

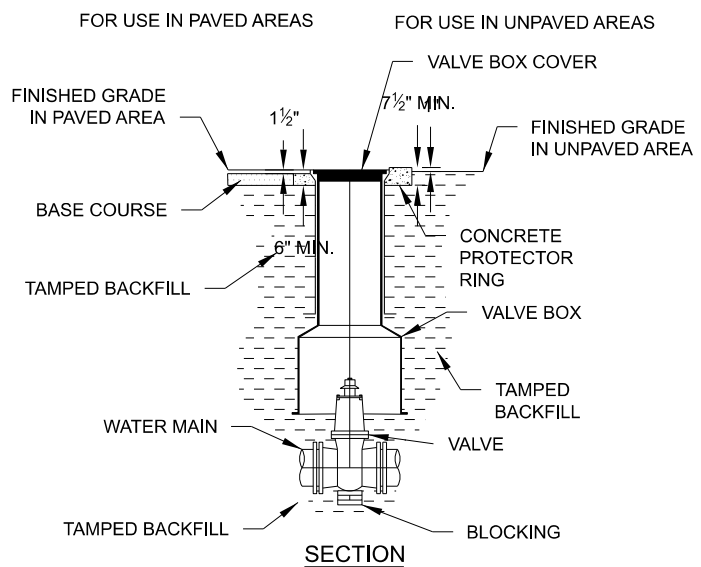
PROJECT TYPICAL DETAILS

JOHNSTON COUNTY

PROJECT REFERENCE NO.		SHEET NO.
HN-0040		UC-3A
DESIGNED BY:	ELM	SEAL 2012 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 5/1/2006 10:05 AM J. P. ...
DRAWN BY:	ELM	
CHECKED BY:	MUP	
APPROVED BY:	MUP	
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



- 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
NOT TO SCALE

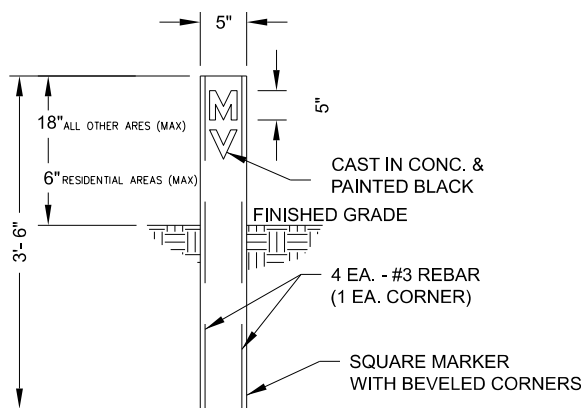
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WATER
STANDARD DETAIL
Valve and Valve
Box Installation

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- NOTES:
1. VALVE MARKERS SHALL BE PLACED AT RW.
 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/ "60" OR "MV" CAST.



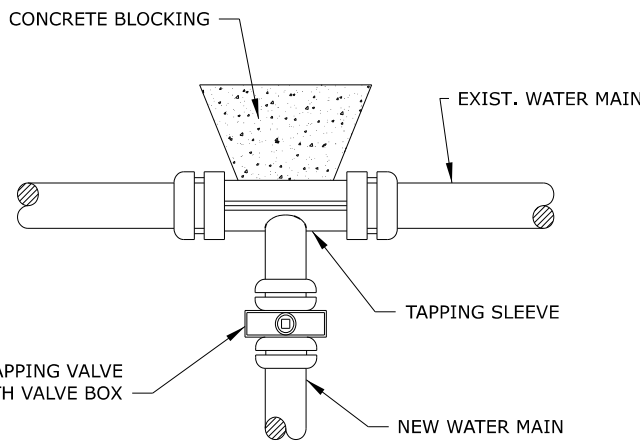
VALVE MARKER DETAIL
NOT TO SCALE

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WATER
STANDARD DETAIL
Valve Marker

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TAPPING SLEEVE & VALVE ASSEMBLY
NOT TO SCALE

- NOTES:
1. TAPPING SLEEVE SHALL BE FABRICATED OF TYPE 304 OR 316 S.S. AND PROVIDE A 360° SEAL AROUND EXISTING PIPE WITH FULL CIRCUMFERENTIAL GASKET.
 2. TAPPING SLEEVE SHALL BE JCM 432, MUELLER H-304, FORD FTSS, ROMAC ST III OR APPROVED EQUAL.
 3. ALL MATERIALS USED IN THE POTABLE WATER SYSTEM MUST BE NSF61 AND NSF372 CERTIFIED AND MEET THE LATEST FEDERAL SAFE DRINKING WATER ACT REQUIREMENTS.

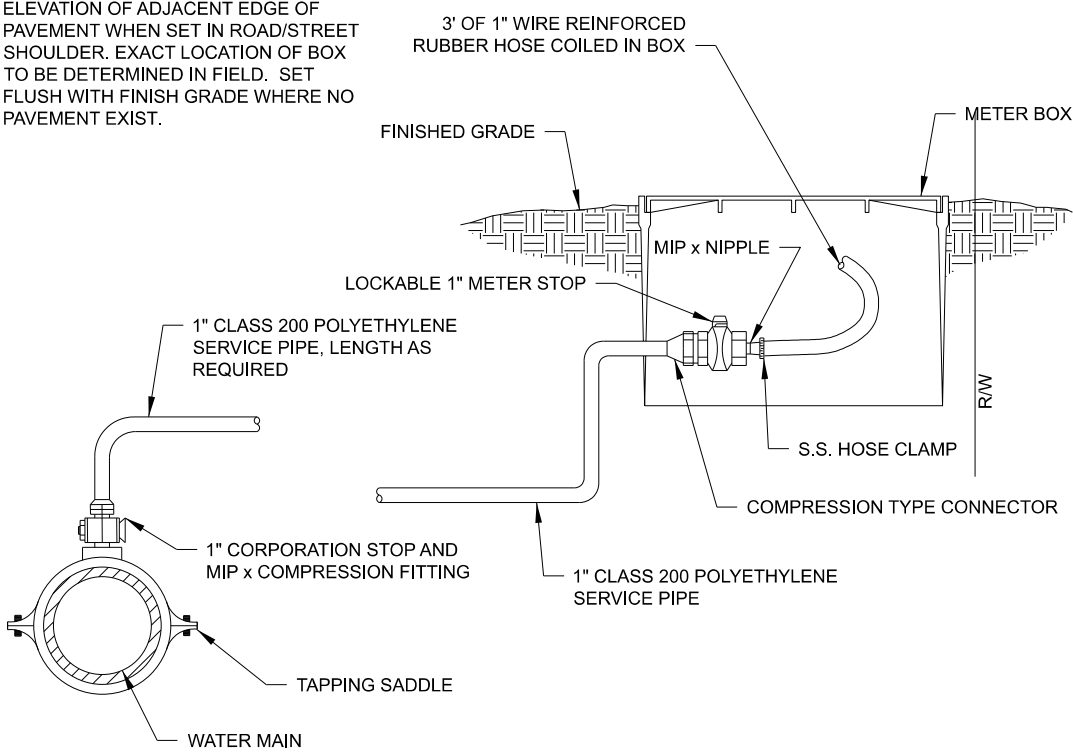
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WATER
STANDARD DETAIL
Tapping Sleeve and
Valve Assembly

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- NOTES:
1. TAP ON THE MAIN SHALL BE MADE IN THE POSITION SHOWN.
 2. LOCATE METER BOX AS SHOWN ON PLAN OR AS DIRECTED IN THE FIELD.
 3. PIPE FROM MAIN TO METER STOP TO BE LEVEL OR CONTINUOUS UP GRADE.
 4. TOP OF BOX TO BE AT LEAST 10" BELOW ELEVATION OF ADJACENT EDGE OF PAVEMENT WHEN SET IN ROAD/STREET SHOULDER. EXACT LOCATION OF BOX TO BE DETERMINED IN FIELD. SET FLUSH WITH FINISH GRADE WHERE NO PAVEMENT EXIST.



MANUAL AIR RELIEF VALVE ASSEMBLY
NOT TO SCALE

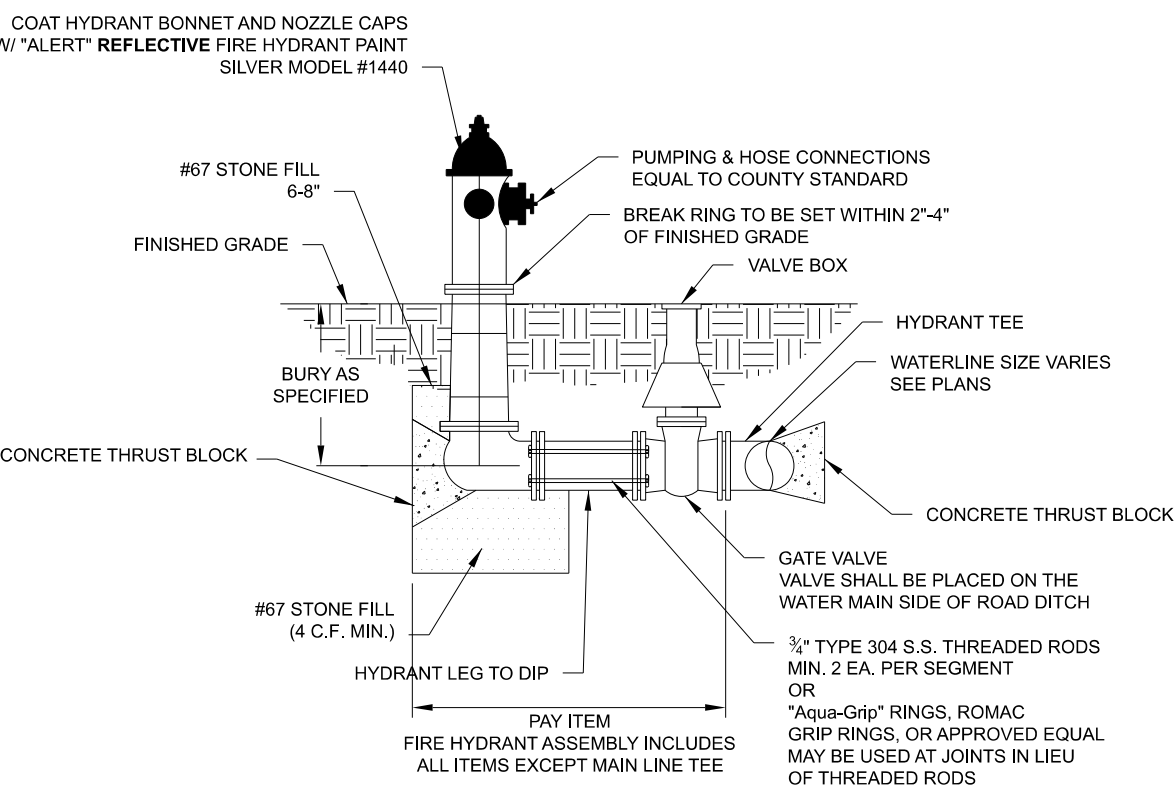
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WATER
STANDARD DETAIL
Manual Air Relief
Valve Assembly

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- NOTE:
1. MIN. OF 4 CU. FT. STONE (MORE IF REQ'D).
 2. CONC. THRUST BLOCK TO HAVE MIN. OF 6 SQ. FT. BEARING ON SOLID BANK (MORE IF REQ'D).
 3. DRAIN HOLES AND FLANGES SHALL BE CLEAR OF CONC.
 4. FIRE HYDRANT BARREL SHALL BE PLUMB.
 5. ALL MATERIALS USED IN THE POTABLE WATER SYSTEM MUST BE NSF61 AND NSF372 CERTIFIED AND MEET THE LATEST FEDERAL SAFE DRINKING WATER ACT REQUIREMENTS.



FIRE HYDRANT ASSEMBLY
NOT TO SCALE

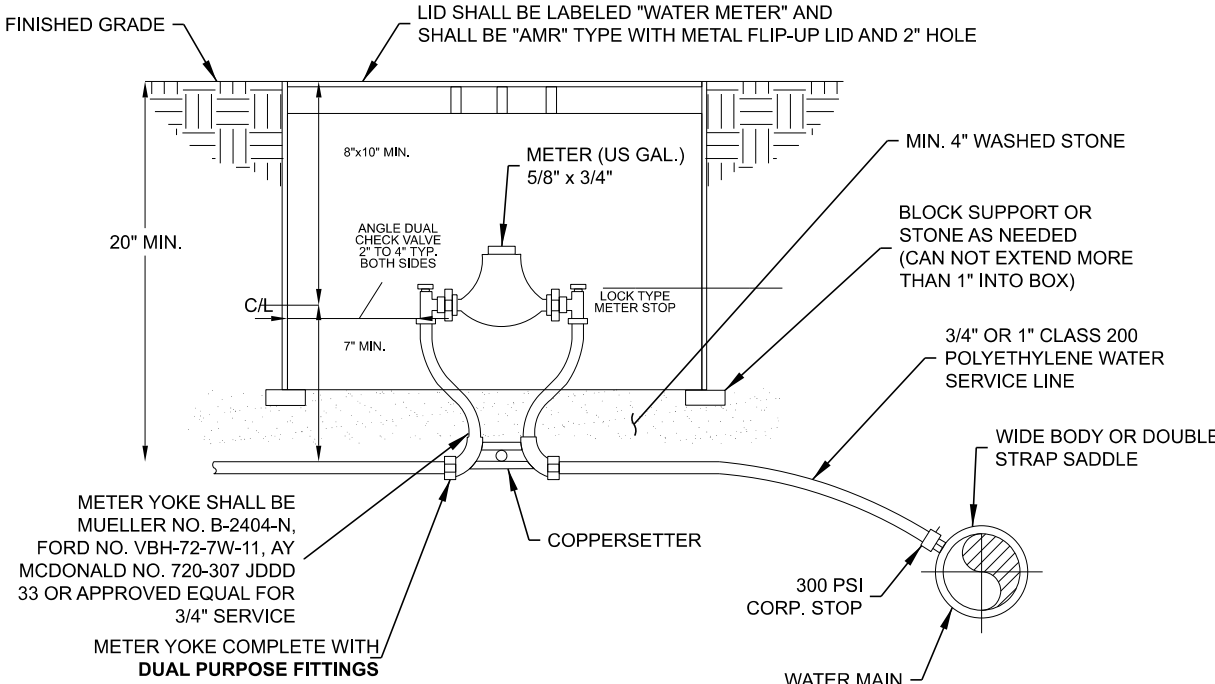
"FIRE HYDRANTS INSTALLED ON EXISTING 6" WATER MAINS, MUST BE INSTALLED USING A 6"x6" TEE CUT INTO THE EXISTING WATER MAIN. FIRE HYDRANTS INSTALLED ON EXISTING WATER MAINS LARGER THAN 6" CAN BE INSTALLED USING A TAPPING SLEEVE AND VALVE ON THE EXISTING WATER MAIN.

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WATER
STANDARD DETAIL
Fire Hydrant
Assembly

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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 YOE IN METER BOX.
4. METER YOKE SHALL BE MUELLER NO. B-2404-N, FORD NO. VBH-72-7W-11, AY MCDONALD NO. 720-307 JDDO 33 OR APPROVED EQUAL FOR 3/4" SERVICE.
5. METER TO MEET AWWA C-900 STD. AND SPECS.
6. METER TO BE PROVIDED AND SET BY JOHNSTON COUNTY. METER WILL NOT BE INSTALLED IF THE SETTER IS NOT CENTERED IN THE BOX, THE SETTER HAS BEEN PULLED UP ON ONE END, THE SETTER IS LAYING ON ITS 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.

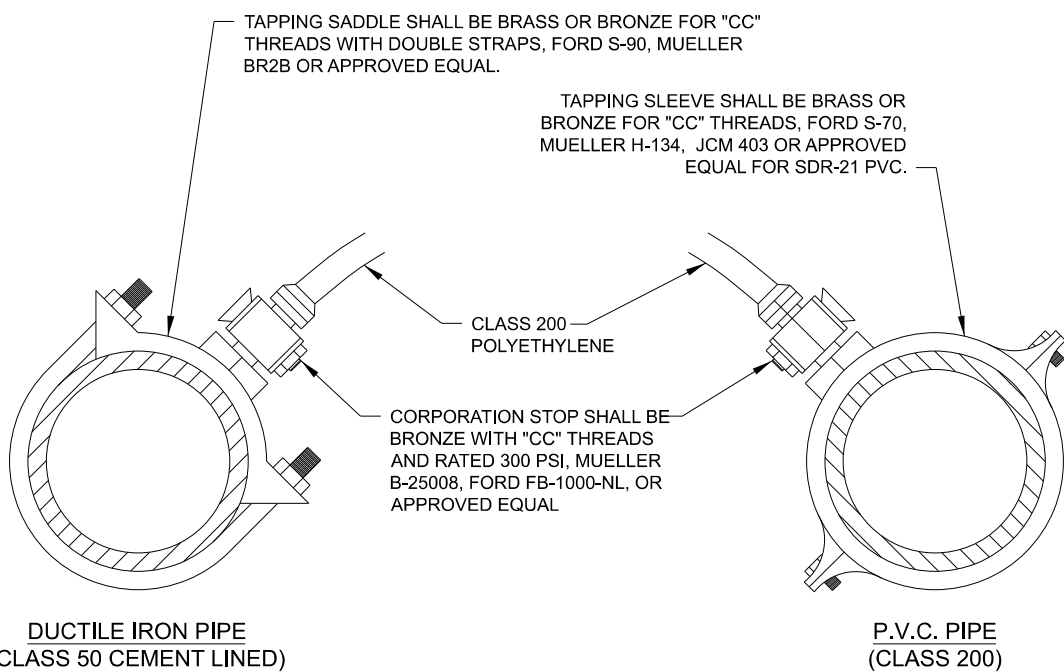
REVISED ON 9-22-2025

3/4" AND 1" WATER METER SERVICE
NOT TO SCALE

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WATER
STANDARD DETAIL
3/4" AND 1" WATER
METER SERVICE

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

STANDARD WATER TAP DETAIL
NOT TO SCALE

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WATER
STANDARD DETAIL
Standard Water Tap

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