JOHNSTON COUNTY DETAILS

PREPARED IN THE OFFICE OF:

Wooten
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919.828.0531 Fax 919.834.3559
License Number: F-0115

VERTICAL SCALE	HORIZONTAL SCALE
5′ 0 5′ 10′	25′ 0 25′ 50′

PROJECT REFERENCE NO.	SHEET NO.
U–6223	UC–3C

DESIGNED BY: CMG
DRAWN BY: TK
CHECKED BY: DGM
APPROVED BY: CMG
REVISED:

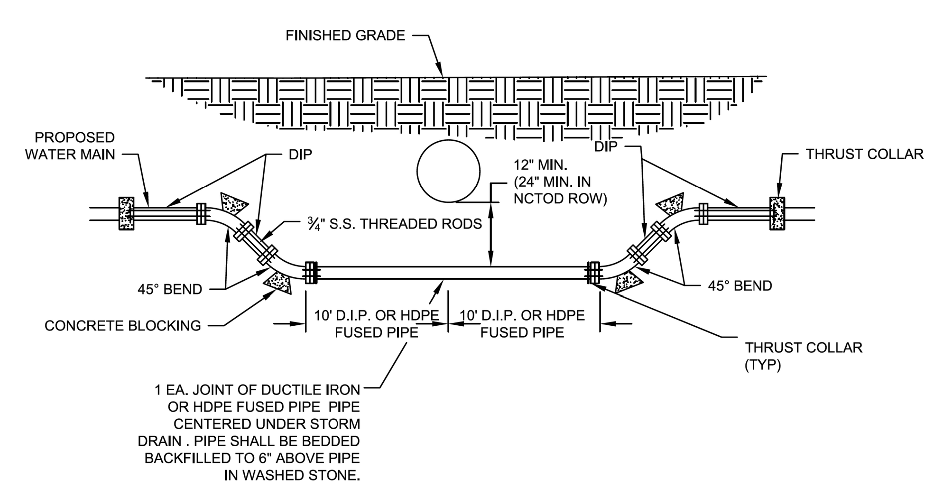
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

UTILITIES ENGINEERING SEC.
PHONE: (919) 707–6690
FAX: (919) 250–4151

NORTH CAROLINA PROFESSIONAL SEAL 29097 ENGINEER DAVID G. MALINAUSKAS
DocuSigned by: David G. Malinauskas
C461B23FCA544C5...
06/17/2022

Document Not Considered Final Unless All Signatures Completed
UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION



STORM DRAIN PIPE CROSSING DETAIL

NOT TO SCALE

NOTES:
1. CULVERT CROSSINGS IN EXISTING NCDOT RIGHT-OF-WAY REQUIRE 24" MIN. SEPARATION FROM BOTTOM OF CULVERT TO TOP OF WATER MAIN.
2. IN LIEU OF RESTRAINT (TIE) RODS, APPROVED RESTAINT JOINT PIPE MAY BE USED.

	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		
Rev. Description Date Init.		

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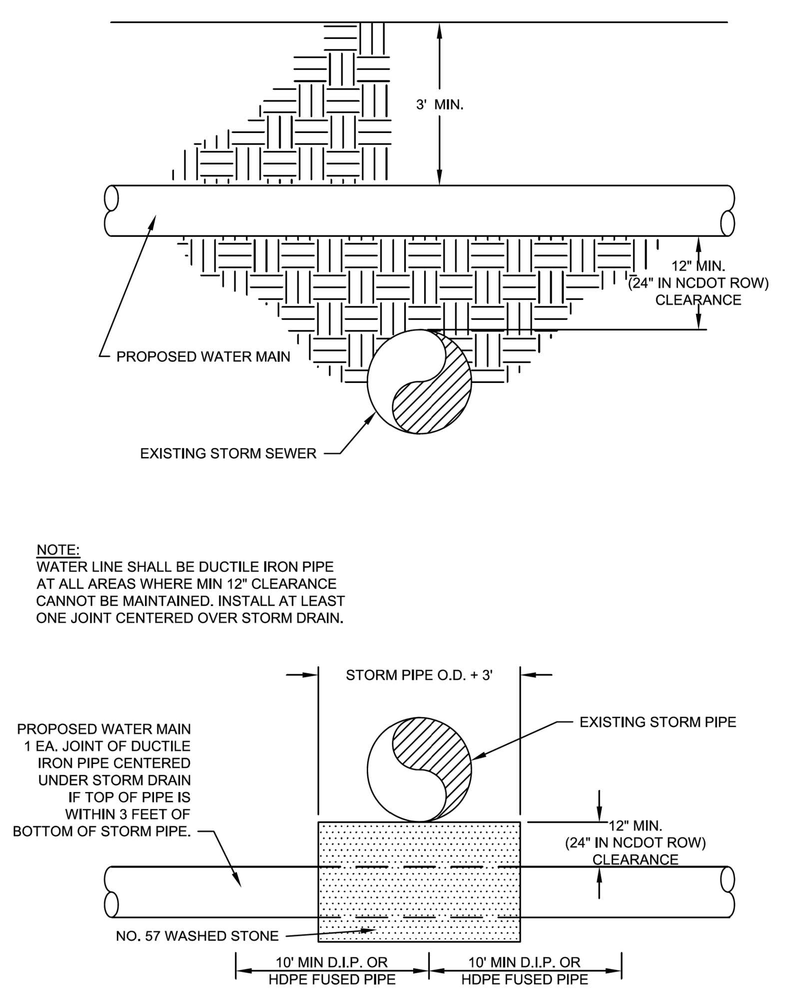
WATER STANDARD DETAIL Storm Pipe Crossing — PAGE 11



NOTE:
WATER LINE SHALL BE DUCTILE IRON PIPE AT ALL AREAS WHERE MIN 12" CLEARANCE CANNOT BE MAINTAINED. INSTALL AT LEAST ONE JOINT CENTERED OVER STORM DRAIN.

STORM SEWER CROSSING DETAILS

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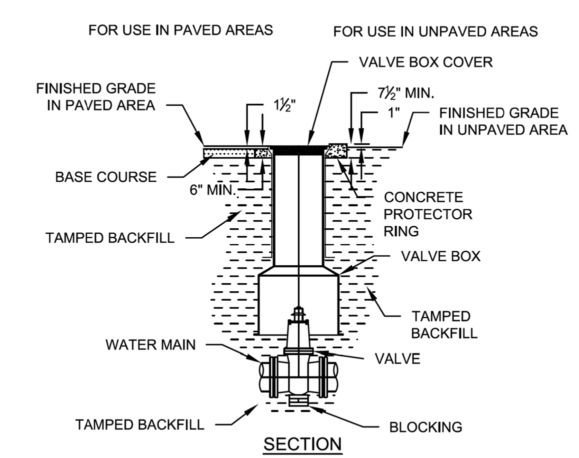
STANDARD WATER DETAIL Storm Sewer Crossing — PAGE 12



NOTES:
1. D.I.P. MAY BE USED FOR VALVE BOX EXTENSIONS.
2. VALVE BOX SHOULD NOT CONTACT WATER MAIN OR VALVE.
3. CONCRETE PROTECTOR RING SHALL BE USED IN ALL UNPAVED AREAS.
4. ALL MATERIALS USED IN THE POTABLE WATER SYSTEM MUST BE NSF61 AND NSF372 CERTIFIED AND MEET THE LATEST FEDERAL SAFE DRINKING WATER ACT REQUIREMENTS.

VALVE AND VALVE BOX INSTALLATION

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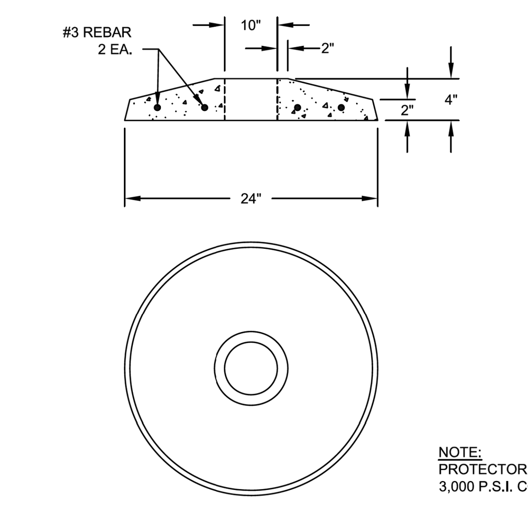
WATER STANDARD DETAIL Valve and Valve Box Installation — PAGE 13



NOTE:
PROTECTOR RING SHALL BE 3,000 P.S.I. CONCRETE.

CONCRETE PROTECTOR RING

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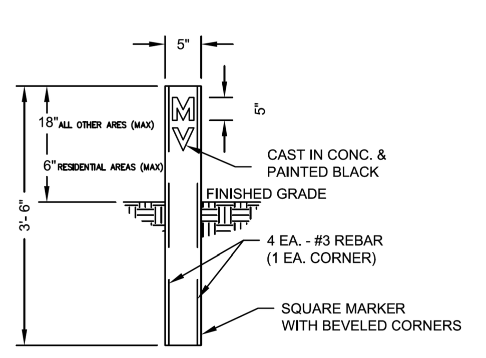
WATER STANDARD DETAIL Concrete Protector Ring — PAGE 14

NOTES:
1. VALVE MARKERS SHALL BE PLACED AT R/W.
2. LETTERS "MV" SHALL FACE TOWARDS VALVE.
3. MARKER SHALL HAVE BRASS OR BRONZE EMBED ON TOP OR SIDE.
4. **CONTRACTOR SHALL STAMP DISTANCE TO CENTER OF VALVE INTO EMBED.**
5. BLOW-OFF ASSEMBLY SHALL INCLUDE 1 EA. MARKER W/ "BO" OR "MV" CAST.



VALVE MARKER DETAIL

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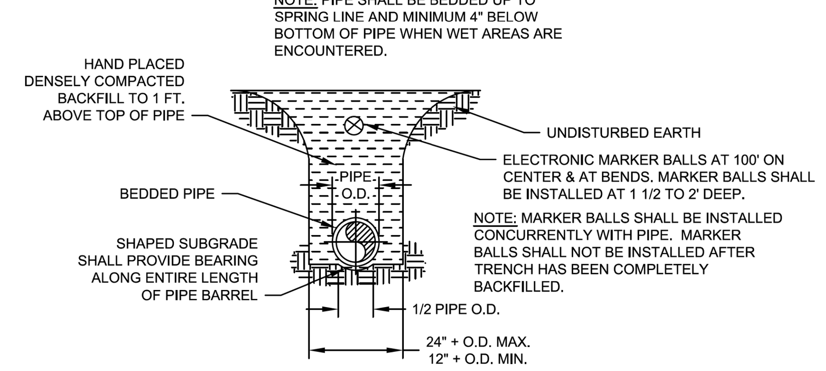
WATER STANDARD DETAIL Valve Marker — PAGE 15

NOTE: PIPE SHALL BE BEDDED UP TO SPRING LINE AND MINIMUM 4" BELOW BOTTOM OF PIPE WHEN WET AREAS ARE ENCOUNTERED.



NOTE:
WATER MAINS 8"Ø AND SMALLER SHALL HAVE MINIMUM OF 3' COVER. WATER MAINS LARGER THAN 8"Ø SHALL HAVE A MINIMUM OF 3'-6" COVER.

PIPE LAYING CONDITION

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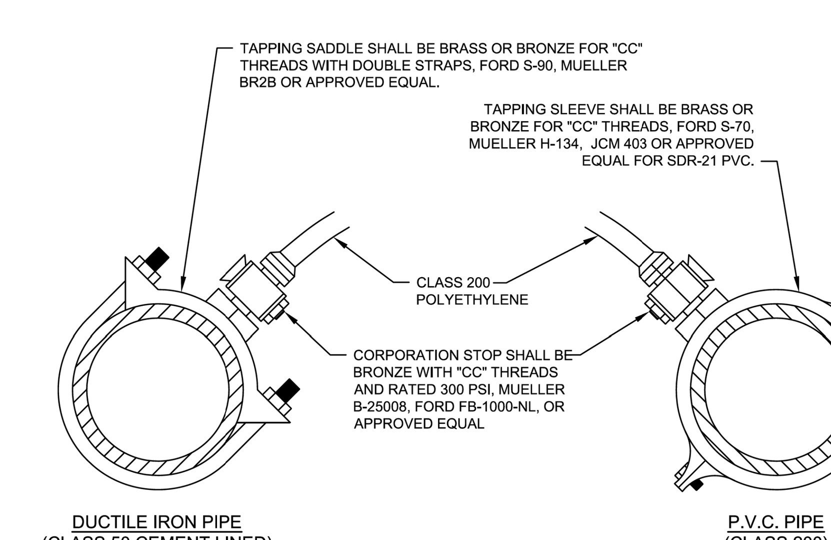
WATER STANDARD DETAIL Pipe Laying Condition — PAGE 17

NOTE:
1. ALL TAPS 2" AND SMALLER SHALL BE MADE WITH TAPPING SADDLE. ALL TAPS LARGER THAN 2" SHALL BE MADE WITH TAPPING SLEEVE AND VALVE. NO DIRECT TAPS SHALL BE MADE.
2. ALL MATERIALS USED IN THE POTABLE WATER SYSTEM MUST BE NSF61 AND NSF372 CERTIFIED AND MEET THE LATEST FEDERAL SAFE DRINKING WATER ACT REQUIREMENTS.



NOTE: ALL TAPS TO BE MADE ON TOP QUARTER OF MAIN.

STANDARD WATER TAP DETAIL

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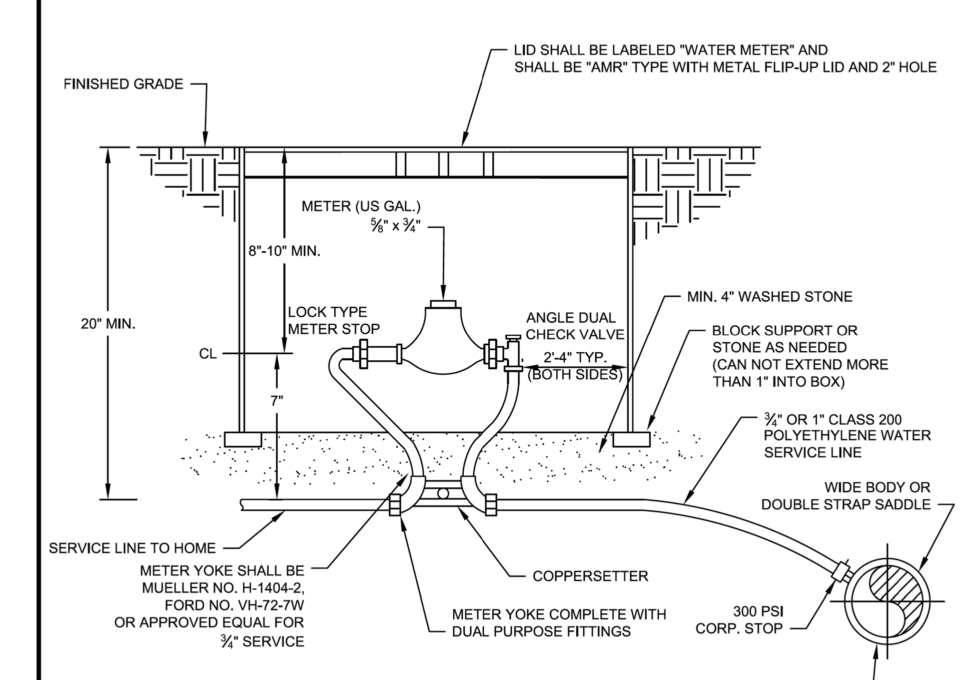
WATER STANDARD DETAIL Standard Water Tap — PAGE 20



NOTE:
1. CONTRACTOR SHALL PLACE METER BOX IN NON TRAFFIC AREA ONLY, OUTSIDE FENCED AREAS, AND 4 FEET AWAY FROM BUSHES AND TREES THAT COULD COVER THE BOX.
2. PLASTIC METER BOX SHALL BE CENTURY #1015, NDS D1200, OR APPROVED EQUAL
3. CONTRACTOR SHALL CENTER METER YOKE IN METER BOX.
4. METER YOKE TO MUELLER No. H-1404-2A, FORD No. VHH-72-7W-11 OR APPROVED EQUAL.
5. METER TO MEET AWWA C-000 STDS. AND SPECS.
6. METER TO BE PROVIDED AND SET BY JOHNSTON COUNTY. METER WILL NOT BE INSTALLED IF, THE THE SETTER IS NOT CENTERED IN THE BOX, THE SETTER HAS BEEN PULLED UP ON ONE END, THE SETTER IS LAYING ON IT'S SIDE, THE SETTER IS TO CLOSE TO THE BOX LID, THE BOX IS BELOW GRADE OR BROKEN, THE CUSTOMERS SERVICE LINE IS NOT HOOKED TO THE UNION NUT, THE 3/4 GATE VALVE HAS NOT BEEN INSTALLED WITHIN 12 INCHES OF THE METER BOX.
7. ALL MATERIALS USED IN THE POTABLE WATER SYSTEM MUST BE NSF61 AND NSF372 CERTIFIED AND MEET THE LATEST FEDERAL SAFE DRINKING WATER ACT REQUIREMENTS.
8. SERVICE LINE TO HOME MUST PASS PLUMBING INSPECTION PRIOR TO SETTING METER.

3/4" & 1" WATER METER SERVICE DETAIL

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WATER STANDARD DETAIL ¾" and 1" Water Meter Service — PAGE 21