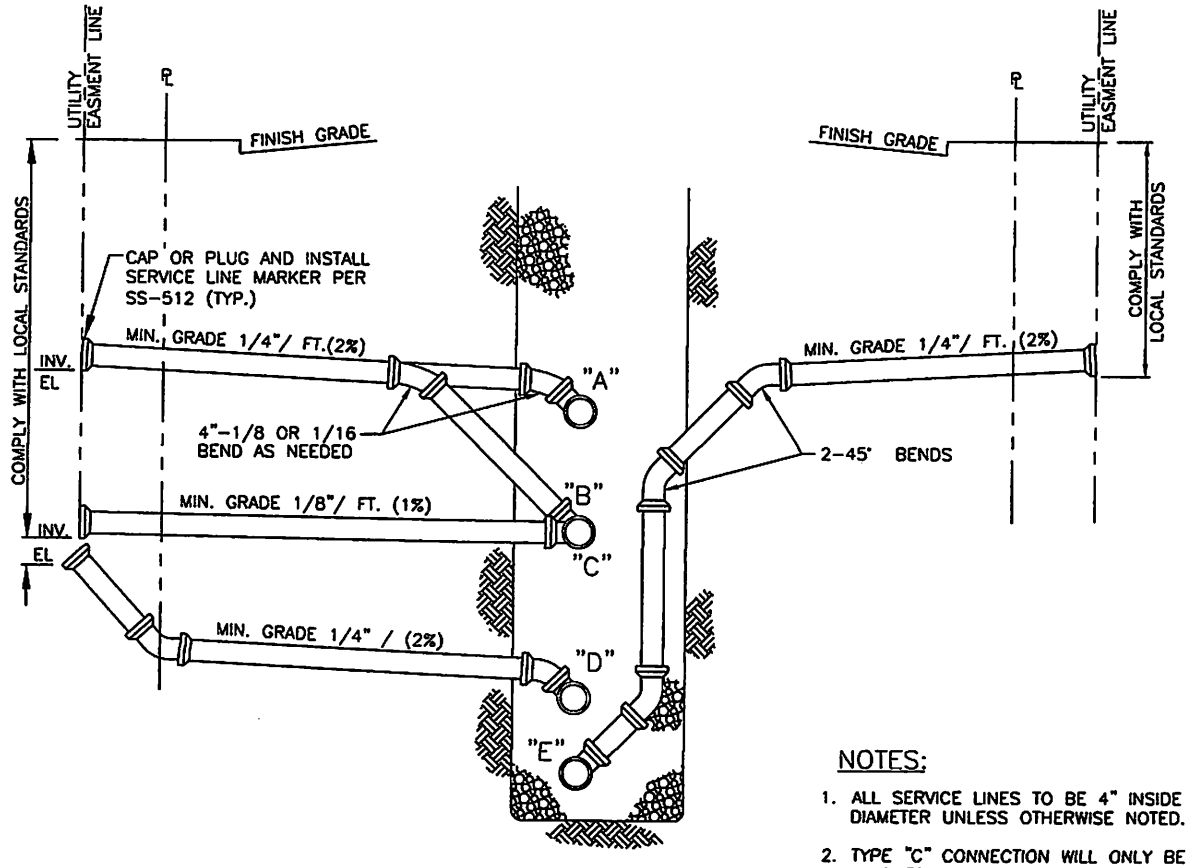
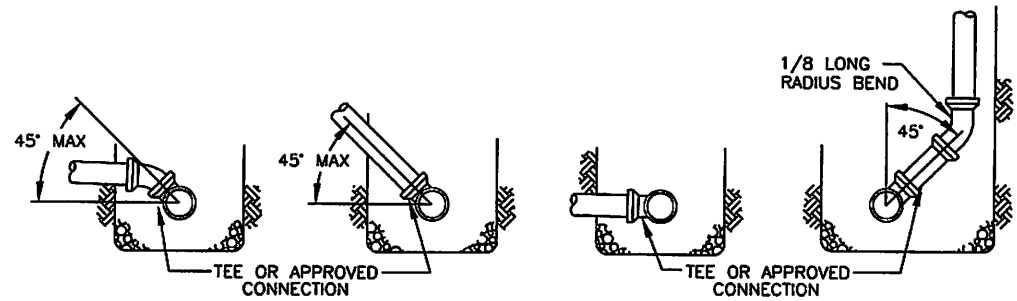


ELEVATIONS

N.T.S.

NOTES:

1. ALL SERVICE LINES TO BE 4" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
2. TYPE "C" CONNECTION WILL ONLY BE ALLOWED IF SHOWN ON THE PLANS OR OTHERWISE APPROVED BY THE PUBLIC WORKS DIRECTOR. ALL CONNECTIONS ARE TO BE RIGID COUPLERS "NO FERNCOS"
3. TYPE "E" ALLOWABLE FOR TRENCHES 15' DEEP OR GREATER WITH PRE-APPROVAL BY THE PUBLIC WORKS DIRECTOR.

