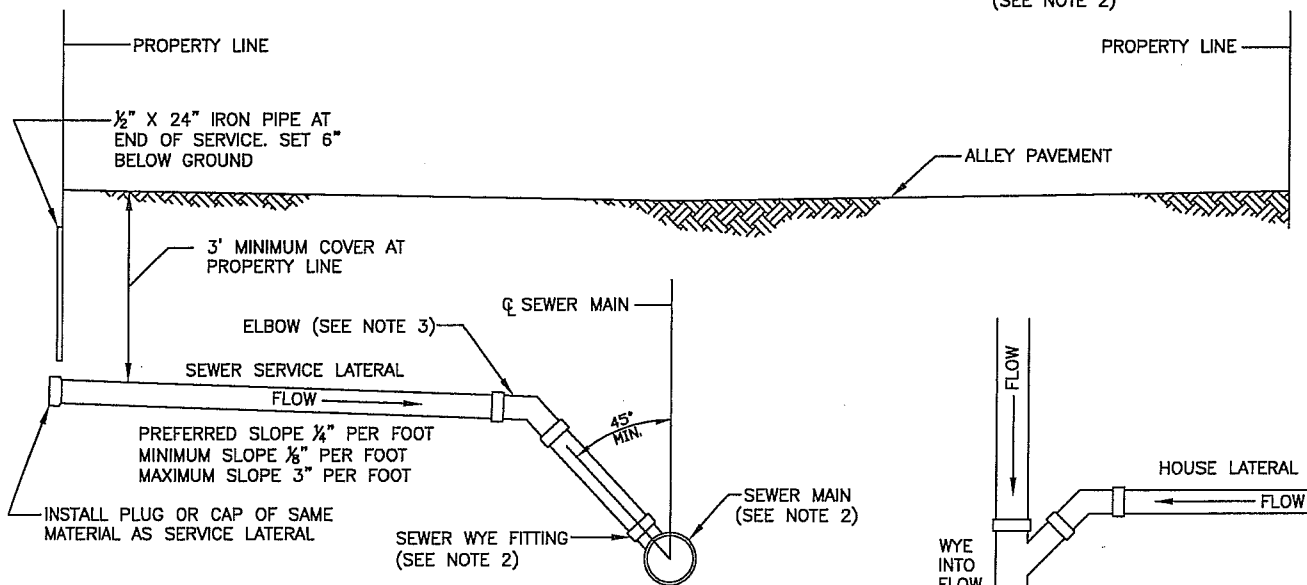


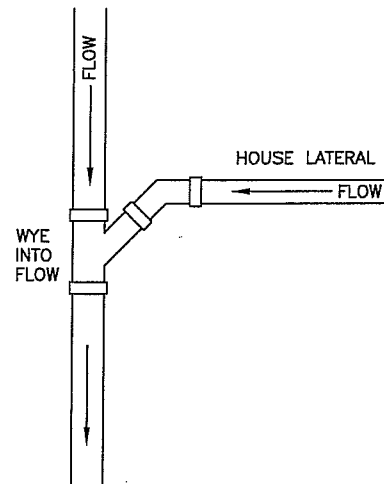
STREET LOCATION

N.T.S.



ALLEY LOCATION

N.T.S.



PLAN VIEW

N.T.S.

NOTES:

1. APPROVED PIPE MATERIALS
P.V.C. - A.S.T.M. D3034-T3PSIG SDR-35
2. FOR EXISTING MAINS, INSTALL WITH DOUBLE STRAP 45° SADDLE AND MATCH EXISTING SEWER MAIN MATERIAL, OR CONSTRUCT AS DIRECTED BY THE ENGINEER. CORE HOLE IN THE MAIN SHALL MATCH SIZE AND SHAPE OF SADDLE WYE. SEE STD. DWG. S-1A.
3. SELECT PRE-MANUFACTURED ELBOW ANGLE TO MATCH FIELD CONDITIONS.



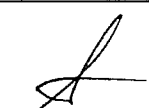



CITY OF CLOVIS

4" & 6" SEWER SERVICE LATERALS

DWG NO.

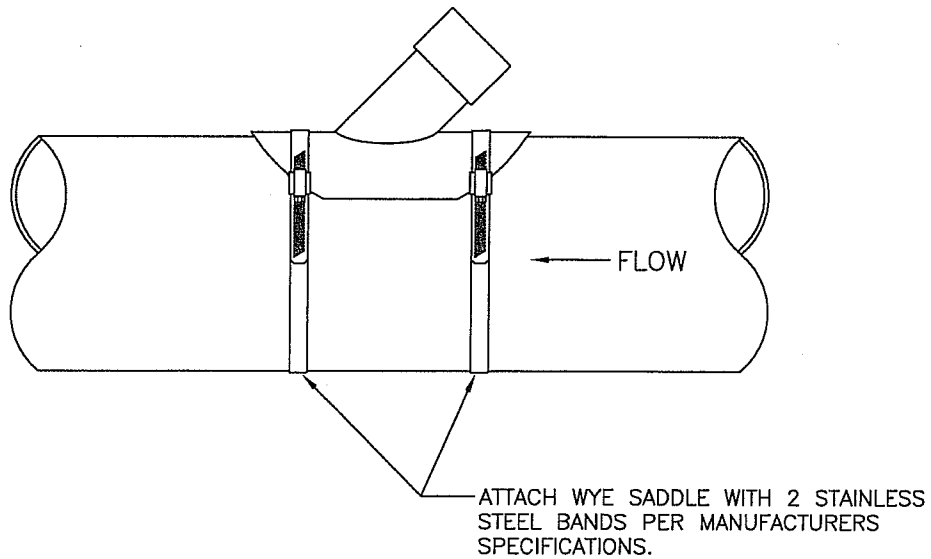
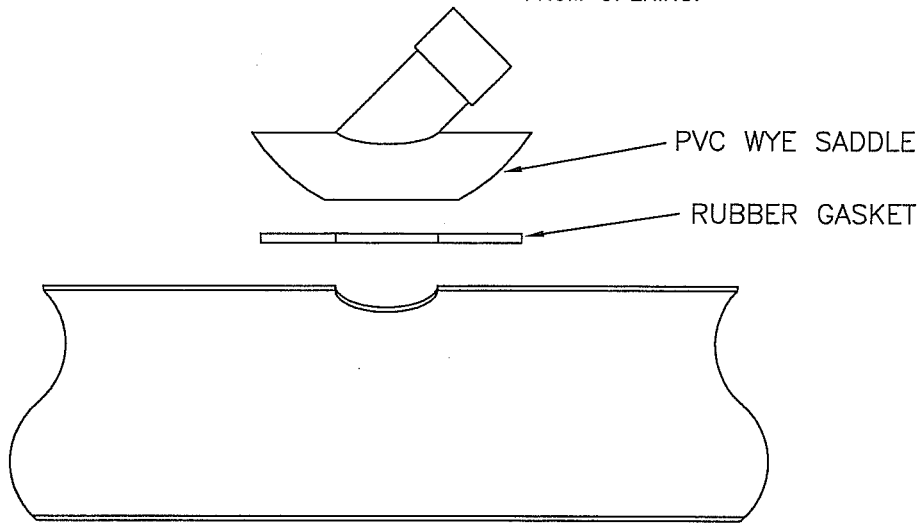
S-1

REF. STD. SPECIFICATIONS SECTION 64

APPROVED BY:	NO.	REVISED	BY	APPROVALS	SCALE: NTS
CITY ENGINEER 	---	03-13-09	BGJ	CM  DRU  PUD 	DRAWN BY: BGJ
	DATE: 6/29/09				SHEET 1 OF 1

NOTE:

USE WYE GASKET TO TRACE SIZE AND SHAPE OF OPENING ONTO PIPE. REMOVE ALL BURRS FROM OPENING.







