

NOTES:

1. CASTING SPECIFICATIONS ASTM A-48 CLASS 35.
2. ALL CASTINGS TO BE FINISHED WITH BLACK BITUMINOUS PAINT.
3. TOWN MAY REQUIRE LARGER RING & COVER SIZINGS (30"+) DEPENDING ON APPLICATIONS.
4. CASTINGS AS SPECIFIED OR APPROVED EQUAL.
5. FOR USE IN ALL LOCATIONS OTHER THAN SIDEWALKS, WHERE SMOOTH LIDS ARE REQUIRED.



WATER MANHOLE RING AND COVER

DETAIL NO.

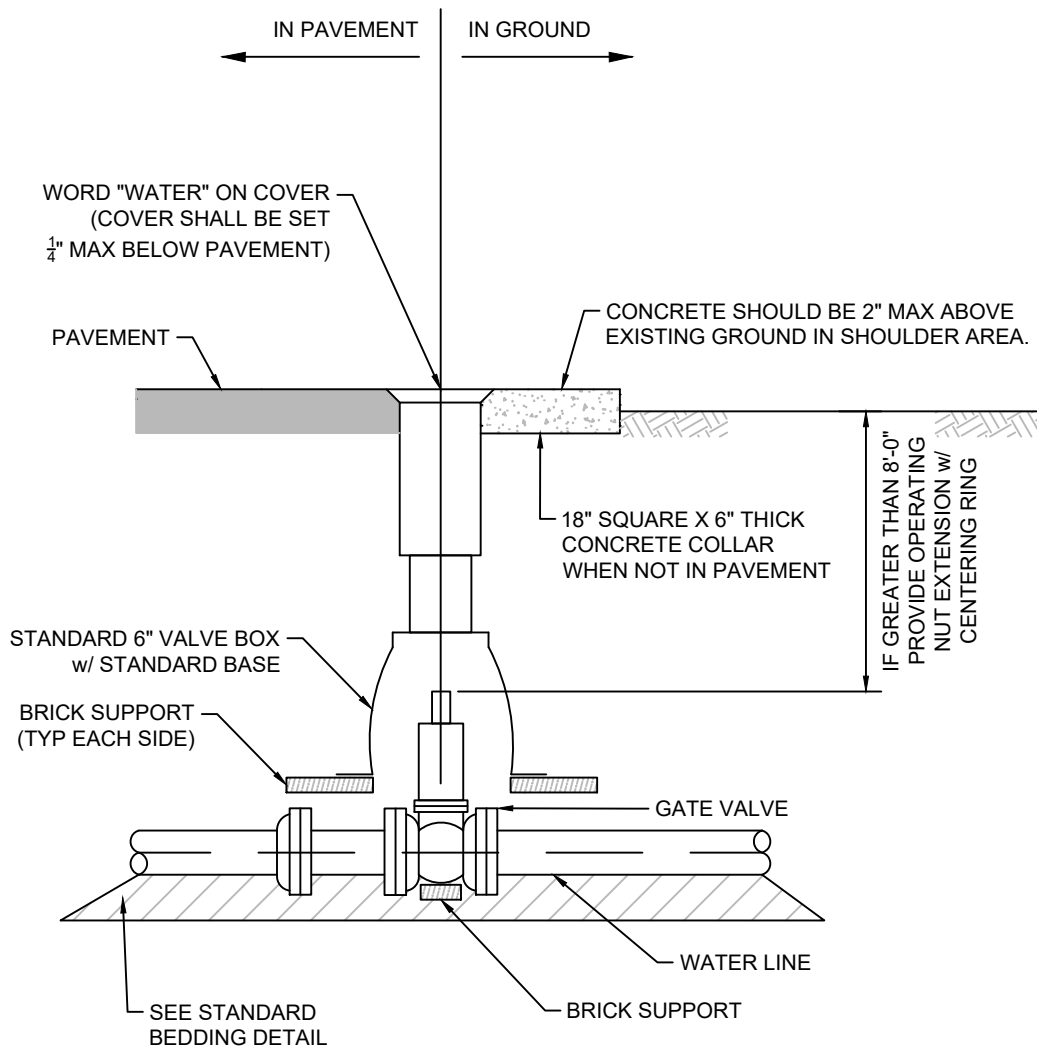
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NOTES:

1. BRICK SHALL BE INSTALLED UNDER THE VALVE AND VALVE BOX TO PROVIDE PROPER SUPPORT.
2. SQUEEGEE SHALL BE INSTALLED BELOW BRICK SUPPORTS.
3. AT THE TOWN'S DIRECTION, TRACER WIRE SHALL BE LOOPED AND BROUGHT TO GRADE VIA A TEST PORT
4. FOR VALVE BOXES WHERE THE OPERATING NUT IS MORE THAN 8 FEET BELOW THE FINISHED GRADE, INSTALL EXTENDED STEMS ON VALVE.
5. VALVES SHALL NOT BE PLACED IN CONCRETE CROSS PANS.
6. EXISTING VALVES SHALL BE OPERATED BY TOWN WATER PERSONNEL ONLY.
7. ALL VALVES OPEN LEFT.
5. OPERATOR NUT SHALL BE PLACED ON NORTH OR EAST SIDE OF WATER MAIN, DEPENDENT ON THE ALIGNMENT OF THE MAIN.



GATE VALVES

DETAIL NO.

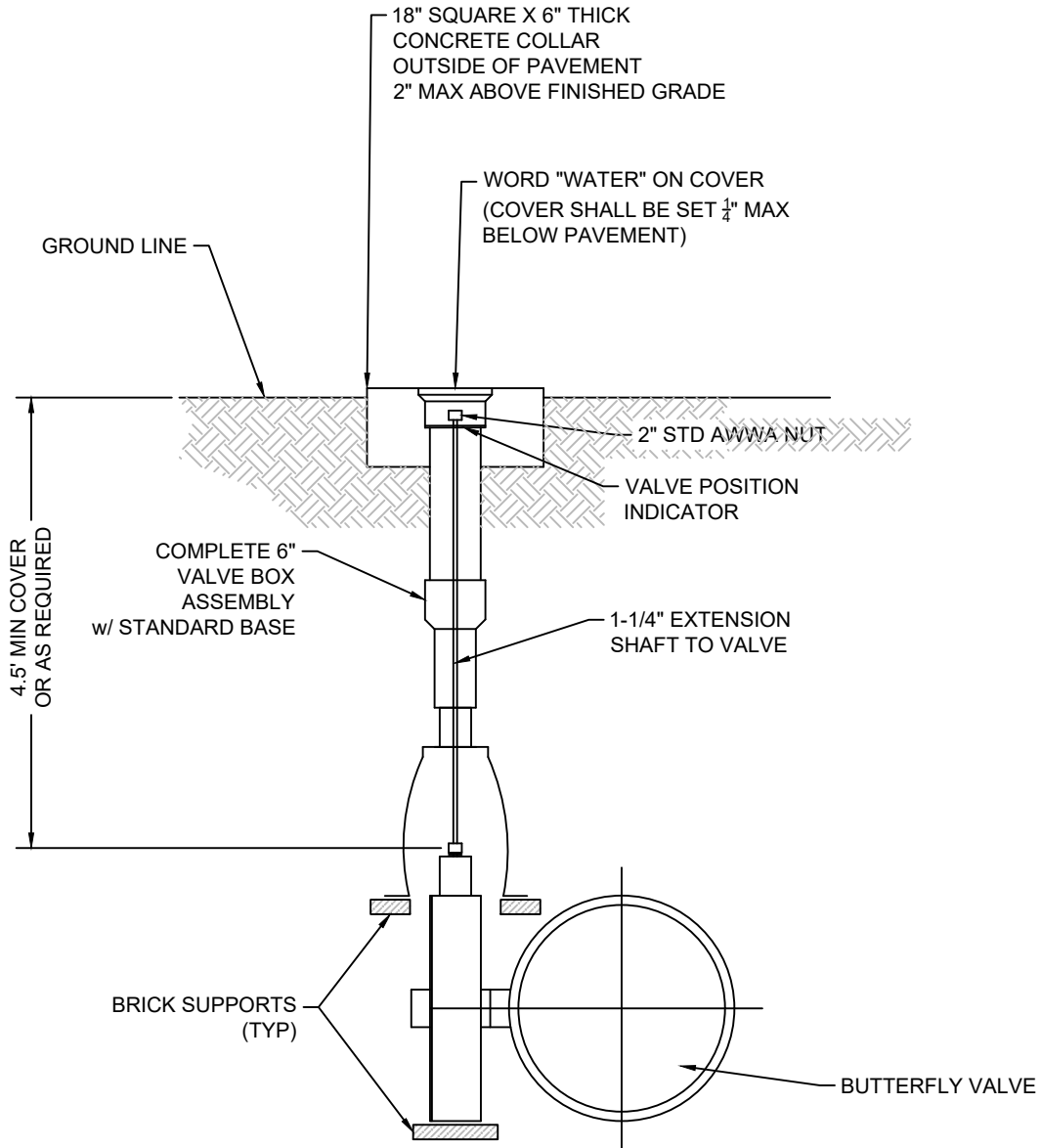
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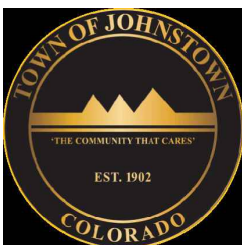
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NOTES:

1. THE VALVE BOX SHALL NOT BE PLACED DIRECTLY ON THE PVC PIPE.
2. THIS TYPE OF INSTALLATION IS USED FOR 16" AND LARGER VALVES ONLY AND ONLY W/ TOWN APPROVAL.
3. BUTTERFLY VALVE AND OPERATOR SHALL BE POLYETHYLENE WRAPPED.
4. ALL VALVES SHALL OPEN TO LEFT.
5. OPERATOR NUT SHALL BE PLACED ON NORTH OR EAST SIDE OF WATER MAIN, DEPENDENT ON THE ALIGNMENT OF THE MAIN.
6. BRICK SHALL BE INSTALLED UNDER THE VALVE AND VALVE BOX TO PROVIDE PROPER SUPPORT.
7. SQUEEGEE SHALL BE INSTALLED BELOW BRICK SUPPORTS.



DIRECT BURY BUTTERFLY VALVE

DETAIL NO.

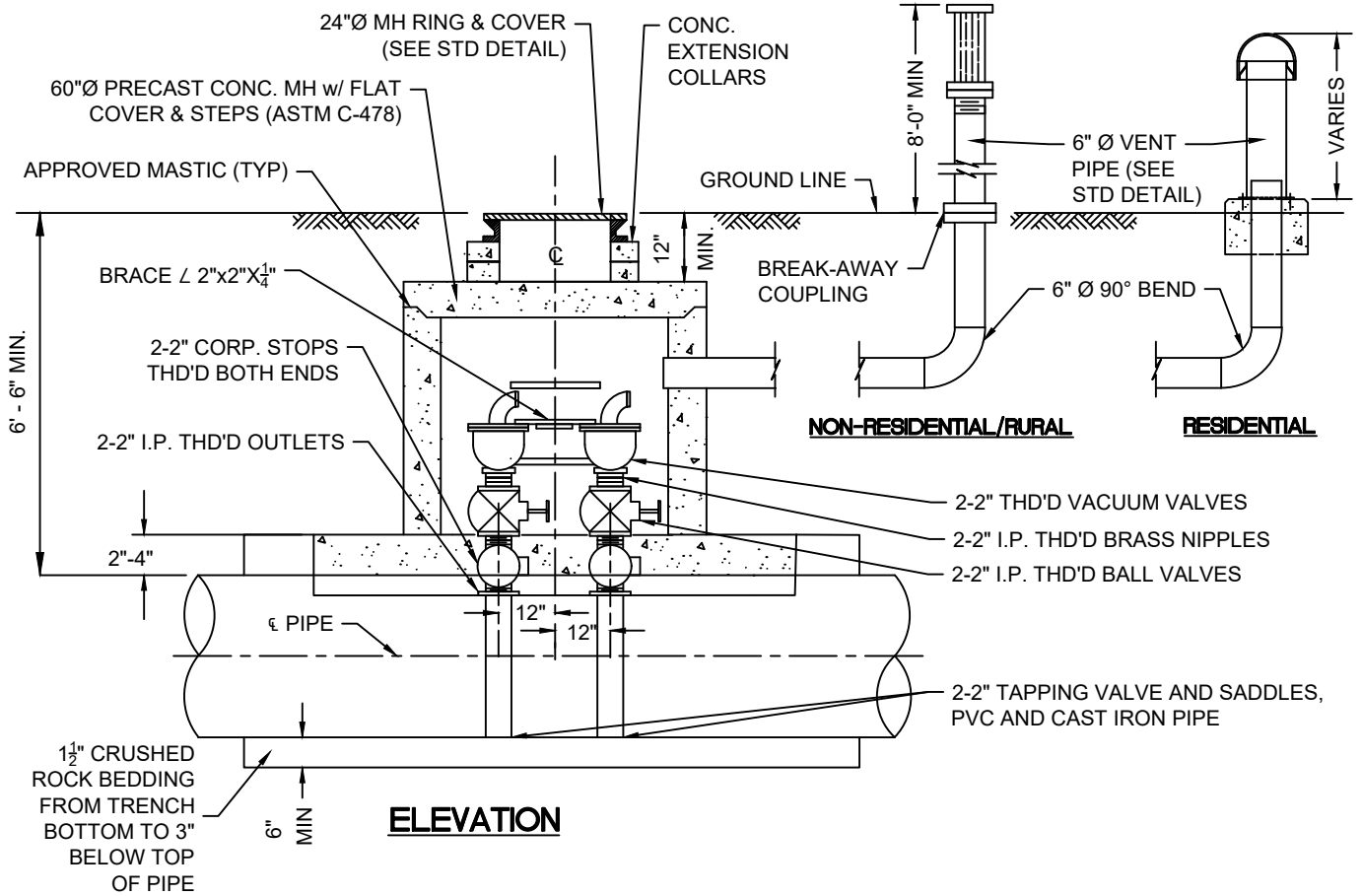
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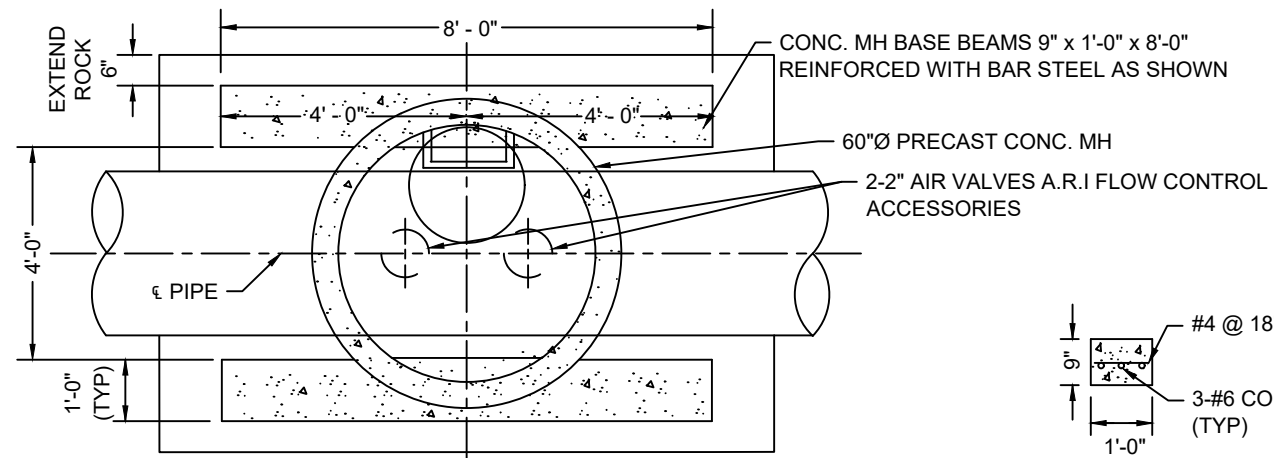
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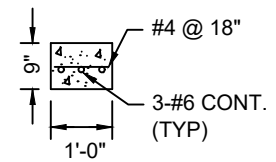


ELEVATION



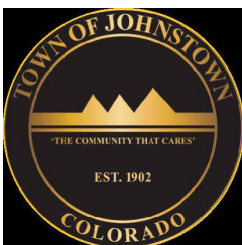
PLAN

FOOTING DETAIL



NOTES:

1. TOWN MAY REQUIRE LARGER RING & COVER SIZINGS (30"+) DEPENDING ON THE APPLICATION.
2. PIPE TO BE GRADED SO VALVES ARE AT HIGH POINT ON LINE ON A LEVEL SECTION OF PIPE WHILE MAINTAINING VAULT DEPTH AS NOTED. VALVES TO BE PLACED AT CENTER OF FULL PIPE SECTION.
3. FOR PIPE LARGER THAN 16"Ø, VALVES, VAULT, AND FOOTING ETC. SHALL BE SPECIALLY DESIGNED AND APPROVED BY TOWN.



AIR AND VACUUM VALVE

DETAIL NO.