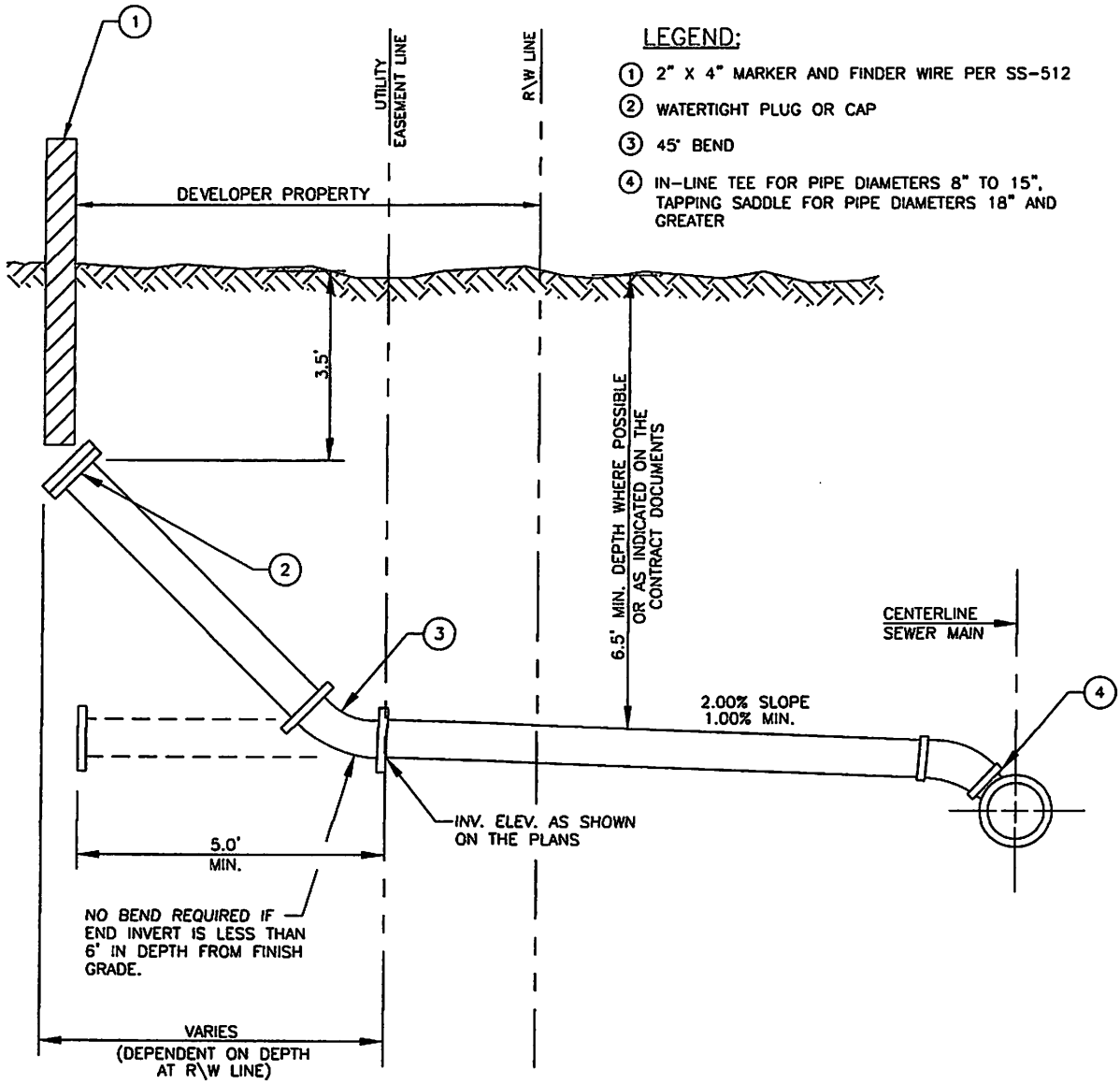


TYPE A & D | TYPE B | TYPE C (SEE NOTE 2) | TYPE E (SEE NOTE 3)

CONNECTION DETAILS

N.T.S.

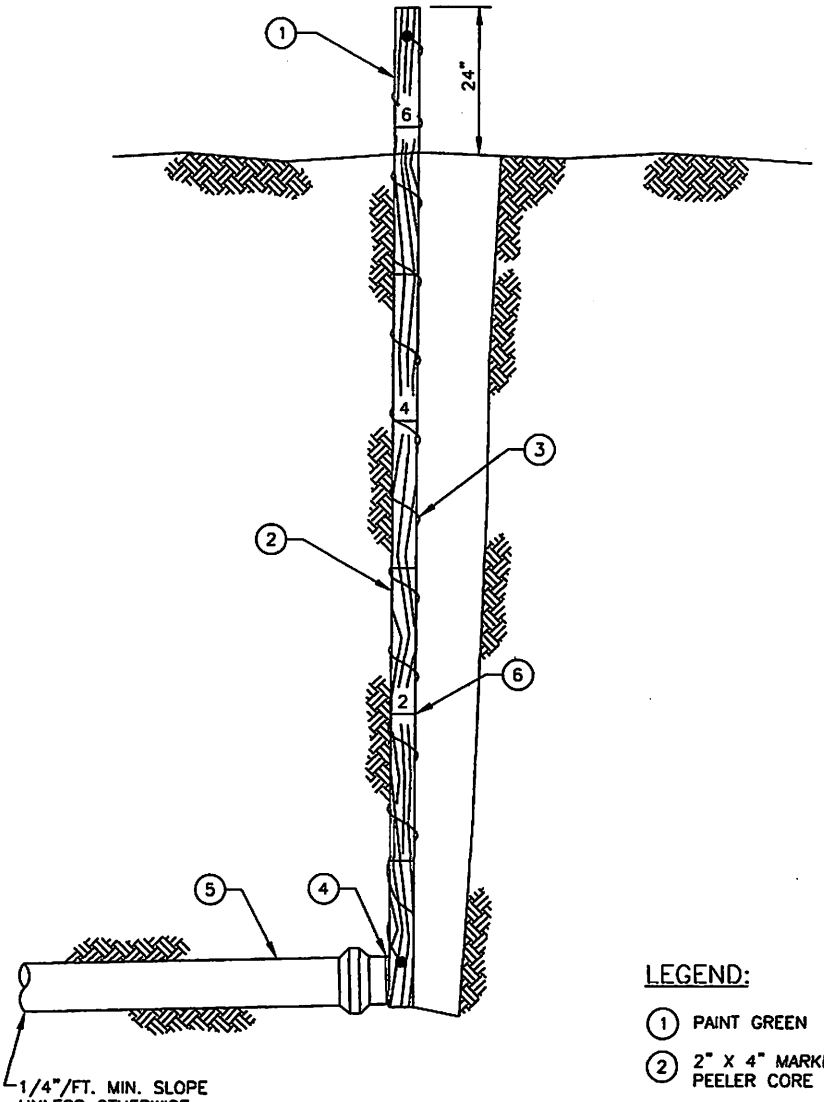
STANDARD SEWER SERVICE LINES	DATE:		SS-511
	REV. #		
	ACAD FILE:	SS-511.DWG	STANDARD DRAWING NO.



PROFILE

N.T.S.

SEWER SERVICE CONN. FOR NEW DEVELOPMENT PROJECTS	DATE: REV. # ACAD FILE: SS-511A.DWG	SS-511A STANDARD DRAWING NO.



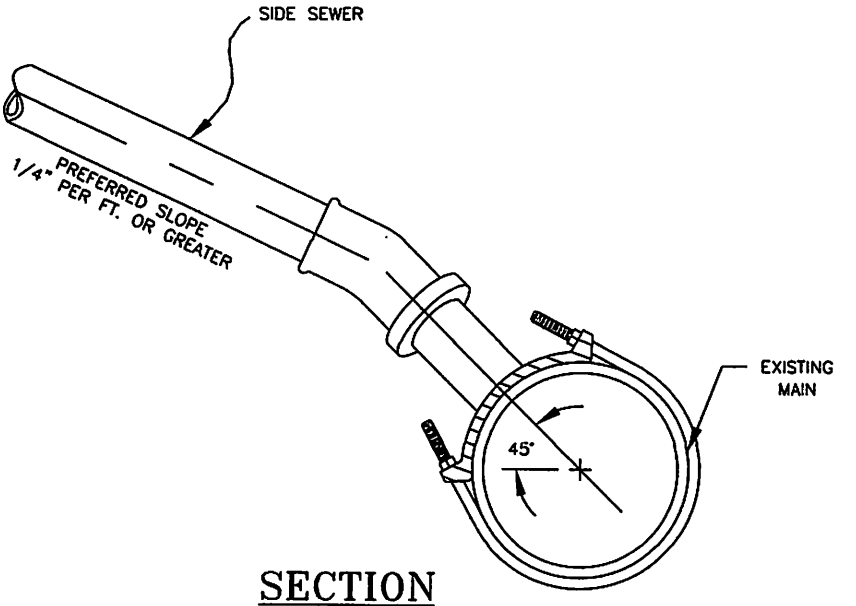
LEGEND:

1. PAINT GREEN
2. 2" X 4" MARKER OR 4"-5" DIAMETER PEELER CORE POST, SET PLUMB
3. NO.12 AWG. GALVANIZED FINDER WIRE, (FASTEN TO BOTTOM AND TOP OF WOODEN MARKER AND WRAP AROUND ENTIRE LENGTH)
4. PLUG OR CAP
5. SEWER SERVICE PIPE
6. MARK POST AT 1' INTERVALS W/PERMANENT PAINT & LABEL EVERY 2'

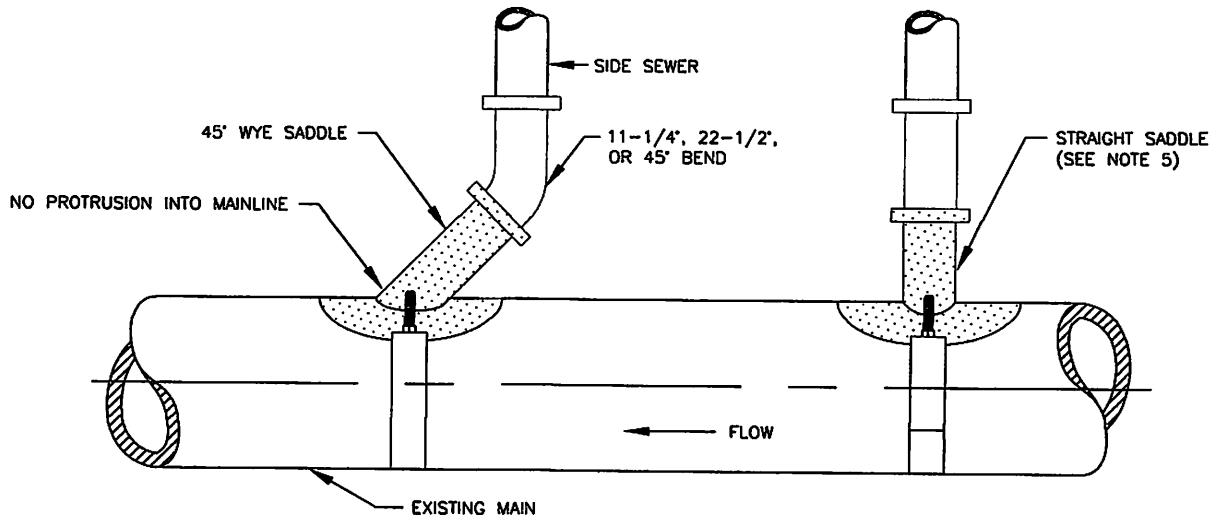
DETAIL

N.T.S.

STANDARD MARKER SEWER SERVICE	DATE:	SS-512
	REV. #	
	ACAD FILE: SS-512.DWG	STANDARD DRAWING NO.



SECTION



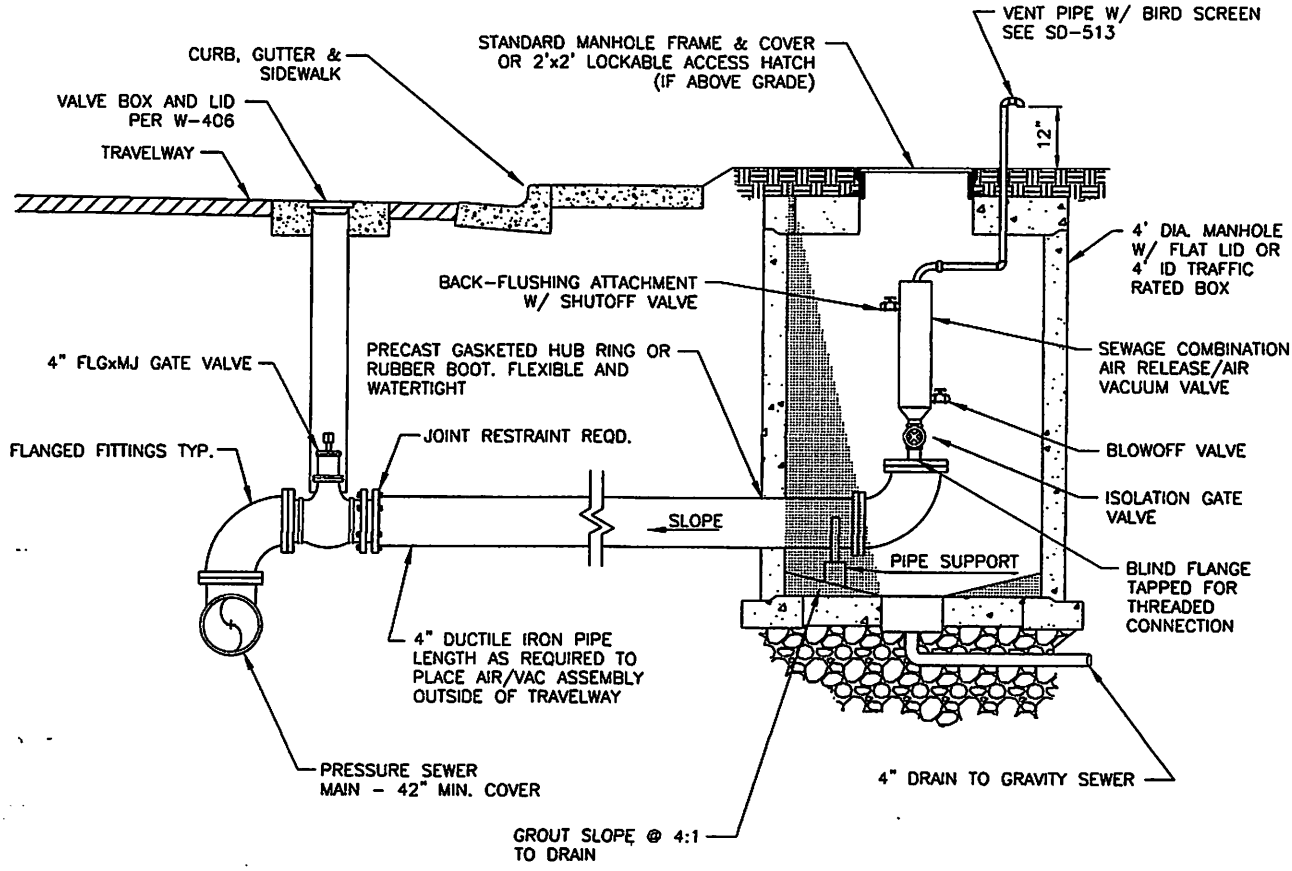
PLAN

N.T.S.

