPTABLE.

3. METER SOCKETS SHALL BE LEVEL, PLUMB, AND SECURELY FASTENED TO THE POST. POST SHALL HAVE MINIMUM DIMENSIONS OF 4"x6" BY 10' LONG, FULLY TREATED. POST SETTING DEPTH IS 48" MINIMUM IN GROUND.

4. ALL METER SOCKETS WITHOUT A METER INSTALLED SHALL BE COVERED AND SEALED WITH A TRANSPARENT COVER PLATE.

5. TERMINALS SHALL BE MARKED WITH A CONDUCTOR RANGE FOR ALUMINUM OR COPPER CONDUCTORS. WHEN ALUMINUM CONDUCTORS ARE USED, THE SOCKET SHALL BE APPROVED AND CLEARLY MARKED FOR THAT USE BY MANUFACTURER.

6. CUSTOMER WIRING, GROUNDING ELECTRODE CONDUCTOR, OR GROUNDING CONDUCTORS, OTHER THAN CONDUIT BONDING JUMPERS, SHALL NOT PASS THROUGH OR TERMINATE IN ANY SEALABLE SECTION.

7. COMMERCIAL (NON-RESIDENTIAL USE) METER PANELS MUST MEET THE FOLLOWING REQUIREMENTS:
   A. ALL COMMERCIAL SERVICES USE SHALL HAVE EUSERC COMPLIANT MANUAL TEST-BYPASS FACILITIES
   B. ALL COMMERCIAL SERVICES OVER 200 AMPS REQUIRE CURRENT TRANSFORMER (CT) METERING
   C. REMOTE METERS ARE NOT PERMITTED

8. INSTALL TWO (2) GROUND RODS PER SERVICE LOCATION. GROUND RODS SHALL BE AT LEAST 6' APART. INSTALL CONTINUOUS BONDING JUMPER BETWEEN BOTH GROUND RODS AND THE SERVICE EQUIPMENT.

UST-1.DWG

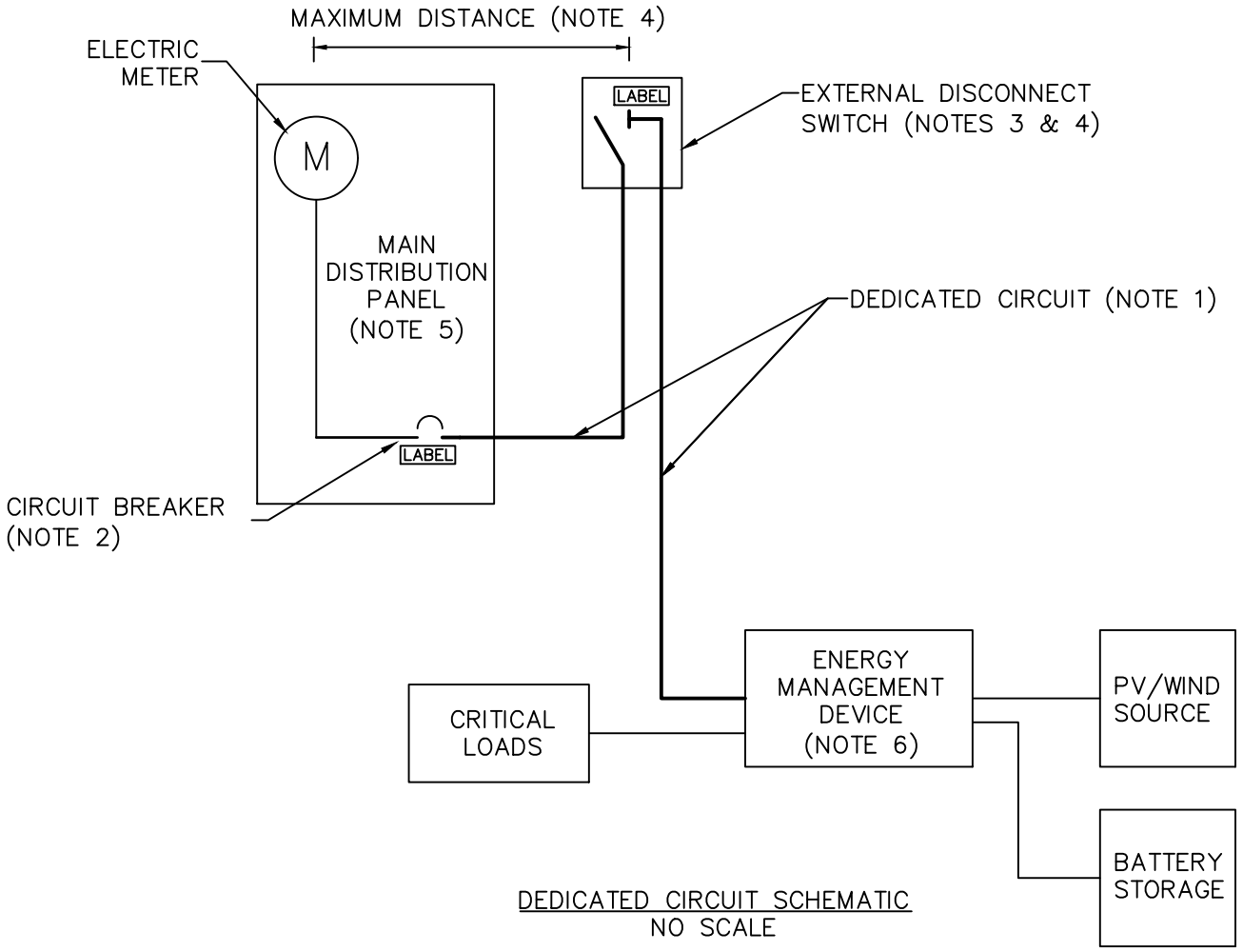
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Underground Temporary Service

General Requiremenets

Drawn	Design	Approved	Date	Category	Voltage	UST-1
JJC	SMS	SMS	3/25/21	Metering	Services	



DEDICATED CIRCUIT SCHEMATIC
NO SCALE

NOTES:

1. ALL CUSTOMER–OWNED GENERATION SHALL CONNECT TO THE MAIN SERVICE PANEL VIA A DEDICATED CIRCUIT (APPENDIX A, SECTION B.1.C)
2. CIRCUIT BREAKER FOR DEDICATED CIRCUIT SHALL BE APPROPRIATELY SIZED AND LABELED (APPENDIX A, SECTIONS B.1.C AND B.1.D)
3. AN EXTERNAL DISCONNECT SWITCH SHALL BE INSTALLED IN THE DEDICATED CIRCUIT BETWEEN THE PANEL AND THE ENERGY MANAGEMENT DEVICE (APPENDIX A, SECTION B.2)
4. EXTERNAL DISCONNECT SWITCH SHALL BE INSTALLED WITHIN SIGHT OF AND WITHIN 10 FEET OF THE DISTRICT'S ELECTRIC METER AND LABELED (APPENDIX A, SECTION B.2)
5. DEDICATED CIRCUIT CONNECTION CAN BE MADE TO THE MAIN DISTRIBUTION PANEL OR A SUBPANEL (APPENDIX A, SECTION B.1.C)
6. ENERGY MANAGEMENT DEVICE SHALL BE CAPABLE OF PREVENTING BATTERY BACKFEED TO THE SERVICE

A-1.DWG

TRUCKEE DONNER Public Utility District

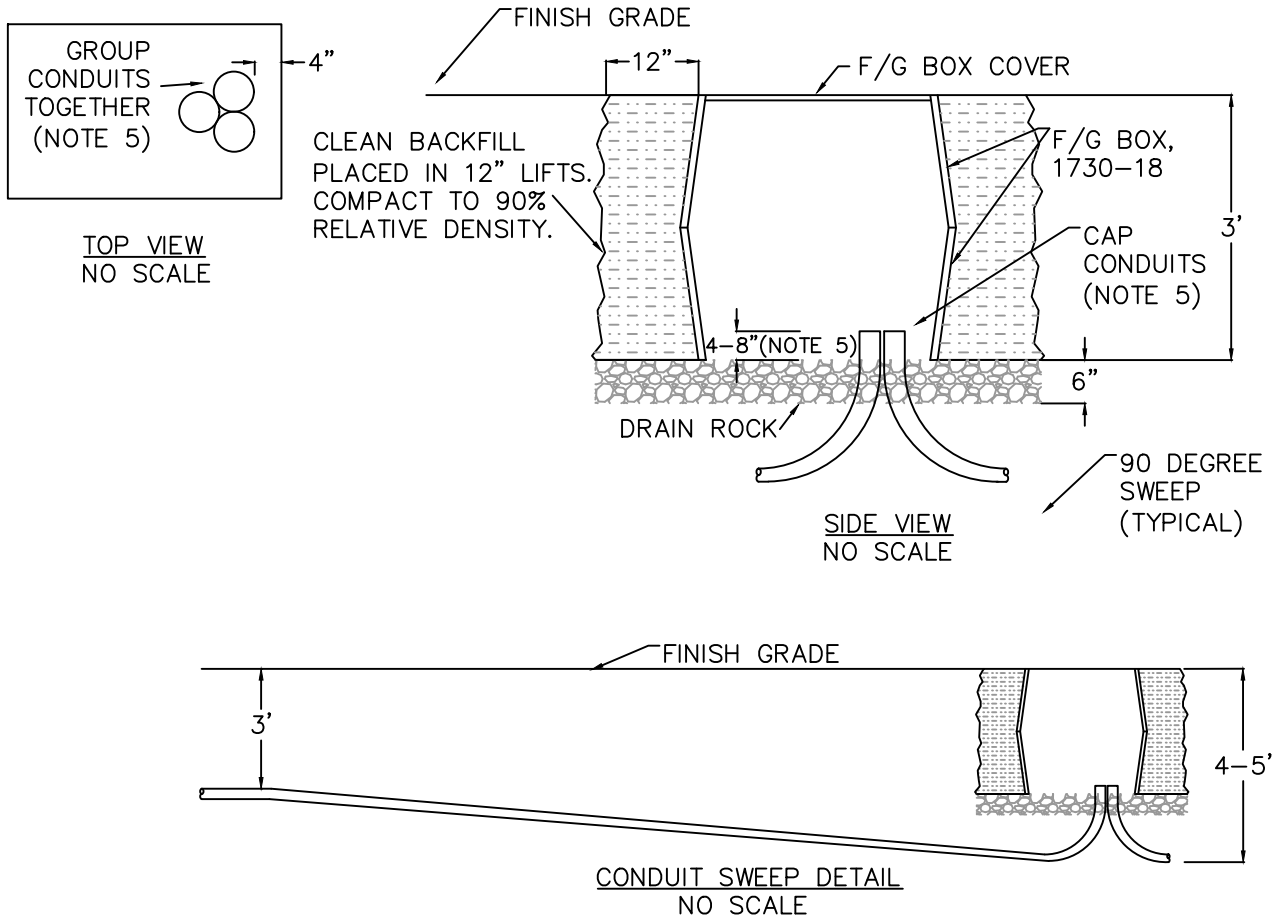
ELECTRIC DEPARTMENT

Dedicated Circuit Requirements

Interconnection Agreement - Appendix A

Solar/Wind/Battery Storage Interconnections

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Interconnect	Service	**A-1**



INSTALLATION NOTES:

1. CUSTOMER TO CONFIRM WITH TDPUD PERSONNEL APPROPRIATE TYPE OF SECONDARY OR COMMUNICATION BOX CONSTRUCTION PRIOR TO INSTALLATION.

2. EXCAVATE TO A MINIMUM OF 12" BEYOND THE OUTSIDE DIMENSION OF THE BOX. INSTALL BOX ON A MINIMUM OF 6" DRAIN ROCK BEDDING.

3. INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL. COMPACT TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.

4. THE COMPLETED INSTALLATION OF A SECONDARY OR PUD COMM BOX CONSISTS OF TWO (2) MODEL 1730-18 (OR 1324-15 IF SPECIFIED) F/G BOXES JOINED TOGETHER AS SHOWN WITH A CORRESPONDING SIZE COVER MARKED "ELECTRIC" OR "PUD COMM" AS APPROPRIATE.

5. INSTALL THE ENDS OF ALL CONDUIT STUBS VERTICALLY INTO THE BOX, PLUMB AND LEVEL. CUTS ARE NOT PERMITTED ON THE BENT PART OF CONDUIT SWEEPS. LENGTH OF CONDUIT STUBS TO BE DETERMINED WITH TDPUD PERSONNEL. INSTALL BELL ENDS ON ALL CONDUIT SWEEPS STUBBED IN BOX.

UBOX-S1.DWG

TRUCKEE DONNER Public Utility District

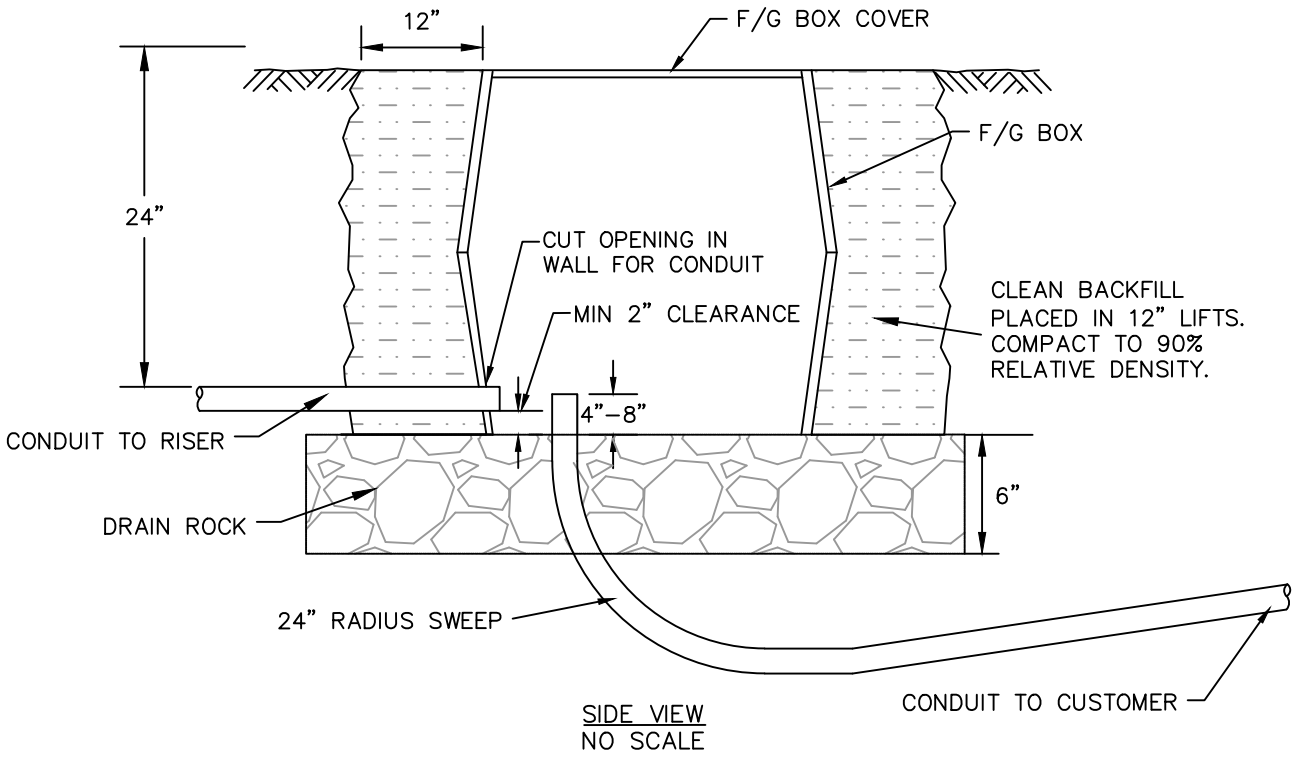
ELECTRIC DEPARTMENT

Secondary & PUD Communication Box

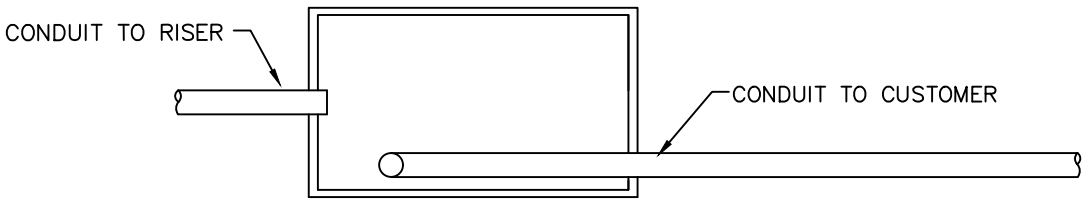
Fiberglass Box Installation Detail

Non-Traffic Use Only

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Vaults & Boxes	Site Work	**UBOX-S1**



SIDE VIEW
NO SCALE



TOP VIEW
NO SCALE

INSTALLATION NOTES:

1. CUSTOMER TO CONFIRM WITH TDPUD PERSONNEL APPROPRIATE TYPE OF SECONDARY OR COMMUNICATION BOX CONSTRUCTION PRIOR TO INSTALLATION.

