

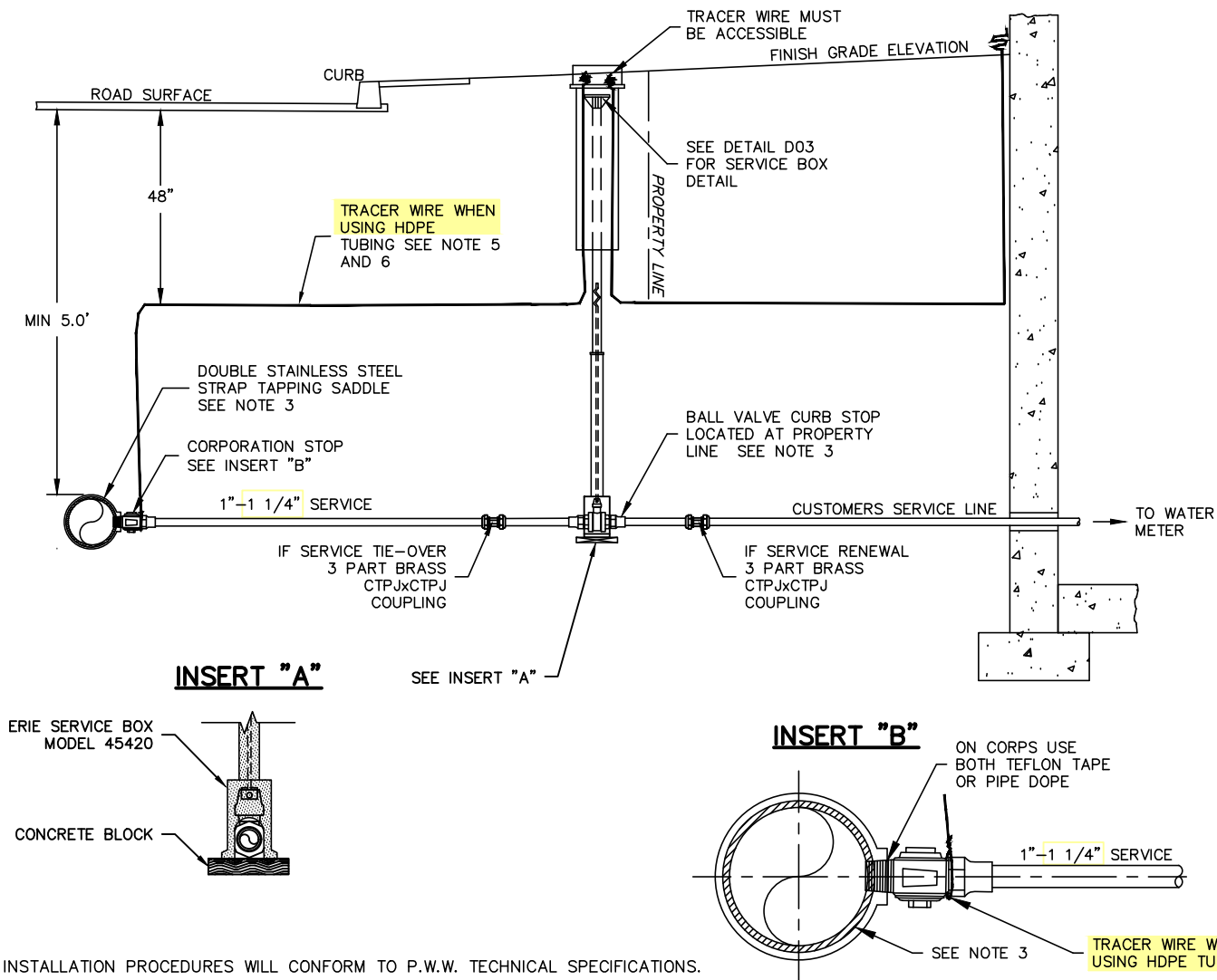
Details Descriptions List

M= Mains, D= Domestic, F= Fire Service, L= Irrigation, T= Temporary, S= Special Detail

D01	Typical	1" - 1 1/4" Service & Valve Box Installation Detail
D02	Typical	1 1/2" - 2" Service & Valve Box Installation Detail
D03	Typical	Service Box Detail in Paved Areas
D04	Typical	1" CT Service, 5/8", 3/4", 1" Meter Service Detail
D05	Typical	1" HDPE Service, 5/8", 3/4", 1" Meter Service Detail
D06	Typical	1 1/4" Service, 5/8", 3/4", 1" Meter Service Through Floor Detail
D07	Typical	1 1/4" Service, 5/8", 3/4", 1" Meter Service Through Wall Detail
D08	Typical	1 1/2" Service, 5/8", 3/4", 1" Meter Service Through Floor Detail
D09	Typical	1 1/2" Service, 5/8", 3/4", 1" Meter Service Through Wall Detail
D10	Typical	2" Service, 5/8", 3/4", 1" Meter Service Through Floor Detail
D11	Typical	2" Service 5/8", 3/4", 1" Meter through wall Detail
D12	Typical	2" Service, with Back Flow W/ 5/8", 3/4", 1" Meter Service Through Floor Detail
D13	Typical	2" Service, with Back Flow w/ 5/8", 3/4" or 1" Meter Service Through Wall Detail
D14	Typical	Detail has been removed no longer needed
D15	Typical	Commercial Service Tapped Off Fire Service
D16	Typical	Residential Domestic Service Tapped Off Fire Service
D17	Typical	Domestic Service Tapped Off Fire Service
D18	Typical	Combined Fire & Domestic Service Entrance Detail-2" METER
D19	Typical	Combined Fire & Domestic Service Entrance Detail-2" COMPOUND
D20	Typical	3 Inch Meter
D21	Typical	4 Inch Meter
F01	Typical	Fire Service Installation Detail
L01	Typical	1" Irrigation Setup Options
L02	Typical	Shallow 2" Irrigation Meter Pit Detail
L03	Typical	1 1/2" Above Ground Irrigation Meter Vault
L04	Typical	2" Above Ground Irrigation Meter Vault
M01	Typical	Utility separation
M02.1	Typical	Trench Detail
M02.2	Typical	Trench Detail-Unsuitable Soils
M03	Typical	1" Release Valve Installation on Ductile Iron
M04	Typical	2" Release Valve Installation on End of Main
M05	Typical	2" Release Valve Installation on Ductile Iron
M06	Typical	1" Release Valve Installation on PVC
M07	Typical	2" Release Valve Installation on PVC
M08	Typical	Tee Installation
M09	Typical	Tee Installation on Existing Main
M10	Typical	Thrust Block Behind Fitting installation
M11	Typical	End of Main Installation with Gate Valve
M12	Typical	End of Main Installation without Gate Valve
M13	Typical	End of Main Installation with Reducer
M14	Typical	Valve Box Detail
M15	Typical	Hydrant installation
M16	Typical	Catch Basin Insulation Detail

M17	<i>Typical</i>	Storm Drain / Water Main Parallel Runs - Elevation View
M18	<i>Typical</i>	Storm Drain / Water Main Intersecting Runs - Elevation View
M19	<i>Typical</i>	Insulation Detail for Less Than 4'-0" of Cover
M20	<i>Typical</i>	Large Service and/or Tapping Sleeve Detail
T01	<i>Typical</i>	Temporary Construction Meter
T02	<i>Typical</i>	Temporary Main Fed from Hydrant
T03	<i>Typical</i>	Temporary Fire Dept. Connection
T04	<i>Typical</i>	Temporary Pedestrian/Roadway Crossing
		Highlighted Items revised in 2023

ITEM REVISED IN 2023



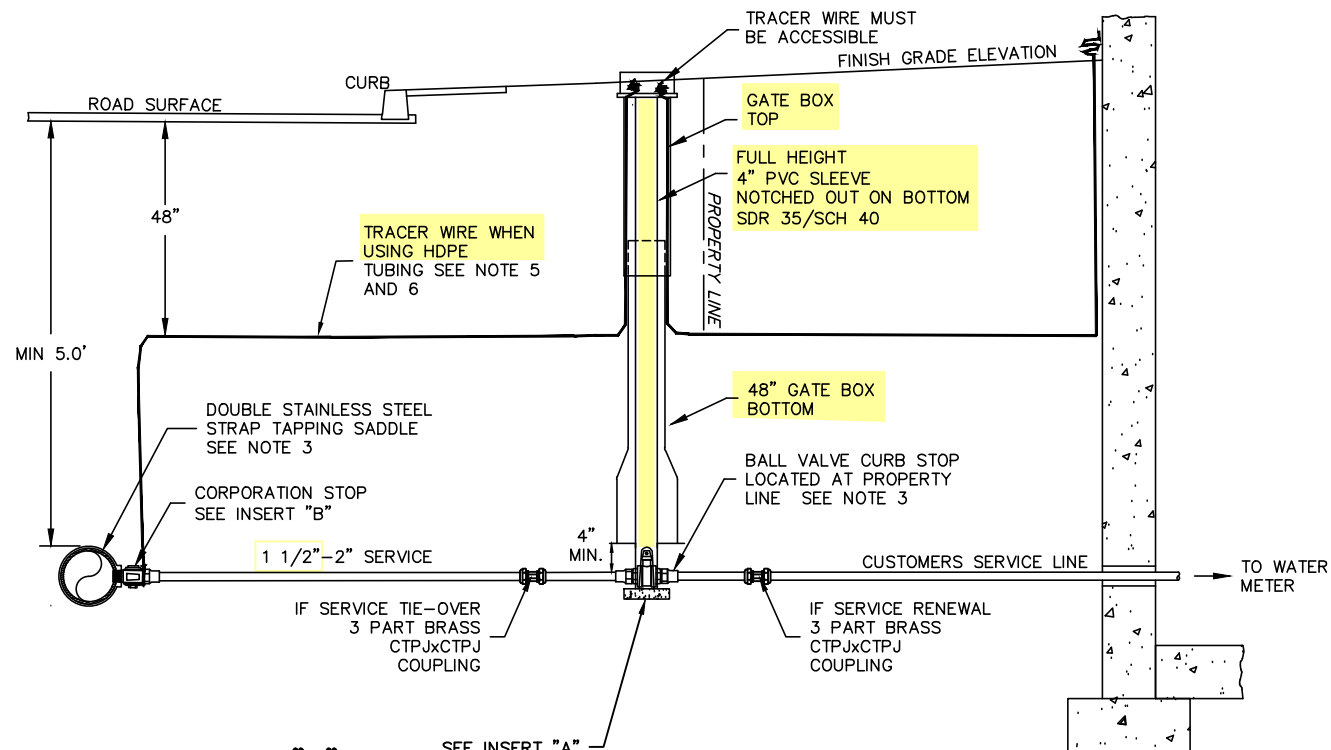
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. IF WATER MAIN IS PVC OR TRANSITE, A DOUBLE STAINLESS STEEL STRAP TAPPING SADDLE MUST BE USED TO CONNECT THE CORPORATION TO THE WATER MAIN. CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
4. IF TAPPING A FIRE SERVICE, THEN SEE DETAIL D15 AND D16.
5. USE 10-GAUGE SOLID-CORE COATED BLUE TRACER WIRE PER P.W.W. TECHNICAL SPECIFICATIONS. SPLICES REQUIRE SNAKEBITE LSC1030C LOCKING CONNECTORS OR EQUAL.
6. INSTALL 3" WIDE BLUE UNDERGROUND WARNING TAPE.
7. SERVICE TO BE PLACED ON 1' COMPACTED SAND BED AND COVERED IN 1' COMPACTED SAND BED.

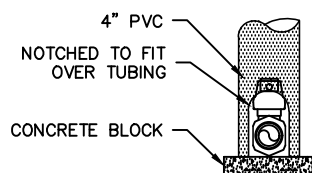


DETAIL D01
TYPICAL 1"-1 1/4" SERVICE &
VALVE BOX INSTALLATION DETAIL
PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS

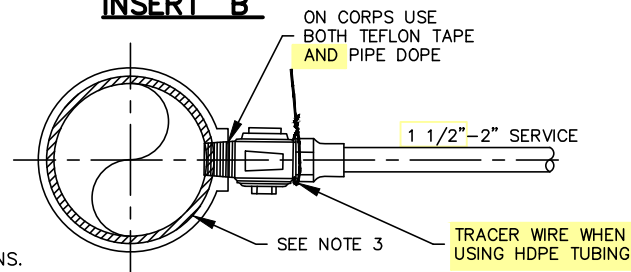
ITEM REVISED IN 2023



INSERT "A"



INSERT "B"

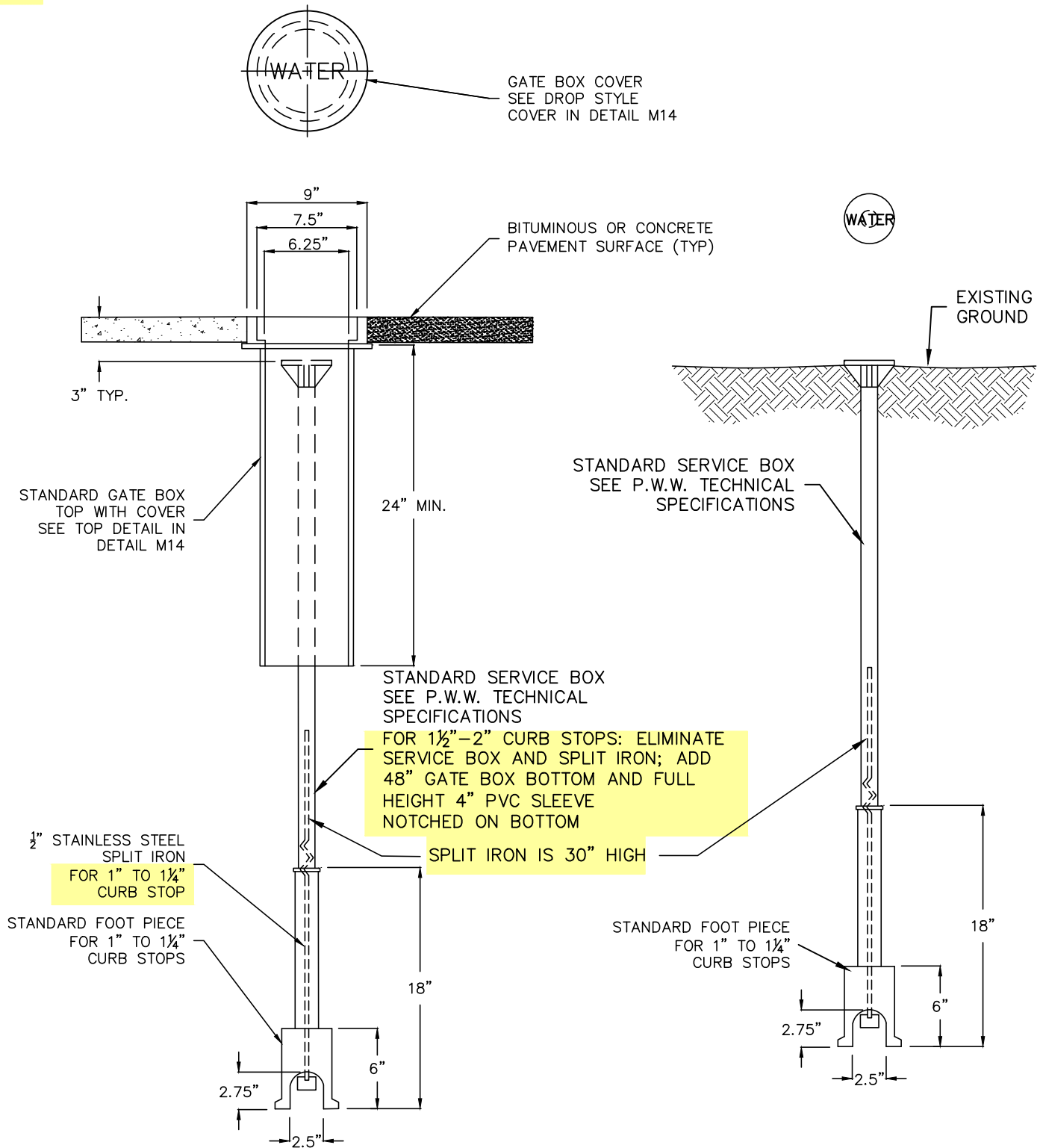


NOTES:

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2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. IF WATER MAIN IS PVC OR TRANSITE, A DOUBLE STAINLESS STEEL STRAP TAPPING SADDLE MUST BE USED TO CONNECT THE CORPORATION TO THE WATER MAIN. CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
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6. INSTALL 3" WIDE BLUE UNDERGROUND WARNING TAPE.
7. SERVICE TO BE PLACED ON 1' COMPACTED SAND BED AND COVERED IN 1' COMPACTED SAND BED.

PENNICHUCK
WATER

DETAIL D02
TYPICAL 1 1/2"–2" SERVICE &
VALVE BOX INSTALLATION DETAIL
PENNICHUCK WATER WORKS, INC.
REV: 03–15–2023 SCALE: NTS

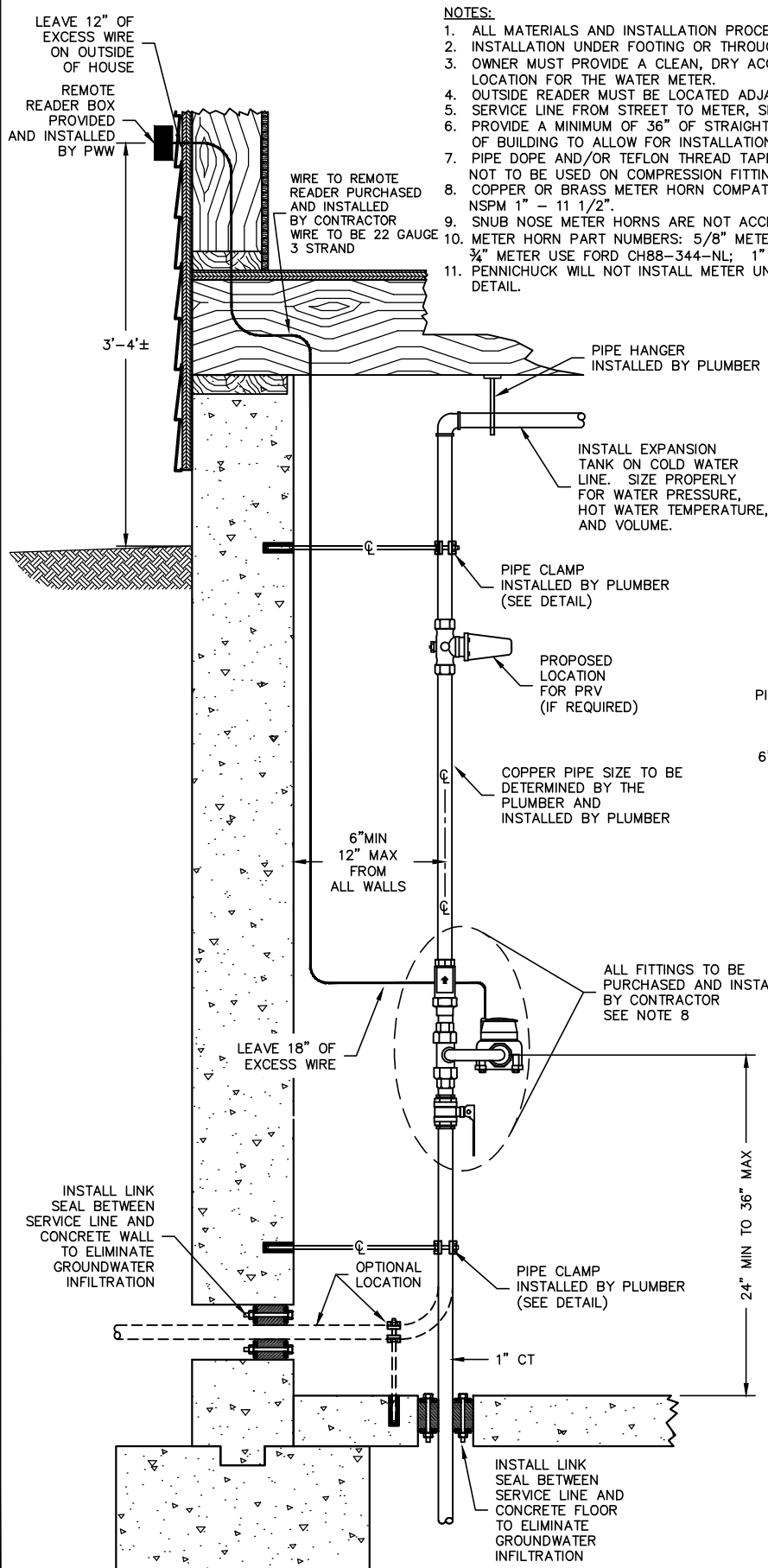


NOTE:

ALL MATERIALS AND INSTALLATION
PROCEDURES WILL CONFORM TO
P.W.W. TECHNICAL SPECIFICATIONS.

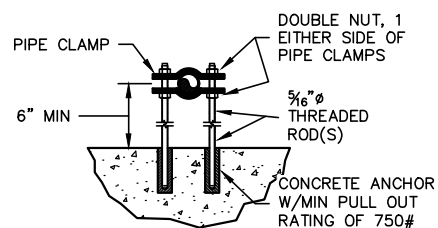


DETAIL D03
TYPICAL SERVICE BOX DETAIL
IN PAVED AREAS
PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS



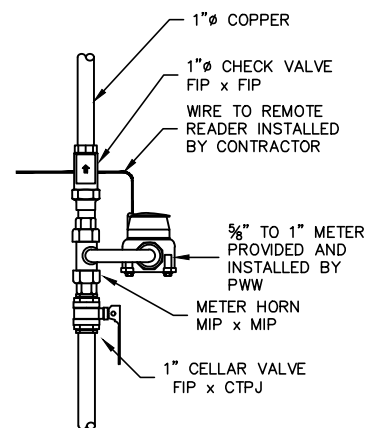
NOTES:

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2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



PIPE CLAMP (WALL)

NTS



MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

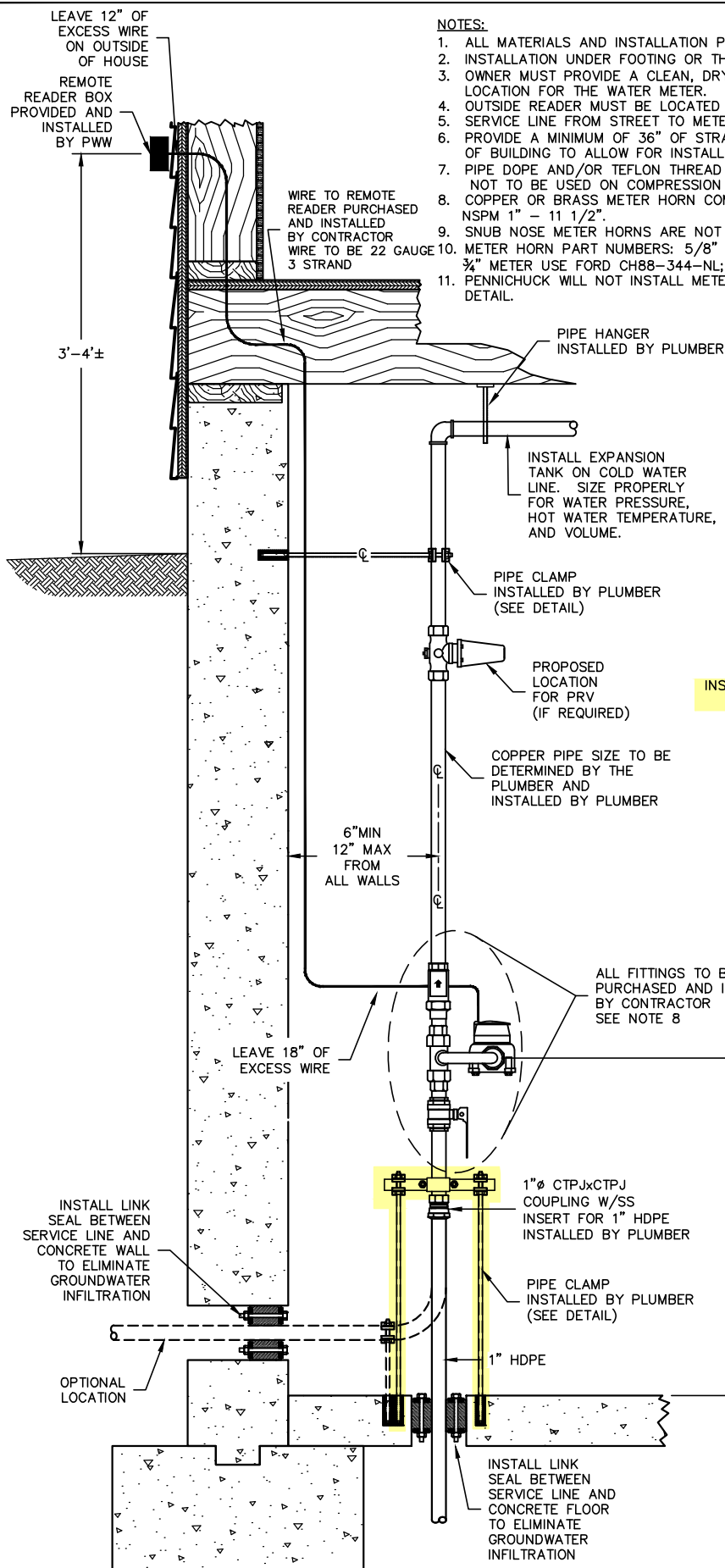


DETAIL D04

TYPICAL 1" CT SERVICE WITH 5/8", 3/4", 1" METER SERVICE INSTALLATION

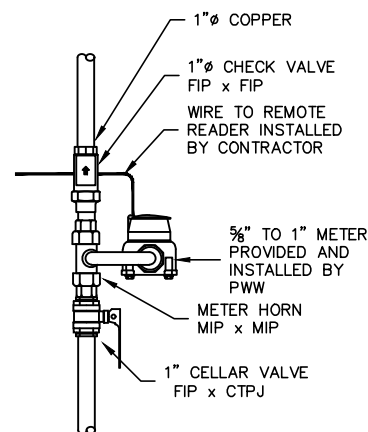
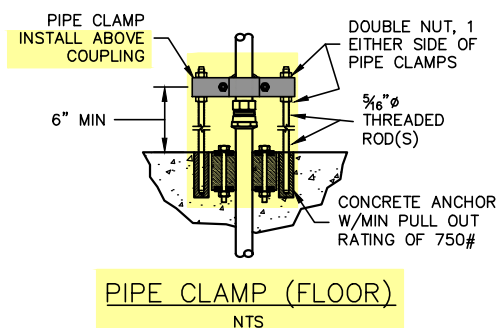
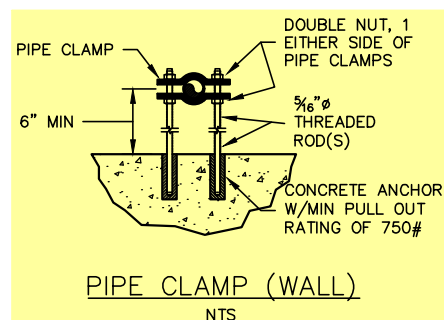
PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS

ITEM REVISED IN 2023



NOTES:

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3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

ITEM REVISED IN 2023



DETAIL D05

1" HDPE SERVICE WITH 5/8" METER SERVICE INSTALLATION

PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS

1" DIAMETER POLYETHYLENE TUBING CAN ONLY BE USED WITH PRIOR WRITTEN APPROVAL FROM THE PENNICHUCK ENGINEERING DEPARTMENT

LEAVE 12" OF
EXCESS WIRE
ON OUTSIDE
OF HOUSE

REMOTE
READER BOX
PROVIDED AND
INSTALLED BY
PWW

WIRE TO REMOTE
READER PURCHASED
AND INSTALLED
BY CONTRACTOR
WIRE TO BE 22 GAUGE
3 STRAND

3'-4'±

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3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.

