



DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
3701 BELL ROAD
NASHVILLE, TENNESSEE 37214-2660

July 29, 2020

SUBJECT: File No. LRN-2018-00397, Davis Creek Energy, LLC, Proposed Area 6 Surface Coal Mine, Campbell County, Tennessee.

Mr. Mike Erp
Davis Creek Energy, LLC
116 Wildwood Drive
Somerset, KY 42503

Dear Mr. Erp:

This letter is sent in response to your Pre-Construction Notification document (PCN) submitted to this office for the discharge of fill material into waters of the U.S. associated with the proposed Area 6 surface mine in Campbell County, Tennessee. The PCN requested project verification under Nationwide Permit #14 (Linear Transportation Projects) and #49 (Coal Remining Activities). Based on the PCN, the project would result in the discharge of fill material into 1,098 linear feet of unnamed tributaries to Hog Camp Creek and 0.56 acre of emergent wetlands. This project has been assigned number LRN-2018-00397. Please refer to this number in all communication concerning this matter.

The impacts proposed in the PCN and the required restoration is listed below:

Table 1: Proposed Impacts and Required Restoration

Impact Type	Aquatic Resource	NWP	Authority	Impacts:	Required Restoration:
Road Crossing Only (NWP14)	Stream 1/ Perennial	14	404	50'	N/A
Pre-Law Mine / Rich Mtn. Re- Mining	Stream 1A/ Intermittent	49	404	387'	387'
Pre-Law Mine / Rich Mtn. Re- Mining	Stream 2/ Intermittent	49	404	29'	0
Pre-Law Mine / Rich Mtn. Re- Mining	Stream 3/ Intermittent	49	404	39'	0

Pre-Law Mine / Rich Mtn. Re-Mining	Stream 4/ Intermittent	49	404	253'	253'
Pre-Law Mine / Rich Mtn. Re-Mining	Stream 8/ Intermittent	49	404	258'	416'
Pre-Law Mine / Log Mtn. Re-Mining	Stream 9/ Intermittent	49	404	82'	82'
Pre-Law Mine / Rich Mtn. Re-Mining	Wetland 2	49	404	0.33	26 FWUs
Pre-Law Mine / Rich Mtn. Re-Mining	Wetland 3	49	404	0.16	
Pre-Law Mine / Rich Mtn. Re-Mining	Wetland 5	49	404	0.07	
Total		1,098 LF (50 LF temp) of stream, 0.56 acre emergent wetlands			1,138 LF of stream, 26 wetland FWUs

Based on the information you provided, Nationwide Permit (NWP) 14, Linear Transportation Projects, and NWP 49, Coal Remining Activities, which became effective March 19, 2017 [82 FR 1860], authorizes your proposal as depicted on the enclosed plans. In order for this authorization to be valid, you must ensure the work is performed in accordance with the enclosed *NWP 14 and 49, Terms and Conditions*, and the *2017 Nationwide Permit General Conditions*. The work must also comply with the special conditions listed in the enclosed "SPECIAL CONDITIONS FOR PERMIT LRN-2018-00397, Davis Creek Energy, LLC."

This verification is valid until March 18, 2022, unless the NWP authorization is modified, suspended, or revoked prior to that date. Furthermore, if you commence or are under contract to commence this activity before the date of NWP expiration, modification, or revocation, you will have 12 months from the date of expiration, modification or revocation to complete the activity under the present terms and conditions of the NWP. This will apply to all NWPs unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5(c) or (d).

This NWP 14 and 49 verification does not obviate your responsibility to obtain and abide by all other federal, state and local permits or approvals required. The NWP verification should not be considered as an approval of the design features of any activity authorized or an implication that such construction is considered adequate for the purpose intended. In addition, it does not grant any property rights or exclusive

privileges and does not authorize any injury to the property or rights of others. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act.

The U.S. Army Corps of Engineers (USACE) has regulatory responsibilities pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). Under Section 10, the USACE regulates any work in, or affecting, navigable waters of the U.S. It appears the review area does not include navigable waters of the U.S. and would not be subject to the provisions of Section 10. Under Section 404, the USACE regulates the discharge of dredged and/or fill material into waters of the U.S., including wetlands.

Enclosed is an approved jurisdictional determination for aquatic resources identified as W1, W4, W6, W7, S1B E, S4 E, S8 E, S9 E, OW1, OW2, and OW3 were determined not jurisdictional. The rationale for this determination is provided in the attached Approved Jurisdictional Determination form. This approved jurisdictional determination expires five years from the date of this letter, unless new information warrants revision of the determination before the expiration date, or the District Engineer identifies specific geographic areas with rapidly changing environmental conditions that merit re-verification on a more frequent basis. This approved jurisdictional determination is only valid for the review area as shown on the enclosed map labeled LRN-2018-00397, Sheet 1”

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

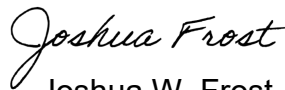
If you object to this decision, you may request an administrative appeal under USACE regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeals Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this decision you must submit a completed RFA form to the Great Lakes and Ohio River Division, Division Office at the following address:

LRD Appeals Officer
U.S. Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10524
Cincinnati, OH 45202-3222
TEL (513) 684-2699; FAX (513) 684-2460

In order for an RFA to be accepted by the USACE, the USACE must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date listed on the RFA form. **It is not necessary to submit an RFA form to the Division Office if you do not object to the decision in this letter.**

Upon completing the authorized work, you must fill out and return the enclosed *Certificate of Compliance with Department of the Army Permit* form. Thank you for your cooperation during the permitting process. If you have any questions, please contact Mr. Brent J. Sewell at (615) 417-0240, or via e-mail brent.j.sewell@usace.army.mil.