2. EXCAVATE TO A MINIMUM OF 12 INCHES BEYOND THE OUTSIDE DIMENSION OF THE BOX. INSTALL BOX ON A MINIMUM OF 6" DRAIN ROCK BEDDING.

3. INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL. COMPACT TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.

4. INSTALL THE ENDS OF ALL CONDUIT SWEEPS VERTICALLY INTO THE BOX, PLUMB AND LEVEL. CUTS ARE NOT PERMITTED ON THE BENT PART OF CONDUIT SWEEPS. LENGTH OF CONDUIT STUBS TO BE DETERMINED WITH TDPUD PERSONNEL. INSTALL BELL ENDS ON ALL CONDUITS AND SWEEPS STUBBED IN BOX.

UBOX-S1A.DWG

TRUCKEE DONNER Public Utility District

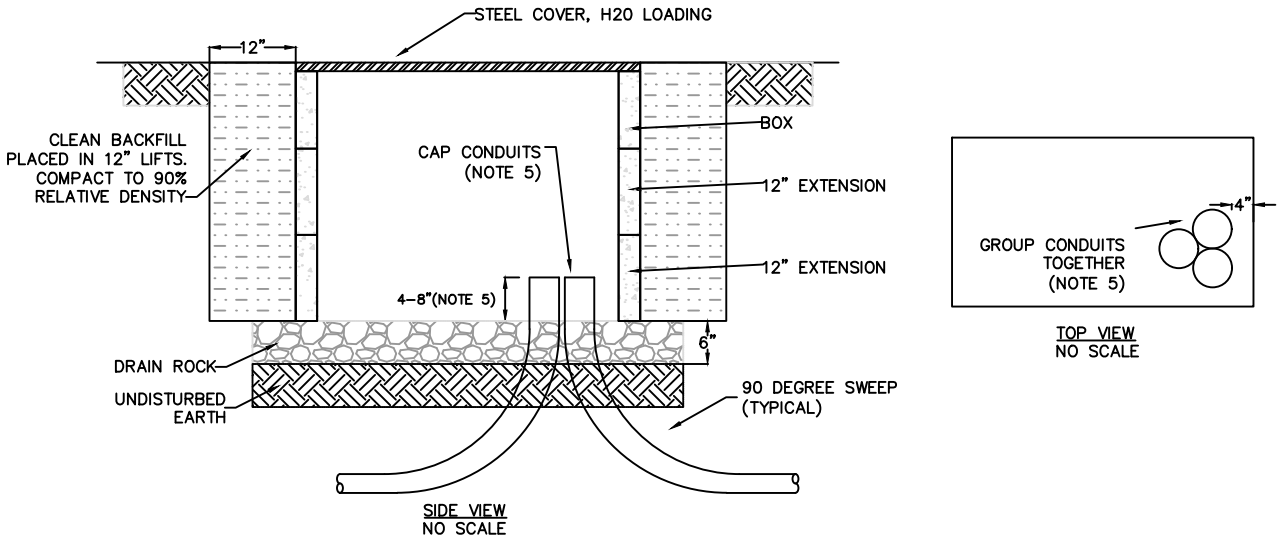
ELECTRIC DEPARTMENT

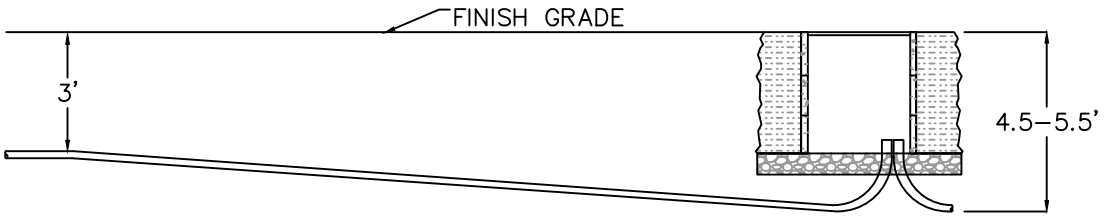
Drain Box - Fiberglass

Installation Detail

Non-Traffic Use Only

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Vaults & Boxes	Site Work	**UBOX-S1A**





CONDUIT SWEEP DETAIL
NO SCALE

INSTALLATION NOTES:

1. CUSTOMER TO CONFIRM WITH TDPUD PERSONNEL APPROPRIATE TYPE OF SECONDARY OR COMMUNICATION BOX CONSTRUCTION PRIOR TO INSTALLATION.

2. EXCAVATE TO A MINIMUM OF 12" BEYOND THE OUTSIDE DIMENSION OF THE BOX. INSTALL BOX ON A MINIMUM OF 6" DRAIN ROCK BEDDING.

3. INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL. COMPACT TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.

4. THE COMPLETED INSTALLATION OF A SECONDARY OR PUD COMM BOX CONSISTS OF ONE (1) MODEL B3048 (N48 OR B1730 IF SPECIFIED) CONCRETE BOX WITH TWO (2) 12" EXTENSIONS AND A CORRESPONDING SIZE STEEL COVER MARKED "ELECTRIC" OR "PUD COMM" AS APPROPRIATE.

5. INSTALL THE ENDS OF ALL CONDUIT STUBS VERTICALLY INTO THE BOX, PLUMB AND LEVEL. CUTS ARE NOT PERMITTED ON THE BENT PART OF CONDUIT SWEEPS. LENGTH OF CONDUIT STUBS TO BE DETERMINED WITH TDPUD PERSONNEL. INSTALL BELL ENDS ON ALL CONDUIT SWEEPS STUBBED IN BOX. THE ENDS SHALL BE COVERED WITH APPROPRIATELY SIZED CAPS OR PLUGS WITH A PULLTAB.

6. CONSTRUCTION OUTSIDE ROADWAY SHOWN. REFER TO STANDARD UBOX-S4 FOR CONSTRUCTION REQUIREMENTS INSIDE ROADWAY AREAS.

UBOX-S2.DWG

TRUCKEE DONNER Public Utility District

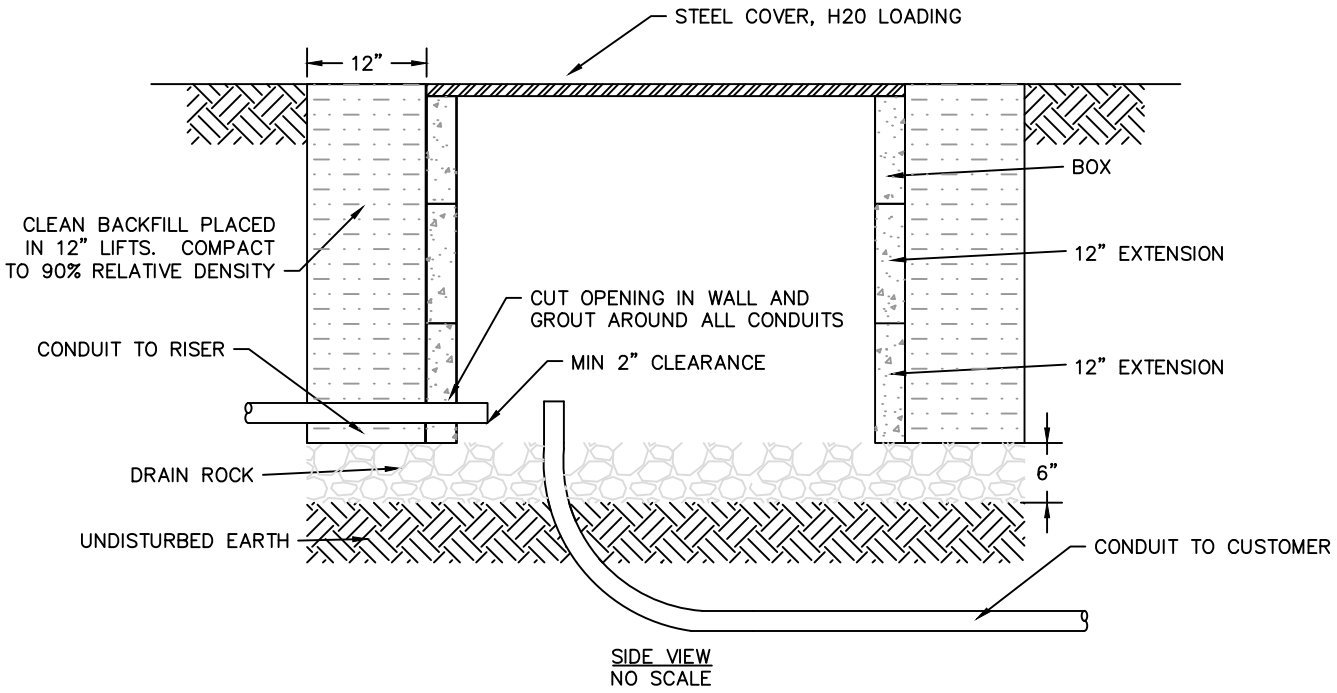
ELECTRIC DEPARTMENT

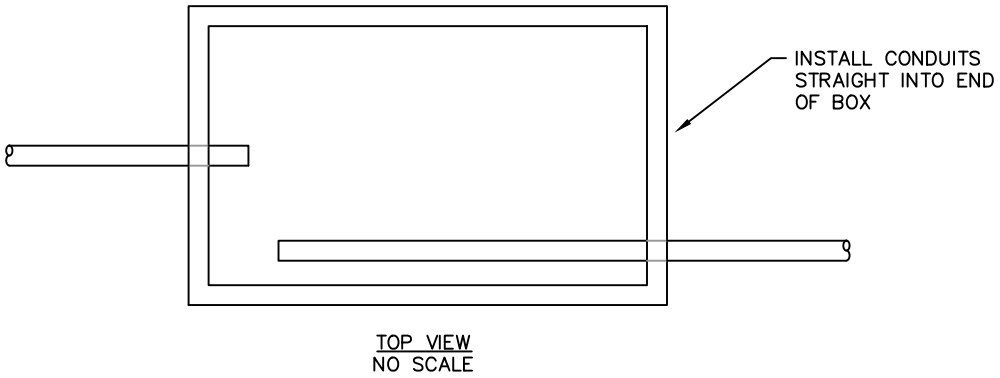
Secondary & PUD Communication Box

Concrete Box Installation Detail

Traffic Rated

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Vaults & Boxes	Site Work	**UBOX-S2**





INSTALLATION NOTES:

1. CUSTOMER TO CONFIRM WITH TDPUD PERSONNEL APPROPRIATE TYPE OF SECONDARY OR COMMUNICATION BOX CONSTRUCTION PRIOR TO INSTALLATION.

2. EXCAVATE TO A MINIMUM OF 12" BEYOND THE OUTSIDE DIMENSION OF THE BOX. INSTALL BOX ON A MINIMUM OF 6" DRAIN ROCK BEDDING.

3. INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL. COMPACT TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.

4. INSTALL THE ENDS OF ALL CONDUIT SWEEPS VERTICALLY INTO THE BOX, PLUMB AND LEVEL. CUTS ARE NOT PERMITTED ON THE BENT PART OF CONDUIT SWEEPS. LENGTH OF CONDUIT STUBS TO BE DETERMINED WITH TDPUD PERSONNEL. INSTALL BELL ENDS ON ALL CONDUITS AND SWEEPS STUBBED IN BOX. INSTALL BELL ENDS ON ALL CONDUITS AND SWEEPS STUBBED IN BOX.

UBOX-S2A.DWG

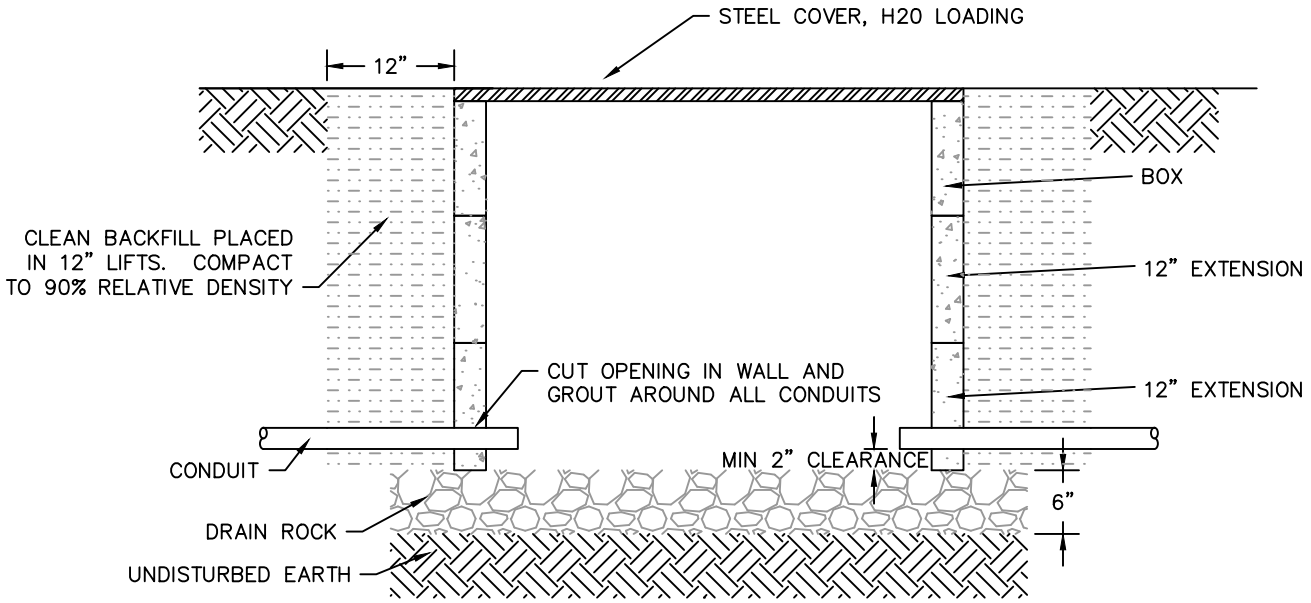
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

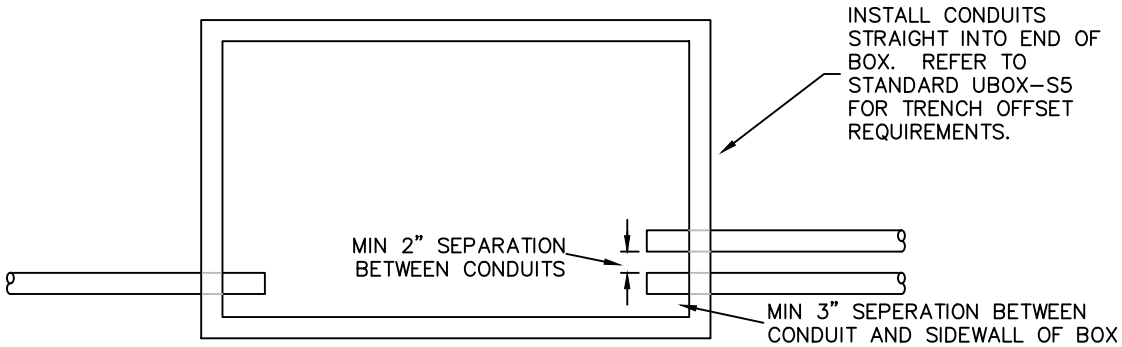
Drain Box - Concrete

Installation Detail

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Vaults & Boxes	Site Work	**UBOX-S2A**



SIDE VIEW
NO SCALE



TOP VIEW
NO SCALE

INSTALLATION NOTES:

1. CUSTOMER TO CONFIRM WITH TDPUD PERSONNEL APPROPRIATE TYPE OF COMMUNICATION BOX CONSTRUCTION PRIOR TO INSTALLATION.

2. EXCAVATE TO A MINIMUM OF 12" BEYOND THE OUTSIDE DIMENSION OF THE BOX. INSTALL BOX ON A MINIMUM OF 6" DRAIN ROCK BEDDING.

3. INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL. COMPACT TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.

4. CONSTRUCTION OUTSIDE ROADWAY SHOWN. REFER TO STANDARD UBOX-S4 FOR CONSTRUCTION REQUIREMENTS INSIDE ROADWAY AREAS.

5. INSTALL BELL ENDS ON ALL CONDUIT STUBS IN BOX.

UBOX-S3.DWG

TRUCKEE DONNER Public Utility District

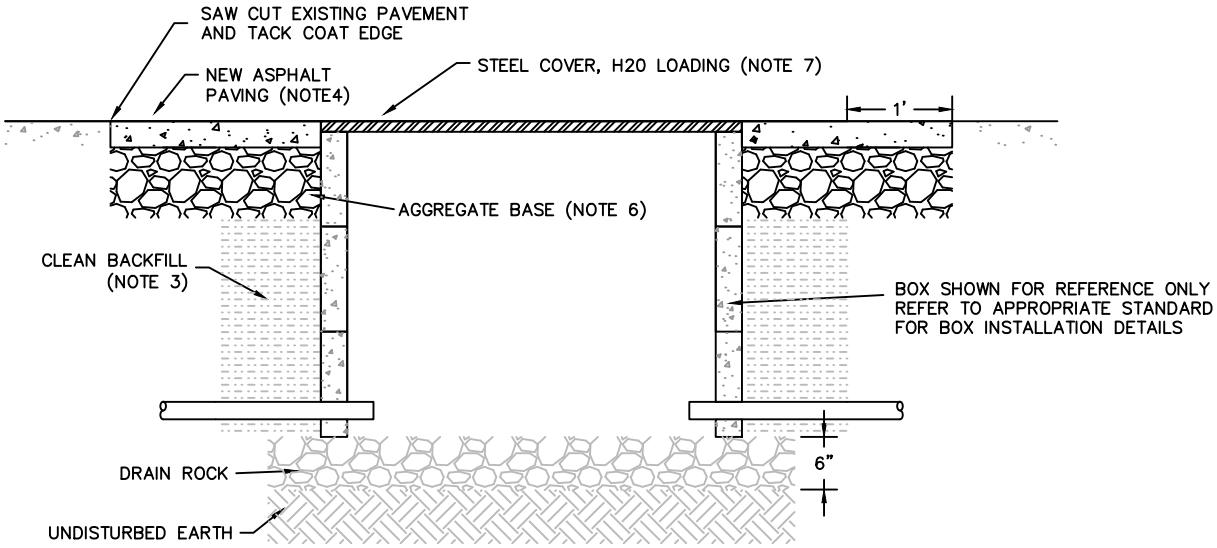
ELECTRIC DEPARTMENT

PUD Communication Box - Concrete

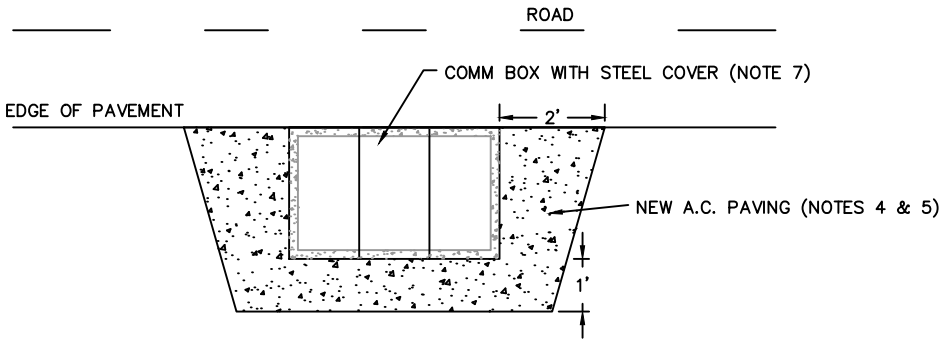
Traffic Rated

Installation Detail

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Vaults & Boxes	Site Work	**UBOX-S3**



CONSTRUCTION INSIDE PAVED PORTION OF ROADWAY
NO SCALE



CONSTRUCTION ALONG SHOULDER OF PAVED ROADWAY
NO SCALE

INSTALLATION NOTES:

1. CUSTOMER TO CONFIRM WITH TDPUD PERSONNEL APPROPRIATE TYPE OF SECONDARY OR COMMUNICATION BOX CONSTRUCTION PRIOR TO INSTALLATION.
2. EXCAVATE TO A MINIMUM OF 12" BEYOND THE OUTSIDE DIMENSION OF THE BOX. INSTALL BOX ON A MINIMUM OF 6" DRAIN ROCK BEDDING.
3. INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL. COMPACT TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.
4. A.C. TO MATCH ROAD A.C. OR AT LEAST 3" MINIMUM THICKNESS.
5. INSTALL A.C. APRON 2' TO EITHER SIDE AND 1' BEHIND BOX.
6. MINIMUM 8" LAYER OF AGGREGATE BASE, OR MATCH EXISTING THICKNESS.
7. BOX SHALL BE INSTALLED SUCH THAT THE COVER IS 1/2" BELOW FINISHED GRADE IN PAVED AREAS.
8. INSTALL BELL ENDS ON ALL CONDUITS STUBBED IN BOX.

UBOX-S4.DWG

TRUCKEE DONNER Public Utility District

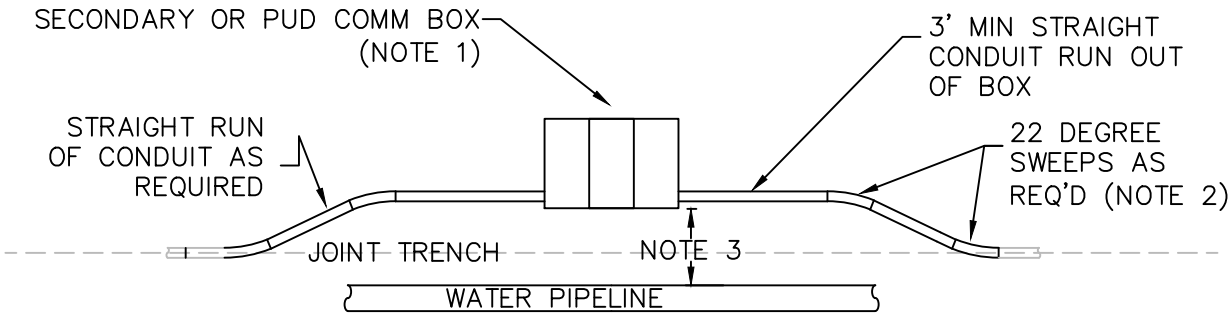
ELECTRIC DEPARTMENT

Secondary & PUD Communication Box

Roadway Areas

Installation Detail

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Vaults & Boxes	Site Work	**UBOX-S4**



LAYOUT DETAIL
(NOT TO SCALE)

NOTES:

1. APPROXIMATE OUTSIDE DIMENSIONS ARE AS FOLLOWS:
   CHRISTY B1730: 20"W x 33"L
   CHRISTY B3048: 36"W x 54"L

2. IN ORDER TO ACCOMMODATE CABLE PULLING (I.E. LIMIT PULLING TENSIONS TO PREVENT CABLE DAMAGE) THE USE OF LARGE RADIUS, SMALL ANGLE CONDUIT SWEEPS ARE NECESSARY TO MAKE A GRADUAL TRANSITION FROM THE TRENCH INTO EACH END OF THE BOX. INSTALL NO MORE THAN 2 SWEEPS, USING A MAXIMUM BEND OF UP TO 22.5 DEGREES FOR EACH SWEEP, INTO EACH END OF THE BOX.

3. OFFSET FROM TRENCH AS REQUIRED TO PLACE THE BOX IN THE ROAD SHOULDER AREA AS DEPICTED ON STANDARD DRAWING UBOX-S4 AND/OR TO MAINTAIN STRAIGHT RUNS OF CONDUIT INTO BOX. BOX SHALL HAVE MINIMUM 18" OFFSET FROM WATER PIPELINE.

UBOX-S5.DWG

TRUCKEE DONNER Public Utility District

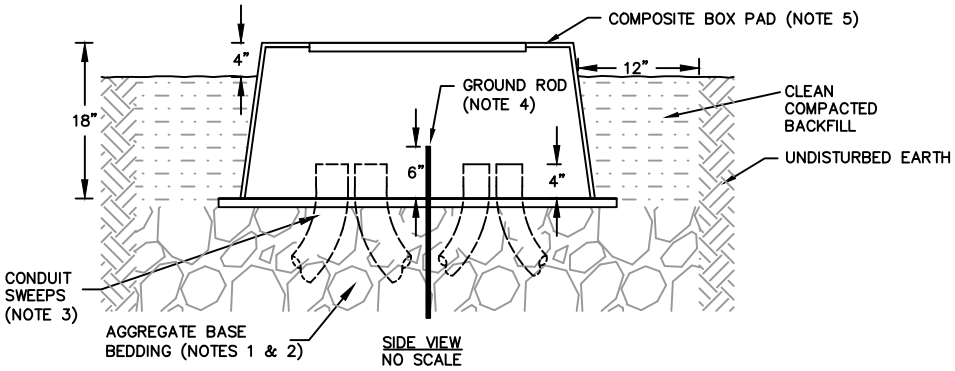
ELECTRIC DEPARTMENT

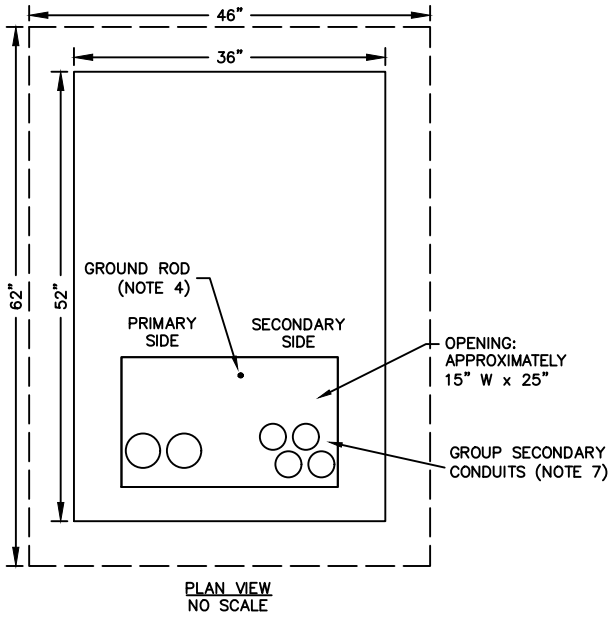
Secondary & PUD Communication Box

Layout Detail

Trench Offset Construction

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Vaults & Boxes	Site Work	**UBOX-S5**





INSTALLATION NOTES:

1. PADS SHALL BE INSTALLED ON A MINIMUM 12" AGGREGATE BASE AFTER TRENCH COMPACTION IS COMPLETE. EXTEND AGGREGATE BASE 1 FOOT AROUND OUTSIDE DIMENSION OF PAD.

2. AGGREGATE BASE BEDDING AND BACKFILL PLACED IN 12" LIFTS. COMPACT TO A MINIMUM OF 90 RELATIVE DENSITY. COMPACTION TESTING TO BE PERFORMED AND DOCUMENTATION OF RESULTS GIVEN TO THE DISTRICT FOR ALL TRANSFORMER PAD CONSTRUCTION.

3. MINIMUM REQUIRED SWEEP RADUIS:
   48 INCHES - PRIMARY CONDUIT
   36 INCHES - SECONDARY CONDUIT

4. INSTALL 5/8" x 8 FT. GROUND ROD IN LOCATION SHOWN, AT LEAST 7.5 FT. IN CONTACT WITH EARTH. DISTRICT WILL SUPPLY ONE GROUND ROD FOR EACH TRANSFORMER LOCATION FOR INSTALLATION BY THE CUSTOMER.

5. OBTAIN FROM AZCO (209-943-2452) ITEM# 36-0001, JENSEN PRECAST (775-359-6200) PGE ITEM# M360601, WESTERN NEVADA SUPPLY (800-648-1230) ITEM# WZNS841661, OR ANOTHER VENDOR APPROVED BY THE DISTRICT.

6. INSTALL THE ENDS OF ALL CONDUIT STUBS VERTICALLY INTO THE PAD, PLUMB AND LEVEL. CUTS ARE NOT PERMITTED ON THE BENT PART OF CONDUIT SWEEPS. LENGTH OF CONDUIT STUBS TO BE DETERMINED WITH TDPUD PERSONNEL. INSTALL BELL ENDS ON ALL CONDUIT SWEEPS STUBBED IN PAD.

7. MAINTAIN MINIMUM SEPARATION OF 1" BETWEEN ALL CONDUITS. GROUP SECONDARY CONDUITS AS CLOSE AS POSSIBLE TO THE FRONT EDGE OF OPENING.

UTP-S1C.DWG

TRUCKEE DONNER Public Utility District

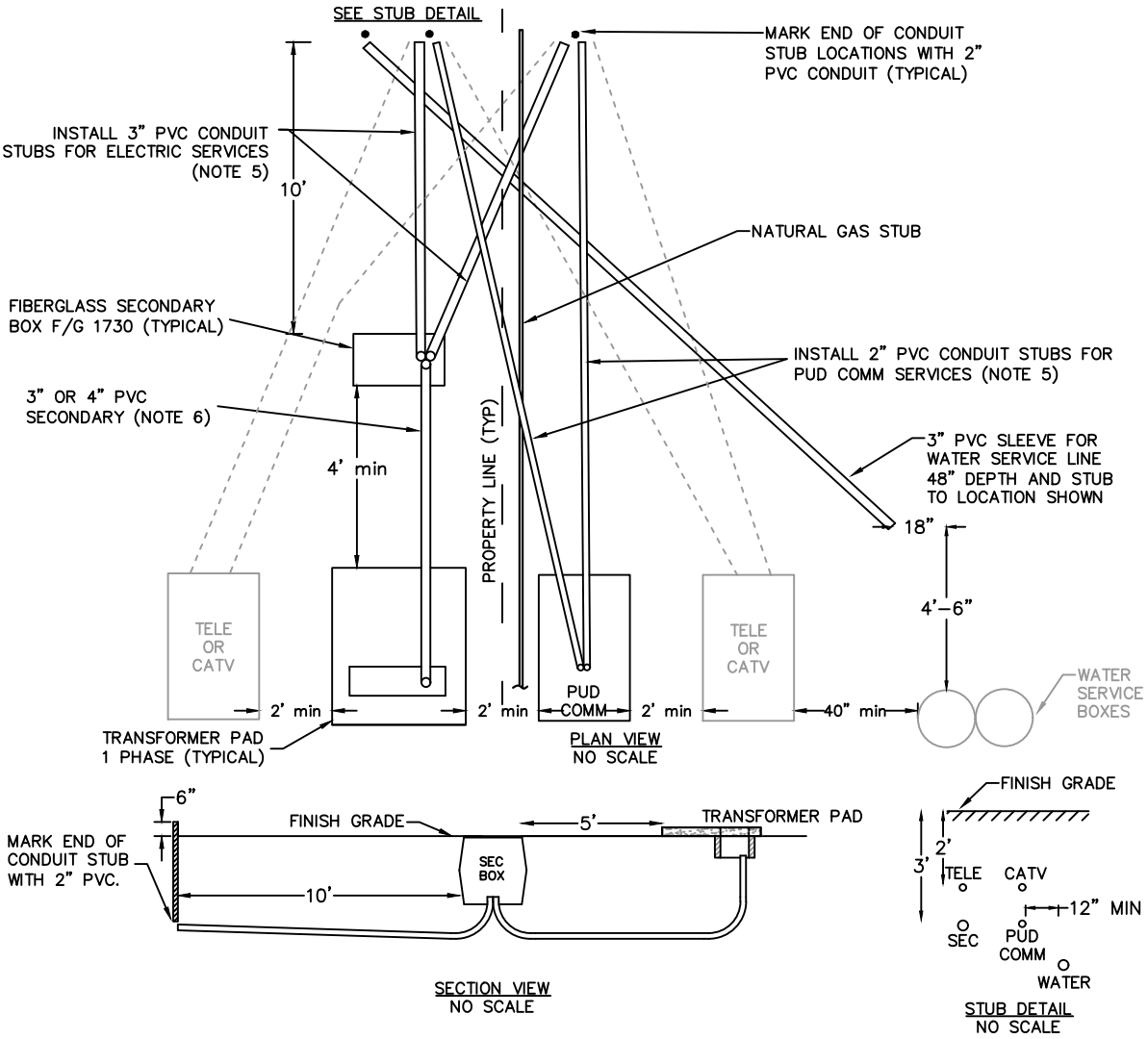
ELECTRIC DEPARTMENT

Transformer Pad

Composite Box Pad - Single Phase

Site Work Installation Detail

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Transformers	Site Work	**UTP-S1C**



INSTALLATION NOTES:

1. REFER TO STANDARDS UTP-S1C, UBOX-S1, UBOX-S1A, UBOX-S2 AND UBOX-S2A FOR TRANSFORMER, SECONDARY BOX AND COMMUNICATIONS BOX SITE WORK CONSTRUCTION DETAILS.