CITY OF CLOVIS

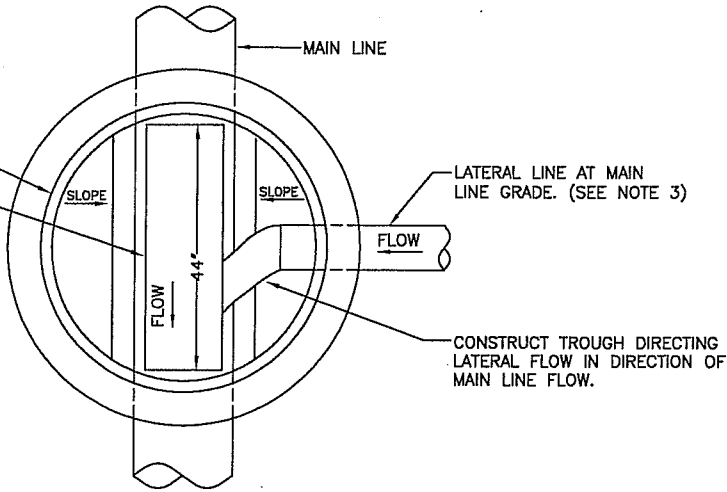
DWG NO.
S-1A

TAPPING SADDLE ASSEMBLY

REF. STD. SPECIFICATIONS
SECTION 64

APPROVED BY:	NO.	REVISED	BY	APPROVALS	SCALE: NTS
CITY ENGINEER 		03-13-09	BGJ	CM  DRU  PUD 	DRAWN BY: BGJ
	DATE: 6/29/09				SHEET 1 OF 1

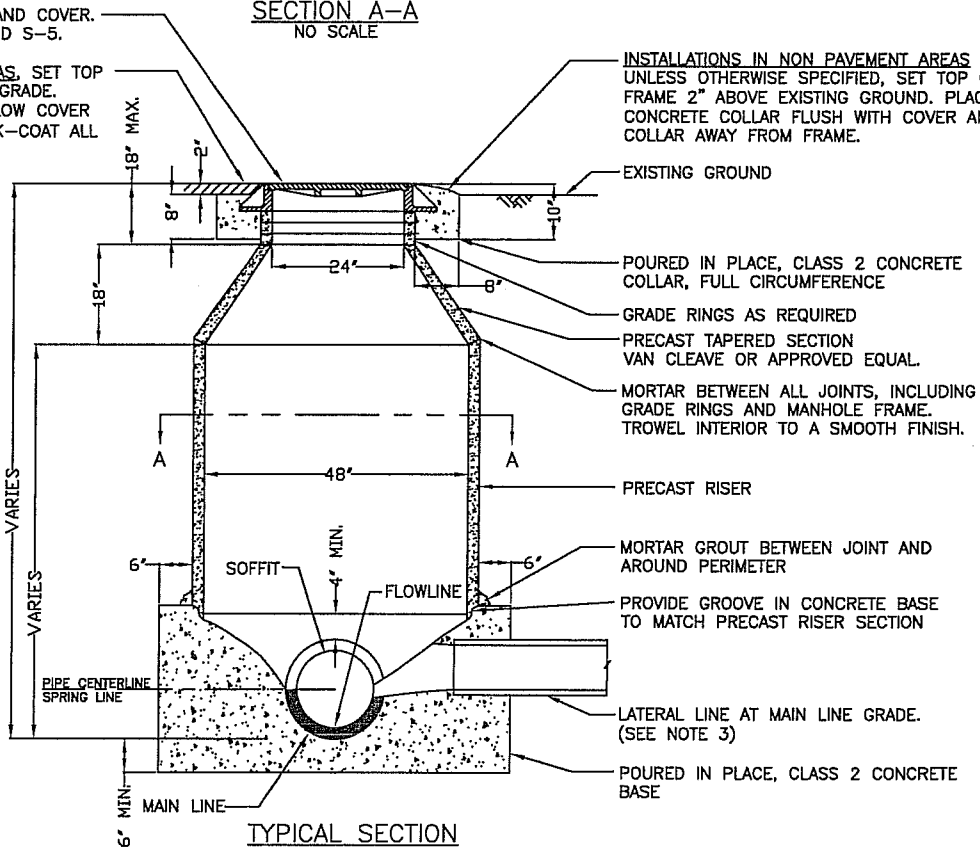
ALL STRAIGHT PIPE TO BE LAID THROUGH MANHOLE WITH TOP HALF REMOVED AND ROUGH EDGES MORTARED SMOOTH. (SEE NOTE 3)



MANHOLE FRAME AND COVER. SEE CITY STANDARD S-5.

INSTALLATIONS IN PAVEMENT AREAS, SET TOP OF FRAME TO FINISH PAVEMENT GRADE. LEAVE CONCRETE COLLAR 2" BELOW COVER AND PLACE 2" TYPE B A.C. TACK-COAT ALL SURFACES PRIOR TO PAVING.

INSTALLATIONS IN NON PAVEMENT AREAS UNLESS OTHERWISE SPECIFIED, SET TOP OF FRAME 2" ABOVE EXISTING GROUND. PLACE CONCRETE COLLAR FLUSH WITH COVER AND SLOPE COLLAR AWAY FROM FRAME.



NOTES:

1. PRECAST PIPE, GRADE RINGS AND TAPERED SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH A.S.T.M. C-478, TYPE II CEMENT.
2. WHEN AN ECCENTRIC TAPERED SECTION IS SPECIFIED, IT SHALL BE SET SUCH THAT THE OPENING IS CENTERED TOWARDS THE DOWNSTREAM SIDE OF THE MAIN LINE PIPE WHENEVER POSSIBLE, UNLESS OTHERWISE SHOWN ON THE PROJECT PLANS.
3. FOR MANHOLES WHERE THE MAIN LINE ANGLES, A FLOW TROUGH ALONG A SMOOTH RADIUS THROUGH THE CONCRETE MANHOLE BASE SHALL BE CONSTRUCTED TO FORM A UNIFORM FLOW SECTION OF THE SAME SHAPE AND SIZE OF THE PIPE BELOW THE SPRING LINE.



CITY OF CLOVIS

DWG NO.

S-2

48" SEWER MANHOLE

REF. STD. SPECIFICATIONS SECTION 64

APPROVED BY:

NO.

REVISED

BY

APPROVALS

SCALE: NTS

CITY ENGINEER

NO.

