

Mains, Hydrants & Fire Services

2" X 6" STD. GALV.
NIPPLE TOE X POE

2" STD. GALV.
STREET ELL 90°

B38 METER BOX
(17-1/4" X 30")

2" APCO #145C AIR VALVE

2" STD. GALV. PIPE

2" STD. GALV. ELL 90°

2" STD. GATE VALVE

2" STD. GALV.
STREET ELL 90°

2" X 6" STD. GALV.
NIPPLE TBE

PIPE CONNECTION
(SEE SER-2c)

MAIN

2" STD. BLTD CPLG.

2" STD. GALV. PIPE

22" X 22" X 22"
VENTED METAL BOX

2" STD. GALV. ELL 90°

2" STD. GALV. STREET
ELL 90°

SCREEN - 1/8" MESH X
16 GA. WIRE

2" STD. GALV. PIPE

2" STD. GALV. TEE

2" X 24" STD. GALV. NIPPLE

2" STD. GALV. CAP

12" X 24" CONC. FOOTING

2" STD. GALV. PIPE SLOPE
UP & AWAY FROM MAIN

12"
MIN.

2" STD GALV
STREET ELL 90°

2" STD GALV
STREET ELL 90°

2" STD GALV
STREET ELL 90°

2" STD GALV
STREET ELL 90°

A
1

PLAN VIEW

NO SCALE

NOTE:

WRAP ALL PIPE W/2 LAYERS
PROTECTIVE WRAP

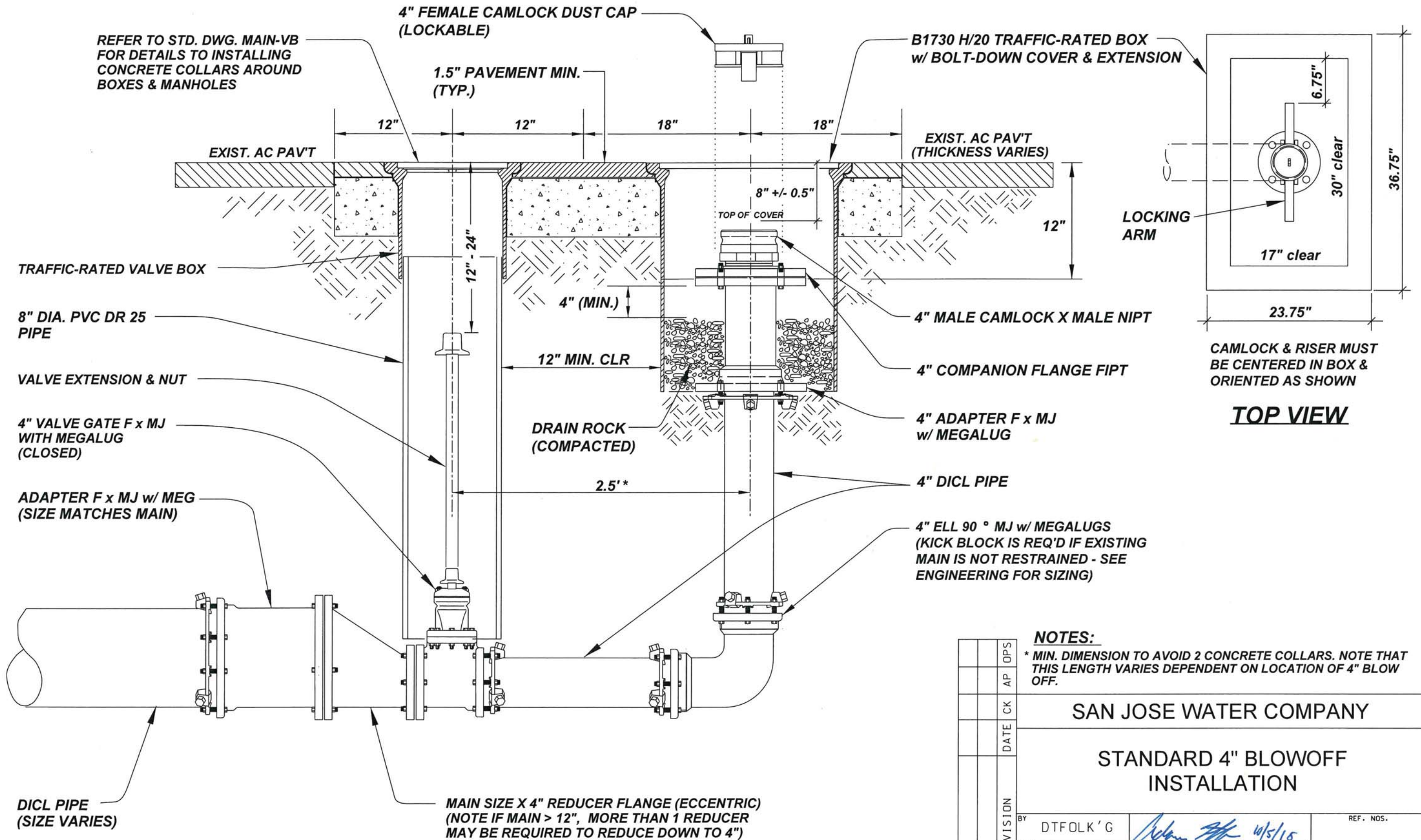
SEE MAIN-AVag FOR AIR VALVE
ENCLOSURE BOX INSTALLATION

SECTION

NO SCALE

A
1

REVISION	DATE	CK	AP	OPS
SAN JOSE WATER COMPANY				
STANDARD 2" SINGLE AIR VALVE INSTALLATION				
BY	P. JOCHIM	<i>[Signature]</i>	OPERATIONS	REF. NOS. A-16-139B-1
DATE	15 NOV '04	<i>[Signature]</i>	ENGINEERING	DWG. NO. MAIN-AV2
CK		<i>[Signature]</i>	CHIEF ENGINEER	
BY	SCALE	SHOWN		



REFER TO STD. DWG. MAIN-VB FOR DETAILS TO INSTALLING CONCRETE COLLARS AROUND BOXES & MANHOLES

4" FEMALE CAMLOCK DUST CAP (LOCKABLE)

B1730 H/20 TRAFFIC-RATED BOX w/ BOLT-DOWN COVER & EXTENSION

1.5" PAVEMENT MIN. (TYP.)

EXIST. AC PAV'T (THICKNESS VARIES)

TRAFFIC-RATED VALVE BOX

8" DIA. PVC DR 25 PIPE

VALVE EXTENSION & NUT

4" VALVE GATE F x MJ WITH MEGALUG (CLOSED)

ADAPTER F x MJ w/ MEG (SIZE MATCHES MAIN)

DICL PIPE (SIZE VARIES)

MAIN SIZE X 4" REDUCER FLANGE (ECCENTRIC) (NOTE IF MAIN > 12", MORE THAN 1 REDUCER MAY BE REQUIRED TO REDUCE DOWN TO 4")

8" +/- 0.5" TOP OF COVER

4" (MIN.)

12" MIN. CLR

DRAIN ROCK (COMPACTED)

2.5'*

4" MALE CAMLOCK X MALE NIPT

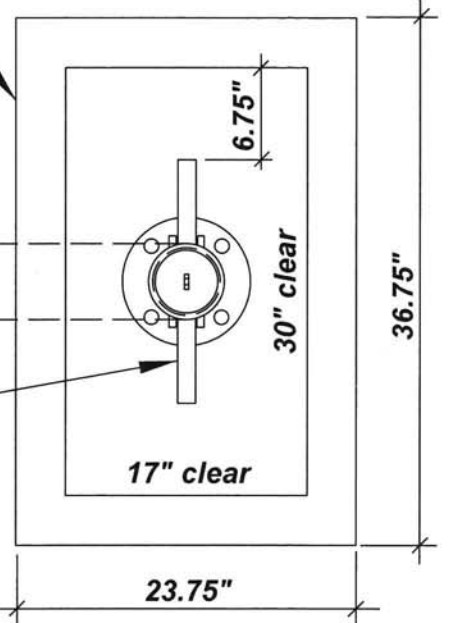
4" COMPANION FLANGE FIPT

4" ADAPTER F x MJ w/ MEGALUG

4" DICL PIPE

4" ELL 90° MJ w/ MEGALUGS (KICK BLOCK IS REQ'D IF EXISTING MAIN IS NOT RESTRAINED - SEE ENGINEERING FOR SIZING)

LOCKING ARM



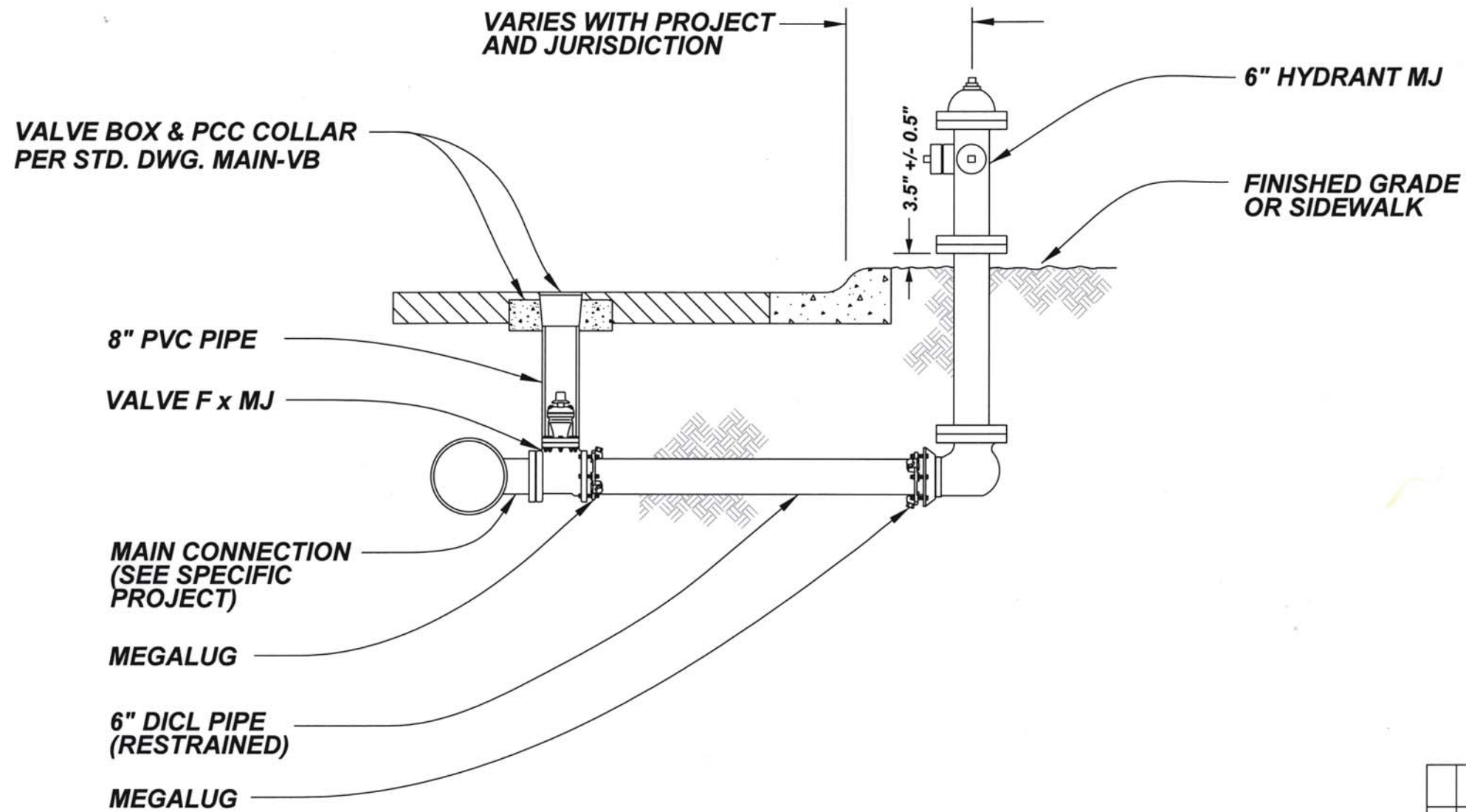
CAMLOCK & RISER MUST BE CENTERED IN BOX & ORIENTED AS SHOWN

TOP VIEW

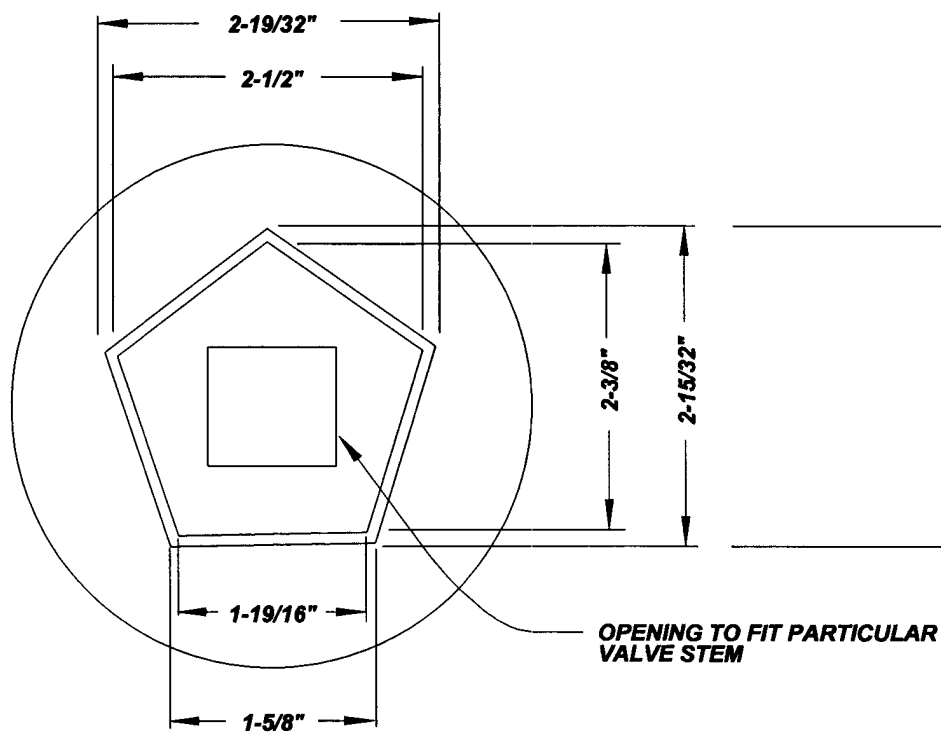
NOTES:

* MIN. DIMENSION TO AVOID 2 CONCRETE COLLARS. NOTE THAT THIS LENGTH VARIES DEPENDENT ON LOCATION OF 4" BLOW OFF.

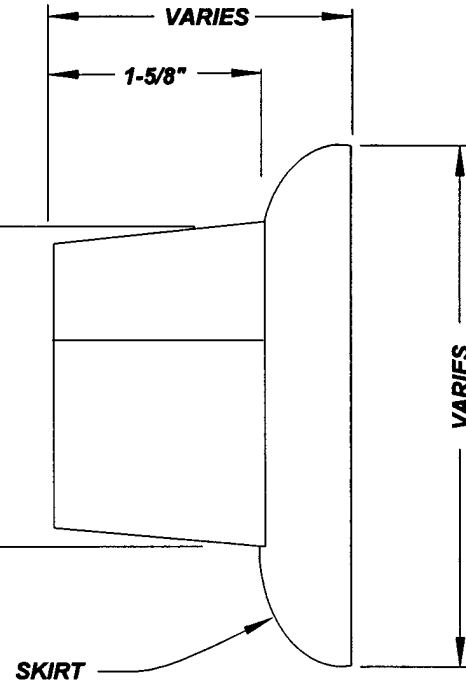
			AP	OPS
			CK	
			DATE	
SAN JOSE WATER COMPANY				
STANDARD 4" BLOWOFF INSTALLATION				
BY	DTFOLK 'G			REF. NOS.
DATE	9/30/2018			DWG. NO.
CK	ETWEN ND			MAIN-4BO
BY	SCALE NONE			



REVISION	DATE	CK	AP	DPS
SAN JOSE WATER COMPANY				
STANDARD HYDRANT INSTALLATION				
BY	LJ DAVID	<i>[Signature]</i> 10/8/18		REF. NOS.
DATE	9/30/2018	OPERATIONS		DWG. NO.
CK	<i>[Signature]</i> 10/15/18	ENGINEERING		MAIN-HYD
BY	SCALE NONE	<i>[Signature]</i> 10/9/18		
				VICE PRESIDENT OF ENGINEERING



TOP VIEW



SIDE VIEW

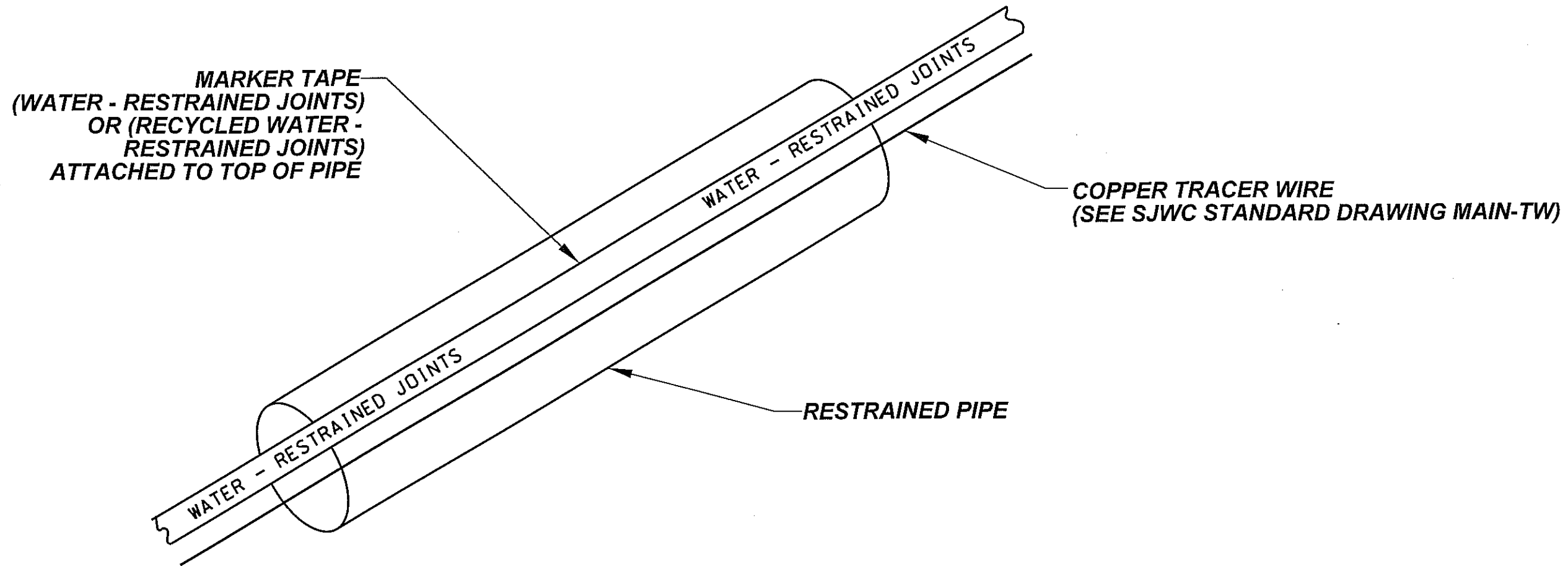
NOTES:

**DEPTH & DIAMETER OF SKIRT BELOW
BASE OF NUT IS NOT CRITICAL**

**REMOVE SQUARE GATE VALVE WRENCH NUT FROM
VALVE STEM AND REPLACE W/PENTAGON NUT.**

MATERIAL: CAST IRON OR DUCTILE IRON

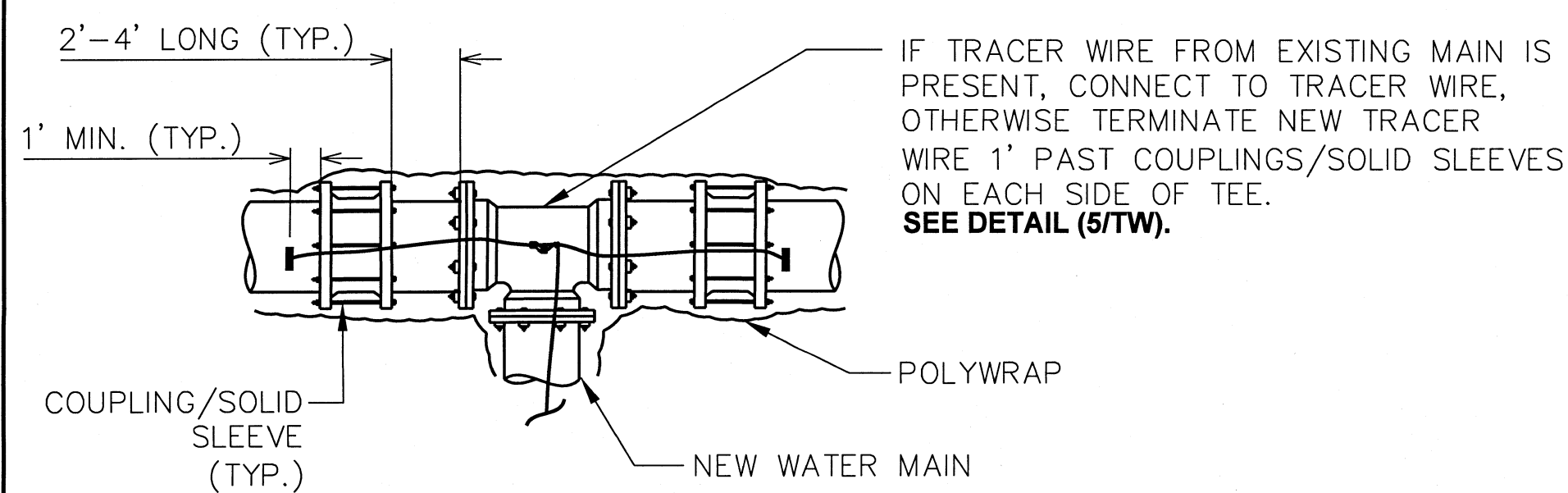
REVISION	DATE	CK	AP	OPS
SAN JOSE WATER COMPANY				
PENTAGON NUT FOR LEFT-HAND OPEN GATE VALVE				
BY	P. JOCHIM	 OPERATIONS		REF. NOS. A-12-154
DATE	15NOV04	 ENGINEERING		DWG. NO. MAIN-PN
CK	ELM	 CHIEF ENGINEER		
BY	SCALE	NONE		



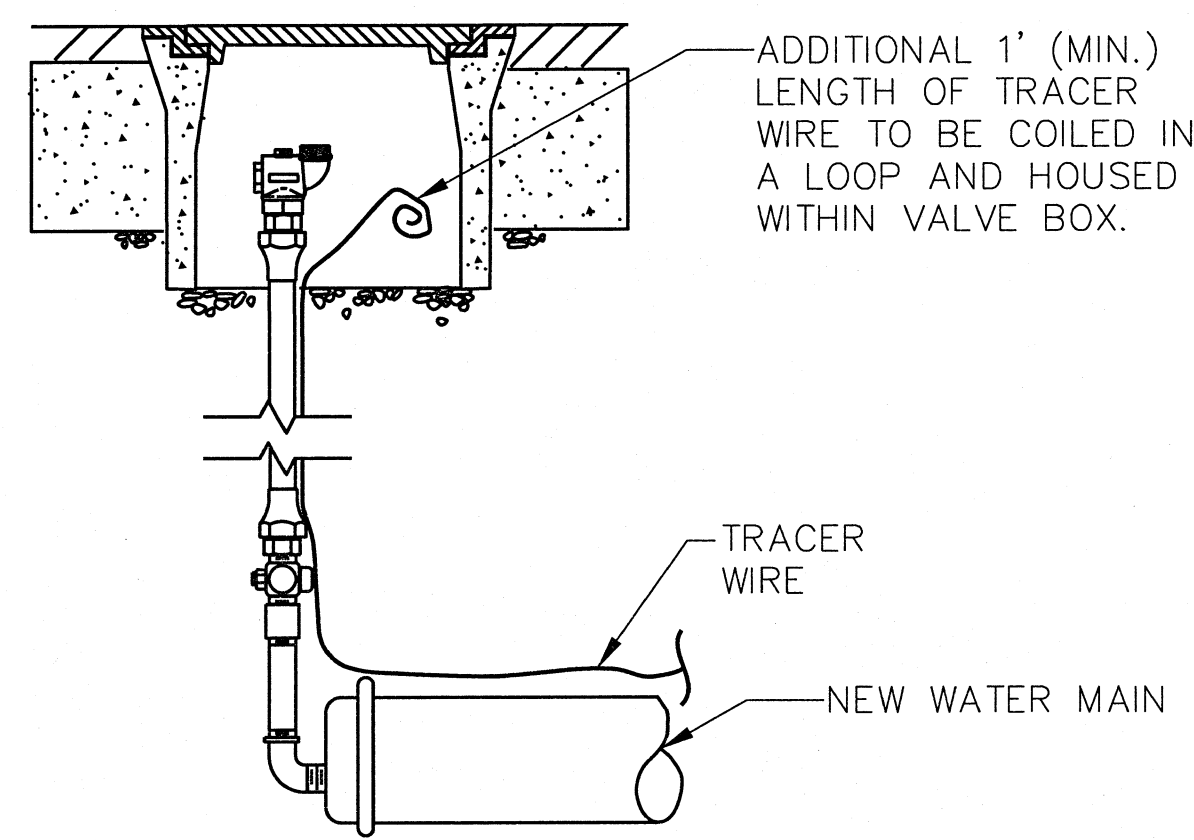
RESTRAINED PIPE MARKER TAPE AND TRACER WIRE DETAIL
NTS

REVISION	DATE	CK	AP	OPS
SAN JOSE WATER COMPANY				
RESTRAINED PIPE MARKING				
BY	J. GUEVARA			
DATE	2/3/15			
CK	TN 2/3/15			
BY	SCALE NONE			

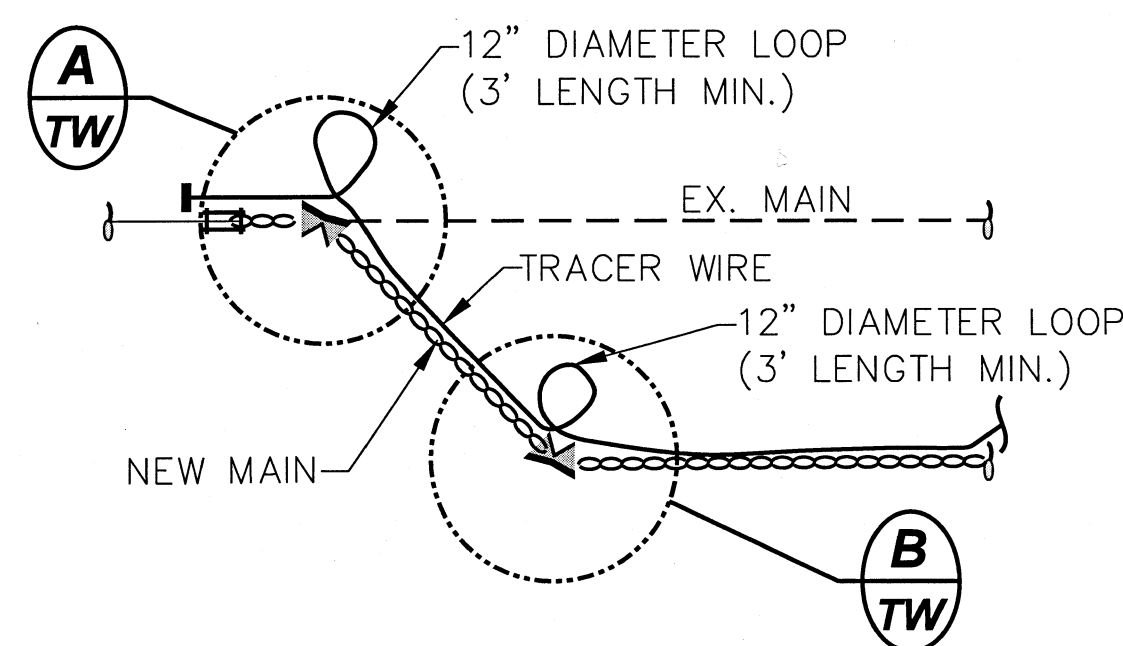
<p><i>Juel Celis</i> 2/3/15 DISTRIBUTION SYSTEM / DATE</p> <p><i>TN</i> 2/3/15 ENGINEERING / DATE</p> <p><i>[Signature]</i> 2/5/15 VICE PRESIDENT OF ENGINEERING / DATE</p>	<p>REF. NOS.</p> <p>DWG. NO. MAIN-RPM</p>
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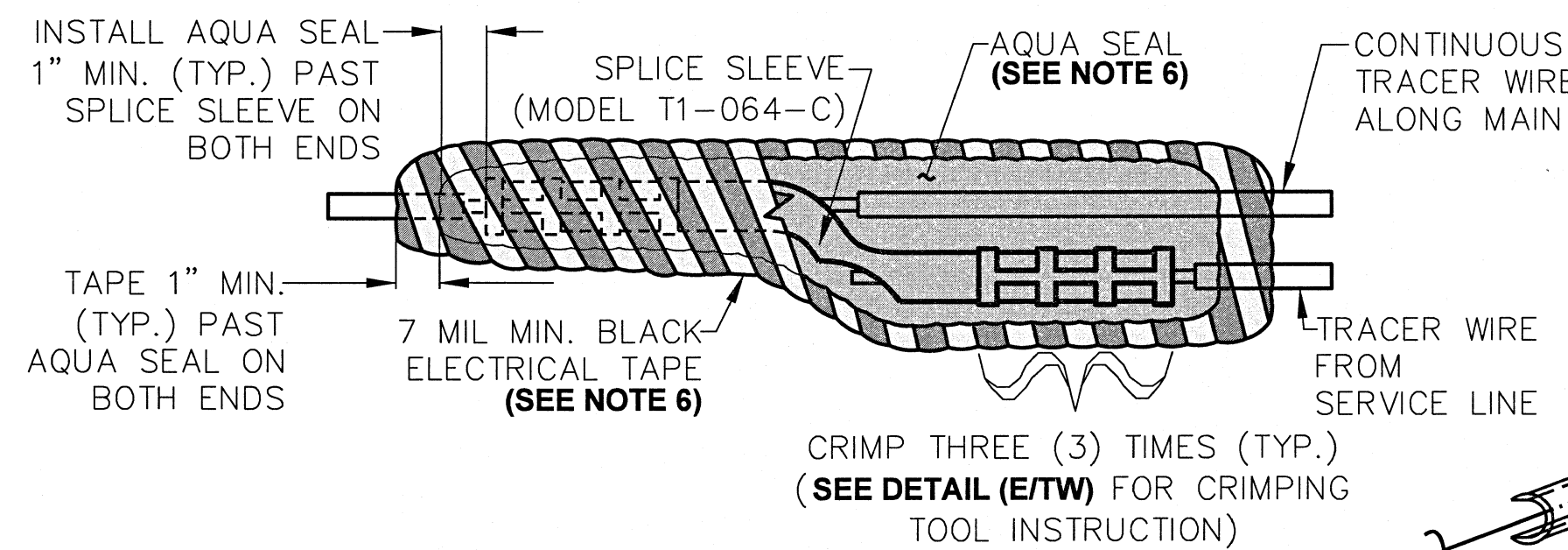
TRACER WIRE WITH CUT IN TEE ON EXISTING MAIN 1
NTS TW



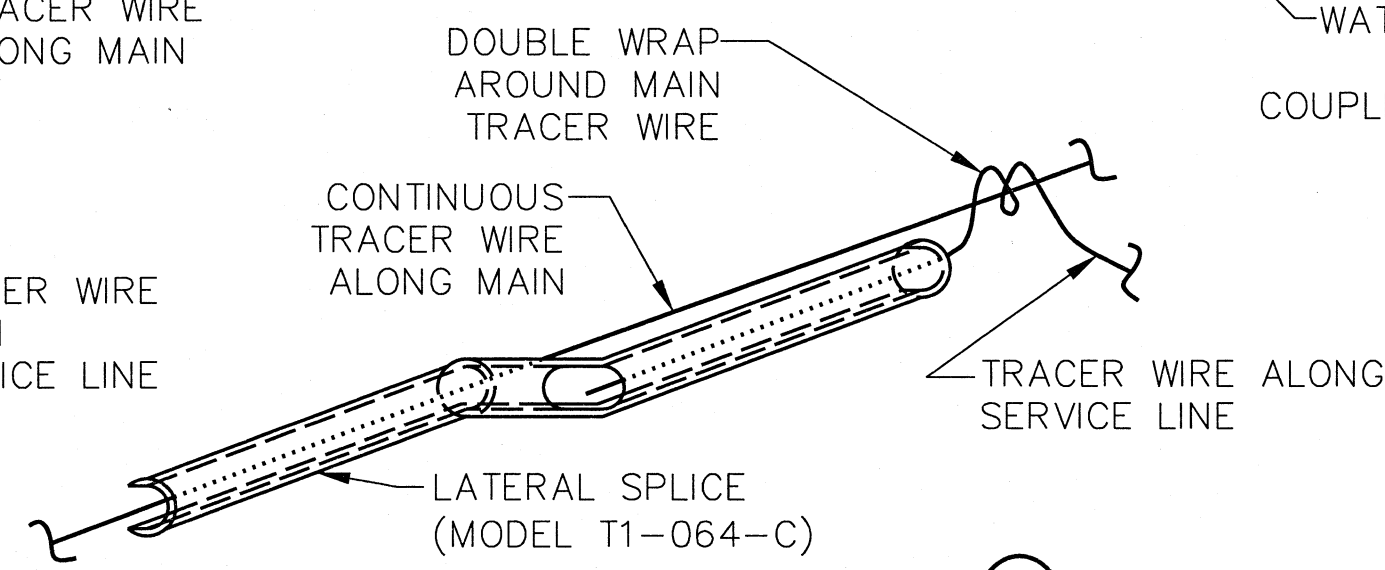
TRACER WIRE WITH BLOWOFF INSTALLATION 4
NTS TW



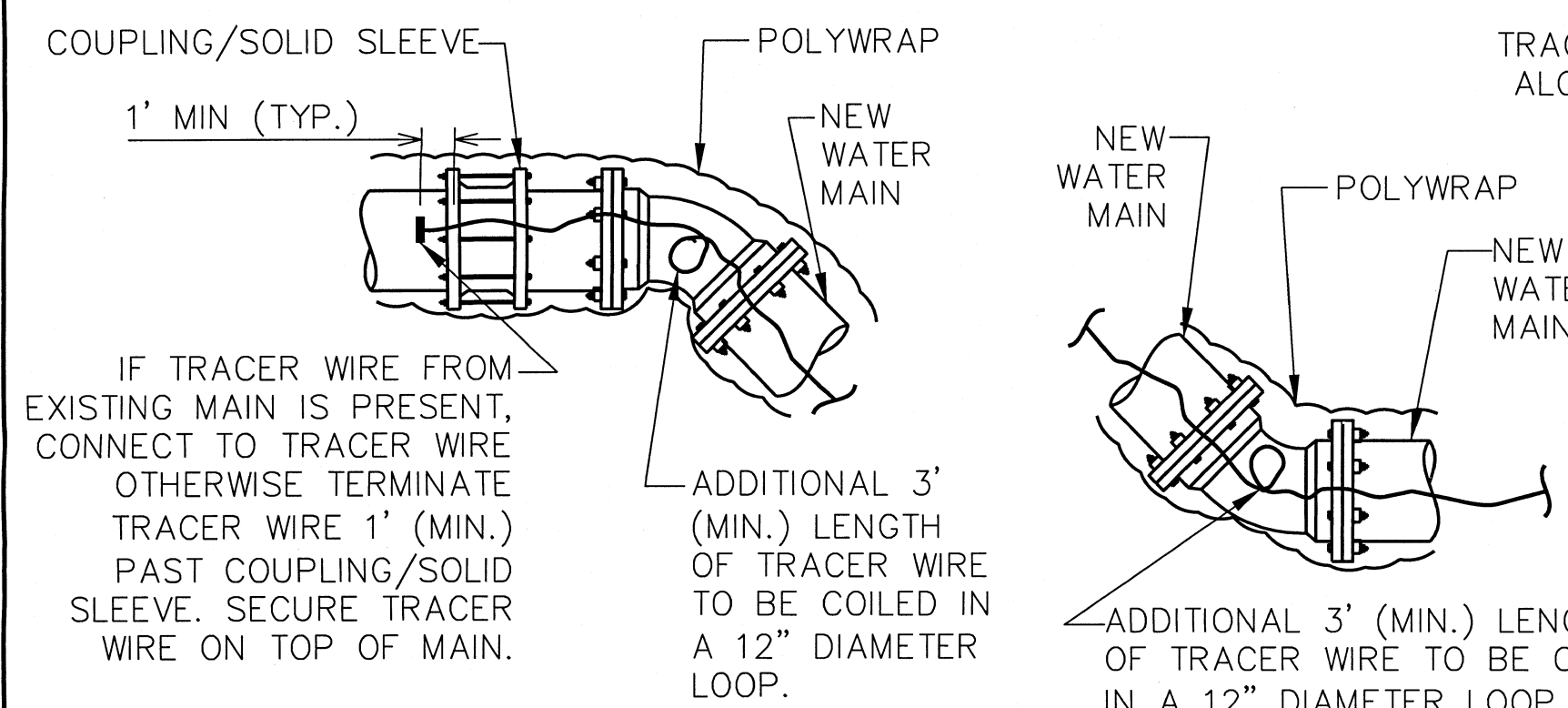
TRACER WIRE WITH MAIN INSTALLATION AT ELBOWS AND TIE-IN LOCATIONS 2
NTS TW



LATERAL SPLICE CONNECTION

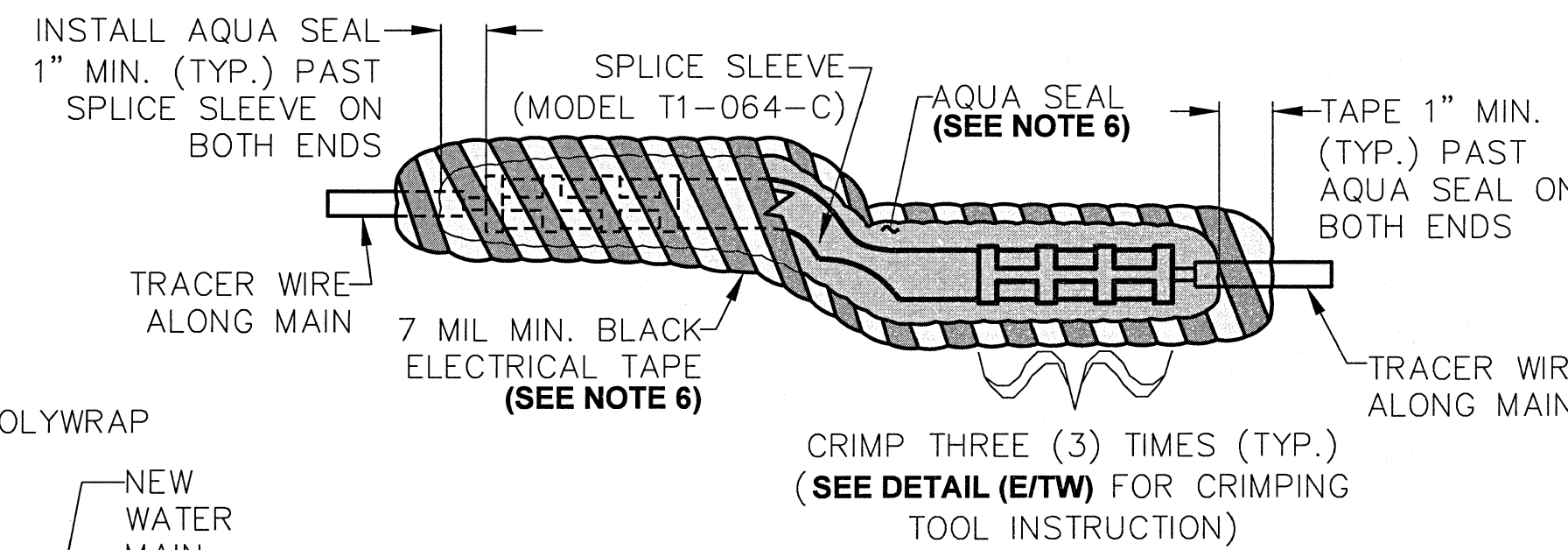


TRACER WIRE AT A HYDRANT 3
NTS TW

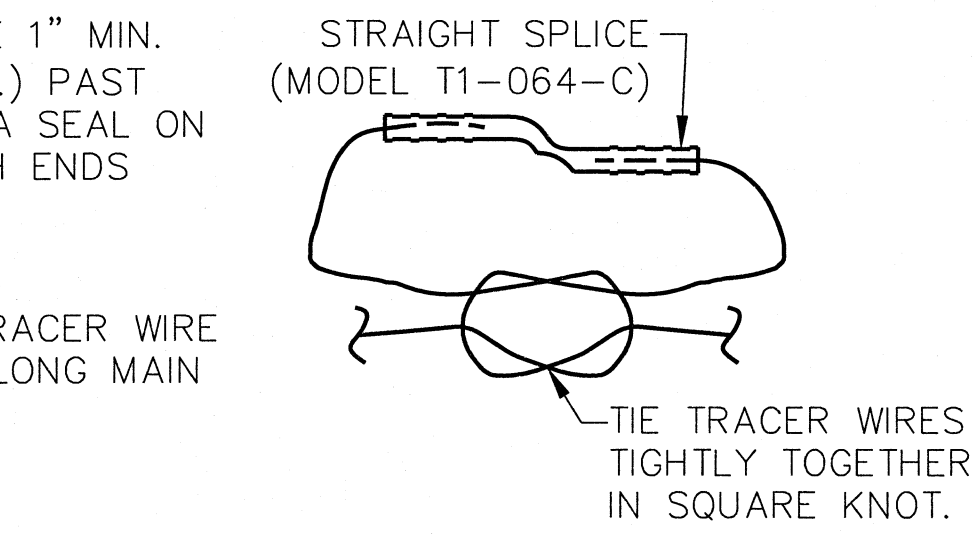


TERMINAL END DETAIL A TW

ELBOW / DEFLECTION DETAIL B TW



STRAIGHT SPLICE CONNECTION



END TO END CONNECTION D TW

TRACER SPLICE WIRE CONNECTION 5
NTS TW

SPLICE CONNECTION NOTES:

1. ALL CONNECTIONS ARE TO BE MADE WITH NICOTAP SPLICE SLEEVE T1-064-C MANUFACTURED BY NICOPRESS. THESE CONNECTIONS WILL BE INSTALLED USING NICOPRESS CRIMPING TOOL 31-DC IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. THE C-GROOVE SHALL BE USED. THE USE OF PLIERS OR TOOLS OTHER THAN SPECIFIED HEREIN IS UNACCEPTABLE. SEE DETAIL (E/TW).

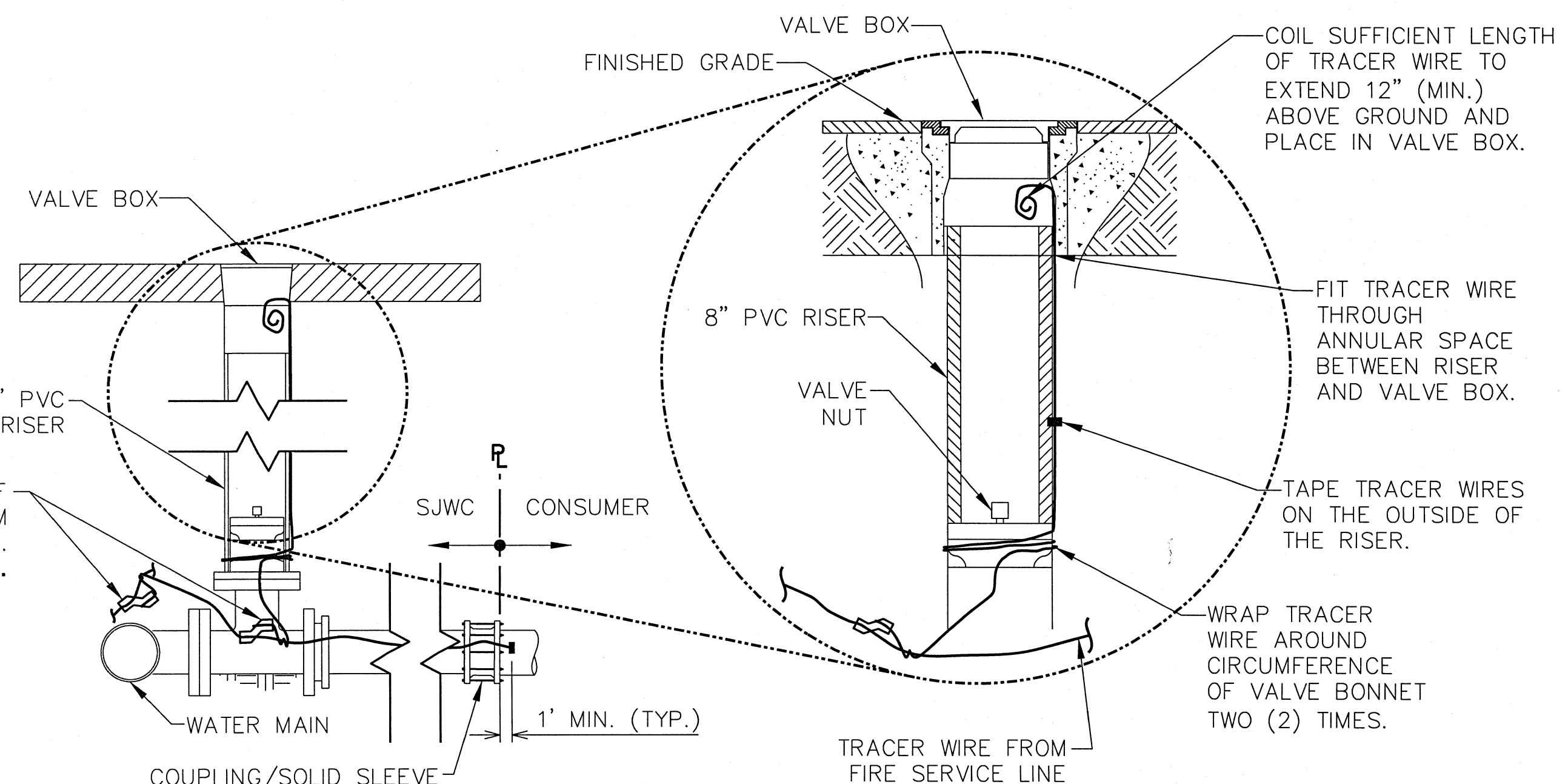
2. WHEN IN USE, VERIFY PRESS DIAMETER OF CRIMPS WITH NICOPRESS TOOL GAUGE ON A DAILY BASIS. ADJUST CRIMPING TOOL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

3. ALL PORTIONS OF WIRE WITHIN SPLICE SLEEVE MUST BE STRIPPED (APPROXIMATELY 1-3/4"). AFTER COMPRESSION, THE SLEEVE AND THE WIRE INSULATION SHOULD BE SEPARATED BY APPROXIMATELY 1/8".

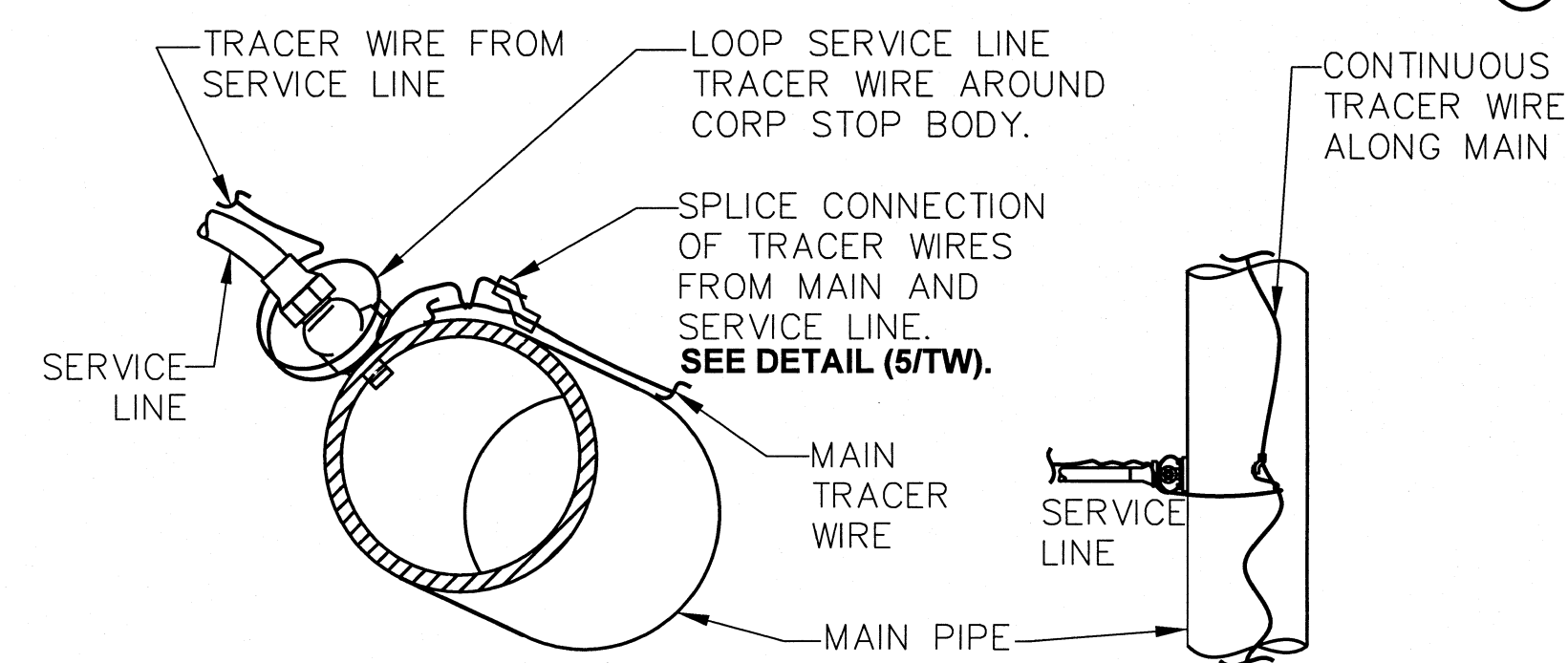
4. FOR ALL SERVICE CONNECTIONS, DOUBLE WRAP SERVICE TRACER WIRE AROUND MAIN TRACER WIRE THEN LEAD SERVICE TRACER WIRE ALONG SERVICE LINE. SEE DETAIL (C/TW).

5. AT END OF TRACER WIRE SPOOL LENGTH, CONNECT TO NEW SPOOL WITH STRAIGHT SPLICE SLEEVE AND APPLY A SQUARE KNOT. SEE DETAIL (D/TW).

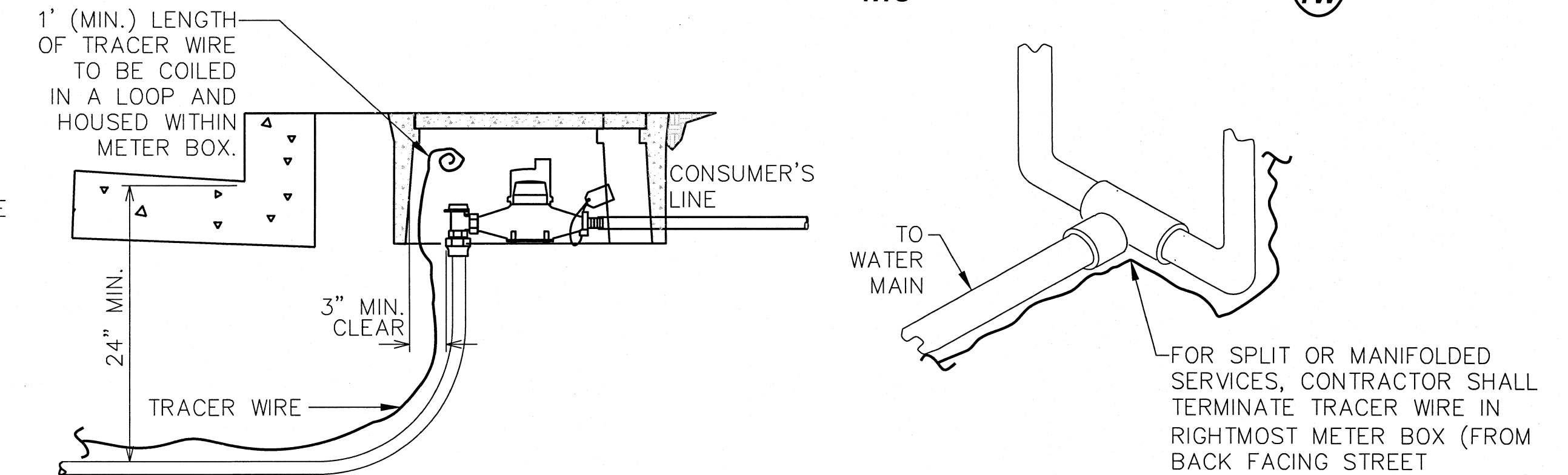
6. APPLY AQUA SEAL TO FULL LENGTH OF CONNECTOR PLUS AN ADDITIONAL 1" MIN. PAST THE CONNECTOR IN BOTH DIRECTIONS ALONG TRACER WIRE. AFTER APPLICATION OF AQUA SEAL, HALF LAP AND DOUBLE WRAP FULL LENGTH OF SEALANT PLUS AN ADDITIONAL 1" MIN. IN BOTH DIRECTIONS ALONG TRACER WIRE WITH 7 MIL MIN. BLACK PVC ELECTRICAL TAPE.



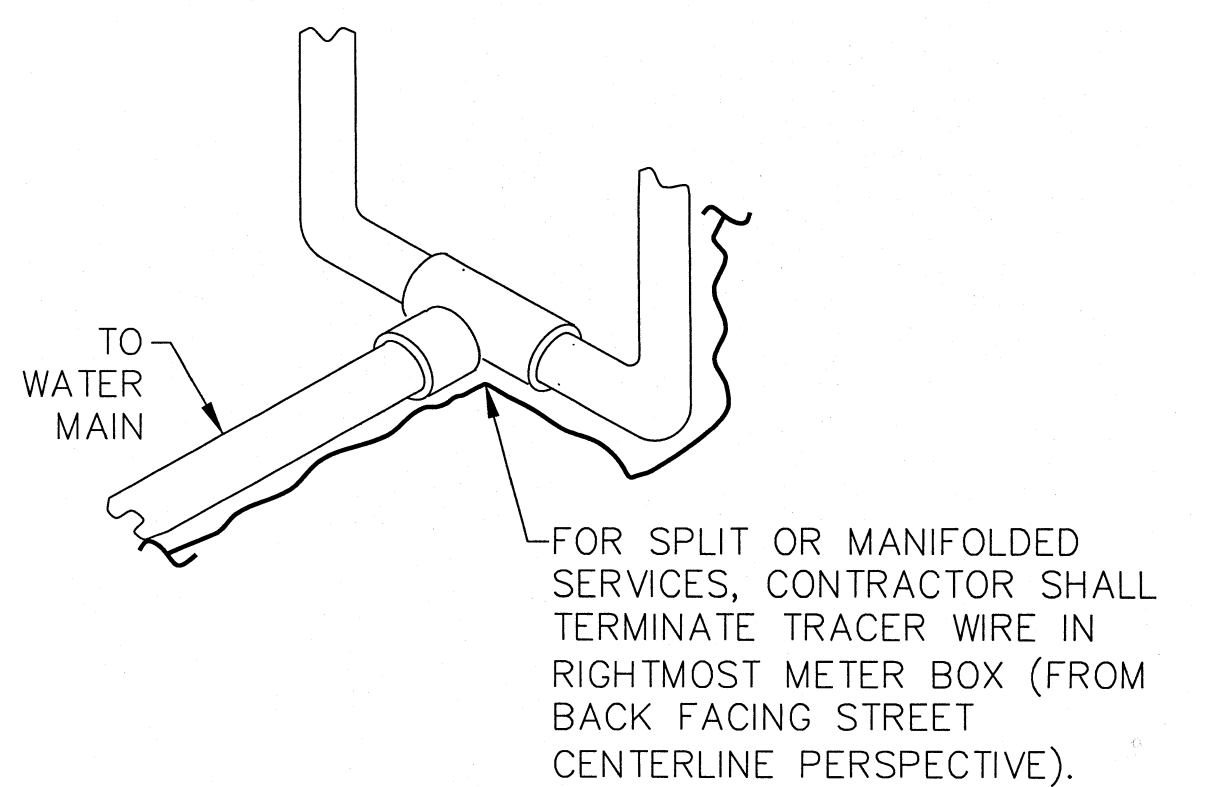
TRACER WIRE WITH FIRE SERVICE INSTALLATION 6
NTS TW



SERVICE LINE TRACER WIRE TIE-IN AT MAIN 7
NTS TW



SERVICE TRACER WIRE AT WATER METER 8
NTS TW



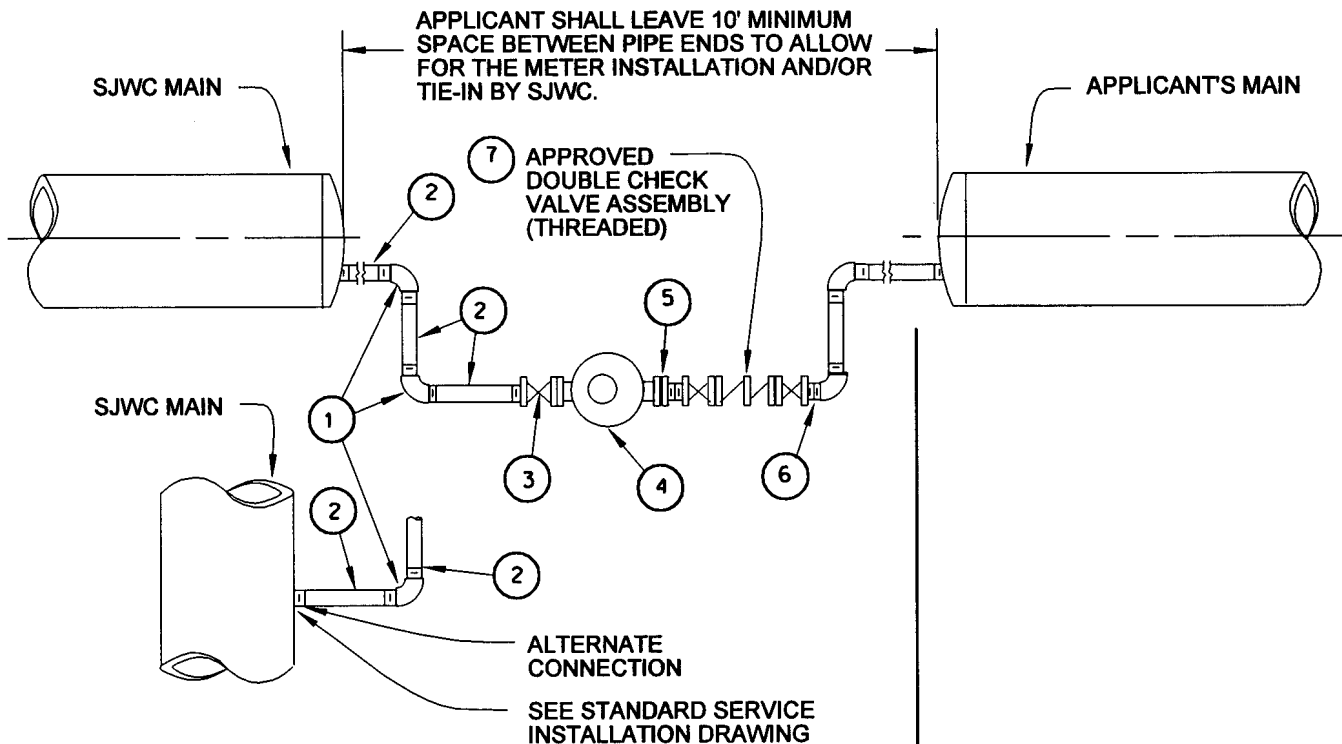
SPLIT SERVICES 9
NTS TW

GENERAL NOTES:

- ALL TRACER WIRES SHALL BE 12 AWG SOLID COPPER WIRE WITH 45 MIL HMW PE INSULATION (MIN.) RATED FOR DIRECT BURIAL AS MANUFACTURED BY AGAVE WIRE LTD.
- TRACER WIRE SHALL BE INSTALLED ABOVE AND ALONG ALL WATER MAINS, SECURELY FASTENED TO TOP OF PIPELINE WITH TAPE.
- TRACER WIRE SHALL TERMINATE IN LOCATIONS AS SHOWN AND AT METER BOXES, BLOWOFF BOXES, FIRE SERVICES, HYDRANTS, AND DEDICATED VALVE BOXES.
- CONTRACTOR SHALL TEST TO CONFIRM CONTINUITY IN ALL TRACER WIRES. IF A SEGMENT OF TRACER WIRE IS FOUND TO BE DISCONTINUOUS, THE CONTRACTOR SHALL REPAIR OR REPLACE THE FAILED SEGMENT OF TRACER WIRE.
- THE LOCATION OF THE TRACER WIRE AND LEADS SHALL BE MARKED ON THE RECORD DRAWINGS WITH THE LEAD LOCATION CLEARLY MARKED IN THE FIELD.

		San Jose Water Company	
TRACER WIRE INSTALLATION			
REVISION DATE CHECK / DATE BY	DATE DATE DATE DATE	J. GUEVARA 2/20/2015 TW 2/23/15 AS SHOWN	REF. NOS. DISTRIB. SYSTEM / DATE 2/23/15 DWG. NO. MAIN-TW SHEET 1 of 1

APPLICANT SHALL LEAVE 10' MINIMUM SPACE BETWEEN PIPE ENDS TO ALLOW FOR THE METER INSTALLATION AND/OR TIE-IN BY SJWC.



ALTERNATE CONNECTION
SEE STANDARD SERVICE INSTALLATION DRAWING

FITTINGS FURNISHED & INSTALLED BY SJWC

FITTINGS FURNISHED & INSTALLED BY APPLICANT

SOURCE OF WATER:
FOR CONNECTION TO A NEARBY FIRE HYDRANT, SJWC CONTRACTOR SHALL OBTAIN PORTABLE METER AND DOUBLE CHECK VALVE ASSEMBLY FROM SJWC STORES DEPARTMENT.

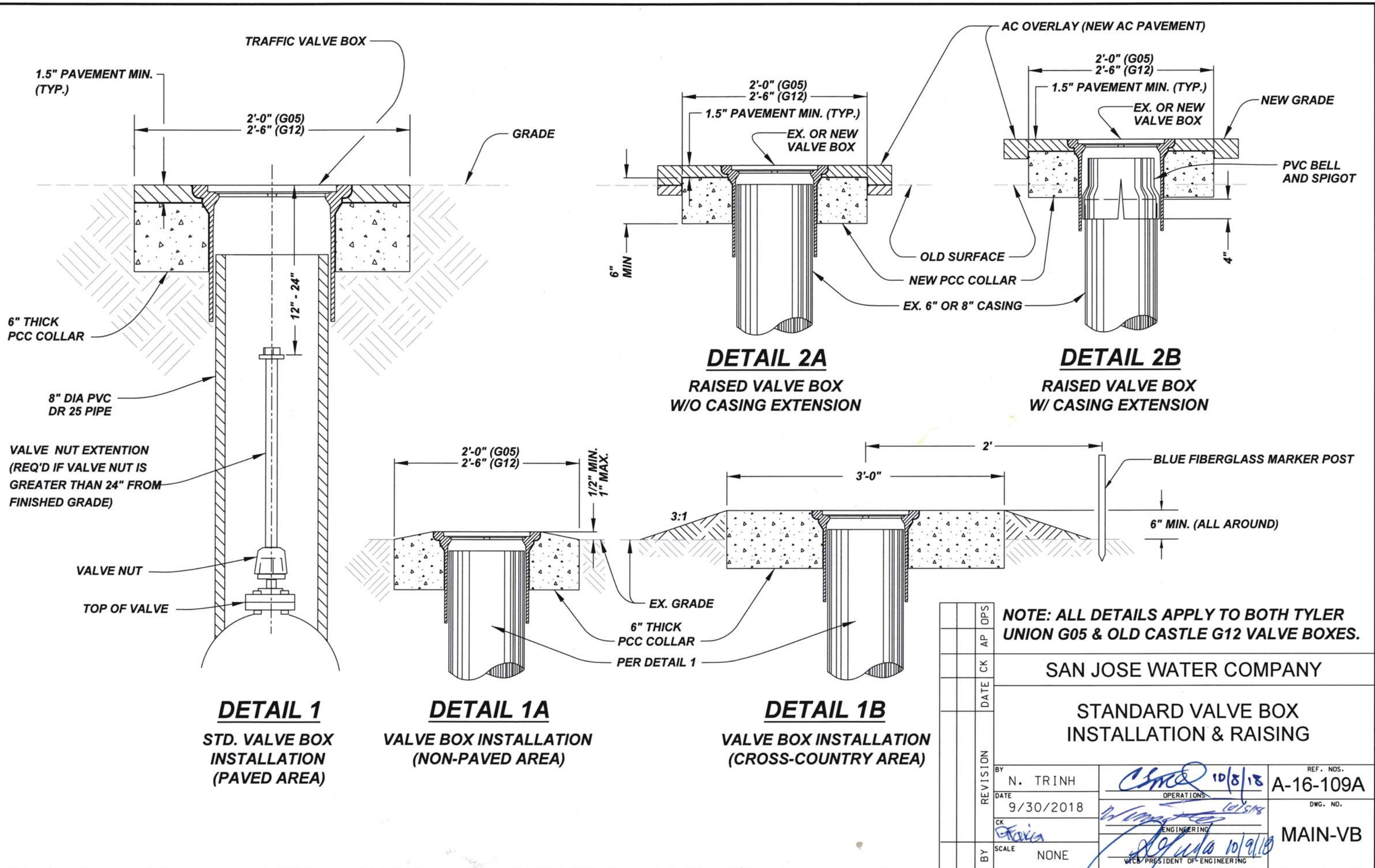
SJWC MATERIALS LIST

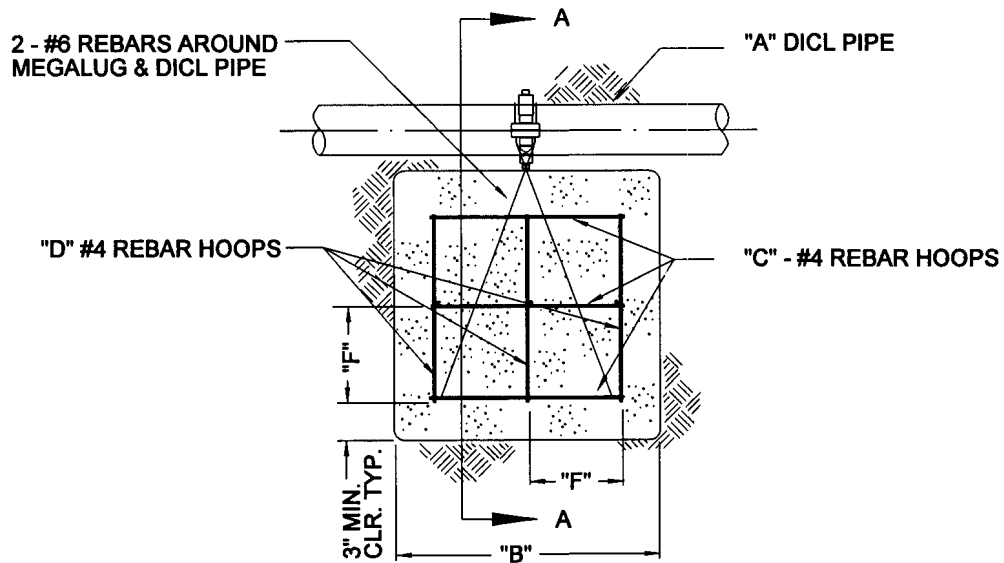
#	DESCRIPTION
1	2" ELL 90° GALVANIZED
2	2" GALVANIZED PIPE
3	2" METER WHEEL VALVE, MODEL J-372-F
4	2" FLANGED METER (TURBO OR POSITIVE DISPLACEMENT)
5	2" METER FLANGE MALE
6	2" NIPPLE CLOSE BRASS
7	2" DOUBLE CHECK VALVE ASSEMBLY

FOR END CAP, SEE BLOCKING AND BLOW OFF DETAIL ON INSTALLATION DRAWING.

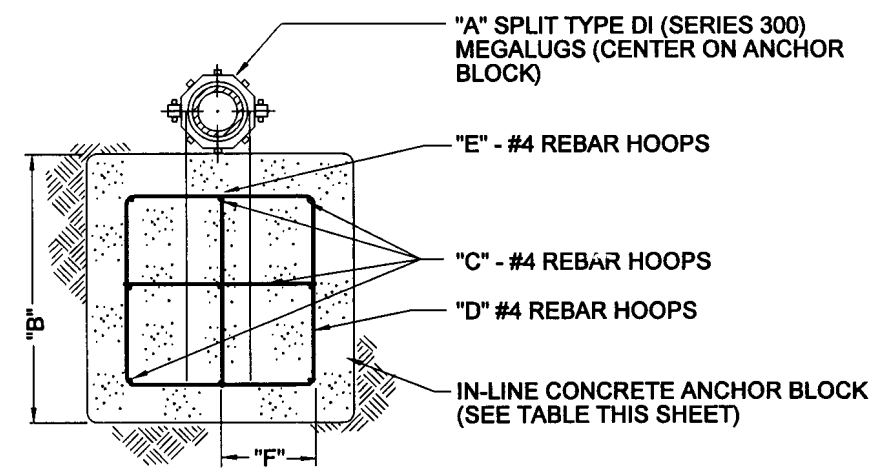
UPON ACCEPTANCE OF THE APPLICANT'S MAINS, SJWC WILL INSTALL THE FINAL CONNECTION BETWEEN THE APPLICANT'S MAIN AND SJWC MAIN.

SAN JOSE WATER COMPANY	
STANDARD TEMPORARY TIE-IN	
REVISION	DATE
BY P. JOCHIM	15 NOV '04
DATE	15 NOV '04
CK	EV
BY	SCALE NONE
OPERATIONS: <i>Victoria</i>	
ENGINEERING: <i>William</i>	
SCALE: NONE	
REF. NOS.	A-16-161
DWG. NO.	MAIN-TT





DETAIL



SECTION AA

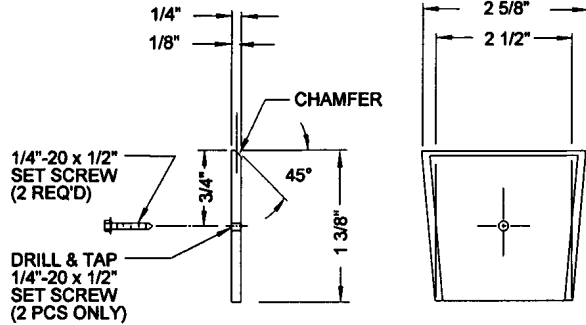
"A" NOMINAL SIZE (IN.)	"B" LENGTH OF ONE SIDE OF ANCHOR BLOCK (IN.)	"C" QUANTITY OF REBAR HOOPS -HORIZONTAL-	"D" QUANTITY OF REBAR HOOPS	"E" QUANTITY OF REBAR HOOPS -VERTICAL-	"F" APPROX. CENTER DISTANCE BETWEEN REBARS (IN.)
4"	30"	3	3	1	12"
6"	39"	4	4	2	11"
8"	45"	4	4	2	13"
10"	54"	5	5	3	12"
12"	60"	6	6	4	11"

NOTES:

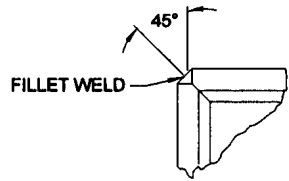
- 1.) IN-LINE ANCHOR BLOCK SHALL BE POURED AGAINST UNDISTURBED GROUND.
- 2.) APPLY TWO COATS OF SUPER TANK SOLUTION ON ALL METAL EXPOSED TO SOIL.
- 3.) ANCHOR BLOCK SIZES ARE BASED ON 150 PSI WORKING PRESSURE (SAFETY FACTOR OF 1.5) AND 2000 LBS./SQ. FT. BEARING SOIL.
- 4.) CONCRETE SHALL BE KEPT CLEAR OF FLANGES, NUTS, AND BOLTS.

REVISION	DATE	CK	AP	OPS	SAN JOSE WATER COMPANY
BY	P. JOCHIM				REF. NOS.
DATE	15 NOV 04				DWG. NO.
CR	ELM				MAIN-LAB
BY	SCALE NONE				

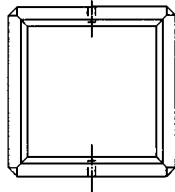
Victoria OPERATIONS
ELM ENGINEERING
ASIS CHIEF ENGINEER



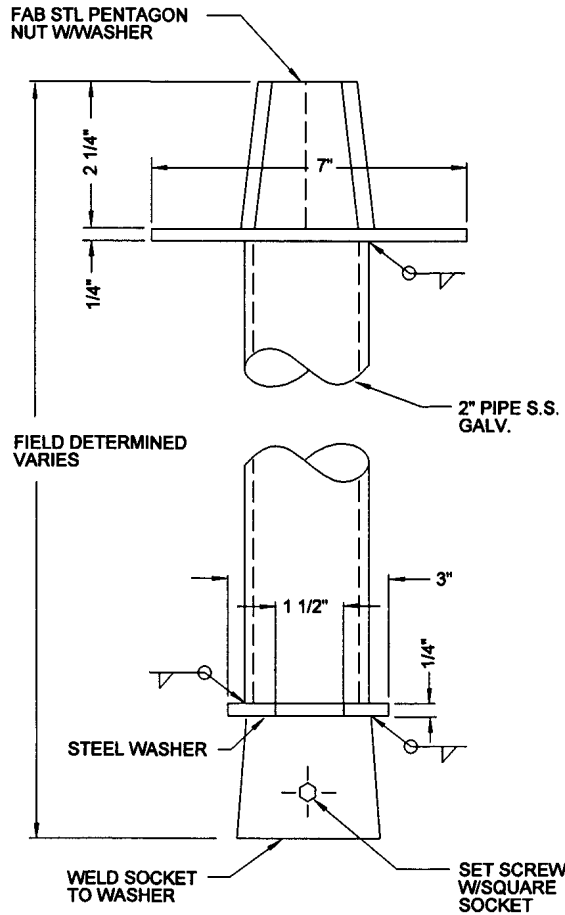
4 EACH



CORNER DETAIL



SQUARE SOCKET



MATERIAL:

STD. PIPE - SCH. 40 (BLACK & GALV.)
 PLATES, SHAPES & WELDED STL. PIPE
 COUPLING, 3000 LB. GRADE 2
 FLANGE, 150 LB. GRADE 2
 FLANGE, 150 LB. AND 300 LB.
 BOLT, NUTS AND FLAT WASHERS

WELDING PROCEDURE:

PIPING:
 AWWA C206
 AWS D7

STRUCTURAL:
 AWS D1

ELECTRODES:
 AWS A5

ASTM WELD ELECTRODES
DESIG. AWS - ASTM CLASS.

A53 E - 60 SERIES
 A36 E - 70 SERIES
 A105 E - 60 SERIES
 A181, GR. 1 E - 70 SERIES
 A307 E - 60 SERIES

MARKING AND USE

MARK _____ NO. REQ'D _____
 USE EST. _____ ITEM _____
 DATE REQ'D _____

NOTES:

APPLY BITUMASTIC #33 ON ALL NON-GALVANIZED SURFACES.
 PAINT OUTSIDE OF SOCKET YELLOW FOR IDENTIFICATION.

NOTE:

AWWA, AWS & ASTM DESIGNATIONS
 TO BE WITH LATEST REVISIONS.

REVISION	DATE	CK	AP	OPS

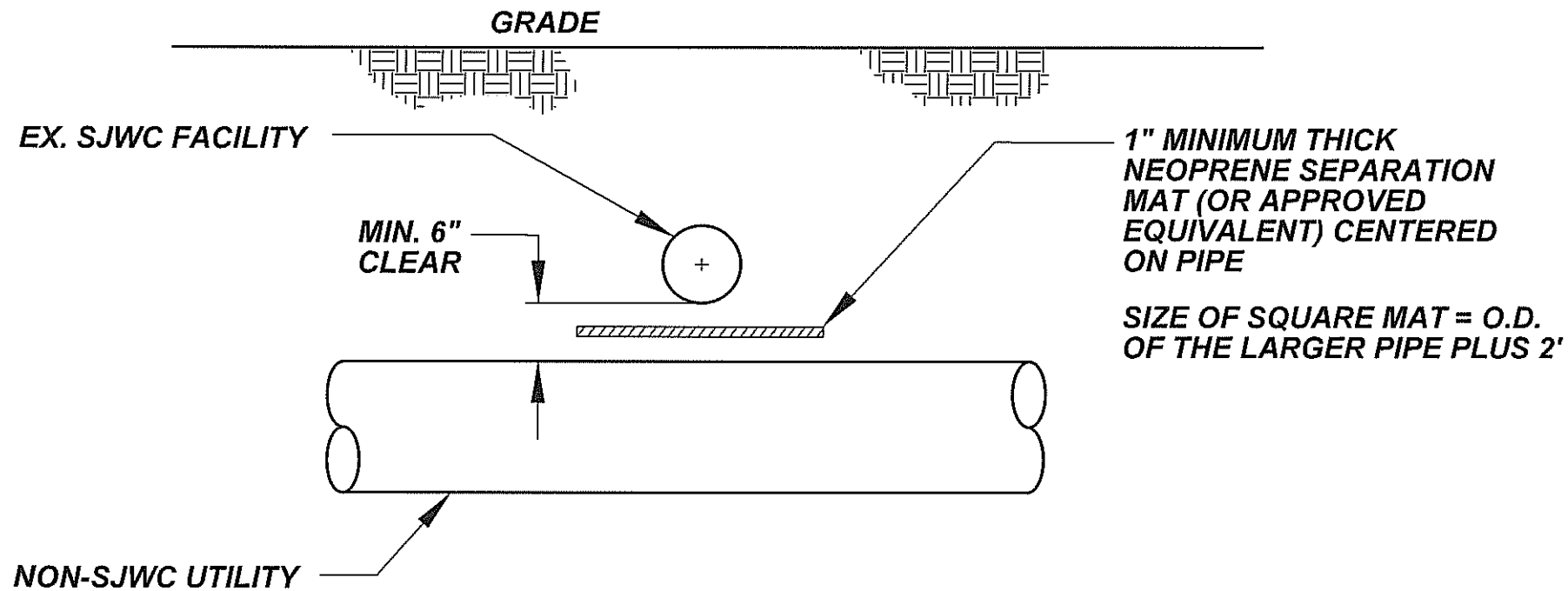
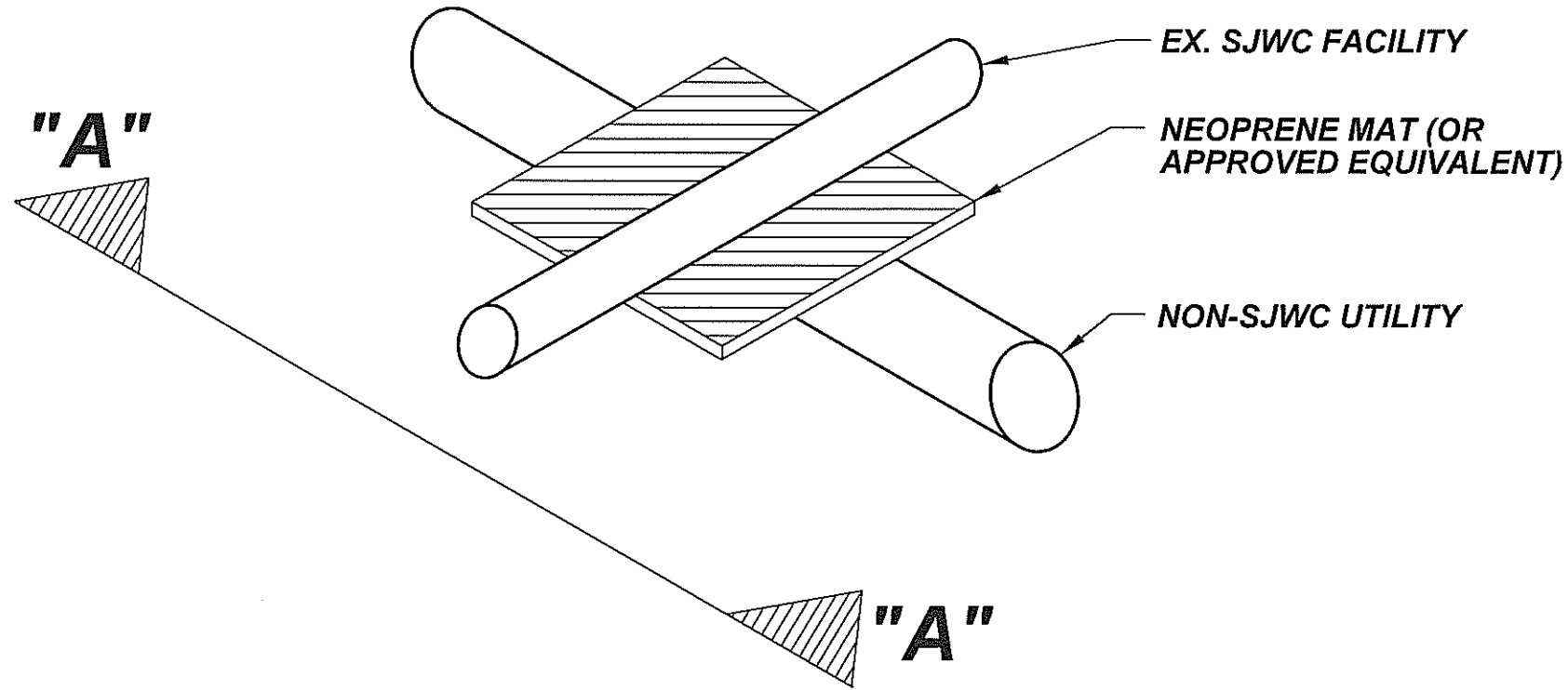
SAN JOSE WATER COMPANY

STANDARD
FABRICATED FITTING
W/SQUARE SOCKET

BY P. JOCHIM
 DATE 15 NOV '04
 CK ELM

[Signature]
 OPERATIONS
[Signature]
 ENGINEERING
[Signature]
 CHIEF ENGINEER

REF. NOS. D-2-392A
 DWG. NO. MAIN-VSE



SECTION A - A

NOTES:

BARRIER IS REQUIRED FOR ANY PROPOSED UTILITY CROSSING INVOLVING SJWC PIPING WHERE THE CLEARANCE BETWEEN THE 2 UTILITIES IS LESS THAN 12".

IF THE CLEARANCE IS LESS THAN 6", THEN THE PROPOSED CROSSING IS NOT ALLOWED; AN OFFSET MAY THEN BE REQUIRED IF AN ALTERNATE SOLUTION CAN'T BE FOUND.

REVISION	DATE	CK	AP	DPS
SAN JOSE WATER COMPANY				
STANDARD SEPARATION BARRIER FOR UTILITIES < 12" CLEAR				
BY	DTFOLKENING	 <small>OPERATIONS</small>		REF. NOS.
DATE	7/31/2013	 <small>ENGINEERING</small>		DWG. NO.
CK	DTFOLKENING	 <small>VICE PRESIDENT OF ENGINEERING</small>		SEP-BAR
SCALE	NONE			