2. FOR CLARITY, NOT ALL ELECTRICAL AND COMMUNICATIONS CONDUITS ARE SHOWN. REFER TO PROJECT DRAWINGS FOR OTHER CONDUITS.

3. SET THE TRANSFORMER, SECONDARY BOX, AND ALL OTHER UTILITY BOXES TO THE SAME FINISH GRADE. CHANGES IN GRADE ARE NOT ACCEPTABLE.

4. OTHER UTILITIES SHALL NOT CROSS UNDER THE TRANSFORMER PAD AREA. THIS AREA INCLUDES THE SIZE OF THE CONCRETE PAD PLUS 1 FOOT ON ALL SIDES (SEE STANDARD UTP-S1 FOR DETAILS).

5. STUB CONDUITS TO CLEAR DRAINAGE DITCHES, SIDEWALKS, OTHER UTILITIES, AND OTHER OBSTRUCTIONS AS NECESSARY.

6. 3" PVC IS TYPICAL. REFER TO PROJECT DRAWINGS FOR SPECIFIC SIZE.

7. MINIMUM SEPARATION FROM OTHER UTILITIES IS 12".

UTP-S2.DWG

TRUCKEE DONNER Public Utility District

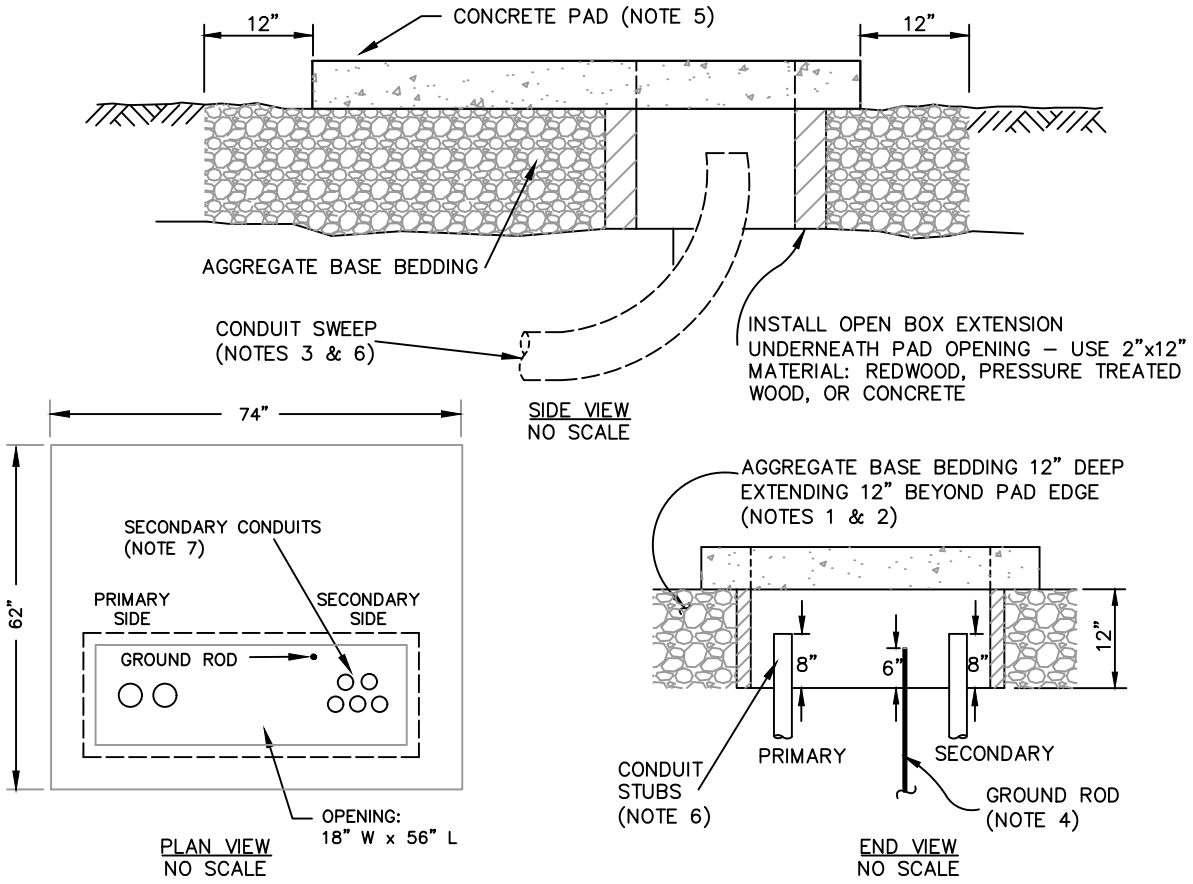
ELECTRIC DEPARTMENT

Transformer Pad & Secondary Box

Residential Lot Areas

Layout Requirements

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Transformers	Site Work	**UTP-S2**



INSTALLATION NOTES:

1. PADS SHALL BE INSTALLED ON A MINIMUM 12" AGGREGATE BASE AFTER TRENCH COMPACTION IS COMPLETE. EXTEND AGGREGATE BASE 1 FOOT AROUND OUTSIDE DIMENSION OF PAD.

2. AGGREGATE BASE BEDDING AND BACKFILL PLACED IN 12" LIFTS. COMPACT TO A MINIMUM OF 90%RELATIVE DENSITY. COMPACTION TESTING TO BE PERFORMED AND DOCUMENTATION OF RESULTS GIVEN TO THE DISTRICT FOR ALL TRANSFORMER PAD CONSTRUCTION.

3. MINIMUM REQUIRED SWEEP RADUIS:
   48 INCHES - PRIMARY CONDUIT
   36 INCHES - SECONDARY CONDUIT

4. INSTALL 5/8" x 8 FT. GROUND ROD IN LOCATION SHOWN, AT LEAST 7.5 FT. IN CONTACT WITH EARTH. DISTRICT WILL SUPPLY ONE GROUND ROD FOR EACH TRANSFORMER LOCATION FOR INSTALLATION BY THE CUSTOMER.

5. OBTAIN FROM JENSEN PRECAST, SPARKS, NEVADA UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
   3 PHASE TRANSFORMER PAD: JENSEN NO. TD5x6

6. INSTALL THE ENDS OF ALL CONDUIT STUBS VERTICALLY INTO THE PAD, PLUMB AND LEVEL. CUTS ARE NOT PERMITTED ON THE BENT PART OF CONDUIT SWEEPS. LENGTH OF CONDUIT STUBS TO BE DETERMINED WITH TDPUD PERSONNEL. INSTALL BELL ENDS ON ALL CONDUIT SWEEPS STUBBED IN PAD.

7. ALL CONDUITS SHALL BE INSTALLED AT LEAST 4" FROM THE EDGE OF THE OPENING. SECONDARY CONDUITS SHALL BE GROUPED TOGETHER WITH MINIMUM 1" BETWEEN CONDUITS.

UTP-S3.DWG

TRUCKEE DONNER Public Utility District

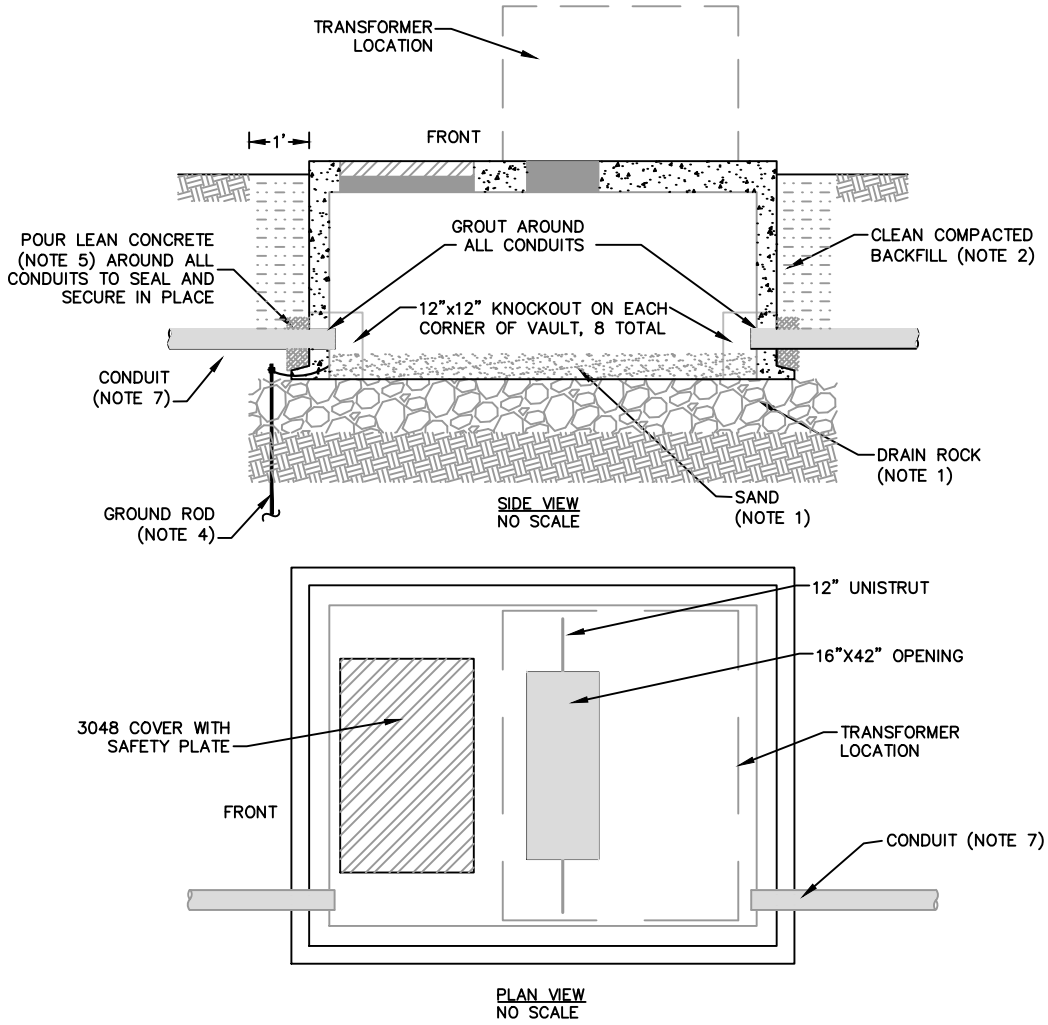
ELECTRIC DEPARTMENT

Transformer Pad

Three Phase

Site Work Installation Detail

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Transformers	Site Work	**UTP-S3**



INSTALLATION NOTES:

1. EXCAVATION TO BE A MINIMUM OF 1 FOOT BEYOND THE OUTSIDE DIMENSION OF THE PAD VAULT. INSTALL PAD VAULT ON A MINIMUM OF 12" OF DRAIN ROCK BEDDING. INSTALL 4" TO 6" OF SAND ON TOP OF DRAIN ROCK BEDDING WITHIN PAD.
2. INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL. COMPACT TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.
3. TOP OF PAD VAULT SHALL BE INSTALLED APPROXIMATELY 3" ABOVE GRADE OR AS DIRECTED BY THE DISTRICT.
4. INSTALL A 5/8" x 8 FT. GROUND ROD CENTERED IN THE 16" X 42" OPENING OF THE PAD VAULT. AT LEAST 7.5 FT OF THE GROUND ROD MUST BE IN CONTACT WITH UNDISTURBED EARTH. DISTRICT WILL SUPPLY THE GROUND ROD AND CONNECTION HARDWARE.
5. LEAN CONCRETE SHALL BE 2 SACK MIX MINIMUM.
6. OBTAIN PAD VAULT FROM JENSEN PRECAST, SPARKS, NEVADA UNLESS OTHERWISE DIRECTED BY THE DISTRICT. JENSEN NO. 68-42TPV.
7. CONDUIT LAYOUT SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. CONDUIT LAYOUT SHALL BE AS DIRECTED BY THE DISTRICT OR AS SHOWN ON THE PROJECT DRAWINGS.
8. INSTALL BELL ENDS ON ALL CONDUITS STUBBED IN VAULT.

UTP-S4.DWG

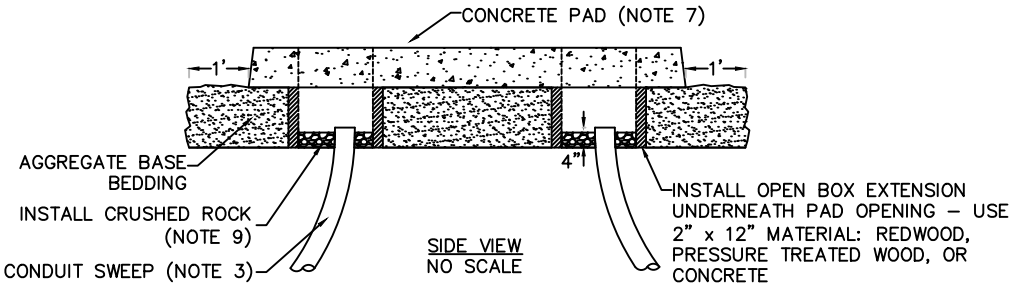
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

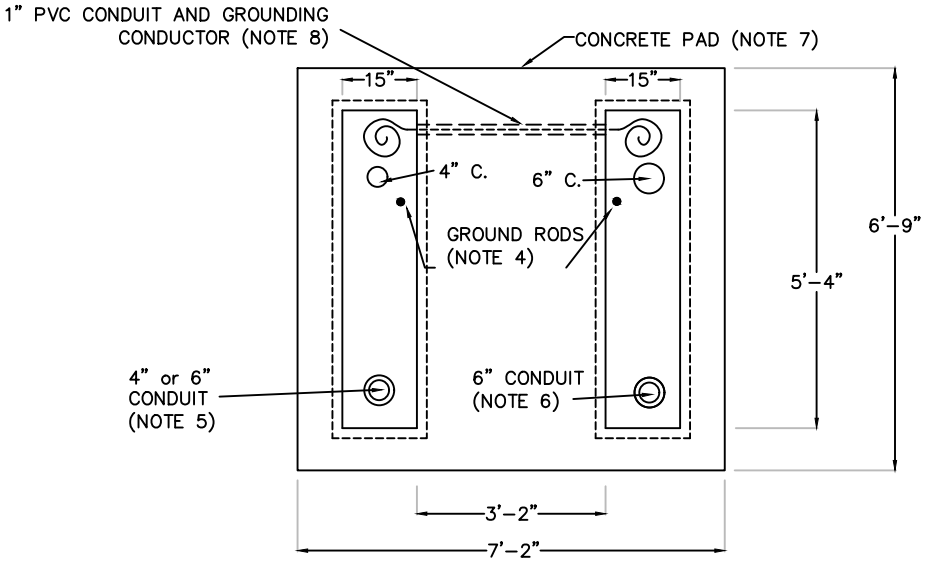
Transformer Pad Vault

Installation Detail

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Vaults & Boxes	Site Work	UTP-S4



SIDE VIEW
NO SCALE



PLAN VIEW
NO SCALE

INSTALLATION NOTES:

1. PADS SHALL BE INSTALLED ON MINIMUM 12" AGGREGATE BASE AFTER TRENCH COMPACTION IS COMPLETE. EXTEND AGGREGATE BASE ONE FOOT AROUND OUTSIDE DIMENSION OF PAD.