NOTES:

1. WYE SADDLE SHALL BE CONNECTED TO MAIN WITH A RUBBER GASKET AND STAINLESS STEEL STRAP AND BOLTS. WHEN EXISTING PIPE IS P.V.C., A P.V.C. WYE SADDLE MAY BE USED, AND SHALL BE EPOXIED INTO PLACE.
2. TAPPED HOLE IN MAIN SHALL BE THE SAME SIZE AS THE SIDE SEWER. PIPE INTERIOR AND HOLE SHALL BE FLUSH, WITH NO INTRUSION INTO MAINLINE. THE HOLE SHALL BE CUT OR DRILLED, NOT BROKEN OUT. THE CUT OR DRILLED MATERIAL SHALL NOT BE ALLOWED TO ENTER MAINLINE.
3. ALL SEWER PIPE & FITTINGS SHALL CONFORM TO THE CITY OF GRANGEVILLE'S STANDARD SPECIFICATIONS.
4. CONTRACTOR SHALL NOT BACKFILL SADDLE CONNECTION UNTIL INSPECTED AND APPROVED BY THE CITY.
5. STRAIGHT SADDLE CAN BE USED ON 12" OR LARGER PIPE ONLY.

	WYE/STRAIGHT SADDLE CONNECTION	DATE:	SS-513
		REV. #	
		ACAD FILE: SS-513.DWG	STANDARD DRAWING NO.



PLAN

N.T.S.

NOTES:

1. ALL WORK AND PRODUCTS SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE ISPWC AND THE CITY OF GRANGEVILLE SPECIFICATIONS AND STANDARDS.
2. TO BE USED WHEN PIPELINE HIGH POINT IS LOCATED WITHIN TRAVEL WAY AND THERE IS INSUFFICIENT BURY DEPTH FOR ISPWC SD-513 CONFIGURATION.
3. APPROVAL BY PUBLIC WORKS DIRECTOR REQUIRED PRIOR TO INSTALLATION.

SEWER AIR RELEASE VACUUM VALVE, ALTERNATE NO. 1	DATE:		SS-515
	REV. #		
	ACAD FILE:	SS-515.DWG	STANDARD DRAWING NO.

C-700
CONCRETE DETAIL
DWGS

C-700
CONRETE DWGS

CITY OF GRANGEVILLE
QUICK REFERENCE
For

DIVISION 700 – CONCRETE

This quick reference of specifications highlights some of the requirements for Public Works Construction within the jurisdiction of the City of Grangeville. This quick reference is intended for use only as a guide for the Designer and Contractor and not as a replacement to the Idaho Standards for Public Works Construction (ISPWC) or the City of Grangeville's Specifications. Please refer to those documents for more complete specifications.

1. Curb, gutter and sidewalk shall be constructed with Class 4000 psi concrete per ISPWC Section 703.

2. ¾-inch minus crushed aggregate base material under concrete construction shall be compacted to a minimum of 95% of maximum laboratory density as determined by AASHTO T-99 Method C per ISPWC Section 202.

3. 6-inch vertical concrete curb and 3-inch rolled concrete curb shall have 6" of ¾ minus crushed aggregate base per Grangeville Standard Drawing C-701.

4. 3-inch rolled curb is allowed on residential roadways, residential road radii, and industrial roadways only. See Grangeville Standard Drawings C-702 and R-810.

5. 3-inch rolled curb shall transition to 6-inch vertical curb at storm drain inlet locations per Grangeville Standard Drawing C-716.

6. Concrete sidewalks shall be 4-inches thick behind vertical curb and gutter and for sidewalk separated from curb by a planter strip. Concrete sidewalks shall be 5-inches thick behind rolled curb and gutter. All concrete sidewalks shall have 4-inches of ¾-inch minus crushed aggregate base. See Grangeville Standard Drawing C-709.

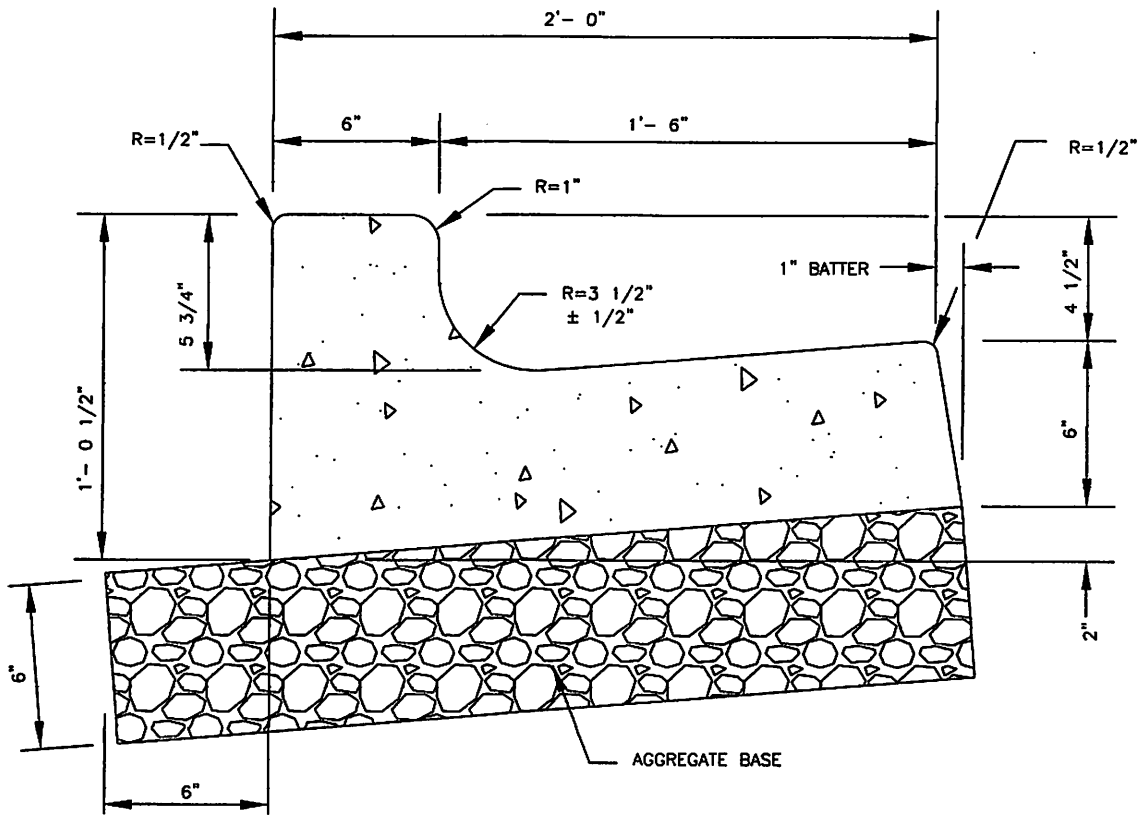
7. Concrete valley gutter shall have a minimum of 8-inches of ¾-inch minus crushed aggregate base per Grangeville Standard Drawing C-708.

8. Concrete driveway approaches shall have 6-inches of ¾-inch minus base as shown on Grangeville Standard Drawing C-710.

9. Curbside mailbox flares shall be provided and installed per Grangeville Standard Drawing C-709A. When possible widened sidewalk section shall be poured "monolithically" with the sidewalk.

10. Pedestrian ramps shall conform to Grangeville Standard drawings C-712A and C-712B unless approved otherwise by the City.

11. 6-inch vertical reverse flow curb and gutter shall conform to Grangeville Standard Drawing C-715.



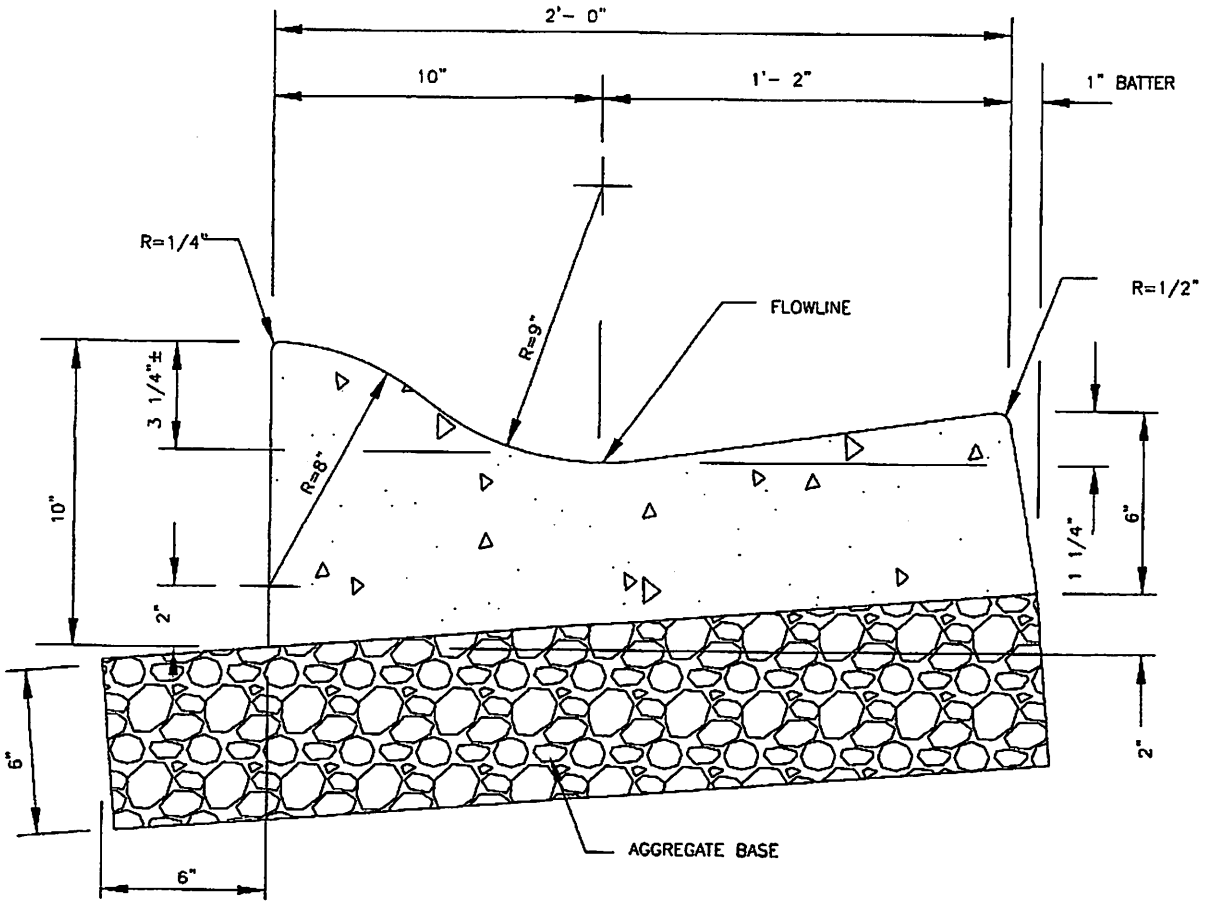
NOTES:

1. GRADE AND ALIGNMENT TO BE ESTABLISHED OR APPROVED BY THE PUBLIC WORKS DIRECTOR OR DESIGNATED REPRESENTATIVE.
2. AGGREGATE BASE SHALL BE 3/4" MINUS CRUSHED MATERIAL WITH A DEPTH OF 6". MATERIAL SHALL COMPLY WITH SECTION 800 ISPWC; COMPACTED MATERIAL SHALL EXCEED 95% OF MAXIMUM LABORATORY DENSITY AS DETERMINED BY AASHTO T-99 METHOD C; A MINIMUM WIDTH OF 3-FT. SHALL BE PLACED TO GRADE, PRIOR TO SETTING CURB FORMS.
3. COLD JOINTS ARE TO BE PLACED AT TERMINAL POINTS OF RADII.
4. CONTINUOUS PLACEMENT PREFERRED, WITH A SCORE INTERVAL OF 8' TO 12'.
5. MATERIALS AND CONSTRUCTION TO BE IN COMPLIANCE WITH ISPWC SPECIFICATIONS AND CITY OF GRANGEVILLE SPECIFICATIONS.
6. BACKFILL AS PER ISPWC STANDARD DRAWINGS.
7. CONCRETE SHALL BE CLASS 4000 PSI UNLESS OTHERWISE SPECIFIED.

CURB AND GUTTER

6" VERTICAL

DATE:	C-701
REV. #	
ACAD FILE: C-701.DWG	STANDARD DRAWING NO.



NOTES:

1. GRADE AND ALIGNMENT TO BE ESTABLISHED OR APPROVED BY THE PUBLIC WORKS DIRECTOR OR DESIGNATED REPRESENTATIVE.
2. AGGREGATE BASE SHALL BE 3/4" MINUS CRUSHED MATERIAL WITH A DEPTH OF 6". MATERIAL SHALL COMPLY WITH SECTION 800 ISPWC; COMPACTED MATERIAL SHALL EXCEED 95% OF MAXIMUM LABORATORY DENSITY AS DETERMINED BY AASHTO T-99 METHOD C; A MINIMUM WIDTH OF 3-FT. SHALL BE PLACED TO GRADE, PRIOR TO SETTING CURB FORMS.
3. COLD JOINTS ARE TO BE PLACED AT TERMINAL POINTS OF RADII.
4. CONTINUOUS PLACEMENT PREFERRED, WITH A SCORE INTERVAL OF 8' TO 12'.
5. MATERIALS AND CONSTRUCTION TO BE IN COMPLIANCE WITH ISPWC SPECIFICATIONS AND CITY OF GRANGEVILLE SPECIFICATIONS.
6. 3" ROLLED CURB AND GUTTER ON RESIDENTIAL AND INDUSTRIAL STREETS ONLY.
7. BACKFILL AS PER ISPWC STANDARD DRAWINGS.
8. ROLLED CURB AND GUTTER SHALL NOT BE CONSTRUCTED AT CATCH BASIN INLETS. TRANSITION TO VERTICAL CURB PER GRANGEVILLE STANDARD DRAWING C-716.
9. CONCRETE SHALL BE CLASS 4000 PSI UNLESS OTHERWISE SPECIFIED.
10. ROLLED CURB & GUTTER ALLOWED ON DRIVEWAY APPROACHES ONLY.

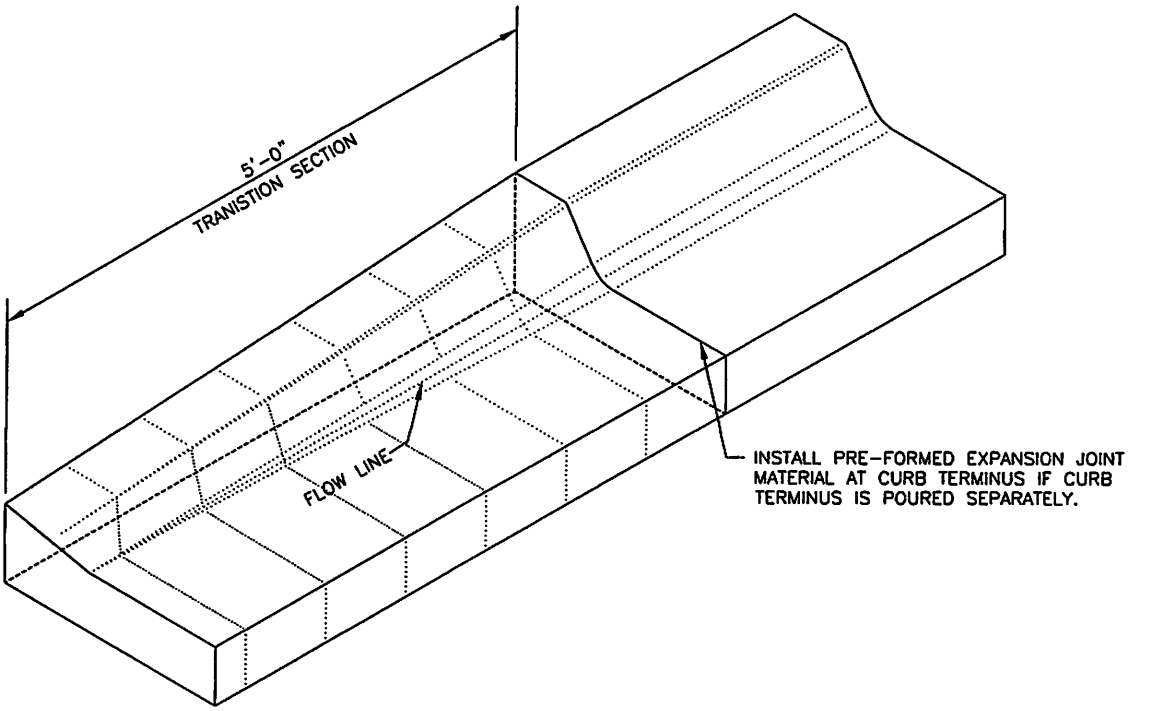
CURB AND GUTTER

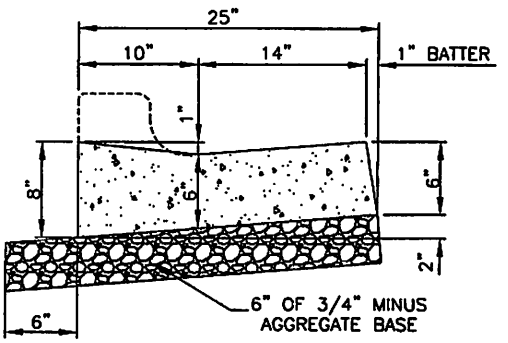
3" ROLLED

DATE:	03/01/04
REV. #	1
ACAD FILE:	C-702.DWG

C-702

STANDARD DRAWING NO.





