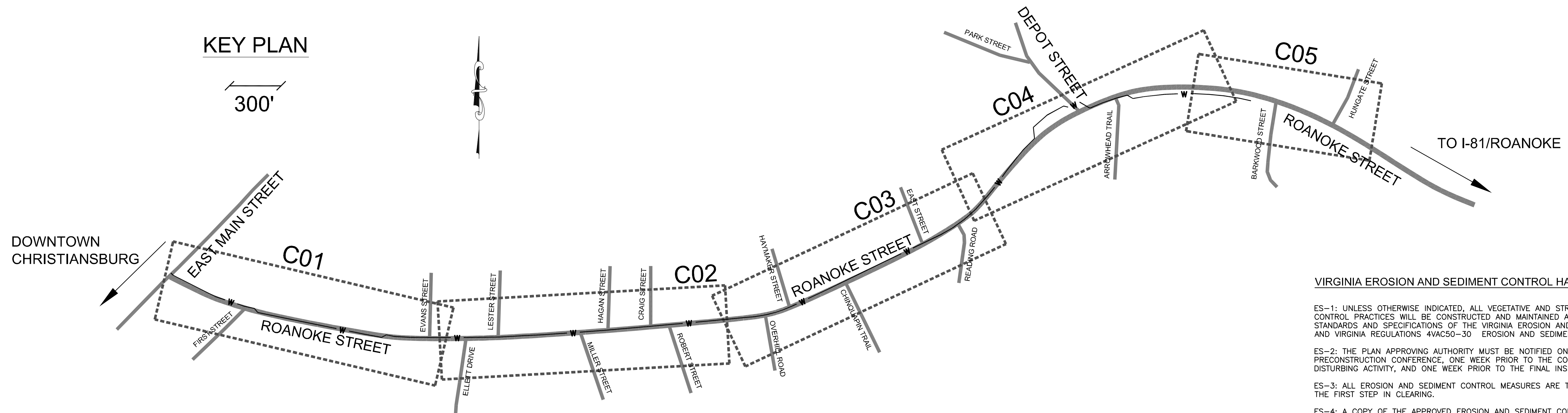


KEY PLAN

300'



VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK NOTES

- ES-1: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2: THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRECONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN WILL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5: PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR WILL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- ES-6: THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7: ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8: DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9: THE CONTRACTOR WILL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

GENERAL NOTES:

1. PROPERTY INFORMATION
OWNER: TOWN OF CHRISTIANSBURG
ATTN: WAYNE NELSON - TOWN ENGINEERING
100 E. MAIN STREET
CHRISTIANSBURG, VA 24073
(540) 382 - 6120

