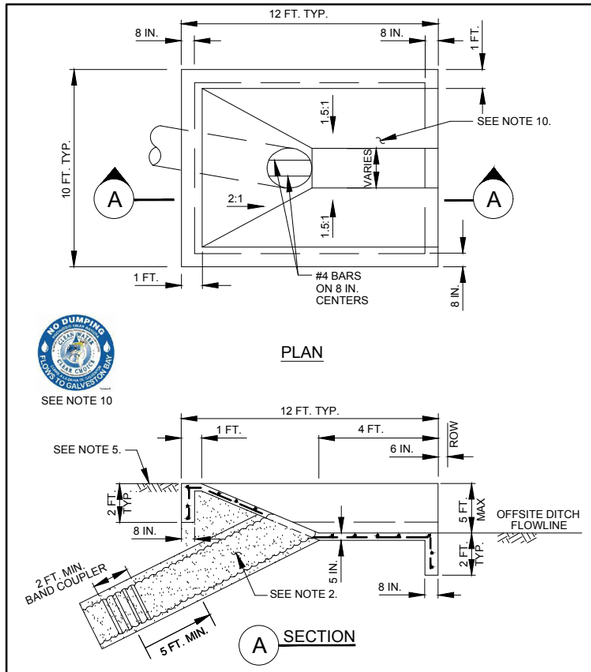
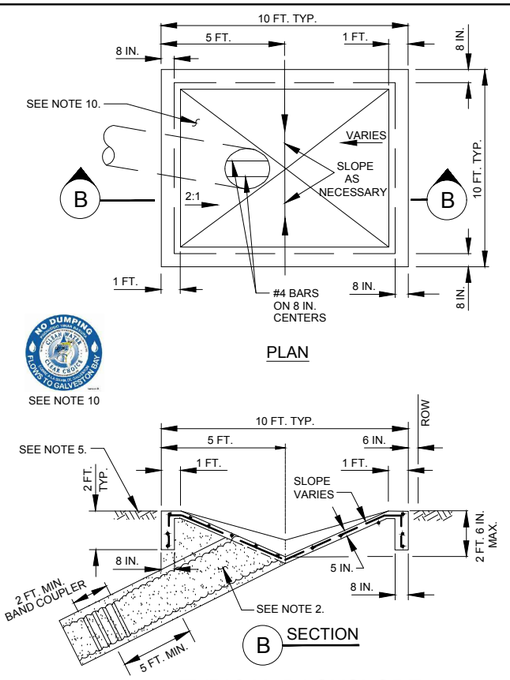


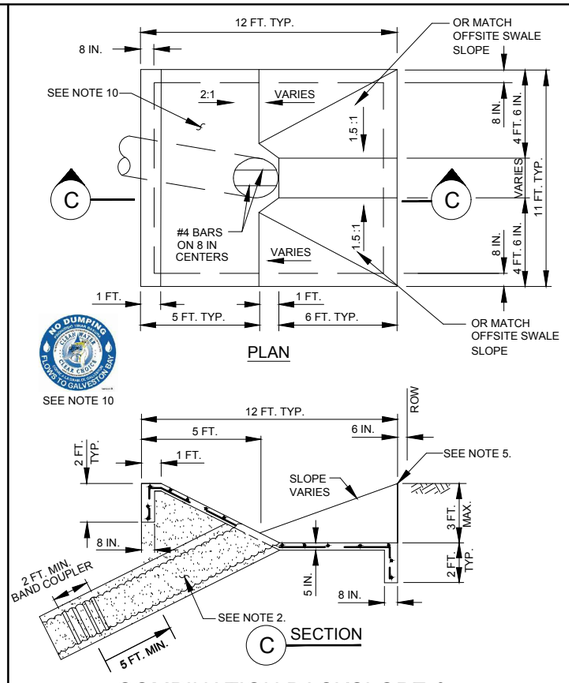
TYPICAL OFFSITE DITCH INTERCEPTOR STRUCTURE

(42 INCH MAX.)



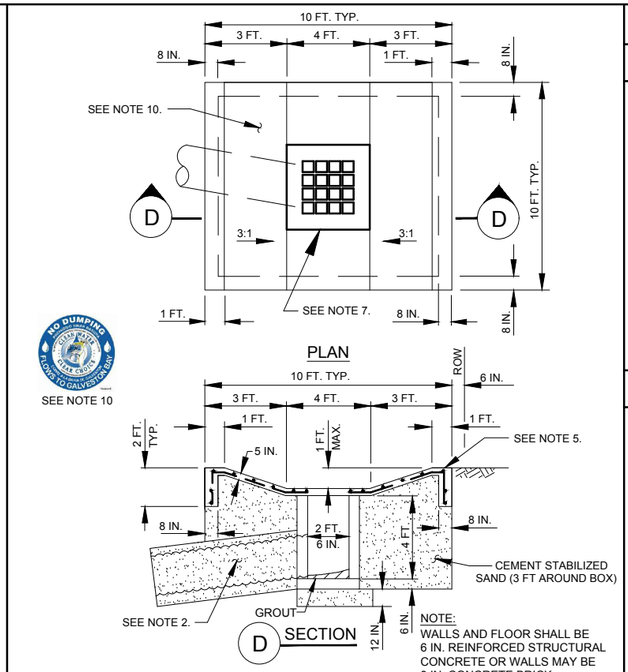
TYPICAL BACKSLOPE INTERCEPTOR STRUCTURE

(24 INCH & 30 INCH ONLY)



COMBINATION BACKSLOPE & OFFSITE DITCH INTERCEPTOR STRUCTURE

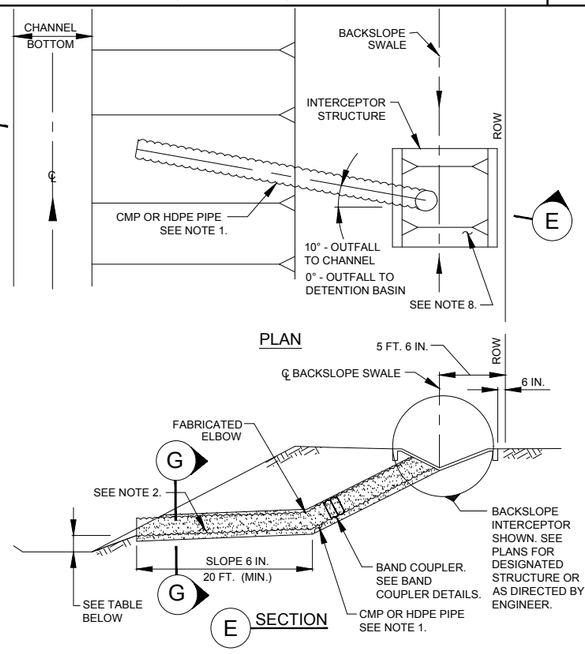
(42 INCH MAX.)



NOTE:
WALLS AND FLOOR SHALL BE 6 IN. REINFORCED STRUCTURAL CONCRETE OR WALLS MAY BE 8 IN. CONCRETE BRICK CONSTRUCTION

URBAN BACKSLOPE INTERCEPTOR STRUCTURE

(24 INCH ONLY)



TYPICAL INTERCEPTOR OUTFALL STRUCTURE LAYOUT

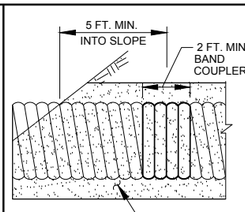
PIPE OUTFALL IN CHANNELS

BOTTOM WIDTH	PIPE OUTLET INVERT
6 FEET ≤ BW ≤ 20 FT	1 FOOT ABOVE FLOWLINE *
20 FEET < BW ≤ 60 FT	AT TOE OF SLOPE *
BW > 60 FT	AT TOE OF SLOPE *

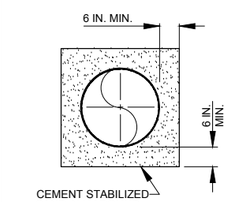
* OR 1 FOOT ABOVE NORMAL WATER LEVEL, WHICHEVER IS HIGHER

PIPE OUTFALL IN DETENTION BASINS

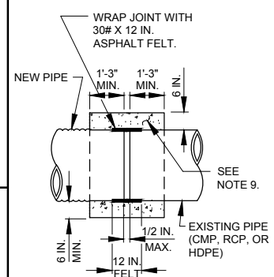
AT TOE OF SLOPE

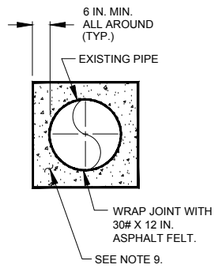


CMP BAND COUPLER DETAIL

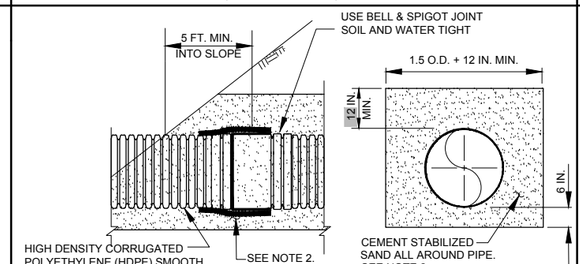


BEDDING CMP DETAIL



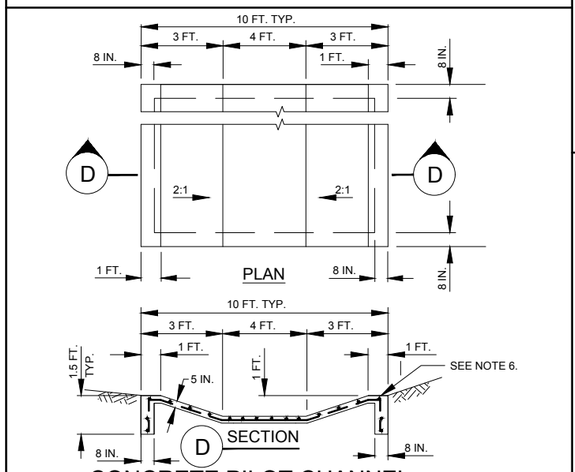


CONCRETE COLLAR DETAIL



HDPE PIPE COUPLER DETAIL

BEDDING HDPE PIPE DETAIL



CONCRETE PILOT CHANNEL - DETENTION BASIN

NOTES:

