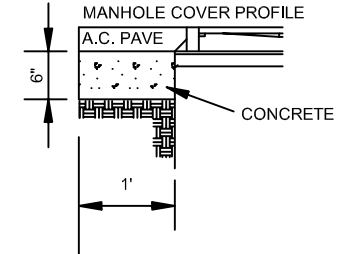
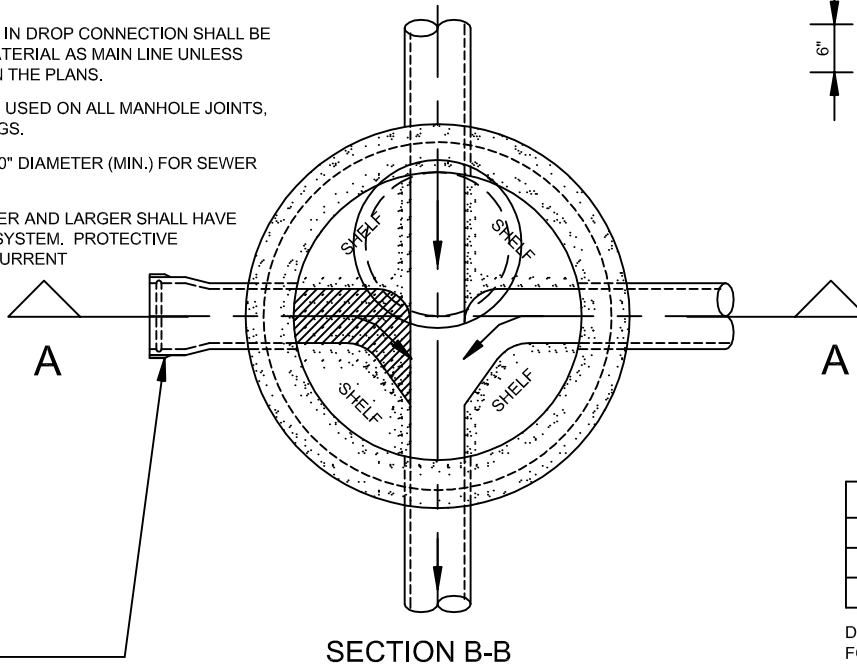


**NOTES**

- 1) ALL PIPE AND FITTINGS IN DROP CONNECTION SHALL BE THE SAME SIZE AND MATERIAL AS MAIN LINE UNLESS OTHERWISE SHOWN ON THE PLANS.
- 2) BITSUMASTIC SHALL BE USED ON ALL MANHOLE JOINTS, EXCLUDING GRADE RINGS.
- 3) MANHOLES SHALL BE 60" DIAMETER (MIN.) FOR SEWER MAIN 15" AND LARGER.
- 4) MANHOLES 60" DIAMETER AND LARGER SHALL HAVE A PROTECTIVE LINING SYSTEM. PROTECTIVE LINING SHALL BE PER CURRENT VWD STANDARD SPECIFICATIONS.

NOTE:  
SHEAR COUPLINGS ARE REQUIRED WHEN BELLED ENDS ARE NOT USED.



MINIMUM DIMENSIONS:  
(All Manhole Types)

'D'	'F'	'G'
6" to 8"	6"	4"
10" to 15"	6"	4"
18" to 27"	12"	4"

DIMENSIONS 'F' & 'G' SHALL BE USED FOR 'D' (INSIDE DIA. OF PIPE) OF THE LARGEST PIPE IN THE MANHOLE.

REVISIONS		
DESCRIPTION	APPROVED	DATE
REMOVE STEPS & REVISE "F" & "G"		7-24-07
ROTATED SECTION		10-17-11
PROTECTIVE LINING NOTE ADDED		3-27-17

**VALLECITOS WATER DISTRICT STANDARD DRAWING**

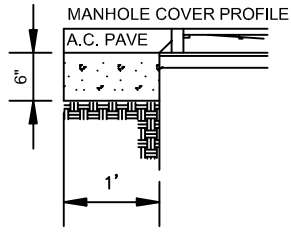
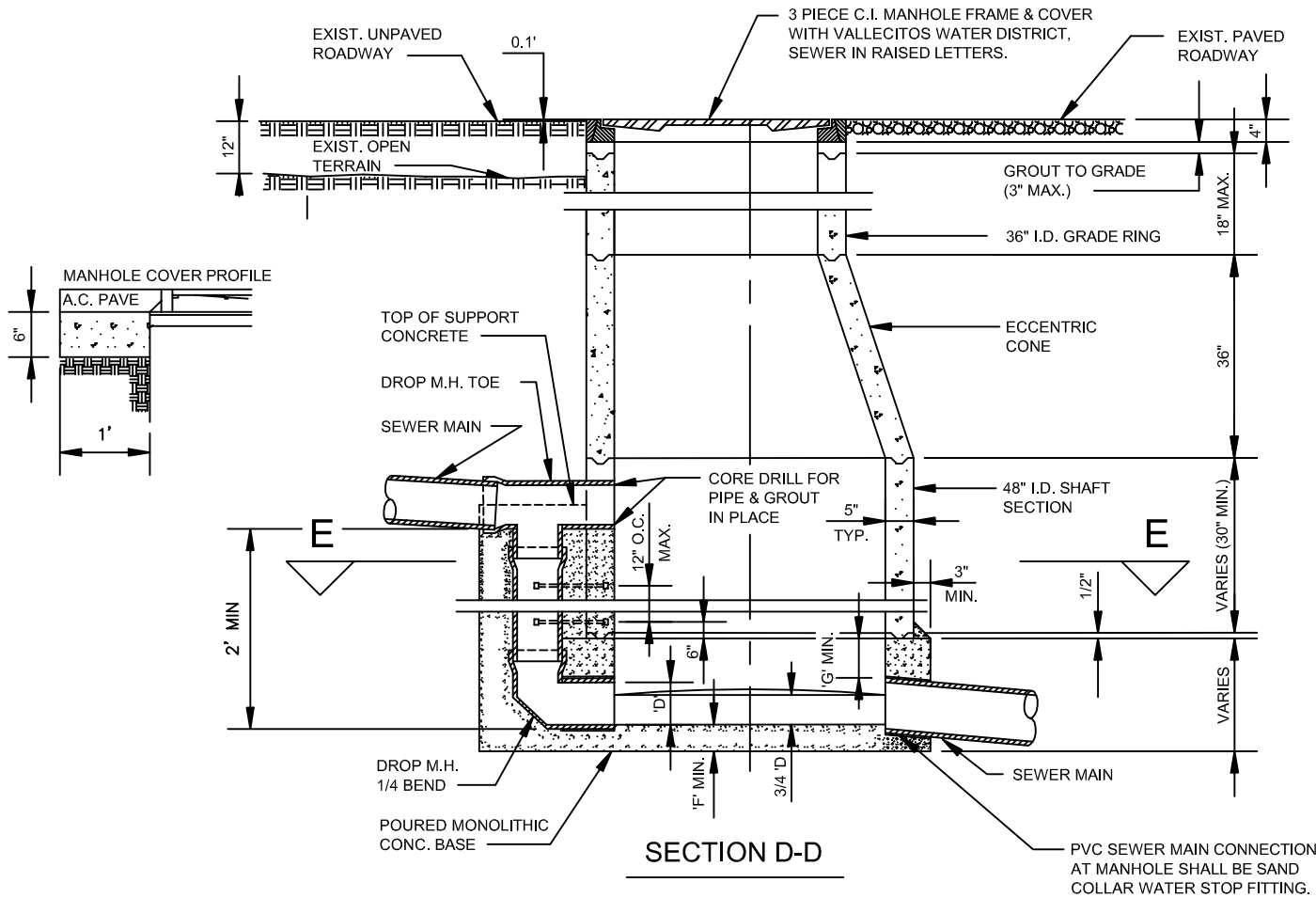
**STANDARD MANHOLE**

DATE: JULY 2015

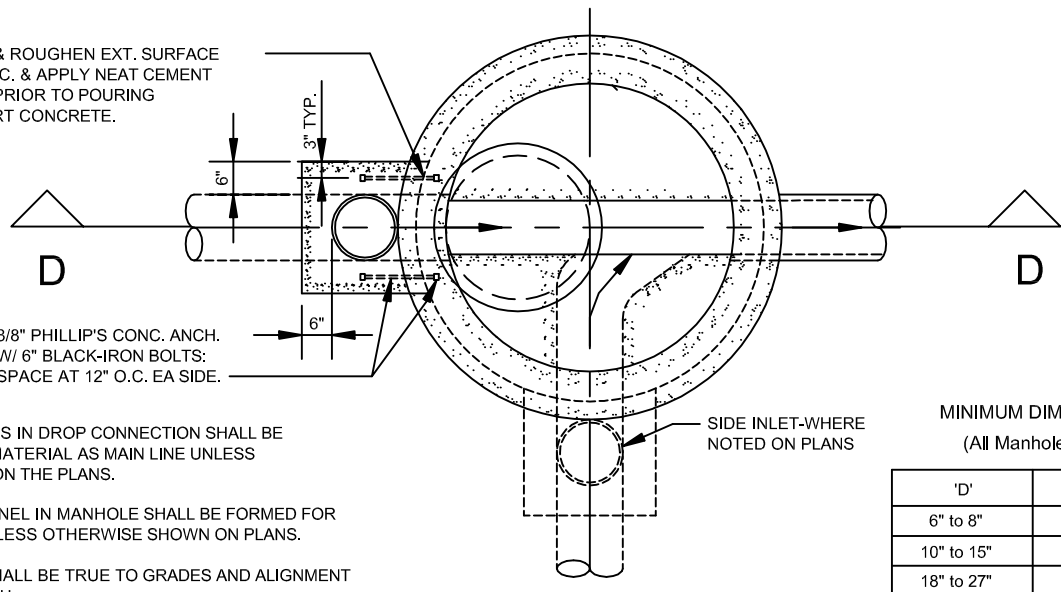
BY:

Drawing No.