Sincerely,



Joshua W. Frost
Chief, Technical Services Branch
Regulatory Division

Enclosures

- Enclosure 1 – Special Conditions
- Enclosure 2 – Site Map and Plans (40 Pages)
- Enclosure 3 – NWP 14 and 49, Terms and Conditions
- Enclosure 4 – 2017 Nationwide Permit General Conditions
- Enclosure 5 – Compliance Certification
- Enclosure 6 – Landowner Letter
- Enclosure 7 – AJD
- Enclosure 8 – RFA Form

cc:

Jesse Robinson (Biological Systems Consultants, Inc.) via e-mail

SPECIAL CONDITIONS FOR

PERMIT LRN-2018-00397

1. **Project Drawings:** The permittee shall construct the authorized activity in accordance with the preconstruction notification dated July 16, 2019, and the attached Project Drawings (Enclosure 2, 40 pages). Work in waters of the U.S. that deviates from the approved plans shall NOT occur without first obtaining approval from the U.S. Army Corps of Engineers, Nashville District, Regulatory Division (USACE).
2. **Certification of Compliance Form:** Within 60 days of completion of the authorized work, the permittee shall complete the attached Certification of Compliance form (Enclosure 5) and submit to the USACE.
3. **OSM Certification:** The Permittee shall comply with the OSM SMCRA Permit for the proposed project.
4. **ARAP Permit:** This authorization remains contingent upon, and must be constructed in accordance with, the project's approved TDEC ARAP permit NR19MS.001. If project plans change that include additional impacts to waters of the United States (WOUS), the permittee shall contact USACE to obtain authorization prior to placing fill material in WOUS as part of this project.
5. **NPDES Permit:** The permittee shall comply with the NPDES issued by the TDEC.
6. **Landowner Letters:** Prior to the discharge of any fill material into waters of the U.S., the permittee shall ensure that all surface landowners sign the landowner letter and return the signed letters to the USACE. Landowner letter verbiage, finalized by the USACE on 03 April 2017, shall be utilized to satisfy this requirement (Enclosure 6).
7. **Notification of Changes:** Should new information regarding the scope and/or proposed impacts of the project become available that was not submitted to this office during our review of the proposal, the permittee must submit written information concerning proposed modification(s) to this office for review and approval.
8. To compensate for the impacts to approximately 1,098 linear feet of intermittent streams, 1,138 linear feet of stream shall be restored utilizing the natural channel design techniques outlined within the PCN.

The permittee shall implement the restoration work plan and complete the initial construction and plantings in accordance with the timeframes specified in the above

referenced PCN. Construction of individual stream restoration channels shall be completed no later than 365 days from the date of initiating stream impacts. Completion of all elements of this PCN and permit is a requirement of this authorization.

9. The restored stream channel shall be designed and constructed with adequate channel lining materials to minimize water loss in the channel, maintain an ordinary high water mark, and the projected flow regime types listed within the PCN. The channel shall be constructed with appropriately sized substrate within 20% of the proposed HGM substrate size.
10. The restored stream channels have been designed and shall be constructed using natural stream design techniques to reestablish the appropriate hydrogeomorphic configuration. Implementation of the PCN must ensure the restored stream segments, totaling 1,138 linear feet, meet the projected U.S. Army Corps of Engineers' HGM index score contained within the PCN (Proposed HGM/T-WRAM score for Mitigation Sites), and generate 808 FCUs submitted as part of the PCN. If the restoration efforts do not meet the performance standards outlined in the PCN and Special Conditions of this Nationwide Permit authorization, corrective measures and/or additional mitigation will be required.
11. Upon completion of the coal extraction and reclamation activities, the permittee shall remove all culverts authorized by this permit and restore the associated stream channels to a natural configuration, hydrology, and pre-construction functional capacity. The permittee shall notify this office upon removal of temporary culverts and construction of stream restoration channels. The channels shall be stable after completion of channel restoration activities and show no evidence of significant bank erosion, head cutting, or other signs of instability.
12. A minimum 50 foot vegetated riparian buffer zone shall be planted along both sides of each restored stream reach:
 - i. The riparian zone shall be vegetated in a random or scattered method planted at a density of at least 300 native tree stems per acre and 100 native shrub stems per acre. Low growing shrubs shall be planted between the irregularly placed woody stems.
 - ii. All trees and shrubs planted in vegetated riparian buffers shall be selected based upon their hydrologic and edaphic tolerances, wildlife food and cover value and shall be native to Campbell County, Tennessee. No more than 30% of any one species of the native riparian plant community shall contribute towards stems per acre. It is acknowledged that desirable, native volunteer species may comprise

more than 30% of the actual stem count, but stems in excess of the 30% limit cannot be contributed towards the target values for applicable performance standards. Vegetation counted towards survival rates, including both planted and volunteer, should be of desirable species native to the ecoregion.

13. The permittee shall be responsible for maintaining all on-site restoration areas until such time as the permittee provides documentation to, and receives verification from, the USACE that the restoration areas have met the following conditions:

- i. Restored streams exhibit a continuous ordinary high water mark and are connected to a surface water tributary system of waters of the United States;
- ii. Restored streams are designed and constructed within the target ranges for Channel Geometry contained within the PCN (Appendix D- Proposed Mitigation Design Information).
- iii. For the intermittent stream reaches, two bankfull flow events must be documented within the 5-year monitoring period to show that an active floodplain has been established as a part of the restoration work.
- iv. Exposed highwalls shall not be present within the stream channel or riparian buffer zone to allow for aquatic life passage.
- v. Streams will be constructed within natural drainage corridors with appropriately sized watersheds to ensure hydrologic connectivity.

14. All stream channels shall receive sufficient flow throughout the monitoring period to maintain an Ordinary High Water Mark (OHWM) in accordance with the requirements of RGL 05-05, dated December 7, 2005, which establishes the extent of USACE jurisdiction for non-tidal waters for CWA Section 404.

15. The intermittent flow regime of all restored streams located within the project must remain the same or increase in duration. Intermittent streams have flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

If the restoration efforts do not produce the appropriate flow regimes listed in the PCN and Nationwide Permit authorization, corrective measures and/or additional mitigation will be required.

16. Wetland restoration sites shall meet the characteristics of jurisdictional wetlands as defined in the Eastern Mountain and Piedmont Regional Supplement to the 1987 Wetland Delineation Manual (Version 2.0) and shall be connected to a surface water tributary system.
17. Implementation of the PCN must ensure the restored wetlands, meet the projected TRAM scores submitted as specified in the PCN. Specifically, the FWU's generated within the wetland mitigation sites must meet or exceed 26 FWUs. If the restoration efforts do not meet or exceed the performance standards outlined in the PCN (Proposed HGM/T- RAM score for Mitigation Sites) and Special Conditions of this Nationwide Permit authorization, corrective measures and/or additional mitigation shall be required.
18. Vegetation requirements:
 - i. Wetland restoration sites shall be vegetated in a random or scattered method planted at a density of at least 300 native tree stems per acre.
 - ii. All trees planted in the wetland restoration sites shall be selected based upon their hydrologic and edaphic tolerances, wildlife food and cover value and shall be native to Campbell County, Tennessee. At least six native tree species shall be planted, with no single species representing more than 30% of tree diversity on the site.
 - iii. The tree plantings within the wetland restoration sites shall be maintained throughout the monitoring period to ensure a density of at least 300 native tree stems per acre at the conclusion of the five year monitoring period. Native volunteer species may be counted towards this quota. At least six native tree species shall be present, with no single species representing more than 30% of tree diversity on the site.
19. The resultant plant communities in the stream and wetland riparian buffer shall contain less than 5% areal coverage of species listed on the Tennessee Invasive Plant Council's (TN-IPC) most recent list (<https://www.tnipc.org/>).
20. An annual monitoring report shall be submitted to the USACE by December 31st of each year following authorization of the project. This report shall provide a status of all completed work in waters and the status of construction of all required restoration. **In the event work in waters has not commenced, a status report shall be submitted to indicate compliance with this condition.**
21. Annual monitoring reports shall be submitted to the Nashville District via e-mail or approved file transfer site no later than December 31 of the year following

completion of the first restoration reach. Failure to submit monitoring reports shall constitute permit non-compliance.

22. The restored stream channels and wetlands shall be monitored annually for a minimum of five years following completion of the restoration for each reach to determine whether reaches comply with performance standards. The monitoring period may be extended past five years based upon the success of the restoration areas. The monitoring requirements may also be revised when/if remediation actions are required. The monitoring and management plan shall evaluate the success of the restoration work and shall allow for any necessary adjustments to ensure success of the site.

23. The monitoring report shall include the inspector's report, performance parameters as described in the plan, photographs with locations or stations depicted on plan views, and any noted deficiencies and associated corrective measures. The annual monitoring report, at a minimum, must also include the following for each restoration site:

- i. Narrative status and conclusions of progress of restoration site development;
- ii. Photographs clearly depicting each restoration site;
- iii. Determination of compliance with each performance standard. Permittee shall provide clear evidence to support each conclusion;
- iv. Remedial action plan: If performance standards are not met, a brief explanation of the difficulties and potential remedial actions proposed, including a timetable, shall be provided;
- v. As-built plans and maps which clearly depict each restoration site relative to other landscape features. A clear delineation of the restoration site perimeter, locations of monitoring stations and photograph locations shall be included. Legend, north arrow, and other descriptive information shall be provided for clarity.
- vi. A set of completed High-Gradient Headwater Streams in Appalachia Field Data Sheets for each stream reach;
- vii. A set of completed T-RAM data sheets and delineation form for each created wetland.
- viii. Stream morphology development status of each stream channel;

- ix. A status of the propagation and survival of riparian vegetation, including species composition, and % aerial cover for riparian buffer zones and wetland restoration sites;
 - x. Monitoring and eradication methods for invasive species along each stream and wetland restoration site;
24. The permittee shall arrange an on-site meeting with the USACE during the growing season after the first, third, and fifth year reports are submitted. The purpose of the meeting is to determine if the stream restoration sites have been constructed in accordance with the restoration plan and are functioning as expected. A current jurisdictional delineation of all waters of the United States shall be provided for verification.
25. Problems, if any, of the restoration areas shall be addressed and potential solutions must be incorporated into actions the permittee shall take to allow the restoration areas to reach their proposed functional status. The permittee is responsible for implementing reasonable corrective measures recommended by the USACE.
26. Following receipt of the fifth year monitoring report, an on-site meeting shall be arranged to determine if all success criteria have been met. A determination of the restoration success will be made by the USACE. Your responsibility to complete the required restoration as set forth in the previous special conditions shall not be considered fulfilled until you have demonstrated restoration success and have received written verification from the USACE. Monitoring may be extended for a longer period if completed restoration is not functioning as predicted in the PCN.
27. All restoration activities are expected to ensure the streams and wetlands result in a net increase in aquatic resource functions. If the restoration efforts do not meet this performance standard, efforts indicated by the applicant's Adaptive Management Plan or other corrective measures shall be required. The permittee shall also comply with the items below:
- i. If performance standards are not met, a detailed explanation of the difficulties and potential remedial actions proposed by the permittee, including a timetable, must be provided. The District Engineer shall ultimately determine if the restoration site is successful for a given monitoring period.
 - ii. Remedial actions taken during the monitoring period shall be described. These actions may include, but are not limited to, removing debris, replanting, controlling invasive species, re-grading the site, applying

additional topsoil or soil amendments, adjusting site hydrology, payment of in-lieu fees, etc. Remedial measures may be necessary to achieve or maintain achievement of the success criteria and otherwise improve the extent to which the restoration site(s) replace the functions and values lost due to project impacts. If remedial actions are not successful, the applicant may be required to implement contingency measure(s), including additional mitigation, to ensure compensation adequately offsets the loss of waters in association with the proposal.

28. Section 7 obligations under Endangered Species Act (ESA) shall be reconsidered if new information reveals impacts of the proposed project may affect federally listed species or critical habitat in a manner not previously considered, the proposed project is subsequently modified to include activities which were not considered during Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS), or new species are listed or critical habitat designated that might be affected by your proposed project. The permittee shall also comply with the items below:

- i. The applicant shall perform mining and reclamation activities in full compliance with the Indiana and northern long-eared bat Protection and Enhancement Plan that was submitted to USACE as part of the PCN within the USACE ESA Action Area.
- ii. The permittee is reminded this Department of the Army Permit authorization does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the USFWS, both lethal and non-lethal “takes” of protected species are in violation of the ESA.

29. In the event any previously unknown historic or archaeological sites or human remains are uncovered while accomplishing the activity authorized by this permit, the permittee must cease all work immediately and contact local, state and county law enforcement offices (*only contact law enforcement on findings of human remains*), our office at (615) 369-7500, and the Tennessee Historical Commission at (615) 770-1096. While accomplishing the activity authorized by this permit, the inadvertent discovery of any artifacts (human remains, funerary objects, sacred objects, and objects of cultural matrimony/patrimony, etc.) shall result in immediately ceasing work and contacting the Regulatory Division of the Nashville District. The USACE will initiate the Federal, state and tribal coordination required to comply with the National Historic Preservation Act and applicable state and local laws and

regulations. Federally recognized tribes are afforded a government-to-government status as sovereign nations and consultation is required under Executive Order 13175 and 36 CFR Part 800.

COMPLIANCE CERTIFICATION

**YOU ARE REQUIRED TO SUBMIT THIS SIGNED CERTIFICATION REGARDING
THE COMPLETED ACTIVITY AND ANY REQUIRED MITIGATION**

I hereby certify that the work authorized by **Permit No. LRN-2018-00397**, and any required mitigation was done in accordance with the Corps authorization, including any general, regional, or special conditions.

Permittee Signature

Date

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative.

Submit this signed certification to the address below:

- U.S Army Corps of Engineers
Regulatory Division
3701 Bell Road
Nashville, TN 37214-2660
- East Regulatory Field Office
501 Adesa Parkway
Suite 250
Lenoir City, TN 37771
- West Regulatory Field Office
2042 Beltline Road, Southwest
Building C, Suite 415
Decatur, Al 35601

Table 1. Waters of the U.S. Alteration Summary

Impact Site / Type	WoUS Name / Type	Stream Linear Feet (LF)	HGM / TRAM Existing Condition Score	Drainage Area Above Site (Acres)	Cubic Yards Discharged into "WOUS"	Types of Materials Discharged	Area of Impact (acres)
Road Crossing Only (NWP14)	Stream 1/ Perennial	50	0.71	44.8	2	silt/clay/gravel/shale/rock	0.001
Pre-Law Mine / Rich Mtn. Re-Mining	Stream 1A/ Intermittent	387	0.67	12.8	8	silt/clay/gravel/shale/rock	0.009
Pre-Law Mine / Rich Mtn. Re-Mining	Stream 2/ Intermittent	29	0.59	6.4	0.4	silt/clay/gravel/shale/rock	0.001
Pre-Law Mine / Rich Mtn. Re-Mining	Stream 3/ Intermittent	39	0.79	6.4	0.6	silt/clay/gravel/shale/rock	0.001
Pre-Law Mine / Rich Mtn. Re-Mining	Stream 4/ Intermittent	253	0.47	51.2	7	silt/clay/gravel/shale/rock	0.012
Pre-Law Mine / Rich Mtn. Re-Mining	Stream 4/ Ephemeral	155	0.77	38.4	3.0	silt/clay/gravel/shale/rock	0.016
Pre-Law Mine / Rich Mtn. Re-Mining	Stream 8/ Intermittent	258	0.70	32	4	silt/clay/gravel/shale/rock	0.021
Pre-Law Mine / Rich Mtn. Re-Mining	Stream 8/ Ephemeral	44	0.69	25.6	1	silt/clay/gravel/shale/rock	0.001
Pre-Law Mine / Log Mtn. Re-Mining	Stream 9/ Intermittent	82	0.85	19.2	1	silt/clay/gravel/shale/rock	0.004
Pre-Law Mine / Log Mtn. Re-Mining	Stream 9/ Ephemeral	77	0.64	19.2	2	silt/clay/gravel/shale/rock	0.002
Pre-Law Mine / Rich Mtn. Re-Mining	Wetland 1	N/A	41.6	N/A	97	silt/clay/gravel/shale/rock	0.12
Pre-Law Mine / Rich Mtn. Re-Mining	Wetland 2	N/A	44.2	N/A	106	silt/clay/gravel/shale/rock	0.33
Pre-Law Mine / Rich Mtn. Re-Mining	Wetland 3	N/A	47.9	N/A	26	silt/clay/gravel/shale/rock	0.16

Pre-Law Mine / Rich Mtn. Re-Mining	Wetland 4	N/A	44.8	N/A	3	silt/clay/gravel/shale/rock	0.02
Pre-Law Mine / Rich Mtn. Re-Mining	Wetland 5	N/A	40.9	N/A	11	silt/clay/gravel/shale/rock	0.07
Pre-Law Mine / Rich Mtn. Re-Mining	Wetland 6	N/A	40.0	N/A	0.2	silt/clay/gravel/shale/rock	0.05
Pre-Law Mine / Rich Mtn. Re-Mining	Wetland 7	N/A	34.8	N/A	3	silt/clay/gravel/shale/rock	0.04
Pre-Law Mine / Rich Mtn. Re-Mining	Open Water 1 / Impoundment	N/A	N/A	N/A	1,600	silt/clay/gravel/shale/rock	0.33
Pre-Law Mine / Rich Mtn. Re-Mining	Open Water 5 / Impoundment	N/A	N/A	N/A	1,484	silt/clay/gravel/shale/rock	0.46
Stream Total	-	1,374	-	-	29	-	0.068
Wetland Total	-	-	-	-	246.2	-	0.79
Open Water Total		-	-	-	3,084	-	0.79
Overall Total		1,374 LF	-	-	3,359 cy	-	1.648 Ac.

As illustrated a total of 1,374 linear feet of ephemeral, intermittent, and perennial streams, 0.79 acres of mine bench wetland, and 0.79 acres of dangerous impoundments / mine pits would be altered by the proposed contour and auger mining to successfully re-mine the Rich Mountain and Lower Log Mountain coal seam levels. During the reclamation process the natural surface and groundwater flow and drainage patterns of these watersheds would be restored closer to their natural location. The water standing on these mine benches creating the wetlands and open waters is causing eutrophication leading to excess organic minerals and nutrients and anoxia, hypoxia, and internal loading in the local water resources. Backfilling of the abandoned mine lands will contribute to the restoration of hydrologic balance to these areas, restore more natural vegetation and topography, reduce erosion and total suspended solids, and will reduce sediment loads downslope of the site.

