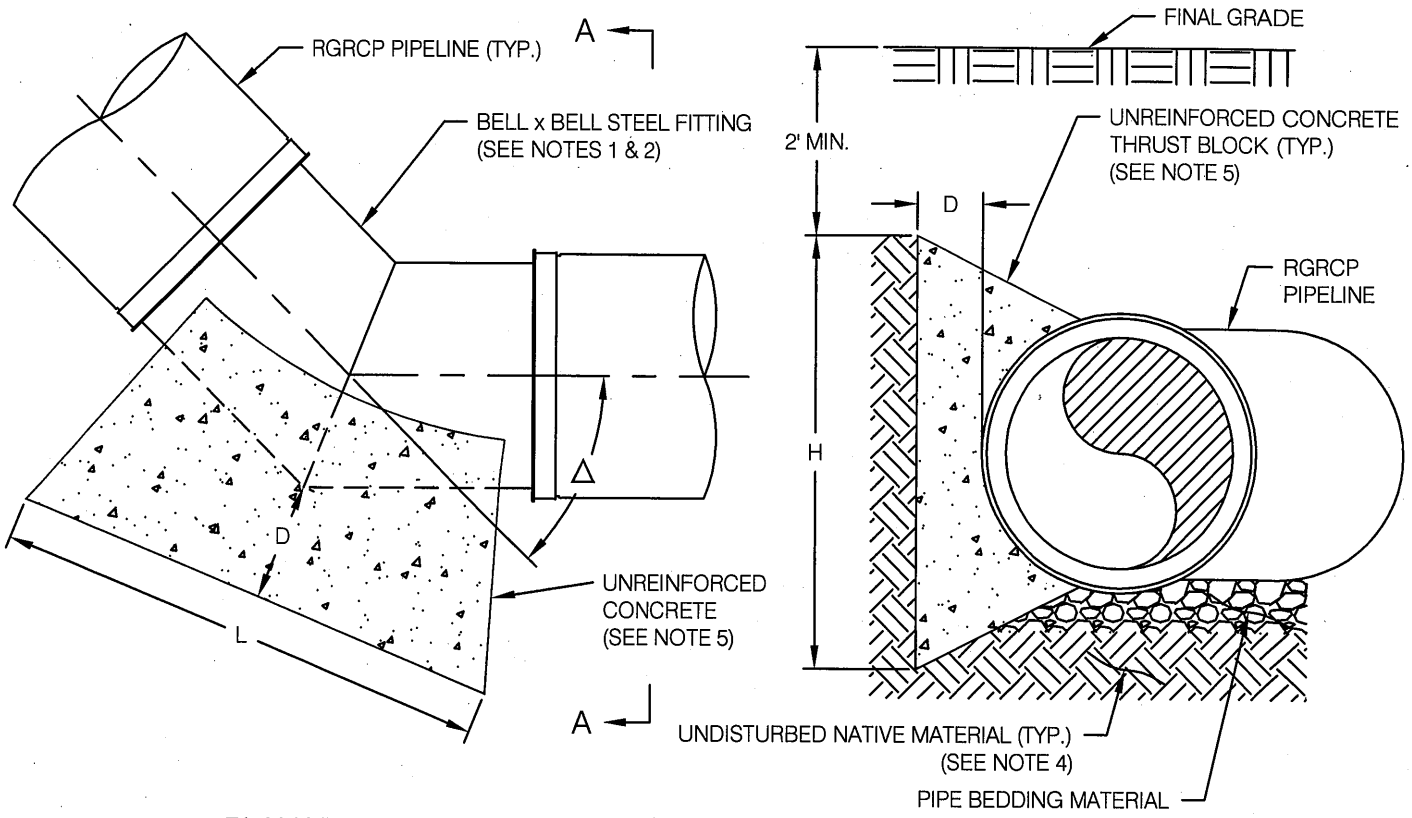

PLAN VIEW

SECTION A-A

HORIZONTAL BENDS

SIZE	BENDS (△) 15°				30°				45°				60°				90°			
	H	L	D	BSA	H	L	D	BSA	H	L	D	BSA	H	L	D	BSA	H	L	D	BSA
30"	2'	2'	1'	4#	2'	4'	1'	8#	3'	4'	1.5'	12#	4'	4'	2'	16#	4'	5.5'	2'	22#
36"	2'	3'	1'	6#	3'	4'	1.5'	12#	4'	4.3'	2'	17#	4.6'	5'	2.5'	23#	5'	6.4'	2.5'	32#
42"	2'	4'	1'	8#	4'	4'	2'	16#	4.6'	5'	2'	23#	5.2'	6'	2.5'	31#	6'	7.2'	3'	43#
48"	2.8'	4'	1.5'	11#	4.2'	5'	2'	21#	5.2'	6'	2.5'	31#	6'	8'	3'	48#	6'	9.4'	3'	56#
54"	2.6'	5'	1.5'	13#	5'	5.2'	2.5'	26#	5.5'	7'	2.5'	38#	6.3'	8'	3'	50#	7'	10.2'	3.5'	71#
60"	2.7	6'	1.5'	16#	5.4'	6'	2.5'	32#	6'	8'	3'	47#	7'	9'	3.5'	62#	7'	12.4'	3.5'	87#
72"	4'	6'	1.5'	24#	6'	7.5'	2.5'	46#	7.5'	9'	3'	68#	9'	10'	3.5'	90#	9'	14'	4'	126#

NOTE: DIMENSION CALCS BASED ON 50 FEET OF HEAD PRESSURE, 1,000 PSF SOIL BEARING CAPACITY AND 1.0 SAFETY FACTOR
H=HEIGHT; L=LENGTH; D=DEPTH; BSA=BEARING SURFACE AREA

NOTES:

1. DUCTILE IRON (AWWA C-110 OR C-153) CLASS 150 BENDS MAY BE SUBSTITUTED. THE INTERIOR SURFACES SHALL BE CEMENT MORTAR LINED PER AWWA C-104 AND THE EXTERIOR SURFACES SHALL BE COAL TAR COATED PER AWWA C-203 OR FUSION BONDED EPOXY LINED AND COATED (AWWA C-116).
2. FLANGE BY COMPRESSION COUPLERS MAY BE FLANGE BY MECHANICAL JOINT OR FLANGED COUPLING ADAPTER.
3. ALL BELOW GROUND NUTS, BOLTS AND MISCELLANEOUS STEEL SHALL BE POLYETHYLENE ENCASED AS PER AWWA C-105 OR TAPE WRAPPED PER AWWA C-209, 20 MILS MINIMUM IN BOTH CASES.
4. ALL THRUST BLOCKS SHALL BE CAST AGAINST UNDISTURBED NATIVE MATERIAL OR APPROVED BACKFILL MECHANICALLY COMPACTED TO 95% RELATIVE COMPACTION. COMPACTION SHALL BE TESTED BY AN OUTSIDE AGENCY AND THE RESULTS SUBMITTED TO THE ENGINEER FOR APPROVAL.
5. THE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI. ALL CEMENT SHALL BE TYPE II PORTLAND CEMENT WITH A MINIMUM OF 5 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE.
6. IF THE MINIMUM DIMENSION "R" IS GREATER THAN THE TRENCH WIDTH, THE THRUST BLOCK SHALL BE REINFORCED WITH #4 REBAR GRID @ 12" O.C. EACH WAY AND LOCATED AS SHOWN
7. THE VALUES GIVEN ARE MINIMUM VALUES, FOR DESIGN PRESSURES GREATER THAN 50 FEET OF HEAD, THRUST BLOCK DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

SOLANO IRRIGATION DISTRICT SINCE 1948

NOTE: CALL U.S.A. AT LEAST 48 HOURS PRIOR TO EXCAVATION 1-800-642-2444

REFER TO THE STANDARD SPECIFICATIONS

RGRCP: CONCRETE THRUST BLOCKS FOR HORIZONTAL STEEL AND DUCTILE IRON BENDS

DETAIL W-30.4

APPROVED BY:

DIRECTOR OF ENGINEERING — RCE #66517 — 7-18-12 DATE

REVISION 3 7-18-12