**S-1**



CLEAN & ROUGHEN EXT. SURFACE OF CONC. & APPLY NEAT CEMENT PASTE PRIOR TO POURING SUPPORT CONCRETE.



**NOTES:**

- 1) ALL PIPE AND FITTINGS IN DROP CONNECTION SHALL BE THE SAME SIZE AND MATERIAL AS MAIN LINE UNLESS OTHERWISE SHOWN ON THE PLANS.
- 2) DROP SECTION CHANNEL IN MANHOLE SHALL BE FORMED FOR 8" DIAMETER PIPE UNLESS OTHERWISE SHOWN ON PLANS.
- 3) CHANNEL INVERTS SHALL BE TRUE TO GRADES AND ALIGNMENT AND FINISHED SMOOTH.
- 4) SHEAR COUPLINGS ARE REQUIRED WHEN BELLED ENDS ARE NOT USED.
- 5) BITSUMASTIC SHALL BE USED ON ALL MANHOLE JOINTS, EXCLUDING GRADE RINGS.

**MINIMUM DIMENSIONS:**  
(All Manhole Types)

'D'	'F'	'G'
6" to 8"	6"	4"
10" to 15"	6"	4"
18" to 27"	12"	4"

DIMENSIONS 'F' & 'G' SHALL BE USED FOR 'D' (INSIDE DIA. OF PIPE) OF THE LARGEST PIPE IN THE MANHOLE.

**TYPE "A" DROP MANHOLE TO BE USED ONLY UPON APPROVAL OF DISTRICT ENGINEER.**

REVISIONS		
DESCRIPTION	APPROVED	DATE
REMOVE STEPS & REVISE "F" & "G"		7-24-07
ROTATED SECTION		10-27-11
ADDED APPROVAL NOTE		3-27-17

**VALLECITOS WATER DISTRICT STANDARD DRAWING**

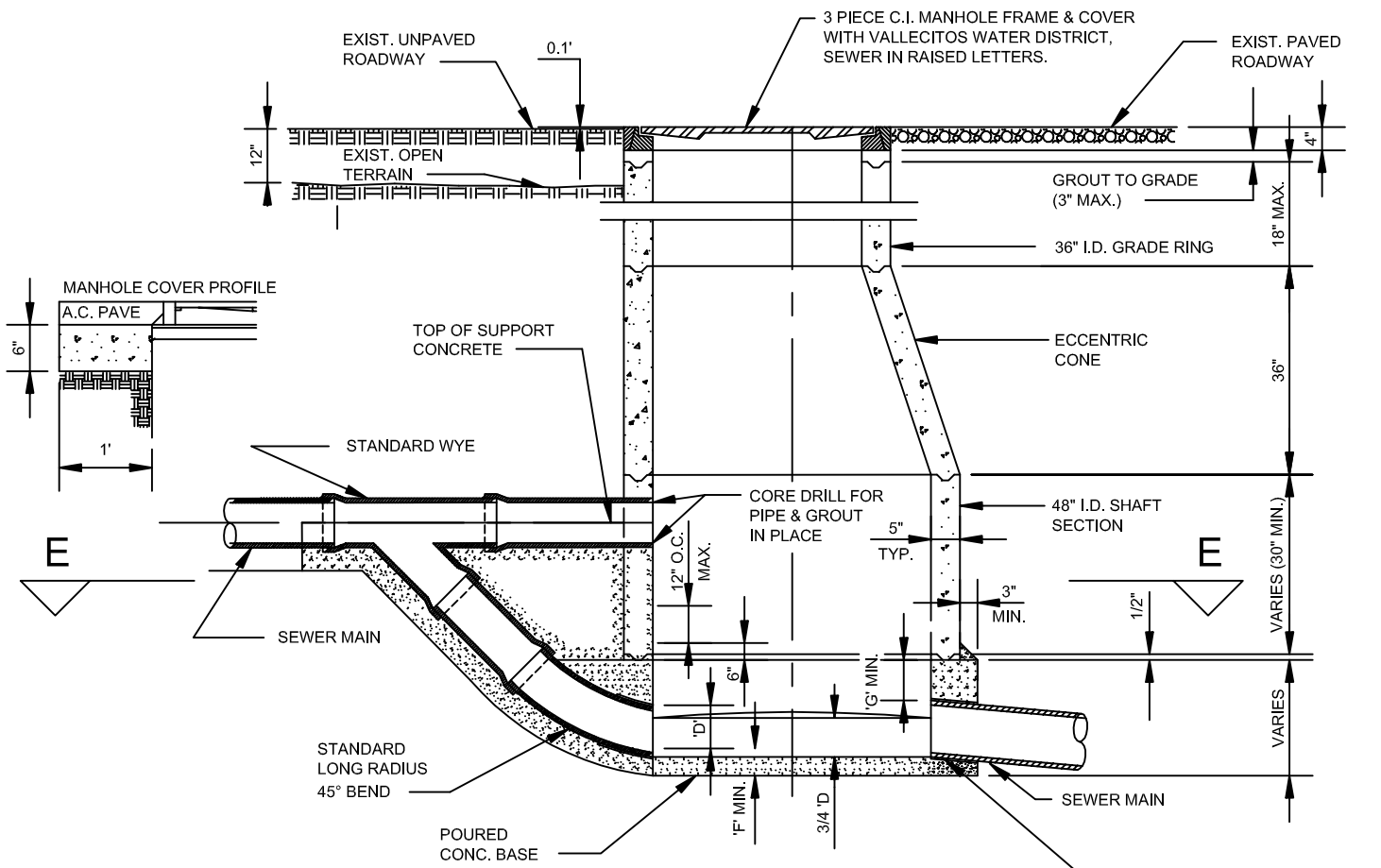
**DROP MANHOLE TYPE "A"**

DATE: JULY 2015

BY:

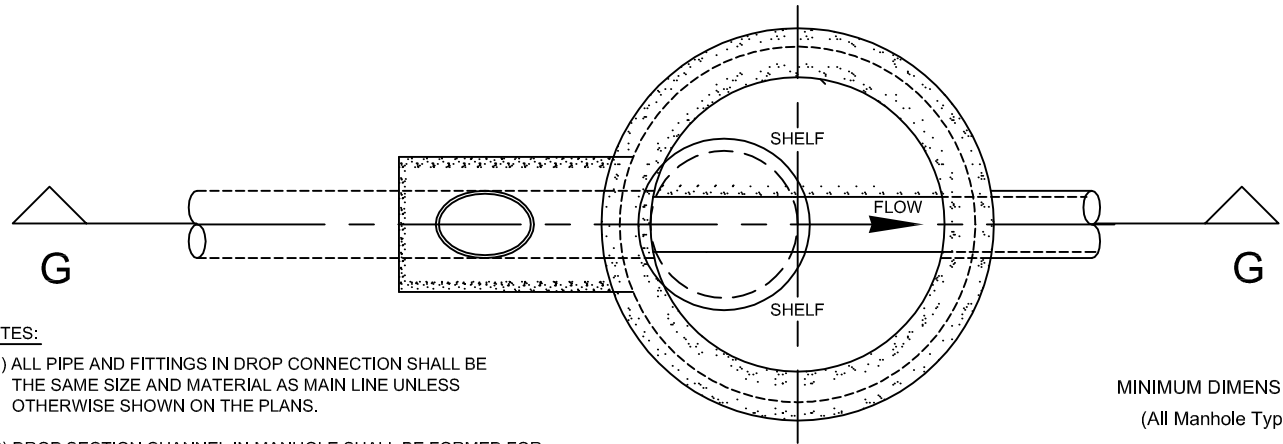
Drawing No.

S-2



SECTION G-G

PVC SEWER MAIN CONNECTION AT MANHOLE SHALL BE SAND COLLAR WATER STOP FITTING.



SECTION H-H

**NOTES:**

- 1) ALL PIPE AND FITTINGS IN DROP CONNECTION SHALL BE THE SAME SIZE AND MATERIAL AS MAIN LINE UNLESS OTHERWISE SHOWN ON THE PLANS.
- 2) DROP SECTION CHANNEL IN MANHOLE SHALL BE FORMED FOR 8" DIAMETER PIPE UNLESS OTHERWISE SHOWN ON PLANS.
- 3) CHANNEL INVERTS SHALL BE TRUE TO GRADES AND ALIGNMENT AND FINISHED SMOOTH.
- 4) IF DISTANCE 'C' IS GREATER THAN 4'-0" USE MANHOLE TYPE 'A'.
- 5) SHEAR COUPLINGS ARE REQUIRED WHEN BELLED ENDS ARE NOT USED.
- 6) BITSUMASTIC SHALL BE USED ON ALL MANHOLE JOINTS, EXCLUDING GRADE RINGS.

