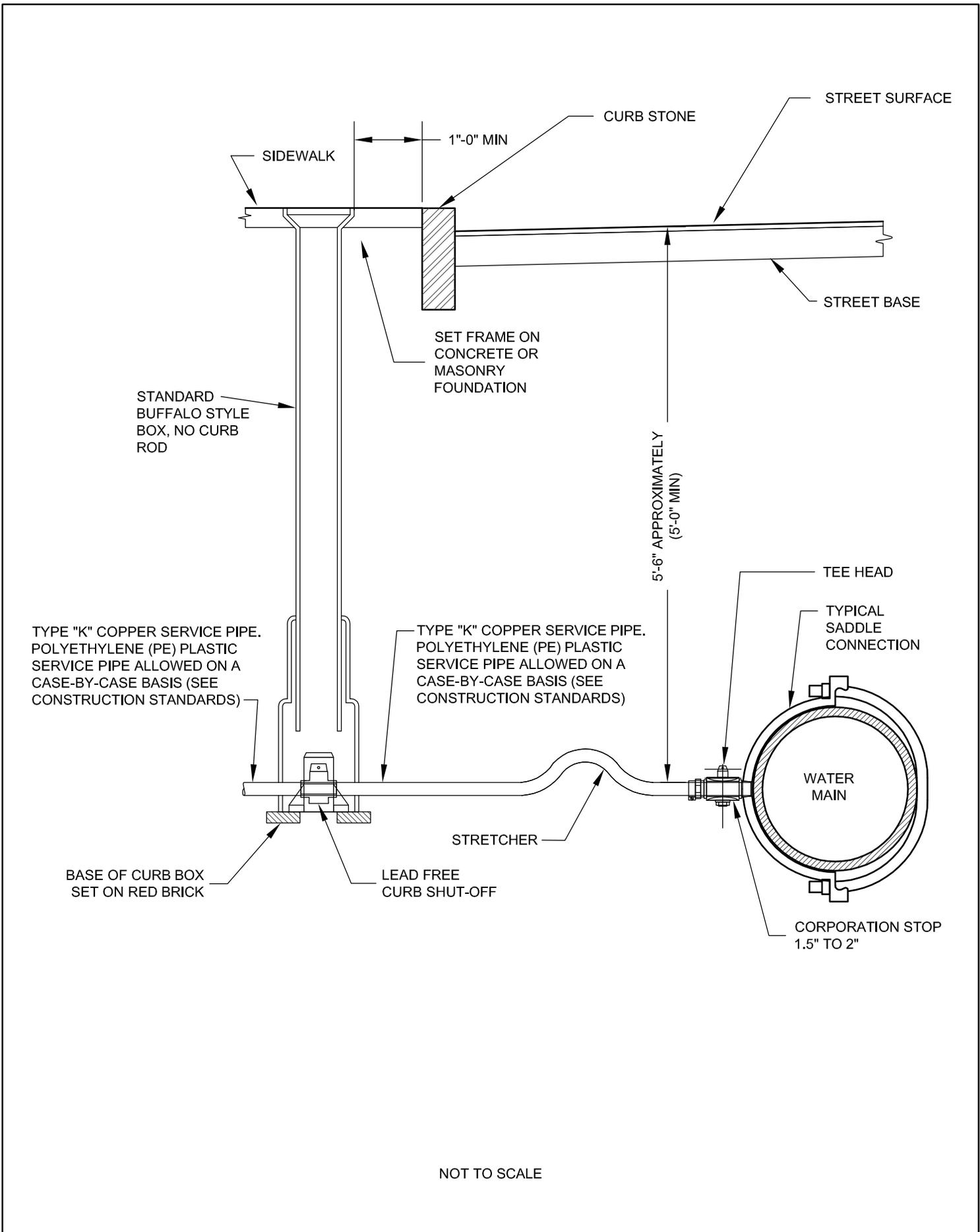


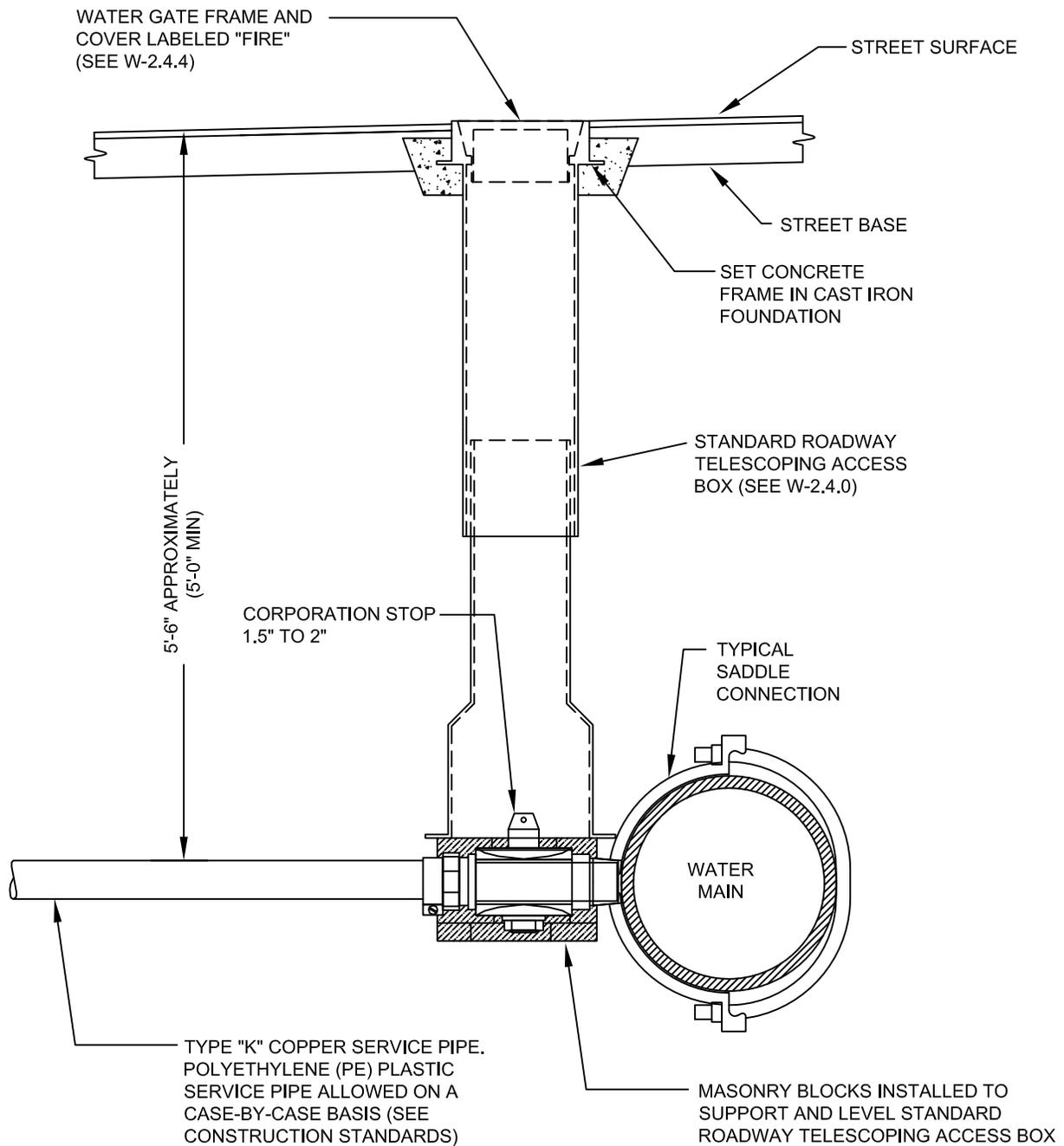
NOT TO SCALE

 <p>TOWN OF FRAMINGHAM DEPARTMENT OF PUBLIC WORKS</p>	<p>TYPICAL WATER CONNECTION FOR 1" SERVICE</p>	<p>DATE: MARCH 2010</p>	<p>DETAIL NO.</p>
		<p>REV: 1</p>	<p>W-2.1.0</p>



NOT TO SCALE

 <p>TOWN OF FRAMINGHAM DEPARTMENT OF PUBLIC WORKS</p>	<p>TYPICAL WATER CONNECTION FOR 1-1/2" TO 2" SERVICE</p>	<p>DATE: MARCH 2011</p>	<p>DETAIL NO.</p>
		<p>REV: 2</p>	<p>W-2.1.1</p>



NOTES:

1. SEPARATE DOMESTIC AND FIRE SERVICES SHALL BE INSTALLED FROM THE BUILDING SERVICED TO THE PUBLIC WATER MAIN.
2. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTENANCE OF THE FIRE SERVICE FROM THE BUILDING SERVICED TO THE PUBLIC WATER MAIN.
3. SADDLE AND CORPORATION STOPS SHALL BE AWWA TAPER THREADS (MUELLER "CC") AS DESCRIBED IN AWWA STANDARD C800

NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

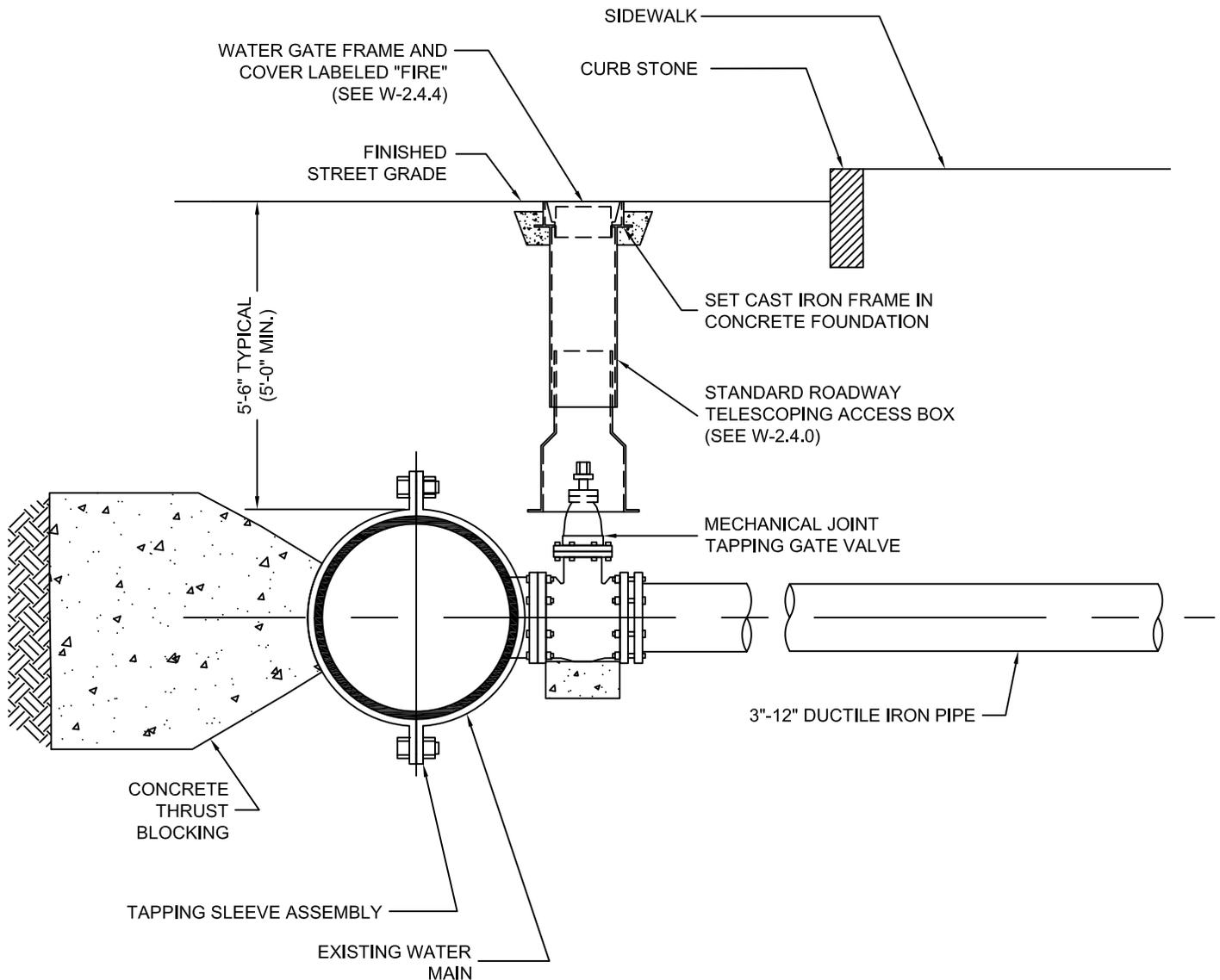
TYPICAL FIRE SERVICE
FOR 1-1/2" TO 2"

DATE:
FEB. 2016

REV:
0

DETAIL NO.

W-2.1.2



NOTES:

1. MAXIMUM TAPPING SLEEVE SHALL NOT BE GREATER THAN $\frac{1}{2}$ DIAMETER OF CONNECTING MAIN.
2. MEGA LUG RESTRAINTS ON ALL MECHANICAL JOINTS.
3. SEPARATE DOMESTIC AND FIRE SERVICES SHALL BE INSTALLED FROM THE BUILDING SERVICED TO THE PUBLIC WATER MAIN.
4. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTENANCE OF THE FIRE SERVICE FROM THE BUILDING SERVICED TO THE PUBLIC WATER MAIN

NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

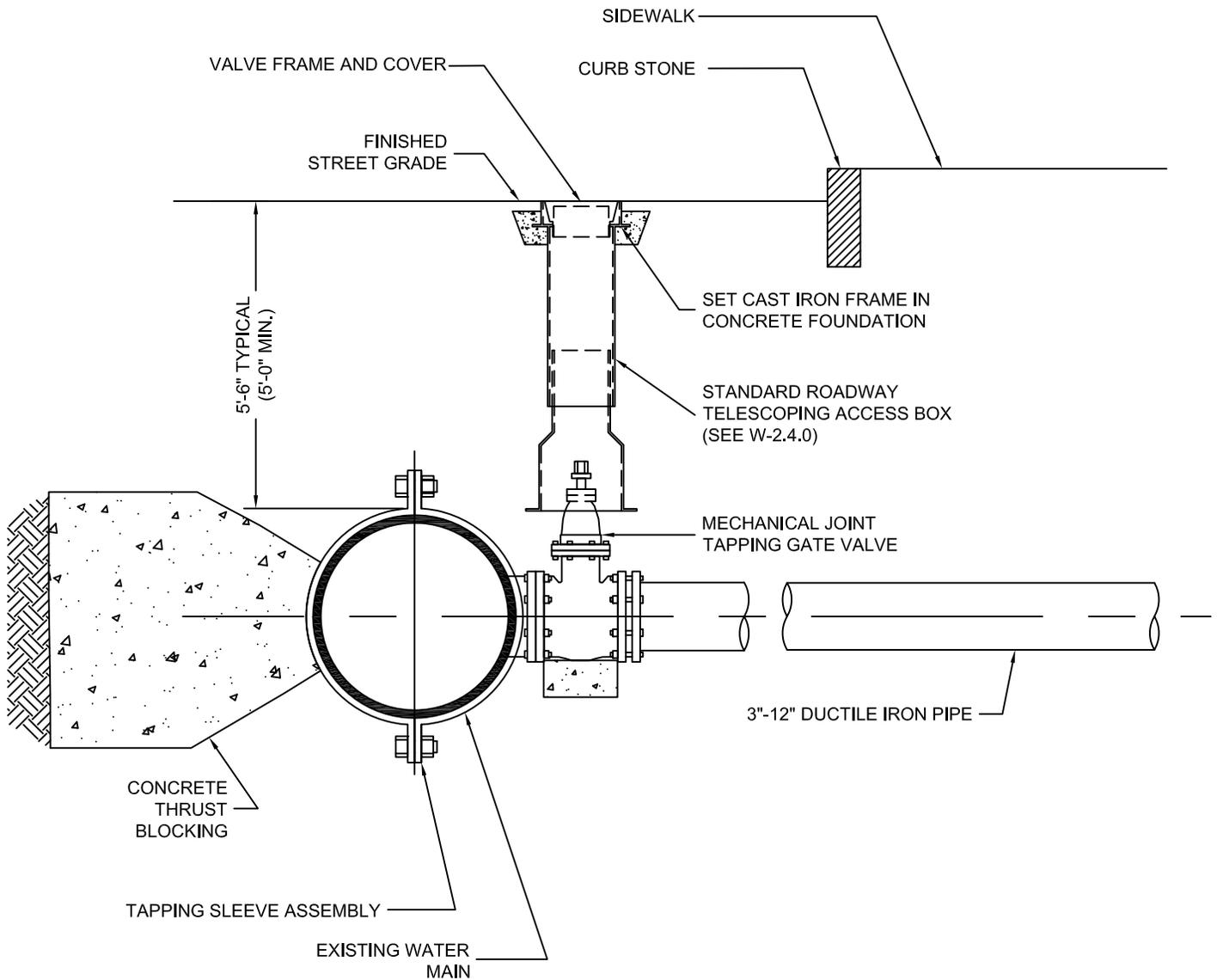
TYPICAL FIRE SERVICE
(TAPPING SLEEVE)

DATE:
FEB. 2016

REV:
0

DETAIL NO.

W-2.1.3



NOTES:

1. MAXIMUM TAPPING SLEEVE SHALL NOT BE GREATER THAN 1/2 DIAMETER OF CONNECTING MAIN.
2. MEGA LUG RESTRAINTS ON ALL MECHANICAL JOINTS.

NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

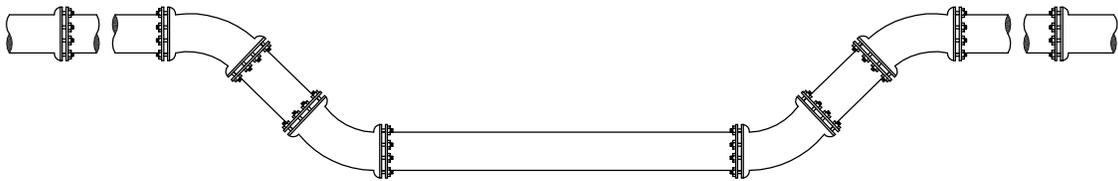
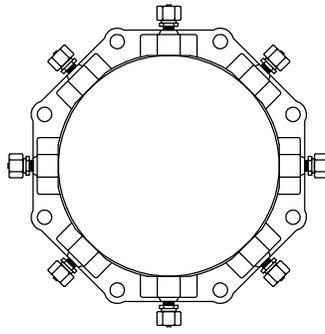
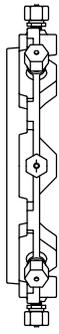
TYPICAL CONNECTION
(TAPPING SLEEVE)

DATE:
FEB. 2016

REV:
2

DETAIL NO.

W-2.1.4



NOTES:

1. DEVICES NEED TO BE PLACED BEYOND THE AREA OF RESTRAINTS IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS.

NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

TYPICAL THRUST RESTRAINT
WEDGE ACTION TYPE JOINTS

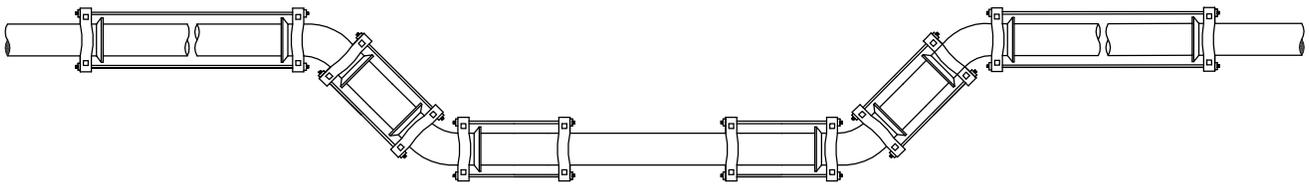
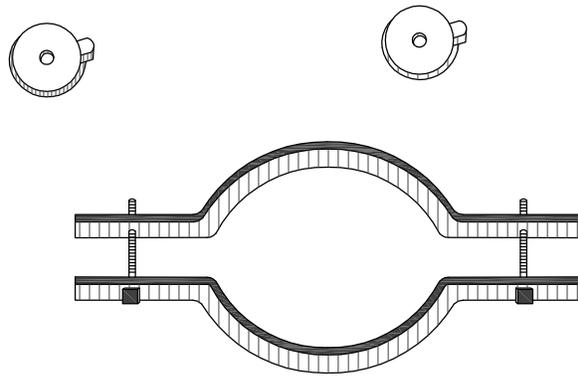
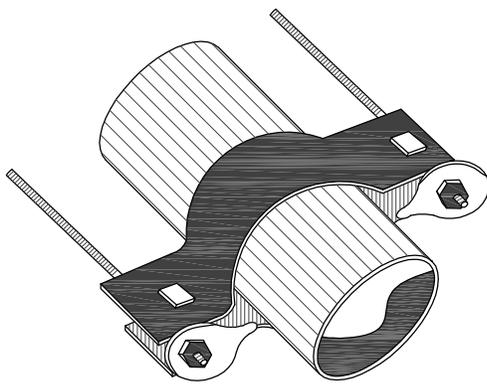
DATE:
SEPT. 2008

REV:
0

DETAIL NO.
W-2.2.0

SCHEDULE OF TIE RODS

PIPE SIZE	NUMBER OF RODS PER FITTING	DIAMETER OF RODS
4" - 12"	2	3/4"
16"	4	3/4"
20" - 24"	4	1 1/2"



NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

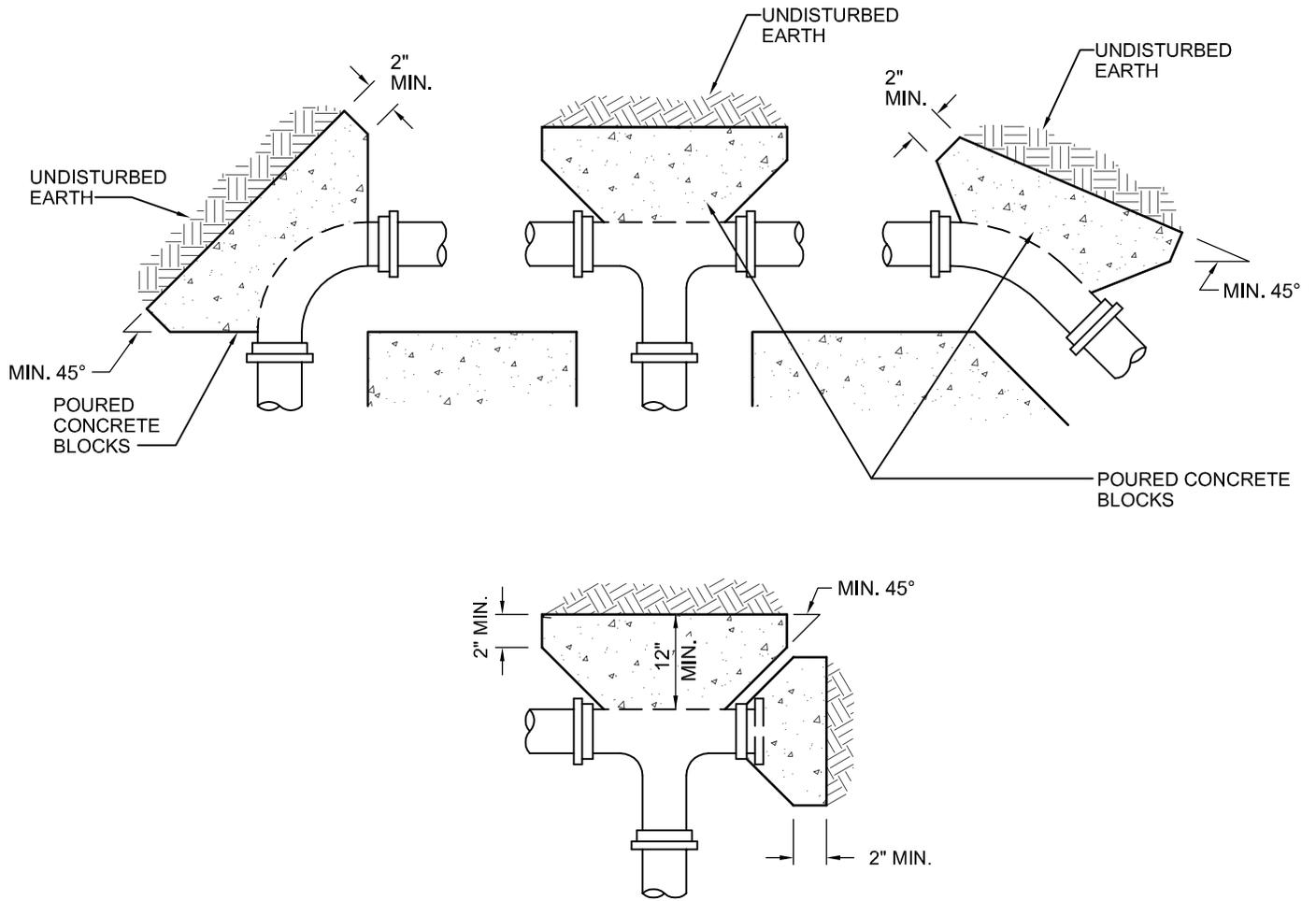
TYPICAL THRUST RESTRAINTS USING
TIE RODS AND FRICTION CLAMPS

DATE:
SEPT. 2008

REV:
0

DETAIL NO.

W-2.2.1



PLAN VIEWS

NOTES:

1. SPECIFIC THRUST BLOCK DESIGN SHALL CONFORM TO AWWA GUIDELINES.
2. PLACE 4 mil. POLYETHYLENE BETWEEN CONCRETE AND FITTING (CONCRETE SHALL NOT INTERFERE WITH JOINT).
3. MINIMUM CONCRETE THICKNESS SHALL BE 12 INCHES.
4. THRUST BLOCK ORIENTATION SHALL BE SUCH THAT THE CENTER OF THE FITTING CORRESPONDS WITH THE CENTER OF THE THRUST BLOCK.
5. THE MINIMUM ALLOWABLE ANGLE (EITHER VERTICAL OR HORIZONTAL) SHALL BE 45 DEGREES.

NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

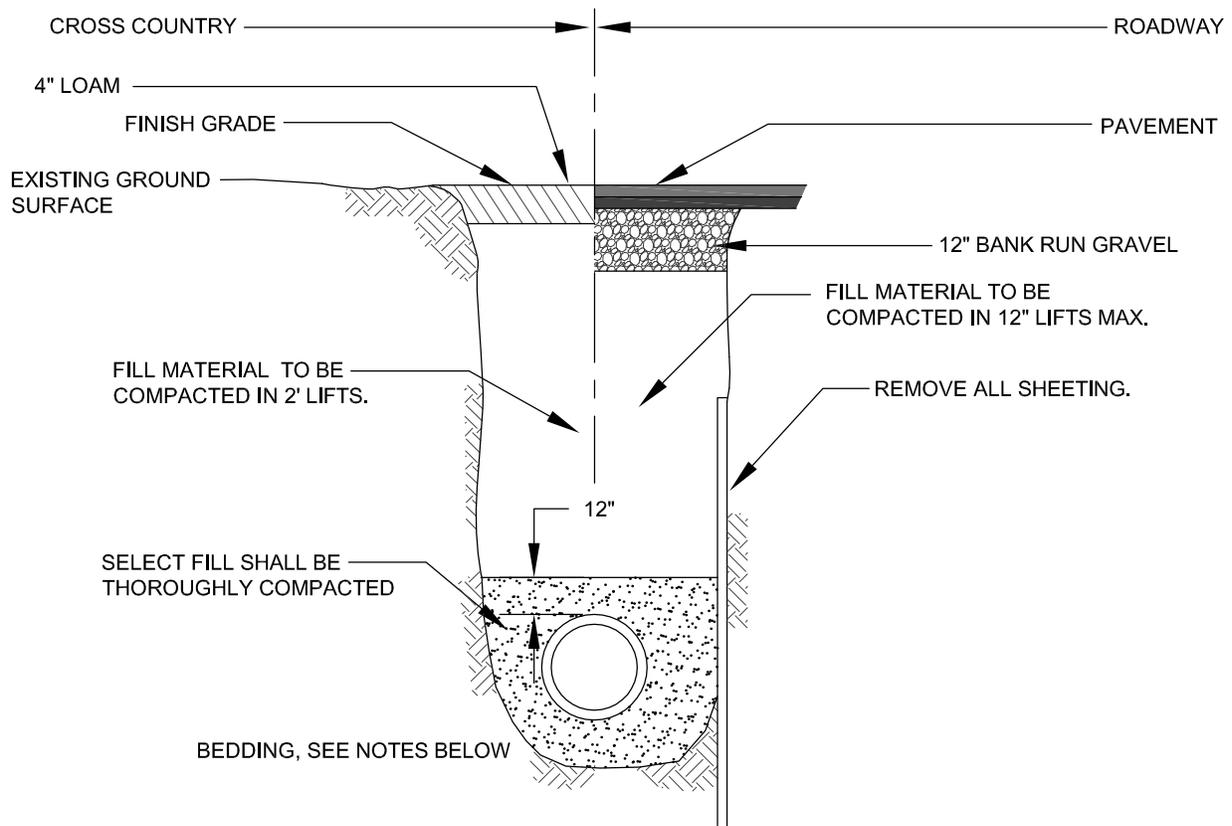
**TYPICAL THRUST
BLOCK DETAIL**

DATE:
SEPT. 2008

REV:
0

DETAIL NO.

W-2.2.2



NOTE: 5'-0" MIN. COVER

NOTES:

1. TOWN OF FRAMINGHAM MAY REQUIRE FLOWABLE FILL AT ITS DISCRETION.
2. FOR LOCATIONS WHERE LEDGE IS NOT ENCOUNTERED IN TRENCH, PIPE CAN LAY ON UNDISTURBED EARTH, OR ON SAND BEDDING CONSISTENT WITH AWWA GUIDELINES.
3. FOR LOCATIONS WHERE LEDGE IS ENCOUNTERED, SAND BEDDING SHALL BE MINIMUM OF 12" THICK UNDER PIPE.
4. FILL MATERIAL SHALL BE COMPACTED TO 95% PROCTOR DENSITY.

NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

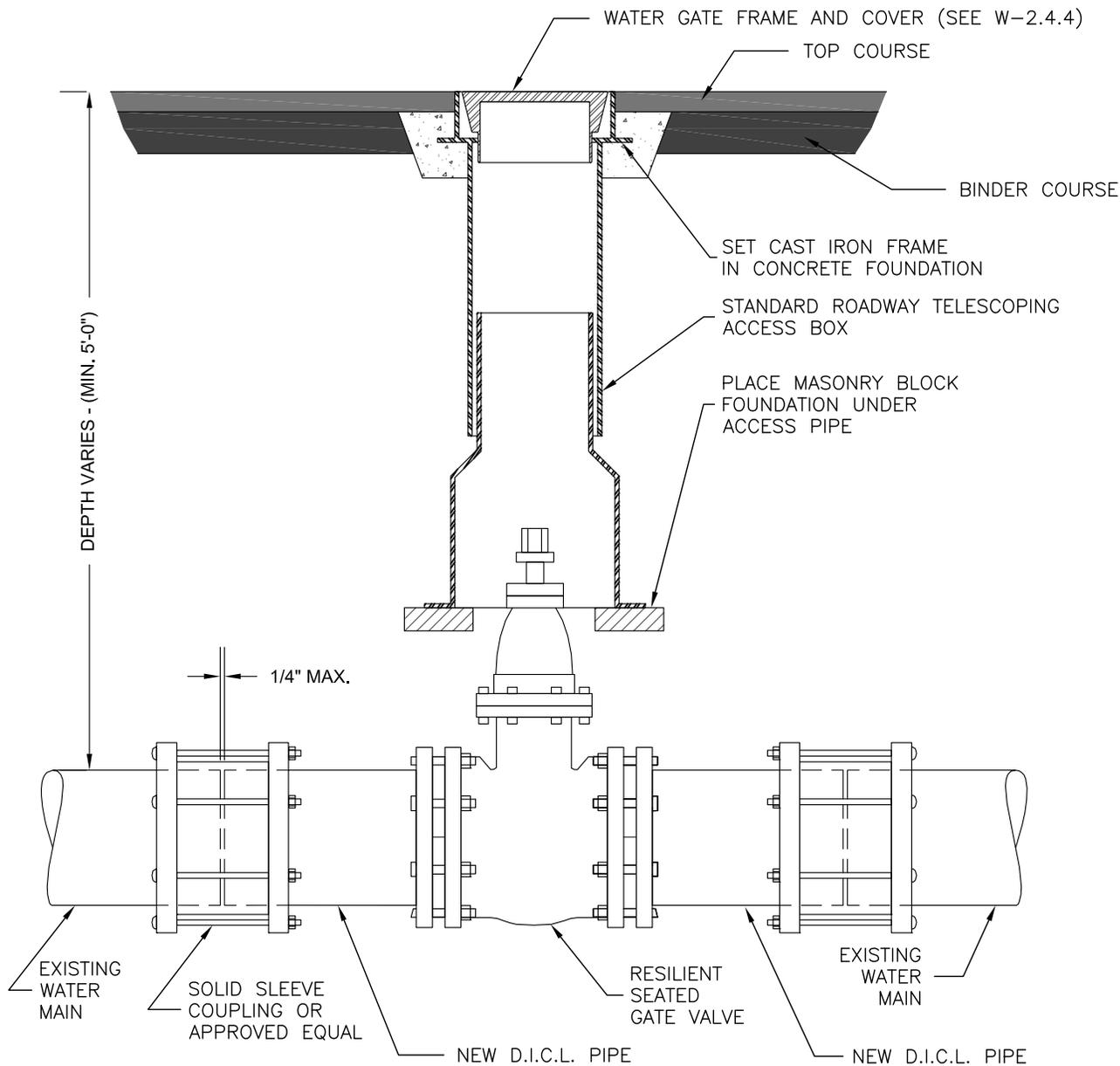
WATER MAIN TRENCH DETAIL

DATE:
MARCH 2011

REV:
2

DETAIL NO.

W-2.3.0



NOTE:

1. ALL EXCAVATION, BACKFILLING AND PAVING SHALL BE IN ACCORDANCE WITH THE TOWN OF FRAMINGHAM REQUIREMENTS.
2. WATER GATE COVER SHALL HAVE A MINIMUM HEIGHT OF FOUR (4) INCHES, BRAND NAME EJ GROUP (FORMERLY LEBARON FOUNDRY CO.) OR EQUAL.

NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

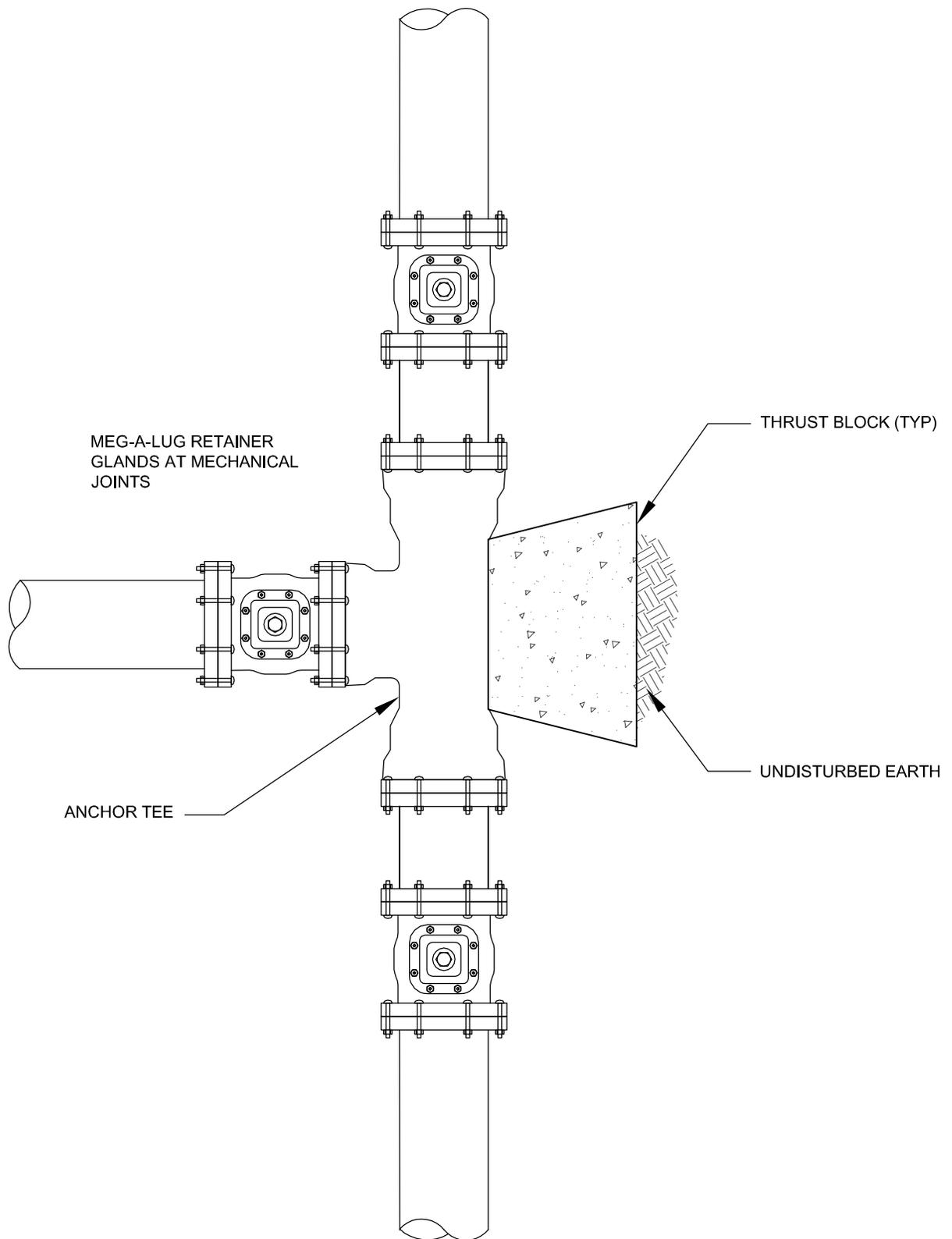
GATE VALVE

DATE:
MARCH 2013

REV:
2

DETAIL NO.