1. INTERCEPTOR OUTFALL PIPES WITHIN THE HCFCD RIGHT-OF-WAY SHALL BE CMP OR HDPE PIPE IN ACCORDANCE WITH SPECIFICATION SECTION 02642- CORRUGATED METAL PIPE, HIGH DENSITY POLYETHYLENE (HDPE) PIPE IN ACCORDANCE WITH SPECIFICATION SECTION 2505-HIGH DENSITY POLYETHYLENE, OR APPROVED EQUAL. USE TABLE ON STORM SEWER AND RIPRAP DETAILS SHEET FOR CORRUGATED GALVANIZED STEEL PIPE THICKNESS.
2. PROVIDE AND PLACE CEMENT STABILIZED SAND IN ACCORDANCE WITH SPECIFICATION SECTION 02321-CEMENT STABILIZED SAND AND SECTION 02316 - STRUCTURAL EXCAVATING.
3. EXCAVATION, FILL AND BACKFILL FOR INTERCEPTOR OUTFALLS SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02316-STRUCTURAL EXCAVATING AND BACKFILLING.
4. CONCRETE SHALL BE STRUCTURAL CONCRETE IN ACCORDANCE WITH SPECIFICATION SECTION 03310-CONCRETE.
5. INTERCEPTOR STRUCTURES:
   a. ADJUST LENGTH AND WIDTH IN FIELD AS NECESSARY.
   b. 2-FEET DEEP X 8-INCH WIDE TOE ALL AROUND THE STRUCTURE.
   c. STEEL REINFORCING-#4 BARS (GRADE 60) AT 12 INCHES ON CENTER EACH WAY.
   d. ANY INTERCEPTOR OUTFALL PIPE LARGER THAN MAXIMUM SIZE INDICATED REQUIRES A SEPARATE DETAIL.
   e. MATCH TOP OF CONCRETE WITH NATURAL GROUND.
6. CONCRETE PILOT CHANNEL
   a. 1.5 FEET DEEP X 8-INCH WIDE TOE ALL AROUND THE STRUCTURE.
   b. STEEL REINFORCING - #4 BARS (GRADE 60) AT 12 INCHES ON CENTER EACH WAY.
   c. MATCH TOP OF CONCRETE WITH BOTTOM OF DETENTION BASIN.
7. CONCRETE PAD AROUND URBAN BACKSLOPE INTERCEPTOR: PAID FOR AS CONCRETE INTERCEPTOR STRUCTURE PER UNIT PRICE SCHEDULE. TYPE "A" INLET BOX, COH DWG. NO. 2084-08 WITH GRATE TOP, VULCAN FOUNDRY COMPANY, V-4880-1 OR APPROVED EQUAL, APPROX. 473 SQ.IN. OPENING. PAID 2632-05
8. BACKSLOPE SWALE AND INTERCEPTOR STRUCTURE ELEVATIONS AND LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. FINAL ELEVATIONS AND LOCATIONS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION.
9. STRUCTURAL CONCRETE WITH #4 BARS (GRADE 60) 12 INCH O.C. EACH WAY, 3 ROWS MIN. EACH WAY. - FOR COLLARS ONLY. WAIT A MINIMUM OF 24 HOURS AFTER PLACING CONCRETE TO BACKFILL.
10. EPOXY "CLEAN WATER CLEAR CHOICE" LOGO BUTTON ON INTERCEPTORS. LOCATION TO BE DETERMINED BY THE ENGINEER.

THIS DETAIL SHEET HAS BEEN PREPARED FOR USE ON HCFCD PROJECTS OR PROJECTS TO BE MAINTAINED BY THE HCFCD WHEN COMPLETED BY OTHERS. AN ENGINEER WHO INCORPORATES THE DETAILS ON THIS SHEET BECOMES RESPONSIBLE FOR ITS USE IN THE END PRODUCT IN ACCORDANCE WITH RULE 137.33 (b) AND (c) OF THE TEXAS BOARD OF PROFESSIONAL ENGINEERS.

ENGINEER - CONFIRM, CHANGE, OR FILL IN.

P.E. SEAL AND SIGNATURE

REV	DESCRIPTION	DATE	APPR

PROJECT ID#

PROJECT TITLE

INTERCEPTOR STRUCTURE AND CONCRETE PILOT CHANNEL DETAILS

PREPARED:

CHECKED:

APPROVED:

COMPANY INFORMATION AND LOGO GOES HERE

HARRIS COUNTY FLOOD CONTROL DISTRICT
9900 Northwest Freeway
Houston, Texas 77092

DATE: 10-23-2018
SCALE: AS NOTED

SHEET NUMBER
OF

S:\Operations\EngDiv\MED\ME Autocad\STANDARD DETAILS PILOT CHANNEL FOR STEVE F\INTERCEPTOR STRUCTURE AND CONCRETE DETAILS.dwg