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Roanoke / Richmond
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1. TRACER WIRES SHALL BE INSTALLED USING MANHOLES, TRACER WIRE ACCESS BOXES, VALVE BOXES OR VAULTS. WATER METERS AND FIRE HYDRANTS AS ACCESS POINTS.

2. FOR WATER AND SEWER INSTALLED BY OPEN TRENCHING, HORIZONTAL DIRECTIONAL DRILLING, OR PIPE BURSTING, TRACER WIRE SHALL BE NEPTCO TRACE-SAFE WATER BLOCKING TRACER WIRE OR APPROVED EQUAL.

3. SPLICES SHALL ONLY BE MADE WITH GEL FILLED CONNECTORS DESIGNED FOR WIRE WITH A WOVEN POLYESTER FIBER CORE SUCH AS NEPTCO TRACE-SAFE WATER BLOCKING CONNECTORS OR APPROVED EQUAL. SPLICES SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING CONTINUITY AT ALL SPLICE LOCATIONS.

4. WHERE HDPE PIPE IS INSTALLED WITHOUT STEEL CASING PIPE, SUCH AS A DIRECTIONALLY DRILLED CROSSINGS, AND CONNECTED TO DUCTILE IRON PIPE ON EACH END, TRACER WIRE SHALL BE INSTALLED ALONG FULL LENGTH OF HDPE PIPE WITH AN ACCESS POINT INSTALLED AT EACH HDPE/DUCTILE IRON TRANSITION. TRACER WIRE SHALL BE CONNECTED TO THE ACCESS POINT IN ACCORDANCE WITH THIS DETAIL. ANY TRANSITION FROM DUCTILE IRON MAIN TO NON-DUCTILE IRON MAIN SHALL HAVE AN ACCESS POINT TO BEGIN TRACER WIRE.

5. AS-BUILT'S SHALL SHOW TRACER WIRE(S) LOCATION AND ACCESS POINT(S), ALONG WITH BUTT SPLICE LOCATIONS.

6. THE TRACER WIRE SHALL BE PLACED ALONG THE LOWER QUADRANT OF THE PIPE. THE WIRE SHALL NOT TOUCH THE PIPE, BUT SHALL BE A MAXIMUM OF 6" FROM THE PIPE. NON-METALLIC SPACERS MAY BE USED TO MAINTAIN A SET DISTANCE FROM THE UTILITY.

7. WIRE SHALL BE BROUGHT TO THE SURFACE EVERY FIVE HUNDRED (500) FEET AND PLACED IN A WATER METER BOX OR A DRAINAGE & WATER SOLUTIONS, INC. (OR APPROVED EQUAL) ALL CAST IRON TRACER WIRE ACCESS BOX.

8. THE TRACER WILL BE TESTED BY THE PARTICIPATING UTILITY AS PART OF THE PROJECT'S FINAL ACCEPTANCE. CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING ALL CONTINUITY OF TRACER WIRE.

9. THE GROUND WIRE SHALL BE #16 AWG COPPER WIRE AND SHALL BE OF ADEQUATE LENGTH TO EXTEND A MINIMUM OF (5) FIVE FEET BEYOND THE TOP OF THE STRUCTURE. THE END OF THE GROUND WIRED SHALL CONNECT TO THE GROUND BAR OR LUG TERMINAL USING A BURNEDY KAGU MECHANICAL TERMINAL LUG.

10. A GROUND ROD SHALL BE INSTALLED AT EACH LOCATION WHERE GROUND WIRE SURFACES AND CONNECTS TO GROUND BAR. GROUND ROD SHALL BE COPPER COATED WITH A MINIMUM DIAMETER OF 5/8" AND SHALL BE BURIED A MINIMUM OF FOUR (4) FEET INTO THE GROUND.

11. THE GROUND BAR SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED USING SS 1/2" X 1/2" SS HEX TAPCON. THE FOLLOWING SHALL BE INSTALLED IN (4) FOUR CENTER HOLES: 10-32SS NUTS, #10 SS WASHERS AND 10-32 X 1/2" SS PHILLIPS. THE FOURTH HOLE SHALL HAVE A BURNEDY KAGU MECHANICAL TERMINAL LUG FOR THE #16 AWG GROUND WIRE. THE ASSEMBLY CAN BE ACQUIRED AT RCD INDUSTRIAL SUPPLY, INC. (540-353-0683). CLAMP RFC-11. THE ENDS OF THE TRACER WIRES SHALL BE PLACED IN THE GROUND BAR AS SHOWN BELOW.

12. IF USING TRACER WIRE ACCESS BOX AS ACCESS POINT, GROUND BAR WILL NOT BE REQUIRED. WIRES SHALL BE CONNECTED AS SHOWN BELOW. TRACER WIRE SHALL BE OF ADEQUATE LENGTH TO EXTEND FIVE (5) FEET ABOVE THE TOP OF ACCESS BOX.

13. TWO WRAPS OF TRACER WIRE SHALL BE WRAPPED SNUGLY AROUND BASE OF HYDRANT. WIRE SHALL NOT BE LEFT IN A WAY THAT WOULD INTERFERE WITH MOWING AROUND HYDRANT.

14. WHEN USING ALL DUCTILE MAIN, TRACER WIRE FOR SERVICES SHALL BE 12 AWG COPPER TRACER WIRE. TRACER WIRE SHALL HAVE BARE WIRE CONTACT TO DUCTILE MAIN.

GROUND BAR

5"

LOCATING CLIP (TS19-IL-LC-C)

1"

LOCATING CLIP (TS19-IL-LC-C)

5' TRACE SAFE

TO GROUNDING SOURCE

GROUND WIRE

5' TRACE SAFE

TRACER WIRE ACCESS BOX LID

3 1/8"

1 1/2"

LOCATING CLIP FRONT VIEW (TS19-IL-LC-C)

LOCATING CLIP (TYP.) (TS19-IL-LC-C)

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

TRACER WIRE FOR NON-METALLIC PRESSURE PIPE

09/06/16

G-4

TS19-C

TS19-C

GROUND BAR (TYP.)

LOCATING CLIP (TYP.) (TS19-IL-LC-C)

LOCATING CLIP FRONT VIEW (TS19-IL-LC-C)

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

TRACER WIRE FOR NON-METALLIC PRESSURE PIPE

09/06/16

G-4A

FINISHED GRADE

3" MIN

NON-DETECTABLE WARNING TAPE, 3 TO 5 MILS IN THICKNESS, TO BE INSTALLED APPROX. 24" ABOVE PIPE AND AT A MINIMUM OF 6" BELOW GRADE (ALL PIPE)

BACKFILL ONLY WITH APPROVED MATERIAL PER APPLICABLE LOCALITY OR VDOT STANDARDS

PIPE SIZE & MATERIAL AS SHOWN ON PLAN

FOR WATERLINES INSTALL BEDDING STONE TO SPRING LINE OF PIPE AT A MINIMUM, OR PER MANUFACTURER'S RECOMMENDATION FOR SEWER LINES BEDDING SHALL BE MIN. 6" ABOVE PIPE

LOCATION OF TRACER WIRE WITH NON-METALLIC PRESSURE PIPE. TRACER WIRE NOT REQUIRED FOR TYPICAL GRAVITY SANITARY SEWER. SEE DETAIL G-4 FOR ADDITIONAL REQUIREMENTS

WIDTH OF TRENCH EXCAVATION PIPE DIA. + 6" EACH SIDE (MINIMUM)

NORMAL SOIL CONDITIONS

(4" MIN. - 6" IN ROCK CONDITIONS)

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

BEDDING AND BACKFILL OUTSIDE OF PAVED AREAS

08/01/15

G-11

EXISTING PAVEMENT SECTION

LIMITS OF OPEN CUT

SURFACE MIX ASPHALT

BASE MIX ASPHALT

SUBBASE

DEPTH VARIES

NON-DETECTABLE WARNING TAPE, 3 TO 5 MILS IN THICKNESS, TO BE INSTALLED APPROX. 24" ABOVE PIPE AND AT A MINIMUM OF 6" BELOW GRADE (ALL PIPE)

LOCATION OF TRACER WIRE WITH NON-METALLIC PRESSURE PIPE. TRACER WIRE NOT REQUIRED FOR TYPICAL GRAVITY SANITARY SEWER. SEE DETAIL G-4

WIDTH OF TRENCH EXCAVATION PIPE DIA. + 6" EACH SIDE (MINIMUM)

BACKFILL ONLY WITH APPROVED MATERIAL PER APPLICABLE LOCALITY OR VDOT STANDARDS

PIPE SIZE & MATERIAL AS SHOWN ON PLAN

SEE BEDDING NOTE BELOW

(6" IN ROCK CONDITIONS)

4"

SEE BEDDING NOTE BELOW

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

BEDDING AND BACKFILL UNDER PAVEMENT AND IN RIGHT-OF-WAY

08/01/15

G-12

1. 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.

2. 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.

3. SINGLE DETECTOR CHECK VALVE SHALL BE WILKINS 310 DALM, WATTS ES-SS07F - BP, OR APPROVED EQUAL WITH FLANGED END CONNECTIONS, BYPASS ASSEMBLY, AND ONE OS&Y GATE VALVE.

4. BYPASS ASSEMBLY SHALL INCLUDE 2 BALL VALVES TO ISOLATE METER.

5. DOMESTIC SHALL BE TYPE K COPPER WITH GRIP JOINT FITTINGS, BALL VALVE AT TAPPING SADDLE (WITH LOCKING TABS) AND CHECK VALVE ON OUTLET.

6. DOMESTIC METER AND BYPASS METER TO BE SUPPLIED BY OWNER AND INSTALLED BY VENDOR.

7. "UNI FLANGE" ADAPTOR FLANGE, OR APPROVED EQUAL, OR FLANGED - PLAIN END PIPING REQUIRED FOR INLET AND OUTLET PIPING.

8. 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.

9. FREE STANDING POST INDICATOR VALVE TO HAVE TAMPER SWITCH TO BE SUPPLIED BY OWNER AND INSTALLED BY VENDOR.

ACCESS HATCH TO BE CENTERED OVER PIPING AND LADDER

DOMESTIC METER

CHECK VALVE

LOK-PAK METER COUPLING

TYPE K COPPER OUT (domestic)

W (see notes)

SMOOTH HOLE WITH LINK SEAL (TYPE OF 3)

DIP IN - DETECTOR CHECK (see notes)

DOUBLE DOOR GUTTER-FRAME H20 RATED ALUM. ACCESS HATCH

PLAN VIEW

1 1/2" HATCH DRAIN

6" MIN

5,000 PSI REINFORCED CONCRETE

DIP IN

12"

6" MIN

SECTION VIEW

EPOXY COATED STEEL PIPE SUPPORT WITH SS ANCHORS (TYP. OF 4)

12" TYP.

TYPE K COPPER OUT (domestic)

DIP OUT

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

COMMERCIAL METER VAULT

02/10/15

W-7

1. PUBLIC HYDRANTS SHALL BE PAINTED SILVER WITH AN OIL-BASED PAINT. PRIVATE HYDRANTS SHALL ALSO BE PAINTED SILVER WITH AN OIL-BASED PAINT UNLESS OTHERWISE SPECIFIED BY THE JURISDICTIONAL FIRE MARSHALL.

2. FIRE HYDRANT SHALL BE INSTALLED 2' MIN. AND 4' MAX. FROM BACK OF CURB OR 6' MIN. AND 12' MAX. FROM EDGE OF PAVEMENT WHEN CURB IS NOT PRESENT. FIRE HYDRANT TO BE INSTALLED WITHIN RIGHT-OF-WAY OR EASEMENT LINE.

3. AREA AROUND HYDRANT AT A RADIUS OF 4' TO BE LEVEL AND UNOBSTRUCTED.

4. WATERPROOF BAGS OR OUT OF SERVICE RINGS SHALL BE PLACED OVER ALL NEWLY INSTALLED FIRE HYDRANTS.

5. HYDRANT ASSEMBLIES SHALL BE ROODED AND RESTRAINED WITH APPROVED M.J. GLAND RESTRAINTS. HIGH PRESSURE (OVER 150 PSI) ALSO REQUIRES CONCRETE THRUST BLOCKS AS SHOWN BELOW.

6. IF DURING CONSTRUCTION THE SEASONAL WATER LEVEL IS NOTED TO BE ABOVE THE DRAIN OUTLETS OF THE PROPOSED HYDRANT, THE PARTICIPATING UTILITY WILL BE NOTIFIED IMMEDIATELY SO THAT THE HYDRANT CAN BE RELOCATED TO A SUITABLE LOCATION, OMITTED, OR THE DRAIN HOLE PLUGGED.

7. TWO WRAPS OF TRACER WIRE SHALL BE WRAPPED AROUND BASE OF HYDRANT.

8. APPROVED MODELS - AVK MODEL 2780, AFC MODEL B-84-B-S, MUELLER CENTURION A423, KENNEDY K810 OR EQUIVALENT.

9. WHERE HYDRANT LATERAL(S) IS APPROVED BY THE PARTICIPATING UTILITY TO BE LONGER IN LENGTH, MAKING THE CONTINUOUS SECTION OF PIPE ON EACH SIDE OF THE GATE VALVE UNEASIBLE, RESTRAINED PIPE JOINTS SHALL BE INSTALLED BETWEEN THE TEE AND GATE VALVE. IN LIEU OF RODDING, HOWEVER, A ROODED CONTINUOUS SECTION OF PIPE SHALL ALWAYS BE INSTALLED BETWEEN THE GATE VALVE AND HYDRANT.

2-2 1/2" NOZZLES

1-4 1/2" PUMPER NOZZLE (FACING THE ROAD)

(NO OBSTRUCTIONS)

VARIES

FINISHED GRADE

2" MIN. COVER

1/8" TO 2 1/4" OR EDGE OF PAVEMENT

2'X2'X4" CONCRETE PAD

VALVE BOX (W/ ADAPTOR) IF OUTSIDE PAVEMENT OR VALVE VAULT UNDER PAVEMENT

STANDARD INSTALLATION INCLUDES FOSTER ADAPTOR OR APPROVED EQUAL

CONCRETE THRUST BLOCK (IF REQUIRED)

WATER MAIN

3/4" DIA. "CORTEN" NON-CORROSIVE THREADED ROD AND NUTS

TRACER WIRE SEE GENERAL DETAIL

APPROVED M.J. GLAND RESTRAINT (i.e. METALLICS, GRIP RINGS OR UNI-FLANGE) SHALL BE USED AT ALL M.J. FITTINGS

TEE - MAIN LINE SIZE, X 6" TO VALVE AND HYDRANT

M.J. FITTINGS SHALL NOT BE ENCASED IN CONCRETE

CONCRETE BASE AND THRUST BLOCK (IF REQUIRED) AGAINST UNDISTURBED SOIL. CONCRETE SHALL NOT COVER HYDRANT DRAIN

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

FIRE HYDRANT ASSEMBLY

02/10/15

W-17

PIPE SIZE

PIPE MATL.

90° BEND

45° BEND

22 1/2° BEND

1 1/4° BEND

VALVE/PLUG (NOTE 2)

TEE BRANCH (NOTE 3)

REDUCER (NOTE 4)

45° VERT.

22 1/2° VERT.

1 1/4° VERT.

6"	D.I.	26'	21'	6'	3'	50'	26'	26'	21'	10'	5'
8"	D.I.	36'	21'	8'	4'	65'	41'	27'	27'	13'	7'
10"	D.I.	43'	21'	9'	5'	77'	53'	26'	32'	16'	8'
12"	D.I.	51'	21'	10'	5'	91'	67'	27'	38'	18'	9'
6"	PVC	29'	21'	6'	3'	78'	25'	40'	32'	16'	8'
8"	PVC	37'	21'	8'	4'	102'	49'	43'	42'	21'	10'
10"	PVC	44'	21'	9'	5'	122'	68'	41'	51'	25'	12'
12"	PVC	51'	21'	11'	6'	143'	89'	42'	60'	29'	15'

1. ALL JOINTS SHALL BE RESTRAINED ON BOTH SIDES OF THE FITTING AND DOCUMENTED BY THE INSPECTOR FOR THE LENGTH SHOWN UNLESS OTHERWISE INDICATED.

2. RESTRAINED LENGTH SHOWN REFERS TO ANY DESIGNED OR POTENTIAL LINE STOP, INCLUDING ALL GATE VALVES.

3. RESTRAINED LENGTH SHOWN REFERS TO THE BRANCH LINE ONLY. THE CONTINUOUS PIPE LENGTH OF THE MAIN RUN SHALL BE A MINIMUM OF 10' ON EACH SIDE OF THE TEE.

4. RESTRAINED LENGTH SHOWN IS BASED ON REDUCING PIPE DIAMETER TO ONE SIZE SMALLER THAN PIPE LISTED (ANY OTHER DIAMETER REDUCTION WILL REQUIRE ADDITIONAL CALCULATIONS BEFORE INSTALLATION). RESTRAINED LENGTH SHOWN IS UPSTREAM ON THE LARGE SIDE OF THE REDUCER.

5. 12" AND SMALLER DIAMETER: IF UNDER 150 PSI WORKING PRESSURE, RESTRAINED JOINT(S) ARE TO BE USED. IF EQUAL TO OR OVER 150 PSI WORKING PRESSURE, BOTH THRUST BLOCK(S) AND RESTRAINED JOINT(S) SHALL BE USED.

6. LARGER THAN 12" DIAMETER: IF UNDER 100 PSI WORKING PRESSURE, RESTRAINED JOINT(S) ARE TO BE USED. IF EQUAL TO OR OVER 100 PSI WORKING PRESSURE, BOTH RESTRAINED JOINT(S) SHALL BE USED (UNLESS OTHERWISE APPROVED BY THE PARTICIPATING UTILITY).

7. FOR RESTRAINED JOINT PIPING REQUIREMENTS AT FITTING R.J. PVC AND R.J. DIP MAY BE USED INTERCHANGEABLY WITH APPROVAL FROM PARTICIPATING UTILITY. CONTRACTOR MUST PLAN ACCORDINGLY FOR THE DIFFERENCE IN PVC AND DIP BELL AND SPIGOT DIMENSIONS.

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

MINIMUM THRUST RESTRAINT OF PIPE JOINTS DESIGN LENGTHS

02/10/15

W-19

1. TAPPING SLEEVE SHALL BE POWERSEAL MODEL 3490 TYPE 304 STAINLESS STEEL WITH CARBON STEEL FLANGE. ROMAC'S MODEL SST III, FORD MODEL FTSS WITH CARBON STEEL FLANGE OR APPROVED EQUIVALENT. SLEEVE SHALL BE RATED AT 100 PSI OVER WORKING PRESSURE AND MUST HAVE A TEST PLUG.

2. TAPPING VALVE SHALL BE AVK RESILIENT SEATED GATE VALVE SERIES 25 MJFL, MUELLER T-2360 RESILIENT WEDGE TAPPING VALVE WITH MJFL, OR AFC SERIES 2500 RESILIENT WEDGE TAPPING VALVE WITH MJFL. VALVE SHALL BE RATED AT 250 PSI.

3. TAPPING SLEEVE AND VALVE SHALL BE FULL PORT TO ACCEPT FULL SIZE SHELL CUTTER.

4. STEEL FLANGE SHALL MEET ANWW C207.

5. SIZE-ON-SIZE TAPPING NOT ALLOWED UNLESS APPROVED BY PARTICIPATING UTILITY.

CONTRACTOR TO EXPOSE & CLEAN PIPE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

FINISHED GRADE

ROUGH GRADE

SOLID GLUE CAP

PRIVATE PROPERTY

RIGHT OF WAY OR LIMITS OF EASEMENT

CLEAN OUT BOX AND LID (SET TO FINISHED GRADE)

CLEAN OUT TO EXTEND ABOVE GROUND A MIN. OF 3 FEET DURING INSTALLATION OF MAIN LINE. PLUMBER SHALL CUT STACK TO FINISHED GRADE AS SHOWN WHEN BUILDING SEWER IS CONNECTED TO LATERAL

45° OR 22.5° BELL & SPIGOT BEND (IF NEEDED)

(SEE NOTE #2)

45° MAX

SEWER MAIN

4" MINIMUM GRAVEL BEDDING #57 OR EQUIVALENT

(SEE NOTE #6)

4" MINIMUM

TEE, WYE, TEE/WYE OR COMBINATION OF WYE & 45° BEND FITTINGS SHALL BE SIZED AS REQUIRED

2'-0" MIN.

11.25" OR 22.5" BEND

(SEE NOTE #2)

SANITARY SEWER LATERAL FOR DEEP SEWER

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

TAPPING, SLEEVE AND VALVE

01/01/14

W-2

1. TRAFFIC BEARING BOX AND LID REQUIRED IN TRAFFIC AREAS (CAPITOL FOUNDRY YB-8'S).

2. SEWER LATERAL AND CLEANOUT PIPING SHALL BE ASTM D3034 SDR 26. SEWER LATERAL FITTINGS SHALL BE OF SAME SDR RATING AS THE SEWER MAIN. SCHEDULE 40 SOLVENT WELD PIPE AND FITTINGS MAY BE USED FOR THE SEWER LATERAL AND CLEANOUT ASSEMBLY WITH APPROVAL FROM THE PARTICIPATING UTILITY.

3. ALL PIPE SHALL BE OF SAME SIZE.

4. NO BENDS ARE ALLOWED IN THE LATERAL FROM THE MAIN TO THE CLEANOUT STACK WYE. (EXCEPT FOR DEEP SEWER, AS SHOWN BELOW).

5. ALL MAIN LINE TAPS ON ACTIVE MAINS SHALL BE PERFORMED BY PARTICIPATING UTILITY.

6. PIPING ON PRIVATE SIDE OF CLEANOUT TO BE INSTALLED PER GOVERNING JURISDICTION REQUIREMENTS.

7. MINIMUM LATERAL SIZE, 4" FOR RESIDENTIAL SERVICE, 6" FOR NON-RESIDENTIAL SERVICE.

8. SEWER CLEANOUTS SHALL BE SAME SIZE AS SEWER LATERAL.

9. MINIMUM COVER FOR ALL SEWER LATERALS SHALL BE THREE (3) FEET.

10. PROPERTY OWNER RESPONSIBLE FOR INSTALLING CLEANOUT ON PROPERTY LINE (IN ACCORDANCE WITH THIS DETAIL) WHEN MAINTENANCE OCCURS.

11. LOWEST SERVED FINISHED FLOOR ELEVATION SHALL BE A MINIMUM OF THREE FEET (3') ABOVE THE TOP OF THE MAIN. AT THE POINT WHERE THE SERVICE LATERAL CONNECTS TO THE MAIN.

12. WHEN CONNECTING TO EXISTING LATERAL USE FERNOCO FLEXIBLE COUPLING.

FINISHED GRADE

ROUGH GRADE

SOLID GLUE CAP

PRIVATE PROPERTY

RIGHT OF WAY OR LIMITS OF EASEMENT

CLEAN OUT BOX AND LID (SET TO FINISHED GRADE)

CLEAN OUT TO EXTEND ABOVE GROUND A MIN. OF 3 FEET DURING INSTALLATION OF MAIN LINE. PLUMBER SHALL CUT STACK TO FINISHED GRADE AS SHOWN WHEN BUILDING SEWER IS CONNECTED TO LATERAL

45° OR 22.5° BELL & SPIGOT BEND (IF NEEDED)

(SEE NOTE #2)

45° MAX

SEWER MAIN

4" MINIMUM GRAVEL BEDDING #57 OR EQUIVALENT

(SEE NOTE #6)

4" MINIMUM

TEE, WYE, TEE/WYE OR COMBINATION OF WYE & 45° BEND FITTINGS SHALL BE SIZED AS REQUIRED

2'-0" MIN.

11.25" OR 22.5" BEND

(SEE NOTE #2)

SANITARY SEWER LATERAL FOR DEEP SEWER

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

SANITARY SEWER LATERAL

01/01/14

S-6

(COMMERICAL METER VAULT SHALL INCLUDE THE INSTALLATION OF A TAMPER SWITCH FOR THE FIRE SERVICE LINE. TAMPER SWITCH SHALL BE INSTALLED ON THE VALVE IN THE VAULT BY THE G.C. G.C. SHALL CONNECT PVC FIRE LINE TO DIP STUB OUTS ENTERING AND EXITING THE VAULT PER WESTERN VIRGINIA WATER AUTHORITY STANDARDS)

LAWSON 2.0
605 CAMPBELL AVENUE, SOUTHEAST
WWW.DETAILS

605 CAMPBELL AVE SE
CITY OF ROANOKE, VIRGINIA

DRAWN BY SMD
DESIGNED BY BTC
CHECKED BY BTC
DATE 6/15/2021
SCALE NA
REVISIONS

City of Roanoke
Planning, Building, & Development

COMPREHENSIVE DEVELOPMENT PLAN

APPROVED

by Ken Richardson 07/26/2021

C15
PROJECT NO. 04190073.00