Figures 2-3 illustrates the impact locations, lengths/acreages, and flow regime of these sites. Representative photographs and the HGM data sheets for each stream channel can be found in Appendix C and are attached to this digital document. The existing TRAM data forms are also located in Appendix C. As illustrated by these assessments all the streams and wetlands have been previously disturbed or were created by historic mining and logging activities.

4) “WATERS OF THE U.S.”

The jurisdictional determination for this project is complete and can be found in Appendix A.

5) MITIGATION

In order to compensate for unavoidable impacts to 1,374 linear feet of ephemeral, intermittent, and perennial streams, 0.79 acres of mine bench wetlands, and 0.79 acres of open water / mine pits, on-site stream restoration of 1,542 linear feet of intermittent and ephemeral streams is proposed along with the creation of at least 2.98 acres of wetland using natural stream design and wetland creation techniques. The Tennessee Stream Quantification Tool (SQT) and Hydrogeomorphic Approach (HGM) functional assessments were used at this site to assess the existing stream conditions. HGM is proposed to be used for the final success criteria for the proposed streams. TRAM HGM Functional Assessment was used to assess the wetland conditions and the proposed wetland creation will provide an overall lift of approximately 82 functional wetland units (FWUs) and an additional 2.19 acres of wetlands.

As illustrated by the existing habitat conditions, the watersheds containing the proposed stream and wetland impacts and restoration sites have been disturbed or created by previous mining and logging activities. Natural stream substrates, in-stream habitat, pattern, profile, dimension, and riparian zones have been adversely affected. As illustrated by the following sections; physical, biological, and chemical functions of the aquatic resources and other functional characteristics of the ecosystem and watershed would benefit from the proposed mitigation plan. As previously discussed, the backfilling of the abandoned mine benches and highwalls will contribute to the restoration of hydrologic balance to these areas, restore more natural vegetation and topography, reduce erosion and total suspended solids, and will reduce sediment loads downslope of the site.

Mitigation Objectives and Work Plan

Due to the previous mining and deforestation activities in the watershed, the natural stream profile, pattern, dimensions, substrates, and riparian zones have been negatively affected and many times are outside of their normal range. The following sections discuss the proposed stream and wetland mitigation objectives and work plan.

Stream Mitigation

The stream restoration plan includes re-establishment of the stream in the mitigation area as near to the dimensions of the reference stream as possible. The restoration would consist of natural stream design techniques to reconstruct the stream channel. The stream mitigation would include restoration of substrate, bank stabilization, in-stream habitat features, and the establishment of a riparian zone. This would also include re-establishing the approximate pre-disturbance cross-section and meanders to the extent practicable.

Reference stream information was obtained from a similar less disturbed watershed located in the vicinity of the proposed project. This site was used to help determine the proposed hydrogeomorphic patterns and conditions for the mitigation sites. A Level II Rosgen¹ assessment

¹ Rosgen, D.L. 1996. Applied River Morphology. Wildland Hydrology, Pagosa Springs, CO.

was conducted to provide portions of the pattern, profile, and dimension information for the design of the mitigation site. In addition to this site the regional curve data was used to determine the post-mine configurations. This information can be found in Appendix D. Regional curve information from “Morphological Stream Design and Assessment Tools for the Southwestern and Central Appalachians (Ecoregions 68/69) of Tennessee²” was also referenced during the mitigation design phase (See Appendix D). These curves were used to guide the design of the stream channels and referenced to verify the proposed profile, pattern, and dimensions. The regional curve data from watersheds containing similar drainage areas and slopes were used. These curve numbers are similar to the reference stream data from existing streams within the vicinity of the project area.

The proposed bankfull channel dimensions and slope based on the reference stream and regional curve information should also improve sediment transport capacity as well as stormwater runoff. Riparian vegetation (50’ on each side of the restored channel or until natural canopy is reached) plantings using native tree and shrub species would also improve bank stability, water temperatures, and wildlife habitat. The Rosgen stream type would generally be “A” or “A+” type streams in these areas but with all streams there are variations from these types found within each segment.

Restoration of 1,542 linear feet of ephemeral and intermittent streams and riparian areas addresses the needs of the watersheds by returning the stream gradient, riparian zones, in-stream habitat, pattern, profile, and dimension closer to their natural state. The reclamation of 4.5 miles of highwalls across the mine site would also benefit the aquatic resources within the entire watershed and ecoregion by restoring natural drainage patterns, eliminating outslope spoil piles and dangerous impoundments / mine pits, restoring natural slopes, and eliminating and ameliorating slide areas.

The stream restoration plan includes re-establishment of the stream in the mitigation area as near to the dimensions of the reference stream as possible. The restoration would consist of natural stream design techniques to reconstruct the stream channels. The stream mitigation would include restoration of substrate, bank stabilization, in-stream habitat features, and the establishment of a riparian zone. This would also include re-establishing the approximate pre-disturbance cross-section and meanders to the extent practicable.

Wetland Mitigation

On-site wetland mitigation offered is to offset the impacts to Wetlands 1 through 7. Wetland establishment is proposed in the locations of the proposed bench ponds as shown on the hydrologic features map contained in Appendix B, and will create approximately 2.98 acres (3.71:1 ratio) of emergent wetland and provide a lift of 82 FWUs. Wetland creation activities will follow the wetland design drawings in Appendix J. The goal of the wetland mitigation is to provide an environment conducive to the growth and maintenance of hydrophytic vegetation, hydric soils, and hydrology. Once the sediment control structures are no longer needed for the operation, these areas will be filled to 1 foot below the spillway. By excavating these

² Morphological Stream Design and Assessment Tools for the Southwestern and Central Appalachians (Ecoregions 68/69) of Tennessee. 2017. Tennessee Department of Environment and Conservation. Nashville. TN

ponds/depressions and directing surface water into these areas, water will be allowed to collect and provide the necessary wetland hydrology.

Mitigation Site Selection

The main consideration for mitigation site selection was rehabilitation of the watershed from previous mining, agriculture, and deforestation. In-stream habitat (hydrology, biogeochemical cycling, habitat) including riparian zone functions have been negatively influenced in the watershed due to the aforementioned activities. An additional benefit to the watershed, elimination of abandoned highwalls, will occur during the mining process.

Baseline Information

The riparian zones surrounding the streams proposed to be impacted were typically observed to be suboptimal in most areas, with a short distance of optimal width. All of the areas have been previously mined or logged. Increasing riparian vegetation species richness and eliminating invasive species across the mitigation areas is one of the primary goals of the stream restoration plan. The mitigation areas currently maintain discontinuous riparian zones populated with a large proportion of invasive plant species.

Baseline functional assessments of the existing streams and wetlands areas were performed through the HGM and TRAM assessment methods, respectively. These functional assessment sheets are contained in Appendix C. These are also the proposed methods for assessing the functional lift success criteria.

Stream Mitigation Plan

The applicant proposes to restore and increase ephemeral and intermittent stream functions within the mitigation area by conducting several watershed enhancement activities using natural stream design techniques. Appendices E-H provides drawings of the proposed activities which include:

A) Stabilization of Stream Banks

Where needed, the stream banks of the mitigation areas above and below the existing embankment pond will be stabilized by re-grading any steep, incised, and highly eroded areas, and through the creation of a 2-stage channel. Boulders and native vegetation will also be used to armor banks from erosion and promote lateral and vertical bank stability along the reaches.

B) Habitat Enhancements (Rock and Log)

Cross vane pool structures will be constructed of cobble, boulders, or logs. Proposed designs for these structures can be found in Appendix E-H.

C) Placement of Large Woody Debris

Local dead large woody debris will be placed throughout the mitigation reaches to decompose and provide detritus (food) for macroinvertebrates as well as provide amphibian habitat.

D) Velocity Dissipating Structures

Velocity dissipating structures (see Appendix E-H for details) will be created using a combination of log vanes or rock vanes placed across the bankfull channel.

E) Riparian Zone Plantings

The riparian zones of the stream restoration sites will be planted at a rate of 300 stems per acre using a variety of trees and shrubs as specified in Appendix I.

Stream Restoration Performance Measures

Final performance measures for the stream restoration areas shall be based on Table 2.

PARAMETER	SUCCESS	METHOD
Geomorphology	Geomorphology Similar to Approved Plans	Photo Documentation/Longitudinal Profile; Cross-sections
Habitat	Lift in FCUs Above Baseline	HGM
Riparian Zone	50' on Each Side of Restored Channels* / 300 Stems per Acre Surviving; Including Volunteers	Stem Count; Measure Riparian Zone Width

*Or until natural canopy is reached

Geomorphology

1. Permanent cross-sections will be located using metal stakes or rebar. These will be measured at years 1, 3, and 5.
2. Photo documentation will be included in the annual reports. Photos will be taken at permanent photo monitoring points which will be established along the mitigation reaches.
3. One longitudinal profile will be measured to document as-built conditions after final construction activities have been completed. One additional profile will be completed during year five of monitoring and compared to the target conditions.

Habitat

Existing habitat scores at the proposed mitigation site were assessed using the HGM method. The assessments are summarized in Table 3 and excel files are embedded into this digital document. HGM scores are proposed to be assessed along the restored mitigation areas during year 1, 3 and 5 of the monitoring program.

Table 3. HGM Mitigation Summary for the Proposed Stream Alteration Areas							
Site	Existing Condition	Existing Length (LF)	Existing FCU	Proposed Condition	Proposed Length (LF)	Proposed FCU	Credit / Debits
Stream 1A	0.67	387	259	0.71	387	275	15
Stream 2	0.59	29	17	0	0	0	-17
Stream 3	0.79	39	31	0	0	0	-31
Stream 4 I	0.47	253	118	0.71	253	180	62
Stream 4 E	0.77	155	119	0.71	283	201	82
Stream 8 I	0.70	258	180	0.71	416	295	116
Stream 8 E	0.69	44	31	0.71	44	31	1
Stream 9 I	0.85	82	70	0.71	82	58	-12
Stream 9 E	0.64	77	50	0.71	77	55	5
TOTAL		1,324 LF	874		1,542	1,110	+236

The FCUs for the restoration sites at 5 years of mitigation are proposed to score 0.71. This equates to a lift of 236 FCUs across the site. The proposed FCI calculator for these streams is attached to this document.

Riparian Zone

The riparian zones of the stream restoration areas will be planted during the dormant season following the final construction activities. Plantings will include, at minimum, a 50' wide corridor using a variety of native trees and shrubs, as indicated by the tree planting list in Appendix I. Permanent tree plot sites for stem counts and riparian zone width determinations will be located along the mitigation areas.

Wetland Mitigation Plan

The wetland creation sites are illustrated on the plan-view design drawings in Appendix J and will be established in the locations of the proposed sediment control structures. These structures will have established hydrology and soils soon after their construction. Vegetation will be the final wetland characteristic to be established and should occur rapidly after the conversion is complete.

The hydrophytic revegetation planting plan for the wetland creation sites consists of planting the following species. *Typha latifolia* (cattail), *Salix nigra* (black willow), *Platanus occidentalis* (American sycamore), *Alnus serrulata* (hazel alder), *Scirpus cyperinus* (Woolgrass), *Juncus* (rush), *Cyperaceae* (sedge) family species or any other locally native FAC, FACW, or OBL species. Table 4 provides the reporting parameters and performance measures for the wetland creation sites.

