

APPENDIX 10E
FLUSH ASSEMBLY INSTALLATIONS

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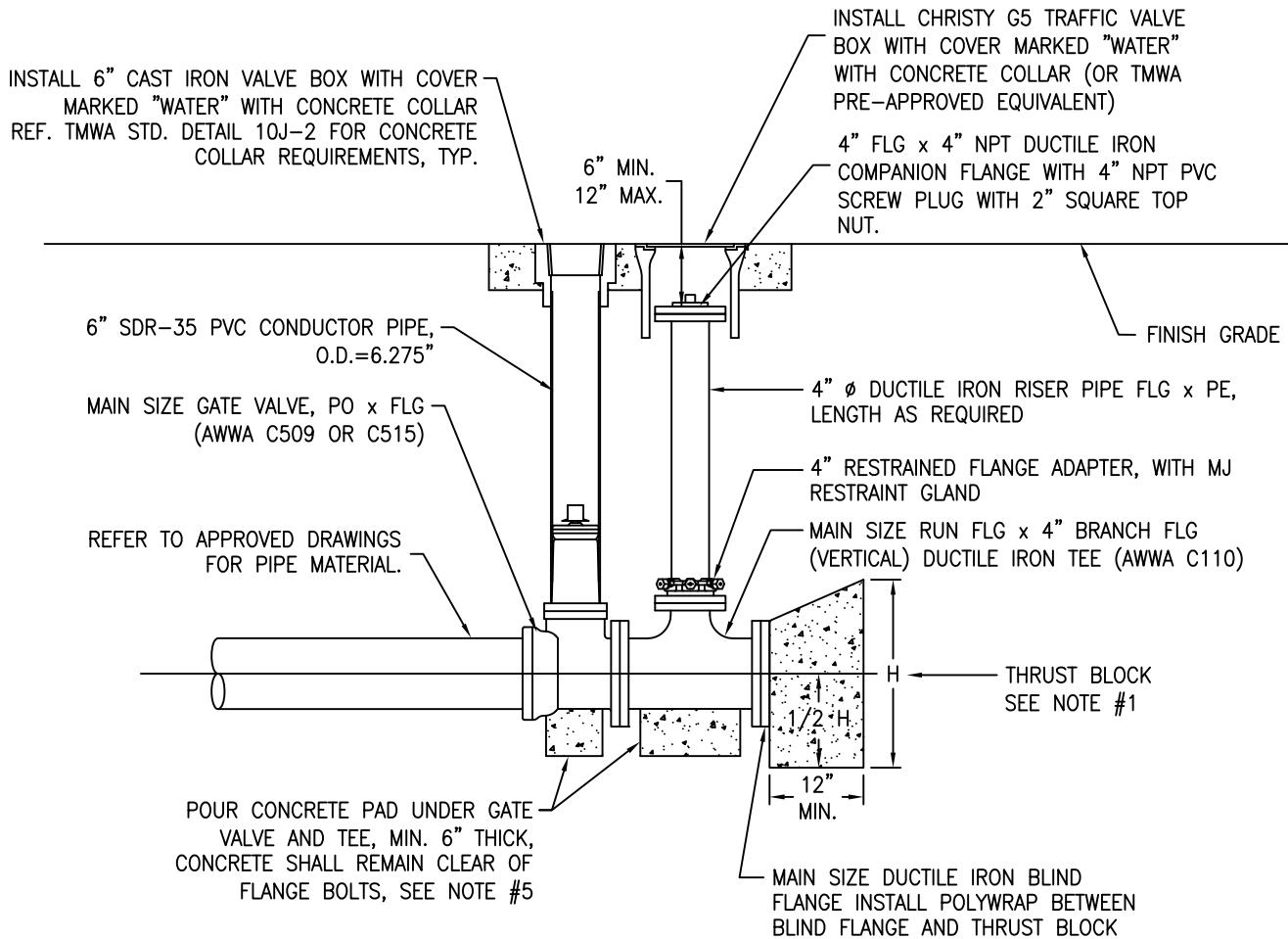
DATE
7/2001
REV
9/2016