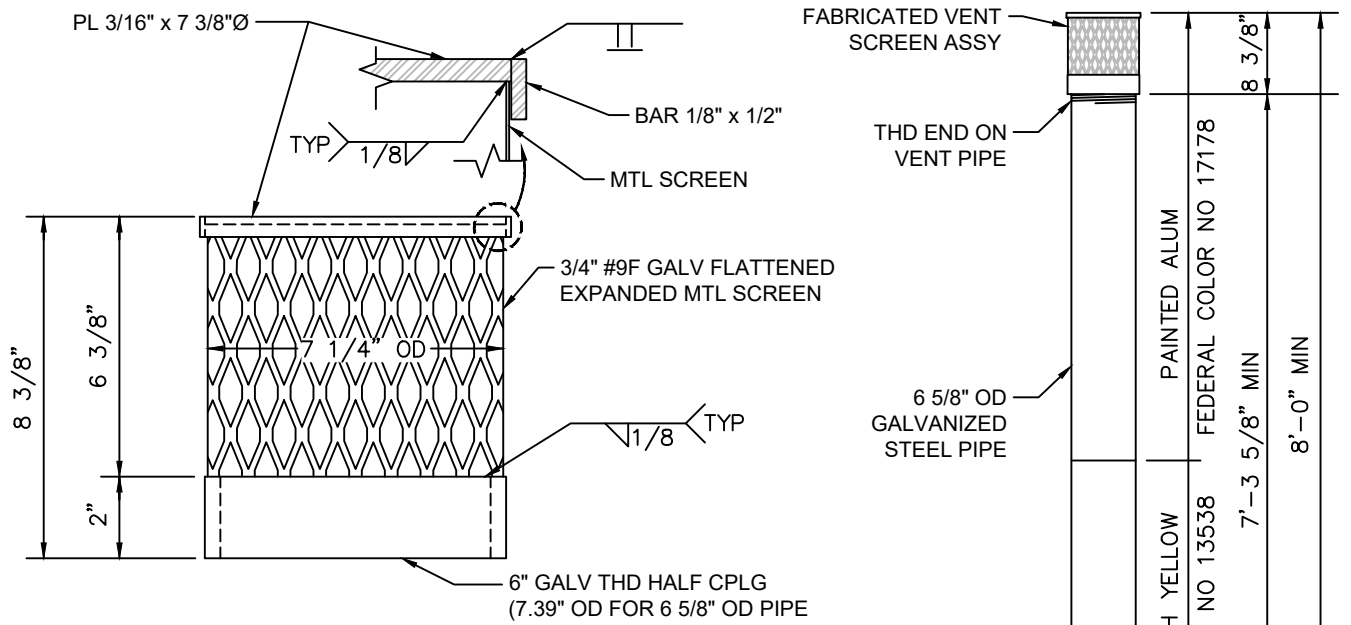
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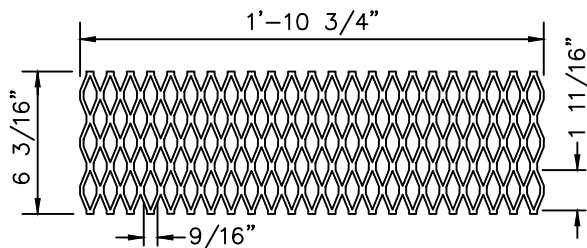
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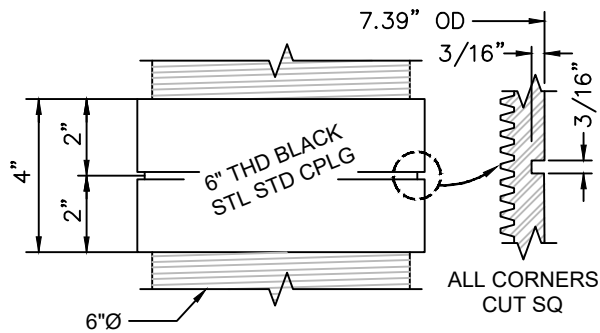
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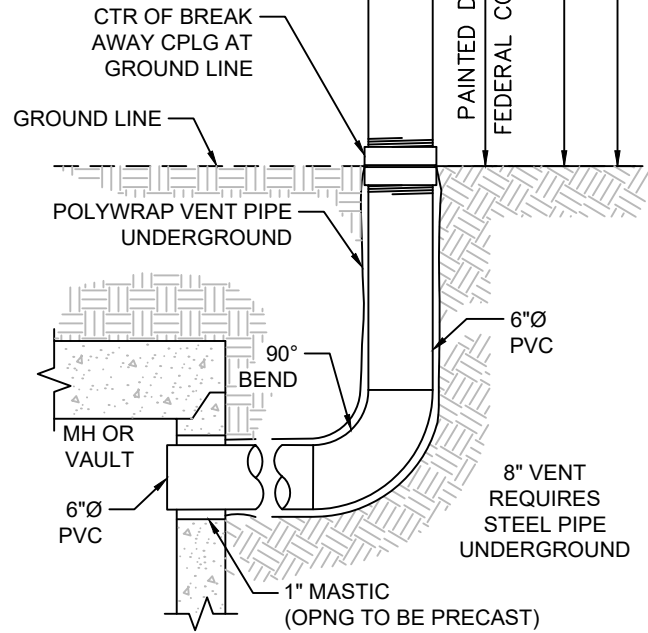
VENT SCREEN ASSEMBLY



METAL SCREEN



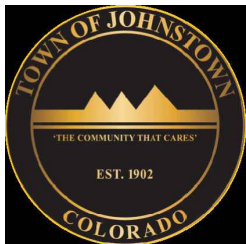
BREAK AWAY COUPLING



VENT PIPE ELEVATION

NOTES:

- TOUCH UP AREAS DAMAGED BY WELDING WITH SILVER COLORED RICH PAINT.
- VENT PIPES TO BE LOCATED IN FIELD AT THE NEAREST INTERSECTION OF THE STREET PROPERTY LINE & THE SIDE LOT LINE.



AIR AND VACUUM VALVE VENT SCREEN - NON-RESIDENTIAL AND RURAL

DETAIL NO.

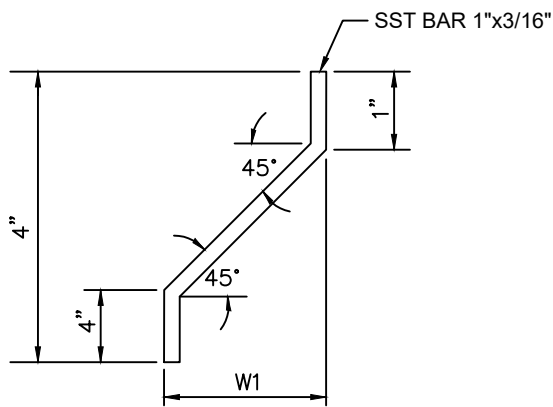
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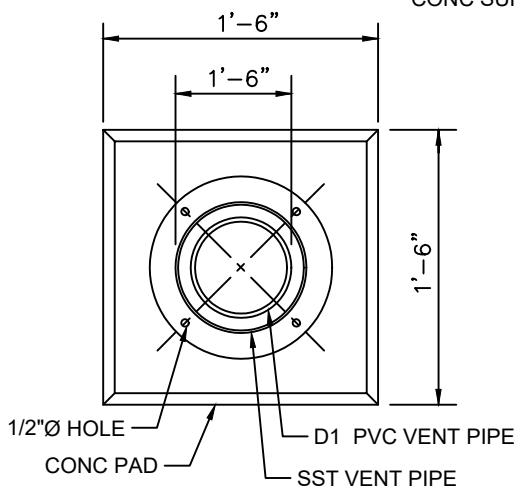
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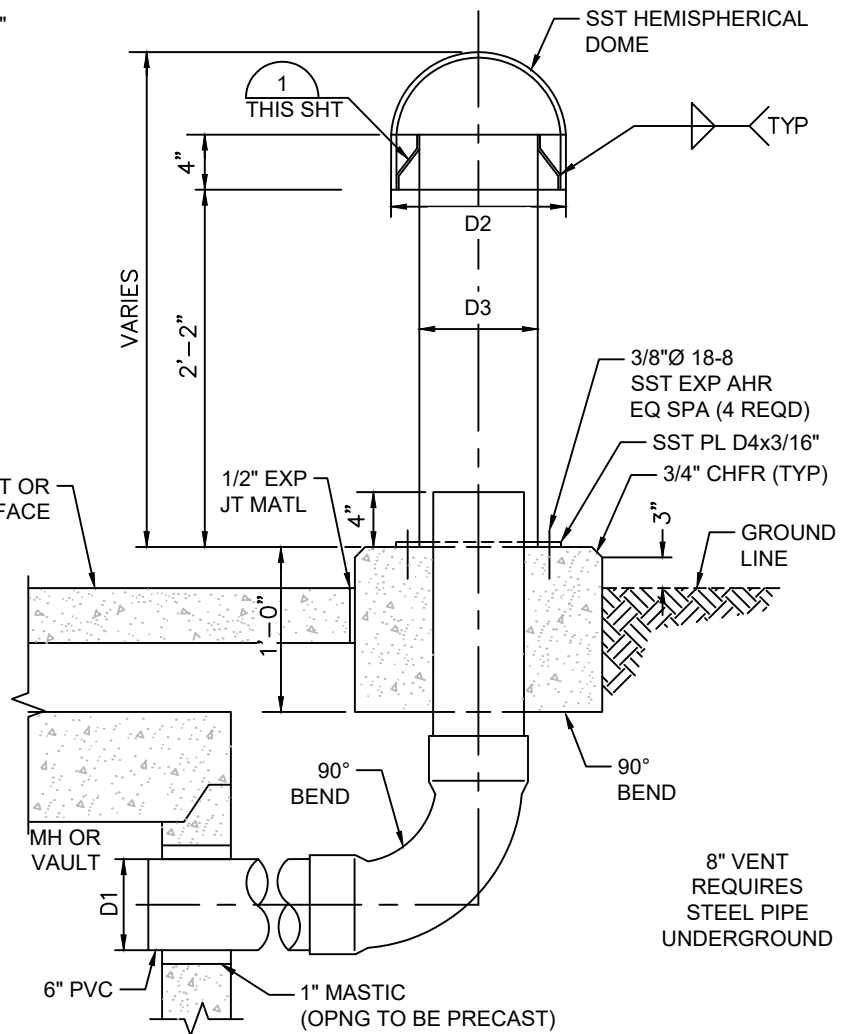
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DETAIL
4 REQD



BASE PLAN



SECTION VIEW

VENT PIPE Ø IN VAULT	CAP Ø	VENT CAP PIPE NOMINAL Ø	FLANGE Ø	BRACKET WIDTH
D1	D2	D3	D4	W1
6"	14"	8"	12"	2 5/8"
8"	18"	10"	14"	3 5/8"
10"	24"	12"	16"	5 5/8"
12"	24"	14"	18"	5"

NOTE:

1. COAT ASSEMBLY WITH EPOXY, 8 MILS MINIMUM. COLOR: BLACK SHEEN: FLAT.



**AIR AND VACUUM VALVE VENT SCREEN -
RESIDENTIAL**

DETAIL NO.

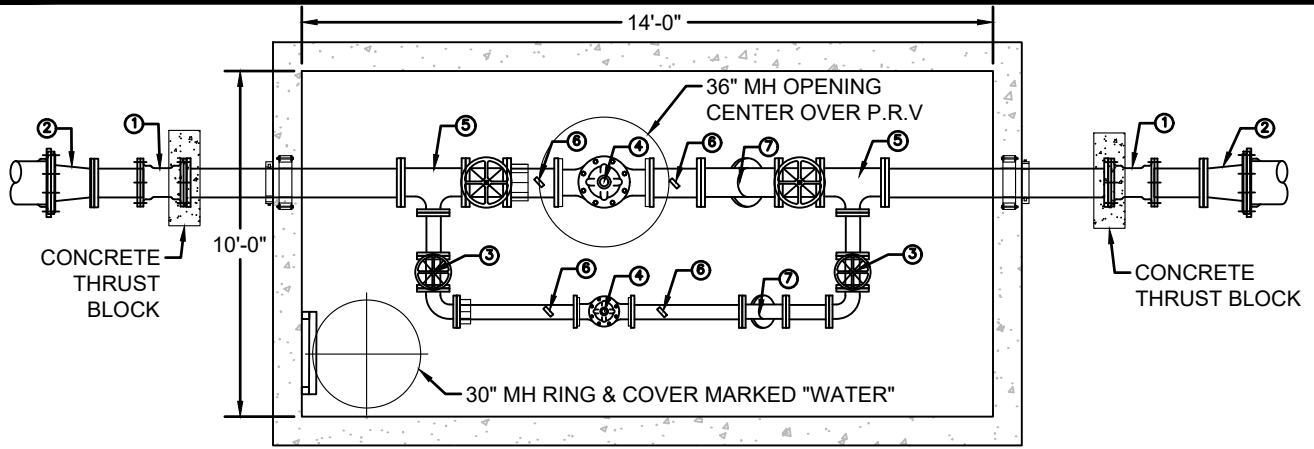
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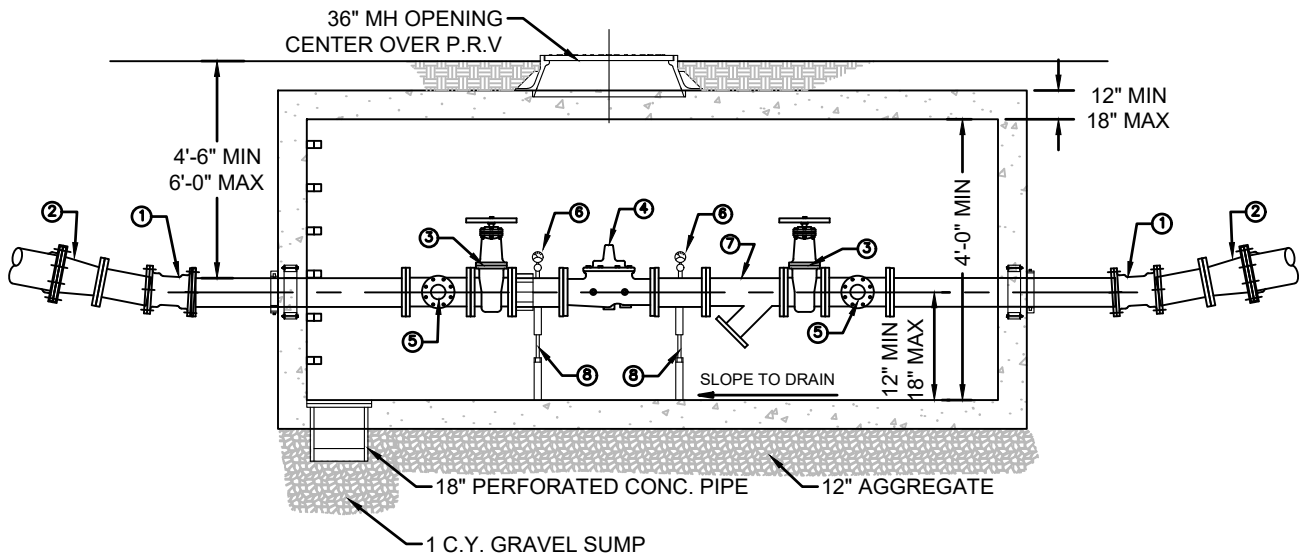
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PLAN VIEW



SECTION VIEW

NO.	DESCRIPTION
1	MJ SLEEVE
2	REDUCER
3	GATE VALVE
4	PRESSURE REDUCING VALVE
5	REDUCING TEE
6	PRESSURE GAUGE
7	"Y" STRAINER



PRESSURE REDUCING VALVE

DETAIL NO.