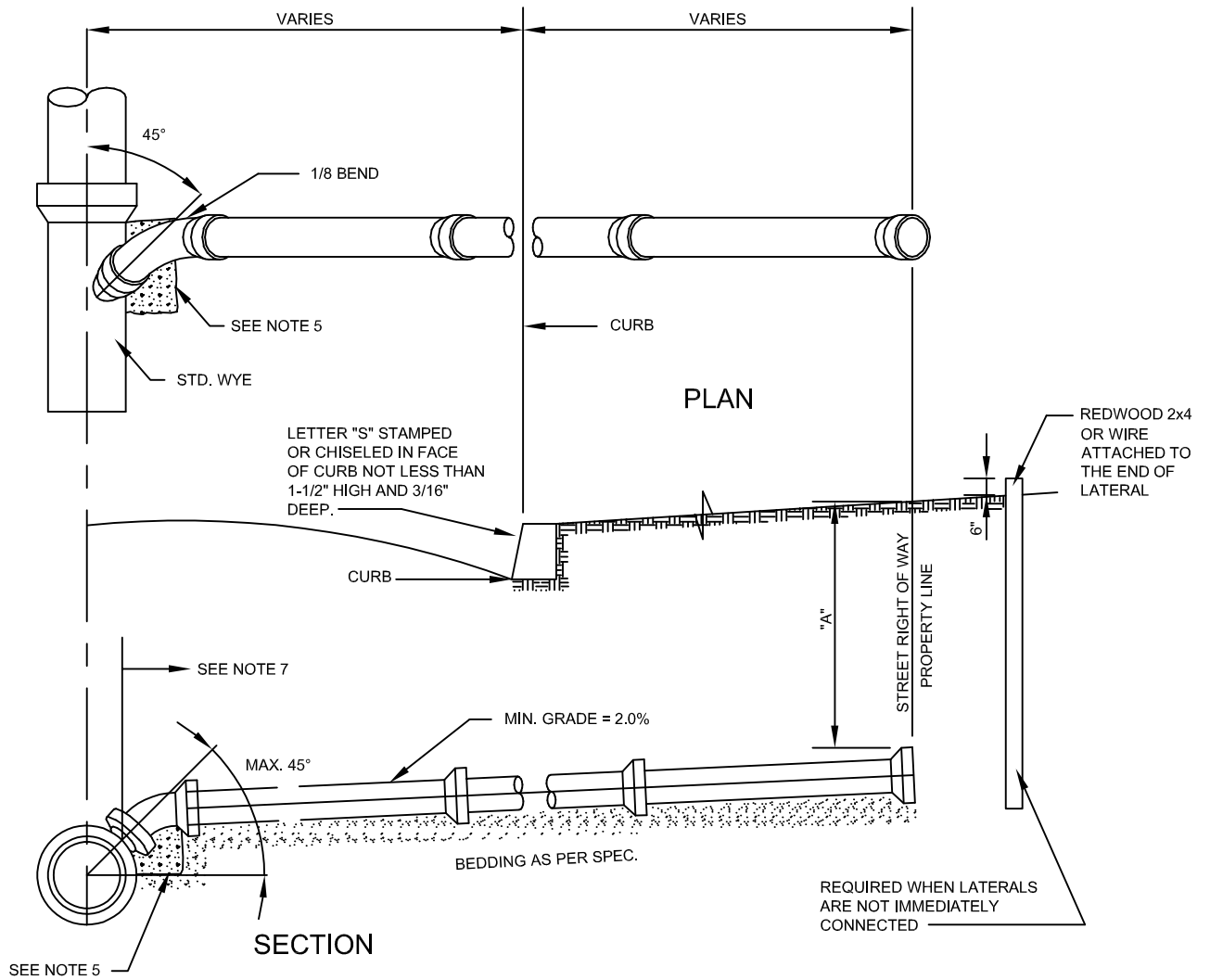
**MINIMUM DIMENSIONS:**  
(All Manhole Types)

'D'	'F'	'G'
6" to 8"	6"	4"
10" to 15"	6"	4"
18" to 27"	12"	4"

DIMENSIONS 'F' & 'G' SHALL BE USED FOR 'D' (INSIDE DIA. OF PIPE) OF THE LARGEST PIPE IN THE MANHOLE.

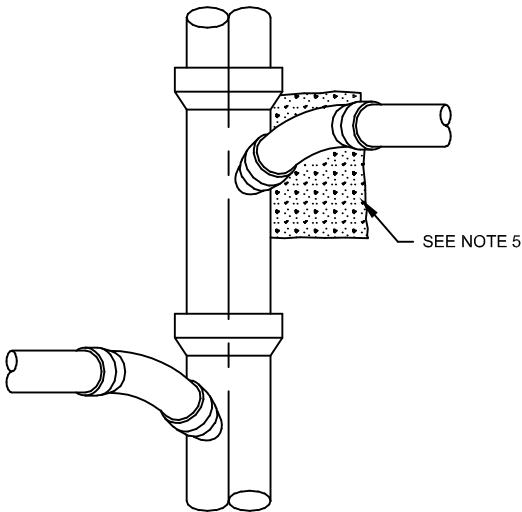
**TYPE "B" DROP MANHOLE TO BE USED ONLY UPON APPROVAL OF DISTRICT ENGINEER.**

REVISIONS			VALLECITOS WATER DISTRICT STANDARD DRAWING	DATE: JAN. 04
DESCRIPTION	APPROVED	DATE		<b>DROP MANHOLE TYPE "B"</b>
REMOVE STEPS & REVISE "F" & "G"		7-24-07		
ROTATED SECTION		10-27-11		
				Drawing No.
				<b>S-3</b>

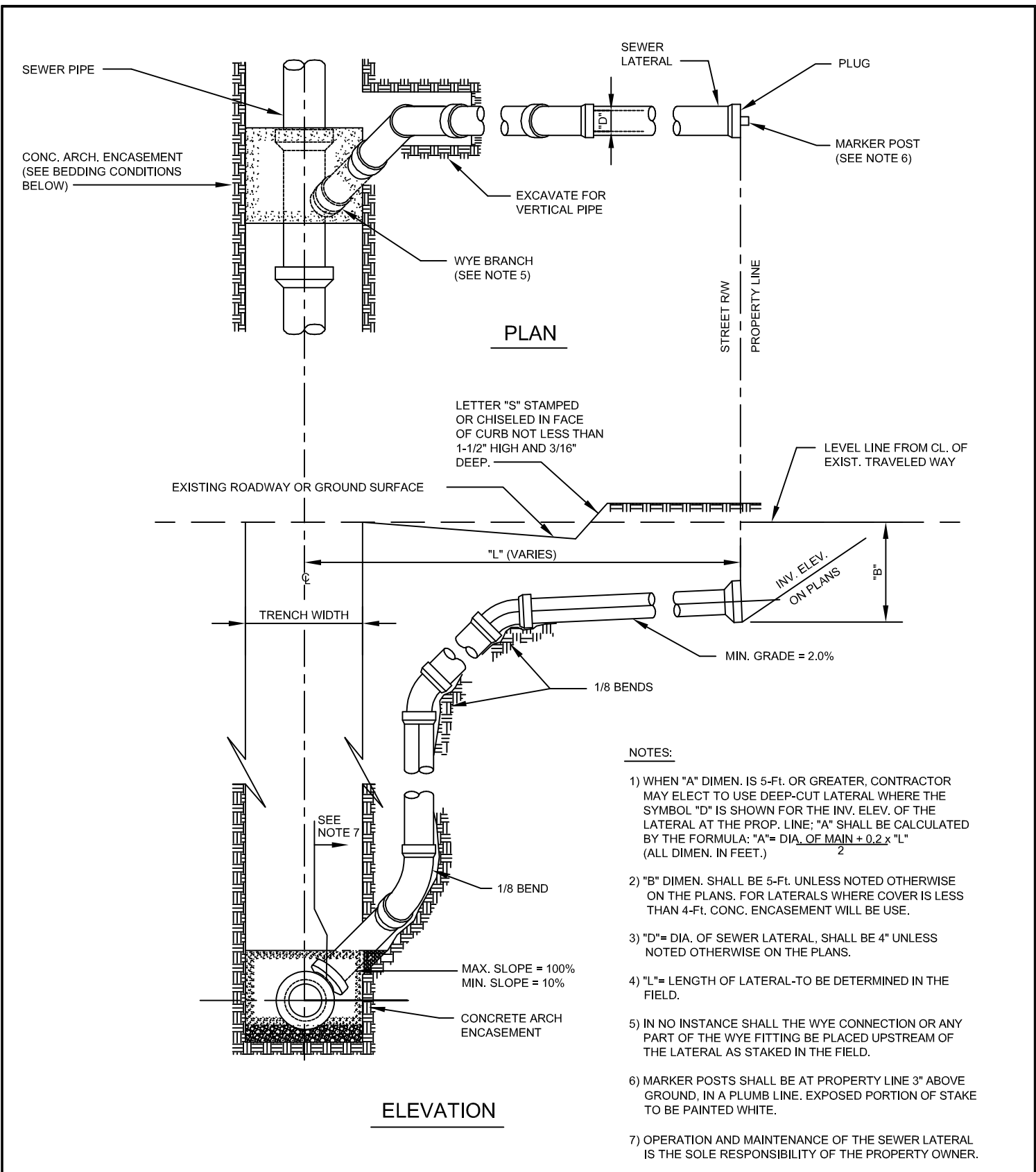


**NOTES:**

- 1) FINAL APPROVAL WILL NOT BE GRANTED UNLESS THE LETTER "S" IS STAMPED ON CURB AS NOTED ABOVE, AT CORRECT STATION.
- 2) FINAL APPROVAL WILL NOT BE GRANTED UNLESS THE SEWER LATERALS COMPLY FULLY WITH THIS DRAWING.
- 3) ALL LATERALS MUST HAVE STATION AND INVERT ELEV. AT PROPERTY LINE NOTED ON "AS-BUILT" DRAWING, OR FINAL APPROVAL WILL NOT BE GRANTED.
- 4) PROPERTY LINE CLEAN OUTS WILL BE REQUIRED ON ALL LATERALS IF WATER IS NOT SERVED BY THE VWD.
- 5) CONCRETE SUPPORT OF SEWER LATERALS, REQUIRED ON HOT TAPS ONLY.
- 6) "A" DIMEN. SHALL BE 5-Ft. UNLESS NOTED OTHERWISE ON THE PLANS. FOR LATERALS WHERE COVER IS LESS THAN 4-Ft. CONC. ENCASEMENT WILL BE USE.
- 7) OPERATION AND MAINTENANCE OF THE SEWER LATERAL IS THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER.