PIPE HANGER
INSTALLED BY PLUMBER

INSTALL EXPANSION
TANK ON COLD WATER
LINE. SIZE PROPERLY
FOR WATER PRESSURE,
HOT WATER TEMPERATURE,
AND VOLUME.

PIPE CLAMP
INSTALLED BY PLUMBER
(SEE DETAIL)

PROPOSED
LOCATION
FOR PRV
(IF REQUIRED)

1"Ø COPPER PIPE TYPE K
INSTALLED BY PLUMBER

6" MIN
12" MAX
FROM
ALL WALLS

LEAVE 18" OF
EXCESS WIRE

ALL FITTINGS TO BE
PURCHASED AND
INSTALLED BY
CONTRACTOR
SEE NOTE 8

1" MIP x CTPJ
INSTALLED BY PLUMBER

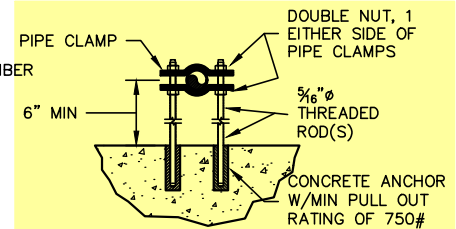
1 1/4" CTPJ x 1 1/4" FIP W/ 1 1/4" x 1"
BRASS BUSHING
INSTALLED BY PLUMBER

1 1/4" HDPE PJ x FIP
W/SS INSERT
INSTALLED BY
PLUMBER

1 1/4" HDPE

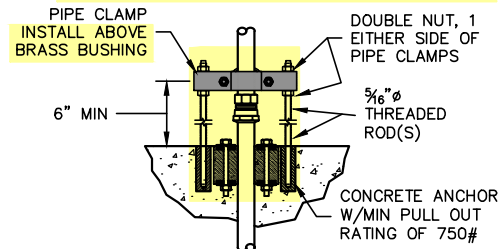
PIPE CLAMP
INSTALLED BY PLUMBER
(SEE DETAIL)

INSTALL LINK
SEAL BETWEEN
SERVICE LINE AND
CONCRETE FLOOR
TO ELIMINATE
GROUNDWATER
INFILTRATION



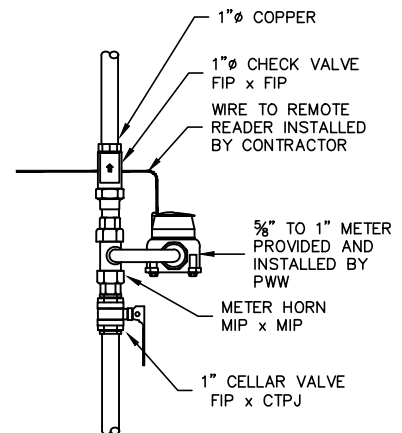
PIPE CLAMP (WALL)

NTS



PIPE CLAMP (FLOOR)

NTS



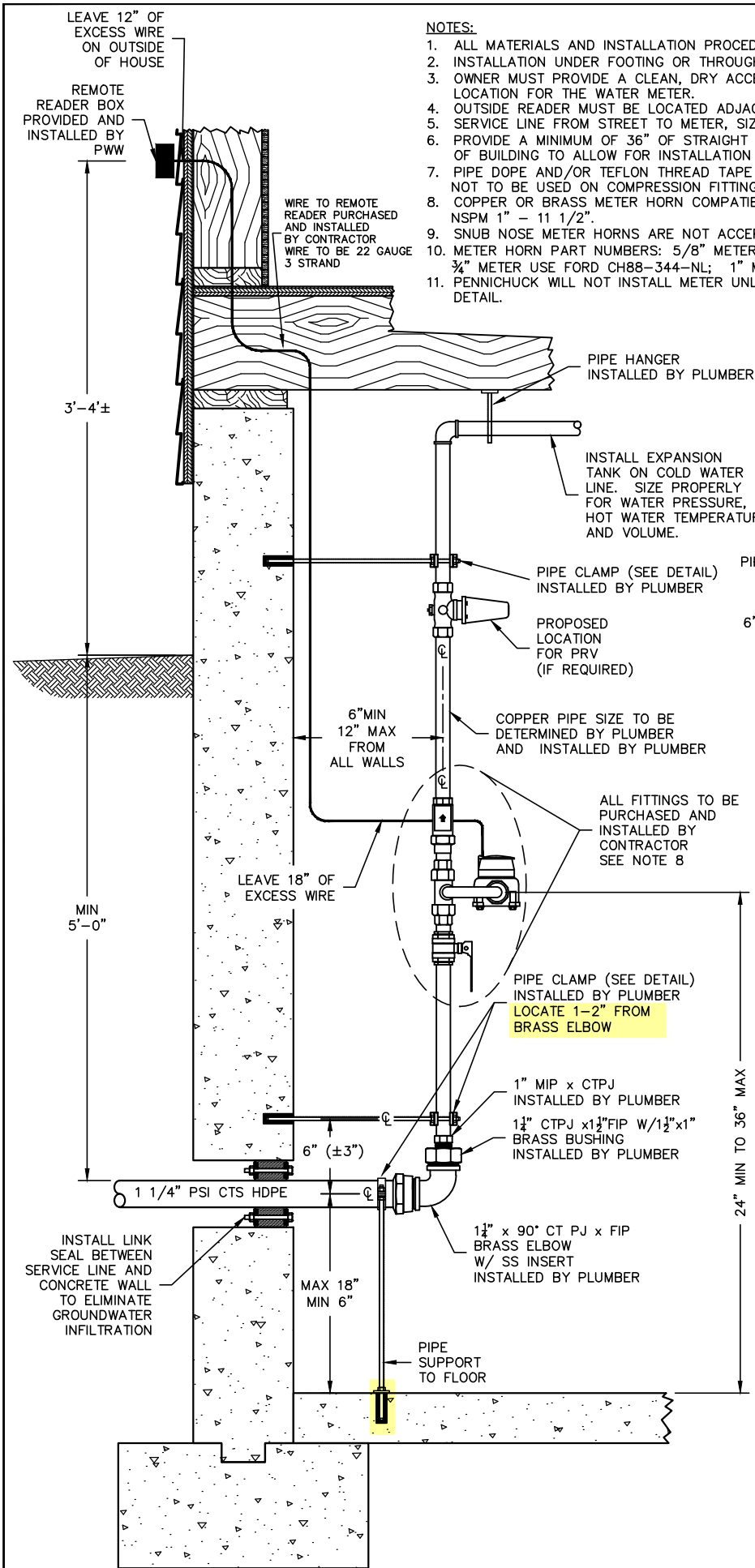
MAX. SPACING BETWEEN CELLAR VALVE,
METER HORN AND CHECK VALVE TO
NOT EXCEED 2 INCHES

ITEM REVISED IN 2023



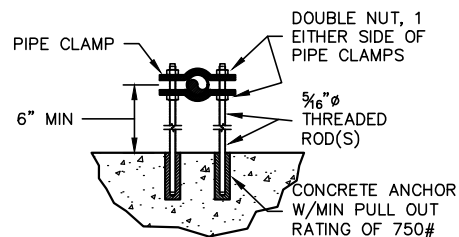
DETAIL D06

TYPICAL 1 1/4" SERVICE WITH 5/8", 3/4" & 1"
METER SERVICE THROUGH FLOOR
INSTALLATION
PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS

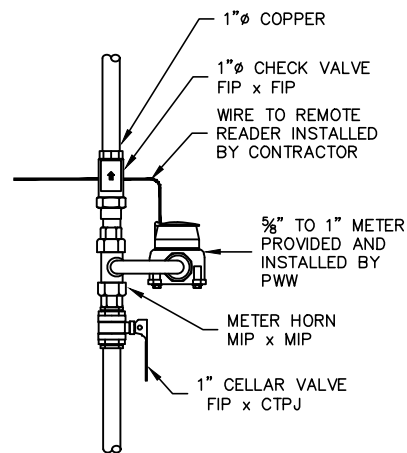


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" x 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



PIPE CLAMP (WALL)
NTS

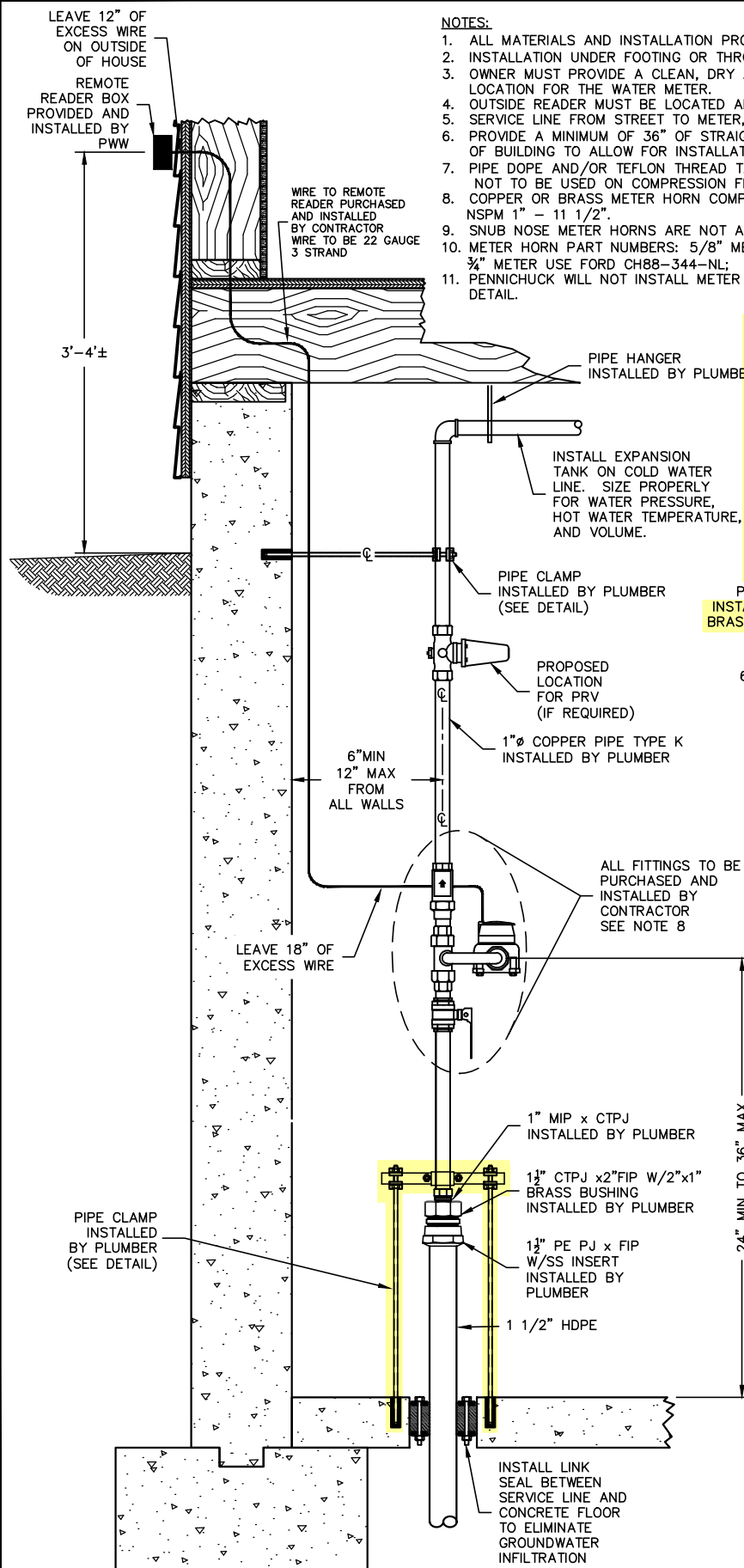


MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

ITEM REVISED IN 2023

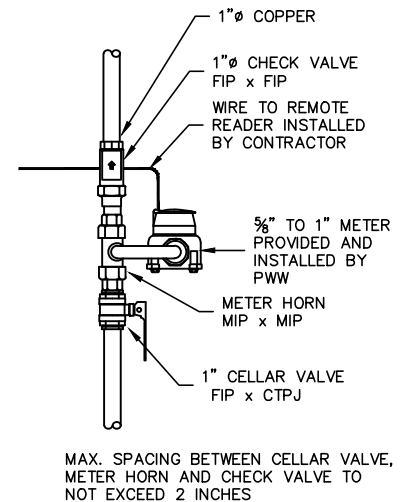
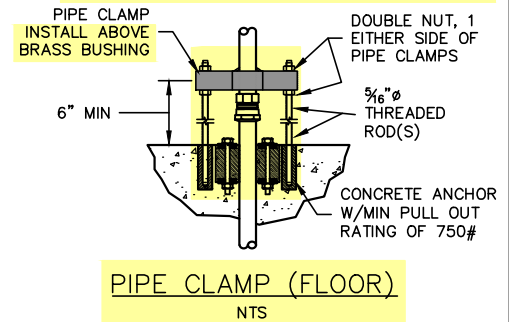
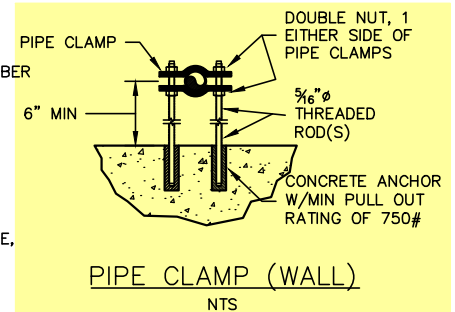


DETAIL D07
TYPICAL 1 1/4" SERVICE WITH 5/8", 3/4"
& 1" METER THROUGH WALL
INSTALLATION
PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS



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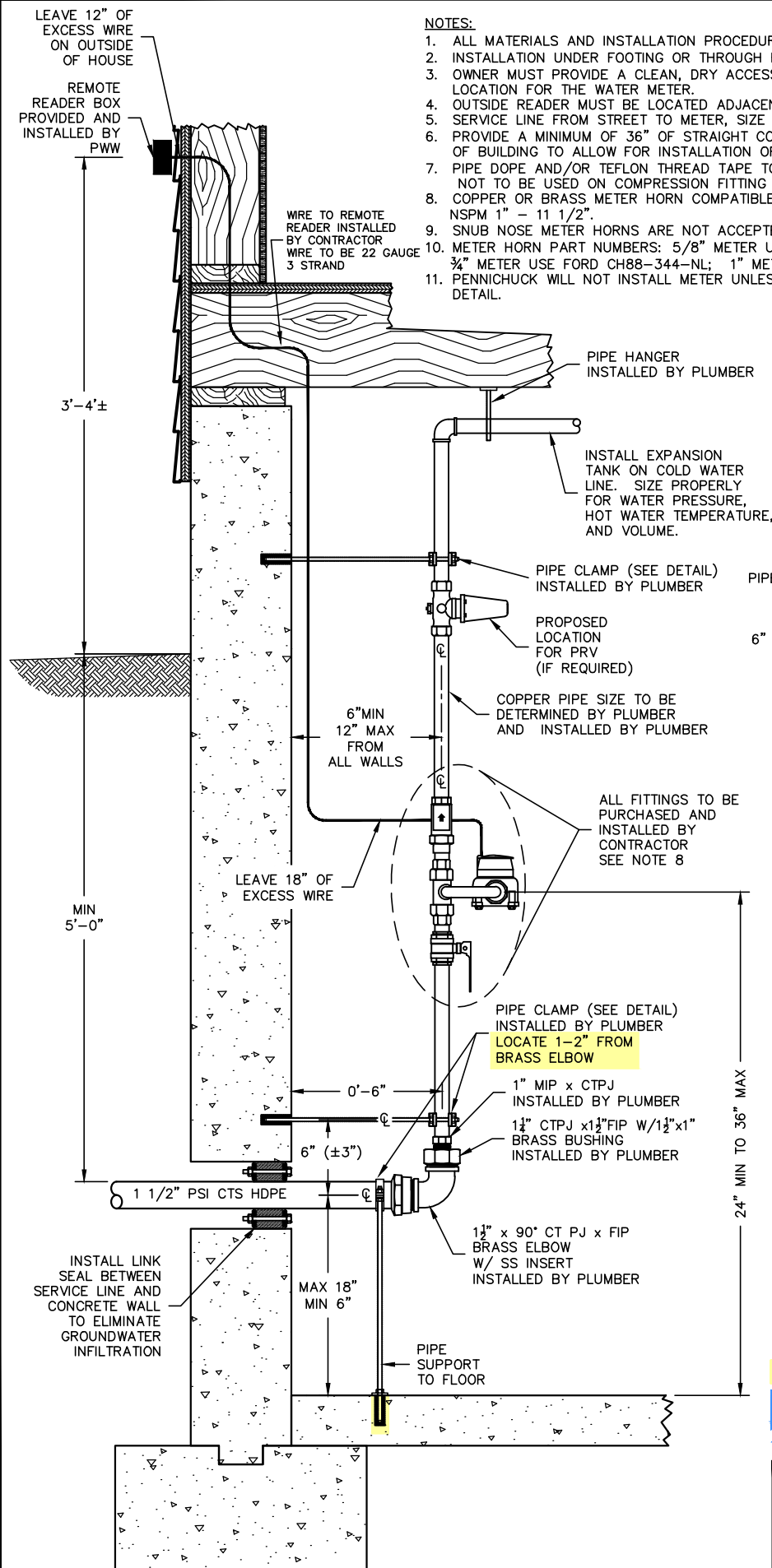
ITEM REVISED IN 2023



DETAIL D08

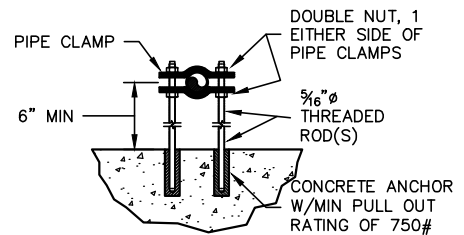
TYPICAL 1 1/2" SERVICE WITH 5/8", 3/4" & 1" METER SERVICE THROUGH FLOOR INSTALLATION

PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS

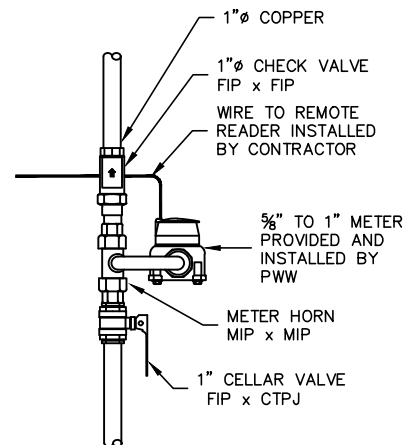


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9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
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PIPE CLAMP (WALL)
NTS



MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

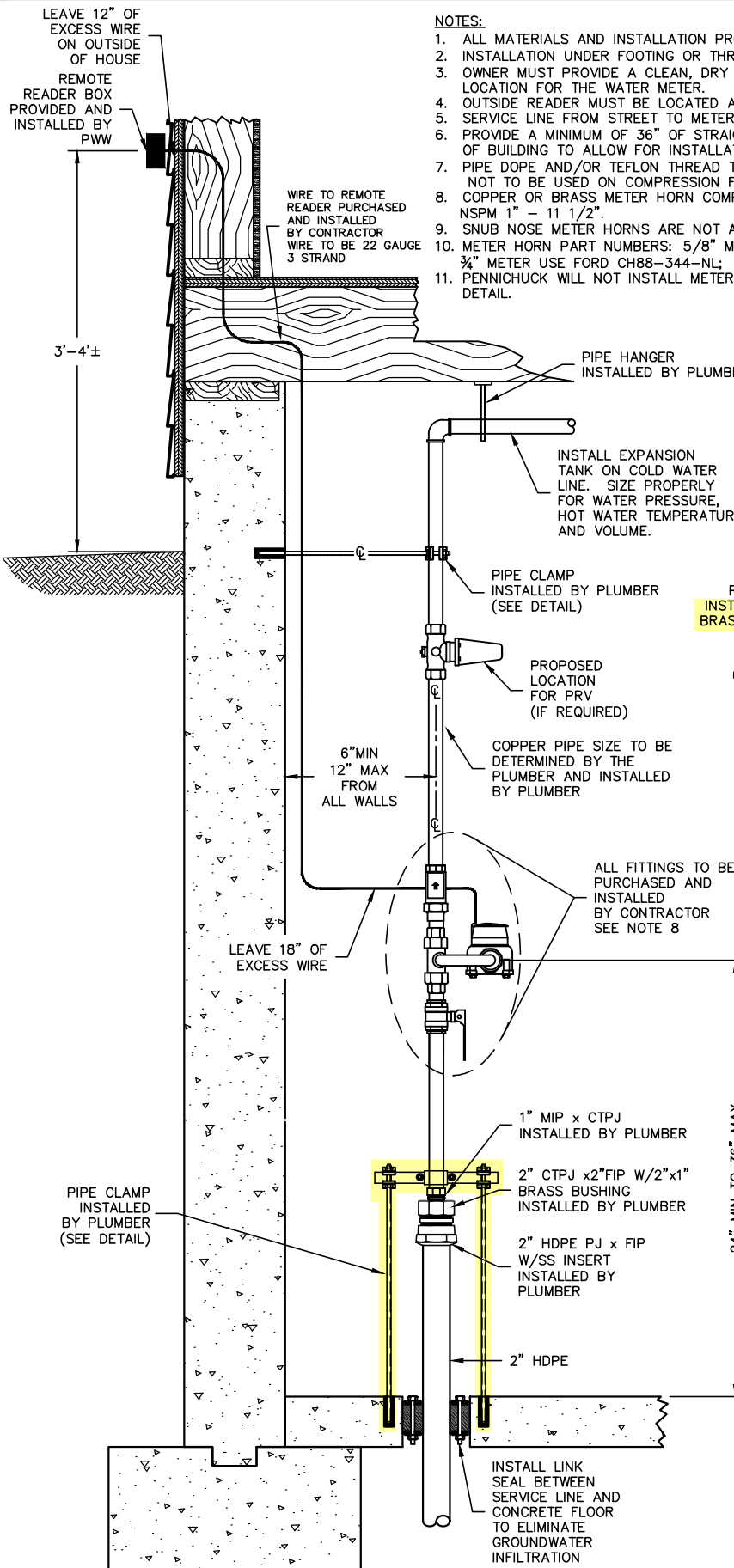
ITEM REVISED IN 2023



DETAIL D09

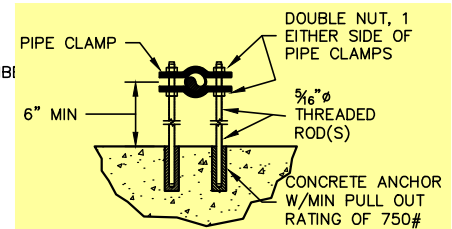
TYPICAL 1 1/2" SERVICE WITH 5/8", 3/4" & 1" METER THROUGH WALL INSTALLATION

PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS



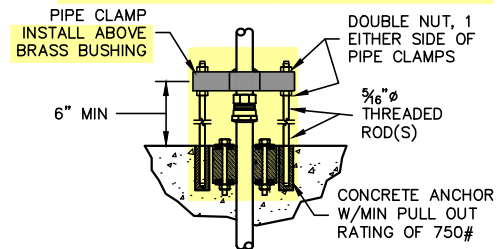
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4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



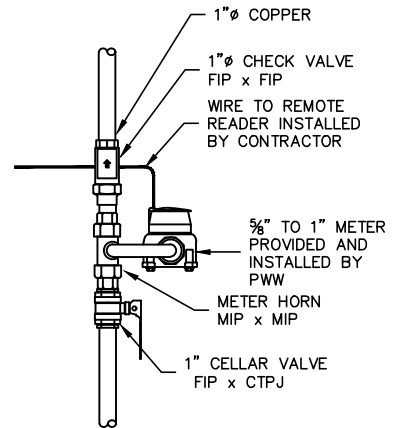
PIPE CLAMP (WALL)

NTS



PIPE CLAMP (FLOOR)