FEMA FLOOD MAP: 51121C0144C & 51121C0143C
TOPOGRAPHIC INFORMATION PROVIDED BY: TOWN OF CHRISTIANSBURG AND GAY & NEEL
HORIZONTAL COORDINATE SYSTEM: VIRGINIA GRID, SOUTH ZONE, NAD-83 (86), IN U.S. SURVEY FOOT UNITS
VERTICAL DATUM: NGVD-29 VERTICAL DATUM
2. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS TO WORK WITHIN THE RIGHT-OF-WAY INCLUDING BUT NOT LIMITED TO THE TOWN OF CHRISTIANSBURG.
3. BENCHMARKS FOR CONTROL WILL BE PROVIDED BY THE OWNER.
4. ALL DISTURBED AREAS NOT PAVED WILL BE GRASSED WITH PERMANENT SEEDING AS SPECIFIED ON THE DRAWINGS AND IN THE SPECIFICATIONS.
5. NOTIFY "MISS UTILITY" AT 1-800-552-7001 AT LEAST 48 HOURS PRIOR TO EXCAVATION IN THE RIGHT-OF-WAY. EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND DO NOT REPRESENT ALL UNDERGROUND UTILITY OR SERVICE LINES.
6. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING PAVEMENT OUTSIDE OF TRENCH AREA DURING CONSTRUCTION. NO TRACKED OR CLEATED EQUIPMENT IS PERMITTED ON THE ASPHALT PAVEMENT. CONTRACTOR MAY INSTALL SUITABLE PROTECTIVE MEASURES (AT NO ADDITIONAL COST TO THE OWNER) IN ORDER TO USE TRACKED OR CLEATED CONSTRUCTION VEHICLES ON THE PAVEMENT. IF CONTRACTOR DAMAGES PAVEMENT DUE TO CONSTRUCTION ACTIVITIES, THE TOWN OF CHRISTIANSBURG WILL REQUIRE REPAVING OF THE DAMAGED AREA. NO ADDITIONAL PAYMENT WILL BE MADE BY THE OWNER TO THE CONTRACTOR FOR DAMAGED PAVEMENT OUTSIDE OF THE TRENCH WIDTH REQUIRED TO INSTALL CONNECTIONS, PIPE AND SERVICE LINES. CONTRACTOR WILL SAWCUT EXISTING ASPHALT OR CONCRETE AND REPAIR PER CONTRACT DOCUMENTS.
7. CONTRACTOR WILL NOT BE REQUIRED TO OBTAIN A PERMIT AND POST A BOND FOR THE CONSTRUCTION FROM VDOT. CONTRACTOR WILL BE REQUIRED TO RECEIVE TOWN OF CHRISTIANSBURG APPROVAL FOR THE STATE OF THE ROADWAY PRIOR TO FINAL COMPLETION.
8. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE AROUND AND THROUGH THE CONSTRUCTION AS CURRENTLY EXISTS. NO PONDING WATER IN DITCHES WILL BE PERMITTED DURING THE CONSTRUCTION.
9. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF PAVEMENT DUE TO CONSTRUCTION OPERATIONS WHILE TRENCH IS OPEN FOR ALL WORK WITHIN CLOSE PROXIMITY TO PAVEMENTS (CENTER LINE OF PIPE IS WITHIN 6' OF EDGE OF PAVEMENT).
10. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND ANY PAYMENT REQUIRED TO UTILITY COMPANIES FOR ANY TEMPORARY SHORING AND/OR SUPPORT OF UTILITY POLES OR LIGHT POLES.
11. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY PROTECTION, REPAIR, AND/OR REPLACEMENT OF ALL GUARDRAIL MOVED, RELOCATED OR DAMAGED BY THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DITCHES AND SHOULDERS. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ALL FENCING MOVED, RELOCATED OR DAMAGED BY THE CONTRACTOR.

GENERAL UTILITY NOTES:

1. ALL WATERLINE BENDS, ELBOWS, AND FITTINGS ARE NOT SHOWN ON THE PLANS. CONTRACTOR WILL INSTALL THE MINIMUM NUMBER OF SUCH FITTINGS AS NECESSARY TO CONSTRUCT THE IMPROVEMENTS PER THE ALIGNMENT AND ELEVATIONS SHOWN AND/OR FIELD CONDITIONS PERMIT.
2. UTILITY CONTACTS:
SHAWN BISON - TOWN OF CHRISTIANSBURG ASSISTANT SUPERINTENDANT OF PUBLIC WORK,
300 SCATTERGOOD DRIVE, (540) 257-0269, SANITARY SEWER & WATER.

SEEDING MIXTURES AND SCHEDULE

SITE SEEDING MIXTURES FOR MINIMUM CARE AREAS

SEED TYPE	(POUND PER ACRE)	PLANTING SOIL AMENDMENTS
KENTUCKY 31 FESCUE	180-250	2000 lbs. STRAW MULCH/ACRE
IMPROVED PERENNIAL RYEGRASS	0-25	1000 lbs. 5-10-10 FERTILIZER/ACRE
KENTUCKY BLUEGRASS	0-25	2 TONS AGRICULTURAL LIMESTONE/ACRE

SITE SEEDING MIXTURES FOR GENERAL SLOPE, 3:1 SLOPES OR FLATTER (lbs/ac)

DATE	3/1-5/15	5/16-8/15	8/16-10/31	11/1-2/28
SEED TYPE				
KENTUCKY 31 FESCUE	128	128	128	128
RED TOP GRASS	2	2	2	2
ANNUAL RYE	20		20	
FOXTAIL MILLET		20		
WINTER RYE				20

SITE SEEDING MIXTURES FOR LOW MAINTENANCE AREA, 3:1 SLOPES OR STEEPER (lbs/ac)

DATE	3/1-5/15	5/16-8/15	8/16-10/31	11/1-2/28
SEED TYPE				
KENTUCKY 31 FESCUE	108	108	108	108
RED TOP GRASS	2	2	2	2
ANNUAL RYE	20		20	
FOXTAIL MILLET		20		
WINTER RYE				20
CROWN VETCH	20	20	20	20

TEMPORARY SEEDING MIXTURES (lbs/ac)

DATE	3/1-4/30	5/1-8/15	8/16-11/1
SEED TYPE			
OATS	50-100		
RYE	50-110		50-110
GERMAN MILLET		50	
ANNUAL RYEGRASS	60		60
WEeping LOVEGRASS		15	
KOREAN LESPEDEZA	25	25	

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION & SEDIMENT CONTROL MEASURES WILL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
2. ALL WORK WILL BE SUBJECT TO INSPECTION BY TOWN OF CHRISTIANSBURG.
3. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN WILL BE PLACED IN ADVANCE OF THE WORK BEING PERFORMED. AS FAR AS PRACTICAL.
4. THE CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED BY THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" AND THE VIRGINIA DEPARTMENT OF TRANSPORTATION. THE CONTRACTOR SHALL NOT DISTURB MORE THAN 10,000 SQUARE FEET OF AREA AT A TIME WHICH SHALL BE RESTORED IMMEDIATELY AFTER WORK IS COMPLETED. THE CONTRACTOR SHALL PREPARE AN EROSION AND SEDIMENT CONTROL PLAN SHOWING ALL PROPOSED PROJECT EROSION AND SEDIMENT CONTROL MEASURES. THIS DOCUMENT SHALL BE SUBMITTED TO THE ENGINEER AT THE PRE-CONSTRUCTION CONFERENCE.
5. IN NO CASE DURING CONSTRUCTION WILL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED.
6. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO LEAVE THE SITE ADEQUATELY PROTECTED AGAINST EROSION, SEDIMENTATION, OR ANY DAMAGE TO ANY ADJACENT PROPERTY AT THE END OF EACH DAY'S WORK.
7. FOR THE EROSION CONTROL KEY SYMBOLS SHOWN ON THE PLANS, REFER TO THE VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES CONTAINED IN THE VIRGINIA EROSION CONTROL HANDBOOK, LATEST EDITION.
8. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION.
9. THE CONTRACTOR WILL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES WILL BE MADE IMMEDIATELY.
10. FOR PERMANENT SOIL STABILIZATION REFER TO SPECIFICATIONS AND SEEDING SCHEDULE LOCATED ON THIS SHEET.

11. EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED UNTIL UPSTREAM DISTURBED AREAS ARE STABILIZED.
12. PROPERTIES ADJOINING THE SITE WILL BE KEPT CLEAN OF MUD OR SILT CARRIED FROM THE SITE BY VEHICULAR TRAFFIC OR RUNOFF.
13. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES WILL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
14. SILT WILL BE REMOVED FROM SILT FENCES WHEN THE SILT REACHES APPROXIMATELY ONE HALF OF THE HEIGHT OF THE BARRIER.
15. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES FOR ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION UNLESS RELEASED IN WRITING BY THE OWNER.
16. UNDERGROUND UTILITIES WILL BE INSTALLED IN ACCORDANCE WITH MS-16 REQUIREMENTS AND AS SHOWN BELOW:
NO MORE THAN 500 LINEAR FEET OF TRENCH WILL BE OPENED AT ONE TIME.
EXCAVATED MATERIALS WILL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
MATERIALS USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
RE-STABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.

Peed & Bortz, L.L.C.
CIVIL & ENVIRONMENTAL ENGINEERS
20 MIDWAY PLAZA DRIVE - SUITE 100
CHRISTIANSBURG, VIRGINIA 24073
PHONE: (540) 394 - 3214 FAX: (540) 394 - 3215

ROANOKE STREET WATER
TOWN OF CHRISTIANSBURG
CHRISTIANSBURG VIRGINIA

Planning Director _____ Date _____
Engineering Director _____ Date _____



DRAWN BY:
B. VAUGHT
REVIEW BY:
S. BORTZ
DATE:
01 APRIL 2017
REVISION:
23 MAY 2017

DWG DESCRIPTION:
KEY PLAN
AND GENERAL
NOTES

G02