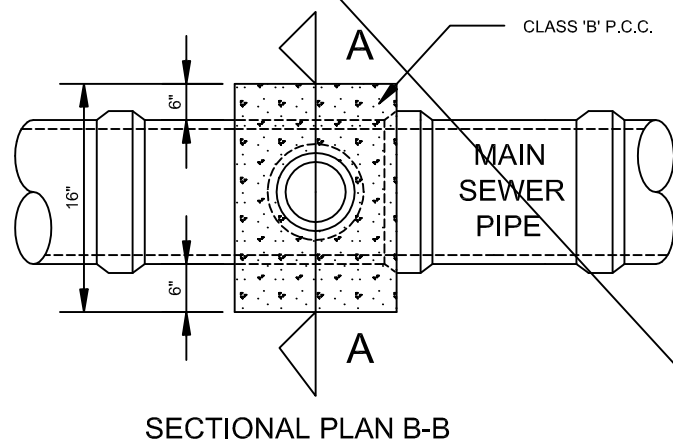
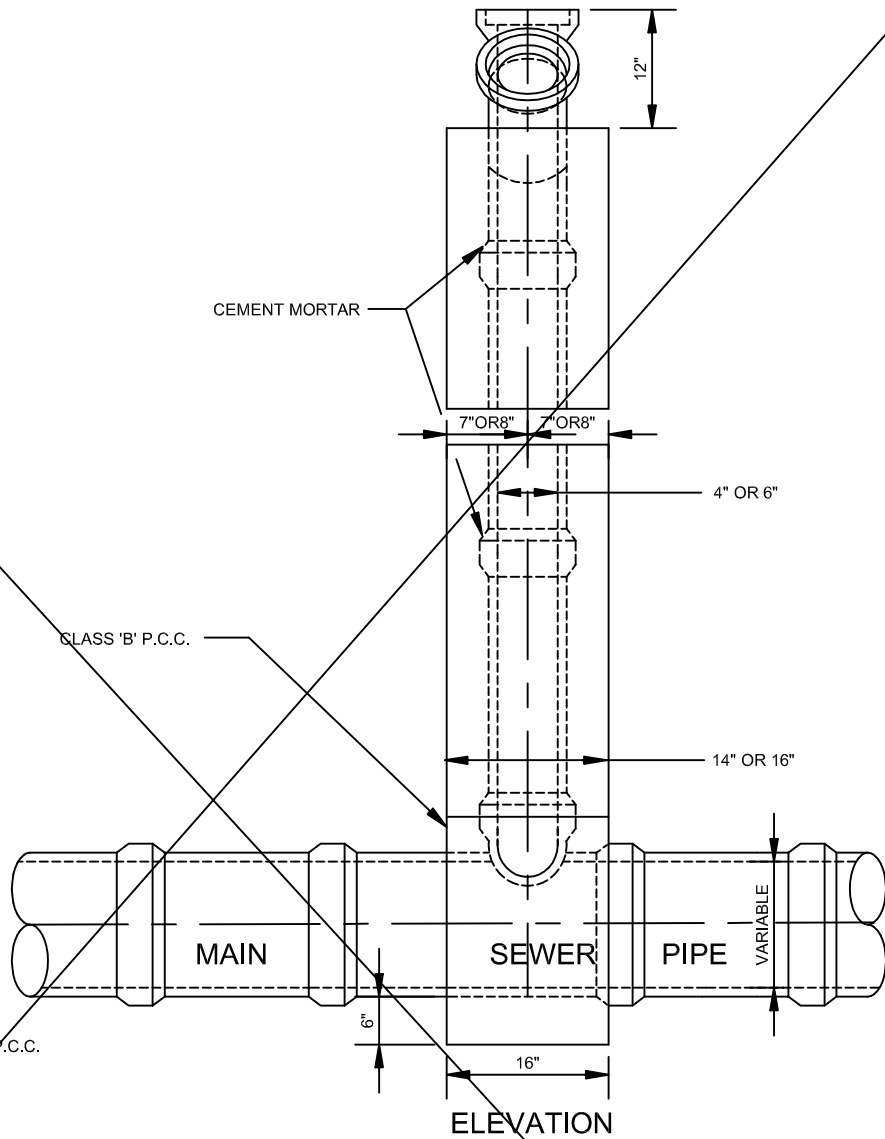
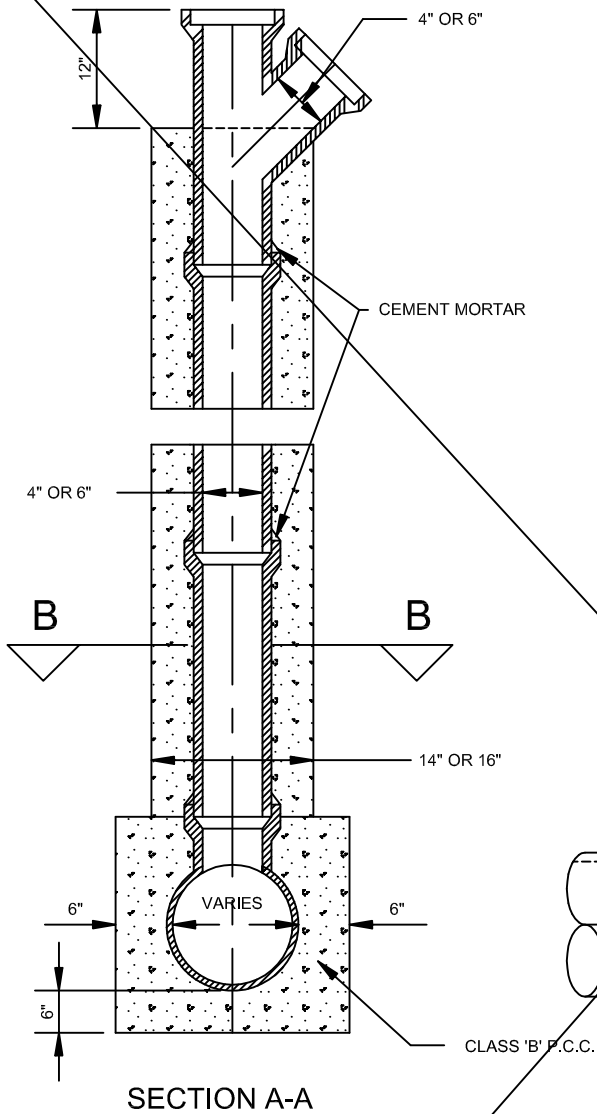


REVISIONS			VALLECITOS WATER DISTRICT STANDARD DRAWING	DATE: JULY 2015
DESCRIPTION	APPROVED	DATE		BY:
ADDED MIN. GRADE		1/30/17	STANDARD LATERAL FOR SEWER	Drawing No. <b>S-4</b>
ADDED NOTE 7		3/2/23		



DEEP CUT LATERALS TO BE USED ONLY  
UPON APPROVAL OF DISTRICT ENGINEER.

REVISIONS			VALLECITOS WATER DISTRICT STANDARD DRAWING	DATE: JULY 2015
DESCRIPTION	APPROVED	DATE		BY:
ADDED NOTE 7		3/2/23	<b>DEEP-CUT LATERAL CONNECTION</b>	Drawing No.
				<b>S-5</b>



**NOTES:**

- 1.) THE UPPER END OF THE CHIMNEY PIPE SHALL BE 8" BELOW THE GRADE OF THE LOWER CURB. UNLESS OTHERWISE SPECIFIED.
- 2.) WHERE ONE OR TWO HOUSES CONNECTIONS ARE TO BE JOINED TO THE CHIMNEY PIPE, USE A SINGLE 'Y' BRANCH, WHERE THREE HOUSE CONNECTIONS ARE TO BE JOINED, USE A DOUBLE 'Y' BRANCH.
- 3.) WHERE THE CHIMNEY PIPE IS TO BE USED FOR A SINGLE HOUSE CONNECTION FACE 'Y' TOWARD PROPERTY TO BE SERVED; WHERE USE FOR HOUSE CONNECTIONS ON BOTH SIDES OF THE SEWER, THE HOUSE CONNECTION ON THE RIGHT SIDE OF THE SEWER, (LOOKING UP GRADE) SHALL BE CONNECTED TO THE 'Y' BRANCH BY A 1/8 BEND AND THE HOUSE CONNECTION ON THE LEFT SIDE SHALL BE CONNECTED TO THE UPPER END OF THE CHIMNEY BY 4" OR 6" 1/4 BEND. UNLESS OTHERWISE SPECIFIED.
- 4.) CHIMNEY PIPE USE ONLY UPON APPROVAL OF THE DISTRICT ENGINEER.

