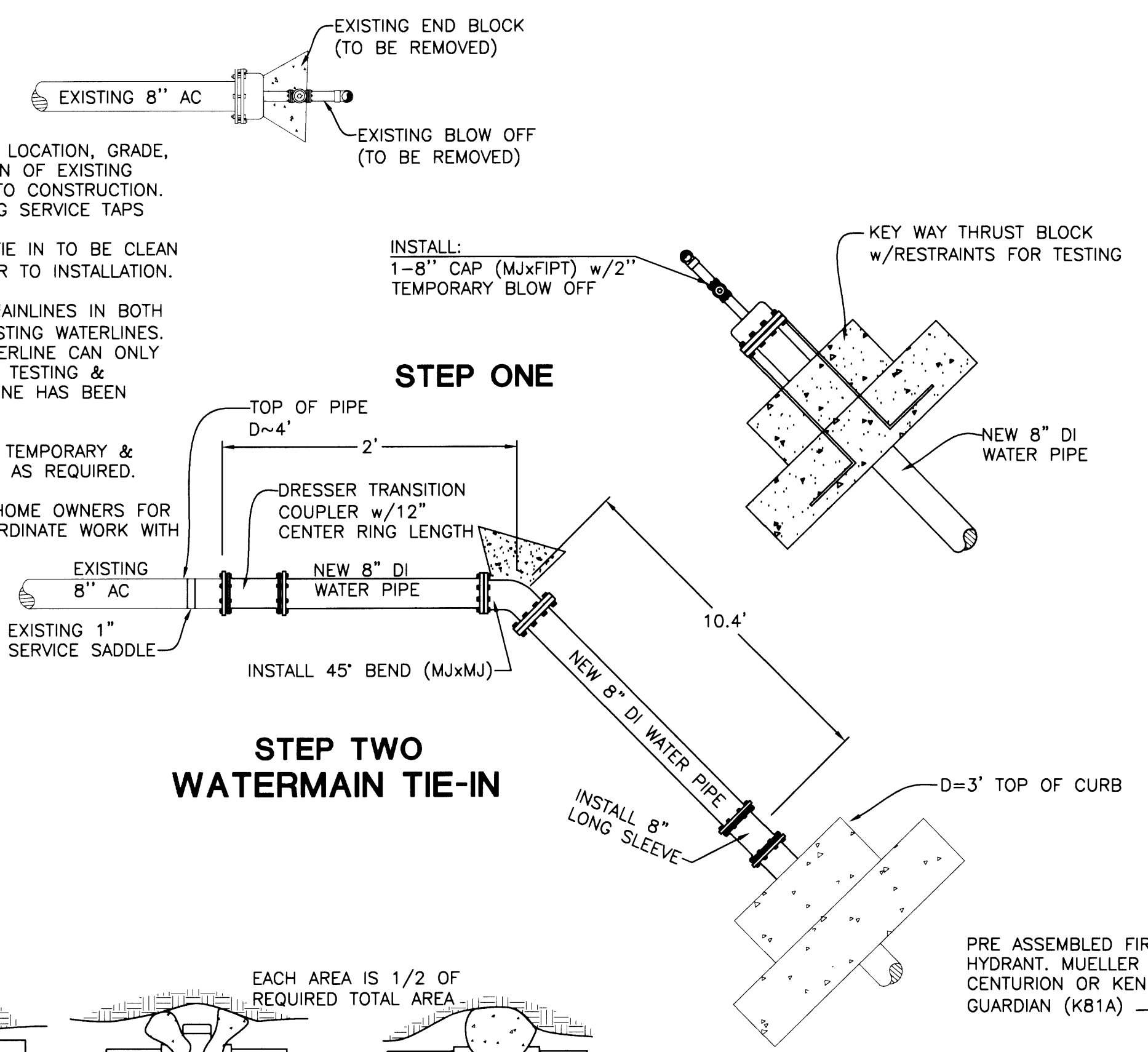
