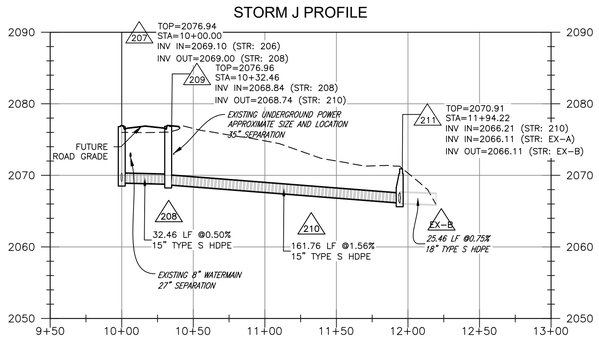
STORM J PROFILE



LEGEND

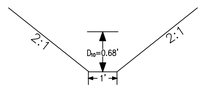
EXISTING GRADE

PROPOSED GRADE

10 0 10 20 30

VERTICAL SCALE: 1" = 10'

DITCH SECTION A



Q_{WD}=9.22 cfs
$V_{10(MAX)}$=5.71 fps
Q_{MAX}=21.21 cfs
D_{MAX}=1.00 ft
Q_D=3.54 cfs
$V_{2(MAX)}$=4.44 fps
Slope=2.44%
L=208 LF
GRASS LINING
(EC-3 TYPE 1)

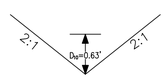
DITCH SECTION B

Q_{WD}=9.29 cfs
$V_{10(MAX)}$=10.62 fps
Q_{MAX}=48.09 cfs
D_{MAX}=1.00 ft
Q_D=3.59 cfs
$V_{2(MAX)}$=8.38 fps
Slope=15.2%
L=36 LF
RIPRAP LINING

DITCH SECTION C

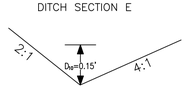
Q_{WD}=3.93 cfs
$V_{10(MAX)}$=10.09 fps
Q_{MAX}=59.80 cfs
D_{MAX}=1.00 ft
Q_D=1.42 cfs
$V_{2(MAX)}$=7.83 fps
Slope=23.5%
L=67 LF
RIPRAP LINING

DITCH SECTION D



Q_{WD}=3.87 cfs
$V_{10(MAX)}$=4.49 fps
Q_{MAX}=77.15 cfs
D_{MAX}=2.00 ft
Q_D=1.4 cfs
$V_{2(MAX)}$=3.44 fps
Slope=2.37%
L=550 LF
GRASS LINING

DITCH SECTION E



Q_{WD}=0.17 cfs
$V_{10(MAX)}$=2.36 fps
Q_{MAX}=3.89 cfs
D_{MAX}=0.50 ft
Q_D=0.08 cfs
$V_{2(MAX)}$=1.92 fps
Slope=4.04%
L=151 LF
GRASS LINING

204 48" DIA. RISER STRUCTURE
OUTLET FLOW CONTROL STRUCTURE
SEE DETAIL SHEET C9
TOP=2079.50
15" RCP OUT=2070.88

206 97.55 LF OF 15" CL. III RCP @ 1.82%
INV. UPPER=2070.88 INV. LOWER=2069.10

207 DI-3B* W/ ST-1
TOP=2076.94 H=7.94' L=6'
15" HDPE IN=2069.10
15" HDPE OUT=2069.00

208 32.46 LF OF 15" TYPE 'S' HDPE @ 0.50%
INV. UPPER=2069.00 INV. LOWER=2068.84

209 DI-3B* W/ ST-1
TOP=2076.96 H=8.22' L=6'
15" HDPE IN=2068.84
15" HDPE OUT=2068.74

210 161.76 LF OF 15" TYPE 'S' HDPE @ 1.56%
INV. UPPER=2068.74 INV. LOWER=2066.21

211 48" MH-2 W/ ST-1
TOP=2070.91 H=4.80'
15" HDPE IN=2066.21
18" HDPE IN=2066.11 (EXISTING)
18" HDPE OUT=2066.11 (EXISTING)

*INSTALL TEMPORARY MANHOLE TOP. THE TOP 30" OF STRUCTURE SHALL BE STACKED WITH A SEPARATE RISER PIECE TO ALLOW FOR FUTURE INSTALLATION OF CURB INLET TOP.

STANDARD GRADING NOTES

1. CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
2. FINISH LAWN AREAS TO WITHIN ONE INCH ABOVE OR BELOW REQUIRED SUBGRADE ELEVATIONS. SHAPE SURFACE UNDER WALKS AND PAVEMENTS TO LINE, GRADE, AND CROSS SECTION, WITH NOT MORE THAN 1/2" ABOVE OR BELOW REQUIRED SUBGRADE ELEVATION.
3. SPREAD TOPSOIL TO A UNIFORM COMPACTED DEPTH OF 2" ON 3:1 OR STEEPER SLOPES AND 4" OVER ALL OTHER DISTURBED AREAS NOT RECEIVING WALKS, PAVEMENT, WALLS OR BUILDING, INCLUDING TRENCHES (SEE TABLE 3.30-A). CARE SHALL BE TAKEN ENSURE PROPER BONDING AND NOT TO APPLY TOPSOIL TO SUBSOIL IF THE TWO SOILS HAVE CONTRASTING TEXTURES (CLAYEY VS. SANDY). IMMEDIATELY FOLLOWING PLACEMENT OF TOPSOIL, DISK THE ENTIRE TOPSOILED AREA AND RAKE FREE OF STONES AND DEBRIS OVER 1/2" IN ANY DIMENSION. PROVIDE A FINISHED SURFACE FREE OF DEPRESSIONS OR HIGH SPOTS. SEED IMMEDIATELY.
4. MINIMUM COVER OVER COLLECTION PIPES SHALL CONFORM TO MANUFACTURER'S STANDARD.

NOTE: UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH MINIMUM STANDARD 16. SEE SHEET C12.

NADB83

50 0 50 100 150

SCALE: 1" = 50'

Michael Kelley 01/06/2026 3:00:53 PM
APPROVED: Engineering Date

Retta Jackson 01/06/2026 3:02:52 PM
APPROVED: Planning Date

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COMMONWEALTH OF VIRGINIA
GRETCHEN LEE MERIX
Lic. No. 63588
12/26/2025
PROFESSIONAL ENGINEER

FARMVIEW ROAD MASS GRADING PLAN

GRADING PLAN

SHANSVILLE MAGISTERIAL DISTRICT
TOWN OF CHRISTIANSBURG, VIRGINIA

DRAWN BY	SJW
DESIGNED BY	SJW
CHECKED BY	GLM
DATE	7/23/2024
SCALE	1"=50'
REVISIONS	
1. 9/17/2024	
2. 10/9/2024	
3. 10/14/2025	
4. 11/18/2025	
5. 12/26/2025	

C5

PROJECT NO. 24230119.00

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