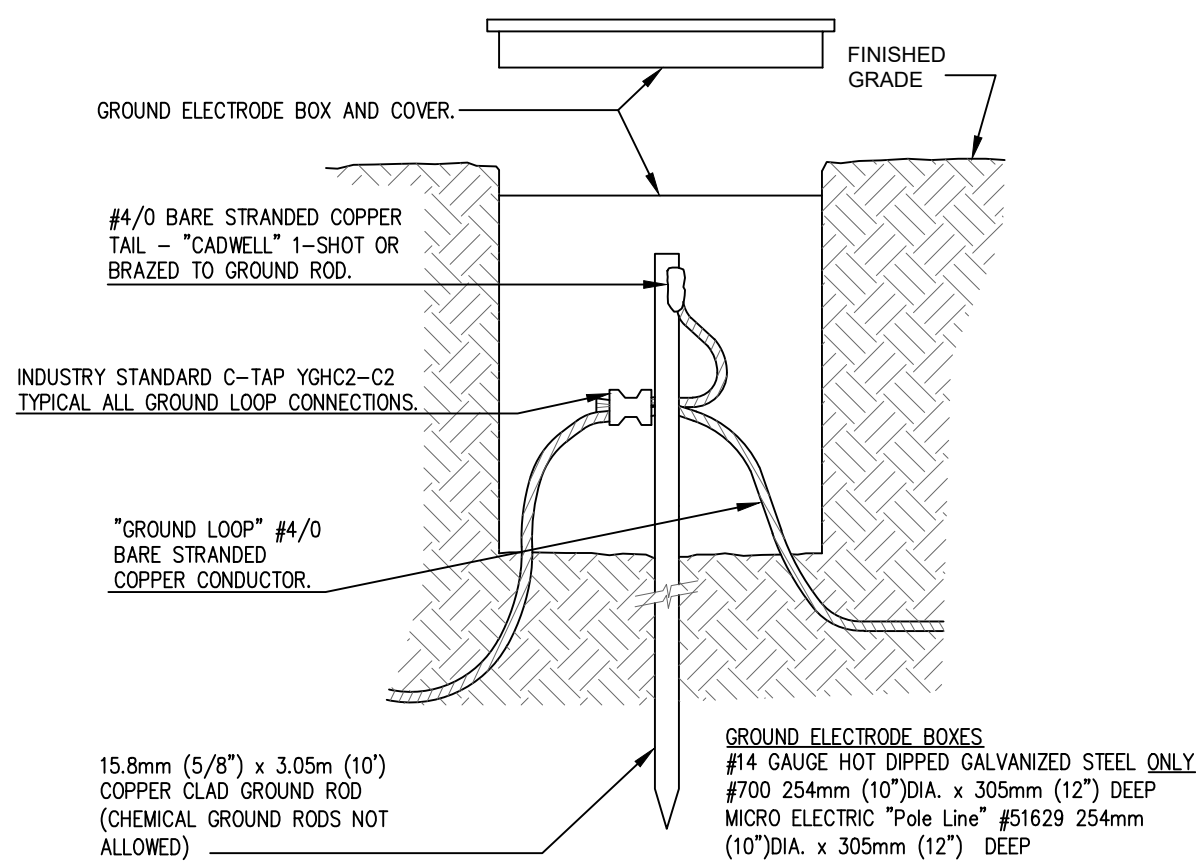
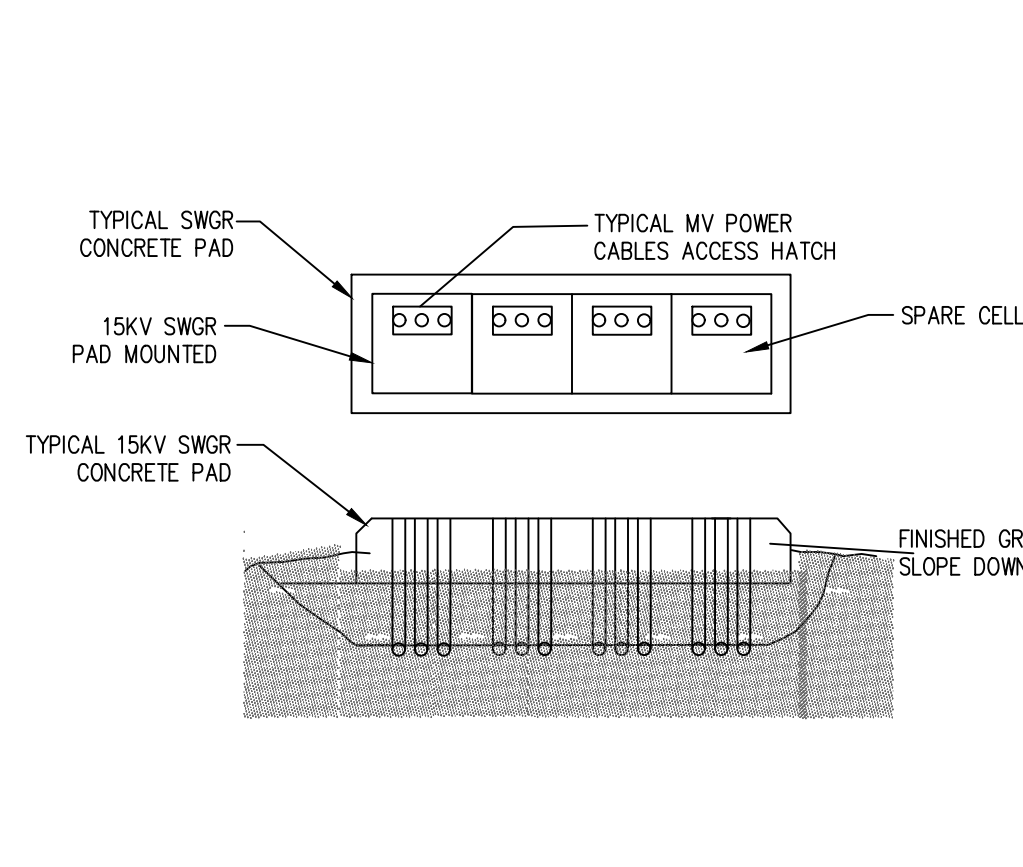