2. AGGREGATE BASE BEDDING AND BACKFILL PLACED IN 12" LIFTS. COMPACT TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING TO BE PERFORMED AND DOCUMENTATION OF RESULTS GIVEN TO THE DISTRICT FOR ALL SWITCH PAD CONSTRUCTION.

3. MINIMUM REQUIRED SWEEP RADIUS IS 48 INCHES, PVC SCHEDULE 40 OR RIGID GALVANIZED STEEL SWEEPS. INSTALL PVC SWEEPS UNLESS OTHERWISE DIRECTED BY THE DISTRICT. LENGTH OF CONDUIT STUBS TO BE CONFIRMED WITH TDPUD PERSONNEL. INSTALL BELL ENDS ON ALL CONDUIT SWEEPS STUBBED IN PAD.

4. INSTALL 5/8" x 8 FT. GROUND RODS IN LOCATIONS SHOWN, WITH AT LEAST 7.5 FT. IN CONTACT WITH EARTH. DISTRICT WILL SUPPLY 2 GROUND RODS FOR EACH PADMOUNT SWITCH LOCATION FOR INSTALLATION BY THE CUSTOMER.

5. THE DISTRICT WILL INDICATE SWITCH CONFIGURATION ON DESIGN DRAWINGS: 9BVFI AND 12BVFI REQUIRE A 4" CONDUIT, AND 11BVFI REQUIRES A 6" CONDUIT IN THIS PAD POSITION.

6. THE 12BVFI REQUIRES A 4" CONDUIT IN THIS PAD POSITION.

7. OBTAIN SWITCH PAD FROM JENSEN PRECAST, SPARKS, NEVADA, UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
   SWITCH PAD: JENSEN NO. 14-U

8. INSTALL 250MCM BARE CU CONDUCTOR UNDERNEATH PAD IN 1" PVC CONDUIT AS SHOWN. LEAVE 3'. TAILS IN EACH CONDUIT WINDOW. INSTALL A NOTCH IN THE BOX EXTENSIONS SO THAT THE CONCRETE PAD SHALL NOT PINCH THE CONDUCTOR.

9. INSTALL CRUSHED ROCK TO A LEVEL WITHIN 2-3 INCHES OF THE TOP OF CONDUITS.

USWP-S2.DWG

TRUCKEE DONNER Public Utility District

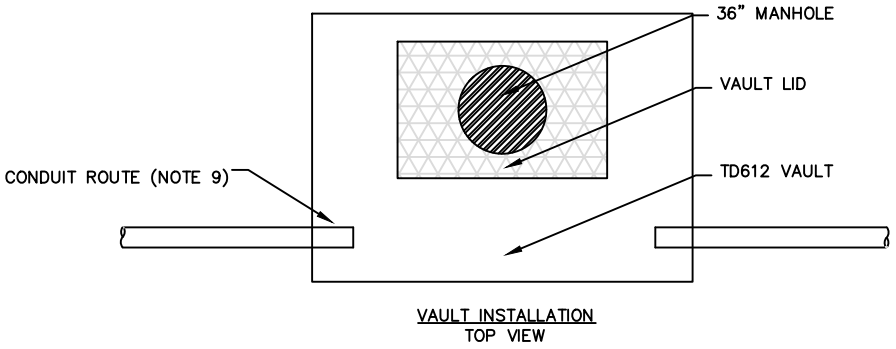
ELECTRIC DEPARTMENT

Padmount Switch Pad-Large

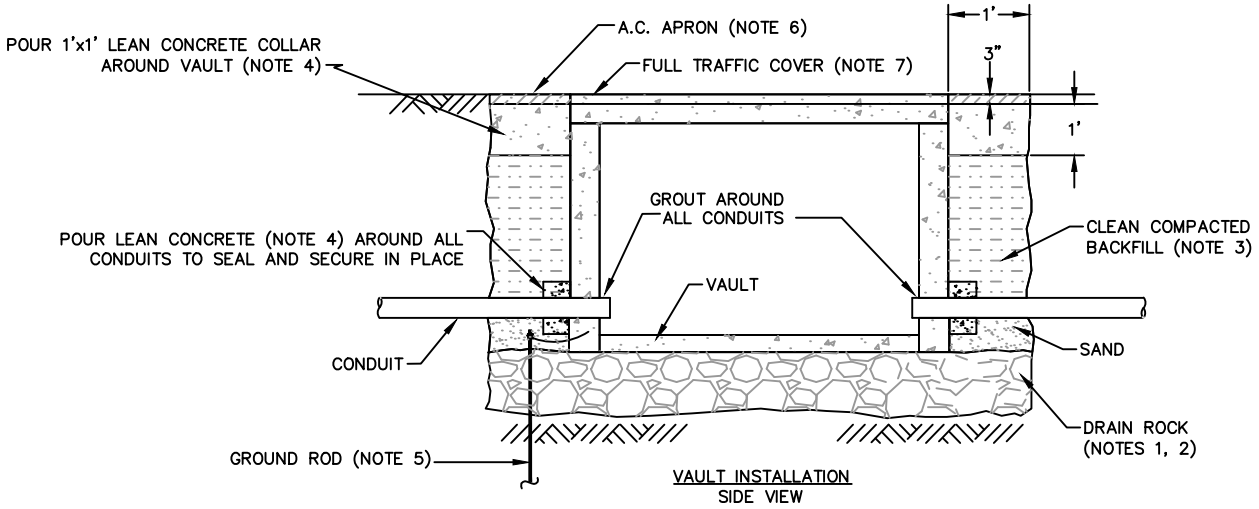
Site Work Installation Detail

Switch Configurations: 9BVFI, 11BVFI, and 12BVFI

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Switches	Site Work	**USWP-S2**



VAULT INSTALLATION
TOP VIEW



VAULT INSTALLATION
SIDE VIEW

INSTALLATION NOTES:

1. EXCAVATION TO BE A MINIMUM OF 1 FOOT BEYOND THE OUTSIDE DIMENSION OF THE VAULT. VAULT SHALL BE INSTALLED ON A MINIMUM 12" DRAIN ROCK BEDDING.

2. IF VAULT HAS NO BOTTOM (OPEN BOTTOM), INSTALL 6" OF SAND DIRECTLY BENEATH VAULT OPENING, AND ON TOP OF THE MINIMUM 12" DRAIN ROCK BEDDING.

3. INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL. COMPACT TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.

4. FOR VAULTS WITH FULL TRAFFIC COVERS, USE WOODEN OR METAL FORMS TO FORM THE OUTER WALL OF THE COLLAR. THE USE OF BARE EARTH AS A WALL FORM IS NOT ACCEPTABLE. LEAN CONCRETE SHALL BE 2 SACK MIX MINIMUM. VAULTS WITH INCIDENTAL TRAFFIC COVERS OR PARKWAY COVERS DO NOT REQUIRE THE INSTALLATION OF A CONCRETE COLLAR.

5. INSTALL A 5/8" x 8 FT. GROUND ROD AS SHOWN NEAREST THE LOCATION AT WHICH THE VAULT'S GROUND CABLE COMES OUT OF THE VAULT. AT LEAST 7.5 FT. OF THE GROUND ROD MUST BE IN CONTACT WITH UNDISTURBED EARTH. DISTRICT WILL SUPPLY THE GROUND ROD AND CONNECTION HARDWARE.

6. VAULTS ADJACENT TO PAVED AREAS REQUIRE THE INSTALLATION OF AN A.C. APRON. SEE STANDARD UV-S2 FOR DETAILS.

7. VAULTS SHALL BE INSTALLED SUCH THAT THE COVER IS 1/2" BELOW FINISHED GRADE IN PAVED AREAS AND 1" ABOVE FINISHED GRADE IN UNPAVED AREAS.

8. INSTALL BELL ENDS ON ALL CONDUITS STUBBED IN VAULT.

9. CONDUITS SHALL ENTER OPPOSITE NARROW ENDS OF VAULT ON SAME SIDE. FOR TD612 VAULTS, TOP OF VAULT ASSEMBLY SHALL BE SET SUCH THAT CONDUITS ARE ON DEEPER SIDE OF THE VAULT. COORDINATE WITH TDPUD PERSONNEL FOR CONDUIT ROUTING.

UV-S1.DWG

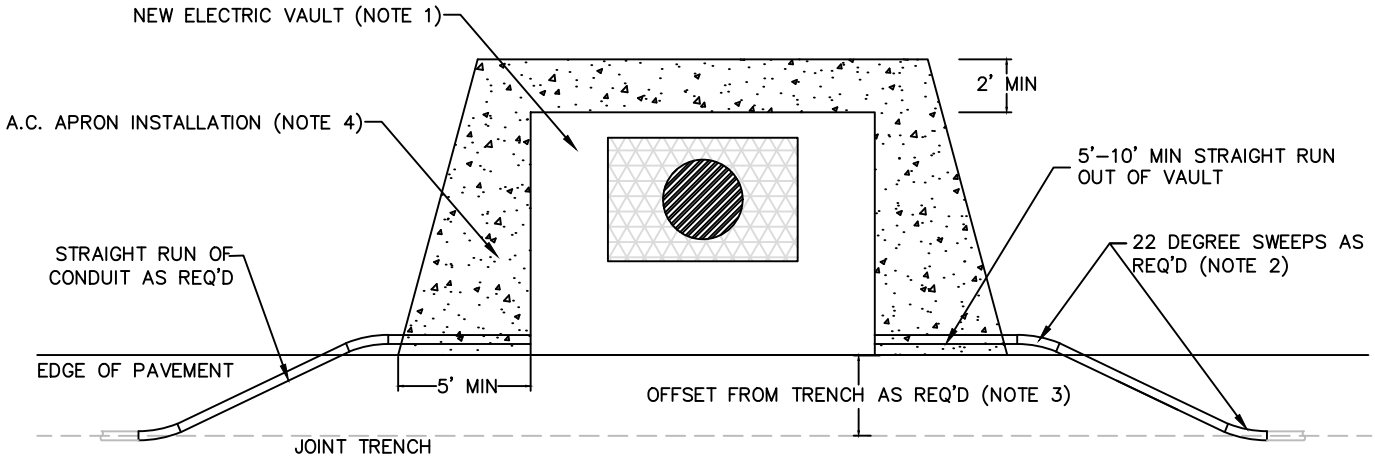
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Primary Electric Vault

Installation Detail

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Vaults & Boxes	Site Work	UV-S1



LAYOUT DETAIL
(NOT TO SCALE)

INSTALLATION NOTES:

1. APPROXIMATE OUTSIDE DIMENSIONS ARE AS FOLLOWS:
   JENSEN PRECAST MODEL NO. 577TD: 5'W x 7'L x 7'-8"D
   JENSEN PRECAST MODEL NO. 612TD: 7'-1"W x 13'-1"L x 9'-2"D

2. IN ORDER TO ACCOMMODATE CABLE PULLING (I.E. LIMIT PULLING TENSIONS TO PREVENT CABLE DAMAGE) THE USE OF LARGE RADIUS, SMALL ANGLE CONDUIT SWEEPS ARE NECESSARY TO MAKE A GRADUAL TRANSITION FROM THE TRENCH INTO EACH END OF THE VAULT. INSTALL NO MORE THAN 2 SWEEPS, USING A MAXIMUM BEND OF UP TO 22.5 DEGREES FOR EACH SWEEP, INTO EACH END OF THE VAULT.

3. OFFSET FROM TRENCH AS REQUIRED TO PLACE THE VAULT IN THE ROAD SHOULDER AREA.

4. VAULTS ADJACENT TO PAVED AREAS REQUIRE THE INSTALLATION OF A.C. APRON. APRON SHALL BE 5' ON EITHER SIDE AND 2' BEHIND VAULT. APRON A.C. SHALL HAVE A MINIMUM DEPTH OF 3" AND MATCH ROAD A.C.

UV-S2DWG

TRUCKEE DONNER Public Utility District

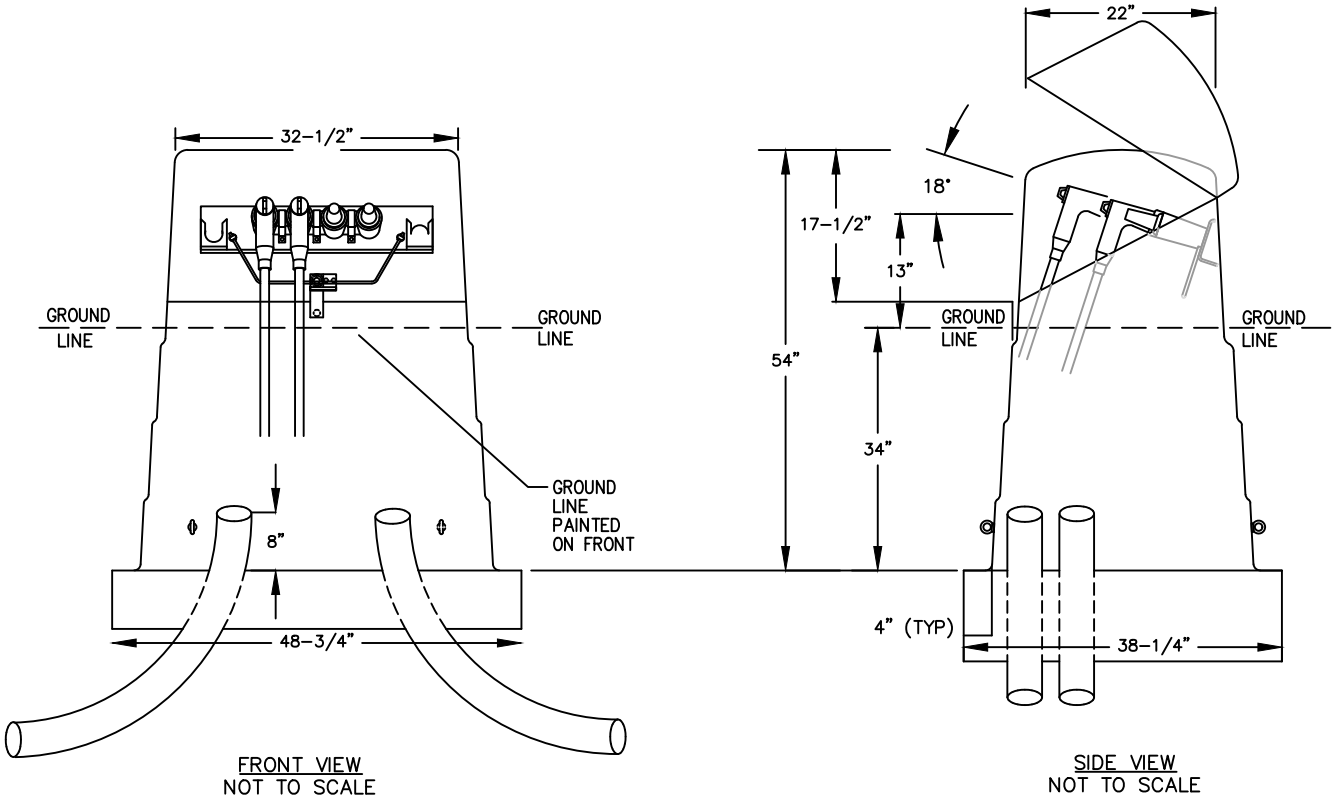
ELECTRIC DEPARTMENT

Primary Electric Vault

Layout Detail

Roadway and Trench Offset Construction

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Vaults & Boxes	Site Work	**UV-S2**



INSTALLATION NOTES:

1. SLOPE PRIMARY TRENCH AT JUNCTION ENCLOSURE LOCATIONS TO A MINIMUM DEPTH OF 5 FEET TO ENSURE PROPER SWEEP ENTRANCE.

2. OBTAIN 5/8" X 8 FT. GROUND ROD FROM TDPUD, TO BE DRIVEN INSIDE RIGHT, BACK CORNER. TDPUD CREW WILL CONNECT ENCLOSURE GROUND LEAD WIRE TO GROUND ROD.

