

BRICK CHURCH BRIDGE WATERLINE BORE

SHEET INDEX

LEGEND (EXISTING)	
WATER/FORCEMAIN	STORM
VALVE	
AIR RELEASE	DROP INLET
BLOW-OFF/ FLUSHING ASSEMBLY	LARGE CURB INLET
SINGLE METER BOX	SMALL CURB INLET
DOUBLE METER BOX	MANHOLE
FIRE HYDRANT	
WELL	
SEWER	OTHER
MANHOLE	POWER POLE
CLEAN OUT	POWER POLE WITH GUY WIRE
GAS VALVE	LAMP POST
UTILITY PEDESTAL	TRAFFIC POLE
MAILBOX	SIGN

⊗ DENOTES VALVE TO BE ABANDONED

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- 4
- COVER
- PLAN & PROFILE
- TRAFFIC PLAN
- E&SC PLAN

OTHER WATER CONSTRUCTION NOTES:

1. ALL WATER FACILITIES SHALL BE INSTALLED ACCORDING TO THE WESTERN VIRGINIA WATER AUTHORITY (WVWA) DESIGN AND CONSTRUCTION STANDARDS (LATEST REVISION).
2. THE CONTRACTOR SHALL FLUSH AND DISINFECT IN ACCORDANCE WITH AWWA SPECIFICATION C651, LATEST REVISION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING VALVE VAULTS AFTER PAVING AND ADJUSTMENT TO FINAL GRADE IF NECESSARY.
4. A MINIMUM COVER OF 3 FEET IS REQUIRED OVER PROPOSED LINES, EXCEPT WHERE SHOWN.
5. ALL CONNECTIONS TO EXISTING WATER MAINS SHALL BE COORDINATED WITH THE WVWA.
6. ANY FIRE HYDRANT TAKEN OUT OF SERVICE AND NOT REUSED SHALL BE PROPERTY OF THE WVWA. THE INSPECTOR SHALL CONTACT FIELD OPERATIONS AND COORDINATE FIELD OPERATIONS PICK UP OF THE HYDRANT.
7. CONTRACTOR SHALL CONFIRM EXISTING SERVICES/STRUCTURES MARKED FOR DEMOLITION ARE INACTIVE PRIOR TO DEMOLITION. OWNER WILL ASSIST CONTRACTOR WITH NOTIFICATION.
8. CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS AT UTILITY CROSSINGS TO VERIFY DEPTH PRIOR TO CONSTRUCTION.

MISC. CONSTRUCTION NOTES:

1. ALL DRIVEWAYS, SIDEWALK, CURBING, FENCING, CULVERTS & MAILBOXES MUST BE RESTORED TO EXISTING CONDITIONS AFTER CONSTRUCTION IS COMPLETED. ANY CHANGES TO EXISTING CONDITIONS MUST BE APPROVED BY WVWA.
2. CONTRACTOR SHALL PROTECT SHRUBS & LANDSCAPING DURING CONSTRUCTION. CONTRACTOR SHALL RELOCATE/REESTABLISH SHRUBS AS NEEDED.
3. CONTRACTOR SHALL PROTECT CURBING FROM DAMAGE.
4. CONTRACTOR SHALL PROTECT PROPERTY PINS. PROPERTY PINS SHALL NOT BE DISTURBED DURING CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING POLE/GUY WIRE PROTECTION AS NEEDED FOR CONSTRUCTION.
6. ALL EXISTING UTILITIES MAY NOT BE SHOWN IN THE EXACT LOCATION.
7. ALL PAVEMENT CUTS SHALL BE SAW CUT AND EDGES TACK COATED PRIOR TO PAVING.

GENERAL NOTES:

1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE WESTERN VIRGINIA WATER AUTHORITY (WVWA) AVAILABLE AT WWW.WESTERNVAVATER.ORG OR BY CONTACTING THE AUTHORITY AT 540-853-5700. THE PROJECT SHALL ALSO COMPLY WITH THE GOVERNING JURISDICTION'S STANDARDS AND OTHER AGENCY STANDARDS (E.G., VDOT, DEQ, DCR, VDH, ETC.) WHERE APPLICABLE.
2. WHILE NOT REQUIRED ON ALL WVWA PROJECTS, WATER SERVICE AND METER REPLACEMENT SHOULD BE DISCUSSED PRIOR TO CONSTRUCTION. THE AUTHORITY WILL INSTALL ALL NEW WATER METERS AND REMOVE ALL EXISTING WATER METERS. THE CONTRACTOR SHALL INSTALL COMPLETE NEW WATER SERVICES INCLUDING THE METER SETTER AND BOX IN CONFORMANCE WITH THE AUTHORITY'S STANDARDS. FOLLOWING METER REPLACEMENT BY THE AUTHORITY, THE CONTRACTOR SHALL DEMOLISH THE EXISTING WATER METER SETTER AND BOX. THE CONTRACTOR SHALL COORDINATE EXISTING METER REMOVAL AND NEW METER INSTALLATION DIRECTLY WITH THE AUTHORITY. THE CONTRACTOR SHALL PROVIDE AT LEAST THREE (3) BUSINESS DAYS ADVANCE NOTICE TO THE AUTHORITY PRIOR TO NEEDING METER INSTALLATIONS. THE CONTRACTOR SHALL SEQUENCE CONSTRUCTION ACTIVITY TO RECEIVE NEW METERS BEFORE CONTACTING THE AUTHORITY FOR WATER METER REPLACEMENT.
3. ALL CONNECTIONS TO EXISTING WATERLINES SHALL BE PERFORMED BY THE WVWA. THE CONTRACTOR SHALL PROVIDE FULL STAINLESS STEEL TAPPING SLEEVE(S) AND VALVE(S). THE CONTRACTOR SHALL EXCAVATE TO THE EXISTING WATERLINE, SHORE THE TRENCH PER OSHA REQUIREMENTS, CLEAN THE EXISTING WATERLINE, AND INSTALL THE TAPPING SLEEVE AND VALVE PRIOR TO THE AUTHORITY PERFORMING THE TAP. THE CONTRACTOR SHALL NOTIFY THE WVWA INSPECTOR AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO REQUIRING THE CONNECTION.
4. ALL CONNECTIONS TO EXISTING SANITARY SEWERLINES SHALL BE PERFORMED BY THE AUTHORITY. THE CONTRACTOR SHALL EXCAVATE TO THE EXISTING SEWERLINE, SHORE THE TRENCH PER OSHA REQUIREMENTS, AND CLEAN THE EXISTING SEWERLINE PRIOR TO THE AUTHORITY PERFORMING THE TAP. THE CONTRACTOR SHALL NOTIFY THE WVWA INSPECTOR AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO REQUIRING THE CONNECTION.
5. THE CONTRACTOR SHALL PERFORM ALL MANHOLE CONNECTIONS. THE CORING AND BOOT INSTALLATION SHALL BE INSPECTED AND APPROVED BY AN AUTHORITY CONSTRUCTION INSPECTOR PRIOR TO ACTIVATING SEWER SERVICE. THE CONTRACTOR SHALL CONTACT THE AUTHORITY'S CONSTRUCTION INSPECTOR RESPONSIBLE FOR THE PROJECT AT LEAST ONE (1) DAY PRIOR TO INITIATING THE MANHOLE CONNECTION.
6. PRIOR TO CONSTRUCTION IN THE RIGHT-OF-WAY, ALL APPLICABLE PERMIT(S) FROM THE GOVERNING JURISDICTION AND/OR AGENCY MUST BE OBTAINED AND A COPY KEPT ON THE PROJECT SITE.
7. FOR PROJECTS REQUIRING TRAFFIC CONTROL IN THE CITY OF ROANOKE, NOTIFY MANAGER OF TRANSPORTATION, MARK JAMISON, AT 540-853-5471 AT LEAST TWO WEEKS IN ADVANCE OF REQUIRING TRAFFIC CONTROL. FOR A LANE CLOSURE PERMIT IN THE CITY OF ROANOKE, CONTACT THE TRAFFIC ENGINEER, HONG LIU, AT 540-853-2686. IN ROANOKE, BOYETOURT OR FRANKLIN COUNTIES, TRAFFIC CONTROL REQUIREMENTS ARE APPROVED BY VDOT, PLEASE CONTACT THE LOCAL VDOT OFFICE FOR ADDITIONAL REQUIREMENTS. TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE MOST RECENT MUTCD MANUAL AND THE VDOT WORK AREA PROTECTION MANUAL UNLESS OTHERWISE SPECIFIED BY THE CITY.
8. THE CONTRACTOR SHALL NOTIFY THE WVWA ENGINEERING COORDINATOR, MARK SINK, AT 540-537-3460 AT LEAST THREE (3) DAYS PRIOR TO CONSTRUCTION.
9. A PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED AT LEAST ONE (1) DAY PRIOR TO ANY CONSTRUCTION.
10. THE CONTRACTOR SHALL HAVE A VALID MISS UTILITY TICKET PRIOR TO EXCAVATION. CONTACT MISS UTILITY AT 1-800-552-7001.
11. ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL LOCATE ALL UTILITIES AND DETERMINE ALL INVERTS PRIOR TO CONSTRUCTION TO ALLOW FOR ADJUSTMENTS DUE TO CONFLICTS WITH OTHER UTILITIES. THE CONTRACTOR SHALL COMPLY WITH THE VIRGINIA STATE WATER WORKS REGULATIONS, SECTION 12VAC5-590-1150, AND THE VIRGINIA STATE SEWAGE COLLECTION AND TREATMENT REGULATIONS WHERE LINES CROSS.
12. AN APPROVED SET OF PLANS AND PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
13. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT.
14. THE CONTRACTOR'S CERTIFIED RESPONSIBLE LAND DISTURBER SHALL BE RESPONSIBLE TO IMPLEMENT ALL EROSION & SEDIMENT CONTROLS REQUIRED. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND SHALL BE INSTALLED PRIOR TO CONSTRUCTION. THE WVWA MAY REQUIRE CHANGES TO AN APPROVED PLAN IN THE FOLLOWING CASES WHERE INSPECTION HAS REVEALED THAT THE PLAN IS INADEQUATE TO SATISFY APPLICABLE REGULATIONS.
15. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING ALL VEHICLES AND EQUIPMENT PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE STREETS ARE KEPT IN A CLEAN, MUD- AND DUST-FREE CONDITION AT ALL TIMES.
16. FIELD CHANGES SHALL BE APPROVED BY THE AUTHORITY'S ENGINEERING DIVISION PRIOR TO SUCH CONSTRUCTION. NO ADDITIONAL PAYMENTS SHALL BE MADE TO CONTRACTOR FOR WORK PERFORMED WITHOUT PRIOR APPROVAL FROM AUTHORITY'S PROJECT MANAGER.
17. THE CONTRACTOR SHALL MAKE PROVISIONS TO PROVIDE ACCESS TO ALL PROPERTIES DURING CONSTRUCTION AND SHALL MAINTAIN SAFE ACCESSIBILITY TO FIRE HYDRANTS AT ALL TIMES.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING ALL MANHOLES AFTER PAVING. MANHOLE RIMS SHALL BE INSTALLED TO GRADE AND FLUSH WITH THE FINAL PAVEMENT.
19. UNREPAIRED ROADWAYS OPENED TO TRAFFIC SHALL HAVE, AT A MINIMUM, COMPACTED AGGREGATE MATERIAL VDOT 21A OR 21B FLUSH WITH THE ADJACENT ROADWAY SURFACE AND SHALL BE INSPECTED AND REPAIRED ON A DAILY BASIS. SOME AREAS MAY REQUIRE A TEMPORARY PATCH UNTIL FINAL PAVING CAN BE COMPLETED.
20. THE CONTRACTOR SHALL NOT EXCAVATE MORE TRENCH LENGTH THAN CAN BE RESTORED WITHIN THE SAME WORK DAY. ALL TRENCHES SHALL BE BACKFILLED OR PLATED AT THE END OF EACH WORK DAY OR WHEN THE CONTRACTOR IS NOT ON SITE.
21. THE CONTRACTOR SHALL SUPPLY THE AUTHORITY WITH CORRECT AS-BUILT PLANS BEFORE SUBSTANTIAL COMPLETION WILL BE GRANTED.
22. HORIZONTAL & VERTICAL BENDS SHOWN IN THE PLAN ARE APPROXIMATE. CONTRACTOR TO BE AWARE THAT ALL HORIZONTAL AND/OR VERTICAL BEND FITTINGS MAY NOT BE SHOWN IN THE PLANS.
23. ANY PROJECTS WITHIN VDOT JURISDICTION WILL REQUIRE COMPACTION TESTS EVERY 500 LINEAR FEET WHERE PAVEMENT (ROADWAY) IS CUT AND REPLACED.
23. CONTRACTOR SHALL RECORD VERTICAL AS-BUILT DATA TO INCLUDE DEPTH OF WATER MAIN, WATER MAIN FEATURES & ALL UTILITY CROSSINGS.

APPROVED FOR CONSTRUCTION:

WVWA CONTACT:

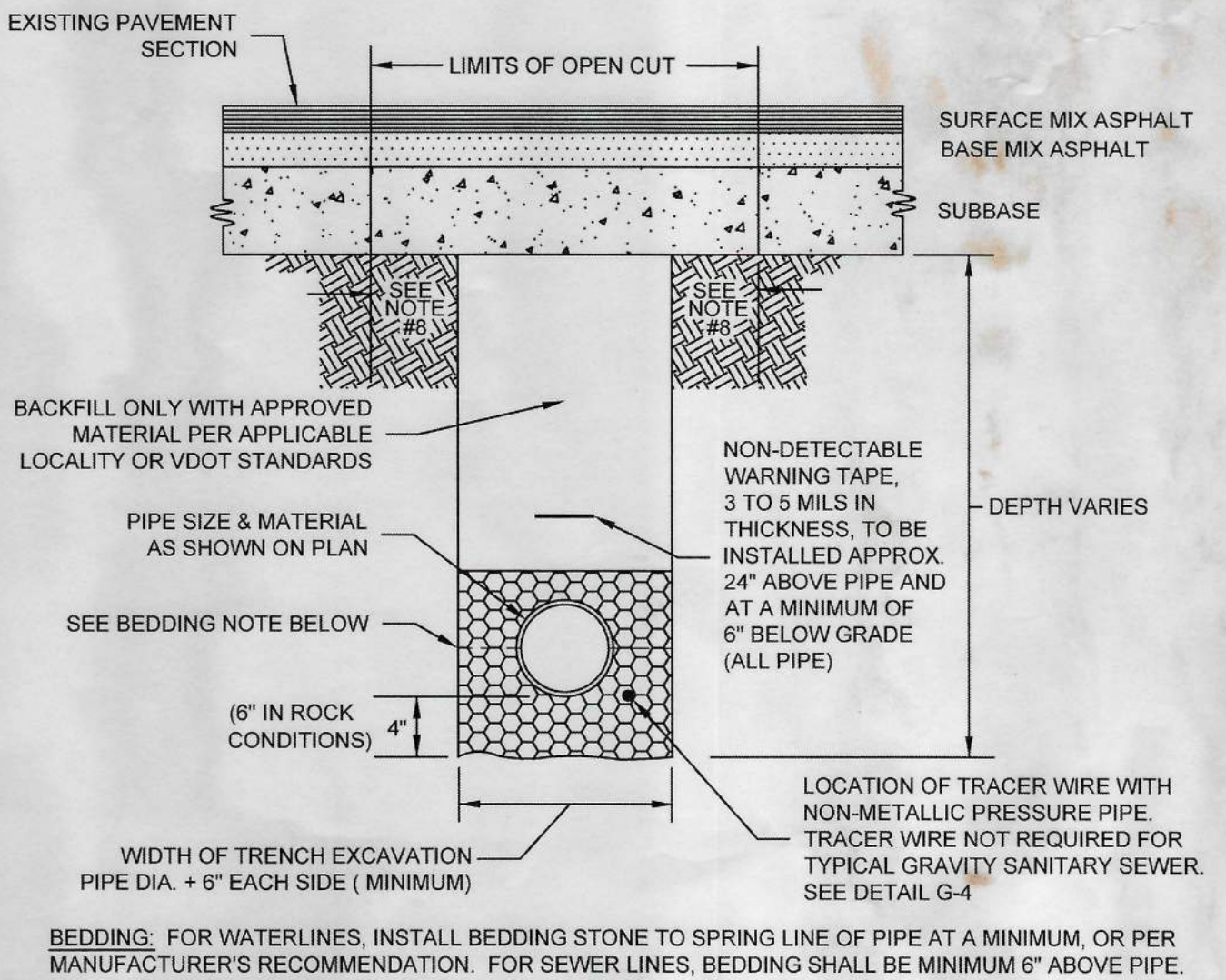
PROJECT MANAGER: \_\_\_\_\_

ENGINEERING COORD: \_\_\_\_\_

PROJECT INSPECTOR: \_\_\_\_\_

Install Contractor	
Construction Start Date	
Completion Date	
Water Main(s)	
Manufacturer	
Diameter	
Pipe Class	
Material	
Comments	
Water Service(s)	
Manufacturer	
Diameter	
Pipe Class	
Material	
Comments	
Water Valve(s) 1	
Water Valve(s) 2	
Manufacturer	
Valve Type	
Diameter	
Direction to Open / Turns to Close	
Comments	
Water Valve (s) 3	
Water Valve (s) 4	
Manufacturer	
Valve Type	
Diameter	
Direction to Close / Turns to Close	
Comments	
Hydrant(s)	
Authority ID #	
Manufacturer	
Model	
Cast Date	
Static Pressure	
Comments	

1. BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THIS DETAIL AND MANUFACTURER'S RECOMMENDATION.
2. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #68 STONE.
3. IN VDOT ROW, THE CONTRACTOR SHALL REPLACE THE PAVEMENT AS REQUIRED AND SPECIFIED BY VDOT. IN ROANOKE CITY, CONTRACTOR SHALL REPLACE PAVEMENT AS REQUIRED BY CITY OF ROANOKE RIGHT OF WAY EXCAVATION AND RESTORATION STANDARDS, LATEST EDITION.
4. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE AS SPECIFIED BY VDOT OR APPLICABLE LOCALITY.
5. PRIOR TO CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS FROM VDOT AND/OR APPLICABLE LOCALITY.
6. IN AREAS SUBJECTED TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 6" LIFTS AND SHALL BE COMPACTED TO AT LEAST 85% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 698.
7. ALL SEWER LINE PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE SEWER LINE ARE DEPENDENT ON MANUFACTURER'S BEDDING CRITERIA.
8. BENCH CUT ON EACH SIDE OF PAVEMENT SHALL BE IN ACCORDANCE WITH VDOT OR APPLICABLE LOCALITY'S SPECIFICATIONS.
9. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED "EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORINGS."
10. 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.



WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

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

08/01/15

G-12

BRICK CHURCH BRIDGE  
WATERLINE BORE

WESTERN VIRGINIA  
WATER AUTHORITY



FRANKLIN COUNTY, VIRGINIA

REVISIONS

DESIGNED BY: GLR

DRAWN BY: PDG, DRJ

CHECKED BY: WNR

SCALE: N/A

DATE: AUGUST 2019

PROJECT NUMBER: WCIP

SHEET TITLE:

COVER

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1 OF 4

As-Built 7.29.22 K. Winslow