REVISIONS		
DESCRIPTION	APPROVED	DATE

**VALLECITOS WATER DISTRICT STANDARD DRAWING**

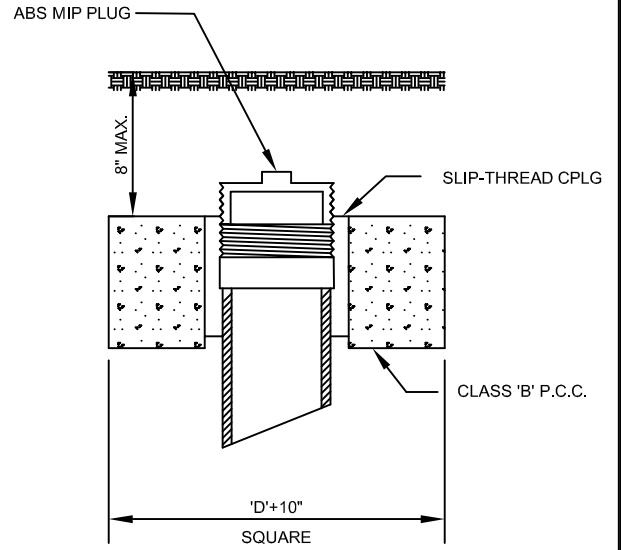
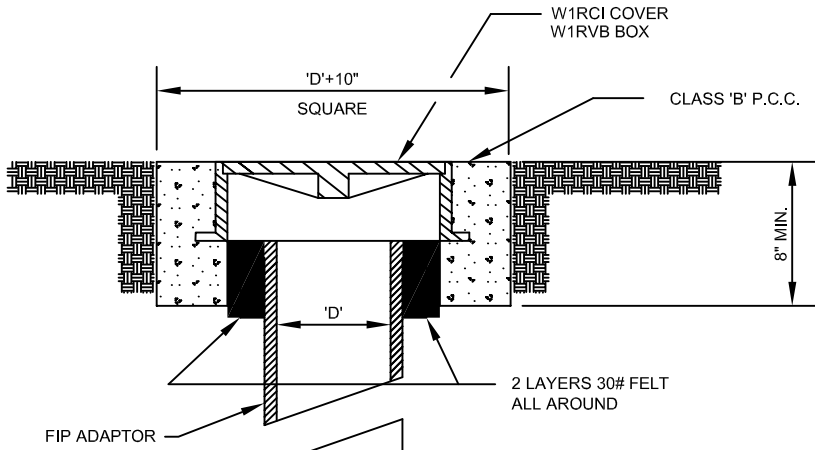
DATE: JAN. 04

BY:

**CHIMNEY PIPE**

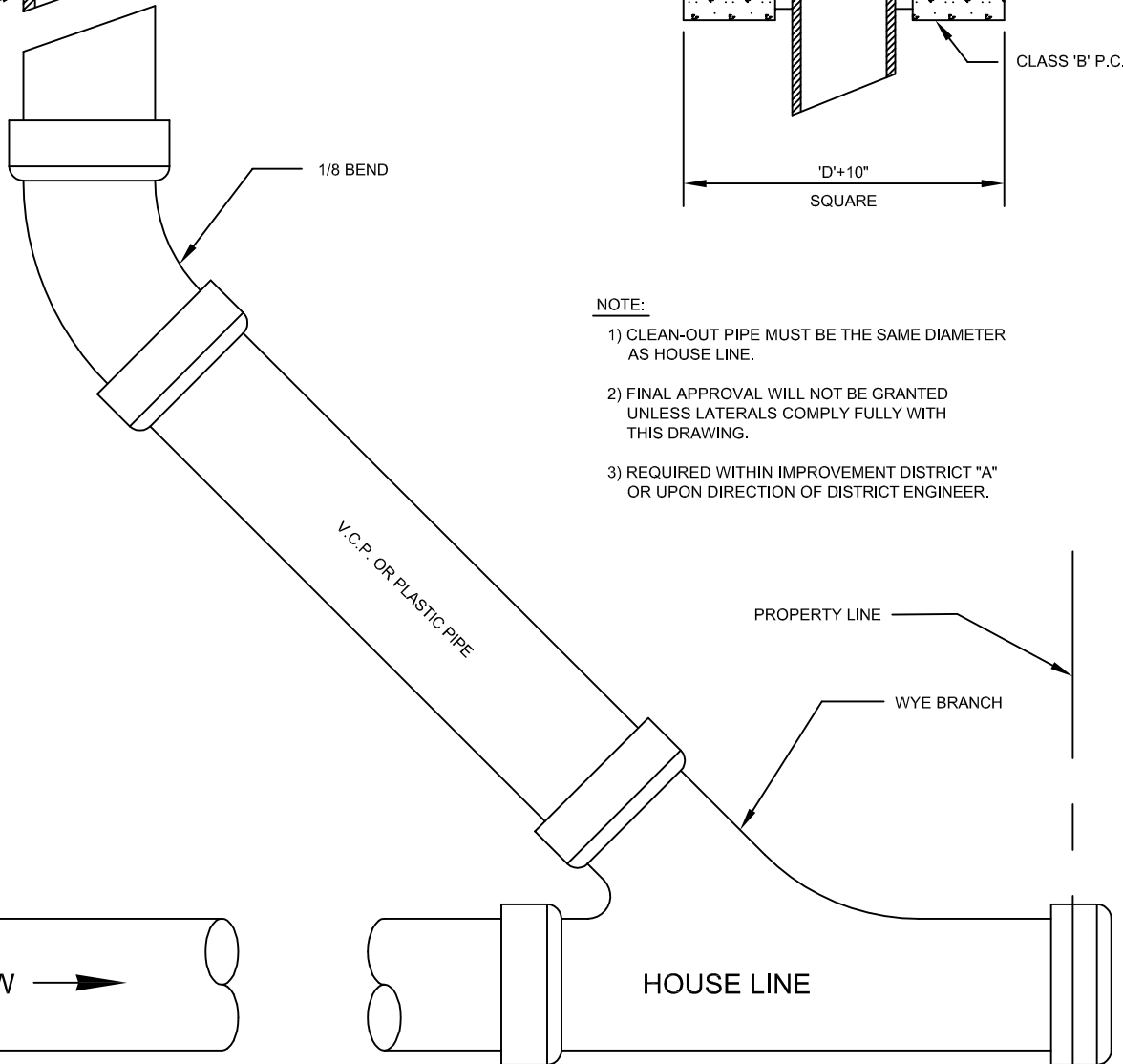
Drawing No.

**S-6**



**NOTE:**

- 1) CLEAN-OUT PIPE MUST BE THE SAME DIAMETER AS HOUSE LINE.
- 2) FINAL APPROVAL WILL NOT BE GRANTED UNLESS LATERALS COMPLY FULLY WITH THIS DRAWING.
- 3) REQUIRED WITHIN IMPROVEMENT DISTRICT "A" OR UPON DIRECTION OF DISTRICT ENGINEER.



SECTIONAL PLAN B-B

REVISIONS		
DESCRIPTION	APPROVED	DATE
THREADED PLUG		8-21-07
BOX AND COVER		6-01-11

VALLECITOS WATER DISTRICT STANDARD DRAWING

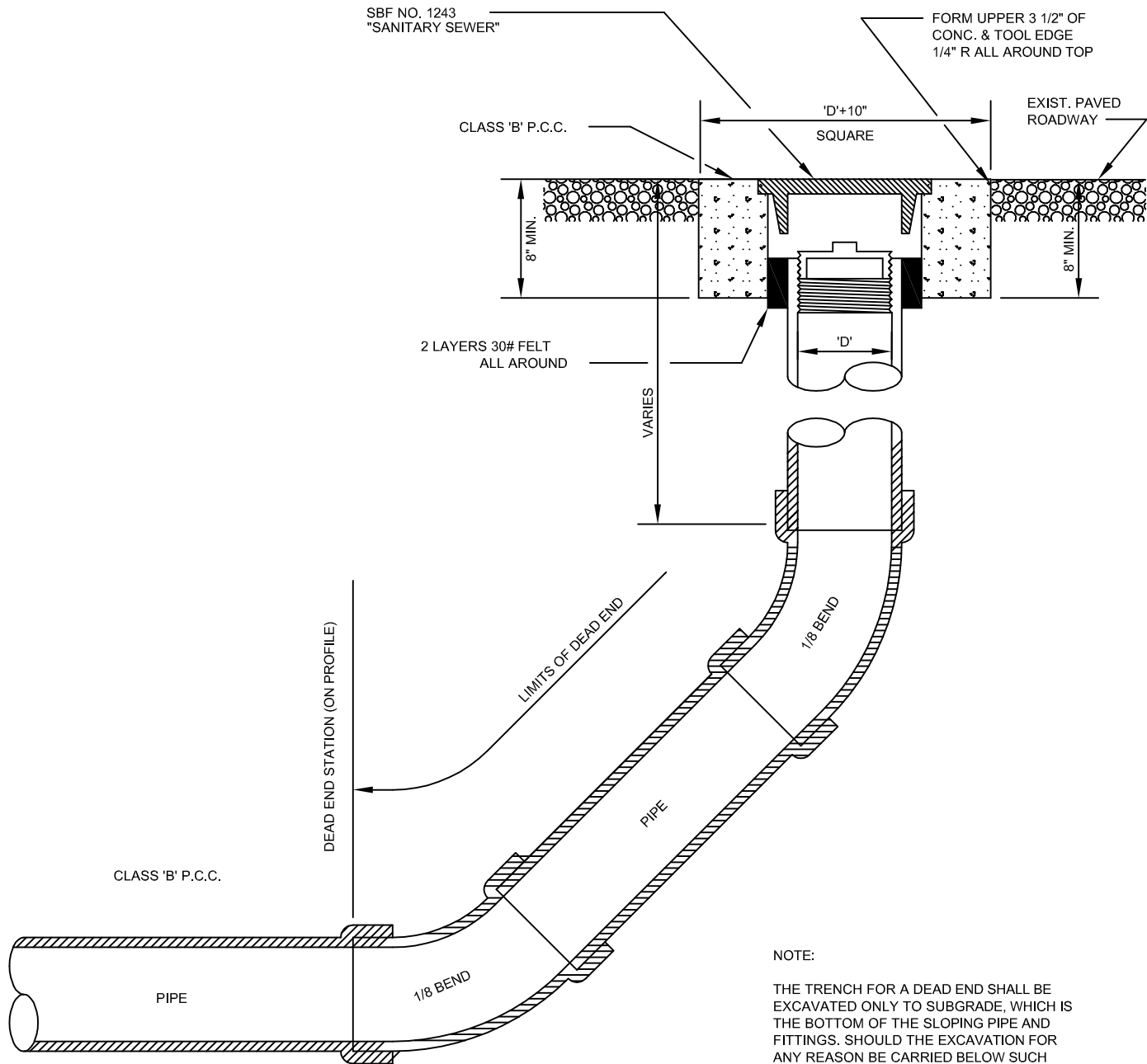
DATE: JAN. 04

PROPERTY LINE CLEANOUT

BY:

Drawing No.