APPENDIX 10E
FLUSH ASSEMBLY INSTALLATIONS
INDEX

DRAWING NUMBER
10E-1

NOTES:

1. REFERENCE TMWA STANDARD DETAIL 10L-2 FOR THRUST BLOCK SIZING AND REQUIREMENTS (DEAD END CONDITION).
2. ALL EXPOSED METAL SHALL BE COATED WITH BRUSHED-ON MASTIC.
3. ALL BOLTS AND ASSOCIATED HARDWARE SHALL BE FLUOROPOLYMER COATED.
4. TEE, VALVE, FITTINGS, DUCTILE IRON PIPE, AND OTHER METAL PARTS SHALL BE ENCASED WITH POLYETHYLENE WRAP PER AWWA C105.
5. CONCRETE FOR PADS SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 3,000 PSI AFTER 28 DAYS. BAG CONCRETE MIX IS NOT ACCEPTABLE.
6. ALL PIPE AND FITTINGS IN CONTACT WITH WATER SHALL BE NSF-61 CERTIFIED.



MATERIAL LIST

QTY.	DESCRIPTION
1	MAIN SIZE RUN FLG x 4" BRANCH FLG DUCTILE IRON TEE (AWWA C110)
1	MAIN SIZE GATE VALVE, PO x FLG, (AWWA C509 OR C515)
1	MAIN SIZE DUCTILE IRON BLIND FLANGE
1	4" FLG x 4" NPT DUCTILE IRON COMPANION FLANGE
1	4" Ø DUCTILE IRON RISER PIPE FLG x PE (LENGTH AS REQUIRED)
1	4" RESTRAINED FLANGED ADAPTER WITH MJ RESTRAINT GLAND
1	4" PVC SCREW PLUG, NPT, WITH 2" SQUARE TOP NUT
1	6" CAST IRON VALVE BOX WITH COVER MARKED "WATER"
1	CHRISTY G5 TRAFFIC VALVE BOX WITH COVER MARKED "WATER"
1	6" SDR-35 PVC CONDUIT PIPE SECTION, O.D.=6.275"
-	CONCRETE BULK - THRUST BLOCKS, PADS, COLLARS



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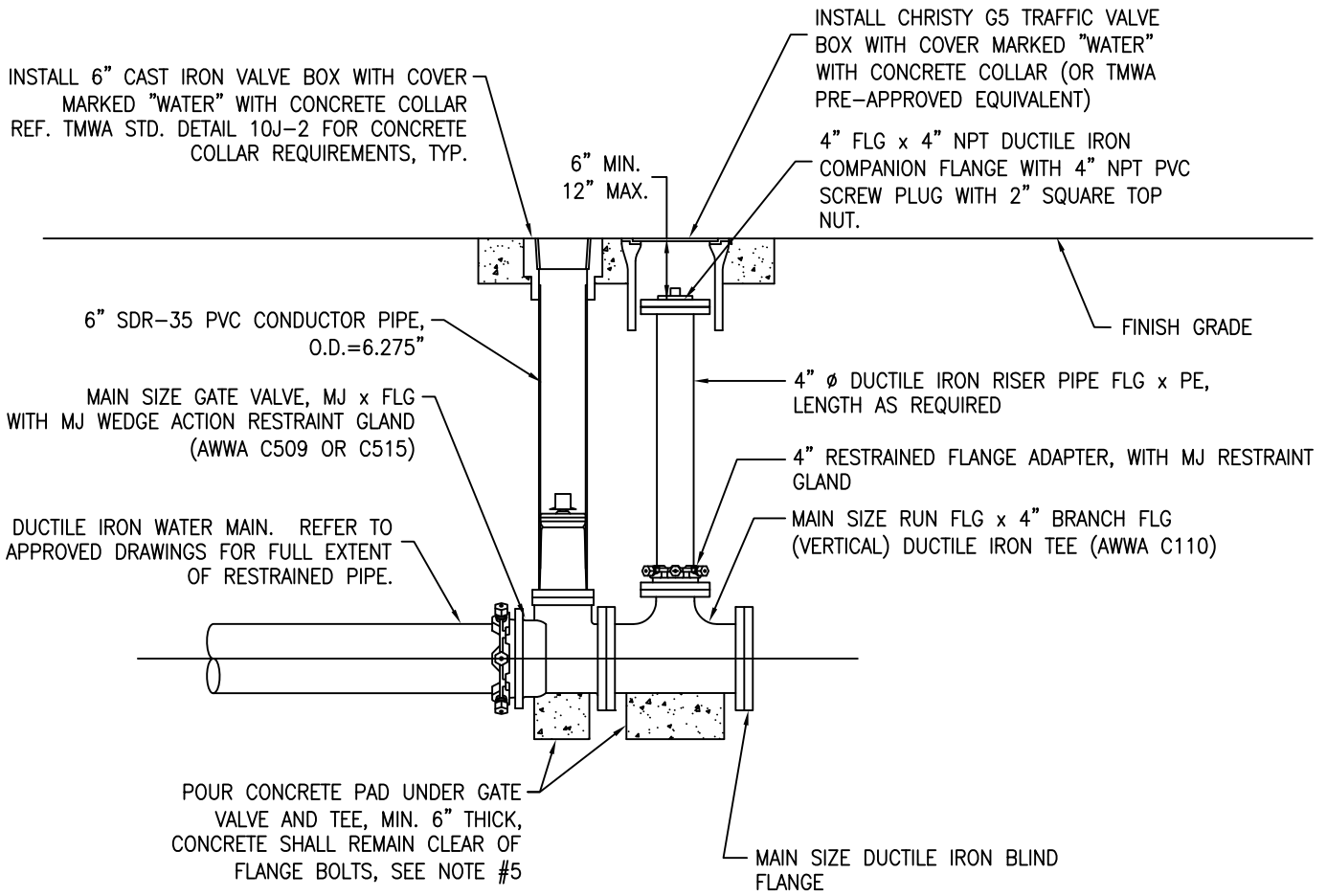
APPENDIX 10E
 FLUSH ASSEMBLY INSTALLATIONS
 FOR PERMANENT DEAD-END LOCATIONS
 FOR MAIN SIZES 6" TO 12"

DRAWING NUMBER

10E-2

NOTES:

1. ALL EXPOSED METAL SHALL BE COATED WITH BRUSHED-ON MASTIC.
2. ALL BOLTS AND ASSOCIATED HARDWARE SHALL BE FLUOROPOLYMER COATED.
3. TEE, VALVE, FITTINGS, DUCTILE IRON PIPE, AND OTHER METAL PARTS SHALL BE ENCASED WITH POLYETHYLENE WRAP PER AWWA C105.
4. CONCRETE FOR PADS SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 3,000 PSI AFTER 28 DAYS. BAG CONCRETE MIX IS NOT ACCEPTABLE.
5. ALL PIPE AND FITTINGS IN CONTACT WITH WATER SHALL BE NSF-61 CERTIFIED.



MATERIAL LIST

QTY.	DESCRIPTION
1	MAIN SIZE RUN FLG x 4" BRANCH FLG DUCTILE IRON TEE (AWWA C110)
1	MAIN SIZE GATE VALVE, MJ x FLG, (AWWA C509 OR C515)
1	MAIN SIZE MJ WEDGE ACTION RESTRAINT GLAND
1	MAIN SIZE DUCTILE IRON BLIND FLANGE
1	4" FLG x 4" NPT DUCTILE IRON COMPANION FLANGE
1	4" Ø DUCTILE IRON RISER PIPE FLG x PE (LENGTH AS REQUIRED)
1	4" RESTRAINED FLANGE ADAPTER, WITH MJ RESTRAINT GLAND
1	4" PVC SCREW PLUG, NPT, WITH 2" SQUARE TOP NUT
1	6" CAST IRON VALVE BOX WITH COVER MARKED "WATER"
1	CHRISTY G5 TRAFFIC VALVE BOX WITH COVER MARKED "WATER"
1	6" SDR-35 PVC CONDUIT PIPE SECTION, O.D.=6.275"
-	CONCRETE BULK - PADS, COLLARS



DATE

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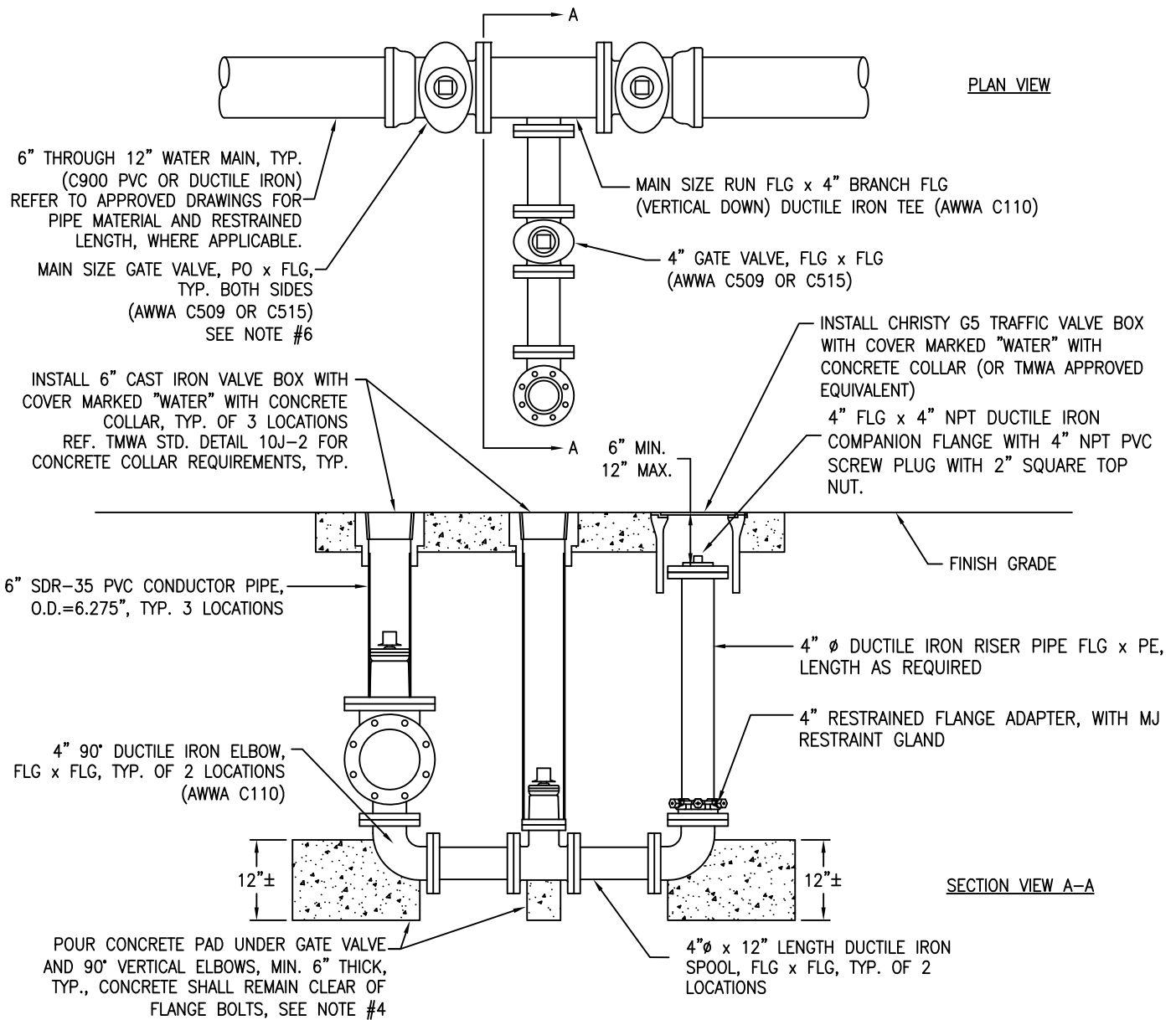
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APPENDIX 10E
 FLUSH ASSEMBLY INSTALLATIONS
 FOR TEMPORARY DEAD-END LOCATIONS
 FOR MAIN SIZES 6" TO 12"

DRAWING NUMBER

10E-3

- NOTES:
1. ALL EXPOSED METAL SHALL BE COATED WITH BRUSHED-ON MASTIC.
 2. ALL BOLTS AND ASSOCIATED HARDWARE SHALL BE FLUOROPOLYMER COATED.
 3. TEE, VALVES, FITTINGS, DUCTILE IRON PIPE, AND OTHER METAL PARTS SHALL BE ENCASED WITH POLYETHYLENE WRAP PER AWWA C105.
 4. CONCRETE FOR PADS SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 3,000 PSI AFTER 28 DAYS. BAG CONCRETE MIX IS NOT ACCEPTABLE.
 5. ALL PIPE AND FITTINGS IN CONTACT WITH WATER SHALL BE NSF-61 CERTIFIED.
 6. MJ x FLG GATE VALVES WITH MJ WEDGE ACTION RESTRAINT GLANDS MAY BE REQUIRED IN LIEU OF PO x FLG GATE VALVES, REFERENCE WATER IMPROVEMENT PLANS.



MATERIAL LIST	
QTY.	DESCRIPTION
1	MAIN SIZE RUN FLG x 4" BRANCH FLG DUCTILE IRON TEE (AWWA C110)
2	MAIN SIZE GATE VALVE, PO x FLG, (AWWA C509 OR C515)
1	4" GATE VALVE, FLG x FLG, (AWWA C509 OR C515)
2	4" 90° DUCTILE IRON ELBOW, FLG x FLG (AWWA C110)
2	4"ø x 12" LENGTH DUCTILE IRON SPOOL, FLG x FLG
1	4" FLG x 4" NPT DUCTILE IRON COMPANION FLANGE
1	4" RESTRAINED FLANGE ADAPTER, WITH MJ RESTRAINT GLAND

MATERIAL LIST (CONT.)	
QTY.	DESCRIPTION
1	4"ø DUCTILE IRON SPOOL, FLG x PE (LENGTH AS REQUIRED)
1	4" PVC SCREW PLUG, NPT, WITH 2" SQUARE TOP NUT
3	6" CAST IRON VALVE BOX WITH COVER MARKED "WATER"
1	CHRISTY G5 TRAFFIC VALVE BOX WITH COVER MARKED "WATER"
3	6" SDR-35 PVC CONDUIT PIPE SECTION, O.D.=6.275"
-	CONCRETE BULK - THRUST BLOCKS, PADS, COLLARS



DATE
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APPENDIX 10E
FLUSH ASSEMBLY INSTALLATIONS

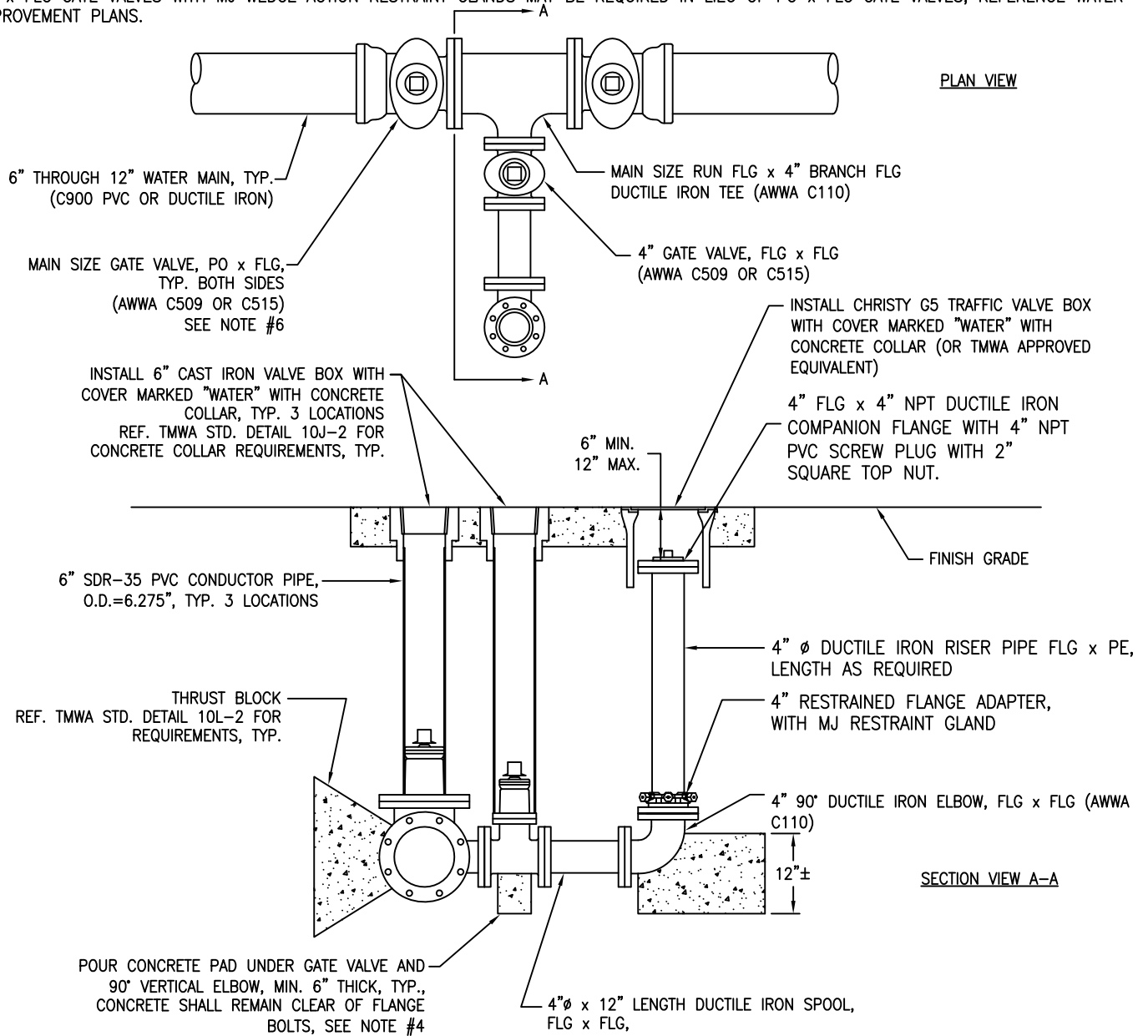
BLOW-OFF ASSEMBLY
FOR MAIN SIZES 6" TO 12"

DRAWING NUMBER

10E-4

NOTES:

1. ALL EXPOSED METAL SHALL BE COATED WITH BRUSHED-ON MASTIC.
2. ALL BOLTS AND ASSOCIATED HARDWARE SHALL BE FLUOROPOLYMER COATED.
3. TEE, VALVES, FITTINGS, DUCTILE IRON PIPE, AND OTHER METAL PARTS SHALL BE ENCASED WITH POLYETHYLENE WRAP PER AWWA C105.
4. CONCRETE FOR PADS SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 3,000 PSI AFTER 28 DAYS. BAG CONCRETE MIX IS NOT ACCEPTABLE.
5. ALL PIPE AND FITTINGS IN CONTACT WITH WATER SHALL BE NSF-61 CERTIFIED.
6. MJ x FLG GATE VALVES WITH MJ WEDGE ACTION RESTRAINT GLANDS MAY BE REQUIRED IN LIEU OF PO x FLG GATE VALVES, REFERENCE WATER IMPROVEMENT PLANS.



MATERIAL LIST	
QTY.	DESCRIPTION
1	MAIN SIZE RUN FLG x 4" BRANCH FLG DUCTILE IRON TEE (AWWA C110)
2	MAIN SIZE GATE VALVE, PO x FLG, (AWWA C509 OR C515)
1	4" GATE VALVE, FLG x FLG, (AWWA C509 OR C515)
1	4" 90° DUCTILE IRON ELBOW, FLG x FLG (AWWA C110)
1	4" ϕ x 12" LENGTH DUCTILE IRON SPOOL, FLG x FLG
1	4" FLG x 4" NPT DUCTILE IRON COMPANION FLANGE
1	4" RESTRAINED FLANGE ADAPTER WITH MJ RESTRAINT GLAND

MATERIAL LIST (CONT.)	
QTY.	DESCRIPTION
1	4" ϕ DUCTILE IRON SPOOL, FLG x PE (LENGTH AS REQUIRED)
1	4" PVC SCREW PLUG, NPT, WITH 2" SQUARE TOP NUT
3	6" CAST IRON VALVE BOX WITH COVER MARKED "WATER"
1	CHRISTY G5 TRAFFIC VALVE BOX WITH COVER MARKED "WATER"
3	6" SDR-35 PVC CONDUIT PIPE SECTION, O.D.=6.275"
-	CONCRETE BULK - THRUST BLOCKS, PADS, COLLARS



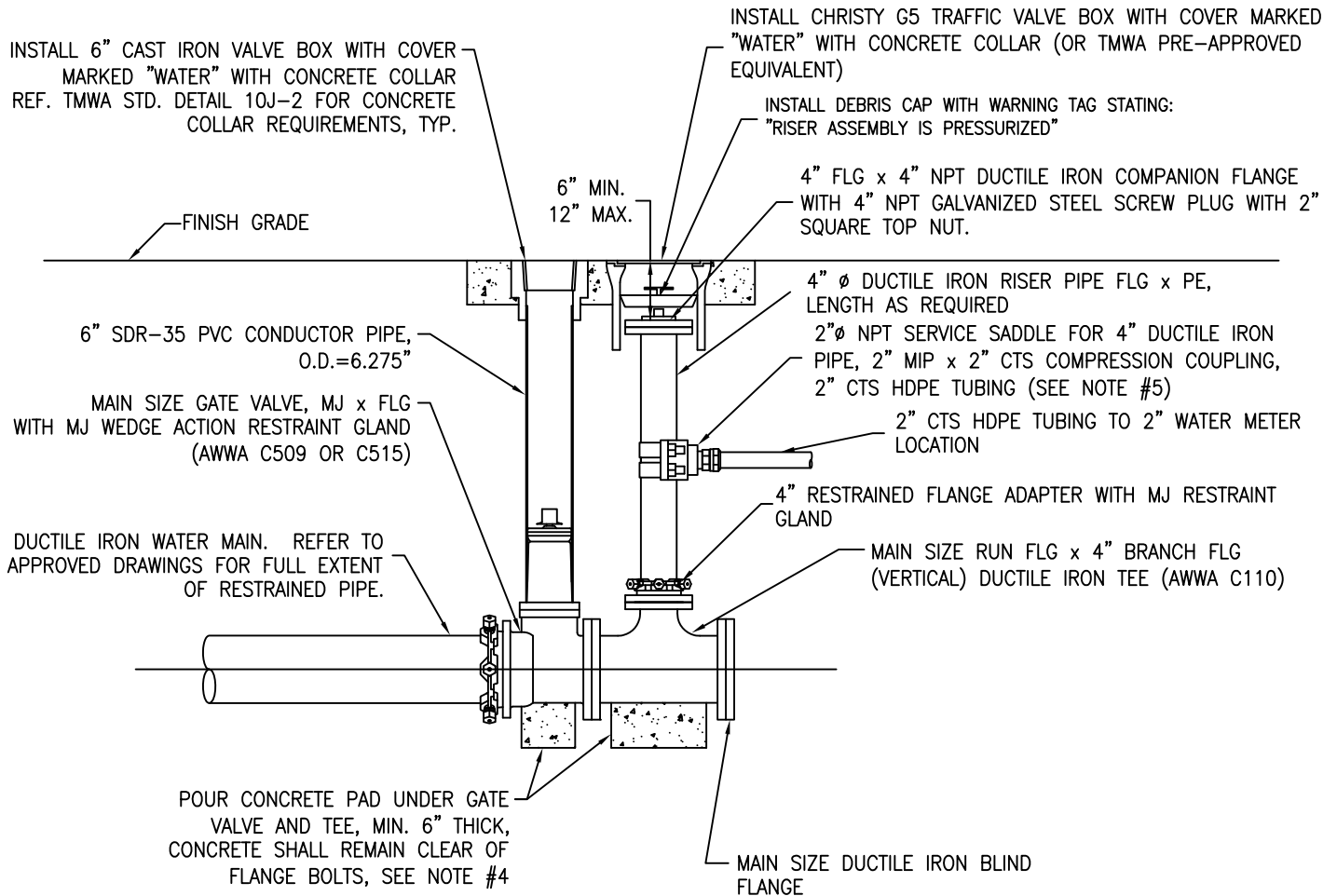
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APPENDIX 10E
FLUSH ASSEMBLY INSTALLATIONS
IN-LINE FLUSH ASSEMBLY
FOR MAIN SIZES 6" TO 12"

DRAWING NUMBER
10E-5

NOTES:

1. REFERENCE TMWA STANDARD DETAIL 10L-2 FOR THRUST BLOCK SIZING AND REQUIREMENTS (DEAD END CONDITION) FOR PERMANENT FLUSH VALVE ASSEMBLIES.
2. ALL EXPOSED METAL SHALL BE COATED WITH BRUSHED-ON MASTIC.
3. ALL BOLTS AND ASSOCIATED HARDWARE SHALL BE FLUOROPOLYMER COATED.
4. TEE, VALVE, FITTINGS, DUCTILE IRON PIPE, AND OTHER METAL PARTS SHALL BE ENCASED WITH POLYETHYLENE WRAP PER AWWA C105.
5. CONCRETE FOR PADS SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 3,000 PSI AFTER 28 DAYS. BAG CONCRETE MIX IS NOT ACCEPTABLE.
6. RETIREMENT REQUIRES REMOVAL OF 4" DUCTILE IRON RISER WITH TAP AND ALL ASSOCIATED 2" CTS HDPE TUBING AND METER BOX. REPLACE WITH NEW 4" DUCTILE IRON FLG x PE SPOOL.
7. ALL PIPE AND FITTINGS IN CONTACT WITH WATER SHALL BE NSF-61 CERTIFIED.



FOR EXISTING FLUSH VALVE ASSEMBLIES:

- ENSURE THAT PLUG IS PRESSURE RATED. PVC SCREW PLUGS SHALL BE REPLACED TO CONFORM TO THIS DETAIL.
- NOT ALL EXISTING FLUSH VALVE ASSEMBLIES WILL BE CONNECTED TO MECHANICALLY RESTRAINED PIPE; THRUST BLOCKS AT THE END OF THE MAIN SHALL NOT BE DISTURBED.
- RISER SHALL BE REPLACED TO THE ABOVE SPECIFICATIONS.



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7/2011

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APPENDIX 10E
FLUSH ASSEMBLY INSTALLATIONS

NEW FLUSH ASSEMBLY FOR
2" CONSTRUCTION WATER SERVICE
FOR MAIN SIZES 6" TO 12"

DRAWING NUMBER

10E-6