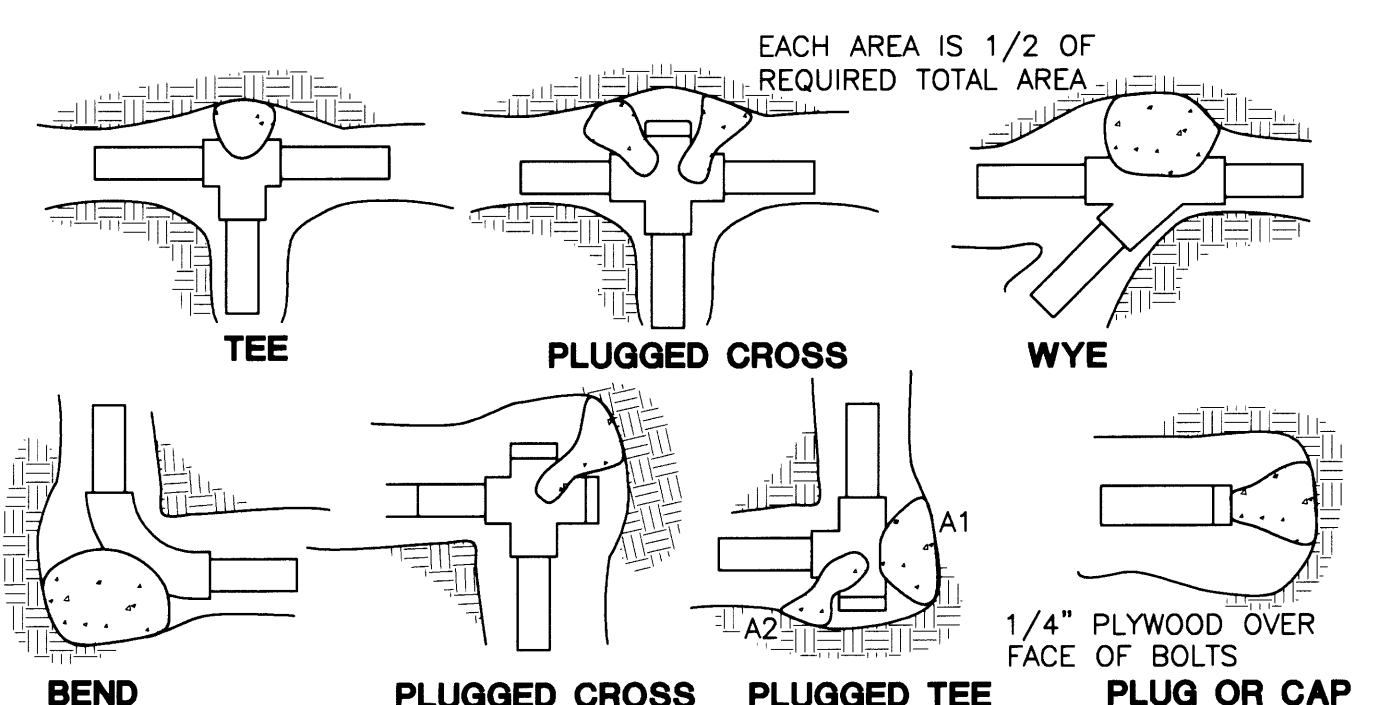


