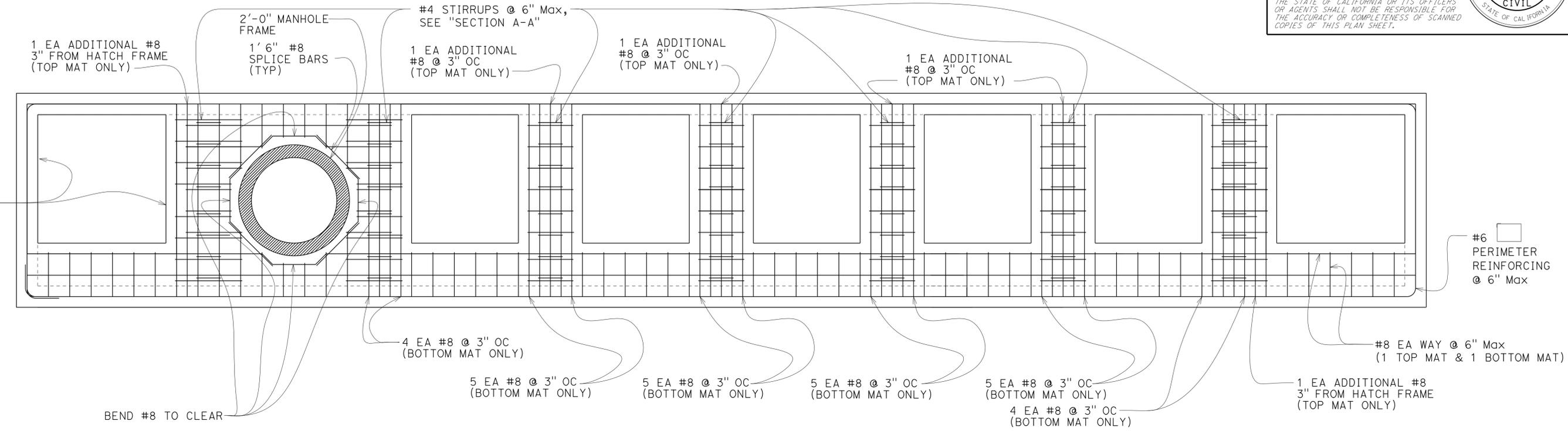


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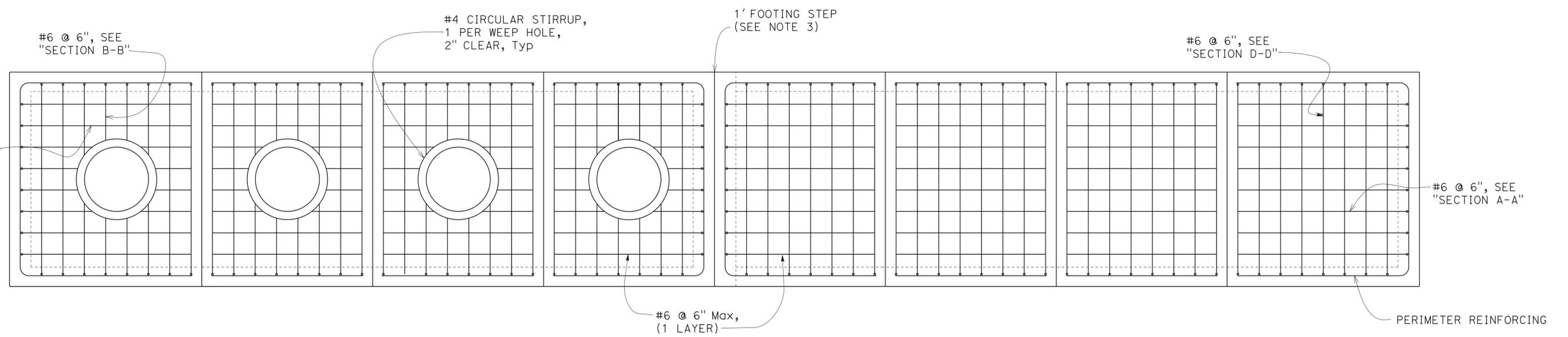
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	89	18.0/24.9	166	243
<i>David C. Watkins</i> 9/29/12 REGISTERED CIVIL ENGINEER DATE			12-17-12 PLANS APPROVAL DATE		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					

NOTES:

- FOR SECTIONS A-A AND B-B, SEE "IL DETAILS No. 3" SHEET.
- FOR SECTIONS C-C AND D-D, SEE "IL DETAILS No. 4" SHEET.



DECK REINFORCING PLAN



INVERT REINFORCING PLAN

SAND VAULT (IN-LINE)

IL DETAILS No. 2

1 REVISED PER ADDENDUM No. 1 DATED APRIL 25, 2013

DRAINAGE DETAILS
NO SCALE
DD-9

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF ENGINEERING

FUNCTIONAL SUPERVISOR: FERMIN BARRIGA

CALCULATED/DESIGNED BY: DAVID WATKINS

CHECKED BY: JOSE VALDEZ

REVISOR: DW

DATE REVISED: 4/17/13

USERNAME => s121614
DGN FILE => 03000002251c009.dwg



UNIT 0305

PROJECT NUMBER & PHASE

03000002251

LAST REVISION DATE PLOTTED => 25-APR-2013
07-25-12 TIME PLOTTED => 10:24

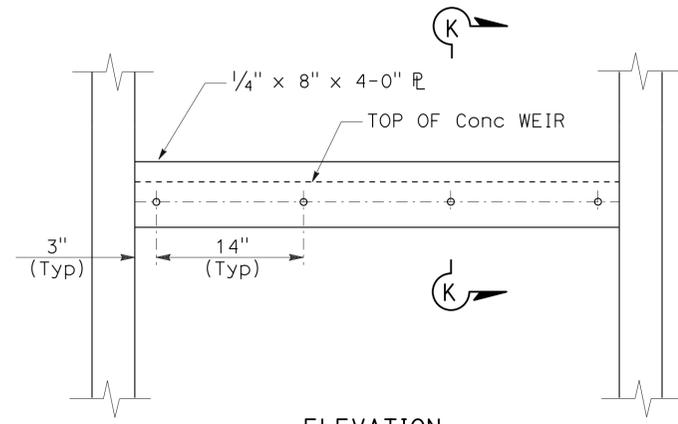
NOTES:

- FOR PERFORATED PLASTIC PIPE, ANCHOR BRACKET, SUPPORT BRACKET, AND WIRE MESH PANEL DETAILS, SEE "SV DETAILS No. 4" SHEET.
- WEIR PLATE AND ANCHORS TO BE 316 STAINLESS STEEL. PROVIDE WATERTIGHT SEAL BETWEEN PLATE ENDS AND VAULT WALL.
- EXTEND FILTER FABRIC TO TOP OF SAND BED AND BOND TO WALL.
- OUTLET CHAMBER EDGE OF OVERFLOW WEIR TO BE ROUNDED (4" RADIUS). GRIND SMOOTH AFTER FORMS ARE REMOVED.
- SET TOP OF WEIR PLATE ELEVATION TO 6" BELOW CONSTRUCTED BYPASS PIPE FLOWLINE ELEVATION AFTER SAND VAULT AND BYPASS PIPE ARE IN PLACE.
- DEBRIS LOG SHALL BE 6" DIAMETER SCHEDULE 40 PVC PIPE, FILLED 1/2 WITH WATER CAPPED.