03-13-09

BGJ

CM

DRU

PUD

DRAWN BY: BGJ

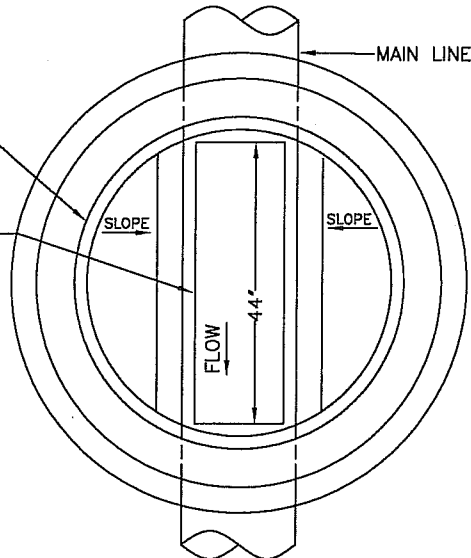
DATE:

6/29/09

SHEET 1 OF 1

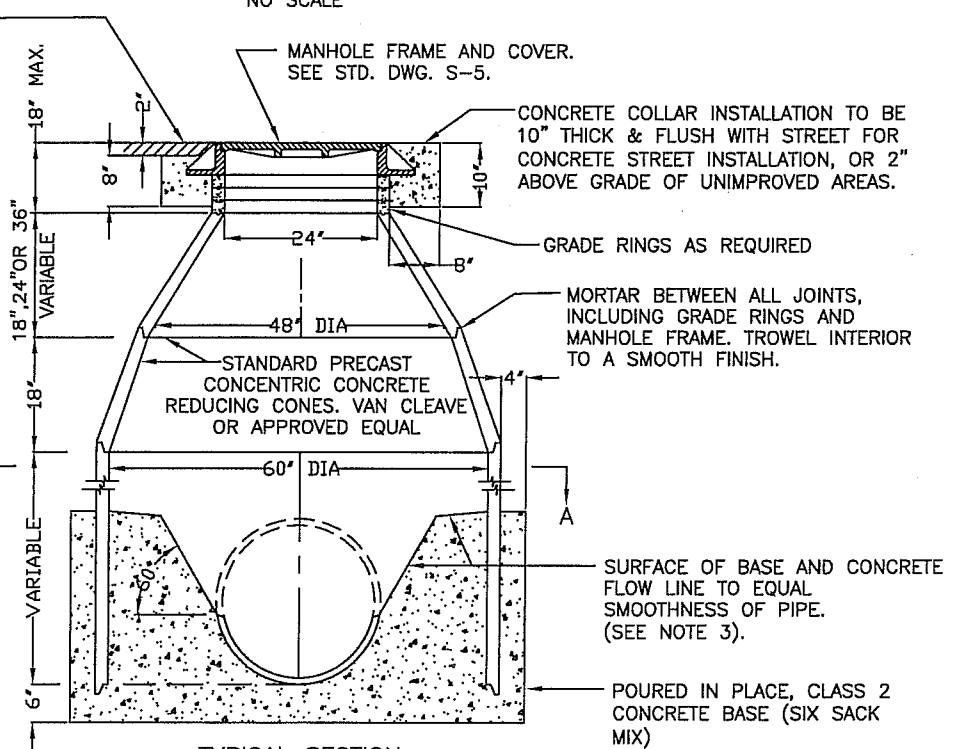
PRECAST RISER SECTION
(SEE NOTE 1)

ALL STRAIGHT PIPE TO BE LAID THROUGH MANHOLE WITH TOP HALF REMOVED AND ROUGH EDGES MORTARED SMOOTH. EXPOSED STEEL REINFORCEMENT TO BE COVERED WITH MORTAR. (SEE NOTE 3)



SECTION A-A
NO SCALE

INSTALLATIONS IN PAVEMENT AREAS, SET TOP OF FRAME TO FINISH PAVEMENT GRADE. LEAVE CONCRETE COLLAR 2" BELOW COVER AND PLACE 2" TYPE B A.C. TACK-COAT TO ALL SURFACES PRIOR TO PAVING.



TYPICAL SECTION
NO SCALE

NOTES:

1. PRECAST PIPE, GRADE RINGS AND TAPERED SECTIONS SHALL COMPLY WITH A.S.T.M. C-478, TYPE II CEMENT.
2. WHEN AN ECCENTRIC TAPERED SECTION IS SPECIFIED, IT SHALL BE SET SUCH THAT THE OPENING IS CENTERED TOWARDS THE DOWNSTREAM SIDE OF THE MAIN LINE PIPE WHENEVER POSSIBLE, UNLESS OTHERWISE SHOWN ON THE PROJECT PLANS.
3. FOR MANHOLES WHERE THE MAIN LINE ANGLES, A FLOW TROUGH, ALONG A SMOOTH RADIUS THROUGH THE CONCRETE MANHOLE BASE, SHALL BE CONSTRUCTED TO FORM A UNIFORM FLOW SECTION OF THE SAME SHAPE AND SIZE OF THE PIPE BELOW THE SPRING LINE.



CITY OF CLOVIS

DWG. NO.

S-3

60" SEWER MANHOLE

REF. STD. SPECIFICATIONS
SECTION 64

(TYPICALLY USE ONLY FOR INTERSECTING SEWERS 21" OR LARGER)

APPROVED BY:

CITY ENGINEER

DATE:

6/29/09

NO.

REVISED

BY

APPROVALS

03-13-09

BGJ

CM

DRU

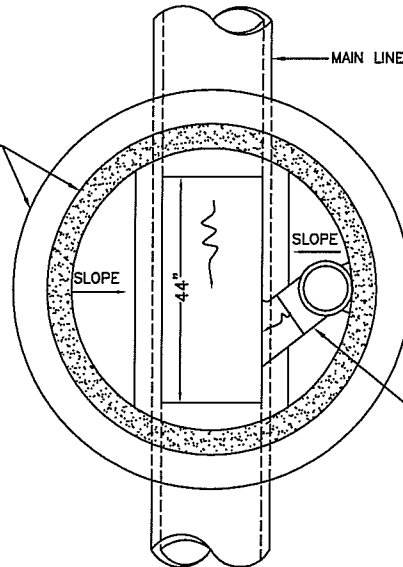
PUD

SCALE: NTS

DRAWN BY: BGJ

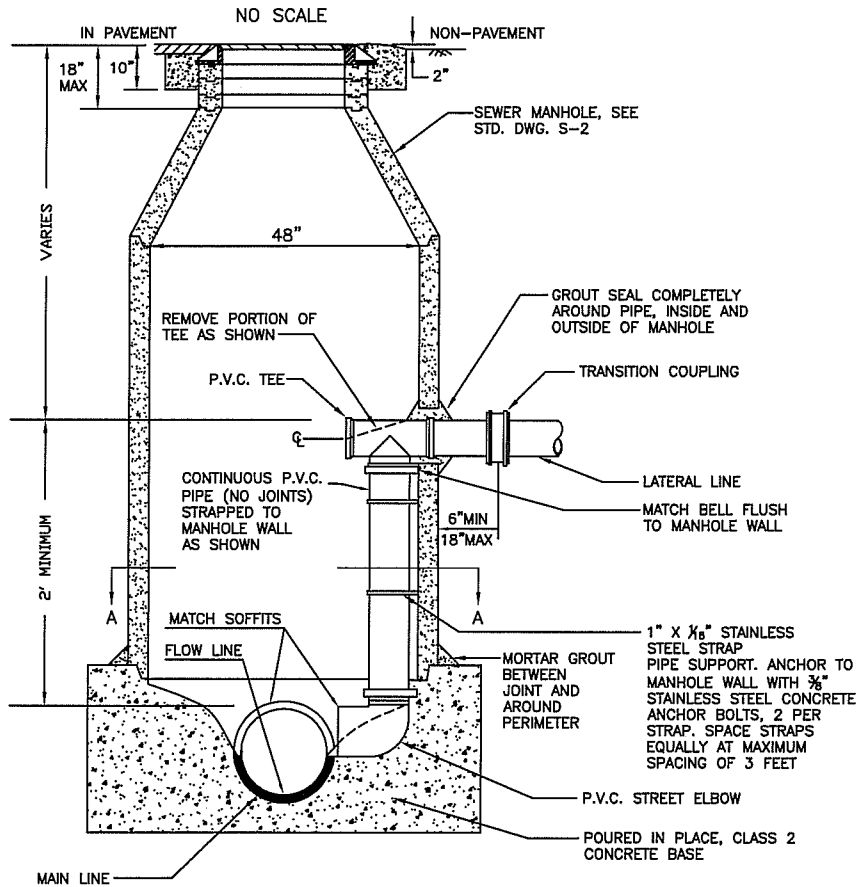
SHEET 1 OF 1

SEWER MANHOLE BASE AND RISER. SEE CITY STANDARD S-2 AND NOTE 1.