3. INSTALL A MIMIMUM OF 6 INCHES OF DRAIN ROCK UNDER JUNCTION ENCLOSURE PEDESTAL FOOTING.

4. CONDUIT SWEEPS INTO ENCLOSURE SHALL BE FACTORY-MADE SCHEDULE 40 PVC ELECTRICAL CONDUIT. INSTALL BELL ENDS ON ALL CONDUIT SWEEPS STUBBED IN JE.

5. BACKFILL TO GROUND LINE MARK ON THE ENCLOSURE. INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL. COMPACT TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.

6. DO NOT USE COMPACTING EQUIPMENT WITHIN 12 INCHES OF ENCLOSURE. COMPACT BY HAND TO ENSURE THAT THE ENCLOSURE IS NOT DAMAGED DURING COMPACTION.

UJ1-S.DWG

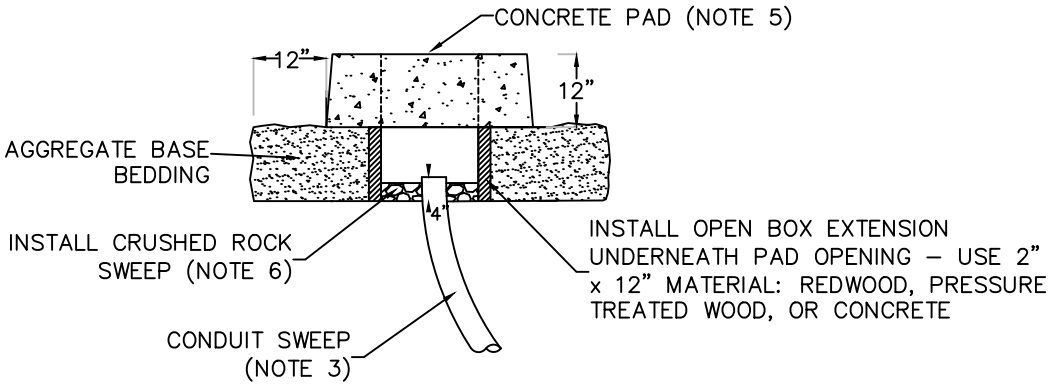
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

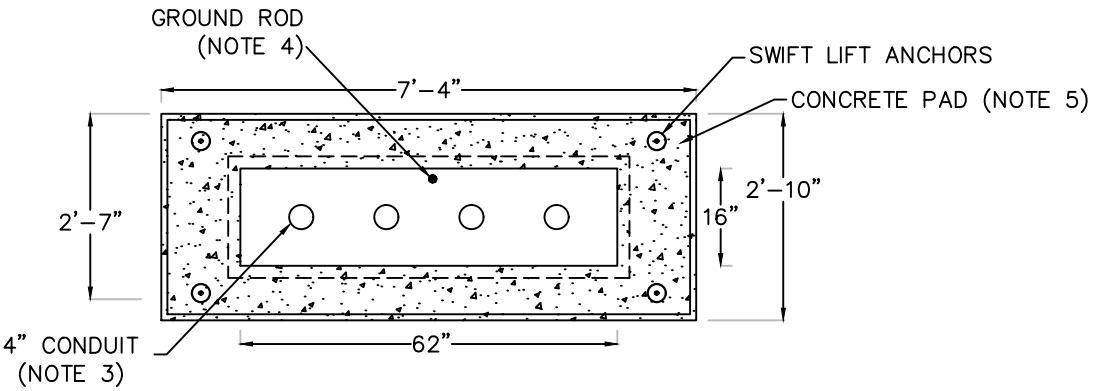
Fiberglass Junction Enclosure, 1 Phase

Installation Detail

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Junction Enclosures	Site Work	**UJ1-S**



SIDE VIEW
NO SCALE



PLAN VIEW
NO SCALE

INSTALLATION NOTES:

1. PADS SHALL BE INSTALLED ON MINIMUM 12" AGGREGATE BASE AFTER TRENCH COMPACTION IS COMPLETE. EXTEND AGGREGATE BASE ONE FOOT AROUND OUTSIDE DIMENSION OF PAD.

2. AGGREGATE BASE BEDDING AND BACKFILL PLACED IN 12" LIFTS. COMPACT TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING TO BE PERFORMED AND DOCUMENTATION OF RESULTS GIVEN TO THE DISTRICT FOR ALL PAD CONSTRUCTION.

3. COORDINATE LOCATION AND LENGTH OF CONDUIT STUBS INTO PAD WITH TDPUD PERSONNEL. USE SCHEDULE 40 PVC WITH 48" RADIUS SWEEPS UNLESS OTHERWISE DIRECTED BY THE DISTRICT. INSTALL THE ENDS OF ALL CONDUIT STUBS VERTICALLY INTO THE PAD, PLUMB AND LEVEL. CUTS ARE NOT PERMITTED ON THE BENT PART OF CONDUIT SWEEPS. LENGTH OF CONDUIT STUBS TO BE DETERMINED WITH TDPUD PERSONNEL. INSTALL BELL ENDS ON ALL CONDUIT SWEEPS STUBBED IN PAD.

4. INSTALL 5/8" x 8 FT. GROUND ROD IN LOCATION SHOWN, WITH AT LEAST 7.5 FT. IN CONTACT WITH EARTH. DISTRICT WILL SUPPLY 1 GROUND ROD1 FOR EACH JUNCTION ENCLOSURE LOCATION FOR INSTALLATION BY THE CUSTOMER.

5. OBTAIN JE PAD FROM JENSEN PRECAST, SPARKS, NEVADA, UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
   JE PAD: JENSEN NO. TD25L

6. INSTALL CRUSHED ROCK TO A LEVEL WITHIN 2-3 INCHES OF TOP OF CONDUITS.

UJ3S-S.DWG

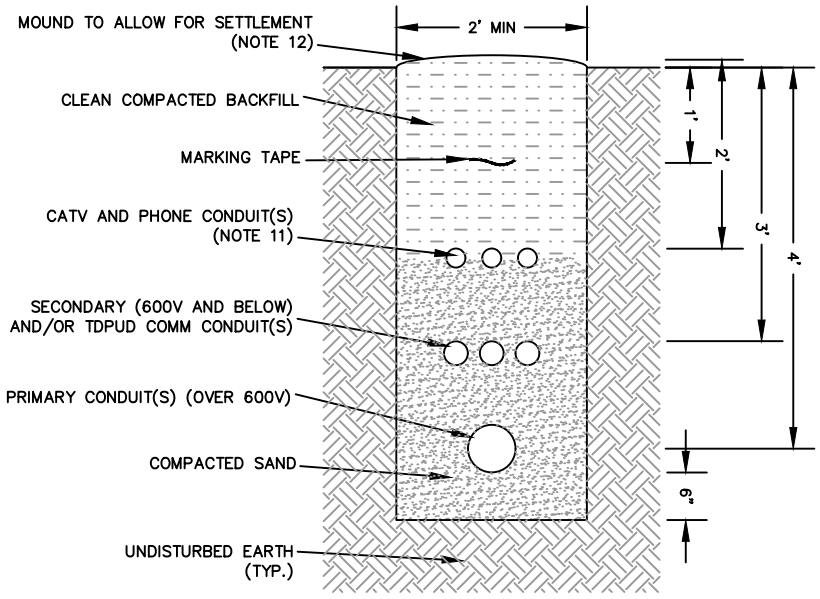
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Steel Junction Enclosure (JE) Pad

Site Work Installation Detail

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Junction Enclosures	Site Work	**UJ3S-S**



NOT TO SCALE

INSTALLATION NOTES

1. ALL ELECTRIC AND PUD COMMUNICATION CONDUIT SHALL BE SCHEDULE 40 PVC. ELECTRIC CONDUIT SWEEPS SHALL BE FACTORY-MADE SCHEDULE 40 PVC. HEATED CONDUIT BENDS ARE NOT ACCEPTABLE.

2. A MAXIMUM OF 270 DEGREES OF ACCUMULATED BENDS SHALL BE ALLOWED IN ANY RUN OF CONDUIT.

3. TRENCH SHALL BE GRADED TRUE AND AS FREE OF ROCKS AS POSSIBLE.

4. INSTALL 6" DEEP SAND BEDDING BEFORE LAYING CONDUIT IN TRENCH. CRUSHED CINDERS **DO NOT** QUALIFY AS SAND BEDDING. AFTER LAYING THE CONDUIT, DISTRICT PERSONNEL MUST INSPECT THE CONDUIT PRIOR TO PLACING ANY BACKFILL MATERIAL. BACKFILL CONDUITS WITH 12" OF SAND AS SHOWN AND COMPACT THE TRENCH. DISTRICT PERSONNEL MUST RE-INSPECT THE SAND BACKFILLED CONDUIT TRENCH.

5. AFTER THE DISTRICT'S SECOND INSPECTION, INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL.

6. COMPACT ALL BACKFILL MATERIAL TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.

7. DISTRICT-OWNED WATER SERVICE LATERALS ARE PERMITTED IN JOINT TRENCH WITH MINIMUM 18" HORIZONTAL SEPARATION BETWEEN INSIDE EDGES OF PIPE AND CONDUIT.

8. CUSTOMER-OWNED UTILITIES INCLUDING WATER AND SEWER SERVICE LATERALS ARE NOT PERMITTED IN JOINT TRENCH. A MINIMUM SEPARATION OF 3' OF UNDISTURBED EARTH SHALL EXIST BETWEEN INSIDE EDGE OF THE CUSTOMER-OWNED UTILITY TRENCH AND JOINT TRENCH CONTAINING TDPUD ELECTRIC CONDUITS.
   EXCEPTION: SINGLE FAMILY RESIDENTIAL WATER SERVICE LATERALS ARE PERMITTED IN SECONDARY SERVICE (240V OR LESS) JOINT TRENCH WITH MINIMUM 12" HORIZONTAL SEPARATION BETWEEN INSIDE EDGES OF PIPE AND CONDUIT.

9. ALL CONDUITS SHALL BE PROVEN FREE AND CLEAR OF DIRT, ROCKS, ETC., BY MEANS OF A MANDREL.

10. FURNISH AND INSTALL A WOVEN POLYESTER, PRE-LUBRICATED PULL TAPE, PRINTED WITH SEQUENTIAL FOOT MARKINGS IN ALL CONDUITS. NO SPLICES ARE ALLOWED IN THE PULL TAPE. MINIMUM TENSILE STRENGTH REQUIREMENTS ARE AS FOLLOWS:
    ELECTRIC CONDUIT: 2500 POUNDS
    COMMUNICATIONS CONDUIT: 2"C. AND LARGER - 1000 POUNDS, 1"C. - 500 POUNDS

11. CATV AND PHONE SHOWN FOR ILLUSTRATION ONLY. CONTACT APPROPRIATE UTILITY FOR SPECIFICATIONS.

12. CONSTRUCTION OUTSIDE ROADWAY SHOWN. REFER TO STANDARD UT-S4 FOR CONSTRUCTION REQUIREMENTS INSIDE ROADWAY AREAS.

MS

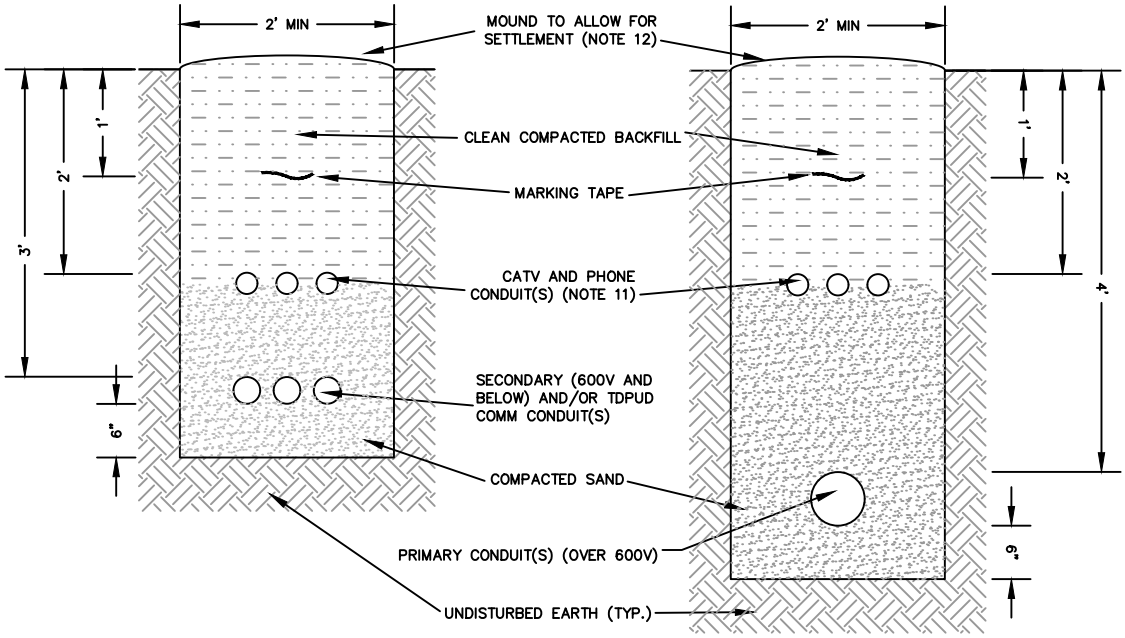
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Joint Trench Construction Details

Primary Electric, Secondary Electric & Communication Conduits

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Trenching	Site Work	**UT-S1**



NOT TO SCALE

INSTALLATION NOTES

1. ALL ELECTRIC AND PUD COMMUNICATION CONDUIT SHALL BE SCHEDULE 40 PVC. ELECTRIC CONDUIT SWEEPS SHALL BE FACTORY-MADE SCHEDULE 40 PVC. HEATED CONDUIT BENDS ARE NOT ACCEPTABLE.

2. A MAXIMUM OF 270 DEGREES OF ACCUMULATED BENDS SHALL BE ALLOWED IN ANY RUN OF CONDUIT.

3. TRENCH SHALL BE GRADED TRUE AND AS FREE OF ROCKS AS POSSIBLE.

4. INSTALL 6" DEEP SAND BEDDING BEFORE LAYING CONDUIT IN TRENCH. CRUSHED CINDERS **DO NOT** QUALIFY AS SAND BEDDING. AFTER LAYING THE CONDUIT, DISTRICT PERSONNEL MUST INSPECT THE CONDUIT PRIOR TO PLACING ANY BACKFILL MATERIAL. BACKFILL CONDUITS WITH 12" OF SAND AS SHOWN AND COMPACT THE TRENCH. DISTRICT PERSONNEL MUST RE-INSPECT THE SAND BACKFILLED CONDUIT TRENCH.

5. AFTER THE DISTRICT'S SECOND INSPECTION, INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL.

6. COMPACT ALL BACKFILL MATERIAL TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.

7. DISTRICT-OWNED WATER SERVICE LATERALS ARE PERMITTED IN JOINT TRENCH WITH MINIMUM 18" HORIZONTAL SEPARATION BETWEEN INSIDE EDGES OF PIPE AND CONDUIT.

8. CUSTOMER-OWNED UTILITIES INCLUDING WATER AND SEWER SERVICE LATERALS ARE NOT PERMITTED IN JOINT TRENCH. A MINIMUM SEPARATION OF 3' OF UNDISTURBED EARTH SHALL EXIST BETWEEN INSIDE EDGE OF THE CUSTOMER-OWNED UTILITY TRENCH AND JOINT TRENCH CONTAINING TDPUD ELECTRIC CONDUITS.
   EXCEPTION: SINGLE FAMILY RESIDENTIAL WATER SERVICE LATERALS ARE PERMITTED IN SECONDARY SERVICE (240V OR LESS) JOINT TRENCH WITH MINIMUM 12" HORIZONTAL SEPARATION BETWEEN INSIDE EDGES OF PIPE AND CONDUIT.

9. ALL CONDUITS SHALL BE PROVEN FREE AND CLEAR OF DIRT, ROCKS, ETC., BY MEANS OF A MANDREL.

10. FURNISH AND INSTALL A WOVEN POLYESTER, PRE-LUBRICATED PULL TAPE, PRINTED WITH SEQUENTIAL FOOT MARKINGS IN ALL CONDUITS. NO SPLICES ARE ALLOWED IN THE PULL TAPE. MINIMUM TENSILE STRENGTH REQUIREMENTS ARE AS FOLLOWS:
    ELECTRIC CONDUIT: 2500 POUNDS
    COMMUNICATIONS CONDUIT: 2"C. AND LARGER - 1000 POUNDS, 1"C. - 500 POUNDS

11. CATV AND PHONE SHOWN FOR ILLUSTRATION ONLY. CONTACT APPROPRIATE UTILITY FOR SPECIFICATIONS.

12. CONSTRUCTION OUTSIDE ROADWAY SHOWN. REFER TO STANDARD UT-S4 FOR CONSTRUCTION REQUIREMENTS INSIDE ROADWAY AREAS.

UT-S2.DWG

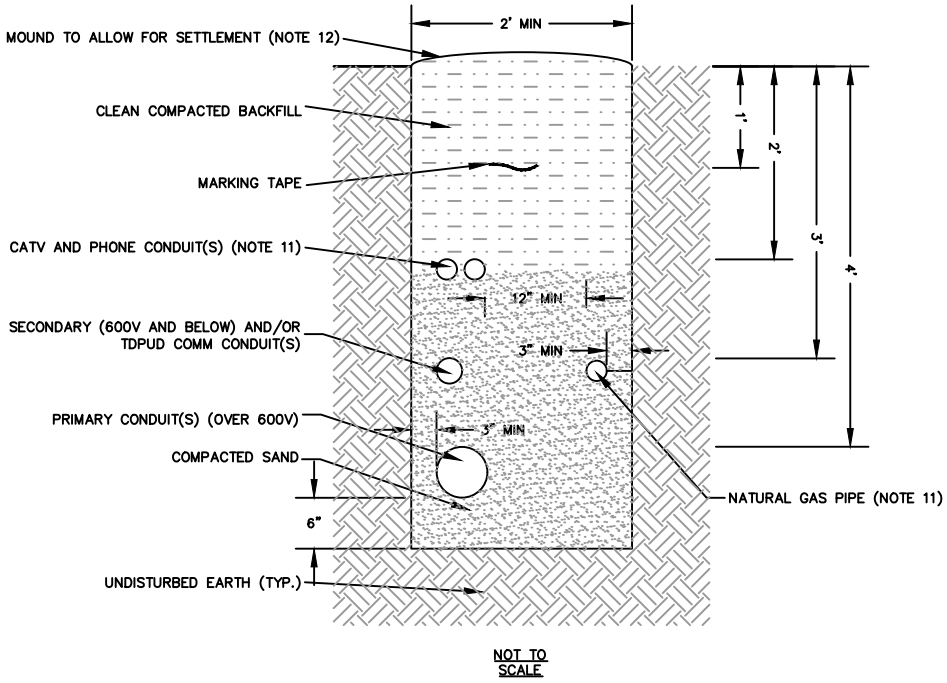
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Joint Trench Construction Details

Primary or Secondary Electric & Communication Conduits

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Trenching	Site Work	**UT-S2**



NOT TO SCALE

INSTALLATION NOTES

1. ALL ELECTRIC AND PUD COMMUNICATION CONDUIT SHALL BE SCHEDULE 40 PVC. ELECTRIC CONDUIT SWEEPS SHALL BE FACTORY-MADE SCHEDULE 40 PVC. HEATED CONDUIT BENDS ARE NOT ACCEPTABLE.
2. A MAXIMUM OF 270 DEGREES OF ACCUMULATED BENDS SHALL BE ALLOWED IN ANY RUN OF CONDUIT.
3. TRENCH SHALL BE GRADED TRUE AND AS FREE OF ROCKS AS POSSIBLE.
4. INSTALL 6" DEEP SAND BEDDING BEFORE LAYING CONDUIT IN TRENCH. CRUSHED CINDERS **DO NOT** QUALIFY AS SAND BEDDING. AFTER LAYING THE CONDUIT, DISTRICT PERSONNEL MUST INSPECT THE CONDUIT PRIOR TO PLACING ANY BACKFILL MATERIAL. BACKFILL CONDUITS WITH 12" OF SAND AS SHOWN AND COMPACT THE TRENCH. DISTRICT PERSONNEL MUST RE-INSPECT THE SAND BACKFILLED CONDUIT TRENCH.
5. AFTER THE DISTRICT'S SECOND INSPECTION, INSTALL CLEAN BACKFILL (SCREEN AS REQUIRED) AND COMPACT IN 12" LIFTS. NO ROCKS OVER 3" IN SIZE ARE PERMITTED IN CLEAN BACKFILL.
6. COMPACT ALL BACKFILL MATERIAL TO A MINIMUM OF 90% RELATIVE DENSITY. COMPACTION TESTING AND DOCUMENTATION OF RESULTS TO BE PERFORMED AS REQUESTED BY THE DISTRICT.
7. DISTRICT-OWNED WATER SERVICE LATERALS ARE PERMITTED IN JOINT TRENCH WITH MINIMUM 18" HORIZONTAL SEPARATION BETWEEN INSIDE EDGES OF PIPE AND CONDUIT.
8. CUSTOMER-OWNED UTILITIES INCLUDING WATER AND SEWER SERVICE LATERALS ARE NOT PERMITTED IN JOINT TRENCH. A MINIMUM SEPARATION OF 3' OF UNDISTURBED EARTH SHALL EXIST BETWEEN INSIDE EDGE OF THE CUSTOMER-OWNED UTILITY TRENCH AND JOINT TRENCH CONTAINING TDPUD ELECTRIC CONDUITS.
   EXCEPTION: SINGLE FAMILY RESIDENTIAL WATER SERVICE LATERALS ARE PERMITTED IN SECONDARY SERVICE (240V OR LESS) JOINT TRENCH WITH MINIMUM 12" HORIZONTAL SEPARATION BETWEEN INSIDE EDGES OF PIPE AND CONDUIT.
9. ALL CONDUITS SHALL BE PROVEN FREE AND CLEAR OF DIRT, ROCKS, ETC., BY MEANS OF A MANDREL.
10. FURNISH AND INSTALL A WOVEN POLYESTER, PRE-LUBRICATED PULL TAPE, PRINTED WITH SEQUENTIAL FOOT MARKINGS IN ALL CONDUITS. NO SPLICES ARE ALLOWED IN THE PULL TAPE. MINIMUM TENSILE STRENGTH REQUIREMENTS ARE AS FOLLOWS:
    ELECTRIC CONDUIT: 2500 POUNDS
    COMMUNICATIONS CONDUIT: 2"C. AND LARGER - 1000 POUNDS, 1"C. - 500 POUNDS
11. CATV, PHONE, AND NATURAL GAS SHOWN FOR ILLUSTRATION ONLY. CONTACT APPROPRIATE UTILITY FOR SPECIFICATIONS.
12. CONSTRUCTION OUTSIDE ROADWAY SHOWN. REFER TO STANDARD UT-S4 FOR CONSTRUCTION REQUIREMENTS INSIDE ROADWAY AREAS.

UT-S3.DWG

TRUCKEE DONNER Public Utility District

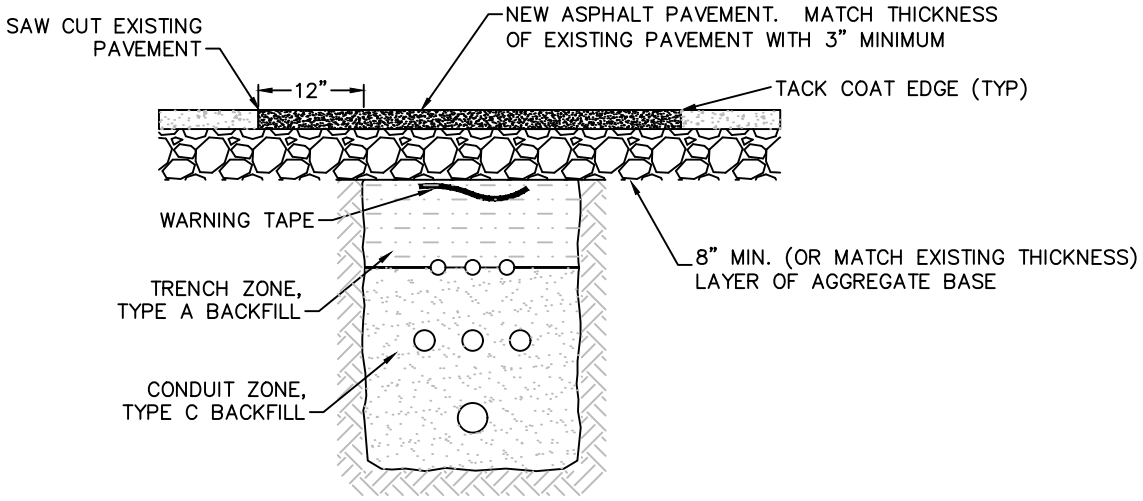
ELECTRIC DEPARTMENT

Joint Trench Construction Details

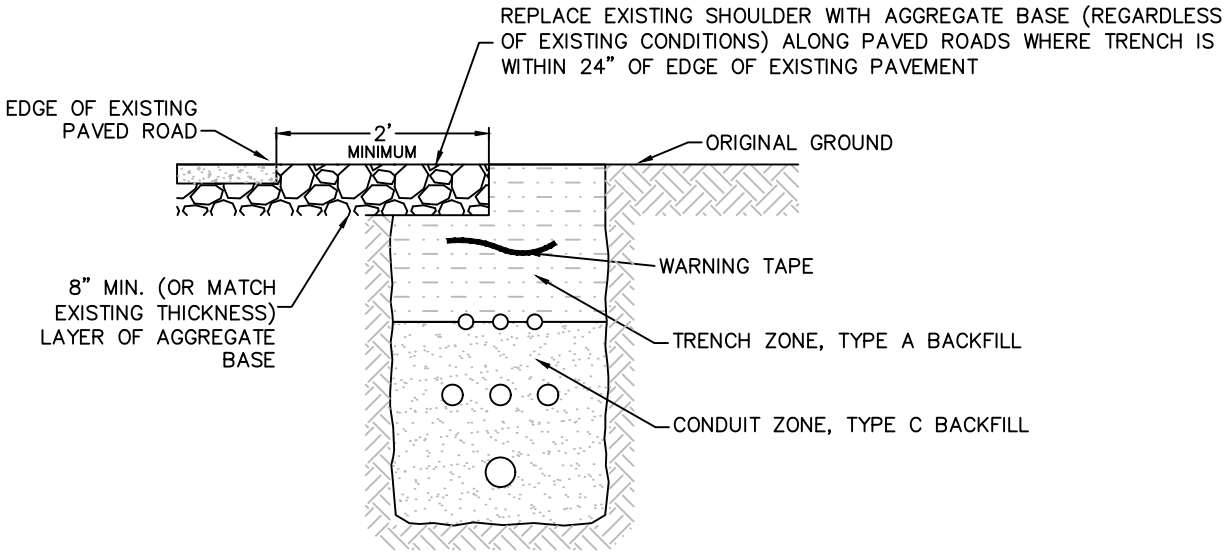
Primary Electric, Secondary Electric

Communication Conduit & Natural Gas Pipe

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Trenching	Site Work	**UT-S3**



CONSTRUCTION INSIDE ROADWAY OR OTHER PAVED AREAS
NO SCALE



CONSTRUCTION ALONG SHOULDERS OF PAVED ROADS
NO SCALE

INSTALLATION NOTES:

1. REFER TO STANDARDS UT-S1, UT-S2, AND UT-S3 FOR CONDUIT CLEARANCES AND DIMENSIONAL REQUIREMENTS AND TRENCH CONSTRUCTION DETAILS.
2. TYPE A BACKFILL: CLEAN COMPACTED BACKFILL (NO ROCKS OVER 3" IN SIZE PERMITTED)
3. TYPE C BACKFILL: COMPACTED SAND

UT-S4.DWG

TRUCKEE DONNER Public Utility District

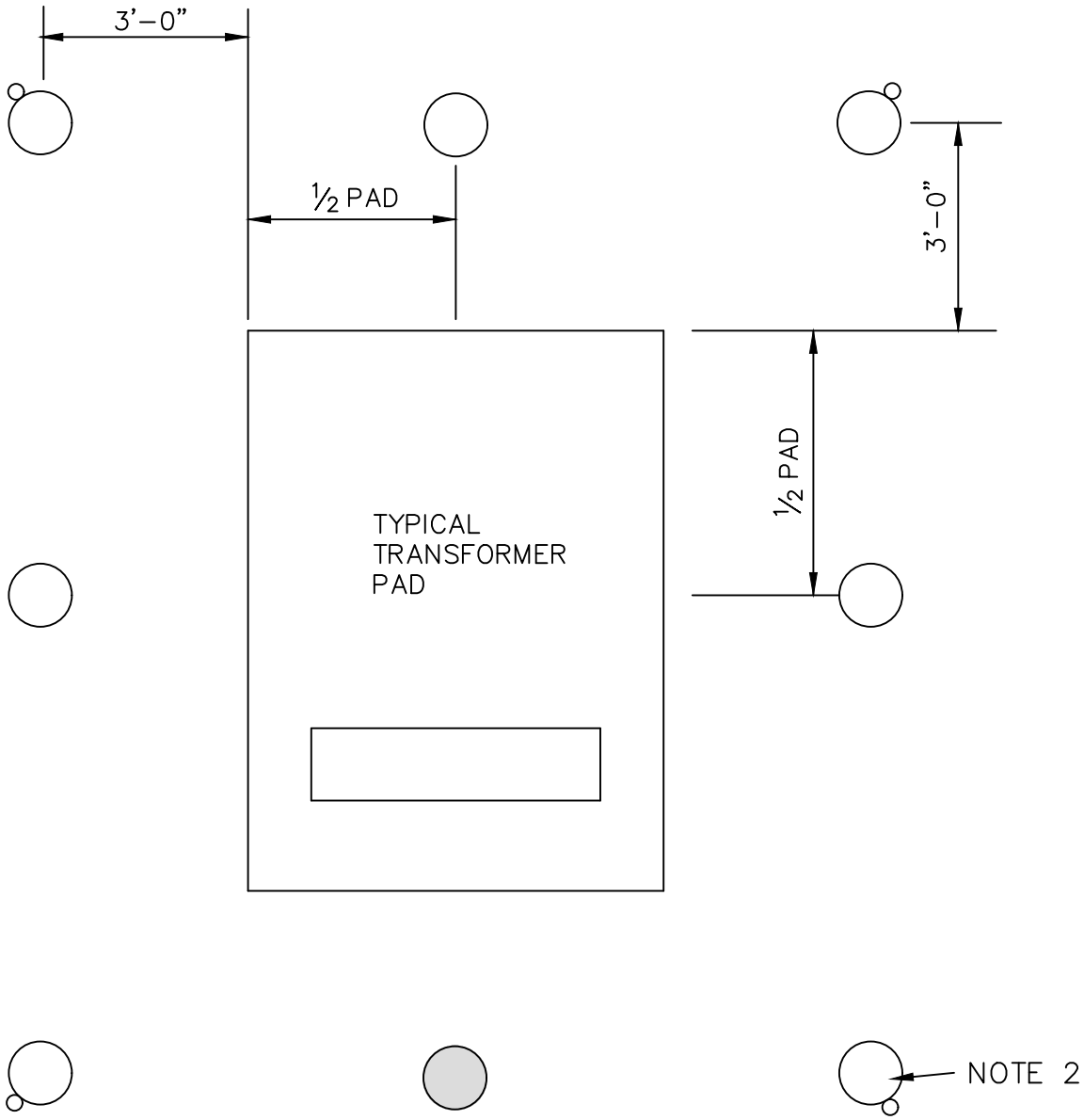
ELECTRIC DEPARTMENT

Trench Construction Details

Roadway Areas

Installation Detail

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Trenching	Site Work	UT-S4



PADMOUNT BARRIER POST LAYOUT

NO SCALE

PERMANENT POST

REMOVABLE POST

INSTALLATION NOTES:

1. THE DISTRICT WILL SELECT AND MARK THE LOCATION OF ALL BARRIER POSTS. CONFIRM LOCATIONS WITH THE DISTRICT BEFORE INSTALLING POSTS.
2. SEE STANDARD UBP-S2 FOR BARRIER POST DETAILS.

UBP-S1.DWG

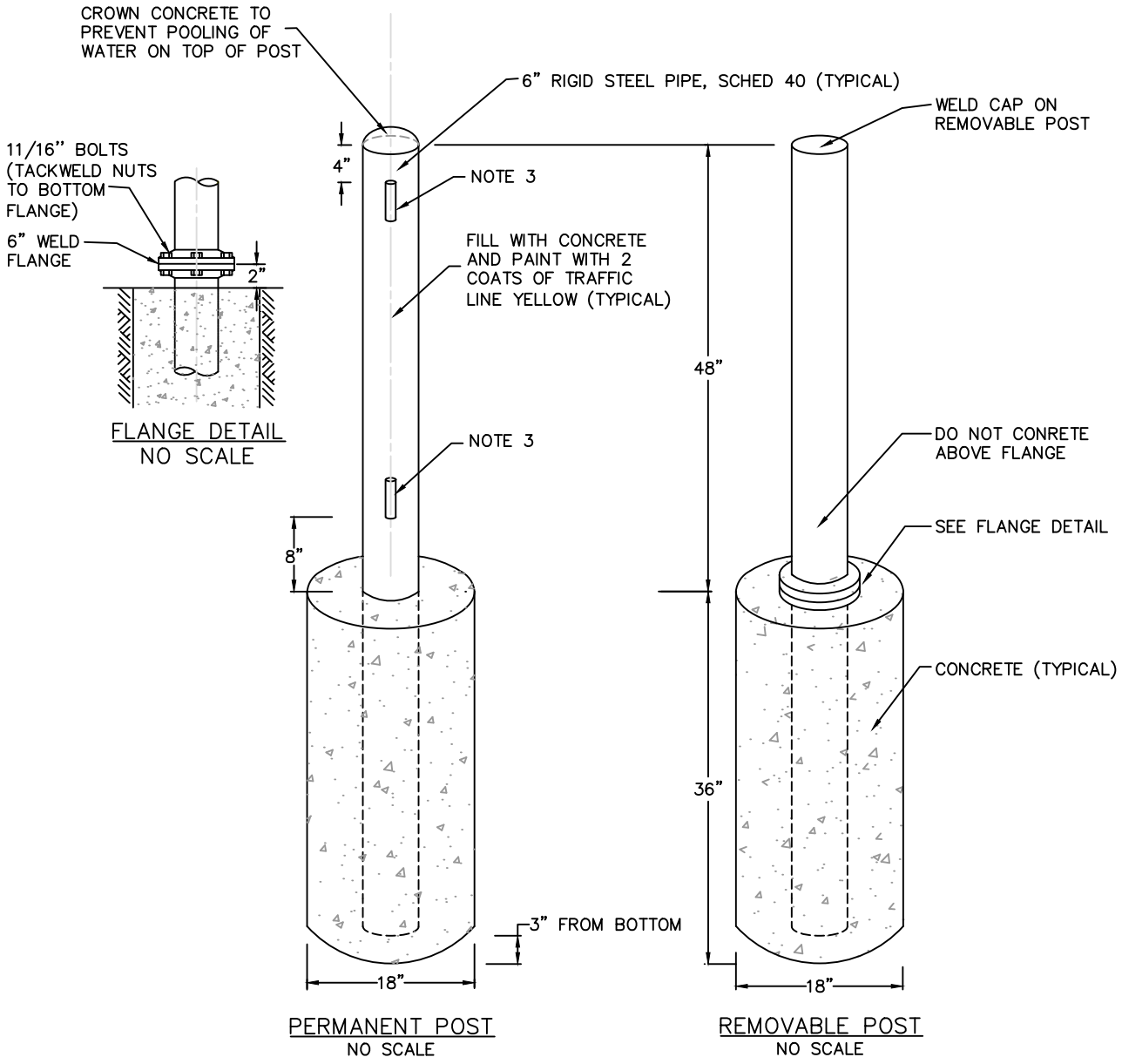
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Barrier Post Layout Guide

Pad Mounted Equipment

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Miscellaneous	Site Work	**UBP-S1**



INSTALLATION NOTES:

1. ON SLOPES, SET POSTS SO THAT THE TOPS OF ALL POSTS ARE LEVEL WITH EACH OTHER. THE SHORTEST POST TO BE 48" ABOVE GRADE.

2. POSTS SHALL BE PAINTED WITH 2 COATS OF TRAFFIC LINE YELLOW PAINT. COLOR MAY BE NEGOTIABLE. CONTACT DISTRICT FOR DETAILS.

3. WELD A 4" LENGTH OF 1½" SCHEDULE 80 RIGID STEEL PIPE TO BARRIER POST FOR THE FUTURE INSTALLATION OF ¾" PVC SNOW STAKES.

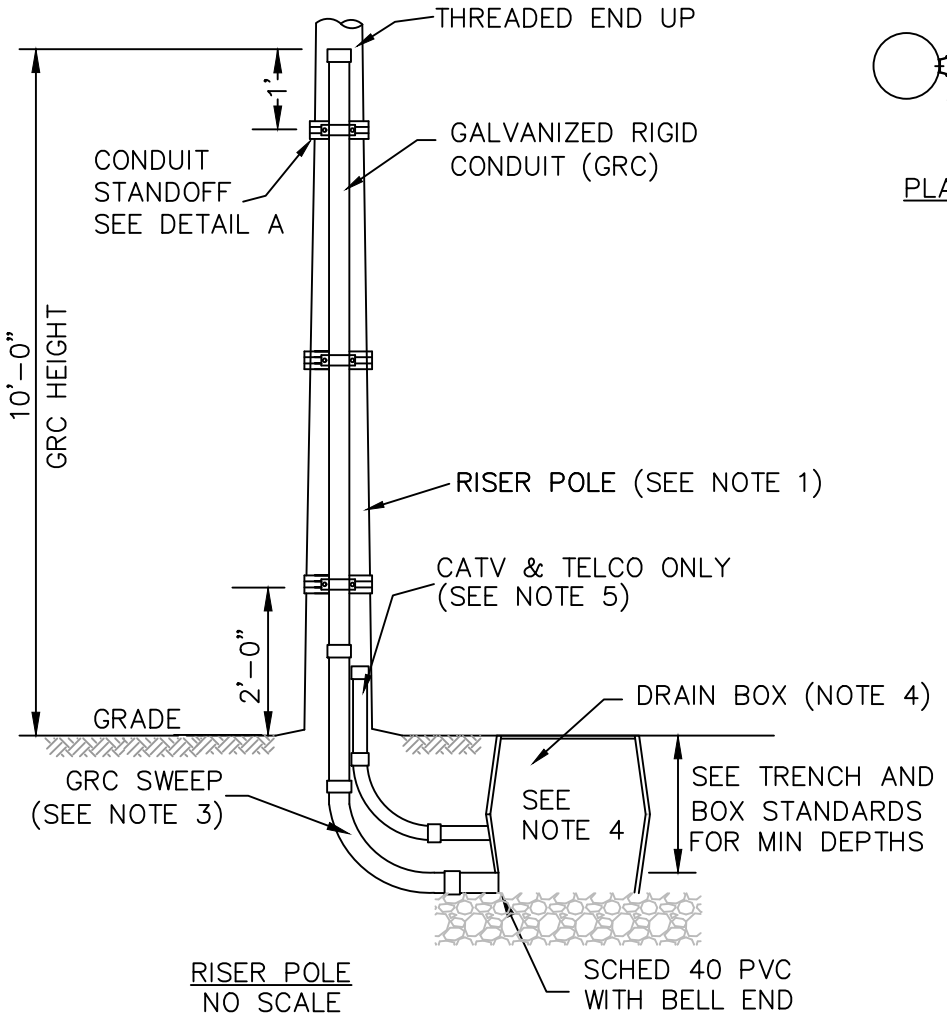
UBP-S2.DWG

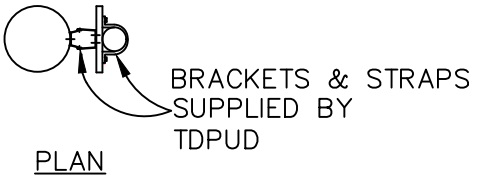
TRUCKEE DONNER Public Utility District

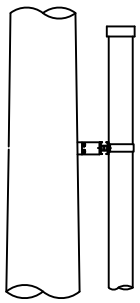
ELECTRIC DEPARTMENT

Barrier Post Construction Details

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Miscellaneous	Site Work	**UBP-S2**







INSTALLATION NOTES:

1. THE DISTRICT WILL MARK THE RISER LOCATION ON THE POLE.

2. WHEN BOTH PUD COMMUNICATIONS AND ELECTRICAL PRIMARY OR SECONDARY RISERS ARE INSTALLED AT THE SAME RISER LOCATION, ATTACH THE PUD COMMUNICATIONS RISER TO THE BACK SIDE OF THE RISER BRACKETS.

3. MINIMUM RADIUS FOR GALVANIZED RIGID CONDUIT (GRC) SWEEPS:
   PRIMARY (>600V) - 48" RADIUS
   SECONDARY/COMM - 36" RADIUS (24" RADIUS WITH DISTRICT APPROVAL)

4. DRAIN BOX MAY BE REQUIRED FOR RISERS AS DIRECTED BY THE DISTRICT. SEE STANDARDS UBOX-S1A AND UBOX-S2A.

5. TELEPHONE AND CATV ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. CONFIRM DETAILS WITH APPROPRIATE UTILITY.

UR-S.DWG

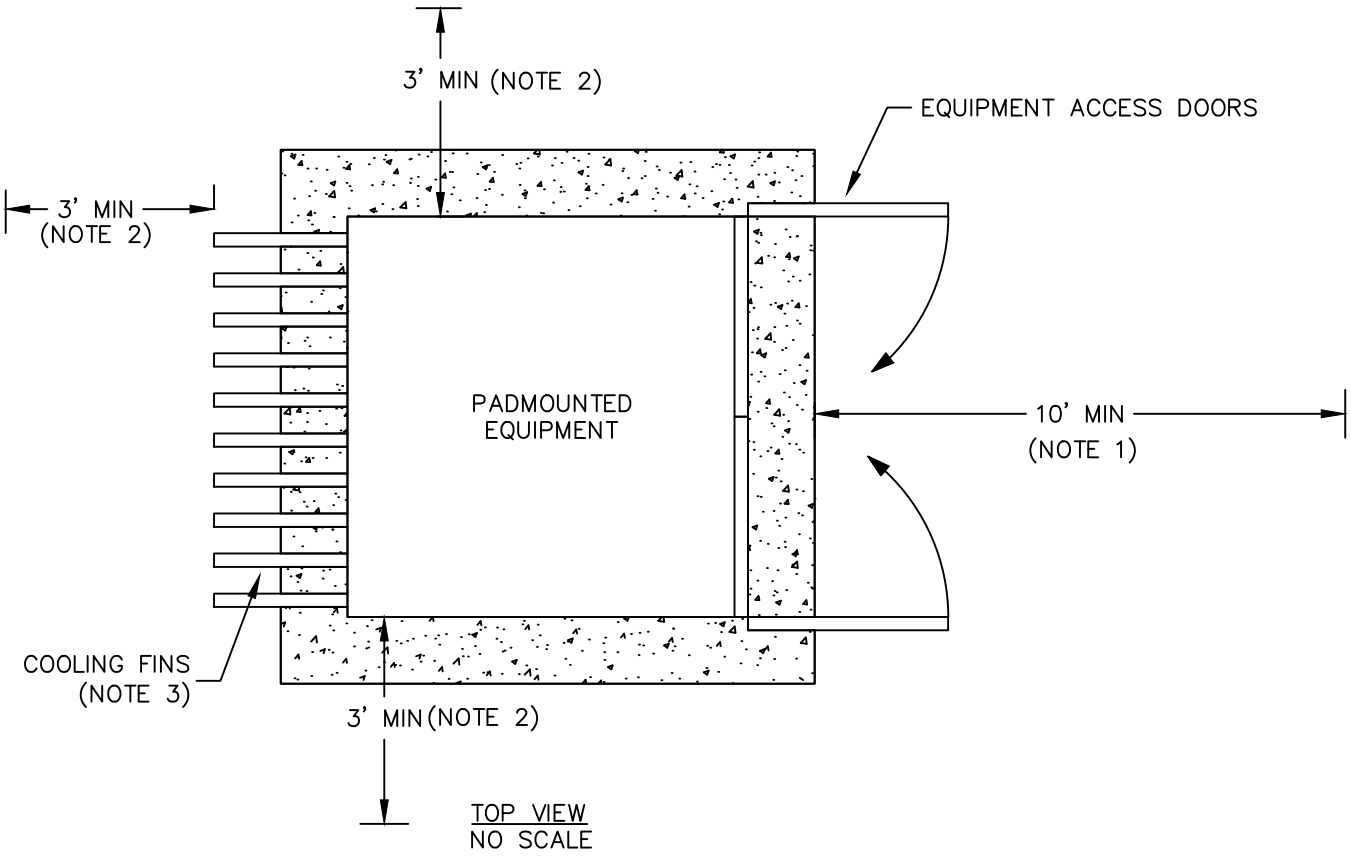
TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

Riser Pole Construction

Primary, Secondary, and PUD Communications Conduit

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	Risers	Site Work	**UR-S**



INSTALLATION NOTES:

1. A CLEAR AND LEVEL WORKING AREA EQUAL TO FULL WIDTH OF PADMOUNTED EQUIPMENT SHALL EXTEND A MINIMUM OF 10' FROM ANY COMPARTMENT OPENING. ONLY REMOVABLE BOLLARDS, IF REQUIRED, ARE PERMITTED TO BE INSTALLED ADJACENT TO EQUIPMENT DOORS.

2. CLEARANCE SHALL BE 3' FROM NON-COMBUSTIBLE SURFACES (BRICK, CONCRETE, STEEL) OR 10' FROM COMBUSTIBLE SURFACES.

3. MINIMUM OF 3' CLEAR WORKING AREA SHALL BE MAINTAINED ON ALL SIDES OF EQUIPMENT WITHOUT OPENINGS, INCLUDING EQUIPMENT COOLING FINS. SEE NOTE 2.

4. CLEAR WORKING AREA SHALL MEAN NO FENCES, SHRUBS, TREES, UTILITY PEDESTALS OR OTHER OBSTRUCTIONS.

UP-1.DWG

TRUCKEE DONNER Public Utility District

ELECTRIC DEPARTMENT

General Clearance Requirements

Pad Mounted Equipment

Drawn	Design	Approved	Date	Category	Voltage	
JJC	SMS	SMS	3/25/21	UG	Site Work	UP-1