S-7



**NOTE:**  
 THE SEWER MAIN SHALL BE LAID FOR THE FULL LENGTH AND DEPTH SHOWN ON THE PLANS AND PROFILE TO THE POINT MARKED DEAD END (D.E.)

**NOTE:**  
 THE TRENCH FOR A DEAD END SHALL BE EXCAVATED ONLY TO SUBGRADE, WHICH IS THE BOTTOM OF THE SLOPING PIPE AND FITTINGS. SHOULD THE EXCAVATION FOR ANY REASON BE CARRIED BELOW SUCH A GRADE, IT SHALL BE REFILLED TO GRADE WITH TYPE 'A' CRUSHED ROCK WHICH SHALL BE TAMPED FIRM AND UNYIELDING. SHOULD A FIRM AND UNYIELDING FOUNDATION BE UNOBTAINABLE BY THIS METHOD, A PARTIAL CONCRETE CRADLE SHALL BE EMPLOYED.

REVISIONS		
DESCRIPTION	APPROVED	DATE
THREADED PLUG		6-13-11

**VALLECITOS WATER DISTRICT STANDARD DRAWING**

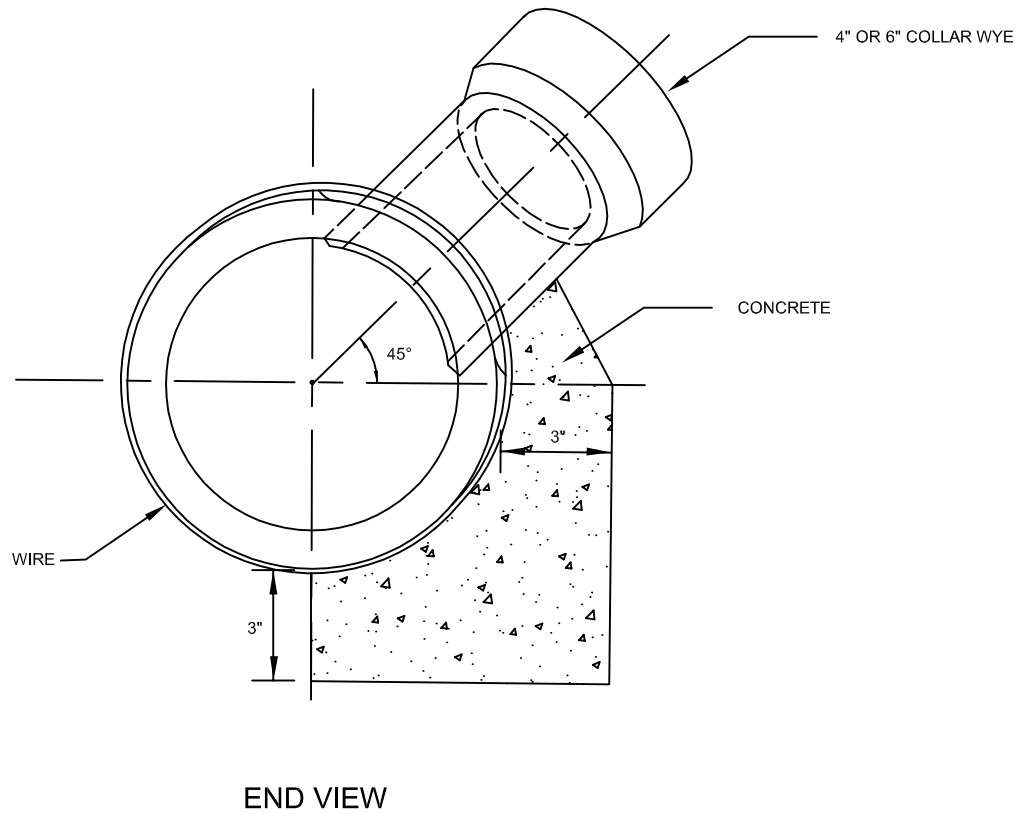
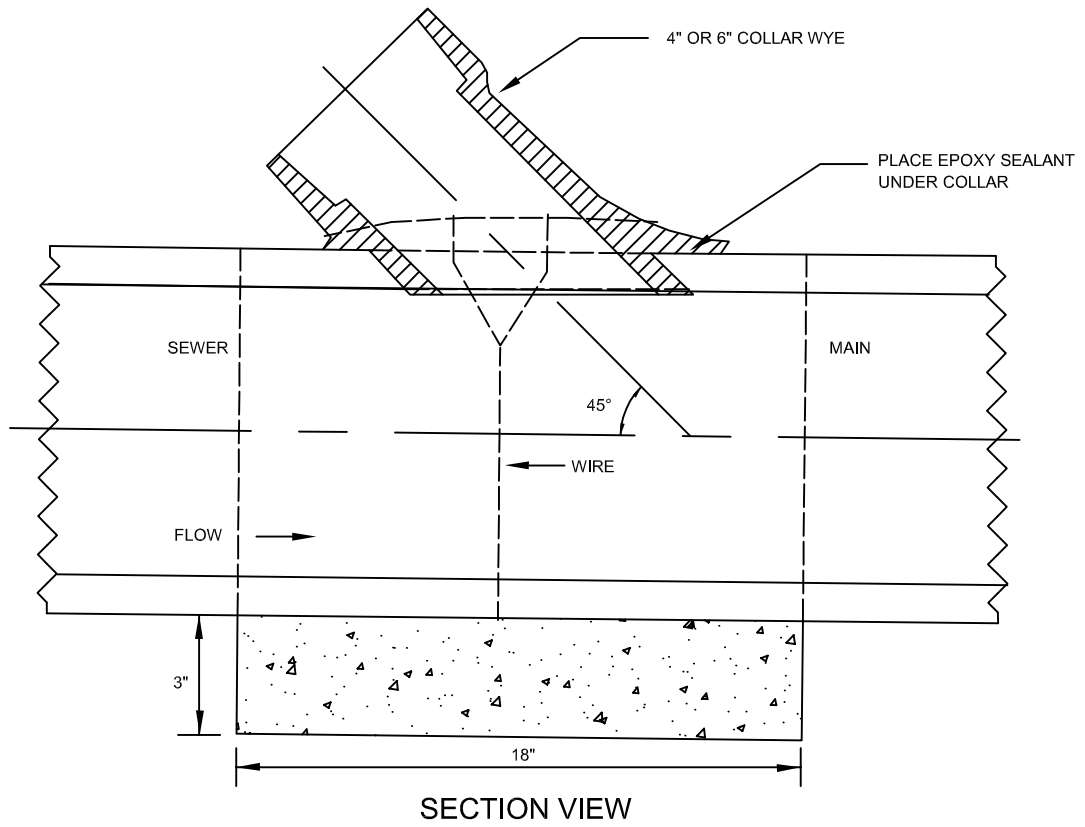
**DEAD END CLEAN-OUT**