TIE IN NOTES:

- CONTRACTOR TO FIELD VERIFY LOCATION, GRADE, ALIGNMENT AND CONFIGURATION OF EXISTING PIPING AT THE TIE IN PRIOR TO CONSTRUCTION. VERIFY LOCATIONS OF EXISTING SERVICE TAPS
- ALL PIPE AND FITTINGS FOR TIE IN TO BE CLEAN AND WIPED w/CHLORINE PRIOR TO INSTALLATION.
- CONTRACTOR TO ALIGN NEW MAINLINES IN BOTH ALIGNMENT AND GRADE w/EXISTING WATERLINES. CONNECTION TO EXISTING WATERLINE CAN ONLY BE MADE AFTER INSTALLATION, TESTING & DISINFECTION OF NEW WATERLINE HAS BEEN COMPLETED.
- CONTRACTOR TO PROVIDE ALL TEMPORARY & PERMANENT THRUST BLOCKING AS REQUIRED.
- CITY WILL NOTIFY INDIVIDUAL HOME OWNERS FOR TEMPORARY SHUT DOWN. COORDINATE WORK WITH CITY WATER DIVISION.



STEP TWO WATERMAIN TIE-IN



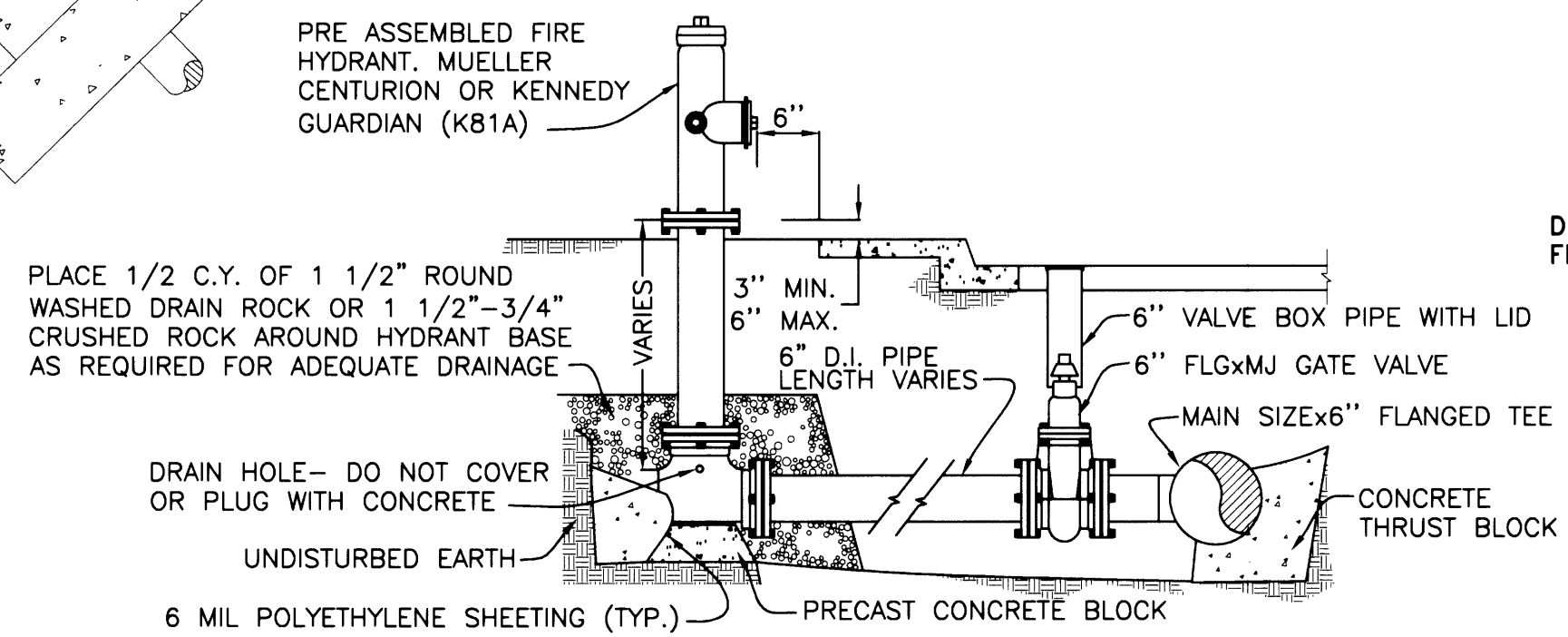
FITTING SIZE	TEE, WYE, PLUG OR CROSS	90° BEND PLUGGED CROSS	TEE PLUGGED ON RUN A1 A2	45° BEND	22 1/2° BEND	11 1/4° BEND
2	0.5	1.1	1.6	1.1	0.5	--
3	1.3	2.1	3.2	2.1	1.3	--
4	2.7	3.7	5.1	3.7	2.7	1.1
6	5.6	8.0	11.5	8.0	4.3	2.7
8	10.1	14.2	20.3	14.4	7.7	4.0
10	15.8	22.4	31.5	22.4	12.3	6.4
12	22.7	32.0	45.4	32.0	17.6	9.1
14	30.7	43.5	61.4	43.5	23.8	12.3
16	40.1	56.9	80.1	56.9	31.0	16.0
18	50.7	72.1	101.5	72.1	39.0	20.3
20	62.7	88.9	125.5	88.9	48.3	25.1
24	90.8	128.2	181.6	128.2	70.0	36.3

