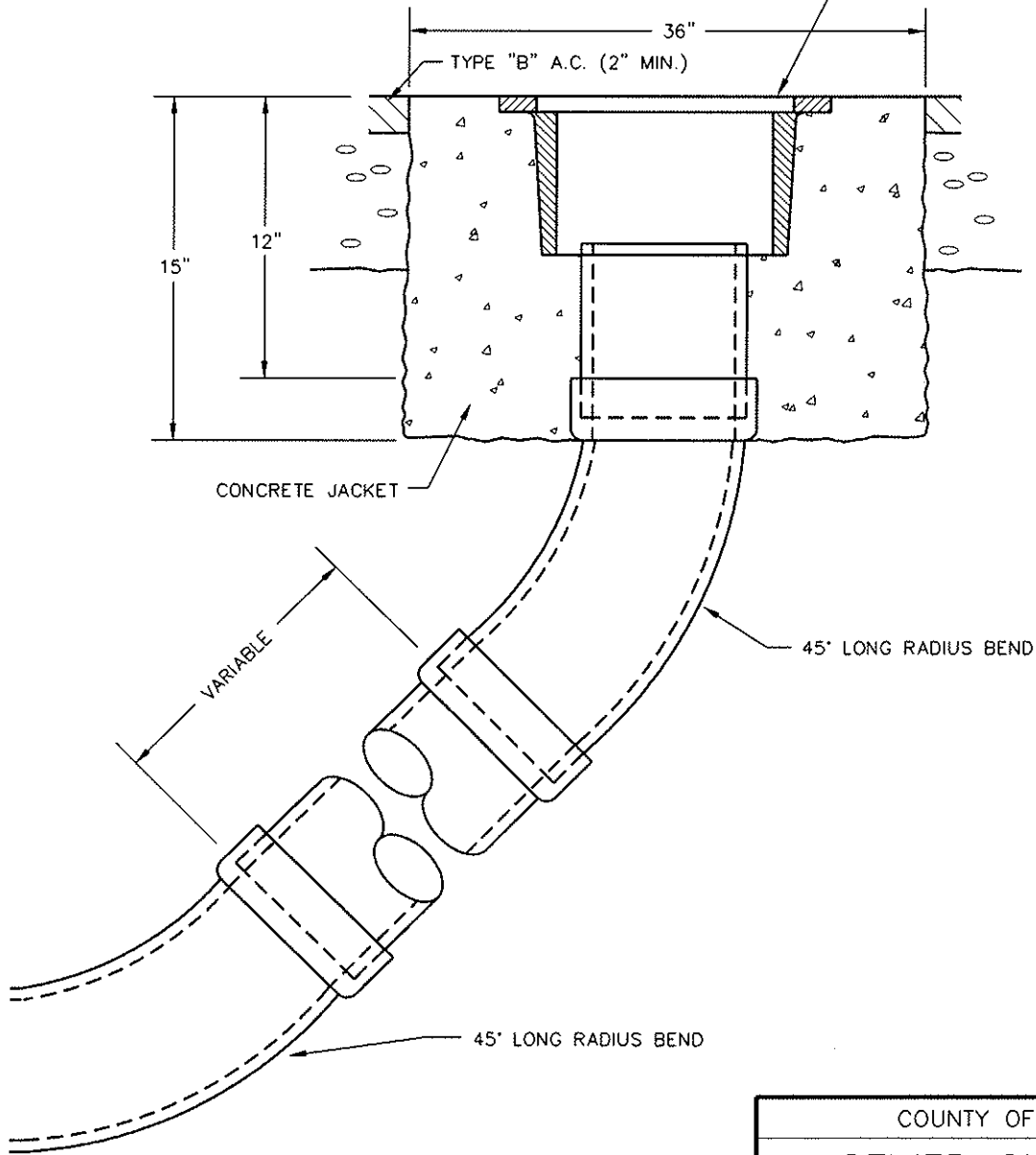


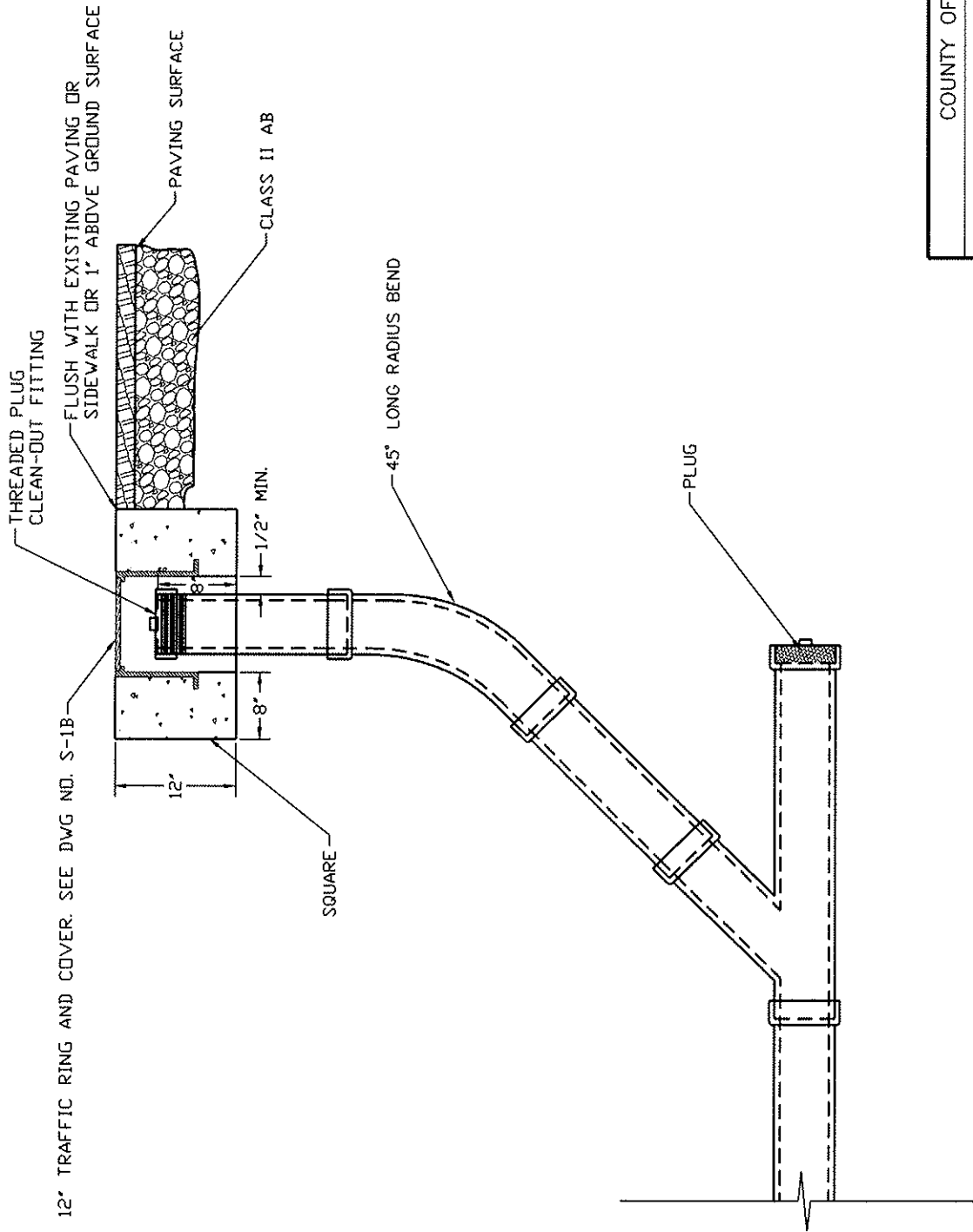
COVER DETAIL

(1) FOR 6" SEWER MAIN USE
D & L SUPPLY 9 1/2"
TRAFFIC VALVE BOX TYPE
H8030 OR APPROVED
EQUAL MARKED "SEWER".

(2) FOR 8" 10" AND 12" SEWER
MAINS USE D & L
CLEAN-OUT ASSEMBLY
H-8026 OR EQUAL
MARKED "SEWER".



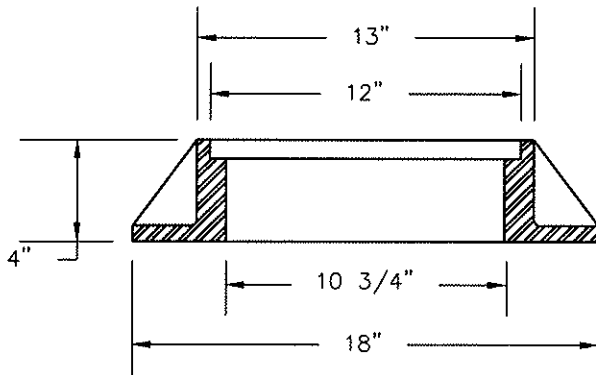
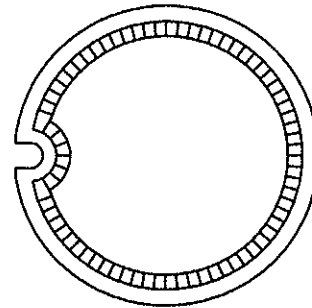
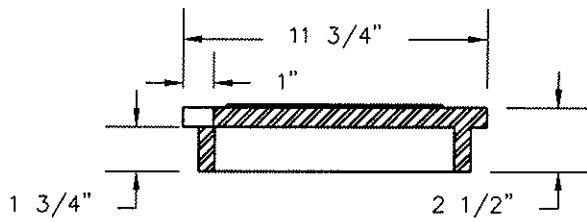
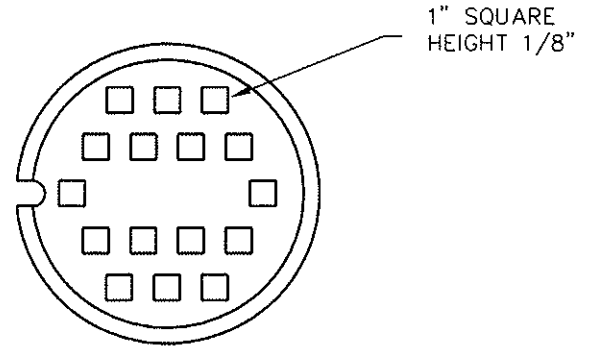
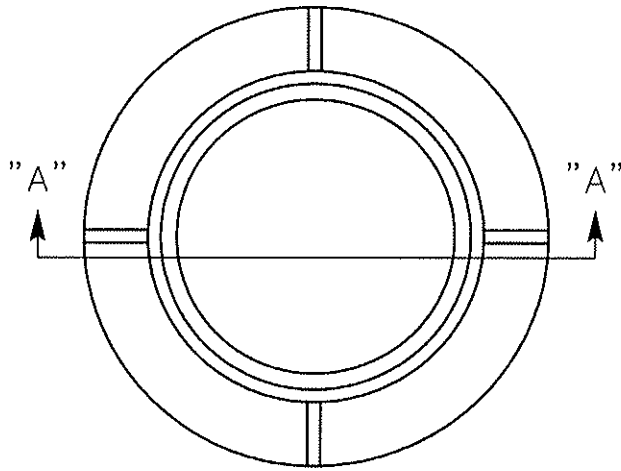
COUNTY OF SUTTER	
SEWER CLEANOUT	
DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DWG NO. S-1
DRN: PSO DATE: 11/2010	