507

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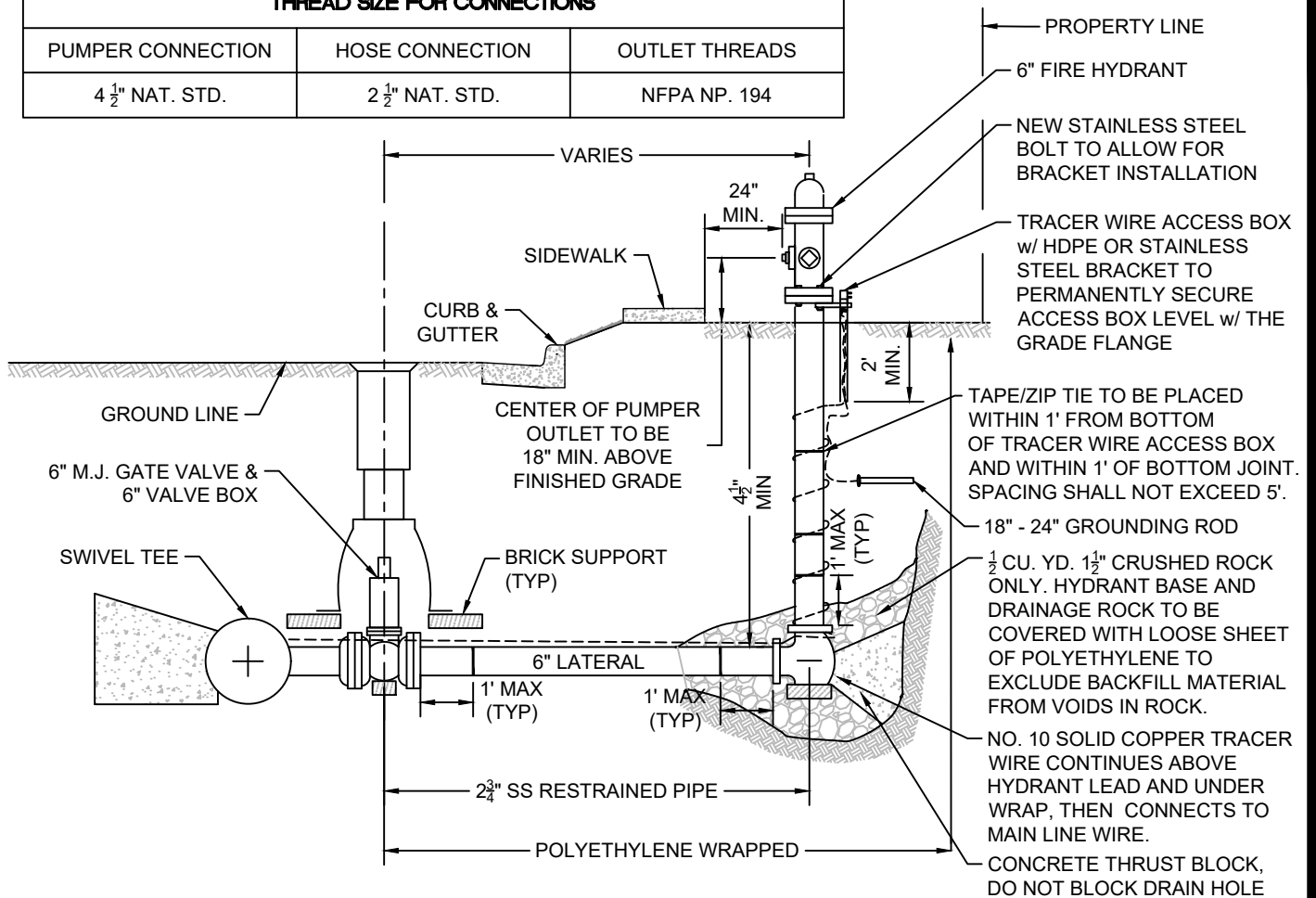
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THREAD SIZE FOR CONNECTIONS

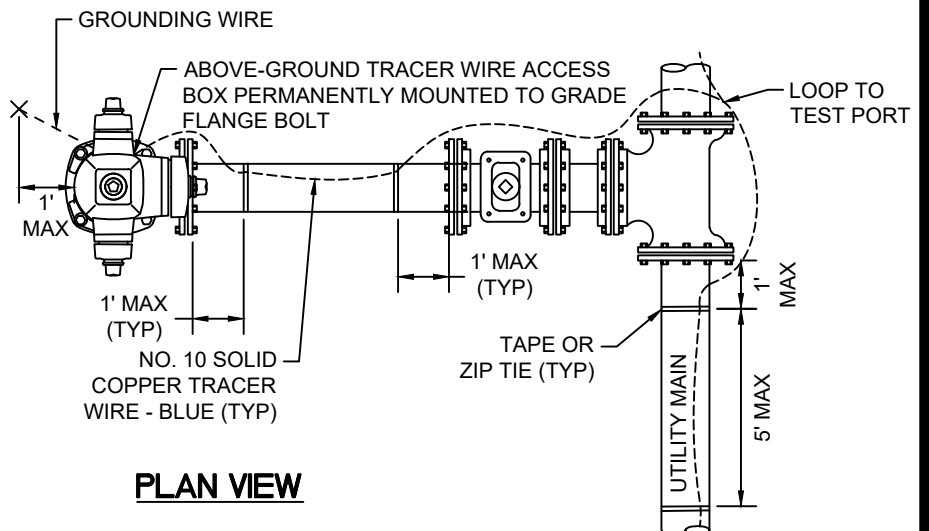
PUMPER CONNECTION	HOSE CONNECTION	OUTLET THREADS
4 1/2" NAT. STD.	2 1/2" NAT. STD.	NFPA NP. 194



SECTION VIEW

NOTES:

1. MUST COMPLY WITH NFPA 24.
2. FIRE HYDRANT SHALL BE OFFSET 2'-0" OFF SIDEWALK AND/OR CURB.
3. NEATLY COIL 3' OF TRACER WIRE AND STORE IN THE ACCESS BOX.
4. ALL FIRE HYDRANTS ARE TO BE PAINTED RED.



PLAN VIEW



FIRE HYDRANT ASSEMBLY

DETAIL NO.

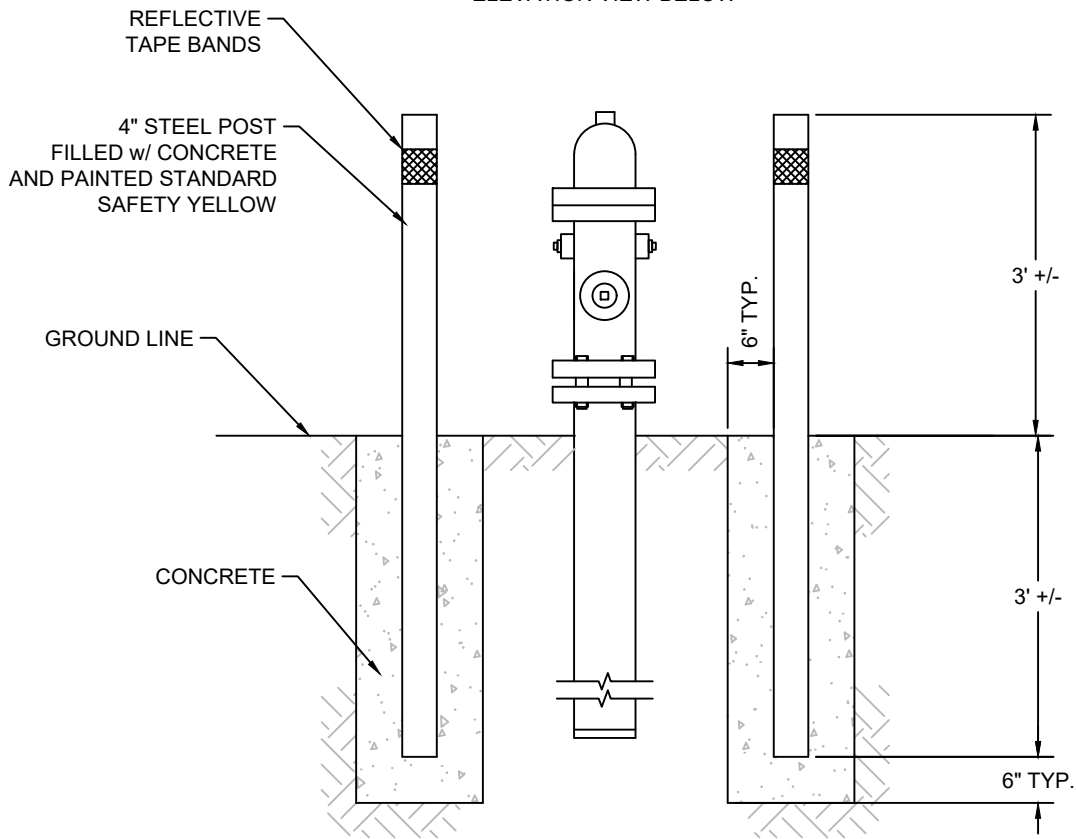
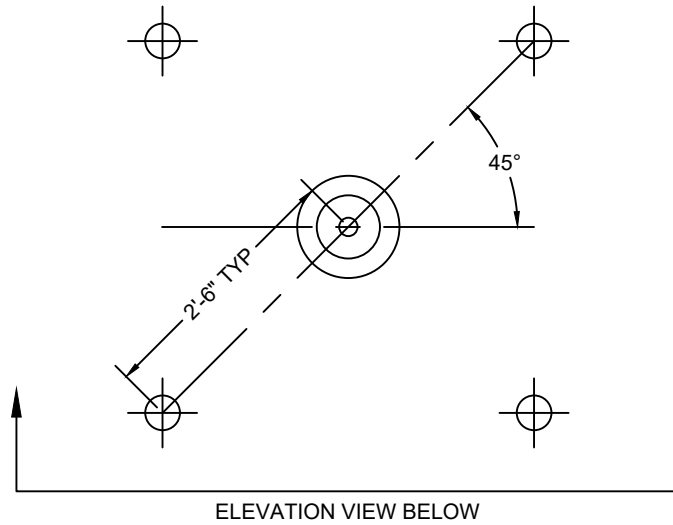
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NOTE:

1. TO BE USED IN COMMERCIAL OR INDUSTRIAL AREAS WHERE HYDRANTS ARE UNPROTECTED FROM THE MAINFLOW OF TRAFFIC. STEAMER CONNECTION ON FIRE HYDRANT SHOULD FACE ADJACENT STREET.



FIRE HYDRANT GUARDS

DETAIL NO.

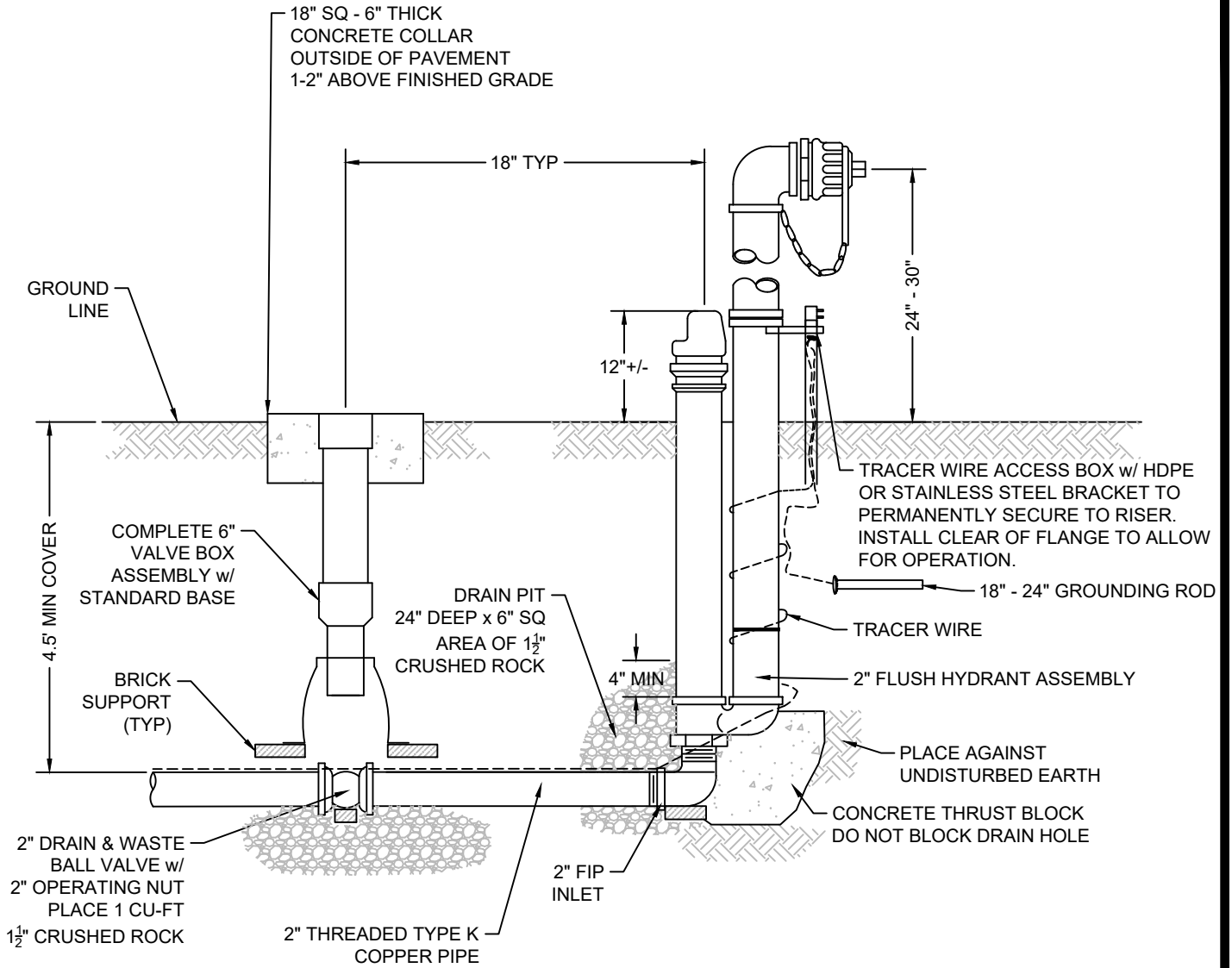
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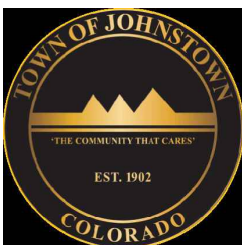
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NOTES:

1. HYDRANT SHALL BE NON-FREEZING, SELF DRAINING TYPE WITH A 4.5 FT. MIN BURY.
2. HYDRANTS SHALL BE FURNISHED WITH A 2" FIP INLET, A NON-TURNING OPERATING ROD, AND SHALL OPEN LEFT.
3. THE OUTLET SHALL BE 2 1/2" NST BRONZE.
4. ALL WORKING PARTS SHALL BE OF BRONZE TO BRONZE DESIGN, AND BE SERVICEABLE FROM ABOVE GRADE WITH NO DIGGING. HYDRANTS SHALL BE LOCKABLE TO PREVENT UNAUTHORIZED USE.
5. CONTRACTOR TO WRAP ALL COPPER AND BRASS PIPE FITTINGS WITH 8 MIL POLYWRAP.
6. THERE SHALL BE 24" OF TRACER WIRE SLACK NEATLY COILED AND STORED IN THE ACCESS BOX.



PERMANENT BLOW-OFF ASSEMBLY

DETAIL NO.

510

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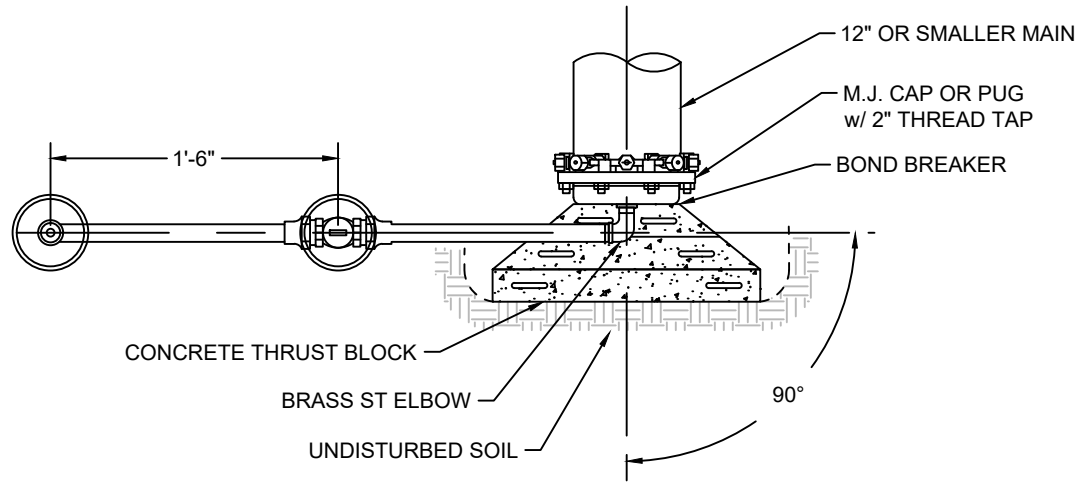
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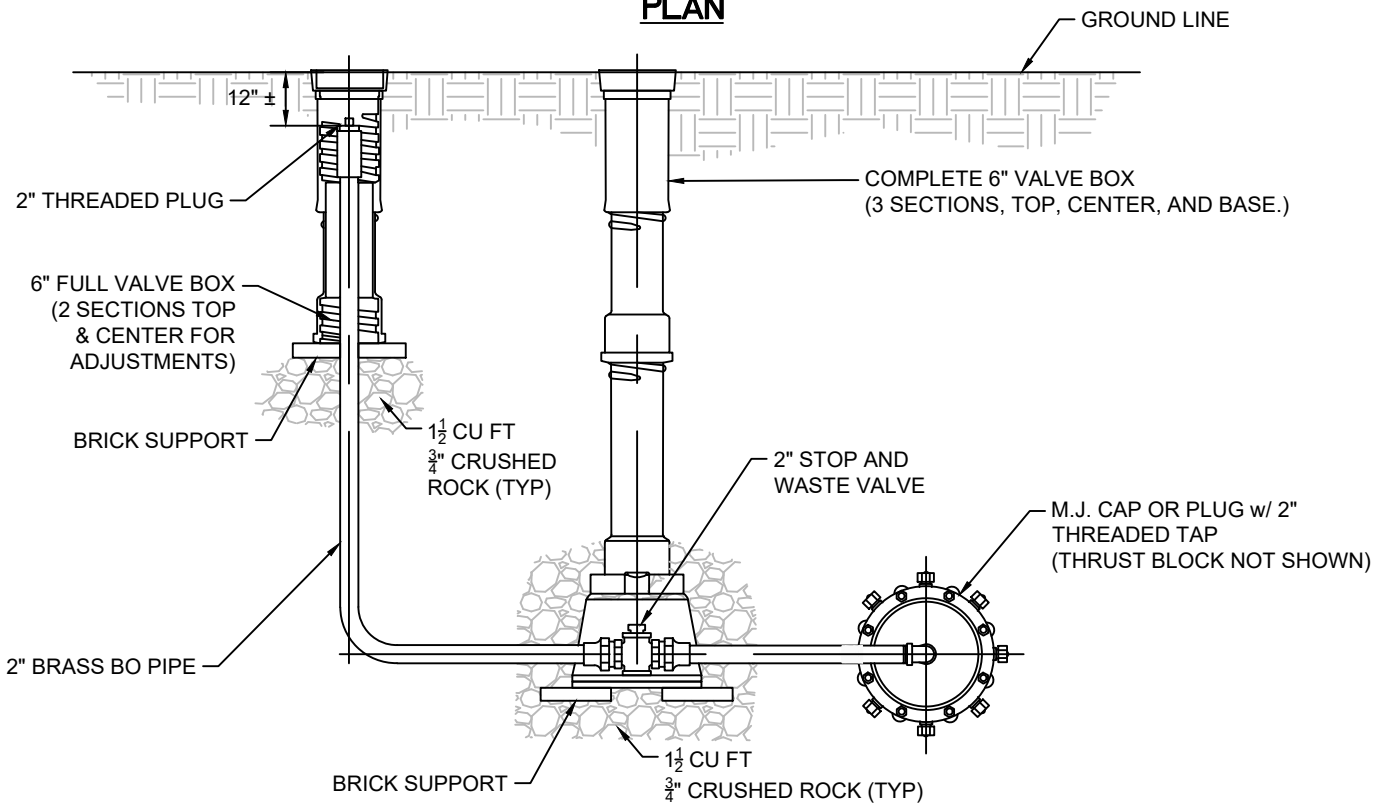
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NOTES:

1. PLUG SHALL BE MECHANICALLY RESTRAINED (SHOWN AS A SPIGOT WITH A CAP):
 - FOR SLEEVE TYPE MACHINED COUPLING PIPE, TIE BACK TO NEXT COUPLING.
 - FOR BELL AND SPIGOT PIPE, TIE TO BELL.
2. ORIENTATION OF BLOW-OFF CAN BE ROTATED TO BE IN LINE WITH THE DEAD END MAIN. DETAIL CAN ALSO BE ADAPTED TO BE TAPPED INTO A MAINLINE TO PROVIDE PERMANENT LOW POINT BLOW-OFF.



