

GRADING LEGEND

	TEMPORARY GRADING AND CONSTRUCTION EASEMENT, AND INGRESS-EGRESS EASEMENT		PROPOSED MODIFIED CROSS VANE
	STREAM EASEMENT		PROPOSED 2-STEP MODIFIED CROSS VANE
	FLOODPLAIN EASEMENT		PROPOSED STEP POOL(S)
	EXISTING EASEMENTS		PROPOSED IMBRICATED ROCK WALL
	EXISTING INFRASTRUCTURE		EX CHANNEL BACKFILL AREAS
	EXISTING CONTOURS (0.5')		LIMITS OF CLEARING / TREE PROTECTION
	PROPOSED CONTOURS (0.5')		LIMITS OF CLEARING
	NONPERENNIAL STREAM (EXISTING TOP OF BANK)		TREE PROTECTION
	PERENNIAL STREAM (EXISTING TOP OF BANK)		ACCESS PATH
	JURISDICTIONAL WETLANDS		
	PROPOSED CENTERLINE		
	PROPOSED TOP OF BANK		

GRADING NOTES:

- PROPOSED CONTOURS ARE INTENDED TO DEPICT OVERALL GRADING CONCEPT. DUE TO IRREGULARITY OF ROCK SHAPES, CONTOURS DEPICTING POOL GRADING WITHIN STRUCTURES ARE APPROXIMATE. SPECIFICATIONS FOR GRADING IN VICINITY OF STRUCTURES ARE PROVIDED IN TYPICAL SECTIONS AND CONSTRUCTION DETAILS. THE SPECIFICATIONS IN THE CONSTRUCTION DETAILS TAKE PRECEDENCE OVER THE CONTOURS DEPICTED ON THE GRADING PLAN.
- TREE PROTECTION FENCING SHALL BE PLACED AROUND ALL AREAS OF TREES TO BE PRESERVED ADJACENT TO THE LIMITS OF CLEARING AND GRADING.
- IT IS ASSUMED THAT ALL TREES WITHIN THE LIMITS OF CLEARING WILL NOT BE REMOVED. PRIOR TO CONSTRUCTION THE LIMITS OF CLEARING (LOC) SHALL BE WALKED BY WSSI STAFF TO CONFIRM TREE REMOVAL. IN THE EVENT THAT THE CONTRACTOR BELIEVES A TREE WITHIN THE LOC COULD BE SAVED, THE CONTRACTOR SHALL CONTACT WETLAND STUDIES AND SOLUTIONS, INC. AND HAVE THE PROJECT ENGINEER DETERMINE IF THE TREE SHOULD BE SAVED OR REMOVED.
- REFER TO THE GEOMETRY PLAN FOR TRAVERSE LOCATIONS AND ELEVATIONS.
- ALL STREAM BEDS REQUIRE 1.0 FT OF REINFORCED BED MATERIAL. FOR CLARITY IT IS NOT SHOWN IN STREAM BEDS WHERE GRADING IS DEPICTED.

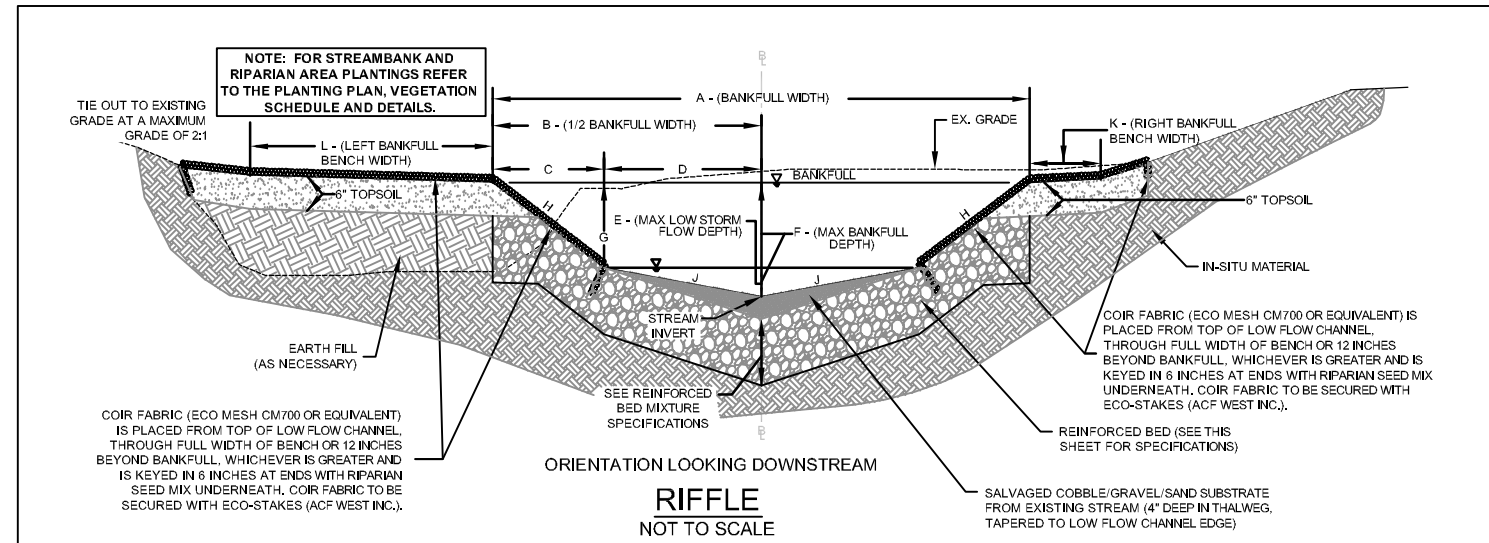
STREAM CROSS SECTION SUMMARY FOR HICKORY CLUSTER

SUMMARY OF STREAM RESTORATION FEATURES ALONG BASELINE		
FEATURE LOCATION PER BASELINE STATION	REFER TO CONSTRUCTION DETAILS FOR DIMENSIONS AND TYPICAL SECTIONS FOR EACH FEATURE TO BE CONSTRUCTED WITHIN THE REACH	
FROM	TO	STREAM RESTORATION FEATURE
10+00.0	10+01.5	CONSTRUCT RIFFLE
10+01.5	10+21.8	TYPICAL DETAIL STEP POOL
10+21.8	10+73.5	CONSTRUCT RIFFLE
10+73.5	11+21.8	TYPICAL DETAIL STEP POOL
11+21.8	11+46.0	CONSTRUCT RIFFLE
11+46.0	11+84.0	CONSTRUCT MOD CROSS VANE
11+84.0	12+16.9	CONSTRUCT RIFFLE
12+16.9	12+58.9	CONSTRUCT MOD 2-STEP CROSS VANE
12+58.9	13+09.0	CONSTRUCT RIFFLE
13+09.0	13+50.0	CONSTRUCT MOD 2-STEP CROSS VANE
13+50.0	13+88.0	CONSTRUCT RIFFLE
13+88.0	14+10.3	TYPICAL DETAIL STEP POOL
14+10.3	14+20.0	CONSTRUCT RIFFLE
14+20.0	14+91.3	TYPICAL DETAIL STEP POOL
14+91.3	15+05.3	CONSTRUCT RIFFLE
15+05.3	15+55.0	MAINTAIN EXISTING CONDITIONS
15+55.0	16+04.5	CONSTRUCT RIFFLE

PROFILE LEGEND

	EXISTING STREAM INVERT PROJECTED TO PROPOSED CENTERLINE
	PROPOSED STREAM INVERT ALONG PROPOSED CENTERLINE
	STRUCTURE ROCKS
	REINFORCED BED
	EARTH FILL
	PC & PT LOCATIONS WITH LINE OR CURVE DESIGNATION REFERENCED FROM STAKEOUT DATA

TYPICAL RIFFLE CROSS SECTION FOR HICKORY CLUSTER



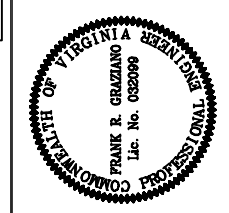
REACH ID	SECTION LOCATION		RIFFLE CROSS-SECTION DIMENSIONS ²												
	PER BASELINE STATION FROM	TO	CROSS-SECTION PARAMETER (FT)												
			A	B	C	D	E	F	G	H	J ³	K	L	NOTES	
HICKORY CLUSTER															
UPSTREAM OF POND	10+00.00	15+05.30	15.0	7.5	3.3	4.2	0.5	1.6	1.1	3.0:1	8.4:1	*	*	* VARIES - SEE GRADING PLAN	
DOWNSTREAM OF POND	15+55.00	16+04.52	17.0	8.5	3.3	5.2	0.5	1.6	1.1	3.0:1	8.4:1	*	*	* VARIES - SEE GRADING PLAN	

RIFFLE NOTES:

- REFER TO THE GRADING PLAN AND LONGITUDINAL PROFILE SHEETS FOR PLACEMENT OF ROCK STRUCTURES WITHIN THE RIFFLE SECTIONS SPECIFIED ABOVE.
- THE "STREAM CROSS SECTION SUMMARY" IS ALSO PROVIDED ON THIS SHEET. THIS SUMMARY SPECIFIES THE TYPE OF CROSS-SECTIONS AND STRUCTURES THAT SHALL BE CONSTRUCTED ALONG THE PROFILE.
- J IS THE SLOPE OF THE SALVAGED SUBSTRATE.

Northern Virginia Stream Restoration Bank
Hickory Cluster
Fairfax County, Virginia

Legend for Grading Plan and Longitudinal Profile, Summary of Stream Cross Sections, and Typical Riffle



REVISIONS		SCALE: AS NOTED	
No.	Date	Description	App. By

Horizontal Datum: VCS NAD 83
Vertical Datum: NGVD 29
Boundary and Topo Source: WSSI and Fairfax Digital Data

Design	Draft	Approved
KLP	KLP	FRG

Sheet #
4 of 38

Computer File Name: E:\2010\2011\PROJ\004\PROJ\004\GRADING.R AN A\PROF11A.R12.dwg

Wetland
Soil and Sediment, Inc.

5300 Wellington Branch Drive, Suite 100 • Gaensville, VA 20185
Phone 703 679 8600 • Fax 703 679 5601
wetlandstudios.com

Copyright © 2011 Wetland Studies and Solutions, Inc.