1
E-3
NTS



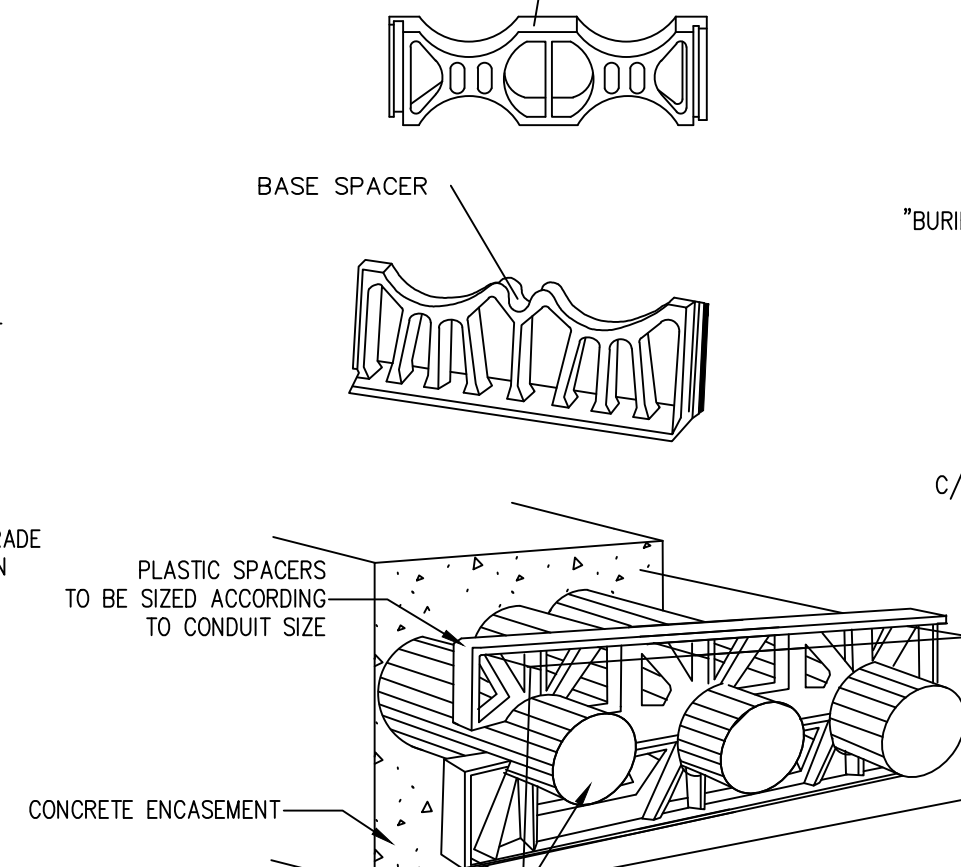
2
E-3
NTS

1. WHEN INSTALLING COVERS, SET THE TOP OF THE CANISTER APPROXIMATELY 50mm (2") BELOW GRADE. REQUEST INSPECTION OF GROUNDING SYSTEM PRIOR TO COVERING TO GRADE LEVEL.
2. PROVIDE INSPECTION BOXES FOR BOTH NEW 15kVA SWITCHGEAR AND NEW 100kVA TRANSFORMER. MINIMUM OF 4 INSPECTION BOX FOR EACH (TOTAL OF 8).
3. COORDINATE ON SITE WITH LOCAL AUTHORITY BEFORE ROUGH-IN AND PLACEMENT OF THE INSPECTION BOX.



3
E-3
NTS

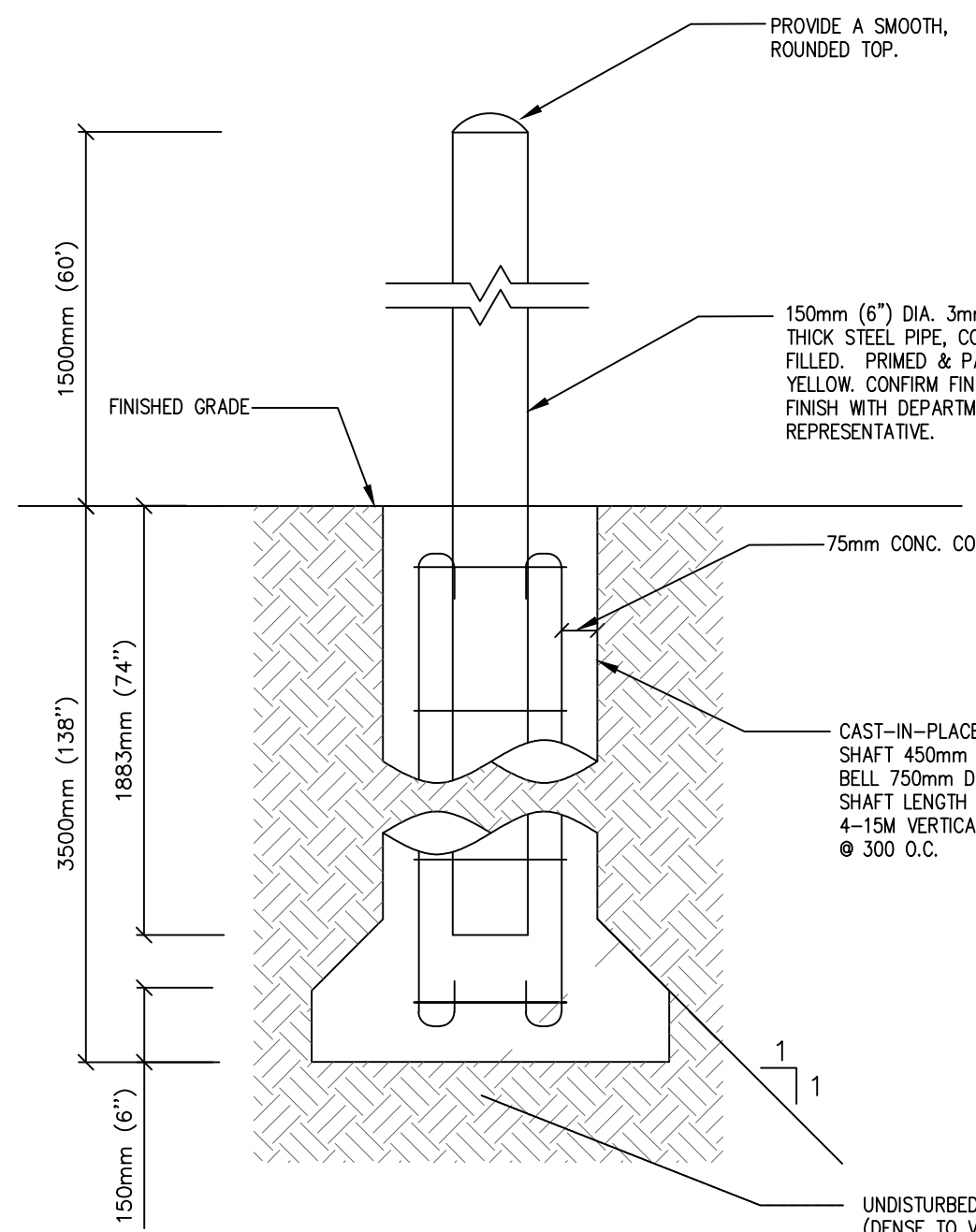
1. CONCRETE TO HAVE MIN 28 DAY SPECIFIED STRENGTH OF AS SPECIFIED BY STRUCTURAL/CIVIL ENGINEER.
2. REINFORCING BARS SHALL BE AS SPECIFIED BY STRUCTURAL/CIVIL ENGINEER.
3. CONCRETE SURFACE TO BE LEVEL AND HAVE A SMOOTH FINISH TO ALLOW WATER RUN OFF.
4. ALL DIMENSIONS AND LOAD BEARING WEIGHT TO BE COORDINATED ON SITE WITH THE NEW SWITCHGEAR AS REQUIRED; BEFORE ROUGH-IN.
5. THE INCOMING AND BRANCH SIDE CABLES ARE FOR U/G CONCRETE ENCASED DUCT BANKS.
6. CONCRETE PAD TO BE ON CONCRETE PILES.
7. REFER TO 10/E-3 FOR SUPPLEMENTAL DETAIL.
8. DETAILS STRUCTURAL DESIGN BY CIVIL/STRUCTURAL, COORDINATE ON SITE WITH CIVIL/CONTRACTOR BEFORE ROUGH-IN.



4
E-3
NTS

TYPICAL HV U/G POWER CABLES NOTES:

1. ALL DUCT BANKS SHALL BE CSA APPROVED.
2. DUCT BANK PASSING BENEATH A HIGH TRAFFIC AREA SHALL BE RUN IN CONCRETE ENCASED DUCT BANK.
3. ALL CONCRETE ENCASED DUCTS SHALL BE SUPPORTED BY CSA APPROVED SPACER AND SHALL NOT BE LESS THAN 1200mm.
4. ALL 90° BENDS IN A DUCT SHALL USE RIGID PVC. FOR THE U/G RUN SHALL BE DB-2 DUCT BANKS LONG SWEET 90° RIGID PVC CONDUIT BENDS FOR THE POLE AND CONCRETE PADS.
5. USE 100mm DUCT FOR EACH RUN OF PRIMARY AND SECONDARY CABLES AS SHOWN ON DETAILS.
6. INSTALL MIN. OF #12 FISH WIRE IN EACH DUCT AND SECURE CAP BOTH ENDS.
7. SPARE DUCTS SHALL BE INSTALLED AS SHOWN.
8. DUCT RISERS ON THE POLE SHALL FACE AWAY FROM ANY ROADS AND/OR SIDEWALKS TO PROVIDE ADEQUATE PROTECTION FOR PERSONS IN VICINITY.
9. ALL DUCTS SHALL BE CAREFULLY INSTALLED AND ALL JOINTS, FITTINGS, COUPLINGS, ETC. ARE TO BE SOLVENT WELDED SO AS TO ENSURE A SECURE CONNECTION IS MAINTAINED. DETAILS STRUCTURAL DESIGN BY OTHERS.
10. FOR MAXIMUM PULLING TENSION FOR PRIMARY AND SECONDARY POWER CABLES.
11. REPAIR OR MAKE GOOD ALL ASPHALT, CONCRETE, GRAVEL OR GRASS SURFACES EXCAVATED BY TRENCH TO SATISFACTION OF DEPARTMENTAL REPRESENTATIVE.
12. TABLE D17K, DIAGRAM D17K, C/W CONCENTRIC GROUND WIRE, 3 CONDUCTORS, SHIELDED CABLES IN CONTACT IN CONCRETE ENCASED.
13. CONDUITS SIZE SHALL BE NO MORE THAN 40% CONDUIT FILL.
14. DETAILS STRUCTURAL DESIGN BY CIVIL/STRUCTURAL, COORDINATE ON SITE WITH CIVIL/CONTRACTOR BEFORE ROUGH-IN.

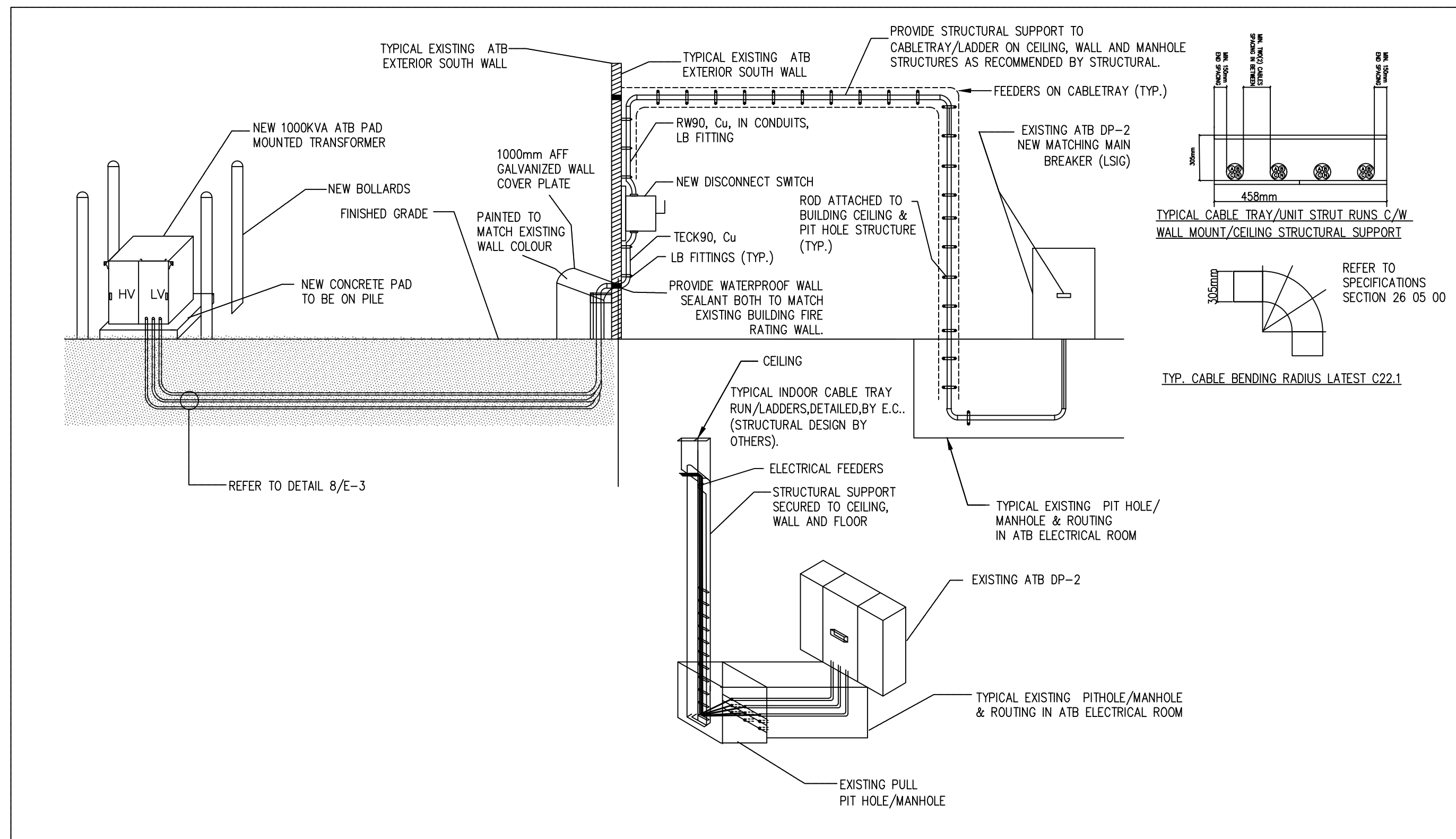


5
E-3
NTS

1. DETAILS STRUCTURAL DESIGN BY CIVIL/STRUCTURAL, COORDINATE ON SITE WITH CIVIL/CONTRACTOR BEFORE ROUGH-IN.

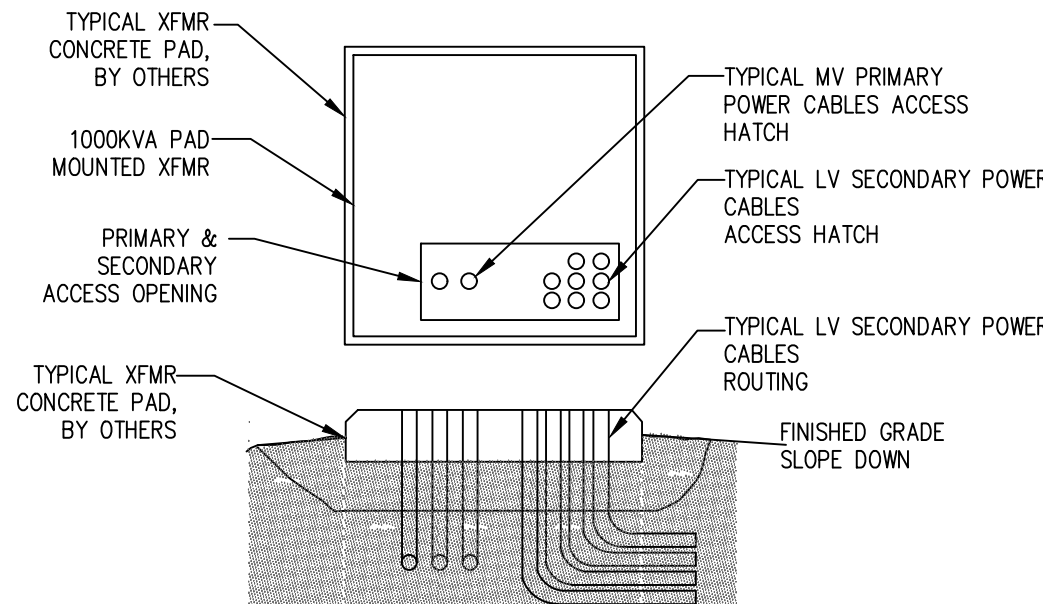
6
E-3
NTS

1. DETAIL DESIGN BY OTHERS.
2. TYPICAL DIMENSIONS (D)(W)(H)(H).
3. DETAILS STRUCTURAL DESIGN BY CIVIL/STRUCTURAL, COORDINATE ON SITE WITH CIVIL/CONTRACTOR BEFORE ROUGH-IN.



