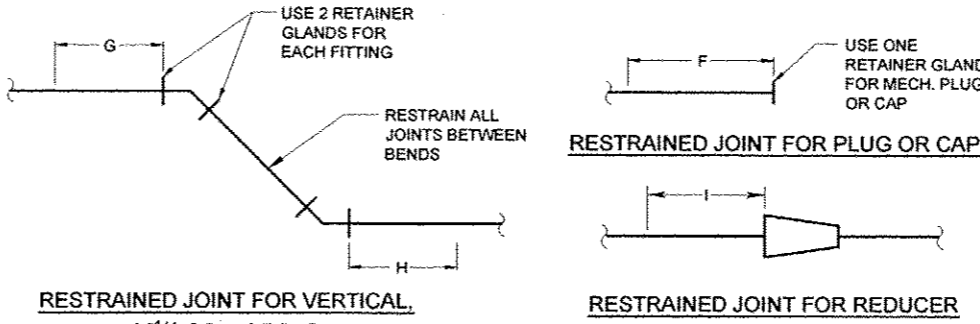
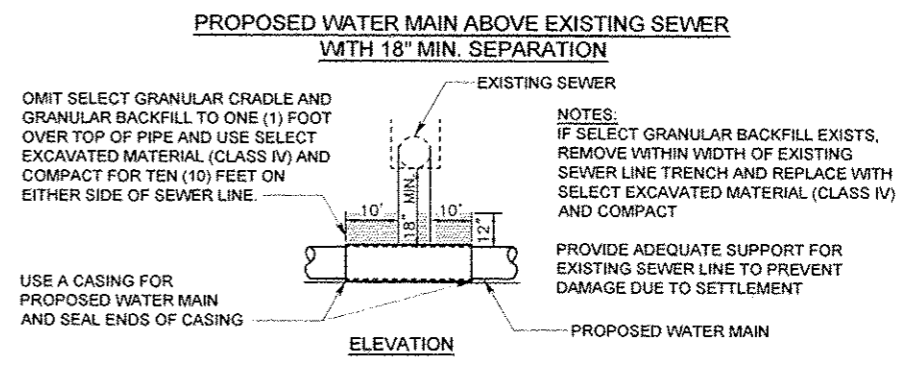
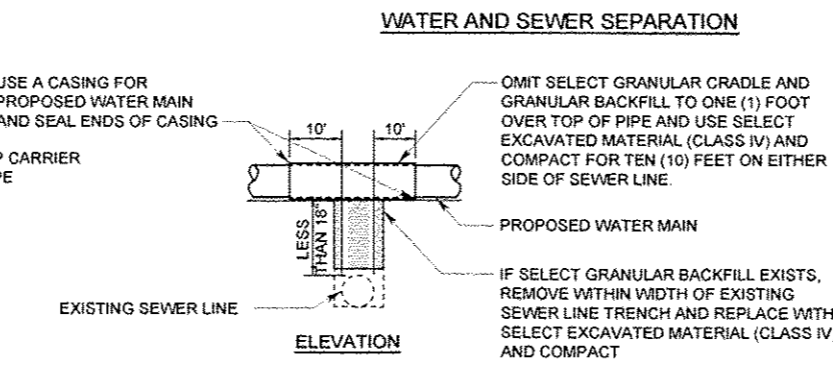
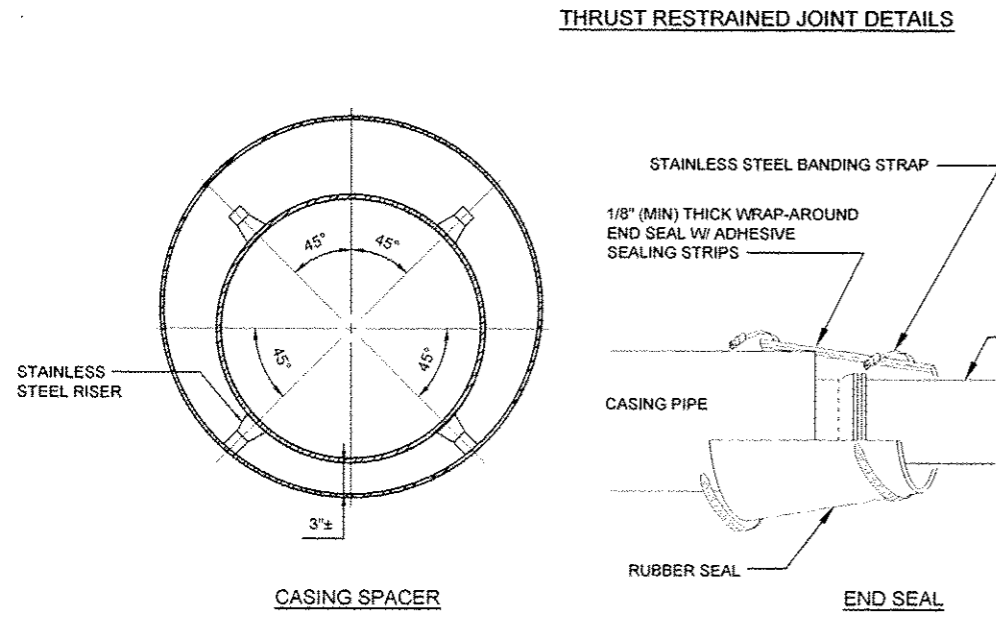