NTS

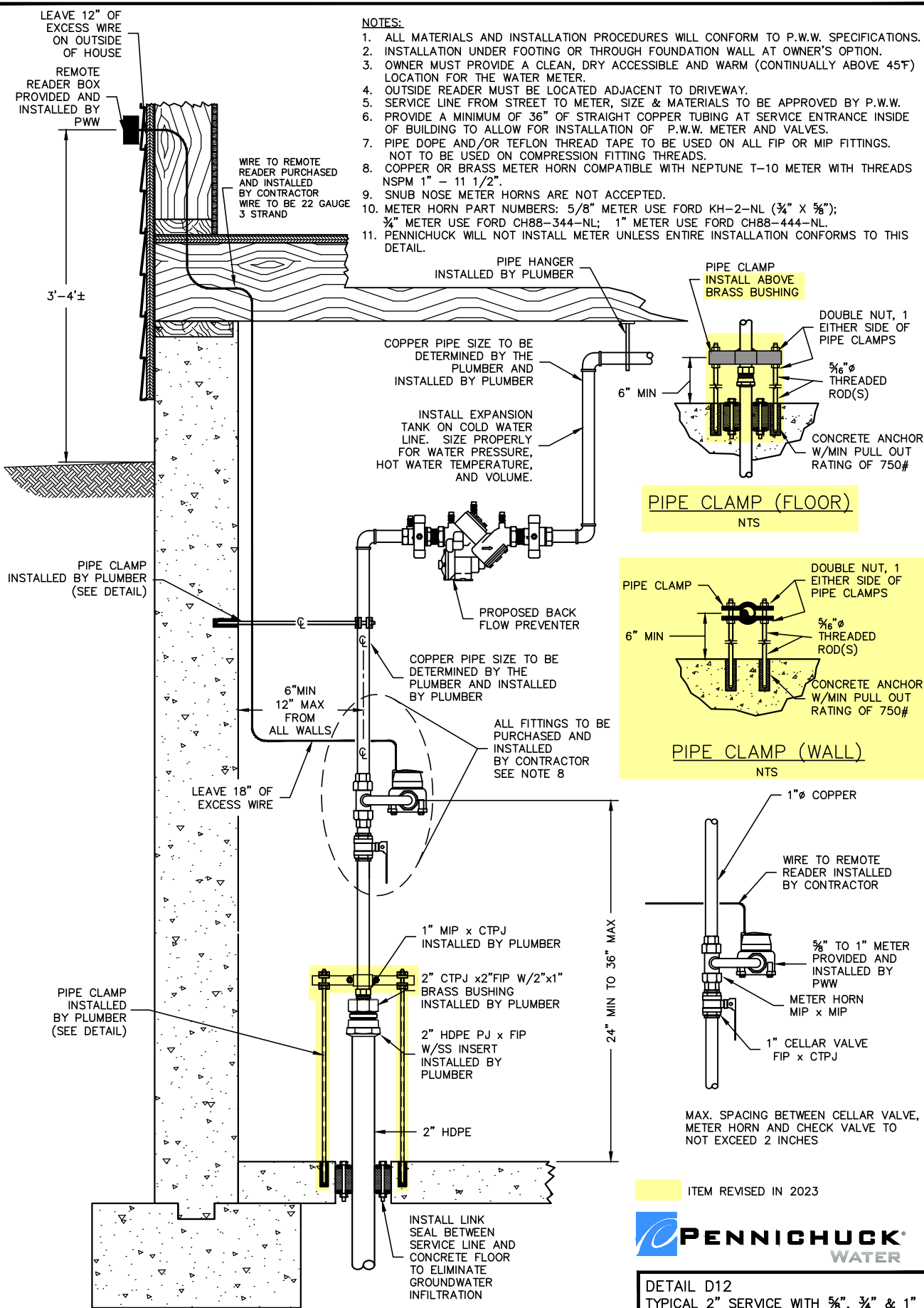


MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

ITEM REVISED IN 2023

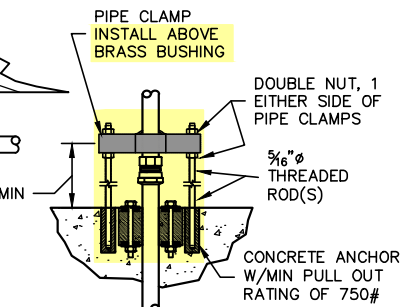


DETAIL D10
TYPICAL 2" SERVICE WITH 5/8", 3/4" & 1"
METER SERVICE THROUGH FLOOR
INSTALLATION
PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS

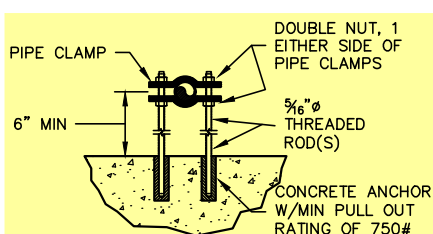


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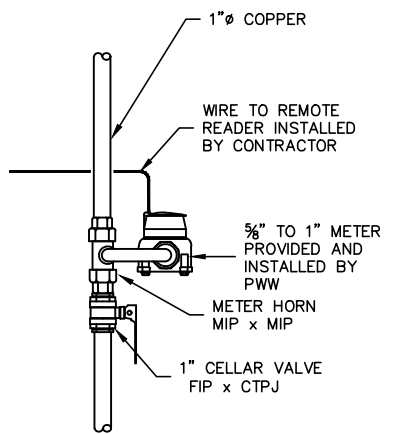
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" x 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



PIPE CLAMP (FLOOR)
NTS



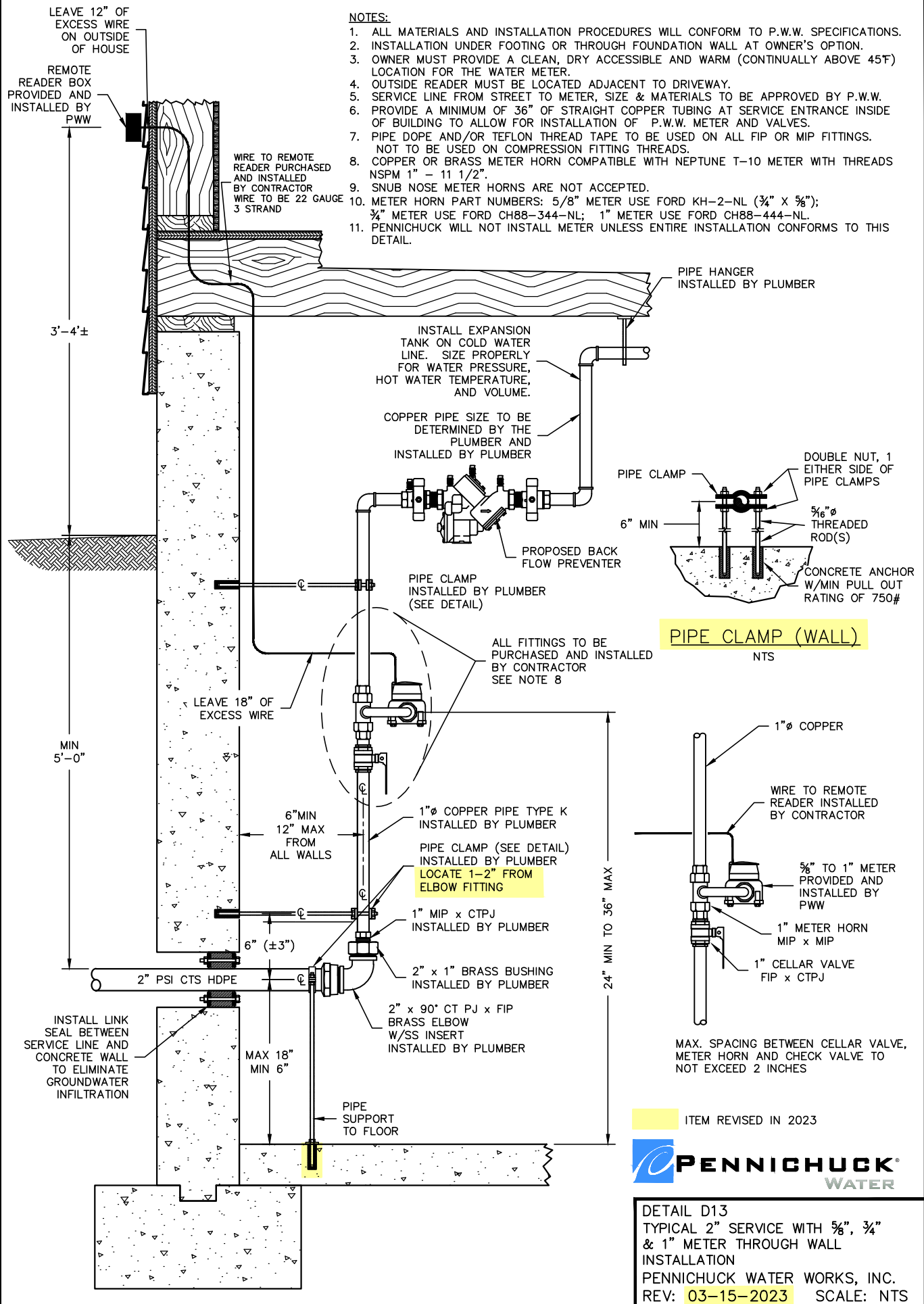
PIPE CLAMP (WALL)
NTS



MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

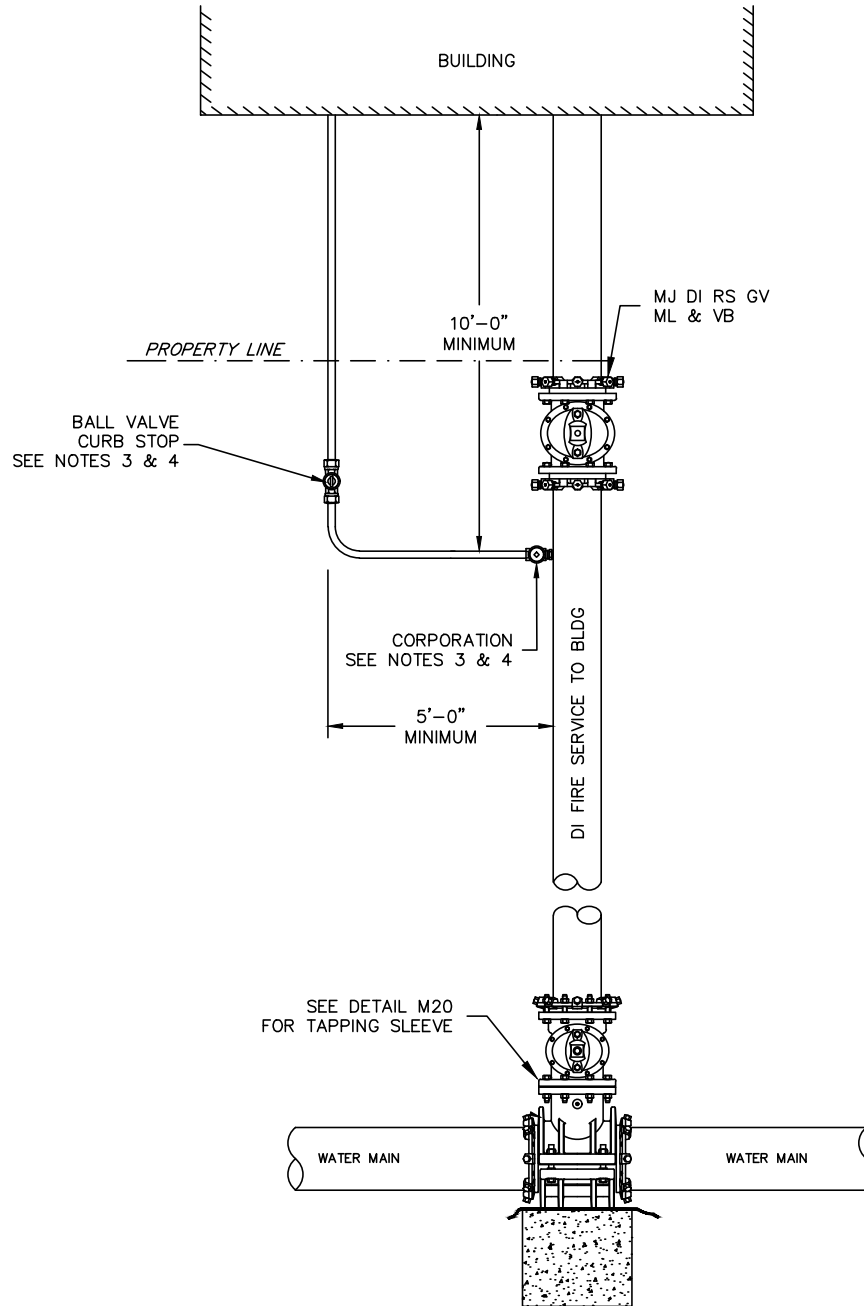
ITEM REVISED IN 2023

DETAIL D12
TYPICAL 2" SERVICE WITH 5/8", 3/4" & 1" METER SERVICE THROUGH FLOOR INSTALLATION
PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS



NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.

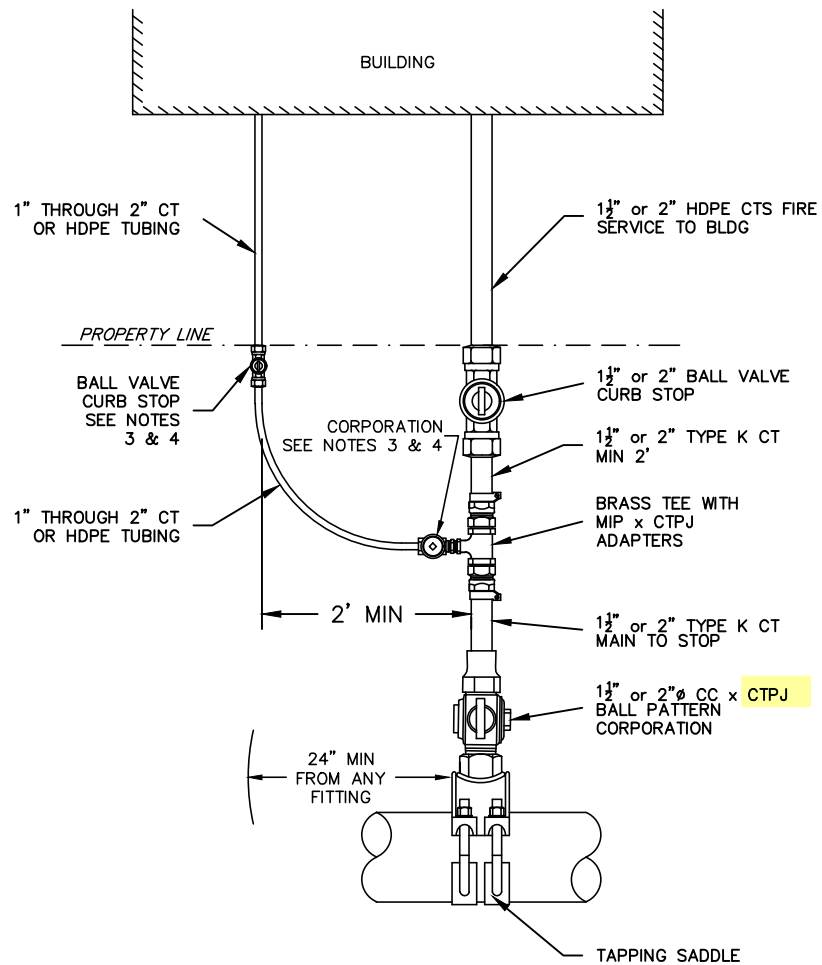


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. SEE DETAIL D01 AND D03 FOR 1" THROUGH 2" SERVICE AND VALVE BOX INSTALLATION DETAIL.
4. SEE DETAIL M01 FOR TYPICAL SERVICE UTILITY SEPARATION ENTRANCE.



DETAIL D15
COMMERCIAL DOMESTIC SERVICE
TAPPED OFF FIRE SERVICE
 PENNICHUCK WATER WORKS, INC.
 REV: 11-1-2021 SCALE: NTS



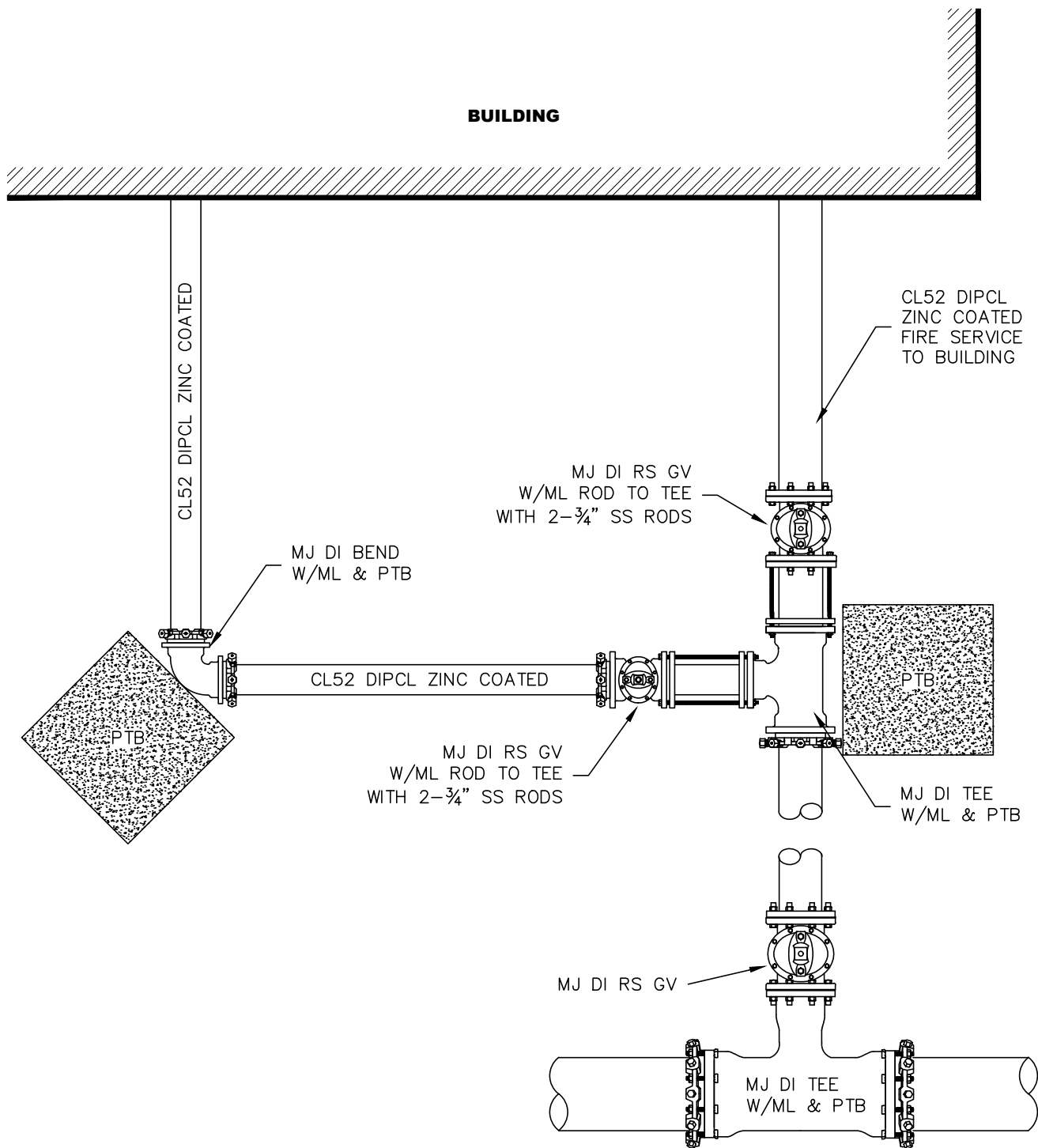
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. INSTALLATION DETAIL. SEE DETAIL D01 FOR 1" THROUGH 2" SIZED SERVICES.
4. SEE DETAIL M01 FOR TYPICAL SERVICE UTILITY SEPARATION ENTRANCE.

ITEM REVISED IN 2023



DETAIL D16
DOMESTIC SERVICE
TAPPED OFF FIRE SERVICE
 PENNICHUCK WATER WORKS, INC.
 REV: 03-15-2023 SCALE: NTS

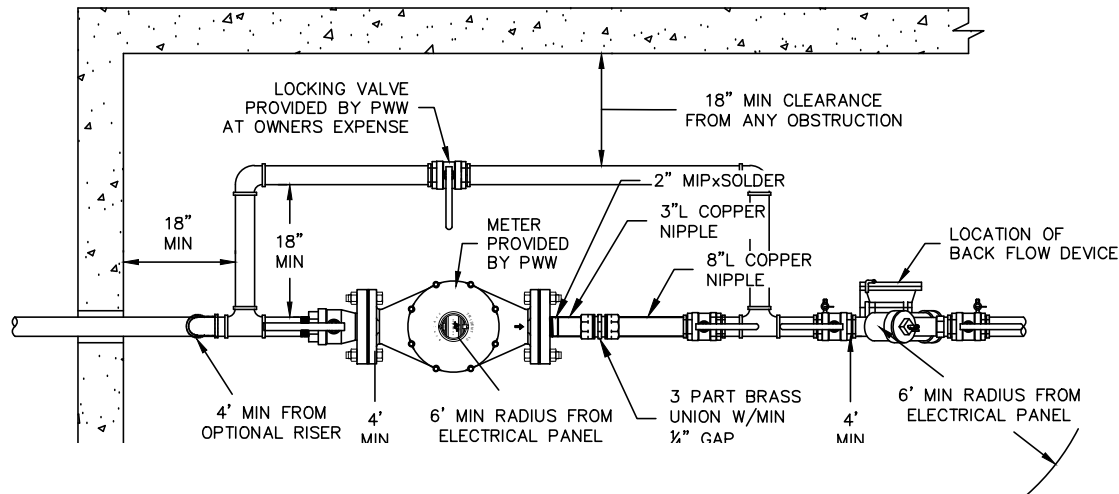


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.

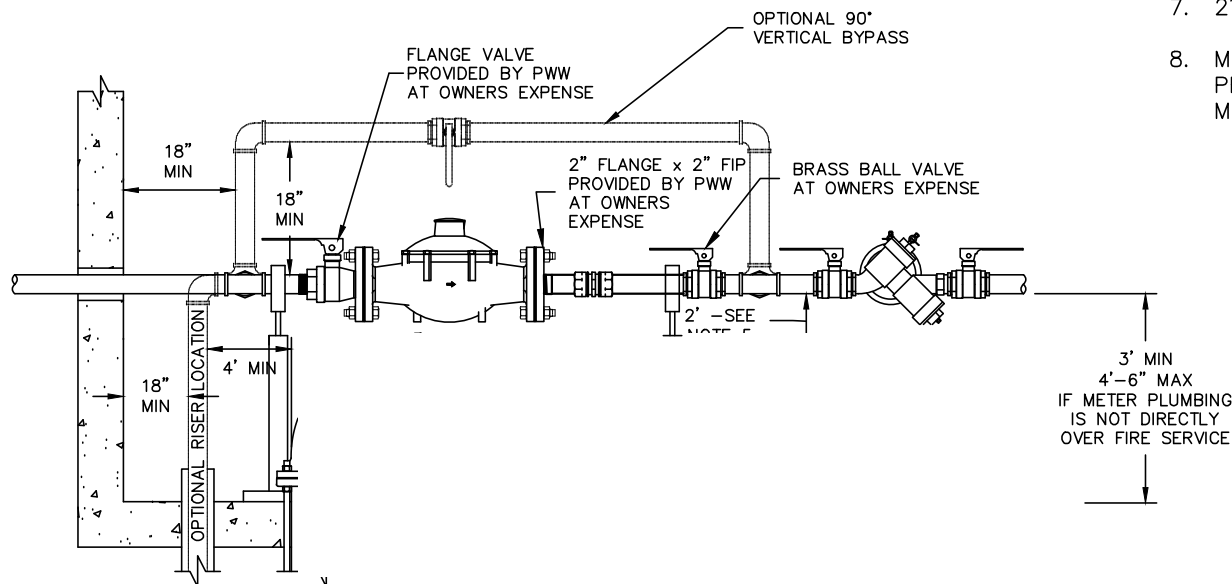


DETAIL D17
TYPICAL COMMERCIAL SERVICE
OFF FIRE SERVICE
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



SEE NOTE 5
FOR OPTIONAL
METER PLUMBING
LOCATION

TOP VIEW



SIDE VIEW

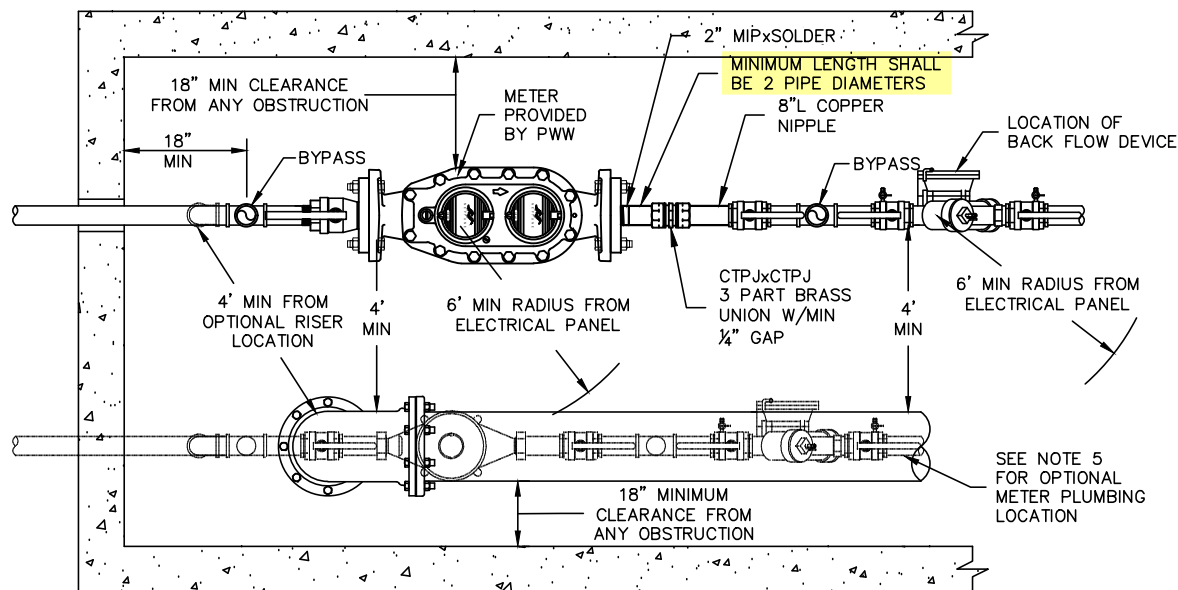
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
3. BACK FLOW PREVENTOR REQUIRED ON ALL FIRE SERVICES. TYPE AND LOCATION SUBJECT TO P.W.W. APPROVAL.
4. ANY ELECTRICAL PANEL MUST MAINTAIN A 6' MINIMUM RADIUS FROM METER AND BACK FLOW.
5. METER PLUMBING MAY BE INSTALLED DIRECTLY OVER THE FIRE SERVICE PROVIDED THAT 2' CLEARANCE IS MAINTAINED AND 4' MINIMUM CLEARANCE FROM ANY OBSTRUCTION IS ALSO MAINTAINED.
6. 1 1/2" METER = 13" LAYING LENGTH.
7. 2" METER = 17" LAYING LENGTH.
8. MIN OF 8-10 PIPE DIAMETERS OF STRAIGHT PIPE PRIOR TO TRU-FLO COMPOUND METER PER MANUFACTURE SPECS.

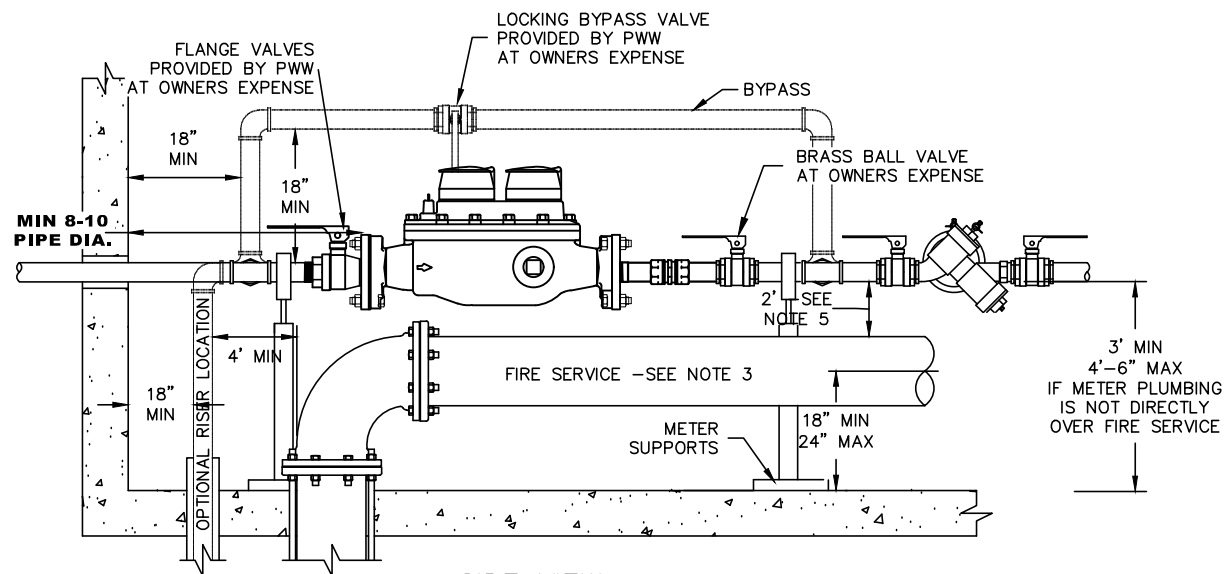


DETAIL D18

DOMESTIC
SERVICE ENTRANCE DETAIL
PENNICHUCK WATER WORKS, INC.
REV: 03-18 SCALE: NTS



TOP VIEW



SIDE VIEW

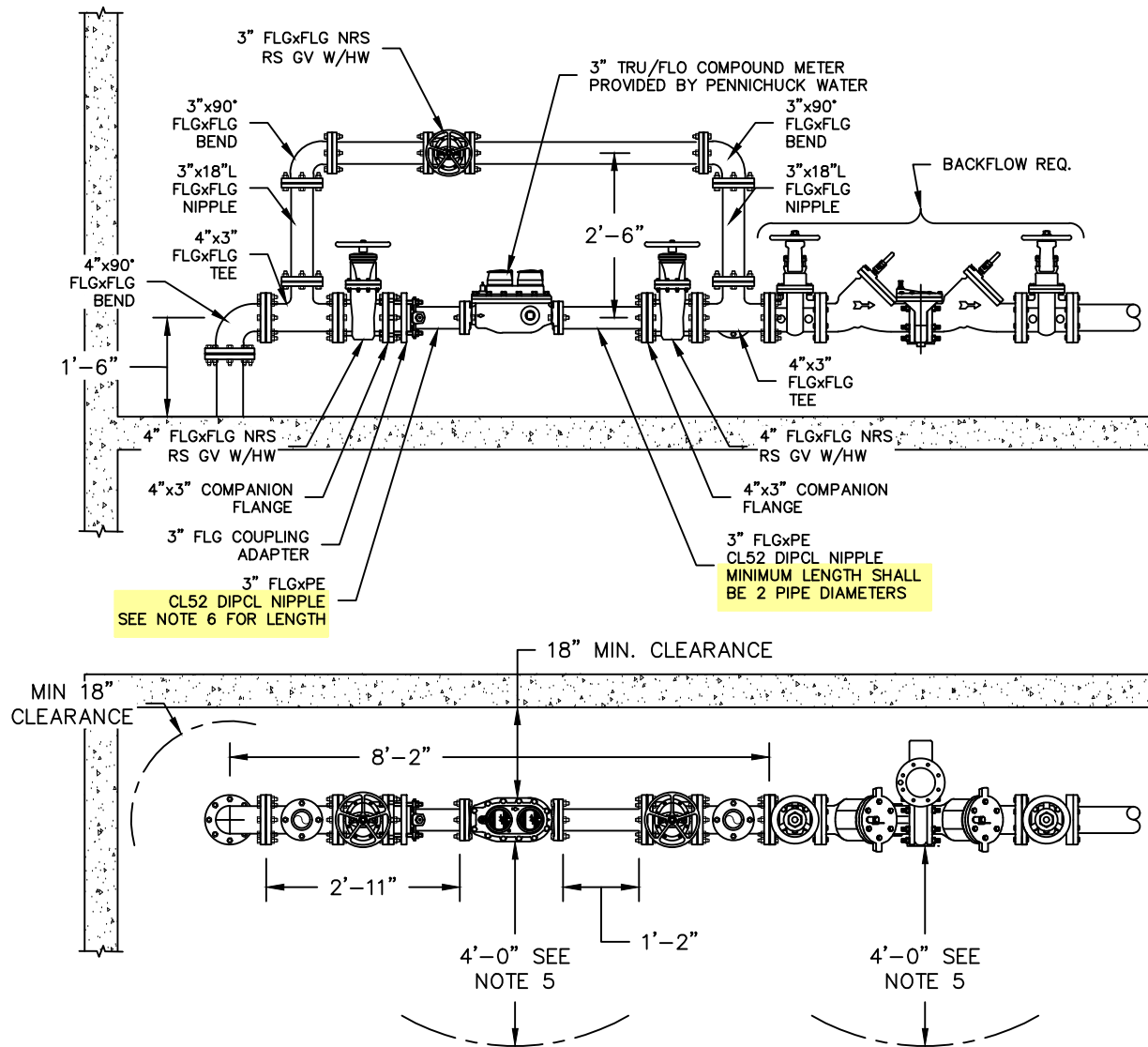
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
3. BACK FLOW PREVENTOR REQUIRED ON ALL FIRE SERVICES. TYPE AND LOCATION SUBJECT TO P.W.W. APPROVAL.
4. ANY ELECTRICAL PANEL MUST MAINTAIN A 6' MINIMUM RADIUS FROM METER AND BACK FLOW.
5. METER PLUMBING MAY BE INSTALLED DIRECTLY OVER THE FIRE SERVICE PROVIDED THAT 2' CLEARANCE IS MAINTAINED AND 4' MINIMUM CLEARANCE FROM ANY OBSTRUCTION IS ALSO MAINTAINED.
6. 2" COMPOUND METER = 15 1/4" LAYING LENGTH.
7. **MIN OF 8-10 PIPE DIAMETERS OF STRAIGHT PIPE PRIOR TO TRU-FLO COMPOUND METER PER MANUFACTURE SPECS.**

ITEM REVISED IN 2023



DETAIL D19
**COMBINED FIRE AND DOMESTIC
 SERVICE ENTRANCE DETAIL**
 PENNICHUCK WATER WORKS, INC.
 REV: 03-15-2023 SCALE: NTS



NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
3. BACK FLOW PREVENTOR REQUIRED ON ALL FIRE SERVICES. TYPE AND LOCATION SUBJECT TO P.W.W. APPROVAL.
4. ANY ELECTRICAL PANEL MUST MAINTAIN A 6' MINIMUM RADIUS FROM METER AND BACK FLOW.
5. METER PLUMBING MAY BE INSTALLED DIRECTLY OVER THE FIRE SERVICE PROVIDED THAT 2' CLEARANCE IS MAINTAINED AND 4' MINIMUM CLEARANCE FROM ANY OBSTRUCTION IS ALSO MAINTAINED.
6. **MIN OF 8-10 PIPE DIAMETERS OF STRAIGHT PIPE PRIOR TO TRU-FLO COMPOUND METER PER MANUFACTURE SPECS.**

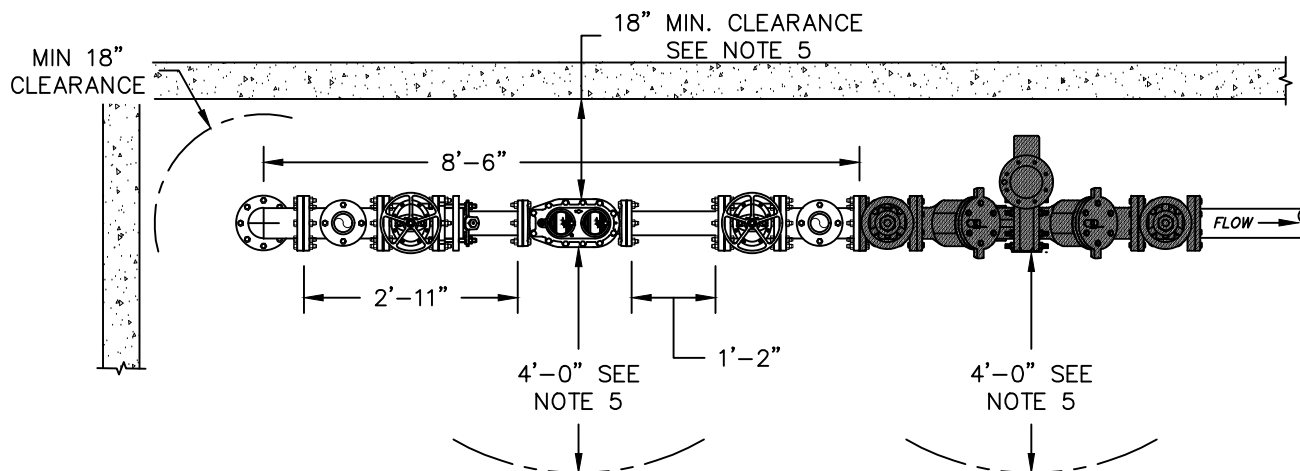
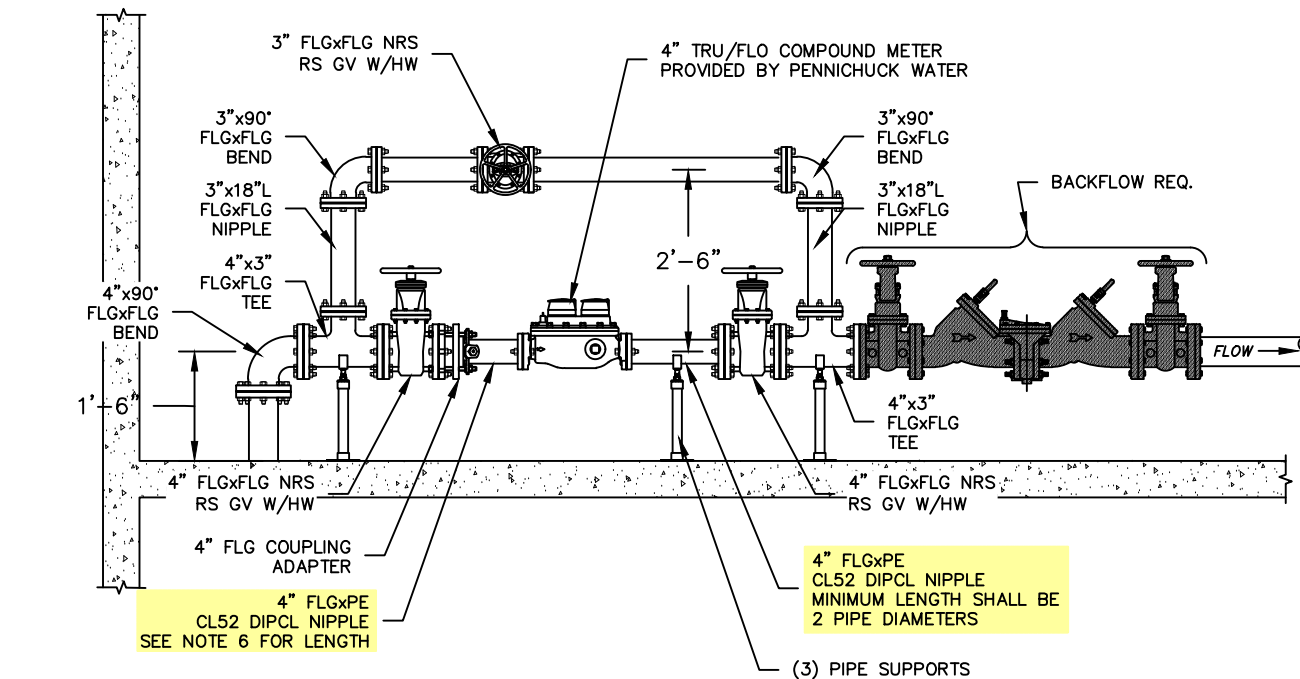
ITEM REVISED IN 2023



DETAIL D20

3" METER DETAIL

PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS



NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
3. BACK FLOW PREVENTOR REQUIRED ON ALL FIRE SERVICES. TYPE AND LOCATION SUBJECT TO P.W.W. APPROVAL.
4. ANY ELECTRICAL PANEL MUST MAINTAIN A 6' MINIMUM RADIUS FROM METER AND BACK FLOW.
5. METER PLUMBING MAY BE INSTALLED DIRECTLY OVER THE FIRE SERVICE PROVIDED THAT 2' CLEARANCE IS MAINTAINED AND 4' MINIMUM CLEARANCE FROM ANY OBSTRUCTION IS ALSO MAINTAINED.
6. **MIN OF 8-10 PIPE DIAMETERS OF STRAIGHT PIPE PRIOR TO TRU-FLO COMPOUND METER PER MANUFACTURE SPECS.**

ITEM REVISED IN 2023

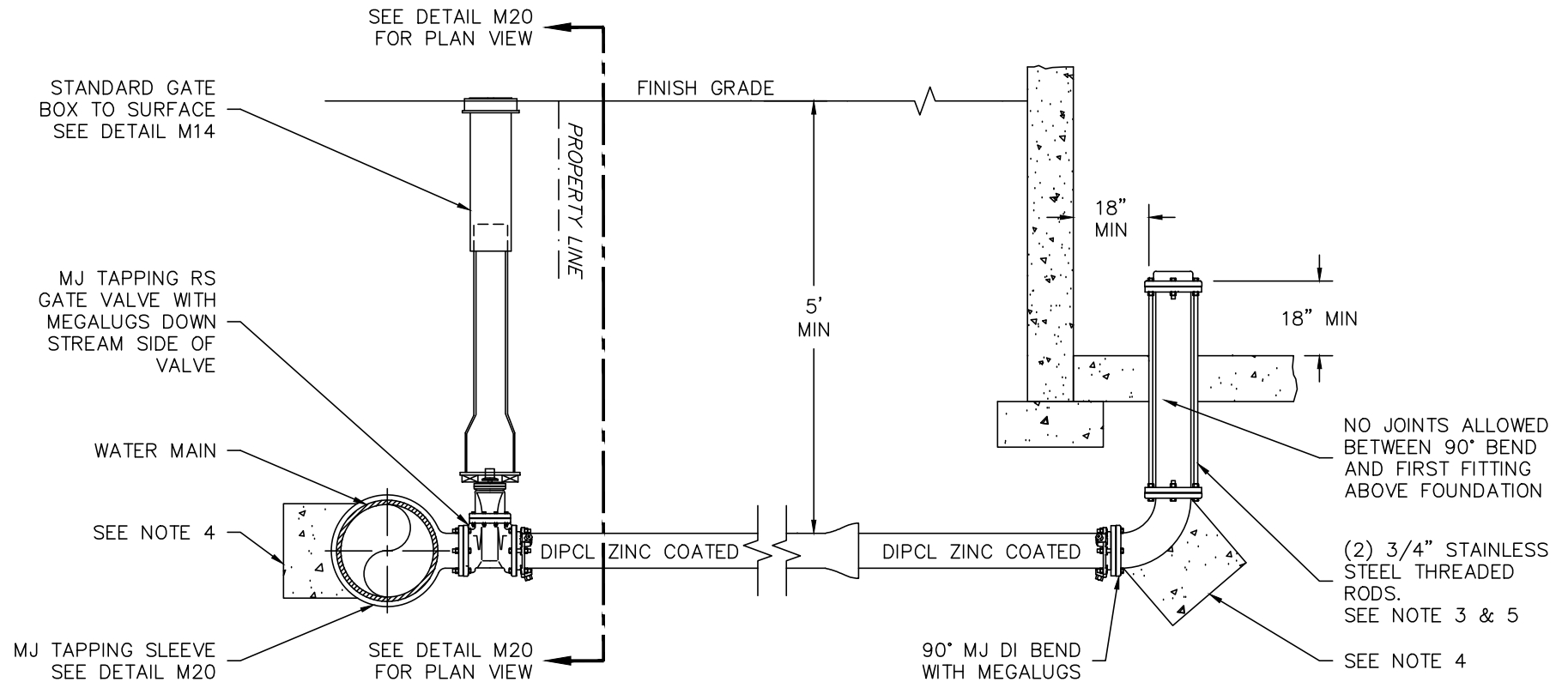


DETAIL D21

4" METER DETAIL

PENNICHUCK WATER WORKS, INC.

REV: 03-15-2023 SCALE: NTS

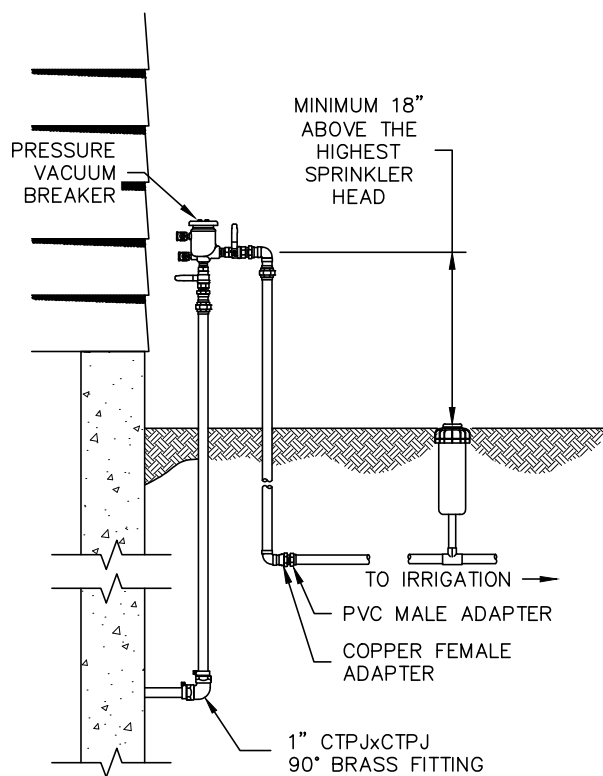


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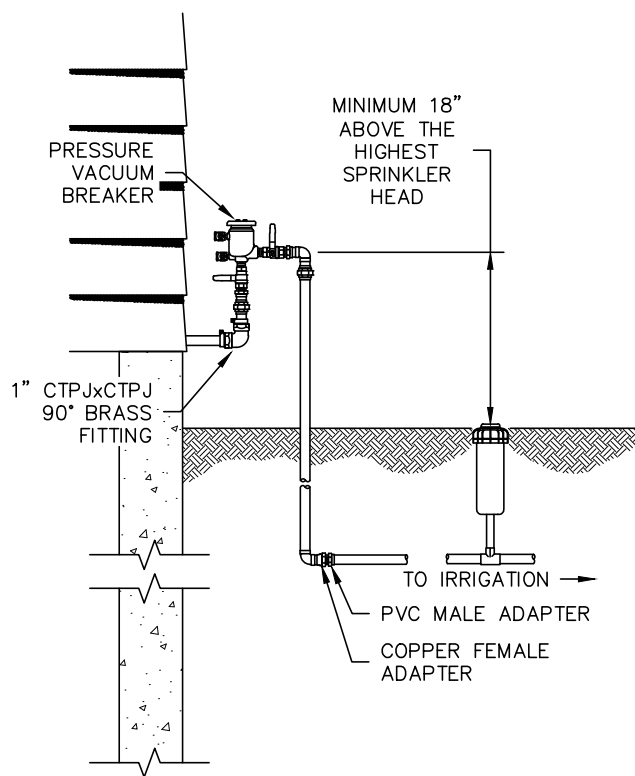
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. PER SPECIFICATION SECTION 01600.C.16.F
10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOC. HARDWARE.
12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOC. HARDWARE.
4. MIN 2'x2'x3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL M10.
5. ALL MECHANICAL JOINT FITTINGS SEPARATED BY PIPE LENGTH OF 10 FEET OR LESS MUST BE RODDED PER PWW TECHNICAL SPECIFICATION SECTION 01600E.2.F



DETAIL F01
TYPICAL FIRE SERVICE
INSTALLATION DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 11-1-2021 SCALE: NTS



OPTION "A"
THROUGH FOUNDATION WALL

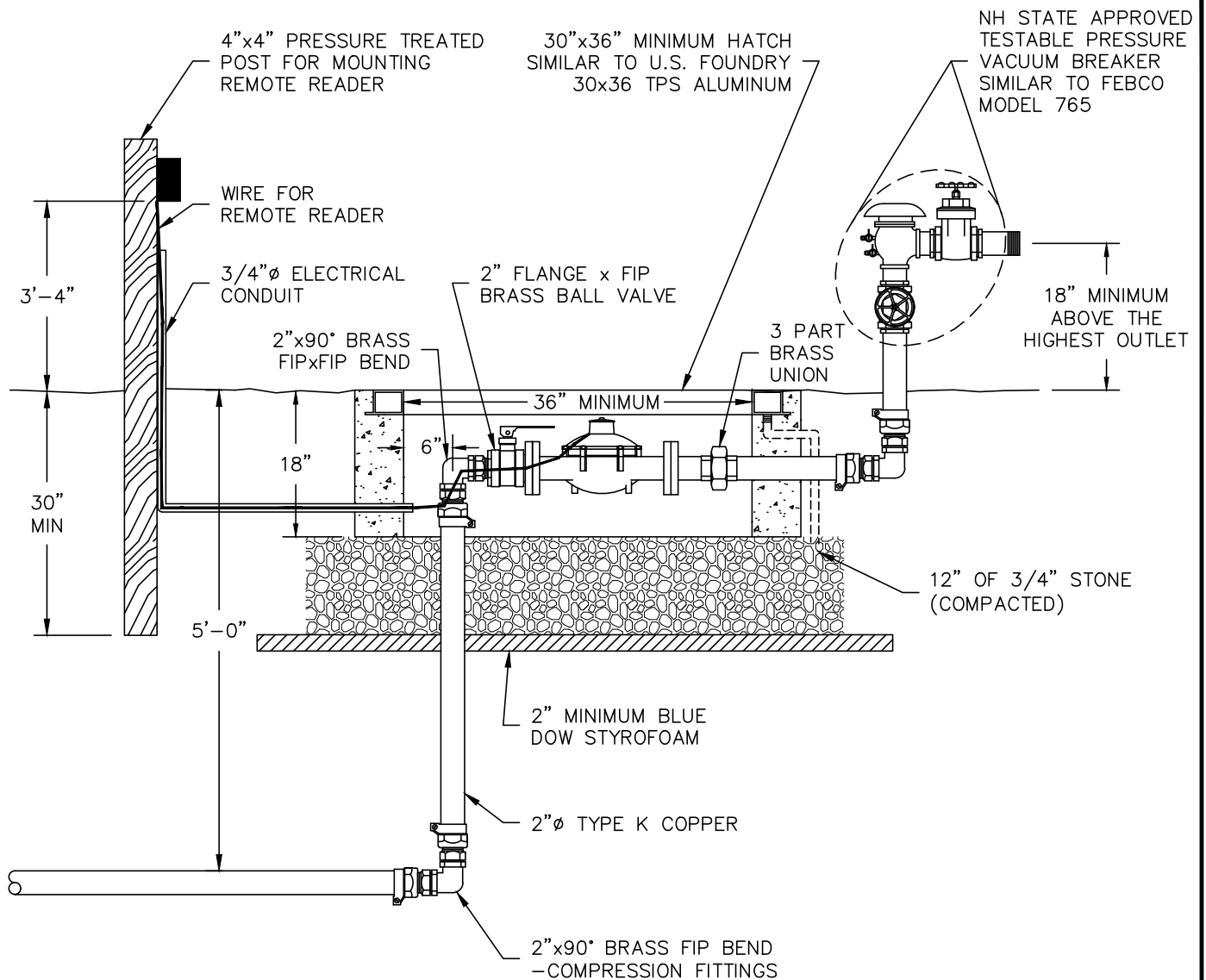


OPTION "B"
THROUGH HOUSE WALL



DETAIL L01
1" IRRIGATION SETUP OPTIONS

PENNICHUCK WATER WORKS, INC.
REV: 03-18 SCALE: NTS

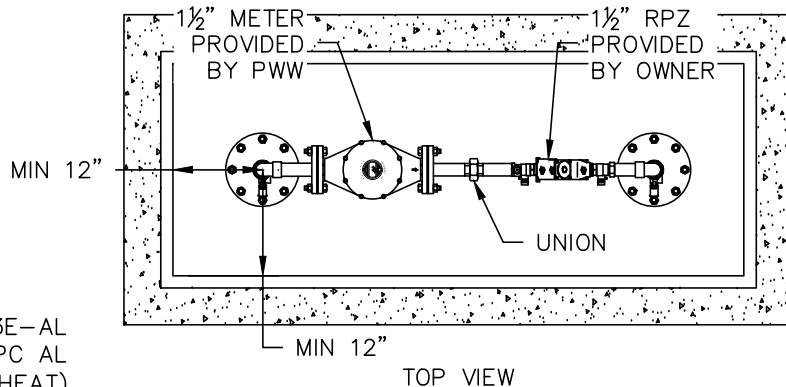


NOTES:

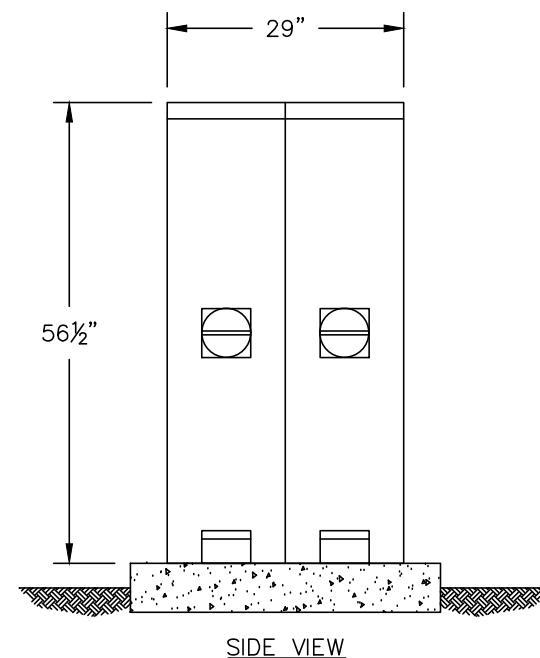
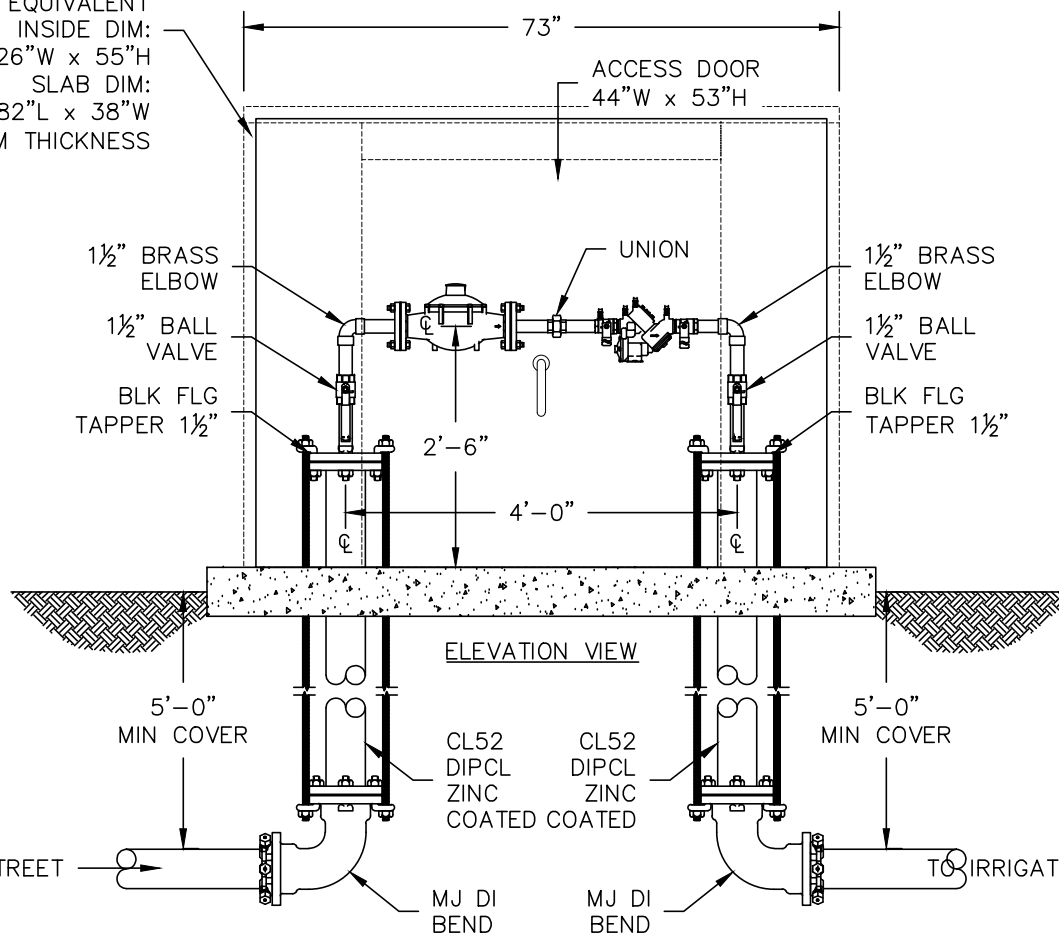
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
4. METER WIRE TO BE 22 AWG 3-STRAND (BLACK/RED/GREEN COLOR CODE) SOLID CORE CABLE AVAILABLE FROM:
ACT SERVICES, INC.
916 PLEASANT STREET
SUITE 3A
NORWOOD, MA 02062
TEL. (781) 255-0978



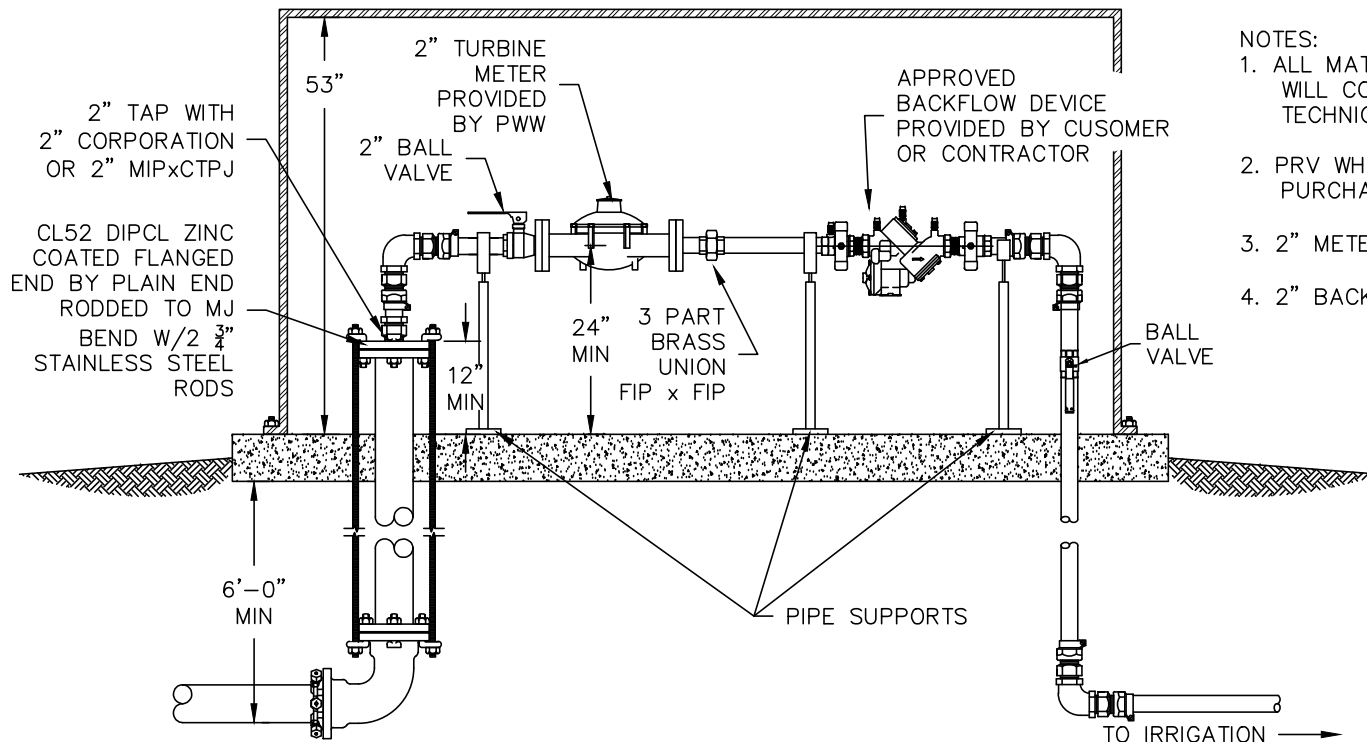
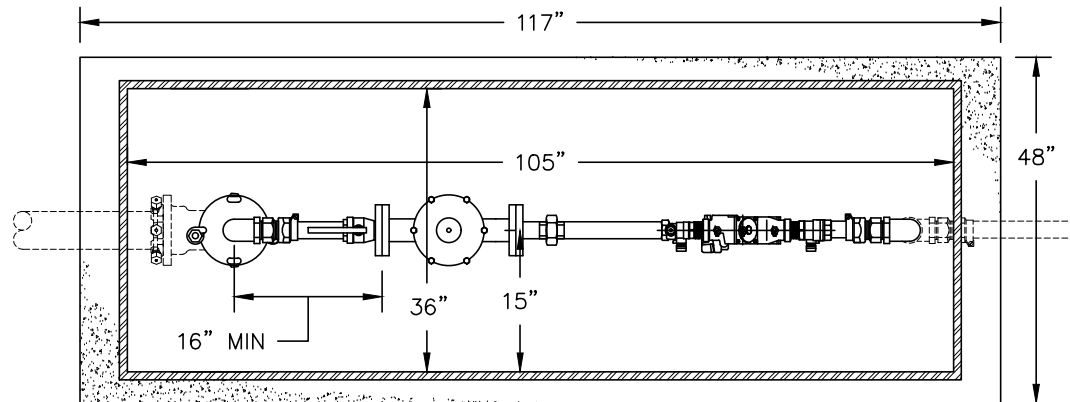
DETAIL L02
 TYPICAL SHALLOW 2" IRRIGATION
 METER PIT DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



HOT BOX® MODEL LB3E-AL
(STANDARD 2-PC AL
ENCLOSURE NO HEAT)
or EQUIVALENT
INSIDE DIM:
70"L x 26"W x 55"H
SLAB DIM:
82"L x 38"W
4" MINIMUM THICKNESS



DETAIL L03
TYPICAL 1 1/2" ABOVE GROUND
IRRIGATION METER VAULT
PENNICHUCK WATER WORKS, INC.
REV: 03-18 SCALE: NTS

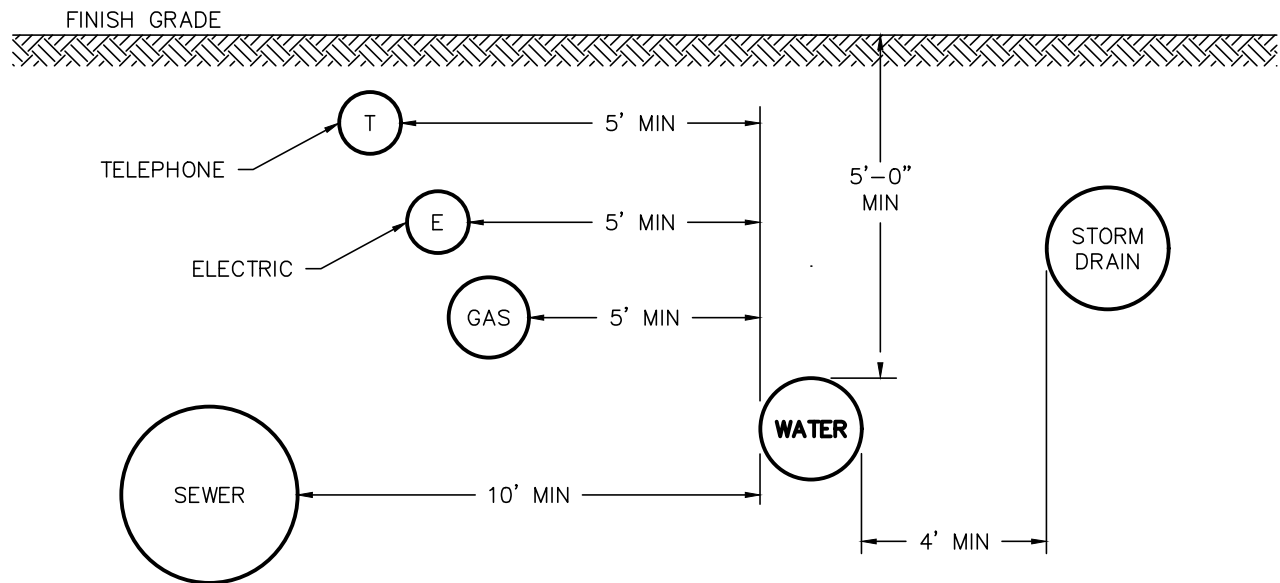


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
3. 2" METER = 17" LAYING LENGTH.
4. 2" BACKFLOW = 20" LAYING LENGTH. (APPROX)



DETAIL L04
2" ABOVE GROUND IRRIGATION
TYPICAL DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

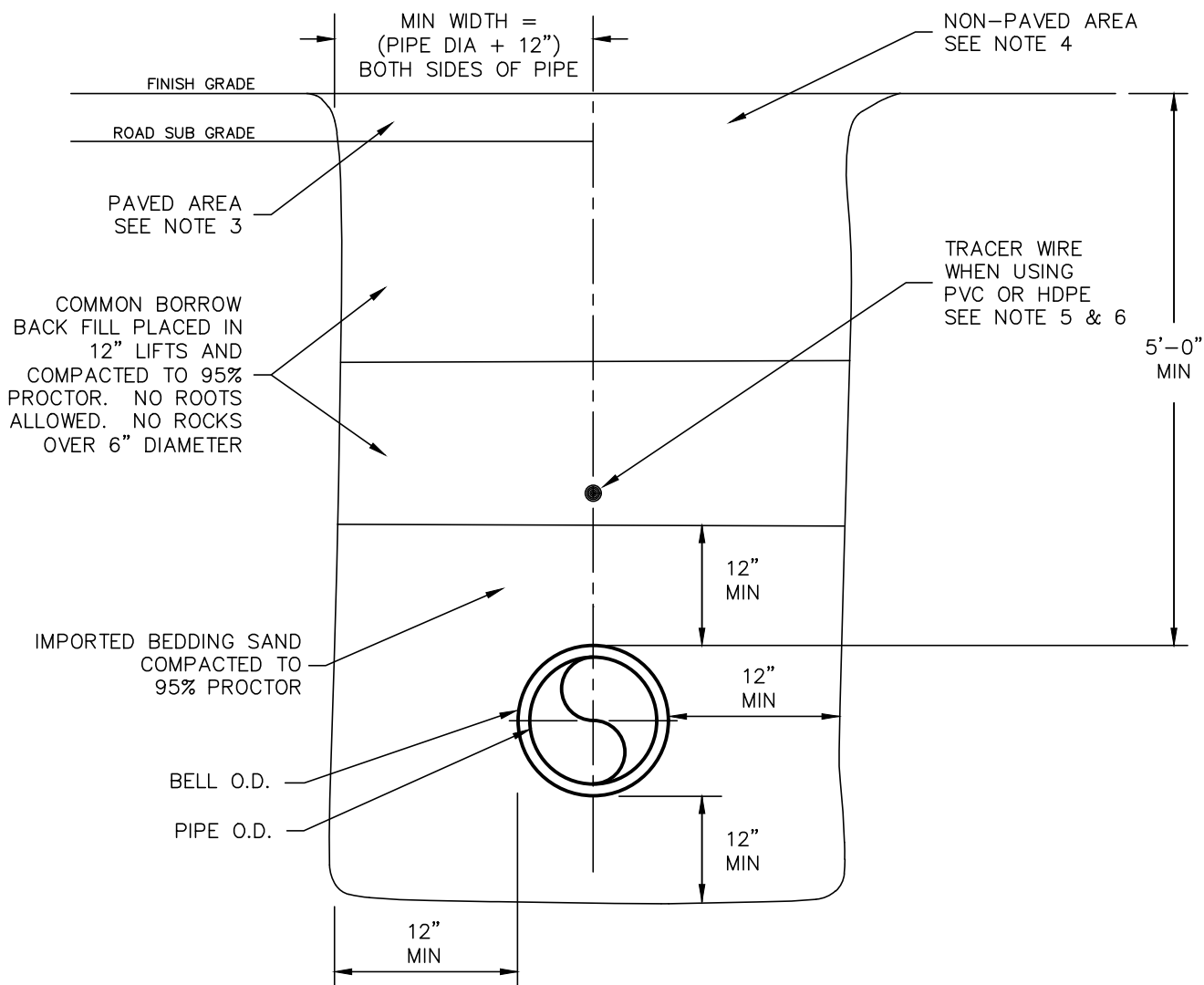


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL WATER MAIN SHOULD HAVE A MINIMUM DEPTH OF 5'-0" OF COVER TO FINISH GRADE.
3. SEE DETAIL M02 FOR TRENCH DETAIL.



DETAIL M01
TYPICAL UTILITY SEPARATION
(MAIN) DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



NOTES:

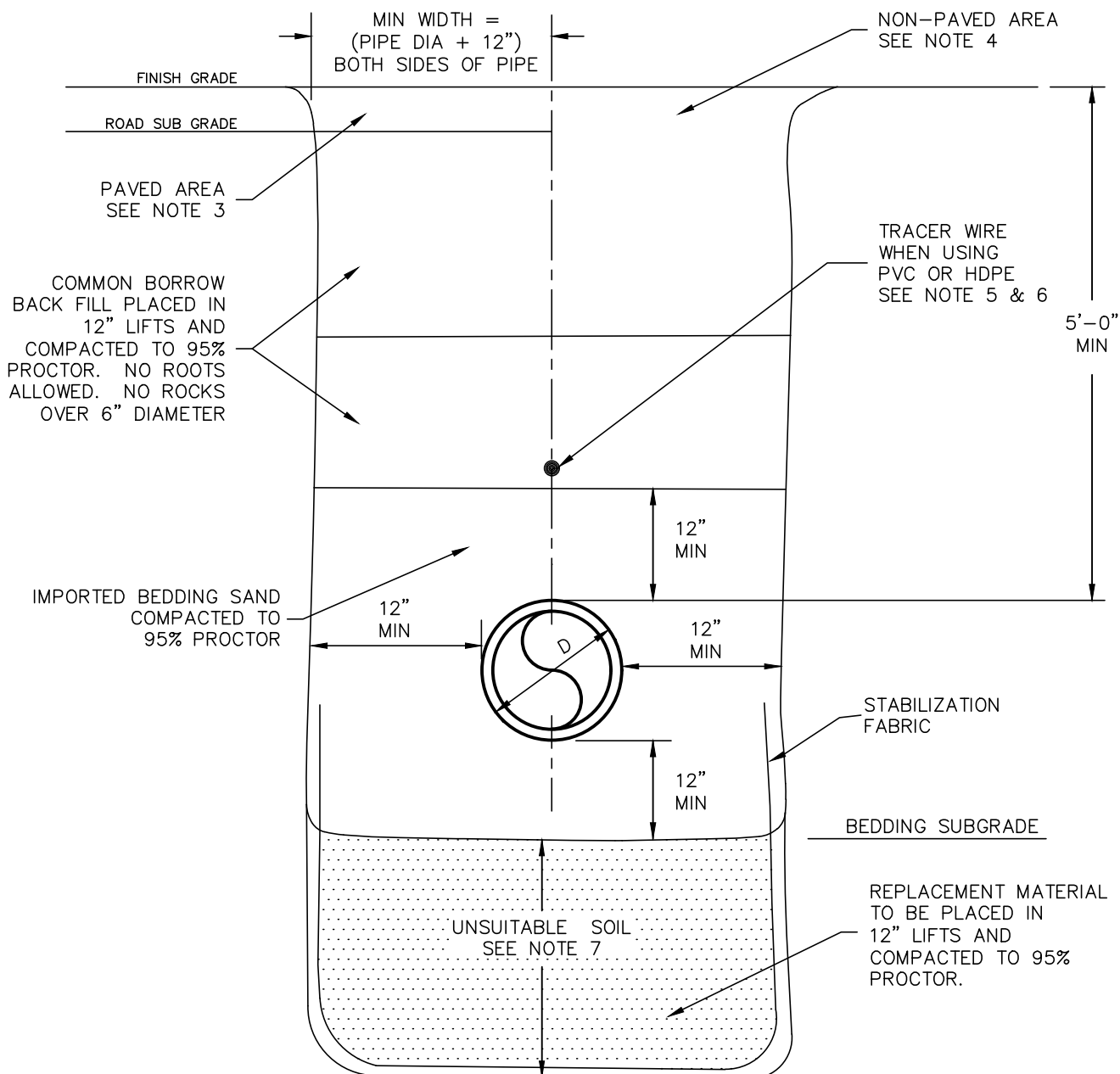
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
3. REQUIREMENTS FOR SUBBASE AND BASE MATERIAL TYPE ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN PAVED AREAS.
4. REQUIREMENTS FOR GRAVEL, LOAM AND/OR SEED ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN NON-PAVED AREAS.
5. USE 10-GAUGE SOLID-CORE COATED TRACER WIRE PER P.W.W. TECHNICAL SPECIFICATIONS.
6. INSTALL 3" WIDE BLUE UNDERGROUND WARNING TAPE.



DETAIL M02.1

TYPICAL TRENCH DETAIL

PENNICHUCK WATER WORKS, INC.
REV: 11-1-2021 SCALE: NTS



NOTES:

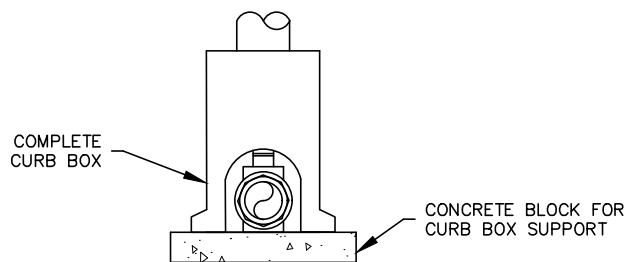
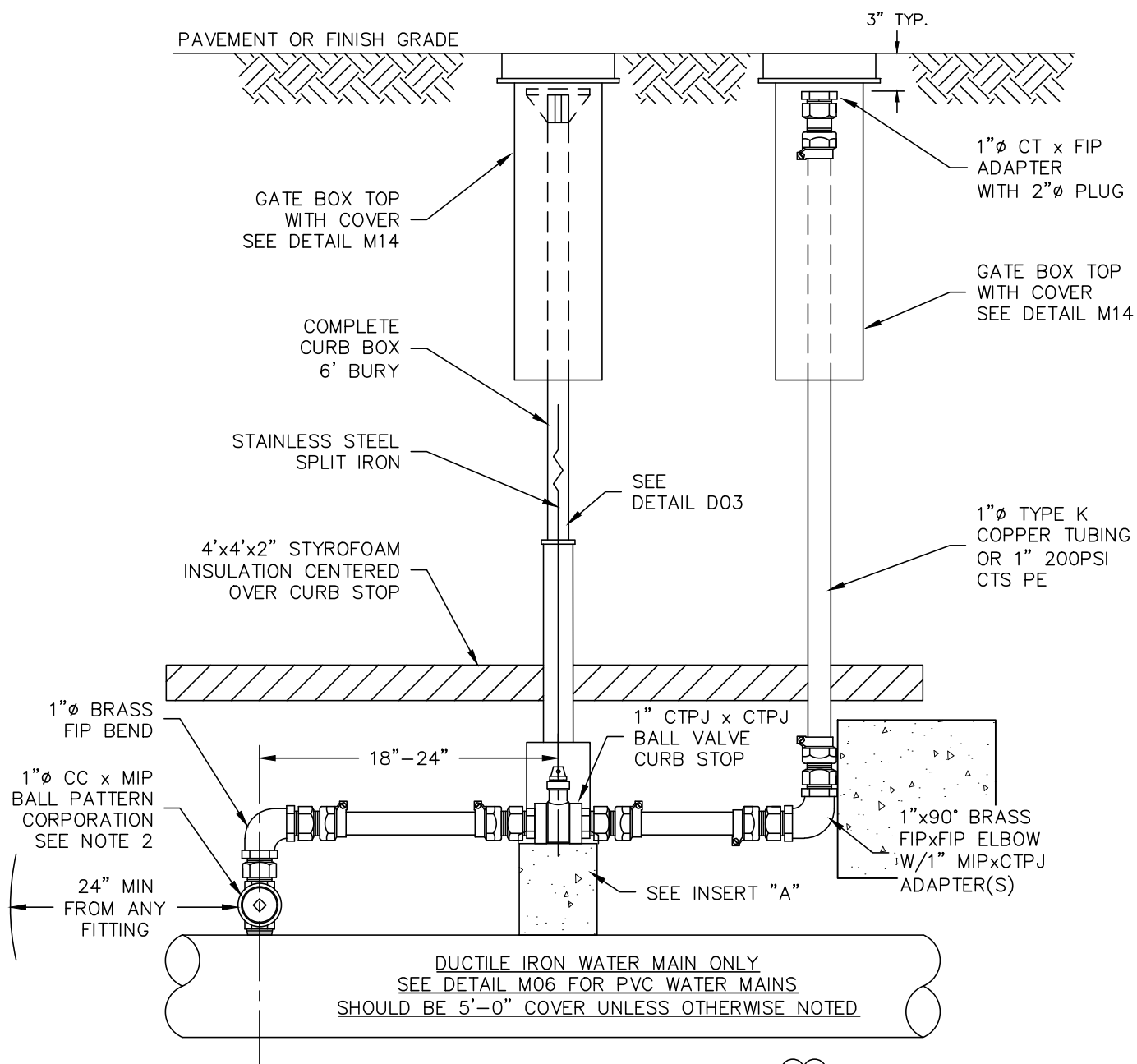
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS. PENNICHUCK FIELD REPRESENTATIVE SHALL DETERMINE LIMITS OF UNSUITABLE SOILS AND MATERIAL TYPE FOR REPLACEMENT.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
3. REQUIREMENTS FOR SUBBASE AND BASE MATERIAL TYPE ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN PAVED AREAS.
4. REQUIREMENTS FOR GRAVEL, LOAM AND/OR SEED ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN NON-PAVED AREAS.
5. USE 10-GAUGE SOLID-CORE COATED TRACER WIRE PER P.W.W. TECHNICAL SPECIFICATIONS.
6. INSTALL 3" WIDE BLUE UNDERGROUND WARNING TAPE.
7. REPLACEMENT MATERIALS FOR UNSUITABLE SOILS ABOVE BEDDING SUBGRADE AND BELOW THE ROAD GRAVELS, SHALL BE EITHER THE BEDDING SAND OR CLEAN COMMON BORROW AS DETAILED.
8. REPLACEMENT MATERIALS FOR UNSUITABLE SOILS BELOW BEDDING SUBGRADE SHALL BE EITHER 1 1/2" CRUSHED STONE OR NHDOT 304.2 GRAVEL, AS DETERMINED BY PWW.



DETAIL M02.2

TYPICAL TRENCH DETAIL
UNSUITABLE SOILS

PENNICHUCK WATER WORKS, INC.
REV: 11-1-2021 SCALE: NTS



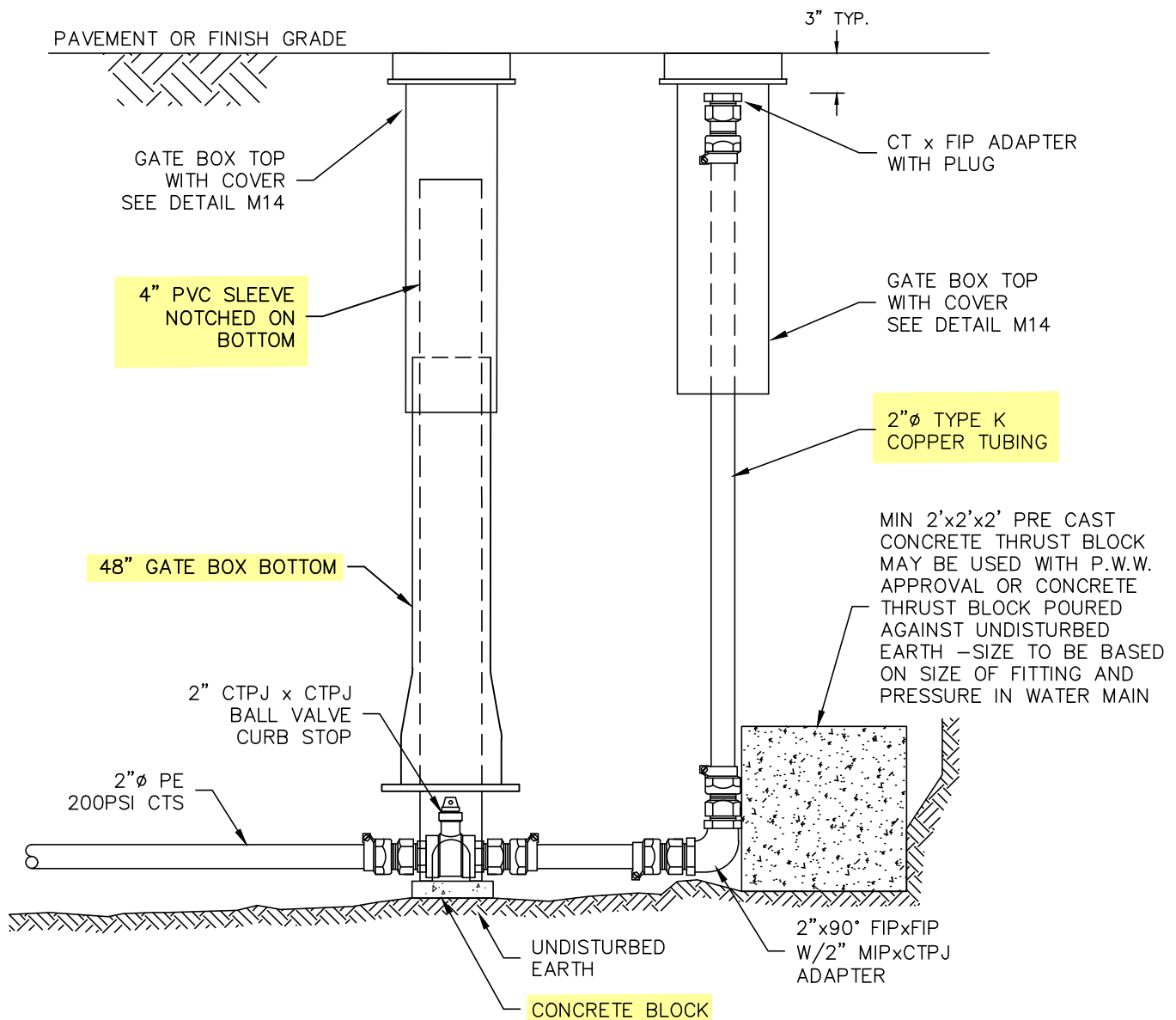
INSERT "A"

NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. WATER MAIN MAY BE DIRECT TAPPED WHEN IT IS 6" OR LARGER DUCTILE IRON.
3. SEE DETAIL M06 FOR INSTALLATION ON PVC WATER MAINS.



DETAIL M03
TYPICAL 1" RELEASE VALVE
INSTALLATION ON DUCTILE IRON
 PENNICHUCK WATER WORKS, INC.
 REV: 11-1-2021 SCALE: NTS



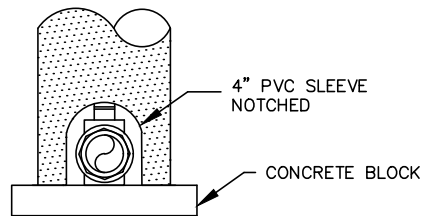
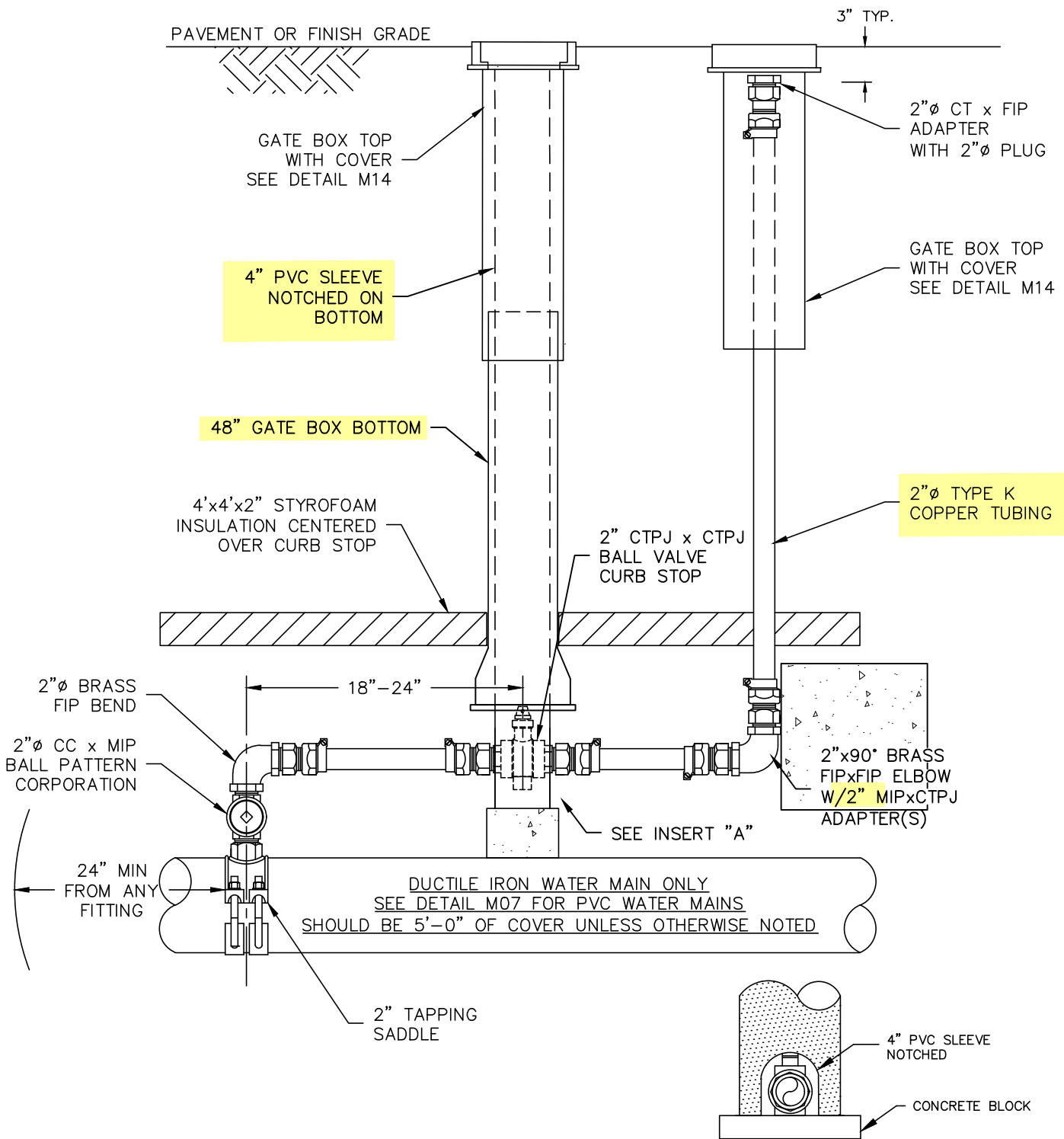
ITEM REVISED IN 2023

NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.



DETAIL M04
TYPICAL 2" RELEASE VALVE
INSTALLATION ON END OF 2" MAIN
PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS



INSERT "A"

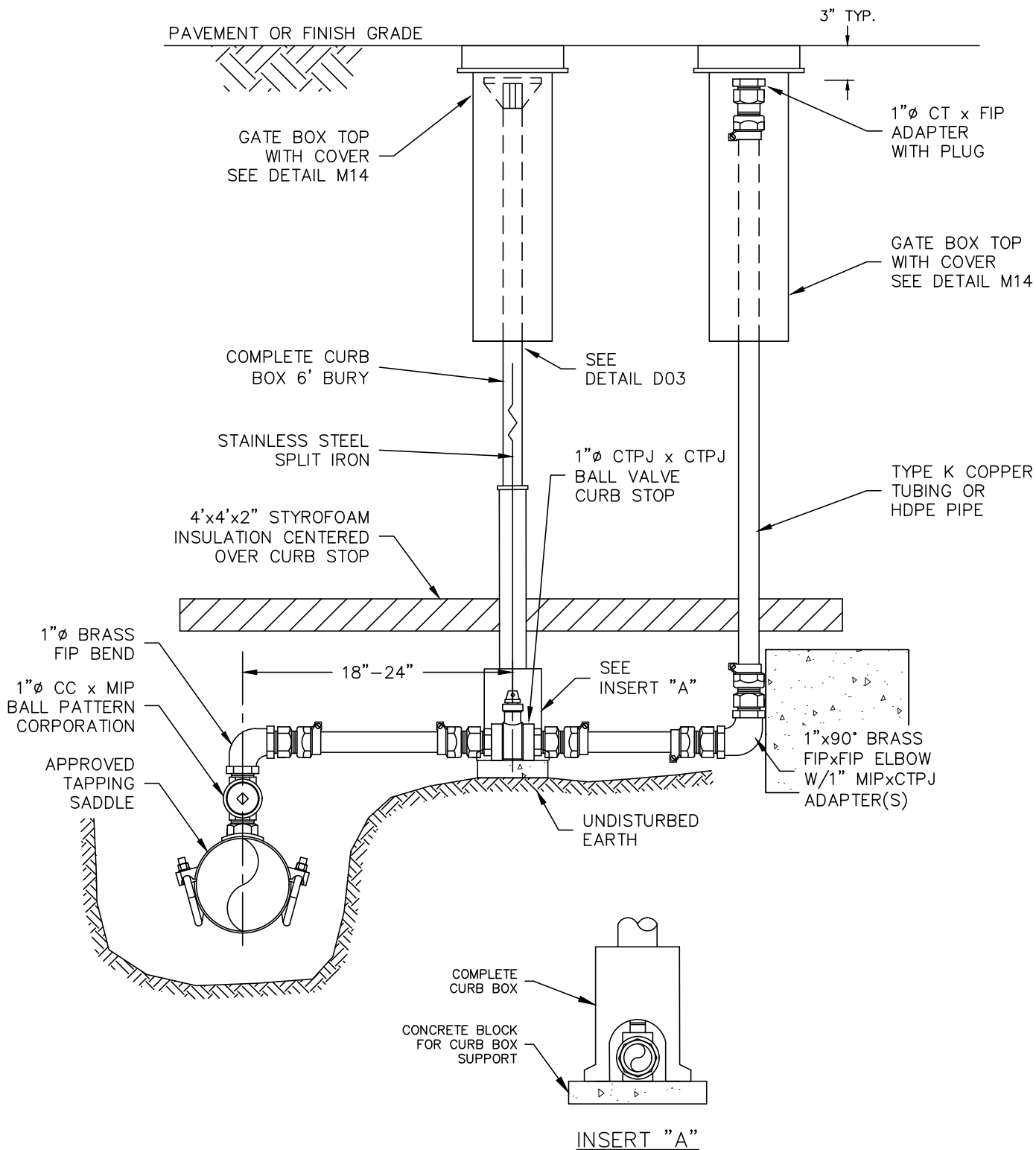
ITEM REVISED IN 2023



DETAIL M05
TYPICAL 2" RELEASE VALVE
INSTALLATION ON DUCTILE IRON
 PENNICHUCK WATER WORKS, INC.
 REV: 03-15-2023 SCALE: NTS

NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. WATER MAIN MAY BE DIRECT TAPPED WHEN IT IS 16" OR LARGER DUCTILE IRON.
3. SEE DETAIL M07 FOR INSTALLATION ON PVC WATER MAINS.

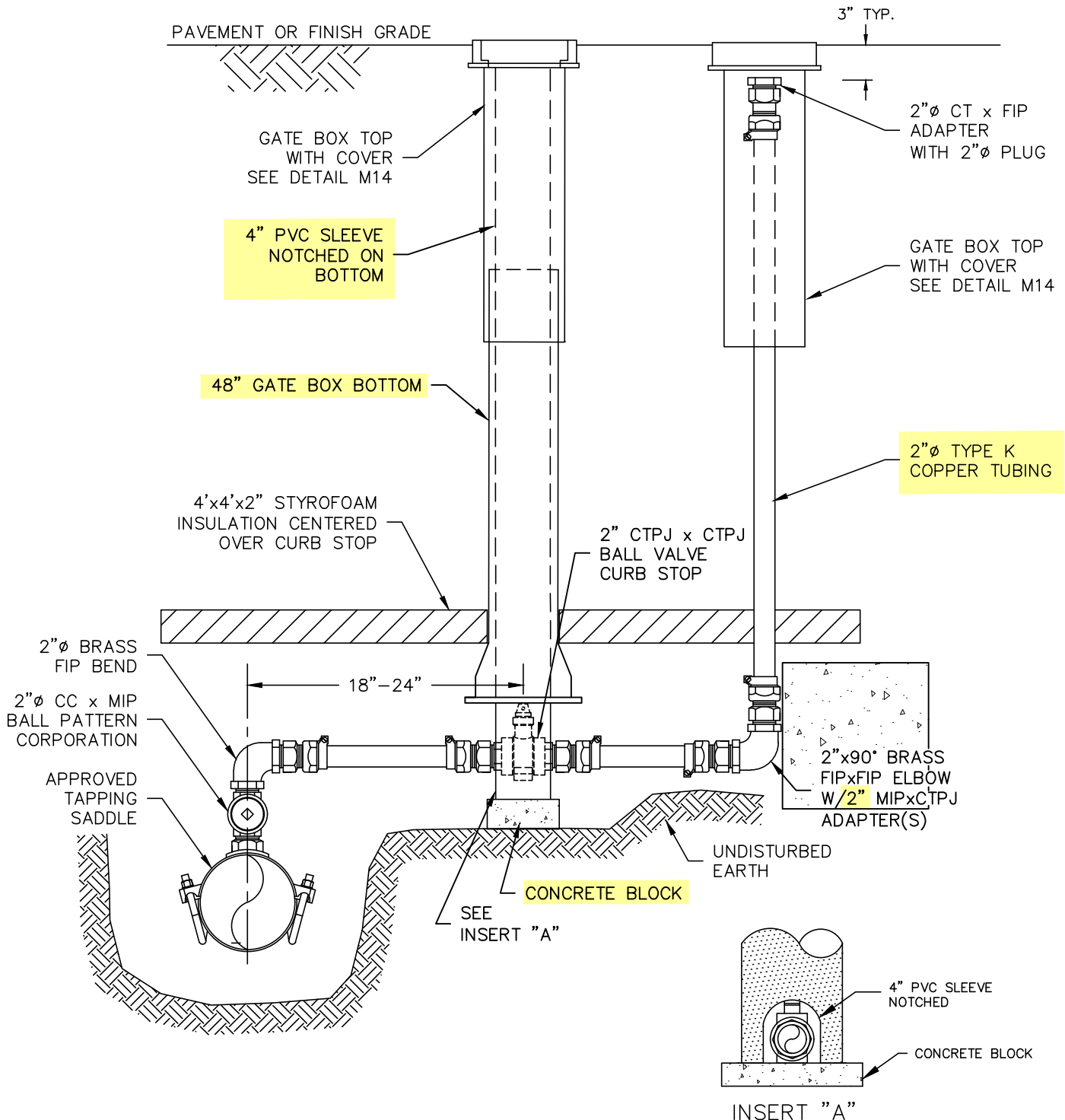


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.



DETAIL M06
 TYPICAL 1" RELEASE VALVE
 INSTALLATION ON PVC
 PENNICHUCK WATER WORKS, INC.
 REV: 11-1-2021 SCALE: NTS



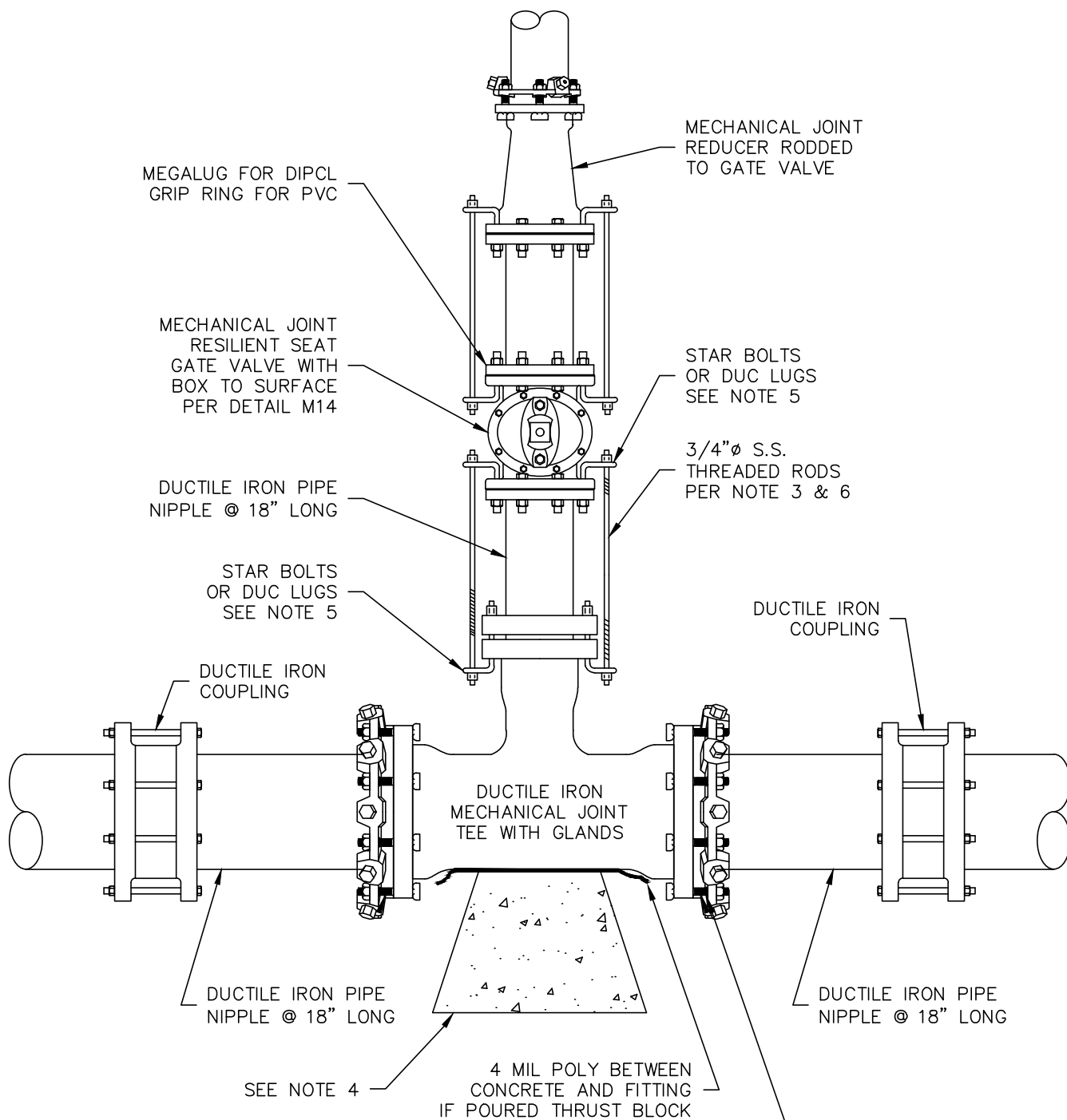
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.

ITEM REVISED IN 2023



DETAIL M07
TYPICAL 2" RELEASE VALVE
INSTALLATION ON PVC
 PENNICHUCK WATER WORKS, INC.
 REV: 03-15-2023 SCALE: NTS



NOTES:

1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4" ϕ S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS.
10" FITTING OR SMALLER = (2) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
12" FITTING OR LARGER = (4) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
4. MIN 2'x2'x3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL M10.
5. SEE PWV TECHNICAL SPECIFICATION SECTION 01600.C.16.F
6. ALL MECHANICAL JOINT FITTINGS SEPARATED BY PIPE LENGTH OF 10 FEET OR LESS MUST BE RODDED PER PWV TECHNICAL SPECIFICATION SECTION 01600E.2.F IF SEPARATION IS MORE THAN 10 FEET SUBSTITUTE MEGALUGS (OR GRIP RINGS) IN LIEU OF THREADED RODS.



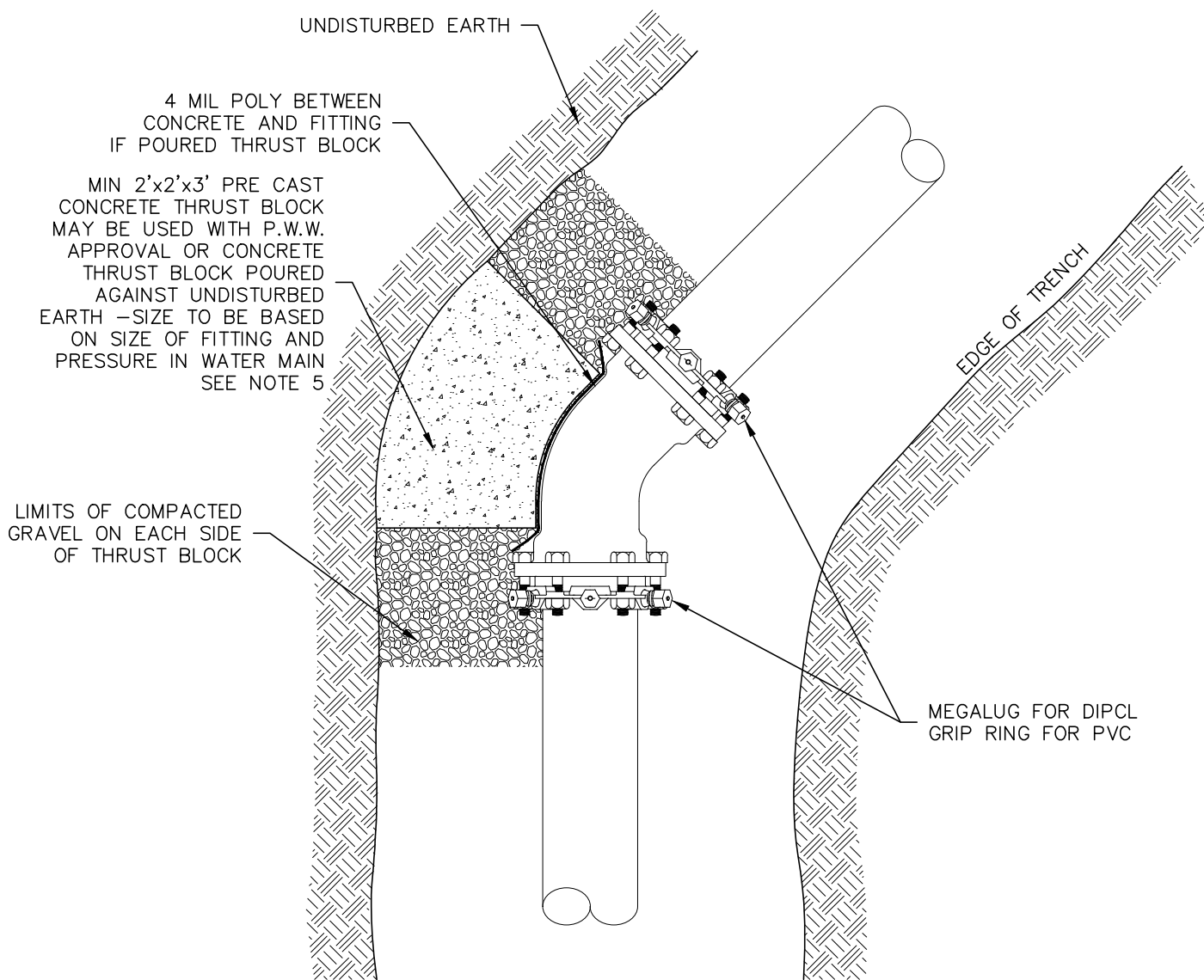
DETAIL M09

TYPICAL TEE INSTALLATION
ON EXISTING MAIN

PENNICHUCK WATER WORKS, INC.

REV: 11-1-2021

SCALE: NTS



NOTES:

1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4" ϕ S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS PER SPECIFICATION SECTION 01600C.16.F
10" FITTING OR SMALLER = (2) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
12" FITTING OR LARGER = (4) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
4. MIN 2'x2'x3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN.
5. VOID BETWEEN PRECAST THRUST BLOCK AND VIRGIN SOIL TO BE FILLED AND CHINKED WITH STONE
6. ALL MECHANICAL JOINT FITTINGS SEPARATED BY PIPE LENGTH OF 10 FEET OR LESS MUST BE RODDED PER PW.W. TECHNICAL SPECIFICATION SECTION 01600E.2.F IF SEPARATION IS MORE THAN 10 FEET SUBSTITUTE MEGALUGS (OR GRIP RINGS) IN LIEU OF THREADED RODS.



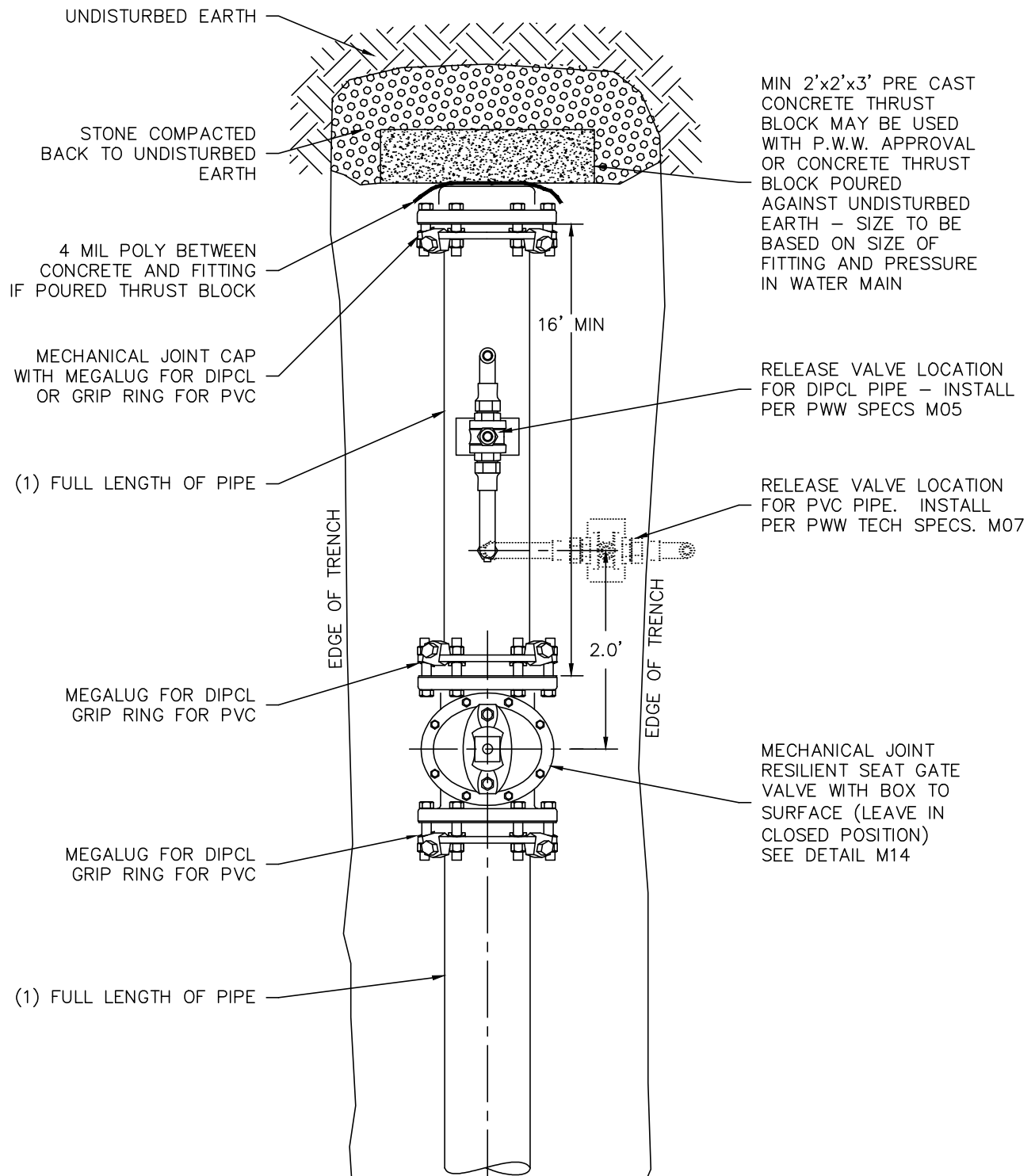
DETAIL M10

*TYPICAL THRUST BLOCK BEHIND
FITTINGS INSTALLATION*

PENNICHUCK WATER WORKS, INC.

REV: 11-1-2021

SCALE: NTS

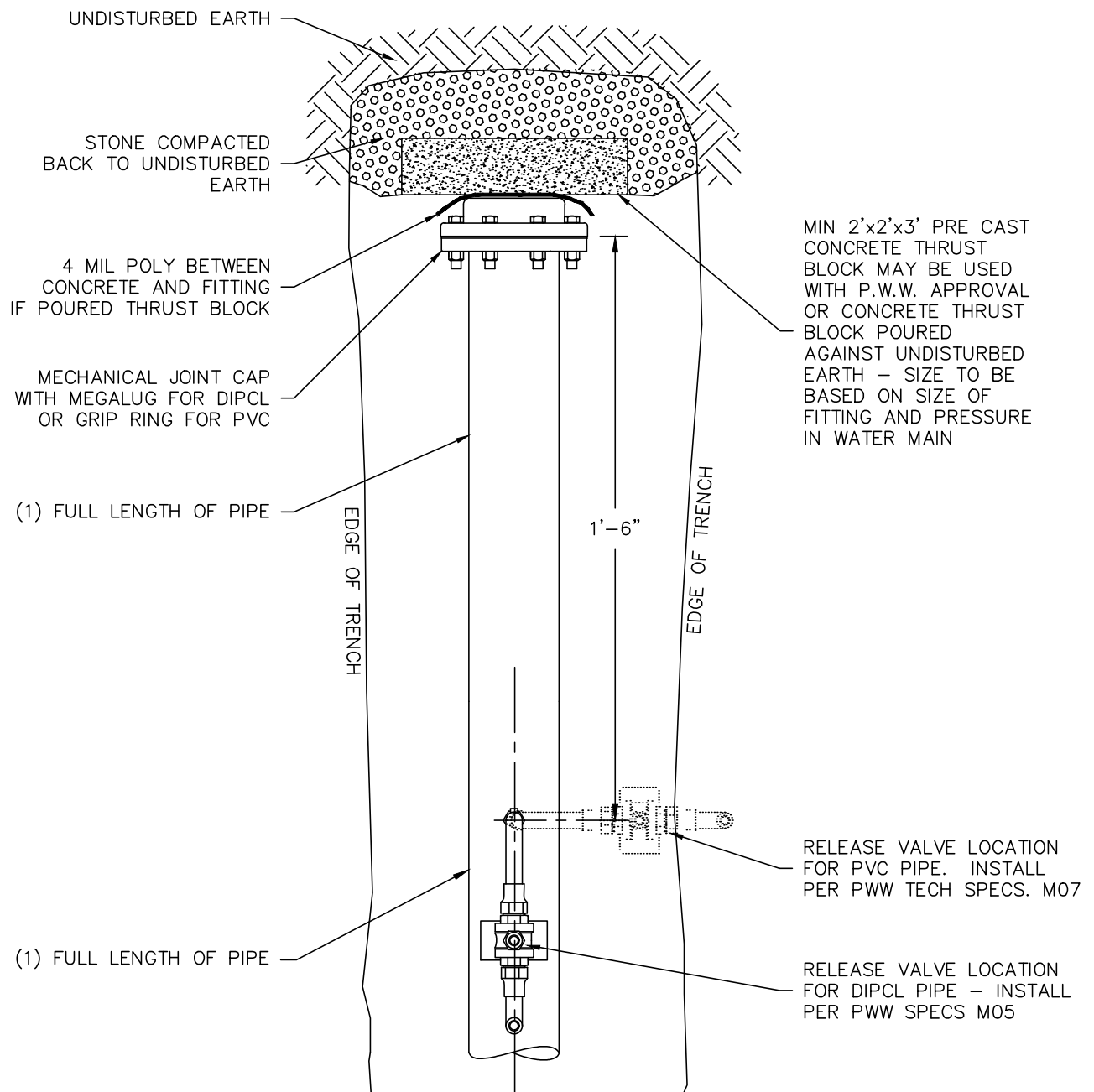


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.



DETAIL M11
 TYPICAL END OF MAIN W/GATE
 VALVE INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

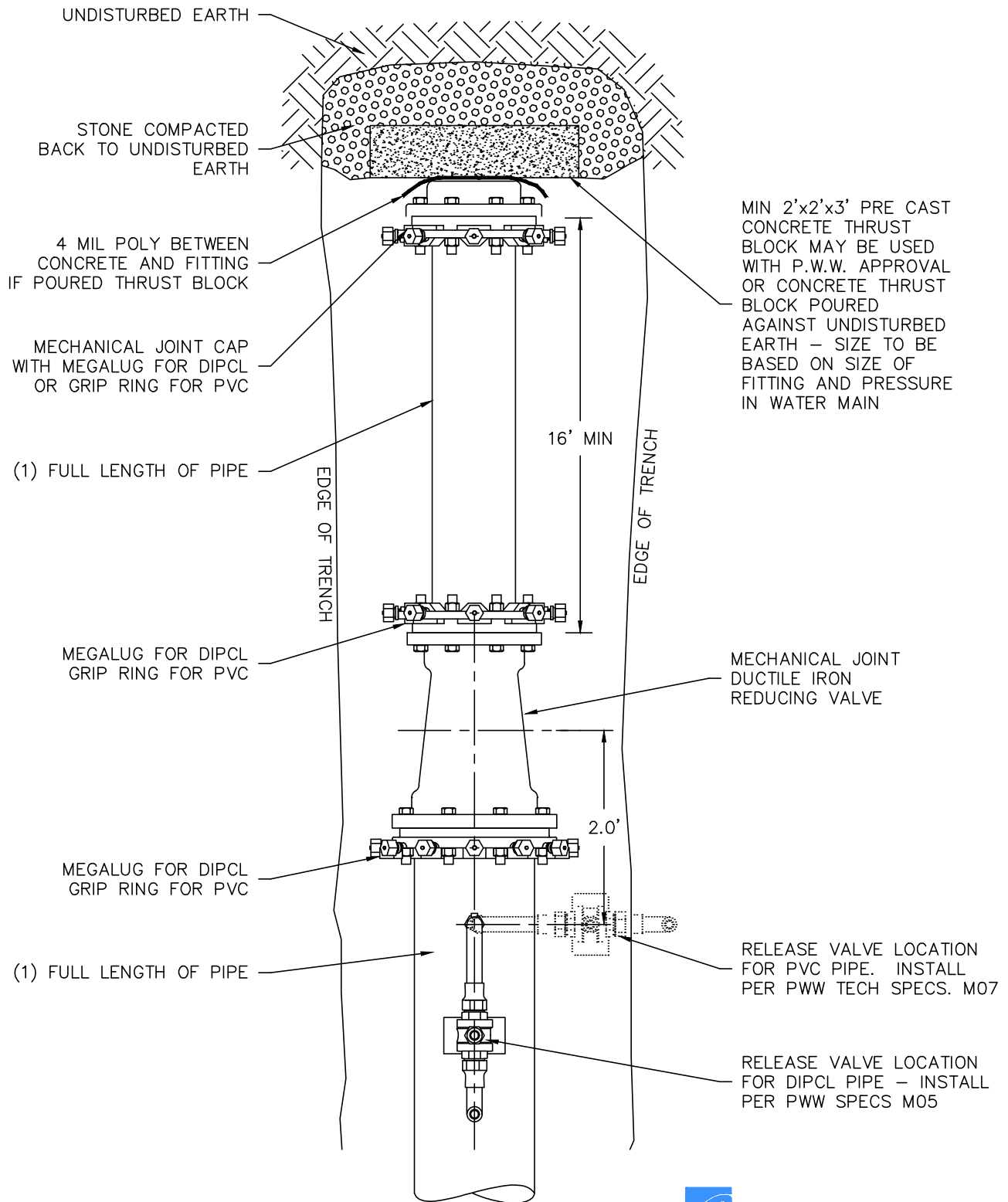


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.



DETAIL M12
 TYPICAL END OF MAIN W/O
 GATE VALVE INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

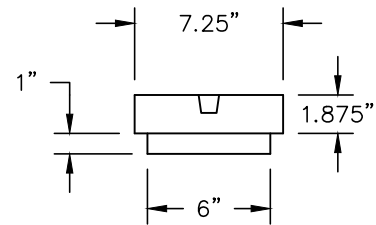
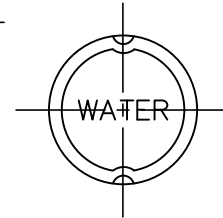
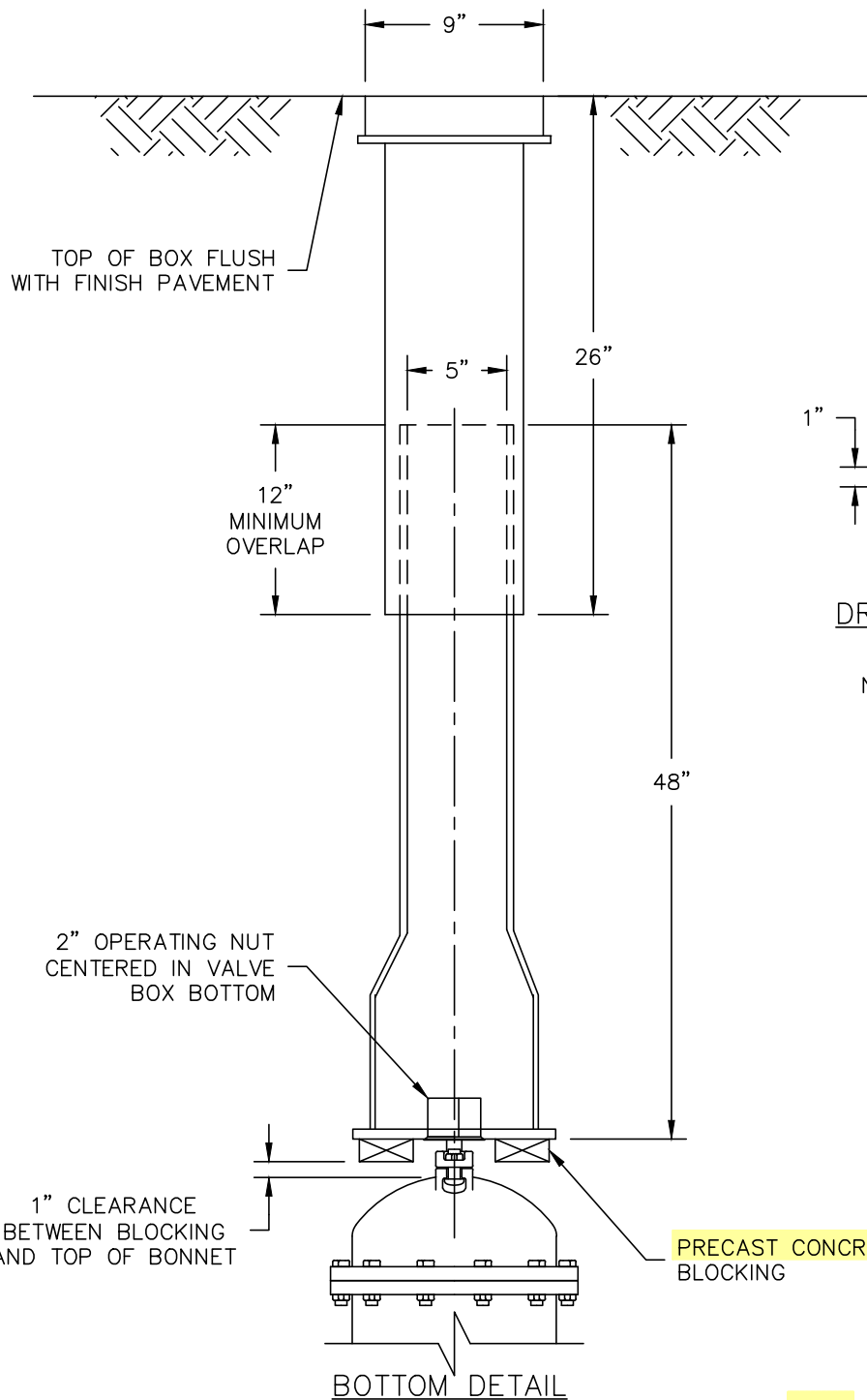


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.



DETAIL M13
 TYPICAL END OF MAIN W/REDUCER
 INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



DROP STYLE COVER

NOTE: COVER MUST BE MARKED "WATER"

NOTES:

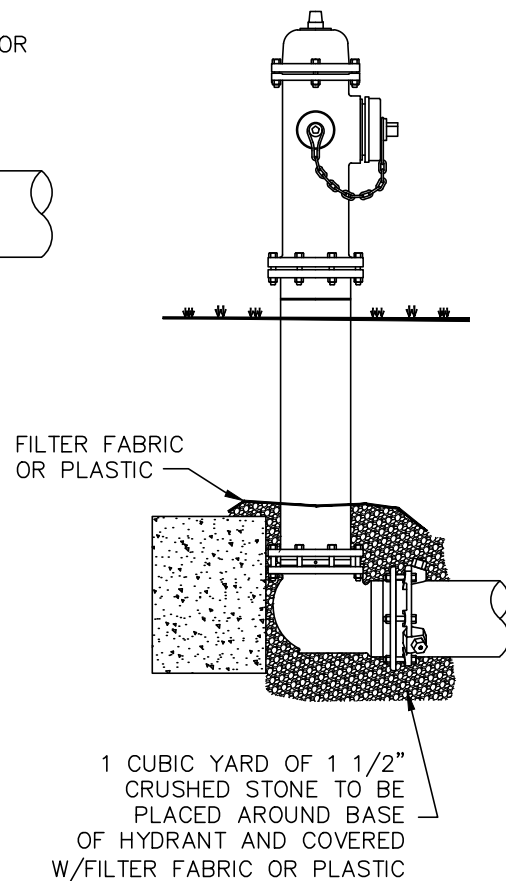
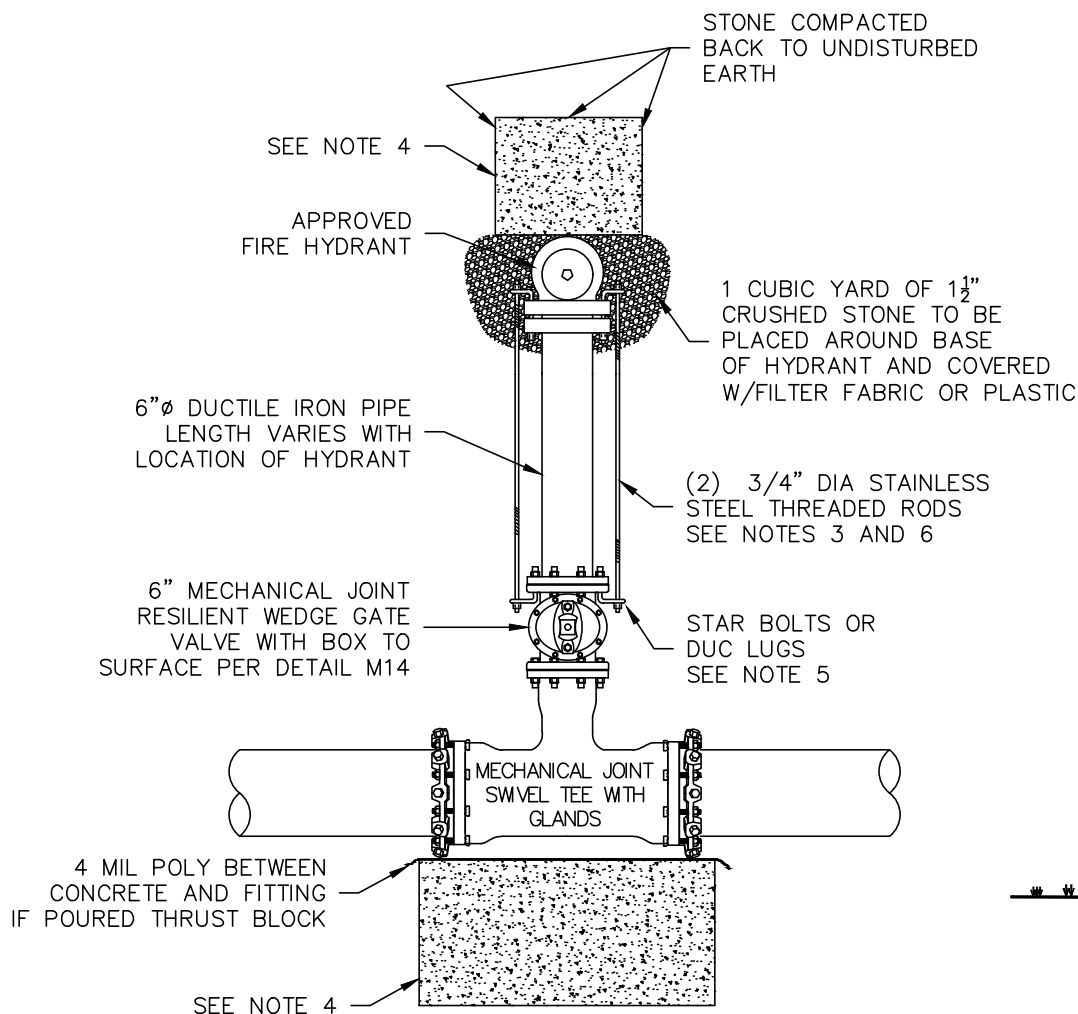
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.

ITEM REVISED IN 2023



DETAIL M14
TYPICAL VALVE BOX DETAIL
PENNICHUCK WATER WORKS, INC.

REV: 03-15-2023 SCALE: NTS

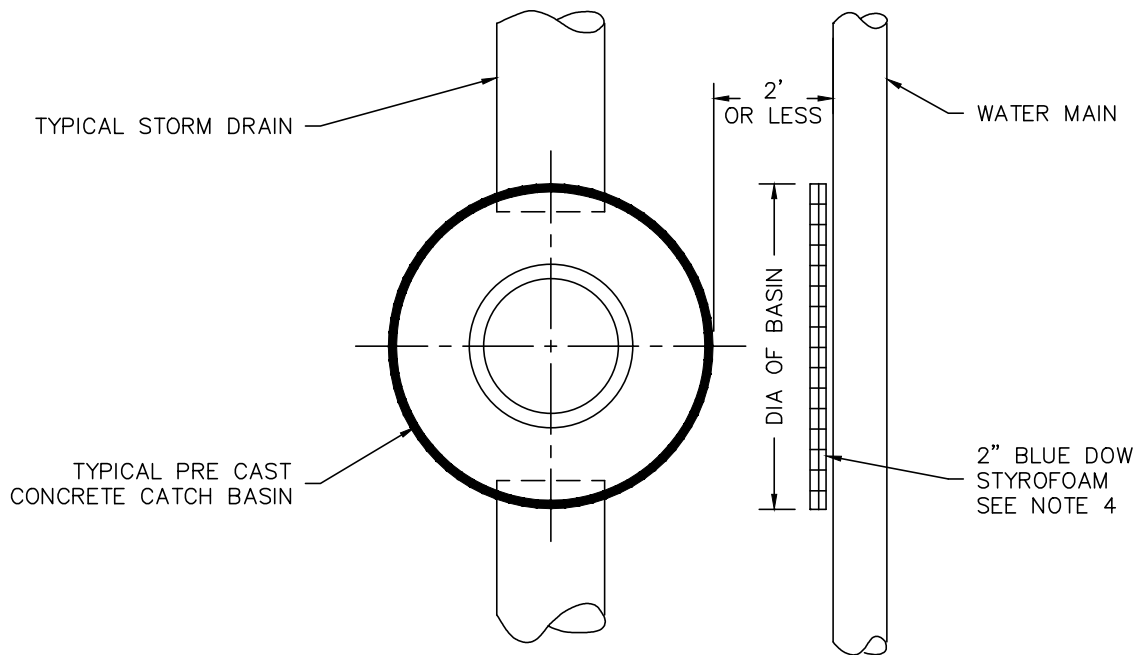


NOTES:

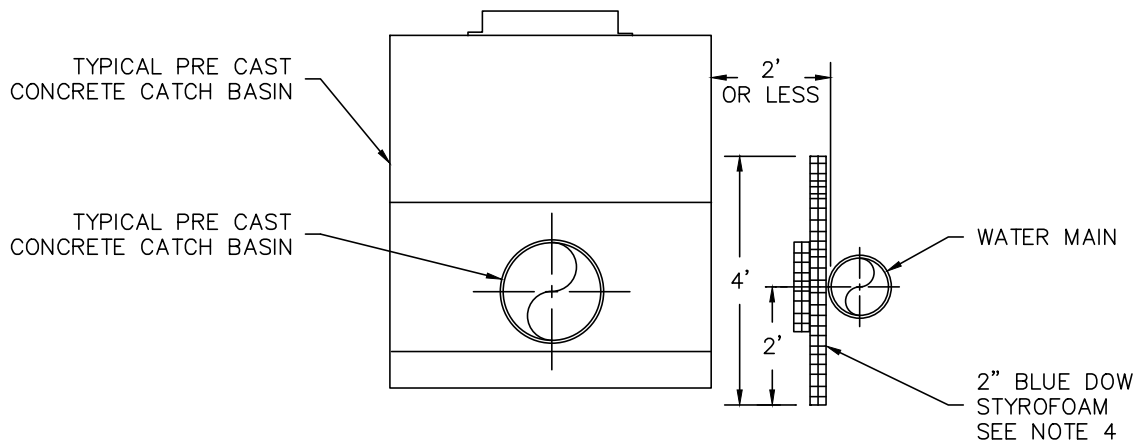
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4" ϕ S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS.
10" FITTING OR SMALLER = (2) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
4. MIN 2'x2'x3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL M10.
5. SEE PWW TECHNICAL SPECIFICATION SECTION 01600.C.16.F
6. ALL MECHANICAL JOINT FITTINGS SEPARATED BY PIPE LENGTH OF 10 FEET OR LESS MUST BE RODDED PER PWW TECHNICAL SPECIFICATION SECTION 01600E.2.F IF SEPARATION IS MORE THAN 10 FEET SUBSTITUTE MEGALUGS (OR GRIP RINGS) IN LIEU OF THREADED RODS.



DETAIL M15
TYPICAL HYDRANT INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 11-1-2021 SCALE: NTS



PLAN VIEW



ELEVATION VIEW

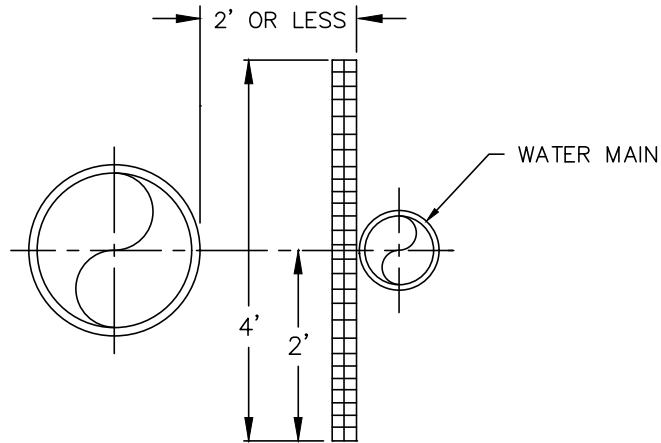
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. P.W.W., INC. RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
4. ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH 1' PIECE OF INSULATION CENTERED OVER SEAM.

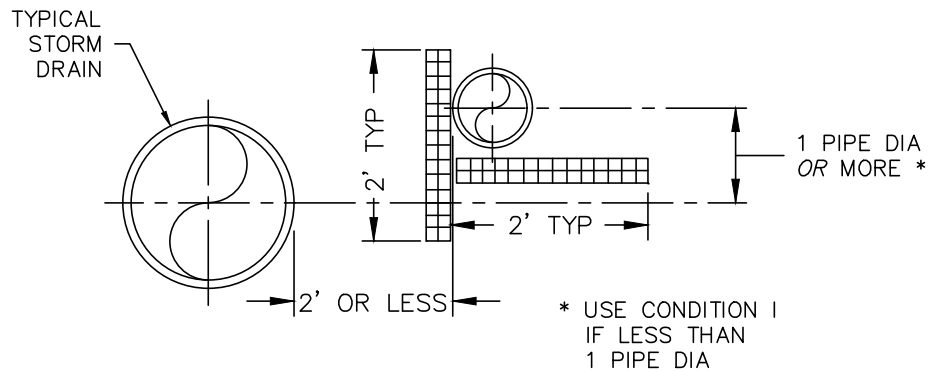


DETAIL M16
TYPICAL CATCH BASIN
INSULATION DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

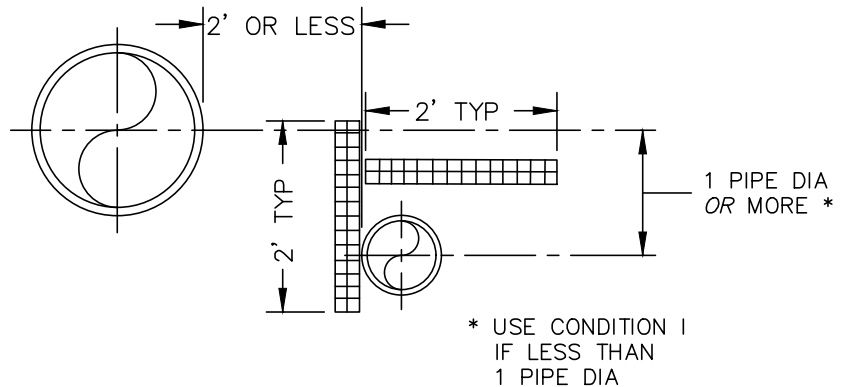
CONDITION I



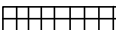
CONDITION II



CONDITION III



NOTES:

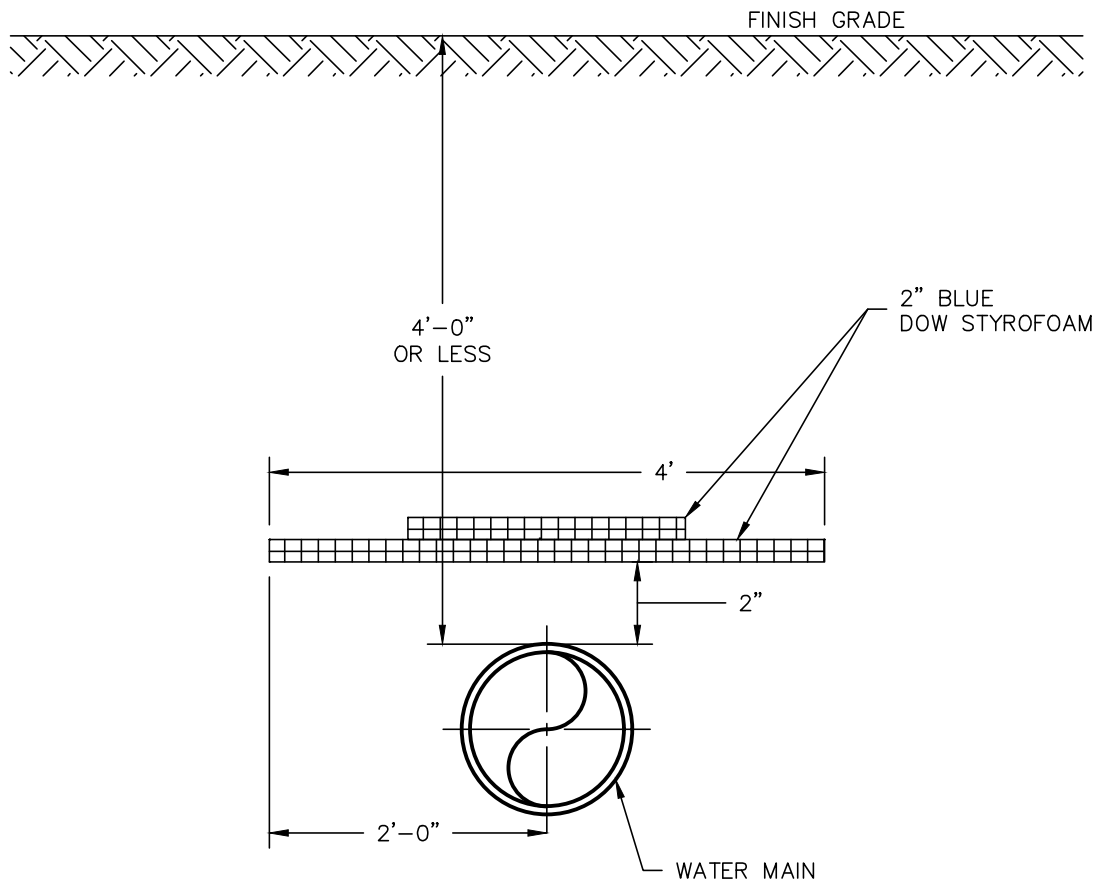
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. P.W.W., INC. RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
3. INSULATION TO BE RUN HORIZONTALLY AS LONG AS CONDITIONS I, II, OR III ABOVE EXIST. ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH 1' PIECE OF INSULATION CENTERED OVER SEAM.
4.  - 2" (MIN) BLUE DOW STYROFOAM



DETAIL M17
STORM DRAIN / WATER MAIN
PARALLEL RUNS - ELEVATION VIEW
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



DETAIL M18
STORM DRAIN / WATER MAIN
INTERSECTING RUNS - ELEV. VIEW
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

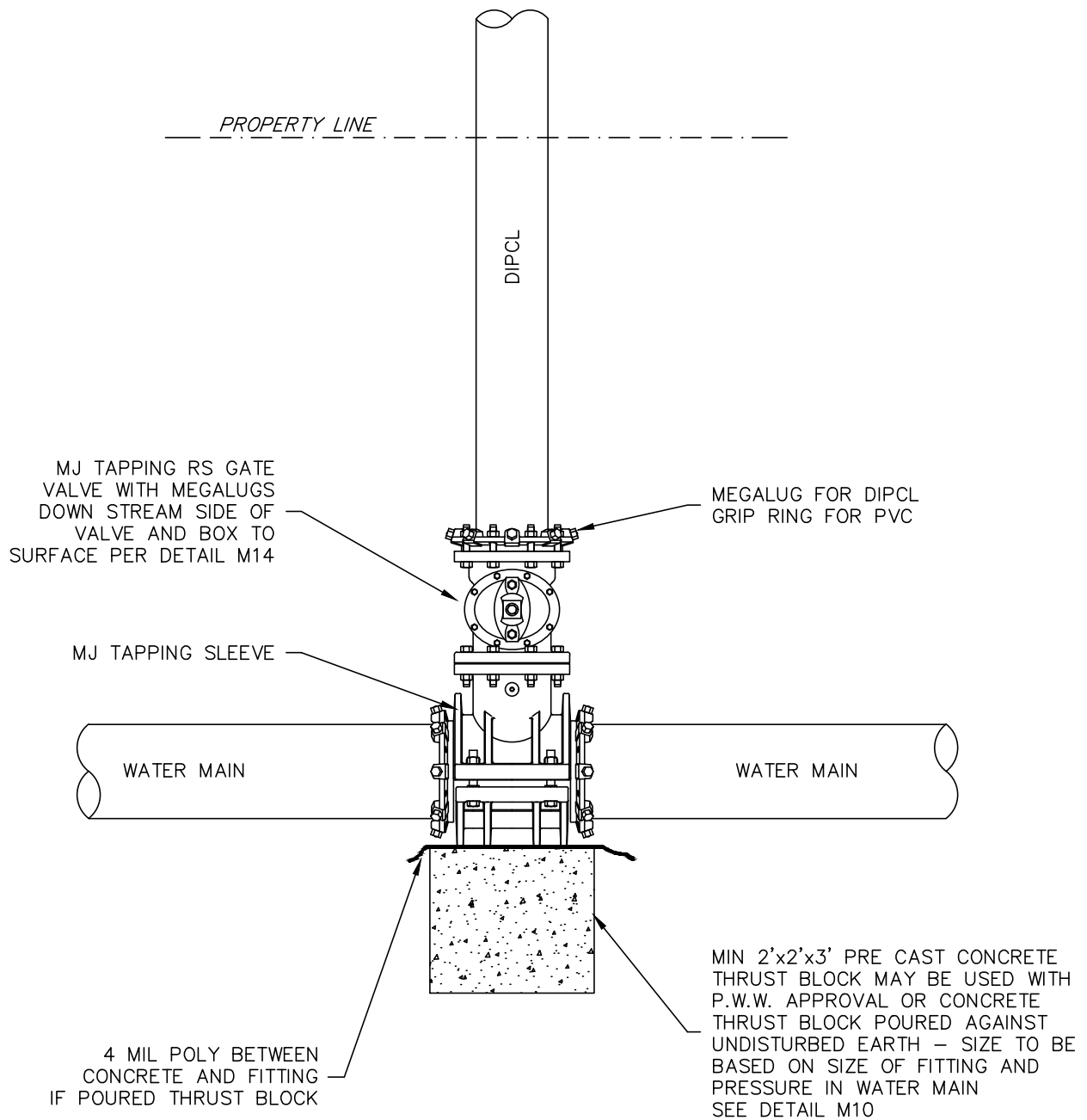


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. P.W.W., INC. RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
3. ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH 2" PIECE OF INSULATION CENTERED OVER SEAM.



DETAIL M19
TYPICAL INSULATION DETAIL FOR
LESS THAN 4'-0" OF COVER
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



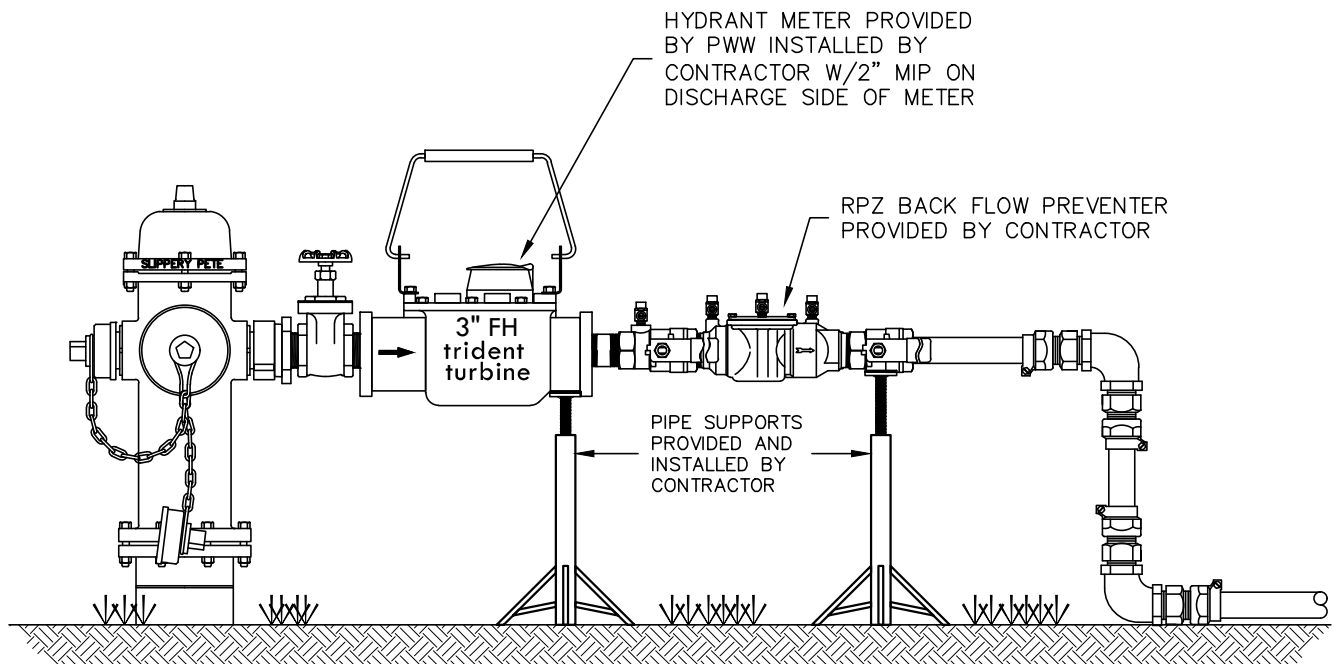
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. SEE DETAIL F01 FOR CROSS-SECTIONAL VIEW.



DETAIL M20
TYPICAL LARGE SERVICE AND/OR
TAPPING SLEEVE DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 11-1-2021 SCALE: NTS

NOTE:
INITIAL INSTALLATION OF
CONSTRUCTION METER BY
PWW METER DEPT.

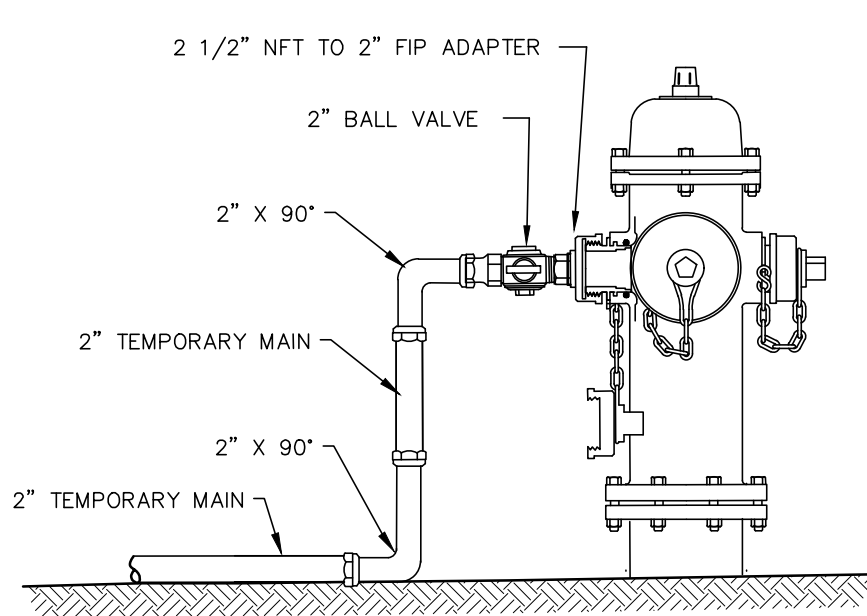


APPLICATION NOTES:

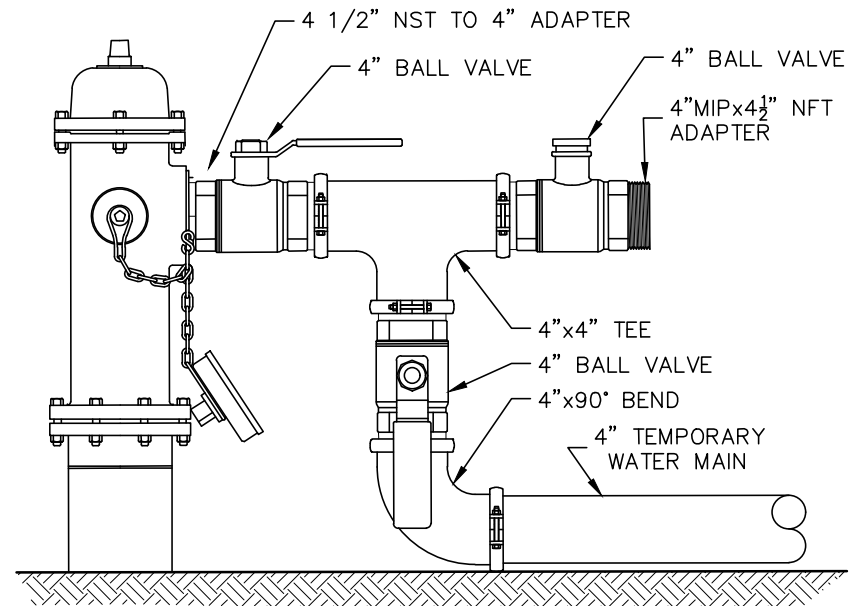
1. USE DESIGNATED HYDRANT ONLY
2. CONTRACTOR IS RESPONSIBLE TO PROTECT THE METER FROM THEFT, DAMAGE AND FREEZING
3. INITIATE AND TERMINATE WATER FLOW SLOWLY.
4. CONTACT PENNICHUCK WATER METER DEPARTMENT TO RELOCATE METER ASSEMBLY TO A DIFFERENT FIRE HYDRANT (603-913-2391)
5. HYDRANT METERS ARE AVAILABLE FROM APRIL 15TH TO NOVEMBER 15TH.



DETAIL T01
TYPICAL CONSTRUCTION METER
INSTALLATION DETAIL
PENNICHUCK WATER WORKS, INC.
REV: 03-18 SCALE: NTS



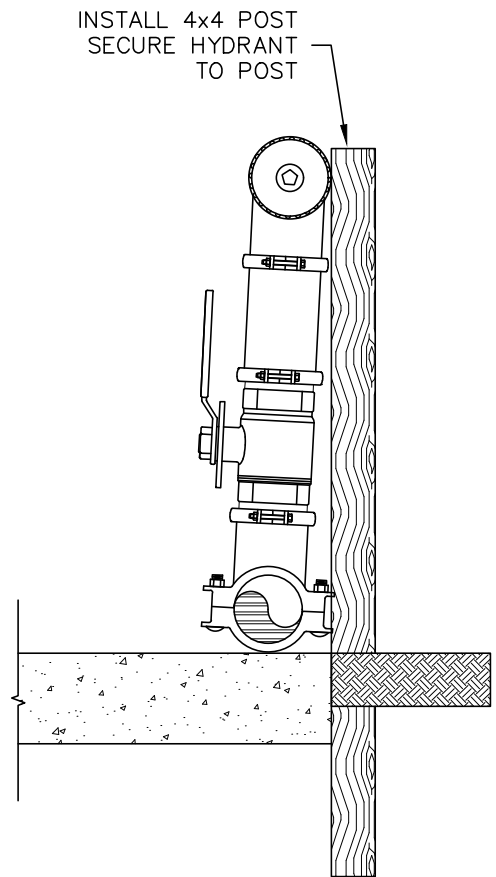
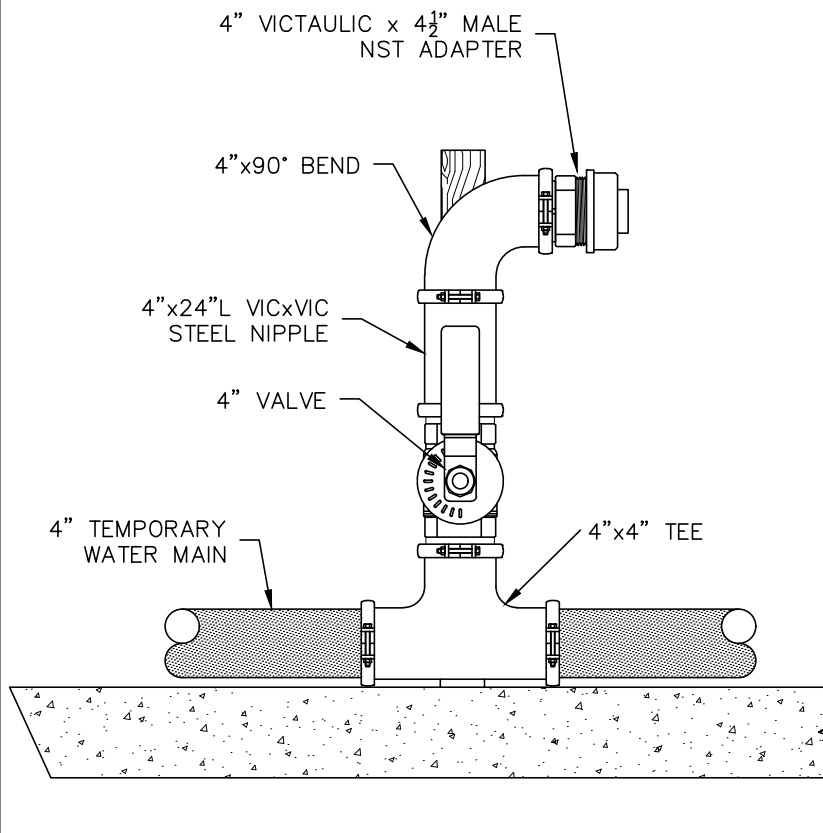
DETAIL "AA"



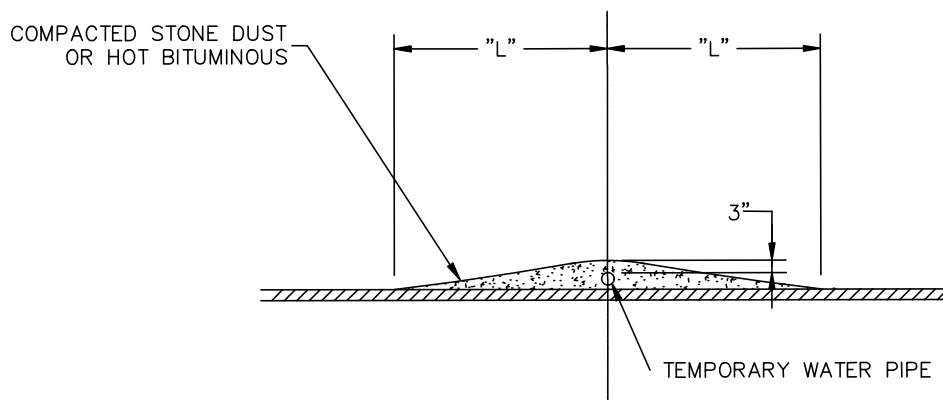
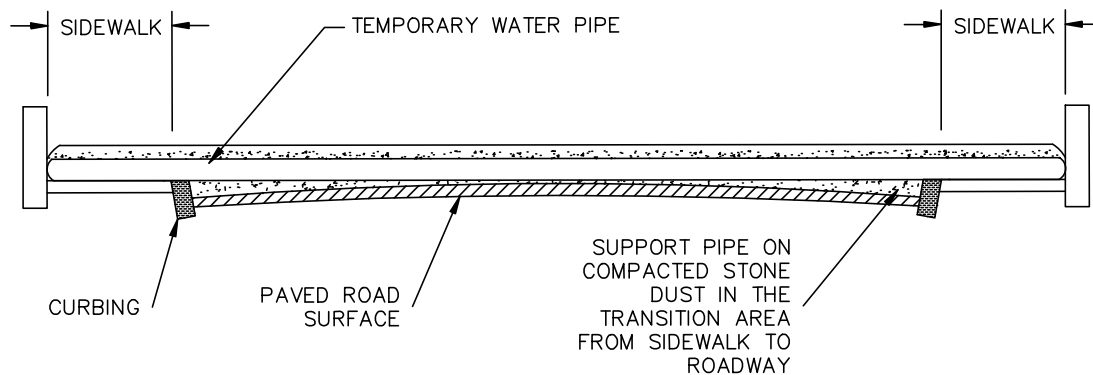
DETAIL "BB"



DETAIL T02
TEMPORARY MAIN FED
FROM A HYDRANT
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



DETAIL T03
TYPICAL FIRE DEPARTMENT
CONNECTION ON TEMP. MAIN
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



TEMPORARY WATER PIPE SIZE	"L" DIMENSION
1"	3 FT
2"	4 FT
4"	6 FT

NOTE:
FOR LOW TRAFFIC ROADS ONLY



DETAIL T04
TEMPORARY PEDESTRIAN/ROADWAY
CROSSING DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS