

CONSTRUCTION NOTES

(1A) CONSTRUCT 54" I.D. CCFRPM PIPE ("HOBAS" PIPE OR APPROVED EQUAL), 1.21-INCH THICK WALL, WITH FLUSH RELINING BELL-SPIGOT JOINT PER TYPICAL SLANT DRAIN HAND-MINED TUNNEL SECTION 1A ON SHEET 19.

(1B) CONSTRUCT 54" I.D. CCFRPM PIPE ("HOBAS" PIPE OR APPROVED EQUAL), 1.21-INCH THICK WALL, WITH FLUSH RELINING BELL-SPIGOT JOINT PER TYPICAL RIB AND LAGGING TUNNEL SECTION 1A ON SHEET 19.

(8) CONSTRUCT VELOCITY REDUCER CONTROL RING WITH SHOP INSTALLED 6-INCH THICK REINFORCED FIBERGLASS INSIDE 54" I.D. CCFRPM PIPE PER DETAIL 8 ON SHEET 19. PLACE RING MID-WAY IN 20-FOOT LONG PIPE LENGTHS. STATION LOCATION CALL-OUTS ON PROFILE ARE APPROXIMATE AND CAN SHIFT AS LONG AS NUMBER OF RINGS AND SPACING IS MAINTAINED.

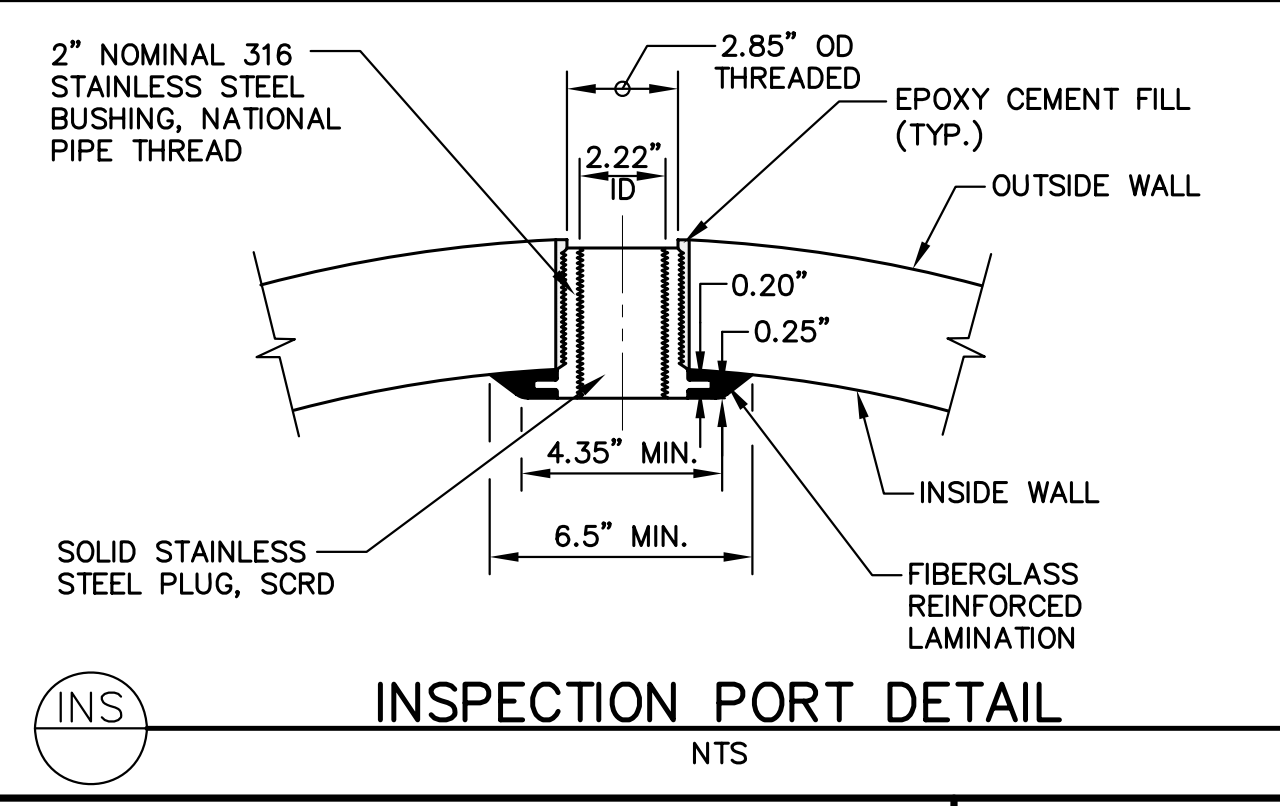
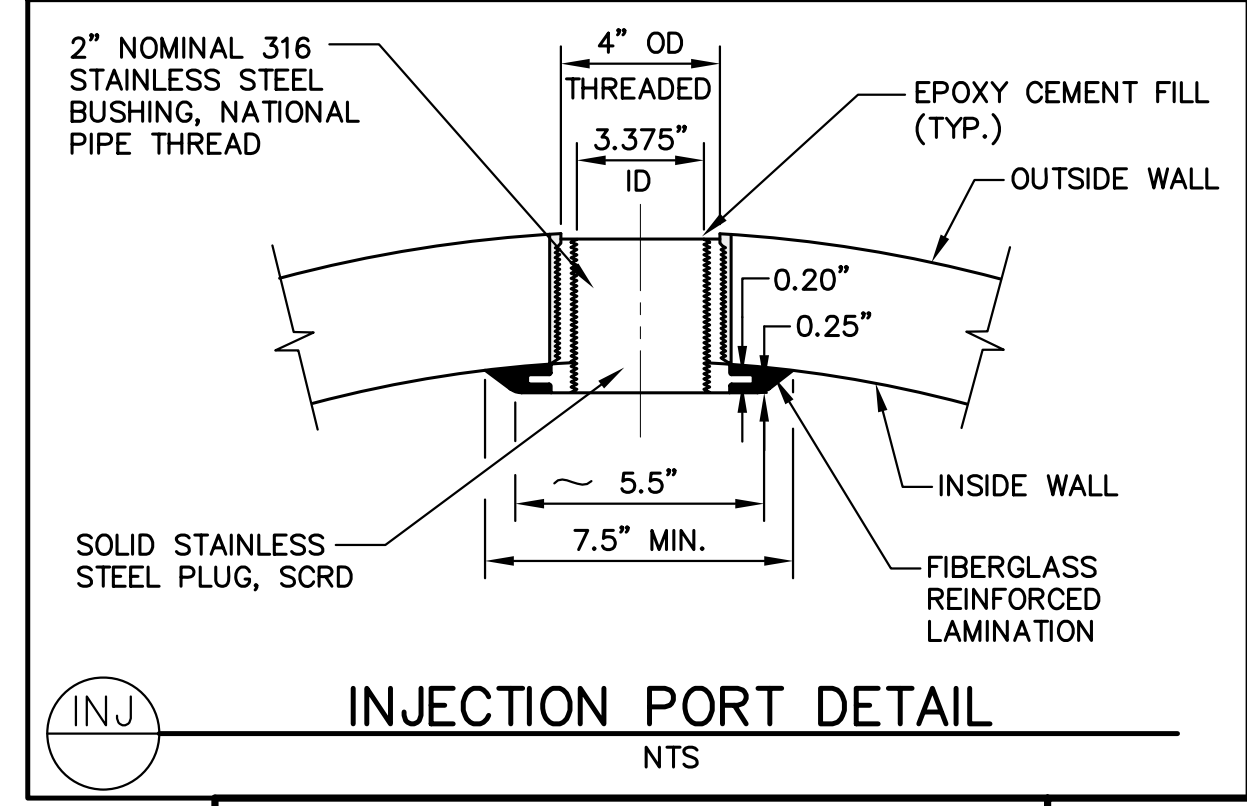
(8A) CONSTRUCT CONCRETE TRENCH SUPPORT BACKFILL PER DETAIL 8A ON SHEET 19. APPLIES TO VELOCITY REDUCER RINGS IN OPEN TRENCH REACH.