NOTE: ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 200 p.s.i. AND AN ALLOWABLE SOIL BEARING STRESS OF 1,000 lbs. PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE/200) x (1000/SOIL BEARING STRESS) x (TABLE VALUE)

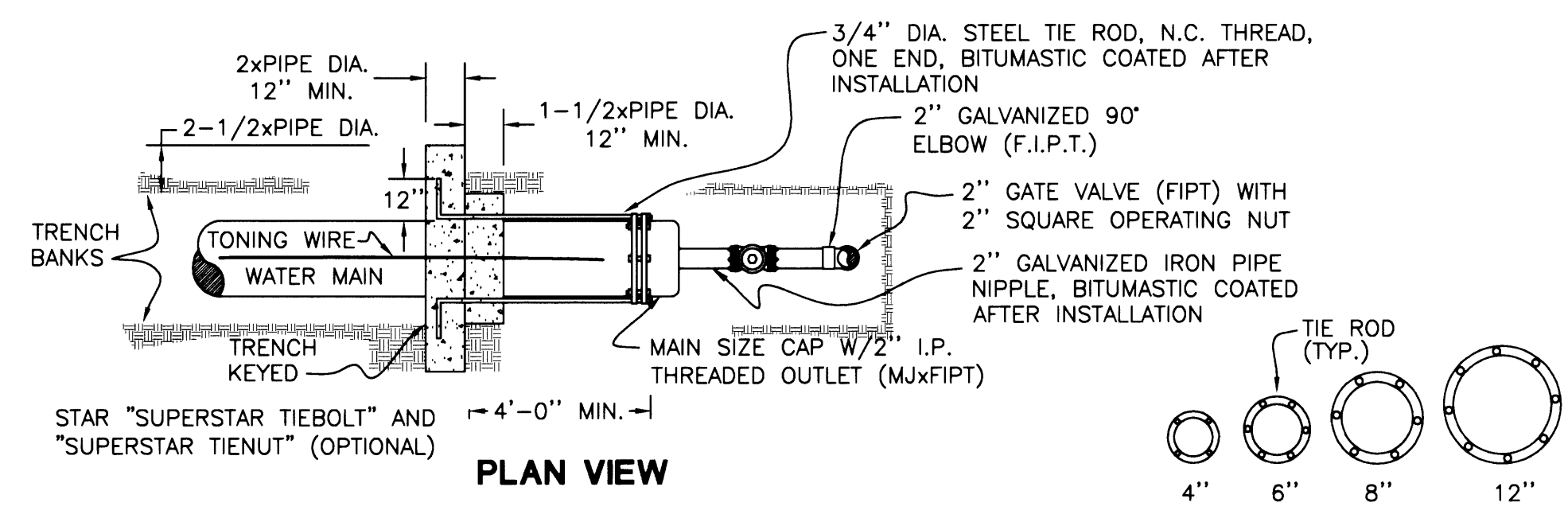
NOTES:

- CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
- KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES.
- THE REQUIRED THRUST BEARING AREAS FOR SPECIAL CONNECTIONS ARE SHOWN ENCIRCLED ON THE PLANS, e.g. 15 INDICATES 15 SQUARE FEET BEARING AREA REQUIRED.
- IF NOT SHOWN ON PLANS REQUIRED BEARING AREAS AT FITTING SHALL BE AS INDICATED ABOVE, ADJUSTED IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS(S) STATED IN THE SPECIAL SPECIFICATIONS.
- BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS. TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL.

THRUST BLOCK DETAILS AND INFORMATION
NO SCALE

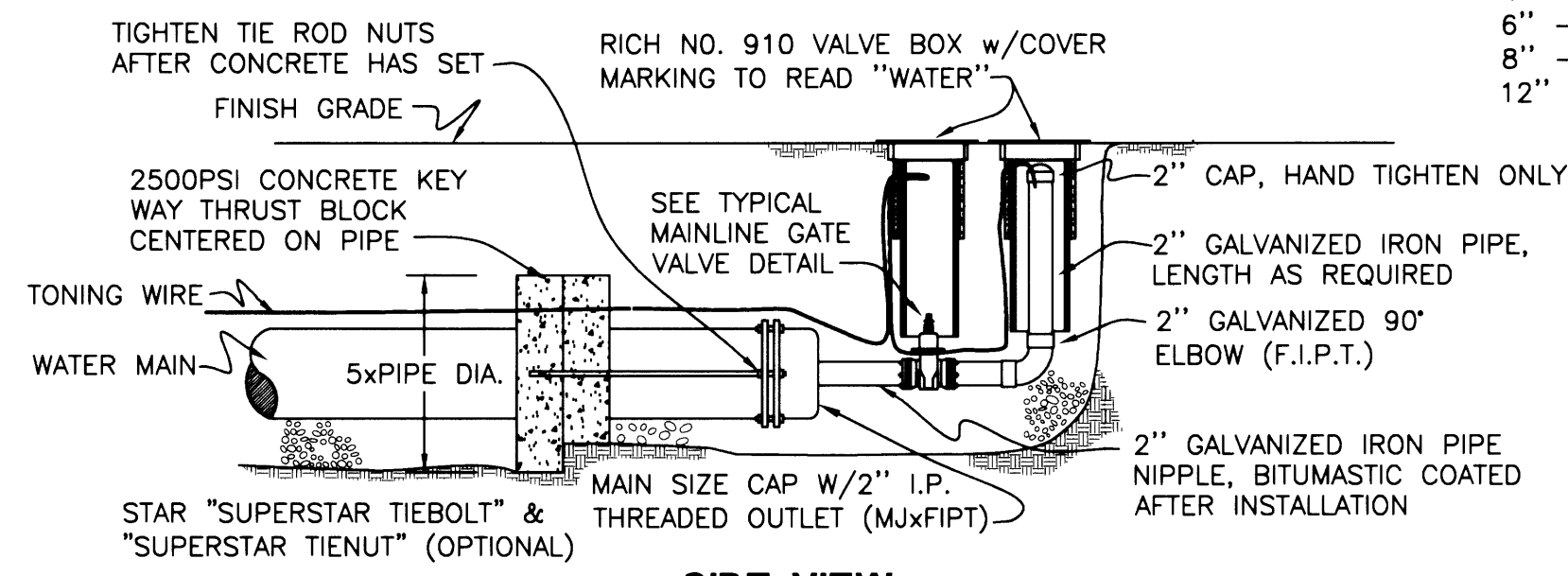


TYPICAL FIRE HYDRANT INSTALLATION (THRUST BLOCKED)

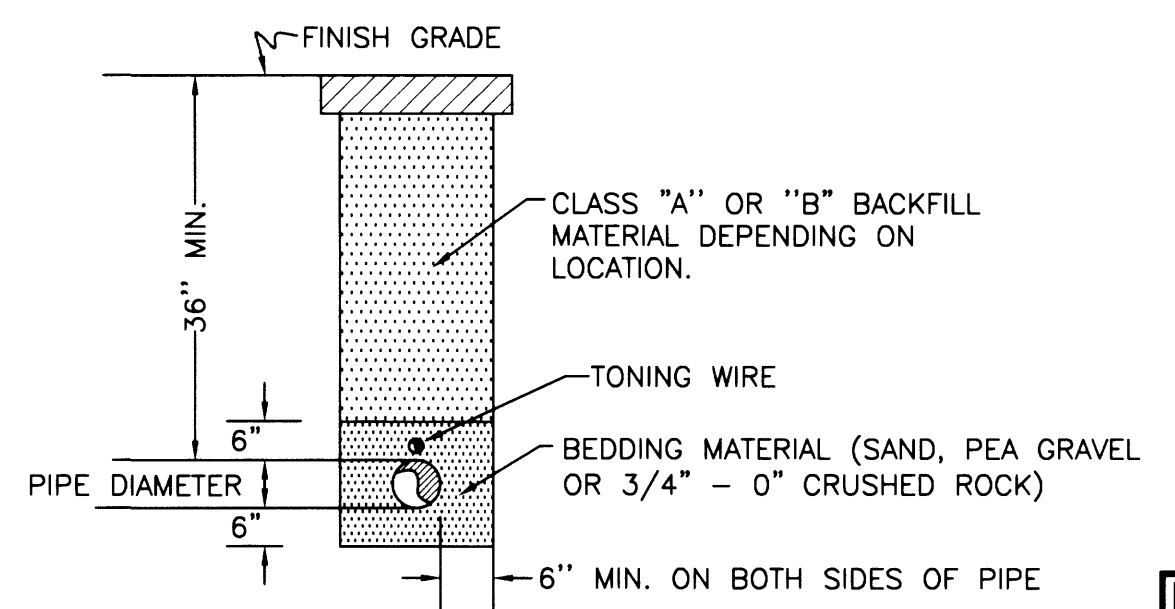


TYPICAL CG-3 INLET DETAIL

- NOTES:
- ALL FABRICATED METAL PARTS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION EXCEPT MH FRAME AND COVER.
 - CONCRETE SHALL MEET CITY STANDARD SPEC. FOR STREET CONSTRUCTION STRUCTURES. (3300 PSI, 22.75MPa)
 - FOR STEEP GRADES USE STD. PRECAST INLET WITH 4'-0" (102mm) OPENING OR TWO 2'-6" (762mm) OPENING INLETS.
 - CURB INLET BASE MAY BE PRECAST OR CAST-IN-PLACE.



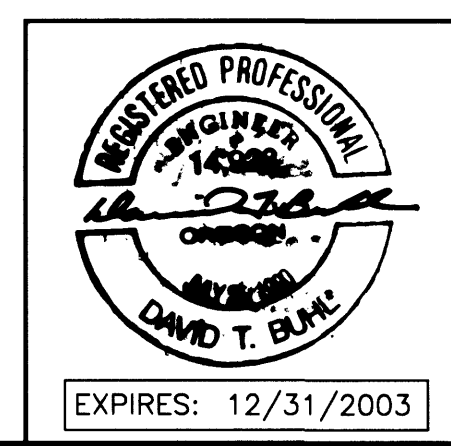
TYPICAL 2" BLOWOFF ASSEMBLY DETAIL



TYPICAL WATER MAINLINE TRENCH DETAIL

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 ONE CALL (800) 332-2344
 OAR 952-001-0010 THROUGH
 OAR 952-001-0090

i.e. ENGINEERING
 Project Name: TAFT DRIVE SUBDIVISION



Rev.	Date	Dwg	Description
1	11/7/02	RWC	AGENCY REVIEWS
2	7/28/03	NRL	AS-BUILTS

Title: PHASE 1A DETAILS
 DES DTB PROJECT NO. 140-78
 DWG BWC DATE: OCTOBER 23, 2002
 CHK SNL SCALE: NO SCALE
 APP DTB SHEET: 7 OF 8

R808DET2