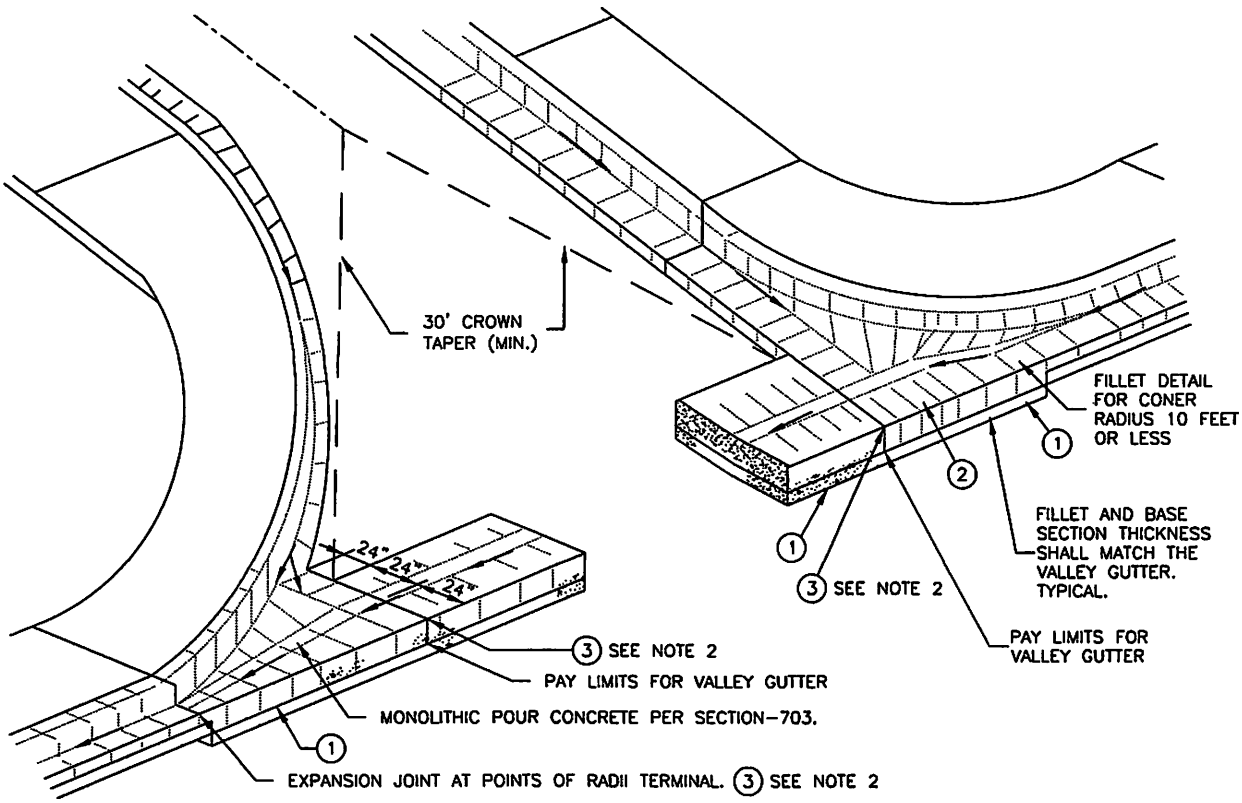
DETAIL AT END OF TRANSITION

N.T.S.

NOTES:

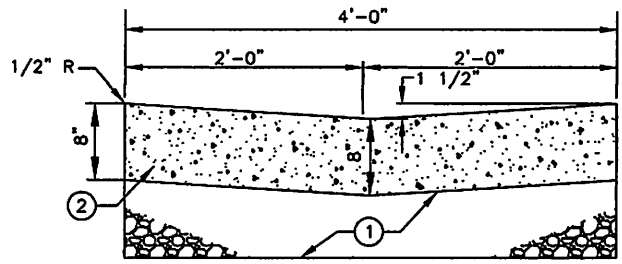
1. USE WITH STANDARD 6" CURB AND GUTTER TO AVOID ABRUPT BEGINNING AND END OF CURB.
2. APPROVED SUMP OR CATCHBASIN IS REQUIRED AT CURB TERMINUS IF LOCATED AT DOWNSTREAM END OF GUTTER.
3. CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 4000 P.S.I.

CURB TERMINUS DETAIL	DATE:		C-707
	REV. #		
	ACAD FILE:	C-707.DWG	STANDARD DRAWING NO.



PERSPECTIVE

N.T.S.



TYPICAL SECTION

N.T.S.

LEGEND:

1. 8" OF 3/4" MINUS CRUSHED AGGREGATE BASE MINIMUM
2. CONCRETE
3. 1/2" EXPANSION JOINT

NOTES:

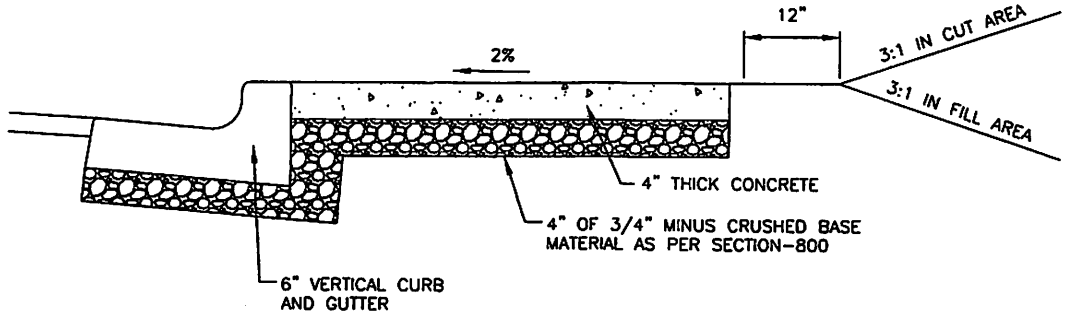
1. GRADE OF GUTTER MINIMUM 0.4%.
2. EXPANSION JOINT 1/2-INCH PRE-FORMED JOINT MATERIAL (AASHTO M 213), UNLESS POURED MONOLITHICALLY.
3. CONCRETE SHALL BE CLASS 4000 PSI UNLESS OTHERWISE SPECIFIED.

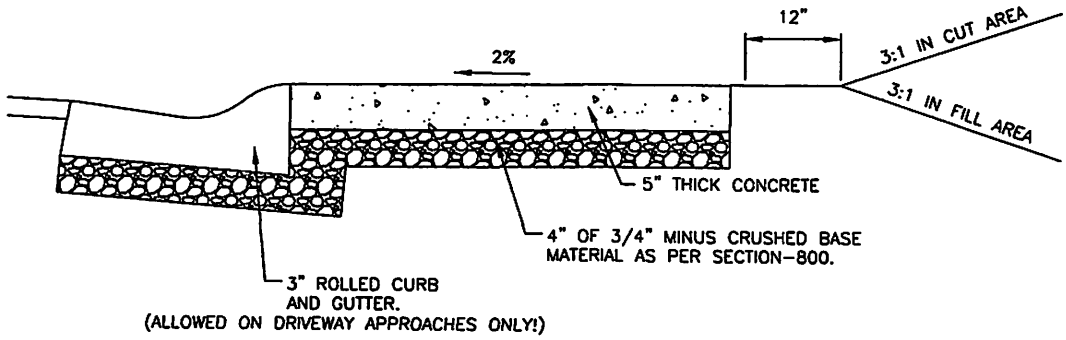
PUBLIC WORKS DEPARTMENT
GRANGEVILLE, IDAHO

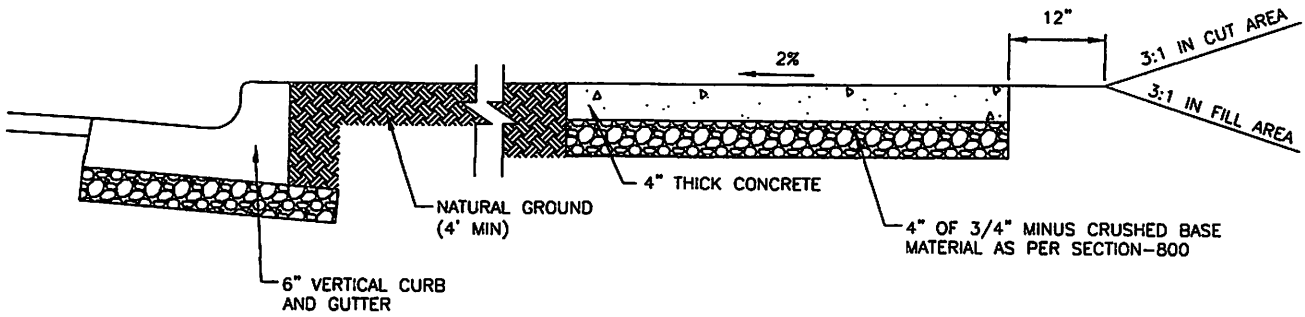
VALLEY GUTTER

DETAIL

DATE:		C-708
REV. #	1	
ACAD FILE:	C-708.DWG	STANDARD DRAWING NO.



