

G:\NCA\Projects\Rock Properties\6191-01 - Firestone Corner, NC\03 - DWG\PlanSheets\C6-1 - UTILITY DETAILS.dwg Layout: Utl Details1 Plotted: 10/22/2019 5:50:08 PM

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. CONCRETE SHALL BE 3000 PSI MIN.
2. CONCRETE FOR THRUST BLOCKING SHALL BE KEPT FAIRLY DRY. THIS MAKES THE CONCRETE WEDGE SHAPE MORE EASILY FORMED WITH THE WIDEST PART BLOCKING AREA AGAINST UNDISTURBED SOIL.
3. NO CONCRETE SHALL COVER ANY BOLTS OR GLANDS.
4. ALL FITTING AND ACCESSORIES TO BE WRAPPED WITH 10 MIL POLYETHYLENE PRIOR TO POURING BLOCKING.
5. VOLUME OF THRUST BLOCKING SHALL BE AS SHOWN ON THE THRUST BLOCKING SCHEDULE.

THRUST BLOCK DETAIL
NOT TO SCALE

PIPE SIZE	18" MIN. - 12" Ø & LESS	24" MIN. - 12" Ø & GREATER
12"	12"	12"
14"	14"	14"
16"	16"	16"
18"	18"	18"
20"	20"	20"
22"	22"	22"
24"	24"	24"
26"	26"	26"
28"	28"	28"
30"	30"	30"
32"	32"	32"
34"	34"	34"
36"	36"	36"
38"	38"	38"
40"	40"	40"
42"	42"	42"
44"	44"	44"
46"	46"	46"
48"	48"	48"
50"	50"	50"
52"	52"	52"
54"	54"	54"
56"	56"	56"
58"	58"	58"
60"	60"	60"

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WATER STANDARD DETAIL
Thrust Block

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STORM SEWER CROSSING DETAILS
NOT TO SCALE

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.

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STANDARD WATER DETAIL
Storm Sewer Crossing

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VALVE AND VALVE BOX INSTALLATION
NOT TO SCALE

NOTES:
1. G.P.F. 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.

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WATER STANDARD DETAIL
Valve and Valve Box Installation

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PIPE LAYING CONDITION
NOT TO SCALE

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 2" COVER. WATER MAINS LARGER THAN 8"Ø SHALL HAVE A MINIMUM OF 3'-6" COVER.

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WATER STANDARD DETAIL
Pipe Laying Condition

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NOTE:
1. ALL TAPS 2" AND SMALLER SHALL BE MADE WITH TAPPING SADDLE.
2. ALL TAPS LARGER THAN 2" SHALL BE MADE WITH TAPPING SLEEVE AND VALVE. NO DIRECT TAPS SHALL BE MADE.
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.

NOTE:
TAPPING SADDLE SHALL BE BRASS OR BRONZE WITH "CC" THREADS WITH DOUBLE STRAPS FORD S-2500R, S-2500L OR APPROVED EQUAL.

NOTE:
TAPPING SLEEVE SHALL BE BRASS OR BRONZE WITH "CC" THREADS WITH DOUBLE CHECK VALVE, FORD S-2500R, S-2500L OR APPROVED EQUAL FOR 8" AND 10" P.V.C.

NOTE:
CORPORATION STOP SHALL BE BRONZE WITH "CC" THREADS AND RATED 300 PSI. MUELLER S-2500R, FORD FB-1000 AL OR APPROVED EQUAL.

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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1 1/2" WATER SERVICE W/ RPZ & BFP
NOT TO SCALE

NOTES:
1. 12" MIN. SEPARATION REQUIRED BETWEEN YOKE CENTERLINE AND TOP OF METER BOX.
2. RPZ MUST BE LOCATED AT THE POINT OF DELIVERY. IF RPZ IS LOCATED IN THE BUILDING, AN ADDITIONAL DOUBLE CHECK VALVE IS REQUIRED AT THE POINT OF DELIVERY.
3. METER SHALL BE FURNISHED AND SET BY JOHNSTON COUNTY.
4. IF THE METER BOX IS LOCATED IN A TRAFFIC AREA A CONCRETE METER BOX, BROOKS No. 36-H WITH 12" EXTENSION SHALL BE USED.
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.

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WATER STANDARD DETAIL
1 1/2" Meter & Backflow Assembly

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3" & LARGER WATER SERVICE W/ BFP
NOT TO SCALE

NOTES:
1. CONCRETE VALVE SHALL HAVE MINIMUM BASE DIMENSIONS ONE (1) IN. VERT. DIMENSIONS OF VALVE SHALL BE MINIMUM 24" TO 30" TO ALLOW FOR VALVE FOR SORE.
2. METER SHALL BE FURNISHED AND SET BY JOHNSTON COUNTY.
3. METER SHALL BE FURNISHED AND SET BY JOHNSTON COUNTY.
4. IF THE METER BOX IS LOCATED IN A TRAFFIC AREA A CONCRETE METER BOX, BROOKS No. 36-H WITH 12" EXTENSION SHALL BE USED.
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.

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WATER STANDARD DETAIL
3" & Larger Meter & Backflow Assembly

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UTILITY DETAILS

PROFESSIONAL ENGINEER
ERIC C. HAMPTON
10/23/2019

FILE NUMBER: 6191-01
DATE: 07/24/19
C4-1