

APPENDIX B

FIGURES

Figure	Drawing – Addendum #3
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B-3	Detail of 1 ½” or 2” Service Installation
B-4	Excavation Detail for Tapping Sleeve
B-5	1 st Floor Setting with Crawl Space Below
B-6	Building with Standard Basement
B-7	Adjusting Stop Box to New Grade (Arch pattern Box)
B-8	Typical Comm. Fire Service Line with Domestic Tee in Line – Addendum #3
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B-15a	Residential Irrigation and/or Non-Circulating Fire Service Installation
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B-16	Tap Cut at Main Procedures ¾” to 2” Direct Taps Only
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B-18	Tracer Wire Detail
B-19	Concrete Thrust Block Standard
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Urbandale Water Utility
Late Notice/Disconnect Policy
Updated April 2013

Bills are due when issued and are considered late after 20 days.

Reminder Notice issued 21st day or first working day after the due date. A late fee of \$1.50 will be applied to the customer's account when the notice is generated. If account balance is less than \$5.00 the late fee will not be applied and notice will not be sent.

Final Notice issued 32nd Day or first working day after the due date.

Hand Delivered Shut Off Notice delivered 42nd day* If the past due balance is less than \$10.00 disconnection will not be pursued.

Water Disconnected 44th day*

*Hand delivered notices and the actual disconnect date will be coordinated so that water is not disconnected on a Friday or the day prior to an observed holiday by the Utility. The Hand Delivered Shut Off Notice will not be delivered prior to the 42nd day and water will not be disconnected prior to the 44th day.

Customers who contact the Utility to make a payment arrangement prior to the Hand Delivered Shut Off Notice may be given an extension. If payment is not received by the date of the arrangement, a Hand Delivered Shut Off Notice will be delivered the following work day.

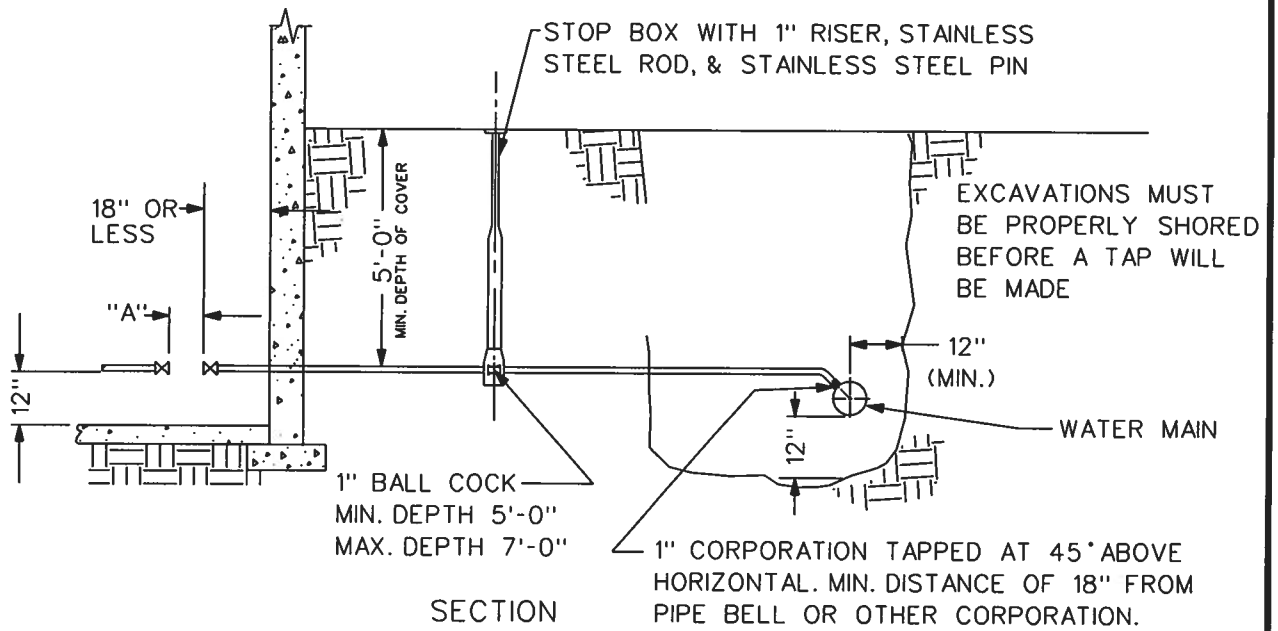
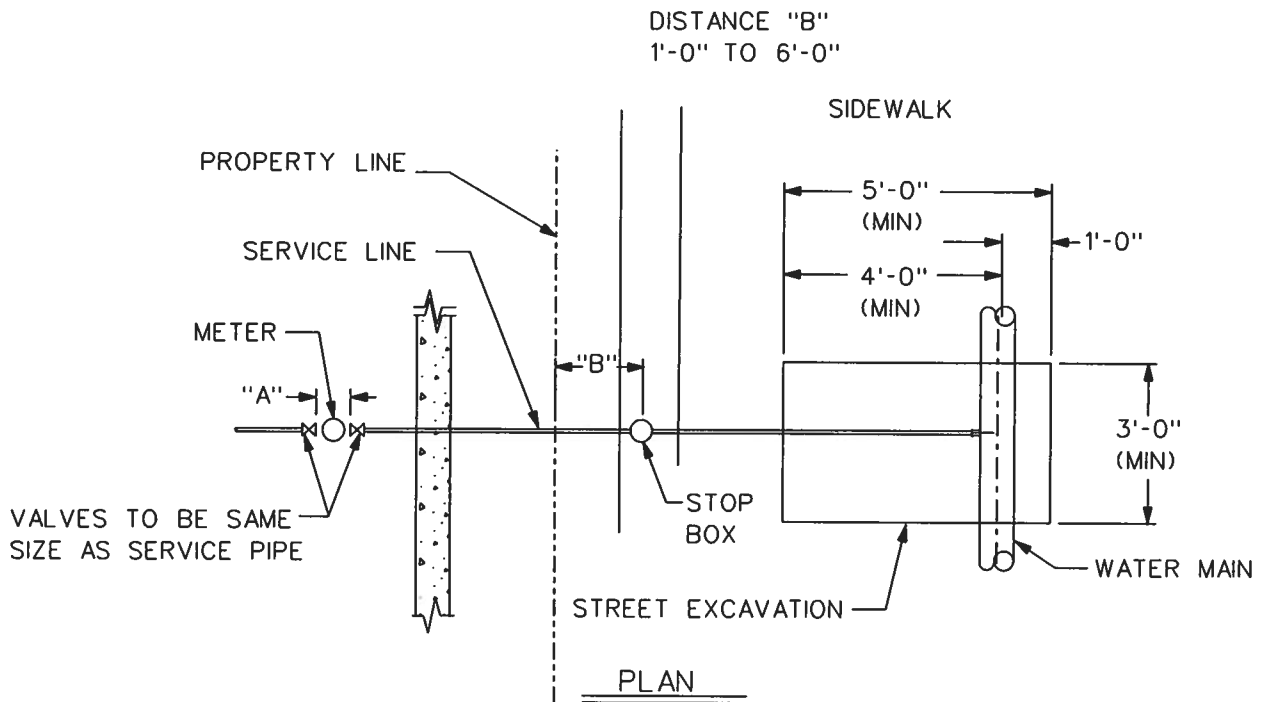
Customers who contact the Utility to make a payment arrangement prior to Water Disconnect may be given an extension. If the payment is not received by the date of the arrangement, water will be disconnected the following work day.

There will be a \$10.00 delivery fee applied to the customer's account with delivery of the Hand Delivered Shut Off Notice.

When water has been disconnected for non-payment the following schedule will be used to determine the turn on fee to reinstate service.

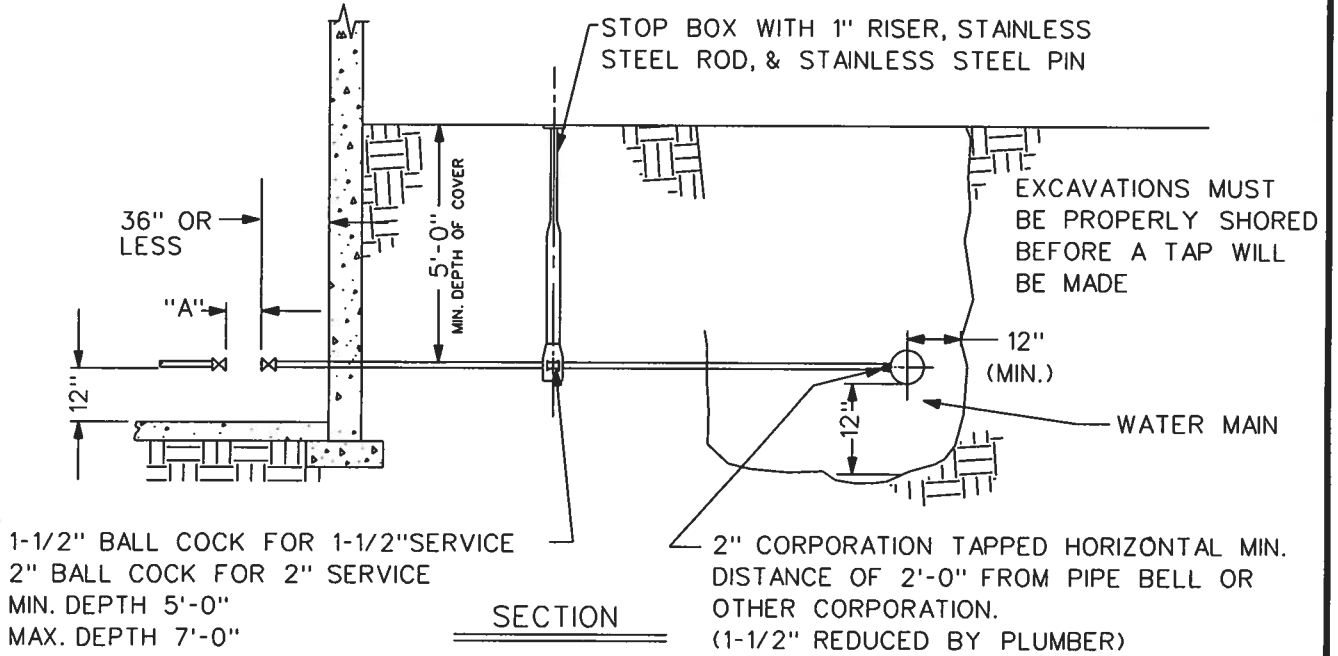
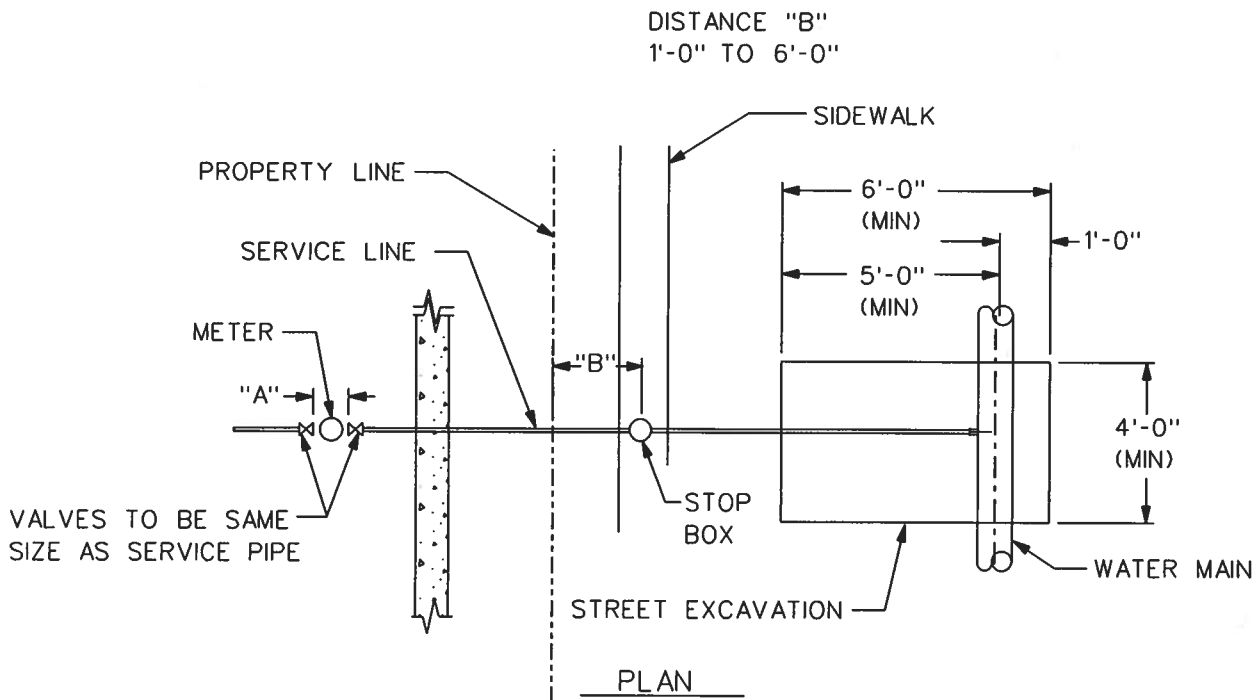
Water Turn on during business hours (Monday thru Friday 8:00 a.m. – 4:30 p.m.)	\$40.00	
Water Turn on after business hours after 4:30, on weekends and holidays)	\$100.00	(Monday thru Friday

Payment of the turn on fee may be required at the time of turn on or applied to the customer's account. A customer may be given an allowance on the late fee, tag fee and turn on fee one time during a twelve month period.

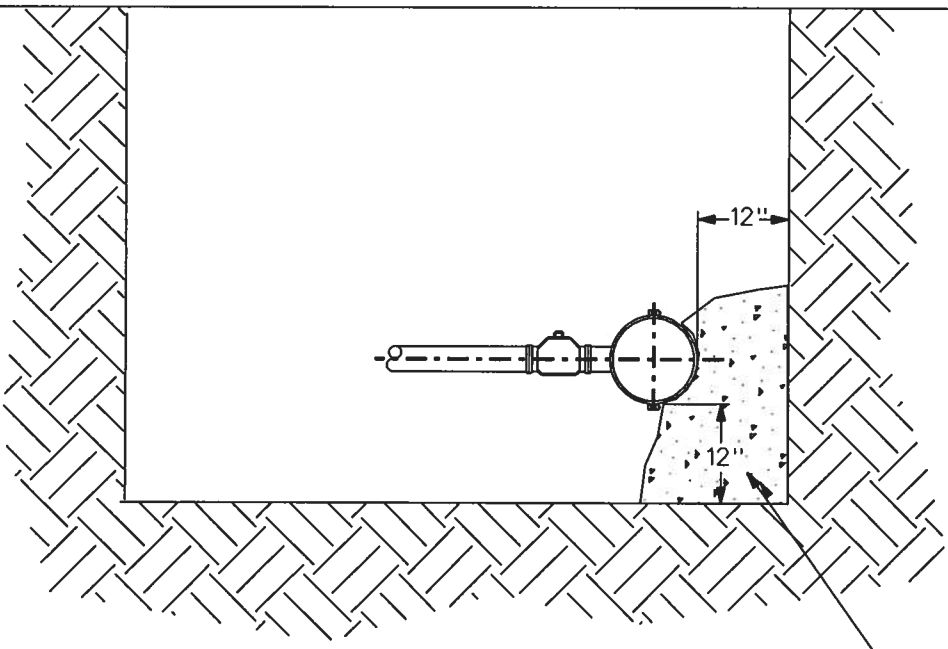
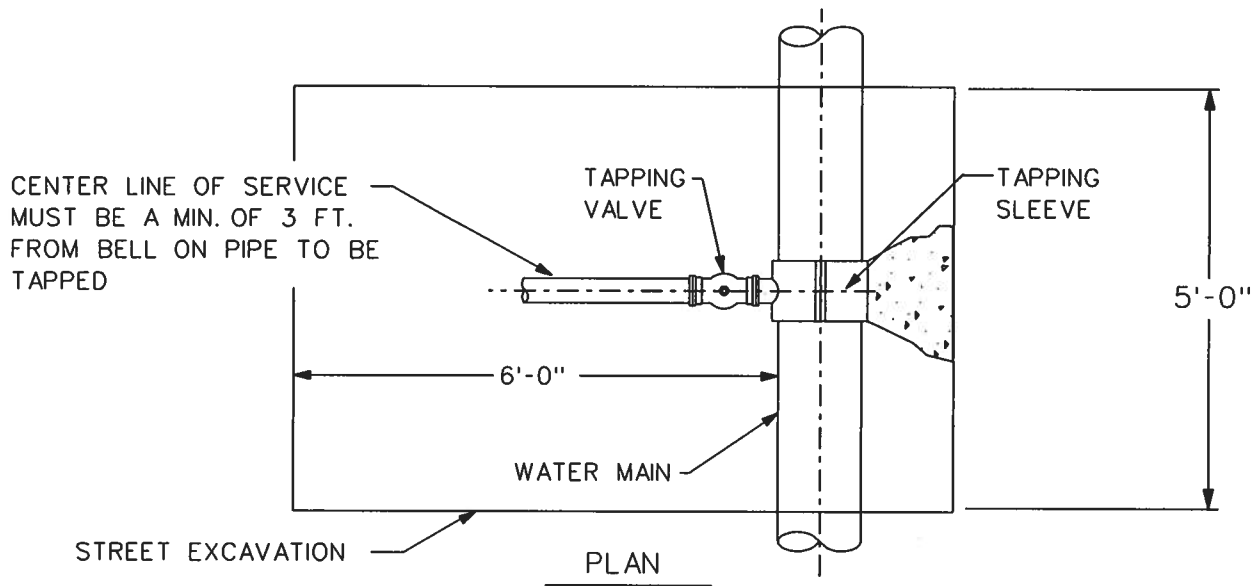


METER SPACING

SIZE OF METER	"A" - FACE TO FACE OF VALVES
5/8"	12"
3/4"	13-1/2"
1"	15"
SCALE: NONE	<p>URBANDALE WATER UTILITY</p> <p>DETAIL OF 1" COPPER SERVICE INSTALLATION</p>
DATE: 07-1-2018	



METER SPACING	
SIZE OF METER	"A" - FACE TO FACE OF VALVES
1-1/2"	13" PLUS FLANGES
2"	13" PLUS FLANGES
SCALE: NONE	URBANDALE WATER UTILITY
DATE: 07-1-2018	



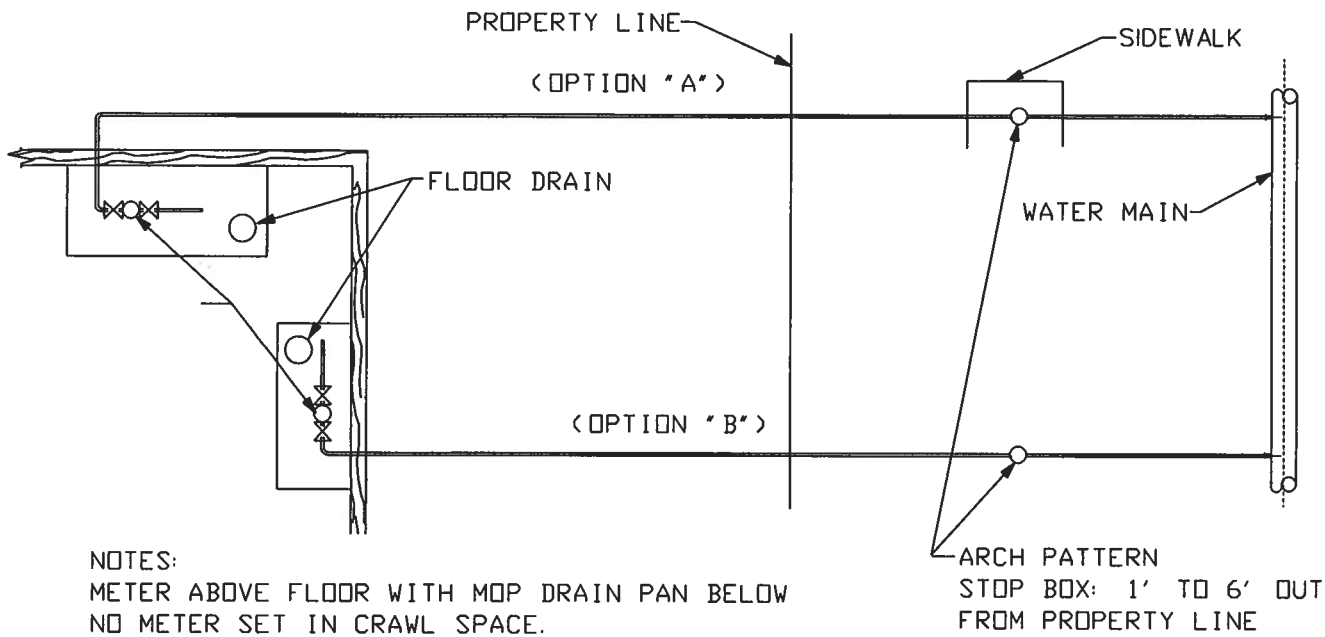
NOTES:

1. IF 2 TAPS ARE TO BE MADE, A MIN. OF 3 FT. BETWEEN SERVICES (ϕ TO ϕ) SHOULD BE MAINTAINED AND THE WIDTH OF THE HOLE INCREASED TO 8 FT. IF BOTH ARE TO BE MADE IN SAME HOLE.
2. EXCAVATIONS OVER 4'-11" DEEP MUST BE SHORED BEFORE A TAP WILL BE MADE. EXCAVATION DIMENSIONS ARE FROM INSIDE FACE OF SHORING.

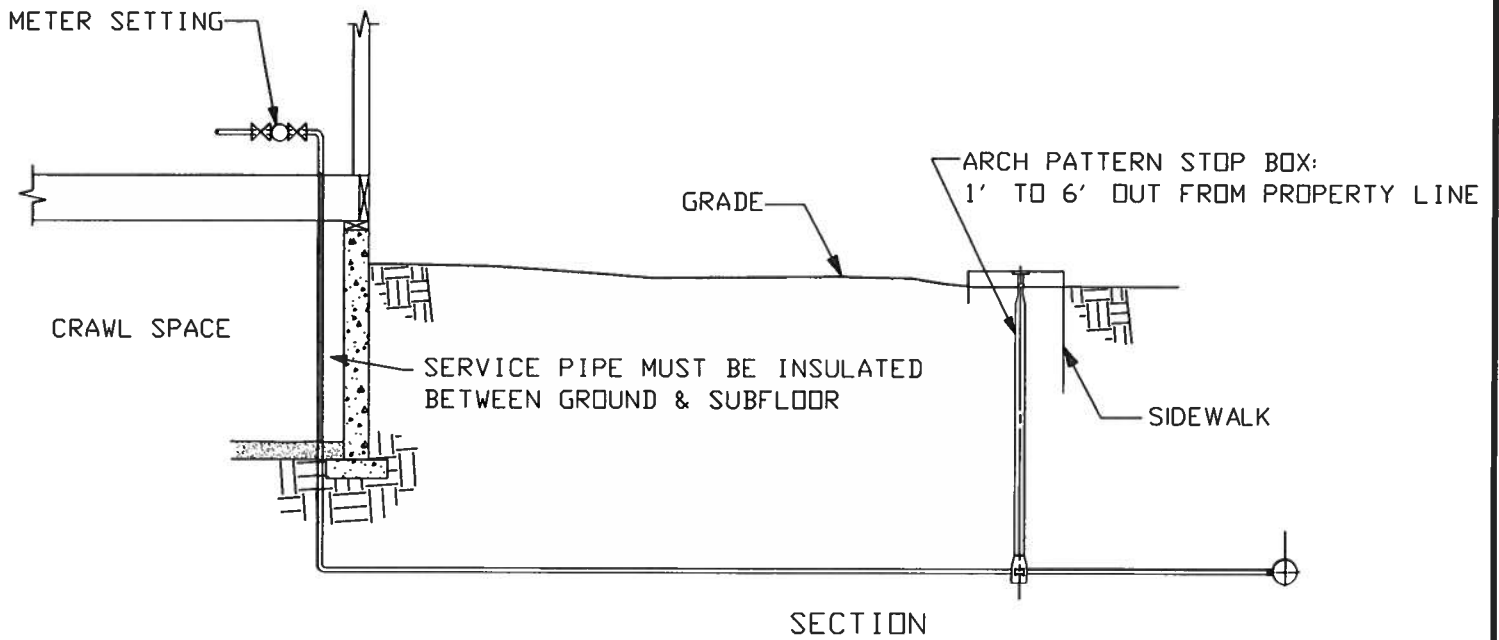
SCALE: NONE
DATE: 07-1-2018

URBANDALE WATER
UTILITY

EXCAVATION DETAIL FOR
TAPPING SLEEVE



PLAN

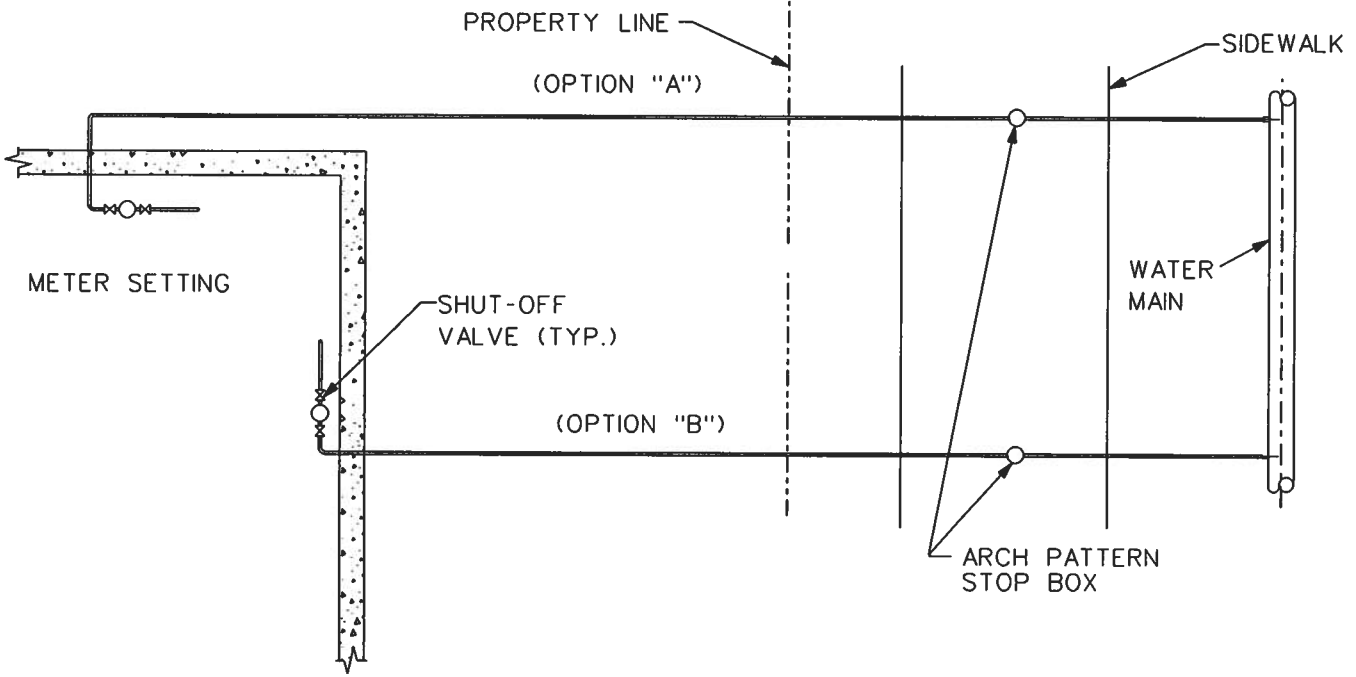


SCALE: NONE

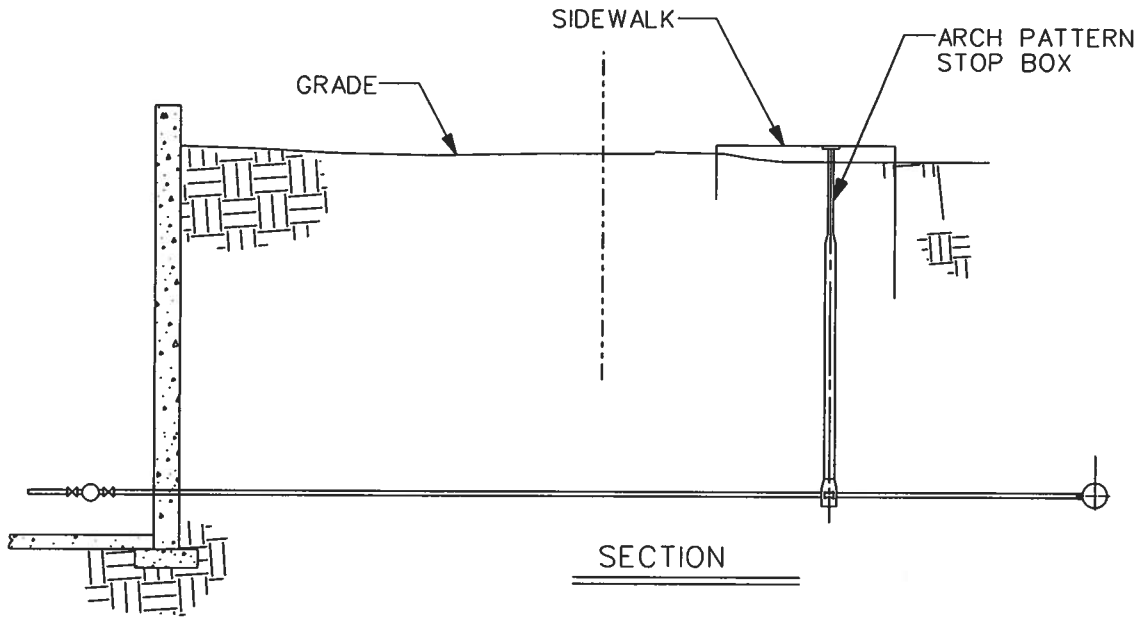
URBANDALE WATER
UTILITY

1ST FLOOR SETTING
WITH CRAWL
SPACE BELOW

DATE: 07-1-2018

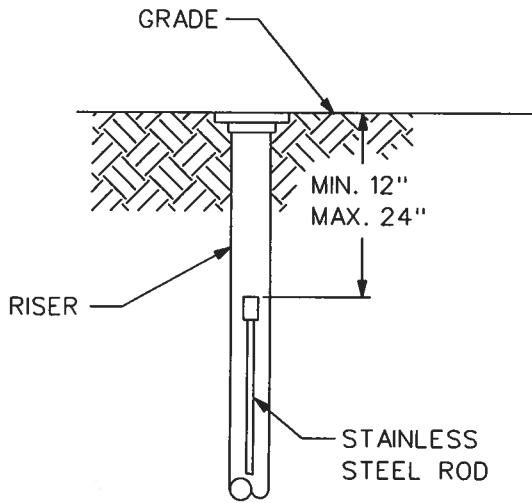


PLAN

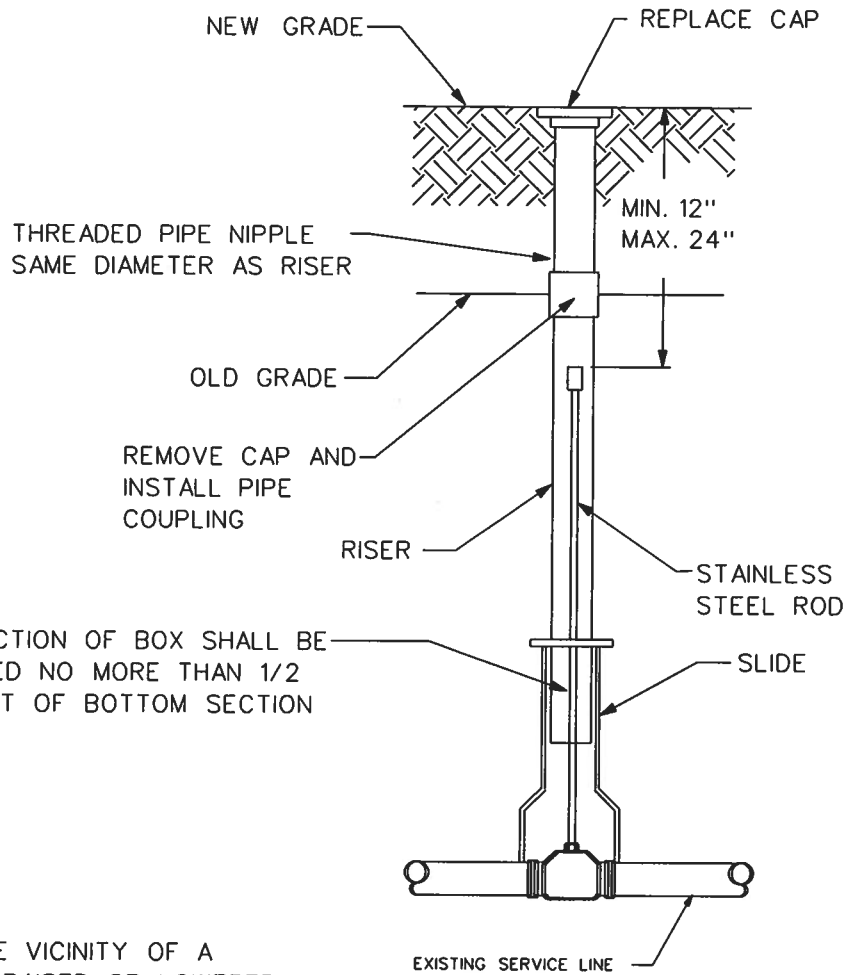


SECTION

SCALE: NONE	URBANDALE WATER UTILITY	BUILDING WITH STANDARD BASEMENT
DATE: 07-1-2018		



NORMAL INSTALLATION



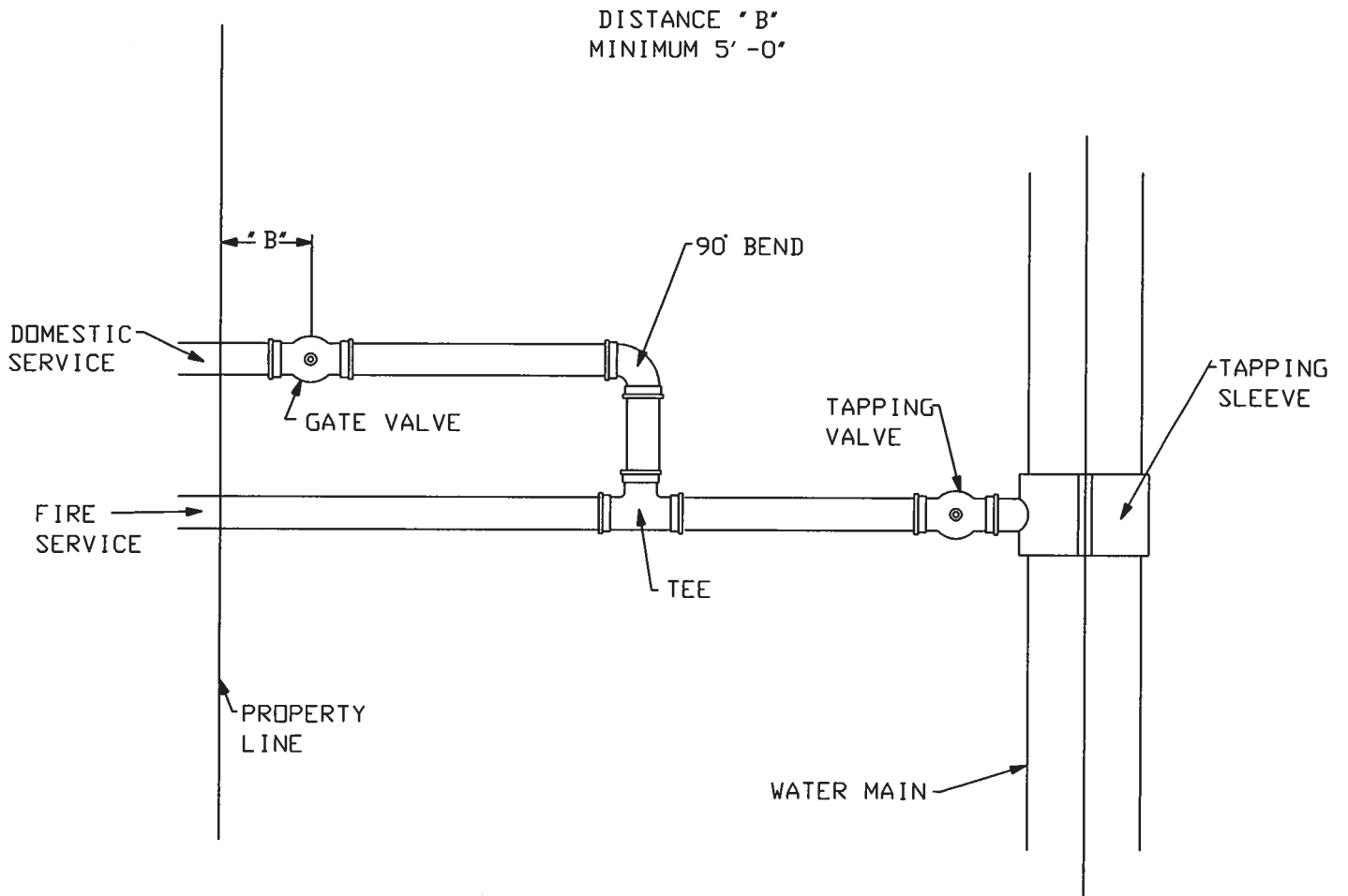
STOP BOX RAISED TO NEW GRADE

TOP SECTION OF BOX SHALL BE EXTENDED NO MORE THAN 1/2 WAY OUT OF BOTTOM SECTION OF BOX

WHEN THE GRADE IS CHANGED IN THE VICINITY OF A STOP BOX, THE STOP BOX MUST BE RAISED OR LOWERED TO THE NEW GRADE. RAISING THE STOP BOX IS ACCOMPLISHED BY REMOVING THE CAP, INSTALLING A PIPE COUPLING AND A THREADED NIPPLE OF THE APPROPRIATE LENGTH AND DIAMETER AND REPLACING THE CAP. THE RISER MUST BE INTEGRAL AND CONTINUOUS. TO LOWER THE STOP BOX, IT WILL BE NECESSARY TO CUT AND RETHREAD THE RISER PIPE AT THE NEW GRADE AND REPLACE THE CAP. THE ROD MUST BE LOWERED IN PROPER PROPORTION TO RISER PIPE.

ALL STOP BOX EXTENSIONS SHALL BE SECURED IN SUCH A WAY SO THAT IT BECOMES ONE PERMANENT PIPE, SUCH AS WELDING, RED LOCTITE OR SET SCREWS.

SCALE: NONE	URBANDALE WATER UTILITY	ADJUSTING STOP BOX TO NEW GRADE (ARCH PATTERN BOX)
DATE: 07-1-2018		



NOTE: DO NOT LOCATE VALVES IN AREAS WHERE CARS CAN BE PARKED.

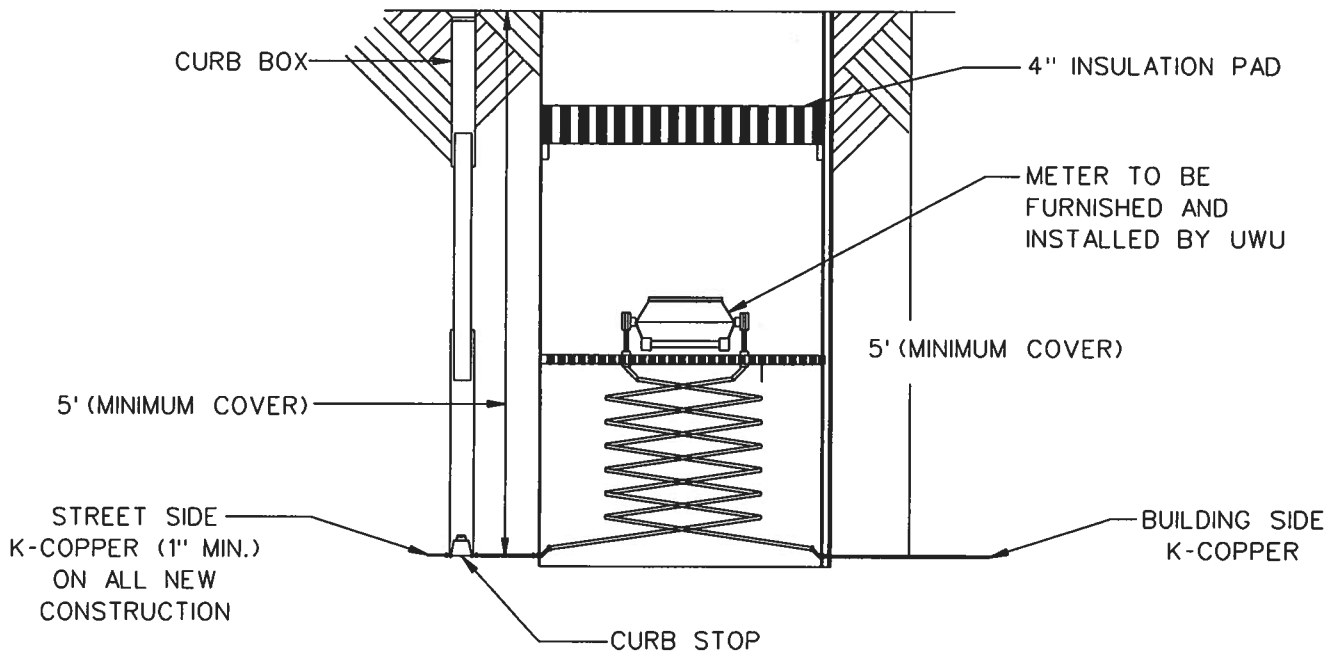
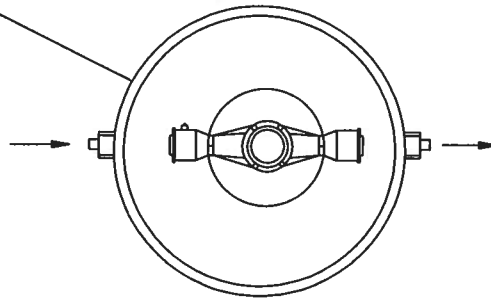
SCALE: NONE

URBANDALE WATER
UTILITY

TYPICAL COMMERCIAL
FIRE SERVICE LINE
WITH DOMESTIC TEE
IN LINE

DATE: 06-10-2021

TOP VIEW
RIGID PVC
METER PIT



NOTE: METER BOX LOCATED AT PROPERTY LINE ON PRIVATE PROPERTY

SCALE: NONE

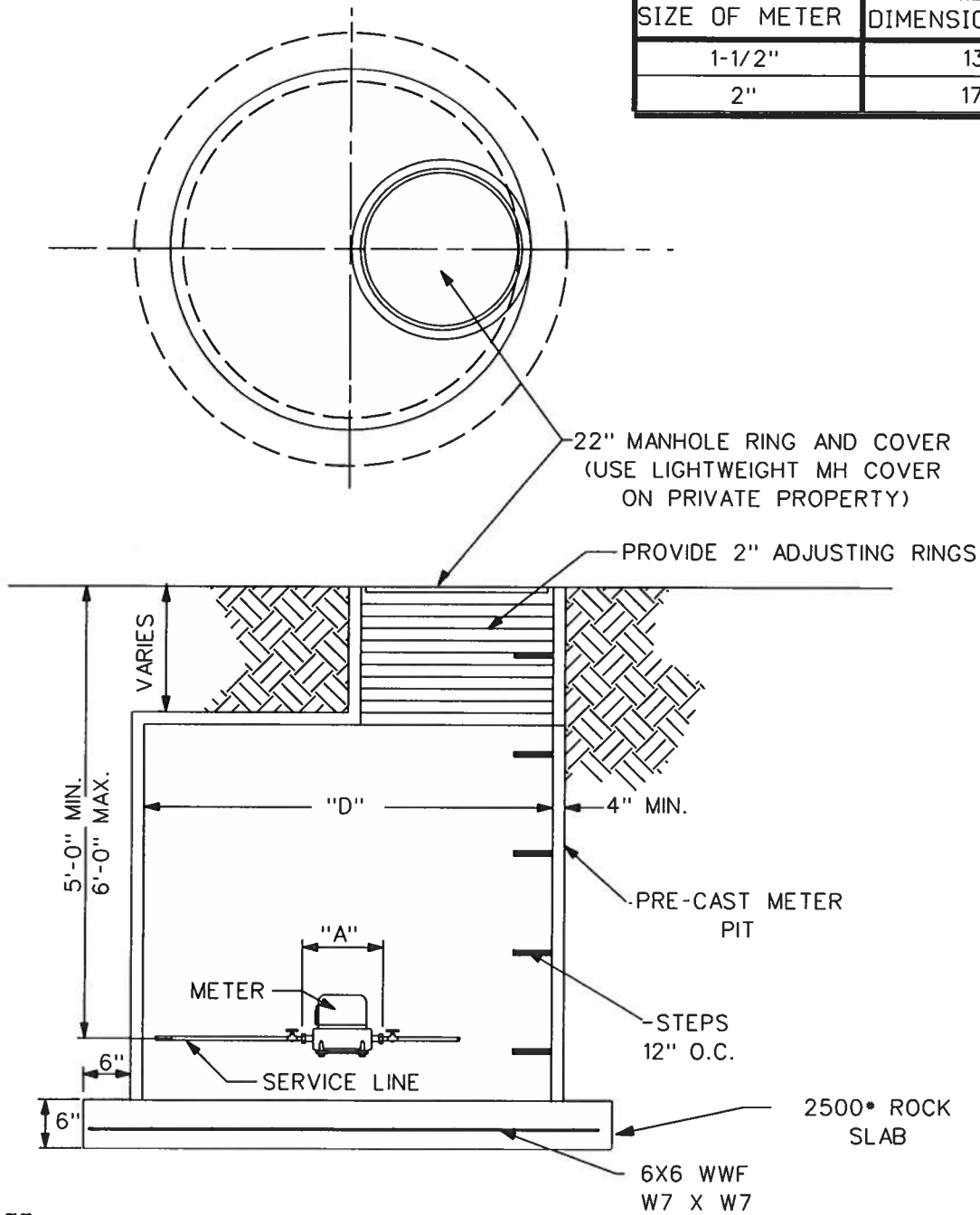
URBANDALE WATER
UTILITY

DETAIL OF THE STANDARD
METER PIT
5/8", 3/4" & 1" METERS
(FOR OFF ROAD USE ONLY)

DATE: 07-1-2018

METER SPACING

SIZE OF METER	DIMENSION "A"	DIMENSION "D"
1-1/2"	13"	60"
2"	17"	60"



NOTE:

1. INCREASE DIAMETER OF PIT 12" FOR EACH ADDITIONAL METER TO BE INSTALLED.
2. DIMENSION "A" IS FACE TO FACE OF THE METER

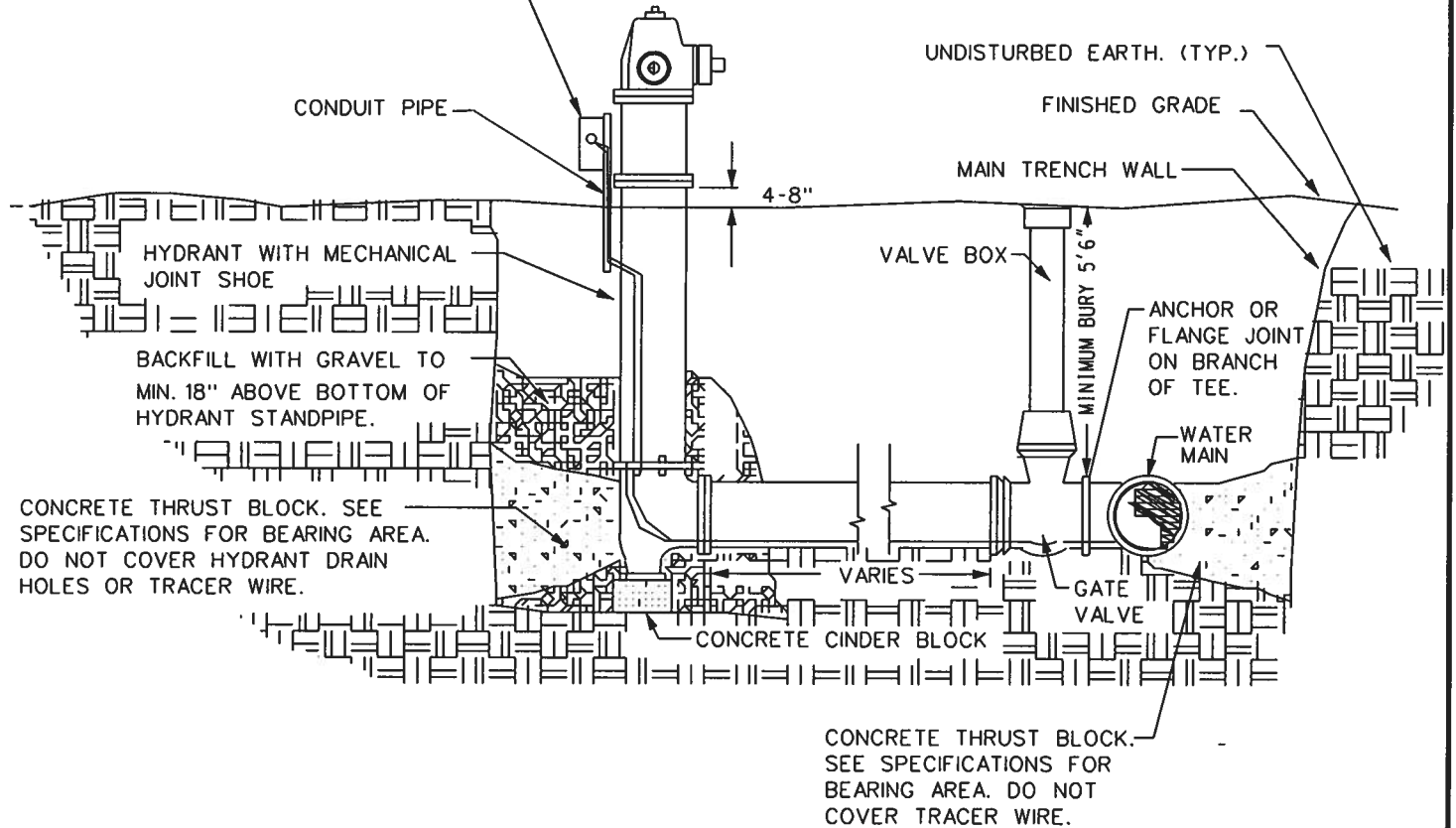
SCALE: NONE

URBANDALE WATER
UTILITY

DETAIL OF THE STANDARD
METER PIT
1-1/2 & 2" METERS

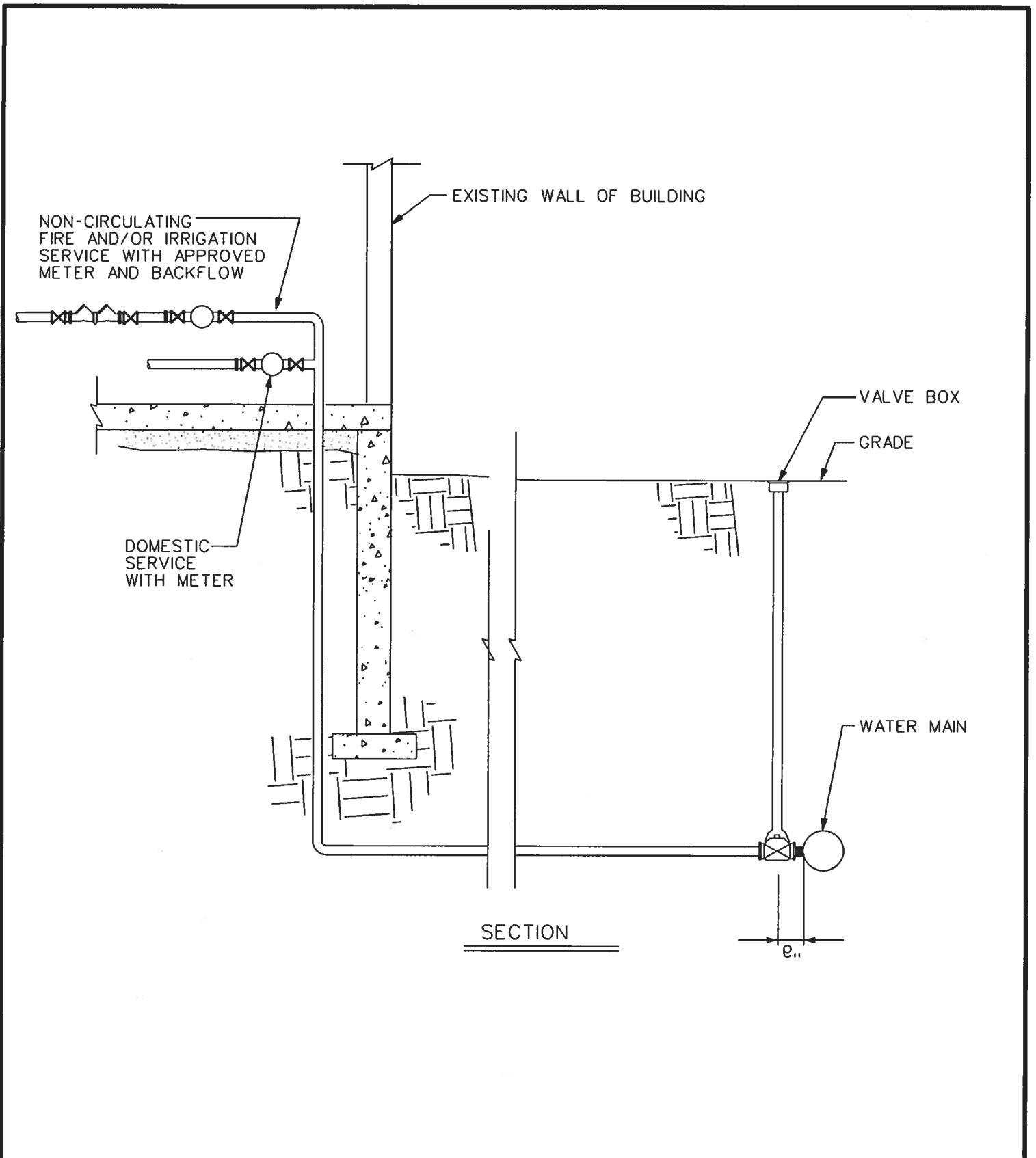
DATE: 07-1-2018

TRACING WIRE RECEPTACLE.
 INSTALL TO BREAK FLANGE BOLT ON
 HYDRANT. CONNECT WIRE AS SHOWN
 IN TRACER WIRE DETAIL.



Note: IRON PIPE, VALVE, FITTINGS AND HYDRANT
 (BURIED PORTION) TO BE WRAPPED WITH
 POLYETHYLENE ENCASEMENT MATERIAL PER
 URBANDALE WATER UTILITY.

SCALE: NONE	URBANDALE WATER UTILITY	FIRE HYDRANT DETAIL
DATE: 07-1-2018		

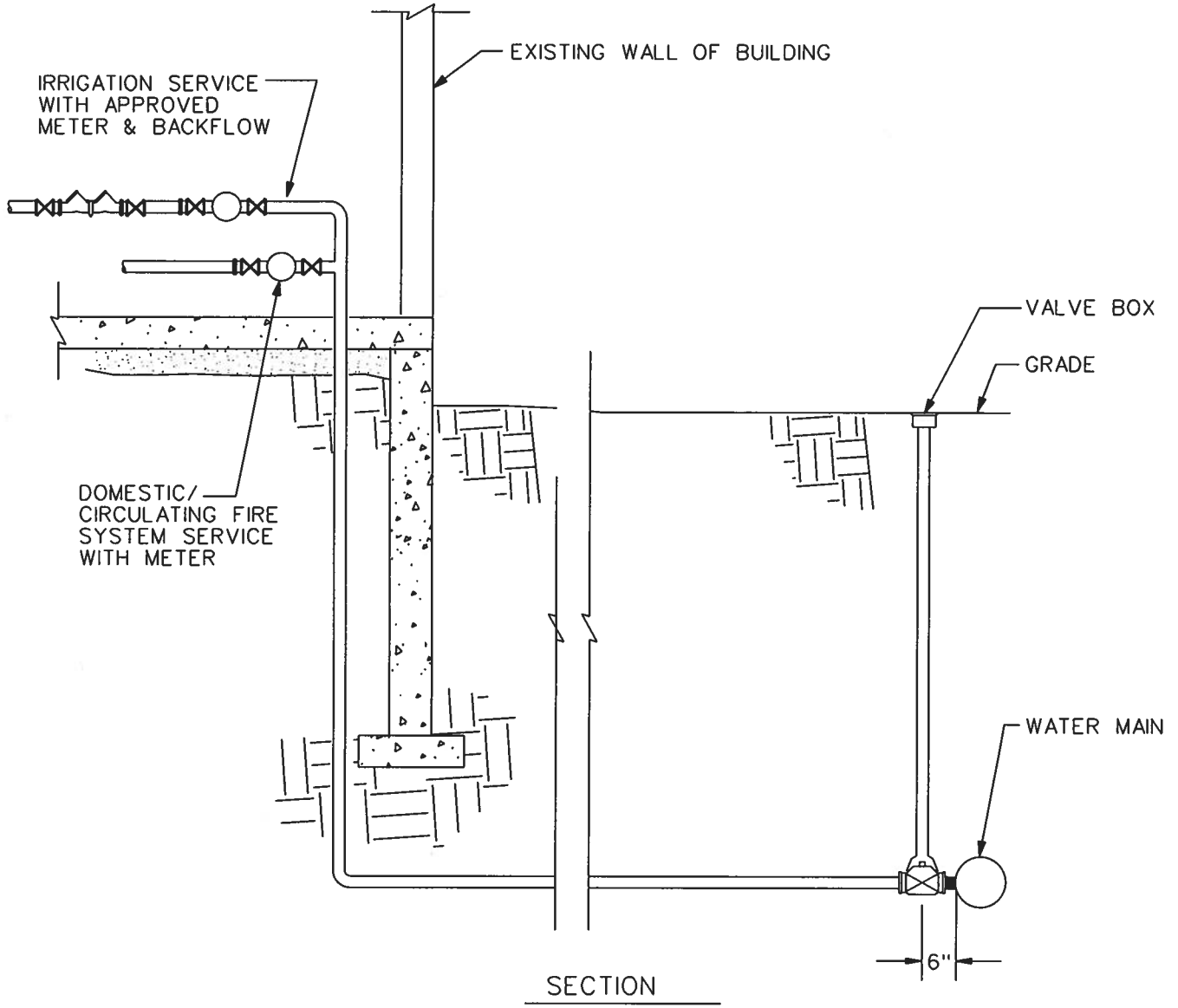


SCALE: NONE

DATE: 07-1-2018

URBANDALE WATER
UTILITY

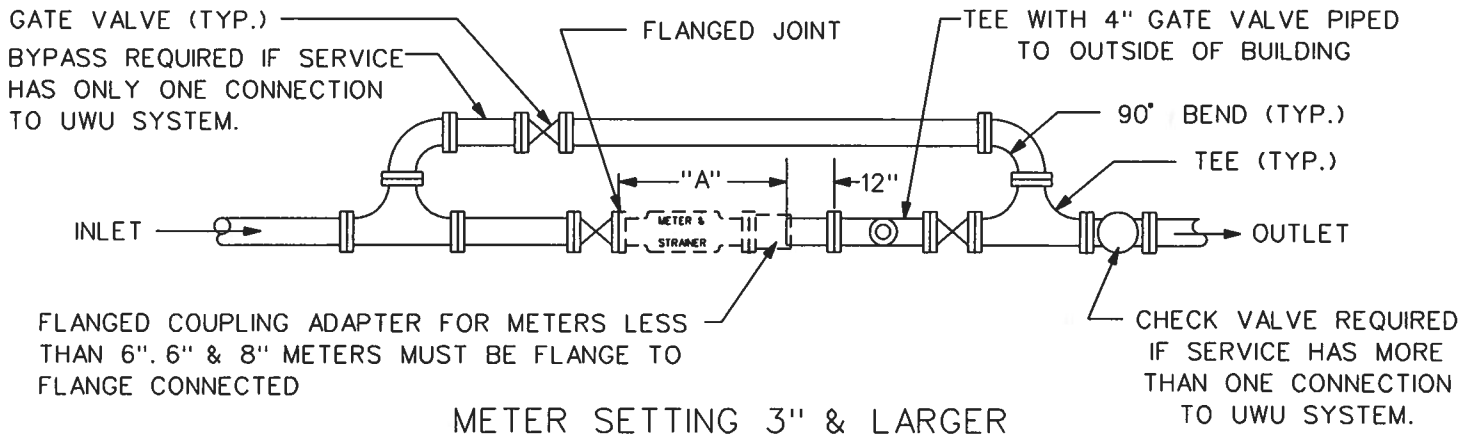
TYPICAL COMBINATION
NON-CIRCULATING FIRE/
IRRIGATION & DOMESTIC
SERVICE



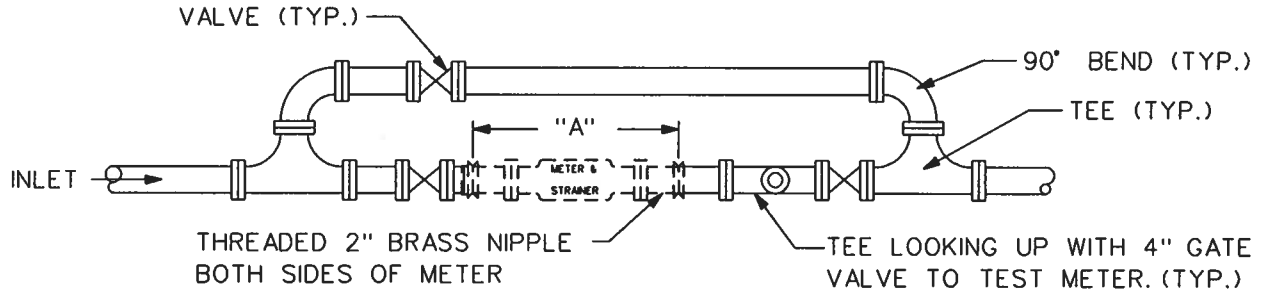
SCALE: NONE
DATE: 07-1-2018

URBANDALE WATER UTILITY

TYPICAL DOMESTIC CIRCULATING FIRE SYSTEM & IRRIGATION SERVICE



METER SETTING 3" & LARGER



2" METER SETTING

SIZE OF METER	DIMENSION "A"							
	TURBINE METER		TRU FLOW COMPOUND METER		FIRE TURBINE		PROTECTUS	
	FLANGE COUPLING ADAPTOR	FLANGE TO FLANGE	FLANGE COUPLING ADAPTOR	FLANGE TO FLANGE	FLANGE COUPLING ADAPTOR	FLANGE TO FLANGE	FLANGE COUPLING ADAPTOR	FLANGE TO FLANGE
2"	29"	N/A	36"	N/A	N/A	N/A	N/A	N/A
3"	19"	18 3/8"	24"	23 3/8"	26-3/4"	26-3/8"	N/A	N/A
4"	22"	21-7/8"	28-1/2"	27-7/8"	35-3/8"	35 1/4"	33-1/2"	33 1/4"
6"	28"	27-7/8"	34"	33-7/8"	45-1/2"	45-1/8"	45-1/2"	45 1/4"
8"	31"	30 3/8"	N/A	N/A	51-15/16"	51-9/16"	53-1/2"	53 1/4"

NOTES:

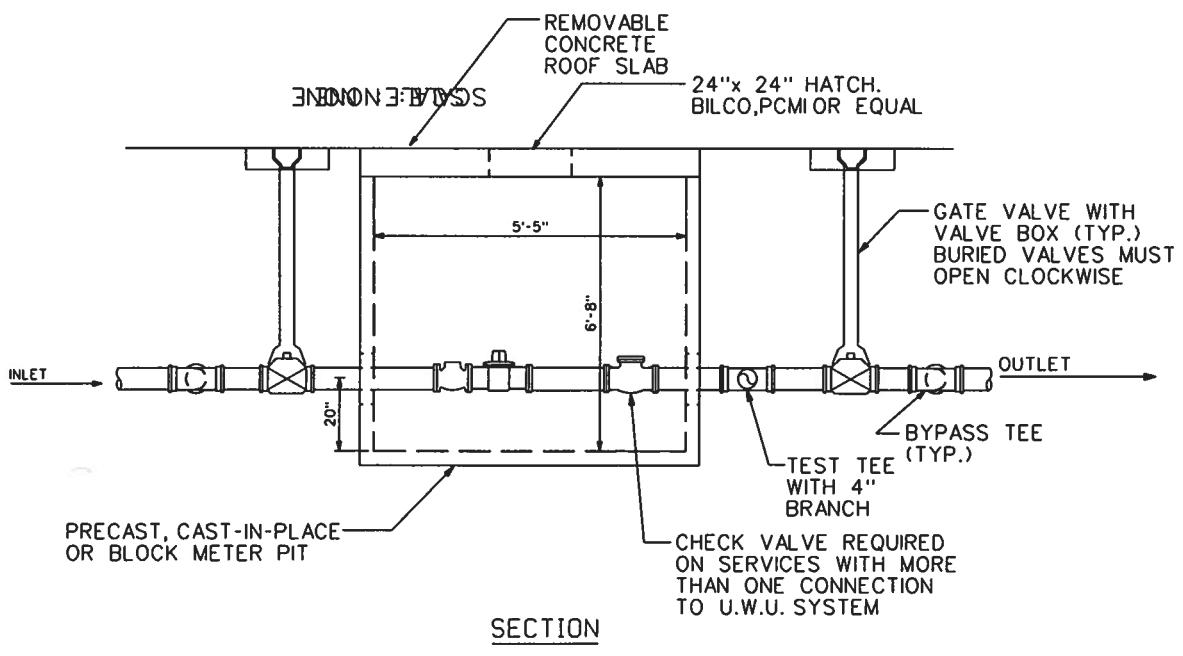
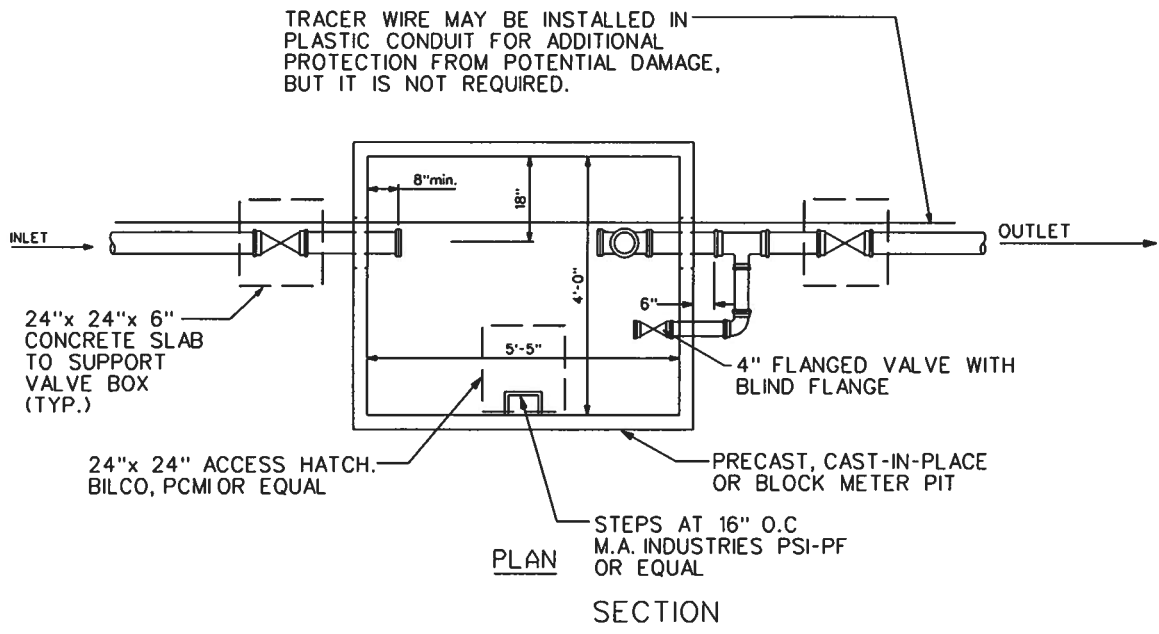
1. INSTALL 1/2" CONDUIT FROM METER TO AN ACCEPTABLE LOCATION FOR MOUNTING METER READING EQUIPMENT.
2. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF URBANDALE PLUMBING CODE.
3. IF THE METER SETTING IS INSIDE A BLDG. 4" PIPE MUST BE INSTALLED FROM THE TEST TEE VALVE TO AN APPROVED LOCATION ON THE OUTSIDE WALL OF THE BUILDING.
4. THRUST RESTRAINTS MUST BE PROVIDED AT FLEXIBLE COUPLINGS AND FLANGED COUPLING ADAPTORS WHEN NECESSARY TO PREVENT LEAKAGE AND OVERSTRESSING OF THE PIPE.
5. METER SHALL BE NO MORE THAN 3' OFF THE FLOOR. PROVIDE PIPE SUPPORTS AT TEES OR AS REQUIRED IN METER PITS.
6. MINIMUM HORIZONTAL CLEARANCE FROM CENTER LINE OF METER TO WALL OR OTHER OBSTRUCTION SHALL BE 30" UNLESS OTHERWISE APPROVED BY URBANDALE WATER UTILITY.

SCALE: NONE

URBANDALE WATER UTILITY

STANDARD PLAN FOR METER & BYPASS INSTALLATION

DATE: 07-1-2018

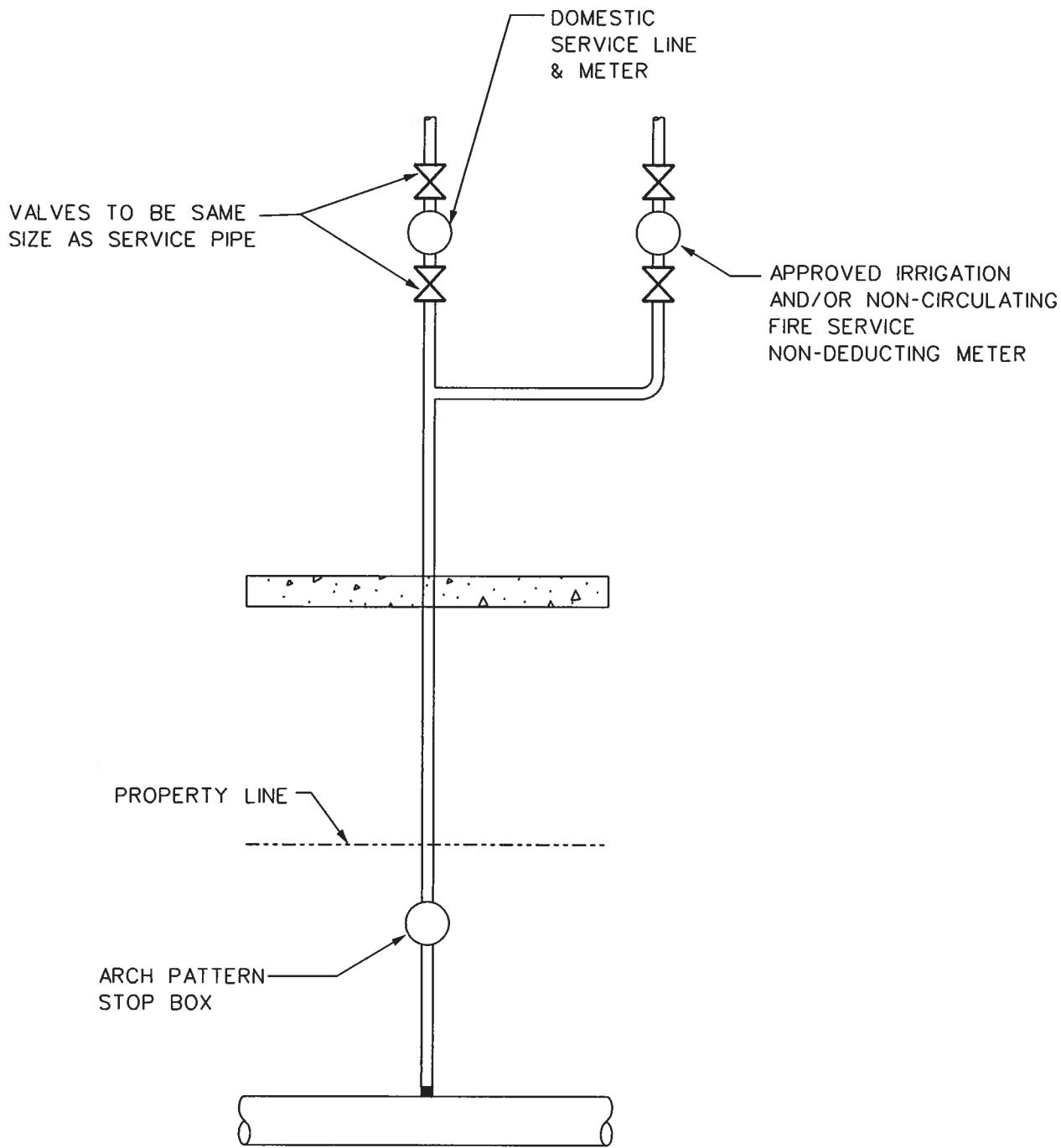


SCALE: NONE

DATE: 07-1-2018

URBANDALE WATER UTILITY

TURBINE OR COMPOUND METER PIT DETAIL WITH TRACER WIRE

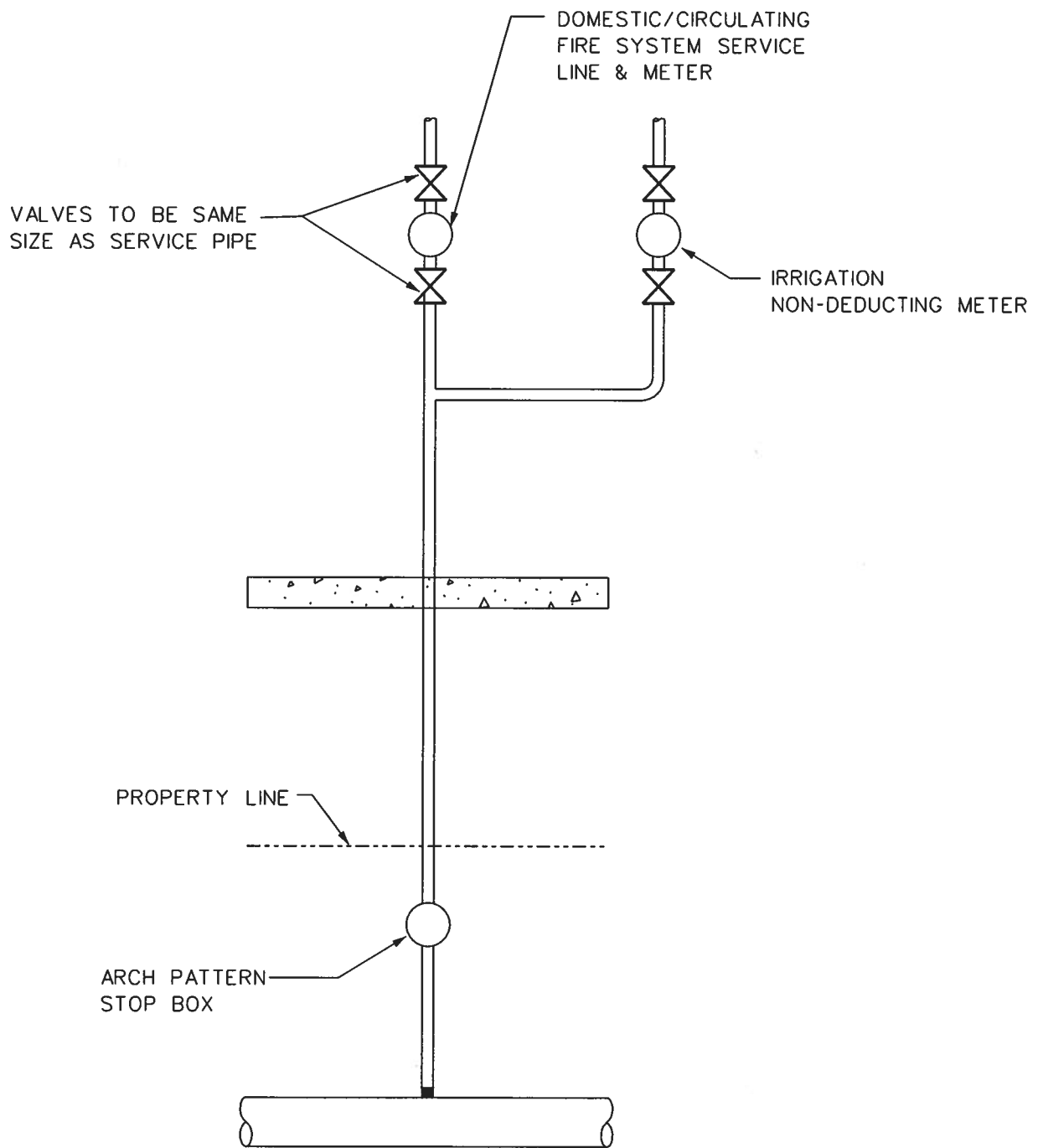


SCALE: NONE

DATE: 07-1-2018

URBANDALE WATER UTILITY

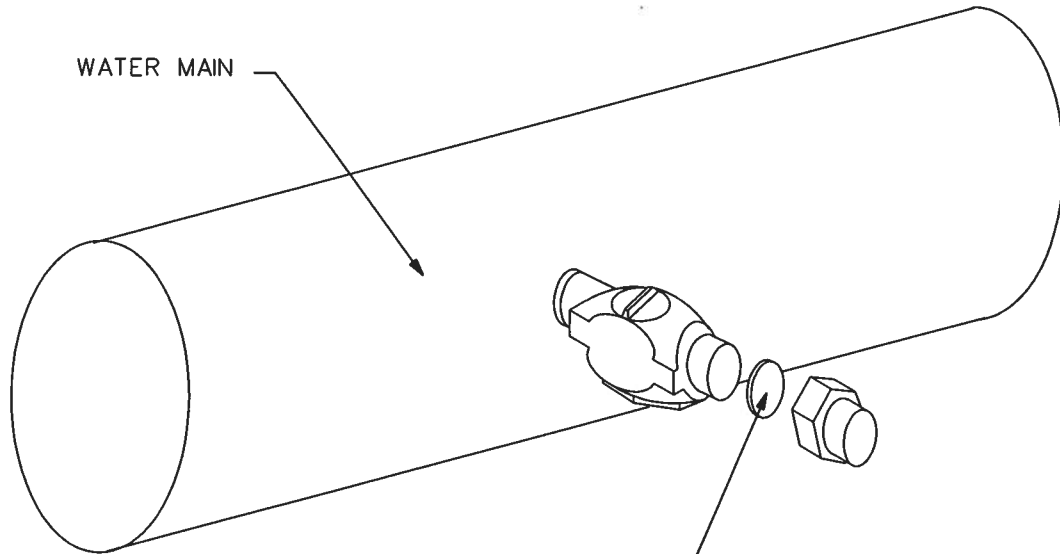
RESIDENTIAL IRRIGATION AND/OR NON-CIRCULATING FIRE SERVICE INSTALLATION



SCALE: NONE
DATE: 07-1-2018

URBANDALE WATER UTILITY

RESIDENTIAL IRRIGATION AND/OR CIRCULATING FIRE SERVICE INSTALLATION



COPPER DISK
(PLUMBERS CAP
MAY BE USED)

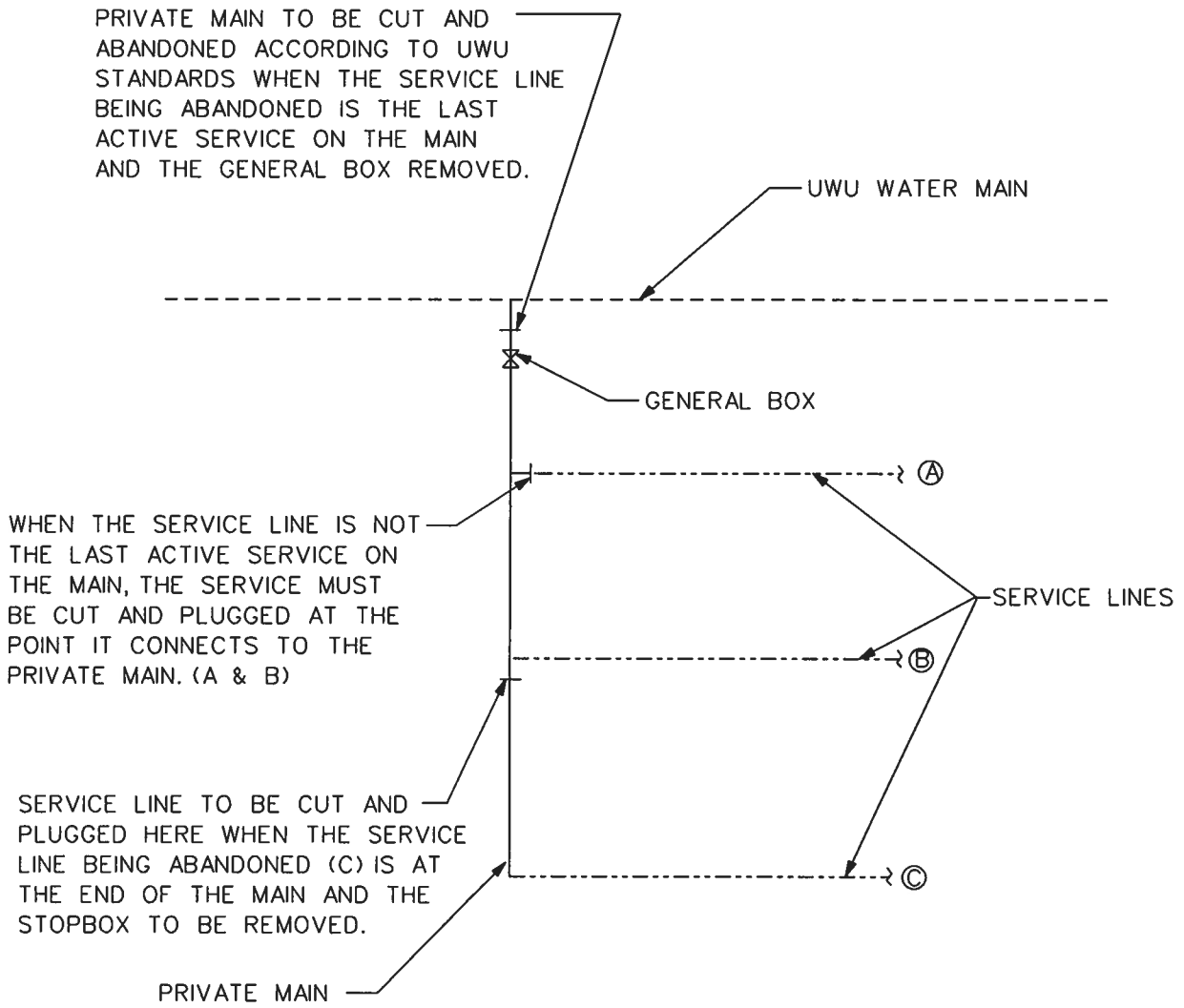
CLOSE CORPORATION. CUT LINE
FLUSH WITH NUT. PLACE COPPER
DISK BETWEEN NUT & CORPORATION.
CURB STOP VALVE TO BE REMOVED
WHEN APPLICABLE.

SCALE: NONE

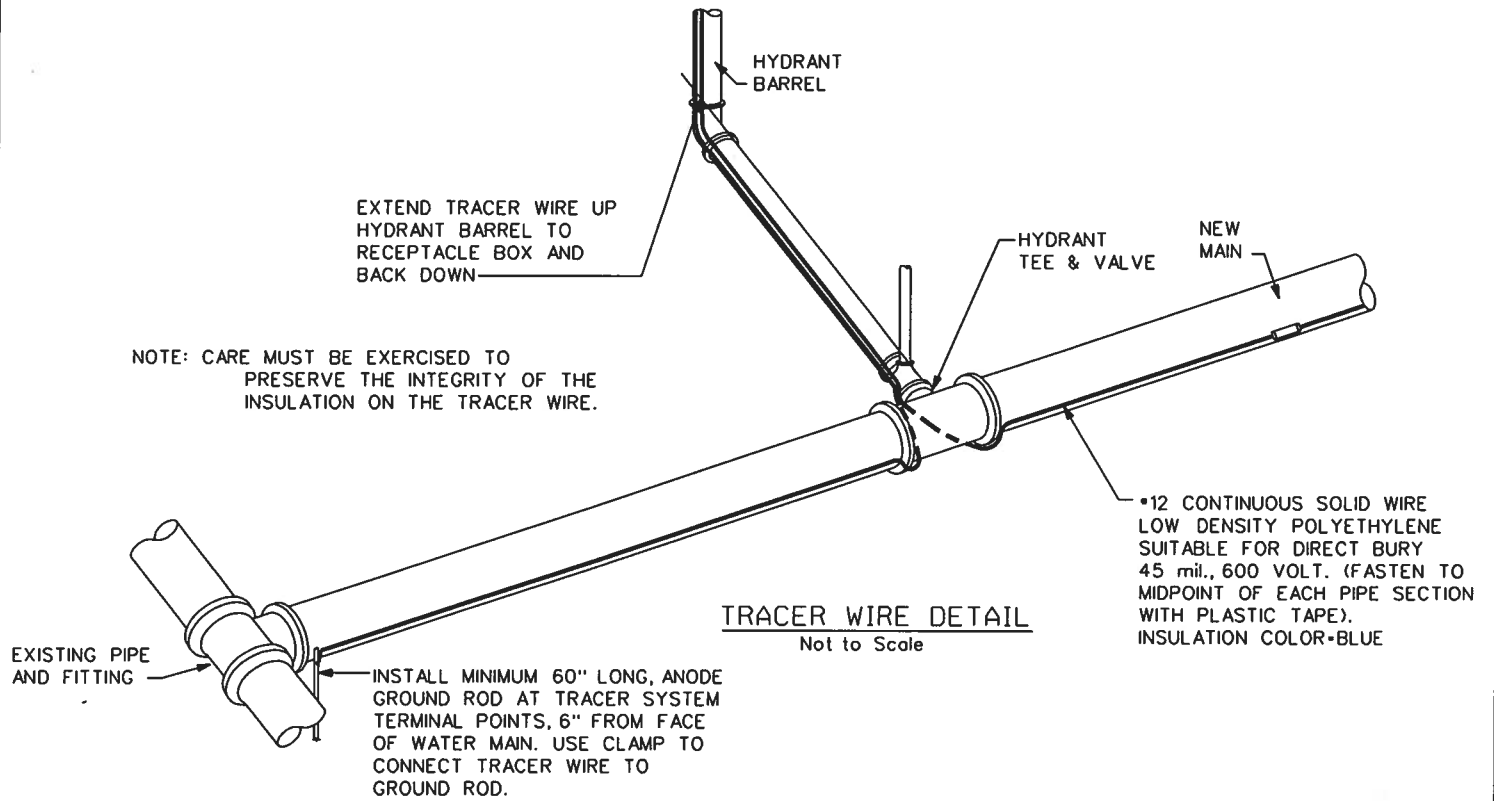
URBANDALE WATER
UTILITY

TAP CUT AT MAIN
PROCEDURES 3/4" TO 2"
DIRECT TAPS ONLY

DATE: 07-1-2018



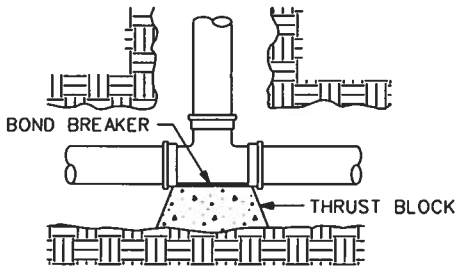
SCALE: NONE	URBANDALE WATER UTILITY	PRIVATE MAIN ABANDONMENT DETAILS
DATE: 07-1-2018		



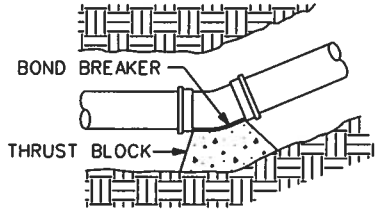
SCALE: NONE
DATE: 07-1-2018

URBANDALE WATER
UTILITY

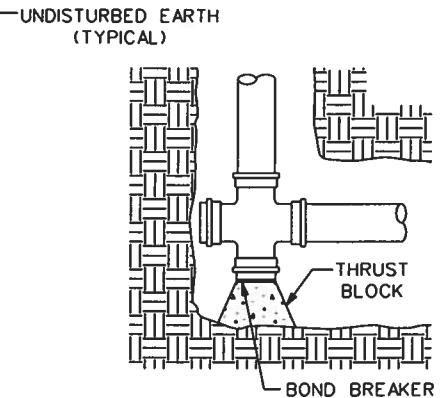
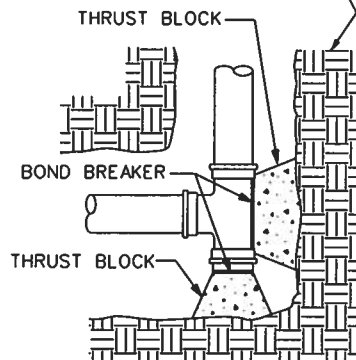
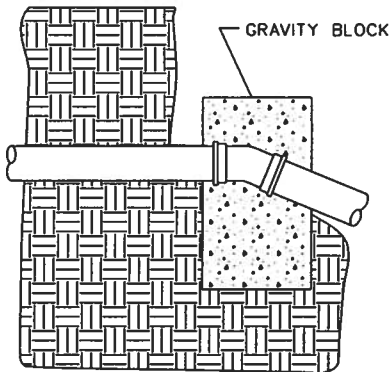
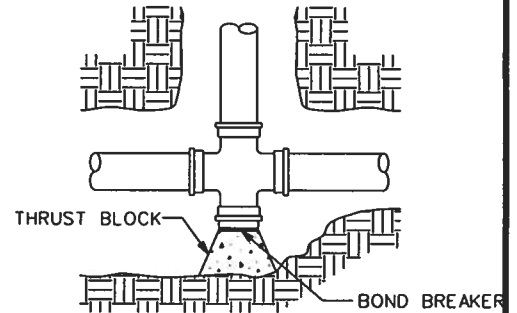
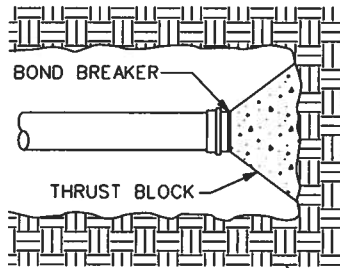
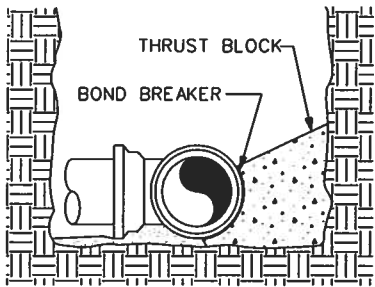
TRACER WIRE DETAIL



SIZE OF PIPE	MINIMUM BEARING SURFACE (IN SQ. FT.)				TEE OR DEAD END
	B E N D S				
	11 1/4°	22 1/2°	45°	90°	
6"	1.00	1.25	2.25	4.50	3.00
8"	1.00	2.00	4.00	7.90	5.25
12"	2.00	4.25	8.25	18.00	11.00
16"	8.00	15.25	28.00	48.00	35.00
20"	8.50	16.50	32.00	57.00	40.00
24"	9.00	18.00	35.00	65.00	45.00



Note: Restrained joints may be used in lieu of blocking with prior approval from Urbandale Water Utility.



SCALE: NONE

DATE: 07-1-2018

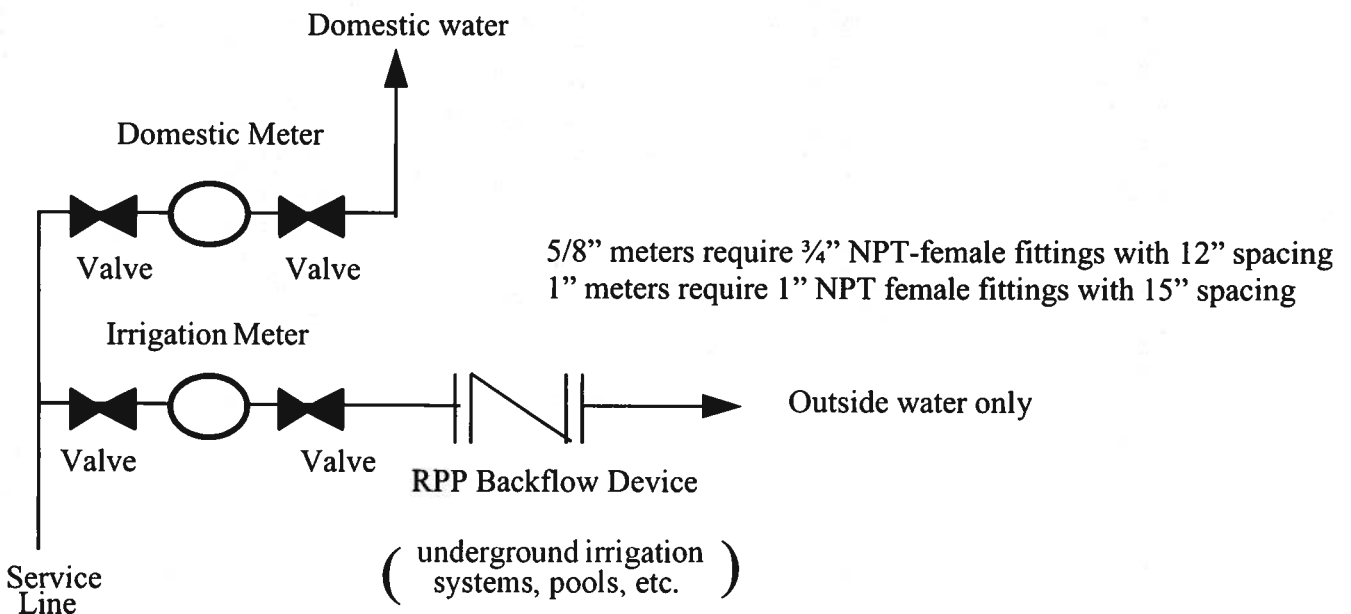
URBANDALE WATER UTILITY

CONCRETE THRUST BLOCK STANDARD

IRRIGATION METERS AND SYSTEM REQUIREMENTS

Date: 07-01-2021

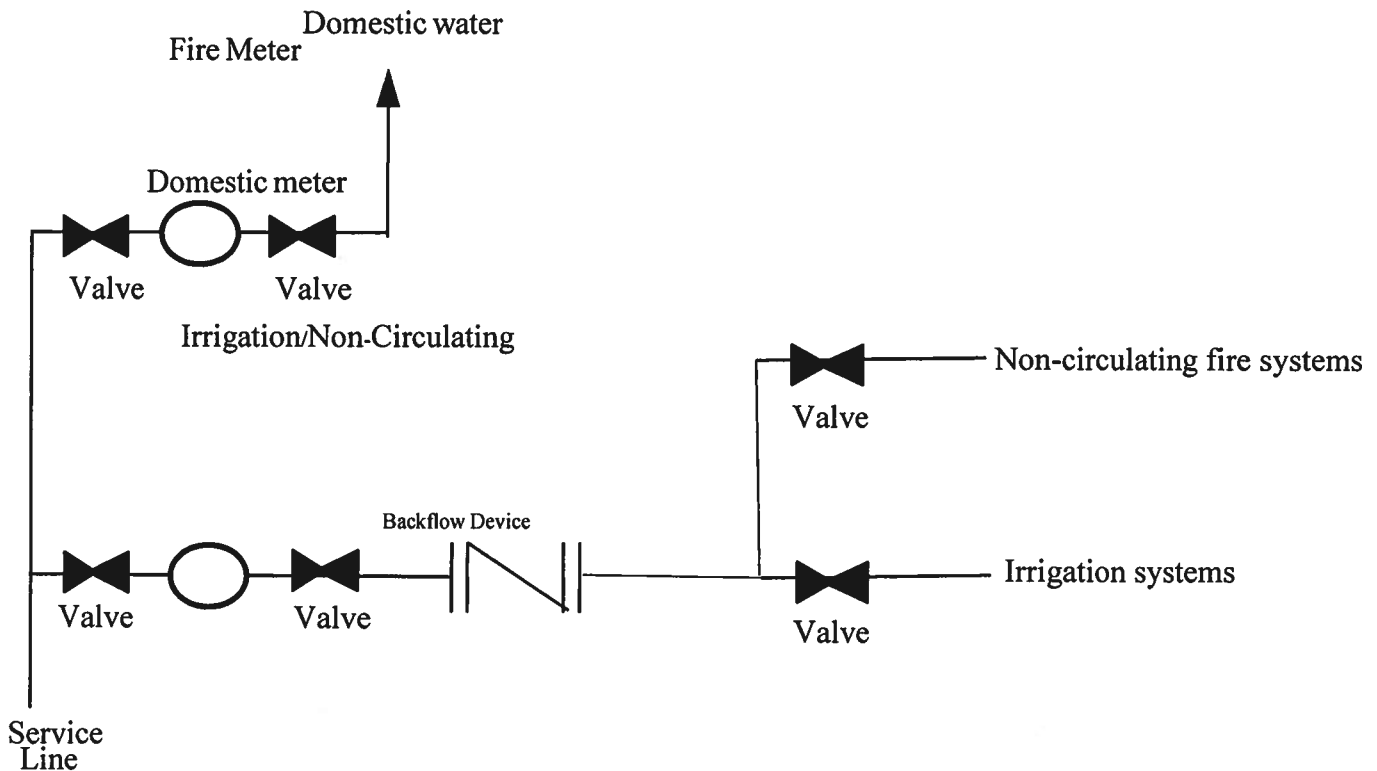
1. Fill out the exemption form and pay sewer exemption fee of \$15.00.
2. All meters must be purchased from the Urbandale Water Utility.
3. All fees to Urbandale Water Utility must be paid before the meter is installed.
4. Deleted.
5. Customer will be responsible for all plumbing changes.
6. The irrigation meter shall be installed 4 feet or less from the house meter with a valve on each side of the meter.
7. The irrigation meter must be teed off the service line ensuring both systems are independently of each other.
8. All underground irrigation systems must have an approved R.P.P. (Reduced Pressure Principal) backflow device (Comparable to a Watts 009 or a Febco 825Y). The RPP must be installed inside the building directly after the irrigation meter or immediately outside the building where the plumbing exists.
9. An initial test of the RPP must be performed by a certified tester and the results recorded with www.BSIonlinetracking.com before the system can be activated.
10. All RPP's are to be tested annually by a certified tester and the results recorded with www.BSIonlinetracking.com.



Residential Non-Circulating Fire Service Meters and System Requirements

Date: 07-1-2018

- 1) All meters must be purchased from the Urbandale Water Utility (U.W.U.).
- 2) All fees shall be paid before the meter is set.
- 3) The service line shall be sized according to the combined total of the domestic, irrigation and fire system demands. If the size of the existing service line will not meet the system demands, it shall be capped at the main and replaced with an appropriately sized service line.
- 4) Provide the total of the irrigation and fire system demand to the U.W.U.
- 5) Irrigation/fire meters shall be installed not more than 4 feet from the domestic meter. There shall be a valve on each side of the meter.
- 6) The irrigation/fire demand shall be combined to utilize one meter. The irrigation/fire meter shall be teed off the service line so that the domestic and irrigation/fire systems are independently metered.
- 7) All fire systems shall have an approved backflow device as described in Urbandale Rules and Regulations, Chapter 106. The backflow device shall be installed inside the house directly after the fire meter.
- 8) An initial test of the backflow device must be performed by a certified tester and a copy of the test results sent to the U.W.U. before the system is activated.
- 9) For more information on the requirements for cross connection and backflow prevention, refer to Urbandale Rules and Regulation, Chapter 106.



**URBANDALE WATER UTILITY
HYDRANT METER RENTAL AGREEMENT**

Date: 07-01-2021

Address _____

Meter Number _____ Return Date _____

Final Read _____ Set Date _____

Beginning Read _____ Total Days _____

Consumption _____

Comments _____

- Hydrant Wrench (\$50 Replacement Cost)
- Hydrant Stand (\$50 Replace Cost)
- 2-1/2" Fire Hose Coupling (\$50 Replacement Cost)

1. Hydrant Meter Deposit Schedule:

5/8" Meter - \$300.00 1" Meter - \$500.00 3" Meter - \$2000.00

2. Hydrant Meter Rental Fee Schedule:

(Schedule is based on a monthly fee. Minimum 30-day fee.)

5/8" Meter - \$50.00 1" Meter - \$50.00 3" Meter - \$100.00

3. Bulk Water Rate will apply. See Fee Schedule.

4. Terms and conditions of Hydrant Meter rentals:

- A. The Urbandale Water Utility must approve the proper use, location, size and other pertinent issues regarding the hydrant meter rental.
- B. A deposit for the amount stipulated in the above "Hydrant Meter Deposit Schedule" must be made prior to the setting of the meter. The deposit amount required is directly related to the size of the hydrant meter requested.
- C. The amount charged to the undersigned for the hydrant meter rental is dependent upon the following factors.
 - 1. The number of days the undersigned has possession of the meter
 - 2. The water usage figured at bulk water rates.
 - 3. Damage, if any, to the hydrant meter assembly or fire hydrant.
- D. The undersigned assumes all responsibility for theft or damage to the fire hydrant and hydrant meter assembly.

- E. It is the responsibility of the undersigned to notify the Urbandale Water Utility when he/she is finished with the hydrant meter so it can be removed and returned to the Urbandale Water Utility.
 - F. It is the responsibility of the undersigned to protect the hydrant and hydrant meter assembly from freezing. In the event freezing does occur, the undersigned assumes all monetary responsibility for damages.
 - G. Water from a fire hydrant is **not** intended for human consumption. The Urbandale Water utility cannot guarantee the quality of water from a fire hydrant or a hydrant meter assembly.
 - H. Each hydrant meter is equipped with a gate valve; which shall be operated by the undersigned to control the flow of water. The fire hydrant shall be opened completely when in use and never be used to control the flow of water.
 - I. Do not modify or disassemble the hydrant meter assembly in any way. The Urbandale Water utility shall be notified immediately of any failed meter assembly.
 - J. The Urbandale Water Utility may revoke any hydrant meter privileges granted to any individual or corporation because of violations of the terms and conditions of this agreement.
 - K. The Urbandale Water Utility may make allowances or amendments in the terms or conditions of the hydrant meter rental agreement to provide flexibility to handle unique situations.
 - L. All rentals, consumptions and damages shall be deducted from the deposit before the remaining deposit balance is returned to the undersigned. In cases where the deposit is insufficient to cover all the fees due, the undersigned will receive an additional billing payable to the Urbandale Water utility.
5. I, the undersigned, have completely read, understand and accept the previously stated terms and conditions of the Hydrant Meter Agreement.

Signed _____ Date _____

Please print the following:

Company Name _____

Billing Address _____

Company Contact Name _____

Telephone # _____