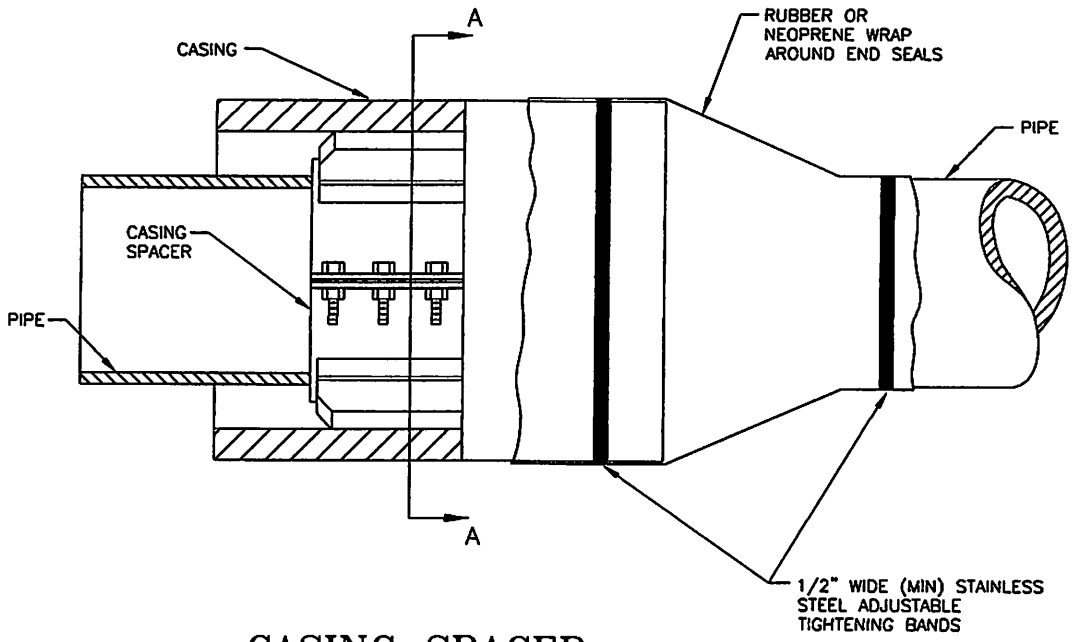




NOTES:

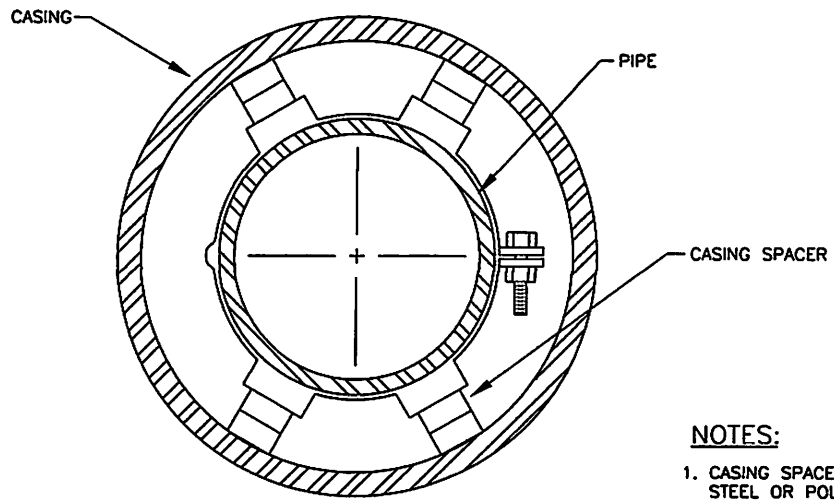
1. LOCATION, GRADE, AND WIDTH TO BE ESTABLISHED OR APPROVED BY THE CITY.
2. BASE TO BE COMPACTED TO EXCEED 95% OF MAXIMUM LABORATORY DENSITY AS DETERMINED BY AASHTO T-99 METHOD C.
3. SLOPE SIDEWALK TOWARD THE STREET NOT TO EXCEED 1/4" PER FOOT (0.02 FT/FT) UNLESS OTHERWISE SPECIFIED BY THE CITY.
4. SCORE AT INTERVALS TO MATCH WIDTH OF WALK NOT TO EXCEED 5 FEET SPACING.
5. 1/2" TRANSVERSE PREFORMED BITUMINOUS JOINTS AT THE TERMINUS POINTS FOR CURVE AND WHERE SIDEWALK IS PLACED BETWEEN TWO PERMANENT FOUNDATIONS, PLACE 1/2" EXPANSION JOINT MATERIAL ALONG THE BACK OF WALK THE FULL LENGTH.
6. CONCRETE SHALL BE CLASS 4000 PSI UNLESS OTHERWISE SPECIFIED.
7. SEE GRANGEVILLE STANDARD DETAIL R-810 FOR SIDEWALK WIDTH.

CONCRETE SIDEWALK DETAIL	DATE:		C-709
	REV. #		
	ACAD FILE:	C-709.DWG	STANDARD DRAWING NO.



CASING SPACER

N.T.S.



SECTION A–A

N.T.S.

NOTES:

1. CASING SPACERS SHALL BE STAINLESS STEEL OR POLYETHYLENE. CALPICO INC., PX, RACI, OR APPROVED EQUAL.
2. CASING SHALL BE SMOOTH STEEL 3/8" MIN. WALL THICKNESS.
3. MINIMUM CASING DIAMETER AS SPECIFIED BY CASING SPACER MANUFACTURER.
4. DISTANCE BETWEEN CASING SPACERS SHALL BE AS SHOWN ON THE PLANS OR AS DETERMINED BY THE PUBLIC WORKS DIRECTOR.

BORING AND JACKING PIPE CASING DETAIL	DATE:	PIPE CASING DETAIL
	REV. #	
	ACAD FILE:	STANDARD DRAWING NO.