12" TRAFFIC RING AND COVER. SEE DWG NO. S-1B

COUNTY OF SUTTER	
8" FLUSHING BRANCH	
DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DWG NO. S-1A
DRN: K.XIONG	DATE: 11/2010

PLAN

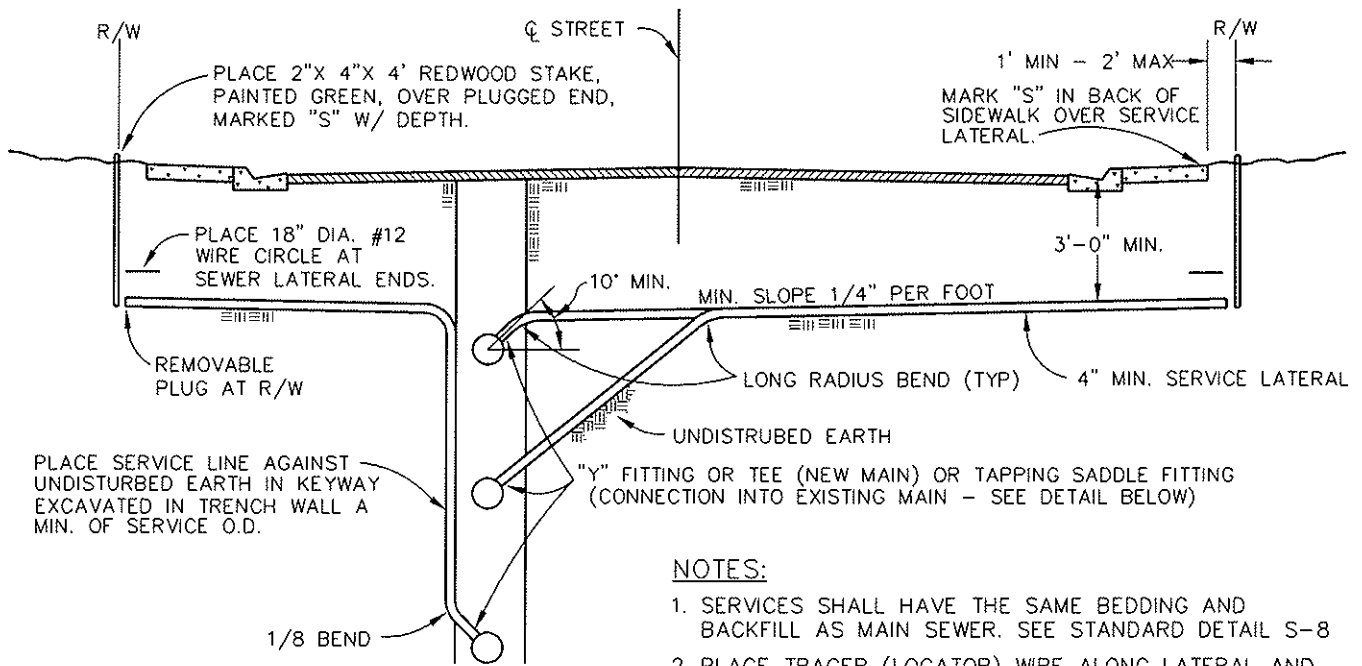


SECTION A-A

NOTES:

1. USE D&L SUPPLY H-8024 OR APPROVED EQUAL. MARKED "FLUSHING".
2. ALL MATERIALS USED IN MANUFACTURING SHALL CONFORM TO ASTM 48, CLASS 35B.
3. CASTING SHALL BE DIPPED IN BLACK, BITUMINOUS PAINT.
4. FRAME AND COVER MEETS H-20 WHEEL LOADING.

COUNTY OF SUTTER	
FRAME AND COVER	
_____ DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DATE: 11/2010
DRN: K.XIONG	DWG NO. S-1B



PLACE SERVICE LINE AGAINST UNDISTURBED EARTH IN KEYWAY EXCAVATED IN TRENCH WALL A MIN. OF SERVICE O.D.

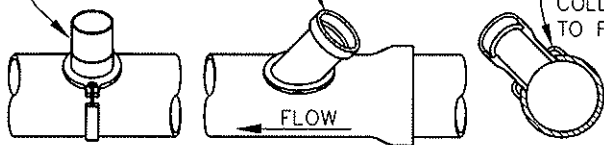
NOTES:

1. SERVICES SHALL HAVE THE SAME BEDDING AND BACKFILL AS MAIN SEWER. SEE STANDARD DETAIL S-8
2. PLACE TRACER (LOCATOR) WIRE ALONG LATERAL AND MAIN.
3. ANY REPAIRS TO SERVICES AND MAINS SHALL HAVE COMPRESSION COUPLINGS WITH STAINLESS STEEL SHEAR RINGS.
4. COLLAR WYE SADDLE OR CUT IN WYE SHALL BE USED FOR 4-INCH AND 6-INCH LATERAL. 8-INCH LATERALS OR LARGER REQUIRE A STANDARD MANHOLE.
5. "HAMMER TAP" CONNECTIONS ARE NOT ACCEPTABLE. THE HOLE FOR THE COLLAR OR WYE FITTING FOR A SEWER SADDLE SHALL BE MADE WITH A TAPPING MACHINE. THE HOLE SHALL BE CLEANLY MACHINED AND IF NECESSARY WORKED BY HAND WITH A RASP OR SANDED TO ACCOMPLISH A TRUE AND NEAT OPENING FOR THE COLLAR WYE.
6. TAP TO BE MADE AT APPROXIMATELY CENTER OF JOINT.
7. THE SADDLE CONNECTION SHALL BE ENCASED TO THE LIMITS SHOWN WITH CONTROLLED LOW STRENGTH CONCRETE (100 PSI, MAX) AFTER THE CONNECTION IS APPROVED BY THE INSPECTOR. THE BELL IN THE LATERAL SHALL NOT BE ENCASED.
8. ALL CHIPS, DIRT, MORTAR, AND CONCRETE SHALL BE KEPT OUT OF THE SADDLE. CLEANING AND BALLING OF THE SADDLED REACH SHALL BE PERFORMED IF DIRECTED BY THE INSPECTOR.
9. ANY DAMAGED PIPE SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE INSPECTOR.
10. MAIN LINE SHALL CUT FOR SADDLE ONLY IN THE PRESENCE OF THE INSPECTOR.

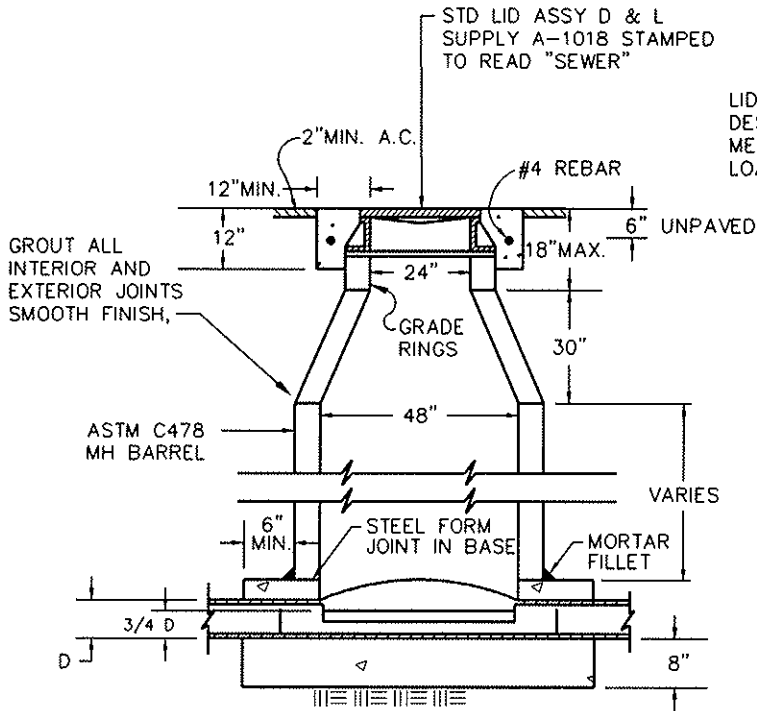
TAPPING SADDLE
(CONNECTED TO PIPE W/STAINLESS STEEL STRAP)
SEALTITE OR APPROVED EQUAL.

TAPPING COLLAR WYE SADDLE
(GROUT TO PIPE)
(APPROVAL REQUIRED
PRIOR TO CONSTRUCTION)

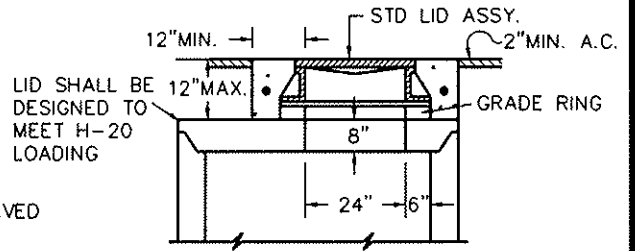
GROUT
COLLAR
TO PIPE



COUNTY OF SUTTER	
SEWER SERVICE CONNECTION	
_____ DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DWG NO. S-2
DRN: PSO	DATE: 11/2010



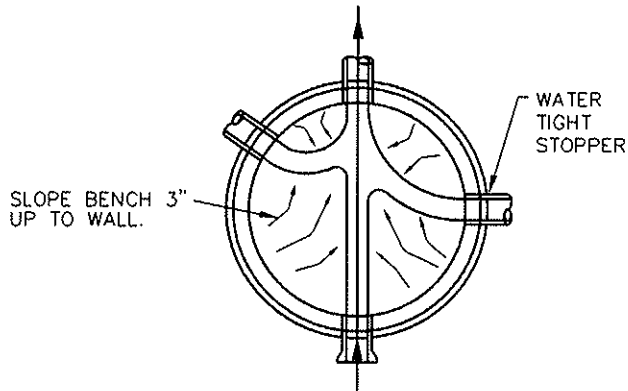
SANITARY SEWER



**SHALLOW MANHOLE DETAIL
(FOR PIPES WITH LESS THAN 4' COVER)**

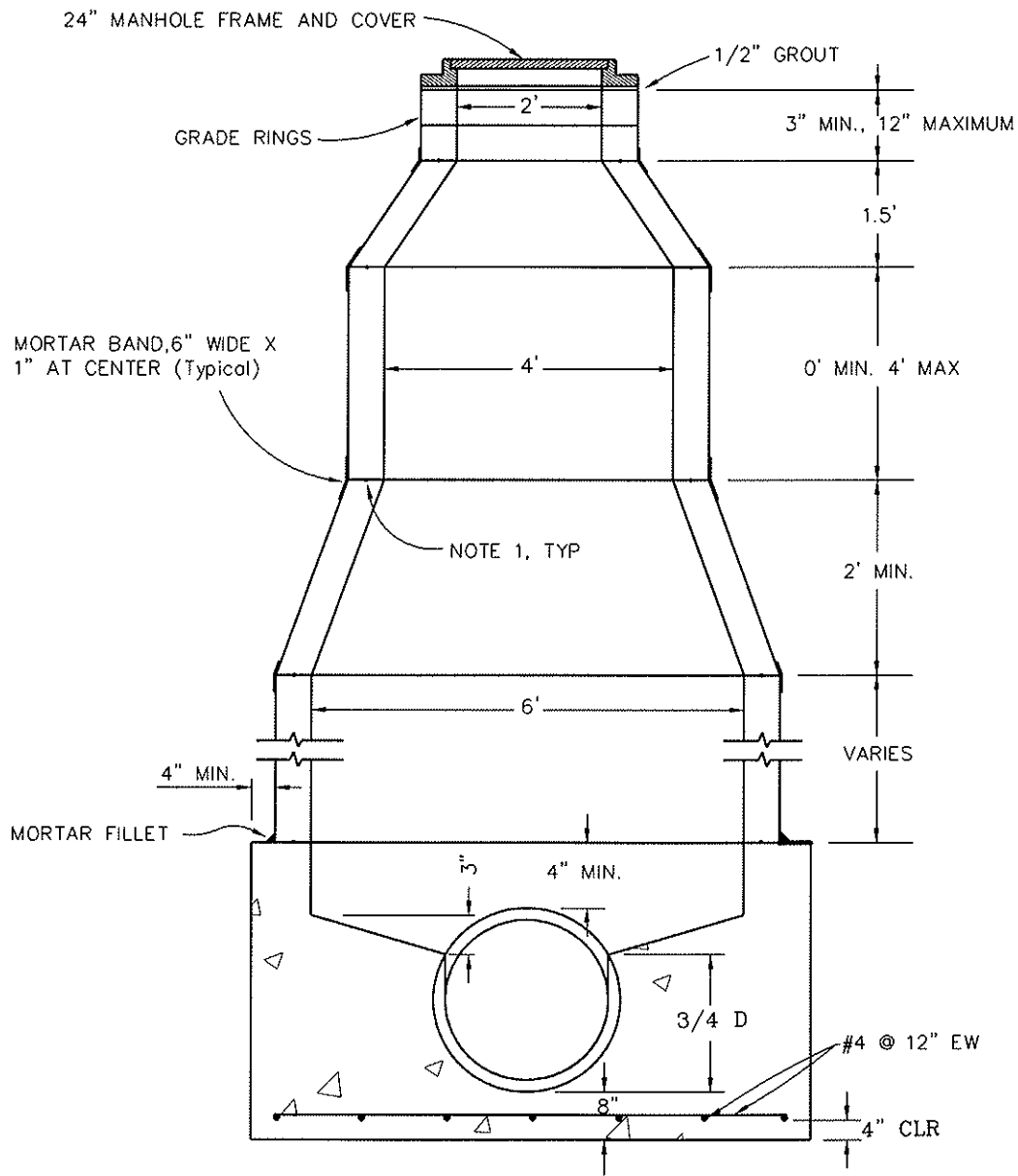
NOTES:

1. FOR PIPES WITH LESS THAN 4' COVER USE THE SHALLOW MANHOLE DETAIL.
2. ALL MANHOLE BASES TO BE CAST IN PLACE UNLESS OTHERWISE APPROVED.
3. MANHOLE BASE TO HAVE 0.1' FALL FROM INLET FLOWLINE TO OUTLET FLOWLINE.
4. ALL CONCRETE TO BE CLASS A, 3000 PSI MIN.
5. 60" MANHOLE REQUIRED FOR 24" AND LARGER PIPE.
6. ALL MANHOLE JOINTS TO BE TOUNGE AND GROOVE WITH "RAMNECK" OR APPROVED EQUAL WATER STOP.
7. PROVIDE 2 GRADE RINGS MIN, 4 GRADE RINGS MAX.
8. SEE DETAIL S-9 FOR DROP CONNECTION REQUIREMENTS.



**CHANNELIZATION FOR
SANITARY SEWER MANHOLES**

COUNTY OF SUTTER		
STANDARD SEWER MANHOLE		
_____ DIRECTOR OF PUBLIC WORKS		
SCALE: NONE	DATE: 11/2010	DWG NO. S-3
DRN: PSO		

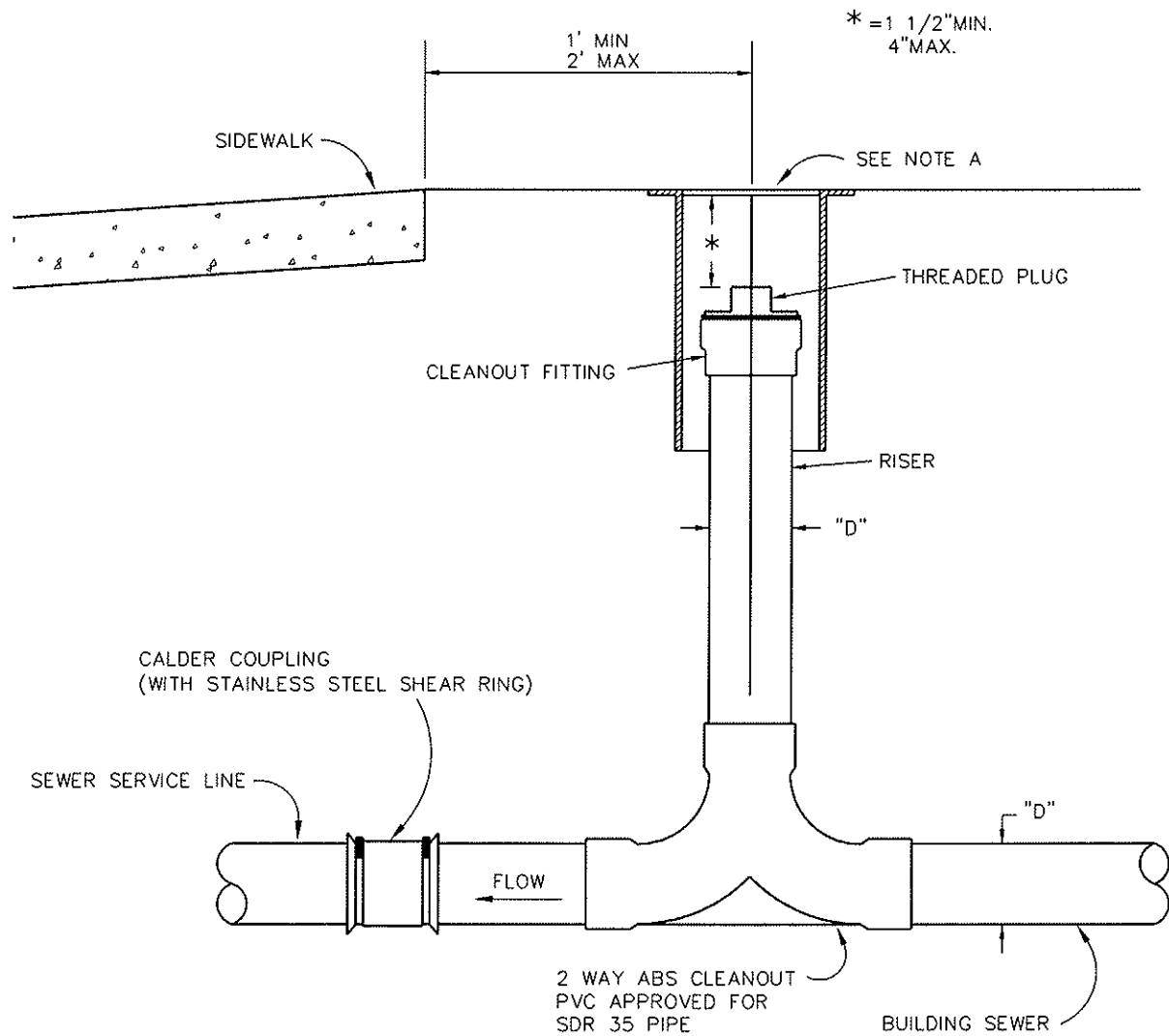


NOTES:

1. SEAL ALL JOINTS WITH RAM-NEK. GROUT JOINTS INSIDE AND OUTSIDE, TYP.
2. REMOVE TOP OF PIPE INSIDE MANHOLE.

SANITARY SEWER SPECIAL MANHOLE

COUNTY OF SUTTER	
SPECIAL SEWER MANHOLE	
DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DATE: 11/2010
DRN: PSO	DWG NO. S-4