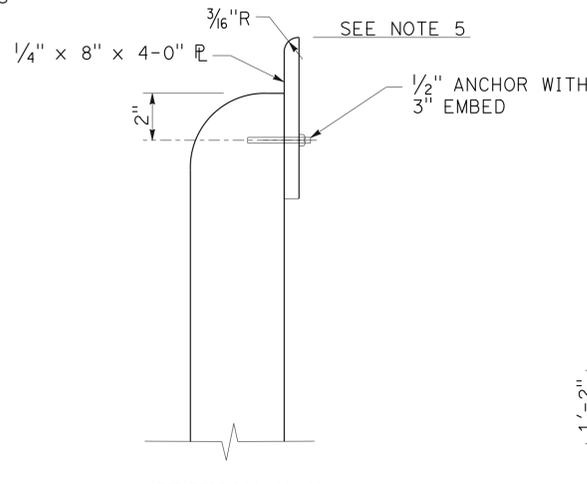
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	89	18.0/24.9	167	243

David C. Watkins 9/29/12
 REGISTERED CIVIL ENGINEER DATE
 12-17-12
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 DAVID C. WATKINS
 No. 65734
 Exp. 9/30/13
 CIVIL
 STATE OF CALIFORNIA

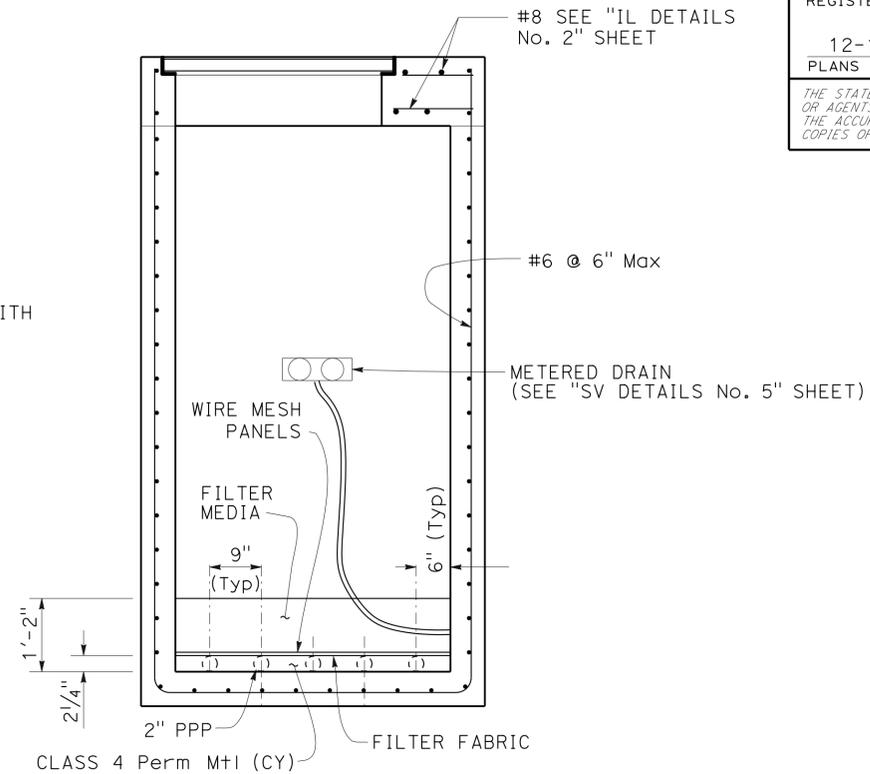


ELEVATION

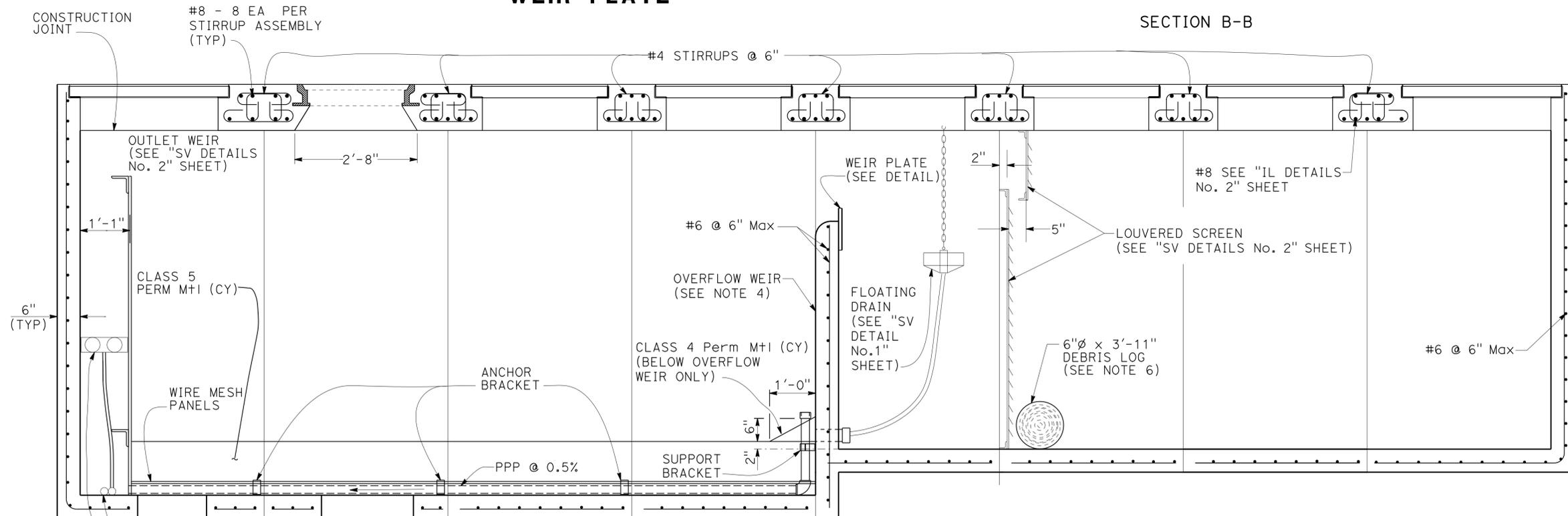


SECTION K-K

WEIR PLATE



SECTION B-B



SECTION A-A

SAND VAULT (IN-LINE)

IL DETAILS No. 3

1 REVISED PER ADDENDUM No. 1 DATED APRIL 25, 2013

DRAINAGE DETAILS
NO SCALE
DD-10

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF ENGINEERING
 Fermin Barriga
 Functional Supervisor
 David Watkins
 Jose Valdez
 Revised By
 Date Revised
 DW
 4/17/13
 Calculated/Designed By
 Checked By