DATE: JAN. 04

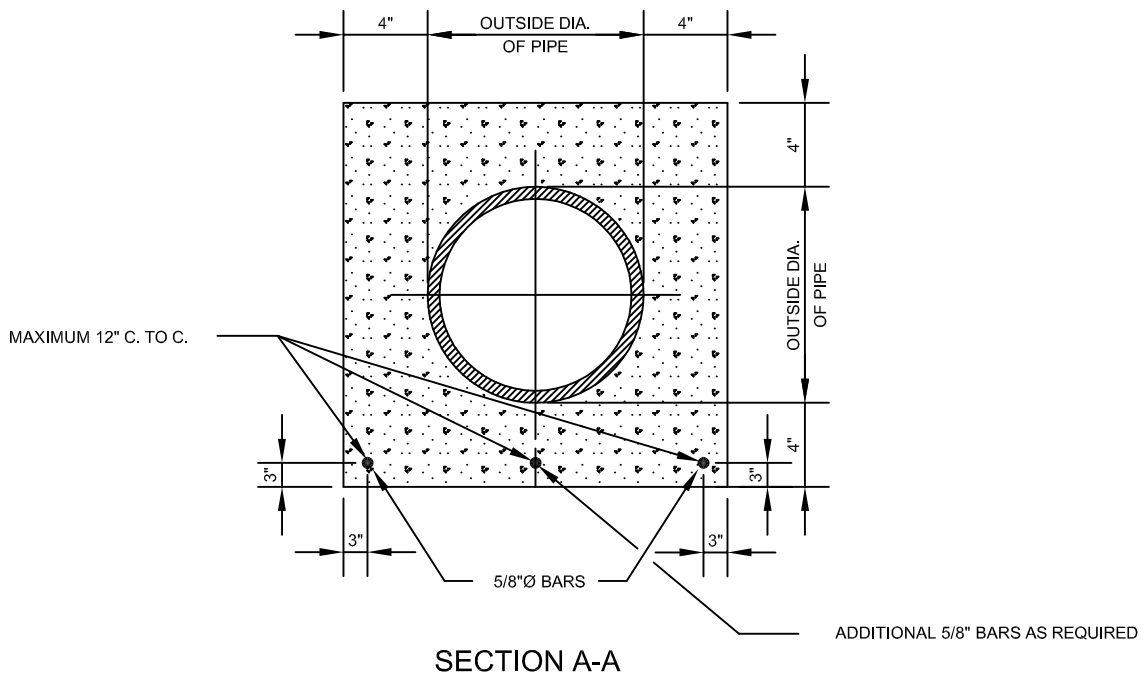
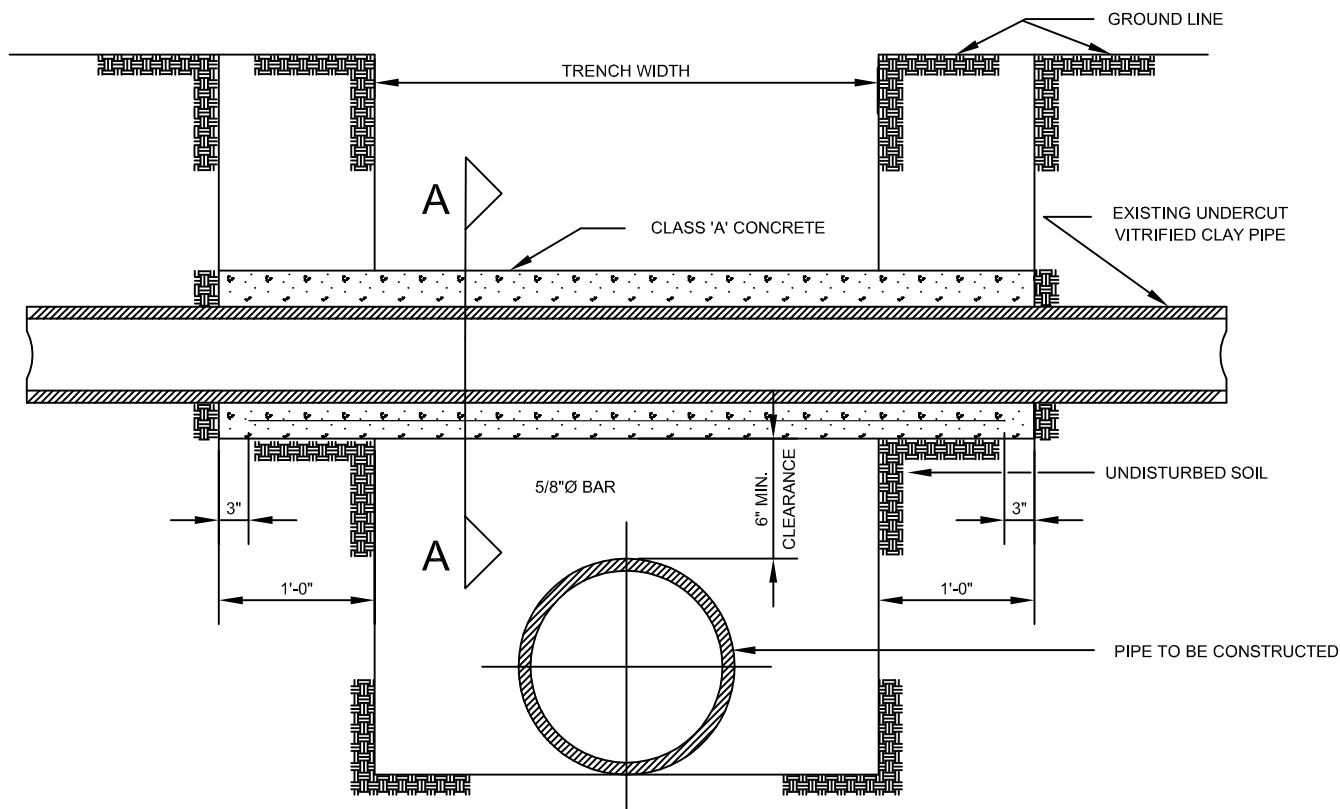
BY:

Drawing No.  
**S-8**





REVISIONS			VALLECITOS WATER DISTRICT STANDARD DRAWING	DATE: JAN. 04
DESCRIPTION	APPROVED	DATE		BY:
CONCRETE CRADLE & EPOXY		8-23-07	<b>CUT IN FIELD LATERAL</b>	Drawing No.
				S-9



REVISIONS		
DESCRIPTION	APPROVED	DATE

**VALLECITOS WATER DISTRICT STANDARD DRAWING**

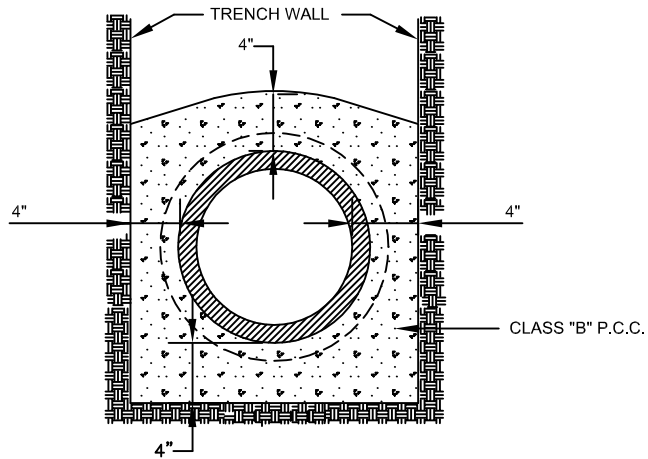
**SUPPORT FOR UNDERCUT V.C. PIPE**

DATE: JAN. 04

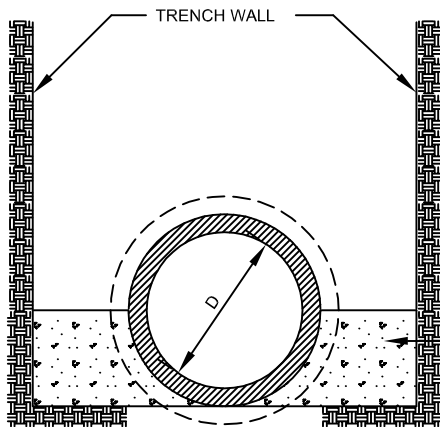
BY:

Drawing No.

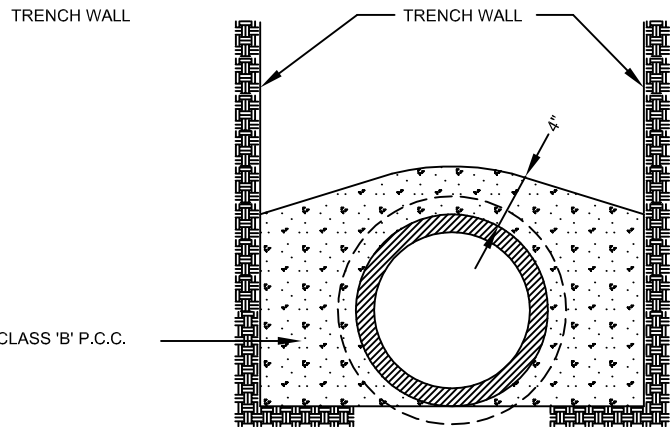
**S-10**



NO. 1  
CONCRETE ENCASEMENT



CONCRETE CRADLE

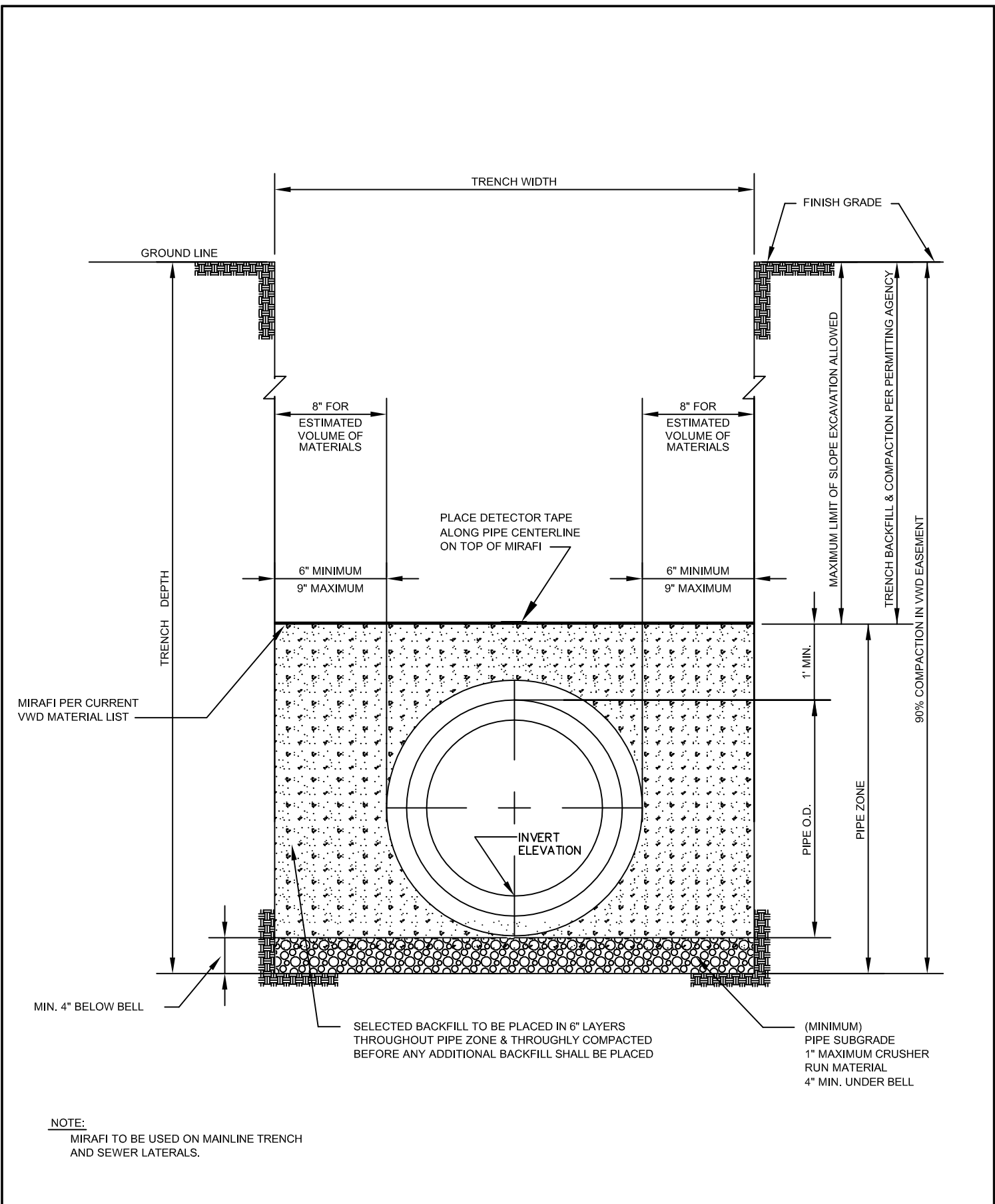


NO. 2  
CONCRETE ENCASEMENT

NOTE:

WHERE TRENCH WIDTH EXCEEDS THE WIDTH SPECIFIED IN THE SPECIFICATIONS, CONTRACTOR SHALL FURNISH AND PLACE AT HIS OWN EXPENSE, A CRADLE AS SHOWN ABOVE.

REVISIONS			VALLECITOS WATER DISTRICT STANDARD DRAWING	DATE: JAN. 04
DESCRIPTION	APPROVED	DATE		BY:
			<b>STANDARD CONCRETE CRADLE AND ENCASEMENT</b>	Drawing No.
				S-11



**NOTE:**

MIRAFI TO BE USED ON MAINLINE TRENCH AND SEWER LATERALS.

REVISIONS		
DESCRIPTION	APPROVED	DATE
DETECTOR TAPE		8-21-07
ADDED MIRAFI		3-28-17

**VALLECITOS WATER DISTRICT STANDARD DRAWING**

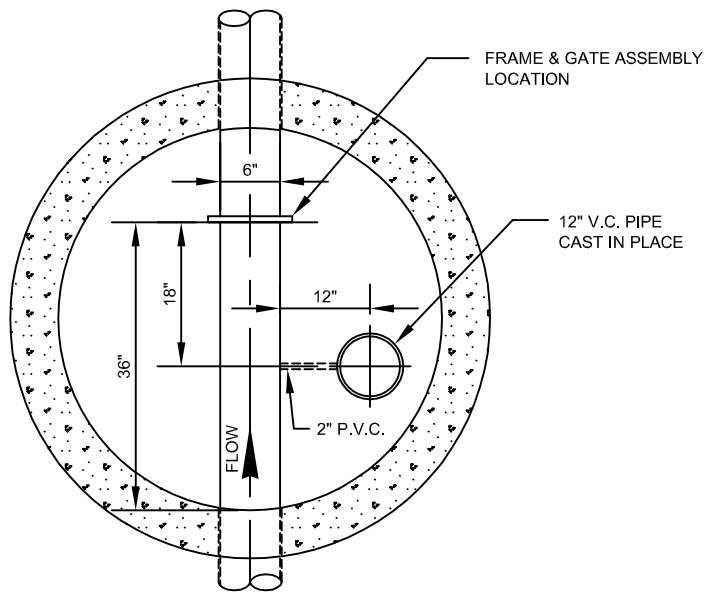
**TRENCH EXCAVATION & BACKFILL FOR SEWERS**

DATE: JULY 2015

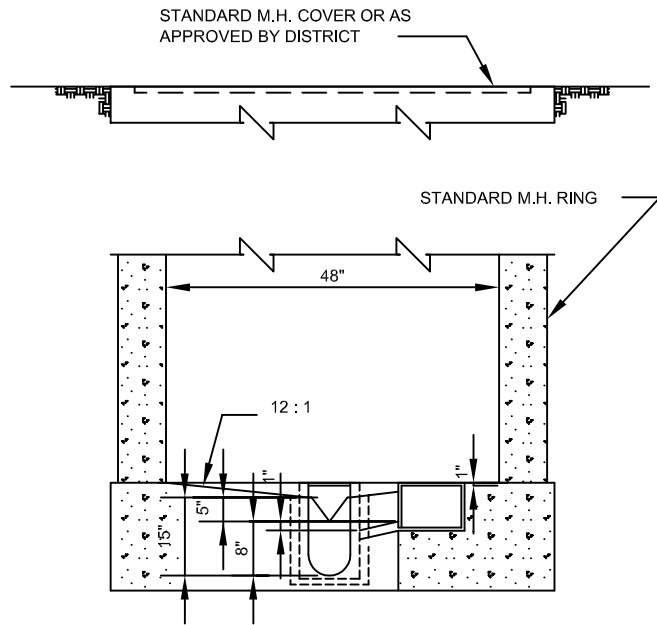
BY:

Drawing No.

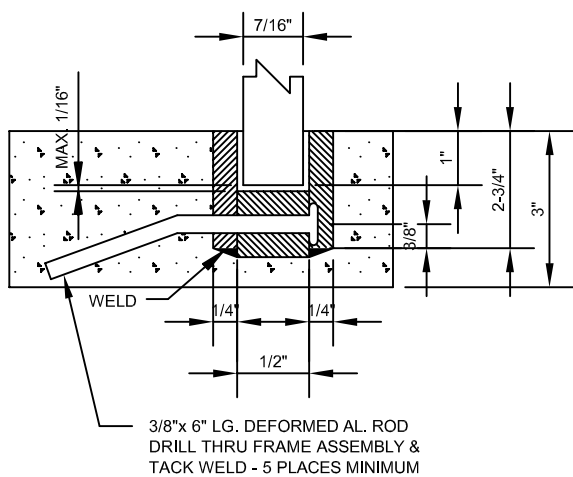
# S-12



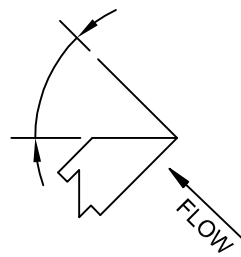
PLAN



SECTION

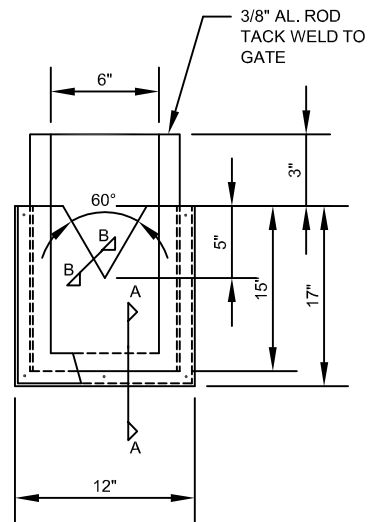


SECTION A-A



SECTION B-B

A RECORDER MAY BE REQUIRED TYPE AND MODEL PER DISTRICT



FRAME & GATE ASSEMBLY

NOTE: ALL MATERIAL FOR GATE AND FRAME TO BE ALUMINUM PLATE

NOTES:

- 1) CONSTRUCT CONTROL MANHOLE ON STRAIGHT RUN OF SEWER PIPE. FLOW SHALL BE STRAIGHT THROUGH AS SHOWN.
- 2) BOTTOM OF V-NOTCH MUST ALWAYS BE ABOVE MAXIMUM POSSIBLE LEVEL IN DOWNSTREAM CHANNEL TO PREVENT SUBMERGED DISCHARGE CONDITIONS.
- 3) THE CONTROL MANHOLE SHALL BE A MINIMUM SIZE OF 4 FOOT SQUARE INSIDE OR 4 FOOT INSIDE DIAMETER AND CONSTRUCTED OF CONCRETE BLOCK, BRICK, STANDARD MANHOLE RINGS OR POURED CONCRETE.
- 4) CONTROL MANHOLE PLANS ARE TO BE SUBMITTED TO THE ENGINEERING DEPARTMENT OF THE VALLECITOS WATER DISTRICT FOR APPROVAL.
- 5) FOR 6" OR 8" LINES ONLY.
- 6) FOR FLOWS OF 10,000 TO 100,000 PER DAY. FOR FLOWS OTHER THAN THOSE SPECIFIED, CONTACT THE DISTRICT.

REVISIONS			VALLECITOS WATER DISTRICT STANDARD DRAWING	DATE: JAN. 04
DESCRIPTION	APPROVED	DATE		INDUSTRIAL WASTE CONTROL MANHOLE
DELETE STEPS / REV. MISC. NOTES		8-21-07	Drawing No.	
			S-13	