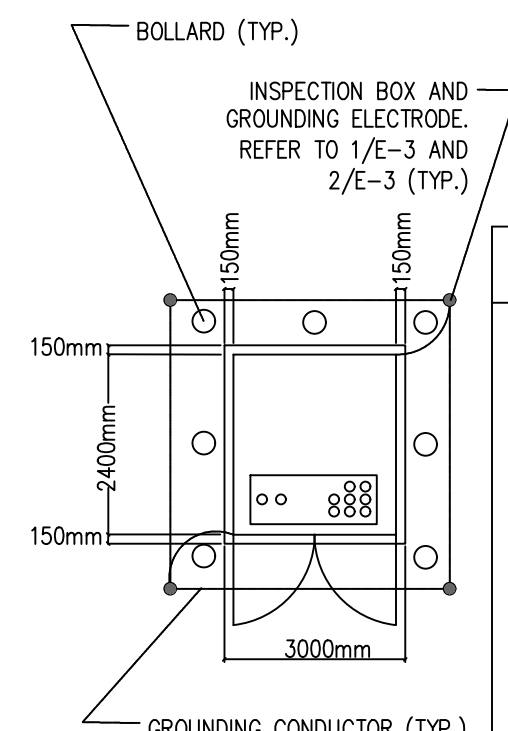
9
E-3
NTS

1. DETAILS STRUCTURAL DESIGN BY CIVIL/STRUCTURAL, COORDINATE ON SITE WITH CIVIL/CONTRACTOR BEFORE ROUGH-IN.



7
E-3
NTS

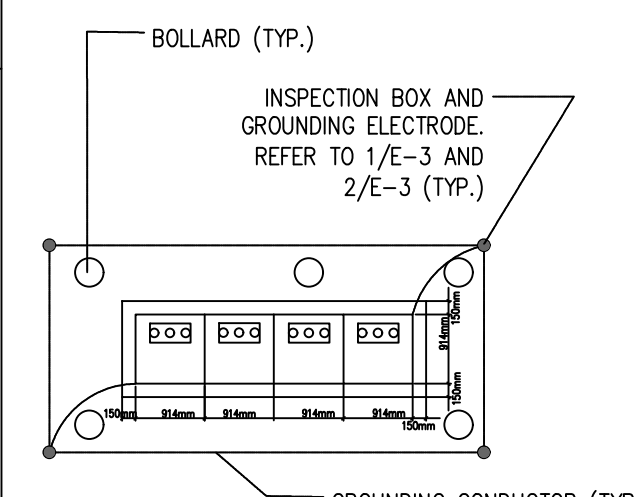
1. CONCRETE TO HAVE MIN 28 DAY SPECIFIED STRENGTH OF AS SPECIFIED BY STRUCTURAL/CIVIL ENGINEER.
2. REINFORCING BARS SHALL BE AS SPECIFIED BY STRUCTURAL/CIVIL ENGINEER.
3. CONCRETE SURFACE TO BE LEVEL AND HAVE A SMOOTH FINISH TO ALLOW WATER RUN OFF.
4. ALL DIMENSIONS AND LOAD BEARING WEIGHT TO BE COORDINATED ON SITE WITH NEW THE PAD MOUNT TRANSFORMER AS REQUIRED; BEFORE ROUGH-IN.
5. TRANSFORMER PAD TO BE C/W CONCRETE PILES.
6. REFER TO 10/E-3 FOR SUPPLEMENTAL DETAIL.
7. DETAILS STRUCTURAL DESIGN BY CIVIL/STRUCTURAL, COORDINATE ON SITE WITH CIVIL/CONTRACTOR BEFORE ROUGH-IN.



TYPICAL TRANSFORMER BOLLARDS AND GROUNDING DETAILS

TYPICAL BOLLARDS AND GROUNDING DETAILS NOTES

1. INSTALL 4/0 AWG BARE STRANDED COPPER GROUND WIRE IN ONE CONTINUOUS LENGTH TO FORM LOOP AROUND THE PADS AND COME UP THROUGH VDD IN PAD W/MAIN BURIAL DEPTH TO BE 600mm BELOW FINISHED SURFACE. LEAVE SUFFICIENT SLOPE IN GROUND WIRE FOR CONNECTION TO TRANSFORMER AND 15kV SWITCHGEAR (DEDICATED FOR EACH).
2. WHERE VEHICULAR TRAFFIC MAY BE A HAZARD, BOLLARDS SHALL BE INSTALLED. BOLLARDS ARE ONLY REQUIRED ON SITES WHERE THE HAZARD EXISTS. COORDINATE ON SITE FOR REQUIREMENTS. THEY SHALL BE INSTALLED A MINIMUM OF 150mm FROM TRANSFORMER AND 15kV SWITCHGEAR.
3. THE GROUND WIRE LOOP SHALL BE INSTALLED OUTSIDE OF THE BOLLARDS, AT 150mm FROM THE BOLLARDS.
4. COORDINATE ON SITE EQUIPMENT DIMENSIONS AND LOAD BEARING WEIGHT BEFORE POURING CONCRETES. PROVIDE THE REQUIRED DIMENSIONS AND LOAD BEARING WEIGHT REQUIREMENT AS REQUIRED.



TYPICAL SWITCHGEAR BOLLARDS AND GROUNDING DETAILS

10
E-3
NTS

1. PROVIDE INSPECTION BOXES FOR BOTH NEW 15kVA SWITCHGEAR AND NEW 100kVA TRANSFORMER. MINIMUM OF 4 INSPECTION BOX FOR EACH (TOTAL OF 8).
2. COORDINATE ON SITE WITH LOCAL AUTHORITY BEFORE ROUGH-IN AND PLACEMENT OF THE INSPECTION BOX.

3	ISSUED FOR CONSTRUCTION	JUL 29 2022
2	100% REVIEW SUBMISSION	JUN 30 2022
1	99% REVIEW SUBMISSION	MAY 27 2022
0	60% REVIEW SUBMISSION	MAR 31 2022

revisions		date
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project
Wabush Service Upgrade
- Wabush Airport

Wabush Airport Terminal Building (ATB)

drawing design

ELECTRICAL SITE PLAN DETAILS

designed HCC conçu

date

drown dessiné

date

approved HCC approuvé

date

Tender Soumission

PWGS Project Manager Administrateur de projets TPSGC

project number no. du projet

R111141.001

drawing no. no. du dessin

E-3

E-DRM/GDD-E: 553477