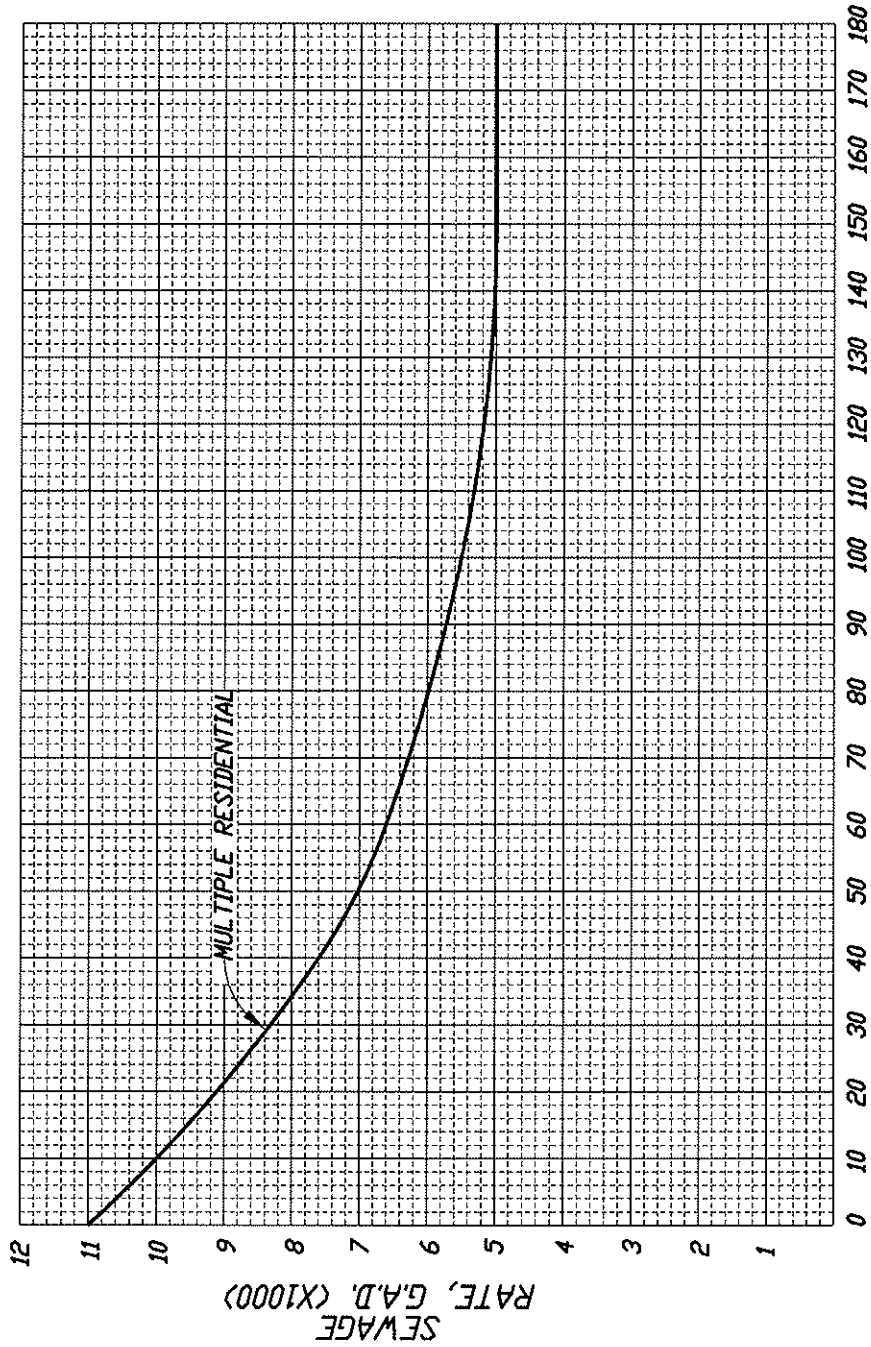


NOTE A:

WHEN INSTALLED IN DRIVEWAY USE BROOKS 3RT SERIES VALVE BOX, MARKED "SEWER" - WHEN INSTALLED IN LAWN OR PLANTER USE BROOKS 1-SP SERIES VALVE BOX MARKED "SEWER".

SANITARY SEWER ACCESS CONTROL

COUNTY OF SUTTER		
SEWER ACCESS CONTROL		
_____ DIRECTOR OF PUBLIC WORKS		
SCALE: NONE	DATE: 11/2010	DWG NO. S-5
DRN: PSO		



CONTRIBUTING AREA, ACRES

COUNTY OF SUTTER

AVERAGE SEWER FLOWS

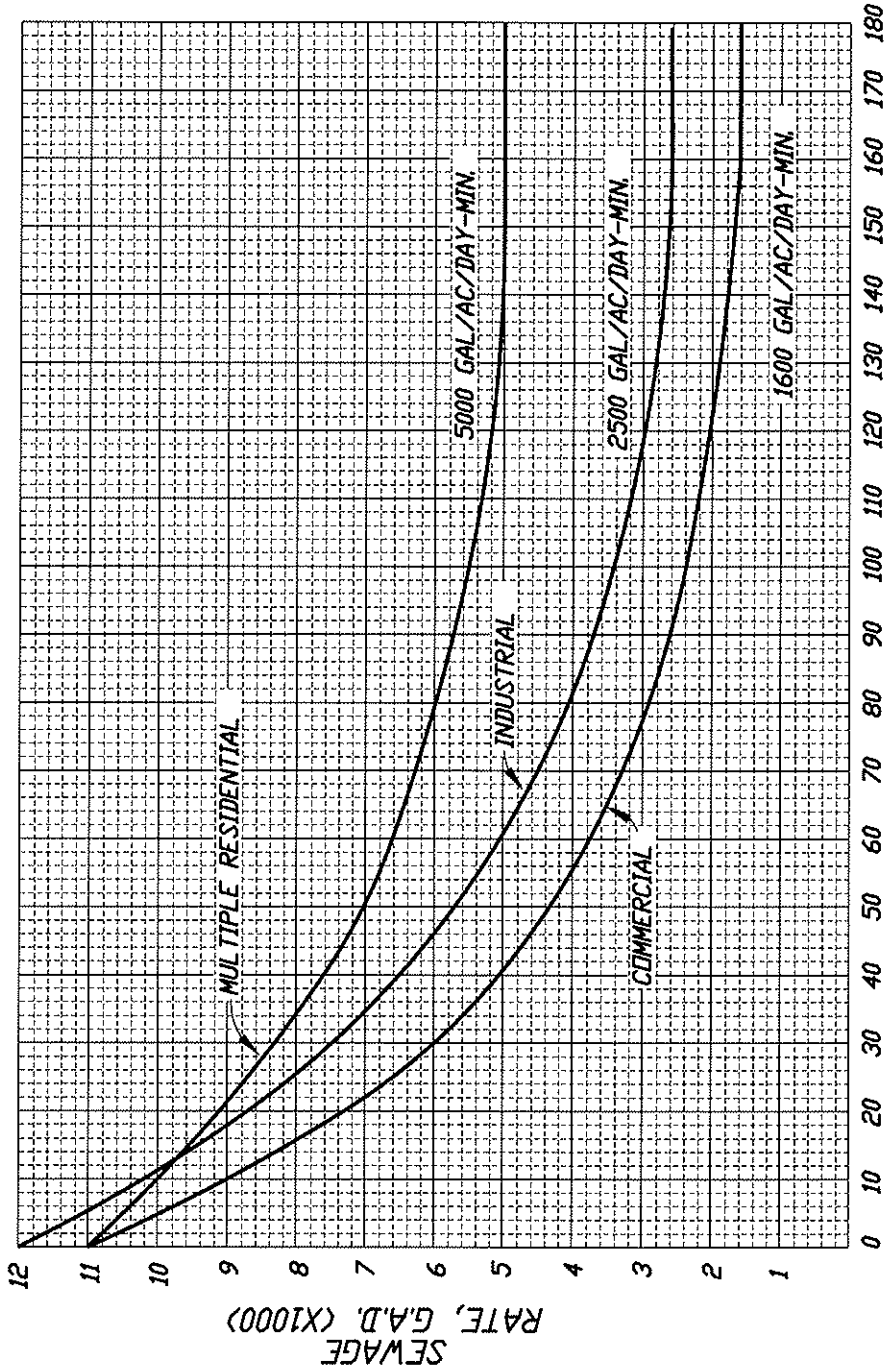
DIRECTOR OF PUBLIC WORKS

SCALE: NONE

DRN: PSO

DATE: 11/2010

DWG NO. S-6



CONTRIBUTING AREA, ACRES

COUNTY OF SUTTER

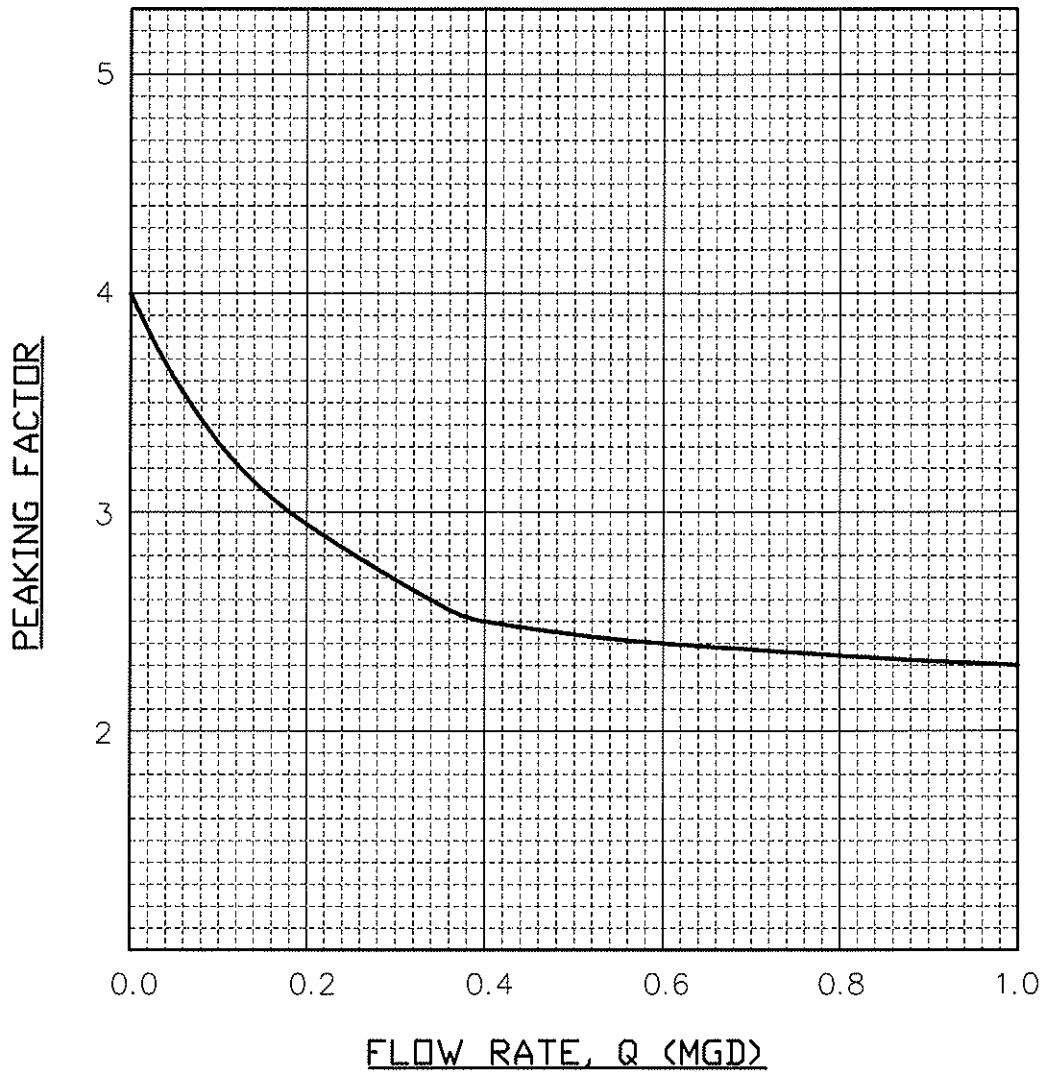
AVERAGE SEWER FLOWS

DIRECTOR OF PUBLIC WORKS

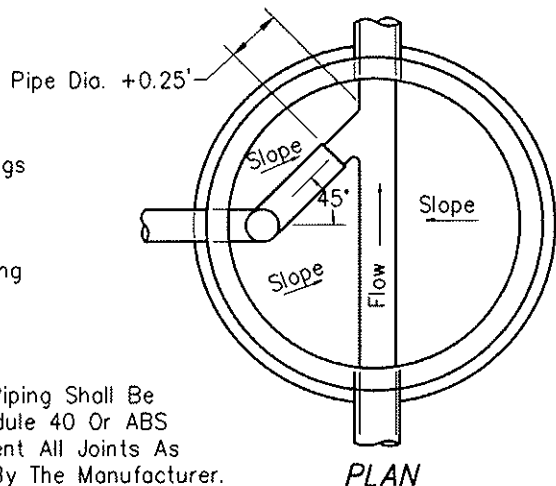
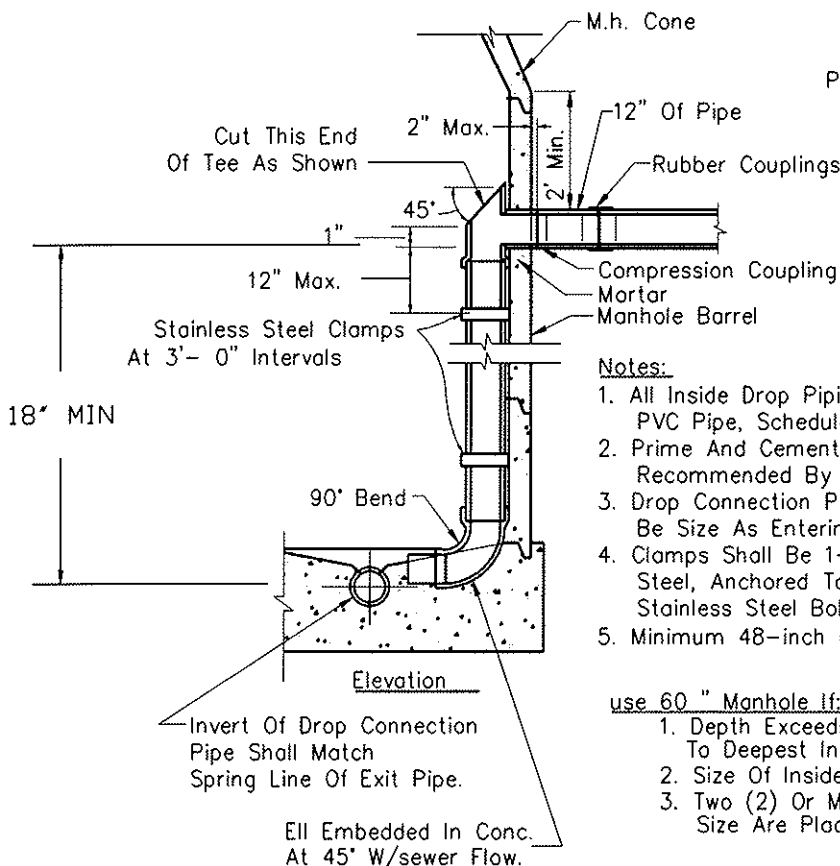
SCALE: NONE
DRN: PSO

DATE: 11/2010

DWC NO. S-6A



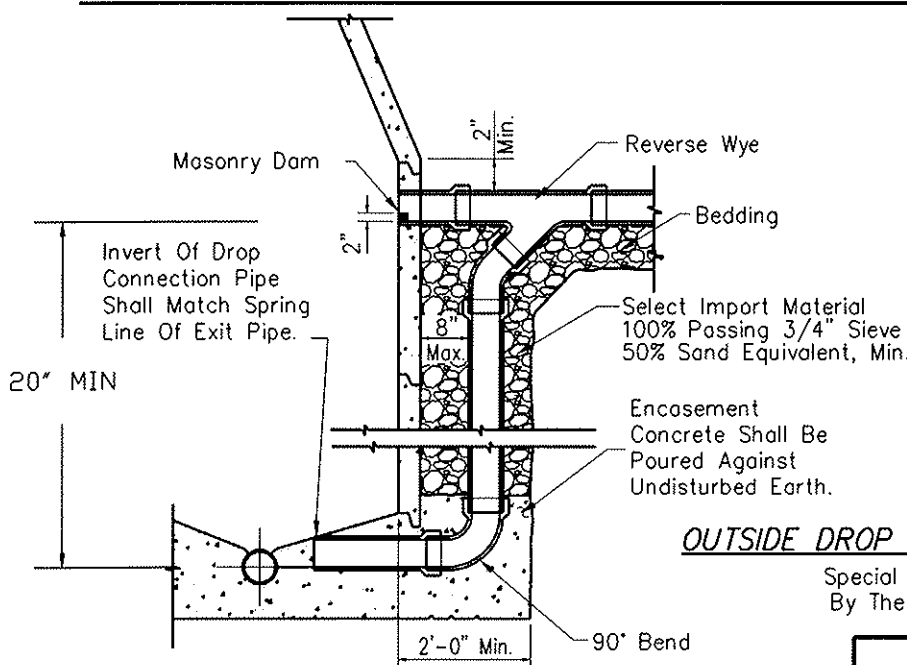
COUNTY OF SUTTER		
SEWER PEAKING FACTORS		
_____ DIRECTOR OF PUBLIC WORKS		
SCALE: NONE	DATE: 11/2010	DWG NO. S-7
DRN: PSO		



- Notes:**
1. All Inside Drop Piping Shall Be PVC Pipe, Schedule 40 Or ABS
 2. Prime And Cement All Joints As Recommended By The Manufacturer.
 3. Drop Connection Pipe & Fittings To Be Size As Entering Pipe.
 4. Clamps Shall Be 1-1/2"x 12 Gage Stainless Steel, Anchored To M.H. Wall With 2-1/2" Stainless Steel Bolts.
 5. Minimum 48-inch Diameter Manhole. See Detail S-3 for M.H.

- use 60" Manhole If:
1. Depth Exceeds 12' (measured From Rim Elevation To Deepest Invert Elevation), Or
 2. Size Of Inside Drop is 10" Or Greater, Or
 3. Two (2) Or More Inside Drop Connections Of Any Size Are Placed Within Manhole.

INSIDE DROP CONNECTION UP TO 8" IN SIZE



Note:
Drop Connection Pipe And Fittings To Be Same Size & Material As Lateral.

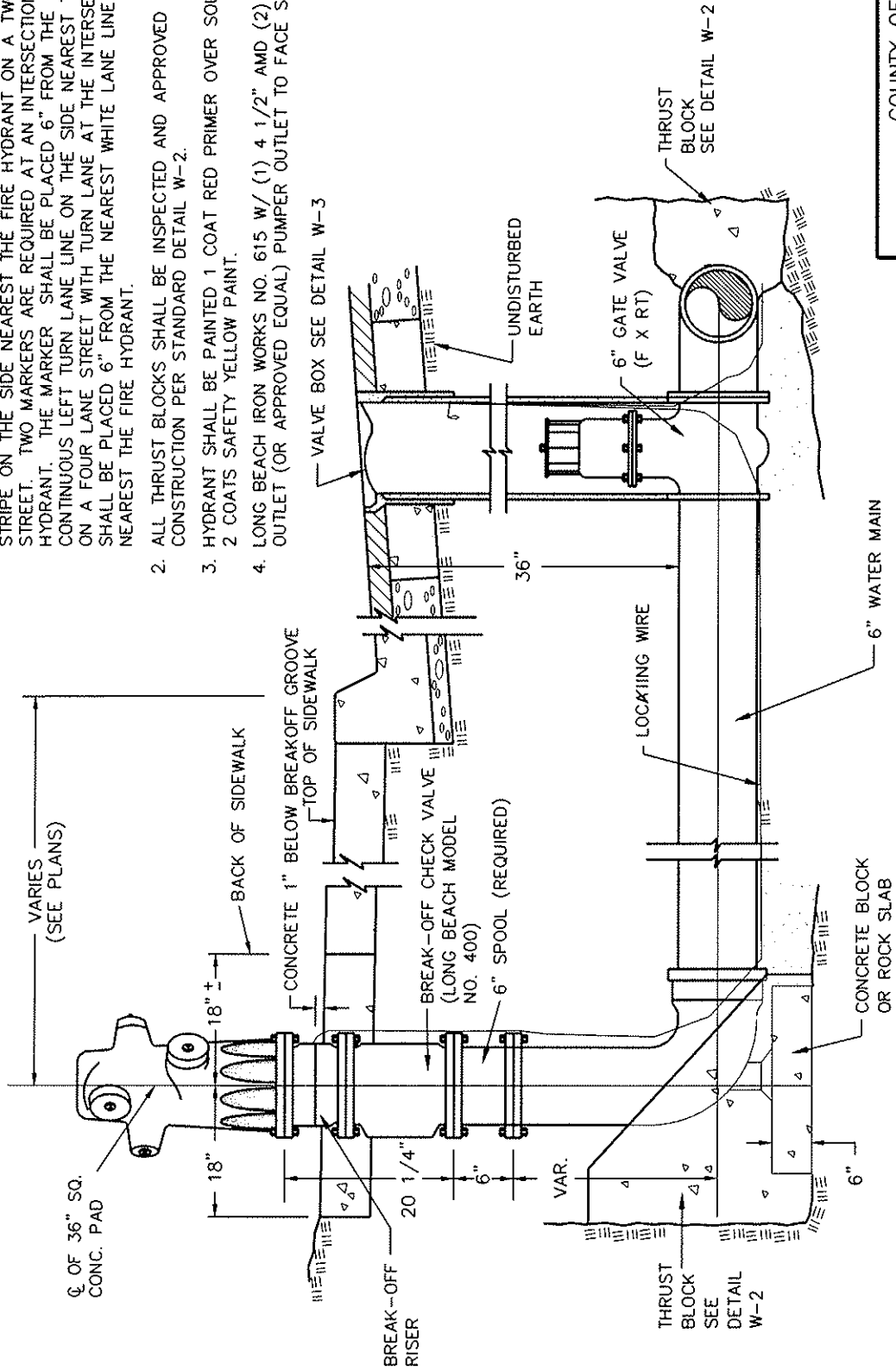
OUTSIDE DROP CONNECTION OVER 8" IN SIZE

Special Case (use Only As Directed By The Director Of Public Works)

COUNTY OF SUTTER		
SEWER DROP CONNECTION		
DIRECTOR OF PUBLIC WORKS		
SCALE: NONE	DATE: 11/2010	DWG NO. S-9
DRN: PSO		

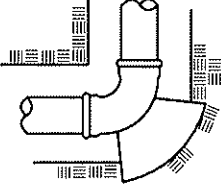
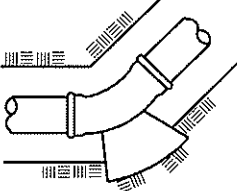
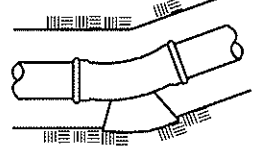
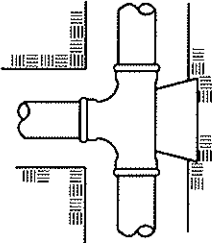
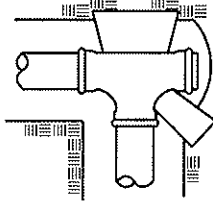
NOTES:

1. BLUE REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED 6" FROM CENTERLINE STRIPE ON THE SIDE NEAREST THE FIRE HYDRANT ON A TWO OR MULTI-LANE STREET. TWO MARKERS ARE REQUIRED AT AN INTERSECTION HAVING A FIRE HYDRANT. THE MARKER SHALL BE PLACED 6" FROM THE EDGE OF THE CONTINUOUS LEFT TURN LANE ON THE SIDE NEAREST THE FIRE HYDRANT. ON A FOUR LANE STREET WITH TURN LANE AT THE INTERSECTION, THE MARKER SHALL BE PLACED 6" FROM THE NEAREST WHITE LANE LINE ON THE SIDE NEAREST THE FIRE HYDRANT.
2. ALL THRUST BLOCKS SHALL BE INSPECTED AND APPROVED AT THE TIME OF CONSTRUCTION PER STANDARD DETAIL W-2.
3. HYDRANT SHALL BE PAINTED 1 COAT RED PRIMER OVER SOUND METAL & 2 COATS SAFETY YELLOW PAINT.
4. LONG BEACH IRON WORKS NO. 615 W/ (1) 4 1/2" AMD (2) 2 1/2" HOSE OUTLET (OR APPROVED EQUAL) PUMPER OUTLET TO FACE STREET.



COUNTY OF SUTTER	
FIRE HYDRANT	
DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DWG NO. W-1
DRN: PSO	DATE: 11/2010

REQUIRED BEARING AREA - TOTAL SQUARE FEET

TYPE OF FITTING		90° BEND	45° BEND	11 1/2° OR 22 1/2° BEND
TYPICAL INSTALLATION				
SIZE OF PIPE	4"	2	1	1
	6"	4	2	1
	8"	7	4	2
	10"	12	6	3
	12"	16	10	5
TYPE OF FITTING		TEE OR DEAD END	TEE WITH PLUG	
TYPICAL INSTALLATION				
SIZE OF PIPE	4"	2	2	
	6"	3	4	
	8"	5	7	
	10"	8	12	
	12"	12	16	

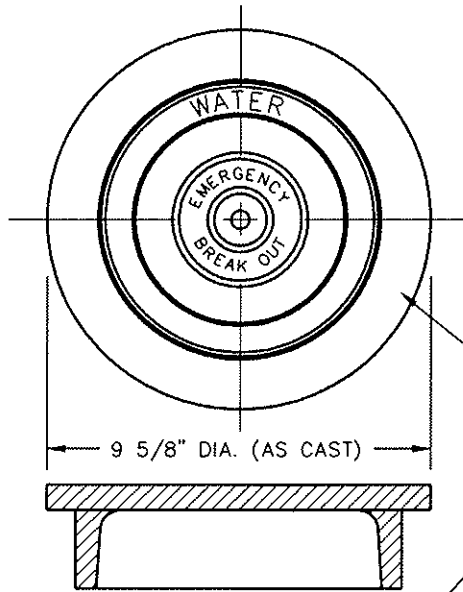
NOTES:

1. THRUST BLOCKS TO BE CONSTRUCTED OF CLASS "B" CONCRETE.
2. AREAS GIVEN ARE FOR CLASS 150 PIPE AT TEST PRESSURE OF 150 P.S.I. IN SOIL WITH 2,000 P.S.F. BEARING CAPACITY. INSTALLATIONS USING DIFFERENT PIPE, TEST PRESSURES, AND/OR SOIL TYPES SHOULD BE ADJUST AREAS ACCORDINGLY, SUBJECT TO APPROVAL OF ENGINEER.
3. BLOCKS TO BE POURED AGAINST UNDISTURBED SOIL.
4. JOINTS TO BE KEPT CLEAR OF CONCRETE.
5. BLOCKS TO BE IN PLACE 7 (SEVEN) DAYS BEFORE TESTING.
6. ALL PLUGS SHALL BE SECURED WITH THRUST BLOCKS.
7. SEE STANDARD DETAIL W-10 FOR CROSS THRUST BLOCK.

COUNTY OF SUTTER	
THRUST BLOCK DETAILS	
_____ DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DATE: 11/2010
DRN: PSO	DWC NO. W-2

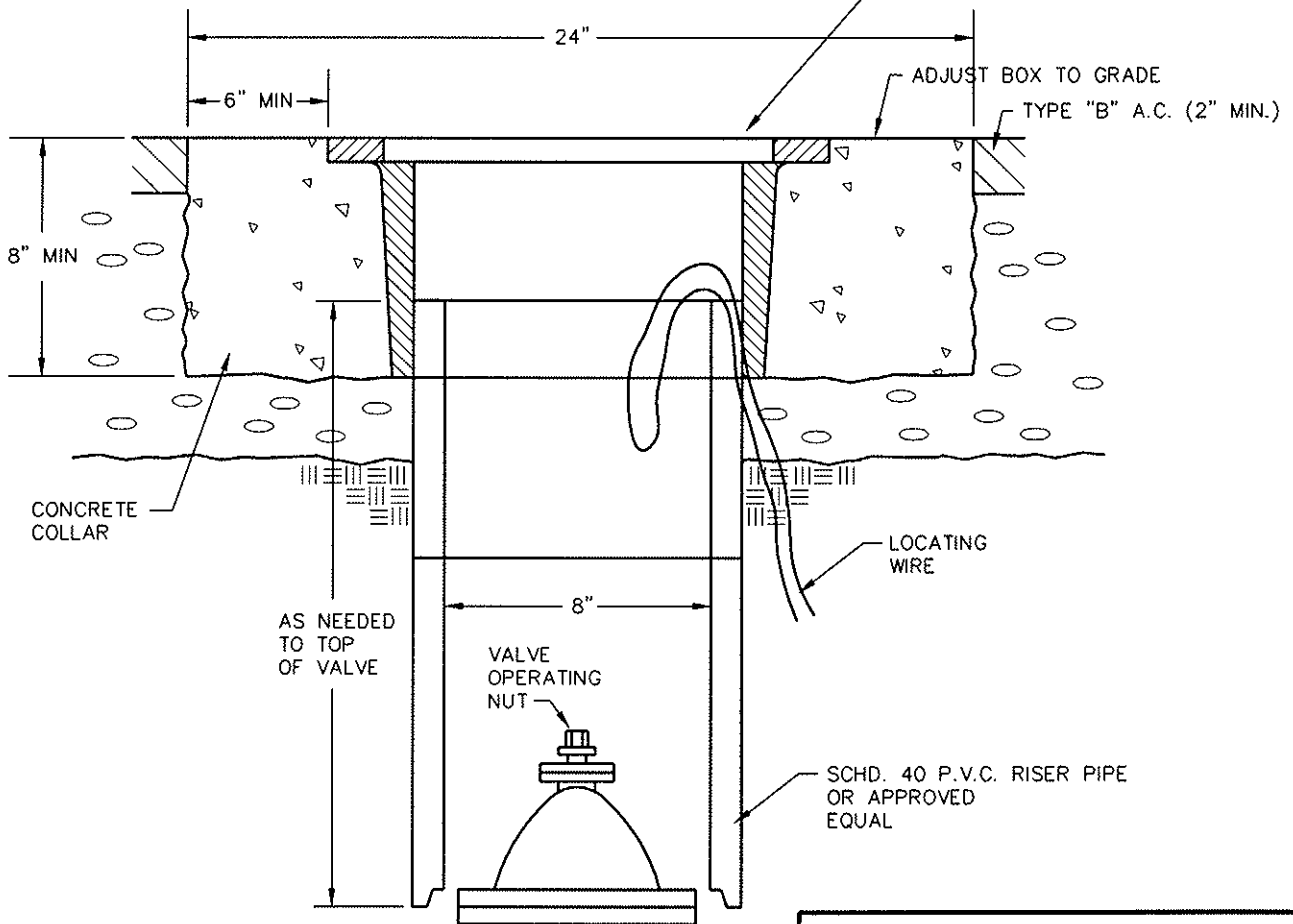
NOTES:

1. RESILIENT SEAT GATE VALVES SHALL COMPLY WITH AWWA C-509. BUTTERFLY VALVES SHALL COMPLY WITH AWWA C-504.
2. VALVE BOX RISER TO BE ONE CONTINUOUS PIECE AND CENTERED ON VALVE.
3. VALVE OPERATING NUT EXTENSION SHALL BE REQUIRED WHERE VALVE NUT IS IN EXCESS OF 5' BELOW FINISHED GRADE.

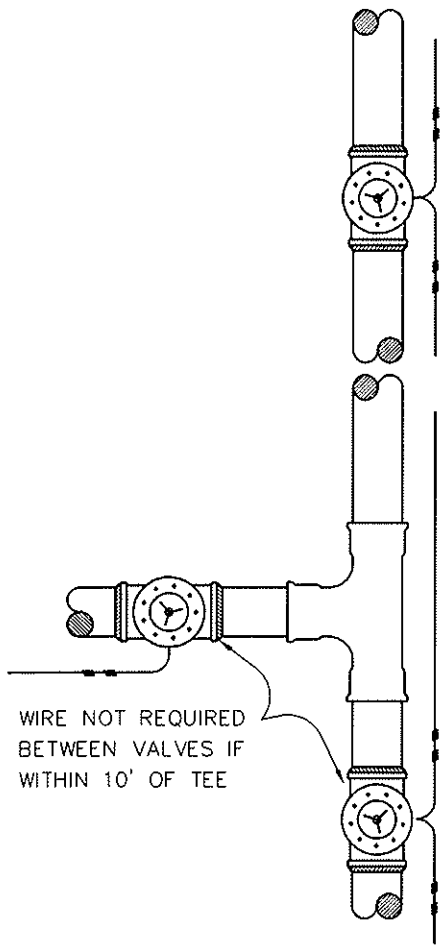


BROOKS No. 3-RT
SERIES TRAFFIC BOX
WITH C1 COVER
MARKED "WATER" OR
APPROVED EQUAL

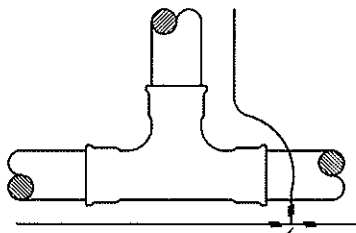
COVER DETAIL



COUNTY OF SUTTER	
WATER VALVE BOX	
_____ DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DATE: 11/2010
DRN: PSO	DWG NO. W-3

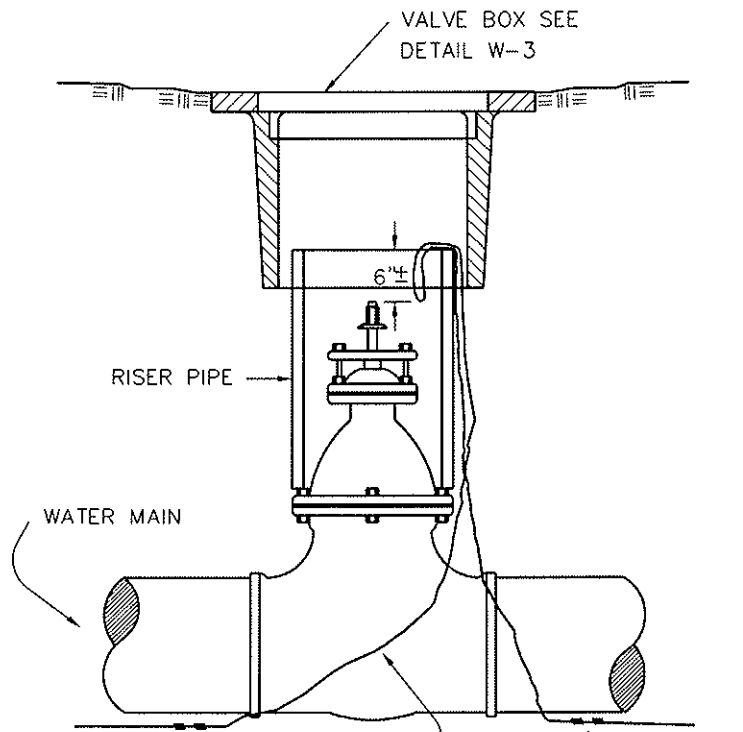


WIRE NOT REQUIRED BETWEEN VALVES IF WITHIN 10' OF TEE



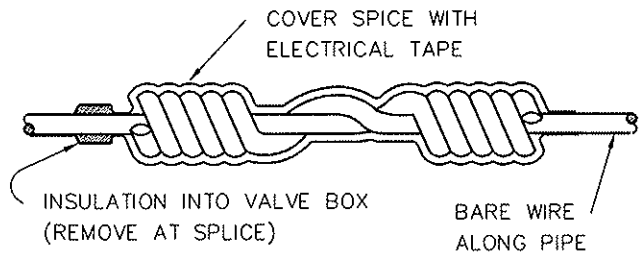
SPLICE RUNS TOGETHER KEEP CLEAR OF FITTING

TYPICAL LAYOUT



10 AWG. SINGLE STRAND, SOFT DRAWN COPPER WIRE; BARE ALONG PIPE, 4/64" POLYVINYL CHLORIDE INSULATION OUTSIDE OF VALVE RISER PIPE AND INTO THE VALVE BOX.

VALVE DETAIL

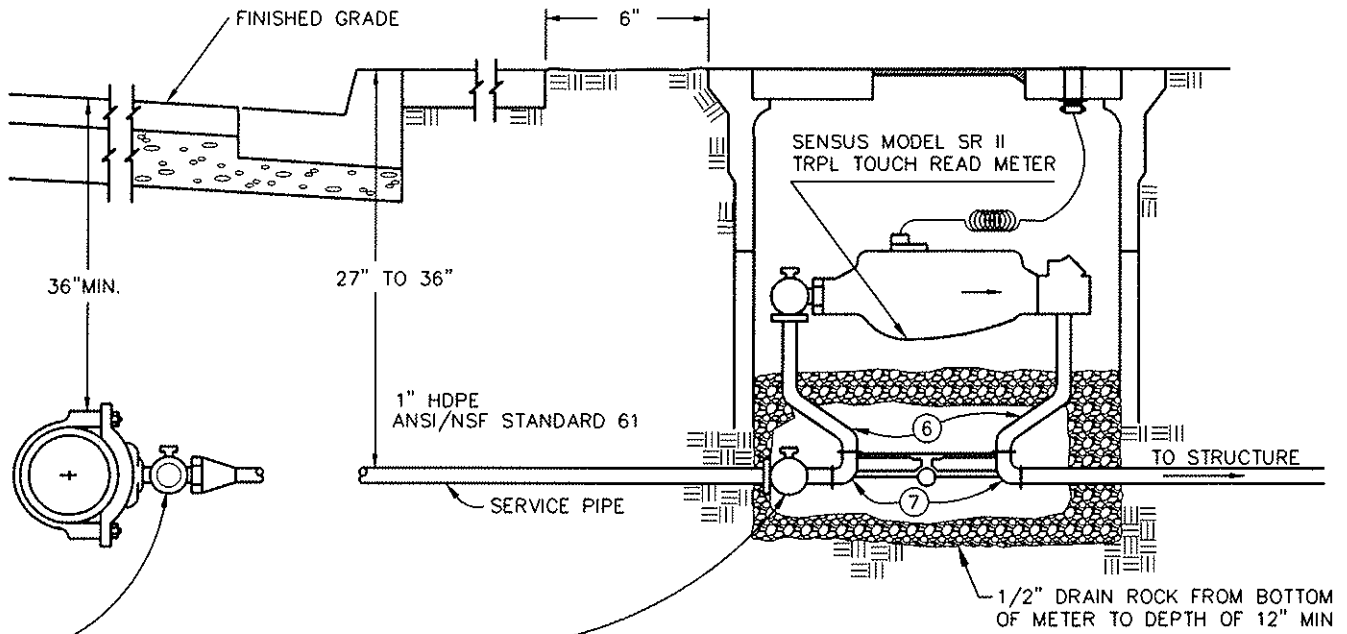


SPLICE DETAIL

NOTES:

1. WIRE TO BE CONTINUOUS BETWEEN VALVE BOXES, EXCEPT AS NOTED.
2. BARE WIRE NOT TO TOUCH METAL VALVES OR FITTINGS.
3. LOCATING WIRE TO BE LAID AT BOTTOM OF TRENCH, NEXT TO PIPE.
4. LOCATING WIRE MUST BE TESTED & BE IN WORKING ORDER AFTER ALL UNDERGROUND WORK IS DONE, AND PRIOR TO STREET PAVING.

COUNTY OF SUTTER	
WATER MAIN LOCATING WIRE	
_____ DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DATE: 11/2010
DRN: PSO	DWG NO. W-4

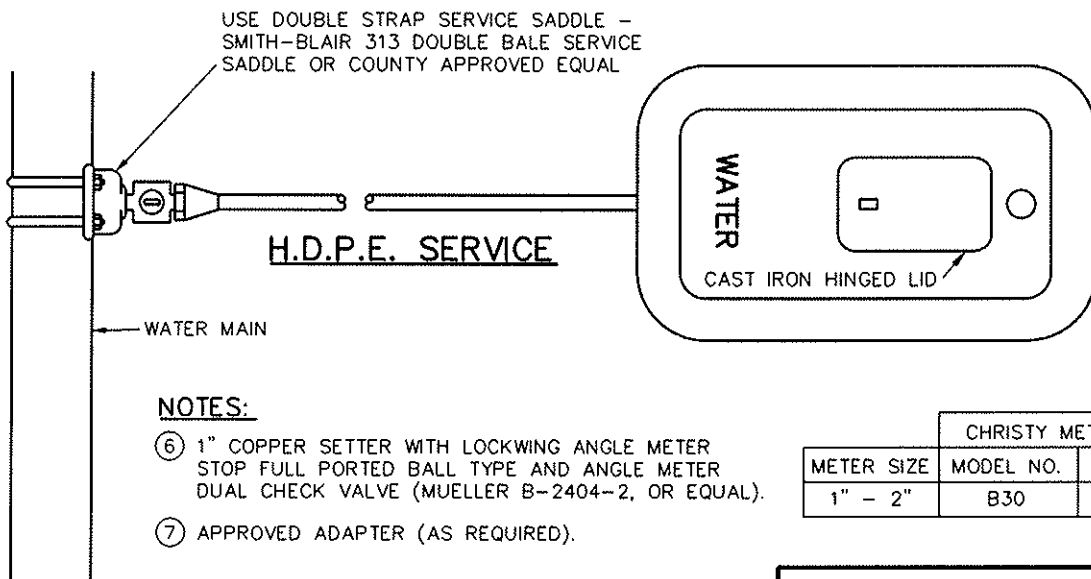


CORPORATION STOP—
FORD BALLCORP FB700
OR COUNTY APPROVED EQUAL.

1" SERVICE USE A BALL VALVE CURB
STOP WITH LOCKWINGS. McDONALD
4602BF OR APPROVED EQUAL.
1 1/2" OR 2" SERVICE USE McDONALD
6102 OR APPROVED EQUAL.
PLACE CURB STOP 1"
INSIDE OF BOX

NOTES:

1. SINGLE SERVICE SHALL BE 1" H.D.P.E. (IPS).
2. SPLICES IN THE SERVICE LINE ARE TO BE AVOIDED; BUT IF ALLOWED, THEY SHALL BE MADE USING CTS GRIP-TYPE COMPRESSION COUPLINGS
3. PIPE MUST BE LABELED WITH A LABORATORY SEAL OR MARK ATTESTING TO SUITABILITY.
4. ALL SERVICE LATERALS MUST HAVE TRACE WIRE INSTALLED.
5. METER BOX SHALL NOT BE LOCATED IN DRIVEWAY.

