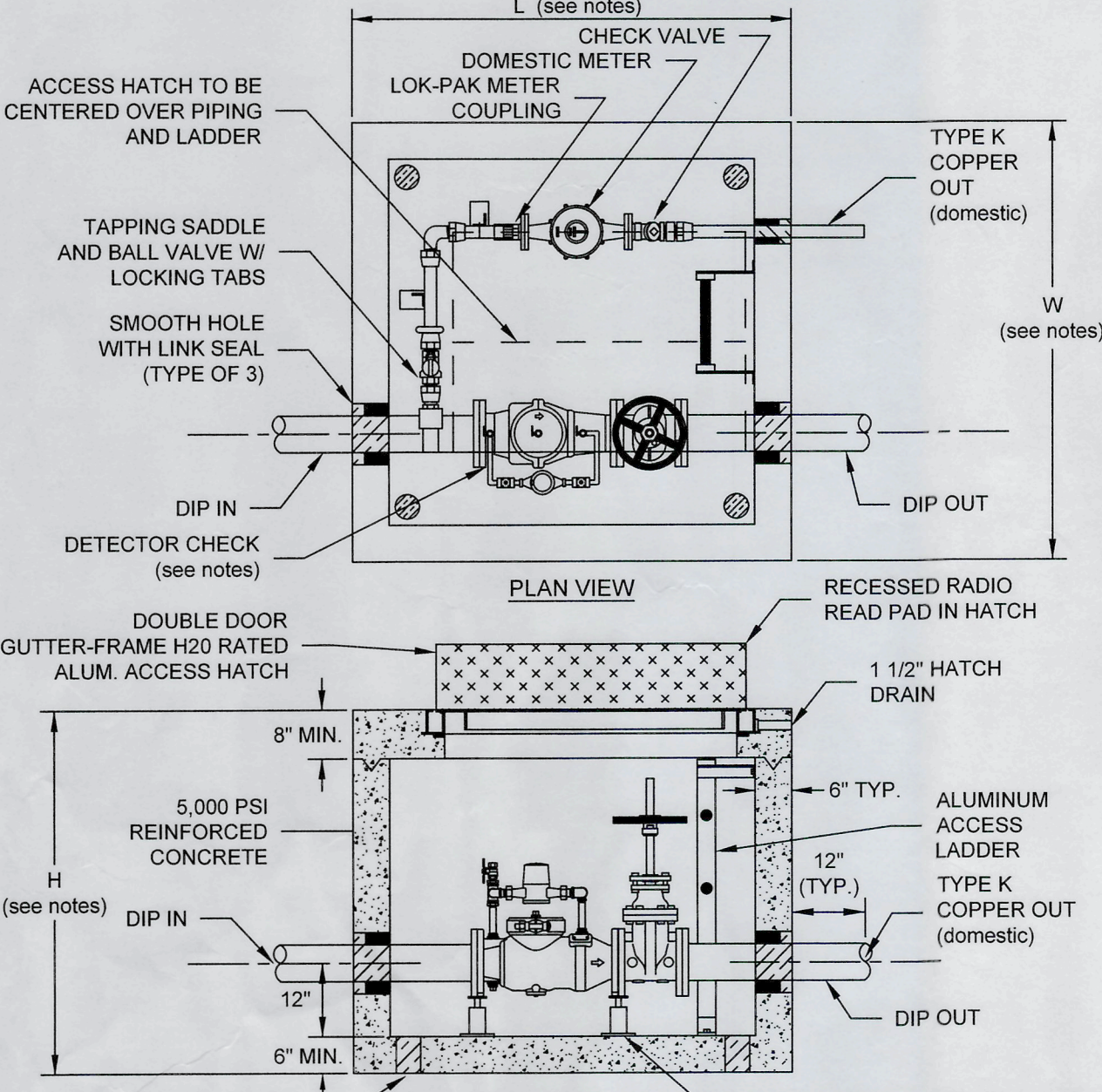


- FOR 6" FIRE LINE, EXTERIOR VAULT DIMENSIONS SHALL BE (L X W X H) 6' X 6' X 5' WITH DOMESTIC TAP MADE INSIDE VAULT AS SHOWN BELOW.
- FOR 8" FIRE LINE EXTERIOR VAULT DIMENSIONS SHALL BE (L X W X H) 6' X 6' X 6' WITH DOMESTIC TAP MADE OUTSIDE VAULT. BALL VALVE WITH LOCKING TABS SHALL BE PROVIDED INSIDE VAULT TO ALLOW FOR ISOLATION OF DOMESTIC METER.
- SINGLE DETECTOR CHECK VALVE SHALL BE WILKINS 310 DALM, WATTS ES-S07F - BP, OR APPROVED EQUAL WITH FLANGED END CONNECTIONS, BYPASS ASSEMBLY, AND ONE OS&Y GATE VALVE.
- BYPASS ASSEMBLY SHALL INCLUDE 2 BALL VALVES TO ISOLATE METER.
- DOMESTIC SHALL BE TYPE K COPPER WITH GRIP JOINT FITTINGS, BALL VALVE AT TAPPING SADDLE (WITH LOCKING TABS) AND CHECK VALVE ON OUTLET.
- DOMESTIC METER AND BYPASS METER TO BE SUPPLIED BY OWNER AND INSTALLED BY VENDOR.
- "UNI FLANGE" ADAPTOR FLANGE, OR APPROVED EQUAL, OR FLANGED - PLAIN END PIPING REQUIRED FOR INLET AND OUTLET PIPING.
- VAULT TO BE INSTALLED ON MIN. 6" COMPACTED VDOT #57 STONE WITH FILTER FABRIC PLACED BETWEEN BOTTOM OF VAULT AND STONE BEDDING. FILTER FABRIC TO EXTEND VERTICALLY A MINIMUM OF 6" ON ALL FOUR SIDES OF VAULT.

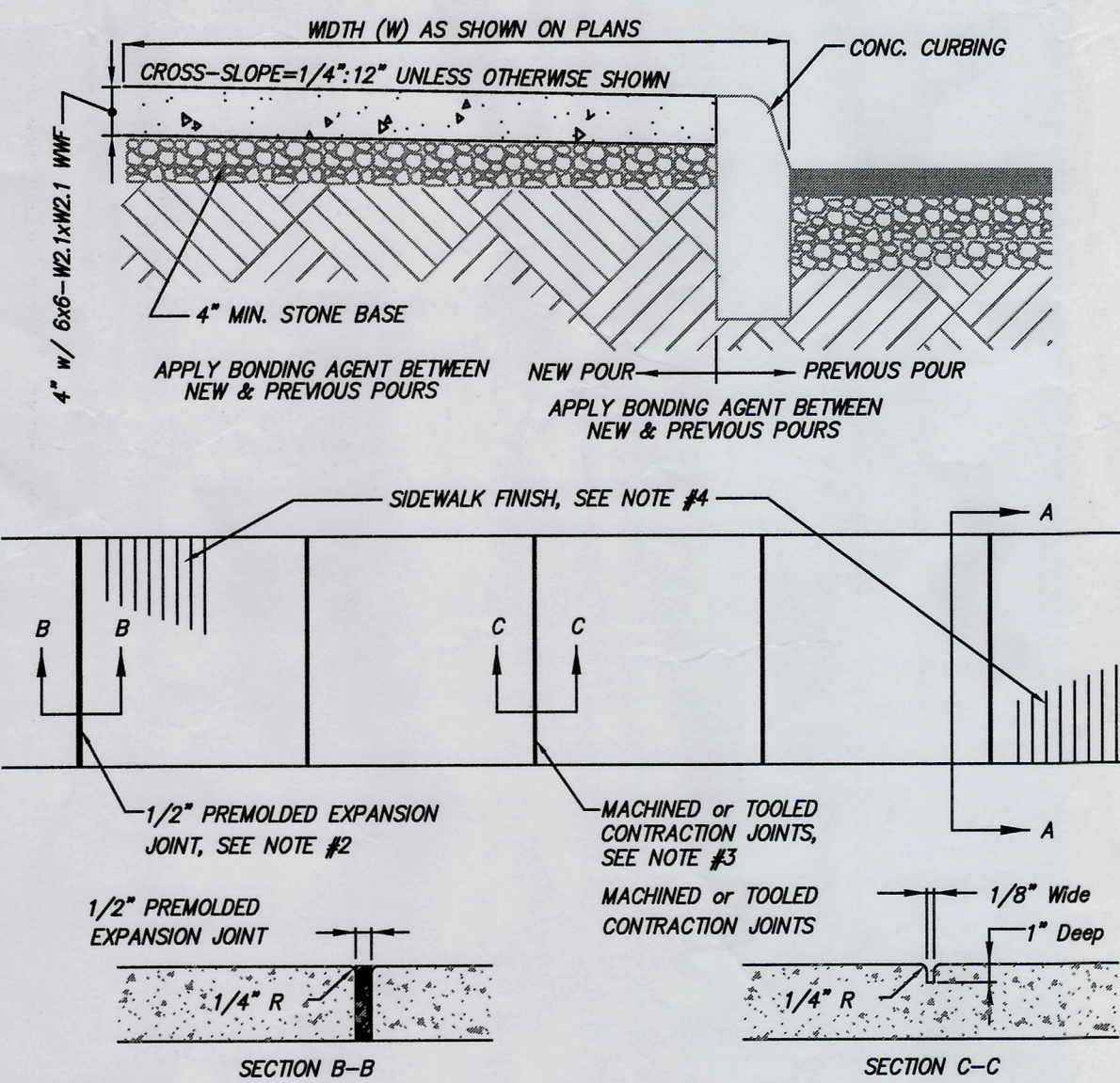


WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

COMMERCIAL METER VAULT

09/07/17

W-7



NOTES:

- ALL CONCRETE SHALL BE VDOT CLASS A3 GENERAL.
- SPACING FOR EXPANSION JOINTS SHALL BE AT MAXIMUM 50' INTERVALS.
- SPACING FOR MACHINED OR TOOLED CONTRACTION JOINTS SHALL BE AT MAXIMUM 5' INTERVALS.
- SIDEWALK FINISH SHALL BE SMOOTH TROWELED FIRST, THEN ENDING WITH A "LIGHT BROOM FINISH" IN THE DIRECTION OF THE CROSS SLOPE.
- WHEN SIDEWALK ABUTS A CURBING OR PREVIOUS CONCRETE POUR, A 1/2" PREMOLDED EXPANSION JOINT IS TO BE USED.
- CURING SHALL BE ACCOMPLISHED BY THE USE OF A LIQUID MEMBRANE SEAL CONTAINING WHITE PIGMENT, APPLIED AT THE RATE OF ONE (1) GALLON PER 150 SQUARE FEET.

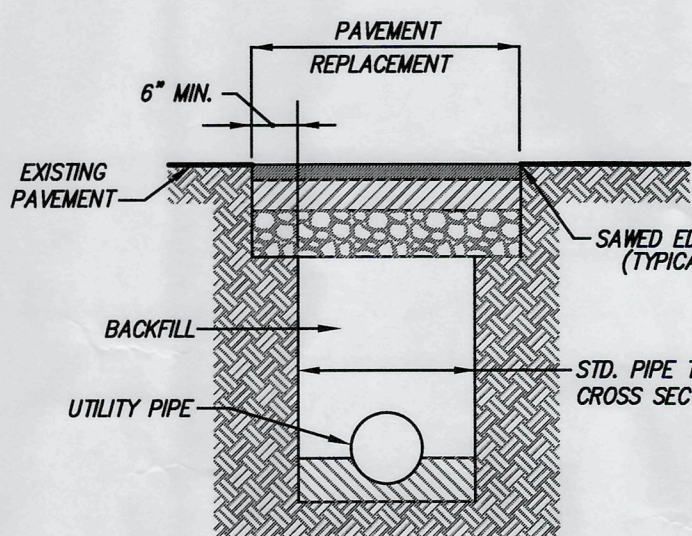
CONCRETE SIDEWALK
NO SCALE

APPROX	APPROXIMATE	INV	INVERT
BC	BOTTOM OF CURB	IPF	IRON PIN FOUND
BLDG	BUILDING	MIN	MINIMUM
BM	BENCHMARK	PVMT	PAVEMENT
CMP	CORRUGATED METAL PIPE	REQD	REQUIRED
CONC	CONCRETE	SS	SANITARY SEWER
EP	EDGE OF PAVEMENT	STD	STANDARD
EXIST	EXISTING	TBM	TEMPORARY BENCHMARK
FF	FINISHED FLOOR	TC	TOP OF CURB
FG	FINISH GRADE	TYP	TYPICAL
		VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION

ABBREVIATIONS & LEGEND

EXISTING	NEW	SPOT ELEVATION
100.5		CONTOURS
----- 100 -----		SANITARY SEWER LINE
== 8"SS ==		WATERLINE
--- 4"W ---	--- 4"W ---	GAS LINE
== 8"SD ==		OVERHEAD UTILITY LINES
--- 2"G ---		UNDERGROUND TEL OR ELEC LINE
--- OHU ---		
--- UE ---	--- UT ---	

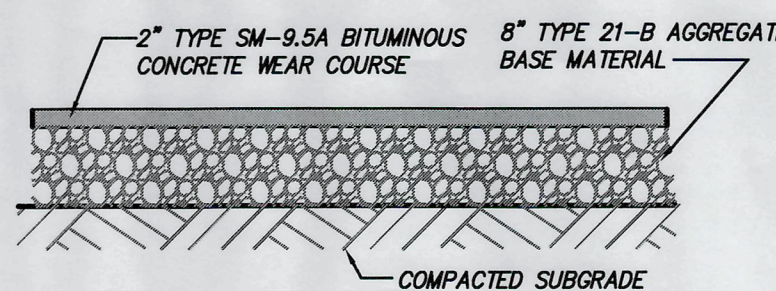
PROJECT BENCHMARK:
RIM OF EXISTING SANITARY SEWER MANHOLE, TAKEN FROM WYWA GIS.
ELEV. = 972.02



PAVEMENT REPLACEMENT
NO SCALE

PAVEMENT REPLACEMENT SECTION - HEAVY DUTY
NO SCALE

REFER TO VDOT SPECIFICATIONS FOR INDIVIDUAL PAVEMENT COURSES SHOWN HEREON

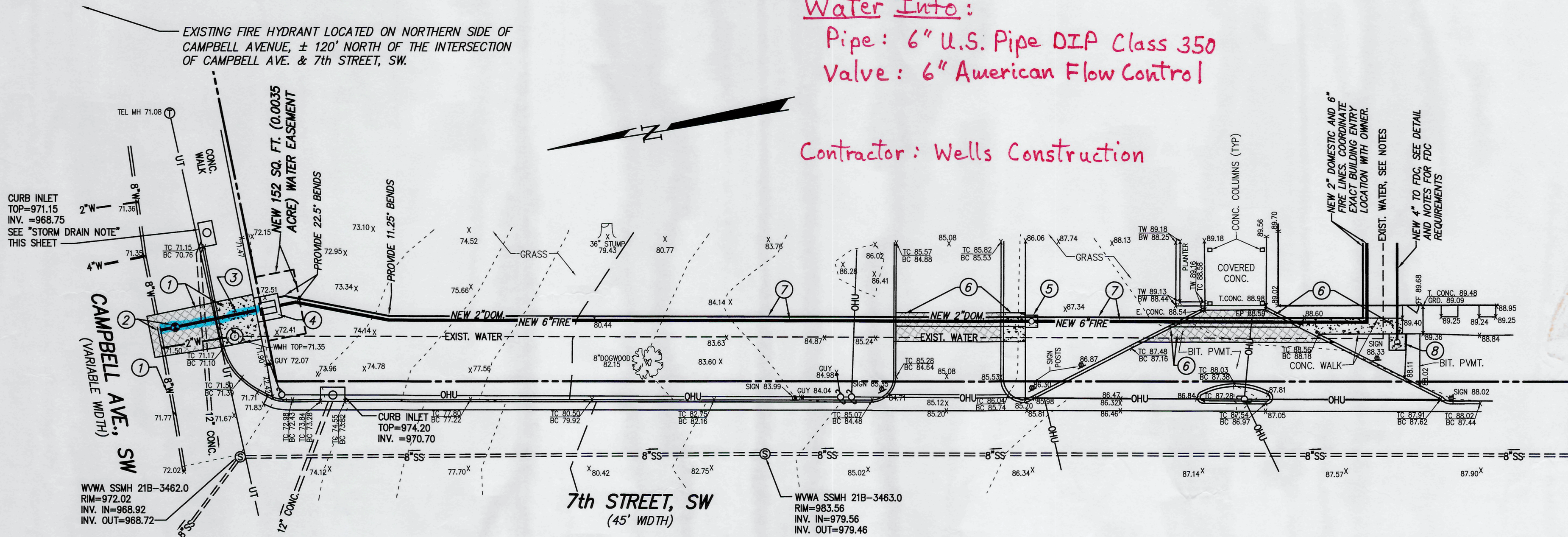


PAVEMENT REPLACEMENT SECTION - STANDARD DUTY
NO SCALE

Water Info:

Pipe: 6" U.S. Pipe DIP Class 350
Valve: 6" American Flow Control

Contractor: Wells Construction



TEMPORARY BENCHMARK:
RAILROAD SPIKE IN POLE, CENTER OF DROPOFF ISLAND
ELEV. = 988.24

FIRE & DOMESTIC WATERLINE CONSTRUCTION REQUIREMENTS

EXISTING CONDITIONS:
FIRE
(NO CURRENT FIRE SERVICE)

DOMESTIC
(SEE PLAN AND NOTES)

UPON ENERGIZING NEW FIRE AND DOMESTIC LINES AS DESCRIBED BELOW, REMOVE EXISTING DOMESTIC METER VAULT IN ITS ENTIRETY. REMOVE ALL 2-INCH WATERLINE BETWEEN VAULT AND 8-INCH MAIN, REMOVE TAPPING SLEEVE OR REDUCING TEE AT MAIN, AND SLEEVE 8-INCH MAIN. PROVIDE HEAVY-DUTY PAVEMENT REPLACEMENT AND CONCRETE SIDEWALK AS REQUIRED, SEE DETAILS.

UNDER PROPOSED CONDITIONS:

ALL NEW WATERLINE MATERIALS, FABRICATION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS.
ALL BACKFILL UNDER HARD SURFACES SHALL BE COMPACTED TO MIN. 95% OF STANDARD PROCTOR (ASTM D698). IN AREAS OF GRASS AND LANDSCAPING, COMPACT TO 95% PROCTOR TO WITHIN 8-INCHES OF FINISH GRADE, COMPACT LAST 8" (TOPSOIL) TO 80% STANDARD PROCTOR.

FIRE & DOMESTIC

- SAW-CUT EXISTING STREET PAVEMENT AND PUBLIC SIDEWALK. SEE DETAILS FOR HEAVY-DUTY PAVEMENT, PAVEMENT REPLACEMENT, AND CONCRETE SIDEWALK FOR REPLACEMENT REQUIREMENTS. WHERE REQUIRED, REPLACE PUBLIC CONCRETE CURBING WITH NEW CONCRETE CURB TO MATCH EXISTING IN FINISH & SECTION, USING VDOT STANDARD A-3 CONCRETE, MIN 3,000 psi.
- PROVIDE A NEW 6" WET-TAP TO THE EXISTING PUBLIC WATER MAIN. ALL MATERIALS AND LABOR SHALL BE PROVIDED BY CONTRACTOR, ASIDE FROM THE ACTUAL ACT OF PERFORMING THE WET-TAP, WHICH WILL BE PERFORMED BY THE WYWA. INSTALL NEW 6" GATE VALVE AND TRAFFIC BEARING VALVE BOX. VALVE SHALL BE CONNECTED TO REDUCING TEE. COORDINATE INSPECTION REQUIREMENTS WITH THE WYWA.
- PROVIDE NEW 6" LINE FROM MAIN TO NEW COMBINATION VAULT.
- PROVIDE AND INSTALL A NEW WYWA STANDARD "W-7" COMBINATION FIRE / DOMESTIC VAULT FOR 6-INCH FIRE LINE AND 2-INCH DOMESTIC LINE, SEE DETAIL, THIS SHEET. FINISH TOP OF VAULT SHALL BE SET FLUSH WITH BACK OF SIDEWALK AND SURROUNDING GRADE.
- PROVIDE NEW POST INDICATOR VALVE (PIV) ASSEMBLY, INTERCONNECT WITH FIRE SUPPRESSION PANEL AS REQUIRED BY SPRINKLER CONTRACTOR. PLACE 3'x3'x6" THICK CONCRETE PAD, TOP OF PAD TO MATCH TOP OF EXISTING WALK.
- SAW-CUT / REMOVE EXISTING ON-SITE BITUMINOUS PAVEMENT AND CONCRETE CURB & SIDEWALK. SEE DETAILS FOR STANDARD DUTY PAVEMENT AND SIDEWALK FOR REPLACEMENT. WHERE REQUIRED, REPLACE ON-SITE CONCRETE CURBING WITH NEW CONCRETE CURB TO MATCH EXISTING IN FINISH & SECTION, USING VDOT STANDARD A-3 CONCRETE, MIN 3,000 psi.
- PROVIDE NEW 6-INCH FIRE AND NEW 2-INCH DOMESTIC LINES FROM VAULT TO POINTS OF BUILDING ENTRY. COORDINATE EXACT POINTS OF BUILDING ENTRY WITH OWNER AND / OR FIRE SUPPRESSION CONTRACTOR.
- PROVIDE NEW FIRE DEPARTMENT CONNECTION (FDC) ON CONCRETE PAD AS SHOWN AND DETAILED HEREON. THE CONTRACTOR SHALL PROVIDE 5-INCH "STORZ" CONNECTION WITH 30-DEGREE ELBOWS ON THE FDC, AND SHALL PROVIDE AND INSTALL KNOX BOX LOCKING 5-INCH STORZ CAPS. PROVIDE NEW BUILDING MOUNTED "FDC" SIGNAGE DIRECTLY ADJACENT TO STANDPIPE. SIGNAGE SHALL BE WHITE BACKGROUND WITH RED LETTERS, AND SHALL BE EASILY VISIBLE FROM THE PUBLIC STREET.
- UPON COMPLETION OF ALL TESTING BY CONTRACTOR, AND INSPECTIONS BY THE WYWA, THE NEW SERVICES MAY BE ACTIVATED. FOLLOWING ACTIVATION OF NEW SERVICES, PERFORM REMOVAL OF EXISTING LATERAL AND METER AS DESCRIBED ABOVE. IT IS SUGGESTED THAT ALL OF THE DOMESTIC WATER PIPE SHOULD BE REMOVED IN ITS ENTIRETY. HOWEVER, IF APPROVED BY OWNER IN WRITING, THOSE PRIVATE PORTIONS OF THE EXISTING DOMESTIC WATER LATERAL THAT WILL NOT BE IN CONFLICT WITH PROPOSED IMPROVEMENTS MAY BE ABANDONED IN-PLACE. IF ABANDONED, TERMINAL ENDS SHALL BE PLUGGED AND CAPPED TO PREVENT SOIL AND / OR RODENT INFILTRATION.

Existing 2" service was cut downstream of the corp stop at the main, and the corp stop was turned off. Existing 2" service line was abandoned inground, and existing meter vault was abandoned in ground.

STORM DRAIN NOTE:

THE SURVEYOR WAS UNABLE TO CONFIRM THE SLOPE OF THE EXISTING 12" STORM DRAIN PIPE THAT LIES IMMEDIATELY EAST OF THE POINT OF NEW WATERLINE INTERCONNECTION. IT IS SUSPECTED THERE MAY BE A STORM DRAIN MANHOLE IN THE VICINITY OF THE STREET INTERSECTION THAT HAS BEEN PAVED OVER.
THE CONTRACTOR SHALL PERFORM AN EXPLORATORY EXCAVATION IN THE AREA WHERE THE NEW WATERLINE CROSSES THE STORM DRAIN TO CONFIRM THERE IS NO CONFLICT WITH THE TWO PIPELINES, AND INFORM THE ENGINEER IMMEDIATELY IF CONDITIONS EXIST THAT WOULD AFFECT THE INSTALLATION OF NEW IMPROVEMENTS SHOWN HEREON.

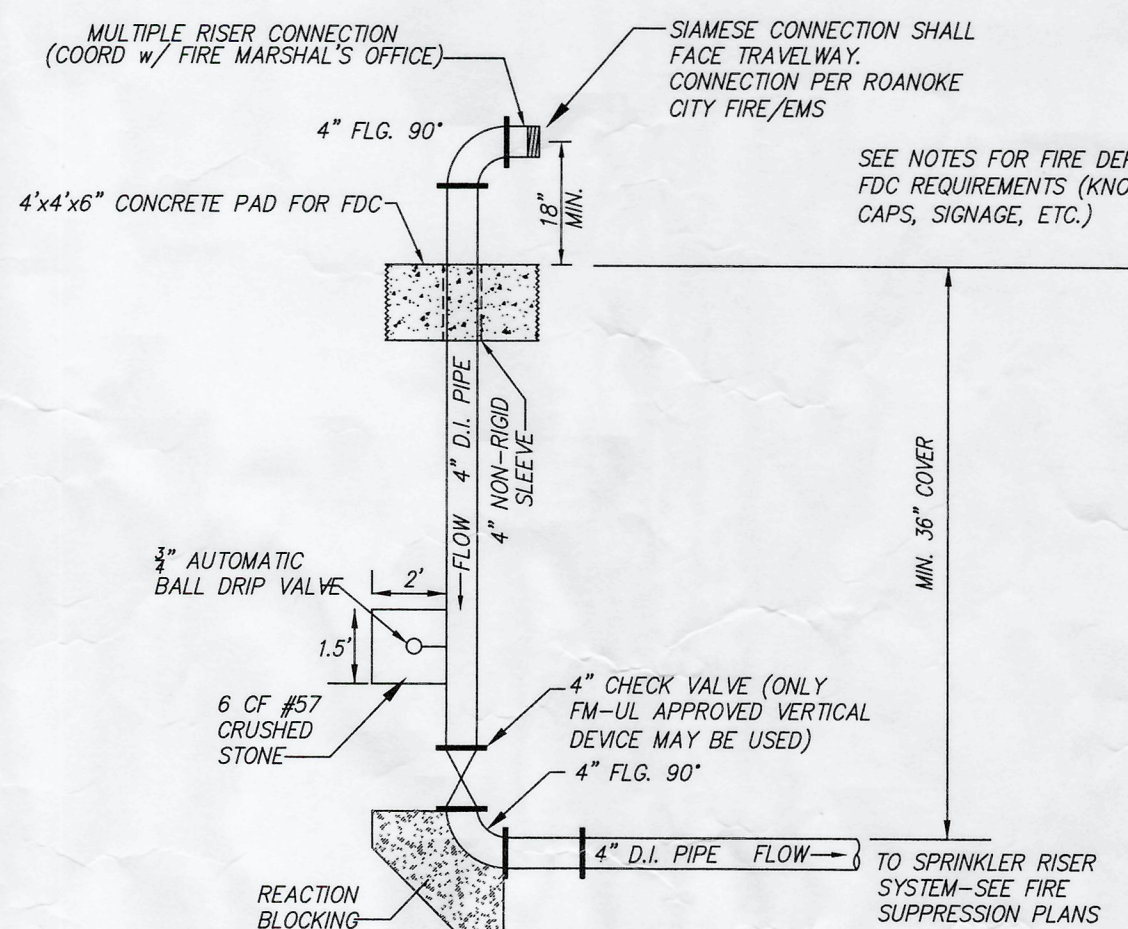
EXISTING WATERLINE NOTES:

ACCORDING TO THE WYWA GIS, THE BUILDING IS SERVED BY AN EXISTING TWO-INCH WATER METER, AND PRESUMABLY A TWO INCH DOMESTIC WATER LATERAL. THE ALIGNMENT SHOWN IS APPROXIMATE, BASED ON PAVEMENT AND SIDEWALK PATCHES OBSERVED IN THE FIELD.

AS-BUILT AND EASEMENT REQUIREMENTS:

FOLLOWING COMPLETION OF CONSTRUCTION AND TESTING, BUT PRIOR TO THE WYWA ACTIVATING THE NEW FIRE AND DOMESTIC SERVICES, THE CONTRACTOR IS REQUIRED TO HAVE AN AS-BUILT SURVEY AND PLAN OF THE NEW VAULT, PIV, AND FDC PREPARED BY A VIRGINIA LICENSED LAND SURVEYOR AND SUBMITTED TO THE WYWA FOR REVIEW AND APPROVAL. UPON FULL ACCEPTANCE OF THE AS-BUILTS, AND ASSUMING ALL OTHER REQUIREMENTS HAVE BEEN MET, THE WYWA MAY GRANT SUBSTANTIAL COMPLETION.

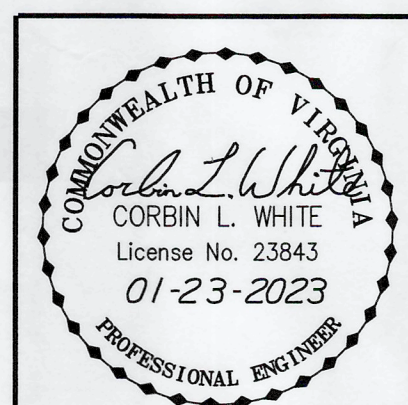
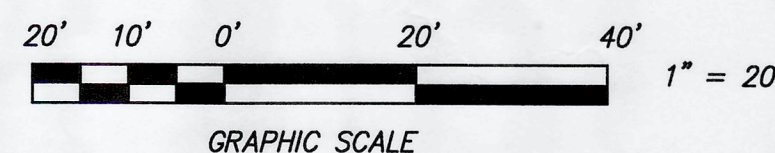
FOLLOWING THE AS-BUILT FIELD LOCATION OF THE NEW IMPROVEMENTS, A FORMAL EASEMENT PLAT IS REQUIRED TO BE PREPARED BY A VIRGINIA LICENSED LAND SURVEYOR, AND REVIEWED AND APPROVED BY THE WYWA. THE PROJECT WILL NOT BE DEEMED COMPLETE UNTIL SUCH EASEMENT PLAT IS RECORDED AT THE CLERK'S OFFICE OF THE CIRCUIT COURT OF THE CITY OF ROANOKE, AND RECORDED COPIES PROVIDED TO THE WYWA.



AS AN ALTERNATIVE TO THE CONCRETE PAD, THE CONTRACTOR MAY INSTALL A 4" INTERIOR DIAMETER DOORHOUSE MANHOLE WITH FLAT TOP, WITH A HOLE CUT IN THE FLAT-TOP FOR FDC STANDPIPE. INSURE THAT AUTOMATIC DRIP VALVE IS INSTALLED ON THE FDC SIDE OF THE CHECK VALVE.

FIRE DEPARTMENT CONNECTION (FDC)
NO SCALE

ALL NEW WATERLINE MATERIALS, FABRICATION, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS.



Designed: C.L. White
Drawn: C.L. White
Checked: January 23, 2023
Date: January 23, 2023
Scale: 1\"/>

NEW FIRE SERVICE LATERAL AND VAULT FOR
RELIABLE WELDING & FABRICATORS, INC.
TO BE CONSTRUCTED FOR NEW FIRE SUPPRESSION SYSTEM FOR KAZIM TEMPLE CORP.

SITUATE 628 CAMPBELL AVENUE, SW
CITY OF ROANOKE, VIRGINIA

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Inspector's As-Built K. Winslow 5.15.23