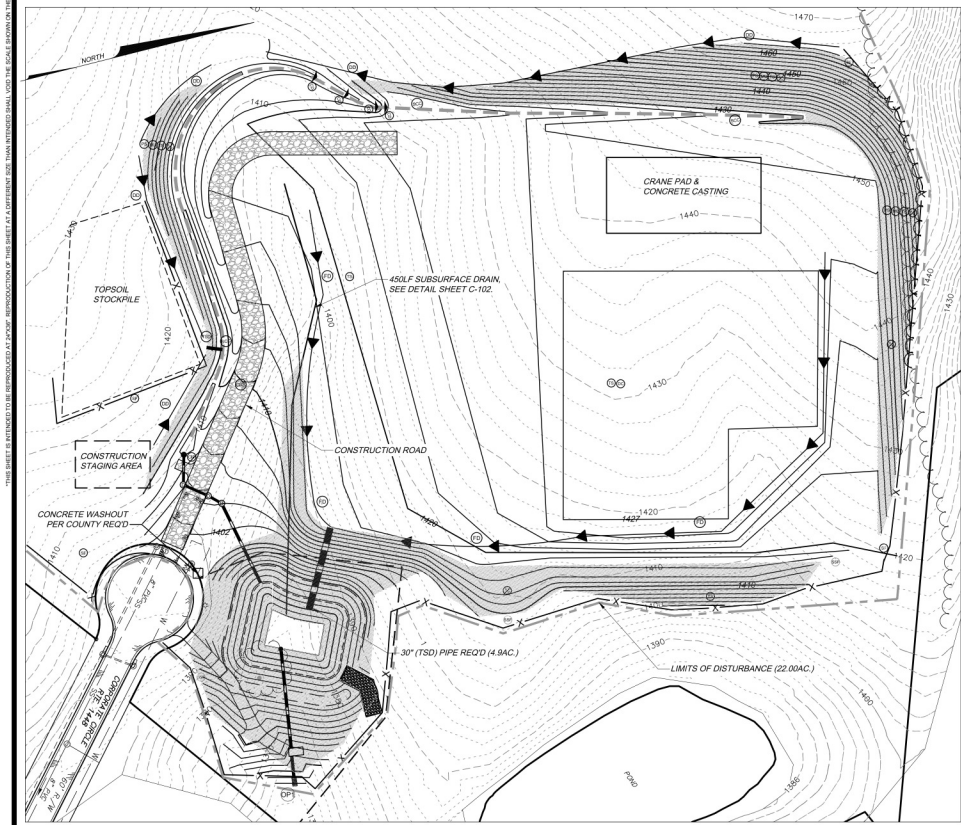


THIS SHEET IS INTENDED TO BE REPRODUCED AT 20% OF ORIGINAL SIZE. ANY REPRODUCTION OF THIS SHEET AT A DIFFERENT SIZE, UNLESS INDICATED OTHERWISE, SHALL VOID THE SCALE SHOWN ON THE SHEET.

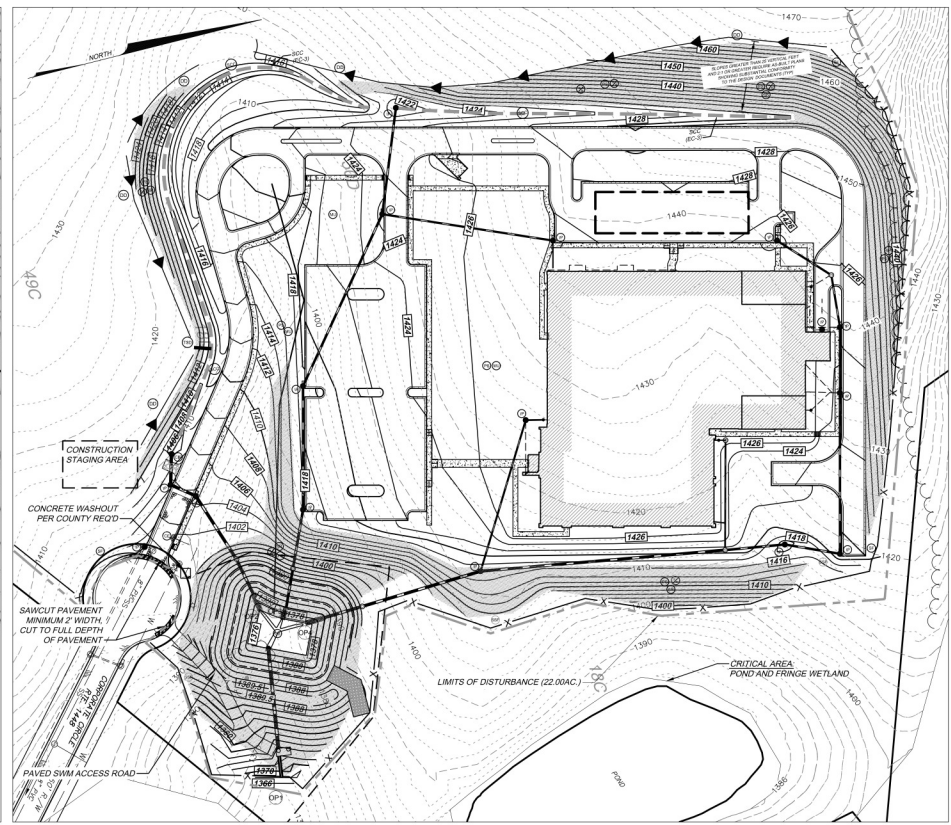
10/13/2020 1:46pm C:\Users\jgibson\OneDrive\Documents\2020\AEP\AEP Project Brook Trout\AEP Project Brook Trout.dwg

THE ENGINEER AND/OR SURVEYOR TAKES NO RESPONSIBILITY FOR THE LOCATION OR ACCURACY OF THE UTILITIES AS SHOWN HEREON OR ANY UTILITIES WITHIN THE PROJECT THAT MAY NOT BE SHOWN HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES TO SEE IF ANY UTILITIES EXIST WITHIN THE AREA OF THE PROJECT BEFORE ANY CONSTRUCTION BEGINS. ANY COST INCURRED BY DAMAGING ANY UTILITY WITHIN THE PROJECT SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

48 WORKING HOURS PRIOR TO STARTING THE WORK, THE CONTRACTOR SHALL CALL MISS UTILITY AT PHONE NUMBER 611 AND ADVISE THE NATURE AND LOCATION OF THE WORK.



EROSION CONTROL STAGE 3



EROSION CONTROL STAGE 4

VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES
* CHART TAKEN FROM THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (JULY 1990)

	CE	TEMPORARY CONSTRUCTION ENTRANCE (3.02)
	SF	SILT FENCE (3.05)
	WR	WIRE REINFORCED SILT FENCE (3.05)
	DD	DIVERSION DIKE (3.09)
	FD	FILL DIVERSION (3.10)
	SB	TEMPORARY SEDIMENT BASIN (3.14)
	TSD	TEMPORARY SLOPE DRAIN (3.15)
	SCC	STORMWATER CONVEYANCE CHANNEL (3.17)
	OP	OUTLET PROTECTION (3.18)
	CD	ROCK CHECK DAMS (3.20)
	SR	SURFACE ROUGHENING (3.29)
	TS	TEMPORARY SEEDING (3.31)
	PS	PERMANENT SEEDING (3.32)
	ML	MULCHING (3.35)
	B	SOIL STABILIZATION BLANKETS & MATTING (3.36)
	DC	DUST CONTROL (3.38)
	EC-3	EC-3 MATTING

TABLE 3.15-4 (TSD)
SIZE OF SLOPE DRAIN

Maximum Drainage Area (Acres)	Pipe Diameter (Inches)
0.5	12
1.5	18
2.5	21
3.5	24
5.0	30

Source: Va. DSWC

- EROSION CONTROL STAGE 3**
1. CONTINUE BULK GRADING OF SITE, ADDING FILL DIVERSIONS AT THE TOP OF FILL AND A TEMPORARY SLOPE DRAIN TO CONVEY RUNOFF TO THE SEDIMENT BASIN.
 2. GRADE BUILDING PAD AND BUILDING SITE PREPARATION AREA ACCORDING TO BUILDING PLAN.
 3. SEED AND STABILIZE CUT AND FILL SLOPES, ADDING BLANKET MATTING WHEN FINAL GRADES ARE ACHIEVED.
 4. INSTALL CHECK DAMS IN STORMWATER CONVEYANCE CHANNEL. SEED AND STABILIZE CHANNEL, ADDING EC-3 LINING WHEN FINAL GRADE IS ACHIEVED.
 5. ALL SLOPES 3:1 OR GREATER SHALL RECEIVE BLANKET/MATTING.
- EROSION CONTROL STAGE 4**
1. BEGIN BUILDING CONSTRUCTION AND INSTALLATION OF UTILITIES, ADDING INLET AND OUTLET PROTECTION DEVICES AS STORM PIPE INSTALLATION PROGRESSES.
 2. PROVIDE AND ADJUST FILL DIVERSIONS UNTIL RUNOFF CAN BE CONVEYED TO SEDIMENT BASIN THROUGH STORMWATER PIPES AND INLET PROTECTION DEVICES.
 3. COMPLETE FINAL GRADING, USING STOCKPILED TOPSOIL AS A GROWING MEDIUM.
 4. SEED AND STABILIZE AREAS AS SOON AS POSSIBLE AS FINAL GRADES ARE ACHIEVED.
 5. ALL SLOPES 3:1 OR GREATER SHALL RECEIVE BLANKET/MATTING.
 6. INSTALL LANDSCAPING AND OTHER AMENITIES.
 7. UPON FINAL STABILIZATION OF THE SITE, AND WITH THE COUNTY'S APPROVAL, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
 8. CONVERT THE SEDIMENT POND INTO A PERMANENT STORMWATER MANAGEMENT BASIN, ADJUSTING THE HEIGHT OF THE RISER PER THE SITE PLANS.
 9. INSTALL BAP/FILTER FILTER CATCHMENTS AND MAKE OTHER ADJUSTMENTS PER MANUFACTURER'S INSTRUCTIONS.
 10. RESTORE ALL DISTURBED AREAS BACK TO EITHER PROPOSED GRADES OR EXISTING CONDITIONS AFTER PROJECT COMPLETION. ALL DISTURBED AREAS, HAUL ROADS, CONSTRUCTION ROADS, AND LAYDOWN AREAS SHALL BE RESTORED.

OUTLET PROTECTION TABLE (3.18) (OP)

ID	OP1	OP2	OP3	OP4
DESIGN FLOW	14.6cfs	32.0cfs	10.9cfs	11.1cfs
TAILWATER DEPTH	1.0'	1.7'	1.0'	1.5'
DISCHARGE VELOCITY	18.3fps	13.8fps	15.3fps	13.6fps
BIP BAP GRADATION	Class 1A	Class 1A	Class 1A	Class 1A
APRON LENGTH	12.0'	8.0'	21.0'	8.0'
APRON WIDTH(S)	7.5', 7.5'	6.0', 6.0'	4.5', 10'	6.0', 6.0'
SIDE SLOPES	48/1	48/1	48/1	48/1
APRON DEPTH	12"	12"	12"	12"

NOTE: THE LOCATION OF ALL OFF-SITE FILL OR BORROW AREAS ASSOCIATED WITH THE CONSTRUCTION PROJECT WILL BE PROVIDED TO ROANOKE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT. AN EROSION CONTROL PLAN OR MEASURES MAY BE REQUIRED FOR THIS AREA.

* LIMITS OF DISTURBANCE: (22.00 AC.)
0.70 AC. LINEAR UTILITY DISTURBANCE
21.30 SITE DISTURBANCE

HURT & PROFFITT
INSPIRED / RESPONSIVE / TRUSTED

434.847.7796
2524 LANCHIONE ROAD
LYNCHBURG, VA 24501

HANDP.COM
L. SCOTT BASKLEY
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING - CONSTRUCTION, TRAFFIC & TRANSPORTATION - CULTURAL RESOURCES

EROSION AND SEDIMENT CONTROL STAGE 3 & 4
FOR
AEP PROJECT BROOK TROUT
ROANOKE COUNTY, VIRGINIA

PROJECT NO. 20190196
LAT. 37.267010°
LONG. -80.171511°
DATE 08/20/2019
DRAWN BY: ELC
CHECKED BY: PSB

SIGNATURE SET

0 30 60 120
SCALE 1" = 60'

HURT & PROFFITT
SHEET NO. C-103
REV.

APPROVED, 1/17/2020