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF ENGINEERING

Caltrans

FUNCTIONAL SUPERVISOR: FERMIN BARRICA

DAVID WATKINS

REVISOR: JOSE VALDEZ

DATE: 4/17/13

DESIGNED BY: DW

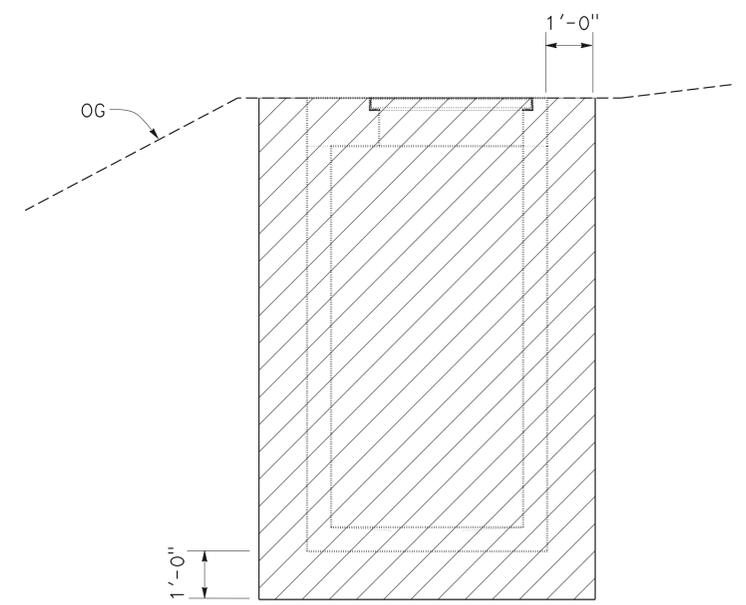
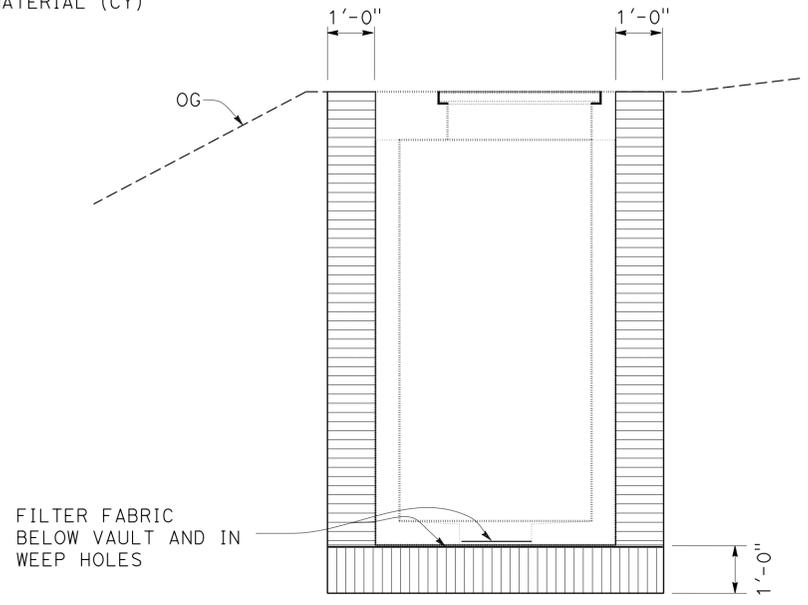
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	89	18.0/24.9	168	243

REGISTERED CIVIL ENGINEER: DAVID C. WATKINS
 No. 65734
 Exp. 9/30/13
 CIVIL

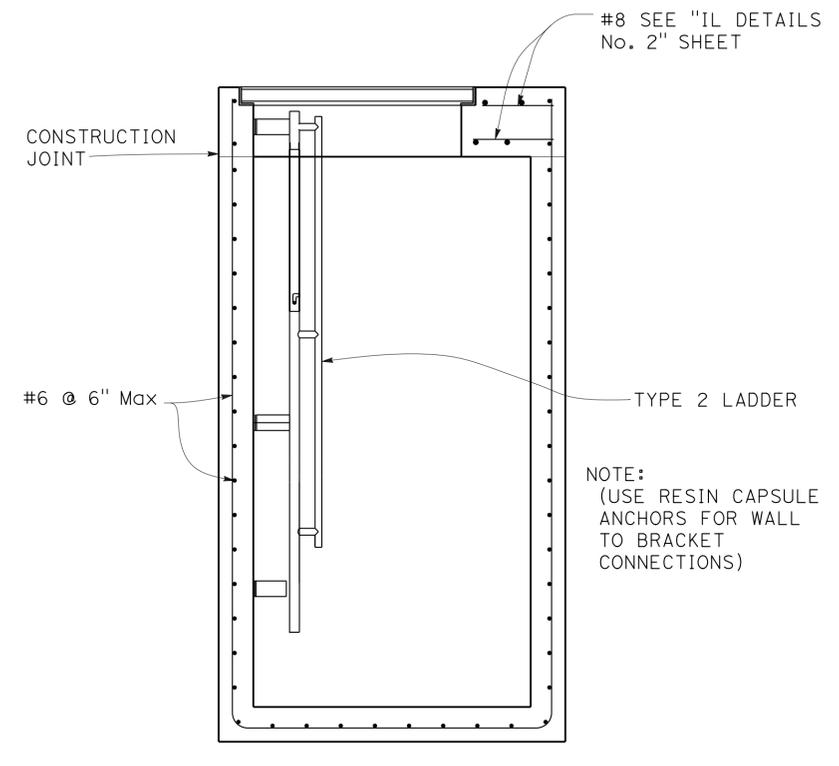
DATE: 9/29/12
 PLANS APPROVAL DATE: 12-17-12

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

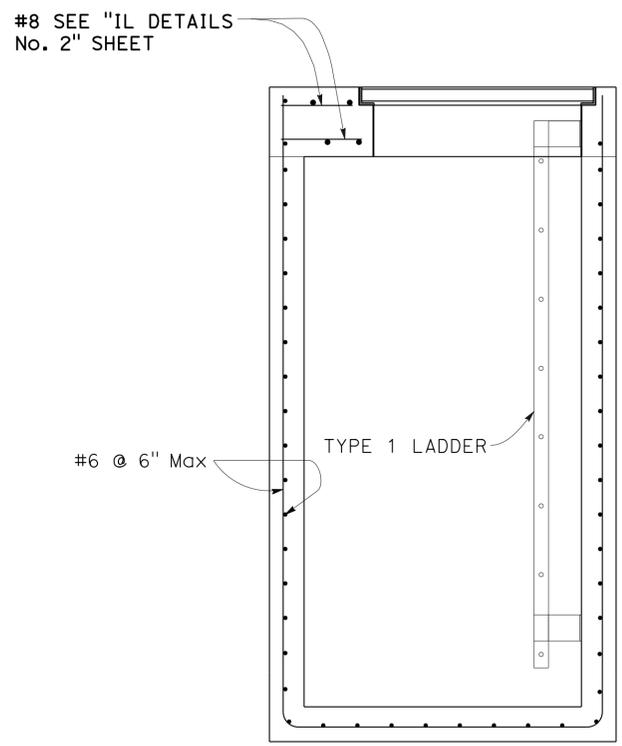
- LEGEND:**
- STRUCTURE EXCAVATION
 - STRUCTURE BACKFILL
 - CLASS 4 PERMEABLE MATERIAL (CY)



LIMITS OF EXCAVATION AND BACKFILL



SECTION C-C



SECTION D-D

SAND VAULT (IN-LINE)
 IL DETAILS No. 4

1 REVISED PER ADDENDUM No. 1 DATED APRIL 25, 2013

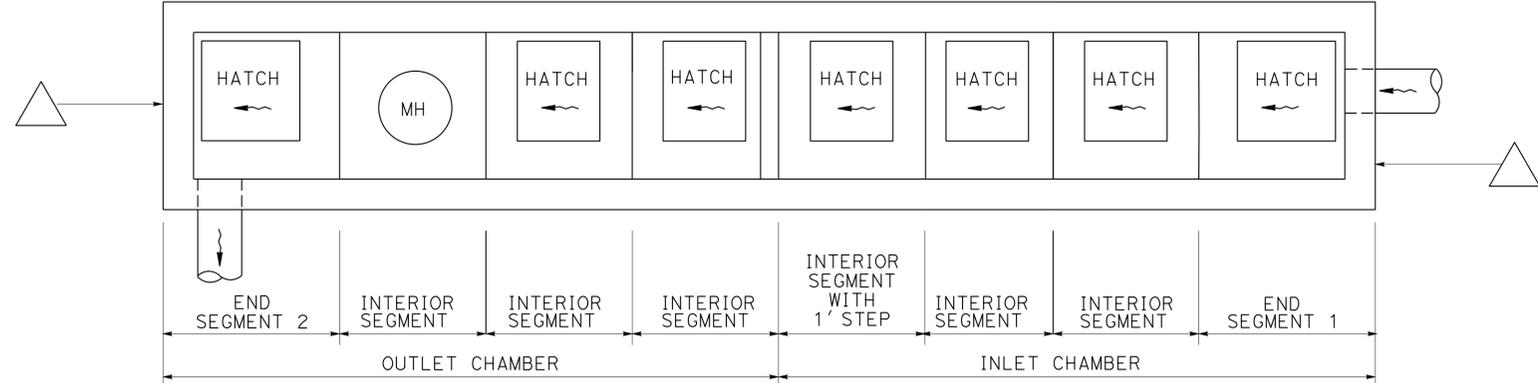
DRAINAGE DETAILS
 NO SCALE
DD-11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	89	18.0/24.9	169	243

David C. Watkins 9/29/12
 REGISTERED CIVIL ENGINEER DATE
 12-17-12
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 DAVID C. WATKINS
 No. 65734
 Exp. 9/30/13
 CIVIL
 STATE OF CALIFORNIA



PLAN (TYPICAL)

△ STATION, OFFSET, ELEVATION (SEE DRAINAGE PROFILES)
 FOR CULVERT FLOWLINE ELEVATIONS, VAULT FLOWLINES, AND ACTUAL PIPE LOCATION AND SIZE, SEE DRAINAGE PLANS AND DRAINAGE PROFILES.

SAND VAULT CONFIGURATION (IN-LINE)

DRAINAGE SYSTEM	DRAINAGE UNIT	OUTLET CHAMBER					INLET CHAMBER				
		NUMBER OF SEGMENTS	END SEGMENT 2	INTERIOR SEGMENT	INTERIOR SEGMENT	INTERIOR SEGMENT	SEGMENTS	INTERIOR SEGMENT WITH 1' 0" STEP	INTERIOR SEGMENT	INTERIOR SEGMENT	END SEGMENT 1
66	v	4	1 EA	1 EA	1 EA	1 EA	4	1 EA	1 EA	1 EA	1 EA
ACCESS HATCH TYPE			TYPE 1	MANHOLE	TYPE 2	TYPE 2	4	TYPE 2	TYPE 2	TYPE 2	TYPE 1
LADDER TYPE			NONE	NONE	NONE	TYPE 2		NONE	TYPE 2	NONE	TYPE 1

NOTE: HATCH TYPE SHOWN : TYPE 1 = 3' 0" x 3' 0", TYPE 2 = 3' 0" x 2' 6"
 LADDER TYPE SHOWN : TYPE 1 - SEE STD PLAN D75C, TYPE 2 - SEE "SV DETAILS No. 3"

SAND VAULT (IN-LINE)
IL DETAILS No. 5

1 REVISED PER ADDENDUM No. 1 DATED APRIL 25, 2013

DRAINAGE DETAILS
 NO SCALE
DD-12

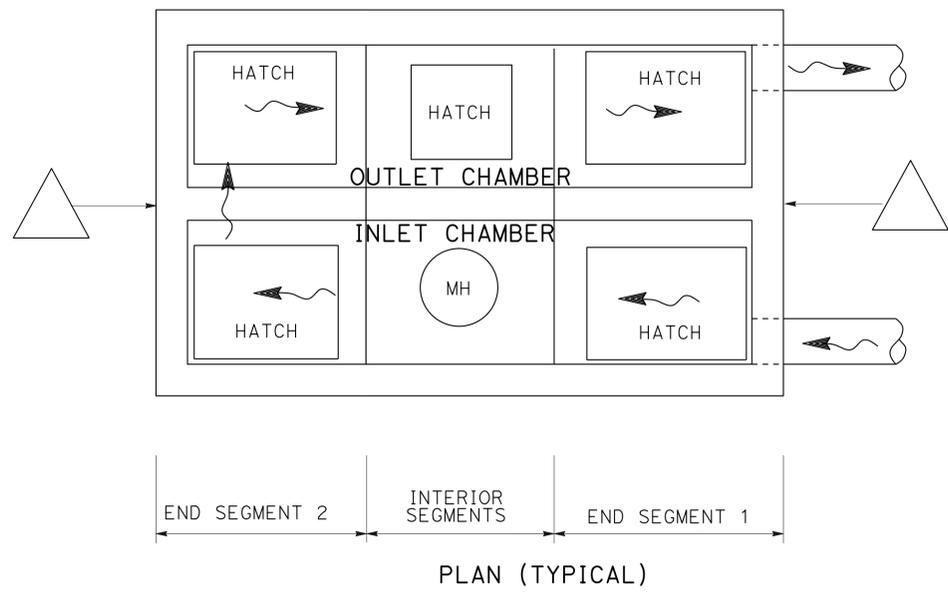
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF ENGINEERING
 Caltrans
 FUNCTIONAL SUPERVISOR: FERMIN BARRIGA
 CALCULATED/DESIGNED BY: DAVID WATKINS
 CHECKED BY: JOSE VALDEZ
 REVISIONS: DW 4/17/13
 BORDER LAST REVISED 7/2/2010

LAST REVISION DATE PLOTTED => 25-APR-2013 10:01:24 TIME PLOTTED => 10:24

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF ENGINEERING
Caltrans
 FUNCTIONAL SUPERVISOR: FERMIN BARRIGA
 DAVID WATKINS
 REVISOR: JOSE VALDEZ
 DW
 DATE: 4/11/13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	89	18.0/24.9	174	243

David C. Watkins 9/29/12
 REGISTERED CIVIL ENGINEER DATE
 12-17-12
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



STATION, OFFSET, ELEVATION (SEE DRAINAGE PROFILES)
 FOR CULVERT FLOWLINE ELEVATIONS, VAULT FLOWLINES, AND ACTUAL PIPE LOCATION AND SIZE, SEE DRAINAGE PLANS AND DRAINAGE PROFILES.

SAND VAULT CONFIGURATION (SIDE BY SIDE)

DRAINAGE SYSTEM	DRAINAGE UNIT	OUTLET CHAMBER				
		NUMBER OF SEGMENTS	END SEGMENT 2	INTERIOR SEGMENT	END SEGMENT 1	
66	i	3	1 EA	1 EA	1 EA	
ACCESS HATCH TYPE			TYPE 1	TYPE 2	TYPE 1	
LADDER TYPE			TYPE 2	NONE	NONE	
		INLET CHAMBER				
		NUMBER OF SEGMENTS	END SEGMENT 2	INTERIOR SEGMENT	END SEGMENT 1	
		3	1 EA	1 EA	1 EA	
		ACCESS HATCH TYPE		TYPE 1	MANHOLE	TYPE 1
		LADDER TYPE		TYPE 2	NONE	TYPE 1

NOTE: HATCH TYPE SHOWN : TYPE 1 = 3' 0" x 3' 0", TYPE 2 = 3' 0" x 2' 6"
 LADDER TYPE SHOWN : TYPE 1 - SEE STD PLAN D75C, TYPE 2 - SEE "SV DETAILS No. 3"

SAND VAULT (SIDE BY SIDE) SS DETAILS No. 5

1 REVISED PER ADDENDUM No. 1 DATED APRIL 25, 2013

DRAINAGE DETAILS
NO SCALE
DD-17

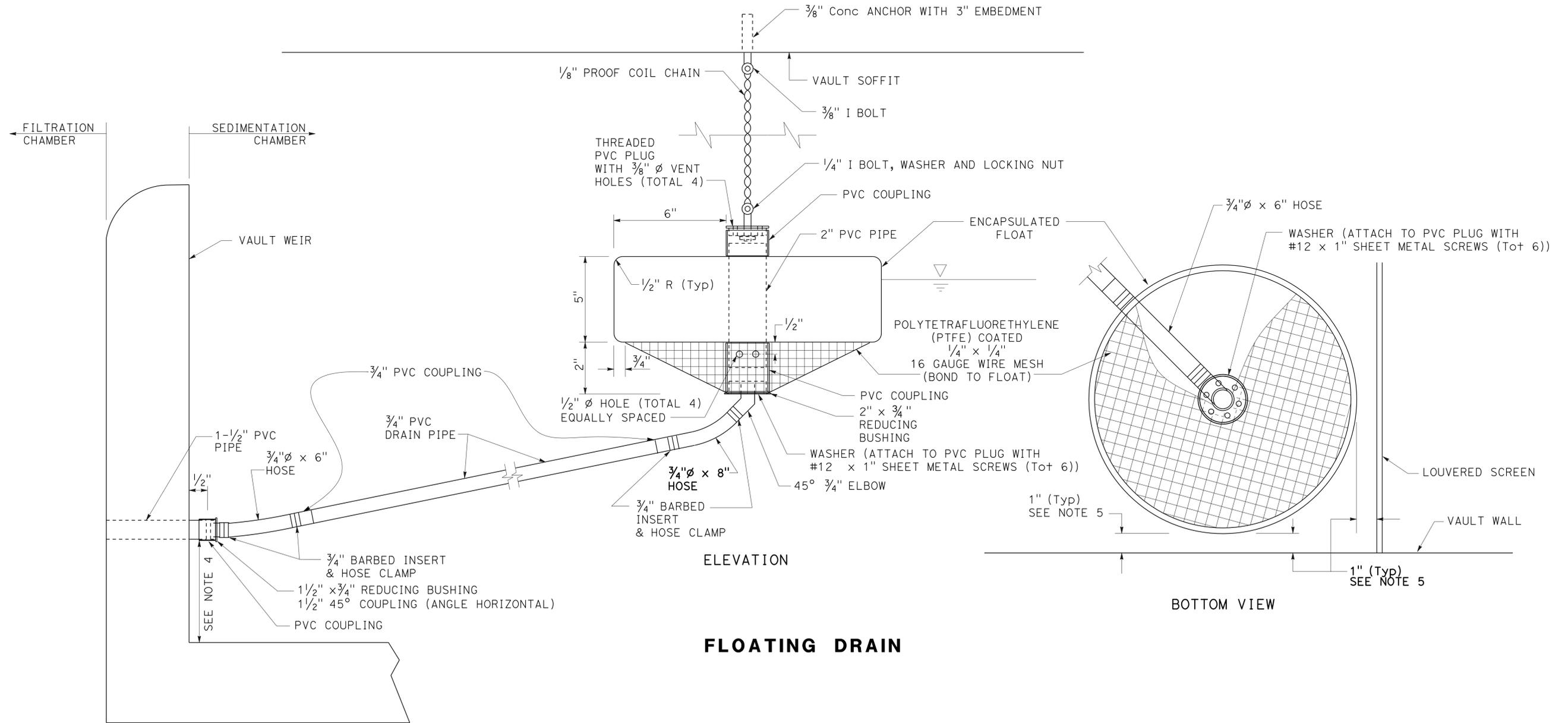
LAST REVISION DATE PLOTTED => 25-APR-2013
 10-01-12 TIME PLOTTED => 10:24

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	89	18.0/24.9	175	243
<i>David C. Watkins</i> 9/29/12 REGISTERED CIVIL ENGINEER DATE			12-17-12 PLANS APPROVAL DATE		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.			REGISTERED PROFESSIONAL ENGINEER DAVID C. WATKINS No. 65734 Exp. 9/30/13 CIVIL STATE OF CALIFORNIA		

NOTES:

1. ALL METAL COMPONENTS 316 STAINLESS STEEL.
2. ALL PVC SCHEDULE 40 (EXCEPT AS NOTED).
3. UPPER CHAIN LENGTH SHALL BE SUCH THAT WHEN TAUT, CHAIN IS VERTICAL AND 3/4" PVC DRAIN PIPE IS HORIZONTAL.
4. 4" FOR VAULTS WITH STEP, 1'-2" FOR VAULTS WITHOUT STEP.
5. MEASURED WHEN PVC DRAIN PIPE IS LEVEL AND ANGLED TO OPPOSITE SIDE OF CHAMBER SECTION.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF ENGINEERING
 Fermin Barriga
 Functional Supervisor
 DW
 Revised By
 4/17/13
 Date Revised
 Calculated/Designed By
 Checked By



ELEVATION

BOTTOM VIEW

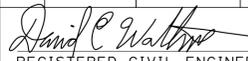
FLOATING DRAIN

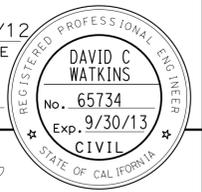
SAND VAULT
SV DETAILS No. 1

1 REVISED PER ADDENDUM No. 1 DATED APRIL 25, 2013

DRAINAGE DETAILS
NO SCALE
DD-18

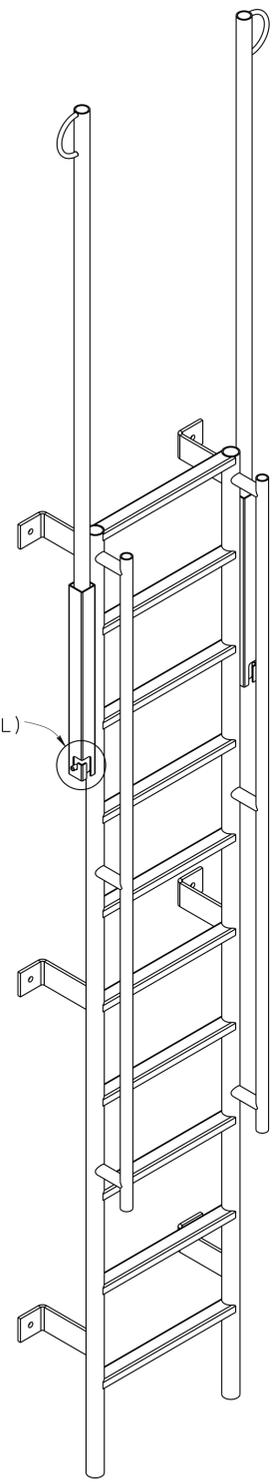
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR	DATE
Division of Engineering	FERMIN BARRIGA	DAVID WATKINS	DW	4/17/13
		CHECKED BY	DATE REVISED	
		JOSE VALDEZ		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	89	18.0/24.9	177	243
			9/29/12		
REGISTERED CIVIL ENGINEER			DATE		
12-17-12			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

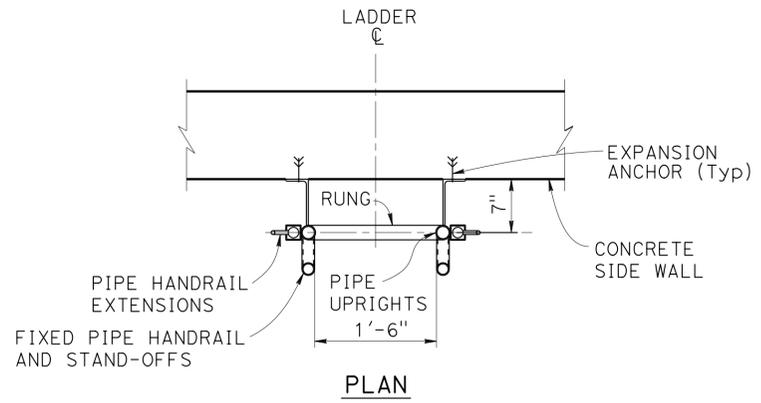


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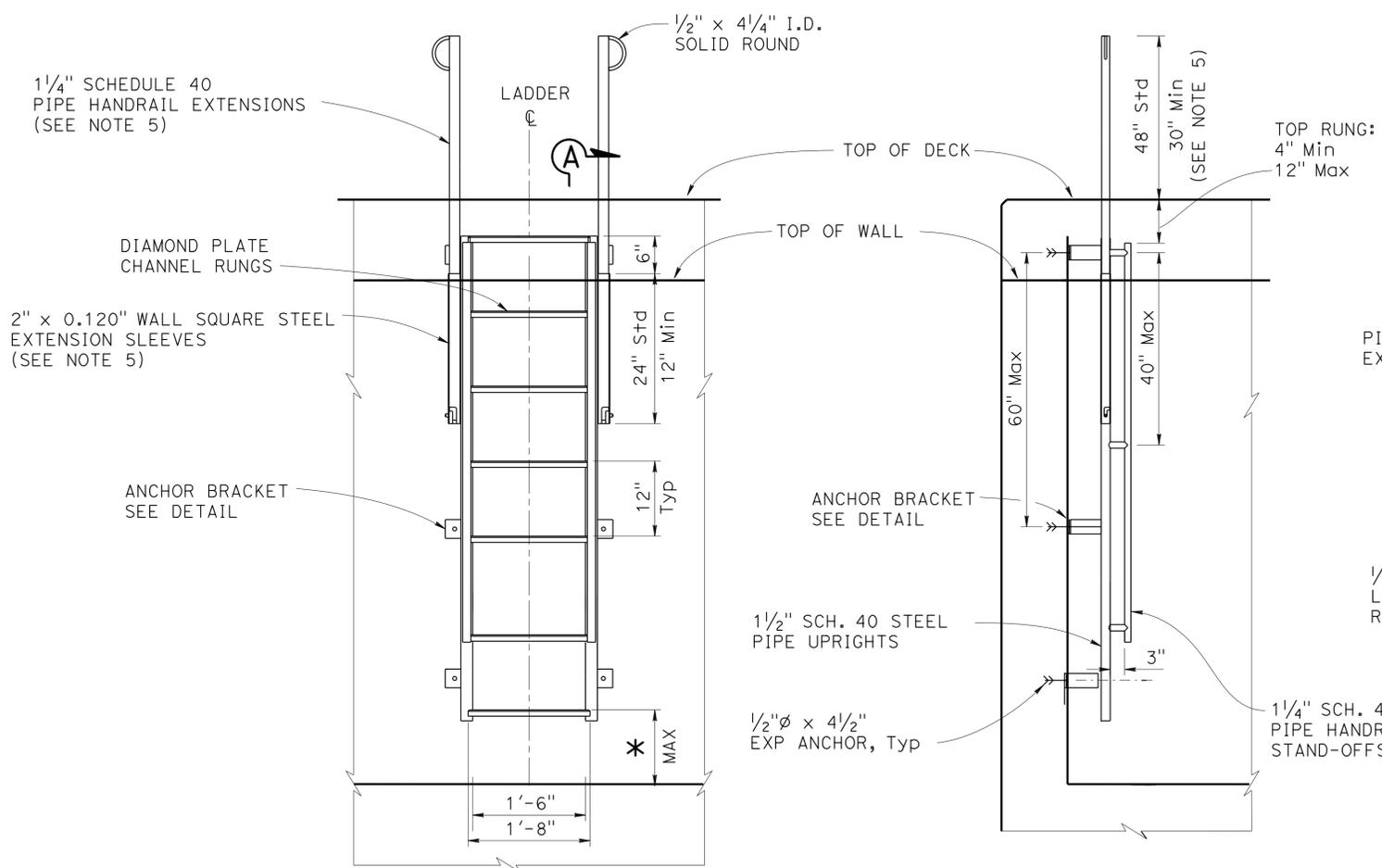
1. THE DISTANCE BETWEEN RUNGS SHALL NOT EXCEED 1'-0" AND SHALL BE UNIFORM THROUGHOUT THE HEIGHT OF WALL.
2. THE LADDER SHALL BE CONSTRUCTED IN ONE LENGTH. ALL CONNECTIONS SHALL BE WELDED.
3. ALL METAL PARTS SHALL BE GALVANIZED. ATTACHMENT HARDWARE SHALL BE STAINLESS STEEL.
4. GRIND EXPOSED CORNERS OF METAL PARTS TO 3/16" RADIUS.
5. REDUCED LENGTHS REQUIRED FOR VAULTS WITH INADEQUATE HEIGHT FOR STANDARD PIPE HANDRAIL EXTENSIONS.
6. LADDER SHALL BE PIPELINE PRODUCTS VL-100 OR EQUAL.



