

- NOTES:**
- ALL ITEMS SHOWN ARE NEW.
  - ORIENTATION OF CONDUITS TO BE FIELD COORDINATED BY THE CONTRACTOR.
  - KEEP CABLES/CONDUCTORS OFF OF THE FLOOR OF CABLE VAULTS.
  - SEE TECHNICAL SPECIFICATION SECTION 33 71 02.00 25 FOR LADDER REQUIREMENTS IN CABLE VAULTS.
  - IDENTIFICATION LETTERING SHALL BE ADDED USING A WELD BEAD (4" HIGH X 1/2" WIDE MIN.). AREA DAMAGED BY WELD SHALL BE REFINISHED WITH A GALVANIZING SPRAY.
  - PROVIDE PULL CORDS AND PLUGS, IN ACCORDANCE WITH SPECIFICATIONS, FOR ALL SPARE CONDUITS.
  - PROVIDE SPLIT SECTION OF INNERDUCT OVER FIBER OPTIC CABLE TO PROTECT FROM RODENTS. INNERDUCT SHALL EXTEND INTO CONDUITS AT EACH END. TIE-WRAP SPLIT INNERDUCT AT MAX. 6" INTERVALS. INSTALL DUCT SEAL AROUND INNERDUC AT CONDUIT ENTRY.
  - BOND METAL LID WITH A MESH COPPER BONDING STRAP (#6 AWG EQUIVLENT).
  - PROVIDE CONDUIT AND CABLE I.D. TAGS IN HANDHOLES AND CABLE VAULTS IN ACCORDANCE WITH DETAILS ON SHEET E-502.

US Army Corps  
of Engineers  
PORTLAND DISTRICT

ADVERTISE

|                                       |                        |                     |
|---------------------------------------|------------------------|---------------------|
| DESIGNED BY:<br>E. BARNISTER          | DRAWN BY:<br>C. G. BY: | DATE:<br>11/17/2022 |
| SUBMITTED BY:<br>WILLIAM FORTUNE P.E. | CONTRACT NO.:          | SOLICITATION NO.:   |
| FILE NAME:<br>DXF 101 ES502.dgn       | FILE NUMBER:           |                     |

DEXTER DAM AND RESERVOIR  
ADULT FISH FACILITY UPGRADE

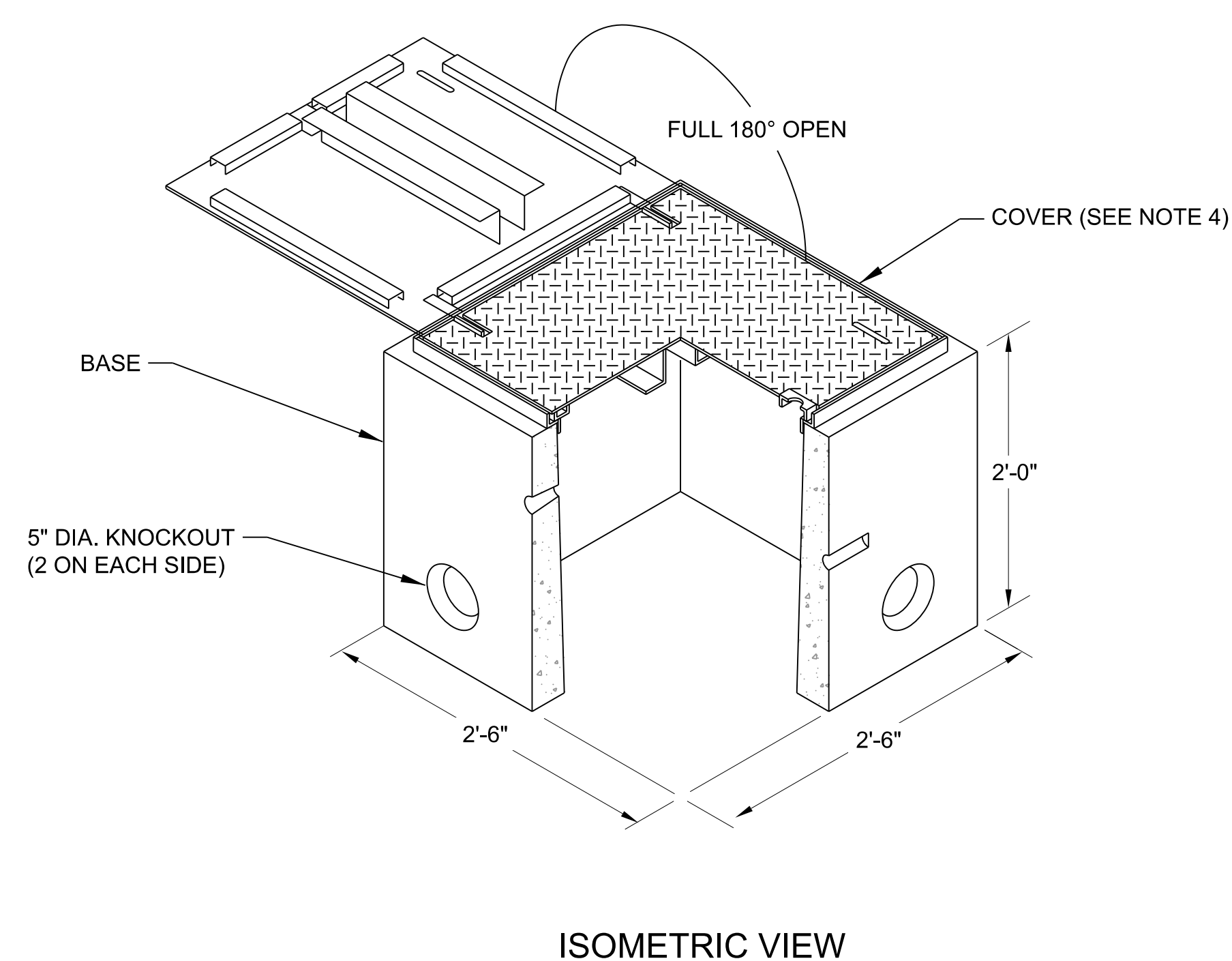
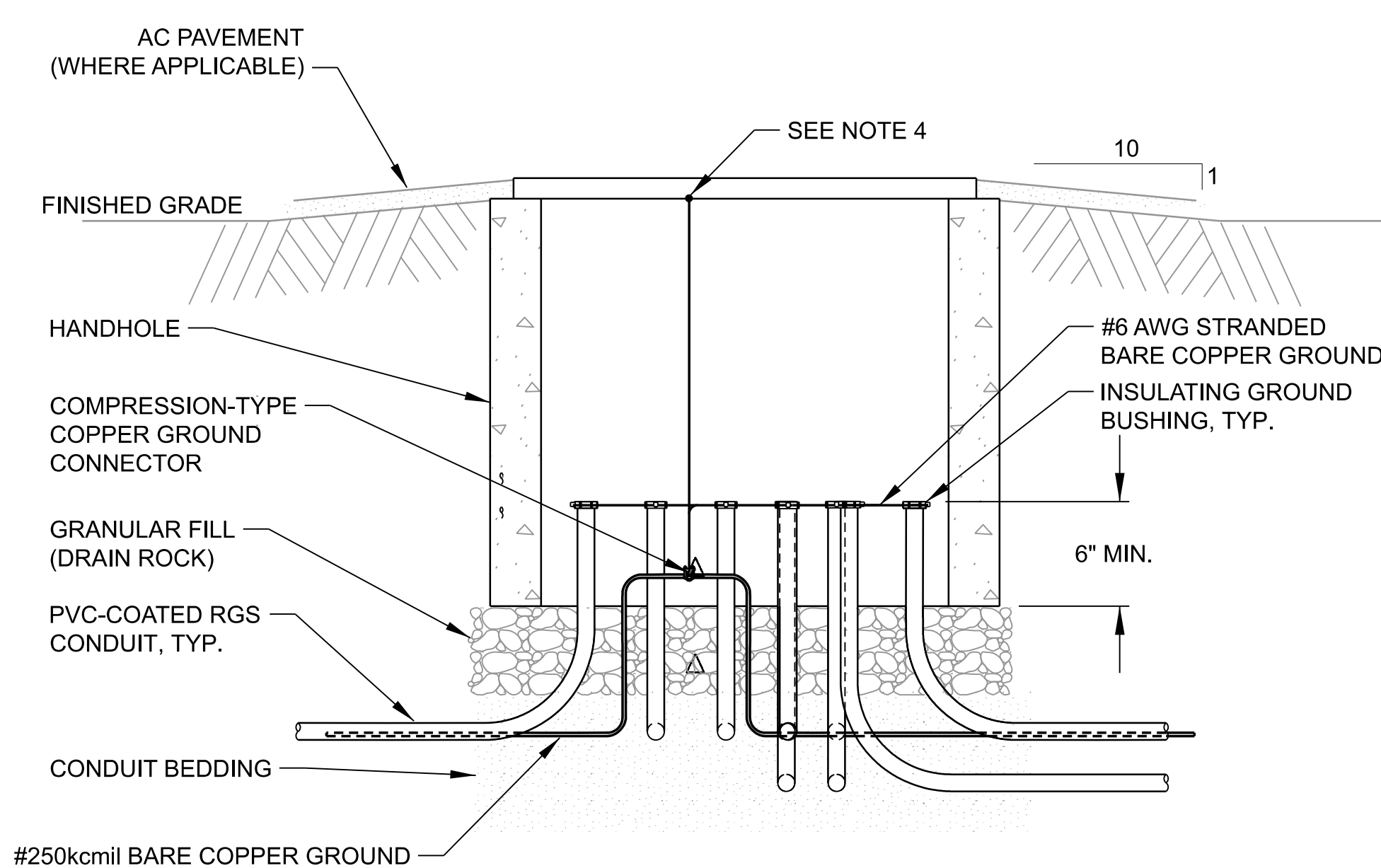
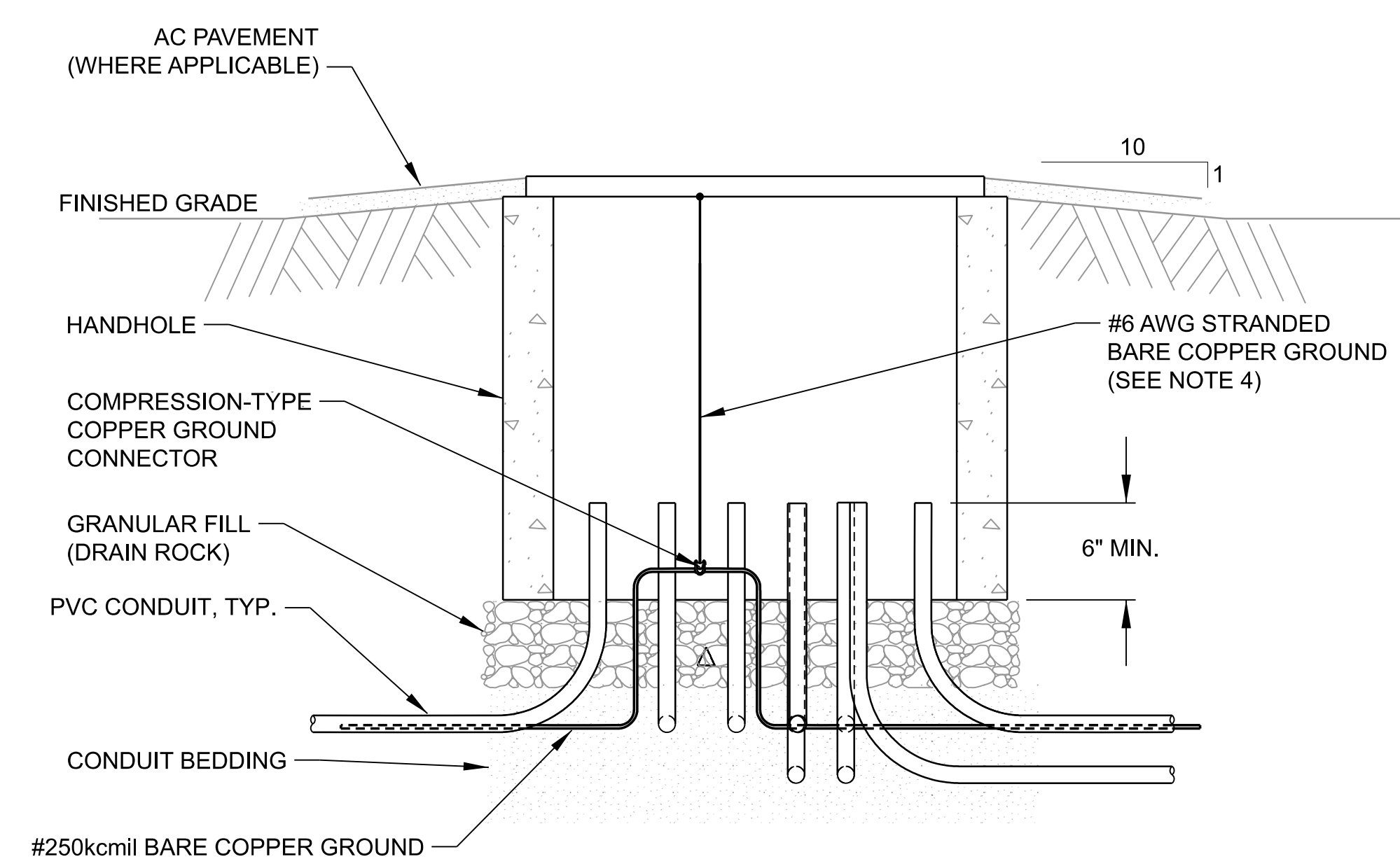
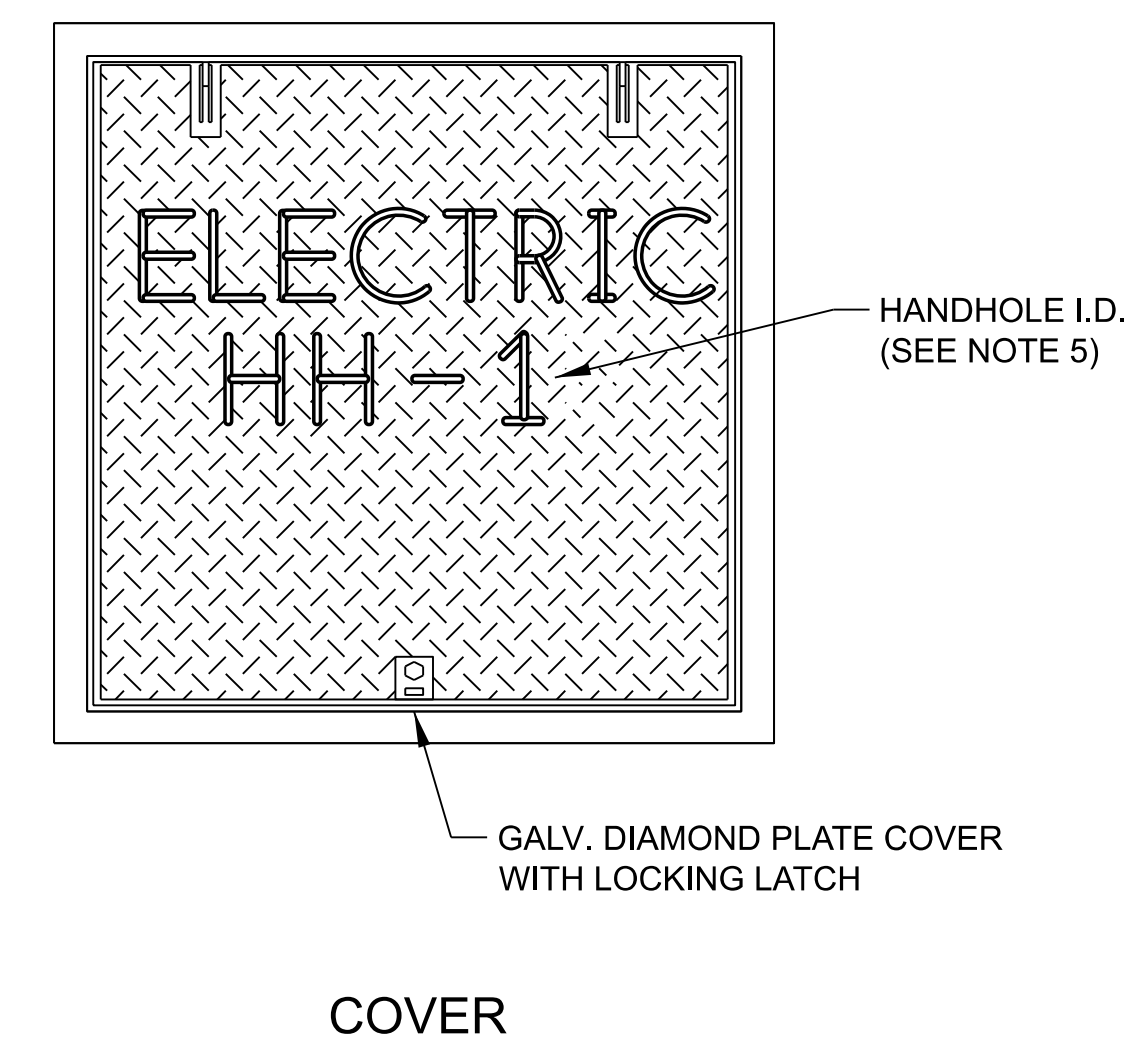
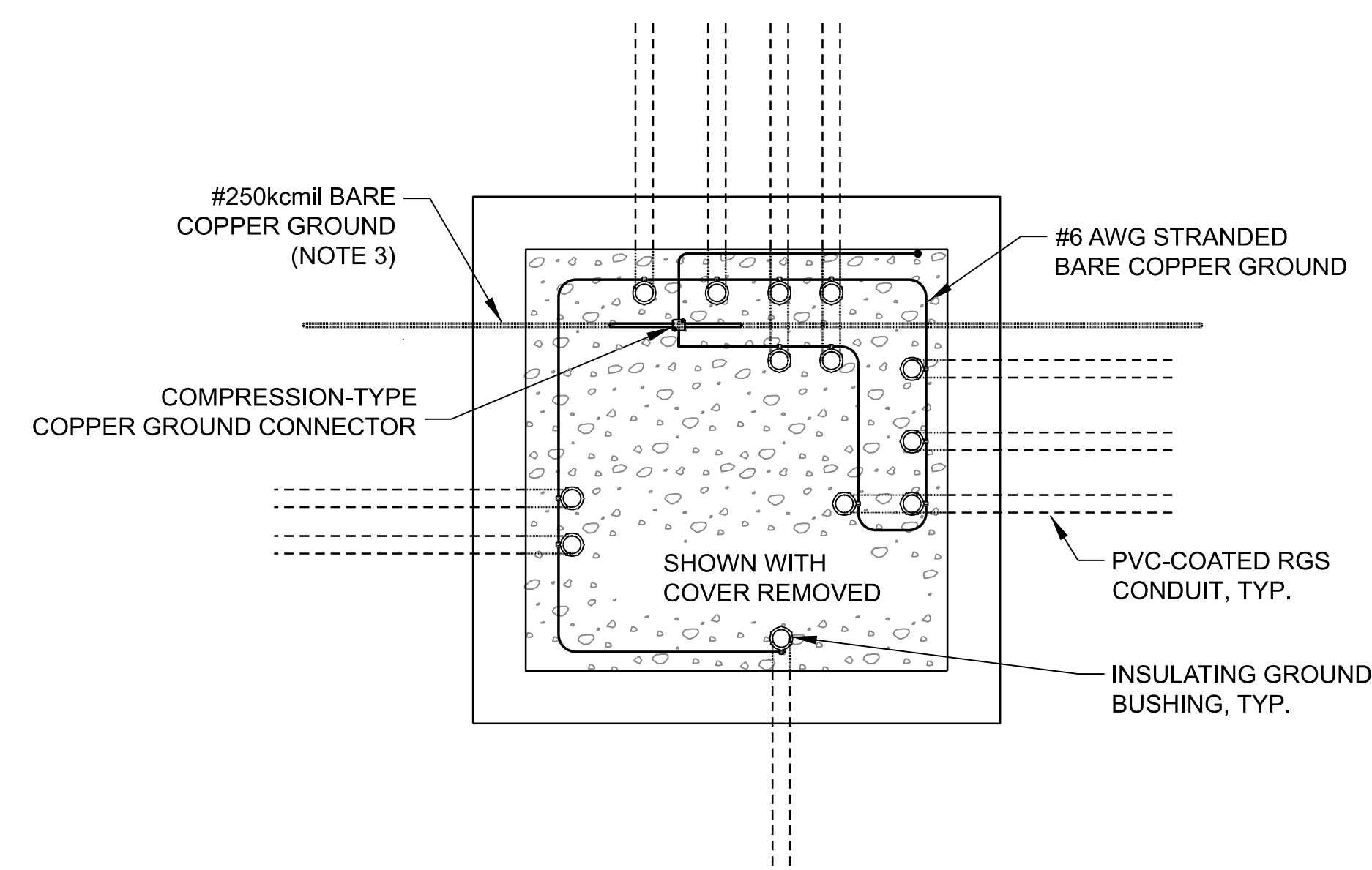
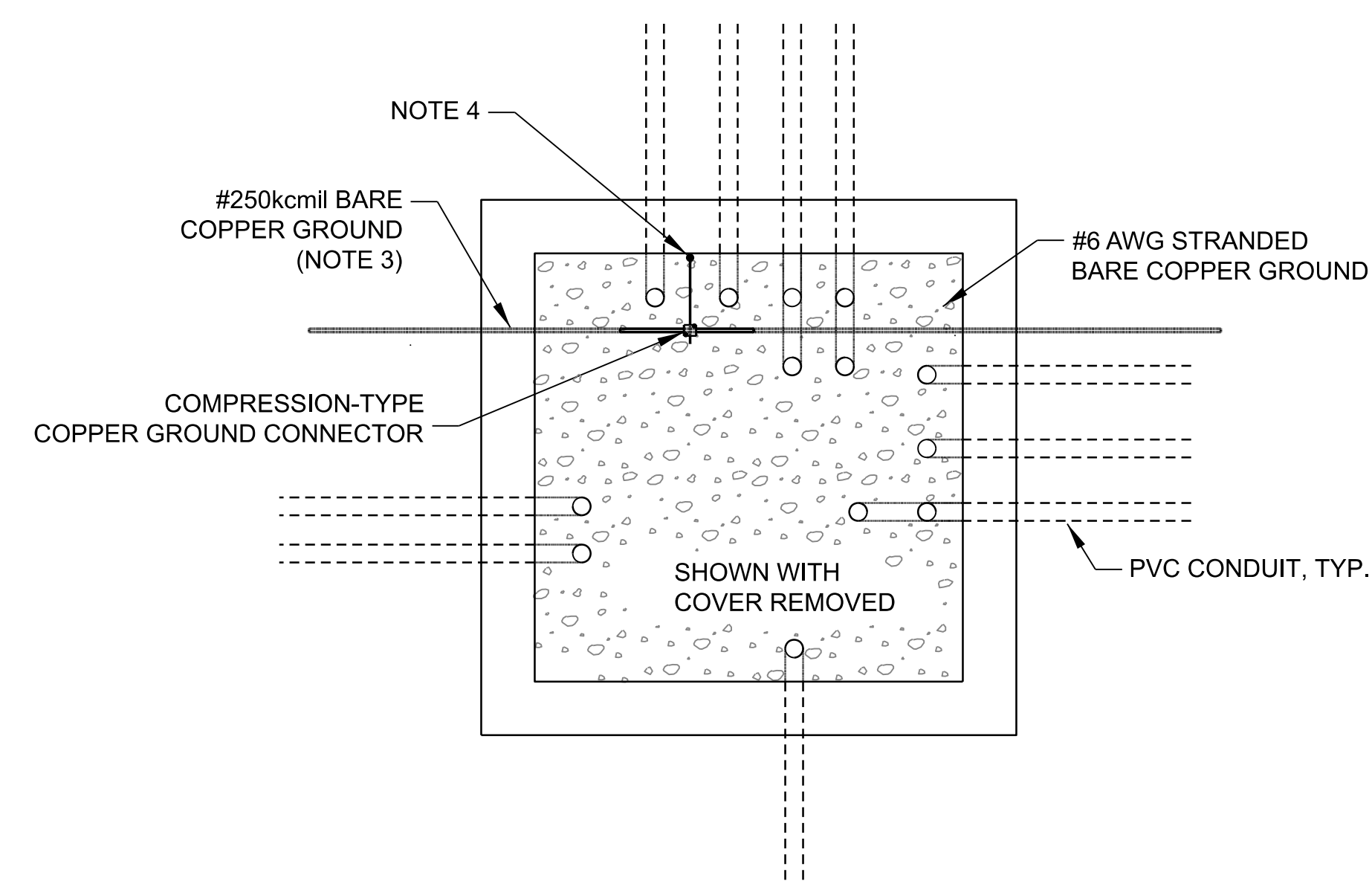
SITE WORK  
CABLE VAULT DETAILS  
SHEET 2

SHEET  
IDENTIFICATION  
ES502









## HH-1 THRU HH-7

TYP. HANDHOLE DETAIL

---

NO SCALE

NO SCALE

- NOTES:

1. ALL ITEMS SHOWN ARE NEW.
2. PROVIDE CONDUIT AND CABLE I.D. TAGS IN HANDHOLES AND CABLE VAULTS IN ACCORDANCE WITH DETAILS ON SHEET E-502.
3. KEEP CABLES/CONDUCTORS OFF OF GROUND IN HANDHOLES.
4. BOND METALCOVER WITH COPPER GROUNDING STRAP (#6 AWG EQUIVLENT).
5. IDENTIFICATION LETTERING SHALL BE ADDED USING A WELD BEAD (4" HIGH X 1/4" WIDE MIN.). AREA DAMAGED BY WELD SHALL BE REFINISHED WITH A GALVANIZING SPRAY.
6. PROVIDE PULL CORDS AND PLUGS, IN ACCORDANCE WITH SPECIFICATIONS, FOR ALL SPARE CONDUITS.
7. ORIENTATION OF CONDUITS TO BE FIELD COORDINATED BY THE CONTRACTOR.



ADVERTISE

|                              |                                       |                              |
|------------------------------|---------------------------------------|------------------------------|
| U.S. ARMY CORPS OF ENGINEERS | DESIGNED BY:<br>G. BANISTER           | DATE:<br>1/17/2022           |
| PORTLAND DISTRICT            | CHECK BY:<br>BANISTER                 | PROJECT NO.:<br>W9127A2-0000 |
| PORTLAND, OREGON             | SUBMITTED BY:<br>WILLIAM FORTUNE P.E. | CONTRACT NO.:                |
|                              | PLOT SCALE: 1:1                       | FILE NUMBER:<br>118/2022     |

# DEXTER DAM AND RESERVOIR ADULT FISH FACILITY UPGRADE

SITE WORK  
HANDHOLE DETAILS  
SHEET 2

SHEET  
IDENTIFICATION  
**ES504**



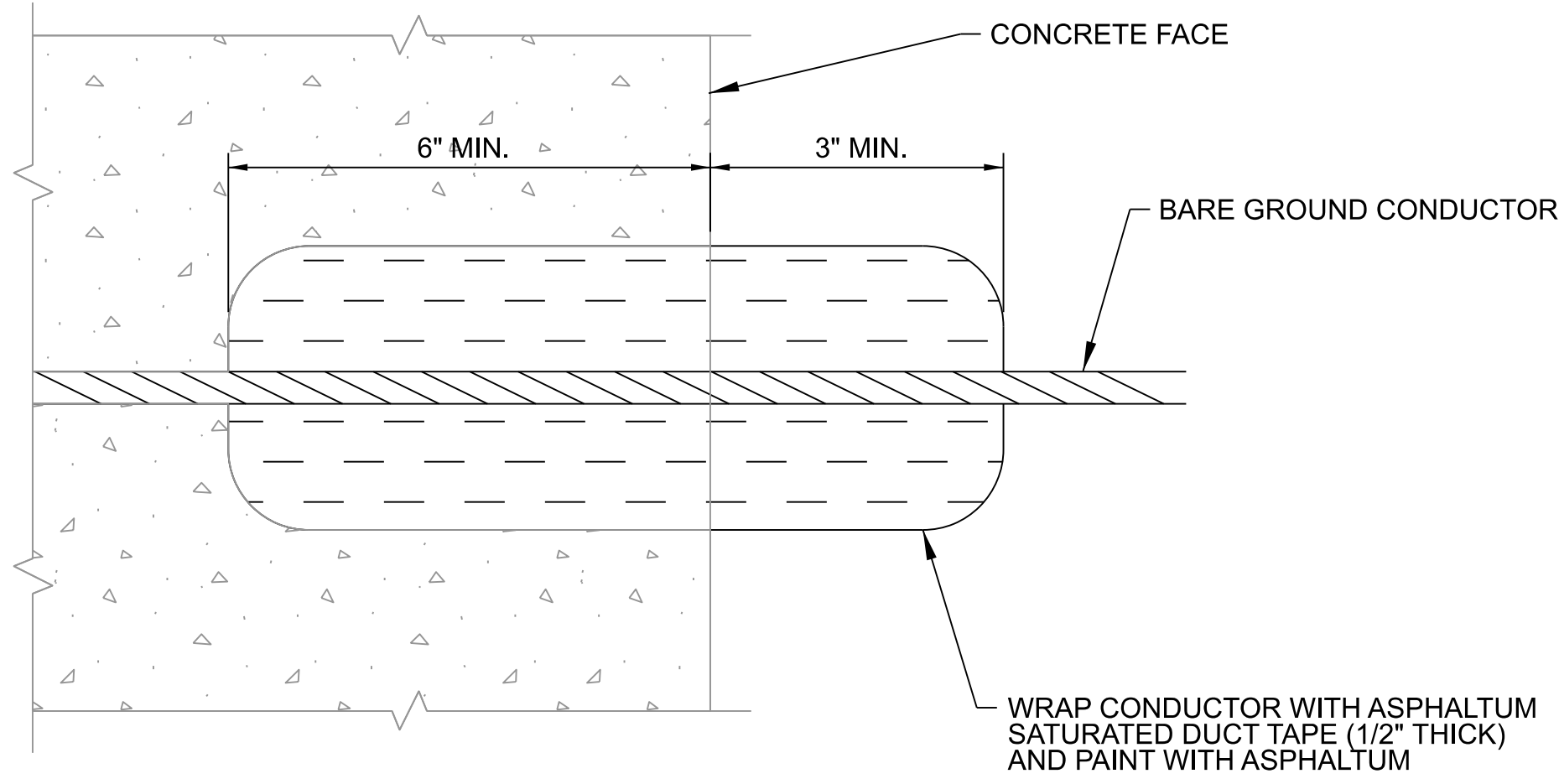
E

D

C

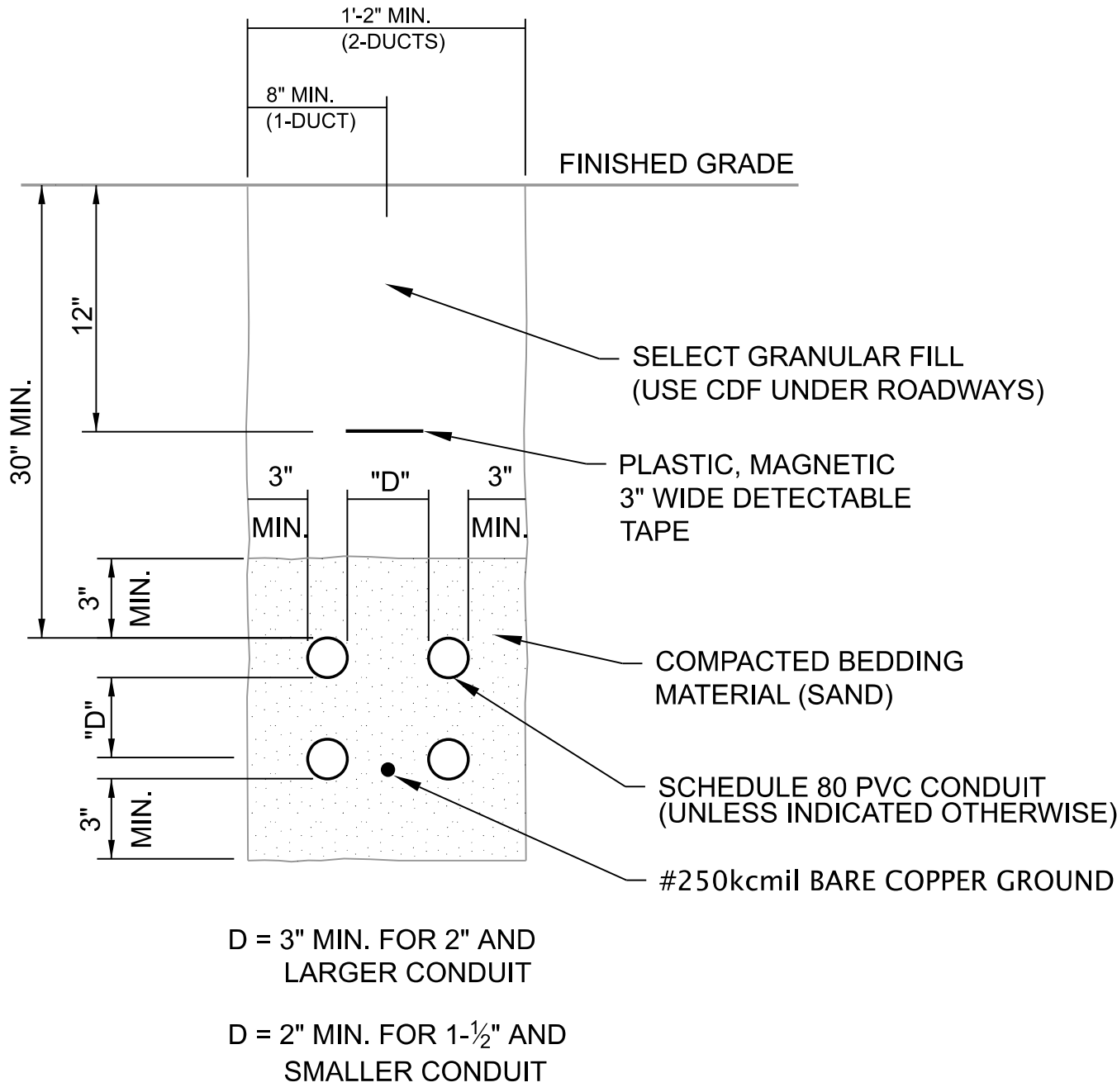
B

A



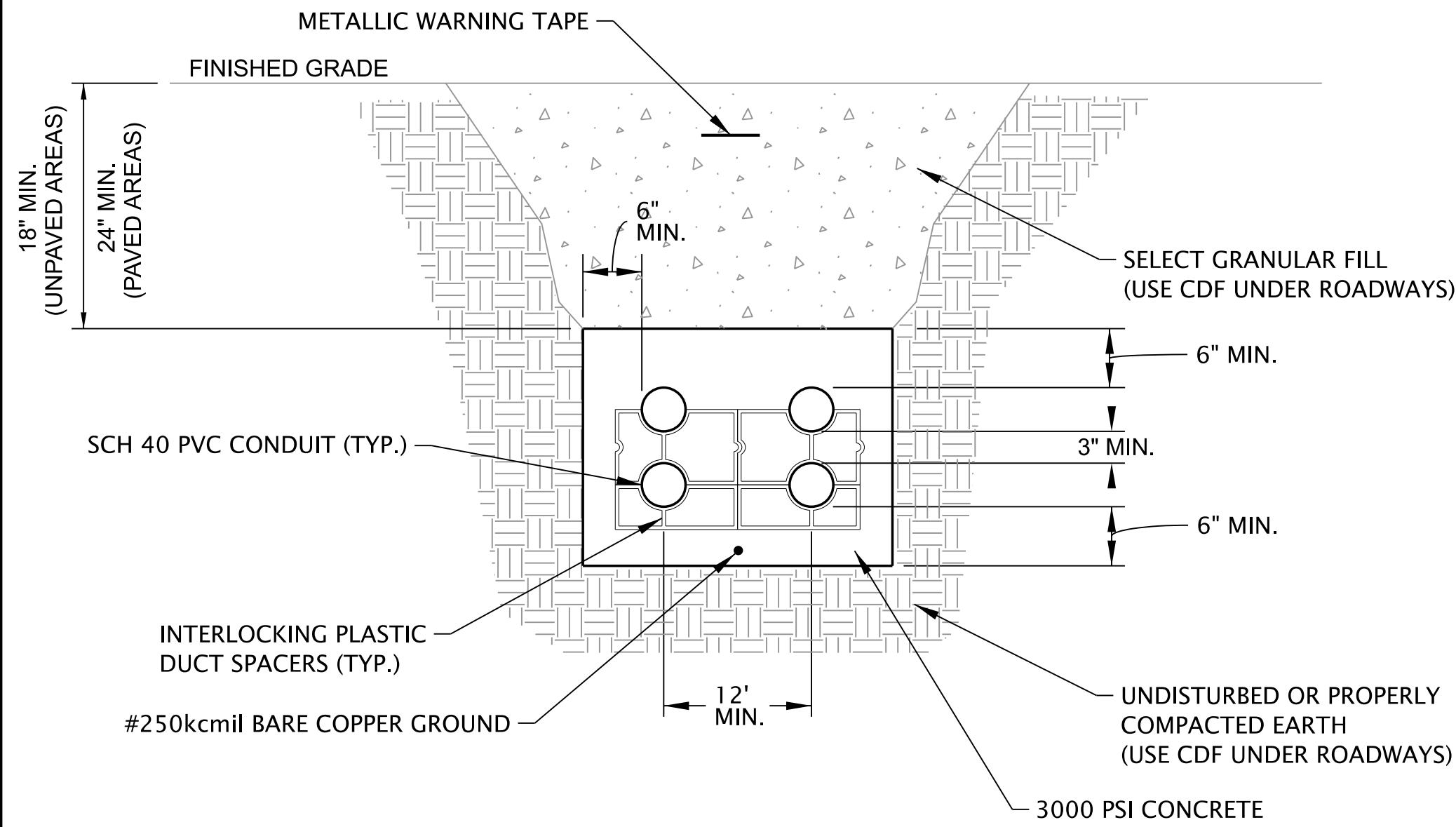
BARE GROUND CONDUCTOR PENETRATION  
OF CONCRETE FACE (FOUNDATIONS)

11  
DETAIL  
NO SCALE



TYP. DIRECT-BURY TRENCH

12  
DETAIL  
NO SCALE



TYP. NONREINFORCED CONCRETE-ENCASED DUCTBANK  
(CONNECTION BETWEEN CABLE VAULTS)

13  
DETAIL  
NO SCALE

NOTES:

1. ALL ITEMS SHOWN AE NEW.
2. SEE SHEET E-001 FOR SYMBOL LEGEND.
3. PROVIDE CONCRETE BASE AND ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.



US Army Corps  
of Engineers  
PORTLAND DISTRICT

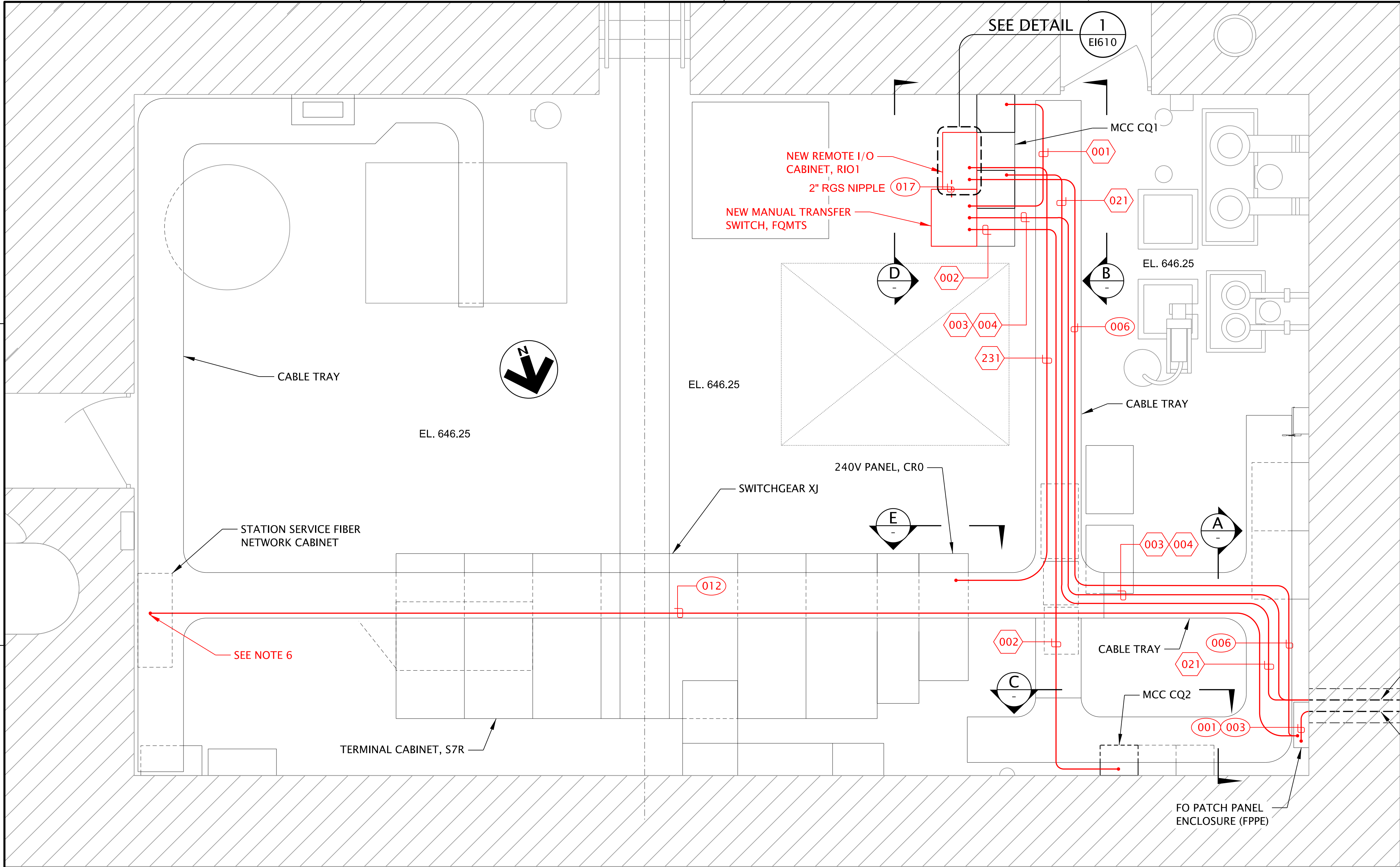
ADVERTISE

|                                       |                                 |                     |
|---------------------------------------|---------------------------------|---------------------|
| DESIGNED BY:<br>E. BARNISTER          | DRAWN BY:<br>C. G. BY:          | DATE:<br>11/17/2022 |
| SUBMITTED BY:<br>WILLIAM FORTUNE P.E. | FILE NAME:<br>DXF 101 ES505.dgn | FILE NUMBER:        |
| CONTRACT NO.:                         | CONTRACT NO.:                   | CONTRACT NO.:       |

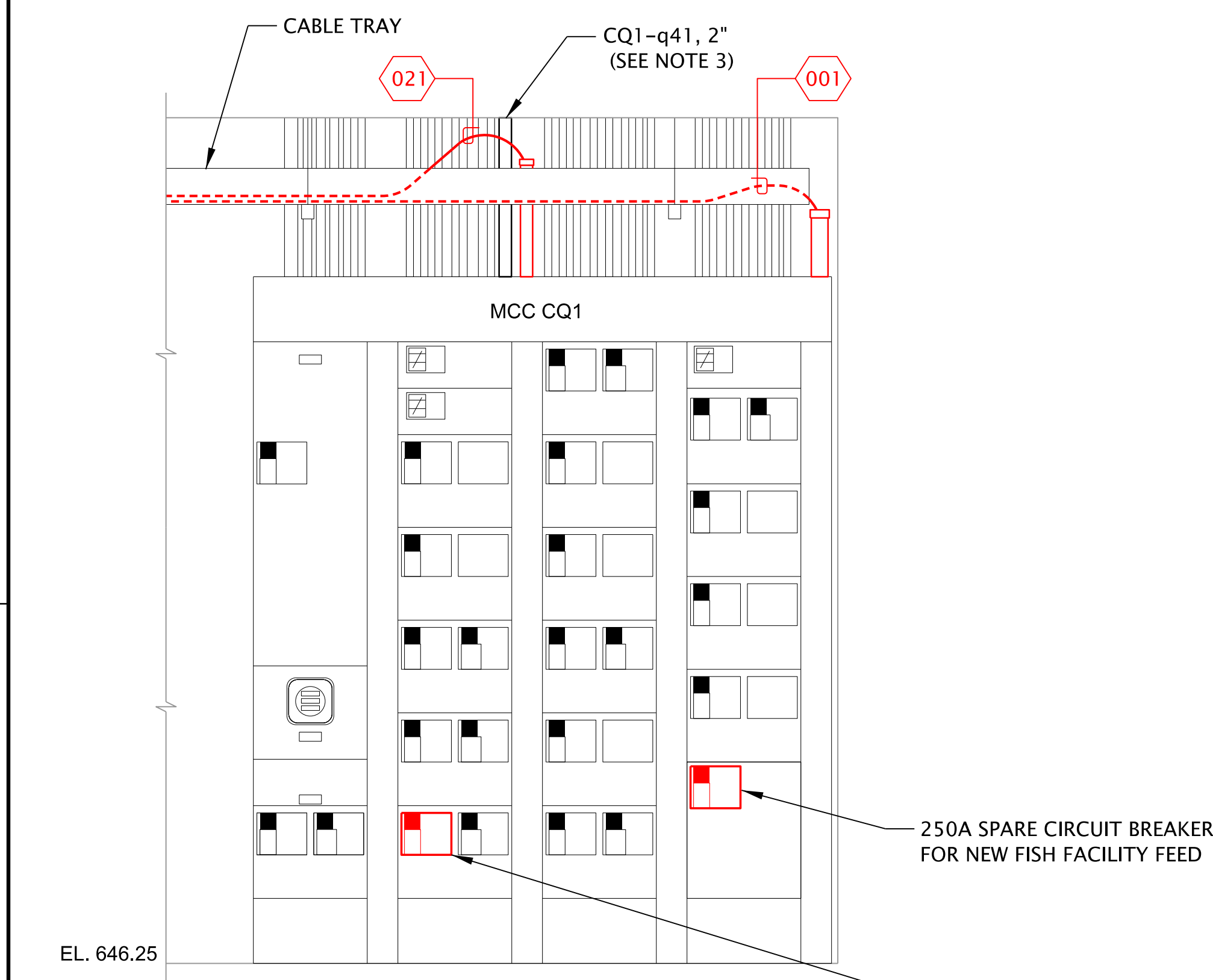
DEXTER DAM AND RESERVOIR  
ADULT FISH FACILITY UPGRADE  
SITE WORK  
MISCELLANEOUS DETAILS

SHEET  
IDENTIFICATION  
ES505

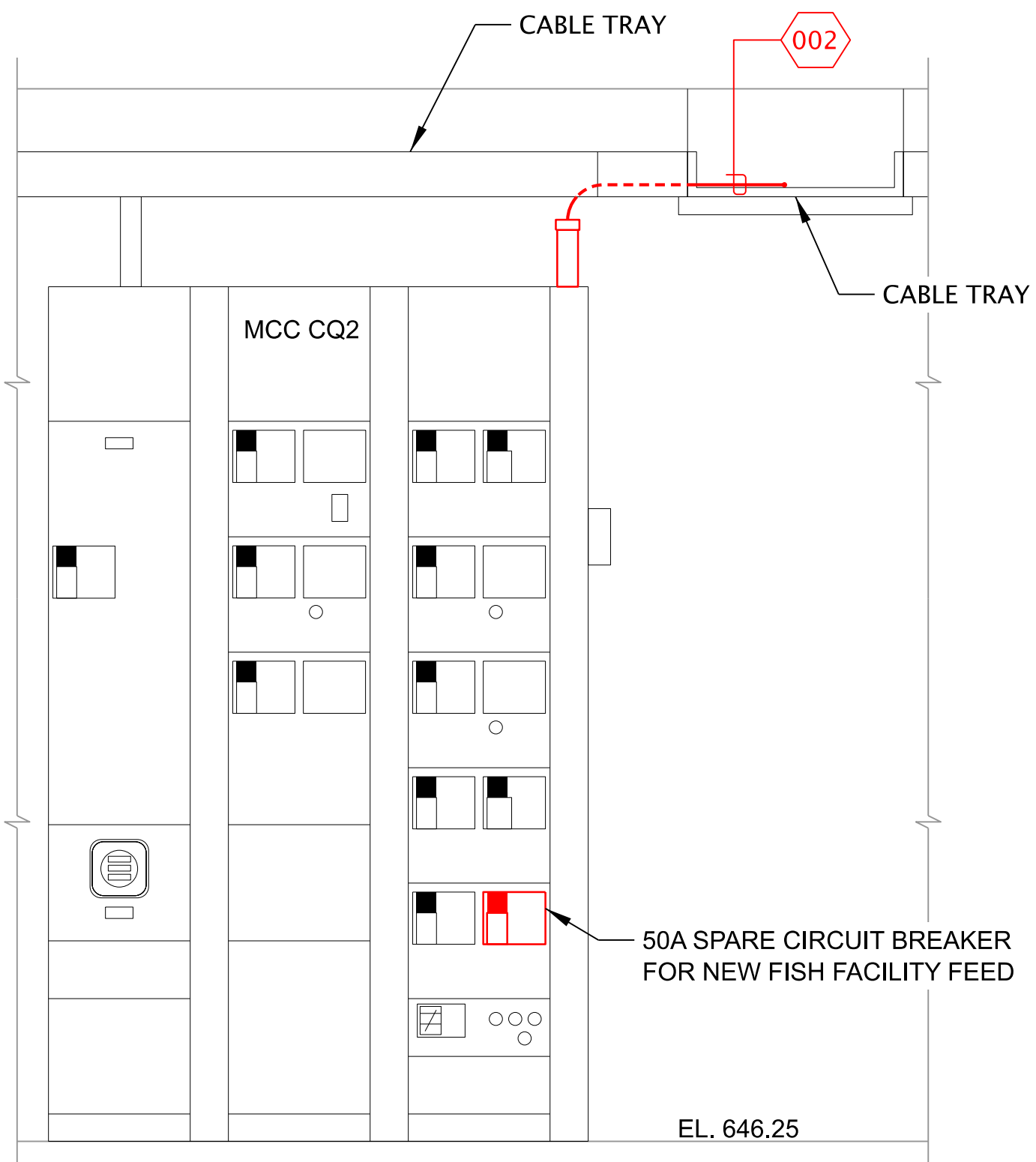




1  
E-101  
PARTIAL PLAN - TURBINE ROOM  
SCALE: 3/8" = 1'-0"

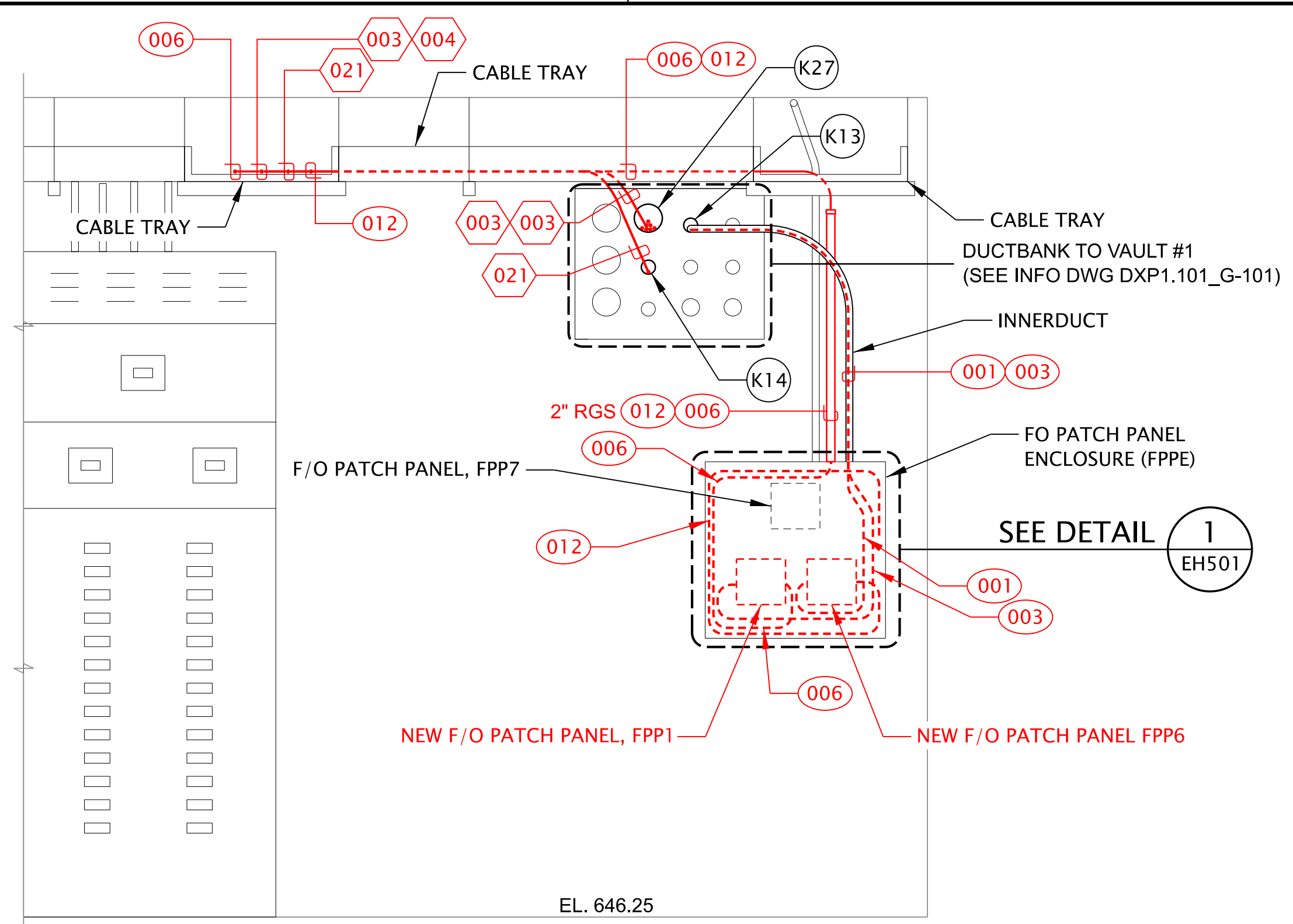


B  
ELEVATION  
SCALE: 3/4" = 1'-0"

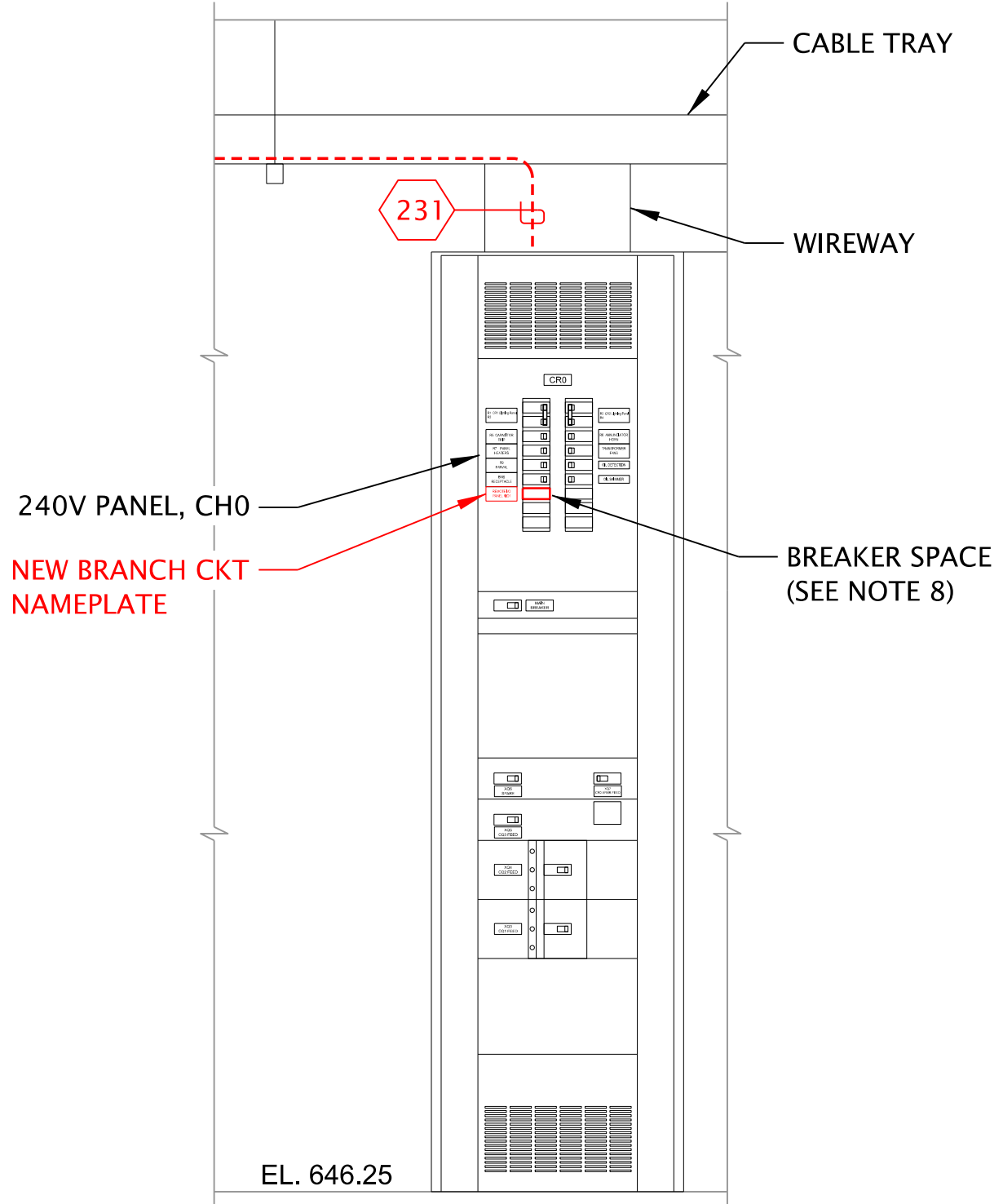


C  
ELEVATION  
SCALE: 3/4" = 1'-0"

SCALE: 3/8" = 1'-0"  
12" 0 2' 4' 6'  
SCALE: 3/4" = 1'-0"  
12" 6" 0 1' 2'



A  
ELEVATION  
SCALE: 3/4" = 1'-0"



E  
ELEVATION  
SCALE: 3/4" = 1'-0"

INFORMATIONAL DRAWINGS:

- |  |   |
|--|---|
| DXP1.101_G-101<br>DXP1.101_S-501<br>DXP-10-6-1A/4/1                  | DEXTER DAM EDG -- SITE PLAN<br>DUCTBANK -- SECTIONS AND DETAILS<br>POWERHOUSE ELECTRICAL -- CQ1 AND CQ2 CONTROL CENTERS<br>CQ3 PANELBOARD ARRANGEMENT DIAGRAM<br>ELECTRICAL RELIABILITY UPGRADES -- GENERATOR BUILDING<br>CONDUIT PLAN<br>POWERHOUSE ELECTRICAL - POWER AND CONTROL<br>CONDUITS - TURBINE, CO-2 & OIL ROOMS AND TURBINE PIT<br>POWERHOUSE ELECTRICAL - POWER AND CONTROL<br>CONDUITS - GENERATOR FLOOR<br>POWERHOUSE ARRANGEMENT -- PLAN EL. 646.25 TURBINE<br>CO2 AND OIL ROOMS<br>POWERHOUSE ELECTRICAL -- SWITCHGEAR ARRANGEMENT |
| DXP1.101_E-110<br>DX-113-64<br>DX-113-65<br>DX-113-101<br>DX-113-120 |   |

NOTES:

- ALL ITEMS SHOWN ARE EXISTING UNLESS INDICATED OTHERWISE. NEW ITEMS SHOWN IN RED.
- REUSE EXISTING 70A CIRCUIT BREAKER (FOR NEW FEED TO FQ4) ONCE EXISTING CONDUCTORS TO EXISTING FISH FACILITY ARE REMOVED.
- REMOVE EXISTING CIRCUIT (CQ1-q1-FCQ) TO EXISTING FISH FACILITY. SEE INFORMATIONAL DRAWINGS DX-113-64\_REV-9 AND DX-113-65\_REV\_9.
- SEE SHEET E-001 FOR SYMBOL LEGEND.
- SEE SHEETS E-703 THRU E-718 FOR CONDUIT AND CABLE SCHEDULES.
- PROVIDE 10' SLACK CABLE TO ALLOW FINAL CONNECTIONS BY OTHERS.
- PROVIDE CABLE GLANDS AT ENDS OF ALL CONDUITS EMPTYING INTO CABLE TRAY.
- PROVIDE NEW 20A, 1-POLE CIRCUIT BREAKER. SEE SHEET E-602.



US Army Corps  
of Engineers  
PORTLAND DISTRICT

| DATE       | DESCRIPTION | MARK |
|------------|-------------|------|
| 11/17/2022 | ADVERTISE   |      |

|                                   |                                       |                               |
|-----------------------------------|---------------------------------------|-------------------------------|
| DESIGNED BY:<br>E. BANISTER       | CHECKED BY:<br>C. GRIFFIN             | FILE NUMBER:<br>DXF 101 E-101 |
| DRAWN BY:<br>WILLIAM FORTUNE P.E. | SUBMITTED BY:<br>WILLIAM FORTUNE P.E. | FILE NAME:<br>DXF 101 E-101   |
| SHEET<br>SIZE:<br>ANSI            |                                       |                               |

DEXTER DAM AND RESERVOIR  
ADULT FISH FACILITY UPGRADE  
POWERHOUSE MODIFICATIONS  
TURBINE ROOM - EL. 646.25  
PARTIAL PLAN AND ELEVATIONS

SHEET  
IDENTIFICATION  
EH101





NO SCALE

NOTE 1: LAYOUT, COMPONENTS, AND QUANTITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY AND PROVIDE ALL MATERIALS AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.



ADVERTISE

|   |                                       |                                   |
|---|---------------------------------------|-----------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>PORTLAND DISTRICT<br>PORTLAND, OREGON | DESIGNED BY:<br>V. BOLDING            | DATE:<br>11/17/2022               |
|   | DWN BY:<br>BOLDING                    | SOLICITATION NO.:<br>W912723R0005 |
|   | SUBMITTED BY:<br>WILLIAM FORTUNE P.E. | CONTRACT NO.:                     |
|   | PLOT SCALE:<br>1"=1'                  | FILE NUMBER:                      |
|   | SIZE:<br>ANSI F                       | FILE NAME:<br>DXF1_101_EH501.dwg  |

## POWERHOUSE MODIFICATIONS COMMUNICATION CABINET LAYOUT AND DETAILS

SHEET  
IDENTIFICATION  
**EH501**

## DXD-10-6-3A37-1 REV-1 FIBER OPTIC TRANSMISSION SYSTEM RISER DIAGRAM &amp; LAYOUT

1. ALL ITEM SHOWN ARE EXISTING UNLESS INDICATED OTHERWISE. ITEMS SHOWN IN RED ARE NEW OR R BEING MODIFIED.
2. PROVIDE ALL WIRING AND MISCELLANEOUS COMPONENTS AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM. ONLY MAJOR COMPONENTS SHOWN.
3. PROVIDE FIBER TRUNK CABLE SERVICE LOOPS IN ACCORDANCE WITH SPECIFICATION SECTION 27 21 10.00 25.