ROTATE 90° STREET ELBOW SO IT ENTERS MAIN LINE AT 45° ANGLE AS SHOWN.

SECTION A-A



TYPICAL SECTION

NOTES

1. MANHOLE SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY STANDARD DRAWING S-2.
2. A DROP MANHOLE SHALL BE USED WHENEVER THE DIFFERENCE BETWEEN THE SOFFIT OF THE MAIN LINE AND THE SOFFIT OF THE LATERAL LINE IS TWO FEET OR GREATER.
3. ALL DROP PIPE MATERIALS SHALL BE A MINIMUM OF 8" PVC ASTM D3034-73 PSIG, SDR-35 OR LARGER TO MATCH LATERAL SIZE.
4. DROP MANHOLES ARE TO BE ALLOWED ONLY UPON SPECIAL AUTHORIZATION OF THE CITY ENGINEER.



CITY OF CLOVIS

DWG NO. S-4

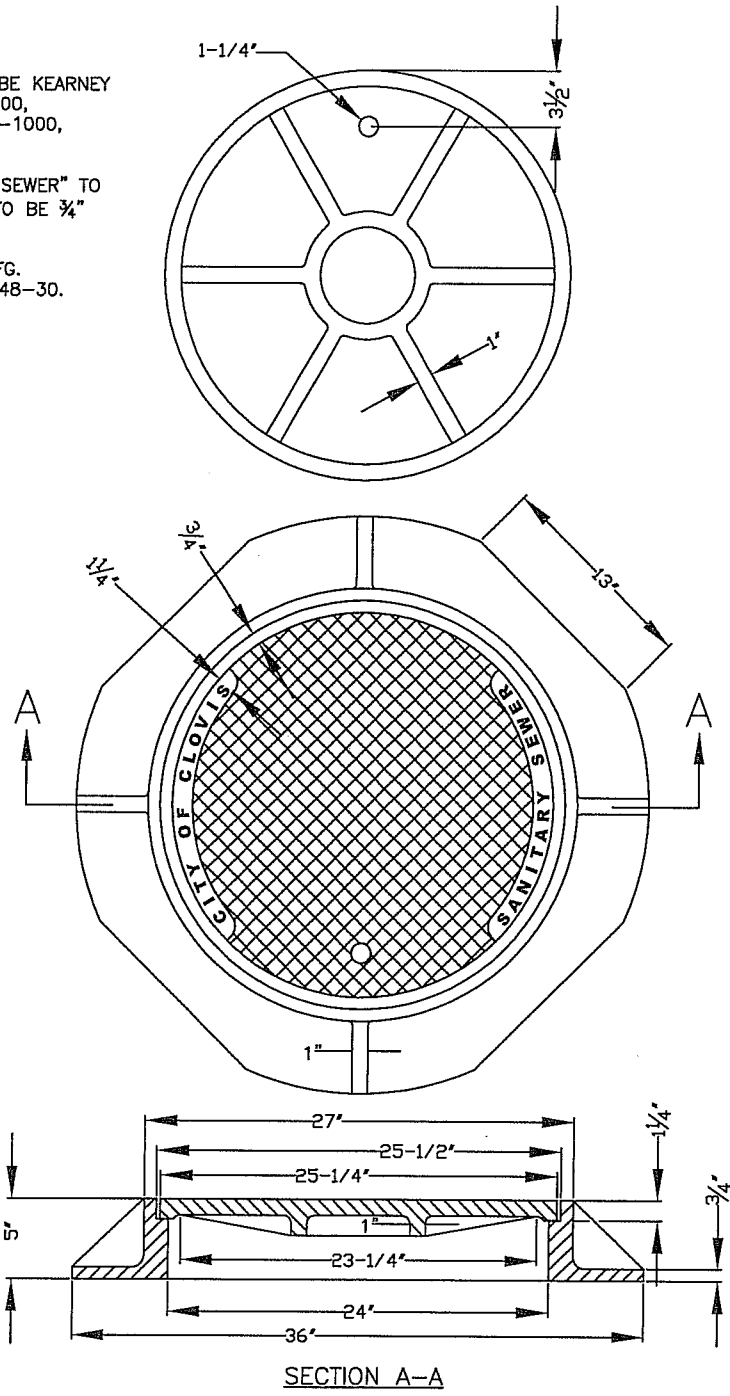
INSIDE DROP MANHOLE

REF. STD. SPECIFICATIONS SECTION 64

APPROVED BY:	NO.	REVISED	BY	APPROVALS	SCALE: NTS
CITY ENGINEER		03-13-09	BGJ	CM DRU PUD	DRAWN BY: BGJ
		01-30-14	PAA		
DATE:					SHEET 1 OF 1

NOTES:

1. FRAME AND COVER SHALL BE KEARNEY
FOUNDRY PART NO. KP-1000,
D&L FOUNDRY PART NO. A-1000,
OR APPROVED EQUAL.
2. "CITY OF CLOVIS SANITARY SEWER" TO
APPEAR ON LID. LETTERS TO BE 3/4"
HIGH.
3. ALL MATERIALS USED IN MFG.
SHALL CONFORM TO ASTM 48-30.



CITY OF CLOVIS

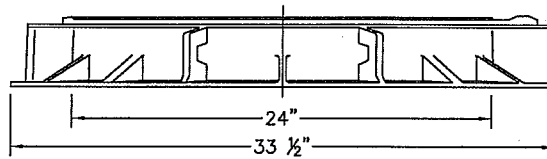
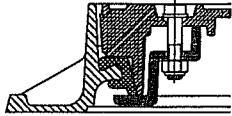
DWG NO.
S-5

SEWER MANHOLE FRAME AND COVER

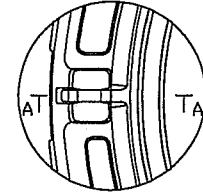
REF. STD. SPECIFICATIONS
SECTION 64

APPROVED BY: CITY ENGINEER DATE: 6/29/09	NO.	REVISED	BY	APPROVALS	SCALE: NTS
		03-04-09	BGJ	CM <i>see</i> DRU <i>MA</i> PUD <i>AK</i>	DRAWN BY: BGJ
					SHEET 1 OF 1

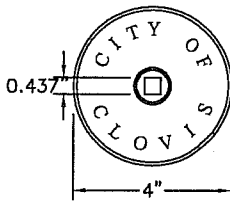
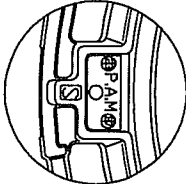
LOCKING MECHANISM



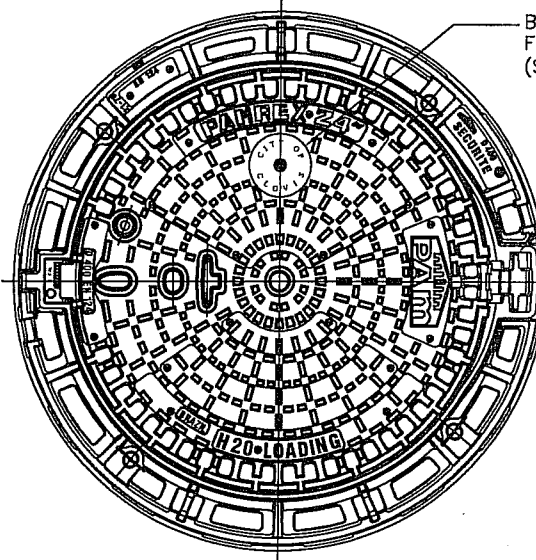
DETAIL A: LIFTING HOLES



FRAME MARKING



BADGE DETAIL TOP VIEW

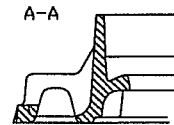


BADGE TO BE INSTALLED DURING FINAL COMPLETION (SEE BADGE DETAIL)

COVER HINGE

NOTCH COLLAR OR GRADE RING BELOW HINGE SWEEP

← DIRECTION OF TRAFFIC



NOTES:

1. MANHOLE COVER AND FRAME SHALL BE CALLED PAMREX RETRO OR APPROVED EQUAL.
2. COVER AND FRAME SHALL BE MANUFACTURED FROM DUCTILE IRON.
3. COVERS SHALL BE HINGED AND INCORPORATE A 90-DEGREE BLOCKING SYSTEM TO PREVENT ACCIDENTAL CLOSURE AND COMPLETE WITH HINGE INFILTRATION PLUG.
4. COVERS SHALL INCLUDE A 4" DIAMETER RECESS WITH 3/8" DIAMETER BOLT KNOCK-OUT THAT IS COMPATIBLE WITH 4" ALMETEK STAINLESS STEEL MARKERS.
5. COVERS SHALL BE COMPATIBLE WITH THE PL-101, AND THE PL101-EX STAINLESS STEEL MANHOLE LOCKING SYSTEM AS MANUFACTURED BY CERTAINTEED CORPORATION.
6. COVERS SHALL BE ONE MAN OPERABLE USING STANDARD HAND TOOLS, AND THE OT-104 & OTL-103 OPENING TOOLS AS MANUFACTURED BY TITUS CERTAINTEED CORPORATION.
7. COVERS SHALL BE CAPABLE OF WITHSTANDING A 120,000 LB. TEST LOAD.
8. FRAMES SHALL BE CIRCULAR AND SHALL INCORPORATE A SEATING RING, A DUAL WIPER INFILTRATION PLUG, AND BE AVAILABLE IN A 24 INCH CLEAR OPENING. THE FRAME DEPTH SHALL NOT EXCEED 4 INCHES, AND THE FLANGE SHALL INCORPORATE BEDDING SLOTS AND BOLT HOLES.
9. ALL COMPONENTS SHALL BE BLACK COATED.



CITY OF CLOVIS

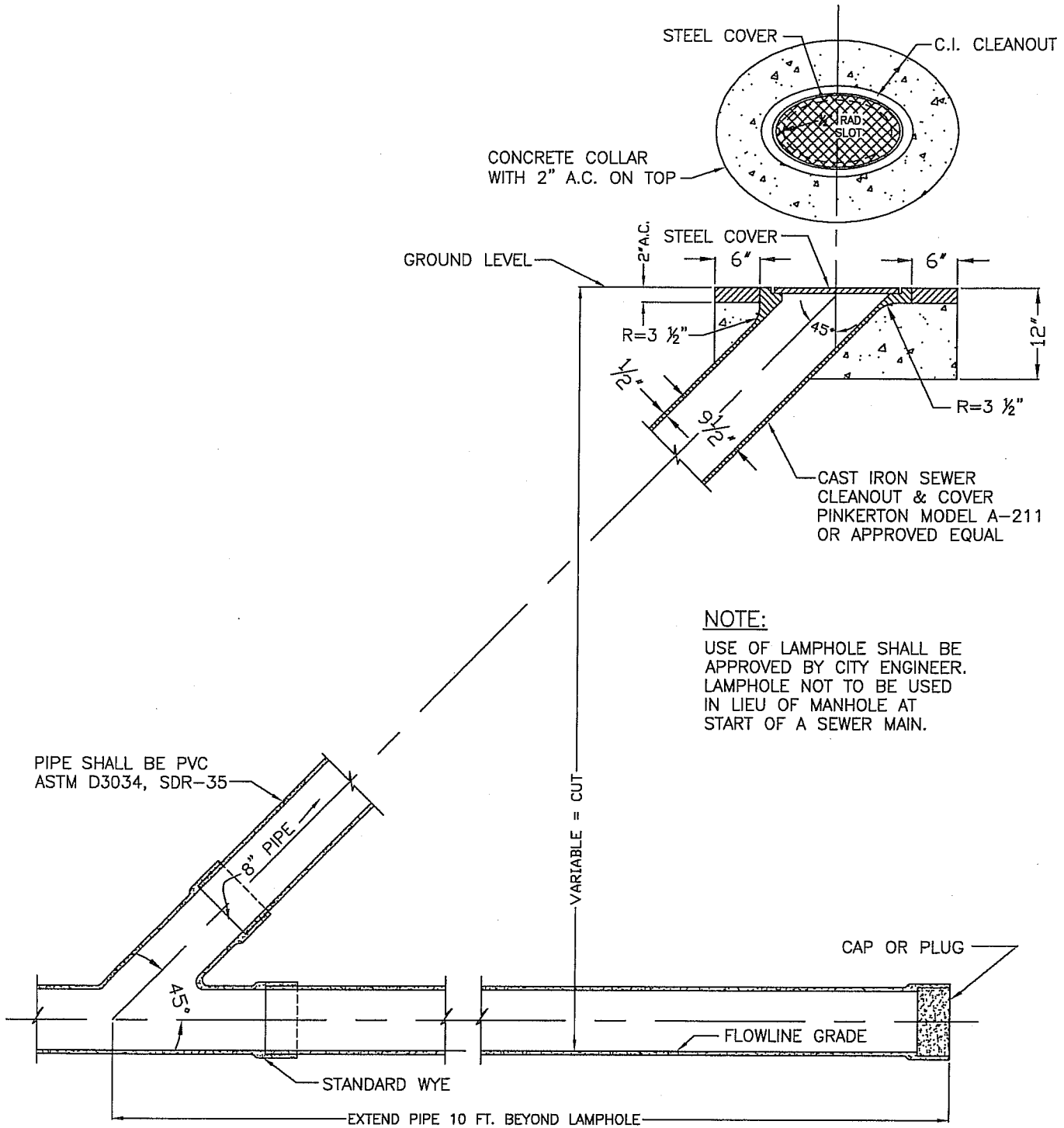
DWG NO.

S-6

LOCKING 24 INCH MANHOLE COVER AND FRAME

REF. STD. SPECIFICATIONS SECTION 64

APPROVED BY:	NO.	REVISED	BY	APPROVALS	SCALE: NTS
CITY ENGINEER DATE: 6/29/09		03-13-09	BGJ	CM <i>[Signature]</i> DRU <i>[Signature]</i> PUD <i>[Signature]</i>	DRAWN BY: BGJ
					SHEET 1 OF 1



CITY OF CLOVIS

DWG NO.

S-7

SEWER LAMPHOLE

REF. STD. SPECIFICATIONS SECTION 64

APPROVED BY:

CITY ENGINEER

DATE:

[Signature]
4/29/09

NO.

REVISED

BY

APPROVALS

03-04-09

BGJ

CM

DRU

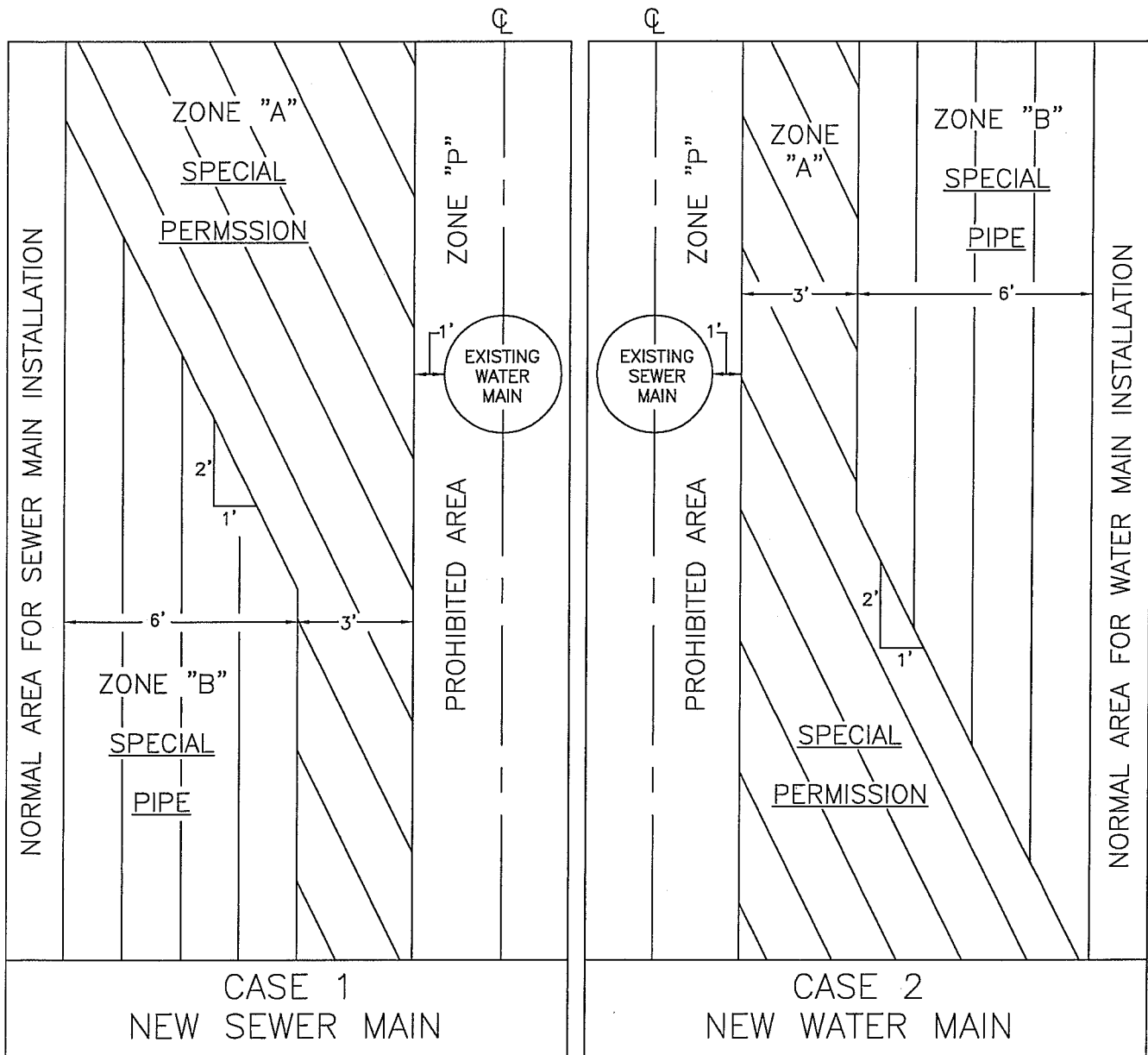
PUD

[Signatures]

SCALE: NTS

DRAWN BY: BGJ

SHEET 1 OF 1



NOTE:

1. ZONES IDENTICAL ON EITHER SIDE OF CENTER LINES.
2. ZONES "P" ARE PROHIBITED ZONES, NO VARIANCES OR SPECIAL CASES.
3. ZONES A & B ARE TO BE USED ONLY WHEN 10' MINIMUM SEPARATION CANNOT BE ATTAINED.



CITY OF CLOVIS

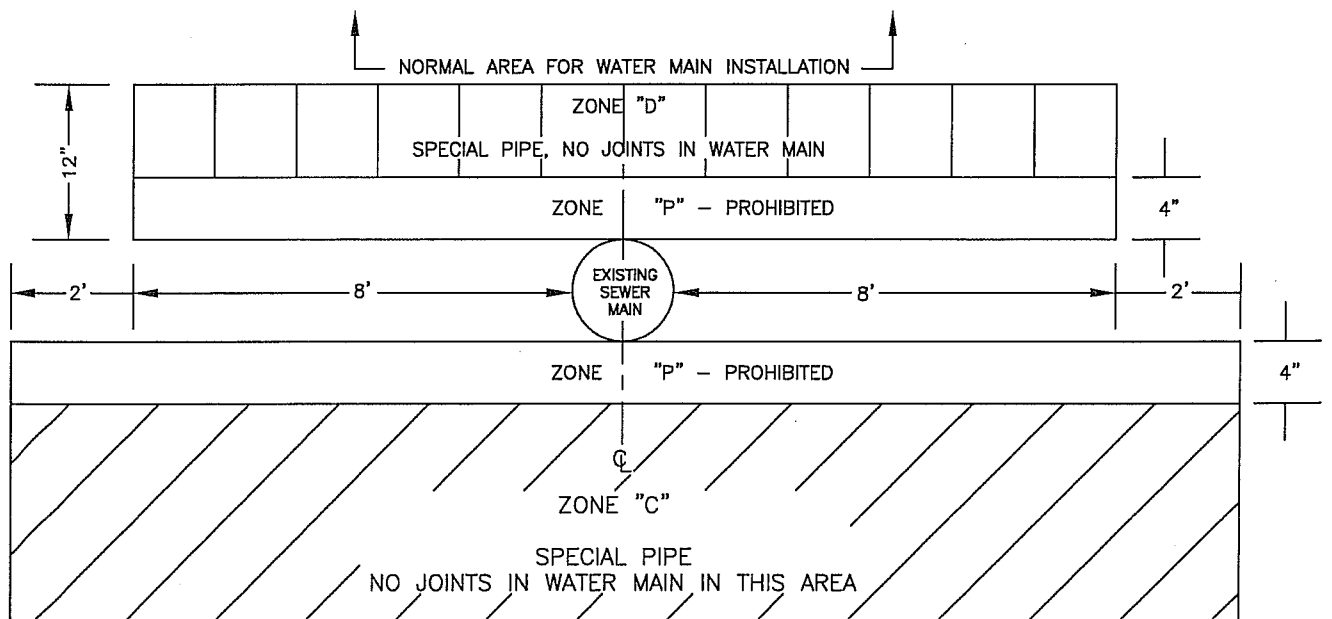
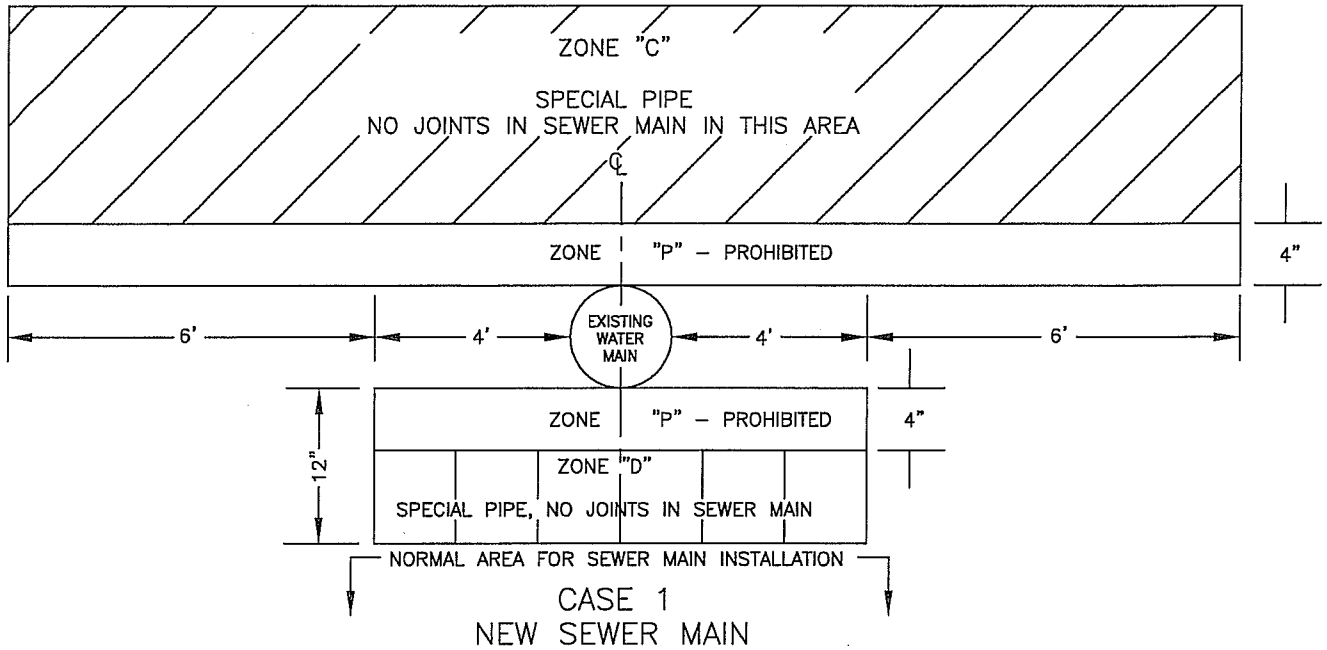
DWG NO.

S-8

SEWER AND WATER MAIN PARALLEL CONSTRUCTION SEPARATION

REF. STD. SPECIFICATIONS
SECTION 64

APPROVED BY:	NO.	REVISED	BY	APPROVALS	SCALE: NTS
CITY ENGINEER		03-13-09	BGJ	CM JEL DRU MAL PUD [Signature]	DRAWN BY: BGJ
	DATE: 1/20/10				SHEET 1 OF 1



NOTES:

1. ZONES "P" ARE PROHIBITED ZONES, NO VARIANCES OR SPECIAL CASES.
2. A NEW WATER MAIN CROSSING A PIPE CARRYING NOT-POTABLE FLUIDS SHALL BE CONSTRUCTED NO LESS THAN 45 DEGREES TO THE PIPE BEING CROSSED.



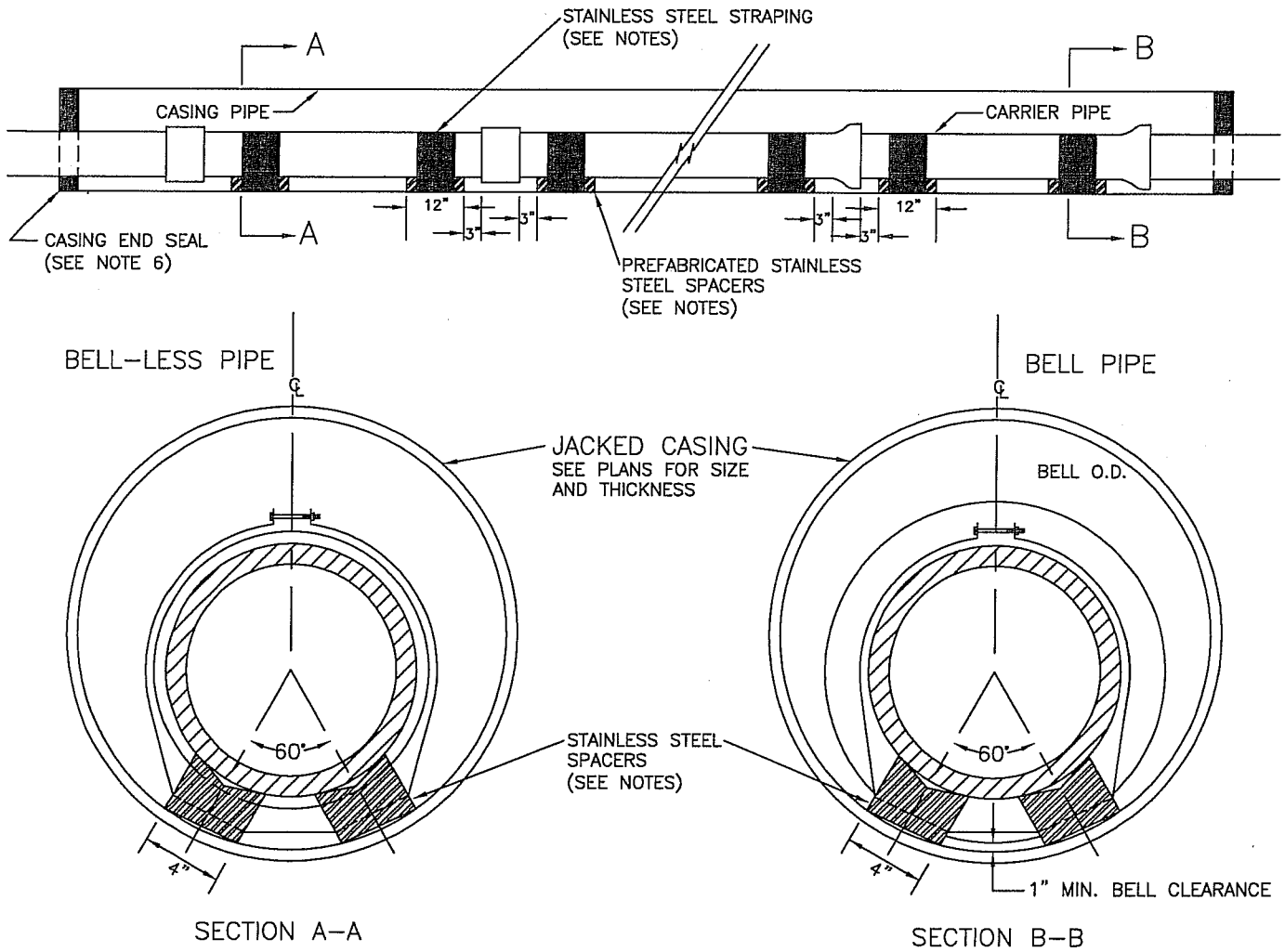
CITY OF CLOVIS

DWG NO.
S-9

SEWER AND WATER MAIN CROSSING CONSTRUCTION SEPARATION

REF. STD. SPECIFICATIONS
SECTION 64

APPROVED BY: CITY ENGINEER <i>[Signature]</i> DATE: 6/29/09	NO. _____ _____ _____	REVISED 03-13-09 _____ _____	BY BGY _____ _____	APPROVALS CM <i>[Signature]</i> DRU <i>[Signature]</i> PUD <i>[Signature]</i>	SCALE: NTS DRAWN BY: BGY SHEET 1 OF 1
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NOTES:

1. CASING PIPE SHALL BE BUTT WELDED SHEETS, ASTM A-570 COMMERCIAL GRADE OR BUTT WELDED PLATES, ASTM A-283. SIZE AND STRENGTH AS SHOWN ON PLANS.
2. CASING SPACERS SHALL BE PREFABRICATED STAINLESS STEEL DESIGNED & MFG. BY PIPELINE SEAL & INSULATOR, INC., HOUSTON, TX., OR APPROVED EQUAL. FOR CARRIER PIPES 24" DIAM. OR LESS, USE PSI MODEL S8G-2; GREATER THAN 24" USE PSI MODEL S12G-2.
3. CASING SPACERS SHALL BE SPECIFICALLY DESIGNED AND FABRICATED FOR THE SPECIFIC PROJECT, AND ELECTRICALLY ISOLATE CARRIER PIPE FROM CASING PIPE.
4. SPACER BANDS SHALL BE 304 STAINLESS STEEL, 8" WIDE FOR PIPES 24" DIAM. OR LESS, AND 12" WIDE FOR PIPES LESS THAN 42" DIAM.
5. SPACER BANDS SHALL BE 3 OR MORE SEGMENT, 12 GA. BANDS TO BE FITTED WITH FLEXIBLE PVC LINER ON INNER SURFACE OF BAND; LINER TO BE 0.09" THICK, HARDNESS OF 85-90 (ASTM D2240, DUROMETER "A"), DIELECTRIC STRENGTH NOT LESS THAN 58,000 VOLTS (ASTM D149). HARDWARE TO BE STAINLESS STEEL.
6. CASING ENDS SHALL BE SEALED WITH PIPELINE SEAL & INSULATOR, INC. MODEL "C" OR MODEL "S", OR APPROVED EQUAL. CONCRETE SHALL NOT BE USED UNLESS SPECIFICALLY APPROVED BY THE CITY ENGINEER OR IS SHOWN ON THE PLANS.







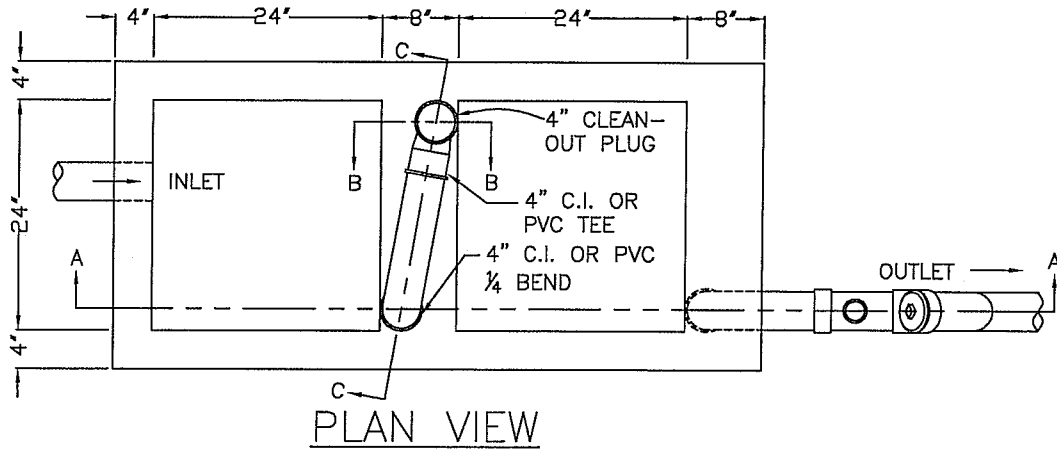
CITY OF CLOVIS

DWG NO.
S-10

INSTALLATION OF CARRIER PIPE IN JACKED STEEL CASING

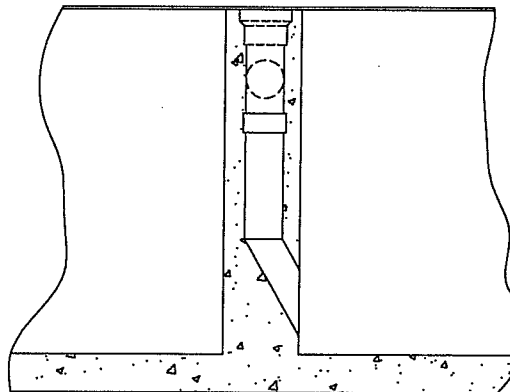
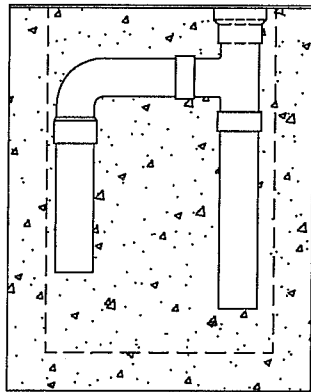
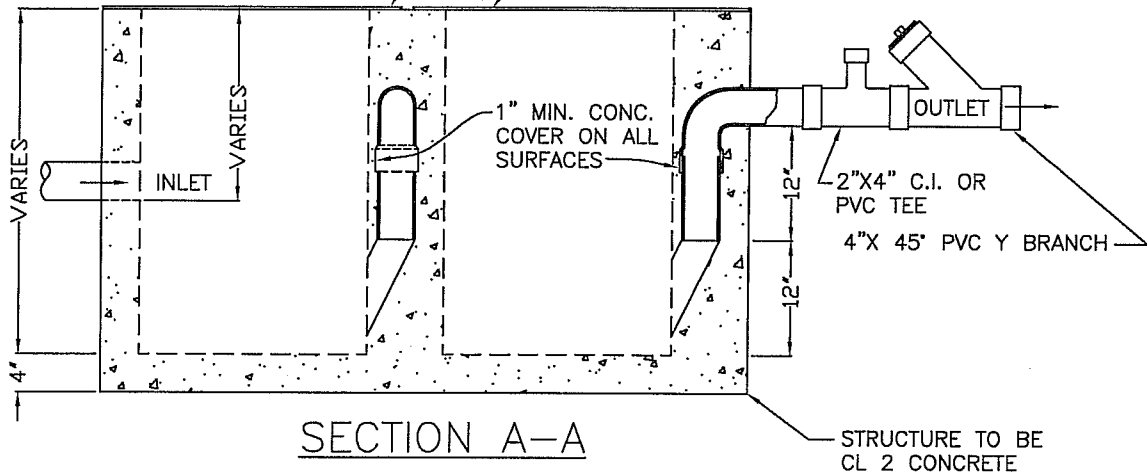
REF. STD. SPECIFICATIONS
SECTION 68

APPROVED BY:	NO.	REVISED	BY	APPROVALS	SCALE: NTS
CITY ENGINEER 		03-04-09	BGJ	CM  DRU  PUD 	DRAWN BY: BGJ
	DATE: 6/29/09				SHEET 1 OF 1



32"x32" BOILER PLATE COVER 1/4" THICK, 1/2" PERFORATION, 3" ON CENTERS

36"x32" BOILER PLATE COVER 1/4" THICK, NO PERFORATION



CITY OF CLOVIS

COMMERCIAL & INDUSTRIAL GREASE TRAP

DWG NO.

S-11

STANDARD REF:

U.B.C.

APPROVED BY:

CITY ENGINEER

DATE:

6/29/09

NO.

REVISED

BY

APPROVALS

03-04-09

BGJ

CM

DRU

PUD

SCALE: NTS

DRAWN BY: BGJ

SHEET 1 OF 1