TYPE 2 LADDER
SCALE: 1" = 1'-0"



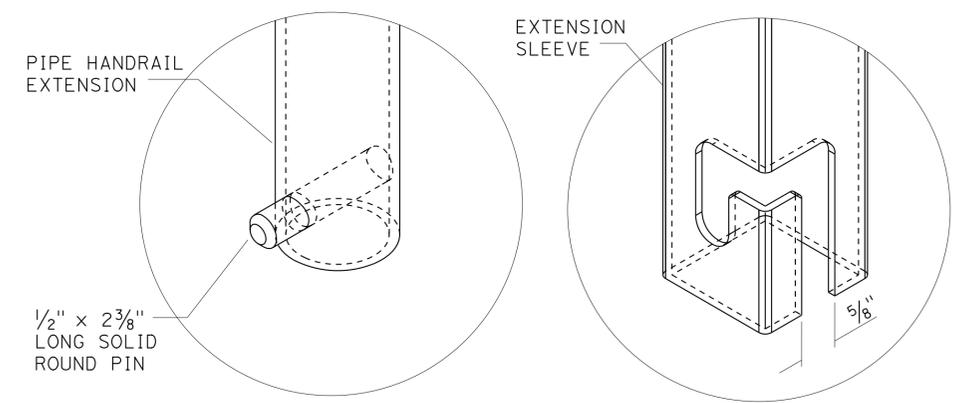
PLAN



FRONT VIEW

SECTION A-A

* 1'-0" INLET CHAMBER
1'-3" OUTLET CHAMBER



HANDRAIL LATCH

ANCHOR BRACKET DETAIL

SAND VAULT

SV DETAILS No. 3

1 REVISED PER ADDENDUM No. 1 DATED APRIL 25, 2013

DRAINAGE DETAILS

NO SCALE

DD-20

NOTES:

1. ALL METAL COMPONENTS 316 STAINLESS STEEL.
2. ALL 1/2" AND 1-1/2" PVC FITTINGS AND PIPE SCHEDULE 40.
ALL OTHER PVC FITTINGS AND PIPE SCHEDULE 80.
ALL FITTINGS SLIP/SOCKET EXCEPT AS NOTED.
3. DRAIN BELOW FLOAT IN PLAN VIEW AND BALL VALVE IN ELEVATION VIEW NOT SHOWN FOR CLAIRITY.

1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	89	18.0/24.9	177A	243

Thomas R. Rutsch 4-4-13
 REGISTERED CIVIL ENGINEER DATE
 12-17-12
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER

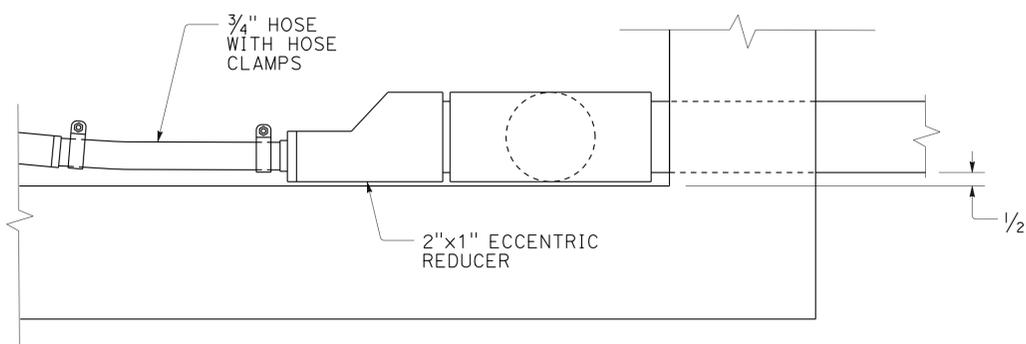
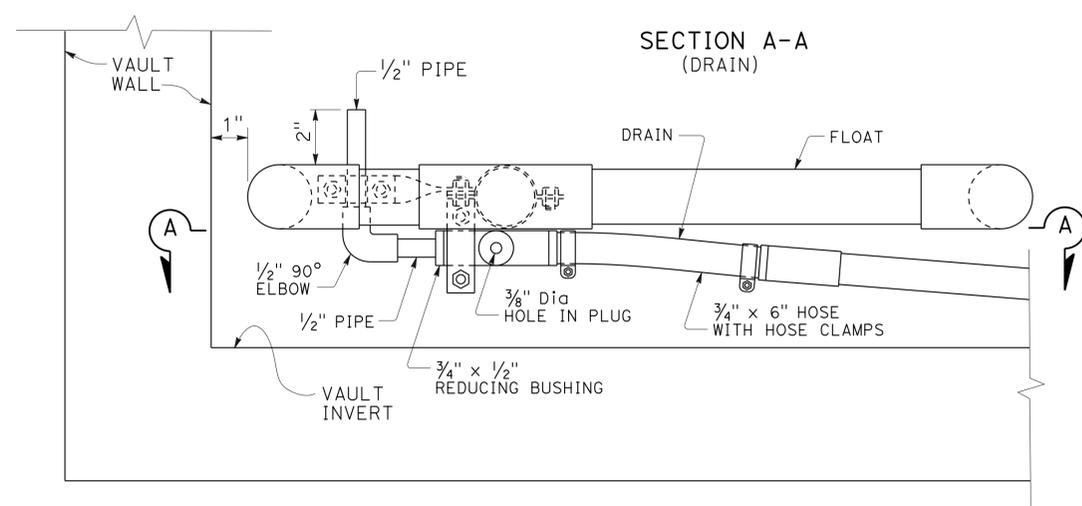
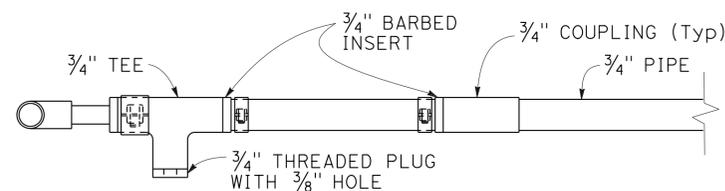
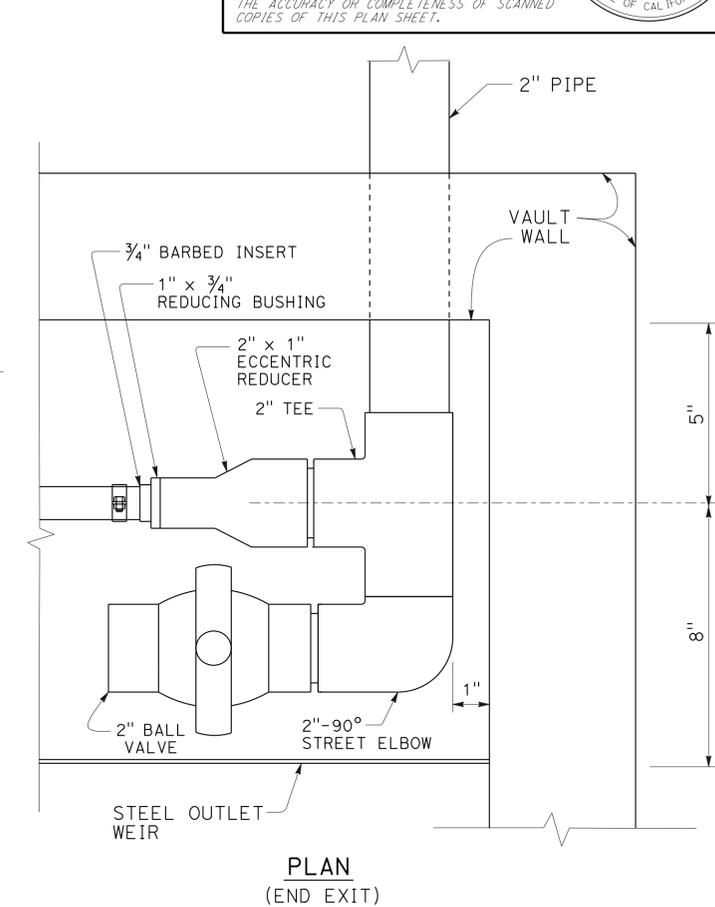
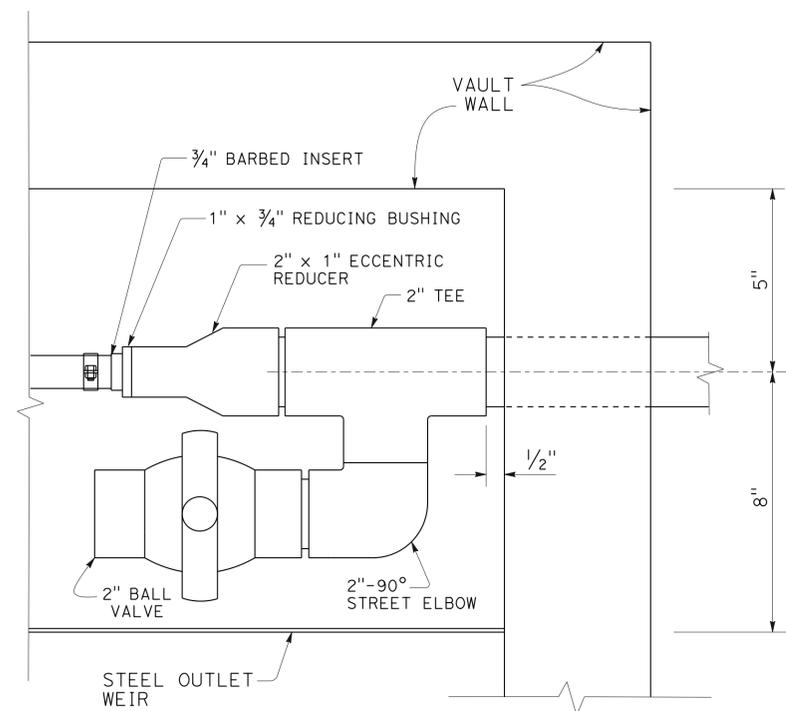
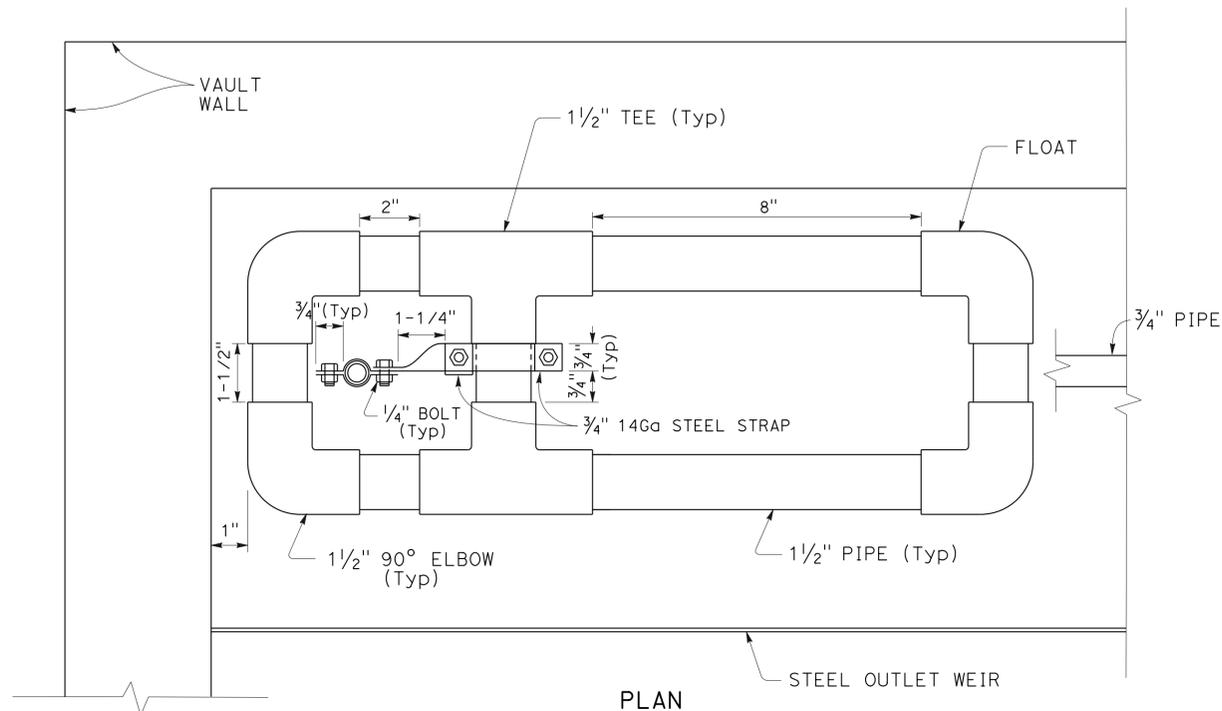
T.K. RUTSCH

No. 47797

Exp. 12-31-13

CIVIL

STATE OF CALIFORNIA



METERED DRAIN SAND VAULT
SV DETAILS No. 5

DRAINAGE DETAILS
NO SCALE

1 **ADDED PER ADDENDUM No. 1 DATED APRIL 25, 2013**

DD-20A

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - NORTH REGION DIVISION OF ENGINEERING
 FUNCTIONAL SUPERVISOR: FERMIN BARRIGA
 T. RUTSCH
 CALCULATED/DESIGNED BY: CHECKED BY:
 REVISOR BY: DATE REVISOR: