

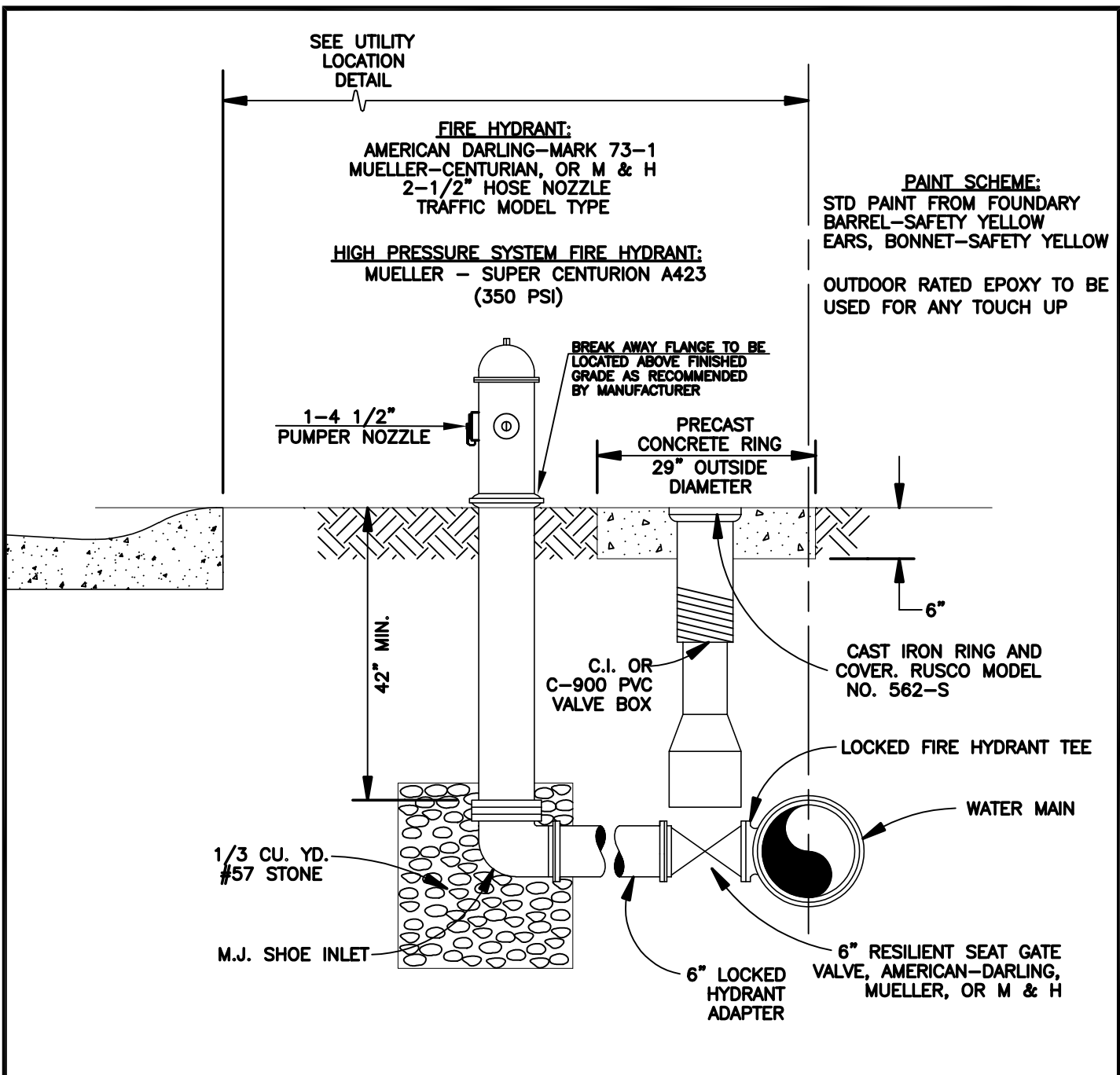
City of Cartersville Water and Sewer Details

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Sewer Details**Std #**

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NOTES:

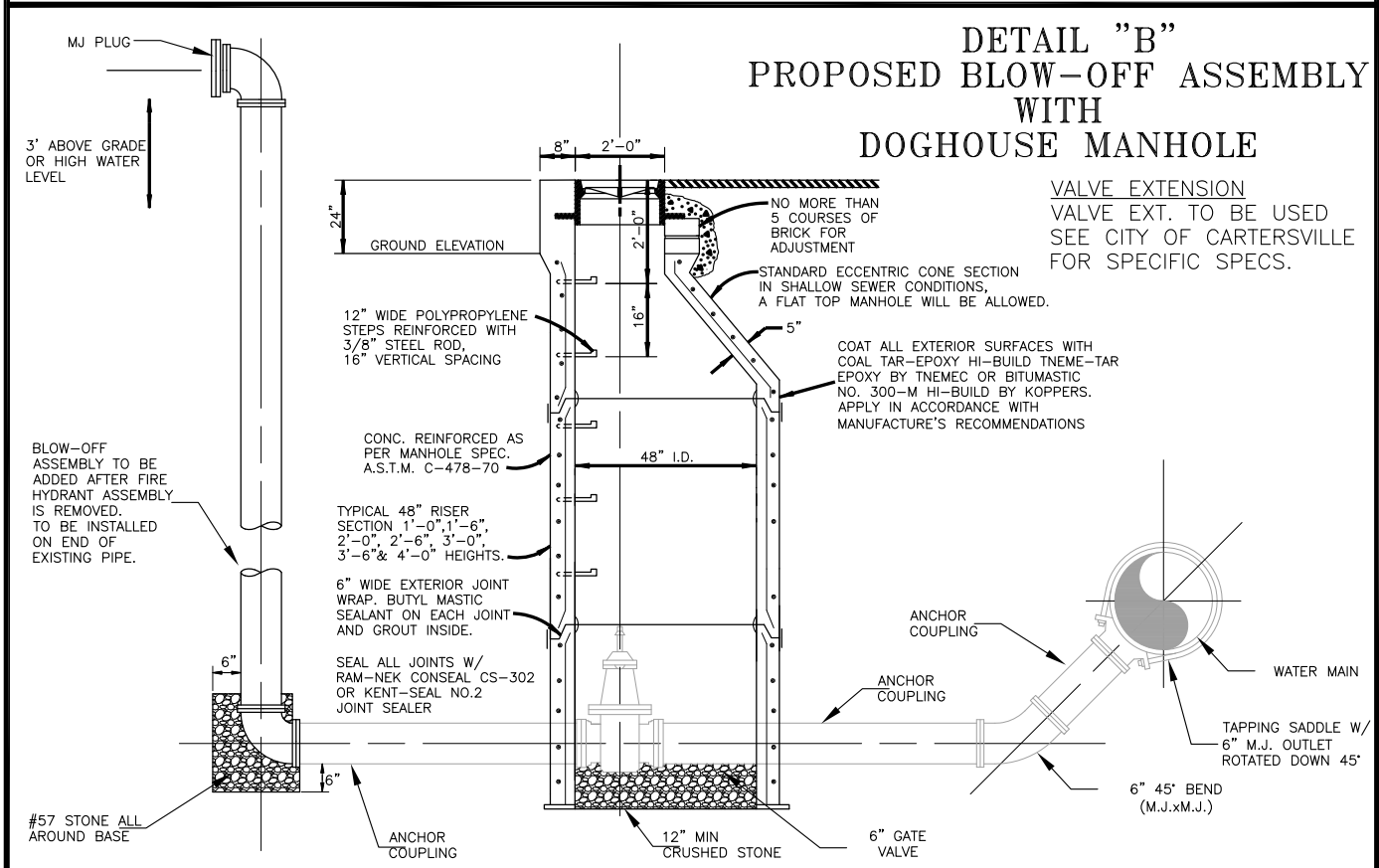
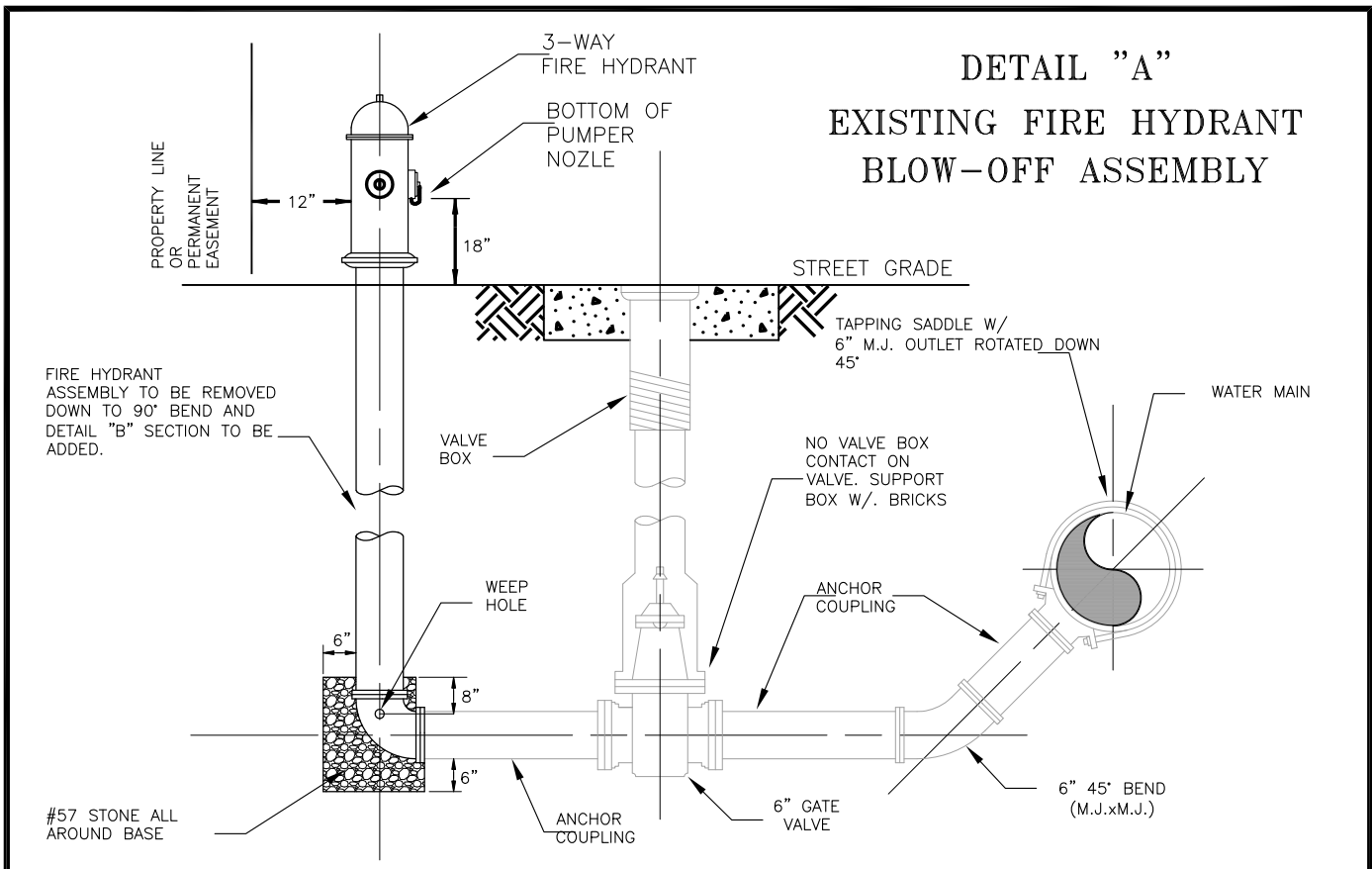
1. HYDRANT NOZZLE TO FACE STREET
2. VALVE BOX TO BE ADJUSTED TO GRADE
3. CONCRETE COLLAR AROUND VALVE BOX IF NOT IN PAVED AREA
4. GRAVEL TO BE PLACED AROUND HYDRANT DRAIN, MINIMUM DIMENSIONS 2' x 2' x 2.25'
5. OFFSET ANCHOR ALLOWED TO ADJUST FH TO GRADE

**CITY OF
 CARTERSVILLE**
 WATER DEPARTMENT

**TYPICAL
 FIRE HYDRANT
 INSTALLATION**
 CONSTRUCTION STANDARD

DATE: JULY. '19
 APPROVED:

STANDARD
 NO.
 5.8.01



**CITY OF
CARTERSVILLE**

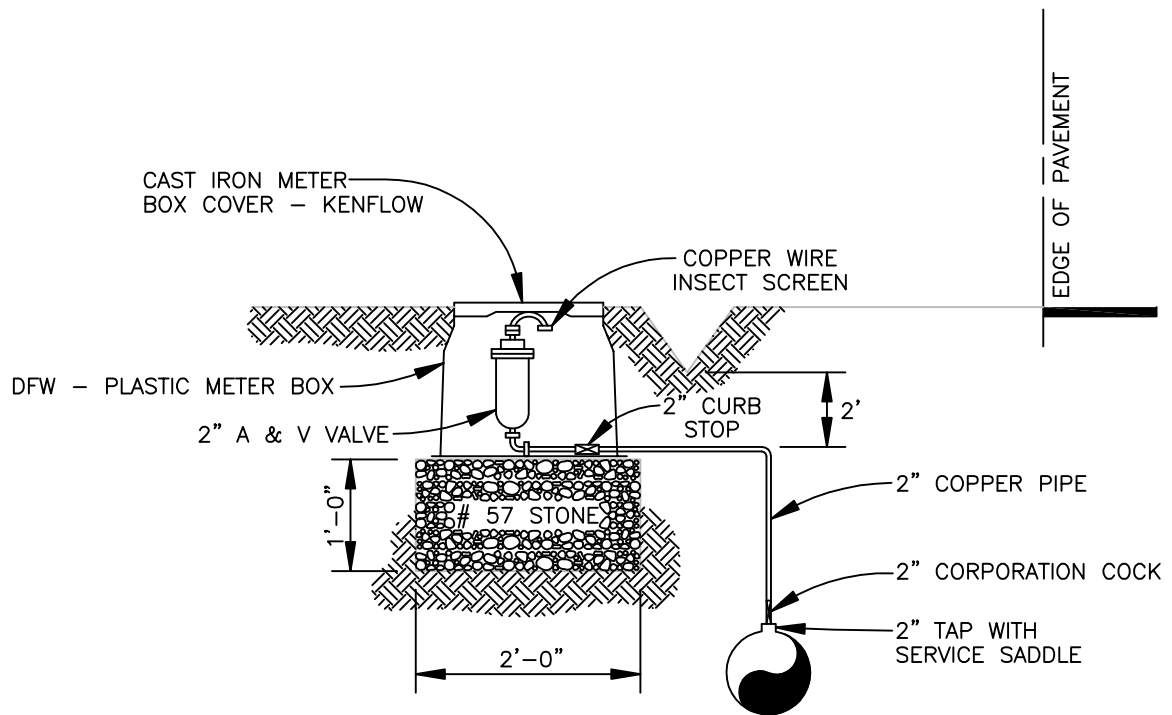
WATER DEPARTMENT

**FIRE HYDRANT
REMOVAL &
BLOW-OFF INSTALL**
CONSTRUCTION STANDARD

DATE: NOV. '14

APPROVED:

STANDARD
NO.
5.8.011



TYPICAL WATER AIR & VACUUM RELEASE VALVE ASSEMBLY

CITY OF
CARTERSVILLE

WATER DEPARTMENT

WATER A & V
RELEASE VALVE
ASSEMBLY
CONSTRUCTION STANDARD

DATE: DEC.'08

APPROVED:

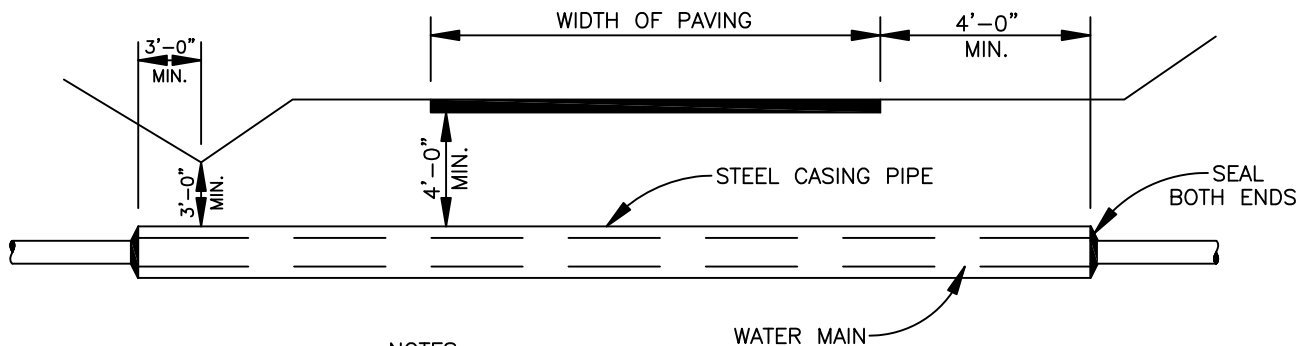
STANDARD
NO.

5.8.02

Casing Size For Road Crossings

Under Roads

Pipe Diameter, inches	Casing Diameter, inches	Wall Thickness, inches
6	12	0.250
8	16	0.250
10	16	0.250
12	18	0.250
14	22	0.250
16	24	0.250
18	30	0.312
20	30	0.312
24	36	0.375



NOTES:

1. CASING PIPE SHALL EXTEND A MINIMUM OF 3' BEYOND TOE OF FILL SLOPES OR DITCH LINES AND 4' BEYOND EDGE OF PAVEMENT AND BACK OF CURB.
2. CASING SPACERS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
3. DEVELOPER MUST OBTAIN PERMIT FROM BARTOW COUNTY ROAD DEPARTMENT OR CARTERSVILLE PUBLIC WORKS AS APPROPRIATE.
4. FOR BORED CASING INSTALLATIONS UNDER RAILROADS OR STATE HIGHWAYS, CONSULT GOVERNING AUTHORITY FOR CASING AND CARRIER PIPE SPECIFICATIONS.
5. PIPE INSIDE CASING MUST BE RESTRAINED JOINT (FIELD LOCK GASKET ALLOWED)

BORED ROAD CROSSING DETAIL

**CITY OF
CARTERSVILLE**

WATER DEPARTMENT

**PIPE IN CASING
TYPICAL DETAIL**

CONSTRUCTION STANDARD

DATE: SEPT. '14

APPROVED:

STANDARD
NO.

5.8.03

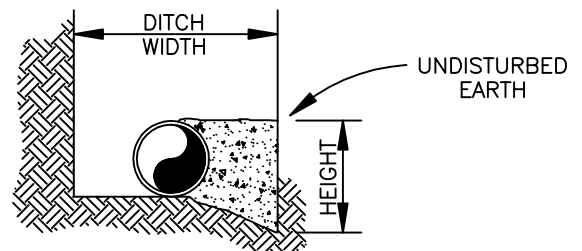
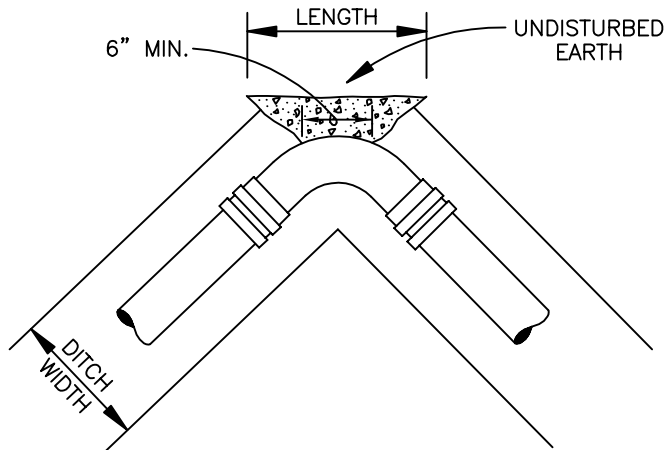


TABLE FOR CONCRETE BLOCKING
(16" PIPE, 200 PSI TEST PRESSURE)

<u>FITTING</u>	<u>MINIMUM BEARING AREA</u> <u>LENGTH x HEIGHT</u>
11 1/4" BEND	2' x 2'
22 1/2" BEND	2' x 3'
45° BEND	3' x 4'
90° BEND	6' x 4'
TEE	4' x 4'
DEAD END	4' x 4'

FOR SMALLER PIPE, THE ABOVE BLOCKING BEARING AREA CAN BE MULTIPLIED BY REDUCTION FACTORS SHOWN BELOW; HOWEVER, THE LEAST DIMENSION IS TO BE NOT LESS THAN 1 FOOT.

<u>PIPE SIZE</u>	<u>REDUCTION FACTOR</u>
12"	0.58
10"	0.41
8"	0.27
6"	0.16

NOTE:

SOIL BEARING STRENGTH OF 2500 PSI IS ASSUMED IN THE CALCULATIONS ABOVE.

CONCRETE BLOCKING

**CITY OF
CARTERSVILLE**

WATER DEPARTMENT

**CONCRETE
BLOCKING DETAIL**

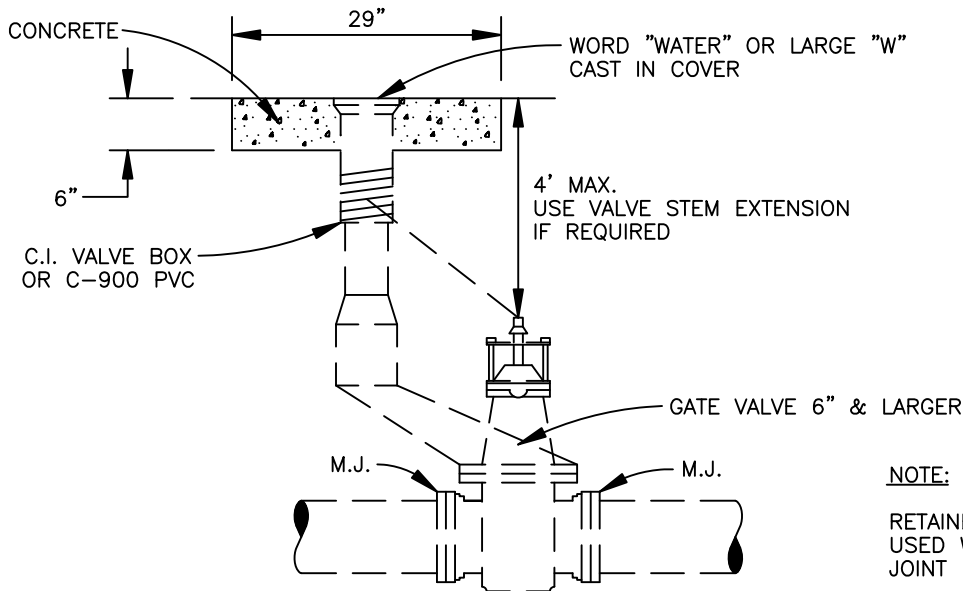
CONSTRUCTION STANDARD

DATE: DEC.'08

APPROVED:

STANDARD
NO.

5.8.04



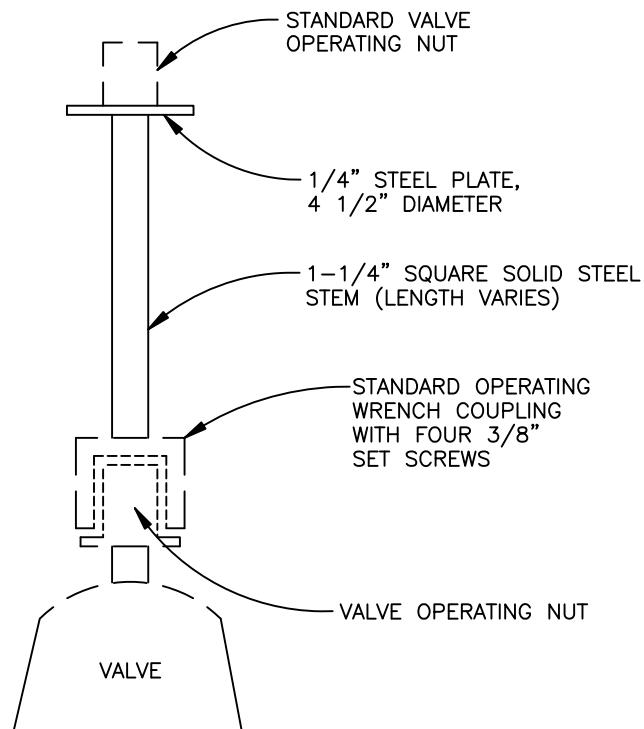
NOTE:

RETAINER GLANDS TO BE USED WITH MECHANICAL JOINT FITTINGS.

TYPICAL VALVE INSTALLATION

NOTES:

1. TOP OF EXTENSION SHALL BE NO MORE THAN TWO FEET BELOW FINAL GRADE.
2. CONTRACTOR IS RESPONSIBLE FOR IN FIELD MEASUREMENT OF DEPTH OF PIPE COVER TO DETERMINE NEED FOR VALVE STEM EXTENSION.



VALVE STEM EXTENSION DETAIL

**CITY OF
CARTERSVILLE**

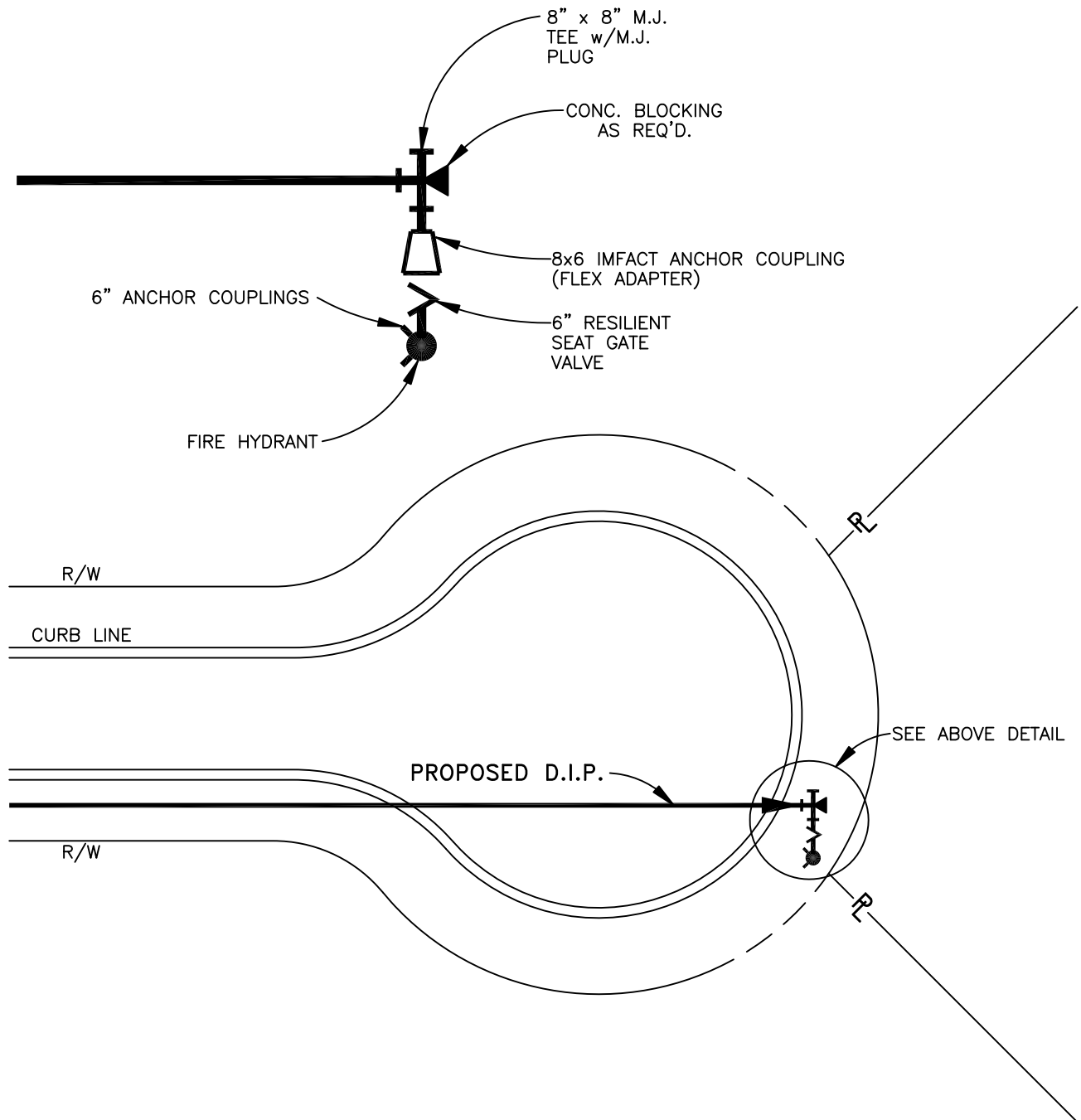
WATER DEPARTMENT

**TYPICAL
VALVE
INSTALLATION**
CONSTRUCTION STANDARD

DATE: SEPT.'14

APPROVED:

STANDARD
NO.
5.8.05



WATERMAIN AT CUL-DE-SAC

NOTE:

ALIGN FIRE HYDRANT WITH PROPERTY LINE.
 CONSTRUCT WITH MAXIMUM DISTANCE OF 8' FROM
 BACK OF CURB TO BACK OF HYDRANT AND BACK OF
 CURB TO BACK OF CONCRETE BLOCKING.

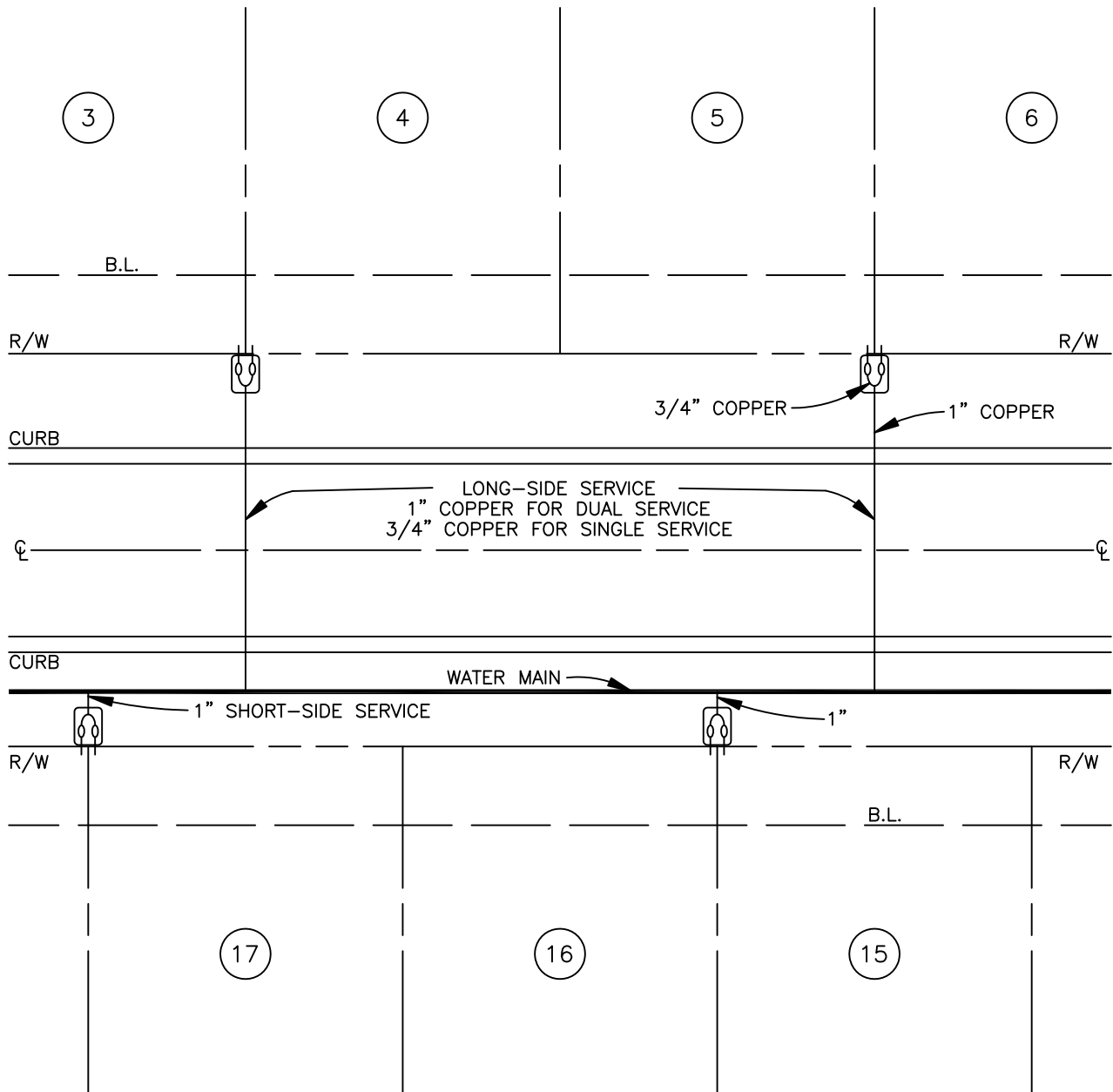
**CITY OF
CARTERSVILLE**
 WATER DEPARTMENT

**TYPICAL
WATERMAIN
AT CUL-DE-SAC**
 CONSTRUCTION STANDARD

DATE: JUN.'17

APPROVED:

STANDARD
NO.
5.8.06



NOTE:

METERS TO BE INSTALLED AT PROPERTY
LINES WHENEVER FEASIBLE

**CITY OF
CARTERSVILLE**

WATER DEPARTMENT

**3/4" WATER
METER LOCATION
(FOR SUBDIVISIONS)**
CONSTRUCTION STANDARD

DATE: SEPT.'14

APPROVED:

STANDARD
NO.
5.8.07

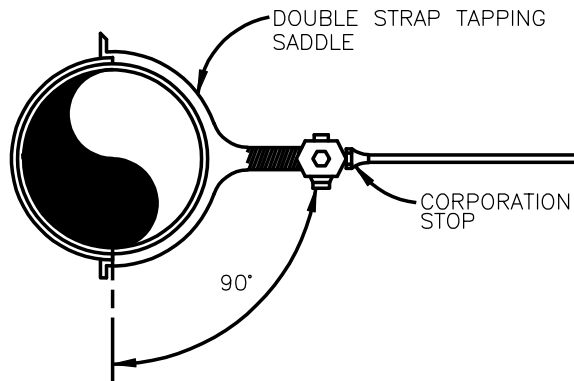
MATERIAL FOR 3/4" WATER TAP

- 1 - TAPPING SADDLE - FORD F202 WITH 3/4" CC THREADS
- 1 - 3/4" CORPORATION STOP - FORD FB1000-3 3/4"
- 1 - 3/4" YOKE (TO INCLUDE:
 - 1 - IRON BAR FORD Y502P
 - 1 - 3/4" BALL VALVE FORD B94-223WR
 - 1 - CHECK VALVE FORD HHS91-323 DUAL)
- 1 - PLASTIC METER BOX - DFW (11" x 17 1/2" @ TOP)
- 1 - CAST IRON METER BOX LID - KENFLOW CAST IRON LID WITH TOUCH READ HOLE FOR SMART POINT
- 1 - 3/4" COPPER TUBING, TYPE 'K', SOFT TEMPER, SEAMLESS FEDERAL SPECIFICATION WW-T-T00
- 1 - EXPANSION WHEEL-EC23

MATERIAL FOR 3/4" DUAL WATER TAP

- 1 - TAPPING SADDLE - FORD F202 WITH 1" CC THREADS
- 1 - 1" CORPORATION STOP - FORD FB1000-4 1"
- 1 - 1" x 3/4" x 7 1/2" BRANCH PIECE
 - 1" INLET x 3/4" MIP OUTLET - FORD U48-43-7 1/2
- 2 - 3/4" YOKES (TO INCLUDE:
 - 2 - IRON BARS - FORD Y502P
 - 2 - 3/4" BALL VALVES - FORD B91-223WR
 - 2 - CHECK VALVES - FORD HHS91-323 DUAL)
- 4 - 3/4" x 12" GALVANIZED STAKES
- 1 - PLASTIC METER BOX - DFW (11" x 17 1/2" @ TOP) WITH DUAL OUTLET
- 1 - CAST IRON METER BOX LID - KENFLOW CAST IRON LID WITH TOUCH READ HOLE FOR SMART POINT
- 1 - 1" COPPER TUBING, TYPE 'K', SOFT TEMPER, SEAMLESS FEDERAL SPECIFICATION WW-T-T00
- 2 - EXPANSION WHEELS-EC23

The backflow preventer shall meet the requirements of the ASSE 1024 standards



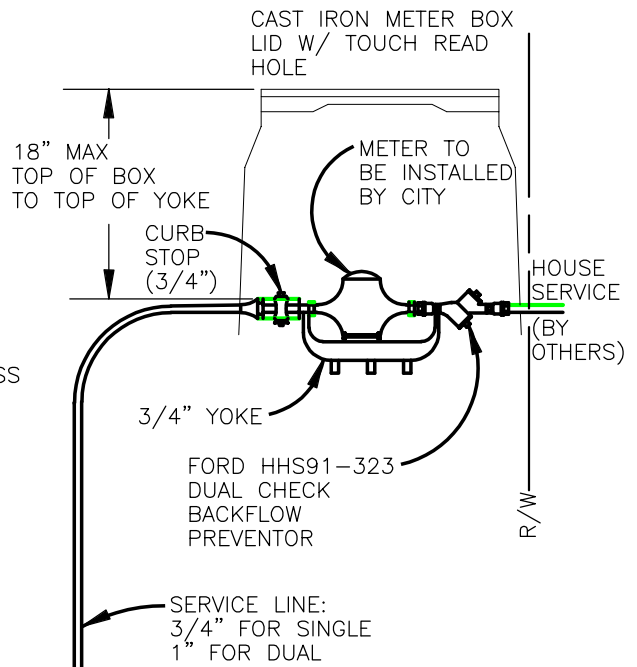
PURCHASED FROM AND PROVIDED BY CITY

SINGLE METER SETTING

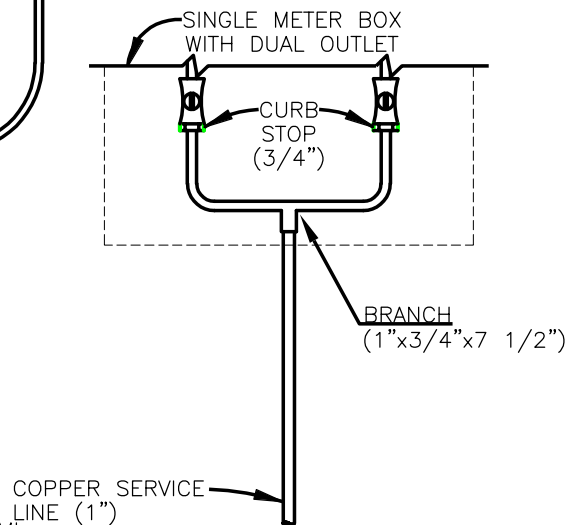
- 1 - 3/4" IPERL METER PART# I2S1GBXX
- 1 - SINGLE PORT SENSUS SMARTPOINT PART# 5396353752201MI

DUAL METER SETTING

- 1 - 3/4" IPERL METER PART# I2S1GBXX
- 1 - DUAL PORT SENSUS SMARTPOINT PART# 5396353752203MI



SECTION



PLAN (DUAL INSTALLATION)

RESIDENTIAL WATER METER INSTALLATION

CITY OF
CARTERSVILLE

WATER DEPARTMENT

RESIDENTIAL
WATER METER
INSTALLATION
CONSTRUCTION STANDARD

DATE: JUNE 22'

APPROVED:

STANDARD
NO.

5.8.08

MATERIAL FOR 3/4" WATER TAP

- 1 - TAPPING SADDLE - FORD F202 WITH 3/4" CC THREADS
- 1 - 3/4" CORPORATION STOP - FORD FB1000-3 3/4"
- 1 - 3/4" YOKE (TO INCLUDE:
 - 1 - IRON BAR FORD Y502P
 - 1 - 3/4" BALL VALVE FORD B94-223WR
 - 1 - CHECK VALVE FORD HHS91-323 DUAL)

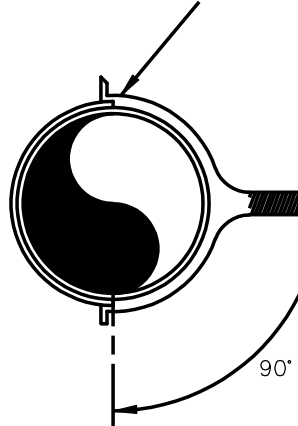
- 1 - PLASTIC METER BOX - DFW (11"x 17 1/2" @ TOP)
- 1 - CAST IRON METER BOX LID - KENFLOW CAST IRON LID WITH TOUCH READ HOLE FOR SMART POINT
- 1- 3/4" COPPER TUBING, TYPE 'K', SOFT TEMPER, SEAMLESS FEDERAL SPECIFICATION WW-T-T00
- 1 - EXPANSION WHEEL-EC23

MATERIAL FOR 3/4" DUAL WATER TAP

- 1 - TAPPING SADDLE - FORD F202 WITH 1" CC THREADS
- 1 - 1" CORPORATION STOP - FORD FB1000-4 1"
- 1 - 1" x 3/4" x 7 1/2" BRANCH PIECE
- 1" INLET x 3/4" MIP OUTLET - FORD U48-43-7 1/2
- 2 - 3/4" YOKES (TO INCLUDE:
 - 2 - IRON BARS - FORD Y502P
 - 2 - 3/4" BALL VALVES - FORD B91-223WR
 - 2 - CHECK VALVES - FORD HHS91-323 DUAL)
- 4 - 3/4" x 12" GALVANIZED STAKES
- 1 - PLASTIC METER BOX - DFW (11" x 17 1/2" @ TOP) WITH DUAL OUTLET
- 1 - CAST IRON METER BOX LID (KENFLOW CAST IRON LID) WITH TOUCH READ HOLE FOR SMART POINT
- 1- 1" COPPER TUBING, TYPE 'K', SOFT TEMPER, SEAMLESS FEDERAL SPECIFICATION WW-T-T00
- 2 - EXPANSION WHEELS-EC23

The backflow preventer shall meet the requirements of the ASSE 1024 standards

DOUBLE STRAP TAPPING SADDLE



CORPORATION STOP

90°

NOTE:

- 1. CONTACT CITY WATER DEPARTMENT BACKFLOW PREVENTION PROGRAM COORDINATOR.

PURCHASED FROM AND PROVIDED BY CITY

SINGLE METER SETTING

- 1 - 3/4" IPERL METER PART# I2S1GBXX
- 1 - SINGLE PORT SENSUS SMARTPOINT PART# 5396353752201MI

DUAL METER SETTING

- 1 - 3/4" IPERL METER PART# I2S1GBXX
- 1 - DUAL PORT SENSUS SMARTPOINT PART# 5396353752203MI

SECTION

METER (TO BE INSTALLED BY CITY)

DFW METER BOX W/ KENFLOW CAST IRON LID W/TOUCH READ HOLE

18" MAX TOP OF BOX TO TOP OF YOKE

DOUBLE CHECK VALVE

(3/4") CURB STOP

3/4" YOKE FORD HHS91-323 DUAL CHECK BACKFLOW PREVENTOR

R/W

SERVICE LINE: 3/4" FOR SINGLE 1" FOR DUAL

SEPARATE METER BOXES

SINGLE METER BOX

DOUBLE CHECK VALVE

WATER METER

CURB STOP (3/4")

COPPER SERVICE LINE (1")

BRANCH (1"x3/4"x7 1/2")

PLAN

(DUAL INSTALLATION)

INDUSTRIAL/COMMERCIAL 3/4" WATER METER INSTALLATION

CITY OF
CARTERSVILLE

WATER DEPARTMENT

INDUSTRIAL/COMMERCIAL
3/4" WATER METER
INSTALLATION

CONSTRUCTION STANDARD

DATE: JUNE '22

APPROVED:

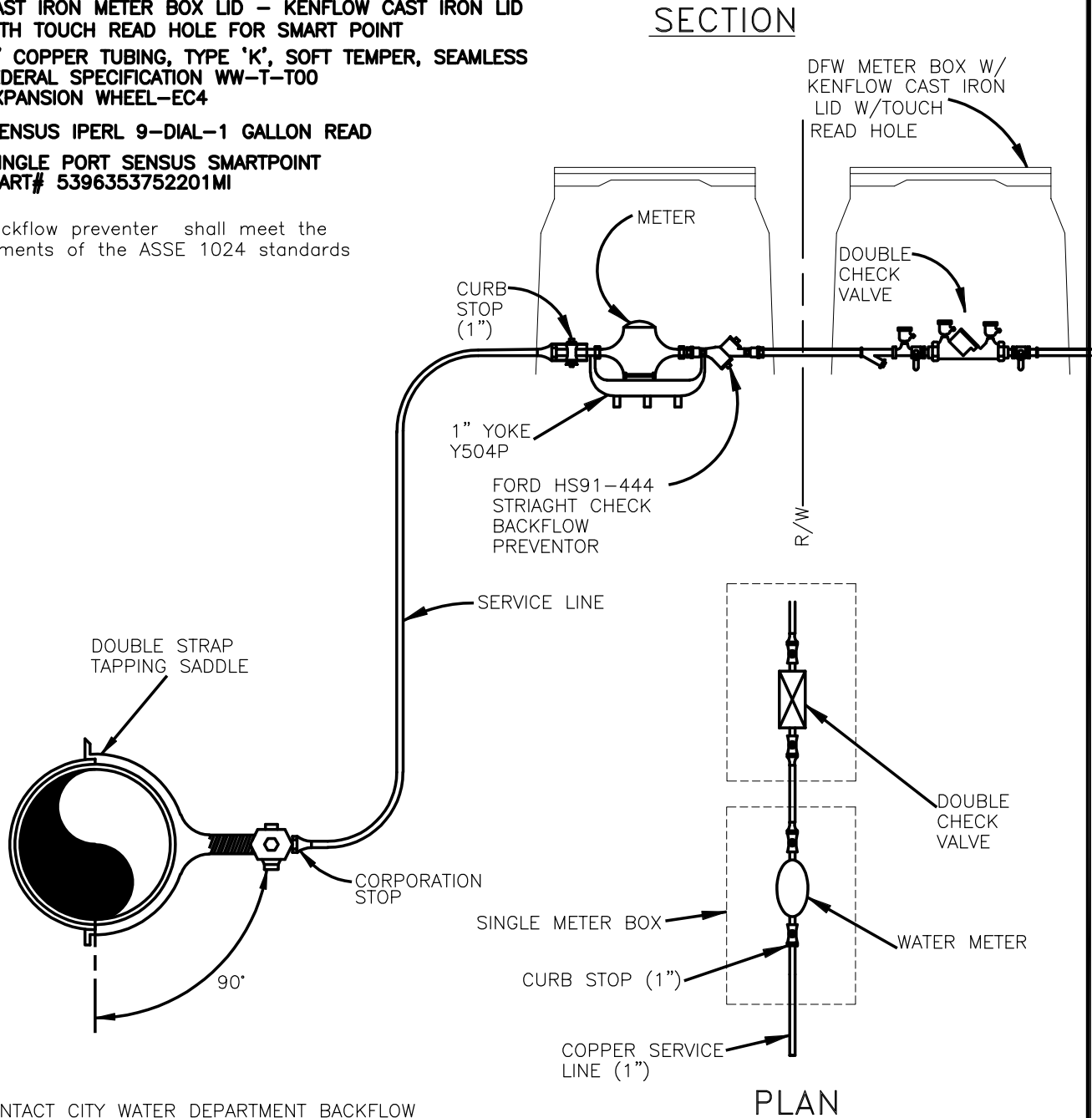
STANDARD
NO.

5.8.09

MATERIAL FOR 1" WATER TAP

- 1 - FORD F202 DOUBLE STRAP TAPPING SADDLE W/1" CC THREADS
- 1 - 1" CORPORATION STOP - FORD FB1000-4-1"
- 1 - 1" YOKE (TO INCLUDE:
 - 1 - IRON BAR FORD Y504P
 - 1 - 1" BALL VALVE FORD B94-344WR
 - 1 - CHECK VALVE FORD HS91-444STRAIGHT CHECK)
- 1 - PLASTIC METER BOX - DFW (11"x 17 1/2" ⌀ TOP)
- 1 - CAST IRON METER BOX LID - KENFLOW CAST IRON LID WITH TOUCH READ HOLE FOR SMART POINT
- 1 - 1" COPPER TUBING, TYPE 'K', SOFT TEMPER, SEAMLESS FEDERAL SPECIFICATION WW-T-T00
- 1 - EXPANSION WHEEL-EC4
- 1 - SENSUS IPERL 9-DIAL-1 GALLON READ
- 1 - SINGLE PORT SENSUS SMARTPOINT PART# 5396353752201MI

The backflow preventer shall meet the requirements of the ASSE 1024 standards



NOTE:

1. CONTACT CITY WATER DEPARTMENT BACKFLOW PREVENTION PROGRAM COORDINATOR.

INDUSTRIAL/COMMERCIAL 1" WATER METER INSTALLATION

CITY OF
CARTERSVILLE

WATER DEPARTMENT

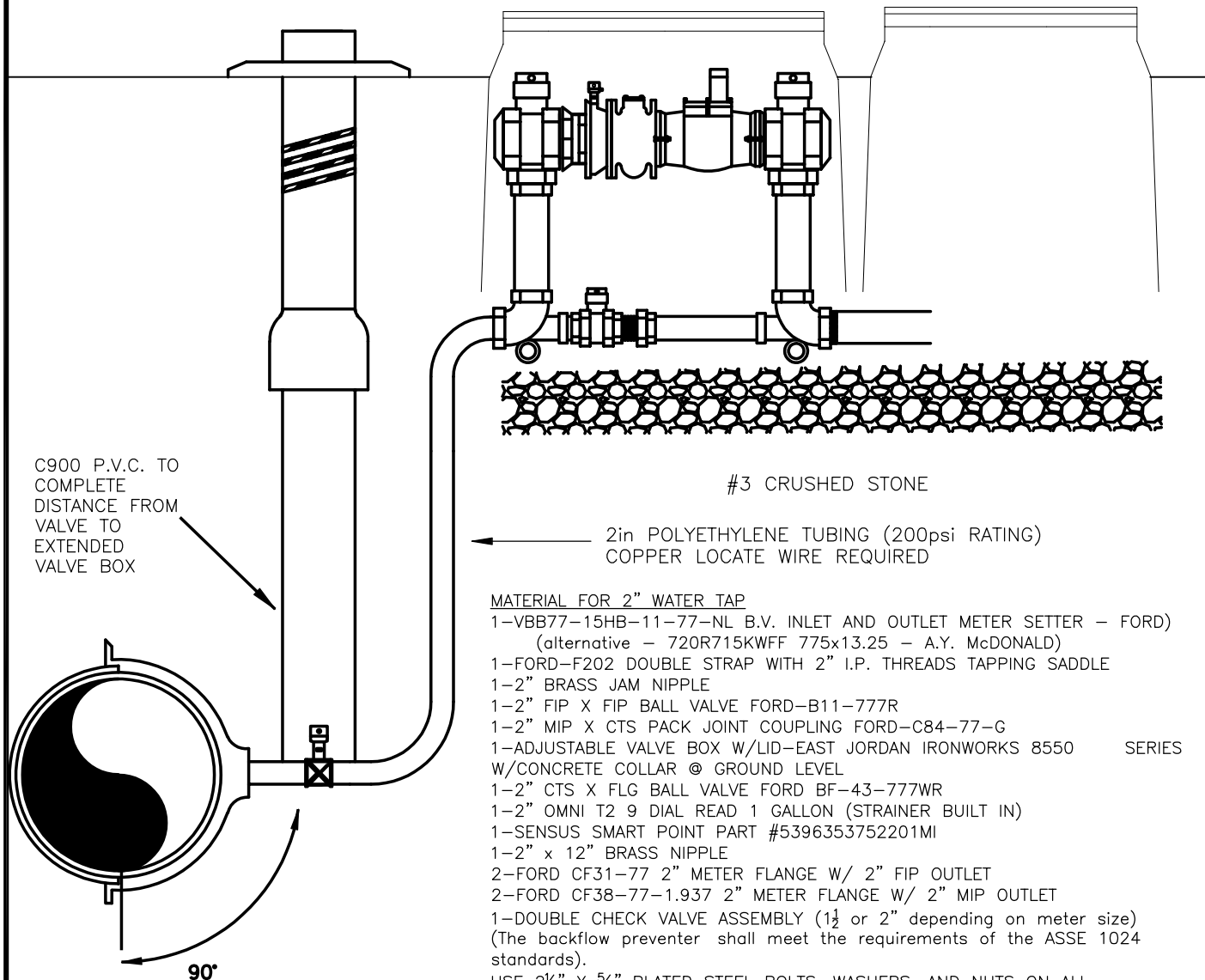
INDUSTRIAL/COMMERCIAL
1" WATER METER
INSTALLATION
CONSTRUCTION STANDARD

DATE: JUNE '22

APPROVED:

STANDARD
NO.

5.8.10



MATERIAL FOR 2" WATER TAP

1-VBB77-15HB-11-77-NL B.V. INLET AND OUTLET METER SETTER - FORD)
(alternative - 720R715KWFF 775x13.25 - A.Y. McDONALD)

1-FORD-F202 DOUBLE STRAP WITH 2" I.P. THREADS TAPPING SADDLE

1-2" BRASS JAM NIPPLE

1-2" FIP X FIP BALL VALVE FORD-B11-777R

1-2" MIP X CTS PACK JOINT COUPLING FORD-C84-77-G

1-ADJUSTABLE VALVE BOX W/LID-EAST JORDAN IRONWORKS 8550 SERIES
W/CONCRETE COLLAR @ GROUND LEVEL

1-2" CTS X FLG BALL VALVE FORD BF-43-777WR

1-2" OMNI T2 9 DIAL READ 1 GALLON (STRAINER BUILT IN)

1-SENSUS SMART POINT PART #5396353752201MI

1-2" x 12" BRASS NIPPLE

2-FORD CF31-77 2" METER FLANGE W/ 2" FIP OUTLET

2-FORD CF38-77-1.937 2" METER FLANGE W/ 2" MIP OUTLET

1-DOUBLE CHECK VALVE ASSEMBLY (1½ or 2" depending on meter size)
(The backflow preventer shall meet the requirements of the ASSE 1024 standards).

USE 2½" x ⅝" PLATED STEEL BOLTS, WASHERS, AND NUTS ON ALL
FLANGE JOINTS.

2-HDPE METER BOX-CARSON 1730-18(17302013) TO BE PLACE ON BED OF
#3 CRUSHED STONE

2-HDPE METER BOX "T" LID-CARSON

(WITH TOUCH READ HOLE FOR SMART POINT)

NOTE:

1. CONTACT CITY OF CARTERSVILLE WATER DEPARTMENT
BACKFLOW PREVENTION PROGRAM COORDINATOR FOR BACKFLOW
STANDARDS AND SPECIFICATIONS.

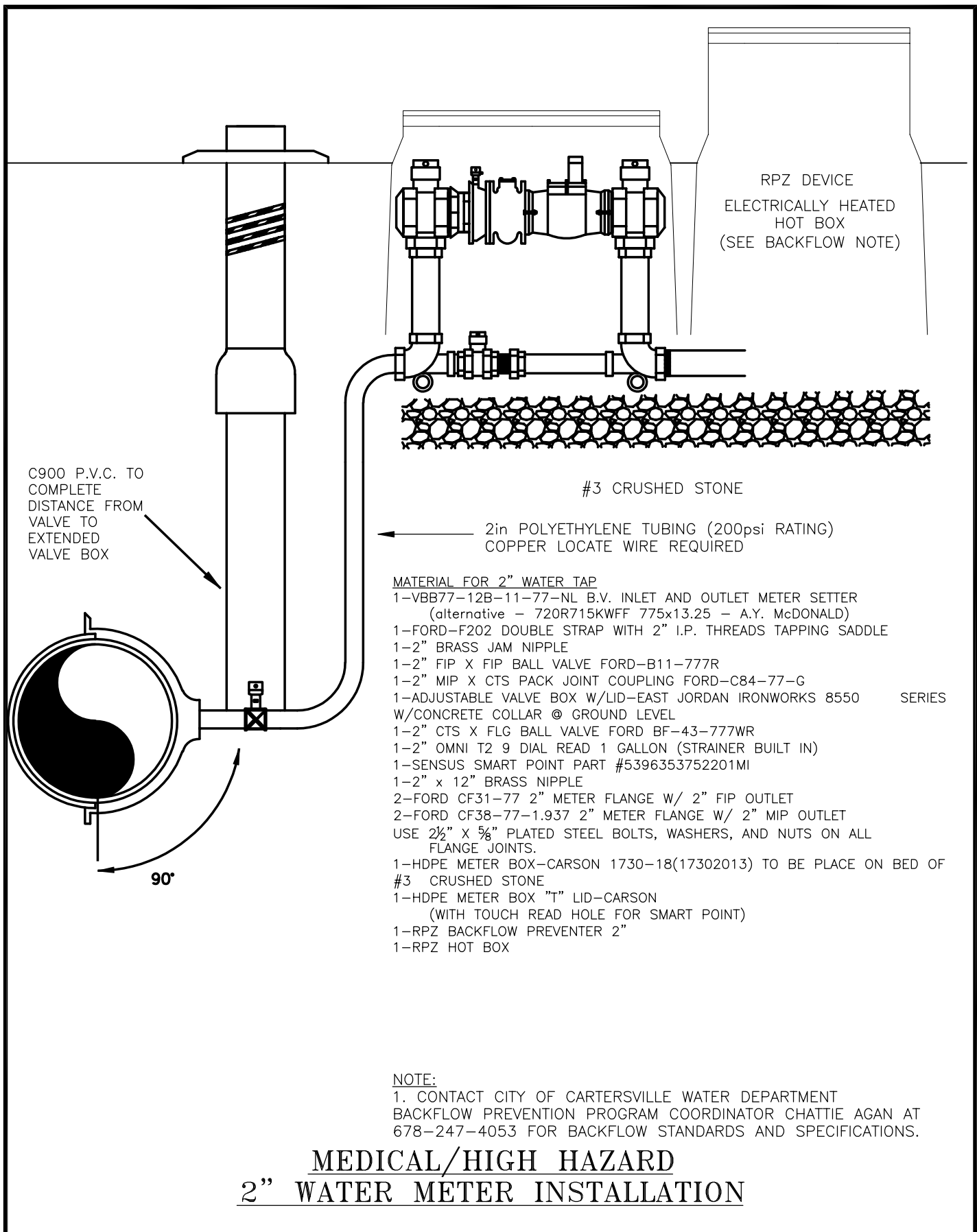
INDUSTRIAL/COMMERCIAL 2" WATER METER INSTALLATION

**CITY OF
CARTERSVILLE**
WATER DEPARTMENT

**INDUSTRIAL/COMMERCIAL
2"
WATER METER
INSTALLATION
CONSTRUCTION STANDARD**

DATE: NOV '22
APPROVED:

**STANDARD
NO.
5.8.11**

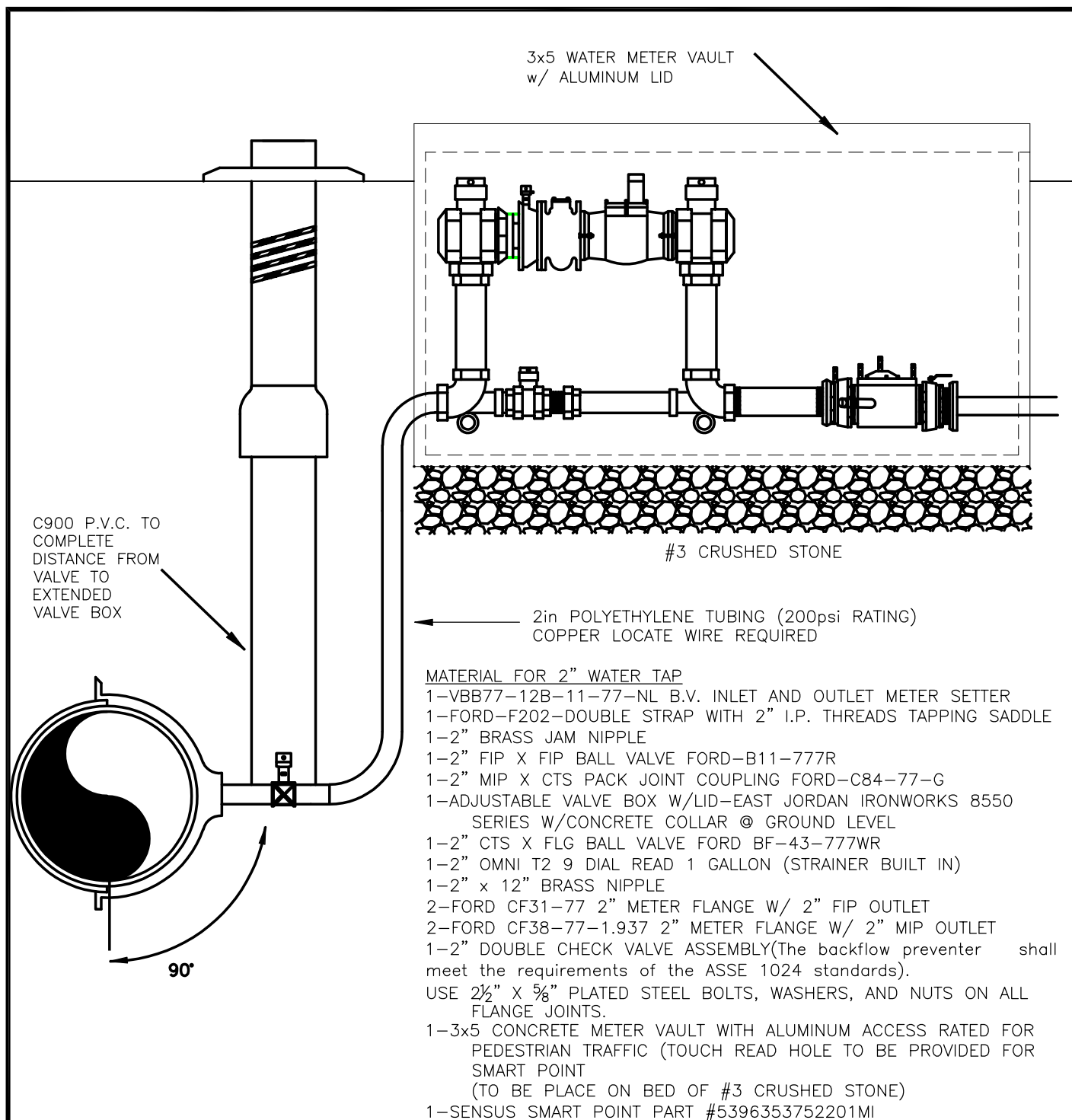


**CITY OF
 CARTERSVILLE**
 WATER DEPARTMENT

**MEDICAL/HIGH HAZARD
 2"
 WATER METER
 INSTALLATION
 CONSTRUCTION STANDARD**

DATE: NOV '22
APPROVED:

**STANDARD
 NO.
 5.8.12**



NOTE:

1. CONTACT CITY OF CARTERSVILLE WATER DEPARTMENT
BACKFLOW PREVENTION PROGRAM COORDINATOR FOR BACKFLOW
STANDARDS AND SPECIFICATIONS.

INDUSTRIAL/COMMERCIAL 2" WATER METER VAULT INSTALLATION

**CITY OF
CARTERSVILLE**

WATER DEPARTMENT

**INDUSTRIAL/COMMERCIAL
2" WATER METER VAULT
INSTALLATION
CONSTRUCTION STANDARD**

DATE: JUNE '22

APPROVED:

STANDARD
NO.

5.8.13

1. 8"x4" TRUE WYE FxF
 2. 4" 45 deg. BEND FxF
 3. 4" OMNI T2 METER W/ BUILT IN STRAINER. 9 DIAL
READING 1 GALLON AND SENSUS SMART POINT PART#
5396353752201MI
 4. 6" Length FxF SPOOL w/ UNI-FLANGE
 5. 4" OS&Y GATE VALVE
 6. 4" DJ400-04 DISMANTLING JOINT
NOMINAL LENGTH 8"
- *PIPE STANDS TYP.

PRODUCT INFORMATION:
SURESPEC VAULT OR EQUIVILANT

SS122-50805
L0906-3636 HR

8'X5'X8' (ID)
DUAL 4" METER VAULT
VAULT= 10,000 LBS
LID= 3,500 LBS

SPECIFICATIONS

MEETS ASTM C858 & C857
RATING: A-16 (H-20)

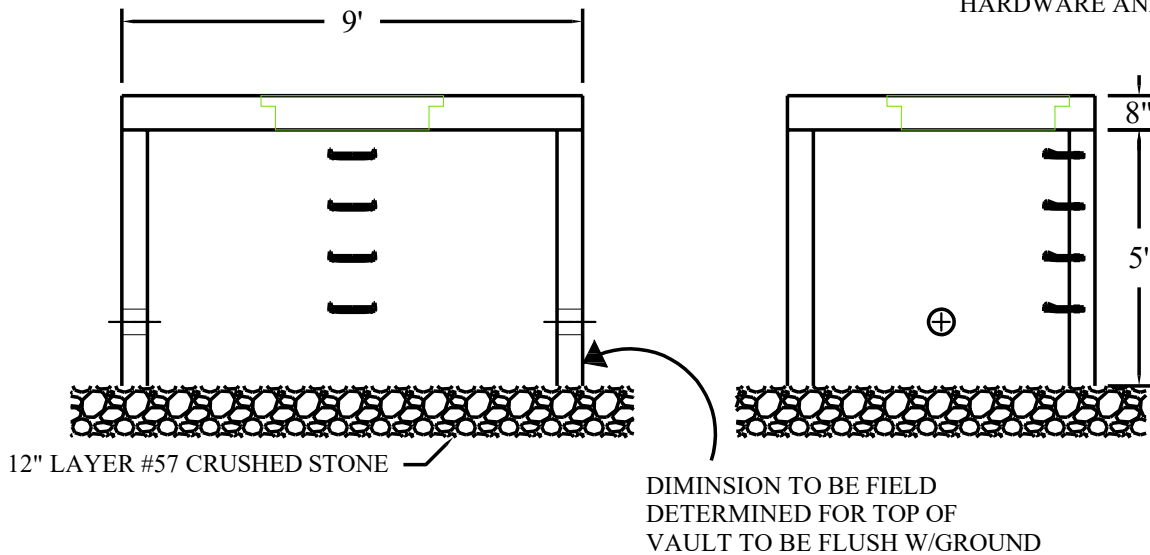
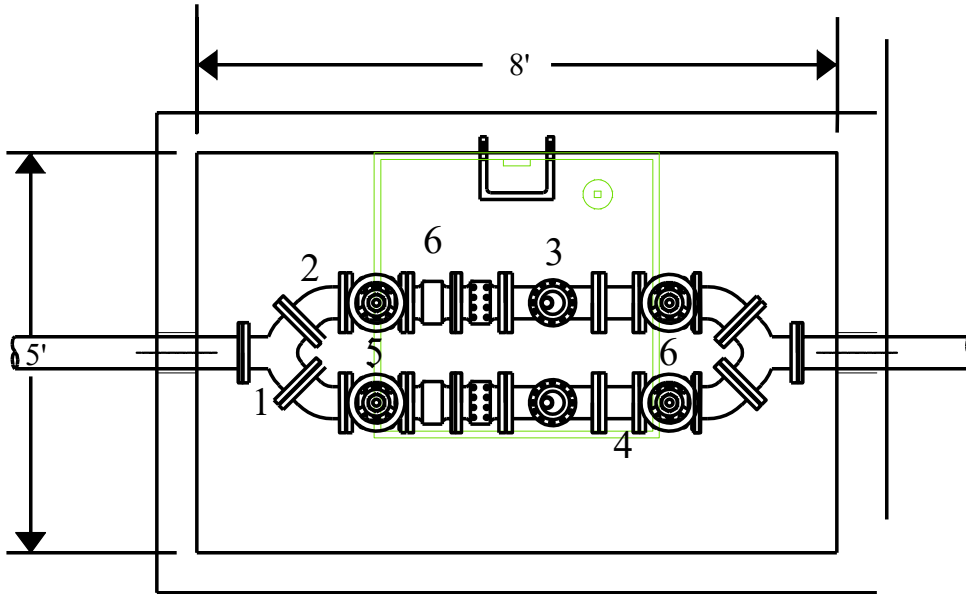
CONCRETE TO BE 5,000 PSI@28 DAYS

REINFORCING GAR MEETS
ASTM A 615

10" STEPS ON 12" CENTERS

BUTYL SEALANT MEETING
ASTM C 990 TO BE USED ON
JOINTS

ACCESS HATCH SHALL BE
FABRICATED WITH ¼" ALUMINIUM
DIAMOND PLATE DESIGNED TO H-20
LOADING 36"X36" FRAME OPENING
EQUIPPED WITH: SLAM LOCK,
RECESSED LOCK BOX, FLUSH MOUNT
LIFT HANDLE, HOLD-OPEN ARM, SS
HARDWARE AND HINGES



INDUSTRIAL/COMMERCIAL DUAL 4" WATER VAULT INSTALLATION

**CITY OF
CARTERSVILLE**

WATER DEPARTMENT

**INDUSTRIAL/COMMERCIAL
DUAL 4" WATER VAULT
INSTALLATION**
CONSTRUCTION STANDARD

DATE: JUNE '22

APPROVED:

STANDARD
NO.

5.8.14

1. 4" FLANGE TRUE WYE Fx F
2. 4"x2" 45 deg. BEND FLGxFLG
3. 2"x2" FLNG BALL VALVE
4. 2" SENSUS OMNI T2 METER 9 DIAL READ 1 GALLON AND SENSUS SMART POINT PART# 5396353752201MI

*PIPE STANDS TYP.

PRODUCT INFORMATION:
SURESPEC VAULT OR EQUIVILANT

SS122-50805
L0906-3636 HR

8'X5'X8' (ID)
DUAL 4" METER VAULT
VAULT= 10,000 LBS
LID= 3,500 LBS

SPECIFICATIONS

MEETS ASTM C858 & C857
RATING: A-16 (H-20)

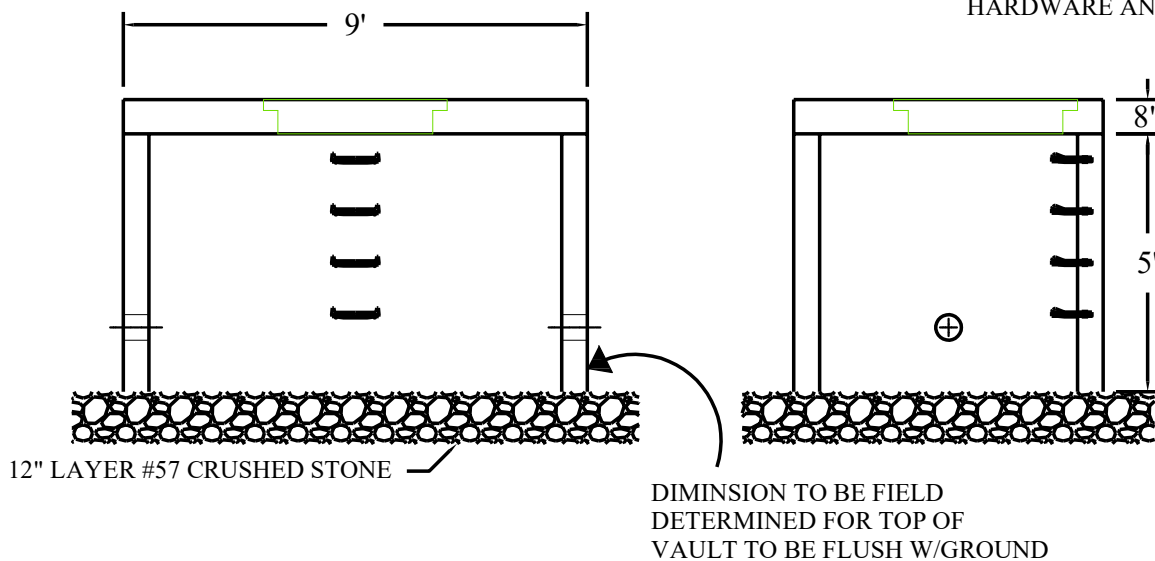
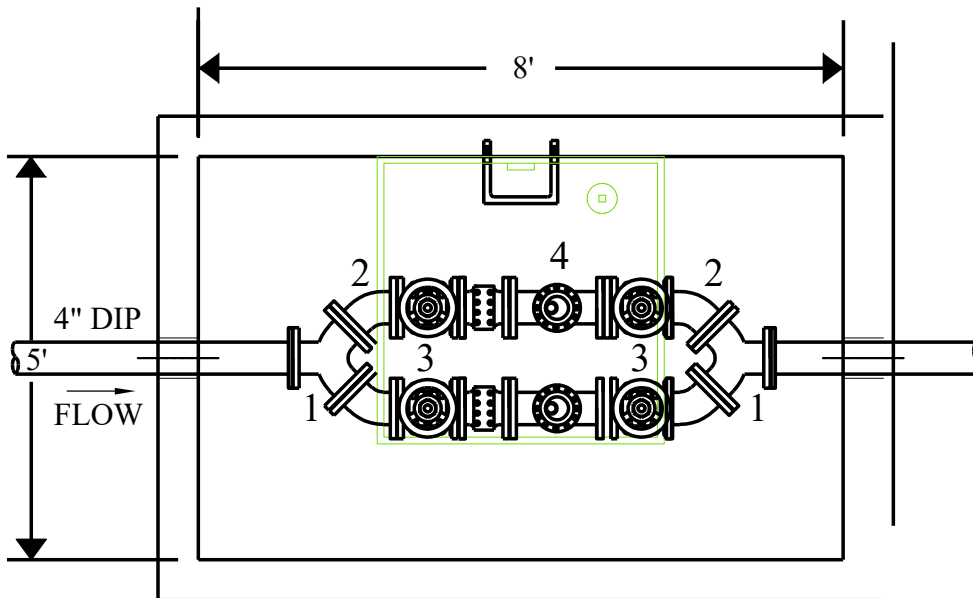
CONCRETE TO BE 5,000 PSI@28 DAYS

REINFORCING GAR MEETS
ASTM A 615

10" STEPS ON 12" CENTERS

BUTYL SEALANT MEETING
ASTM C 990 TO BE USED ON
JOINTS

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FABRICATED WITH ¼" ALUMINIUM
DIAMOND PLATE DESIGNED TO H-20
LOADING 36"X36" FRAME OPENING
EQUIPPED WITH: SLAM LOCK,
RECESSED LOCK BOX, FLUSH MOUNT
LIFT HANDLE, HOLD-OPEN ARM, SS
HARDWARE AND HINGES



INDUSTRIAL/COMMERCIAL DUAL 2" WATER VAULT INSTALLATION

**CITY OF
CARTERSVILLE**

WATER DEPARTMENT

**INDUSTRIAL/COMMERCIAL
DUAL 2" WATER VAULT
INSTALLATION
CONSTRUCTION STANDARD**

DATE: JUNE '22

APPROVED:

STANDARD
NO.

5.8.14.2

1. 4" OS&Y GATE VALVE
2. 4" STRAINER BUILT INTO METER
3. 4" OMNI T2 METER 9 DIAL/ READ 1 GALLON AND SENSUS
SMART POINT PART#5396353752201MI
4. 6" Length FxF SPOOL w/ UNI-FLANGE
5. 4" DJ400-04 DISMANTLING JOINT
NOMINAL LENGTH 8"

*PIPE STANDS TYP.

PRODUCT INFORMATION:
SURESPEC VAULT OR EQUIVILANT

SS122-50805
L0906-3636 HR

8'X5'X8' (ID)
DUAL 4" METER VAULT
VAULT= 10,000 LBS
LID= 3,500 LBS

SPECIFICATIONS

MEETS ASTM C858 & C857
RATING: A-16 (H-20)

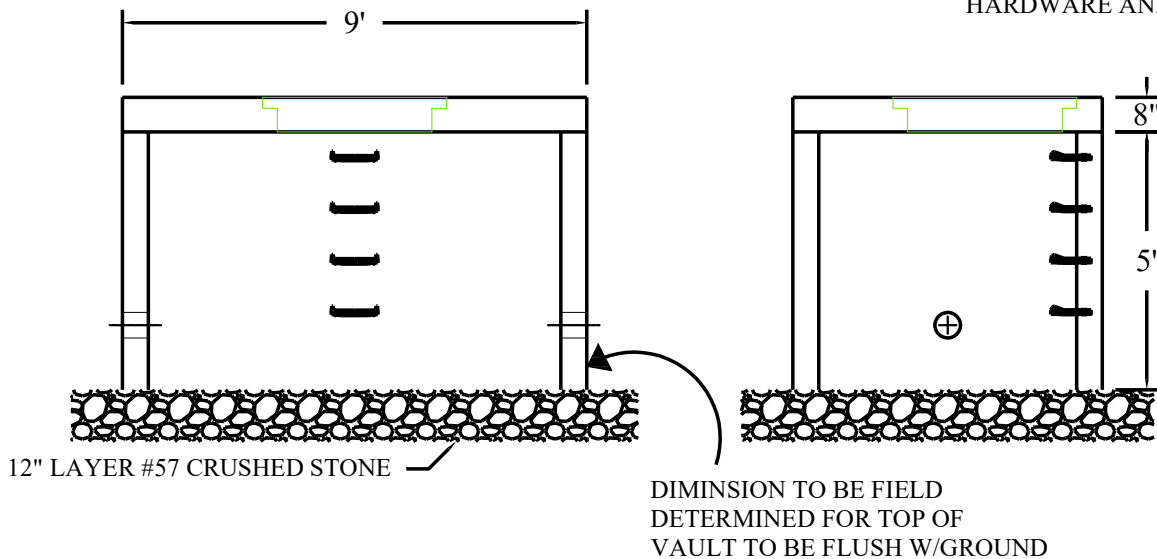
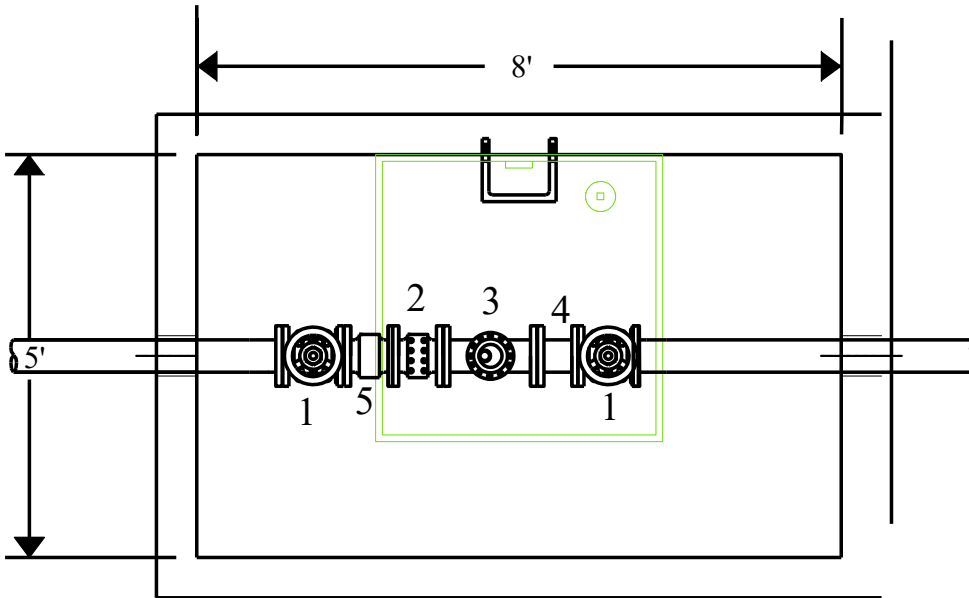
CONCRETE TO BE 5,000 PSI@28 DAYS

REINFORCING GAR MEETS
ASTM A 615

10" STEPS ON 12" CENTERS

BUTYL SEALANT MEETING
ASTM C 990 TO BE USED ON
JOINTS

ACCESS HATCH SHALL BE
FABRICATED WITH ¼" ALUMINIUM
DIAMOND PLATE DESIGNED TO H-20
LOADING 36"X36" FRAME OPENING
EQUIPPED WITH: SLAM LOCK,
RECESSED LOCK BOX, FLUSH MOUNT
LIFT HANDLE, HOLD-OPEN ARM, SS
HARDWARE AND HINGES



INDUSTRIAL/COMMERCIAL 4" WATER VAULT INSTALLATION

**CITY OF
CARTERSVILLE**

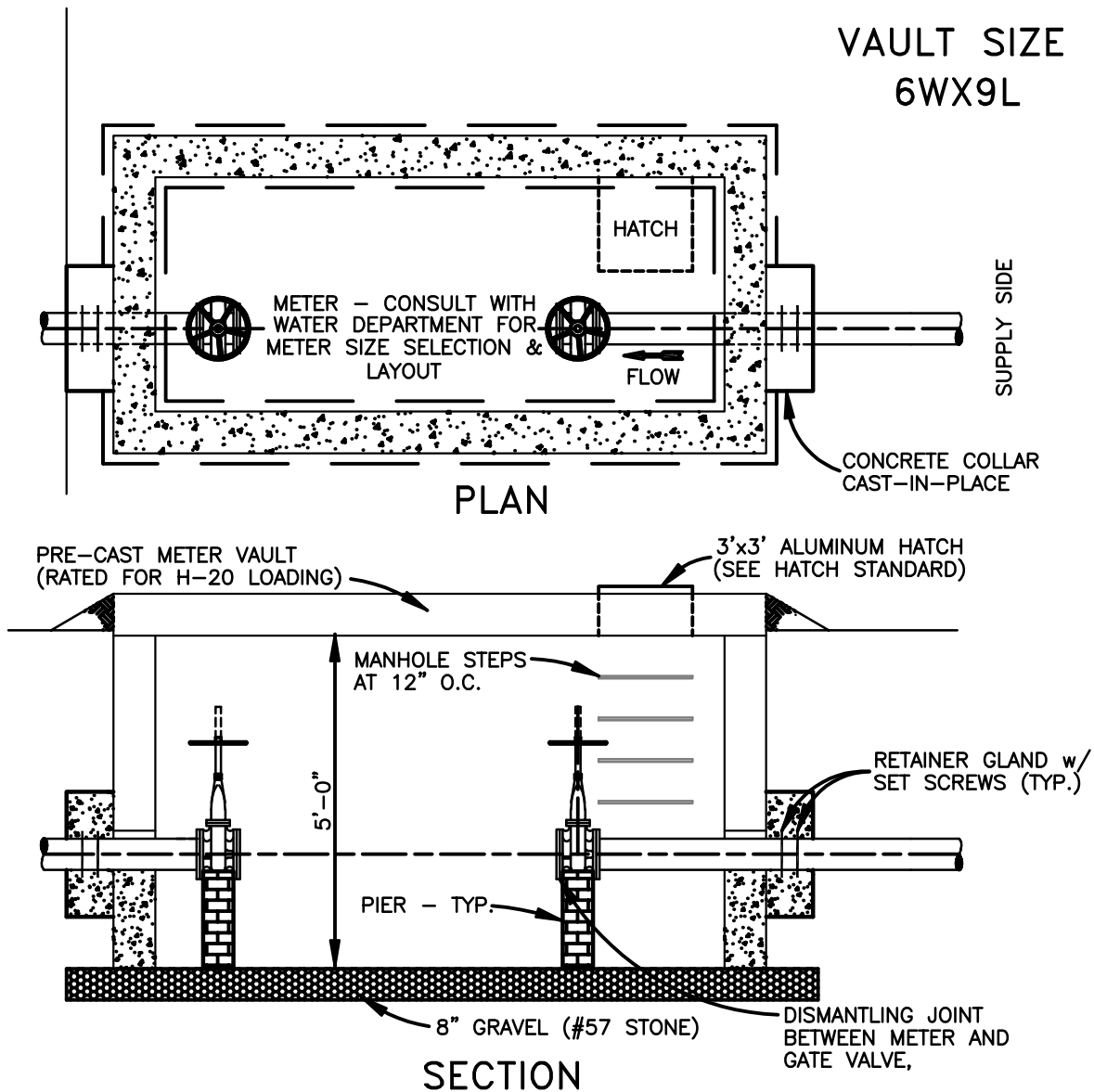
WATER DEPARTMENT

**INDUSTRIAL/COMMERCIAL
4" WATER VAULT
with DISMANTLING JOINT**
CONSTRUCTION STANDARD

DATE: JUNE '22

APPROVED:

STANDARD
NO.
5.8.15



NOTES:

1. BOXES EXCEEDING 5' IN DEPTH MUST BE APPROVED BY THE CITY.
2. COVER OPENING & STEPS TO BE PLACED NEAREST THE METER REGISTER.
3. THE METER MUST BE INSTALLED WITH AT LEAST 8 DIAMETERS OF STRAIGHT PIPE SAME SIZE AS METER ON THE INLET SIDE TO PERMIT ON-SITE MAINTENANCE AND CALIBRATION.
4. THESE BOXES ARE NOT TO BE INSTALLED IN TRAFFIC AREAS WITHOUT PRIOR PERMISSION FROM THE CITY.
5. DOUBLE CHECK BACK FLOW PREVENTION REQUIRED ON PROPERTY OWNER'S SIDE OF METER. LOCATION SHALL BE APPROVED BY THE CITY.
6. ALL VALVES AND FITTINGS INSIDE THE VAULT SHALL BE FLANGED.
7. ALL FITTINGS OUTSIDE THE VAULT SHALL BE MECHANICAL JOINT WITH RETAINER GLANDS.
8. PROVIDE 120 VOLT ELECTRICAL SERVICE WITH GROUND FAULT
9. PROVIDE ELECTRICAL SUMP PUMP AND DISCHARGE PIPING.

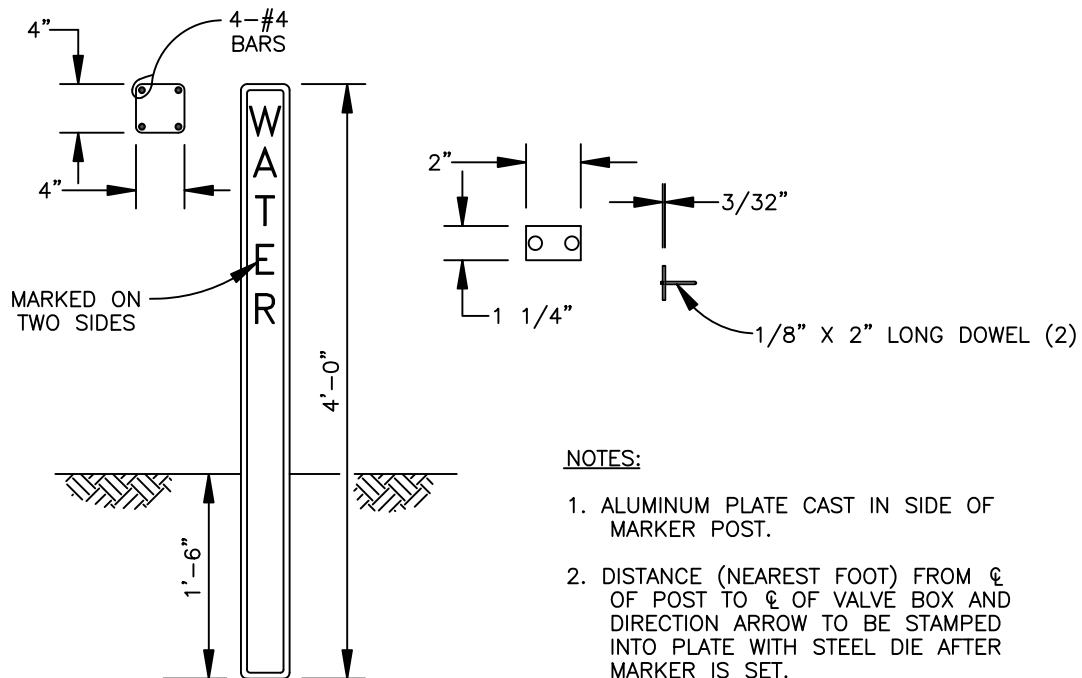
**CITY OF
CARTERSVILLE**
WATER DEPARTMENT

**TYPICAL LARGE
METER & VAULT
INSTALLATION**
CONSTRUCTION STANDARD

DATE: SEPT.'14

APPROVED:

STANDARD
NO.
5.8.16



DETAIL OF CONCRETE VALVE MARKER

**CITY OF
CARTERSVILLE**

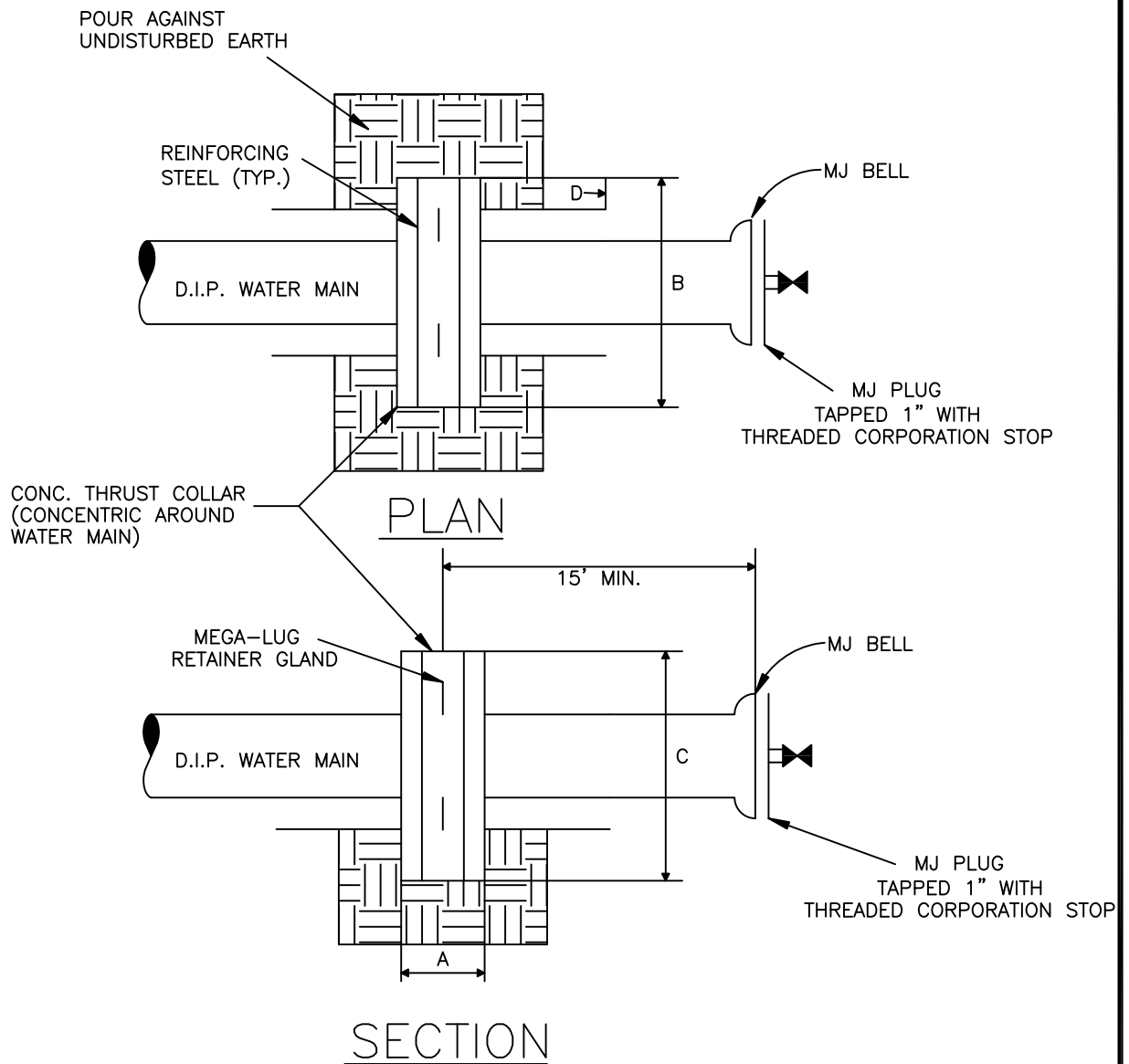
WATER DEPARTMENT

**CONCRETE
VALVE
MARKER**
CONSTRUCTION STANDARD

DATE: SEPT.'14

APPROVED:

STANDARD
NO.
5.8.17



MAIN DIA	CONCRETE COLLAR DIMENSION				STEEL REINFORCING
	A	B	C	D	
24"	1'-9"	9'-0"	9'-0"	2'-6"	#9 @ 8" O.C. E.W.E.F.
20"	1'-6"	7'-8"	7'-8"	2'-0"	#9 @ 12" O.C. E.W.E.F.
16"	1'-3"	6'-6"	6'-6"	1'-6"	#8 @ 12" O.C. E.W.E.F.
12"	1'-2"	5'-3"	5'-3"	1'-0"	#7 @ 12" O.C. E.W.E.F.
6"or8"	1'-0"	4'-0"	4'-0"	0'-8"	#6 @ 12" O.C. E.W.E.F.

**CITY OF
CARTERSVILLE**

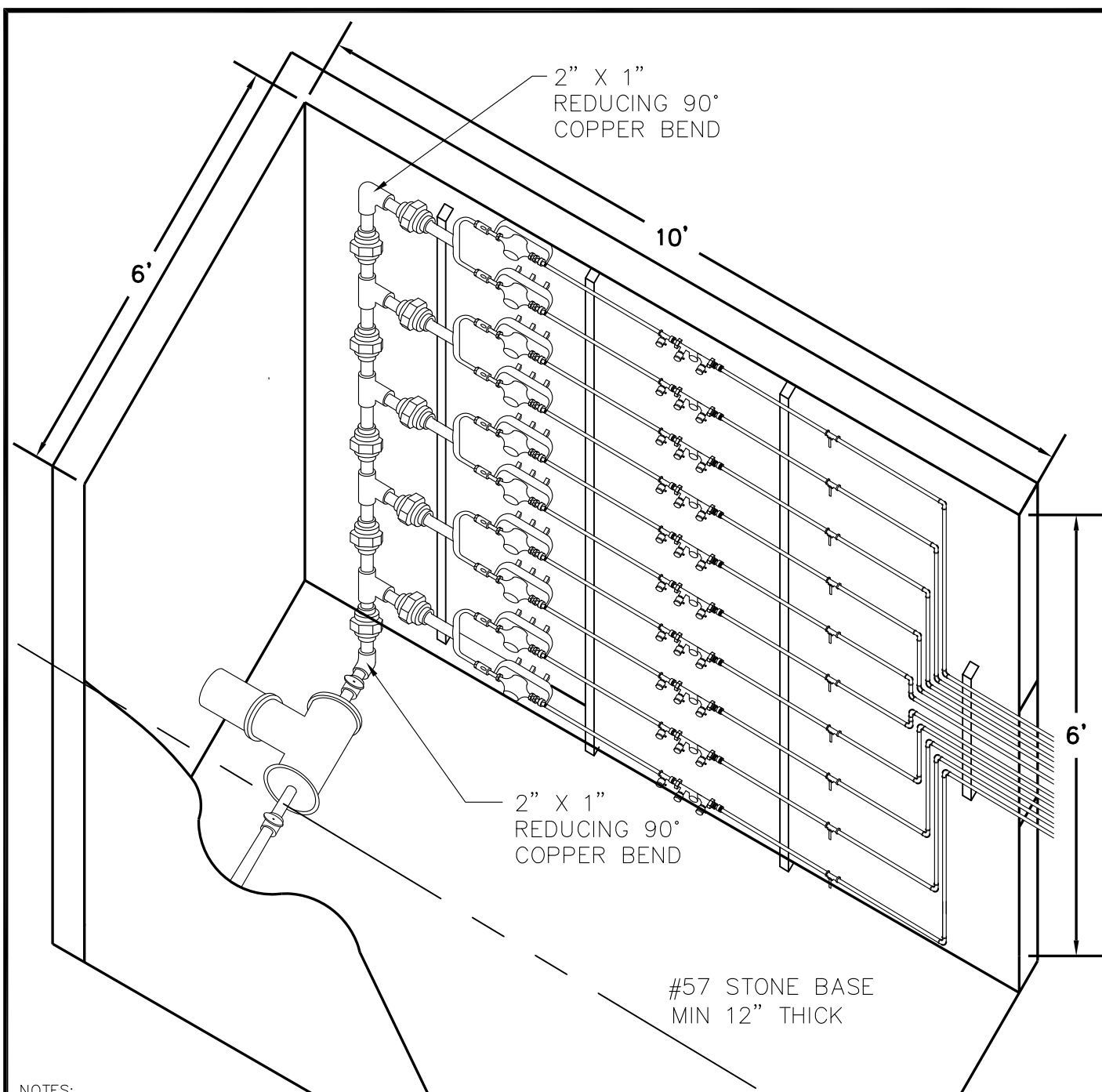
WATER DEPARTMENT

**WATER MAIN TERMINATION
AND THRUST COLLAR
DETAIL**
CONSTRUCTION STANDARD

DATE: SEPT. '14

APPROVED:

STANDARD
NO.
5.8.18



NOTES:

1. REFERENCE CITY OF CARTERSVILLE
DETAIL 5.8.08 FOR MATERIAL STANDARDS
2. REFERENCE CITY OF CARTERSVILLE DETAIL 5.8.14
FOR PLAN AND SECTION OF MULTIPLE METER VAULT INSTALLATION
3. WATER METERS TO BE LOCATED ON BOTH WALLS, AS NEEDED. (20 MAX)
4. WATER PIPES SERVICING DENTAL OR MEDICAL FACILITIES SHALL BE PROVIDED WITH AN ABOVE GROUND RPZ
ASSEMBLY OUTSIDE OF VAULT. NO DCV IS NECESSARY ON PIPES CONNECTED TO AN RPZ.

ISOMETRIC VIEW
MULTIPLE WATER METER VAULT

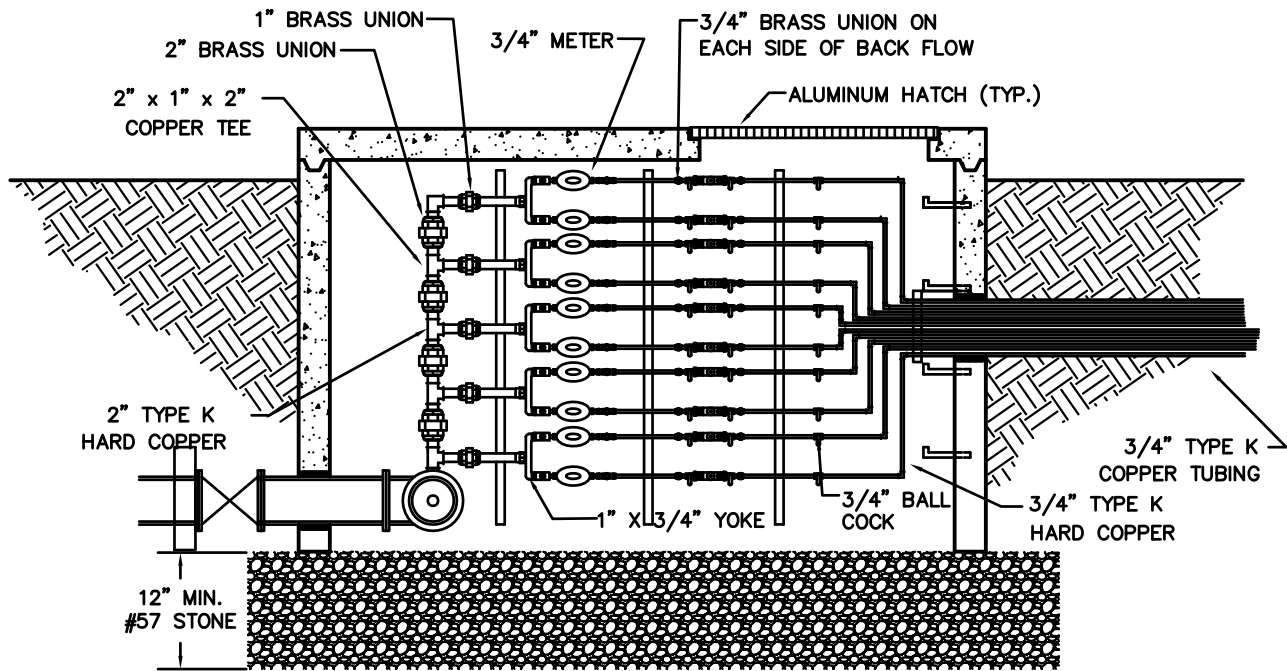
**CITY OF
CARTERSVILLE**
WATER DEPARTMENT

**MULTIPLE WATER
METER VAULT
INSTALLATION**
CONSTRUCTION STANDARD

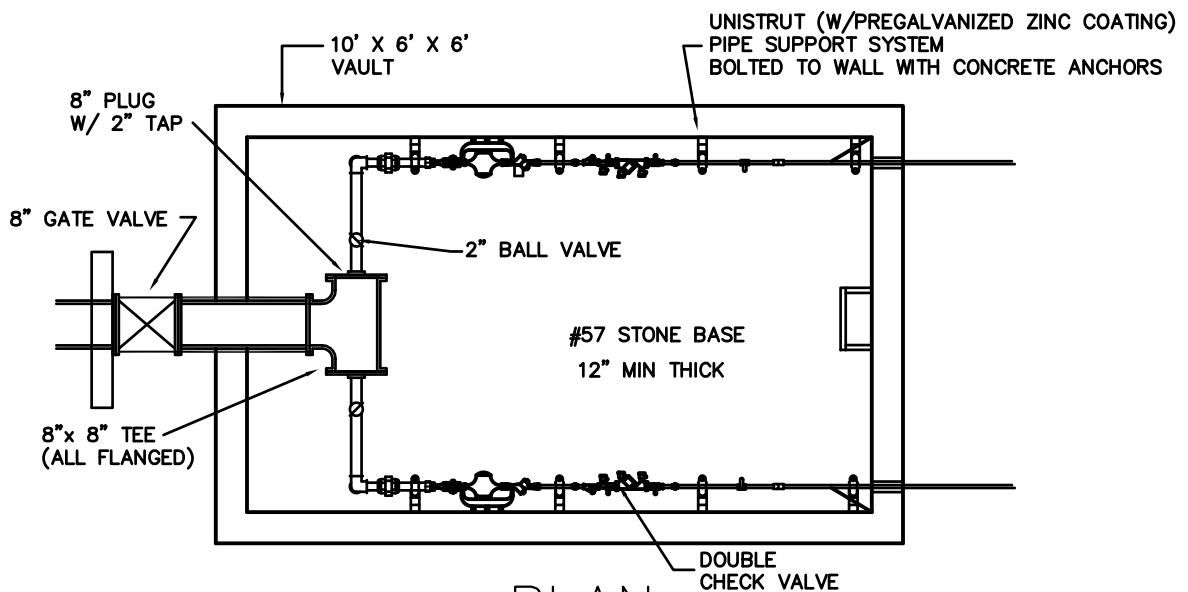
DATE: DEC.2003

APPROVED:

STANDARD
NO.
5.8.19



SECTION



PLAN

NOTES:

1. REFERENCE CITY OF CARTERSVILLE DETAIL 5.8.08 FOR MATERIAL STANDARDS
2. REFERENCE CITY OF CARTERSVILLE DETAIL 5.8.13 FOR ISOMETRIC VIEW OF MULTIPLE METER VAULT INSTALLATION.
3. WATER PIPES SERVICING DENTAL OR MEDICAL FACILITIES SHALL BE PROVIDED WITH AN ABOVE GROUND RPZ ASSEMBLY OUTSIDE OF VAULT. NO DCV IS NECESSARY ON PIPES CONNECTED TO AN RPZ.

MULTIPLE WATER METER VAULT

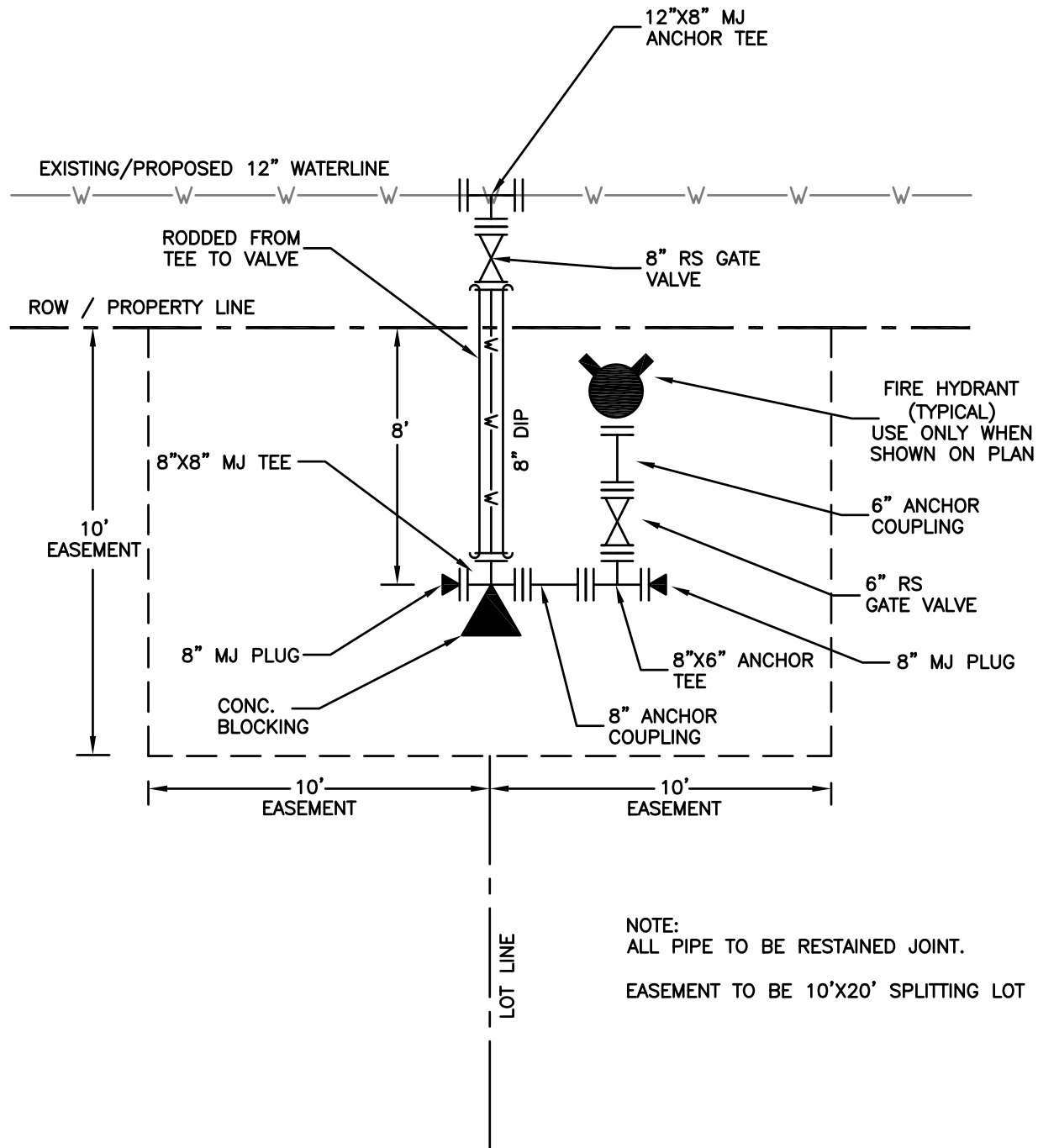
**CITY OF
CARTERSVILLE**
WATER DEPARTMENT

**MULTIPLE WATER
METER VAULT
INSTALLATION**
CONSTRUCTION STANDARD

DATE: SEPT. '14

APPROVED:

STANDARD
NO.
5.8.20



TYPICAL LOT LINE WITH FIRE HYDRANT AND TEE CONNECTION

**CITY OF
CARTERSVILLE**
WATER DEPARTMENT

**LOT LINE
FIRE HYDRANT
CONNECTION**
CONSTRUCTION STANDARD

DATE: JUN.'17

APPROVED:

STANDARD
NO.
5.8.21

SECTION

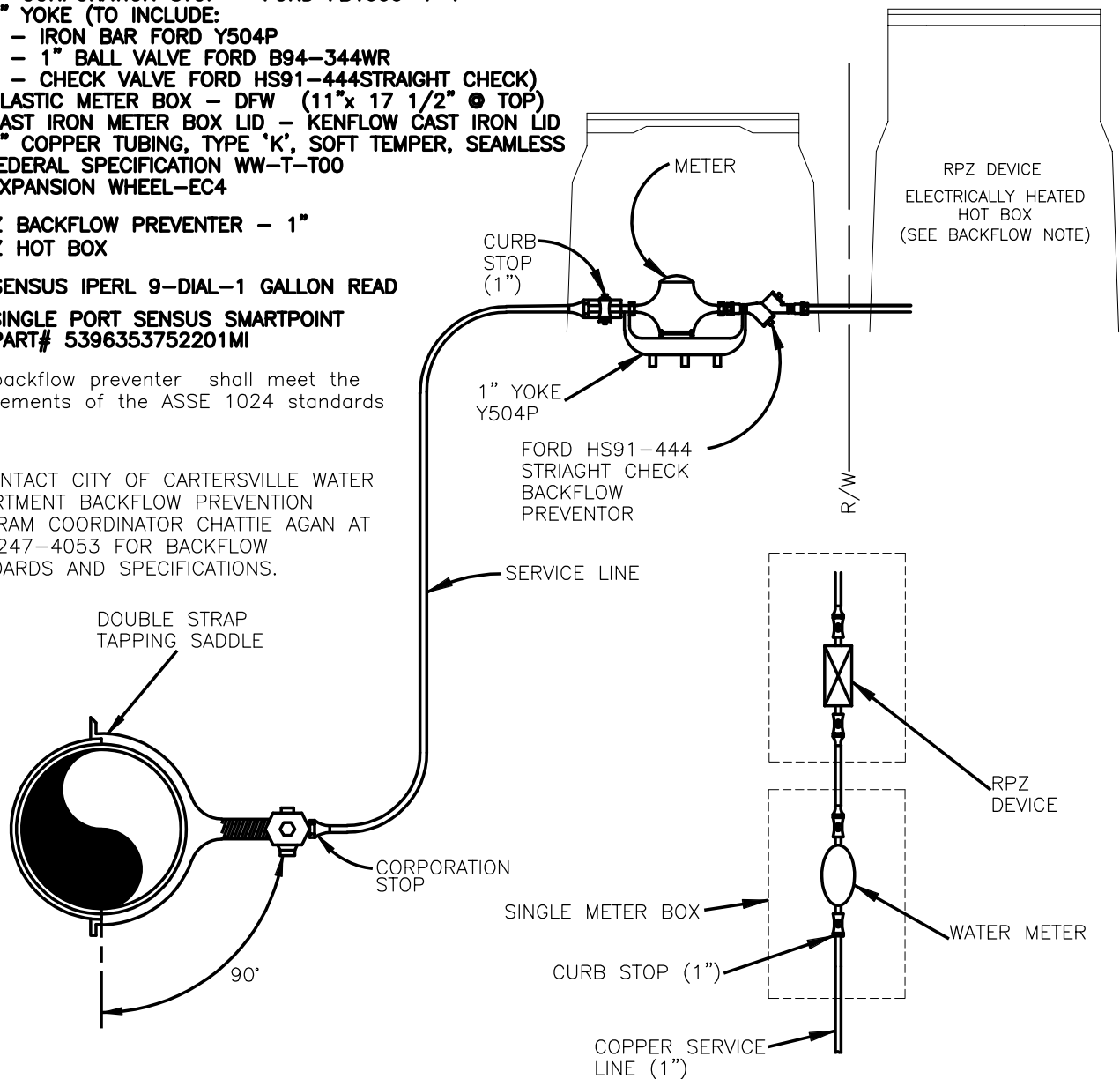
MATERIAL FOR 1" WATER TAP

- 1 - FORD F202 DOUBLE STRAP TAPPING SADDLE W/1" CC THREADS
- 1 - 1" CORPORATION STOP - FORD FB1000-4-1"
- 1 - 1" YOKE (TO INCLUDE:
 - 1 - IRON BAR FORD Y504P
 - 1 - 1" BALL VALVE FORD B94-344WR
 - 1 - CHECK VALVE FORD HS91-444 STRAIGHT CHECK)
- 1 - PLASTIC METER BOX - DFW (11"x 17 1/2" @ TOP)
- 1 - CAST IRON METER BOX LID - KENFLOW CAST IRON LID
- 1 - 1" COPPER TUBING, TYPE 'K', SOFT TEMPER, SEAMLESS
FEDERAL SPECIFICATION WW-T-T00
- 1 - EXPANSION WHEEL-EC4
- 1-RPZ BACKFLOW PREVENTER - 1"
- 1-RPZ HOT BOX
- 1 - SENSUS IPERL 9-DIAL-1 GALLON READ
- 1 - SINGLE PORT SENSUS SMARTPOINT
PART# 5396353752201MI

The backflow preventer shall meet the requirements of the ASSE 1024 standards

NOTE:

1. CONTACT CITY OF CARTERSVILLE WATER DEPARTMENT BACKFLOW PREVENTION PROGRAM COORDINATOR CHATTIE AGAN AT 678-247-4053 FOR BACKFLOW STANDARDS AND SPECIFICATIONS.



PLAN

MEDICAL / HIGH HAZARD INDUSTRIAL/COMMERCIAL 1" WATER METER INSTALLATION

CITY OF
CARTERSVILLE

WATER DEPARTMENT

MEDICAL/HIGH HAZARD
INDUSTRIAL/COMMERCIAL
1" WATER METER
INSTALLATION
CONSTRUCTION STANDARD

DATE: APR 20'

APPROVED:

STANDARD
NO.

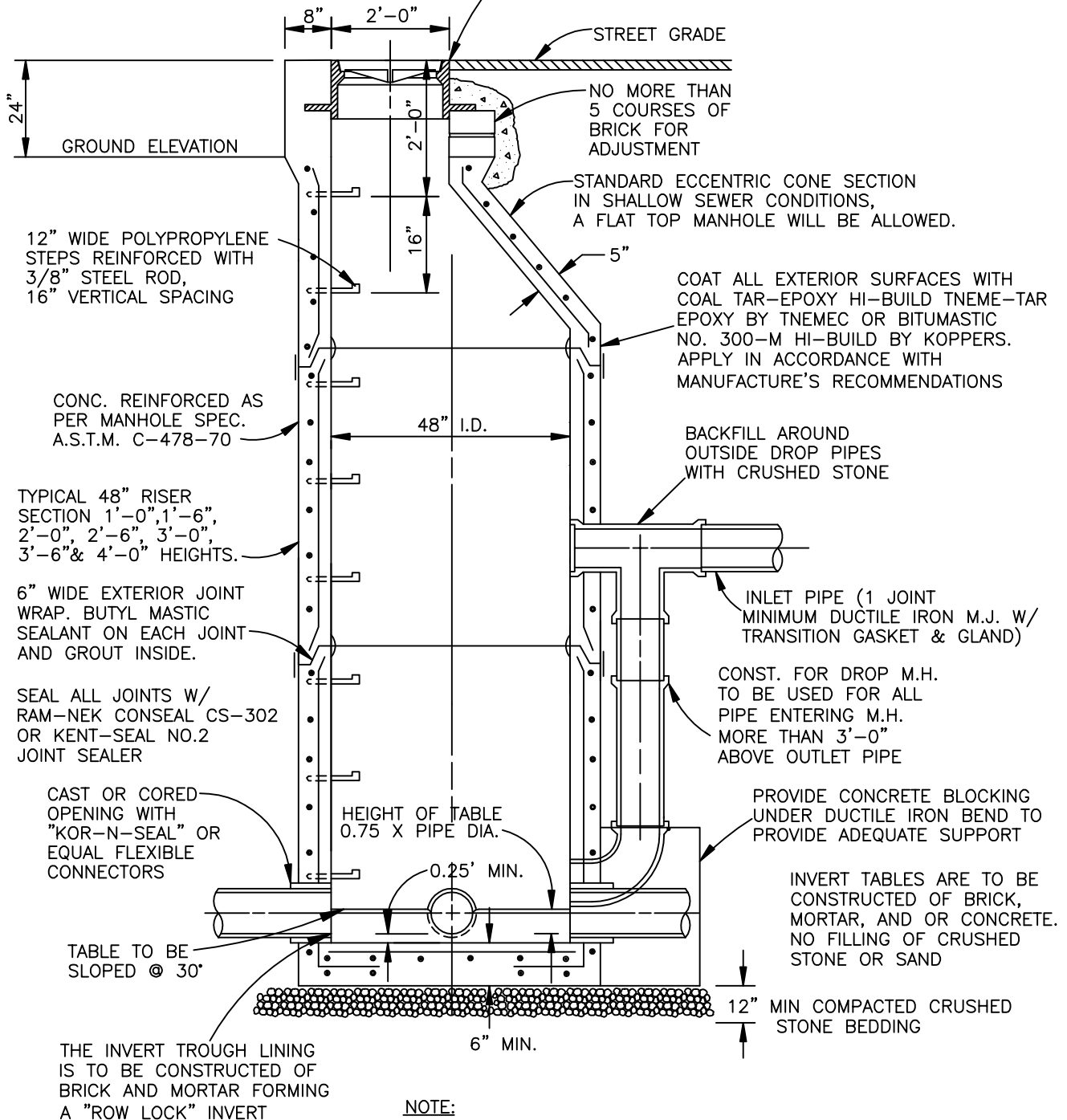
5.8.22

NOTE:

- *MANHOLES TO BE FLUSH WITH PAVEMENT IN PAVED AREAS.
- *MANHOLES ON OUTFALL LINES ARE TO BE 24" ABOVE GROUND WITH CAST IN RING AND COVER
- *WATERTIGHT MANHOLE FRAME AND COVERS SHALL BE DESIGNATED ON PLAN AND PROFILE.

MANHOLE RING AND COVER

- * VULCAN FOUNDRY No. V1327-1-CWD
- * VULCAN FOUNDRY No. V2327-1-CWD (BOLT DOWN WATER TIGHT)



NOTE:

- PROVIDE MINIMUM 0.25' DROP THROUGH MANHOLE
- NO THRU WALL LIFT HOLES ALLOWED

**CITY OF
CARTERSVILLE**

WATER DEPARTMENT

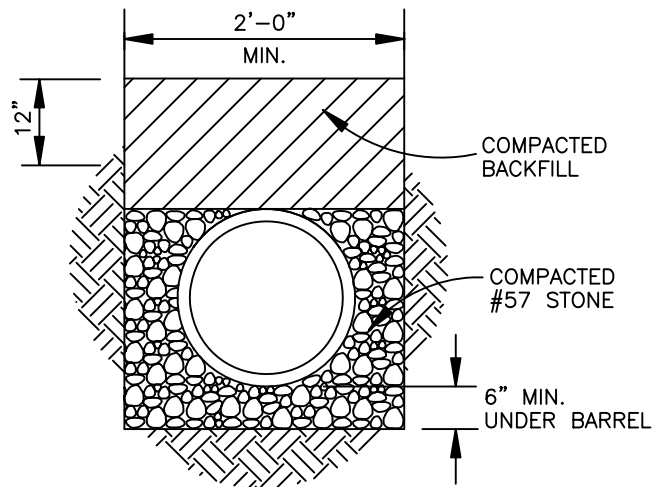
**PRECAST
CONCRETE
MANHOLE**
CONSTRUCTION STANDARD

DATE: SEPT.'14

APPROVED:

STANDARD
NO.

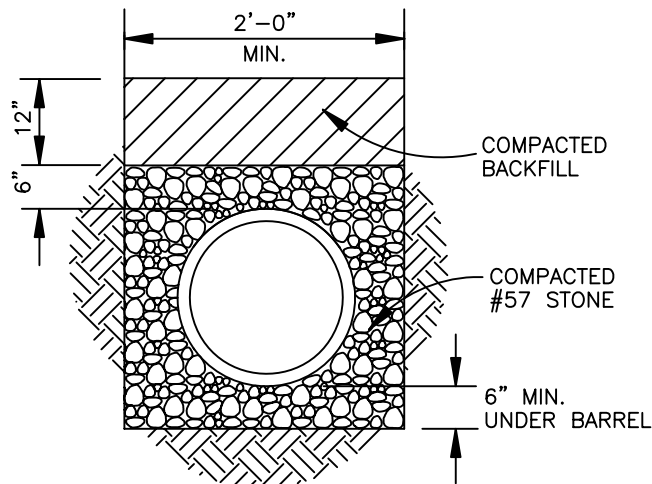
4.6.01



STANDARD D.I.P. PIPE
BEDDING DETAIL
 FULL RUNS (MH TO MH) ONLY

NOTE:

- * ALL SANITARY SEWER PVC PIPE IS TO BE SDR-26
- * ALL DIP PIPE TO BE COATED WITH PROTECTO 401 CERAMIC COATING



STANDARD P.V.C. PIPE
BEDDING DETAIL

**CITY OF
CARTERSVILLE**
 WATER DEPARTMENT

**STANDARD
PIPE BEDDING
DETAIL**
 CONSTRUCTION STANDARD

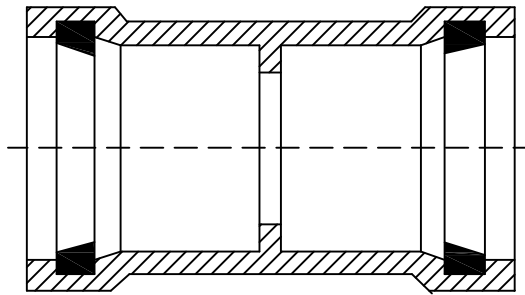
DATE: SEPT.'14

APPROVED:

STANDARD
NO.
4.6.02

TYPICAL DETAIL
JOINING D.I. PIPE TO PVC SEWER PIPE

USE "HARCO" SDR-26
PVC LINE COUPLING (W/ STOP)



<u>SIZE</u>	<u>PART #</u>
4	109-040
6	109-060
8	109-080
10	109-100
12	109-120

**CITY OF
CARTERSVILLE**

WATER DEPARTMENT

**PVC TO DUCTILE IRON
PIPE TRANSITION**

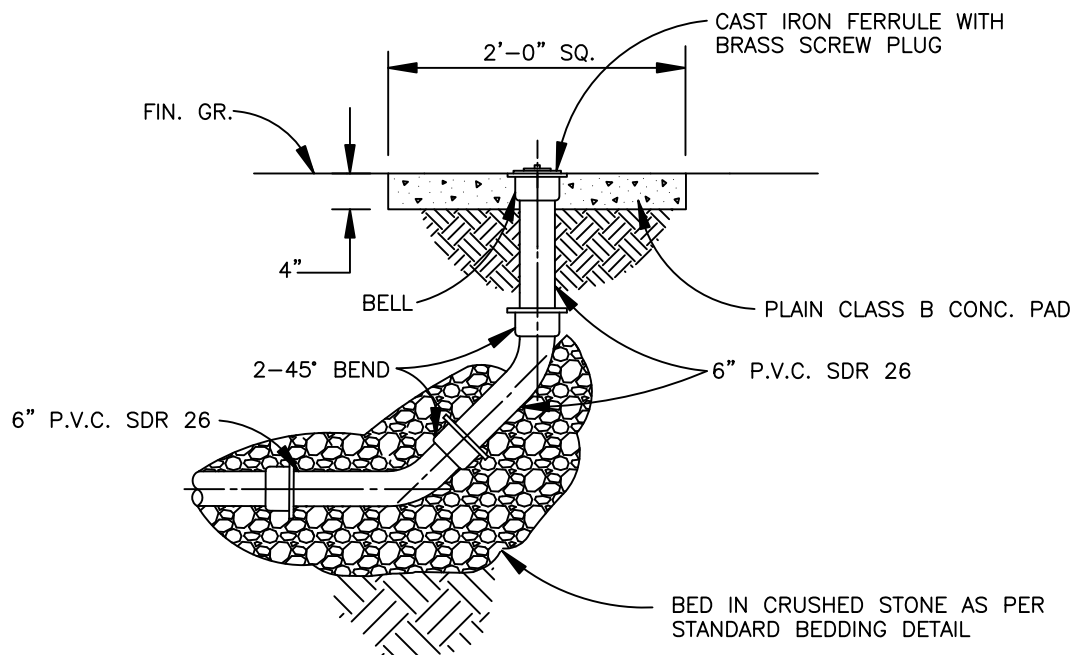
CONSTRUCTION STANDARD

DATE: SEPT. '14

APPROVED:

STANDARD
NO.

4.6.03



CLEANOUT DETAIL

**CITY OF
CARTERSVILLE**

WATER DEPARTMENT

**CLEANOUT
DETAIL**

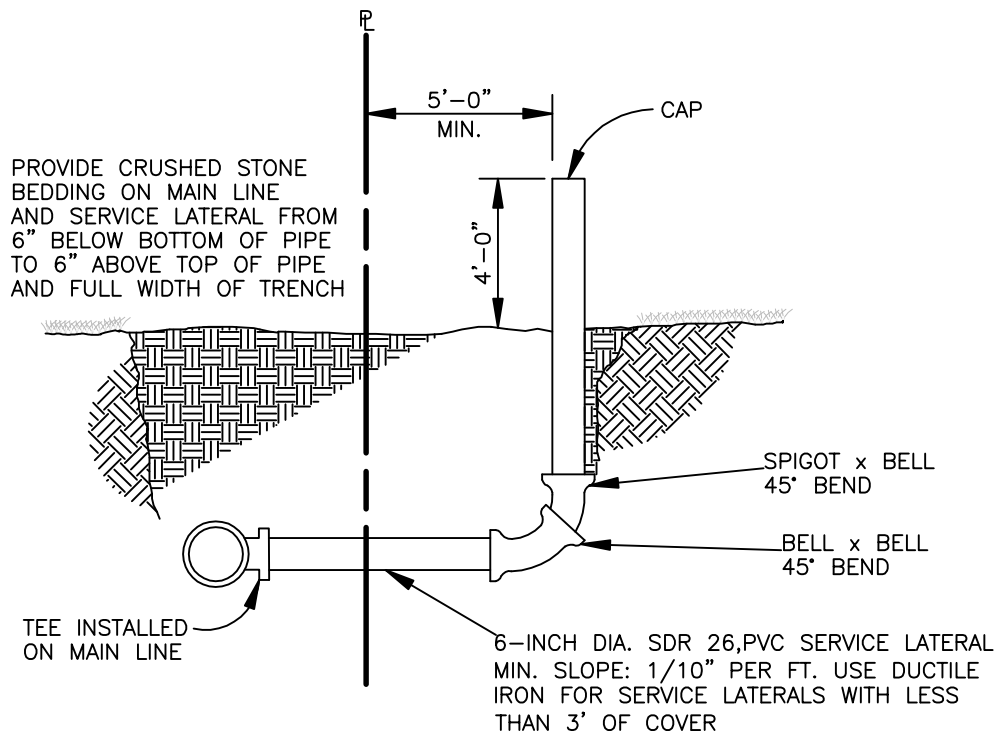
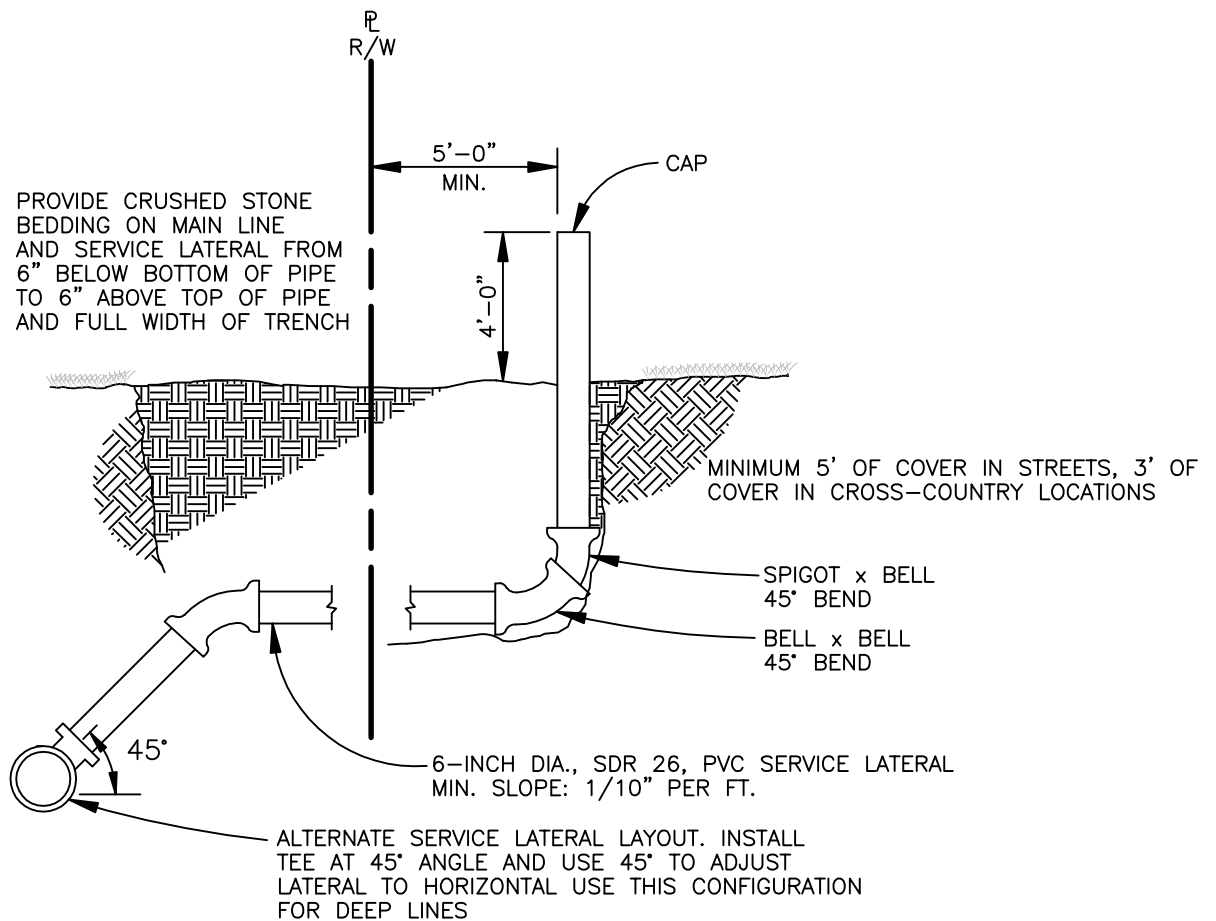
(COMMERCIAL OR PAVED AREAS)
CONSTRUCTION STANDARD

DATE: SEPT. '14

APPROVED:

STANDARD
NO.

4.6.05



**CITY OF
CARTERSVILLE**

SEWER SPECIFICATIONS

SEWER SERVICE LATERAL

STANDARD DETAIL

DATE: DEC. '08

APPROVED:

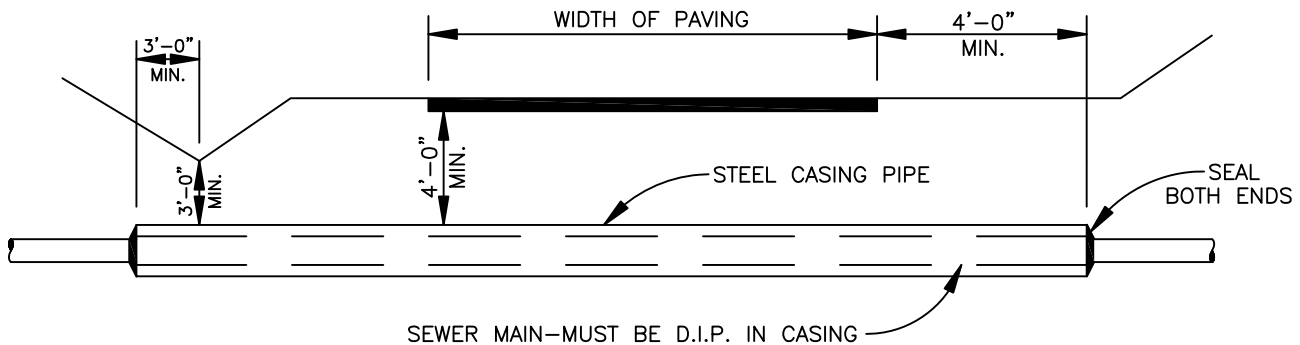
STANDARD
NO.

4.6.06

Casing Size For Road Crossings

Under Roads

Pipe Diameter, inches	Casing Diameter, inches	Wall Thickness, inches
6	12	0.250
8	16	0.250
10	16	0.250
12	18	0.250
14	22	0.250
16	24	0.250
18	30	0.312
20	30	0.312
24	36	0.375



NOTES:

- CASING PIPE SHALL EXTEND A MINIMUM OF 3' BEYOND TOE OF FILL SLOPES OR DITCH LINES AND 4' BEYOND EDGE OF PAVEMENT AND BACK OF CURB.
- CASING SPACERS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- DEVELOPER MUST OBTAIN PERMIT FROM BARTOW COUNTY ROAD DEPARTMENT OR CARTERSVILLE PUBLIC WORKS AS APPROPRIATE.
- FOR BORED CASING INSTALLATIONS UNDER RAILROADS OR STATE HIGHWAYS, CONSULT GOVERNING AUTHORITY FOR CASING AND CARRIER PIPE SPECIFICATIONS.
- PIPE INSIDE CASING MUST BE RESTRAINED JOINT (FIELD LOCK GASKETS ARE ALLOWED)

BORED ROAD CROSSING DETAIL

**CITY OF
CARTERSVILLE**

WATER DEPARTMENT

**PIPE IN CASING
TYPICAL DETAIL**

CONSTRUCTION STANDARD

DATE: SEPT. '14

APPROVED:

STANDARD
NO.

4.6.07