W-2.4.0



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

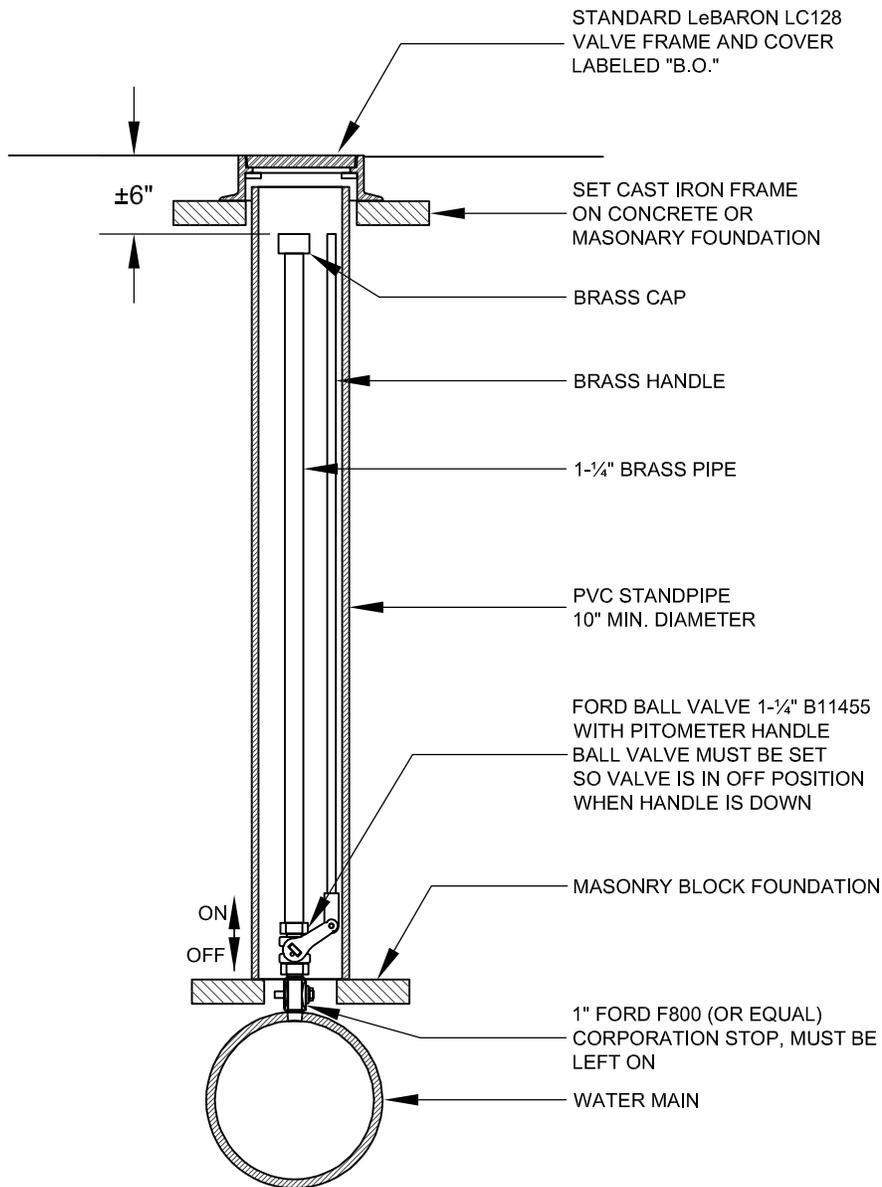
TYPICAL ANCHOR TEE
INSTALLATION

DATE:
SEPT. 2008

REV:
0

DETAIL NO.

W-2.4.1



NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

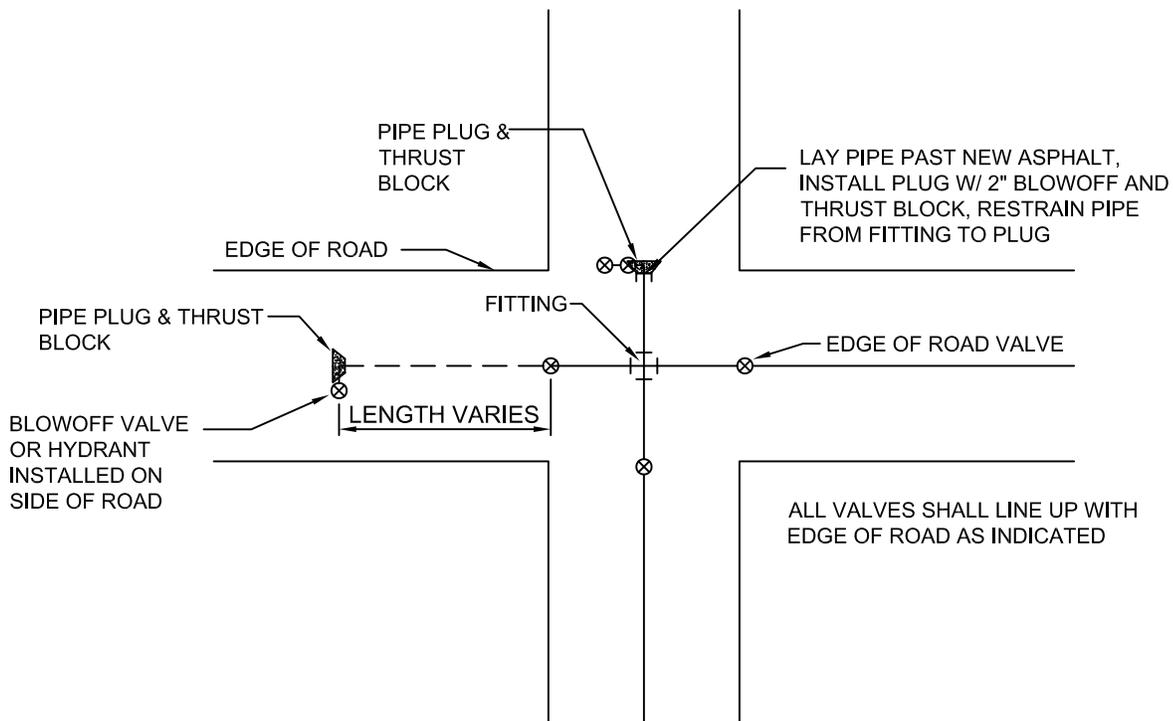
AIR RELEASE VALVE/BLOW-OFF

DATE:
SEPT. 2008

REV:
0

DETAIL NO.

W-2.4.2



NOTES:

1. AT THE END OF A NEW INSTALLATION WHERE ROAD RESTORATION HAS BEEN PROVIDED, LAY PIPE PAST NEW ASPHALT AND PROVIDE BLOW OFF OR HYDRANT.
2. WHERE A BLOW OFF IS PROPOSED, BLOW OFF MUST BE A MINIMUM 2" AND CAPPED MAIN SHALL HAVE THRUST SUPPORT OF RESTRAIN PIPE FROM FITTING TO PLUG.

NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

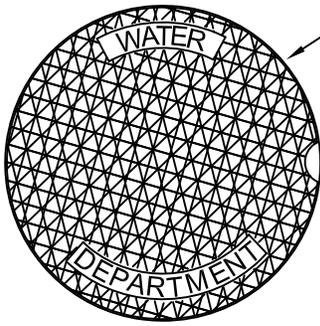
VALVE LOCATION
AT INTERSECTION

DATE:
FEB. 2016

REV:
1

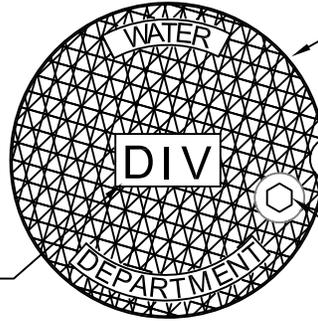
DETAIL NO.

W-2.4.3



NOTE: COVER READS:
"WATER"
"DEPARTMENT"
IN 3/4" LETTERS

GATE COVER

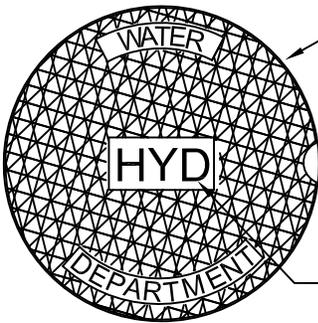


NOTE: COVER READS:
"WATER"
"DEPARTMENT"
IN 3/4" LETTERS

NOTE: COVER READS:
"DIV" IN 1 1/4" LETTERS

NOTE: Ø5/8" x 2 3/4"
STAINLESS STEEL BOLT

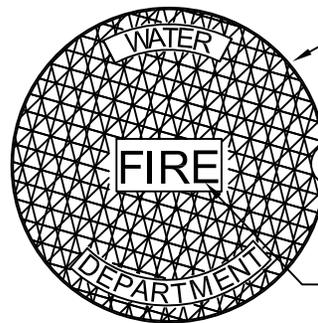
DIVISION GATE COVER



NOTE: COVER READS:
"WATER"
"DEPARTMENT"
IN 3/4" LETTERS

NOTE: COVER READS:
"HYD" IN 1 1/4" LETTERS

HYDRANT GATE COVER



NOTE: COVER READS:
"WATER"
"DEPARTMENT"
IN 3/4" LETTERS

NOTE: COVER READS:
"FIRE" IN 1 1/4" LETTERS

FIRE GATE COVER

NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

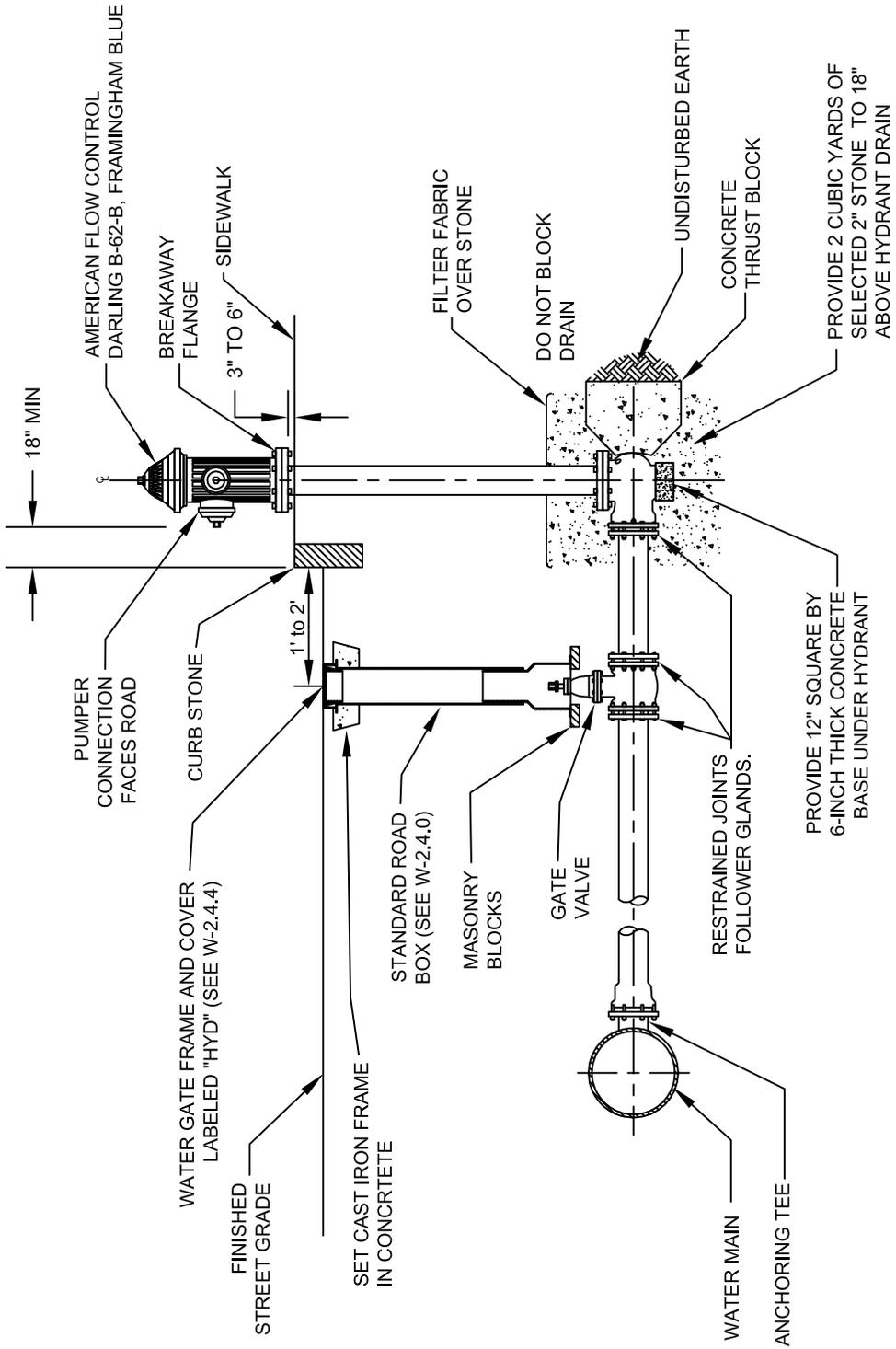
WATER GATE COVERS

DATE:
FEB. 2016

REV:
4

DETAIL NO.

W-2.4.4



NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

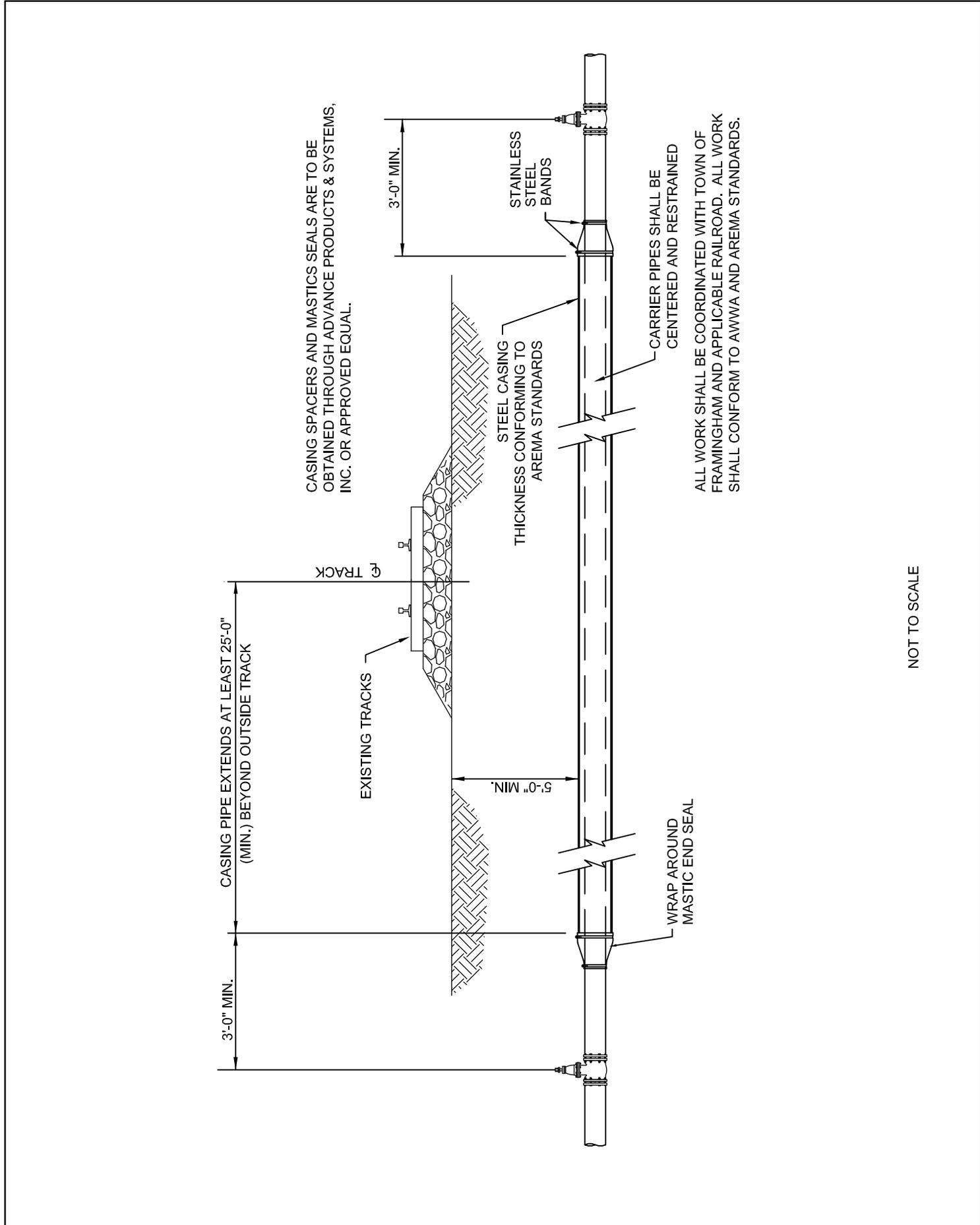
FIRE HYDRANT INSTALLATION

DATE:
AUGUST 2015

REV:
3

DETAIL NO.

W-2.5.0



NOT TO SCALE



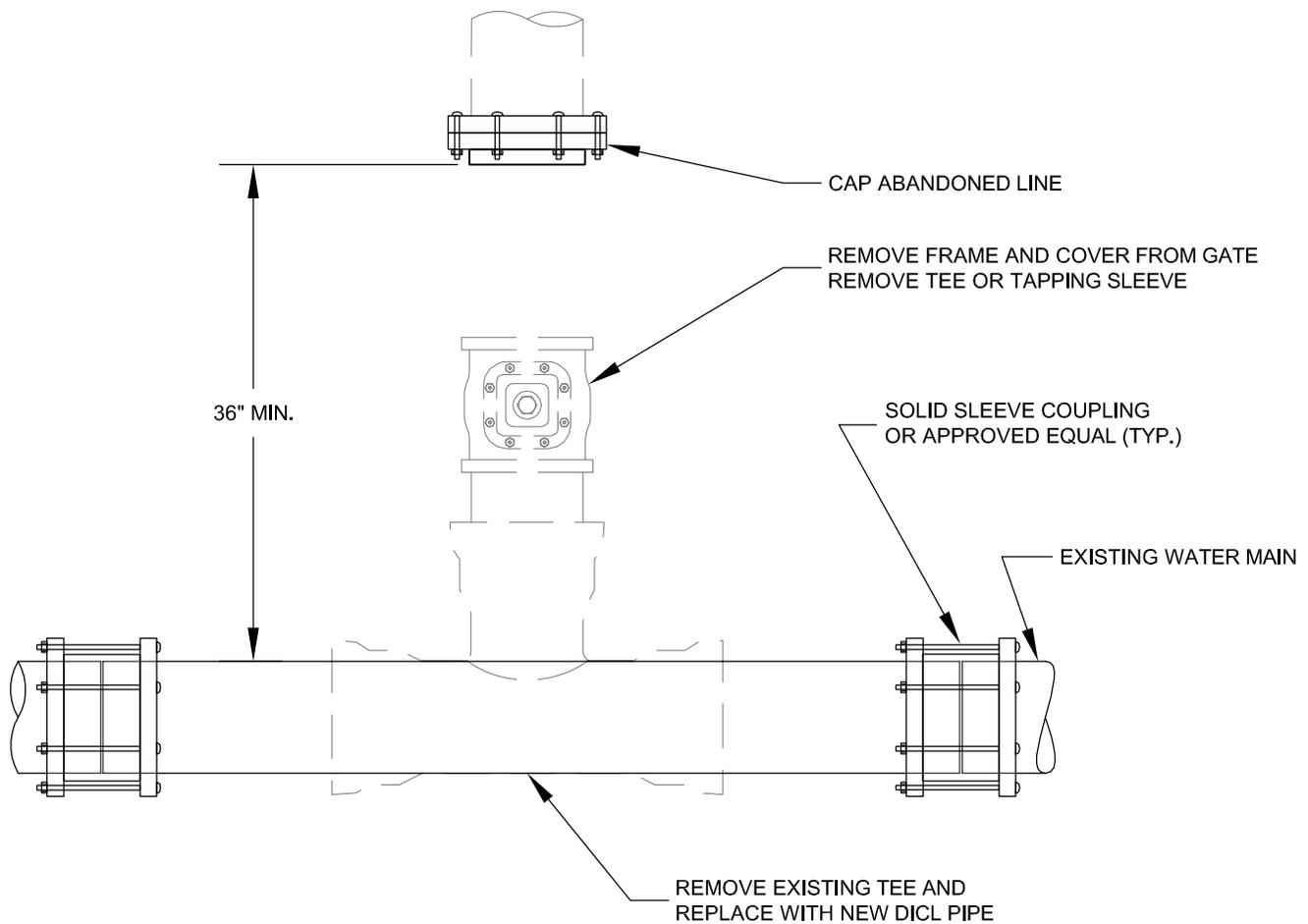
TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

WATER CROSSING
UNDER RAILROAD

DATE:
SEPT. 2008

REV:
0

DETAIL NO.
W-2.6.1



NOTES:

1. ALL WORK MUST BE PERFORMED BY A FRAMINGHAM LICENSED AND BONDED CONTRACTOR.
2. THIS PROCEDURE WILL INVOLVE A MAIN LINE SHUT DOWN THAT THE CONTRACTOR WILL COORDINATE WITH FRAMINGHAM'S D.P.W. WATER OPERATIONS DIVISION.
3. 48-HOUR PRIOR WRITTEN NOTIFICATION OF ALL AFFECTED CUSTOMERS MUST BE PERFORMED BY THE CONTRACTOR.
4. ALL WORK MUST BE PERMITTED BY FRAMINGHAM AND ALL OTHER APPROPRIATE AGENCIES.
5. ALL WORK MUST BE INSPECTED BY FRAMINGHAM INSPECTOR OR DESIGNEE PRIOR TO BACKFILLING.

NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

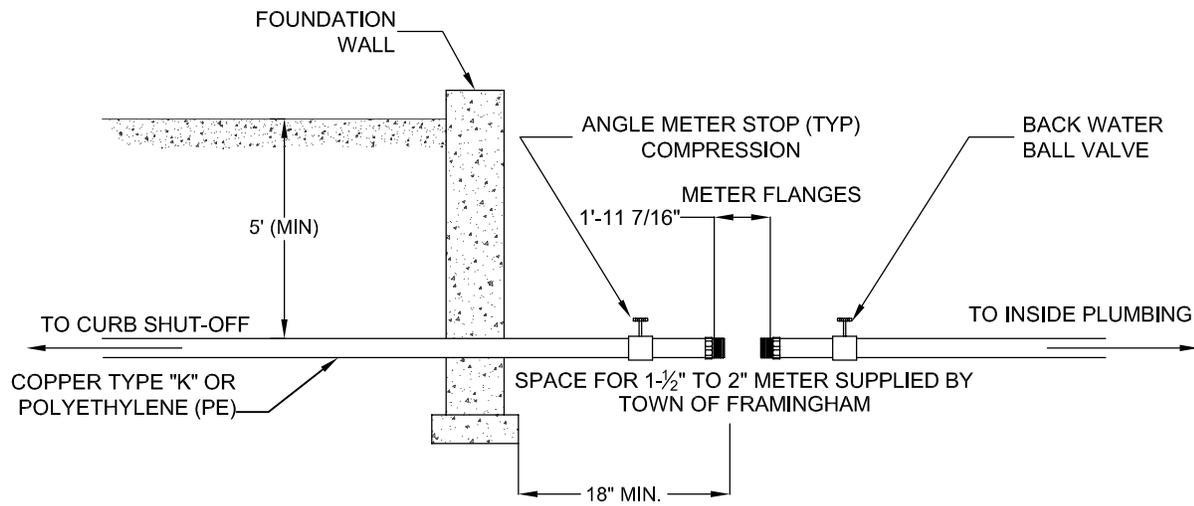
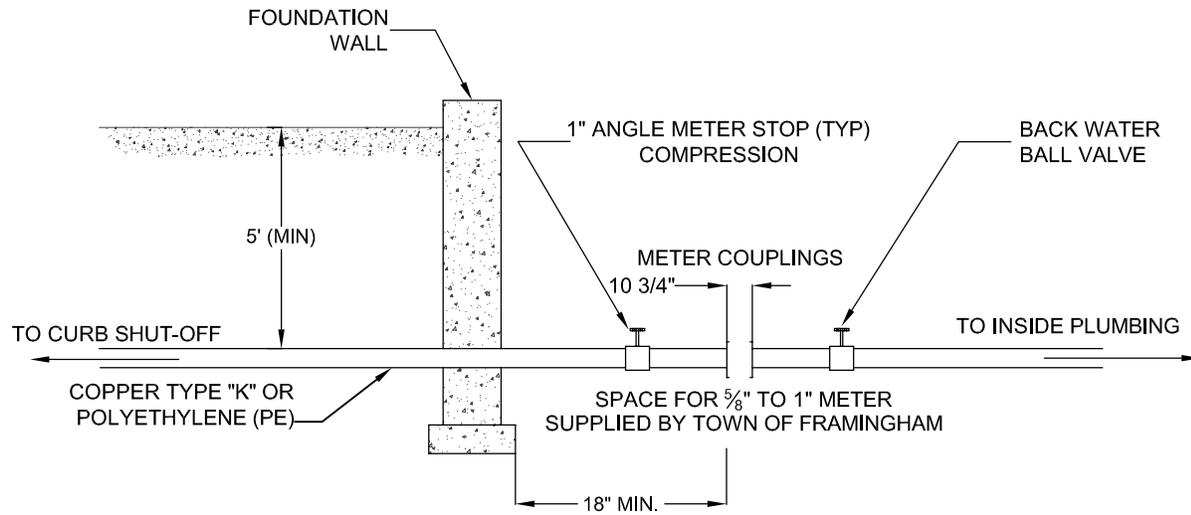
DETAIL OF CUT AND REMOVE OF
WATER CONNECTION 4" AND OVER

DATE:
FEB. 2010

REV:
1

DETAIL NO.

W-2.7.0



NOT TO SCALE



TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS

METER INSTALLATION

DATE:
SEPT. 2008

REV:
0

DETAIL NO.

W-2.8.0