PLAN



ELEVATION



**TEMPORARY BLOW-OFF ASSEMBLY
12" MAINS AND SMALLER**

DETAIL NO.

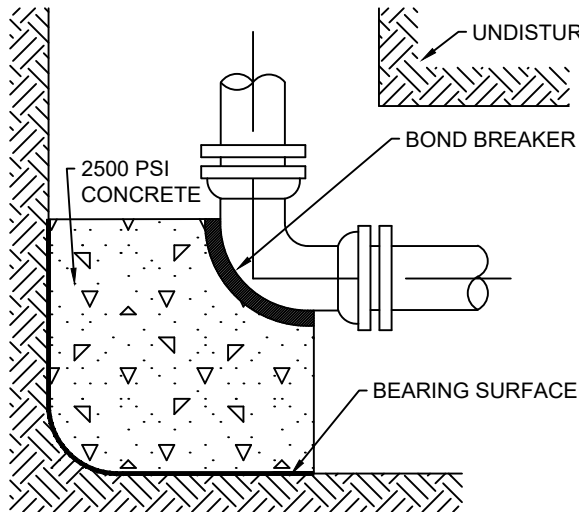
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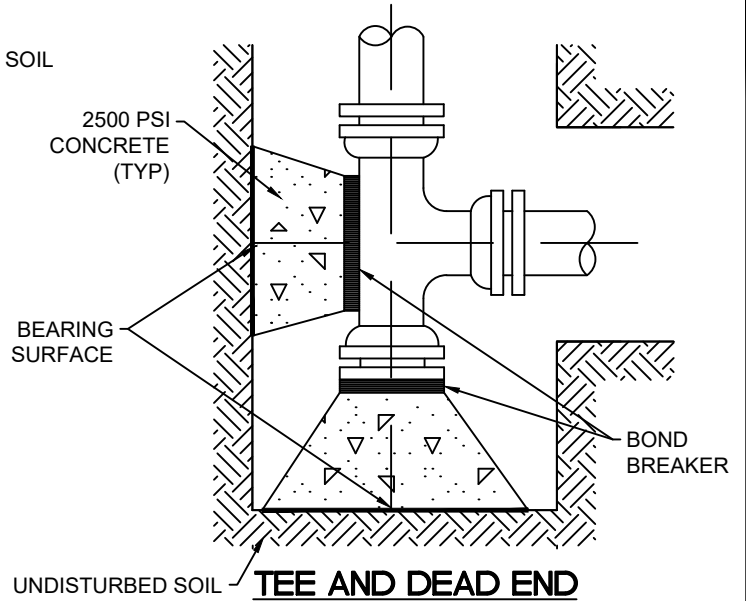
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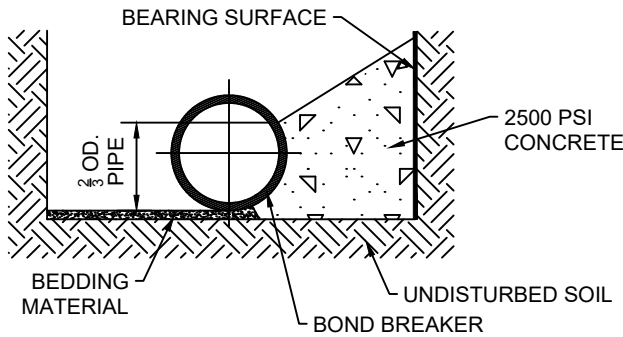
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11 $\frac{1}{4}$ °, 22 $\frac{1}{2}$ °, 45°, AND 90° BENDS



TEE AND DEAD END



TYPICAL CROSS SECTION

**MINIMUM BEARING SURFACE AREA
(IN SQUARE FEET)**

SIZE OF PIPE	BENDS				TEE OR DEAD END
	11 $\frac{1}{4}$ °	22 $\frac{1}{2}$ °	45°	90°	
4"	1.00	1.00	1.00	NA	1.50
6"	1.00	1.25	2.25	NA	3.00
8"	1.00	2.00	4.00	NA	5.25
12"	2.00	4.25	8.25	NA	1.00
16"	3.50	6.60	12.50	23.00	16.50
20"	5.00	10.00	19.50	35.50	25.00
24"	7.00	14.00	27.75	51.00	36.00

*BASED ON 3,000 PSF BEARING CAPACITY OF SOIL IN CONTACT WITH TRUST BLOCK.

NOTES:

1. BEARING SURFACES SHOWN IN CHART ARE MINIMUM.
2. BASED ON 150 PSI INTERNAL PIPE PRESSURE PLUS WATER HAMMER.
 - 2.1. 4", 6" AND 8" WATER HAMMER = 120 PSI
 - 2.2. 12" WATER HAMMER = 110 PSI
 - 2.3. 16", 20" AND 24" WATER HAMMER = 70 PSI
3. ALL FITTINGS, INCLUDING FITTINGS AT THRUST BLOCKS, SHALL BE WRAPPED WITH XPS.
4. ALL TAPS LARGER THAN 4" REQUIRE A THRUST BLOCK.
5. ALL BENDS, TEES, AND DEAD ENDS SHALL BE BOTH MECHANICALLY RESTRAINED AND THRUST BLOCKED.



**HORIZONTAL CONCRETE THRUST
BLOCKS**

(BEARING SURFACES & INSTALLATION)

DETAIL NO.

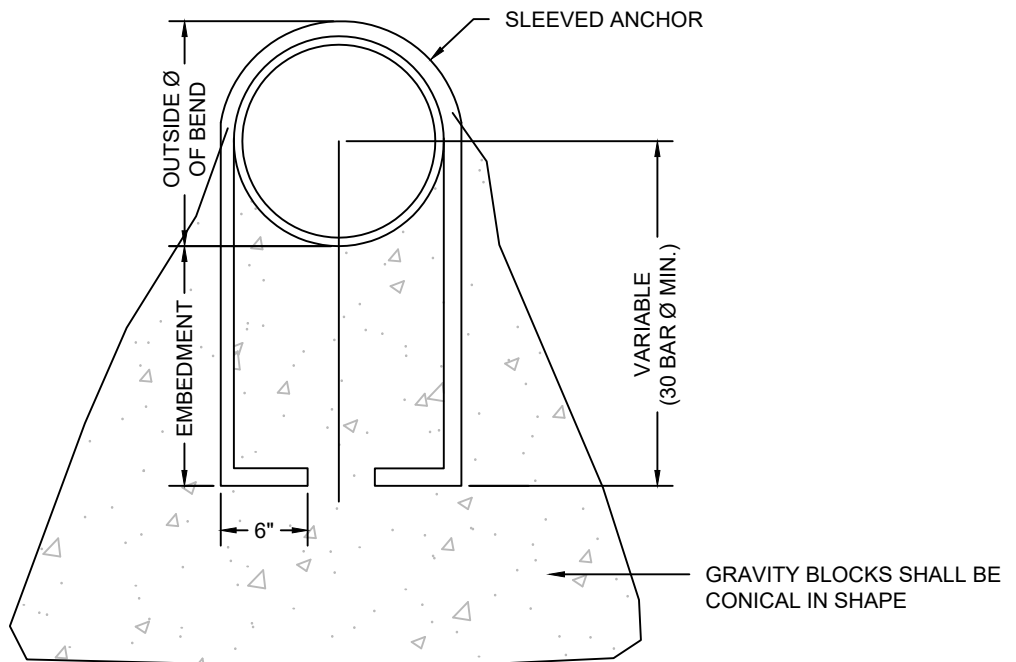
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**GRAVITY BLOCKS MINIMUM VOLUME
(IN CUBIC FEET)**

SIZE OF PIPE	BENDS		
	11 $\frac{1}{4}$ °	22 $\frac{1}{2}$ °	45°
6"	10.5	20.5	40.0
8"	17.5	35.0	68.0
12"	37.0	75.0	145.0
16"	48.5	96.0	189.0

NOTES:

1. VERTICAL 90° BENDS ARE NOT ALLOWED.
2. ALL LINES 12" AND LARGER WILL REQUIRE BODY CLAMPS APPROPRIATELY SIZED ALL-THREAD AND DOUBLE NUT.
3. THERE SHALL BE A MINIMUM CLEARANCE OF 24" BETWEEN WATERLINE AND ANY NEW CONSTRUCTION.
4. ALL JOINTS SHALL BE RESTRAINED BETWEEN THE FITTINGS.
5. ANCHORS SHALL BE SLEEVED TO PREVENT CORROSION OF THE PIPE AND/OR BAR. THIS COULD INCLUDE, BUT NOT LIMITED TO, STAINLESS/EPOXY COATED TIES, CURVED FIBERGLASS BOARD, ETC.
6. VERTICAL TRUST BLOCKS REQUIRED ON UPPER BENDS OF WATER LINE LOWERINGS.



VERTICAL CONCRETE THRUST BLOCKS

DETAIL NO.

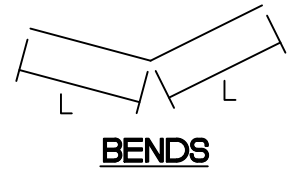
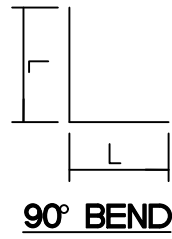
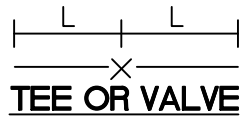
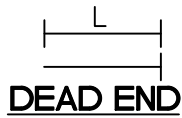
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LENGTH OF RESTRAINED PIPE

FITTING	PIPE SIZE					
	4"	6"	8"	12"	16"	20"
TEE OR VALVE	30"	46'	61'	90'	116'	141'
PLUG FOR 90° BEND	30'	46'	61'	90'	116'	141'
45° BEND	9'	13'	18'	26'	34'	41'
22½° BEND	2'	3'	5'	7'	9'	11'
11¼° BEND	1'	1'	1'	2'	2'	3'

NOTES:

1. LENGTH OF RESTRAINED PIPE MEASURED EACH WAY FROM VALVES AND BENDS.
2. MINIMUM 4.5' GROUND COVER REQUIRED.
3. BASED ON 150 PSI INTERNAL PRESSURE.
4. IN GENERAL THE FOLLOWING ITEMS ARE TO BE RESTRAINED:
 - A. ALL HORIZONTAL & VERTICAL BENDS
 - B. PLUGS/CAPS/DEAD ENDS
 - C. BRANCHES ON TEES
 - D. FIRE HYDRANTS (PER DETAIL)
 - E. VALVES
 - F. CROSSES
 - G. OTHER APPURTENANCES AS DIRECTED BY THE TOWN.
5. APPURTENANCES SHALL HAVE A MECHANICAL JOINT RESTRAINT ON EACH SIDE OF THE FITTING OR VALVE.
6. CROSSES SHALL BE RESTRAINED IN ALL DIRECTIONS IN GENERAL ACCORDANCE WITH TEE LENGTH REQUIREMENTS.
7. WHEN REDUCERS ARE USED ON VALVE INSTALLATION, THE LENGTH OF RESTRAINT SHALL BE BASED ON THE LARGER SIZE OF THE PIPE AND NOT THE SIZE OF THE VALVE, OR SMALLER PIPE, ETC.



LENGTH OF RESTRAINED PIPE

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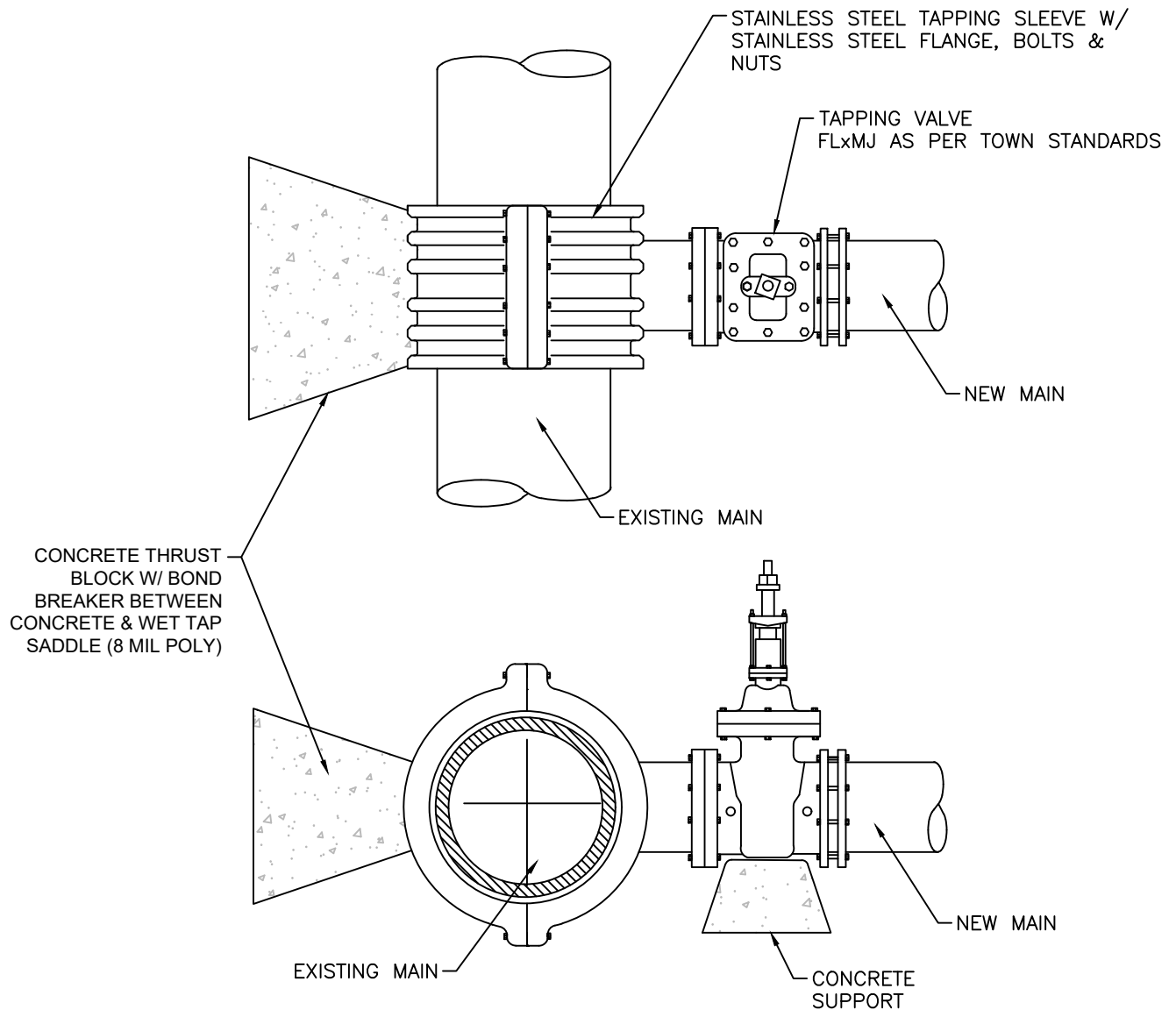
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NOTES:

1. CONTRACTOR SHALL FIELD VERIFY EXISTING MAIN SIZING, LOCATION, LAYOUT, ETC. PRIOR TO INITIATING TAPPING WORK.
2. TOWN MUST BE NOTIFIED AT LEAST 4 WORKING DAYS BEFORE TAPPING AN EXISTING MAIN, A TOWN REPRESENTATIVE MUST BE ONSITE DURING TAPPING. ONLY TOWN PERSONNEL WILL OPERATE EXISTING VALVES OR OTHER APPURTENANCES.
3. SEE THRUST BLOCK DETAILS, AND RESTRAINED PIPE DETAILS FOR FURTHER INFORMATION.
4. THRUST BLOCK/SUPPORT CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MJ FITTINGS.
5. TAPPING TEE & VALVE ARE ONLY ALLOWABLE WHEN SERVICE TO CRITICAL INFRASTRUCTURE CANNOT BE DISRUPTED, OR WHEN THE NEW PIPE IS SMALLER THAN THE EXISTING PIPE.
6. RUBBER GASKETS SHALL MEET AWWA C111 STD. PAPER GASKETS ARE NOT ALLOWED.



TAPPING TEE AND VALVE

DETAIL NO.

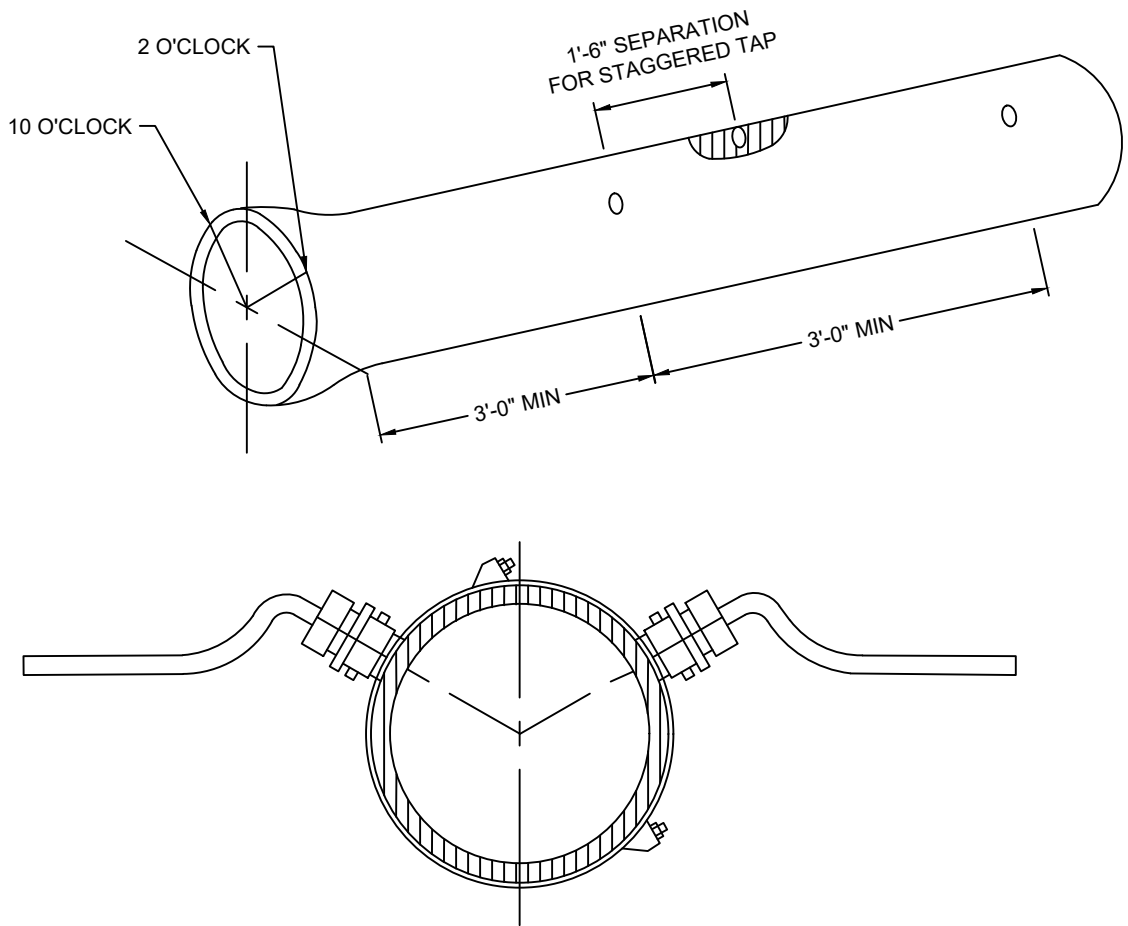
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NOTES:

1. WATER SERVICE TAPS SHALL BE MADE STAGGERED AT EITHER 10 OR 2 O'CLOCK POSITION ON THE CIRCUMFERENCE OF A WATER MAIN. THE MINIMUM DISTANCE BETWEEN A TAP MADE AT 10 AND ONE MADE AT 2 SHALL BE 18-INCHES AS MEASURED ALONG THE PIPE. THE MINIMUM BETWEEN SUCCESSIVE TAPS (10-10) SHALL BE 3-FEET.
2. THE MINIMUM DISTANCE FROM EITHER THE BELL OR THE SPIGOT END OF A PIPE SHALL BE 3-FEET. A MAXIMUM OF 4 WATER SERVICE TAPS SHALL BE ALLOWED PER LENGTH OF PIPE.
3. IN THE EVENT THE PIPE SUPPLIER INSTALLATION GUIDE/RECOMMENDATIONS ARE MORE CONSERVATIVE THAN THESE GUIDELINES. THE MANUFACTURERS INSTALLATION REQUIREMENTS SHALL BE MET.



DOMESTIC WATER TAPPING

DETAIL NO.

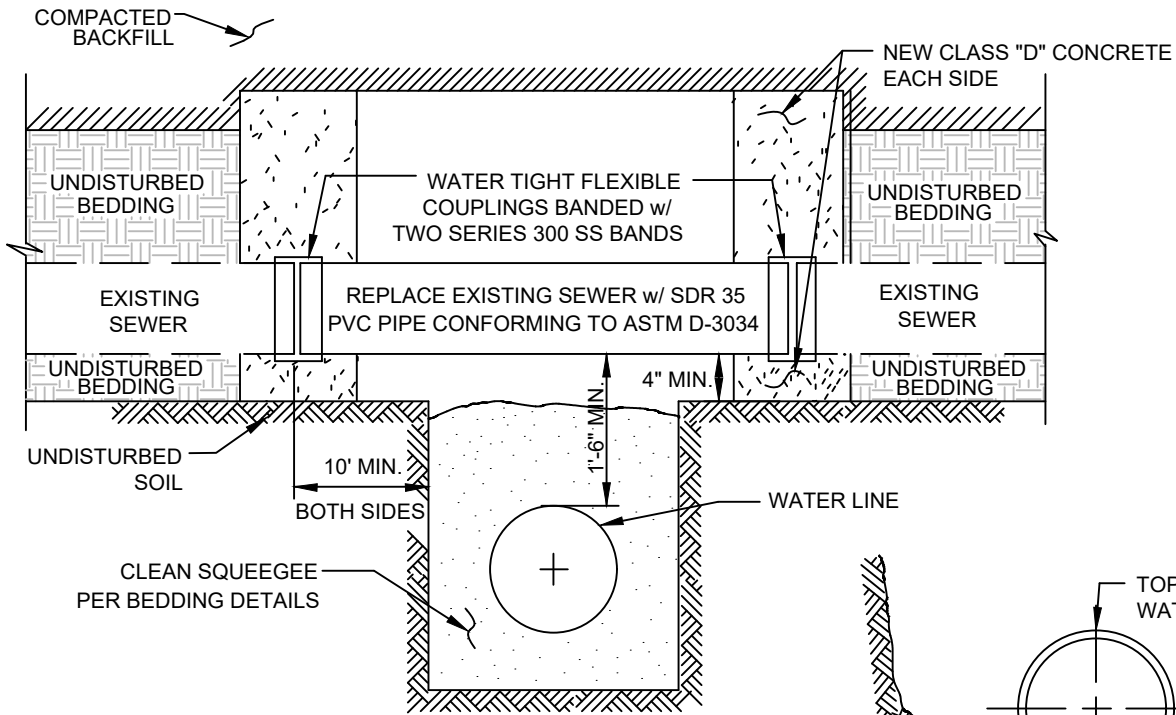
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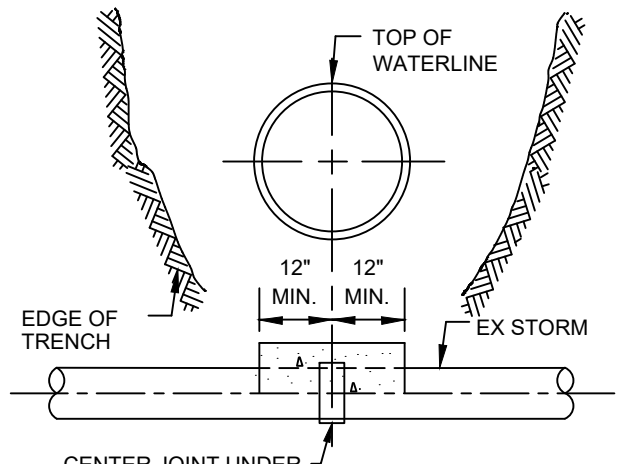
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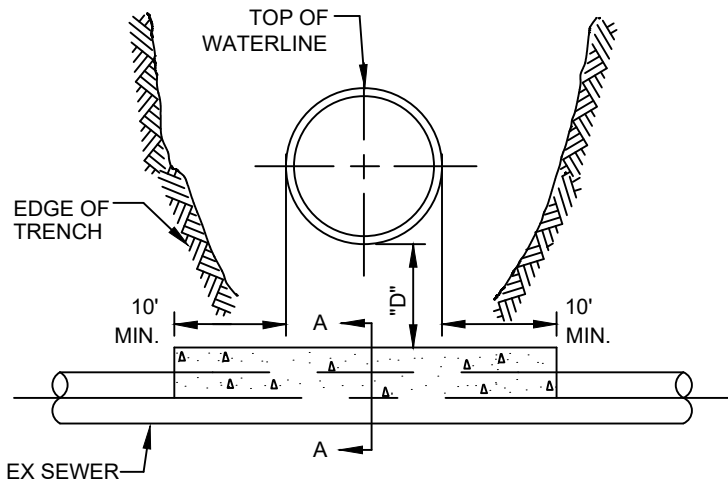
NOTES:

1. ANY EXISTING SUB-DRAIN UNDER THE SEWER SHALL BE REPLACED SUCH THAT NO FLOW SHALL ENTER THE WATER LINE TRENCH.
2. CONCRETE ENCASEMENT OF JOINTS REQUIRED WHEN VERTICAL SEPARATION IS LESS THAN 1'-6" OR HORIZONTAL DISTANCE IS LESS THAN 10' BETWEEN PARALLEL LINES.
3. CONCRETE ENCASEMENT OF JOINTS REQUIRED IN ALL CASES WHERE SEWER LINE IS ABOVE WATER LINE.

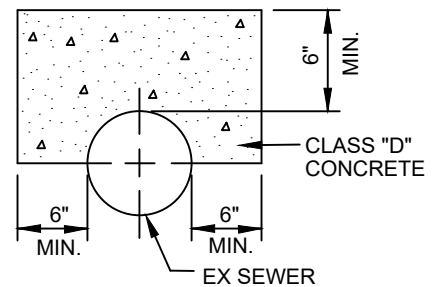


CENTER JOINT UNDER WATERLINE. ALL JOINTS WITHIN 10' OF WATERLINE & SHALL BE ENCASED IN CONCRETE.

STORM CROSSING UNDER



SEWER CROSSING UNDER WITH 'D' LESS THAN 2'-0"



SECTION A-A



CROSSING DETAIL FOR STORM AND SANITARY SEWER

DETAIL NO.

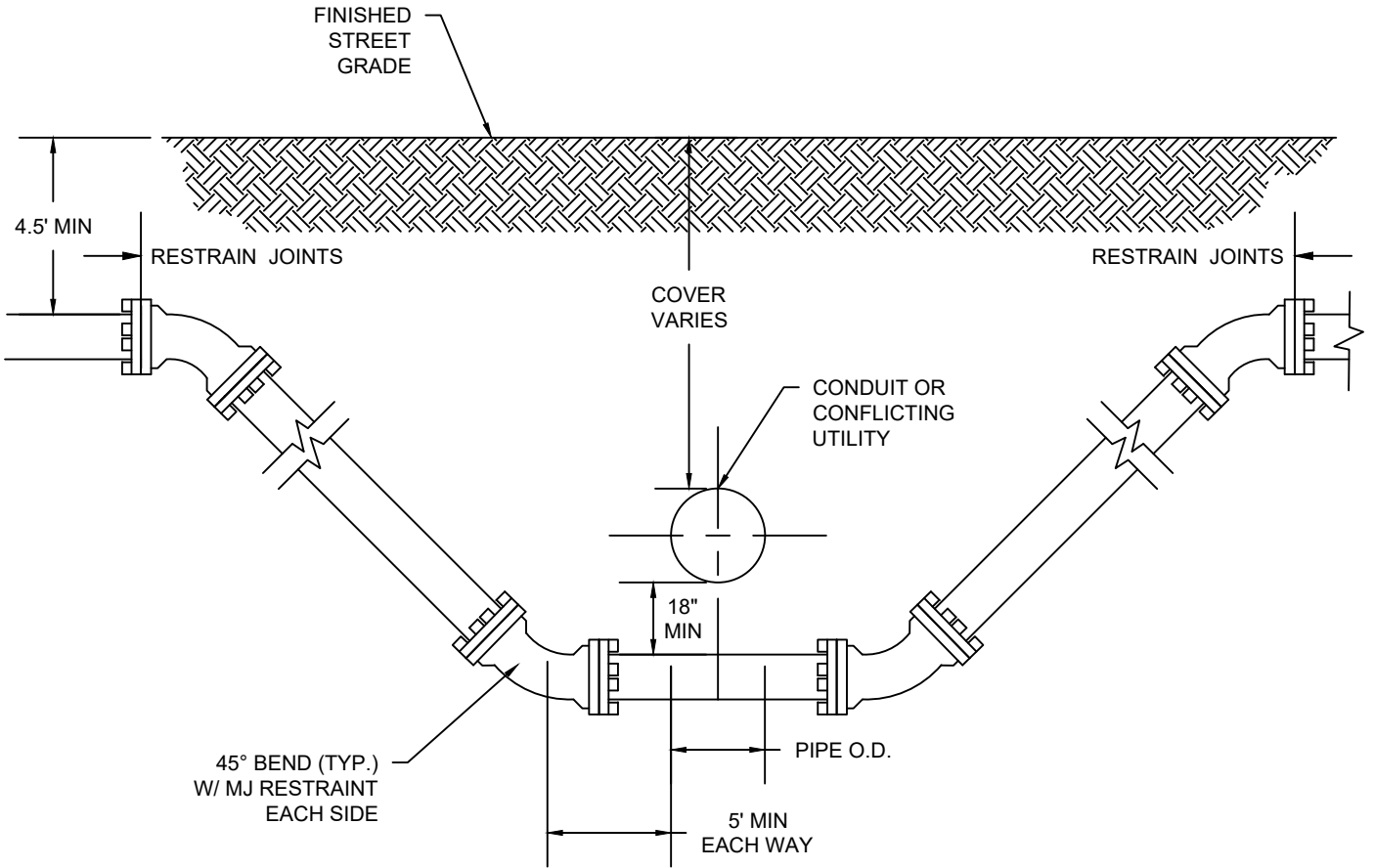
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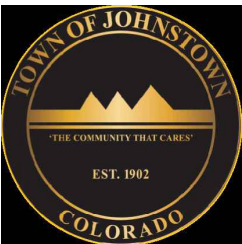
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NOTES:

1. LENGTH OF RESTRAINED PIPE SHALL BE IN ACCORDANCE WITH THESE ENGINEERING STANDARDS/DETAILS.
2. REFERENCE MECHANICAL JOINT, THRUST BLOCK, AND POLYETHYLENE WRAP DETAILS.



WATER LINE LOWERING

DETAIL NO.

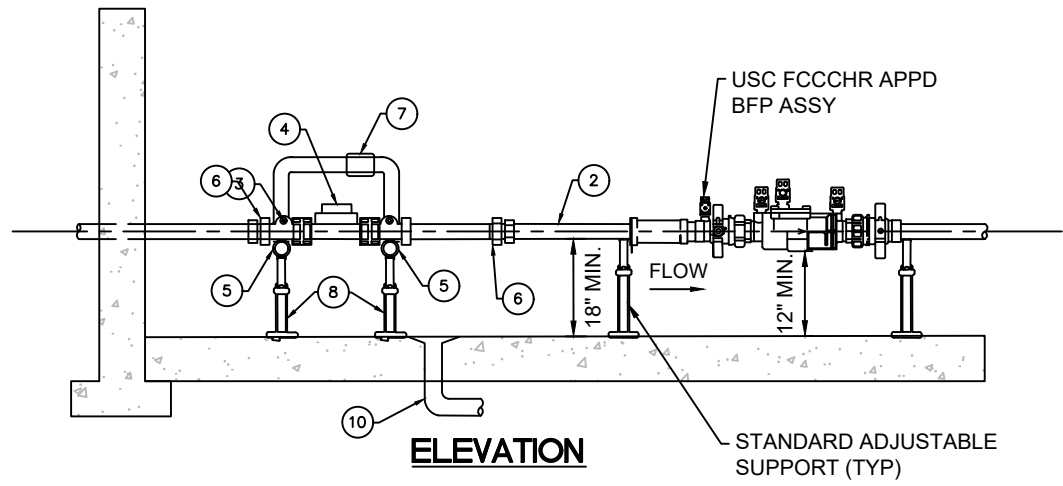
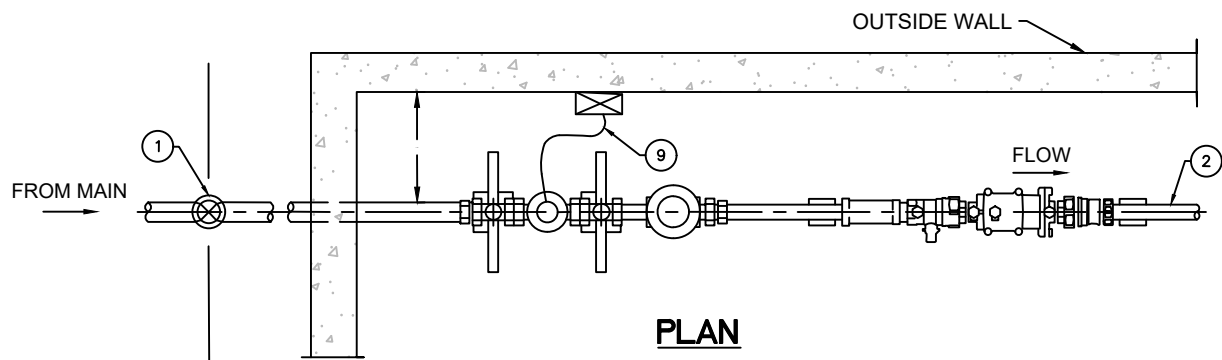
518

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DATE: 9/20/2022

SCALE: NTS

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KEY:

- ① CURB STOP
- ② TYPE "K" COPPER TUBING
- ③ 2" COPPERSETTER/METER YOKE
- ④ METER WITH ENCODER REGISTER
- ⑤ 1"X18" BSP-40
- ⑥ MALE IRON PIPE TO FLARE COUPLING FROM INLET SIDE OF COPPERSETTER & OUTLET SIDE OF CHECK VALVE
- ⑦ BY-PASS WITH VALVE WILL BE 1" FOR 1-1/2" COPPERSETTERS & 1-1/2" OR 1-1/4" FOR 2" COPPERSETTERS
- ⑧ STANDARD ADJUSTABLE SUPPORTS
- ⑨ SIGNAL WIRE TO METER TRANSMISSION UNIT (MTU)
- ⑩ FLOOR DRAIN(FD)

NOTES:

1. NEW INSIDE METER INSTALLATIONS ARE PERMITTED ONLY BY WRITTEN APPROVAL. EXISTING INSIDE METER INSTALLATIONS SHALL COMPLY WITH THIS DRAWING.
2. INSTALLATION SHALL ALLOW FOR ACCESS FROM PUBLIC RIGHT-OF-WAY OR EASEMENT TO METER AND VALVES, AND PROVIDE PROTECTION FROM FREEZING.
3. A FLOOR DRAIN SHALL BE PLACED WITHIN 10-FEET OF THE METER INSTALLATION IN THE SAME ROOM.
4. METER AND BACKFLOW MUST HAVE ADEQUATE SUPPORT FROM THE FLOOR OR WALL USING CONCRETE, ADJUSTABLE SUPPORTS, OR STRUCTURAL CHANNEL ATTACHED TO WALL.
5. WALL PENETRATIONS SHALL BE GROUTED WITH CONCRETE.
6. USC FCCCHR APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY OR DOUBLE CHECK BACKFLOW ASSEMBLY DETERMINED BY DEGREE OF HAZARD POSED BY INTERNAL PLUMBING USE.
7. REFER TO LOCAL CODES AND MANUFACTURER REQUIREMENTS FOR SPECIFIC INSTALLATION INSTRUCTIONS.



BACKFLOW PREVENTION INTERIOR INSTALLATION

DETAIL NO.

519

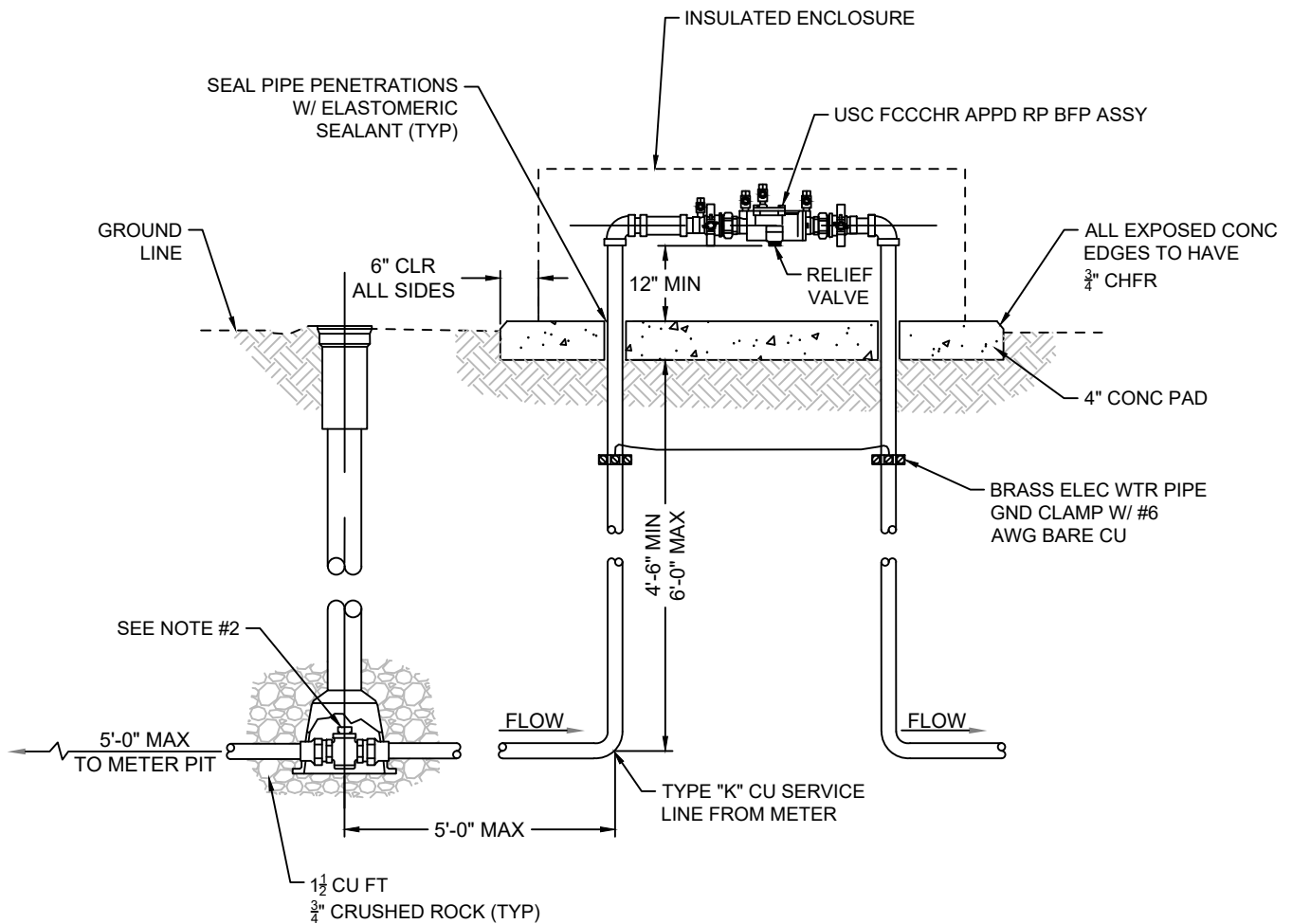
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SCALE: NTS

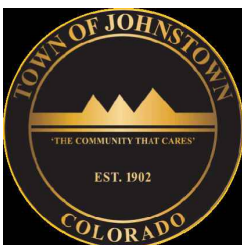
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**TYPICAL OUTSIDE INSTALLATION OF REDUCED
PRESSURE PRINCIPAL DEVICE (SMALLER THAN 3")**



NOTES:

1. CONCRETE PAD PENETRATIONS SHALL BE 1-INCH LARGER THAN PIPE DIAMETER.
2. DIAMETER OF FITTINGS, NIPPLE, AND TUBING SHALL BE EQUAL IN DIAMETER TO THE BACKFLOW PREVENTER.
3. HEATED ENCLOSURE SHALL HAVE SEPARATE APPROVED ELECTRICAL SERVICE AND SHALL BE SIZED TO ALLOW ADEQUATE ROOM FOR TESTING AND MAINTENANCE.
4. REFER TO LOCAL CODES AND MANUFACTURER REQUIREMENTS FOR INSTALLATION INSTRUCTIONS.



**BACKFLOW PREVENTION - OUTDOOR
INSTALLATION SMALLER THAN 3"**

DETAIL NO.

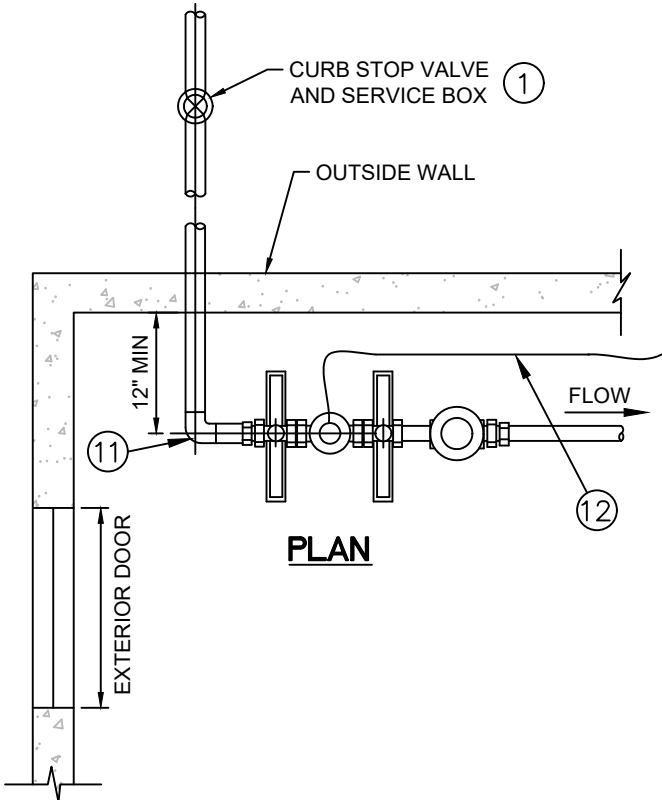
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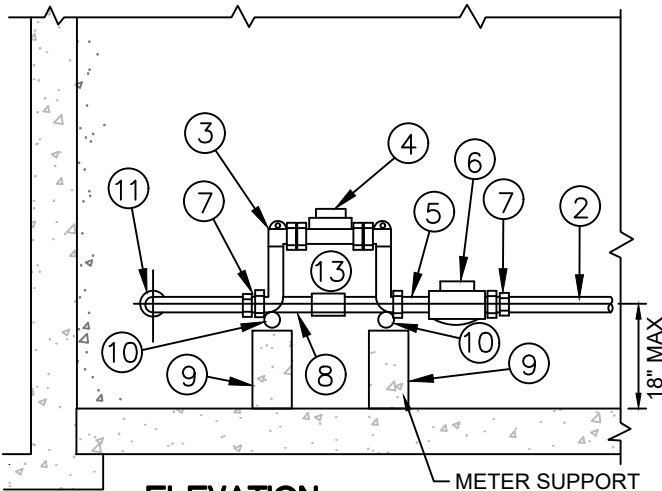
DATE: 9/20/2022

SCALE: NTS

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PLAN



ELEVATION

NOTES:

1. PIPE JOINTS SHALL BE THREADED OR SOLDERED AS PER TOWN STANDARDS.
2. INSTALLATION MUST ALLOW ACCESS FOR MAINTENANCE AND BE PROTECTED FROM FREEZING.
3. A FLOOR DRAIN SHALL BE PLACED NEAR THE METER INSTALLATION.
4. METER SUPPORT SHALL BE EITHER CONCRETE OR ADJUSTABLE STEEL PIPE.
5. MUST BE LOCATED IN FIRE RISER/UTILITY ROOM WITH EXTERNAL DOORS FOR TOWN ACCESS.

KEY:

- ① CURB STOP
- ② TYPE K COPPER TUBING
- ③ 12" COPPERSETTER/METER YOKE
- ④ METER UNIT
- ⑤ 3" NIPPLE BETWEEN COPPERSETTER AND CHECK VALVE
- ⑥ CHECK VALVE
- ⑦ MECH. IRON PIPE TO FLARE COUPLINE FROM INLET SIDE OF COPPERSETTER AND OUTLET SIDE OF CHECK VALVE
- ⑧ BY-PASS WILL BE 1" FOR 1½" COPPERSETTERS AND 1½" OR 1¼" FOR 2" COPPERSETTERS
- ⑨ CONCRETE BLOCK SUPPORTS 4" X 4" X 12"
- ⑩ 1"Ø X 18" (LENGTH) PIPE
- ⑪ 90° ELBOW
- ⑫ ELECTRICAL LINE TO REMOVE READING UNIT MUST BE IN CONDUIT
- ⑬ ISOLATION VALVE ON BY-PASS LINE



INSIDE SETTING FOR 1.5' AND 2' COMMERCIAL OR MULTI-FAMILY METER

DETAIL NO.

521

REVISION NO: 1

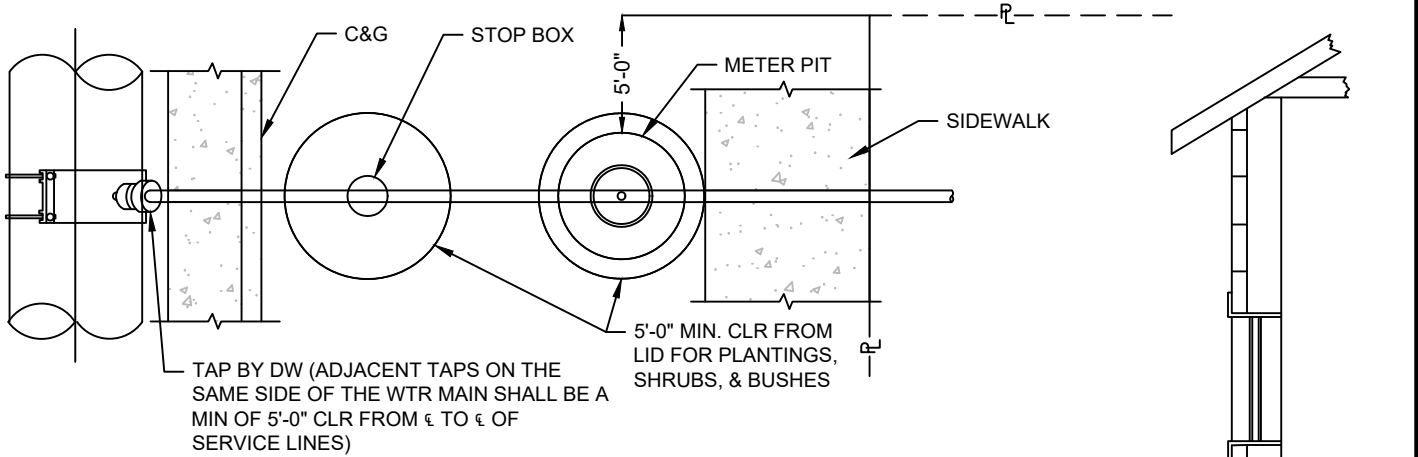
DATE: 9/20/2022

SCALE: NTS

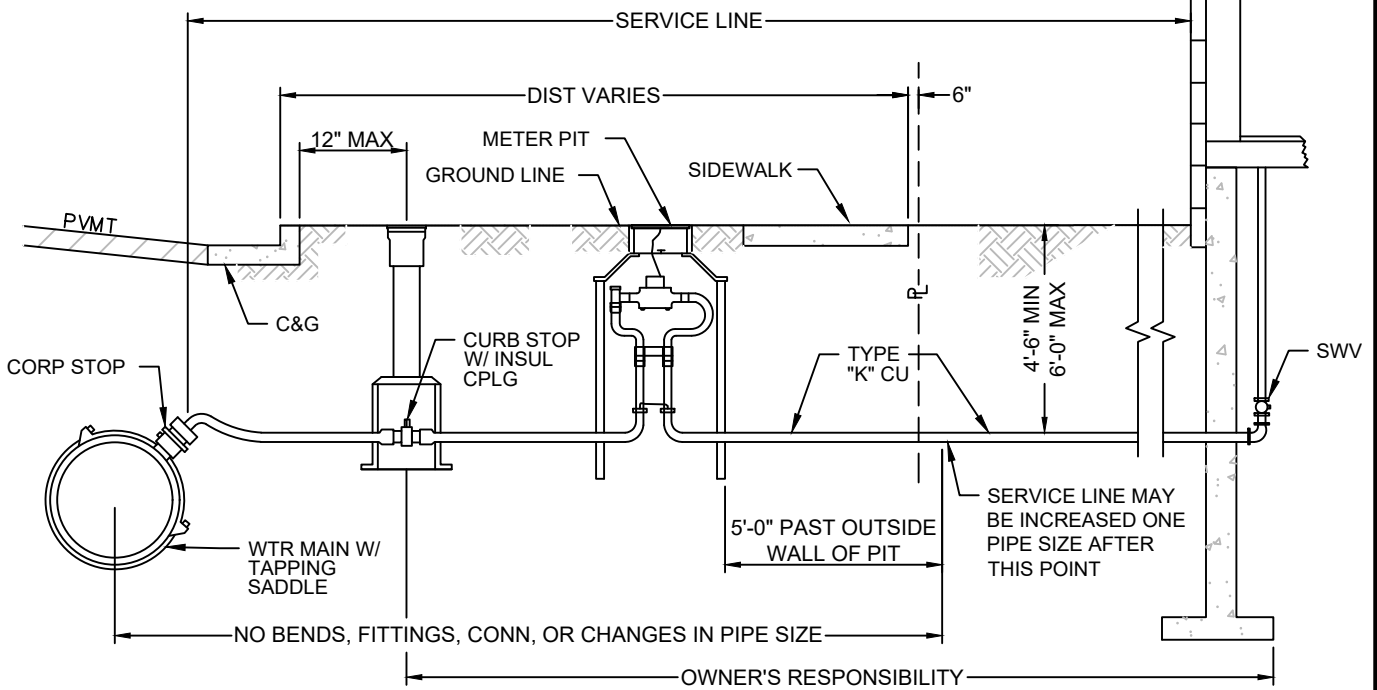
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NOTES:

1. THE STOP BOX SHALL BE LOCATED IN PUBLIC RIGHT-OF-WAY, 12" FROM THE BACKSIDE OF THE CURB OR ATTACHED SIDEWALK.
2. INSTALL METER PIT AND SERVICE LINE IN ACCORDANCE WITH TOWN SPECIFICATIONS.
3. REFER TOWN STANDARD DETAILS FOR TRACER WIRE REQUIREMENTS.
4. ALL SERVICE LINES SHALL BE A MINIMUM OF 3/4" DIAMETER TYPE "K" COPPER.
5. ALL JOINTS UNDERGROUND SHALL BE COMPRESSION JOINTS.
6. NEW CONSTRUCTION REQUIREMENTS:
 - 6.A. TAPPING SADDLE MUST BE USED ON ALL TAPS. PIPE SHALL BE TYPE "K" COPPER THROUGH THE METER PIT OR TO METER.
 - 6.B. ALL SERVICE LINES SHALL HAVE A CURB STOP INSTALLED, AS SHOWN BELOW.
 - 6.C. ALL METERS SHALL HAVE AN INSIDE SHUT-OFF.
 - 6.D. ALL NEW RESIDENTIAL CONSTRUCTION IS TO HAVE OUTSIDE METERS.



PLAN



ELEVATION



OUTSIDE SETTING FOR 0.75' AND 1' SERVICE LINE, STOP BOX, AND METER

DETAIL NO.

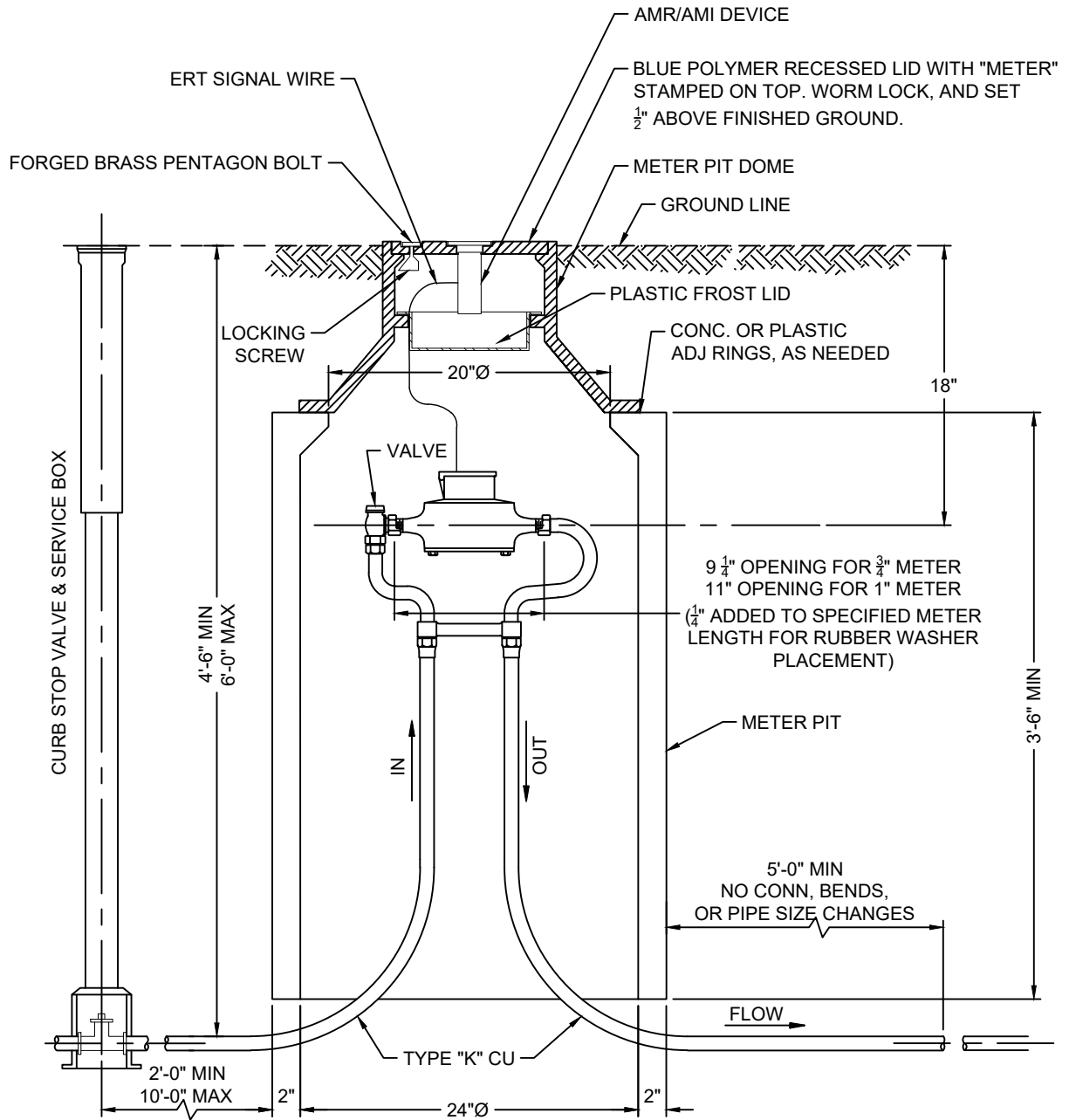
522

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NOTES:

1. BENDING COPPER RISERS FOR GRADE ADJUSTMENT OF THE METER YOKE IS NOT PERMITTED.
2. SERVICE LINES SHALL NOT CROSS IN THE METER PIT.
3. COPPER RISERS SHALL BE NEW. DAMAGED OR BENT COPPER RISERS ARE NOT PERMITTED.
4. INSTALL METER PIT AND SERVICE LINE IN ACCORDANCE WITH TOWN STANDARD SPECIFICATIONS.
5. COMPOSITE METER PITS SHALL BE LOCATED IN LANDSCAPED AREAS ONLY NOT SUBJECT TO TRAFFIC LOADING.
6. CURB STOPS MUST BE IN AN EASEMENT OR RIGHT-OF-WAY.



OUTSIDE SETTING FOR 0.75' AND 1' METER

DETAIL NO.

523

REVISION NO: 1

DATE: 9/20/2022

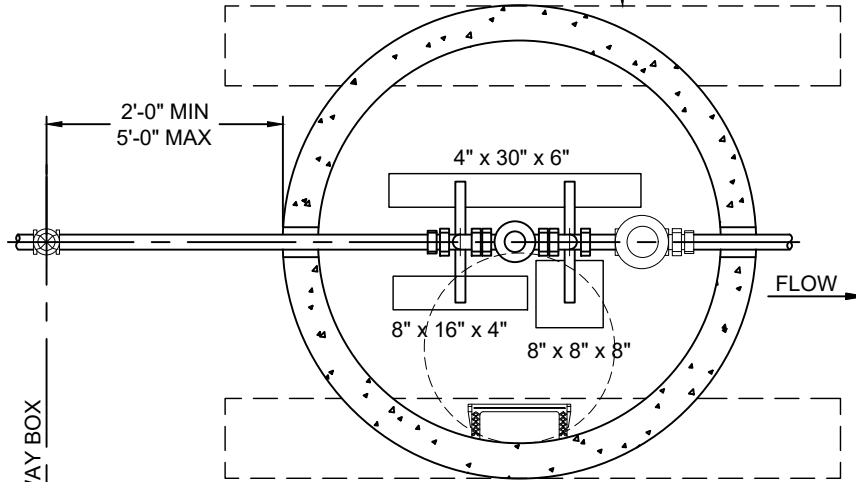
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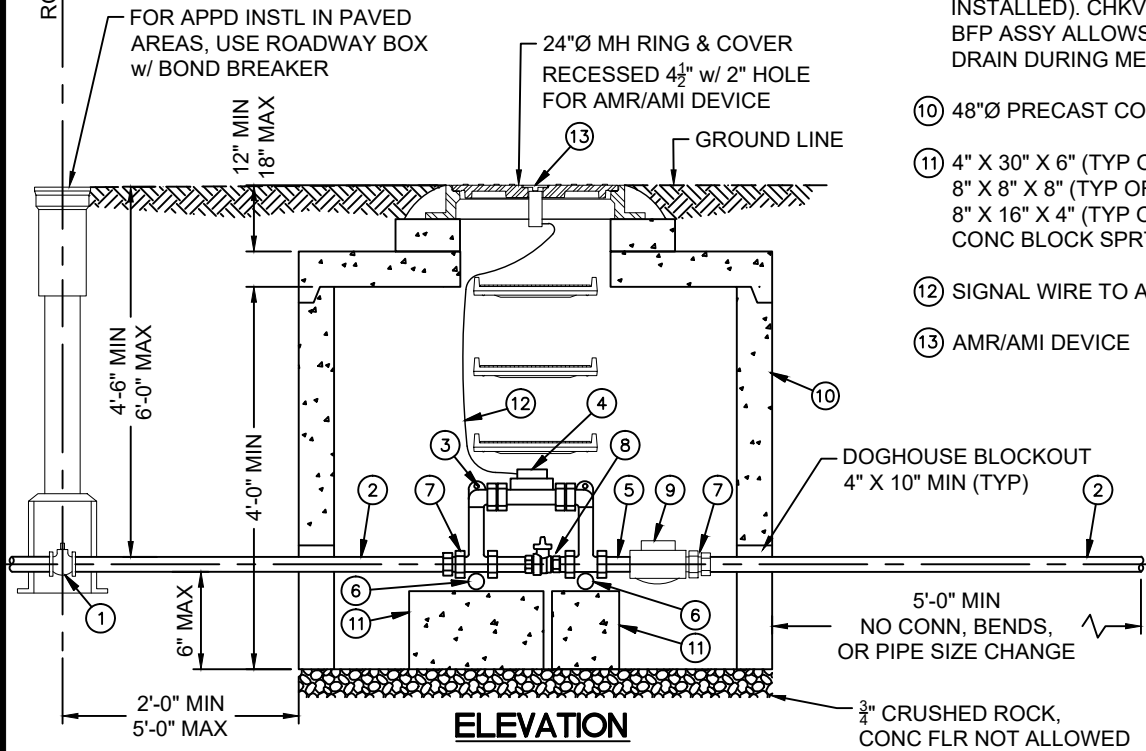
12" X 12" X 8'-0" CONC BASE
BM REQD FOR METER IN
STREET OR PARKING AREA

KEY:

- ① CURB STOP
- ② TYPE "K" CU TUBING
- ③ 1½" OR 2" COPPERSETTER/METER YOKE w/ BYPASS
- ④ WTR METER w/ ENCODER REGISTER
- ⑤ 3" NIPPLE BTWN COPPERSETTER & CHKV
- ⑥ 1" X 23" BSP-40
- ⑦ IRON PIPE TO FLARE CPLG FROM INLET SIDE OF COPPERSETTER & OUTLET SIDE OF CHKV.
- ⑧ BYPASS w/ VALVE WILL BE 1" FOR 1½" COPPERSETTERS & 1¼" OR 1¼" FOR 2" COPPERSETTERS; NO BYPASS FOR IRRIGATION METERS.
- ⑨ CHKV (NOT REQD WHERE A BFP DEVICE IS INSTALLED). CHKV MAY BE REQD IF DIST TO BFP ASSY ALLOWS EXCESSIVE WTR TO DRAIN DURING METER MAINTENANCE.
- ⑩ 48"Ø PRECAST CONC MH
- ⑪ 4" X 30" X 6" (TYP OF 2) OR 8" X 8" X 8" (TYP OF 4) OR 8" X 16" X 4" (TYP OF 4) CONC BLOCK SPRT
- ⑫ SIGNAL WIRE TO AMR/AMI DEVICE
- ⑬ AMR/AMI DEVICE



PLAN



ELEVATION

NOTES:

- 1. CURB STOP SHALL BE 2' MIN. FROM THE INLET SIDE OF THE METER MH.
- 2. THE COPPERSETTER OR METER YOKE SHALL BE 12" HIGH MAX.
- 3. GROUT DOGHOUSE BLOCKOUTS AFTER SERVICE LINE INSTALLATION.
- 4. INSTALL METER MH AND SERVICE LINE IN ACCORDANCE WITH TOWN STD. SPECIFICATIONS.



**OUTSIDE SETTING FOR 1.5' AND 2' METER
WITH CHECK VALVE AND BYPASS**

DETAIL NO.

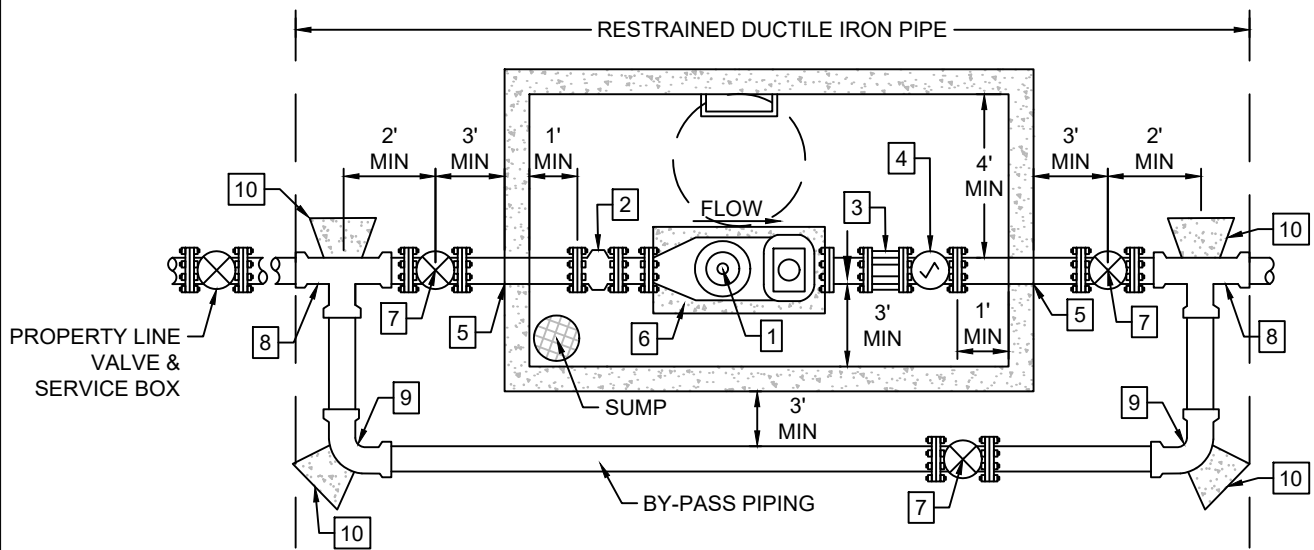
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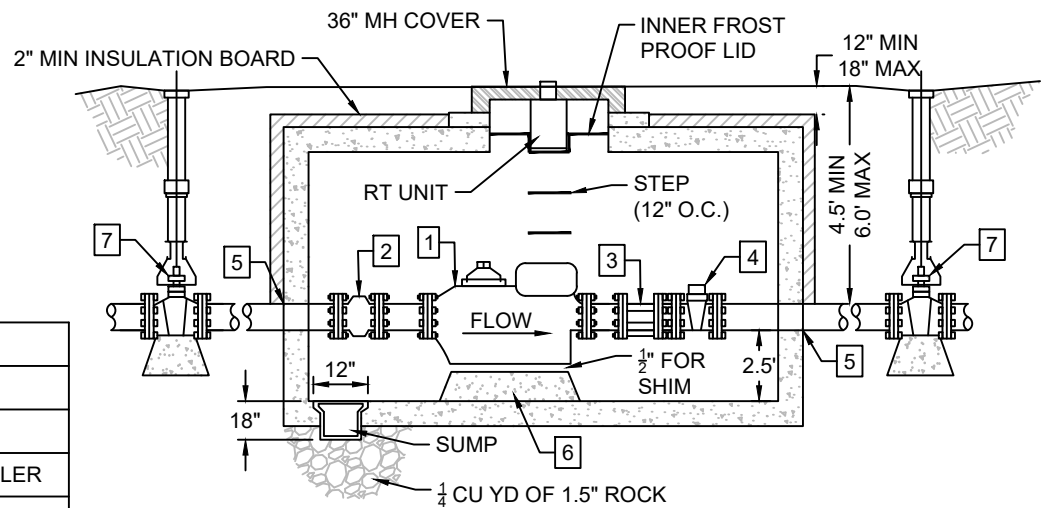
DATE: 9/20/2022

SCALE: NTS

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PLAN



ELEVATION

LEGEND	
1	METER
2	STRAINER
3	MECHANICAL COUPLER
4	CHECK VALVE
5	LINK SEAL
6	CONCRETE SUPPORT
7	GATE VALVE
8	TEE
9	ELBOW
10	THRUST BLOCK

NOTES:

1. VAULT AND MANHOLE COVER TO BE RATED FOR HS-20 TRAFFIC LOADING.



OUTSIDE SETTING FOR 3' AND LARGER METER

DETAIL NO.

