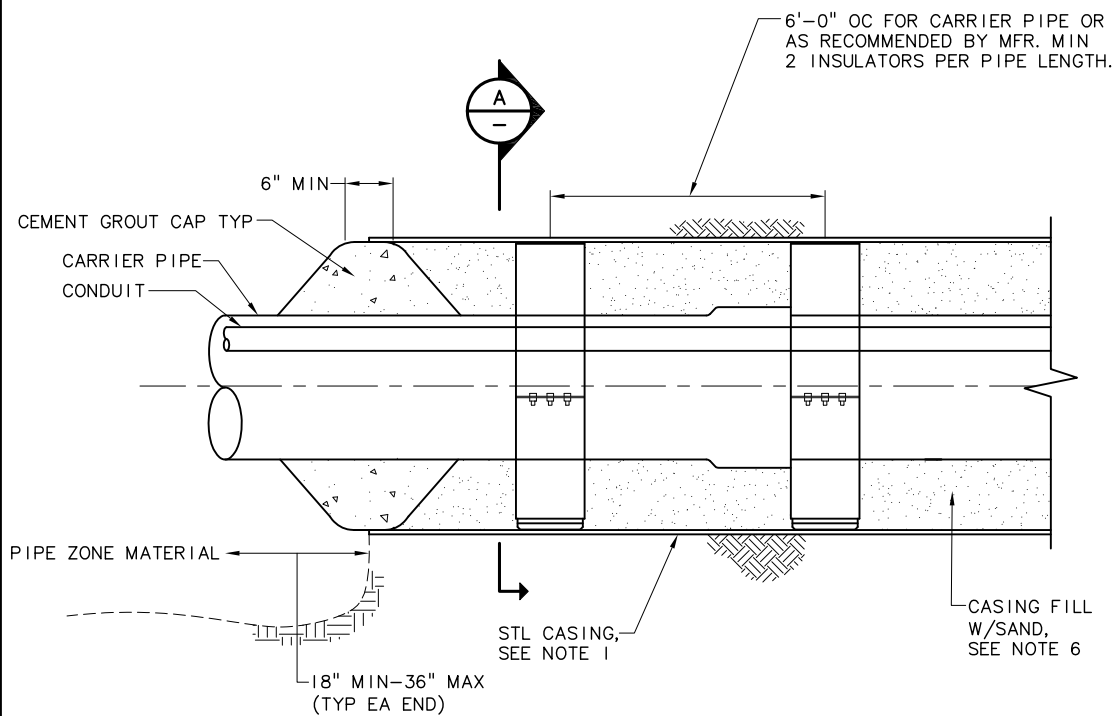
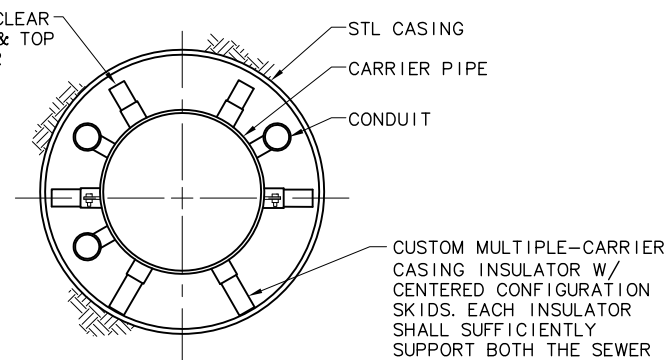


NOTES:

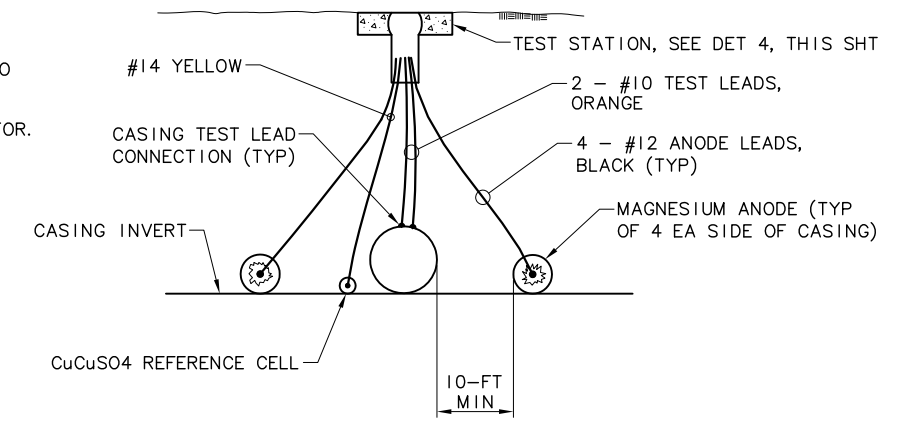
1. NEW ANSI/AWWA C200 STEEL CASING AS REQUIRED BY PLANS AND SPECIFICATIONS.
2. PROVIDE 2" MINIMUM CLEARANCE BETWEEN CASING AND CARRIER PIPE BELLS AND APPURTENANCES.
3. SEE SPECIFICATIONS AND THIS DRAWING FOR CASING CATHODIC PROTECTION REQUIREMENTS.
4. CONTRACTOR IS RESPONSIBLE FOR COATING THE CASING. REFER TO THE SPECIFICATIONS CONCERNING THE REQUIRED SYSTEM.
5. CONTRACTOR TO VERIFY CASING SIZES PRIOR TO ORDERING AND SIZING CASING INSULATORS.
6. CASING INSULATOR SHALL BE INSTALLED AT EACH INSERTION LINE AND EACH PIPE JOINT AS RECOMMENDED BY PIPE MANUFACTURER.
7. CASING SHALL BE FILLED WITH FINE CLEAN DRY SAND CAREFULLY AIR BLOWN IN SUCH A WAY TO ELIMINATE ANY VOIDS.
8. CASING, APPURTENANCES, AND ALL OTHER MISCELLANEOUS ITEMS TO BE FURNISHED BY CONTRACTOR.



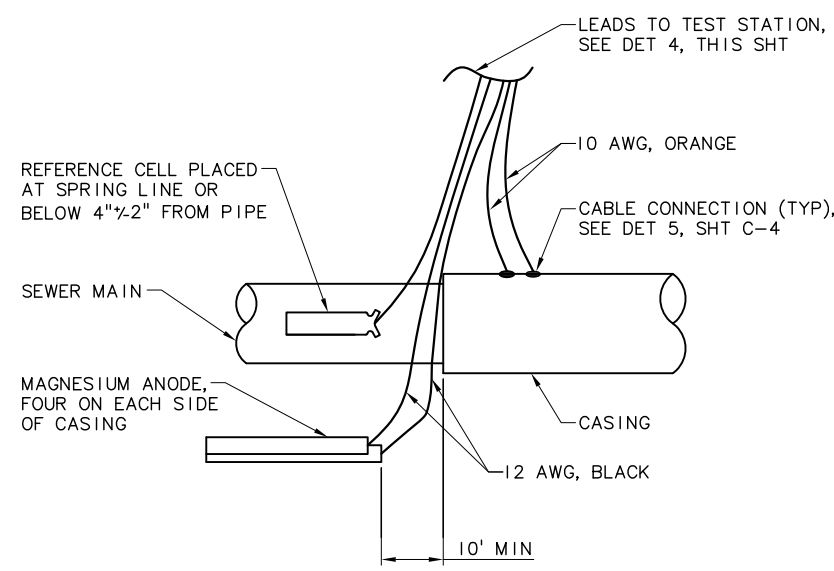
STEEL CASING DETAIL (1) C-1
SCALE: NTS



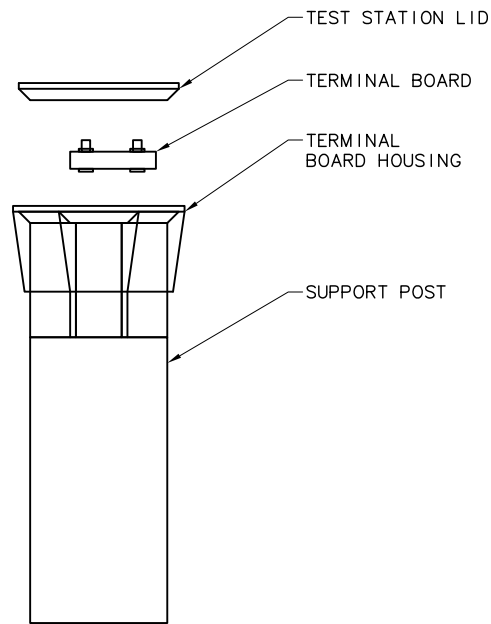
SECTION A
SCALE: NTS



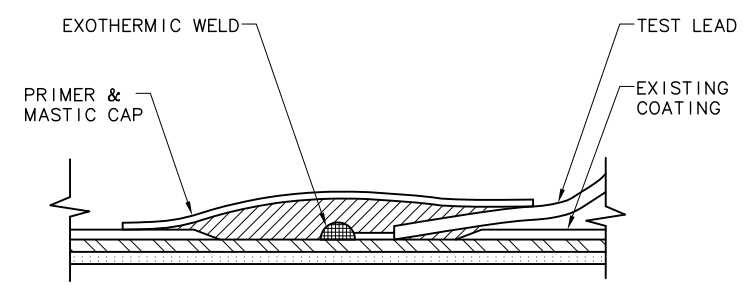
MAGNESIUM ANODE INSTALLATION (2) -
SCALE: NTS



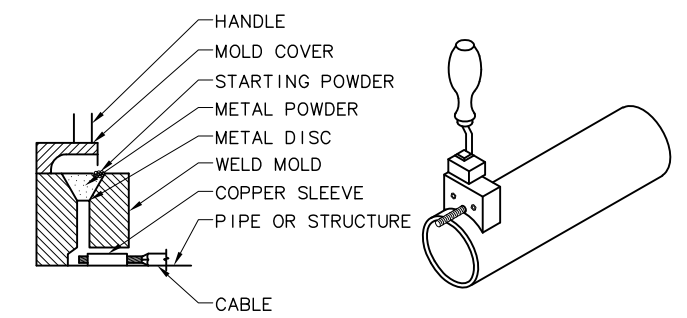
CASING TEST STATION (3) -
SCALE: NTS



TEST STATION (4) C-1
SCALE: NTS



CABLE TO CASING CONNECTION (5) -
SCALE: NTS



- STEPS:**
1. CLEAN AND FILE PIPE OR STRUCTURE TO BRIGHT METAL.
 2. STRIP INSULATION FROM WIRE SUFFICIENT TO CLEAR WELD MOLD, INSTALL COPPER SLEEVE.
 3. HOLD FIRMLY WITH OPENING AWAY FROM OPERATOR, IGNITE POWDER.
 4. REMOVE SLAG FROM CONNECTION, TEST WELD WITH SHARP HAMMER BLOW.
 5. COVER ALL EXPOSED METALS AS REQUIRED.

EXOTHERMIC WELD (6) -
SCALE: NTS

G:\08\0934\204\CAD\08-0934-204-WA-DET.dwg C-3 7/17/2008 5:01 PM DAK 17.0s (LMS Tech)

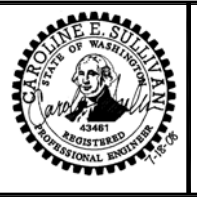
NO.	DATE	BY	REVISION

NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

BTS DESIGNED
DAK DRAWN
CES CHECKED



MSA Murray Smith & Associates, Inc.
Engineers/Planners

2707 Colby Avenue, Suite 1110 PHONE 425.252.9003
Everett, Washington 98201-3566 FAX 425.252.8853



EAST 1ST STREET SEWER EXTENSION

GENERAL CIVIL DETAILS

PROJECT NO.: 08-0934.204 SCALE: AS SHOWN DATE: JULY 2008