(9) CONSTRUCT REINFORCED CONCRETE OUTLET STRUCTURE, HEADWALL, WARPED WINGWALLS AND BEACH APRON PER MODIFIED CALTRANS STD PLAN D86B, MODIFIED PER DETAIL 9 ON SHEET 19. H=XX'+/-, DIA=54" I.D., SLOPE =2:1. (XX" INVERT SLAB, 6' DEEP 3' WIDE CUTOFF WALL ALL AROUND). CONSTRUCT DRAINAGE WEEPHOLES AT 8' MAX SPACING ALONG WINGWALLS PER CALTRANS STD B0-3, DETAIL 3-1.

(10) CONSTRUCT 4' POST AND CABLE RAILING IN TOP OF OUTLET HEADWALL AND WINGWALLS PER CALTRANS STD B11-47. USE PRE-APPROVED CORROSION RESISTANT STEEL MATERIALS ONLY.

(11) CONSTRUCT PERMANENT XX" DIAMETER PCC SOLDIER PILE TOTAL LENGTH=XX", EMBEDDED XX" (UNDISTURBED), RETAINING XX" (TEMPORARY), RETAINING XX" (PERMANENT). CENTER WXXXXX STEEL BEAM PER DETAIL 11 ON SHEET 19. TOP OF PILE EQUALS TOP OF HEADWALL. PLACE TEMPORARY 1-INCH STEEL PLATE LAGGING BEHIND SOLDIER PILES TO SPAN BLUFF FACE EXCAVATION WIDTH UNTIL PERMANENT OUTLET STRUCTURE IS CONSTRUCTED.

(12) INSTALL CALIFORNIA CURB SHELF BASKET WATER CLEANING SYSTEM FOR CURB INLET AS MANUFACTURED BY BIO CLEAN, INTERCEPTOR CASE (OR APPROVED EQUAL).



60% DESIGN PLANS
NOT FOR CONSTRUCTION
NOVEMBER 1, 2011



PLAN PREPARED BY:
Harris & Associates
34 Executive Park, Suite 150
Irvine, CA 92614 (949) 655-3900
RANDALL G. BERRY RCE #44642 DATE

CITY OF RANCHO PALOS VERDES
RON DRAGOO SENIOR ENGINEER DATE
RCE: 54924

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED	RGB/EGS/PL
DRAWN	EGS/PL
CHECKED	RGB
DATE	OCT 11

CITY OF RANCHO PALOS VERDES

SAN RAMON STORM DRAIN
DETAILS

SHEET 19 OF 31
SHT. 19
PRJ NO. XXXXX