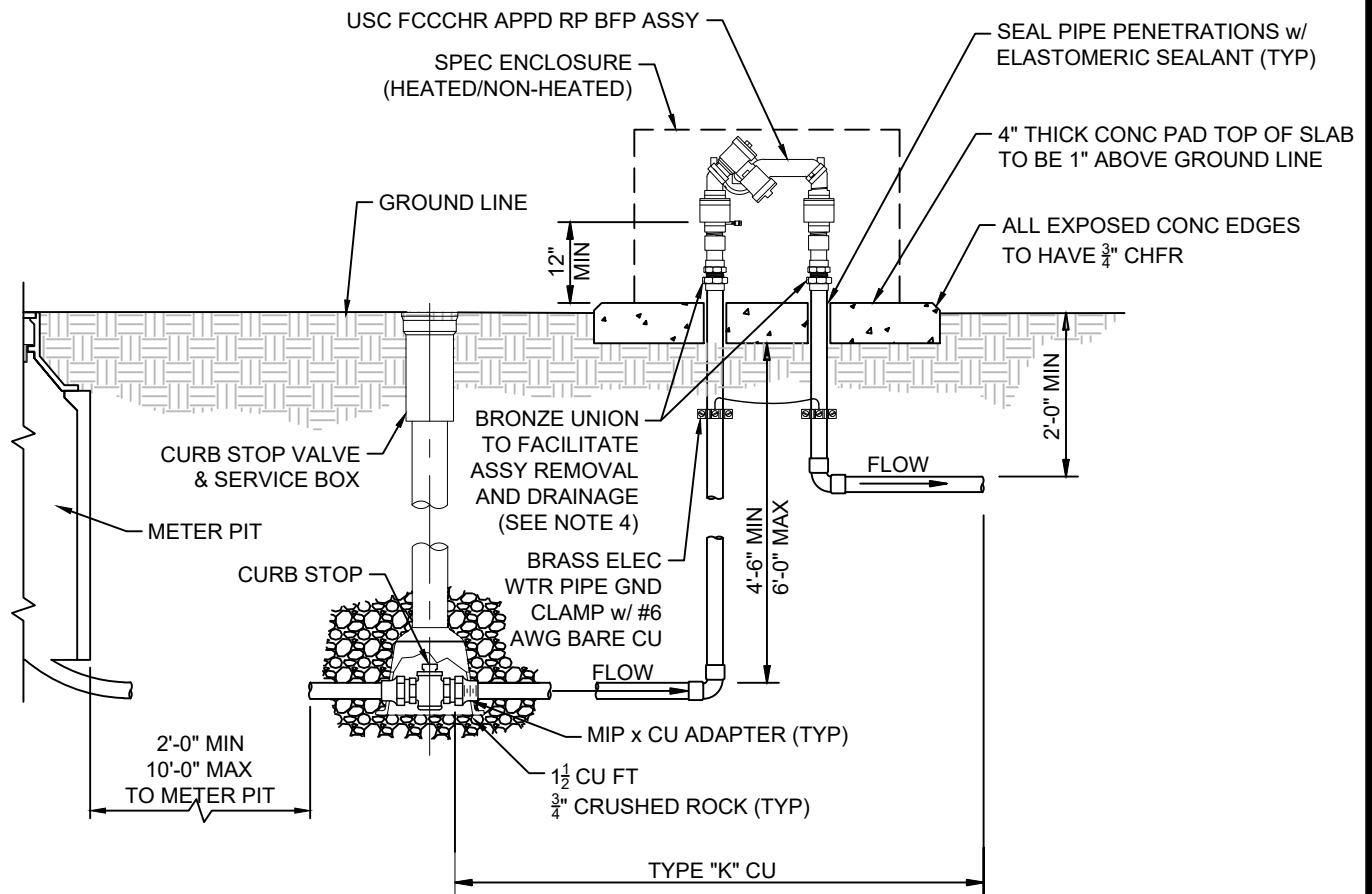
525

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DATE: 8/22/22

SCALE: NTS

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ELEVATION

NOTES:

1. CONCRETE PAD PENETRATIONS SHALL BE 1-INCH LARGER THAN PIPE DIAMETER.
2. DIAMETER OF FITTINGS, NIPPLE, AND TUBING SHALL BE EQUAL IN DIAMETER TO THE BACKFLOW PREVENTER.
3. REFER TO LOCAL CODES AND MANUFACTURER REQUIREMENTS FOR SPECIFIC INSTALLATION INSTRUCTIONS.
4. DRAINING OF LINE UPSTREAM OF ASSEMBLY CAN BE ACHIEVED BY REMOVING ASSEMBLY AT COUPLERS AND INSERTING APPROPRIATE SIZED HOSE INTO THE LINE AND BLOWING OR SUCKING EXISTING WATER OUT TO PREVENT FREEZE DAMAGE.
5. CURB STOPS MUST BE IN A EASEMENT OR RIGHT-OF-WAY.



**IRRIGATION METER - 1" AND SMALLER
IN METER PIT**

DETAIL NO.

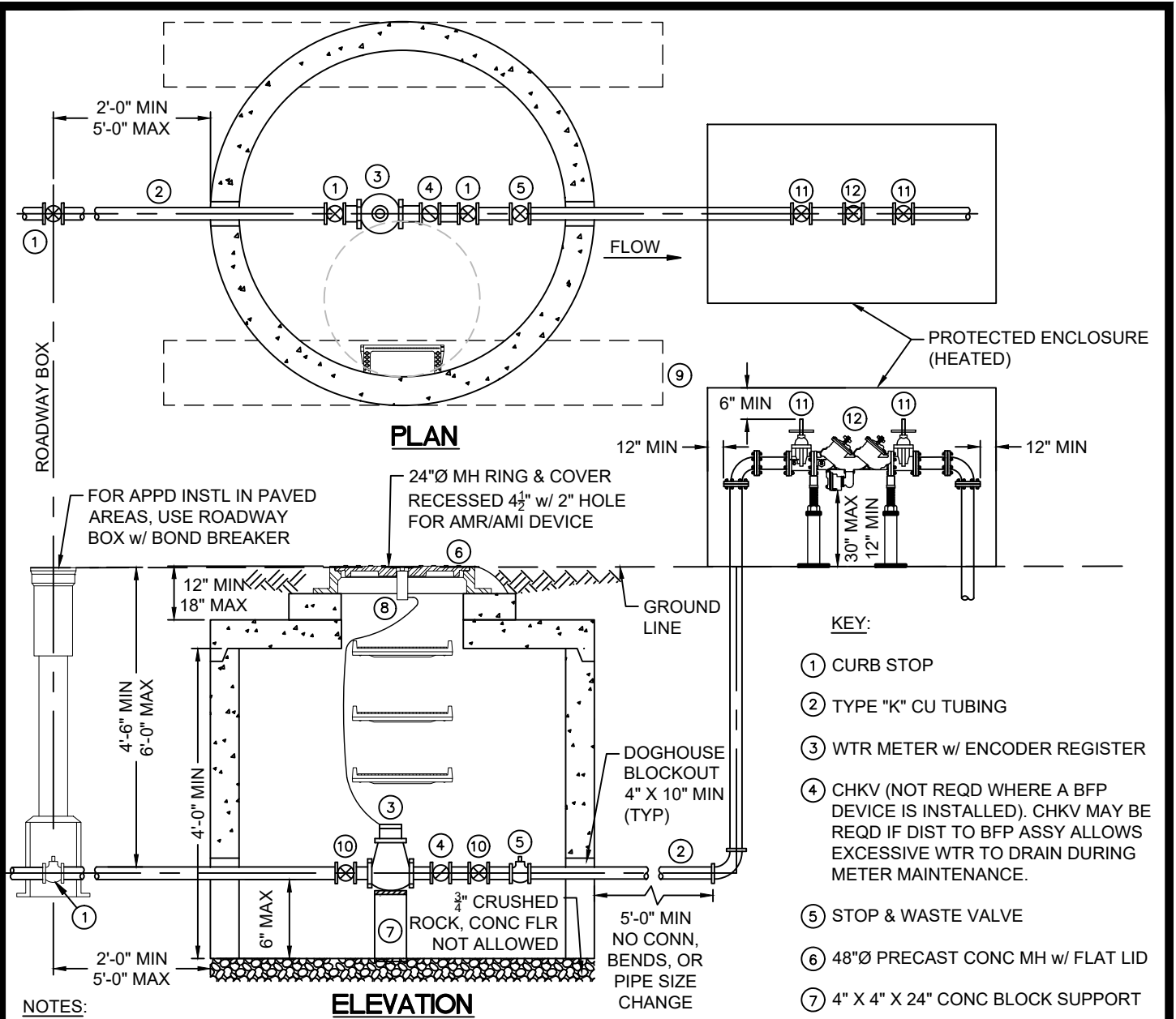
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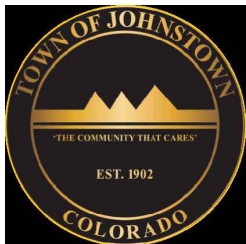


NOTES:

1. CURB STOP SHALL BE 2' MIN. FROM THE INLET SIDE OF THE METER MH.
2. THE COPPERSETTER OR METER YOKE SHALL BE 12" HIGH MAX.
3. GROUT DOGHOUSE BLOCKOUTS AFTER SERVICE LINE INSTALLATION.
4. INSTALL METER MH AND SERVICE LINE IN ACCORDANCE WITH TOWN STD. SPECS.
5. METER VAULT SHALL BE INSTALLED IN LANDSCAPED AREA UNLESS APPROVED BY THE TOWN. MH LID SHALL BE SET TO 1" ABOVE FINISHED GRADE IN LANDSCAPED AREAS.
6. METER SHALL BE FURNISHED BY TOWN AND INSTALLED BY CONTRACTOR.
7. JOINTS INSIDE METER VAULT SHALL BE THD OR SHALL BE SOLDERED PER ASTM B32.
8. ALL VAULTS AND METERS MUST BE IN UTILITY EASEMENTS.
9. HEATED ENCLOSURE SHALL HAVE SEPARATE APPROVED ELECTRICAL SERVICE AND SHALL BE SIZED TO ALLOW ADEQUATE ROOM FOR TESTING AND MAINTENANCE.
10. OUTSIDE COVERS MUST HAVE DOORS FOR ACCESS TO TEST COCKS FOR TESTING AND MAINTENANCE.

KEY:

- ① CURB STOP
- ② TYPE "K" CU TUBING
- ③ WTR METER w/ ENCODER REGISTER
- ④ CHKV (NOT REQD WHERE A BFP DEVICE IS INSTALLED). CHKV MAY BE REQD IF DIST TO BFP ASSY ALLOWS EXCESSIVE WTR TO DRAIN DURING METER MAINTENANCE.
- ⑤ STOP & WASTE VALVE
- ⑥ 48"Ø PRECAST CONC MH w/ FLAT LID
- ⑦ 4" X 4" X 24" CONC BLOCK SUPPORT
- ⑧ SIGNAL WIRE TO AMR/AMI DEVICE
- ⑨ 12" X 12" X 8'-0" CONC BASE BM REQD FOR METER IN STREET OR PARKING AREA
- ⑩ BALL VALVES
- ⑪ GATE VALVES
- ⑫ RELIEF VALVE



IRRIGATION METER - 1.5' AND 2' IN METER PIT

DETAIL NO.

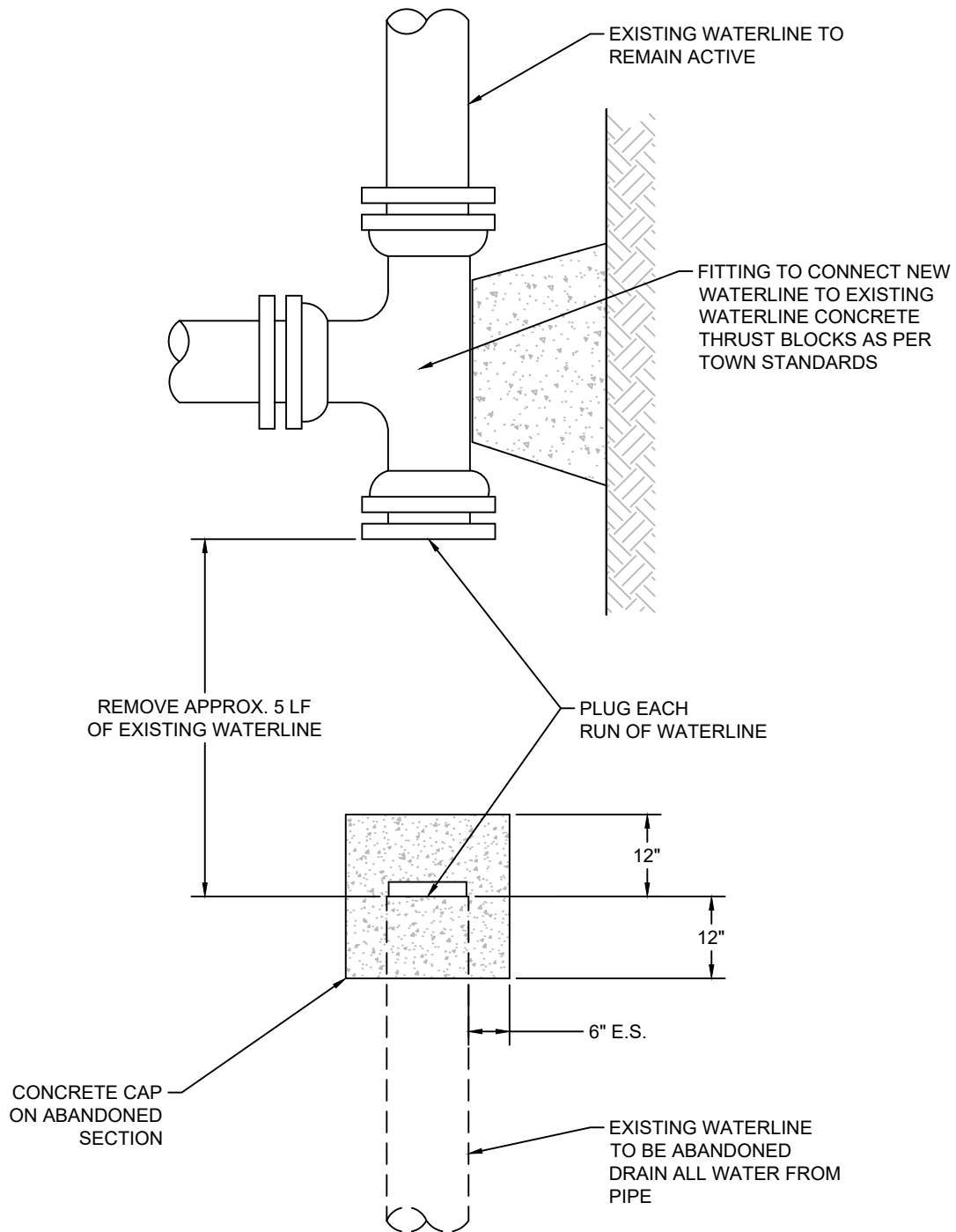
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WATER PIPE ABANDONMENT

DETAIL NO.

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SCALE: NTS

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