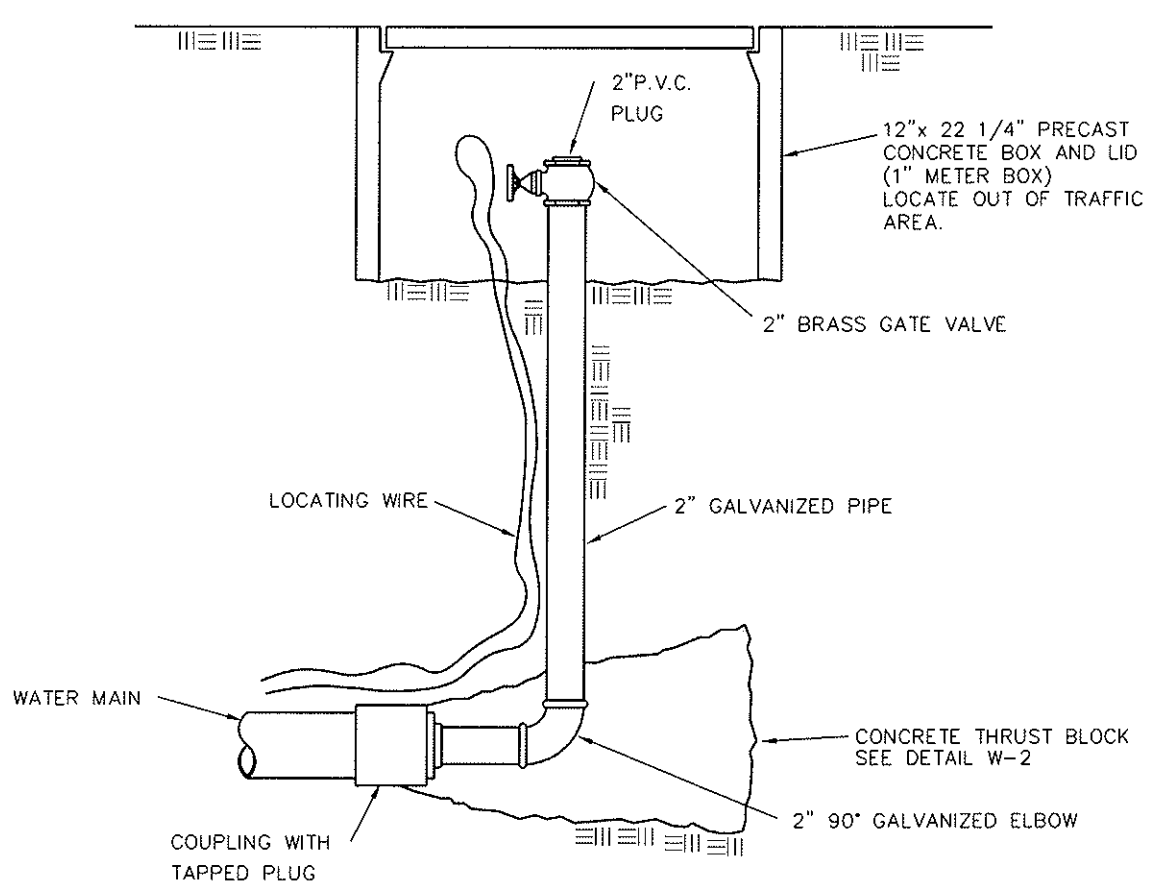
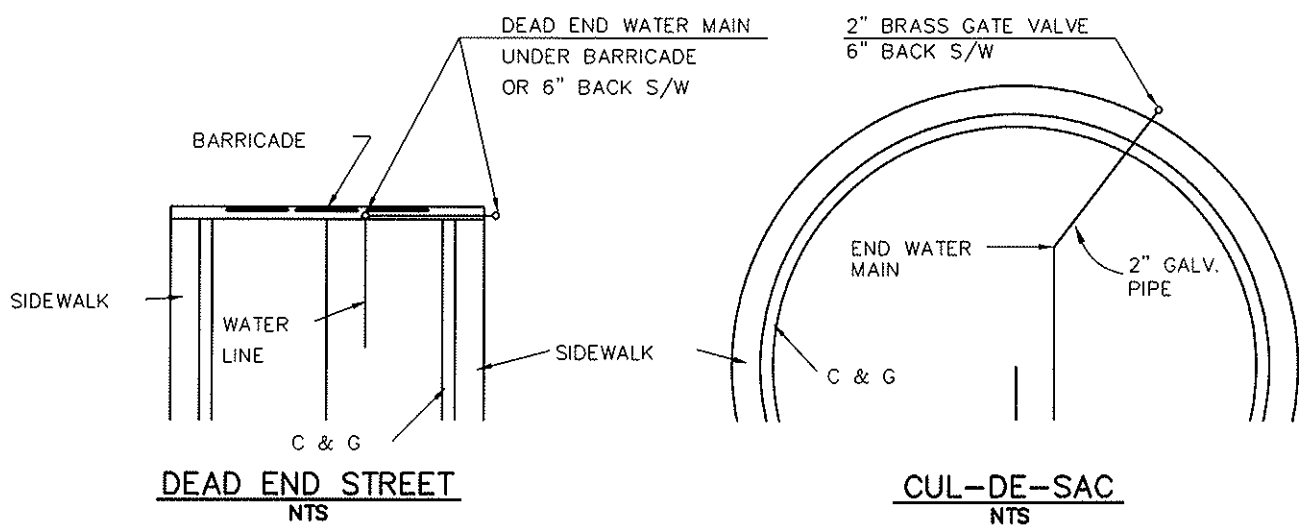


NOTES:

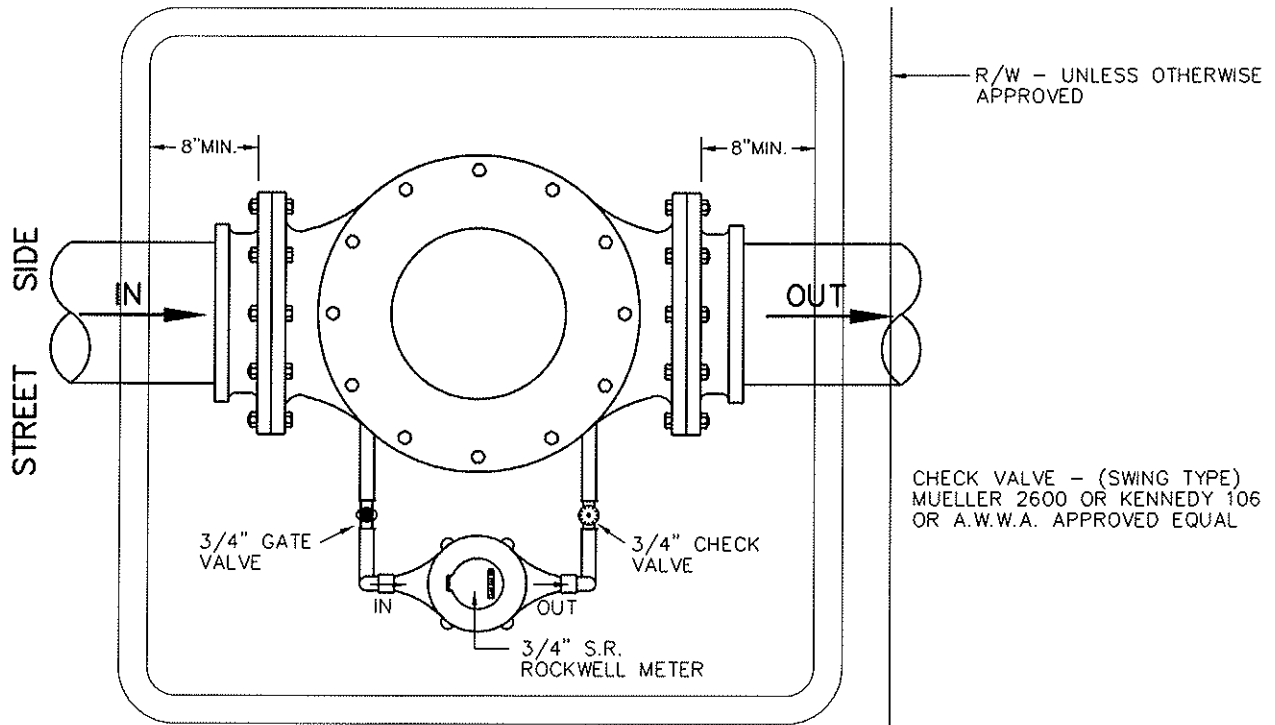
- ⑥ 1" COPPER SETTER WITH LOCKWING ANGLE METER STOP FULL PORTED BALL TYPE AND ANGLE METER DUAL CHECK VALVE (MUELLER B-2404-2, OR EQUAL).
- ⑦ APPROVED ADAPTER (AS REQUIRED).

CHRISTY METER BOX		
METER SIZE	MODEL NO.	LID TYPE*
1" - 2"	B30	B30GP

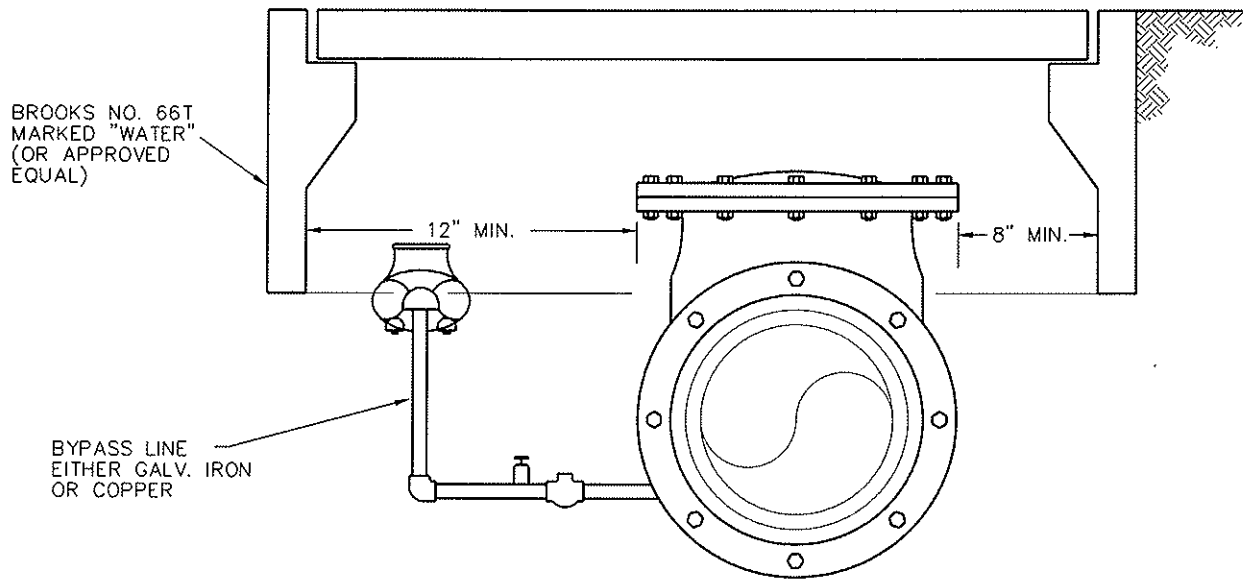
COUNTY OF SUTTER	
SINGLE WATER SERVICE	
_____ DIRECTOR OF PUBLIC WORKS	
SCALE: NONE DRN: KSX	DATE: 11/2010
DWG NO. W-5	



COUNTY OF SUTTER	
BLOW OFF	
DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DWG NO. W-7
DRN: PSO	DATE: 11/2010



PLAN VIEW



END VIEW

COUNTY OF SUTTER	
FIRE SERVICE CHECK VALVE	
DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DWG NO. W-8
DRN: PSO	DATE: 11/2010