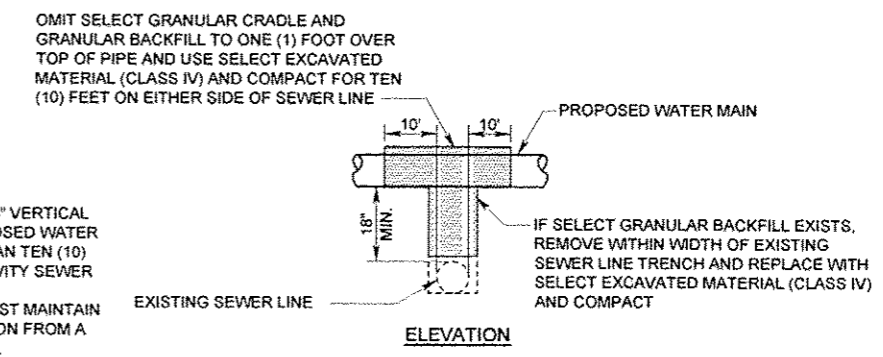
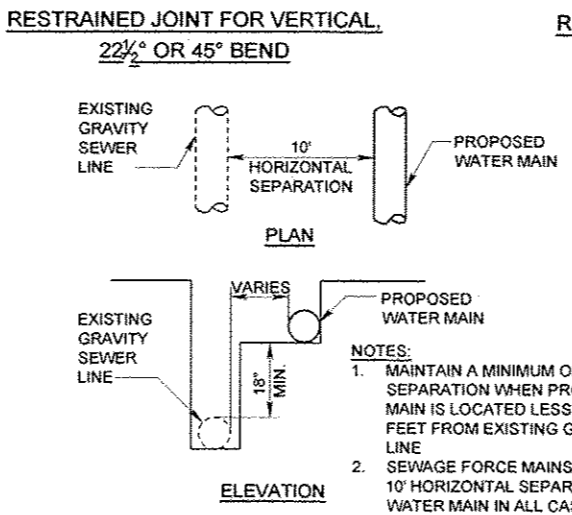
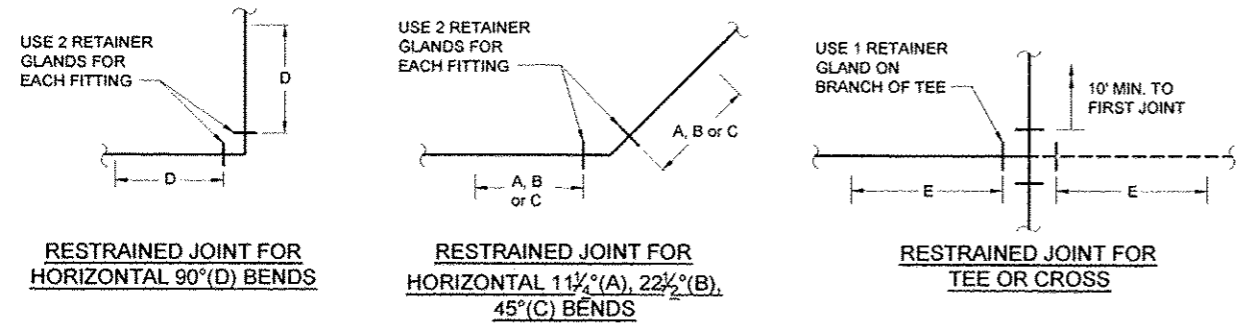


MINIMUM NUMBER OF RESTRAINED JOINT FULL LENGTH PIPE SECTIONS FROM FITTING, FEET (UNLESS NOTED OTHERWISE)										
PIPE SIZE (INCHES)	PIPE MATERIAL	A	B	C	D	E	F	G	H	I
4"	DIP	3	7	15	35	25	27	40	24	9
6"	DIP	5	10	21	50	37	39	60	37	26
8"	DIP	6	13	27	66	49	52	81	49	42
10"	DIP	8	16	33	80	61	63	100	62	55
12"	DIP	9	19	39	95	73	75	120	74	69

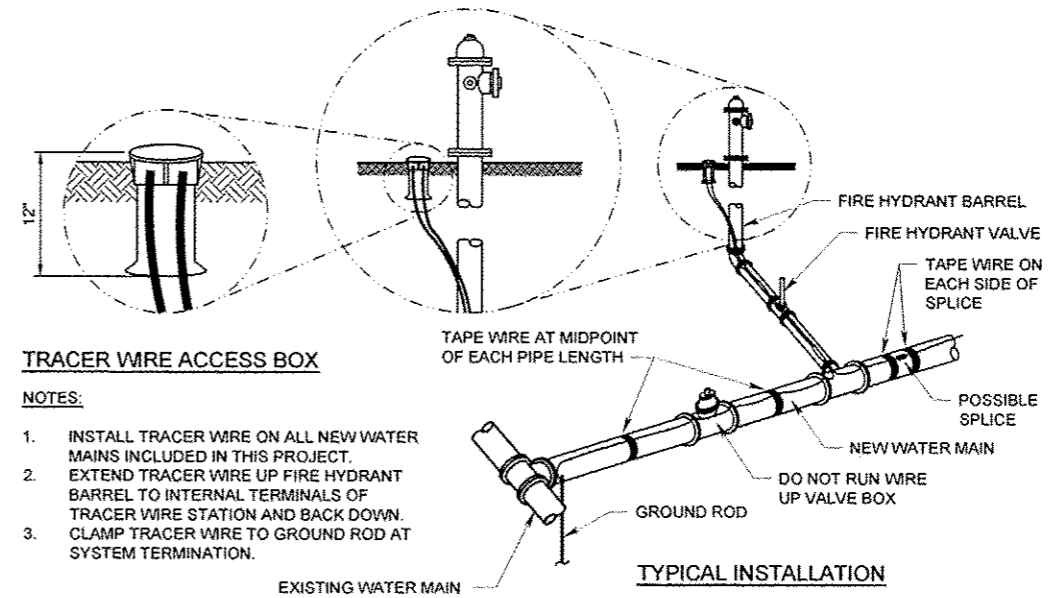
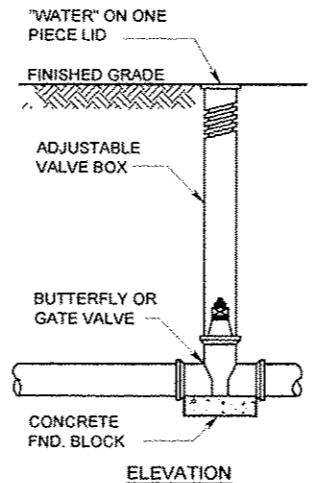
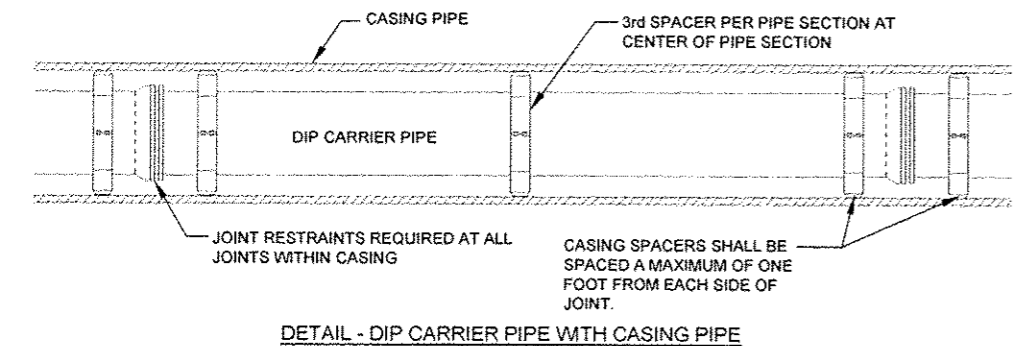
(a) USE PIPE JOINT RESTRAINT IN PIPING LAID WITHIN THESE DISTANCES FROM THE FITTING.
 (b) BASED ON 100 PSI TEST PRESSURE, 2.0 FACTOR OF SAFETY, POLYETHYLENE ENCASMENT, AND 3'-6" MIN. DEPTH OF BURY.



- GENERAL NOTES:**
- PIPE MATERIAL AND JOINT TYPES WILL BE AS INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS. TYPICAL DETAILS SHOWN ON THIS SHEET ILLUSTRATE THE ENGINEER'S INTENT FOR INSTALLING WATER MAINS. THEY ARE NOT PRESENTED AS A SOLUTION TO ALL CONSTRUCTION PROBLEMS WHICH MAY BE ENCOUNTERED IN THE FIELD.
 - THE CONTRACTOR MAY ALTER HIS METHOD OF CONSTRUCTION TO SUIT FIELD CONDITIONS, PROVIDED HE SUBMITS HIS PROPOSED ALTERNATE TO THE ENGINEER FOR REVIEW PRIOR TO PERFORMING THE WORK.
 - ALL THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH, WHERE APPROVED FOR USE BY ILAW. COVER ALL FITTINGS WITH PLASTIC SHEET PRIOR TO POURING CONCRETE.



- NOTE:**
- PROVIDE JOINT RESTRAINTS THROUGH CASING PIPE TO 10' MIN. BEYOND EACH END OF CASING OR AS SHOWN ON THE DRAWINGS
 - CASING SPACERS SHALL BE ADVANCE PRODUCTS AND SYSTEMS, INC. MODEL SSI, OR EQUAL
 - CASING PIPE MATERIAL SHALL BE AS SHOWN ON THE PLANS. IF CASING PIPE MATERIAL IS NOT SPECIFIED, THE CASING PIPE SHALL BE STEEL.
 - CASING SPACERS MAY BE OMITTED WITH PRIOR WRITTEN APPROVAL FROM ENGINEER AND ILAW.
 - CONTRACTOR SHALL OBTAIN AND VERIFY ALL DIMENSIONS AND CONDITIONS AT JOB SITE AND BE FULLY RESPONSIBLE FOR SAME.



- NOTES:**
- INSTALL TRACER WIRE ON ALL NEW WATER MAINS INCLUDED IN THIS PROJECT.
 - EXTEND TRACER WIRE UP FIRE HYDRANT BARREL TO INTERNAL TERMINALS OF TRACER WIRE STATION AND BACK DOWN. CLAMP TRACER WIRE TO GROUND ROD AT SYSTEM TERMINATION.

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 Champaign, IL 61820
 Phone: 217-242-0005
 Illinois Professional Design Firm No. 124-004913

ROUTE 150 WATERMAIN RELOCATION BETWEEN URBANA AND ST. JOSEPH
 ILLINOIS AMERICAN WATER COMPANY
 IDOT CONTRACT NO. 70663

URBANA, ILLINOIS
 CHAMPAIGN COUNTY

NO.	BY	DATE	DESCRIPTION

Date of Preparation: July 17, 2013

SURVEYED	BY	DATE

DRAWN	BY	DATE

DESIGNED	BY	DATE

CHECKED	BY	DATE

RECORD DRAWING OF COMPLETED CONSTRUCTION BY
 RECORD DRAWINGS OF COMPLETED CONSTRUCTION
 CONFORMING TO CONTRACTOR AND/OR OWNERS RECORDS

PROJECT ID: 11013
C5.01
 SHEET 27 OF 29