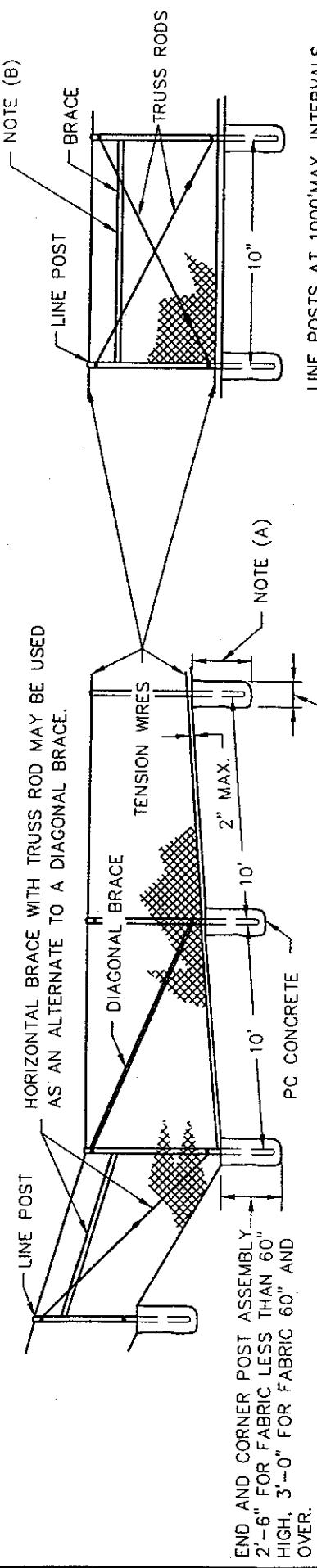
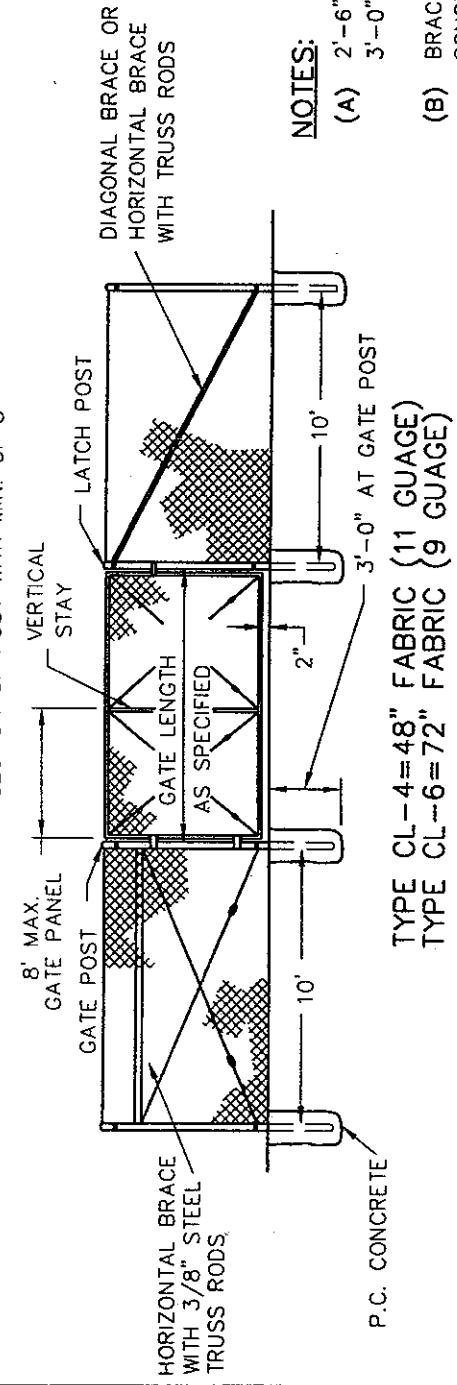


STANDARD DRAWINGS



LINE POSTS AT 1000' MAX. INTERVALS
BRACED AND TRUSS ED IN BOTH
DIRECTIONS EXCEPT THAT THIS
BRACING AND TRUSSING MAY BE
 OMITTED WHEN THE FABRIC IS
 STRETCHED BY EQUIPMENT.



NOTES:
(A) 2'-6" FOR FABRIC LESS THAN 60" HIGH
3'-0" FOR FABRIC 60" AND OVER
(B) BRACE TO BE REMOVED AFTER ALL OTHER FENCE CONSTRUCTION IS COMPLETED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

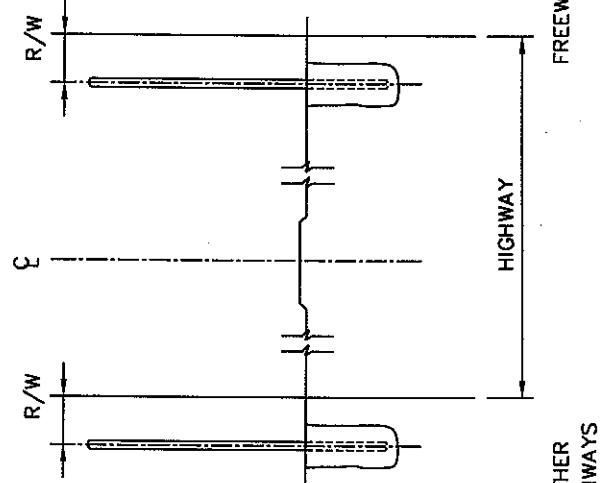
1. THE ABOVE TABLE SHOWS EXAMPLES OF POST AND BRACE SECTIONS WHICH MAY COMPLY WITH THE SPECIFICATIONS.
2. SECTIONS SHOWN IN THE TABLES MUST ALSO COMPLY WITH THE STRENGTH REQUIREMENTS AND OTHER PROVISIONS OF THE SPECIFICATIONS.
3. OTHER SECTIONS WHICH COMPLY WITH THE STRENGTH REQUIREMENTS AND OTHER PROVISIONS OF THE SPECIFICATIONS MAY BE USED ON APPROVAL OF THE DIRECTOR.
4. OPTIONS EXERCISED SHALL BE UNIFORM ON ANY ONE PROJECT.
5. DIMENSIONS SHOWN ARE NOMINAL.
6. TYPICAL MEMBER DIMENSIONS AND GATE POST TABLES DETAIL (D-1A).

COUNTY OF SUTTER	
CHAIN LINK FENCE DETAIL ONE	
<i>Richie Sutter</i> APPROVED	DATE
SCALE : NONE	DWG NO. D-1
DRN : PSO	BY
REVISIONS	DATE

TYPICAL MEMBER DIMENSIONS

FENCE HEIGHT	LINE POSTS			END, LATCH & CORNER POSTS			BRACES		
	ROUND (I.D.)	H	ROLL FORMED (I.D.)	ROUND FORMED (I.D.)	ROUND (I.D.)	H	ROLL FORMED □	ROLL FORMED □	
LESS THAN 6'	1-1/2"	1-7/8" x 1-5/8"	1-3/4" x 1-3/4"	2"	3-1/2" x 3-1/2"	2" x 1-3/4"	1-1/4"	1-2" x 1-15/16"	1-5/8" x 1-1/4"
OVER 6'	2"	2-1/4" x 2"	2" x 1-3/4"	2" x 2-1/2"	3-1/2" x 3-1/2"	2" x 1-3/4"	1-1/4"	1-2" x 1-15/16"	1-5/8" x 1-1/4"

6" OR AS SPECIFIED
AS SHOWN ON
DETAIL PLANS
(SEE NOTE BELOW)

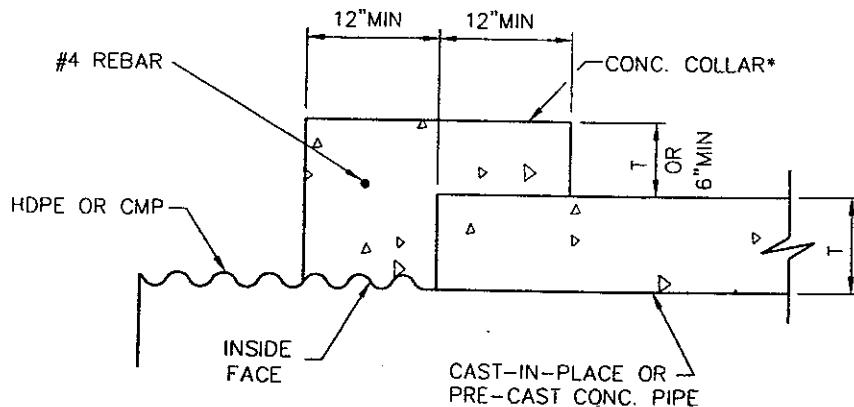


GATE POST			
FENCE HEIGHT	GATE WIDTHS	NOMINAL I.D.	WEIGHT PER FOOT
6'-0" AND LESS	UP THRU 6' OVER 6' THRU 12'	2-1/2"	4.95
6'-0" AND LESS	OVER 12' THRU 18' OVER 18' TO 24' MAX.	4" 5"	10.79 14.62
OVER 6'	UP THRU 6' OVER 6' THRU 12' OVER 12' THRU 18'	6" 5" 6"	18.97 14.62 18.97
OVER 6'	OVER 18' TO 24' MAX.	7.58	

NOTE: ABOVE POST DIMENSIONS AND WEIGHTS ARE
MINIMUMS LARGER SIZES MAY BE USED ON
APPROVAL OF ENGINEER.

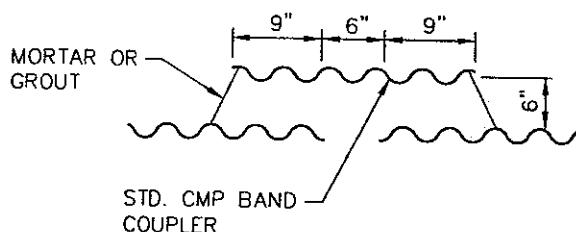
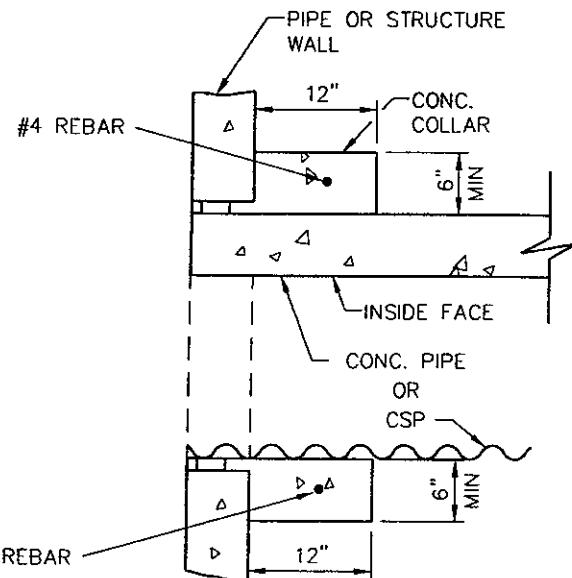
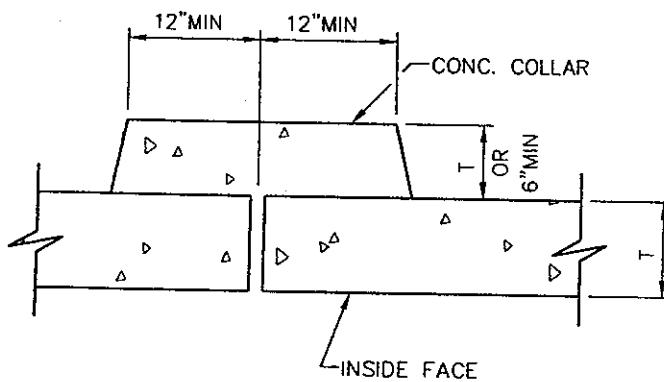
NOTE: OFFSET TO BE 2'-0" AT MONUMENT LOCATIONS,
MEASURED AT RT. ANGLE TO R/W LINES.
TAPER TO ACHIEVE OFFSET TO BE AT LEAST 20' LONG.

COUNTY OF SUTTER	
CHAIN LINK FENCE DETAIL TWO	
<i>[Signature]</i>	APPROVED
11/10/05	K.X.
DATE	REVISIONS
DATE	BY
	SCALE : NONE
	DRN: PSO
	DWG NO. D-1A



CAST-IN-PLACE OR PRE-CAST CONCRETE PIPE TO HDPE OR CMP

*TRANSITION OF PIPE MATERIAL AT MANHOLES IS PREFERRED



CONCRETE PIPE, HDPE OR CMP INTO EXISTING PIPE OR STRUCTURE

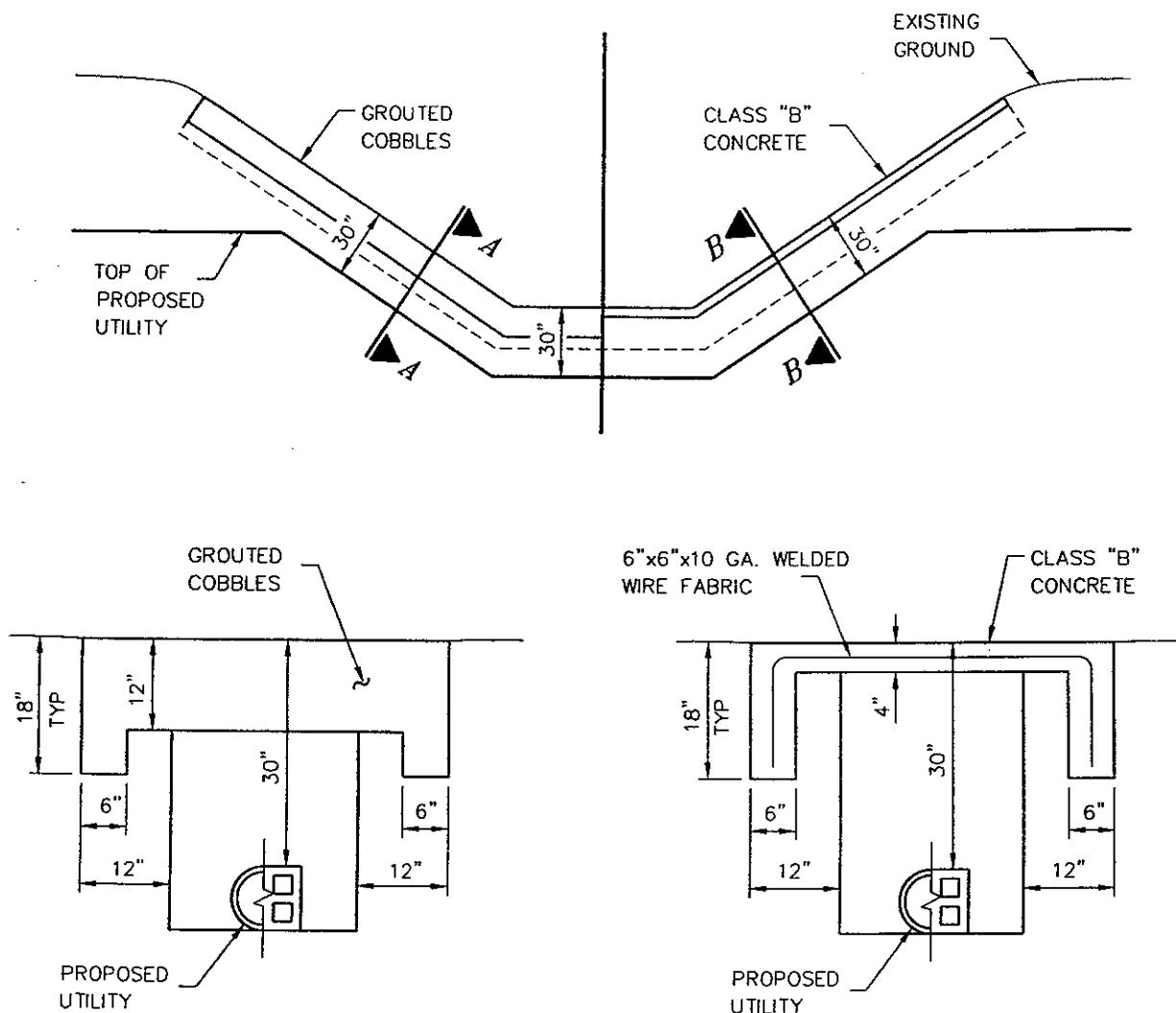
PIPES OF DISSIMILAR METALS

DATE	REVISIONS	BY

COUNTY OF SUTTER

PIPE CONNECTIONS DETAIL

Robert E. Baile 6/8/02
APPROVED DATE
SCALE : NONE
DRN : PSO DWG NO. D-2

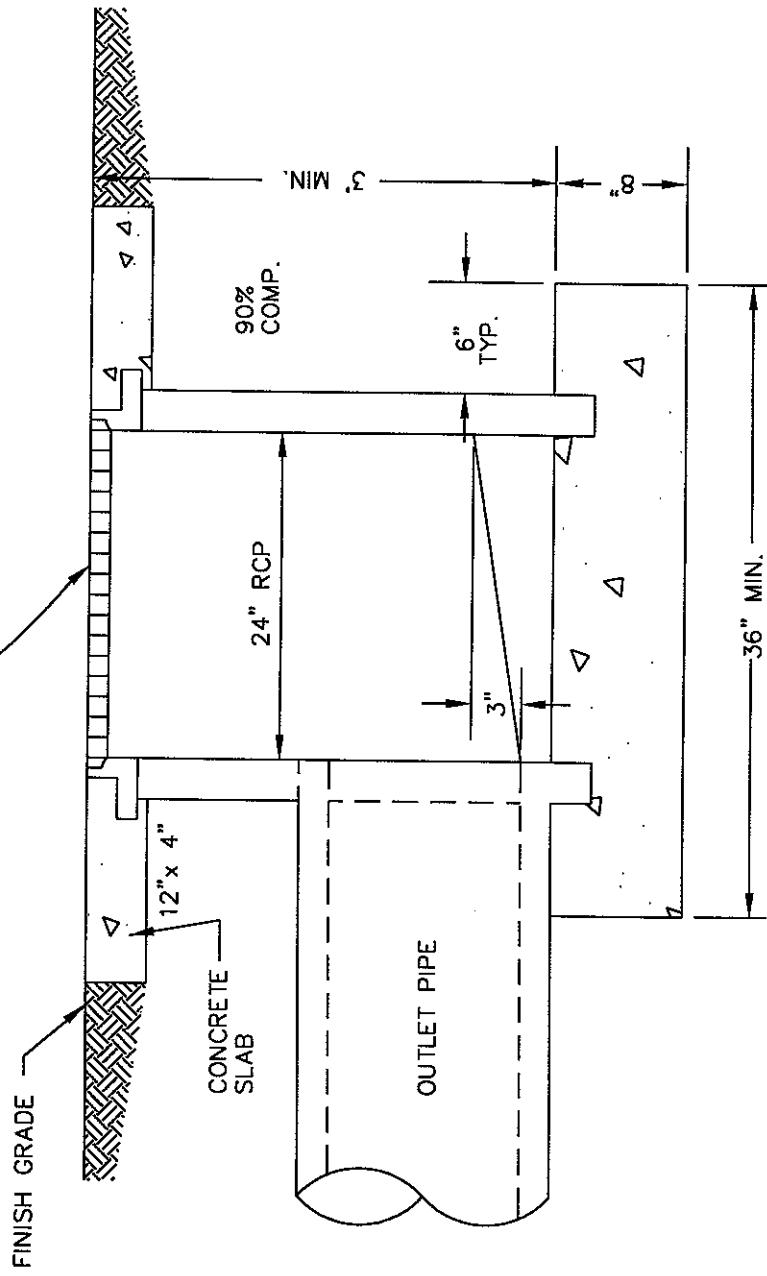


NOTES:

1. ALL UTILITY CROSSINGS OF EXISTING STREAMS SHALL BE AT LEAST 30" BELOW EXISTING CHANNEL SIDES AND BOTTOMS. DEEPER PLACEMENT MAY BE REQUIRED IF FUTURE CHANNEL IMPROVEMENTS ARE ANTICIPATED.
2. THE CUT SHALL BE SEALED AS SHOWN WITH GROUTED COBBLES, CLASS "B" CONCRETE OR OTHER APPROVED MATERIAL TO A WIDTH 12" EACH SIDE OF THE UTILITY TRENCH. ALL NATURAL STREAMS, AS SHOWN ON THE NATURAL STREAMS PLAN, SHALL UTILIZE GROUTED COBBLES.

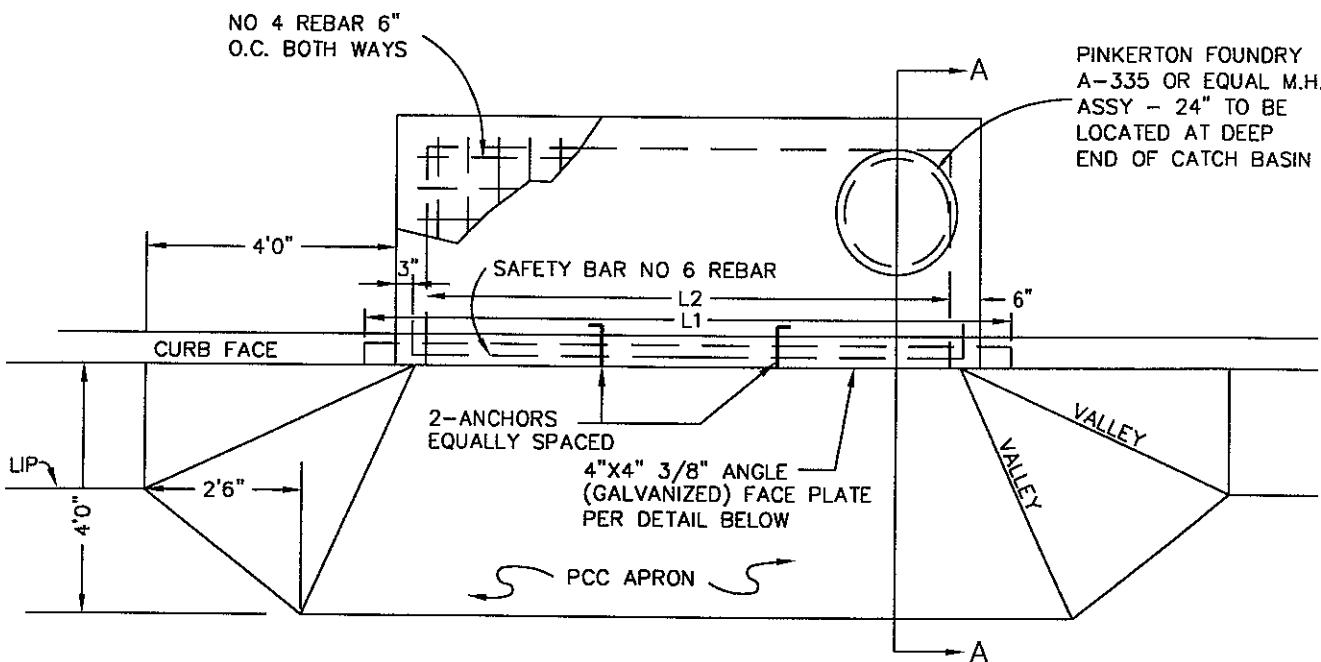
COUNTY OF SUTTER			
UTILITY STREAM CROSSING DETAIL			
		APPROVED	1/10/02
DATE	REVISIONS	BY	SCALE : NONE DRN : PSO
		DWG NO. D-3	

STANDARD MANHOLE FRAME
WITH SLOTTED COVER, APPROVED
BY SUTTER COUNTY PUBLIC WORKS
SEE DETAIL D-14

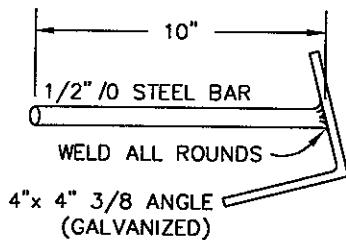


NOTE:
THIS DI FOR INSTALLATION IN ROAD SIDE DITCH.
NOT FOR USE WITH CURB & GUTTER.

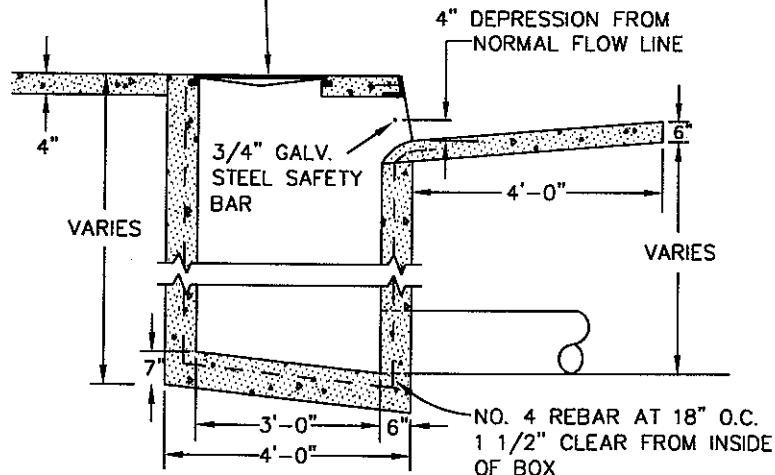
COUNTY OF SUTTER	
FIELD DROP INLET	
 APPROVED 2/14/06 DATE	
6/10/04 DATE	K.X. REVISIONS BY
SCALE : NONE DRN : PSO DWG NO. D-4	



CONFORM TO SIDEWALK GRADE



FACE PLATE DETAIL



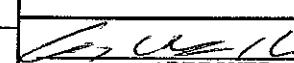
SCHEDULE		
STYLE	L ₁	L ₂
TYPE "A"	9'-6"	7'
TYPE "B"	7'-6"	5'

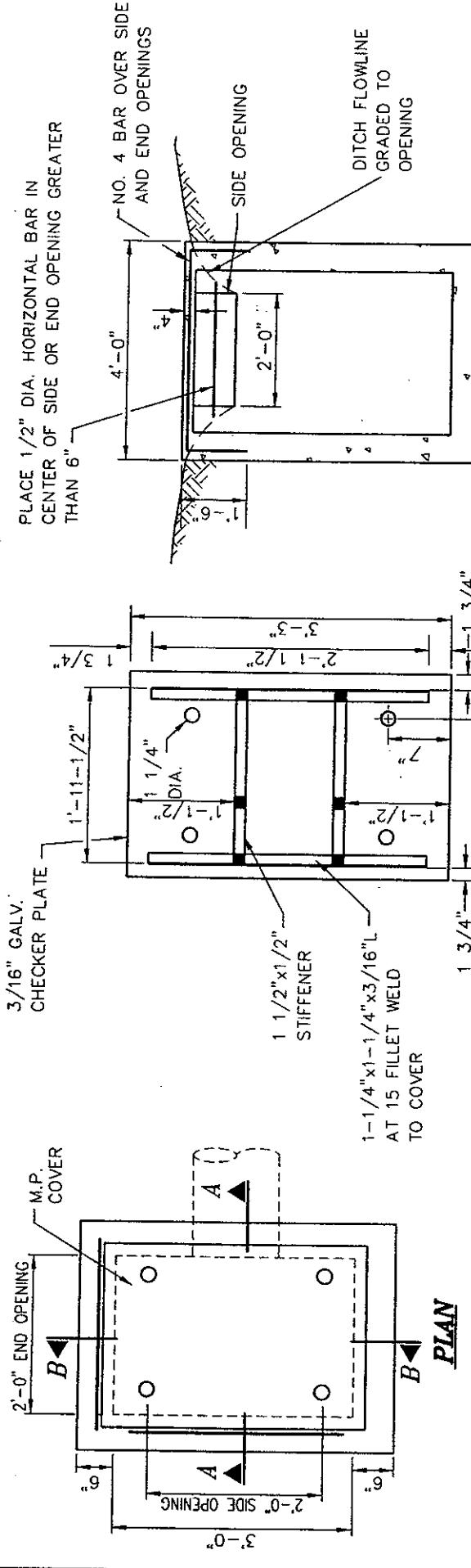
SECT. A-A

NOTE:

A PRECAST UNIT MEETING THESE MINIMUM STANDARDS MAY BE SUBSTITUTED UPON PRIOR APPROVAL OF THE DIRECTOR.

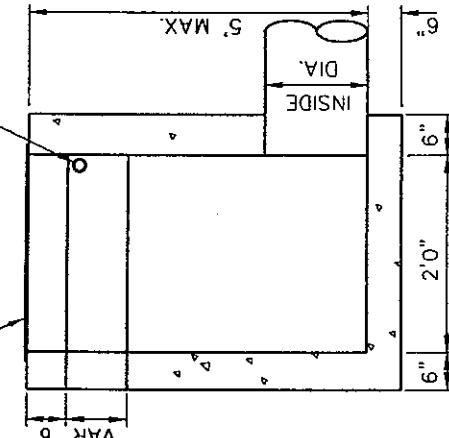
DATE	REVISIONS	BY
6/10/04		K.X.

COUNTY OF SUTTER		
CATCH BASIN		
 3/14/06		
APPROVED		
SCALE : NONE		
DRN : PSO		
DWG NO. D-5		



PLAN

M.P.
COVER
1 1/2" x 6" GALV
EYE BOLT
VAR



SECTION A-A

**METAL COVER
(UNDERSIDE)**

SECTION B-B

NOTES:

1. TOP OF WALLS TO BE FINISHED TO A FLAT PLANE TO PROVIDE EVEN BEARING FOR PLATE COVER.
2. PROVIDE 1/4" x 18" GALV. CHAIN WELD TO COVER AND EYE BOLT.
3. PROVIDE END OR SIDE OPENINGS AS SHOWN ON PLAN OR CROSS SECTION AND EYE BOLT.
4. METAL PLATE COVER TO BE GALVANIZED.

COUNTY OF SUTTER

DROP INLET TYPE "F"

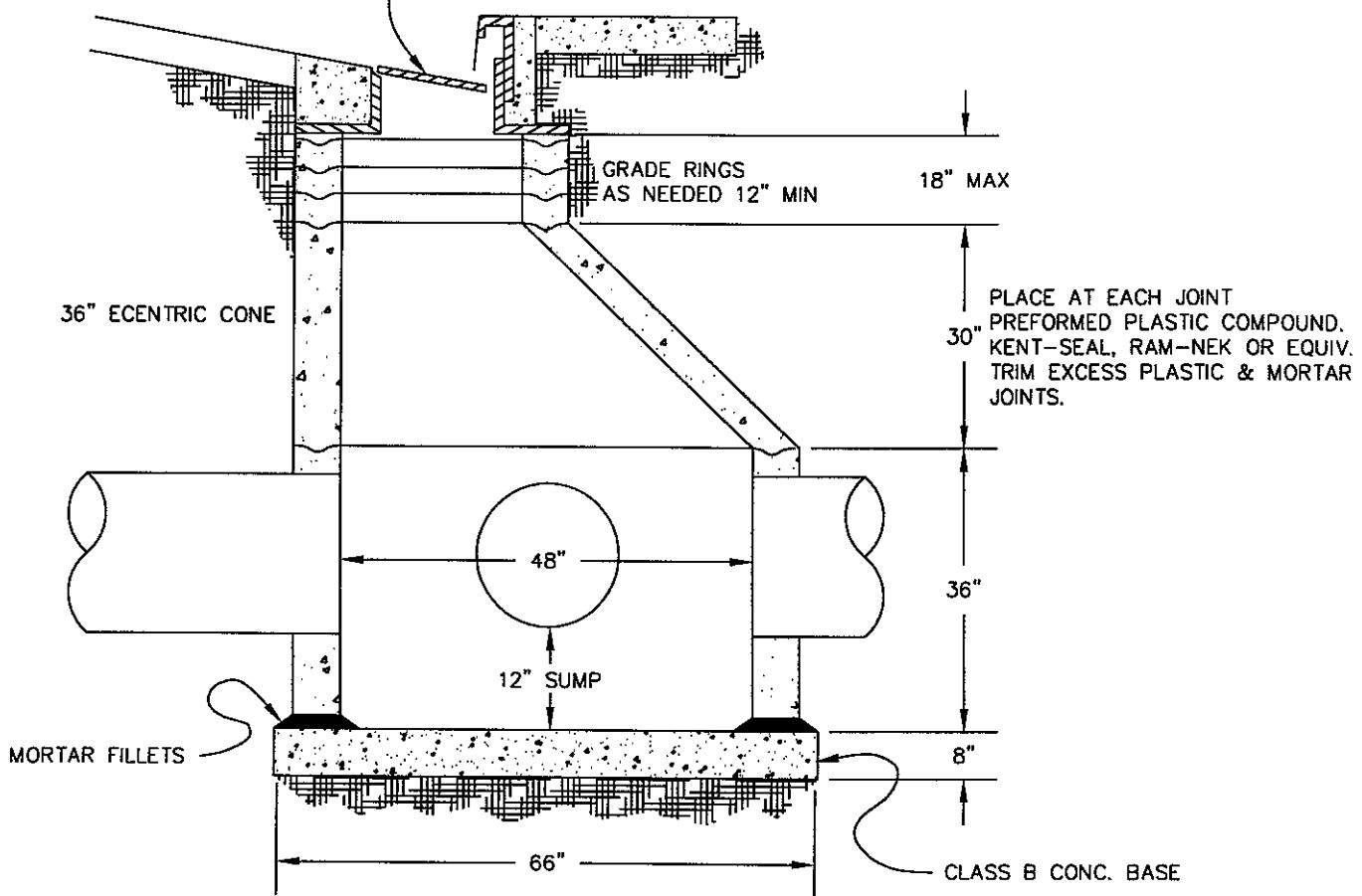
APPROVED
DATE
6/15/99

SCALE : NONE	DRW : PSO	DWG NO. D-6
--------------	-----------	-------------

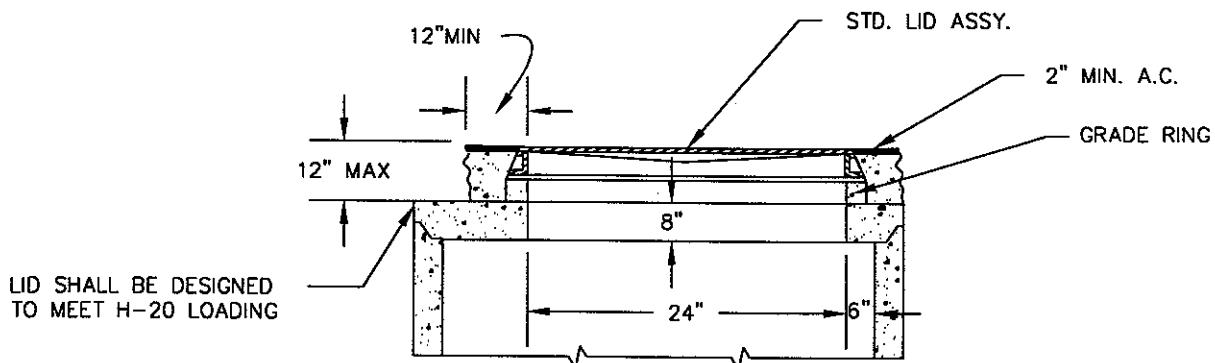
SEE DETAIL D-9

NOTE:

FOR PIPES WITH LESS THAN
4' COVER USE THE SHALLOW
MANHOLE DETAIL.



JUNCTION D.I. DETAIL



SHALLOW MANHOLE DETAIL (FOR PIPES W/LESS THAN 4' COVER)

COUNTY OF SUTTER

DRAINAGE INLET

L. L. H.
APPROVED

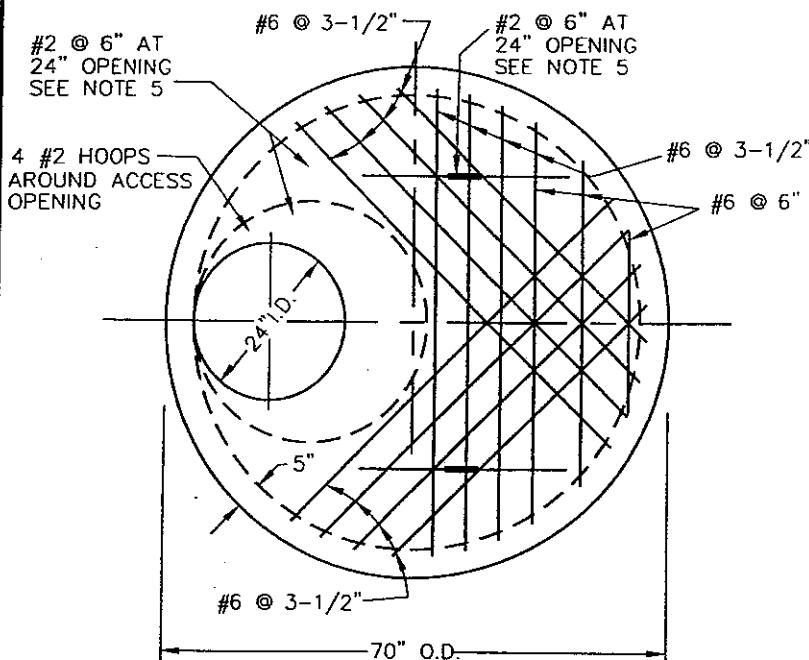
3/14/06
DATE

6/11/04		K.X.
DATE	REVISIONS	BY

SCALE : NONE
DRN : PSO

DWG NO. D-7

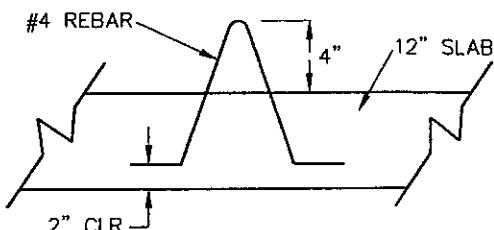
H-20 LOADING



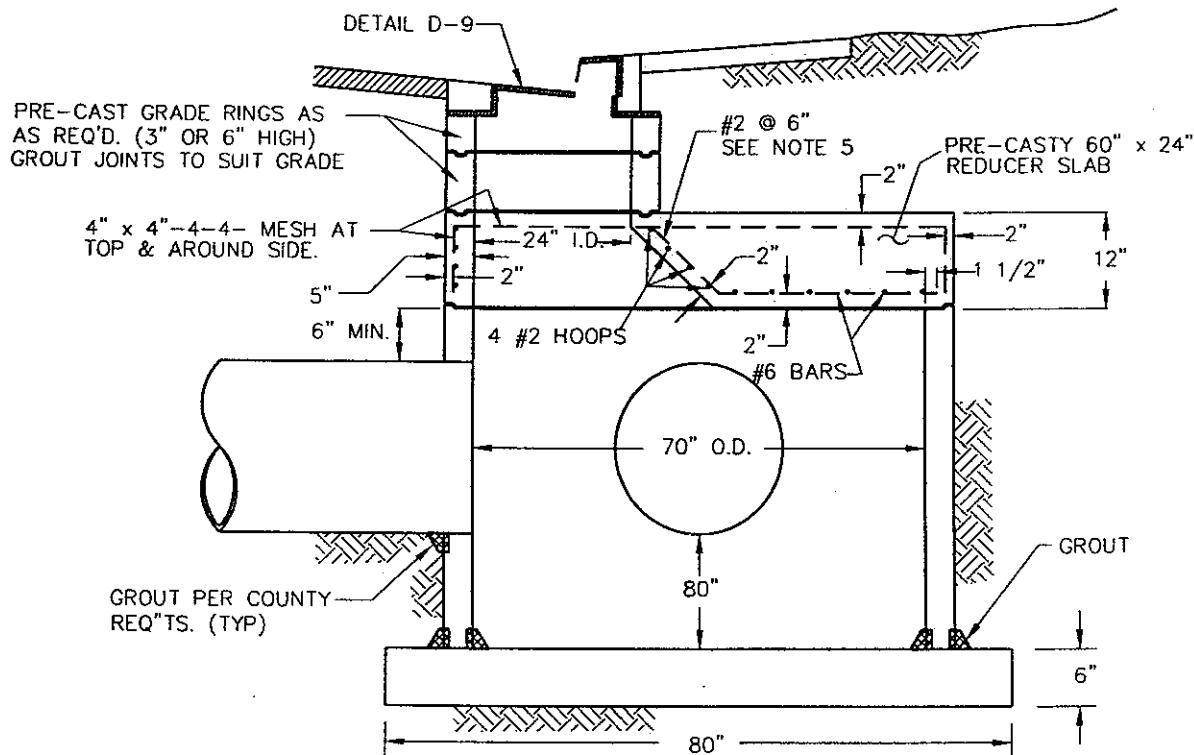
SLAB PLAN

NOTES:

1. MANHOLES & SLABS ARE MANUFACTURED TO ASTM SPECIFICATION C478.
2. CONCRETE SHALL TEST 3000 psi AT 28 DAYS.
3. GALVANIZED STEEL STEPS. 3/4" O . SPACED 12" O.C. MAY BE SPECIFIED. STEPS ARE SPACED AT 6" FROM JOINTS.
4. 1:3 GROUT MIX OR RAM-NEK JOINT COMPOUND TO BE USED IN ALL JOINTS.
5. #2 BARS BENT UP & SPACED 6" O.C. AROUND 24" OPENING. HORIZONTAL LEG TO FAN OUT AT EQUAL SPACE TO 2" CLR. AT EDGE OF SLAB.
6. WEIGHT OF REDUCER SLAB= 3600 LBS.



LIFTING EYE DETAIL



COUNTY OF SUTTER

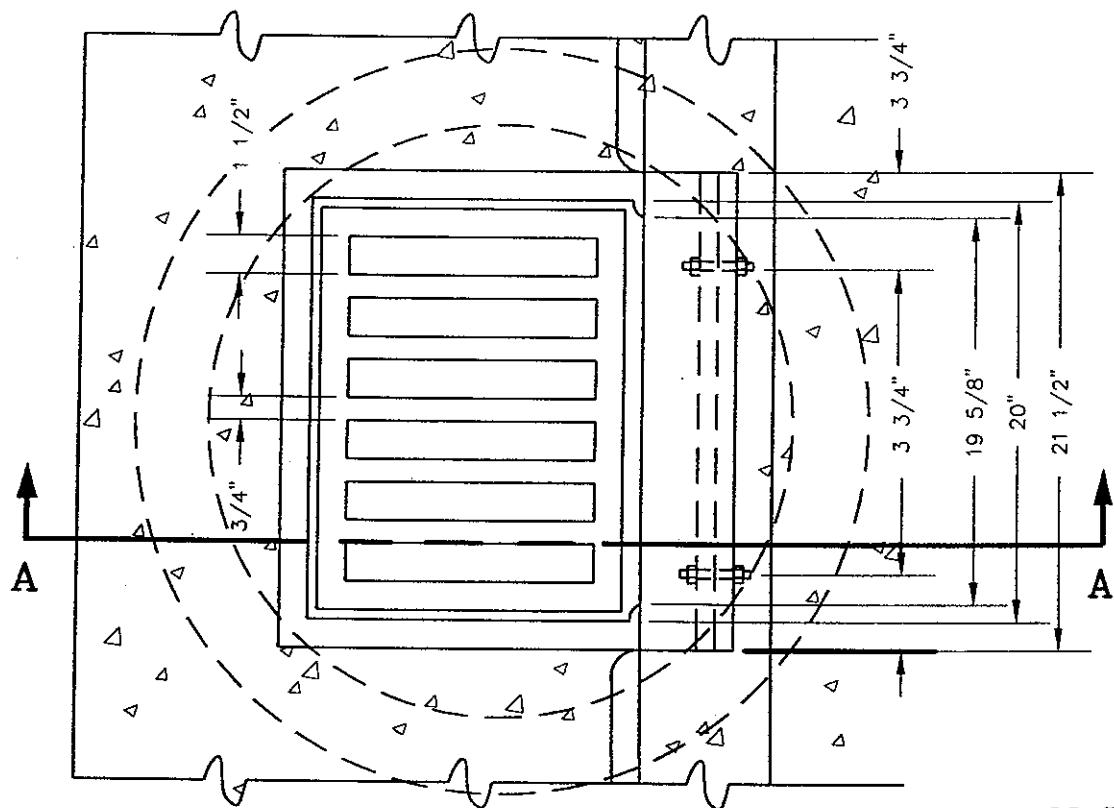
MODIFIED JUNCTION BOX

John L. Bennett *4/10/02*

APPROVED

DATE

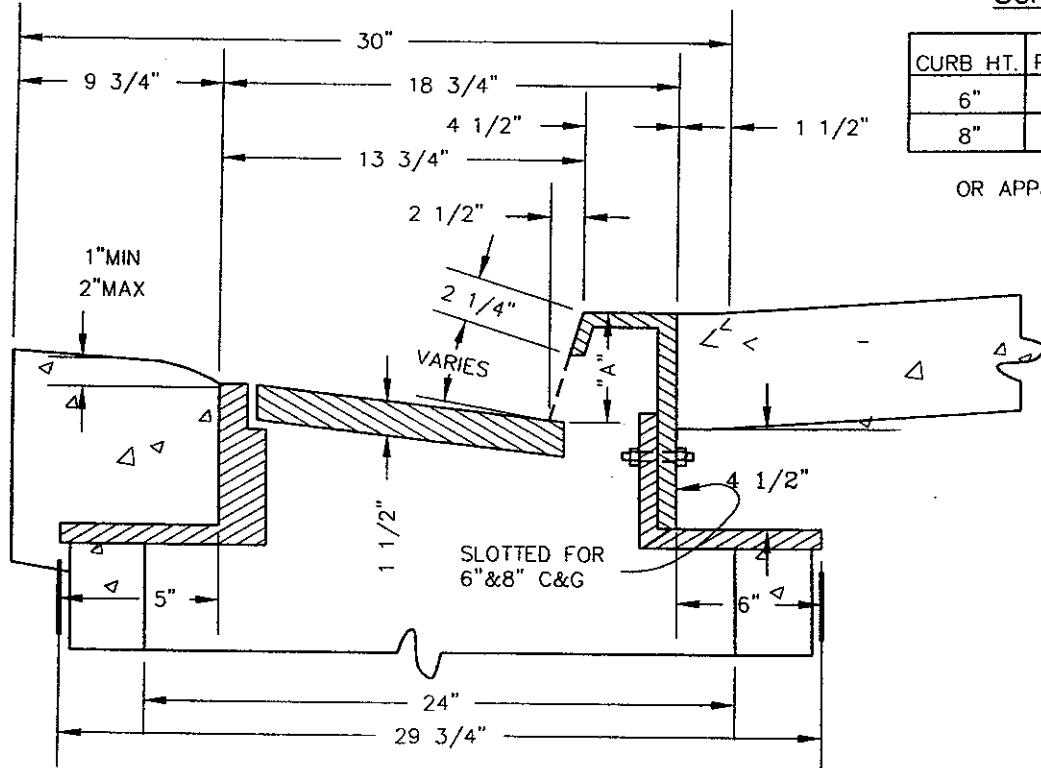
DATE	REVISIONS	BY	SCALE : NONE	DRN : PSO	DWG NO. D-8



SCHEDULE A

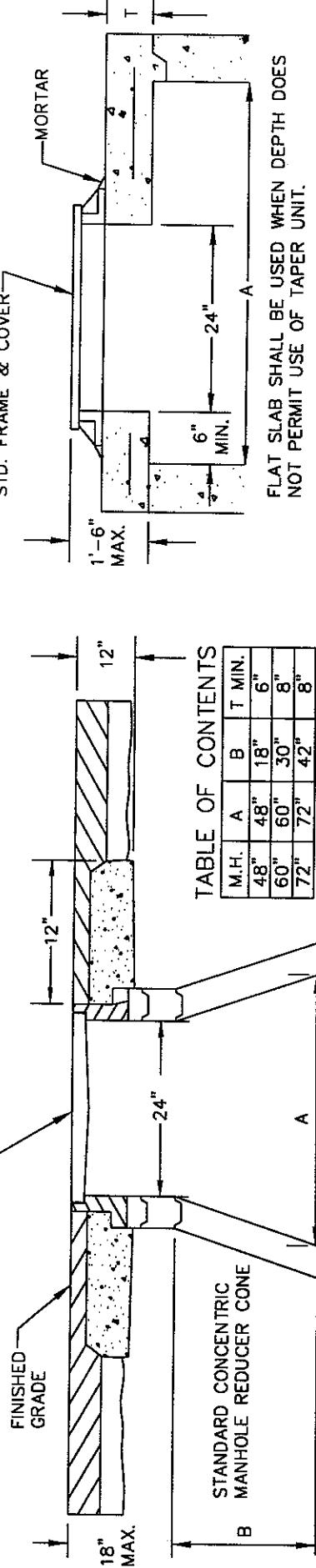
CURB HT.	PINKERTON NO.	"A"
6"	A-420B-M	6"
8"	A-420B-M	8"

OR APPROVED EQUAL



DATE	REVISIONS	BY
------	-----------	----

COUNTY OF SUTTER		
DROP INLET DRAINAGE GRATE ASSEMBLY		
		
APPROVED	DATE	
SCALE : NONE		DRN : PSO
DWG NO. D-9		

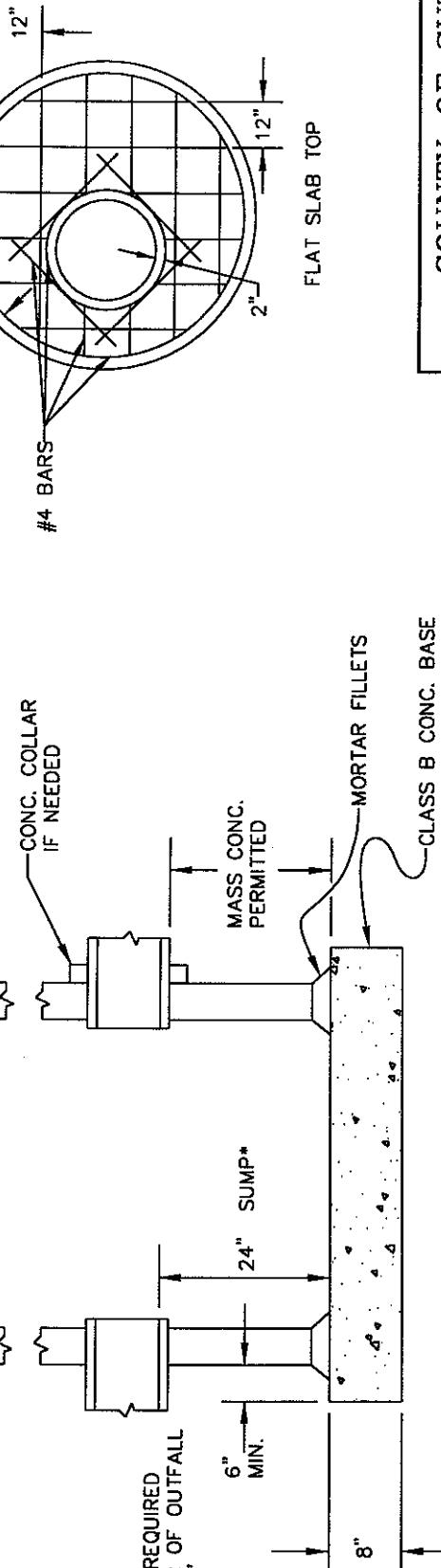
STANDARD MANHOLE
FRAME & COVER

PLACE AT EACH JOINT
PREFORMED PLASTIC
COMPOUND, KENT-SEAL
OR RAM-NECK OR EQUIV.
TRIM EXCESS PLASTIC
& MORTAR JOINTS

- DIMENSION "B" IS A MINIMUM
DIMENSION AND MAY BE GREATER
IF DEPTH PERMITS

- RISER SECTIONS, CONES AND
ADJUSTING RINGS SHALL CONFORM
TO ASTM DESIGNATION C-478.

- FRAME SHALL BE SECURED TO RISER
OR FLAT SLAB TOP WITH CEMENT
MORTAR.



*SUMP NOT REQUIRED
IF DIAMETER OF OUTFALL
IS OVER 30"

CLASS B CONC. BASE

FLAT SLAB SHALL BE USED WHEN DEPTH DOES
NOT PERMIT USE OF TAPER UNIT.

ECCENTRIC CONES SHALL BE USED
WHERE SPECIFIED ON THE PLANS.
JOINTS MAY BE EITHER KEYED OR
TONGUE AND GROOVE.

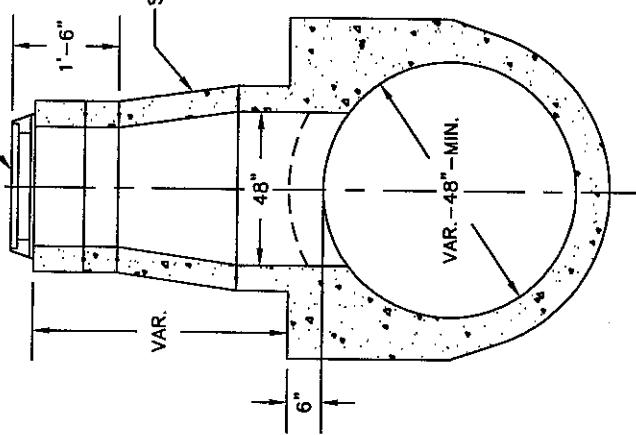
TABLE OF CONTENTS

M.H.	A	B	T MIN.
48"	48"	18"	6"
60"	60"	30"	8"
72"	72"	42"	8"

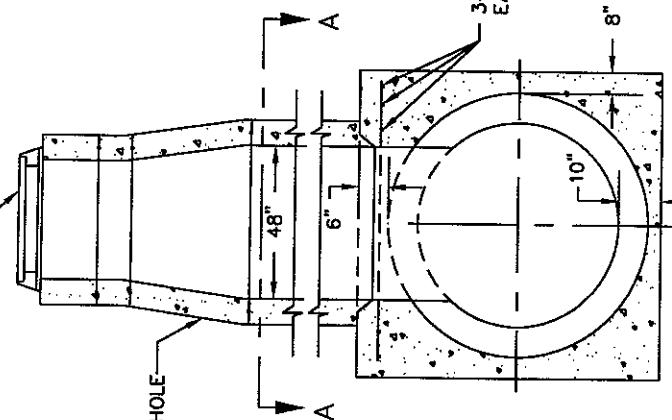
COUNTY OF SUTTER

STANDARD PRECAST STORM MANHOLE	3/1/06
<i>[Signature]</i>	APPROVED
K.X.	DATE
6/11/04	
DATE	REVISIONS
BY	DRN : PSO
SCALE : NONE	DWG NO. D-10

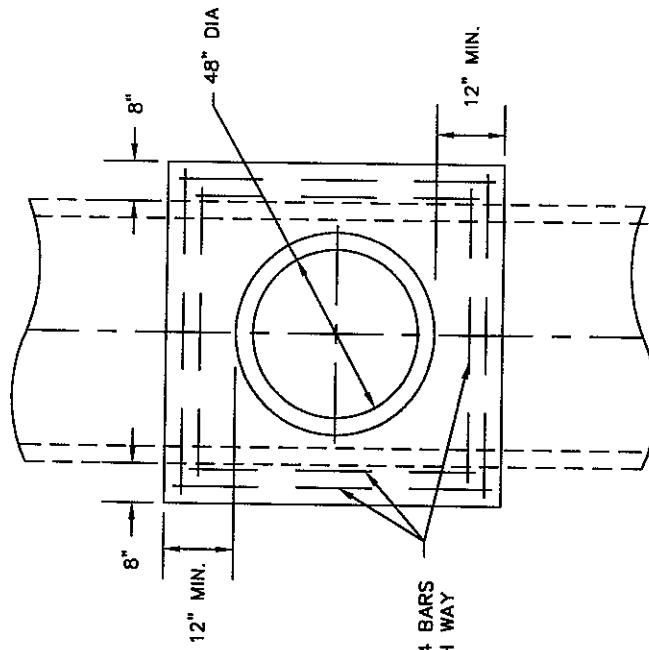
STANDARD 24" FRAME & COVER



TYPE A
(CAST-IN-PLACE PIPE ONLY)



TYPE B



SECTION A-A

NOTES:

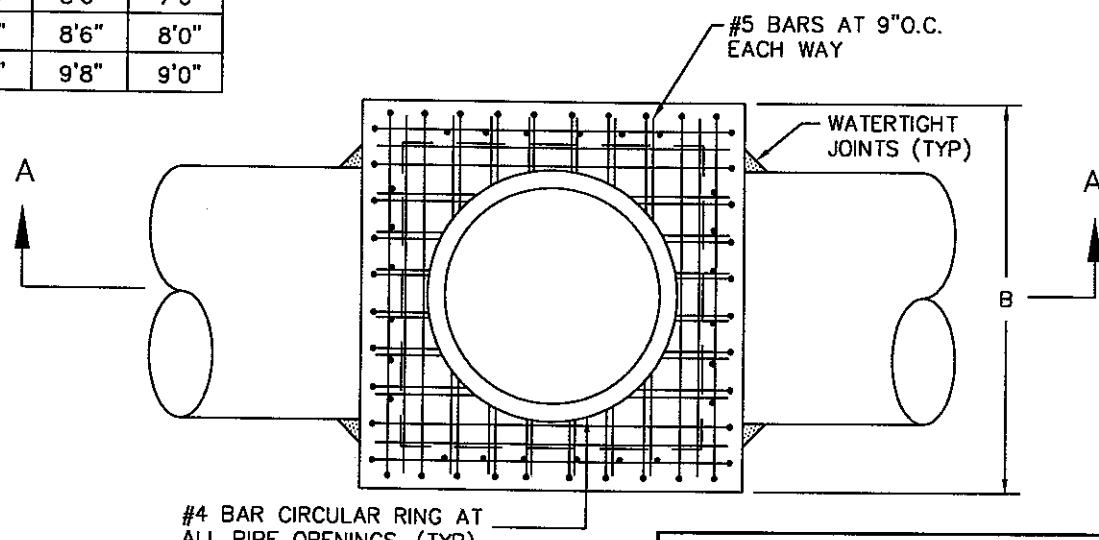
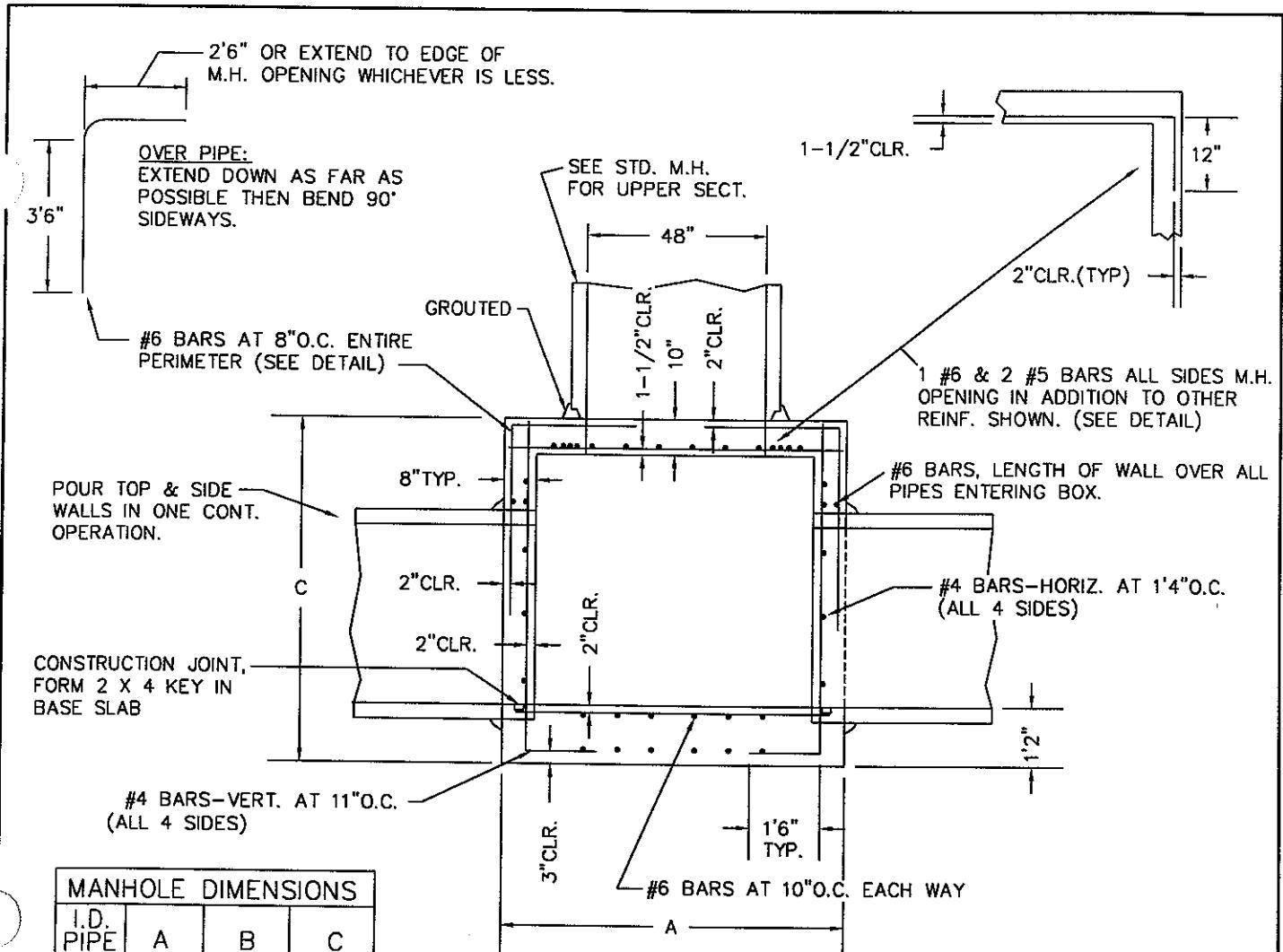
1. REMOVE CONCRETE IN MANHOLE OPENING AND CONSTRUCT RISER BASE WHILE CONCRETE IS STILL FRESH.
2. PLACE RISER SECTION AFTER CONCRETE HAS SET.

NOTES:

1. ALL PIPE OTHER THAN CAST-IN-PLACE PIPE.
2. CAST-IN-PLACE PIPE LESS THAN 48" DIA.

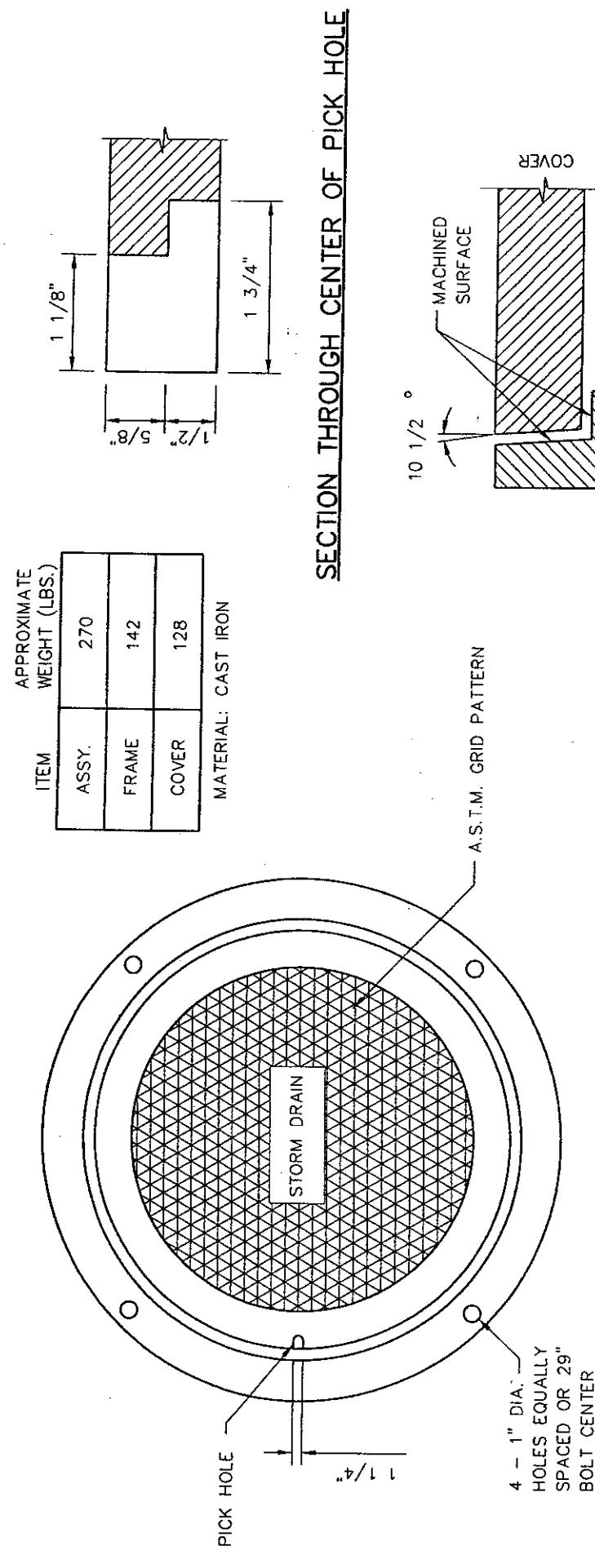
COUNTY OF SUTTER

TYPE A & B SADDLE MANHOLE	
<i>[Signature]</i>	APPROVED
6/11/04	K.X.
DATE	REVISIONS
6/11/04	BY
SCALE : NONE	DWG NO. D-11
DRN : PSO	

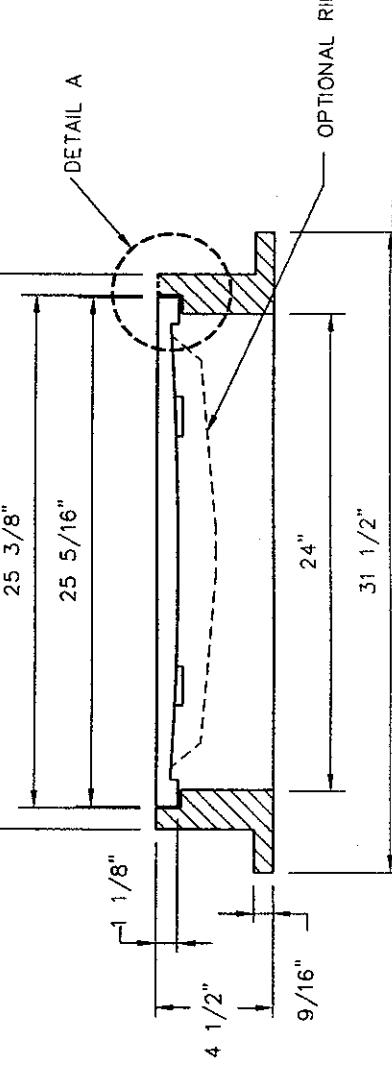
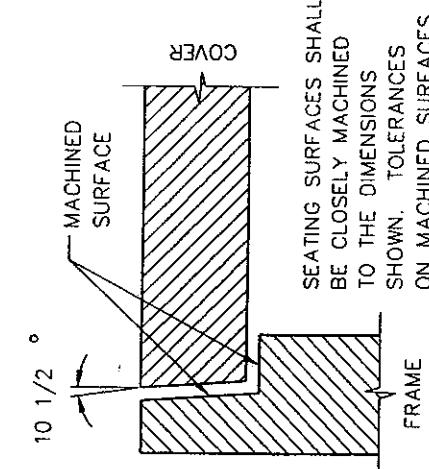


DATE	REVISIONS	BY
6/14/04		K.X.

COUNTY OF SUTTER		
30" DIAM. PIPE OR GREATER JUNCTION BOX		
<i>[Signature]</i>		3/14/06
APPROVED		DATE
SCALE : NONE		
DRN : PSO		
DWG NO. D-12		

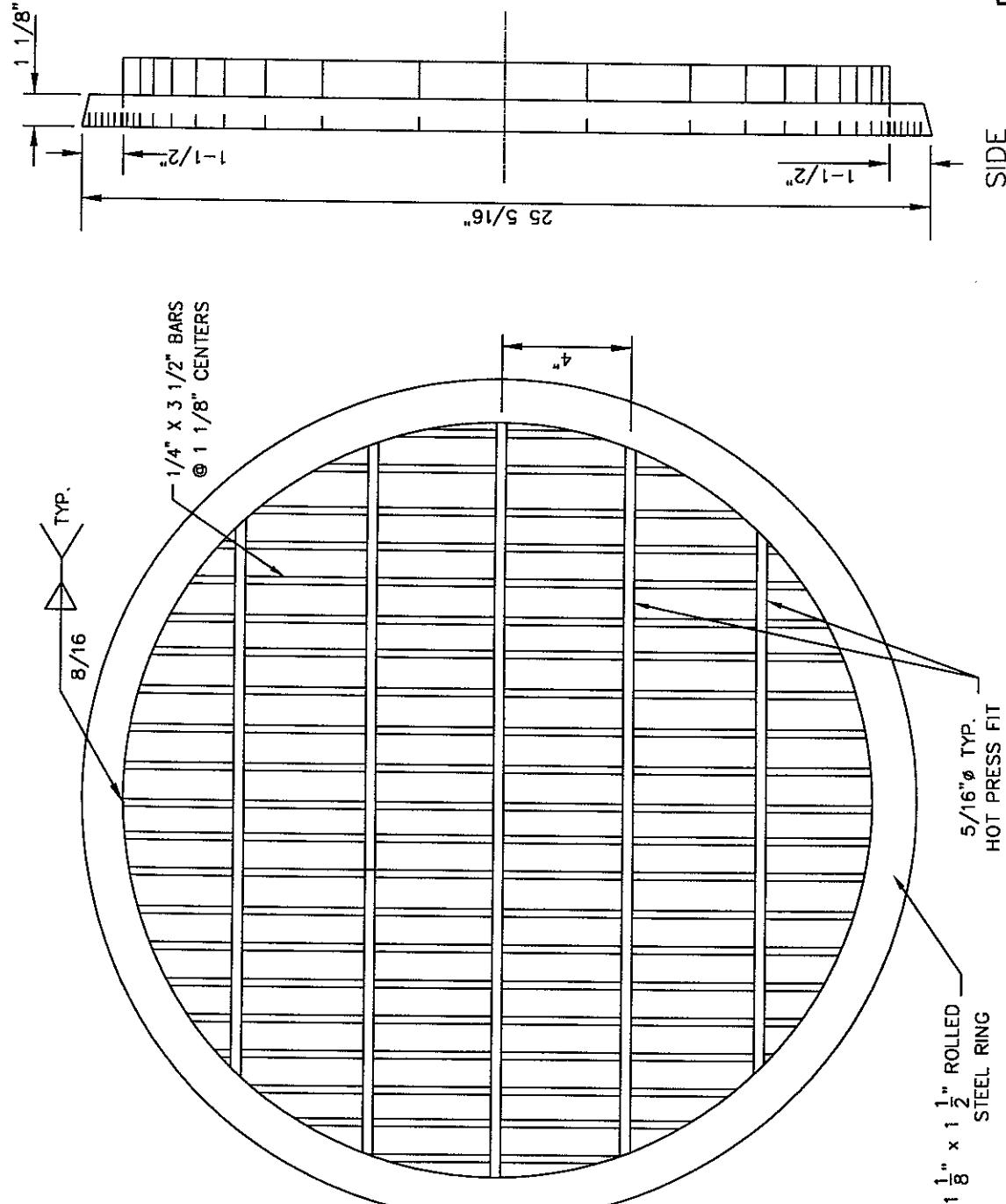


SECTION THROUGH CENTER OF PICK HOLE



NOTE:
ALL MATERIALS TO BE MADE IN U.S.A.

COUNTY OF SUTTER	
STANDARD 24" MANHOLE FRAME & COVER	<i>10/22/02</i>
APPROVED	<i>10/22/02</i>
SCALE : NONE	DWG NO. D-13
DRN : PSO	
DATE	REVISIONS BY

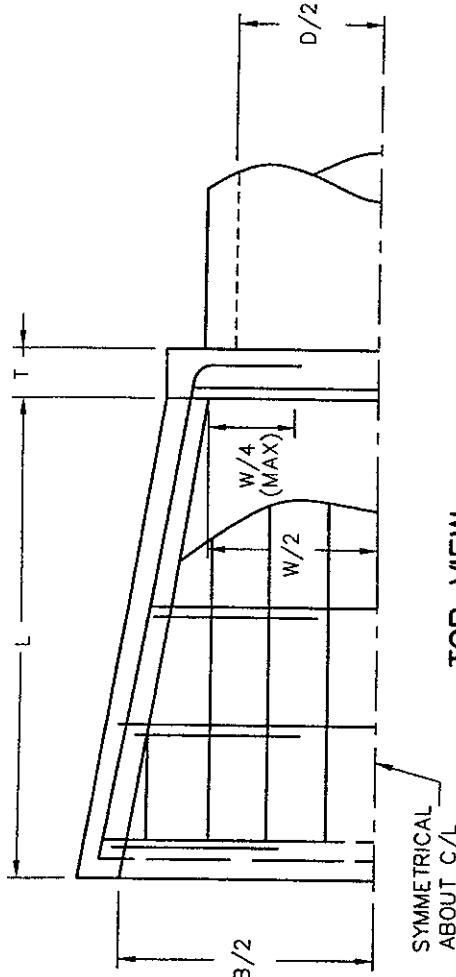


NOTES:

1. MANHOLE COVER SHALL FIT FRAME SHOWN ON DRAWING D-13.
2. SEATING SURFACES SHALL BE MACHINED AS SHOWN IN DETAIL ON DRAWING D-13.
3. THIS COVER MAY BE USED ONLY WITH APPROVAL OF ENGINEER
4. GALVANIZE AFTER FABRICATION.

COUNTY OF SUTTER	
GRATE TYPE MANHOLE COVER	3/14/06
APPROVED	DATE
K.X.	
SCALE : NONE	DWG NO. D-14
DRN : PSO	

TOP	SIDE
6/14/04	
DATE	



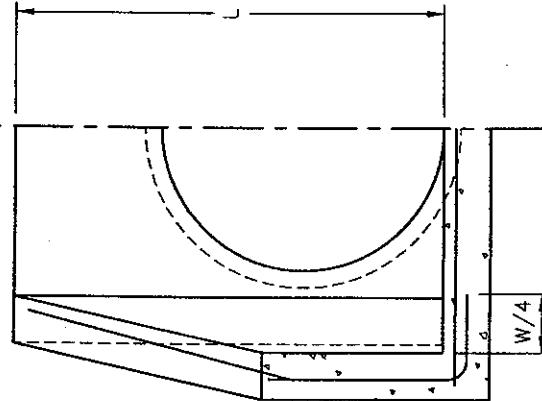
TOP VIEW

DIMENSIONS AND REINFORCING

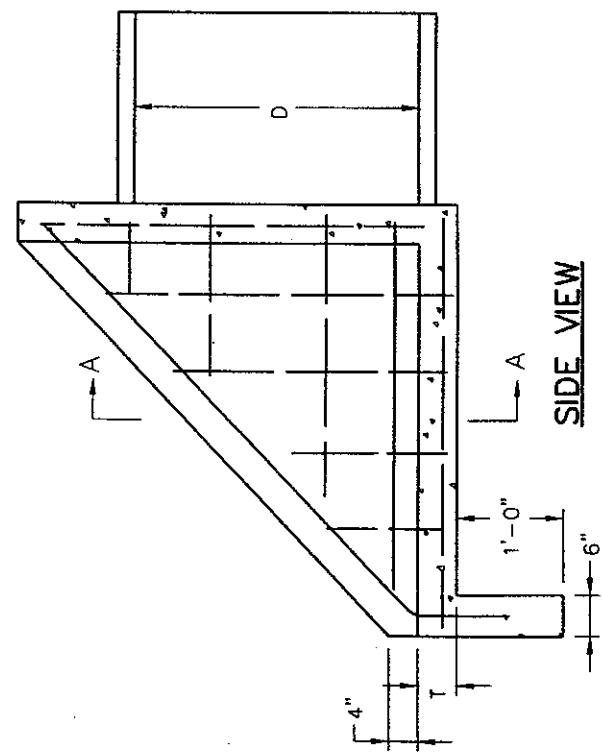
ALL REINFORCING						
D	W	B	L	T	ALL REINFORCING	
33"	3'-3"	5'-3"	4'-0"	6"	#3'Ø12"	
36"	3'-8"	5'-8"	4'-2"	6"	#3'Ø12"	
42"	4'-4"	6'-4"	4'-8"	6"	#3'Ø12"	
48"	4'-10"	7'-2"	5'-2"	8"	#6'Ø12"	
54"	5'-4"	8'-0"	6'-0"	8"	#6'Ø12"	
60"	6'-0"	8'-10"	6'-6"	8"	#6'Ø12"	

NOTES:

1. "B" MAY BE REDUCED IF REQUIRED BY CHANNEL DIMENSIONS.
2. REINFORCING BAR SPACING SHOWN IS MAXIMUM SPACING.
3. USE CLASS 'B' CONCRETE.



HALF SECTION A-A



SIDE VIEW

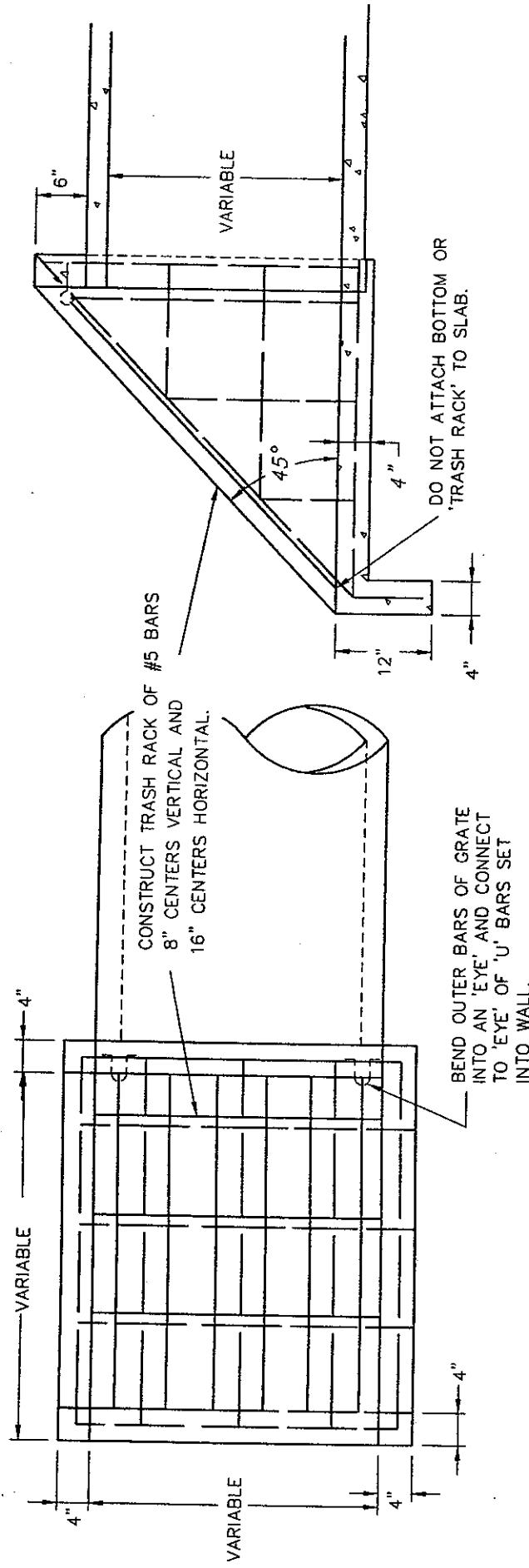
COUNTY OF SUTTER

PIPE INLET STRUCTURE

[Signature]
APPROVED
DATE

SCALE : NONE	DRN : PSO	DWG NO. D-15
DATE	REVISIONS	BY

DWG Name: R:\develop\SU10202\Std-Det\Sutter\d-16.dwg Updated By: Yusuf



NOTE: ALL REINFORCING TO BE #4 @ 12"
USE CLASS 'B' CONCRETE

NOTE:

NOTE: ALL REINFORCING TO BE #4 @ 12"
USE CLASS 'B' CONCRETE

SIDE VIEW

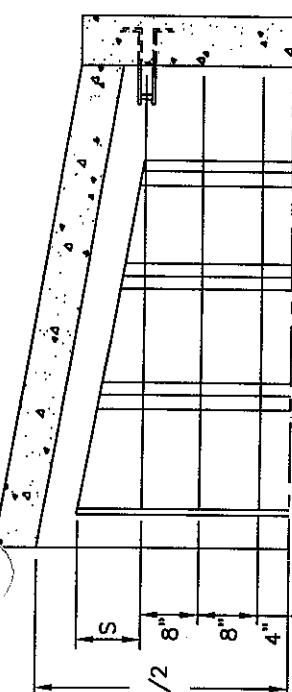
COUNTY OF SUTTER		PIPE INLET STRUCTURE AND TRASH RACK (30" PIPE & SMALLER)		APPROVED <i>John C. Sutter</i>	DATE <i>10/10/02</i>
SCALE : NONE	DRN : PSO				DWG NO. D-16
REVISIONS	BY				
DATE					

TRASH RACK DIMENSIONS

DIA.	NUMBER & SIZE		L	L'	S	H
	BAR 'A'	L BAR				
33"	8-3/8" x 2-1/2"	3-2 x 2 x 1/4	5'-1"	1'-10"	8"	3'-8"
36"	8-3/8" x 2-1/2"	3-2 x 2 x 1/4	5'-4"	1'-11"	8"	3'-10"
42"	9-3/8" x 2-1/2"	3-2 x 2 x 1/4	5'-11"	2'-3"	9"	4'-4"
48"	9-3/8" x 2-1/2"	4-2 x 2 x 1/4	6'-7"	1'-9"	10"	4'-10"
54"	10-3/8" x 3"	4-3 x 3 x 1/4	7'-9"	2'-1.5"	10.5"	5'-8"
60"	11-3/8" x 3-1/2"	4-3 x 3 x 1/4	8'-5"	2'-4"	11"	6'-2"

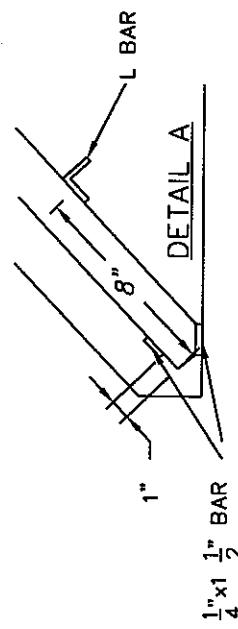
NOTES:

1. THIS TRASH RACK TO BE USED WITH PIPE INLET STRUCTURES.
2. MATERIAL TO CONFORM TO ASTM DESIGNATION A-36.
3. 'S' MAY VARY WITH 'B' SEE PLATE.
4. ALL FILLET WELDS TO BE 3/16"
5. 2 HINGES REQUIRED FOR 33,36 & 42 INCH PIPES. 3 HINGES REQUIRED FOR 48, 54 & 60 INCH PIPES.

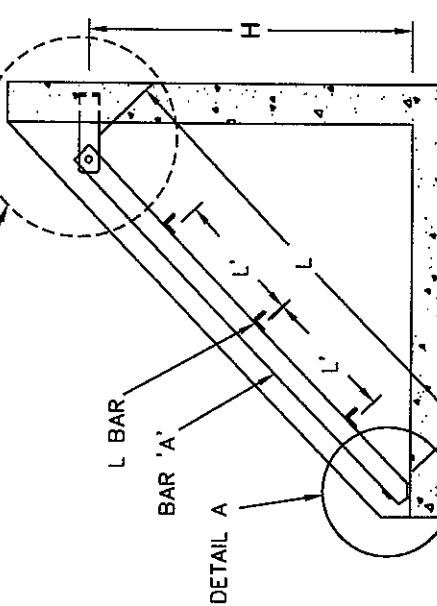


TOP VIEW

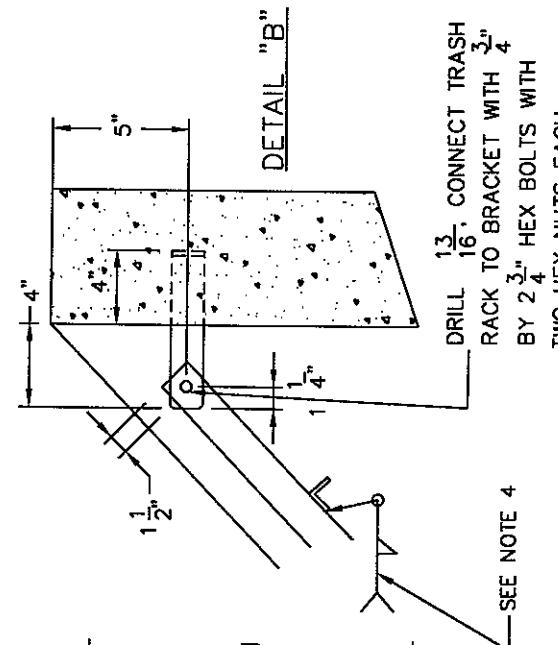
SYMMETRICAL
ABOUT C/L



DETAIL A



SIDE VIEW



DETAIL "B"

SEE NOTE 4
NOTE PIPE NOT SHOWN.

DRILL $1\frac{3}{16}$, CONNECT TRASH
RACK TO BRACKET WITH $2\frac{3}{4}$ "
BY $2\frac{3}{4}$ " HEX BOLTS WITH
TWO HEX NUTS EACH.

COUNTY OF SUTTER

(33" PIPE OR LARGER)

APPROVED

2/14/06

DATE

K.X.	REVISIONS	BY	SCALE : NONE	DRN : PSO	DWG NO. D-17
11/3/05					

TRASH RACK LATCH LINKAGE, SEE TABLE AT RIGHT FOR SIZE OF SQUARE TUBING STOCK FOR FABRICATION

AT RIGHT FOR SIZE OF SQUARE TUBING
STOCK FOR FABRICATION

WITH CHAIN AND PADLOCK

PIPE RACK LATCH PLATE LATCH PLATE

ANCHOR - 1/2" DIA
STEEL BENT TO 3" DIA
AND EMBEDDED 12"

RACK LATCH SEE DETAIL BELOW

#4 BARS EACH FACE

3" x 3" STEEL ANGLE
SAME THICKNESS AS PLATE

LATCH LINKAGE—SEE TABLE FOR SIZE OF SQUARE TUBING STOCK FOR FABRICATION

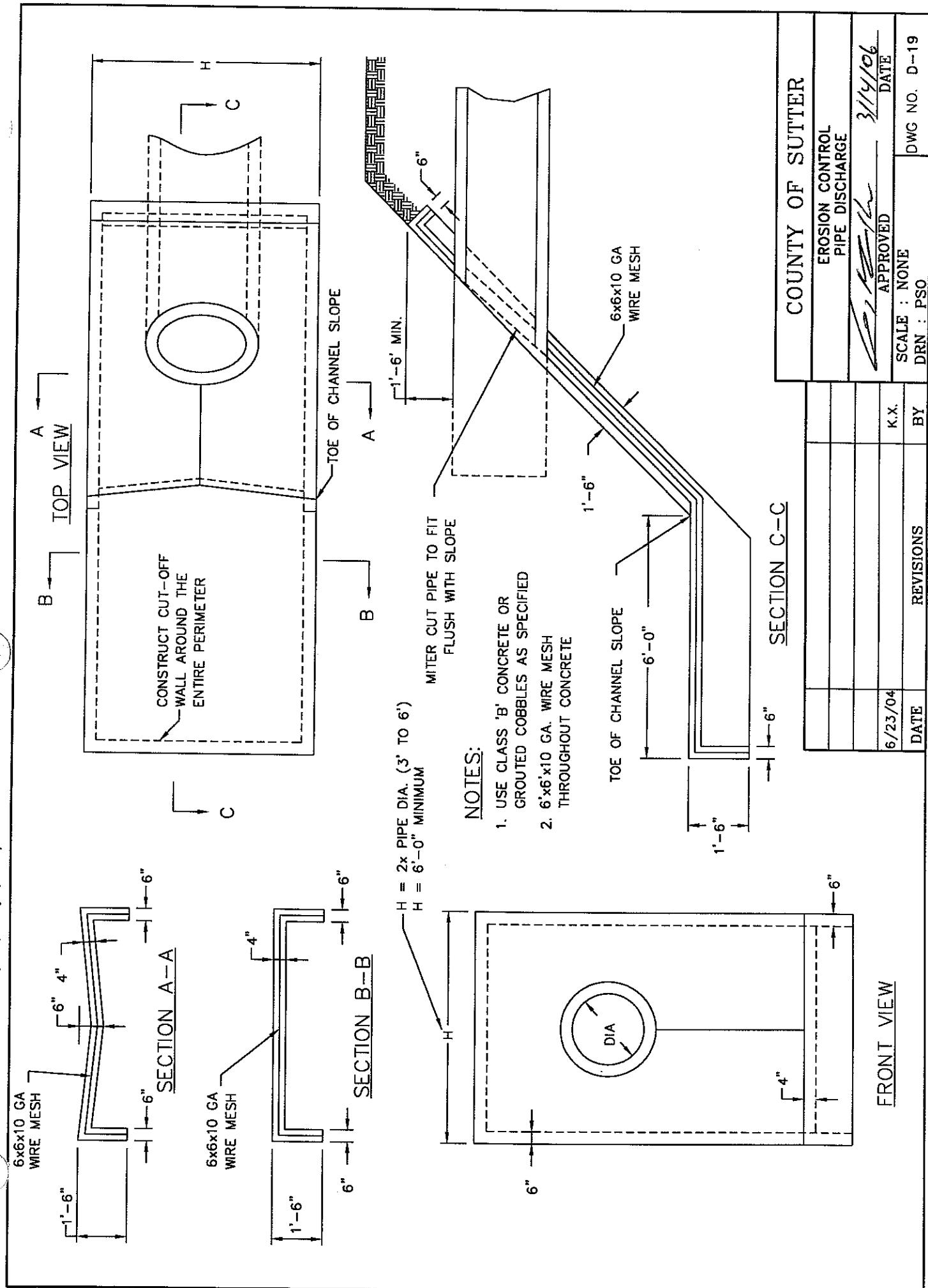
NOTES:

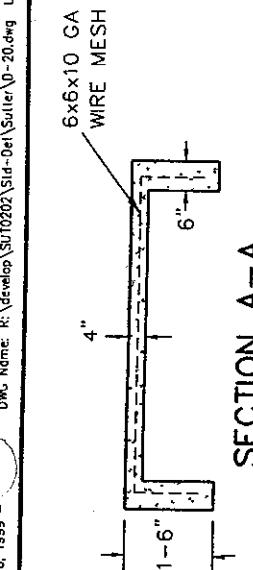
1. ENTIRE RACK TO BE WELDED REINFORCING STEEL OR ROUND BARS OF EQUAL DIA WITH HORIZONTAL BARS BEING 8" CENTER TO CENTER
2. USE CLASS "B" CONCRETE.
3. ROOM SHALL BE PROVIDED DOWNSTREAM TO LAY RACK FLAT.
4. FASTEN LATCH BRACKET, TO HEADWALL WITH 1/2"x6" BOLTS
5. WHEN RACK BAR SHALL BE TIGHT AGAINST THE TOP OF THE HINGE BRACKET SO THAT THE RACK CANNOT BE LIFTED OFF THE LATCH.
6. FABRICATE HINGE BRACKET FROM #4 RE-BAR.
7. ALL REINFORCING STEEL SHALL HAVE 2" EMBEIDMENT EXCEPT AS NOTES

PIPE SIZE	RACK BAR SIZE	LATCH PLATE THICKNESS	LATCH PLATE SIZE
21"	#4	1/4"	1", .095" THICK
24"	*	*	*
27"	#5	*	*
30"	*	3/8"	*
33"	#6	*	*
34"	*	*	1", .133" THICK
42"	#7	*	*
48"	*	1/2"	*
54"	*	*	*
60"	#8	*	*
66"	*	*	*
72"	*	*	*
84"	*	*	*

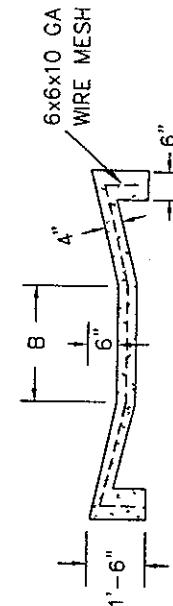
PIPE OUTFALL-ACCESS CONTROL RACK	
	3/14/06
APPROVED	DATE
SCALE : NONE	DWG NO. D-18
DRN : FSO	

5/14/04	REVISIONS	K.X.
DATE	REVISIONS	BY



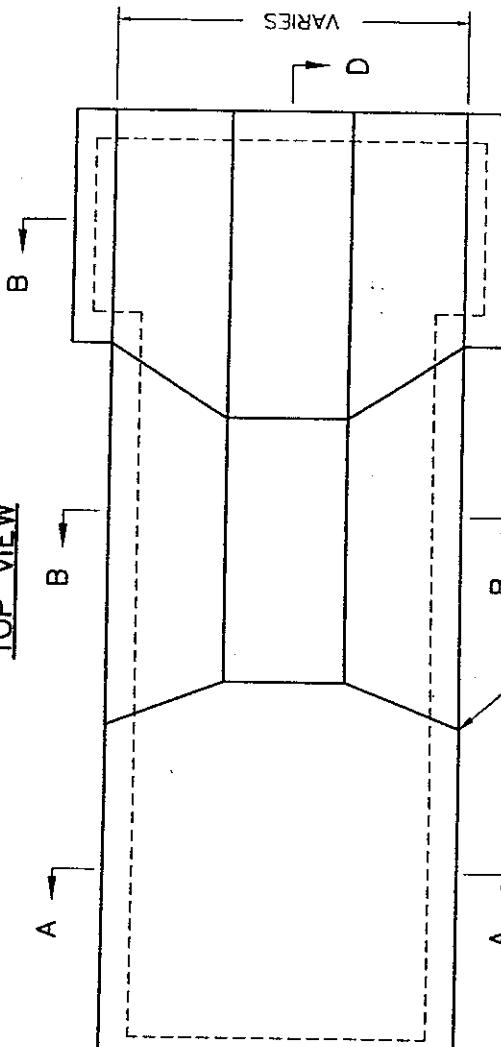


SECTION A-A



SECTION B-B

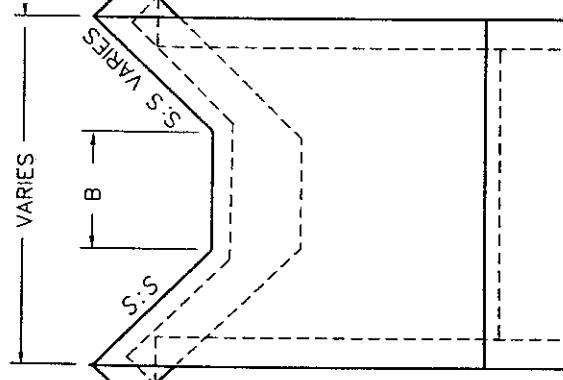
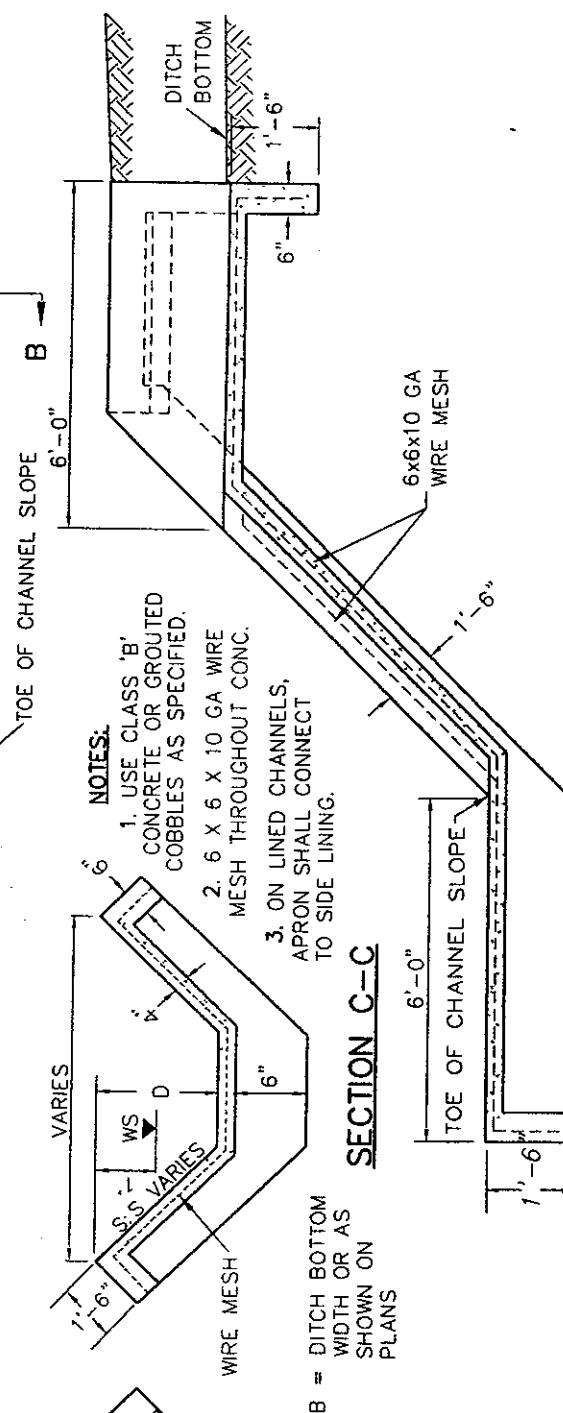
TOP VIEW



A →

B →

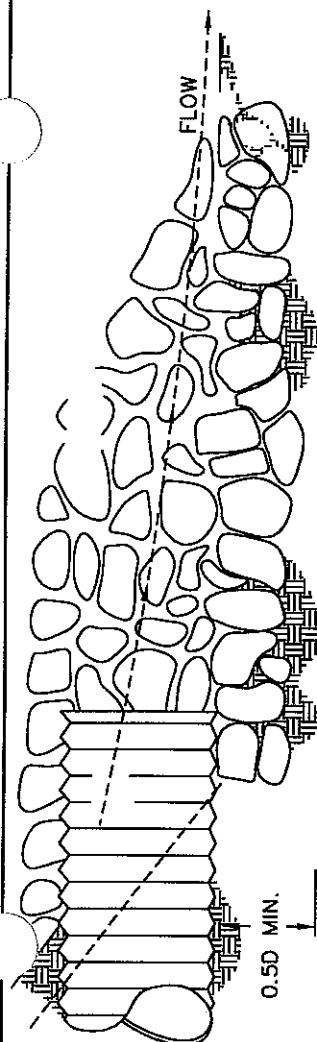
D



FRONT VIEW

SECTION D-D

COUNTY OF SUTTER	
EROSION CONTROL	
DITCH DISCHARGE	
APPROVED <i>[Signature]</i> DATE <i>[Signature]</i>	
SCALE : NONE	DWG NO. D-20
DRN : PSO	
DATE	REVISIONS
BY	

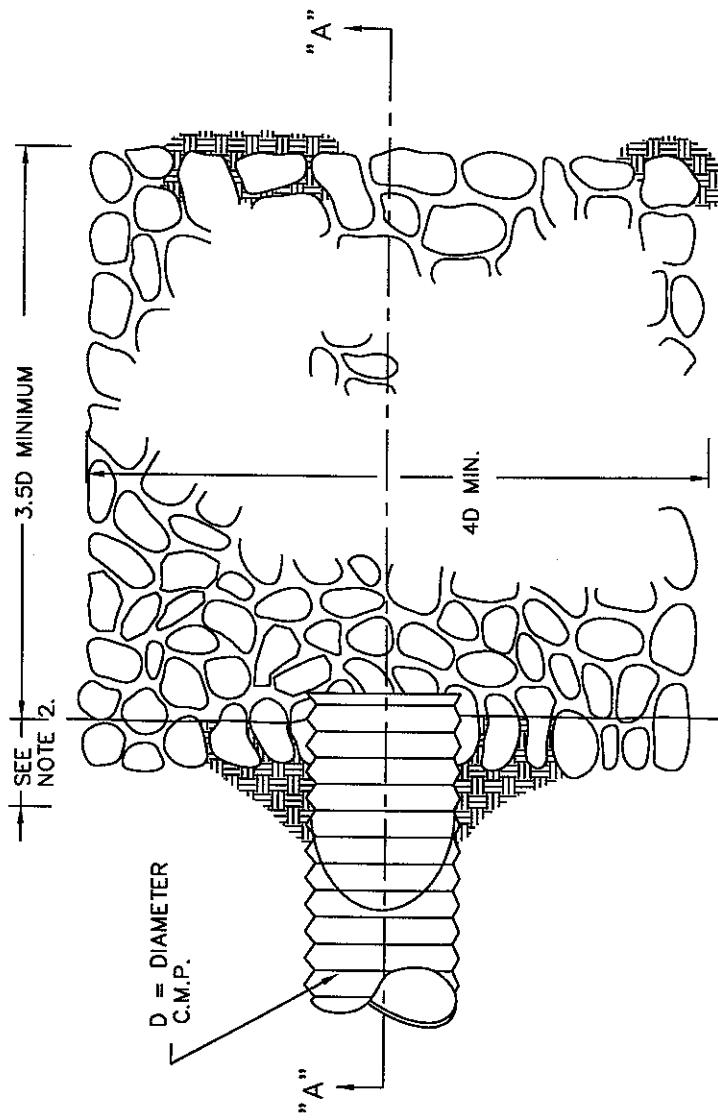


SECTION A-A

0.50 MIN.

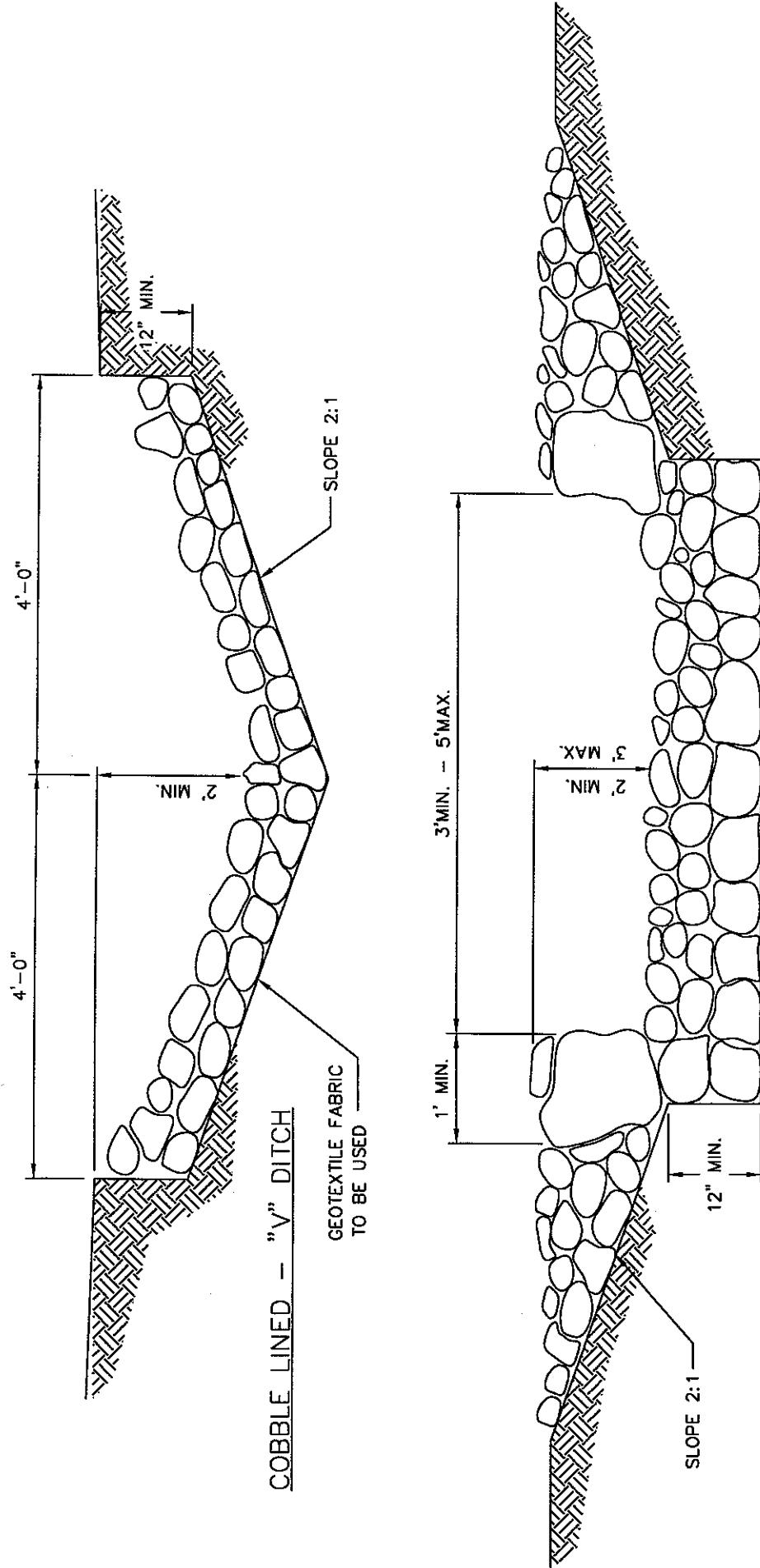
NOTE:

1. STONE LINING SHALL BE COBBLES CONFORMING TO THE REQUIREMENTS SECTION 72 OF THE STANDARD SPECIFICATIONS OR SHOT ROCK AS DIRECTED BY THE ENGINEER.
2. 0.5D OR 1' WHICH EVER IS GREATER.



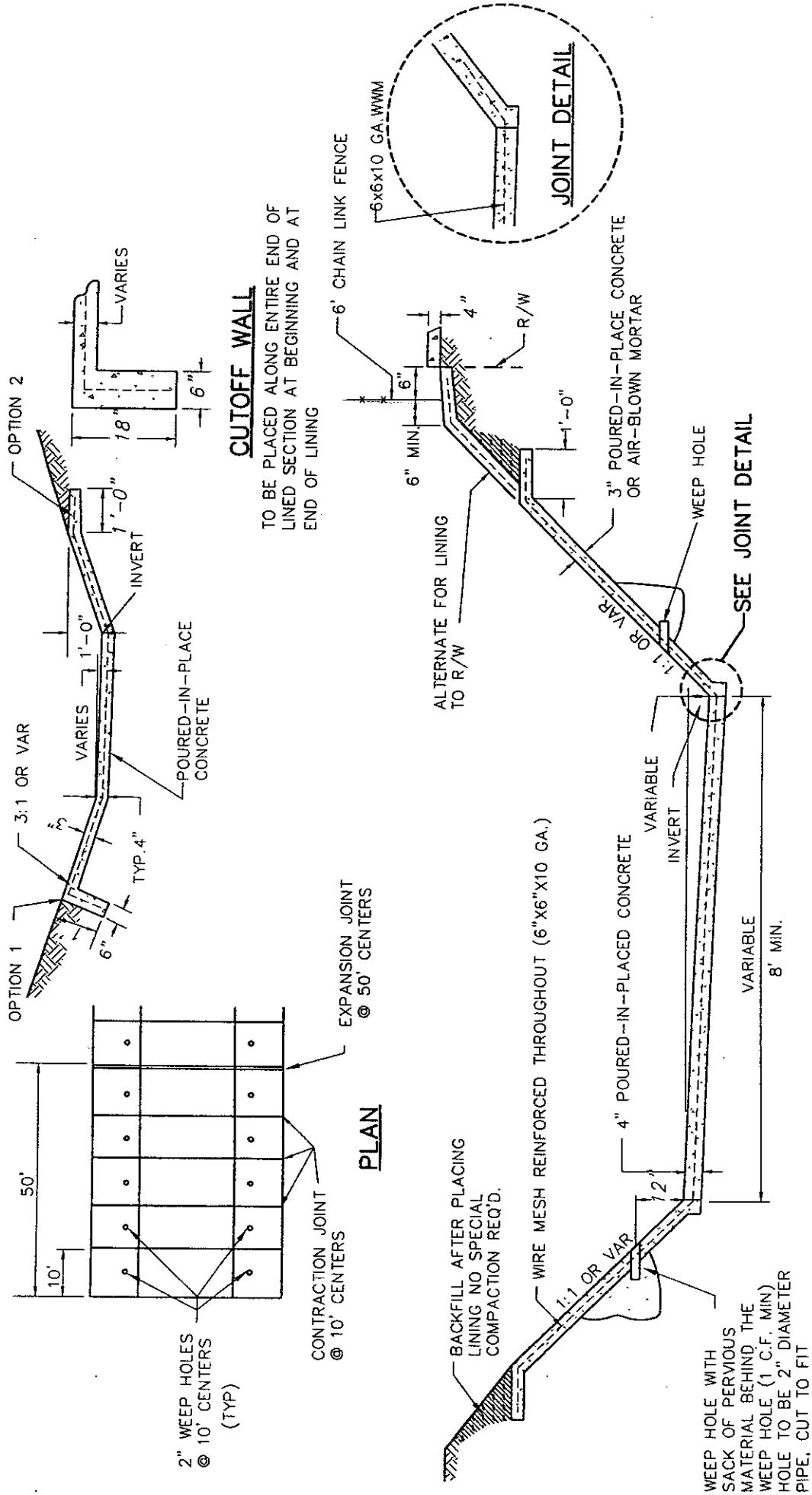
21

CULVERT OUTFALL			
11/3/05	K.X.	APPROVED	3/2/06 DATE
DATE	REVISIONS	BY	SCALE : NONE DRN : PSO
			DWG NO. D-21



NOTE:
6" TO 36" COBBLE

COUNTY OF SUTTER	
ROCK LINED CHANNEL SECTION	2/14/06
APPROVED	DATE
K.X.	
6/14/04	SCALE : NONE
DATE	DRN : PSO
REVISIONS	BY



COUNTY OF SUTTER

LINED CHANNEL SECTION

1902

SCALE : NONE DATE : DWG NO. D-23

MAXIMUM TRENCH DEPTH MEASURED SURFACE TO BOTTOM OF TRENCH IN FEET		REINFORCED CONCRETE PIPE -CLASS-					VCP E.S.	CAST IN PLACE
DIA METER	C-14 CONC. PIPE -CLASS-	1	2	3	4	5		
10	12	17	29					
12	12	17	21	8	12	30		
15	12	17	20	10	15	35		
18	11	17	19	11	16	38		
21	11	17	19	12	17	39		
24	11	16	19	12	18	39		
27	11	16	18	13	19	39		
30	11	15	17	14	19	38		
33	11	15	16	14	20	38		
36	10	13	14	13	17	27	69	25
42				14	18	29	62	
48				15	19	30	60	
54				16	20	31	58	
60				16	21	31	57	
66				17	22	32	56	45
72				15	18	23	53	35
								30

NOTES:

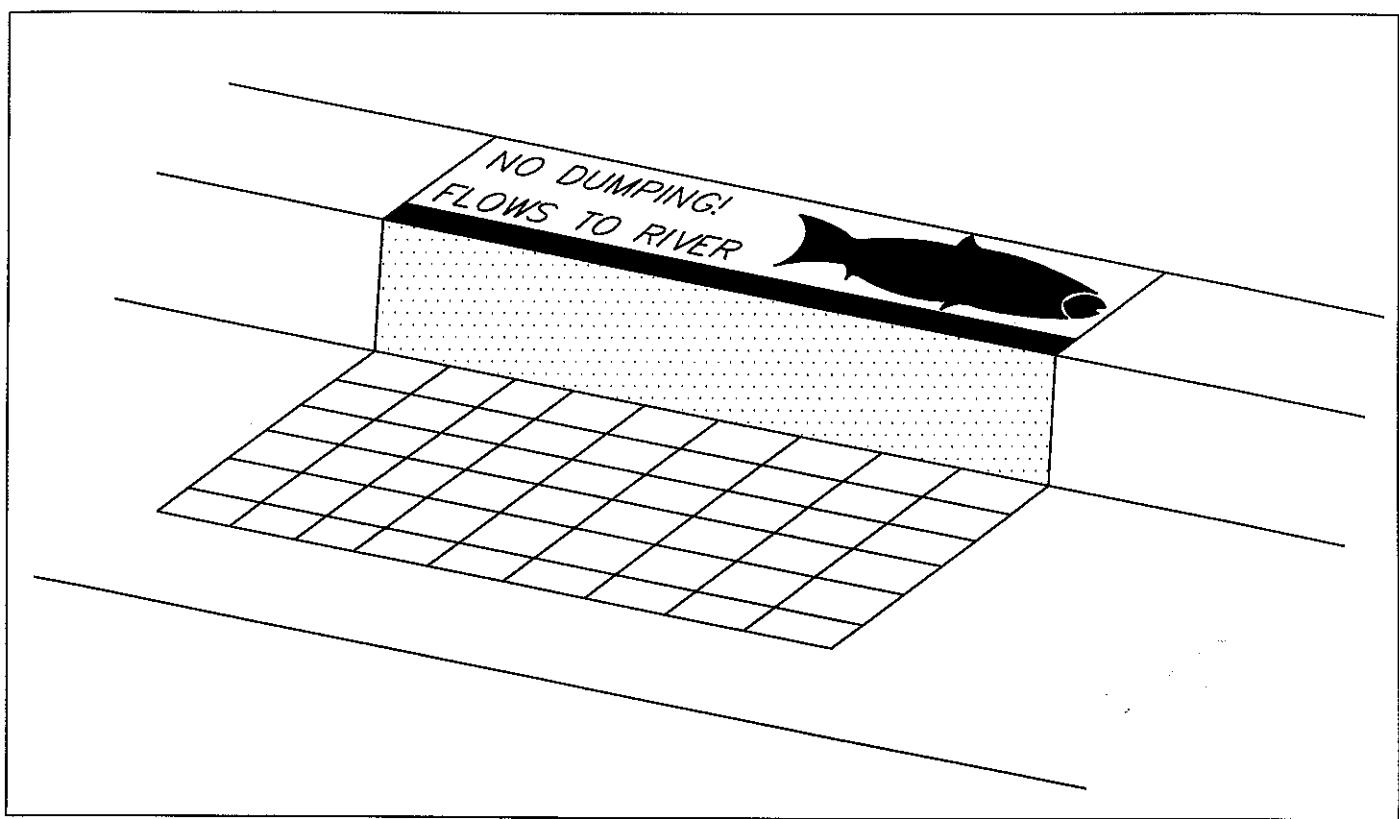
1. ALL DEPTHS SHOWN FOR FLEXIBLE PAVEMENT AND TRENCH WIDTH EQUAL TO O.D. OF PIPE PLUS 16" FOR PIPE 33" AND SMALLER IN INSIDE DIAMETER. TRENCH WIDTH EQUALS O.D. OF PIPE PLUS 24" FOR PIPE 36" AND LARGER IN INSIDE DIAMETER. TRENCH WIDTH MEASURED AT TOP OF PIPE.
2. THIS DETAIL SHALL BE A GUIDE ONLY. THE COUNTY REQUIRES THAT A NCPI LOAD CALCULATION BE RUN ON ALL PIPES FOR TRENCH LOAD DESIGN.

COUNTY OF SUTTER

PIPE COVER REQUIREMENTS
RCP, VCP & CAST-IN-PLACEAPPROVED *John G. Sutter* DATE *4/20/89*

SCALE : NONE DRN : PSO DWG NO. D-25

A PUBLIC NOTICE SHALL BE PLACED ADJACENT TO ALL DRAIN INLETS
IN ACCORDANCE WITH THE DETAIL BELOW.



NOTES:

1. MESSAGE AND SYMBOL SHALL BE PERMANENTLY PLACED WITH THE USE OF BOMACRON OR ANOTHER METHOD APPROVED BY THE COUNTY PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER.
2. LETTERS SHALL BE 1-1/2" IN HEIGHT. OUTSIDE DIMENSION OF PUBLIC NOTICE BACKGROUND SHALL BE 12" x MINIMUM OF 30" (FIT TO BACK OF INLET).
3. COLORS SHALL BE BLACK LETTERING AND GRAPHIC WITH GREY BACKGROUND.
4. PAINTING OF MESSAGE WILL NOT BE ALLOWED.
5. FOR AREA DRAIN INLETS, NOTICE WILL BE PLACED ADJACENT AND PARALLEL TO THE LONG AXIS OF THE DRAIN.

COUNTY OF SUTTER		
NO DUMPING PUBLIC NOTICE DETAIL		
6/25/04	K.X.	<i>John K.</i>
		APPROVED
DATE	REVISIONS	SCALE : NONE
		DRN : PSO
		DWG NO. D-26

THE VORTECHS™ STORMWATER TREATMENT SYSTEM

VORTECHS™ MODEL	GRIT CHAMBER DIAM./AREA FT./FT.²	PEAK DESIGN FLOW ^a CFS	SEDIMENT STORAGE ^b CYS	APPROX. SIZE ^c L X W FT
1000	3/7	1.6	0.75	9x3
2000	4/13	2.8	1.25	10x4
3000	5/20	4.5	1.75	11x5
4000	6/28	6.0	2.5	12x6
5000	7/38	8.5	3.25	13x7
7000	8/50	11.0	4.0	14x8
9000	9/64	14.0	4.75	15x9
11000	10/79	17.5	5.5	16x10
16000	12/113	25.0	7.0	18x12

ENGINEERING NOTES

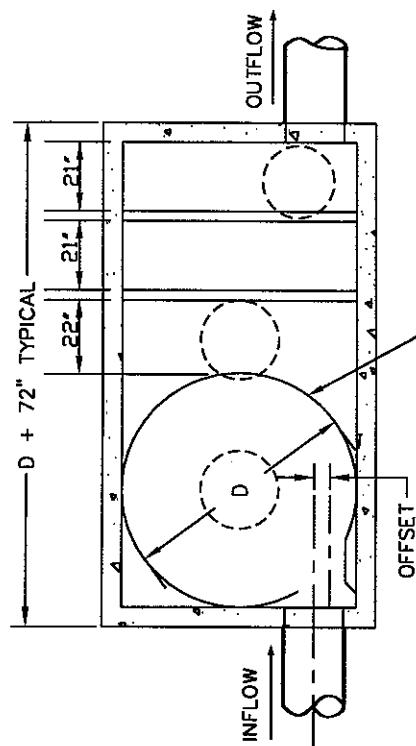
- A) FOR IN-LINE SYSTEMS WITHOUT A BYPASS, SIZING CRITERIA IS BASED ON PROVIDING ONE SQUARE FOOT OF GRIT CHAMBER SURFACE AREA FOR EACH 100 GPM OF PEAK DESIGN STORM FLOW RATE (E.G. 10-YEAR STORM). FOR MORE DETAILS ABOUT VORTECHNICS SIZING CRITERIA REFER TO VORTECHNICS TECHNICAL BULLETIN 3.
- B) SEDIMENT STORAGE VOLUME ASSUME A 3 FOOT SUMP.
- C) CONSTRUCTION DETAILS MAY VARY DEPENDING ON THE SPECIFIC APPLICATION. ANY ALTERATIONS TO THE SIZING CHART SPECIFICATIONS WILL APPEAR ON VORTECHNICS DIMENSIONAL AND SHOP DRAWINGS. PLEASE CALL VORTECHNICS FOR THE WEIGHT OF SPECIFIC VORTECHS SYSTEMS, IF NEEDED.

SPECIAL NOTE:

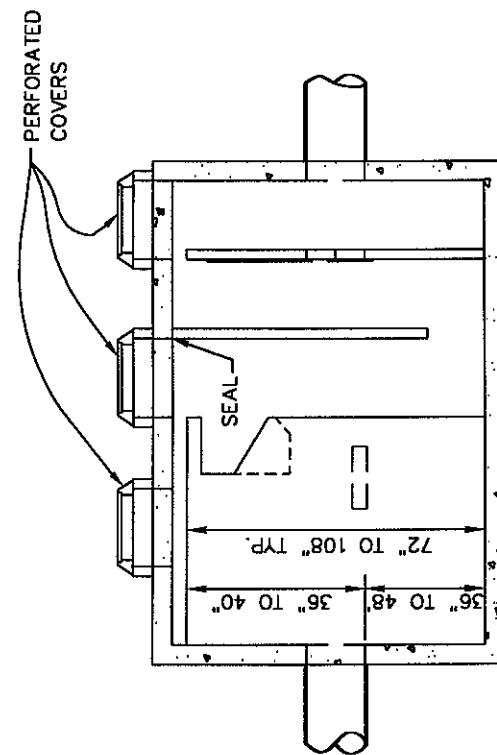
OIL STORAGE CAPACITY, WHEN IT IS NEEDED TO MEET A SPECIFIC REQUIREMENT FOR SPILL CONTAINMENT, CAN BE SIZED TO MEET THE STORAGE REQUIREMENT WITH THE SELECTED MODEL. VORTECHS TECHNICAL STAFF WILL OPTIMIZE SYSTEM GEOMETRY TO MEET CONTAINMENT REQUIREMENTS WITHIN A CORRECTLY SIZED VORTECHS SYSTEM. (207) 885-9830.

COINTY OF SITTER

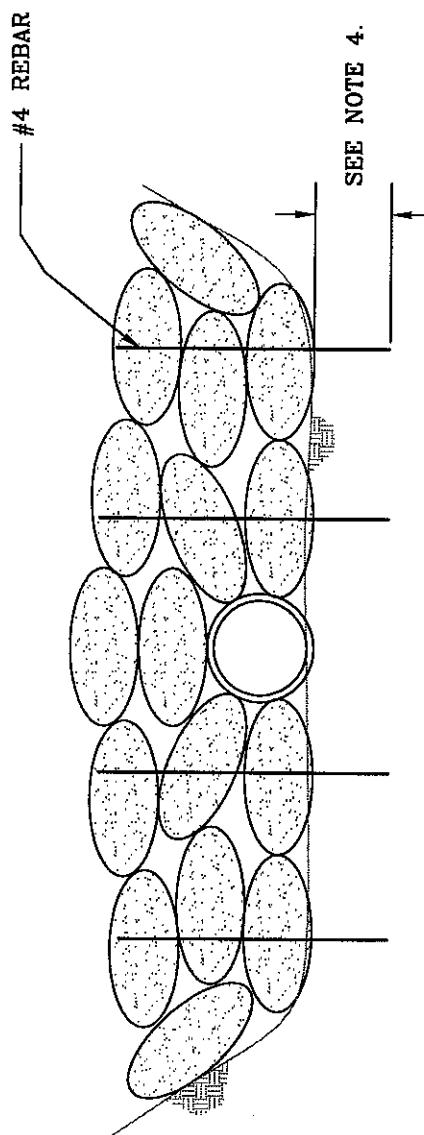
COUNTY OF SUTTER	
SAND AND OIL TRAP MANHOLE	
WITH FLAT SLAB TOP	
<i>[Signature]</i>	
APPROVED	3/14/06
DATE	3/14/06
REVISIONS	BY
DATE	DWG NO. D-27
SCALE : NONE	DRN : K. XIONG



DI AN VIEW

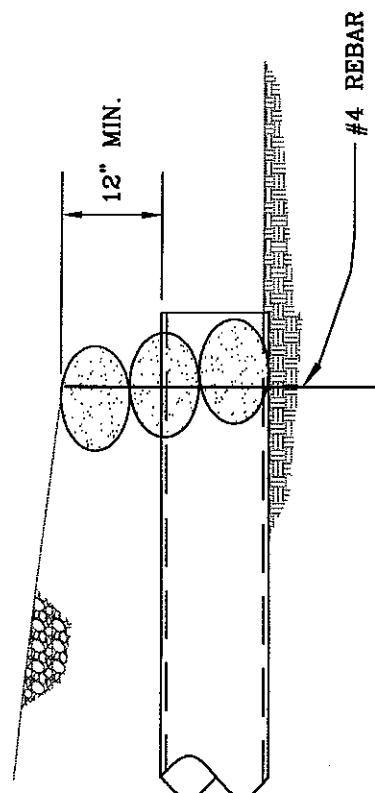


ELEVATION VIEW



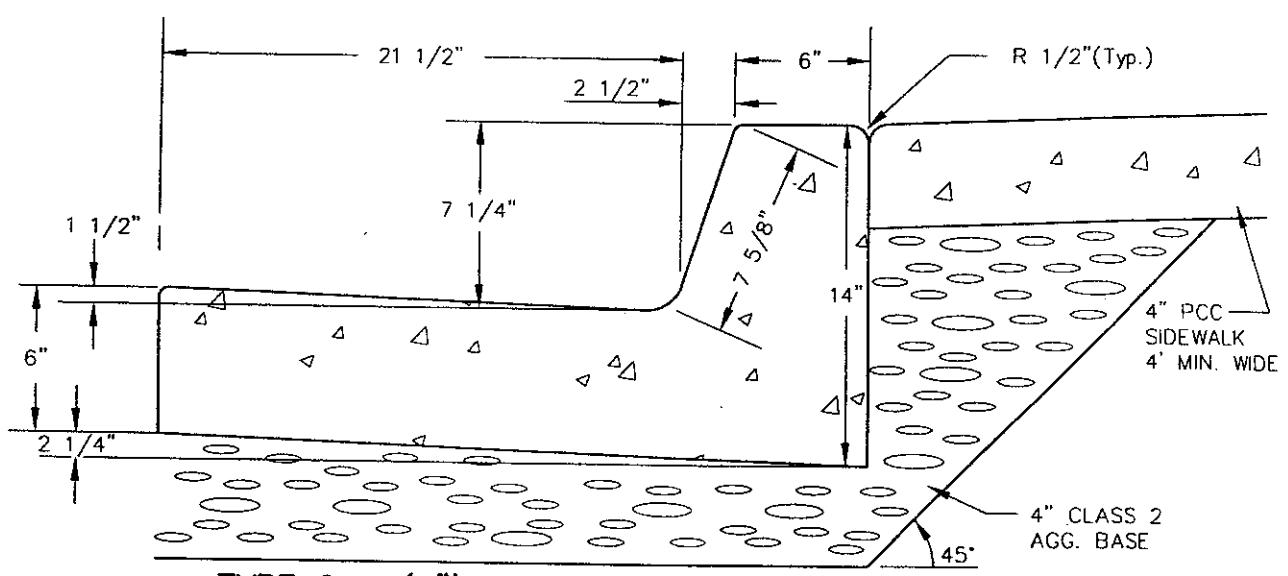
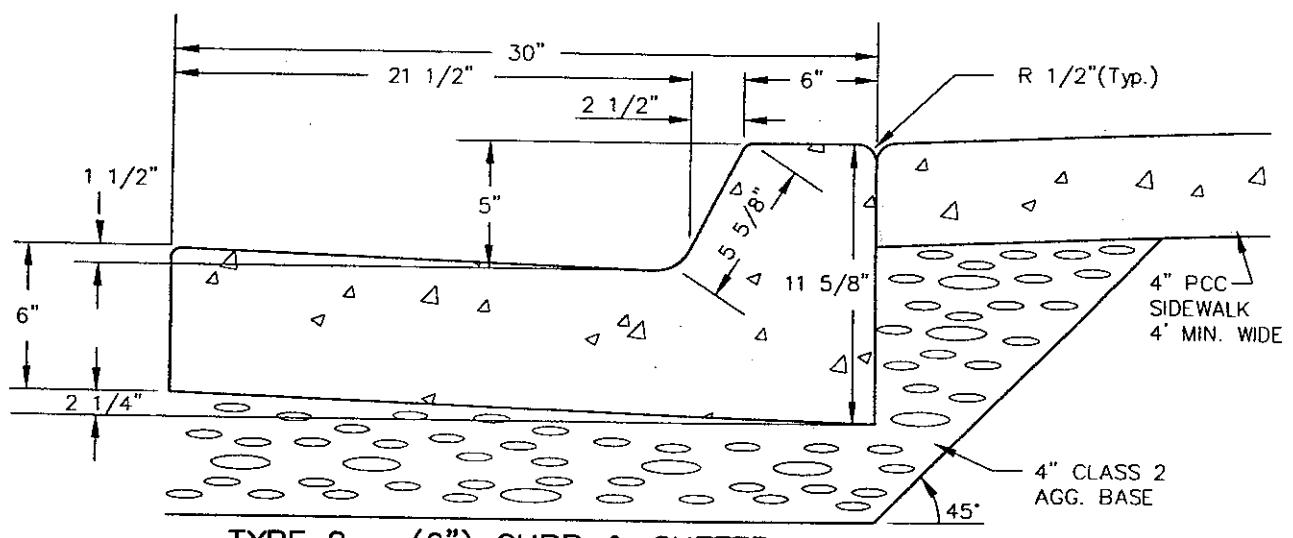
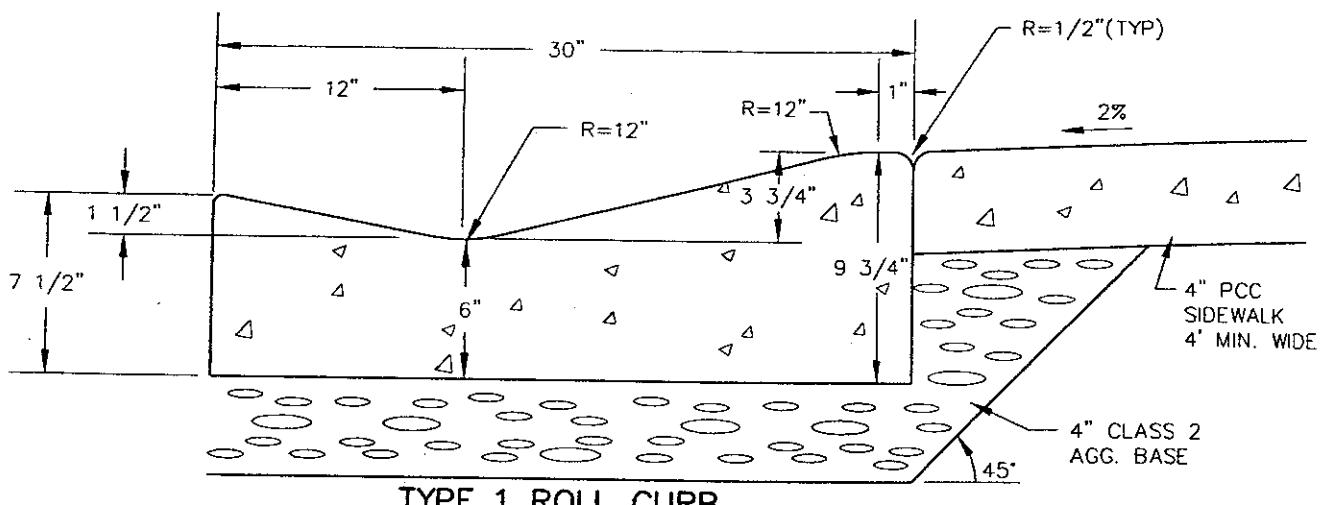
NOTES:

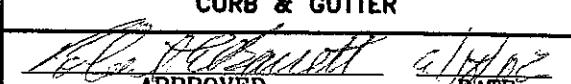
1. PIPE SHALL BE PLACED SLIGHTLY BELOW EXISTING GRADE.
2. BACKFILL REQUIREMENT FOR PRIVATE ROAD AND DRIVEWAY CONNECTION, SEE DWG NOS. H-12 AND H-13.
3. REBAR SHALL CUT OFF A MINIMUM ONE INCH BELOW THE SURFACE.
4. REBAR SHALL PENETRATE INTO THE GROUND AS REQUIRED TO SECURE THE SAND BAGS IN PLACE OR AS DIRECTED BY INSPECTOR.

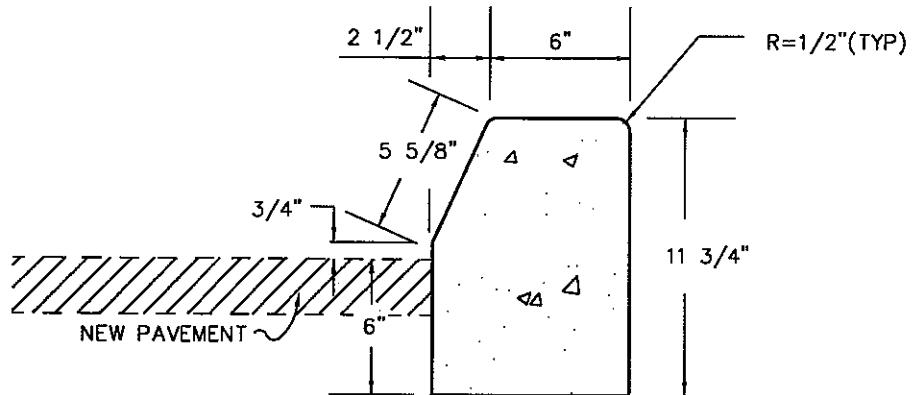


SIDE VIEW

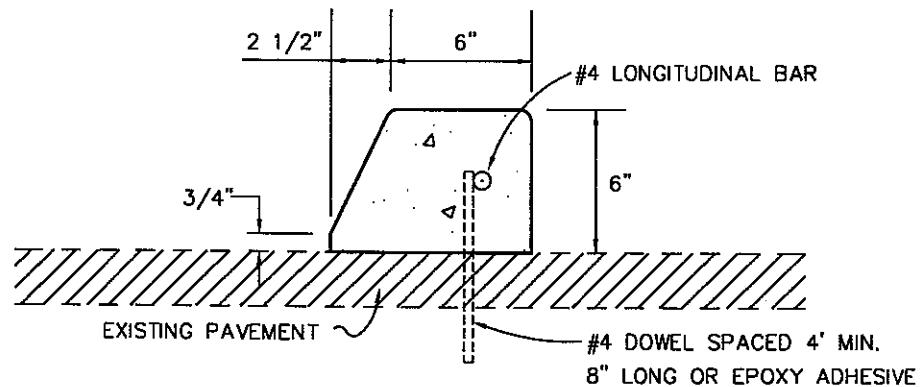
COUNTY OF SUTTER	
SANDBAG	
<i>[Signature]</i>	3/14/06
APPROVED	DATE
SCALE : NONE	DWG NO. D-29
DRN : K.XIONG	
DATE	
REVISIONS	BY



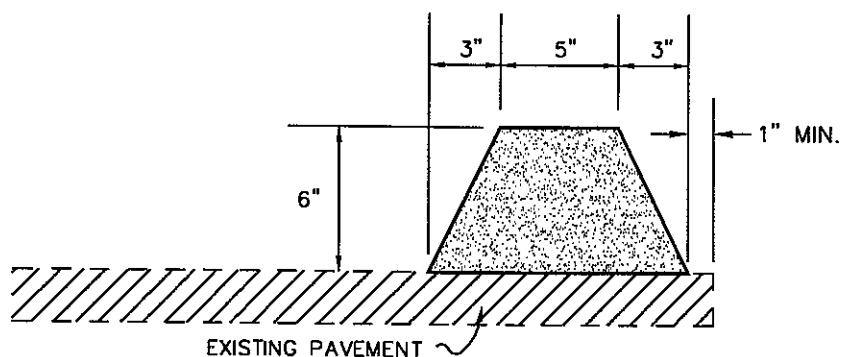
COUNTY OF SUTTER			
CURB & GUTTER			
			
APPROVED		DATE	
DATE	REVISIONS	BY	SCALE : NONE
			DRN : PSO
			DWG NO. H-1



6" P.C.C. CURB (TYPE A)

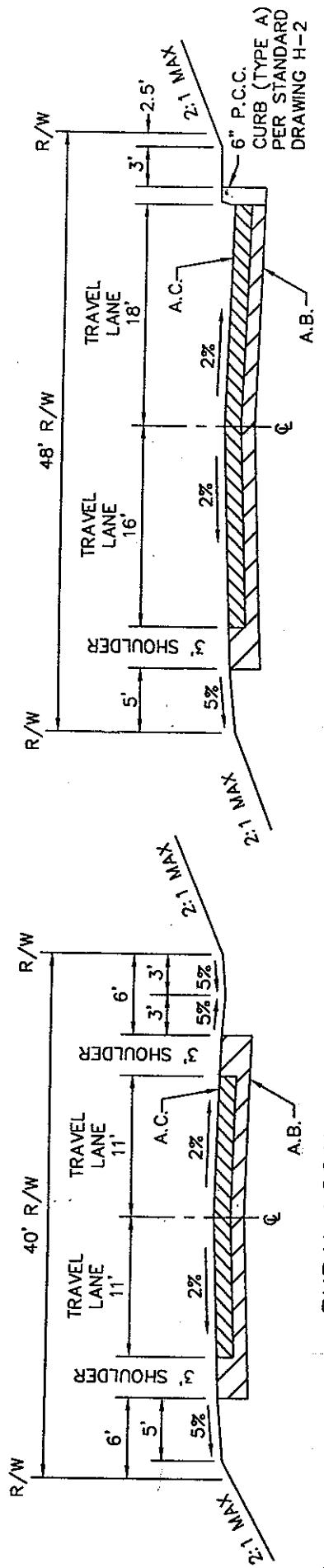


6" P.C.C. CURB (TYPE B)

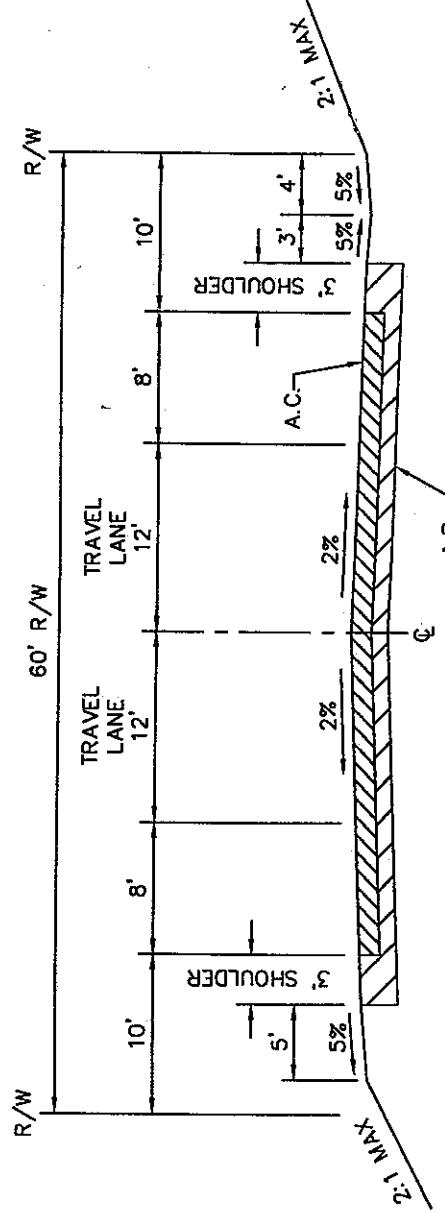


6" A.C. DIKE

			COUNTY OF SUTTER	
			BARRIER CURB	
11/8/05		K.X.	<i>[Signature]</i>	3/14/06
DATE	REVISIONS	BY	APPROVED	DATE
			SCALE : NONE	
			DRN : PSO	DWG NO. H-2



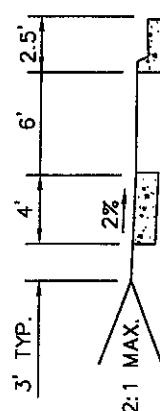
RURAL LOCAL



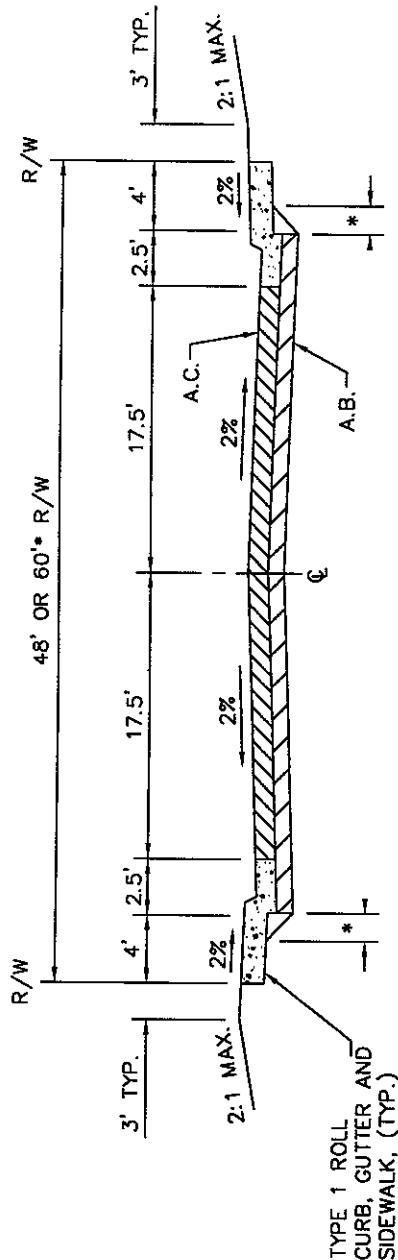
RURAL ARTERIAL

NOTES:
SEE SECTION 4-3 OF THE DESIGN
STANDARD FOR MINIMUM STRUCTURAL
SECTIONS.

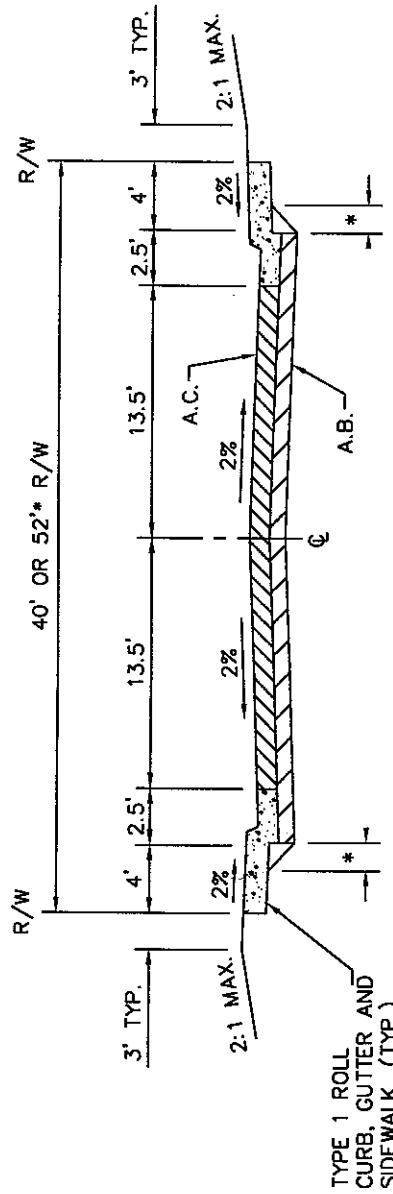
COUNTY OF SUTTER	
RURAL ROAD SECTIONS	
<i>Approved</i>	3/14/06
DATE	APPROVED
11/8/05	DATE
K.X.	SCALE : NONE
REVISIONS	BY
DRN : PSO	DWG. H-3



* 6' OPTIONAL PLANTER STRIP
BETWEEN BACK OF CURB
AND SIDEWALK



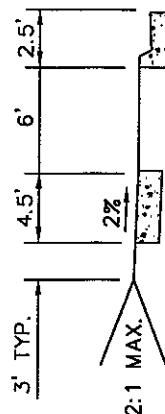
STANDARD RESIDENTIAL



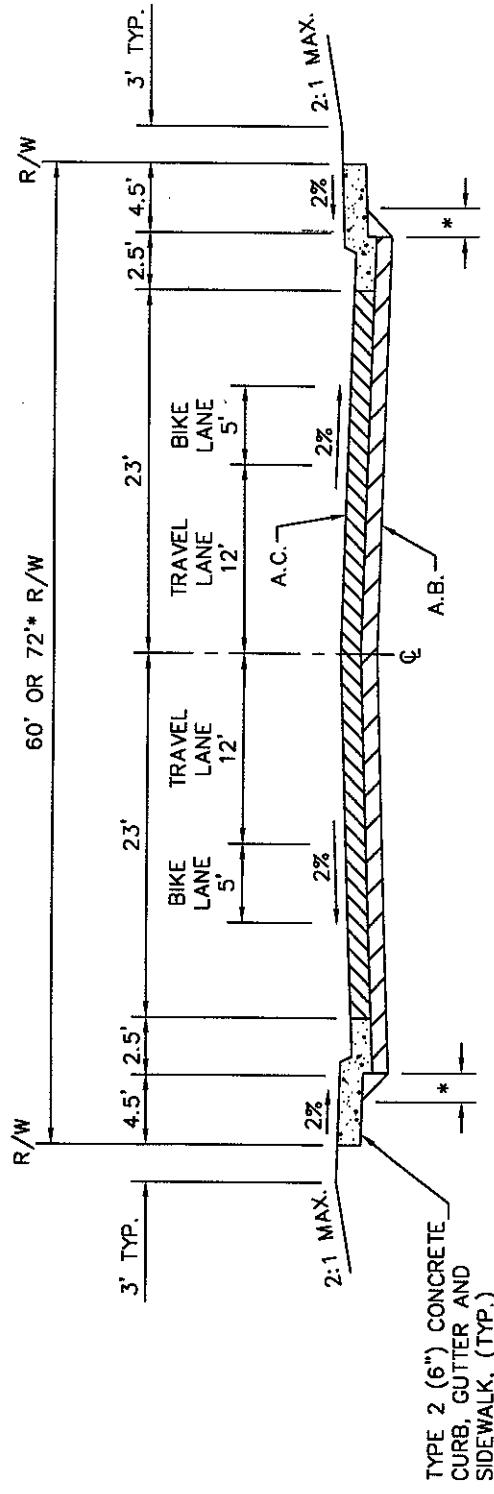
MINOR RESIDENTIAL

NOTES

SEE SECTION 4-3 OF THE DESIGN STANDARD FOR MINIMUM STRUCTURAL SECTION



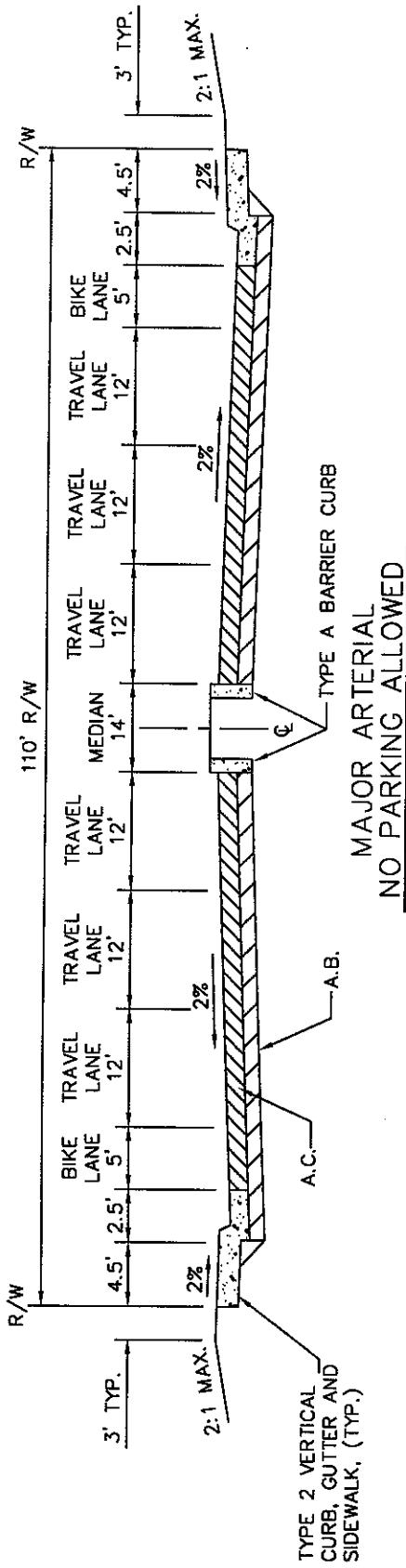
* 6' OPTIONAL PLANTER STRIP
BETWEEN BACK OF CURB
AND SIDEWALK



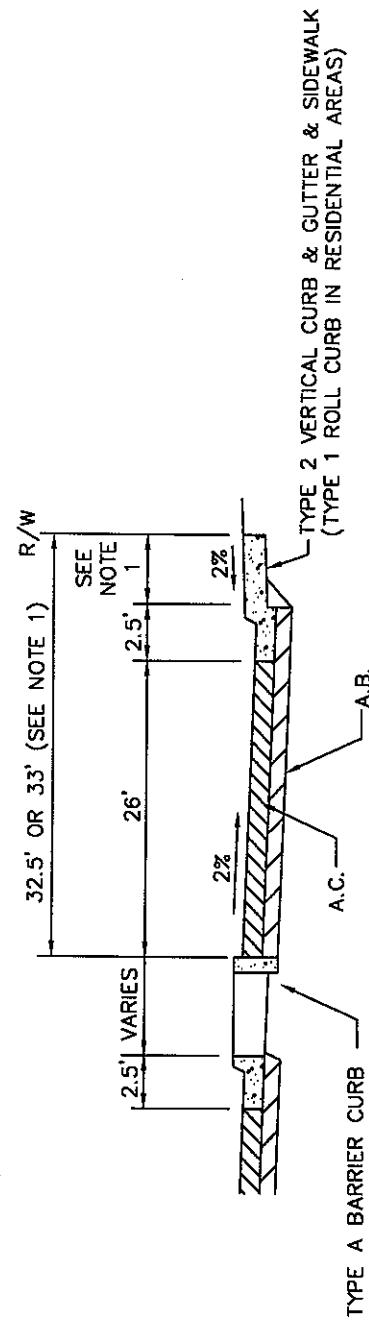
NOTES:
SEE SECTION 4-3 OF THE DESIGN
STANDARD FOR MINIMUM STRUCTURAL
SECTION.

COUNTY OF SUTTER

TYPICAL SECTION	
60' COLLECTOR STREET	2/14/04 DATE
<i>[Signature]</i> APPROVED	
6/15/04 DATE	K.X. REVISIONS
SCALE : NONE DRN : PSO	DWG NO. H-5



**MAJOR ARTERIAL
NO PARKING ALLOWED**



20

1. SIDEWALK SHALL BE 4' WIDE IN SINGLE FAMILY & DUPLEX RESIDENTIAL AREAS AND 4.5' IN ALL OTHER AREAS.
2. SEE SECTION 4-3 OF THE DESIGN STANDARD FOR MINIMUM STRUCTURAL SECTION

COUNTY OF SISKIYOU

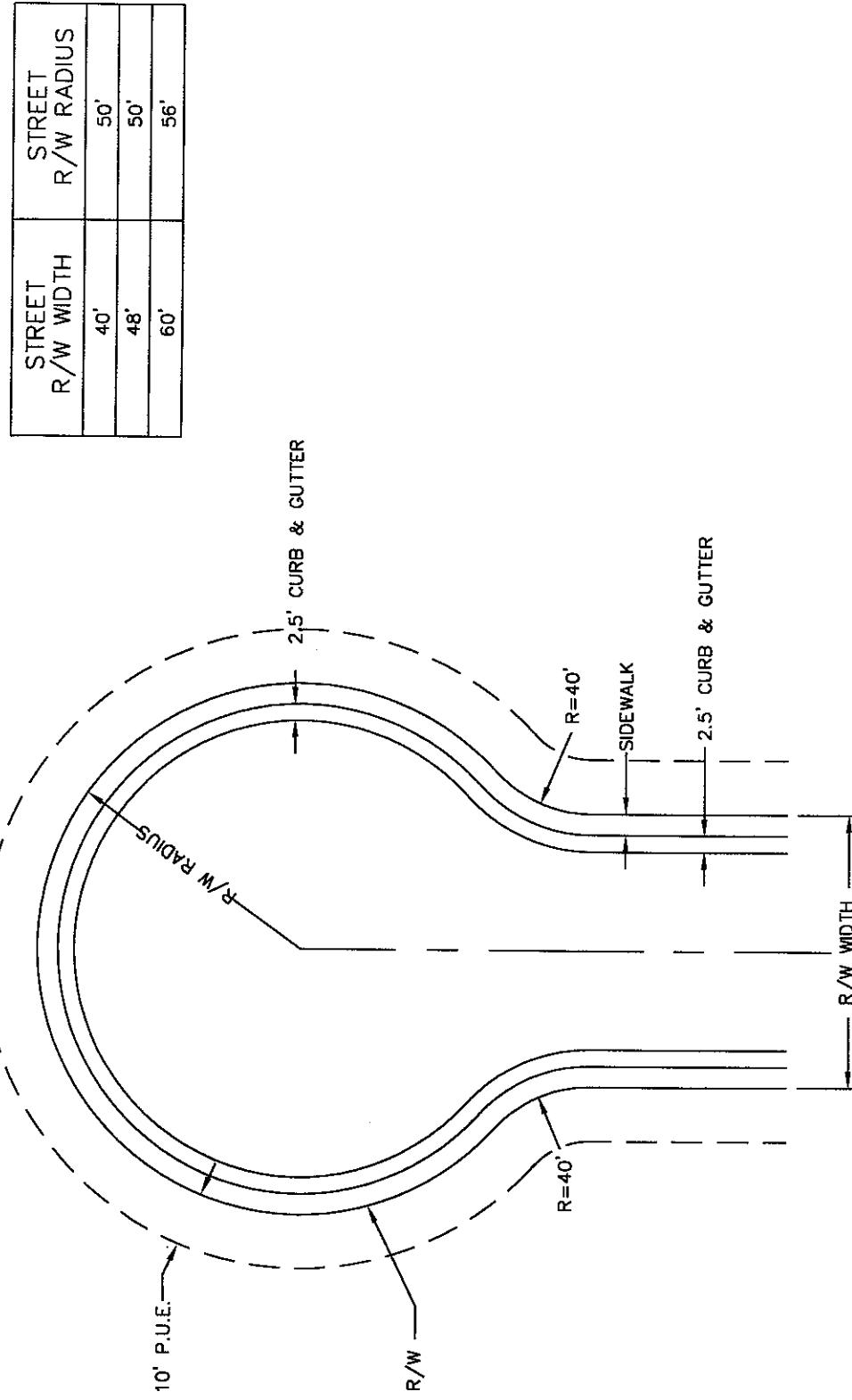
**TYPICAL SECTION
110' MAJOR ARTERIAL**

3/14/06

117

APPROVED	DATE
NONE	DWG NO. H-7

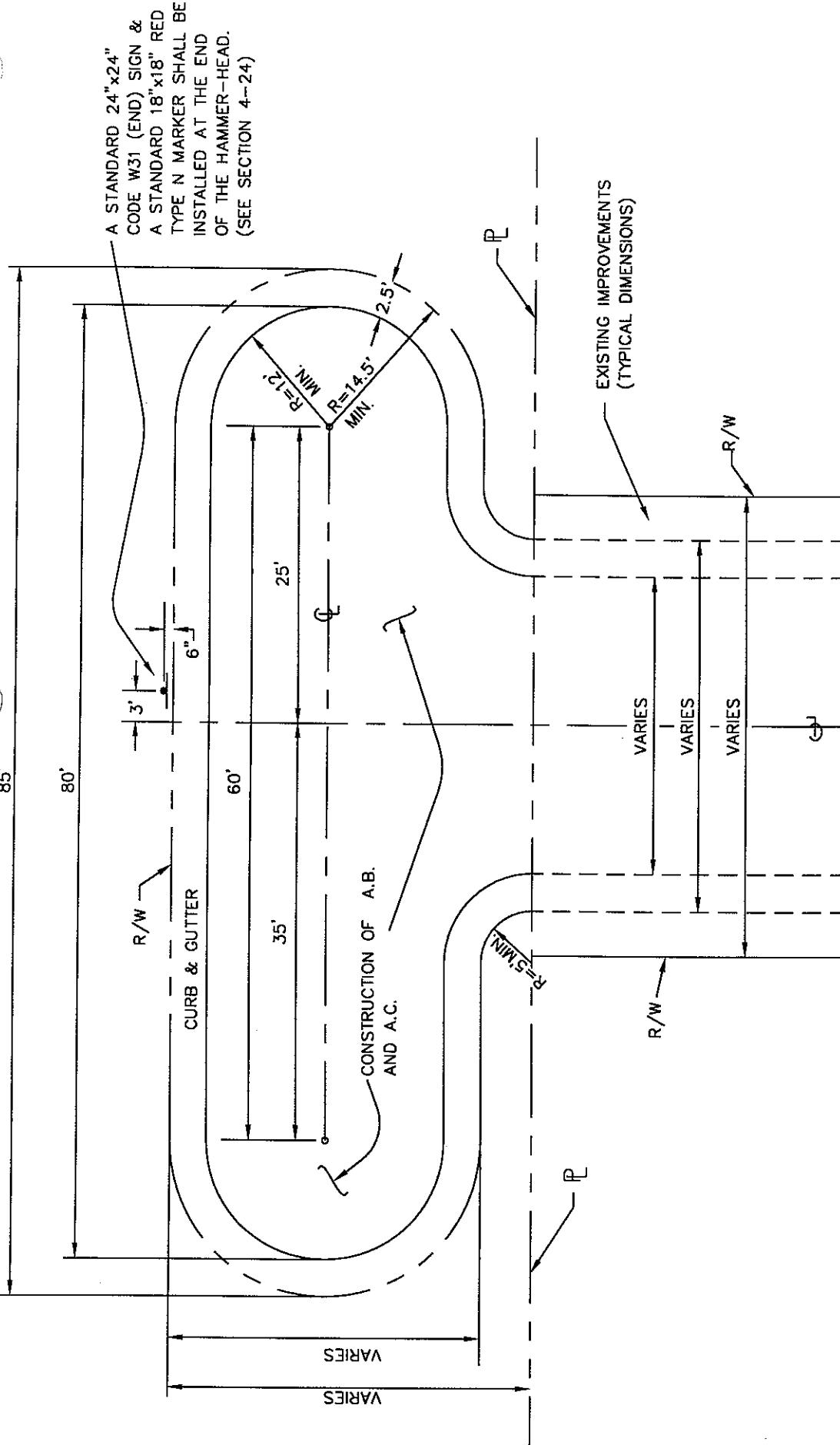
11/8/05



NOTE:

1. A STANDARD CODE W53 (NOT A THROUGH STREET) SIGN IS TO BE POSTED AT THE ENTRANCE TO ALL CUL-DE-SACS GREATER THAN 250 FEET IN LENGTH.
2. SEE SECTION 4-3 OF THE DESIGN STANDARD FOR MINIMUM STRUCTURAL SECTION.

COUNTY OF SUTTER	
STANDARD CUL DE SAC	APPROVED
<i>[Signature]</i>	2/14/06 DATE
11/8/05	K.X.
DATE	REVISIONS
DRN : PSO	BY
SCALE : NONE	DWG NO. H-8



NOTE

1. HAMMER-HEAD DESIGN MAY BE USED WHERE TEMPORARY CUL-DE-SAC CAN NOT BE CONSTRUCTED.
2. SEE SECTION 4-3 OF THE DESIGN STANDARD FOR MINIMUM STRUCTURAL SECTION.

EXISTING PAVEMENT

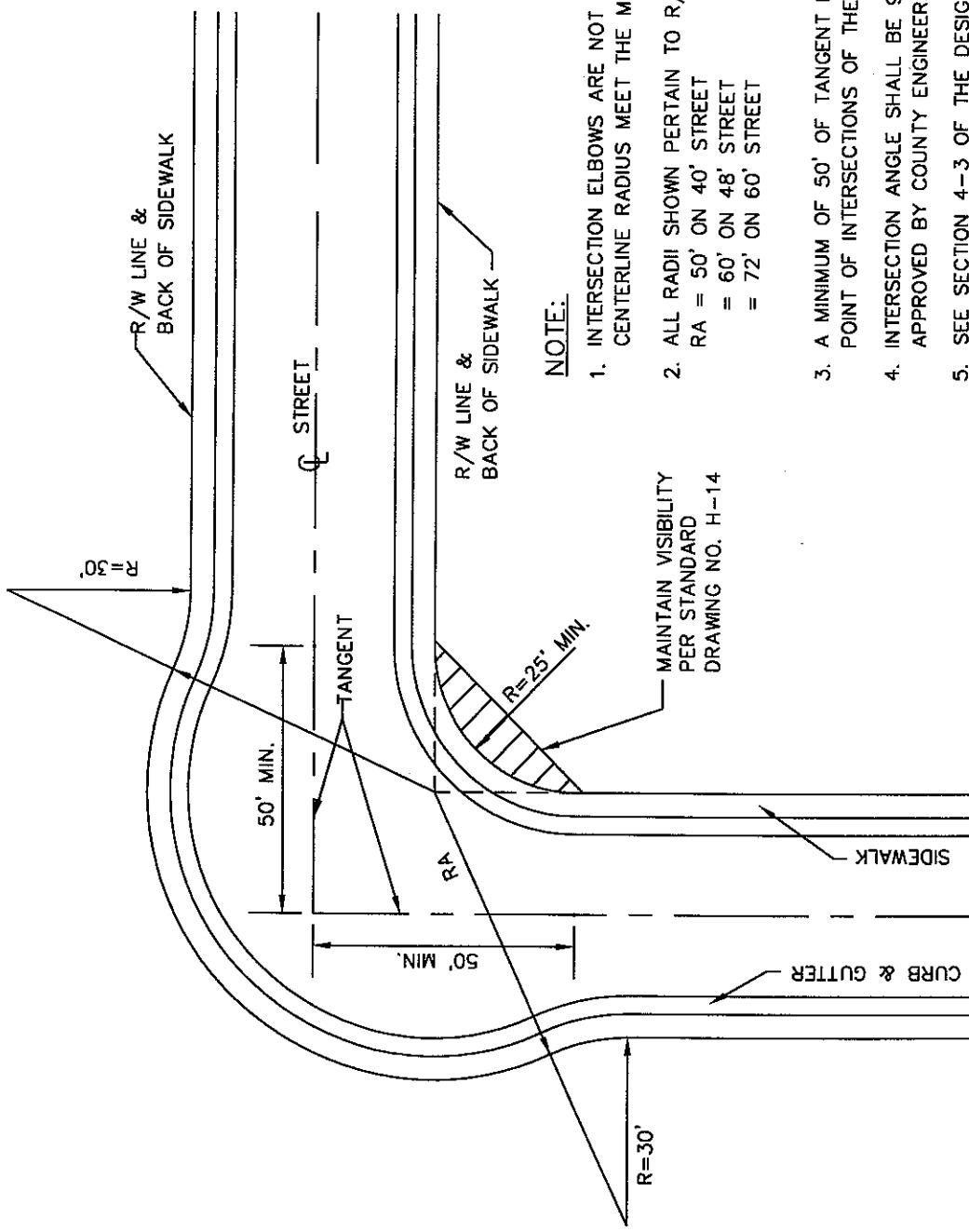
COUNTY OF SUTTER

HAMMERHEAD CUI DE SAC

3/14/186

SCALE : NONE APPROVED _____ DATE _____

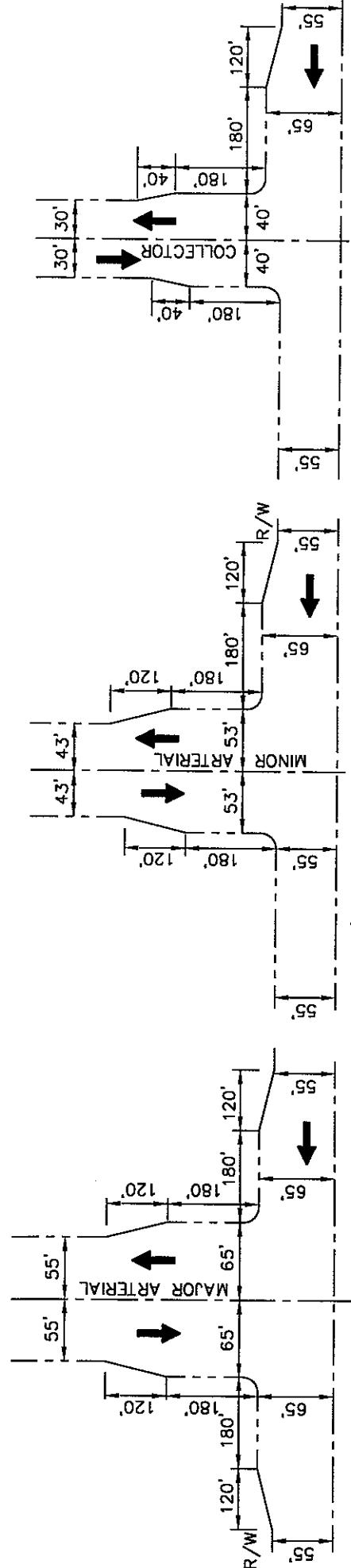
SCALE : NONE APPROVED DATE



NOTE:

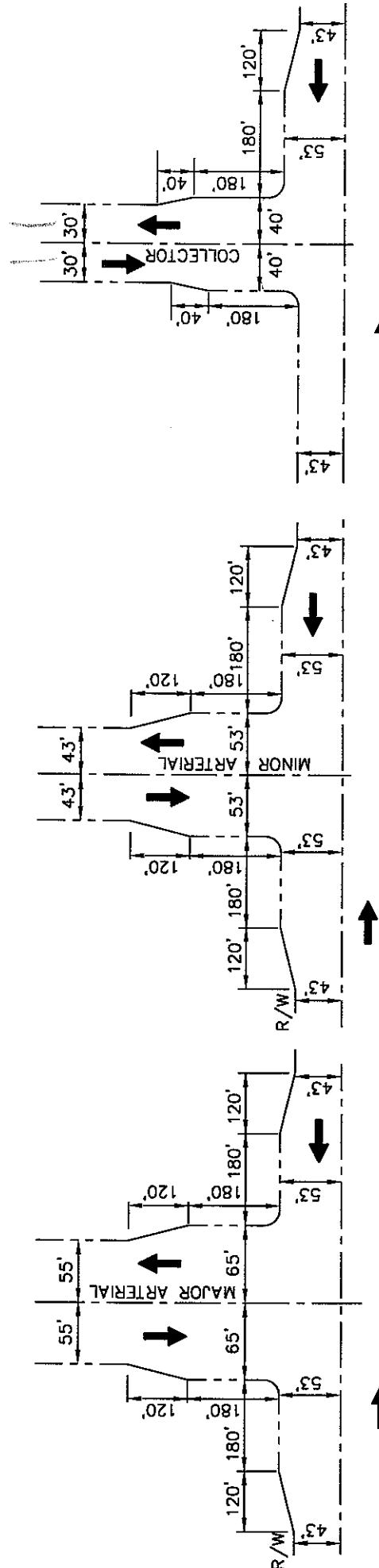
1. INTERSECTION ELBOWS ARE NOT REQUIRED WHERE THE CENTERLINE RADII MEET THE MINIMUM REQUIREMENTS
2. ALL RADII SHOWN PERTAIN TO R/W LINES.
 $R=50'$ ON 40' STREET
 $= 60'$ ON 48' STREET
 $= 72'$ ON 60' STREET
3. A MINIMUM OF 50' OF TANGENT IS REQUIRED FROM THE POINT OF INTERSECTIONS OF THE CENTERLINES.
4. INTERSECTION ANGLE SHALL BE $90^\circ \pm 5'$ EXCEPT AS APPROVED BY COUNTY ENGINEER.
5. SEE SECTION 4-3 OF THE DESIGN STANDARD FOR MINIMUM STRUCTURAL SECTION.

COUNTY OF SUTTER	
90° INTERSECTION ELBOW	
3/14/06	
APPROVED	
11/8/05	K.X.
DATE	REVISIONS
11/8/05	BY
SCALE : NONE	DWG NO. H-10
DRN : PSO	



DIRECTION OF TRAVEL

MAJOR ARTERIAL 110' (OR MORE) STREET



DIRECTION OF TRAVEL

MINOR ARTERIAL (86')

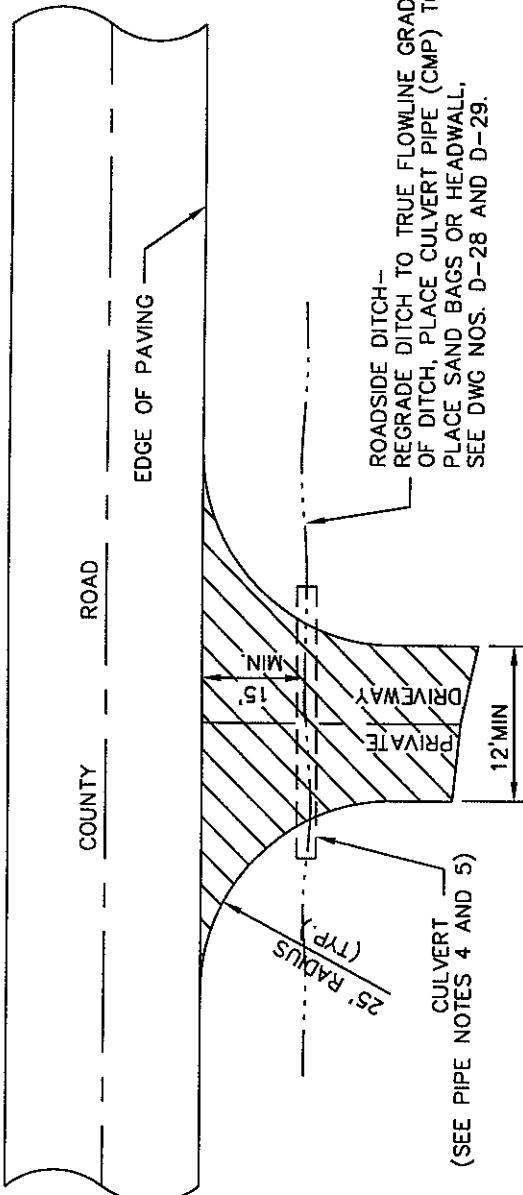
NOTE:

1. WIDENING NOT USUALLY REQUIRED AT COLLECTOR/ COLLECTOR AND SMALLER INTERSECTIONS.
2. ANY MODIFICATIONS TO THESE STANDARDS MUST BE APPROVED BY THE DIRECTOR.

COUNTY OF SUTTER	
WIDENING DETAILS AT MAJOR STREET INTERSECTIONS	
<i>[Signature]</i>	APPROVED
6/16/04	K.X.
DATE	REVISIONS
SCALE : NONE	BY
DRN : PSO	DWG NO. H-11

7/14/06

DATE
APPROVED
SCALE : NONE
DRN : PSO
DWG NO. H-11



NOTES:

1. Prior to new paving, edge of existing paving at County road is to have a neat, straight, vertical sawcut to tie into.
2. Prior to placing asphalt concrete the sawcut edge is to have a SS-1 tack coat applied.

3. The driveway approach section shall be a minimum of 2 1/2" asphalt concrete on 4" Class II aggregate base rock for residential approaches and 4" asphalt concrete on 6" Class II aggregate base rock for commercial drive approaches. Asphalt concrete shall consist of AR4000, 1 1/2" maximum aggregate asphalt concrete. Base rock shall be compacted to 95%.

4. Asphalt concrete placement at County road is to be a flush butt joint. Placed to sawcut edge of road and sloped away from road. Finish grade is to slope away from County road at a minimum 2% fall, 5% maximum fall.

5. Paving surface at butt joints shall be sealed with SS-1 emulsion 4" each side of joint after final compaction of asphalt concrete. Sealant shall be sanded as necessary to prevent traffic pick up.

6. All work shall conform to the Standard Specifications of the State of California, Department of Transportation, current edition.

7. Public Works shall be notified 24 hours after permit issue and prior to any work performed. Phone Number 822-7450

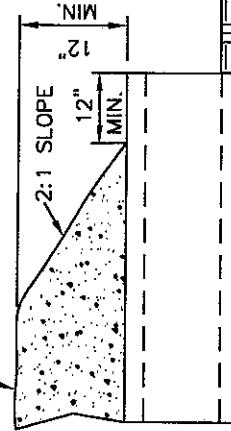
8. No additional drainage water direct to County right of way.

9. Appropriate agencies shall be contracted/notified of work prior to any work start for necessary utility permits and USA notification (I-800-227-2600) and markings by permittee/owner.

NOTE:

1. Pipe shall be placed slightly below existing grade or at a grade specified by the County Road Department.
2. Pipe sections shall be joined together securely to prevent infiltration.
3. Used pipe is unacceptable.
4. Pipe diameter shall be 12" minimum.
5. Pipe placement shall be 100' maximum in length. Any pipe placement more than 100' in length shall install a DI or leave 5' gap between.

ROAD SURFACE



CULVERT DETAIL

COUNTY OF SUTTER

DRIVEWAY CONNECTION

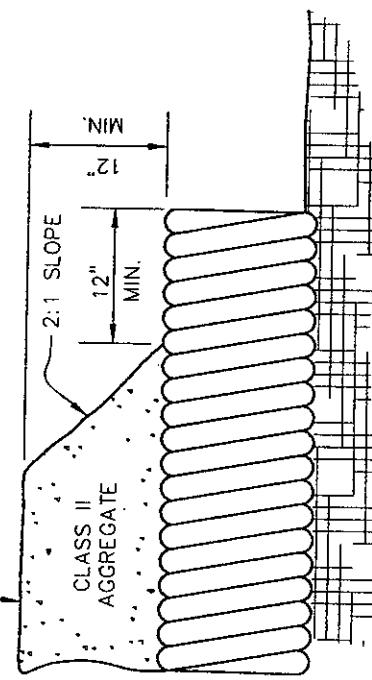
[Signature] APPROVED **2/14/06**
DATE

SCALE : NONE
DRN : PSO
DATE : 11/3/05
REVISIONS : BY
DWG NO. H-12

LENGTH OF TAPER FOR
COUNTY ROADS WITH
LESS THAN 8' SHOULDERS

SHOULDER WIDTH	8'	6'	4'	2'	0'
LENGTH OF TAPER	50'	38'	25'	13'	0'

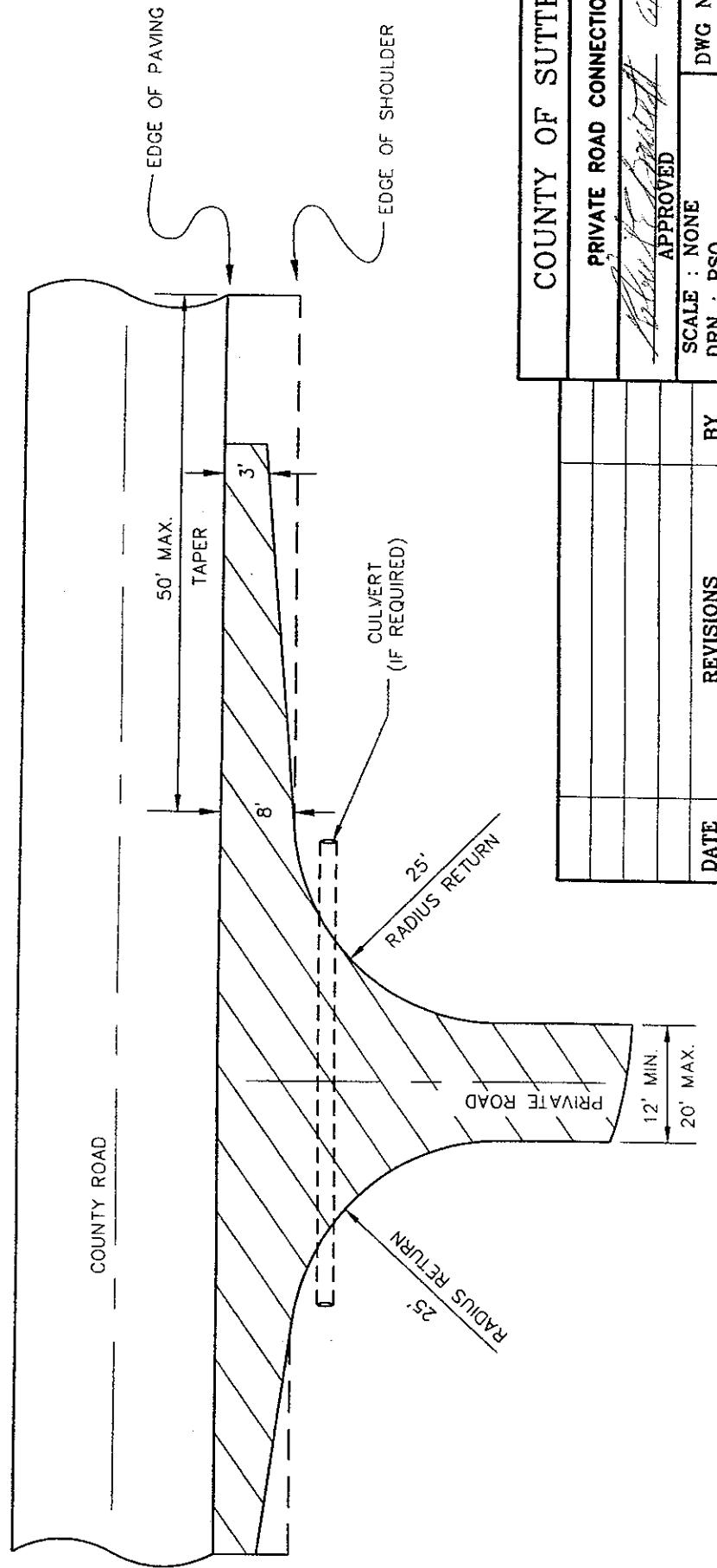
ROAD SURFACE

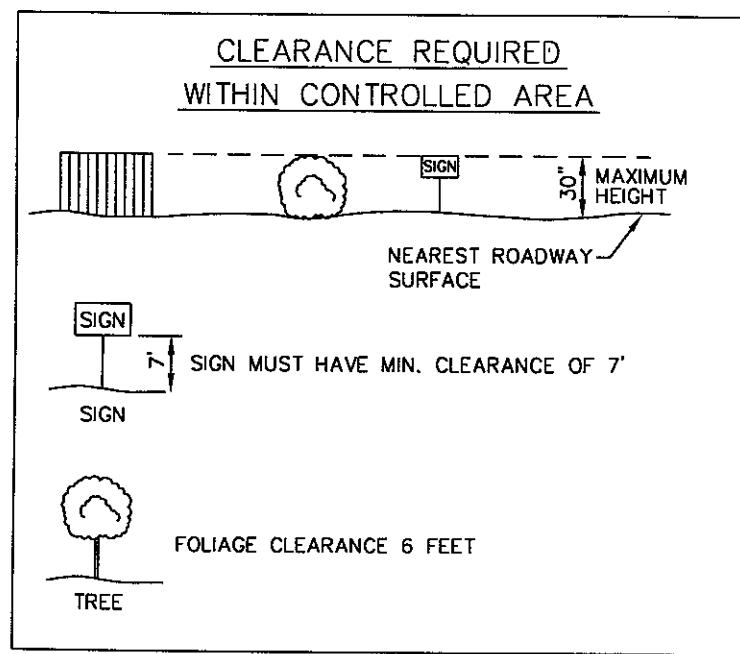
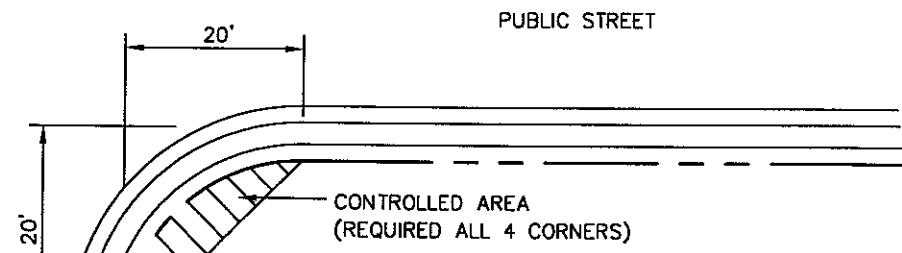
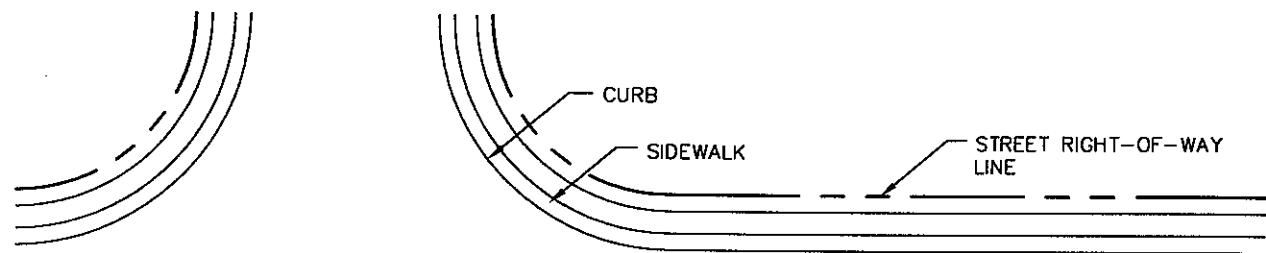


NOTES:

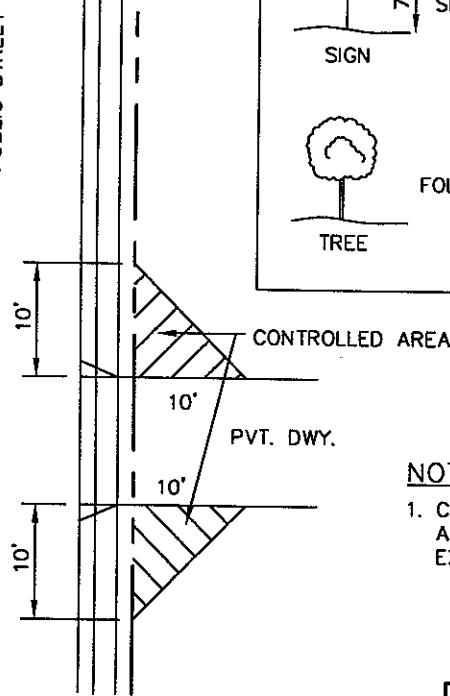
1. PIPE SHALL BE PLACED SLIGHTLY BELOW EXISTING GRADE OR AT A GRADE SPECIFIED BY THE COUNTY ROAD DEPARTMENT
2. PIPE SECTIONS SHALL BE JOINED TOGETHER SECURELY, SO THAT NO INFILTRATION OCCURS.
3. USED PIPE IS UNACCEPTABLE

CULVERT DETAIL





PUBLIC STREET



NOTE:

1. CONTROLLED AREA DIMENSIONS MAY BE ADJUSTED BY DIRECTOR TO MEET EXISTING CONDITIONS.

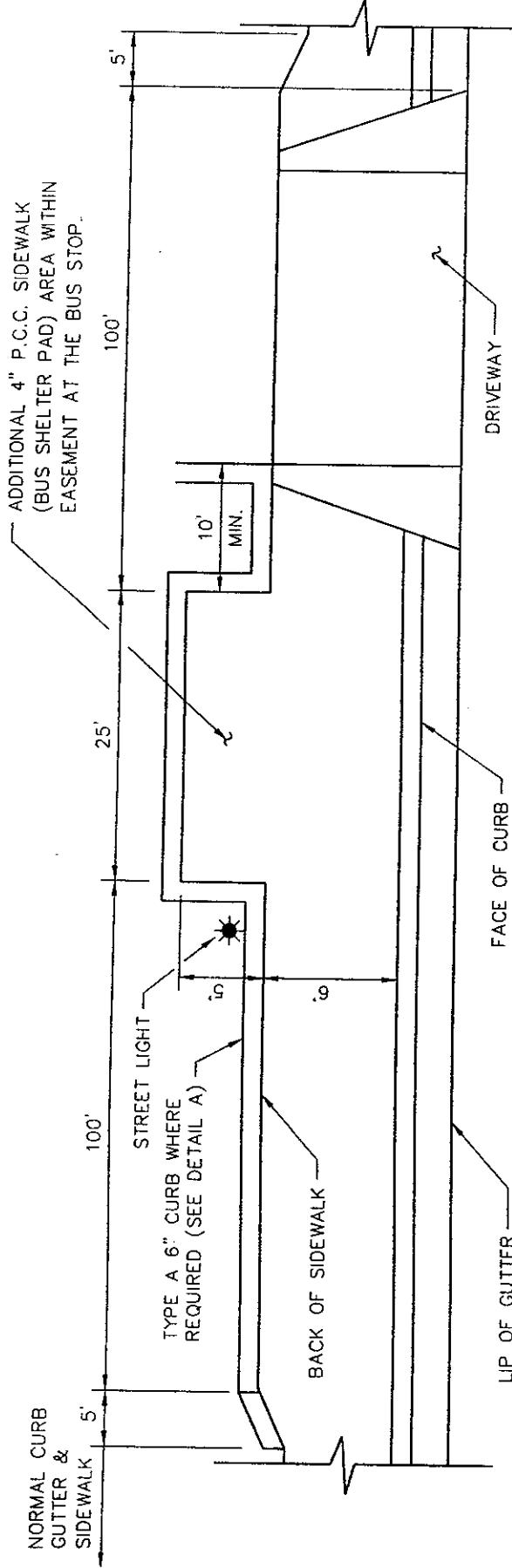
COUNTY OF SUTTER

VISIBILITY REQUIREMENTS
RESIDENTIAL STREETS

11/8/05
APPROVED

3/14/06
DATE

DATE	REVISIONS	BY	SCALE : NONE DRN : PSO	DWG NO. H-14
11/8/05		K.X.		



ADDITIONAL 4" P.C.C. SIDEWALK
(BUS SHELTER PAD) AREA WITHIN
EASEMENT AT THE BUS STOP.

LIP OF GUTTER

FACE OF CURB

BACK OF SIDEWALK

TYPE A 6" CURB WHERE
REQUIRED (SEE DETAIL A)

100'

25'

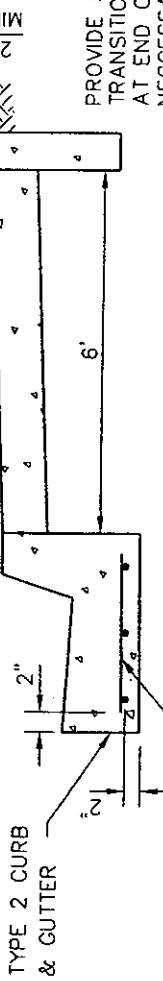
100'

5'

NORMAL CURB
GUTTER &
SIDEWALK

ADDITIONAL 4" P.C.C. SIDEWALK
(BUS SHELTER PAD) AREA WITHIN
EASEMENT AT THE BUS STOP.

PLACE TYPE A (6") CURB WHERE BACK
OF WALK SLOPE IS TOWARD SIDEWALK



PROVIDE 5 FOOT
TRANSITION SECTION
AT END OF CURB IF
NECESSARY

NOTES:

1. DETAIL 'A' SECTION SHALL BE USED FOR 100 FEET EACH SIDE OF BUS STOPS WITHOUT TURNOUTS. THE WIRE MESH REINFORCING STEEL SHALL BE CONTINUED ACROSS ANY DRIVEWAYS WITHIN THE 100 FOOT DISTANCE FROM THE BUS STOP.

2. PLACE UNDER-SIDEWALK DRAINS AT ALL BEHIND-SIDEWALK DRAINAGE CATCH POINTS.

DETAIL A

PLACE 6x6x10 GA
WIRE MESH

COUNTY OF SUTTER
BUS STOP

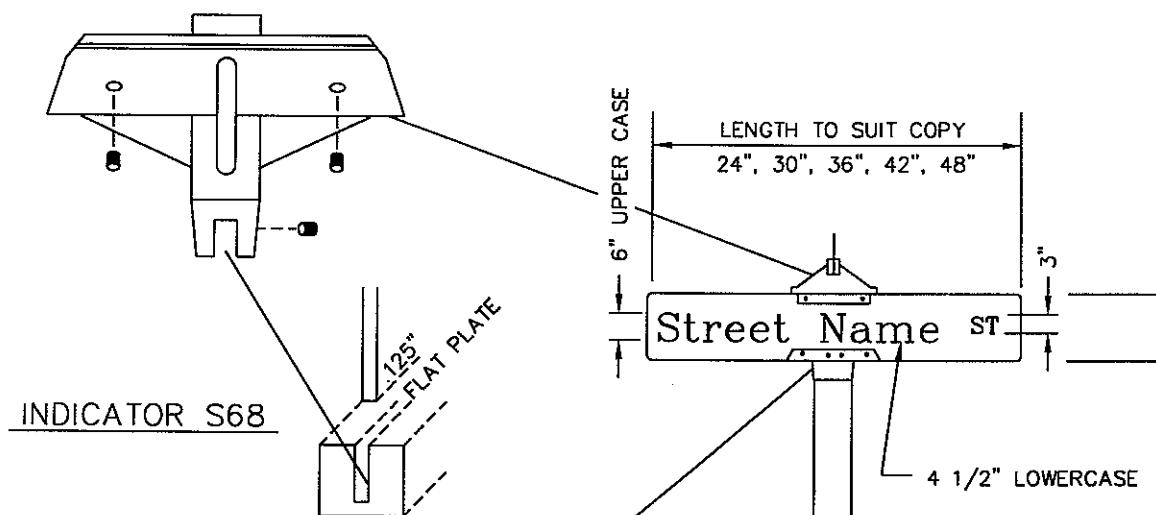
APPROVED
By: *John Smith* *Signature*
DATE: *1/1/2023*

SCALE : NONE	DRN : PSO	DWG NO. H-15

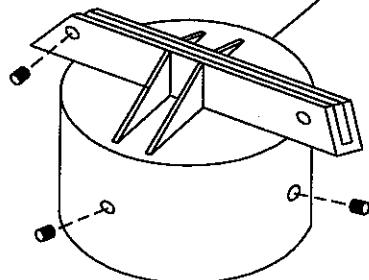
90° CROSPiECE NO. V14(HD)SL-105-90

NOTE:

Use heavy duty slotted high tensile aluminum alloy die castings for caps & cross pieces Hawkins & Hawkins (part #'s given) or equal.



Cop & Crosspiece set screws 5/16"-18x1/4
steel plated socket hd.
No. v14(hd) IIOS.



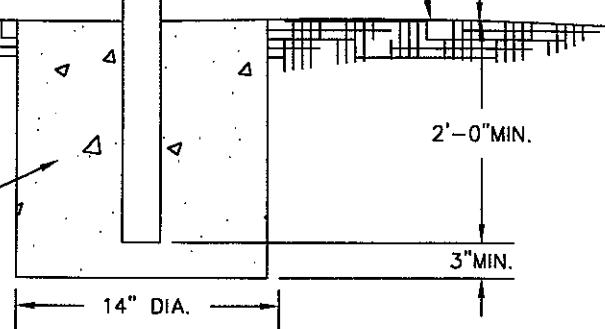
Cap for 2" I.D. Pipe NO. V14 (hd)SL-107.2C

NOTES:

- 1.) Sign location to be determined by the County Engineer.
- 2.) Name plates & mounting assemblies to meet the requirements of the County Engineer.
- 3.) Spot weld mounting assembly to pipe to prevent turning.
- 4.) Plate color shall be white on green & shall be reflective.
- 5.) Reflective letters to be 6" (Series C) for name, and 3" ST., CT., AVE., etc. & placed on top
- 6.) Flat Plate thickness is .125", round corners

2" DIA. GALVANIZED PIPE

P.C.C.



DATE	REVISIONS	BY
6/22/04		K.X.

COUNTY OF SUTTER

STANDARD STREET NAME SIGN TYPE "A"

E. V. H.
APPROVED

3/14/06
DATE

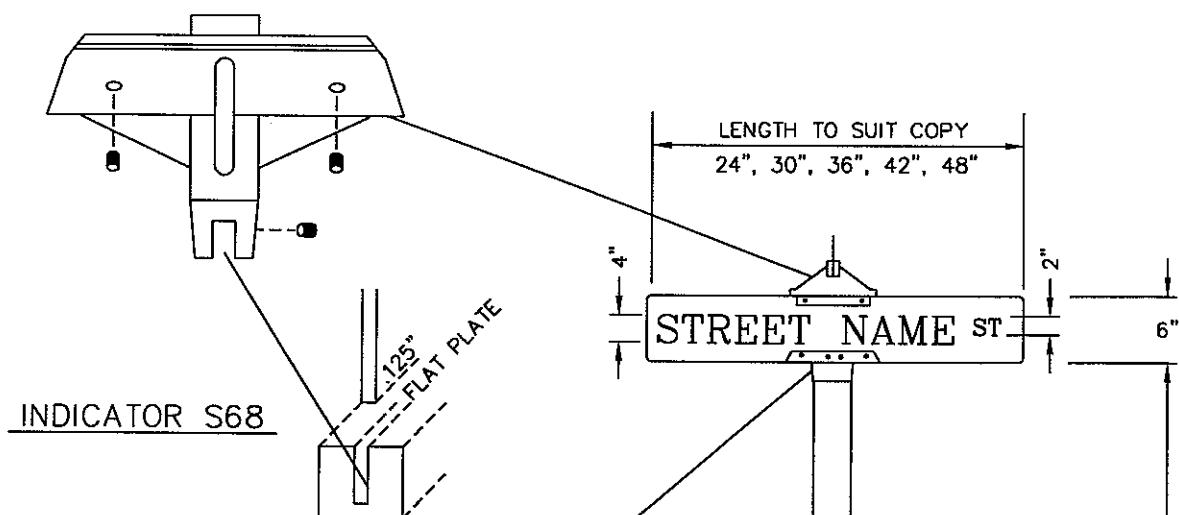
SCALE : NONE
DRN : PSO

DWG NO. H-16

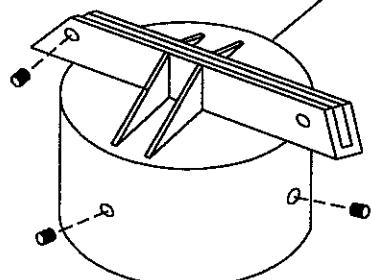
90° CROSSPIECE NO. V14(HD)SL-105-90

NOTE:

Use heavy duty slotted high tensile aluminum alloy die castings for caps & cross pieces Hawkins & Hawkins (part #'s given) or equal.



Cap & Crosspiece set screws 5/16"-18x1/4
steel plated socket hd.
No. v14(hd) 110S.



Cap for 2" I.D. Pipe NO. V14 (hd)SL-107.2C

8'-0" MIN. TO 9'-0" MAX.

2" DIA. GALVANIZED PIPE

NOTES:

- 1.) Sign location to be determined by the County Engineer.
- 2.) Name plates & mounting assemblies to meet the requirements of the County Engineer.
- 3.) Spot weld mounting assembly to pipe to prevent turning.
- 4.) Plate color shall be white on green & shall be reflective.
- 5.) Reflective letters to be 4" (Series C) for name, and 2" ST.,CT.,AVE.,etc. & placed on top
- 6.) Flat Plate thickness is .125", round corners

COUNTY OF SUTTER

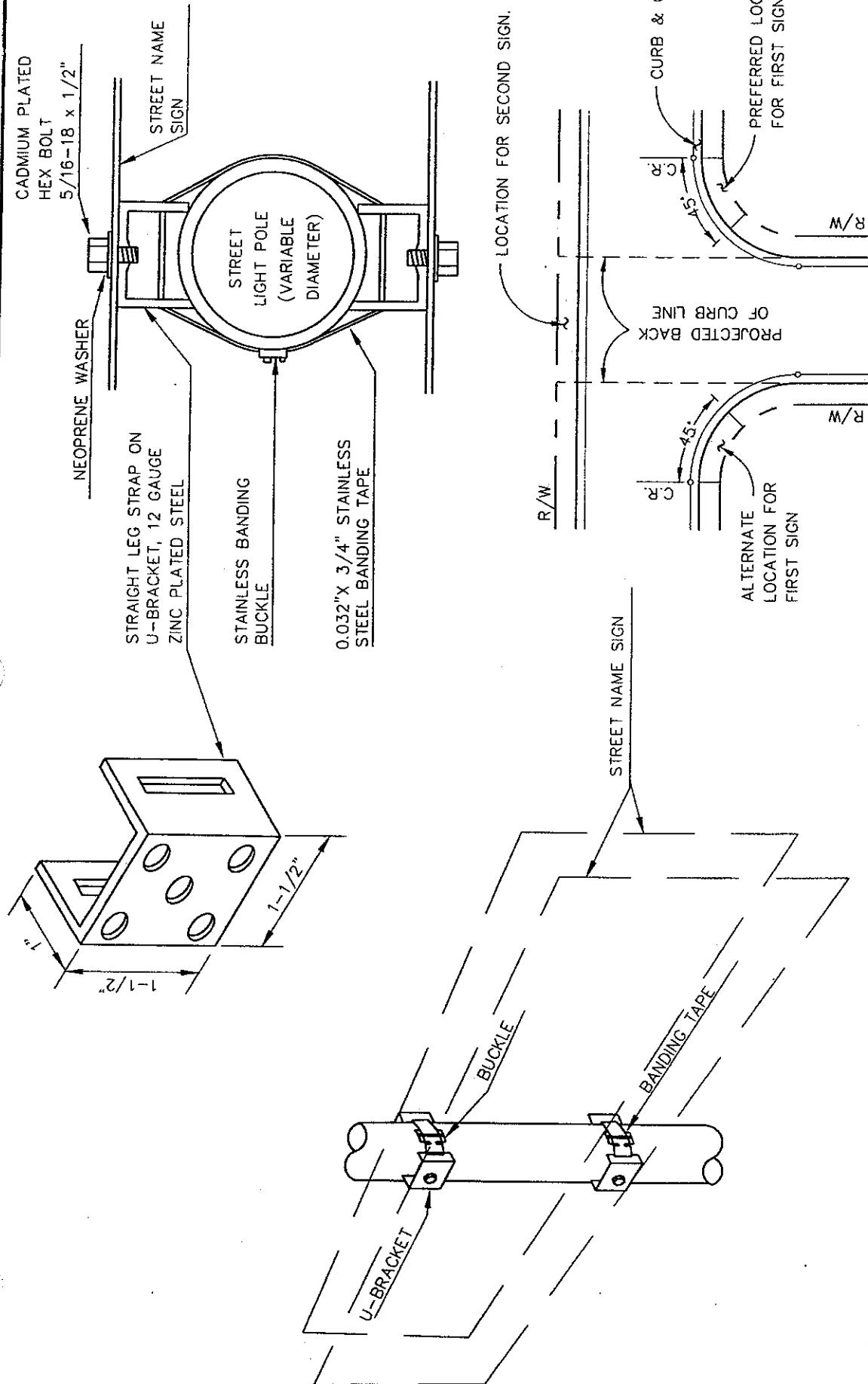
STANDARD STREET NAME SIGN TYPE "B"

G. Taylor
APPROVED

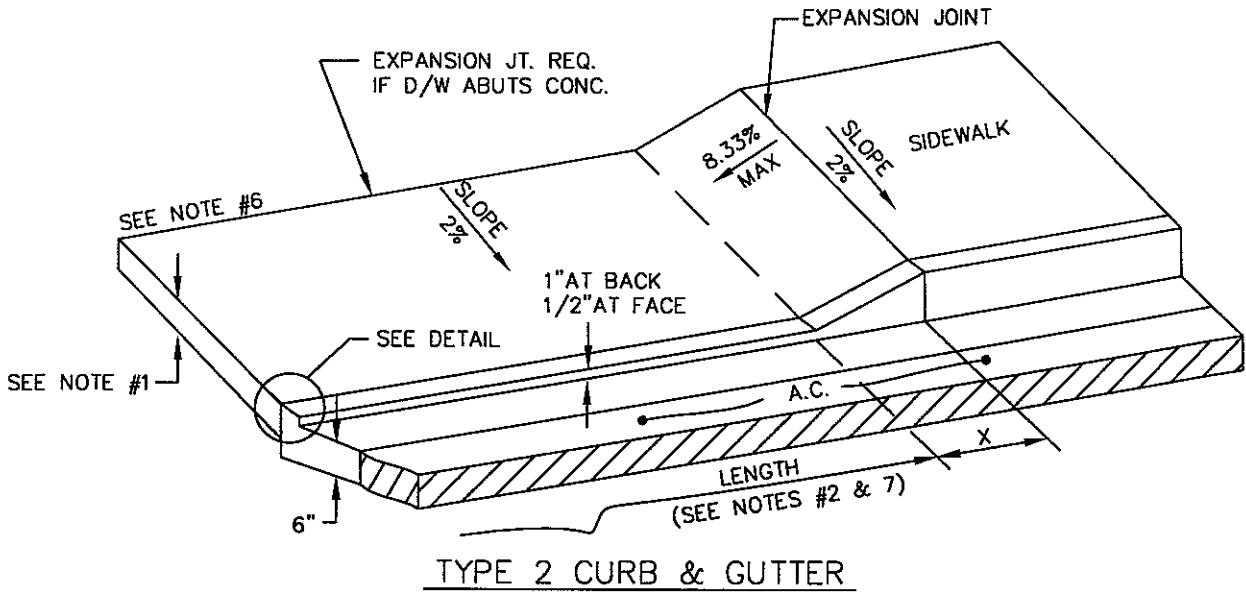
3/14/06

6/22/04		K.X.
DATE	REVISIONS	BY

COUNTY OF SUTTER	
STANDARD STREET NAME SIGN TYPE "B"	
<i>C. K. L.</i>	3/14/06
APPROVED	DATE
SCALE : NONE	DWG NO. H-16A
DRN : PSO	

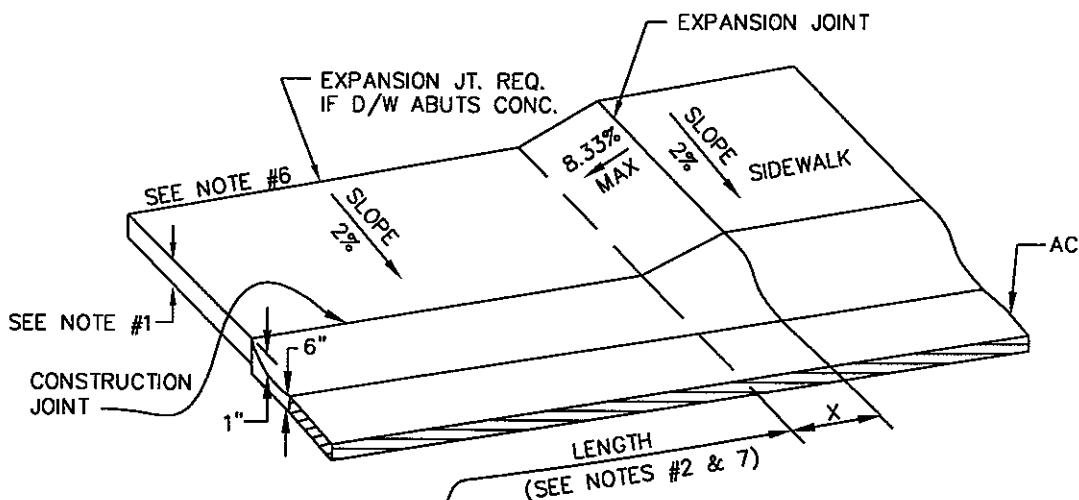


COUNTY OF SUTTER	
STREET NAME SIGN INSTALLATION	
PLACEMENT ON STREET LIGHT POLE	
APPROVED <i>RLebutsky</i> DATE <i>3/24/99</i>	
SCALE : NONE	DWG NO. H-17
DRN : PSO	BY
DATE	REVISIONS



NOTES:

- 1.) Min. D/W slab thickness in single family residential areas shall be 4".
- 2.) Min. width of residential D/W shall be 12', & max of 24'.
- 3.) All concrete removals shall be to neat saw cut lines.
- 5.) D/W approach shall be poured separately from curb unless otherwise approved by the engineer.
- 6.) On site grading may be required to eliminate excessive grade change and to maintain suitable drainage.
- 7.) Maximum curb opening may be increased due to special conditions on approval of county engineer.



TYPE 1 ROLL CURB

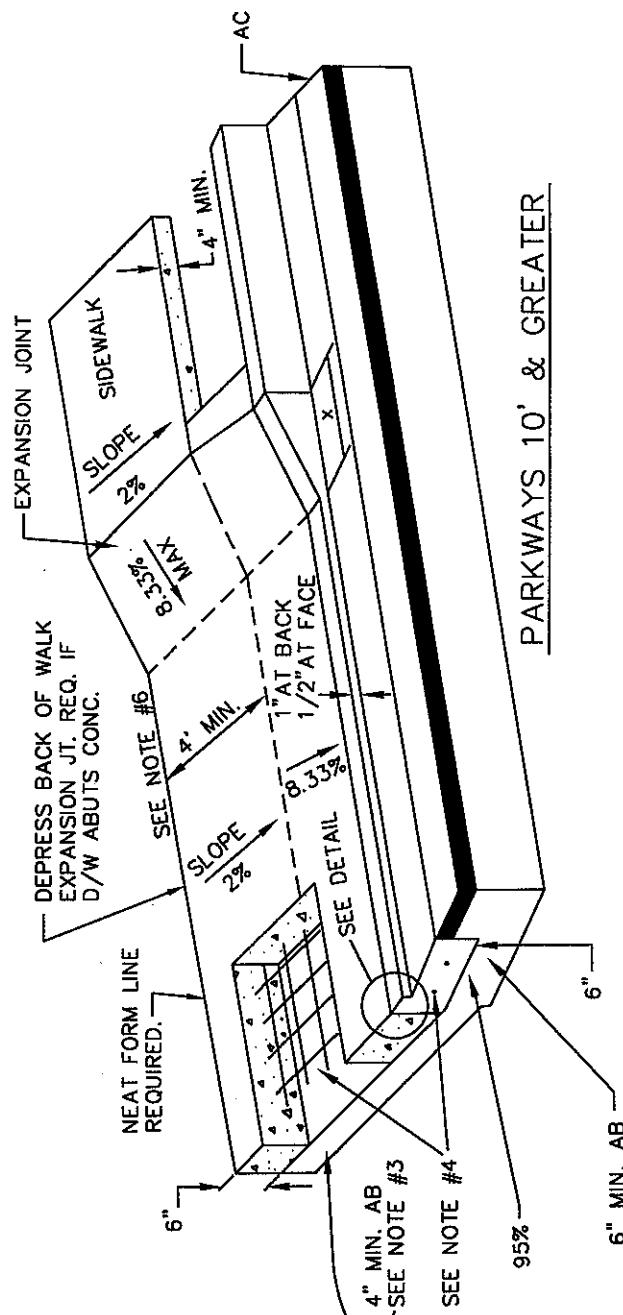
COUNTY OF SUTTER

RESIDENTIAL DRIVEWAY

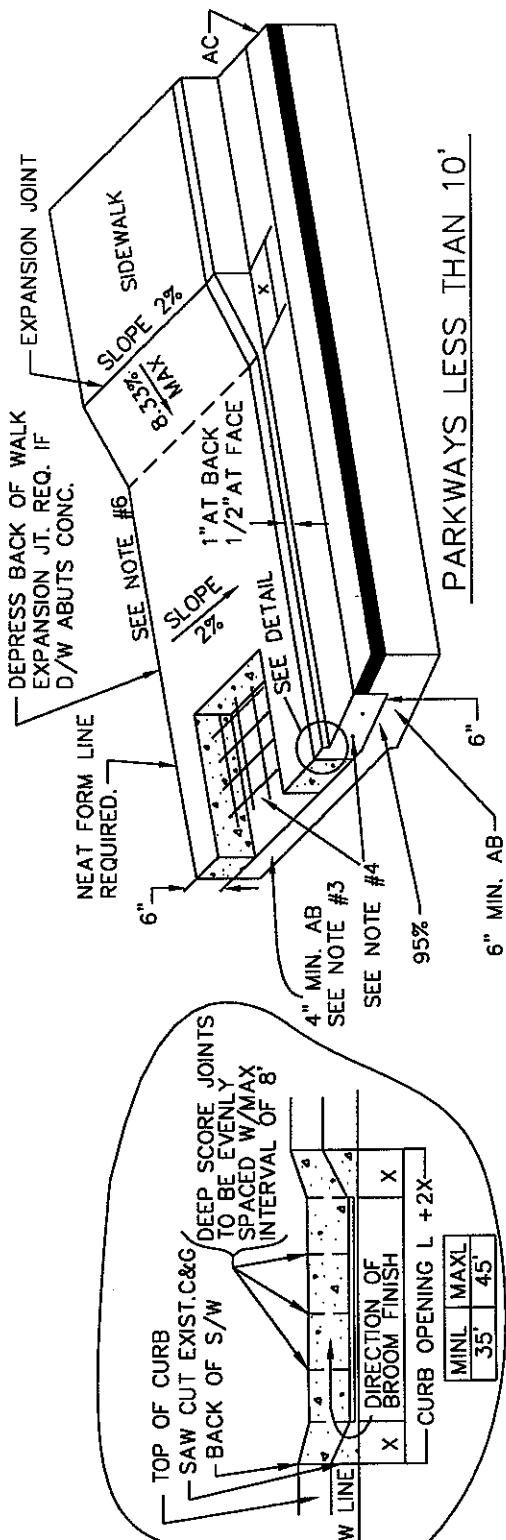
C. K. Z. L.
APPROVED

3/14/06
DATE

DATE	REVISIONS	BY	SCALE : NONE DRN : PSO	DWG NO. H-18
11/9/05		K.X.		



PARKWAYS 10' & GREATER



NOTES:

- 1.) All concrete removal shall be to neat saw cut lines.
- 2.) 95% relative compaction required on subgrade.
- 3.) 1" additional concrete thickness may be substituted for the required 4" of class 2 A.B.
- 4.) All driveways shall have 2 No. 4 rebar 12" O.C. in the gutter and 6" x 6" x 10 G.A. wire mesh throughout the approach.
- 5.) D/W approach shall be poured separately with curb unless otherwise approved by the engineer.
- 6.) On site grading may be required to eliminate excessive grade change and to maintain suitable drainage.
- 7.) Maximum curb opening may be increased due to special conditions on approval of county engineer.

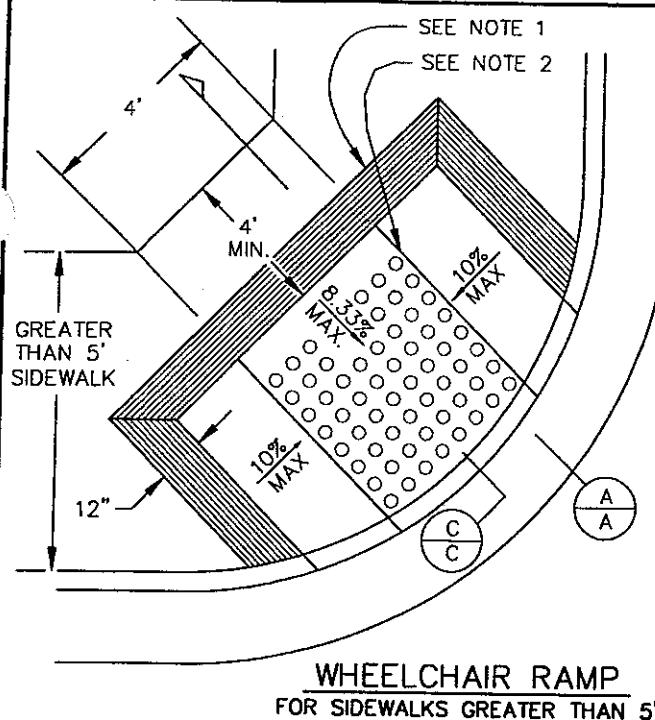
X	LENGTH	6"	8"
PARKWAY	CURB	CURB	CURB
WIDTH			
$\geq 10'$	3'	5'	
< 10'	5'	7'	

DATE	REVISIONS	BY

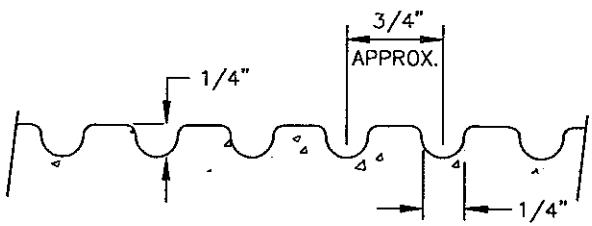
COUNTY OF SUTTER	COMMERCIAL DRIVEWAY
<i>✓✓✓</i>	<i>✓✓✓</i>

APPROVED	DATE
<i>✓✓✓</i>	<i>2/19/06</i>

SCALE : NONE	DWG NO. H-19
DRN : PSO	



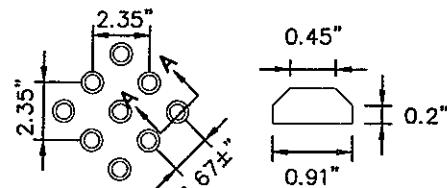
WHEELCHAIR RAMP
FOR SIDEWALKS GREATER THAN 5'



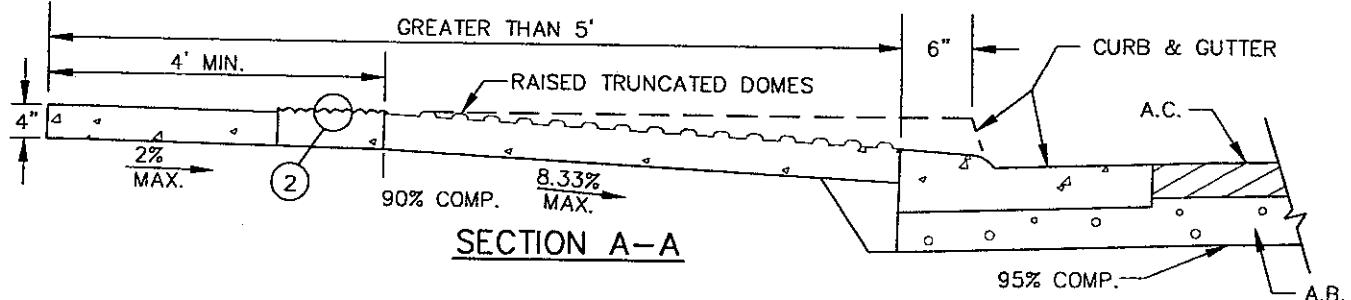
GROOVE DETAIL (2)

N.T.S.

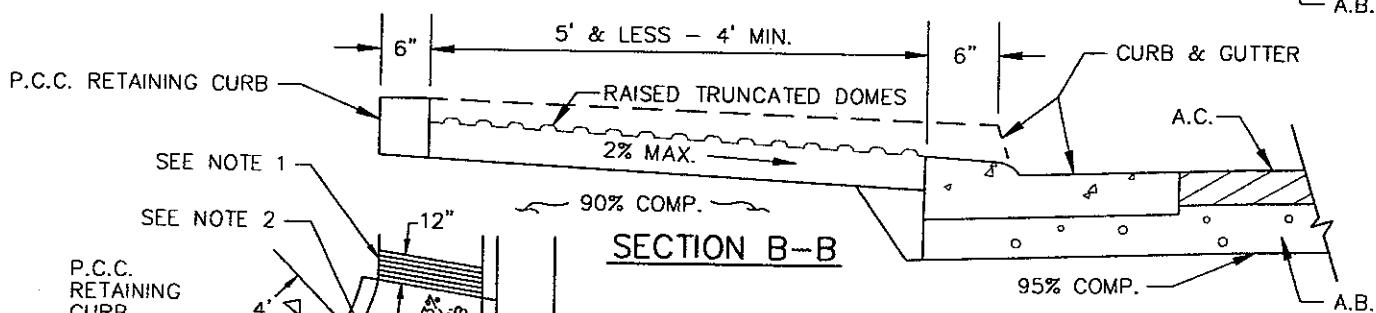
1.) The ramp shall have a 12" wide border w/1/4" grooves approx. 3/4" O.C. (see groove detail). The surface of the ramp shall have a transverse broomed surface texture rougher than the surrounding sidewalk.
 2.) Domes may be omitted when ramp slope exceeds 6.67%. Truncated domes per Caltrans Std. Pln. a88-1. See section 71-4 c.2. and 71-5 of the Caltrans Const. Specs. for required product or approved equal information.



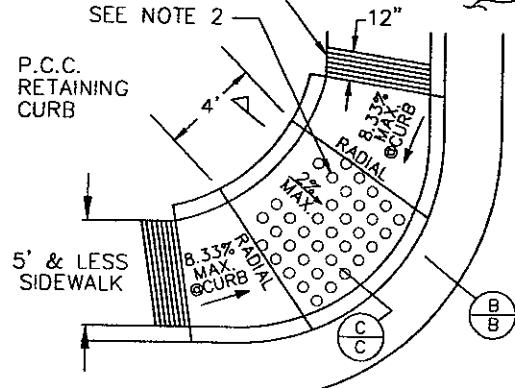
PLAN SECTION A-A
TRUNCATED DOME DETAIL



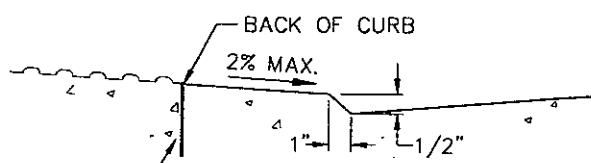
SECTION A-A



SECTION B-B



WHEELCHAIR RAMP
FOR SIDEWALKS 5' AND LESS



SECTION C-C

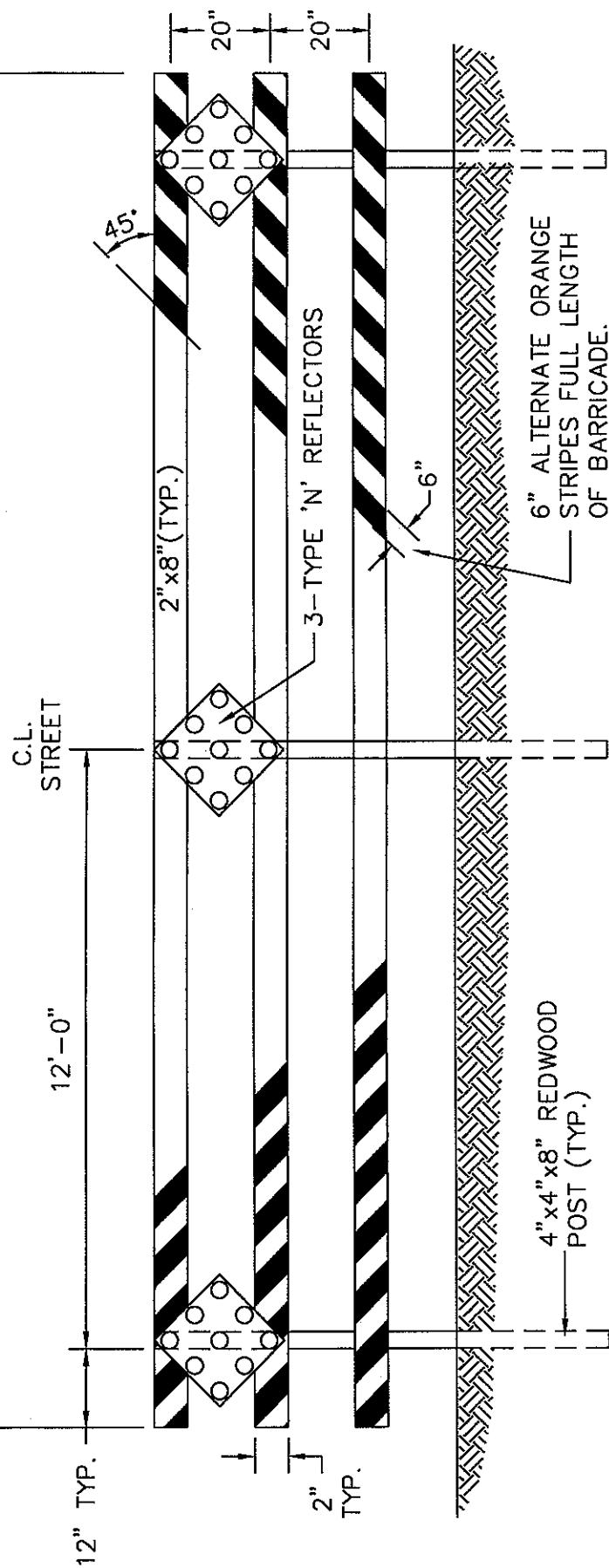
DATE	REVISIONS	BY

COUNTY OF SUTTER

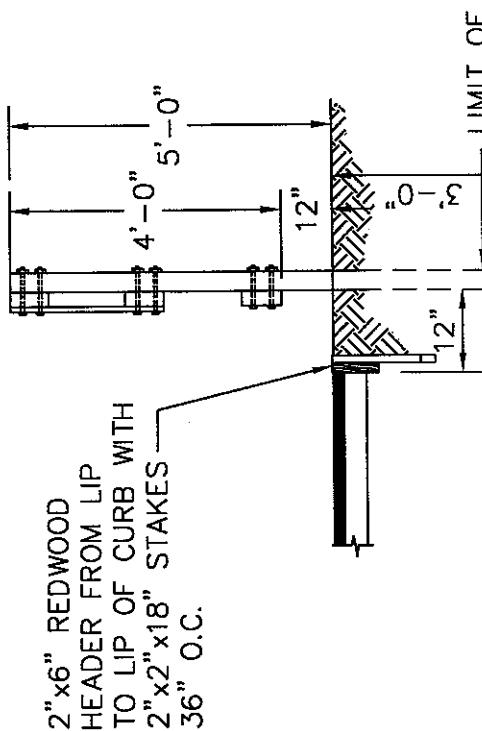
WHEELCHAIR RAMP

Robert L. Loeffell 4/10/02
APPROVED DATE
SCALE : NONE
DRN : PSO DWG NO. H-20

VARIABLES BACK OF SIDEWALK



FRONT



NOTE:

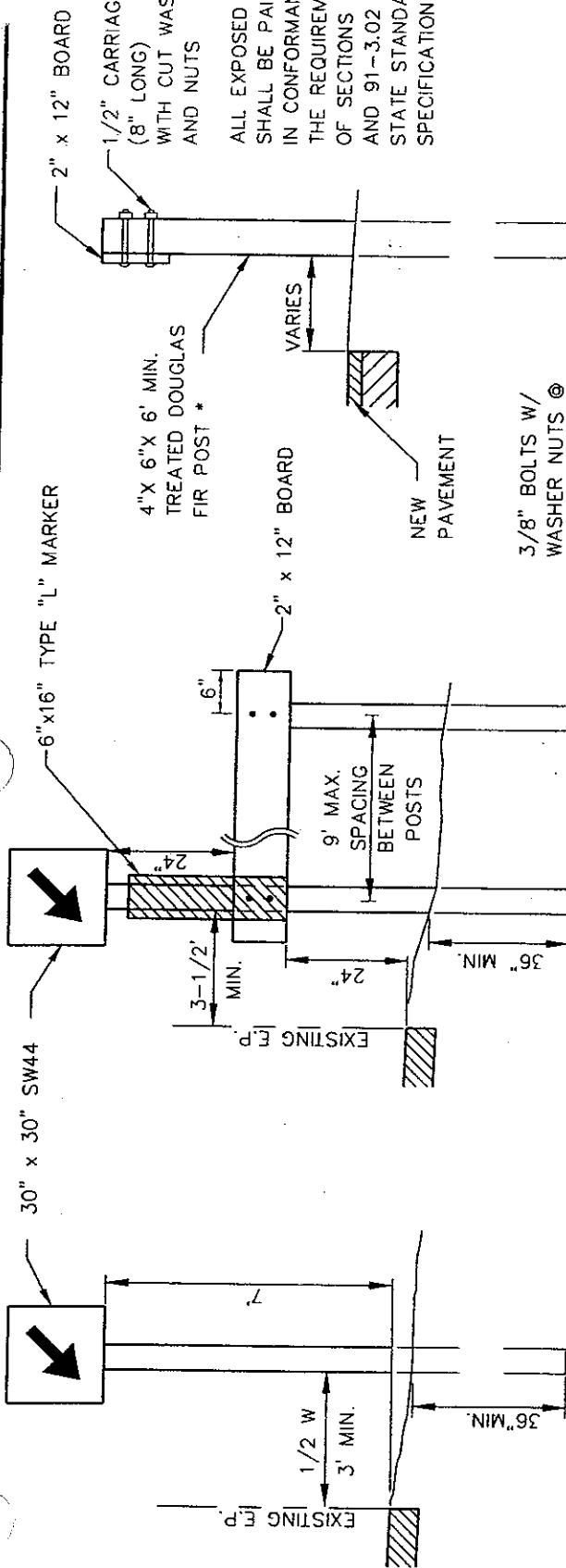
ALL EXPOSED SURFACES TO BE PAINTED WITH 2 COATS OF WHITE AND ONE COAT OF ORANGE FOR STRIPES. BOTH PAINTS TO CONFORM TO SECT. 91-3.02 OF THE CA. DIV. OF HIGHWAYS STANDARD SPECS. ALL POSTS SHALL BE FOUNDATION GRADE REDWOOD. 2" x 8" CROSS MEMBERS SHALL BE CONSTRUCTION GRADE DOUGLAS FIR. BARRICADE(S) SHALL EXTEND TO BACK OF WALK.

COUNTY OF SUTTER

STANDARD TIMBER BARRICADE

[Signature] 3/14/06
APPROVED DATE

K.X.
SCALE : NONE
DRN : PSO
DWG NO. H-21



1/2" CARRIAGE BOLTS
(8" LONG)
WITH CUT WASHERS
AND NUTS

ALL EXPOSED SURFACES
SHALL BE PAINTED WHITE
IN CONFORMANCE WITH
THE REQUIREMENTS
OF SECTIONS 91-3.01
AND 91-3.02 OF THE
STATE STANDARD
SPECIFICATIONS.

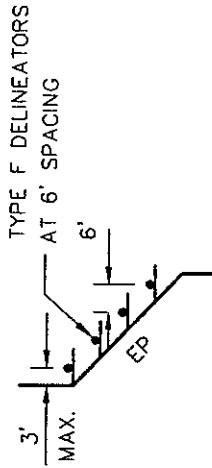
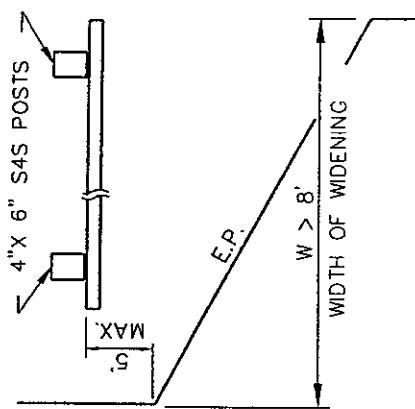
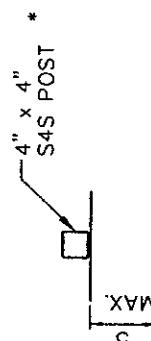
4" X 6" X 6' MIN.
TREATED DOUGLAS
FIR POST *

2" X 12" BOARD

VARIES

NEW
PAVEMENT

3/8" BOLTS W/
WASHER NUTS @
EA. BOARD & POST



SPECIAL APPLICATION AT DIRECTION OF ENGINEER

**W4-2 IN LIEU OF TYPE F DELINEATOR
AT DIRECTION OF ENGINEER

* STATE OF CALIFORNIA SPECIFICATIONS 56-2.02B

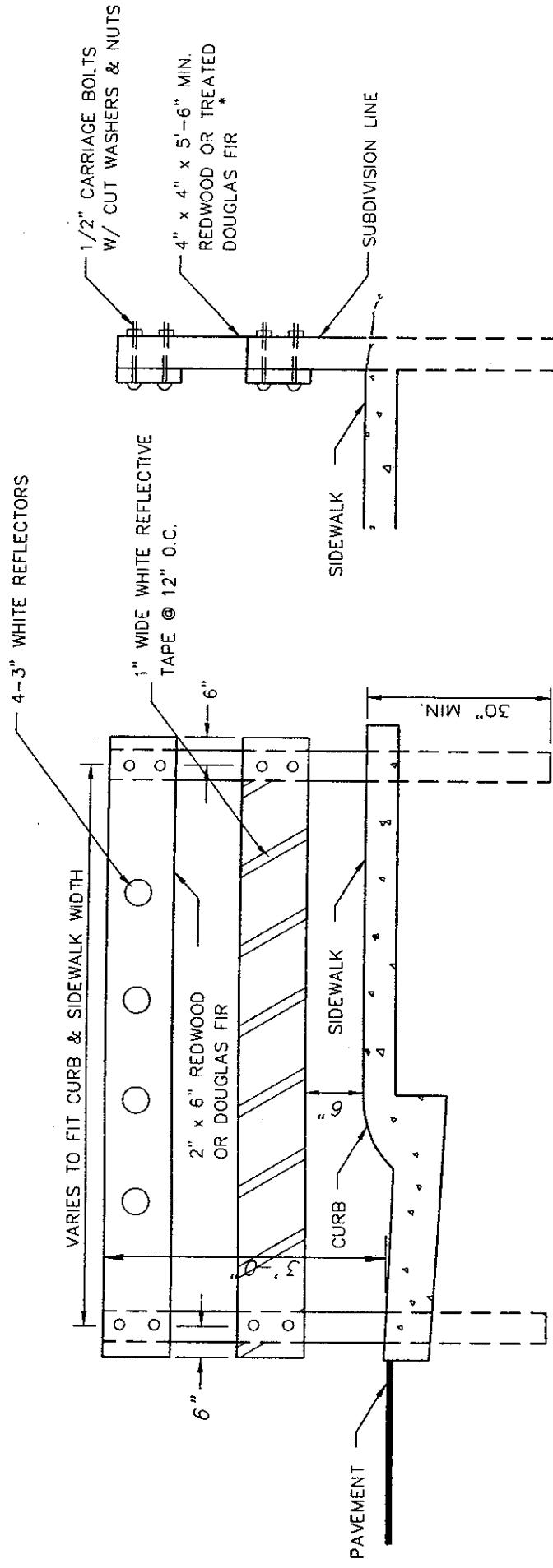
COUNTY OF SUTTER

BARRICADE PAVEMENT WIDENING

John Riehulsky
APPROVED
DATE

SCALE : NONE DRN : PSO DWG NO. H-22

DATE	REVISIONS	BY



NOTE:

1. SIDEWALK BARRICADES TO BE ERECTED AT EACH LOCATION WHERE SATISFACTORY PROVISION CAN NOT BE MADE FOR PEDESTRIANS TO CONTINUE BEYOND THE TERMINUS OF A SIDEWALK.
2. ALL EXPOSED SURFACES TO BE PAINTED WITH TWO (2) COATS OF WHITE PAINT CONFORMING TO SECTION 91-3.02 OF STATE SPECIFICATIONS.

* STATE OF CALIF. SPECIFICATION #58-1.02

COUNTY OF SUTTER	
SIDEWALK BARRICADE	
<i>[Signature]</i>	
APPROVED	DATE
SCALE : NONE	DWG NO. H-23
DRN : PSO	BY
REVISIONS	DATE

TYPE 2
CURB &
GUTTER

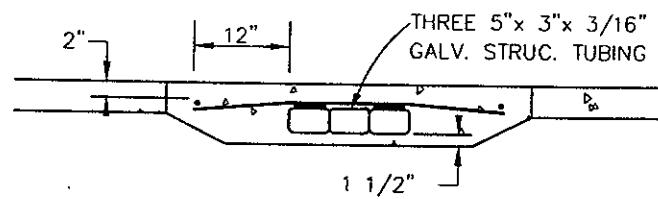
1 3/4"

5" x 3" x 3/16" GALV.
STRUC. TUBING

2%

SIDEWALK

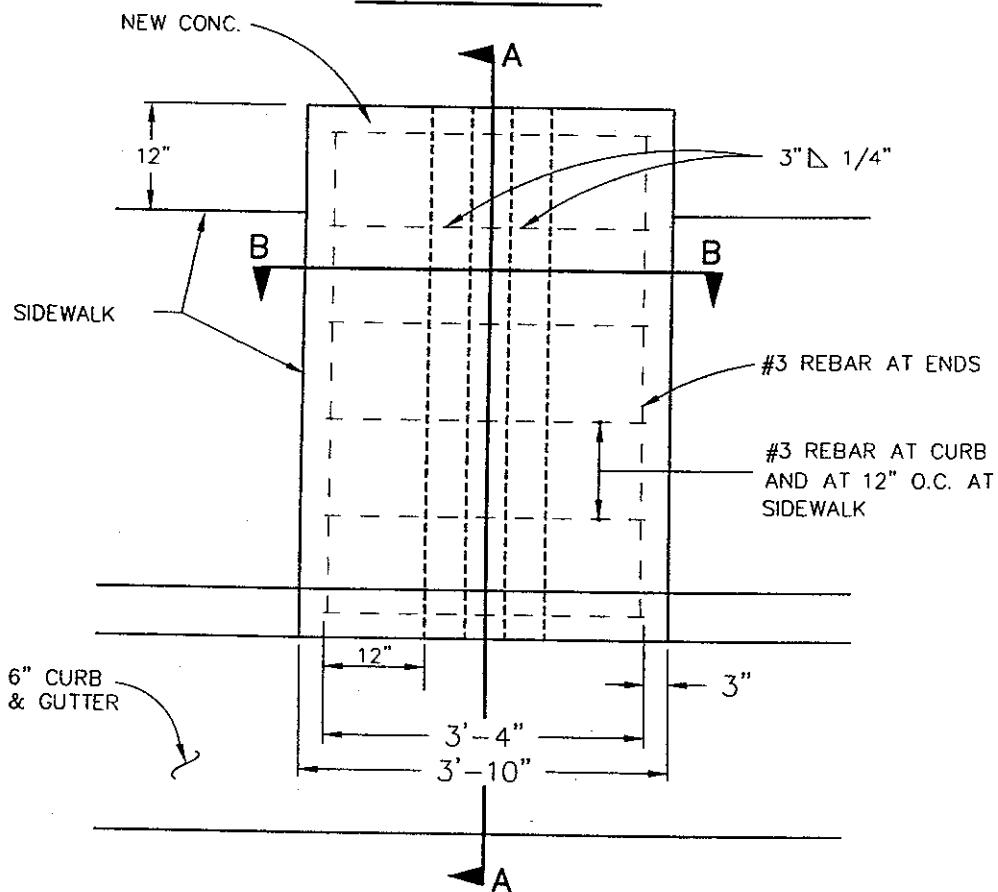
SECTION A-A



NOTE:

1. DRAIN ASSEMBLY SHALL BE FABRICATED AND HOT DIP GALVANIZED.
2. STRUCT. TUBING TO BE CUT TO FIT CURB ANGLE. COAT ENDS W/MIN. 2 COATS SHERWIN WILLIAMS "GALVITE" OR EQUAL.

SECTION B-B

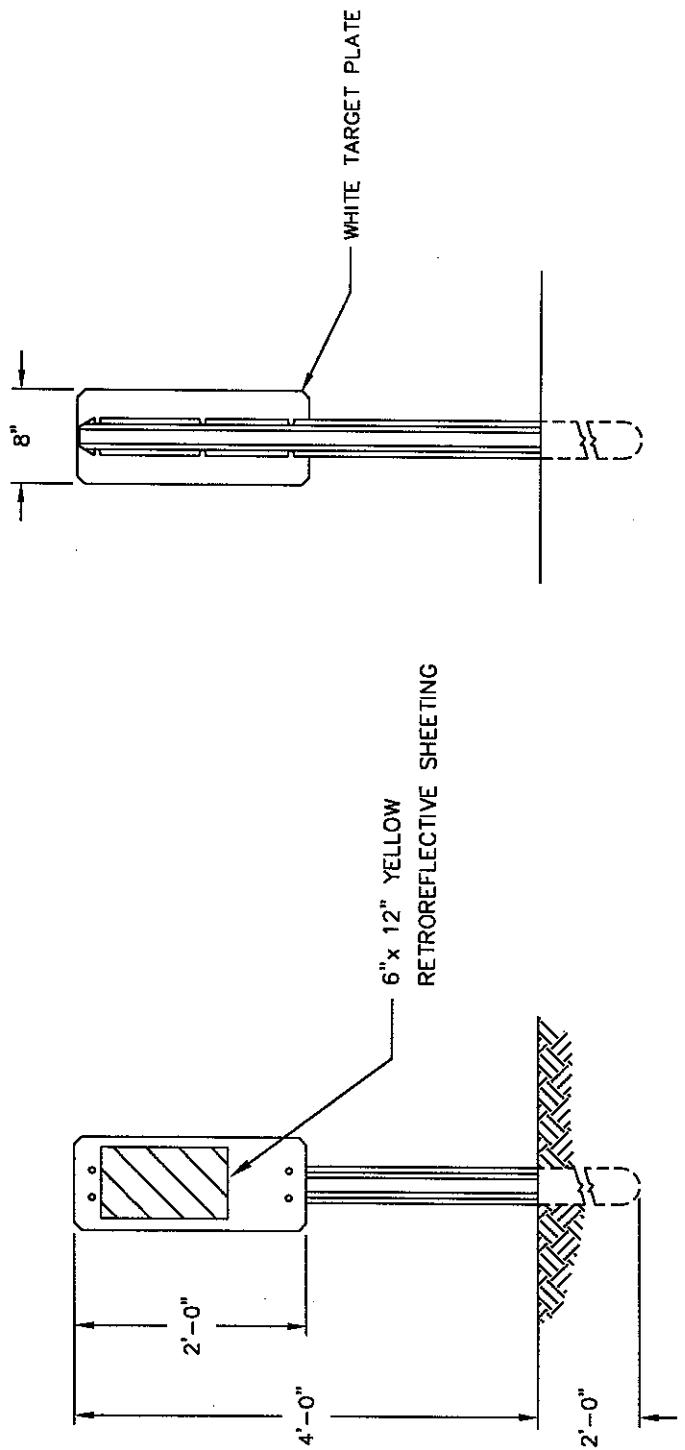


PLAN VIEW

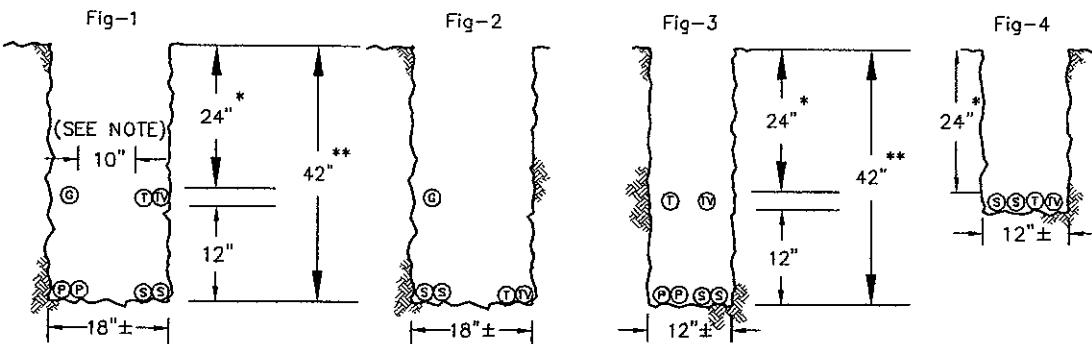
COUNTY OF SUTTER		
SIDEWALK DRAIN		
<i>Robert Sutter</i> 3/18/02		
APPROVED	DATE	
SCALE : NONE	DRN : PSO	DWG NO. H-24
DATE	REVISIONS	BY

NOTES:

1. CONSTRUCTION AND MATERIALS SHALL CONFORM TO CALTRANS STD. PLAN SHEET A73A.
2. PLACE 6" BEYOND EDGE OF PAVEMENT. SPACE AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.



COUNTY OF SUTTER	
OBJECT MARKER	
3/14/96	
APPROVED	DATE
SCALE : NONE	
DRN : K. XIONG	
REVISIONS	BY
DATE	DWG NO. H-25



LEGEND:

- (G) — GAS
- (P) — ELECT. PRIMARIES
- (S) — ELECT. SECONDARIES
- (T) — TELEPHONE
- (TV) — TELEVISION

NOTE:

- * — INCREASE TO 30" IN STREET AREA
- ** — INCREASE TO 48" IN STREET AREA

SEPARATION MAY BE REDUCED TO NOT LESS THAN 6' WHEN NECESSARY, INSTEAD OF INCREASING TRENCH WIDTH.

TYPICAL SIDEWALK & STREET JOINT TRENCH CONFIGURATIONS

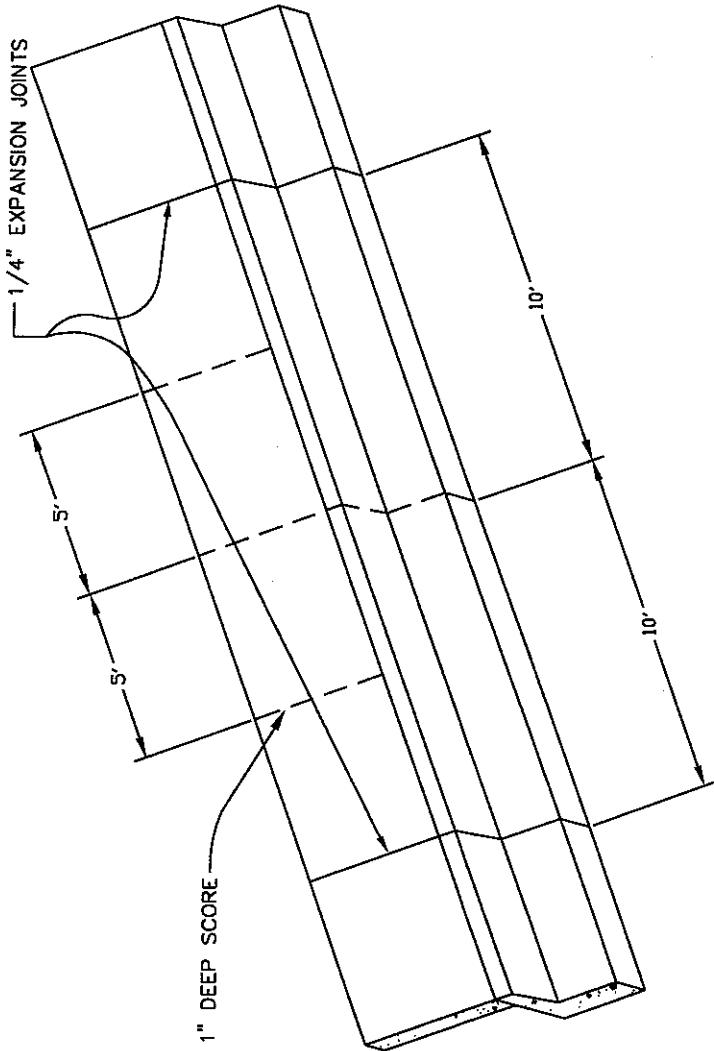
Sect.	(G)	(P)	(S)	(T)	(TV)	Fig.
A	X	X		12" Trench Width		1
B	X	X	X	12" Trench Width		1
C	X	X	X	X		1
D	X	X		X		1
E	X		X	12" Trench Width		1
F	X		X	X		2
G	X	X			X	1
H	X		X		X	2
I	X			X		1

Sect.	(G)	(P)	(S)	(T)	(TV)	Fig.
J	X			X	X	1
K	X				X	1
L		X	X	36" Min. Cover		3
M		X	X	X		3
N		X		X		3
P		X		X	X	3
Q		X	X		X	3
R		X			X	3
S			X	X		4

Sect.	(G)	(P)	(S)	(T)	(TV)	Fig.
T				X		4
U					X	4
V	X	X	X	X	X	1
W	X			X	X	2
X		X	X	X	X	3
Y			X	X	X	4

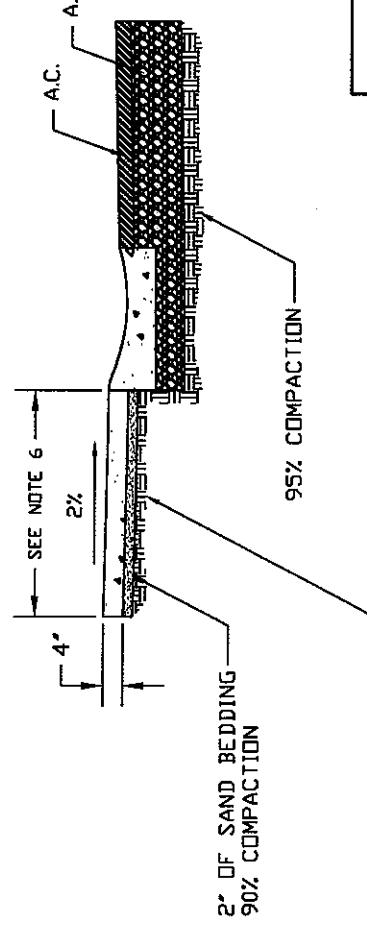
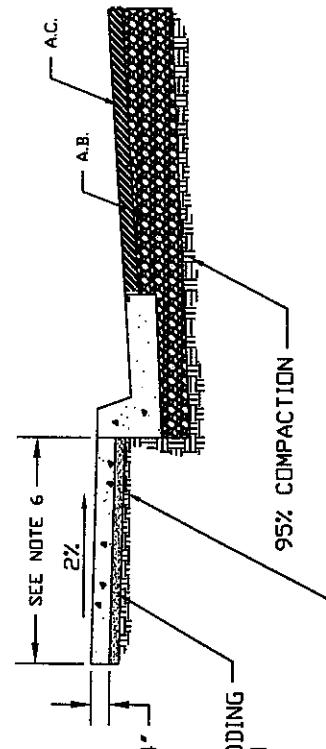
JOINT TRENCH OCCUPANCY GUIDE

COUNTY OF SUTTER		
JOINT UTILITY TRENCH		
		1/14/06 <u>2/14/06</u> APPROVED <u>APPROVED</u> DATE <u>DATE</u>
REVISIONS		BY
DATE	REVISIONS	BY
		SCALE : NONE
		DRN : PSO
		DWG NO. H-26



NOTES:

1. DISTANCE BETWEEN SCORE LINES TO BE 5' IN SIDEWALK.
2. 1/4" TRANSVERSE EXPANSION JOINTS AT 20' INTERVALS FOR SIDEWALK.
3. 1/4" TRANSVERSE EXPANSION JOINTS AT 60' INTERVALS FOR CURB AND GUTTER.
4. SIDEWALK EXPANSION JOINTS TO COINCIDE WITH THOSE IN CURB AND GUTTER.
5. CURB AND GUTTER TO HAVE 1" DEEP SCORE AT 10' INTERVALS.
6. SIDEWALK WIDTH, SEE STANDARD DRAWING NOS. H-4, H-5, H-6, H-7.



COUNTY OF SUTTER	
STANDARD SIDEWALK	
<i>✓</i> APPROVED	3/14/06
SCALE : NONE	DWG NO. H-27
DRN : K.X.	
DATE	
REVISIONS	BY

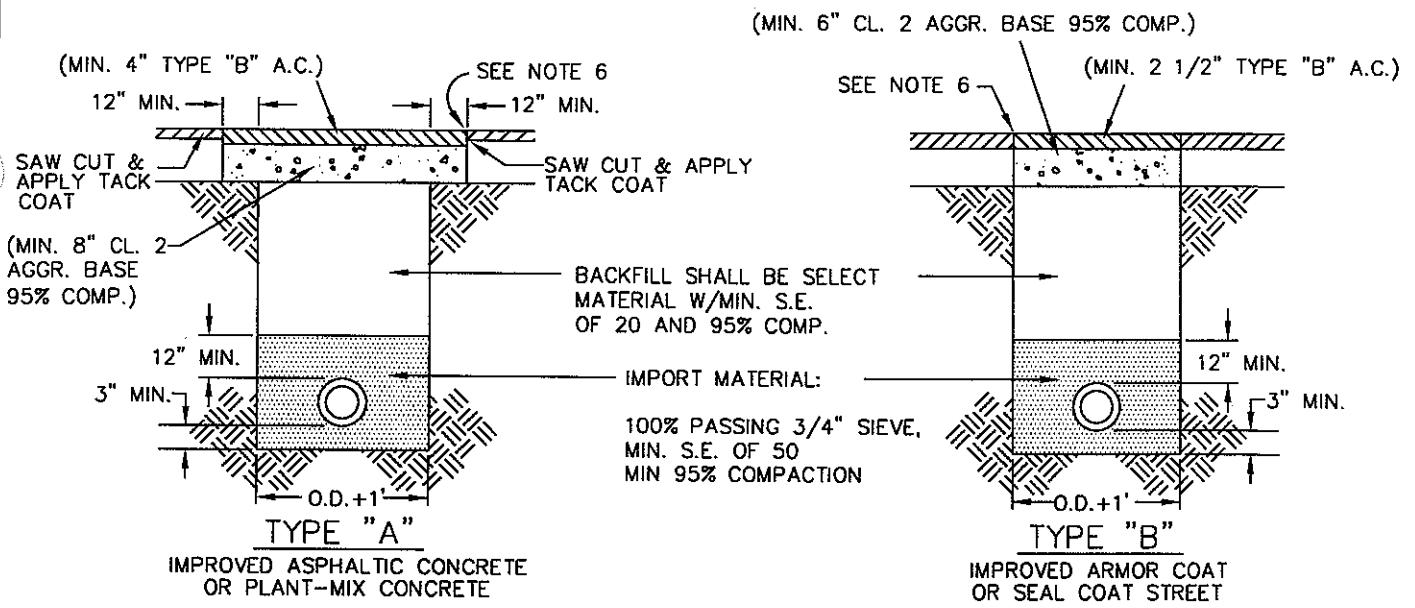
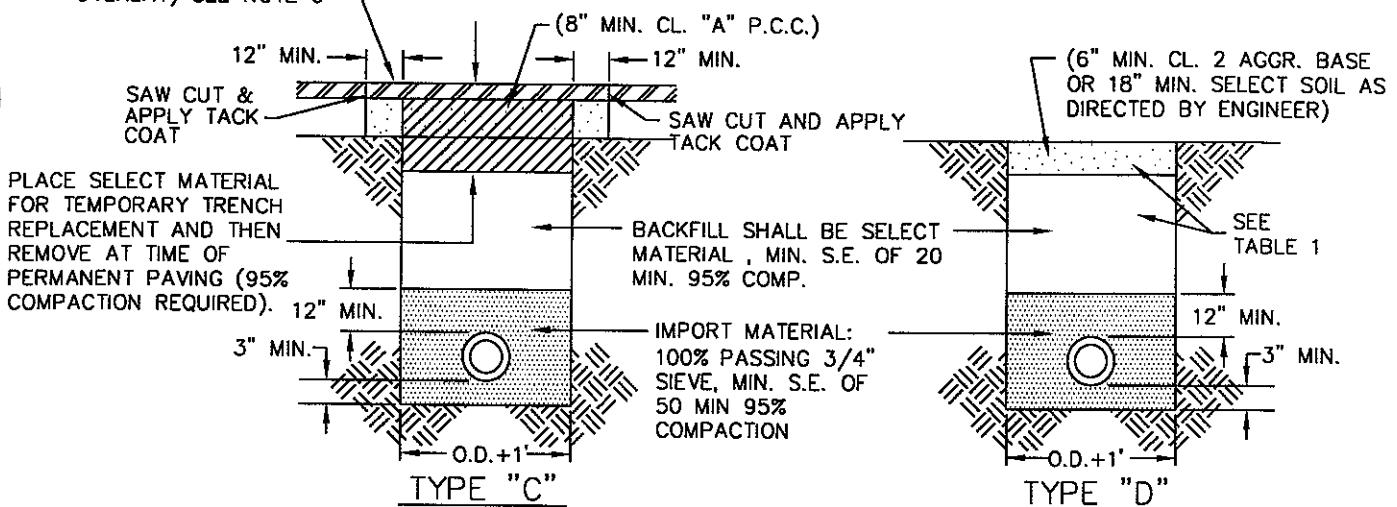


TABLE 1

TYPE	LOCATION	BACKFILL & COMP.	RESTORATION TYPE
D-1	WITHIN 5' OF E.P.	SELECT MATERIAL 95%	6" CL. 2" A.B.
D-2	GREATER THAN 5' TO E.P.	SELECT MATERIAL 90%	18" MIN. SELECT SOIL
D-(SW)	SIDEWALK AREAS	SELECT MATERIAL 95%	4" P.C.C. OR EQUAL TO EXIST. WHICHEVER IS GREATER

(PLACE TYPE "B" A.C. IF
PAVEMENT HAS AN A.C.
OVERLAY) SEE NOTE 6 —



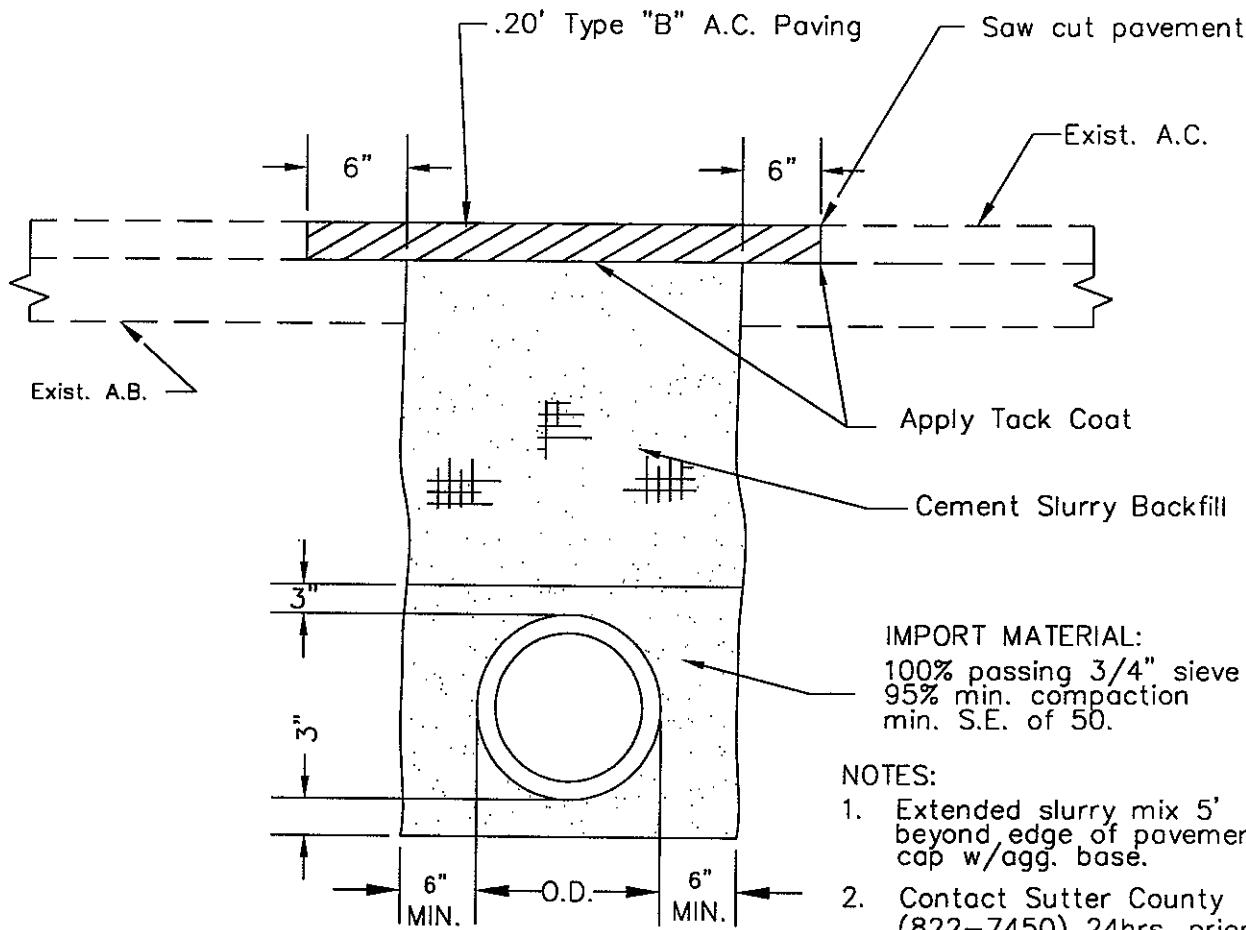
NOTES:

PORLAND CEMENT CONCRETE STREETS

UNIMPROVED STREETS ALLEYS OR EASEMENTS

1. Type "A", "B" & "C" trenches require (2) two cuts: first cut initial trench width then 30 days after work has been completed it shall be saw cut 12" wider both sides.
2. Type "A", "B" & "C" trenches require placement and maintenance of temporary pavement (sc-800 cold mix) for a minimum of 30 days prior to permanent paving.
3. Structural thickness shown is minimum allowable. Other thickness of structural sections may be required by director if existing structural section exceeds these minimums.
4. All trench work 5' and deeper shall have approved trench sloping or shoring plan.
5. Paving surface at trench joints shall be sealed with asphalt emulsion 4" each side of joint after final compaction of asphalt concrete. Sealant shall be sanded as necessary to prevent traffic pickup.
6. Contact Sutter County Public Works (822-7450) 24 hrs. prior to trenching.
7. Contractor shall provide S.E. (Sand Equivalent) test Results for backfill and bedding material from geotech lab.
3. All trenches in the public R/W shall be either properly backfilled or sealed w/steel plates at the end of each working day.

COUNTY OF SUTTER	
TYPE I TRENCH RESTORATION	
<i>C. K. L.</i>	3/14/06
APPROVED	DATE
SCALE : NONE	DWG. NO. H-28
DRN : PSO	



TYPE II TRENCH RESTORATION

CEMENT SPECIFICATIONS

2 Sack Portland Cement (188 lbs.)
 52 Gallons Water
 814 lbs. 3/8" rock SSD Weight
 2310 lbs. Sand

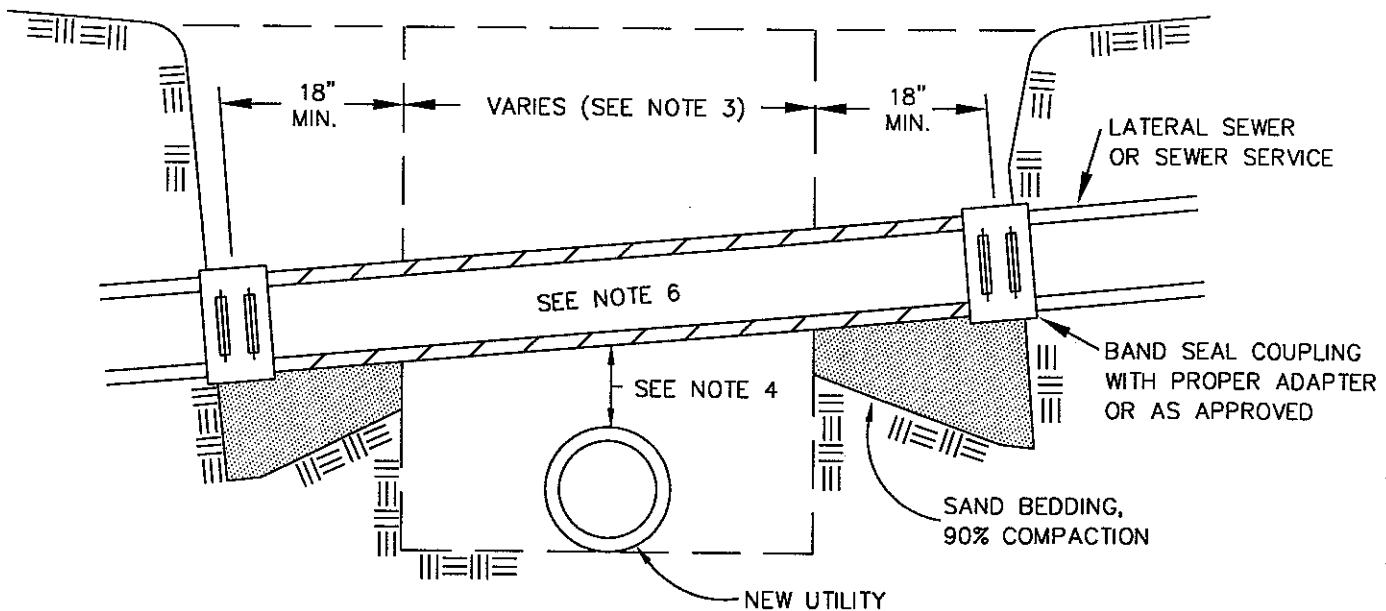
TOTAL BATCH WT. 3,750 LBS. PER CUBIC YARD ±10% TO BE SHOWN ON DELIVERY TICKET.

Backfill Slurry mix to top of exist. a.b. and bridge w/metal plate until slurry mix can support vehicular traffic.

Asphalt concrete patch to match existing thickness, 0.2' min.
 Do not move slurry once placed in ditch.

2% max. (by cement wt.) calcium chloride may be added to slurry mix.

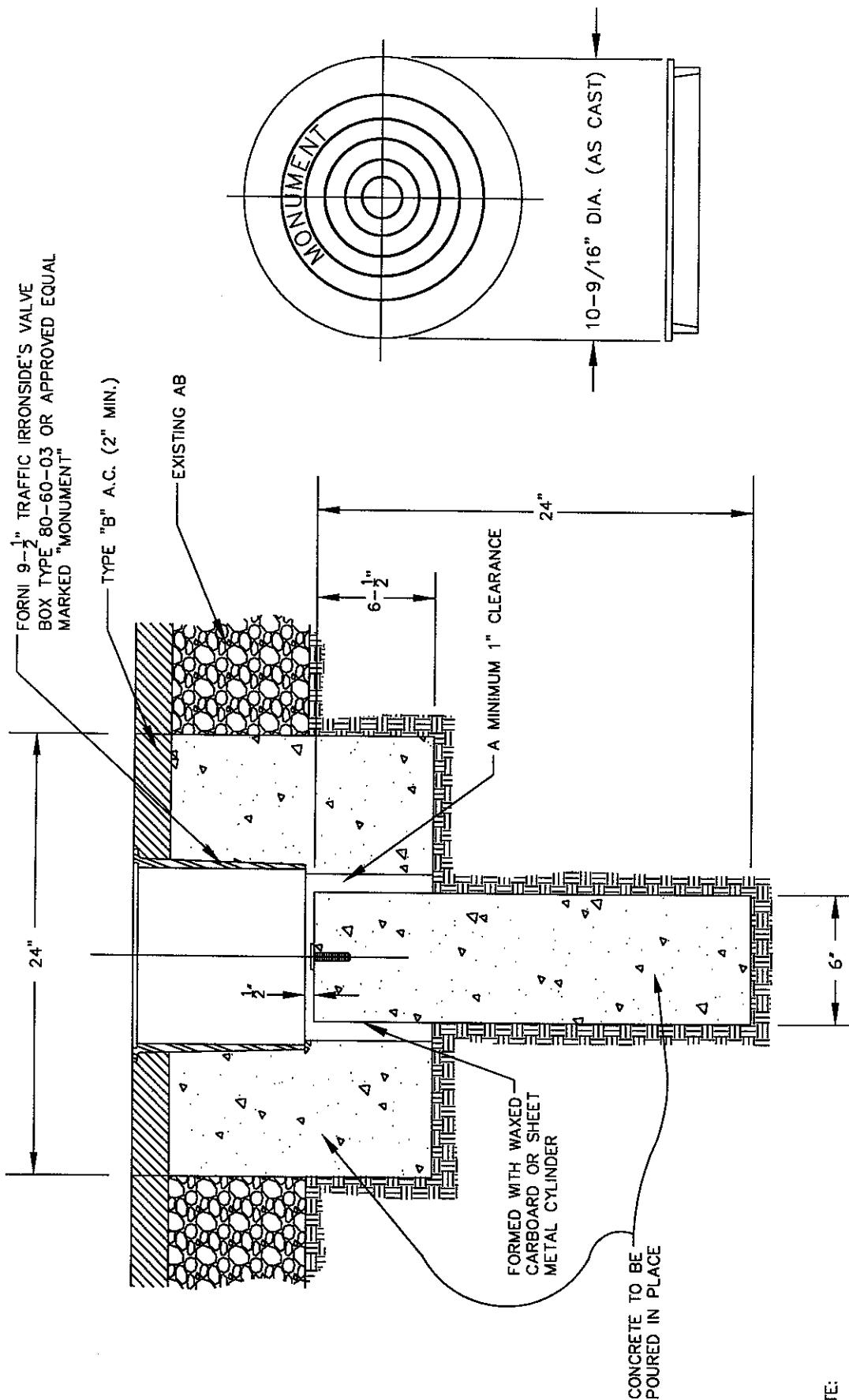
COUNTY OF SUTTER		
TYPE II TRENCH RESTORATION		
<i>6/22/04</i>		APPROVED
DATE	REVISIONS	BY
SCALE : NONE DRN : PSO		DWG NO. H-28A



NOTES:

1. INSIDE DIAMETER OF PIPE TO BE THE SAME AS THE PIPE TO WHICH IT CONNECTS.
2. ALTERATIONS OF SEWER GRADES WILL BE PERMITTED ONLY AFTER PERMISSION HAS BEEN RECEIVED FROM THE COUNTY OR SPECIAL DISTRICT.
3. WHENEVER THE SPAN OF THE PIPE EXCEEDS 5'-0" REPLACEMENT PROCEDURE AND MATERIAL SHALL BE AS DIRECTED BY THE COUNTY OR SPECIAL DISTRICT.
4. MINIMUM CLEARANCE BETWEEN PIPES SHALL BE 3".
5. TRIM THE END OF THE SIDE SEWER PIPE TO A CLEAN CUT UNDAMAGED END WITH MECHANICAL PIPE CUTTER.
6. EXTRA STRENGTH VITRIFIED CLAY PIPE OR DUCTILE IRON PIPE FOR SANITARY SEWER LINES; FOR STORM DRAIN LINES, CONCRETE PIPE OF THE SAME TYPE REMOVED.
7. BAND SEAL COUPLING SHALL HAVE STAINLESS STEEL SHEAR RING.

COUNTY OF SUTTER		
UTILITY CROSSING		
<i>[Signature]</i>		3/14/08
APPROVED		DATE
DATE	REVISIONS	BY
SCALE : NONE DRN : PSO		DWG NO. H-29

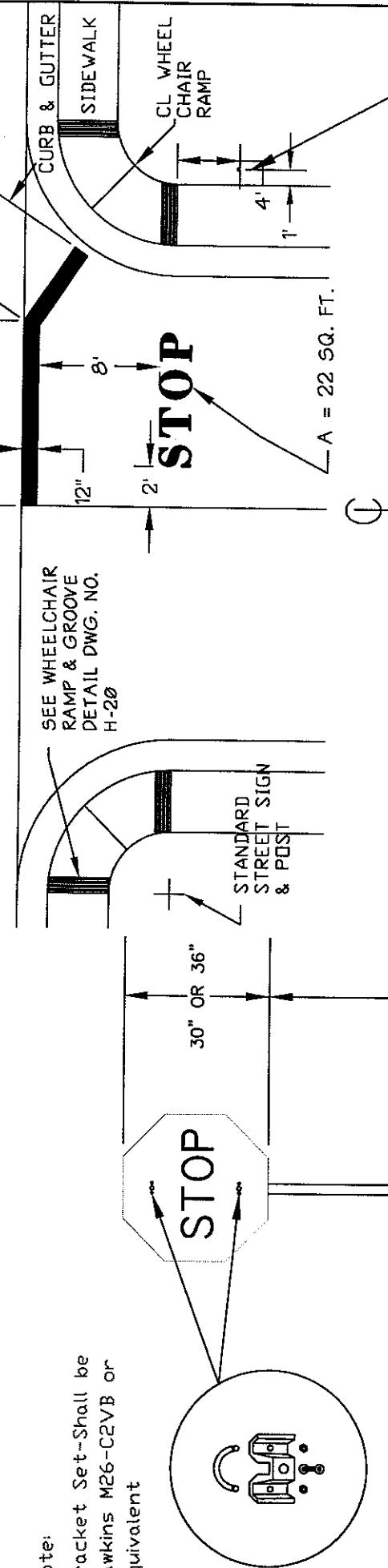


NOTE:
SURVEY MONUMENT MARKER
SOLID BRASS, 1-3/8" DIA. TOP
AND 7/16" X 2" SHANK

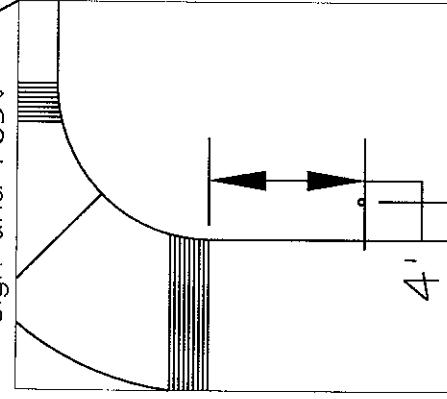
COUNTY OF SUTTER	
MONUMENT WELL	
 APPROVED 2/14/06 DATE	
SCALE : NONE	K.X.
DRN : M. MILLER 6/15/92	DWG NO. H-30
DATE	REVISIONS
6/2/04	

Note:
Bracket Set - Shall be
Hawkins M26-C2VB or
equivalent

SEE WHEELCHAIR
RAMP & GROOVE
DETAIL DWG. NO.
H-20



Standard Stop
Sign and Post



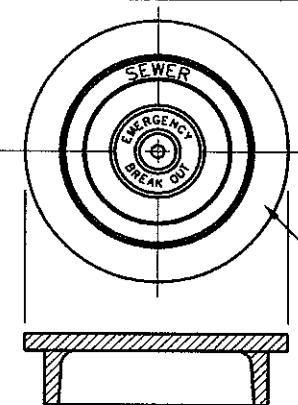
COUNTY OF SUTTER

STANDARD STOP SIGN

2/26/06
APPROVED
DATE

SCALE : NONE
DRN : B. MOODY
DWG NO. H-31

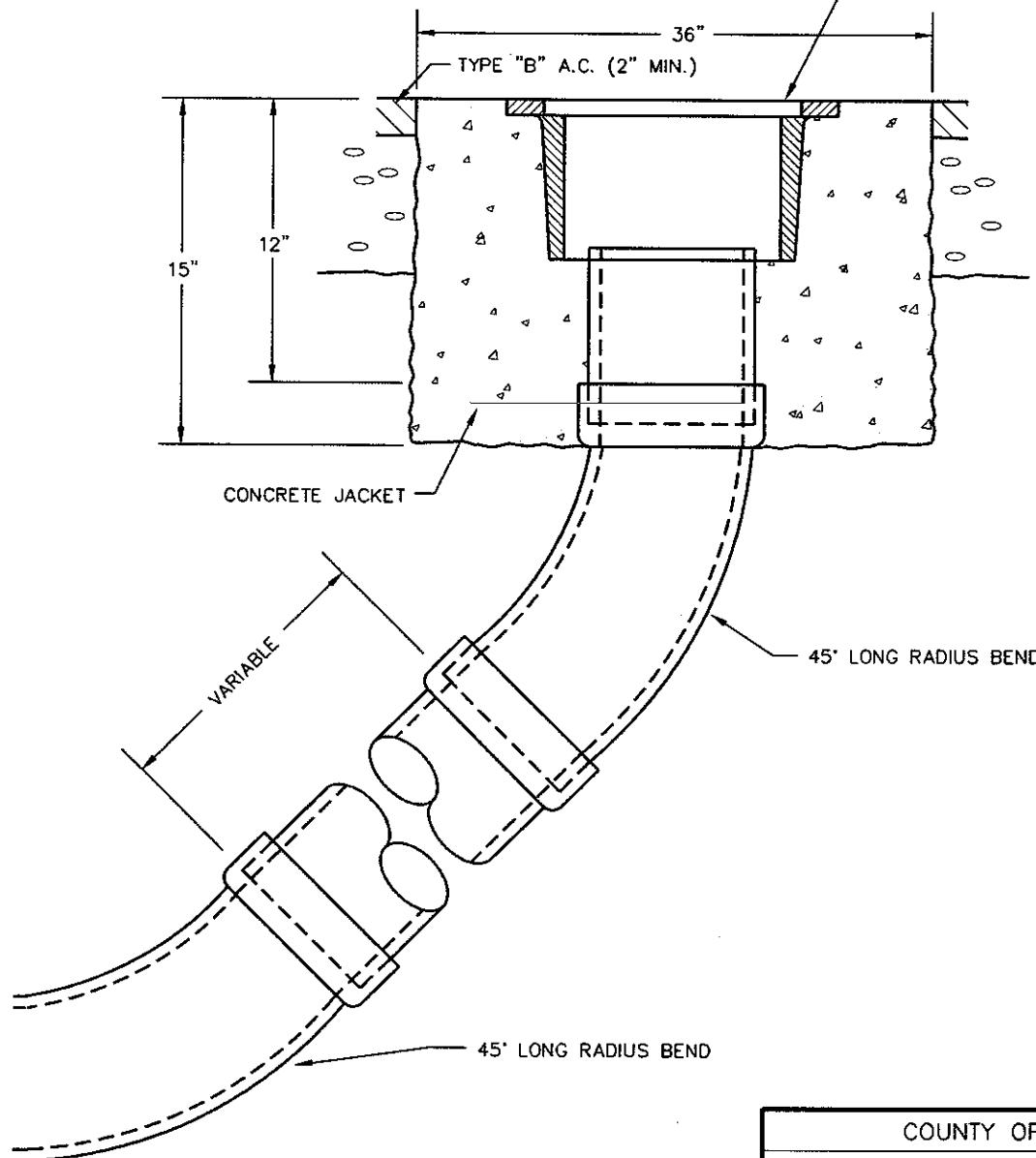
REVISIONS BY
DATE



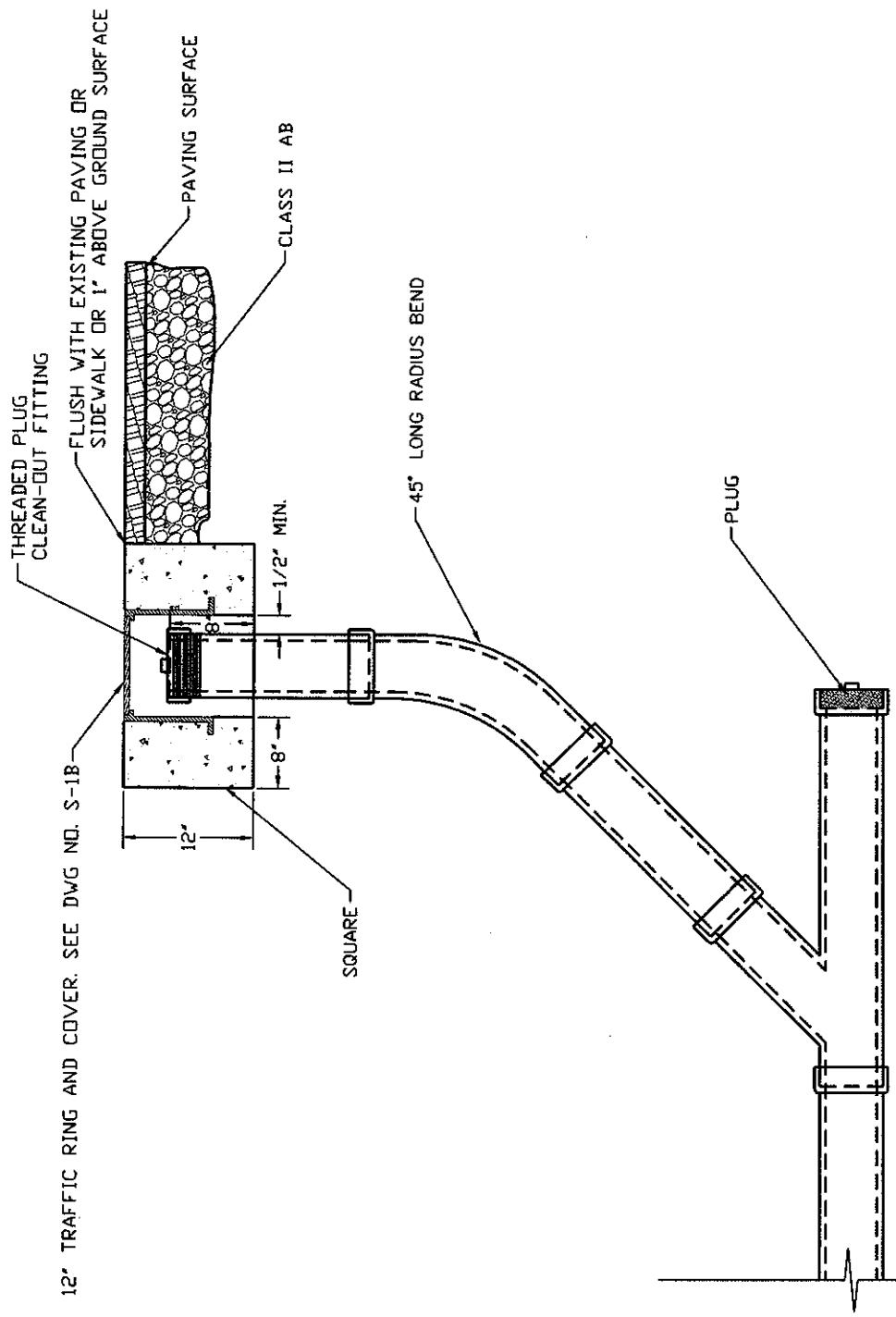
COVER DETAIL

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

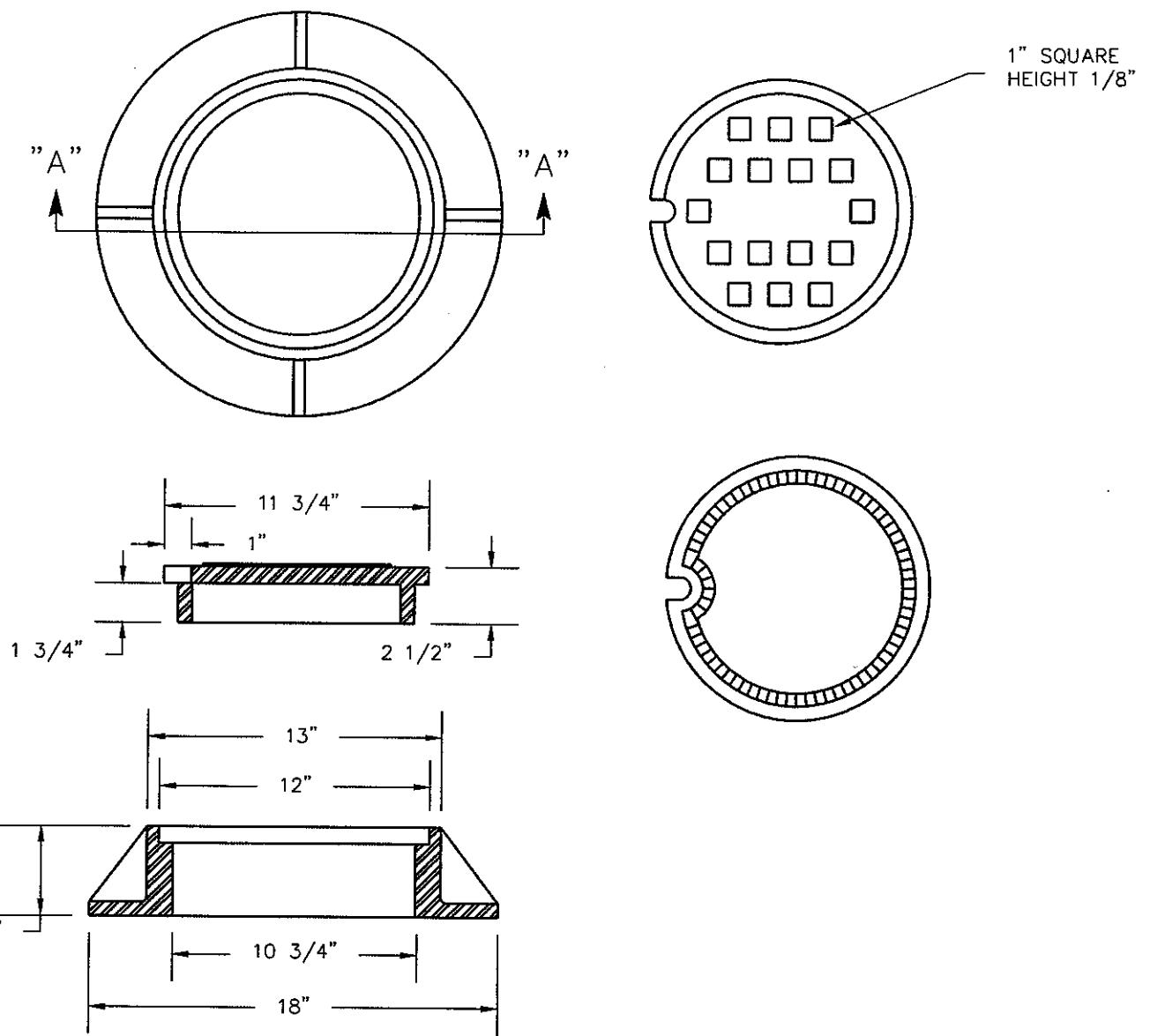
(2) FOR 8" 10" AND 12" SEWER
MAINS USE D & L
CLEAN-OUT ASSEMBLY
H-8026 OR EQUAL
MARKED "SEWER".



COUNTY OF SUTTER	
SEWER CLEANOUT	
<i>Douglas W. Bault</i>	
DIRECTOR OF PUBLIC WORKS	
SCALE: NON	DATE: 11/2010
DRN: PSO	DWG NO. S-1



PLAN

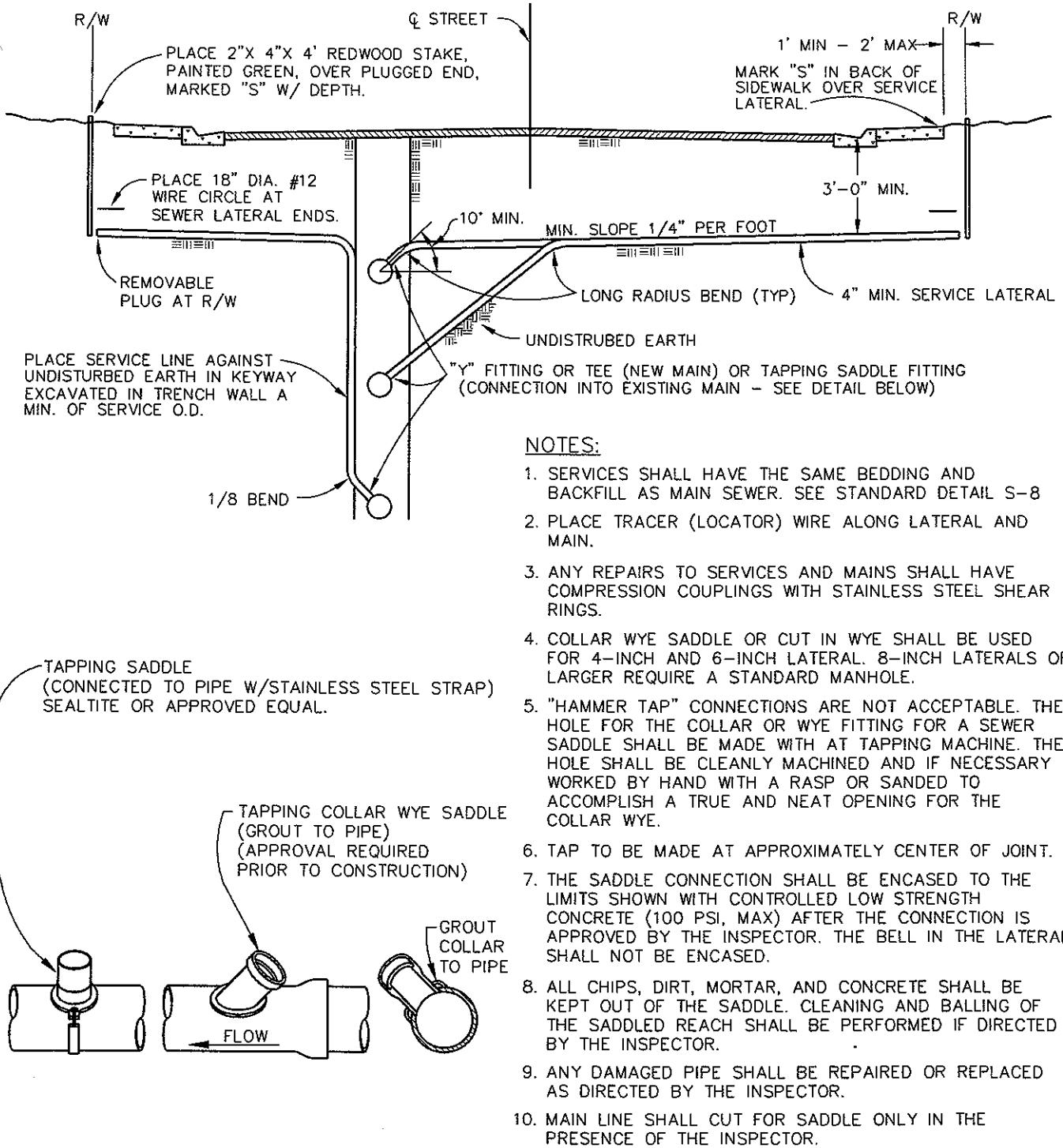


SECTION A-A

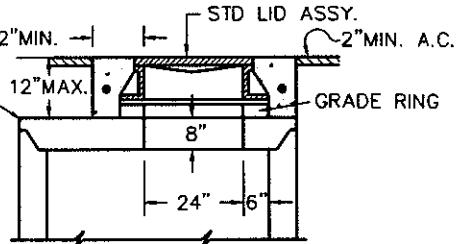
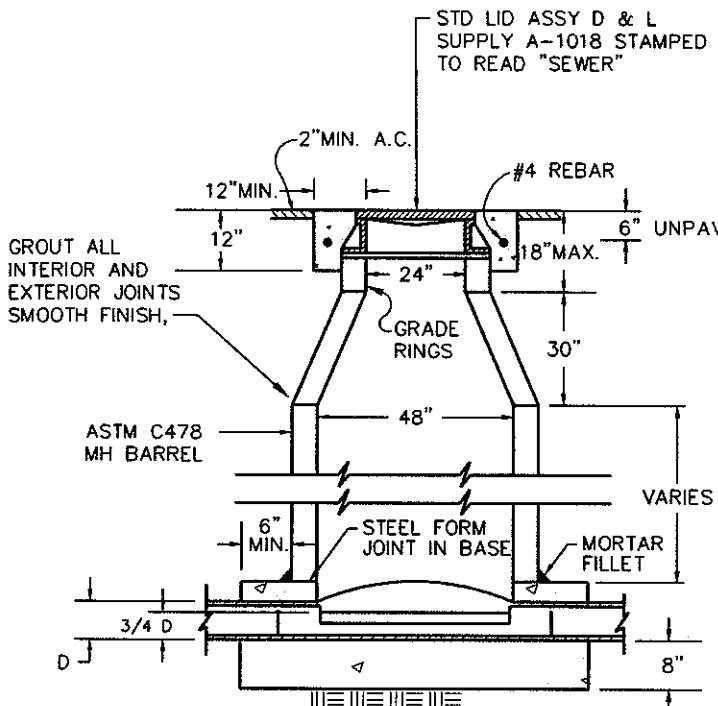
NOTES:

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	
<i>Douglas N. Hauff</i> DIRECTOR OF PUBLIC WORKS	
SCALE: NONE DRN: K.XIONG	DATE: 11/2010
DWG NO. S-1B	



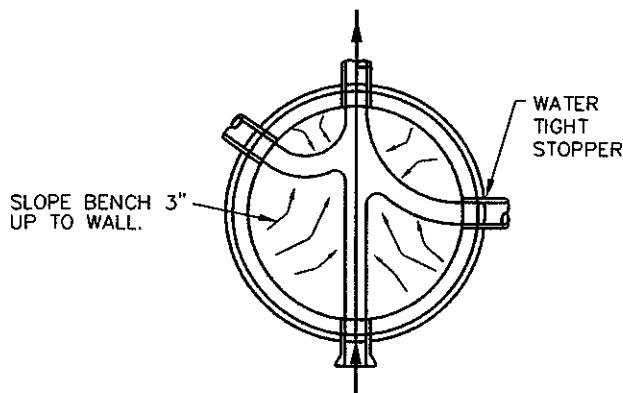
COUNTY OF SUTTER	
SEWER SERVICE CONNECTION	
<i>Douglas N. Hauff</i>	
DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DATE: 11/2010
DRN: PSO	DWG NO. S-2



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

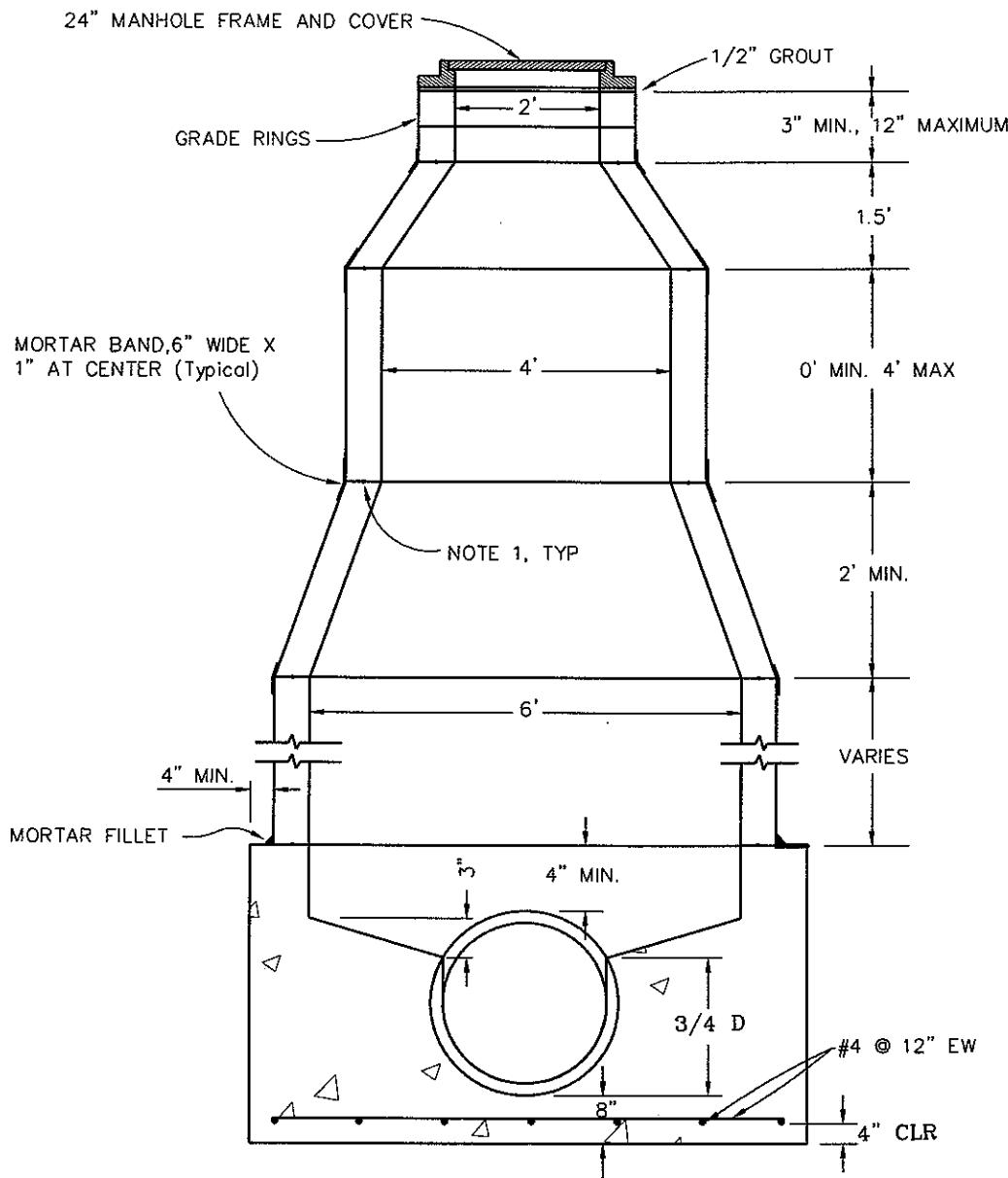
NOTES:

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 TOUNCE 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

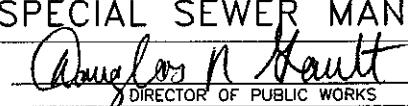
COUNTY OF SUTTER	
STANDARD SEWER MANHOLE	
<i>Douglas N. Blaett</i> <small>DIRECTOR OF PUBLIC WORKS</small>	
SCALE: NONE DRN: PSO	DATE: 11/2010 DWG NO. S-3

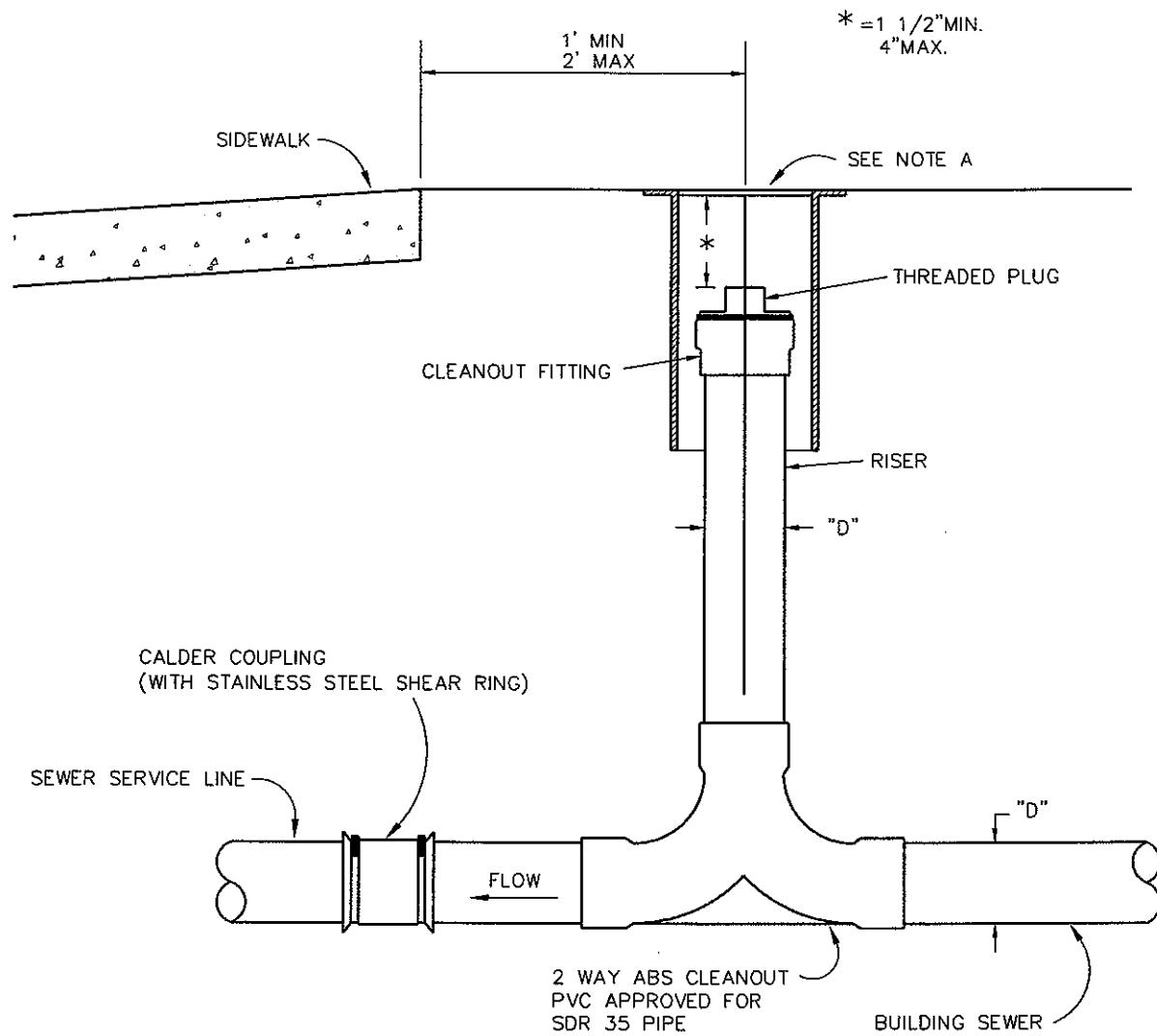


NOTES:

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 DRN: PSO	DATE: 11/2010 DWG NO. S-4

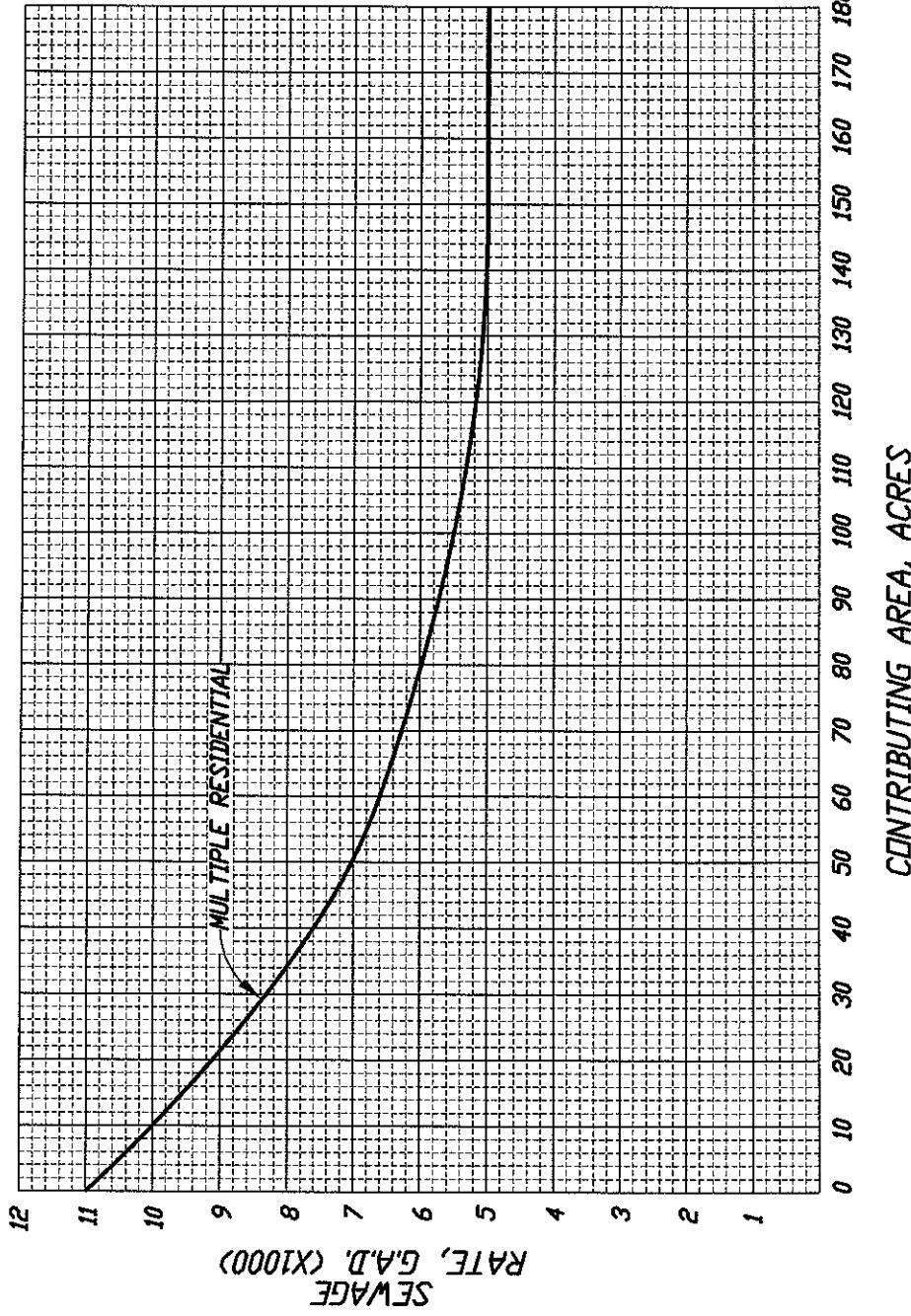


NOTE A:

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	
<i>Douglas N. Gault</i> <small>DIRECTOR OF PUBLIC WORKS</small>	
SCALE: NONE DRN: PSO	DATE: 11/2010 DWG NO. S-5



COUNTY OF SUTTER

AVERAGE SEWER FLOWS

Douglas M. Hunt

DIRECTOR OF PUBLIC WORKS

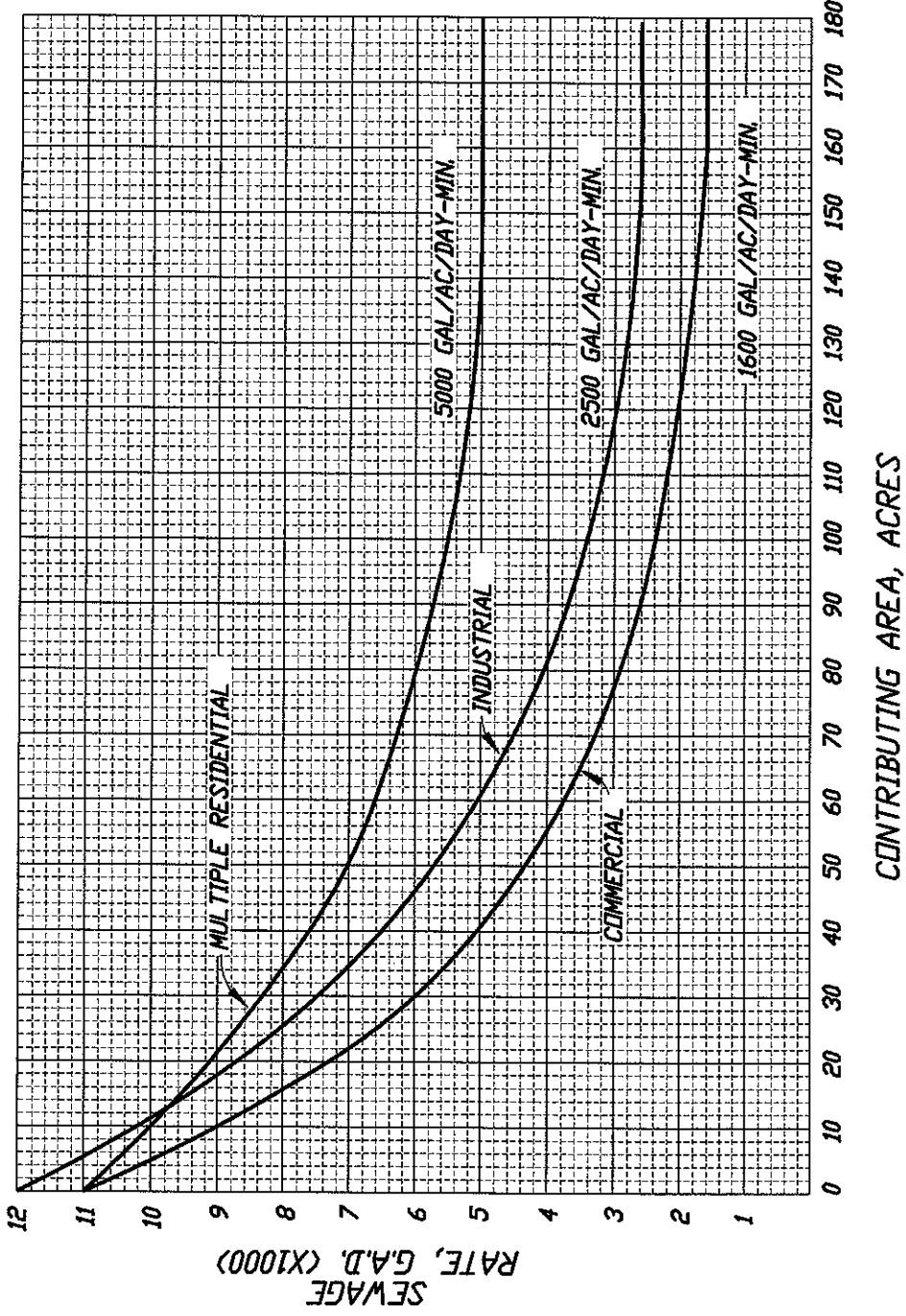
DWG NO. S-6

SCALE: NONE

PSO

DRN:

DATE: 11/2010

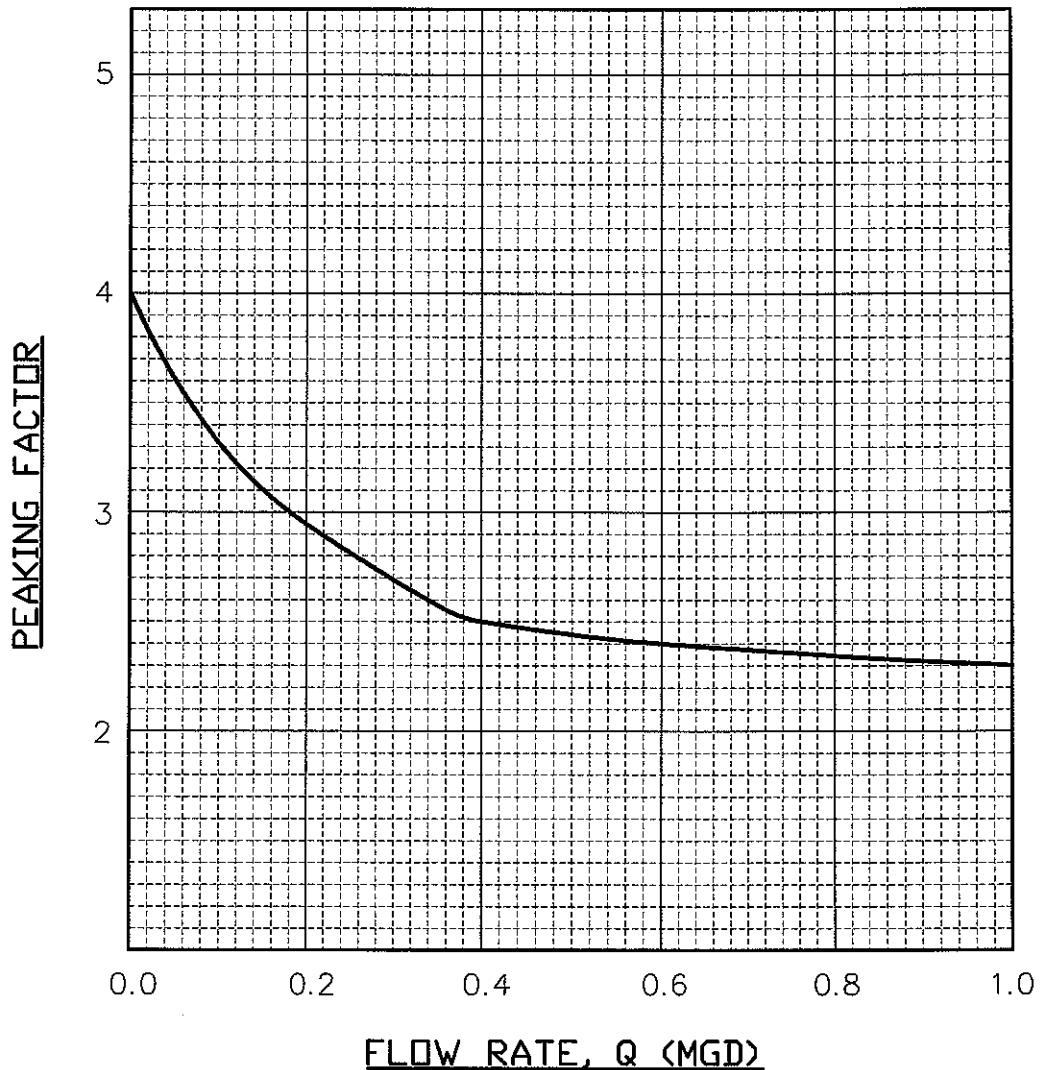


COUNTY OF SUTTER

AVERAGE SEWER FLOWS

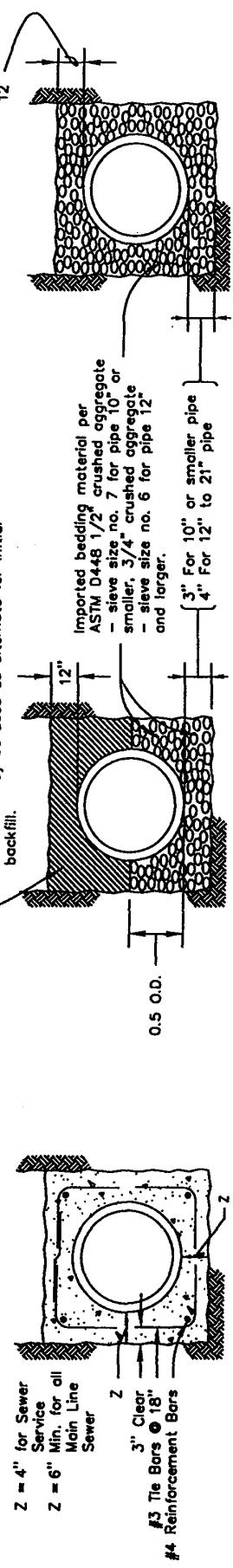
John M. Hauff
DIRECTOR OF PUBLIC WORKS

SCALE: NONE
DRN: PSO
DWG NO. S-6A
DATE: 11/2010



COUNTY OF SUTTER	
SEWER PEAKING FACTORS	
<i>Douglas N. Mault</i>	
DIRECTOR OF PUBLIC WORKS	
SCALE: NONE	DATE: 11/2010
DRN: PSO	DWG NO. S-7

Native material carefully placed; compact to 90% relative compaction. Imported bedding material may be used as alternate for initial backfill.



Bedding Factor = 2.2 for 36" or less; for greater than 36" dia. field condition only (see note 2).

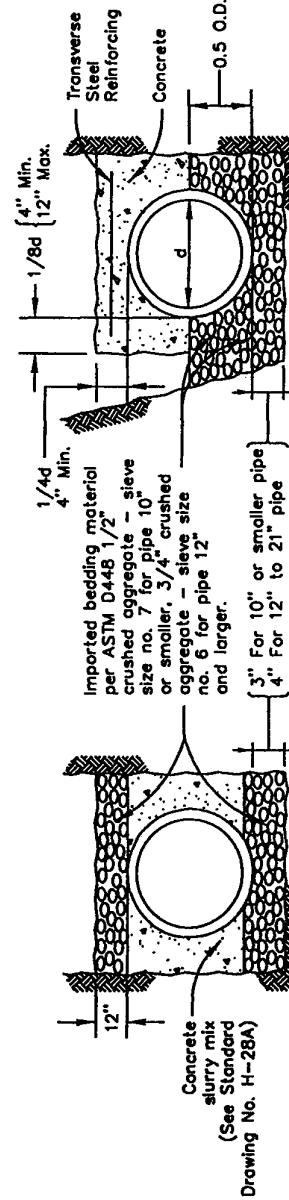
TYPE II ALTERNATE

GENERAL NOTES:

1. Minimum depth of bedding and material under pipe bells shall be 3 inches.
2. For pipe greater than 36" in diameter Type II Alternate conditions have resulted in the allowable trench width for Type II being exceeded and calculations must be submitted for the Engineer's approval to determine the appropriate bedding factor for the situation. Design Method No. 38 as published by the American Concrete Pipe Association shall be the basis for the calculations. Maximum allowable Bedding Factor is 2.2.
3. Type III and IV may be used only when construction conditions encountered in the field have resulted in the allowable trench width for Type II and Type II Alternate being exceeded. Written approval of the Engineer is necessary.
4. For reinforced concrete, P is the percentage of the area of transverse steel to the area of concrete above the top of the pipe barrel. Use wire mesh or uniformly distributed small diameter rebar.
5. For all flexible (non-rigid) pipe, imported material must be used for bedding and initial backfill to 12 inches over pipe bell.

TYPE II (See Note 5)

CONCRETE ENCASEMENT



Bedding Factor = 3.4
 $P = 0.4\%$

TYPE IV (See Notes 3 & 4)

TYPE III
(See Note 3)
(Concrete must extend from pipe to the trench walls. TYPE III is not allowed where soils are expansive)

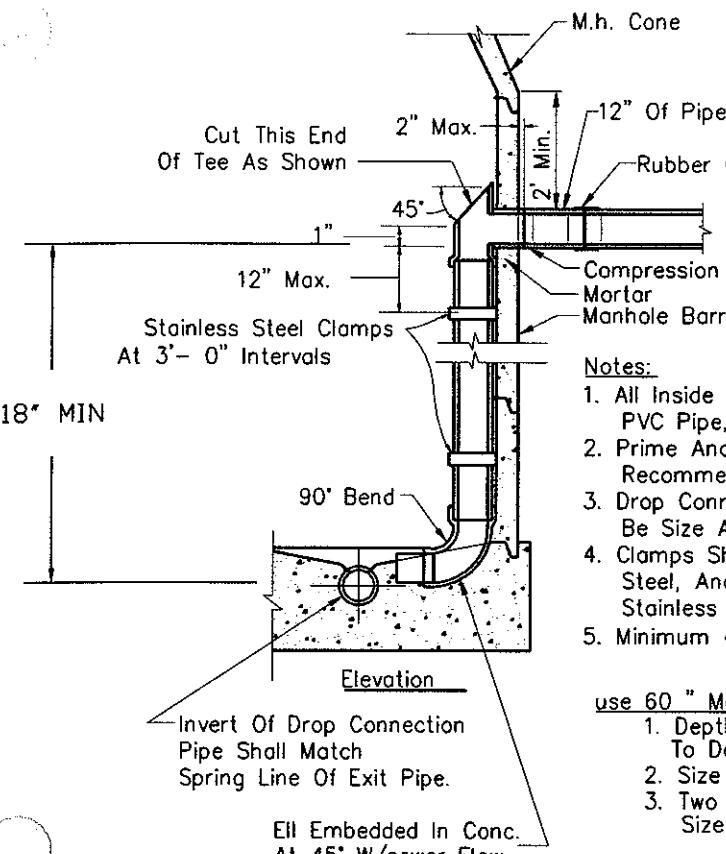
COUNTY OF SUTTER

PIPE BEDDING
& INITIAL BACKFILL

[Signature]
APPROVED
DATE 3/1/06

DWG NO. S-8

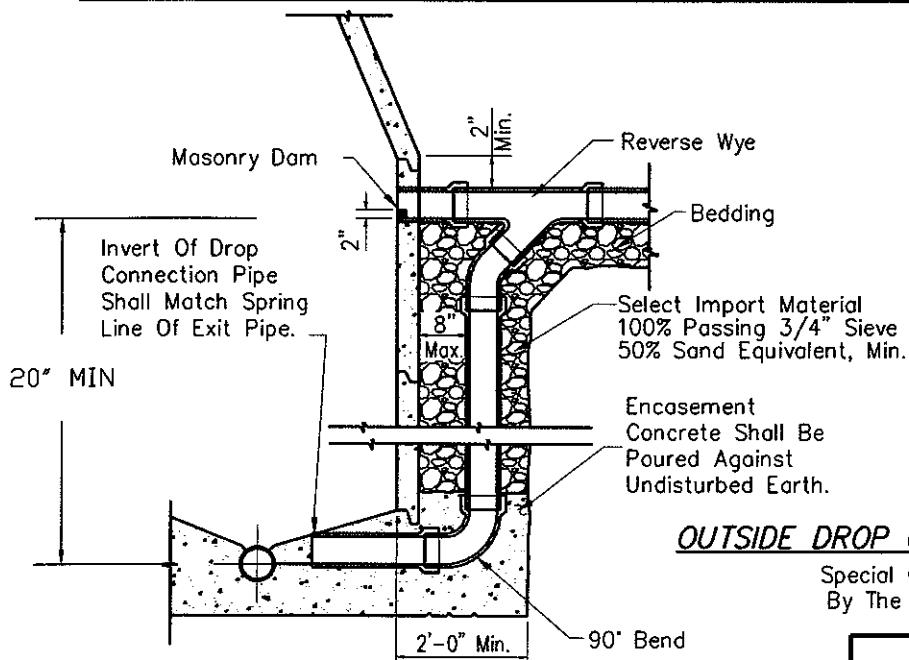
DATE	REVISIONS	BY	K.X.	SCALE : NONE	DRN: PSO
11/3/05					



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



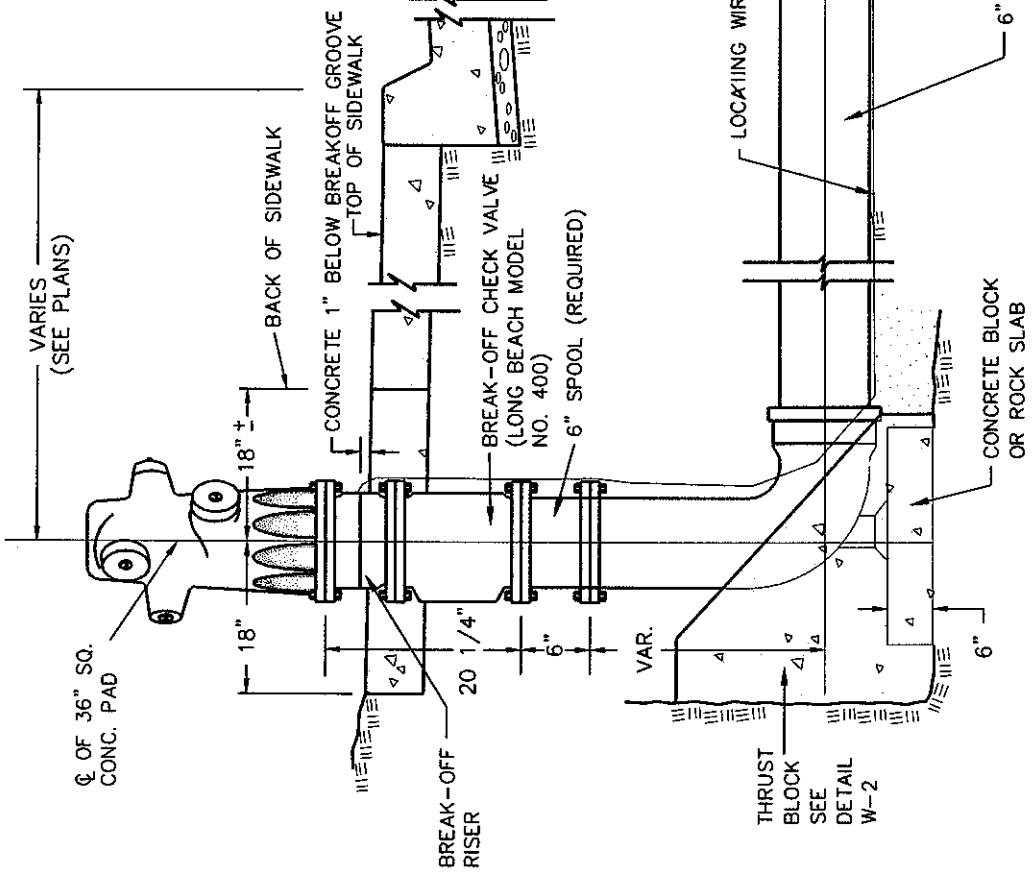
OUTSIDE DROP CONNECTION OVER 8" IN SIZE

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

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

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 LINE 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" AND (2) 2 1/2" HOSE OUTLET (OR APPROVED EQUAL) PUMPER OUTLET TO FACE STREET.



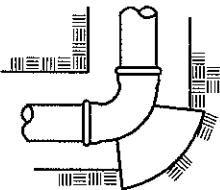
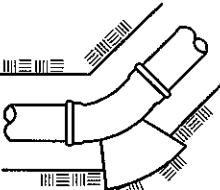
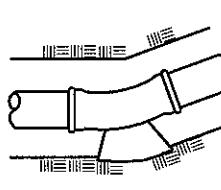
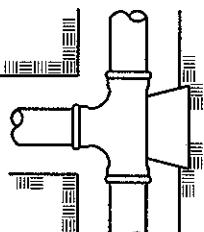
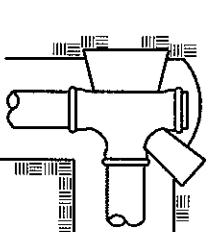
COUNTY OF SUTTER

FIRE HYDRANT

Douglas M. Knott
DIRECTOR OF PUBLIC WORKS

SCALE: NONE
DRN: PSO DATE: 11/1/2010 DWG NO. W-1

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"	1	1
	6"	2	2
	8"	4	4
	10"	7	2
	12"	12	3
		16	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

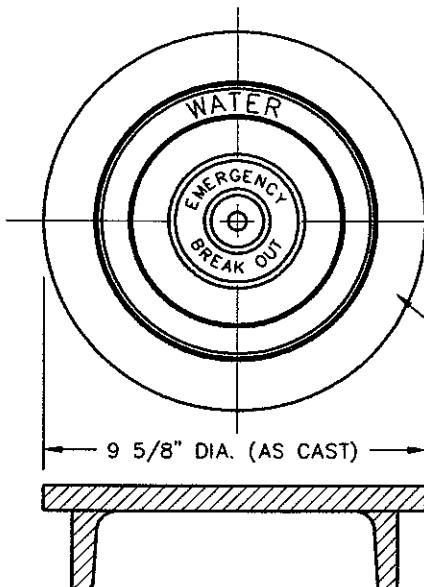
THRUST BLOCK DETAILS

Douglas N. Bailett
DIRECTOR OF PUBLIC WORKS

SCALE: NONE DRN: PSO DATE: 11/2010 DWG NO. W-2

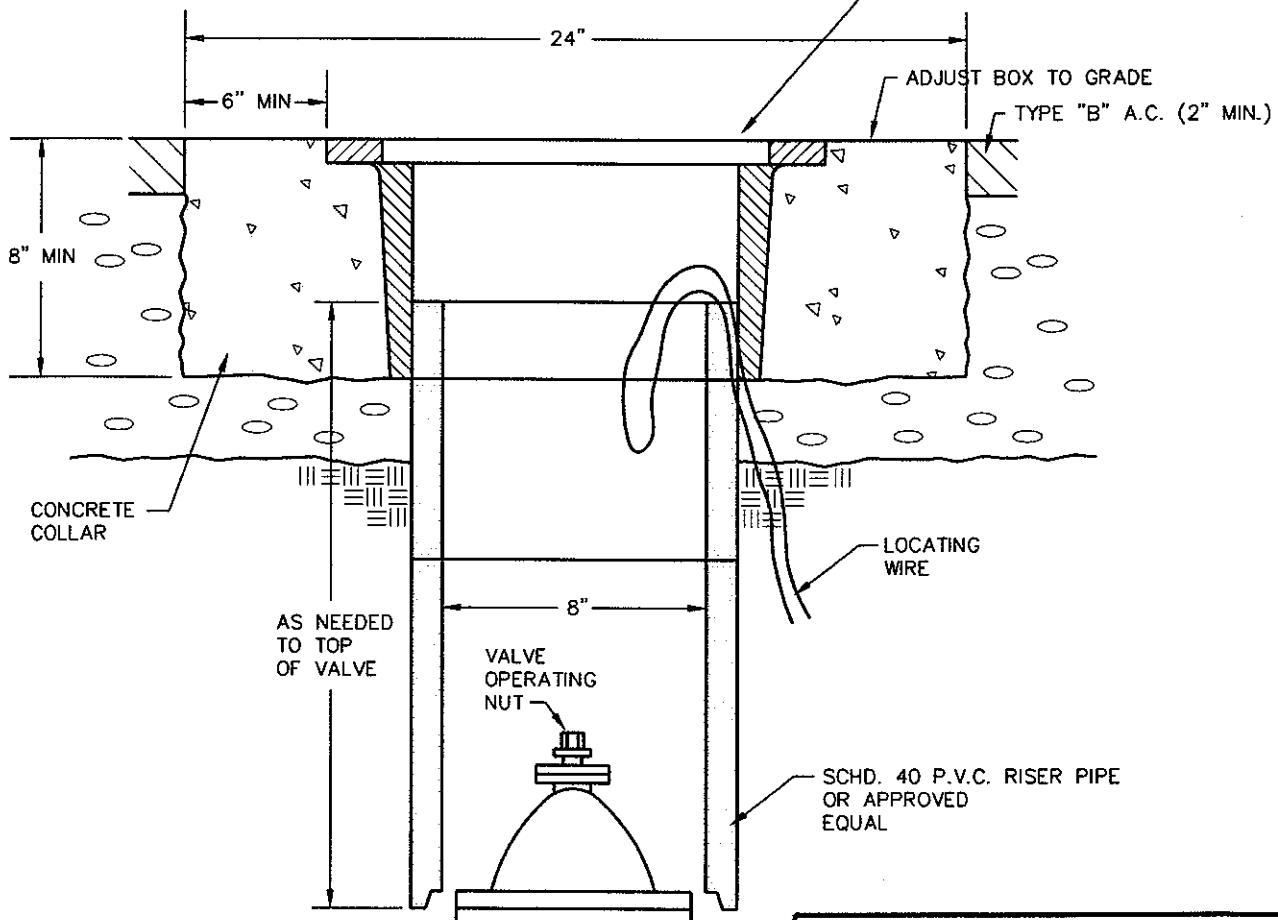
NOTES:

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

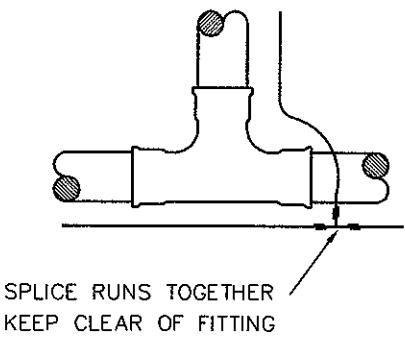
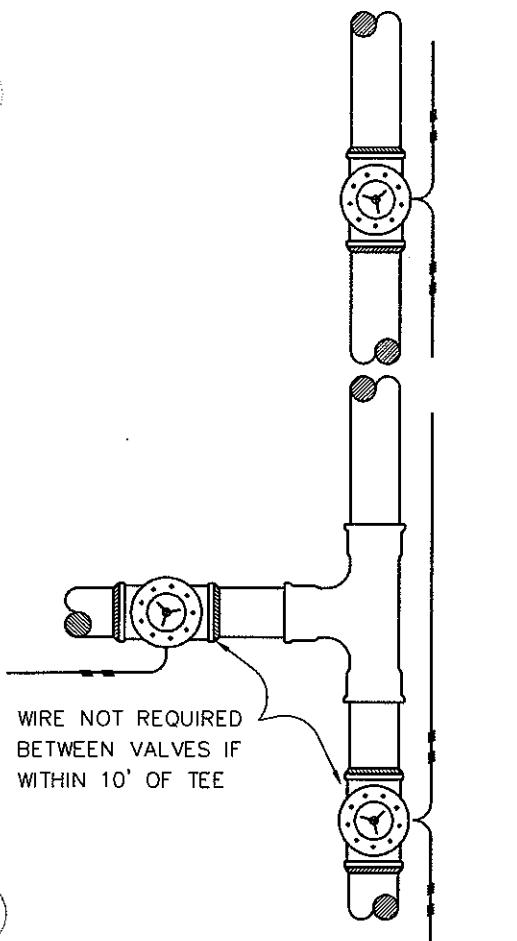
George N. Bault
DIRECTOR OF PUBLIC WORKS

SCALE: NONE

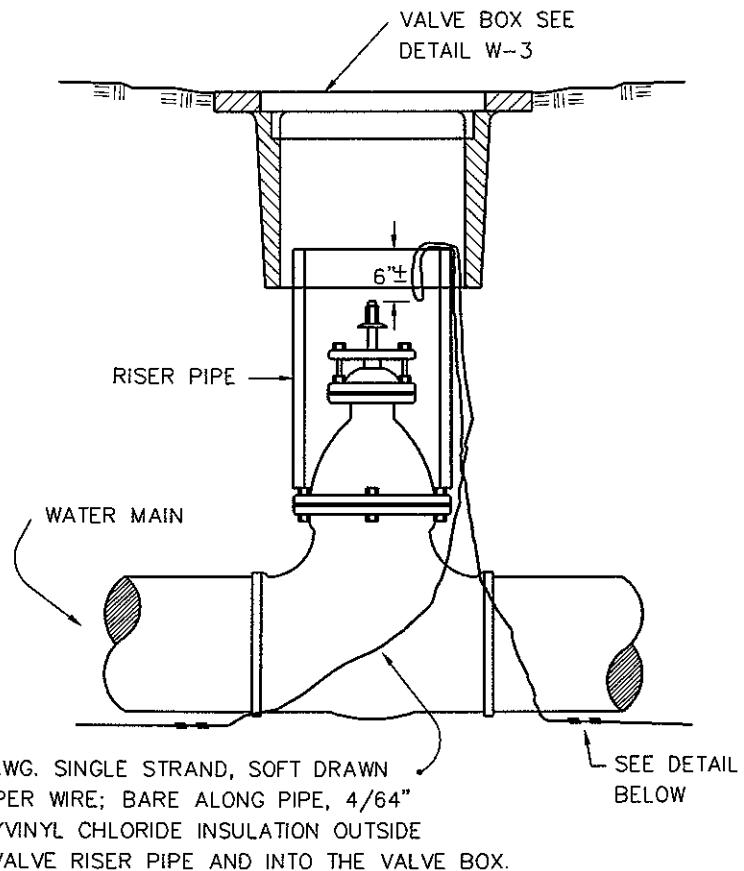
DRN: PSO

DATE: 11/2010

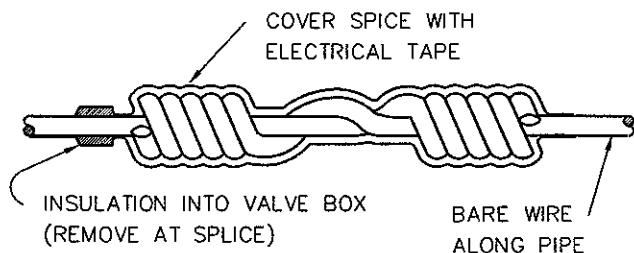
DWG NO. W-3



TYPICAL LAYOUT



VALVE DETAIL

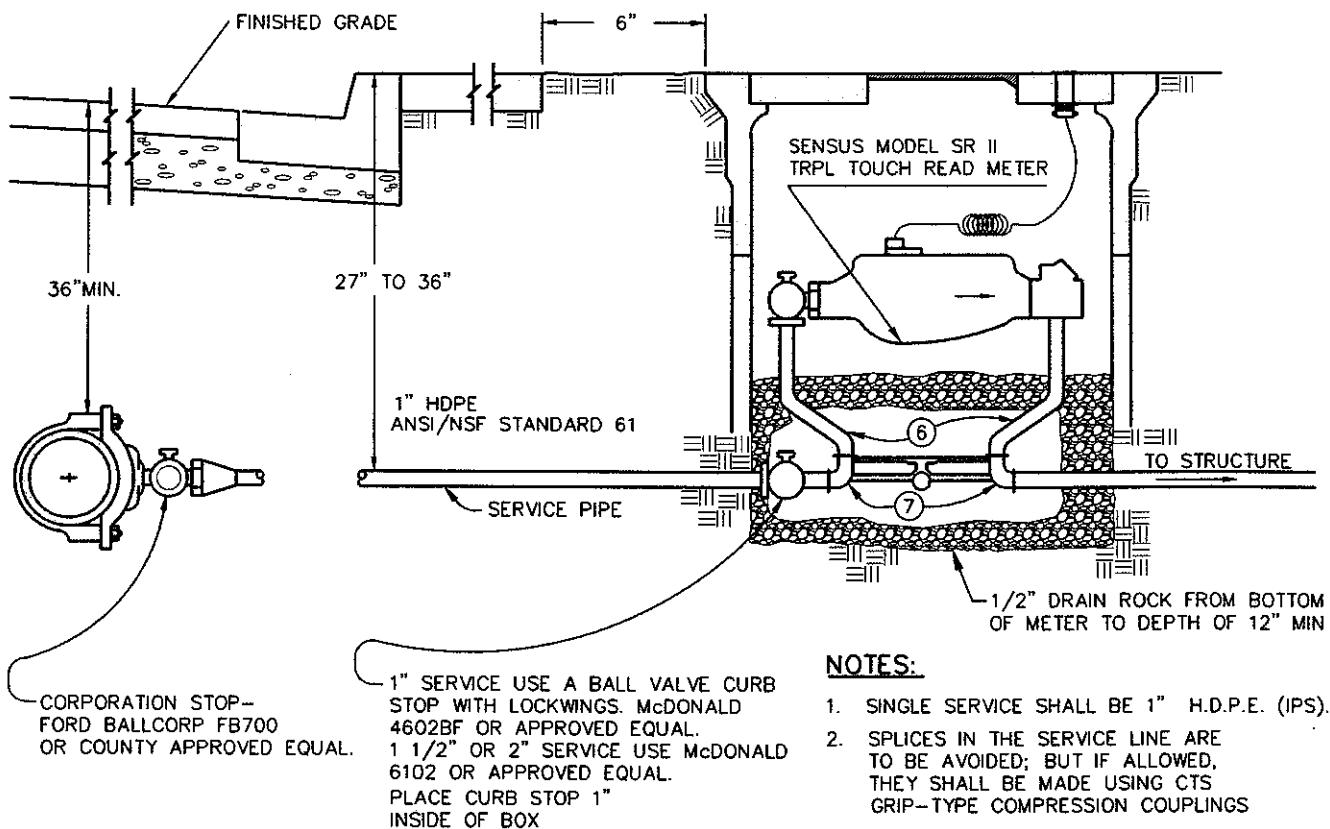


SPLICE DETAIL

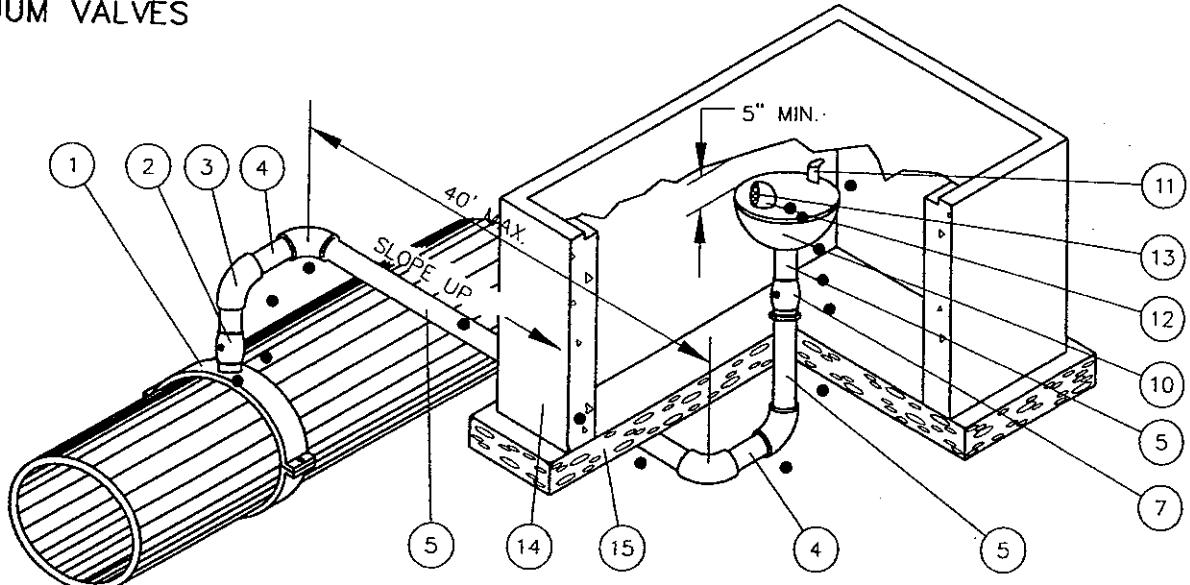
NOTES:

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	
<i>Douglas N. Gault</i> DIRECTOR OF PUBLIC WORKS	
SCALE: NONE DRN: PSO	DATE: 11/2010 DWG NO. W-4



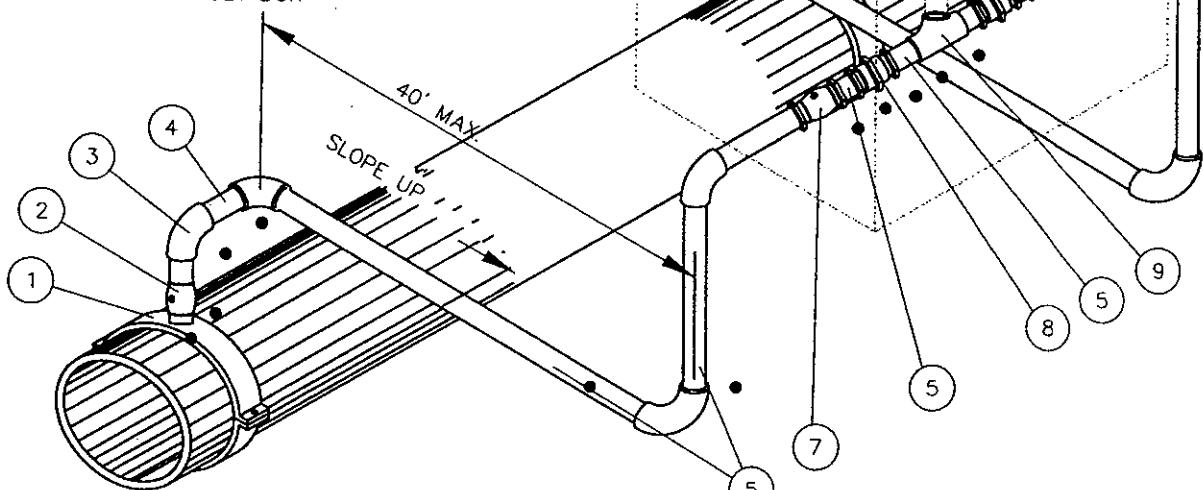
AIR-VACUUM VALVES



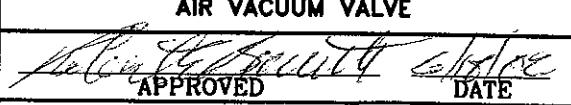
1. SERVICE SADDLE-SMITH BLAIR #313 OR APPR. EQUAL (DBL STRAP FOR D.I. FULL BODY FOR PVC)
2. CORP. STOP-FORD FB 1700
3. 90° ELL
4. NIPPLE
5. GALV. PIPE-RIGID
7. TEFLOM BALL TYPE CURB STOP McDONALD # 6101 OR EQUAL
8. UNION
9. TEE
10. AIR-VACUUM & AIR RELEASE VALVE
11. BIBB W/TEE HANDLE
12. 90° BRASS ST. ELL
13. FINE MESH COPPER SCREEN WIRE AROUND ST. ELL
14. VAULT: 17" X 30"- BROOKS MODEL NO. 66T WITH EXTENSION AS NECESSARY
15. DRAIN ROCK, 5 CU. FT. PER VAULT BOX

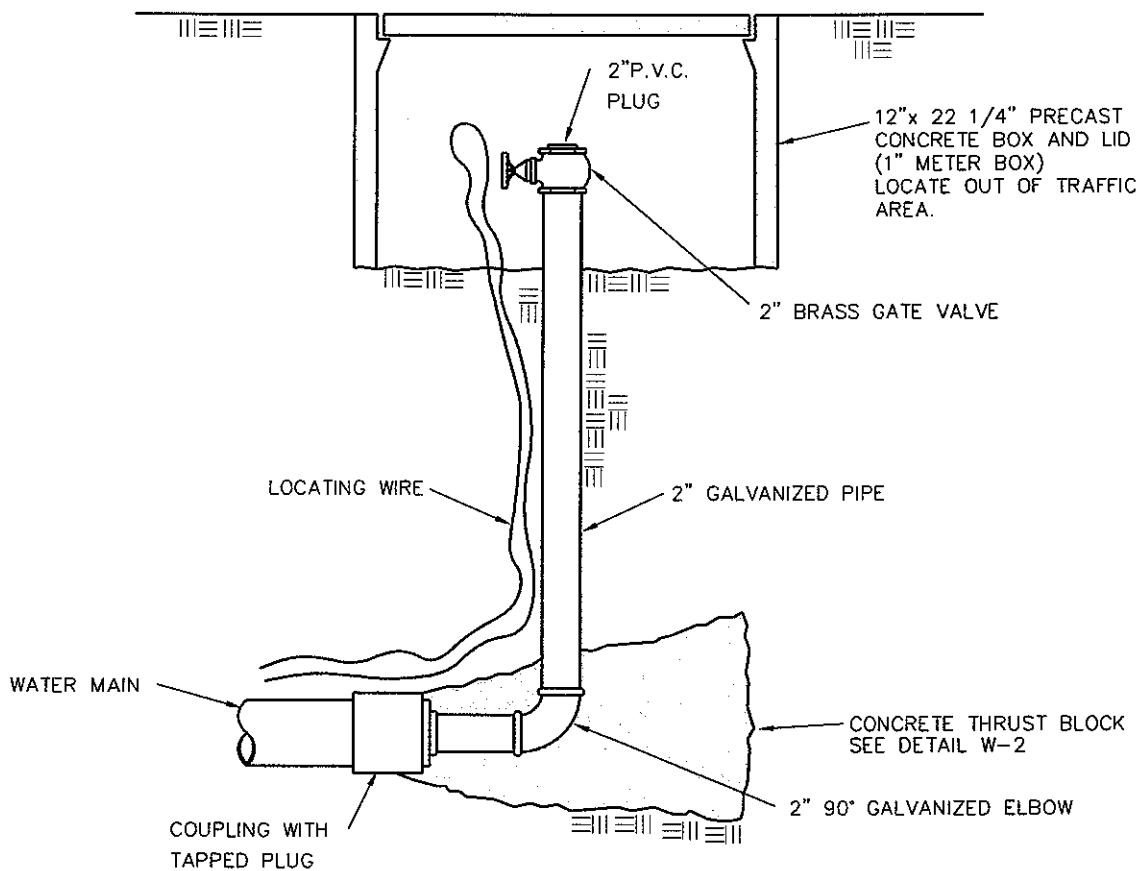
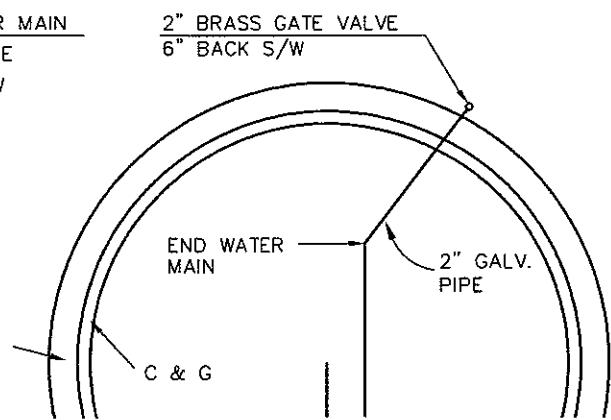
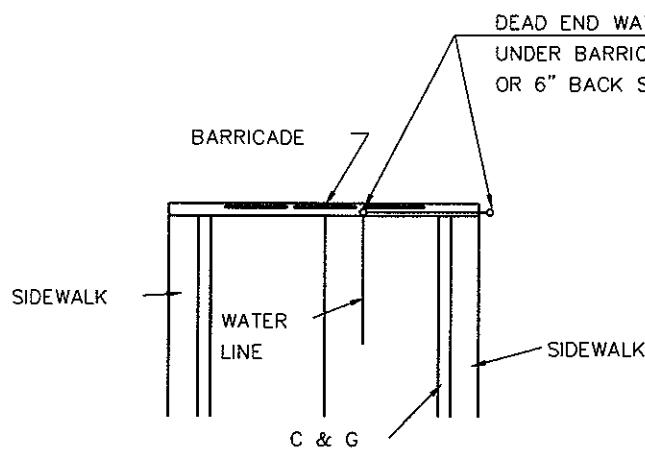
TYPE	AIR-VALVE SIZE	SIZE OF PIPE FITTINGS
A	1"	1"
A	2"	2"
B	1"	2"
B	2"	2"

SINGLE AIR-VACUUM VALVE
TYPE "B"

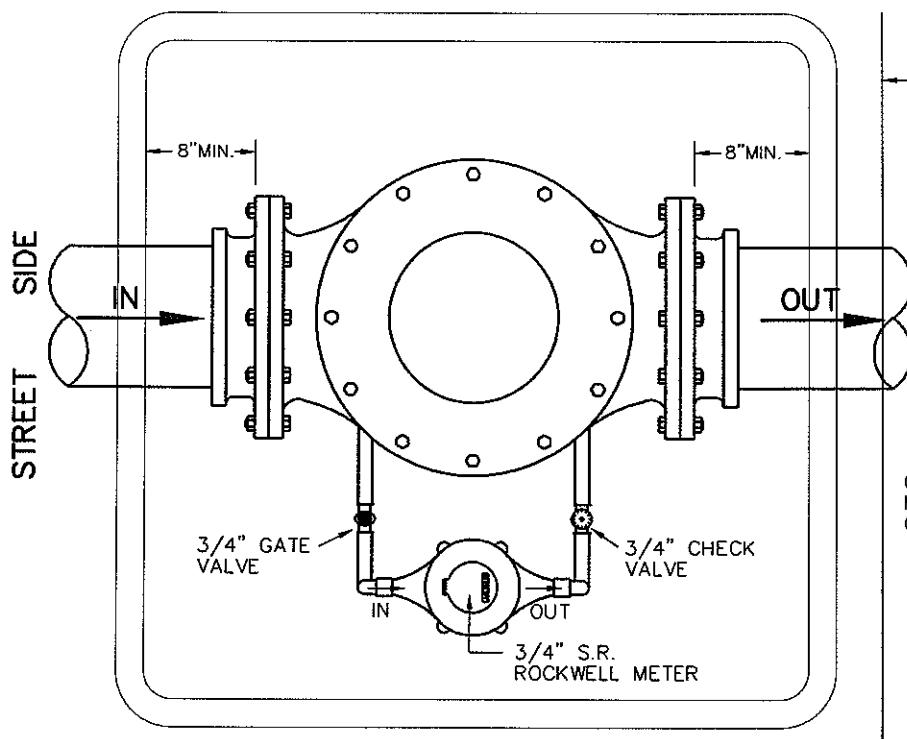


DOUBLE AIR-VACUUM VALVE
TYPE "A"

		COUNTY OF SUTTER		
		AIR VACUUM VALVE		
		 APPROVED		
DATE	REVISIONS	BY	SCALE : NONE DRN : PSO	DWG NO. W-6



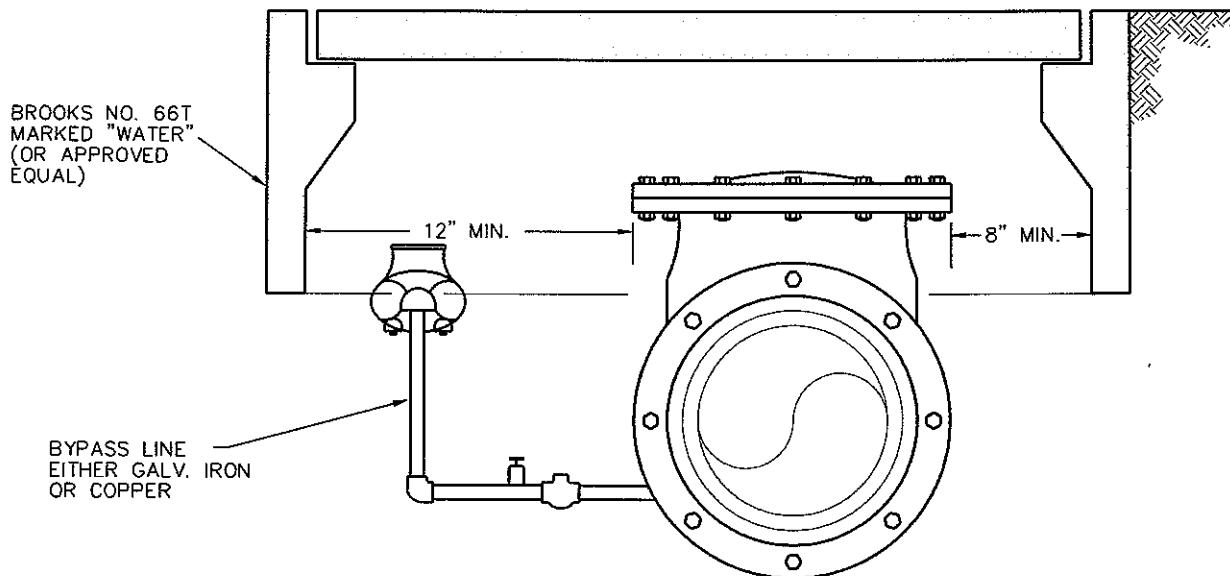
COUNTY OF SUTTER	
BLOW OFF	
<i>Charles N. Vault</i>	
DIRECTOR OF PUBLIC WORKS	
SCALE: NONE DRN: PSO	DATE: 11/2010 DWG NO. W-7



R/W - UNLESS OTHERWISE APPROVED

CHECK VALVE - (SWING TYPE)
MUELLER 2600 OR KENNEDY 106
OR A.W.W.A. APPROVED EQUAL

PLAN VIEW

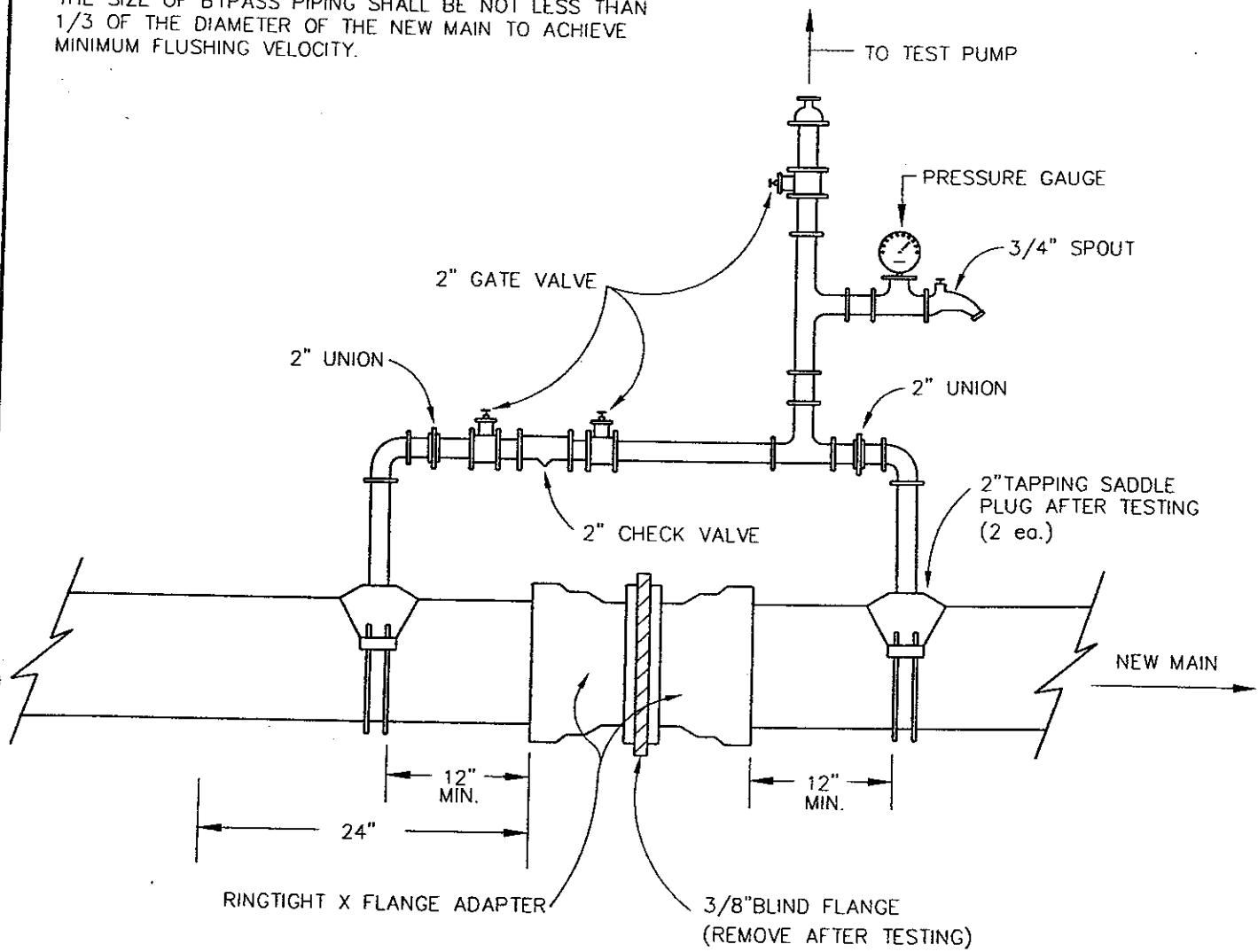


END VIEW

COUNTY OF SUTTER	
FIRE SERVICE CHECK VALVE	
<i>Douglas N. Hault</i> <small>DIRECTOR OF PUBLIC WORKS</small>	
SCALE: NONE	DATE: 11/2010
DRN: PSO	DWG NO. W-8

NOTE:

THE SIZE OF BYPASS PIPING SHOWN IS FOR A 6" MAIN
THE SIZE OF BYPASS PIPING SHALL BE NOT LESS THAN
1/3 OF THE DIAMETER OF THE NEW MAIN TO ACHIEVE
MINIMUM FLUSHING VELOCITY.

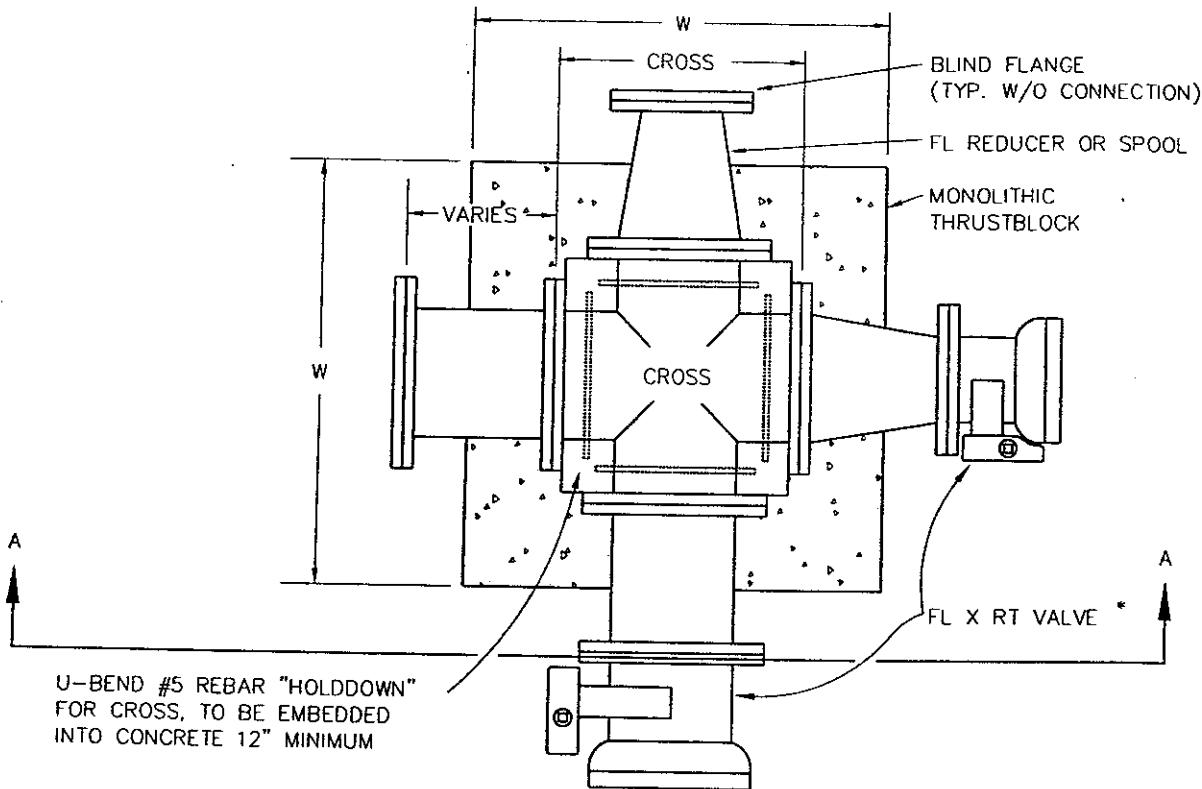


NOTE: ALL MATERIAL INSTALLATION AND
RECONNECTION TO BE FURNISHED BY CONTRACTOR

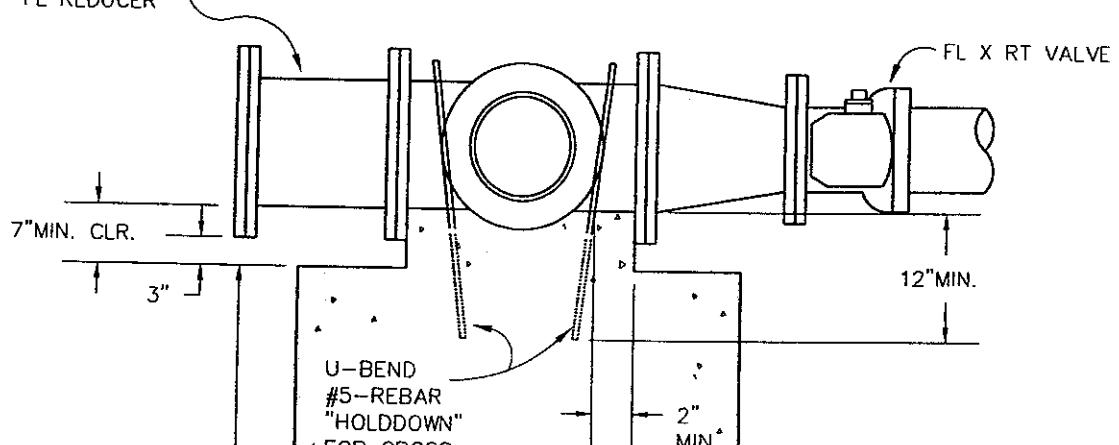
FOR NEW WATER MAIN CONSTRUCTION

DATE	REVISIONS	BY

COUNTY OF SUTTER		
TESTING BLOCK AND BYPASS		
<i>John S. Sutter</i>		APPROVED
		DATE
SCALE : NONE	DRN : PSO	DWG NO. W-9



PLAN

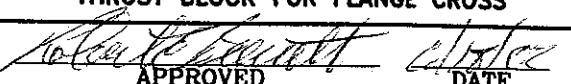


SIZE OF THRUST BLOCK		
SIZE OF CROSS	D	W
16"	4.5'	4.5'
14"	4'	4'
12"	3.5'	3.5'
10"	3'	3'
8"	2'	2.5'
6"	1.5'	2'

SECTION A-A

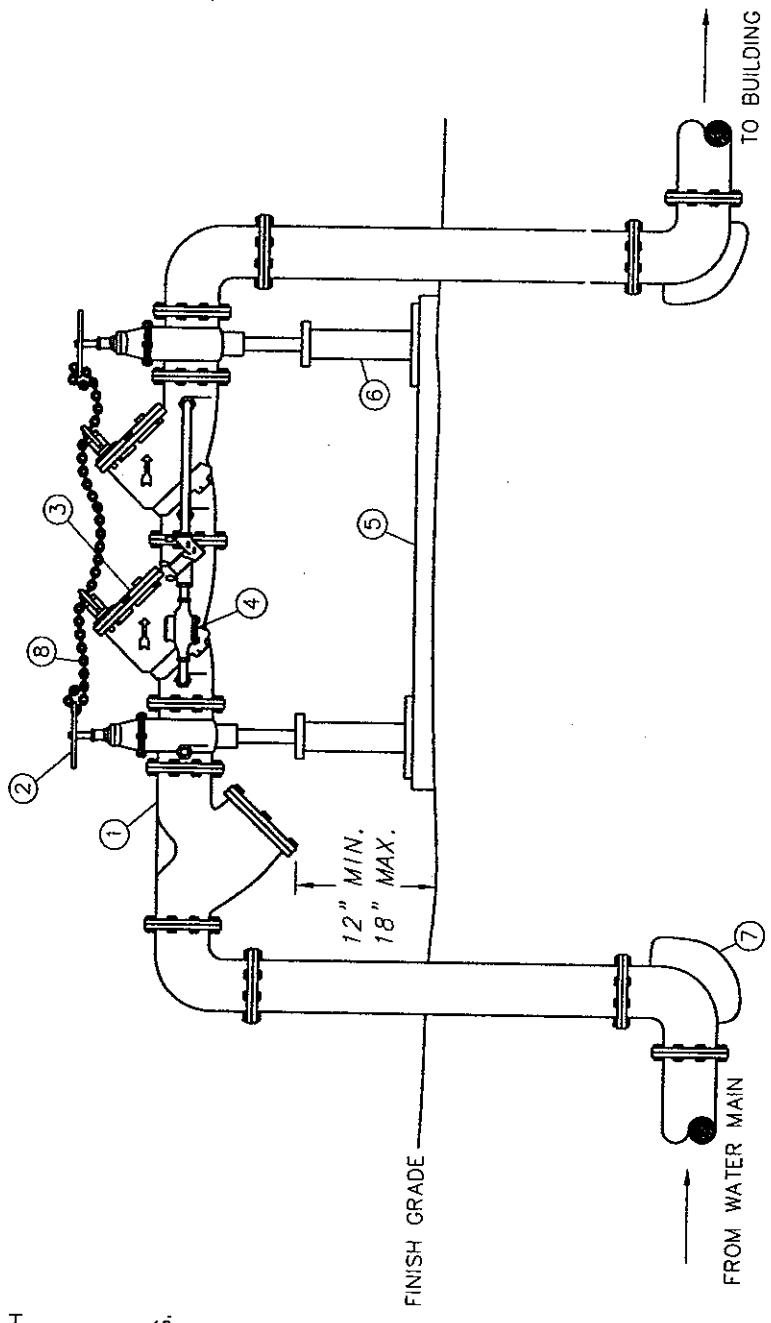
* **NOTE:**

BUTTERFLY VALVES SHALL BE INSTALLED FOR SIZES 12" OR GREATER. GATE VALVES SHALL BE INSTALLED FOR SIZES 10" AND SMALLER

COUNTY OF SUTTER			
THRUST BLOCK FOR FLANGE CROSS			
			
APPROVED			
DATE	REVISIONS	BY	SCALE : NONE DRN : PSO
			DWG NO. W-10

NOTES:

1. NO WATER SHALL BE DRAWN THROUGH THE BACKFLOW DEVICE UNTIL IT HAS BEEN TESTED BY THE COUNTY.
2. THE BACKFLOW DEVICE SHALL BE INSULATED WITH AN APPROVED FREEZE PROTECTION BAG.
3. FITTINGS SHALL BE FLANGE BY FLANGE OR RESTRAINED.
4. BURIED NUTS AND BOLTS SHALL HAVE SAP CAPS.
5. BURIED PIPE AND FITTINGS SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE OR APPROVED EQUAL.
6. PIPE AND FITTINGS SHALL BE DUCTILE IRON.



MATERIALS:

- ① FLANGED "Y" TYPE STRAINER
- ② OS & Y GATE VALVE (TYP.)
- ③ DOUBLE DETECTOR CHECK-ALL DEVICES TO BE APPROVED BY COUNTY
- ④ DETECTOR METER
- ⑤ 4" THICK REINFORCED CONCRETE SLAB (CLASS "B" CONCRETE)
- ⑥ SUPPORTS 2-TYP. SHALL BE BOLTED DOWN WITH A MINIMUM OF TWO BOLTS EACH
- ⑦ THRUST BLOCK (TYP.) DETAIL W-2
- ⑧ 1/4" NON CASE HARDENED CHAIN WITH LOCK BETWEEN VALVES

COUNTY OF SUTTER		ONSITE FIRE PROTECTION AND BACKFLOW ASSEMBLY	
<i>Initials</i>		<i>Initials</i>	
APPROVED		DATE	
SCALE : NONE	DRN : PSO	SCALE : NONE	DRN : DWG NO. W-11
DATE	REVISIONS	BY	