PARAMETER	SUCCESS	METHOD
Wetland Delineation	Meets USACE Criteria for Wetland Areas	1987 USACE Manual, Eastern Mountains Regional Supplement
Wetland Function	Exceed 70 FWUs	TRAM

Site	Existing Condition	Existing Acreage	Existing FWU	Proposed Condition	Proposed Acreage	Proposed FWU	Credit / Debits
Wetland 1	41.6	0.12	5	0	0	0	-5
Wetland 2	44.2	0.33	15	0	0	0	-15
Wetland 3	47.9	0.16	8	0	0	0	-8
Wetland 4	44.8	0.02	1	0	0	0	-1
Wetland 5	40.9	0.07	3	0	0	0	-3
Wetland 6	40.0	0.05	2	0	0	0	-2
Wetland 7	34.8	0.04	1	0	0	0	-1
Proposed	0	0	0	39.3	2.98	117	+117
TOTAL		0.79	35		2.98	117	Net + 82

Timing

The proposed mining activity will commence as soon as possible after the Section 404 and SMCRA permits are issued (2019). Stream mitigation work will begin within 1 year of the completion of the proposed impacts. Wetland mitigation will commence after approval by OSMRE that the pond is no longer needed for the operation. All mitigation sites will be monitored over a five-year period, with a projected completion year of 2024.

Monitoring and Management Program

The monitoring and management plan will evaluate the success of the mitigation as described in the previous section and as detailed on Table 6. It will include an inspection of the mitigation sites at the beginning of the first growing season after mitigation efforts are complete and continue annually for a five-year period. Those items as previously discussed will be examined and the results provided to the USACE in an annual report (before December 31) after the mitigation efforts are complete. The reports will include photographs, and assessment locations noted on site plan-views. Successes and/or failures of the mitigation effort will also be noted and any maintenance efforts that were performed the previous year will be described. The reports will also include an assessment of invasive species (non-native or noxious), an assessment of the degree to which performance standards are being met and any proposed corrective actions.

Table 6. Stream and Wetland Monitoring Timeline					
PARAMETER	Year 1	Year 2	Year 3	Year 4	Year 5
Stream Geomorphology					
Cross-sections	X		X		X
Longitudinal Profile	X				X
Stream Habitat / Functional Lift					
HGM	X		X		X
Stream Riparian Zone					
0.25 Ac. Stem Count/Measure Width	X	X	X	X	X
Wetlands					
Wetland Delineation			X		X
TRAM		X	X	X	X

Site Protection Measures

The applicant will maintain the mitigation areas for the full agreed upon life of the mitigation project.

Long-term Management

The mitigation areas will be monitored annually, which will provide management activities where needed. Permanent photo point and cross-section locations will be established along the restored reach. Riparian areas along the restored streams will also be monitored annually to ensure that the projected riparian zone widths and stem counts are met by the end of the project timeline.

Responsible Parties

The applicant is responsible for implementation of the mitigation efforts:

(1) The Applicant:

Davis Creek Energy, LLC
116 Wildwood Dr.
Somerset, Kentucky 42503

(2) Preparer of Verification Documents:

Biological Systems Consultants, Inc.
P.O. Box 54954
Lexington, KY 40555

Adaptive Management Plan

If the mitigation performance measures are not met by the end of the 5-year mitigation monitoring schedule, an alternate mitigation plan would be provided to USACE for approval.

6) ENDANGERED SPECIES ACT

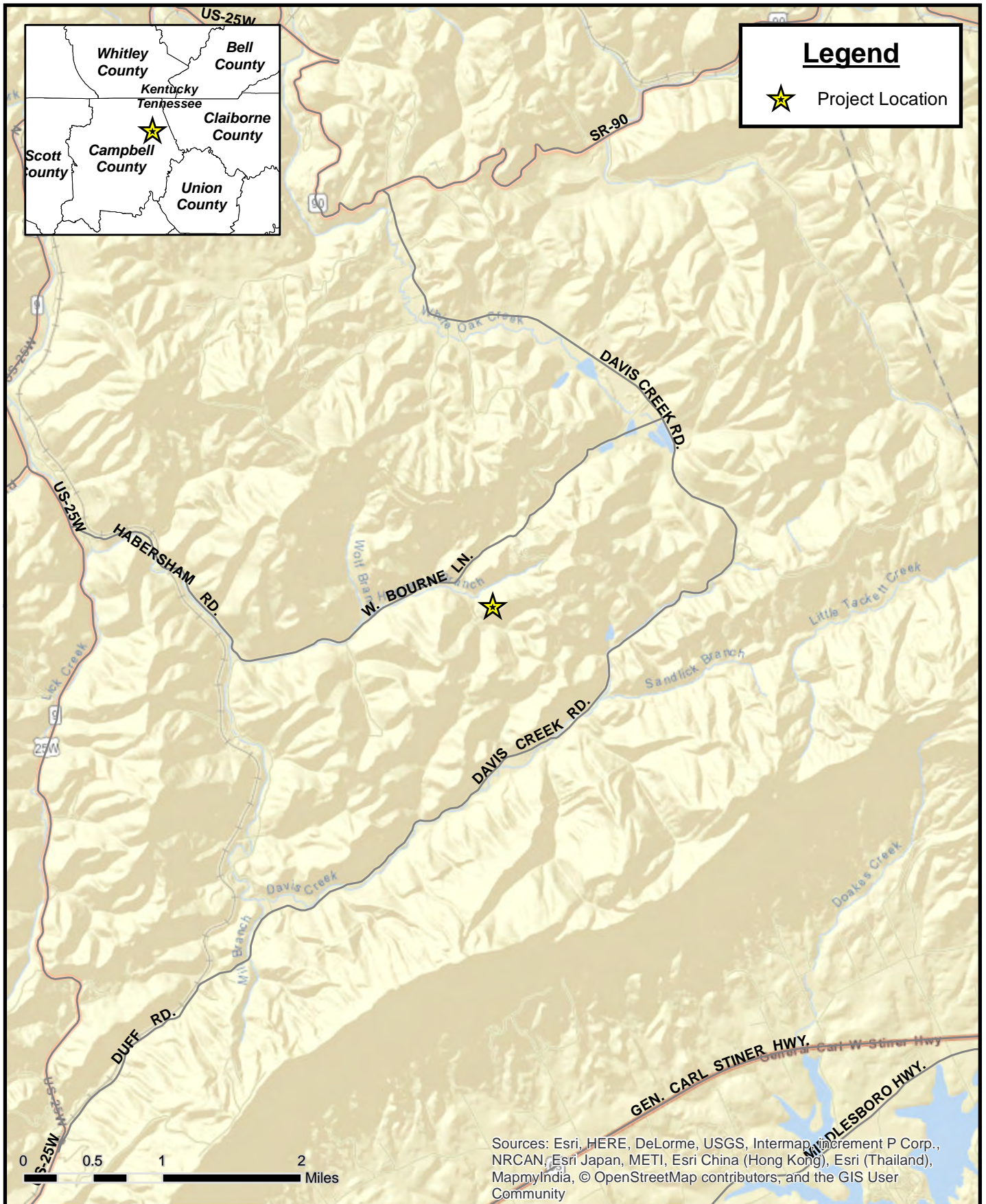
OSMRE is the lead agency for Section 7 of the ESA for this project.

7) NATIONAL HISTORIC PRESERVATION ACT

OSMRE is the lead agency for Section 106 of the NHP for this project. No cultural or historic properties are anticipated to be impacted by the proposed project based on the amount of previous disturbance to the site.

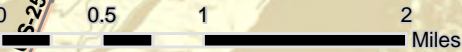
8) CLEAN WATER ACT SECTIONS 401 AND 402

The Section 401 Water Quality Certification is pending from TDEC. The NPDES permit is also pending at this time.



Legend

★ Project Location



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Prepared by:

BIOLOGICAL SYSTEMS CONSULTANTS, INC.
 P.O. Box 54954, Lexington, KY 40555
 (859) 263-4142

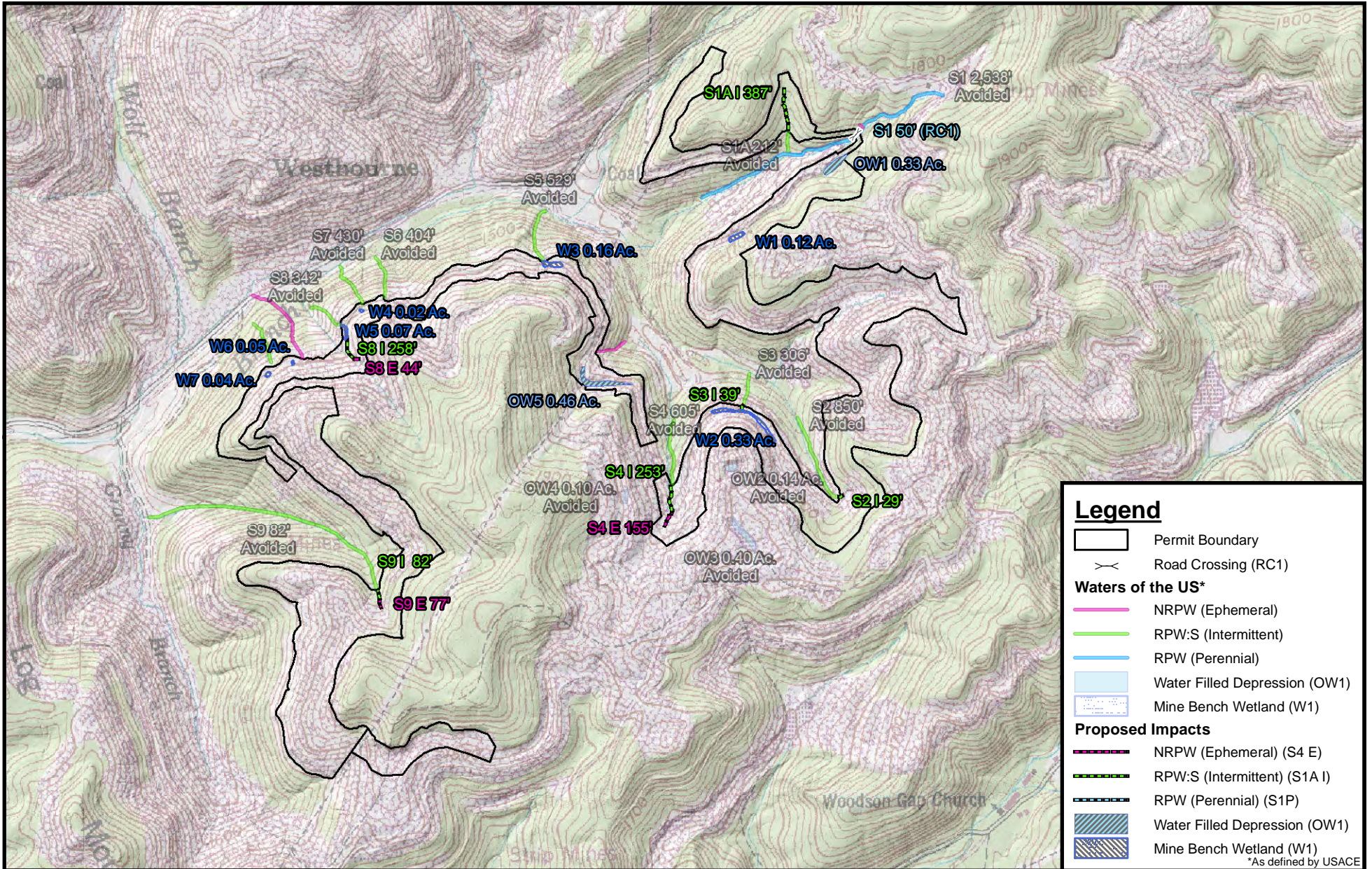
Prepared for:
Davis Creek Energy, LLC

Figure 1: Highway Location Map

BSC#: 218091
 DATE: January 31, 2019
 Drawn By: BES



USACE#: LRN 2018-00397
 Permit#: Pending
 Checked By: BES



Legend

- Permit Boundary
- Road Crossing (RC1)
- Waters of the US***
 - NRPW (Ephemeral)
 - RPW:S (Intermittent)
 - RPW (Perennial)
 - Water Filled Depression (OW1)
 - Mine Bench Wetland (W1)
- Proposed Impacts**
 - NRPW (Ephemeral) (S4 E)
 - RPW:S (Intermittent) (S1A I)
 - RPW (Perennial) (S1P)
 - Water Filled Depression (OW1)
 - Mine Bench Wetland (W1)

*As defined by USACE

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 P.O. Box 54954, Lexington, KY 40555
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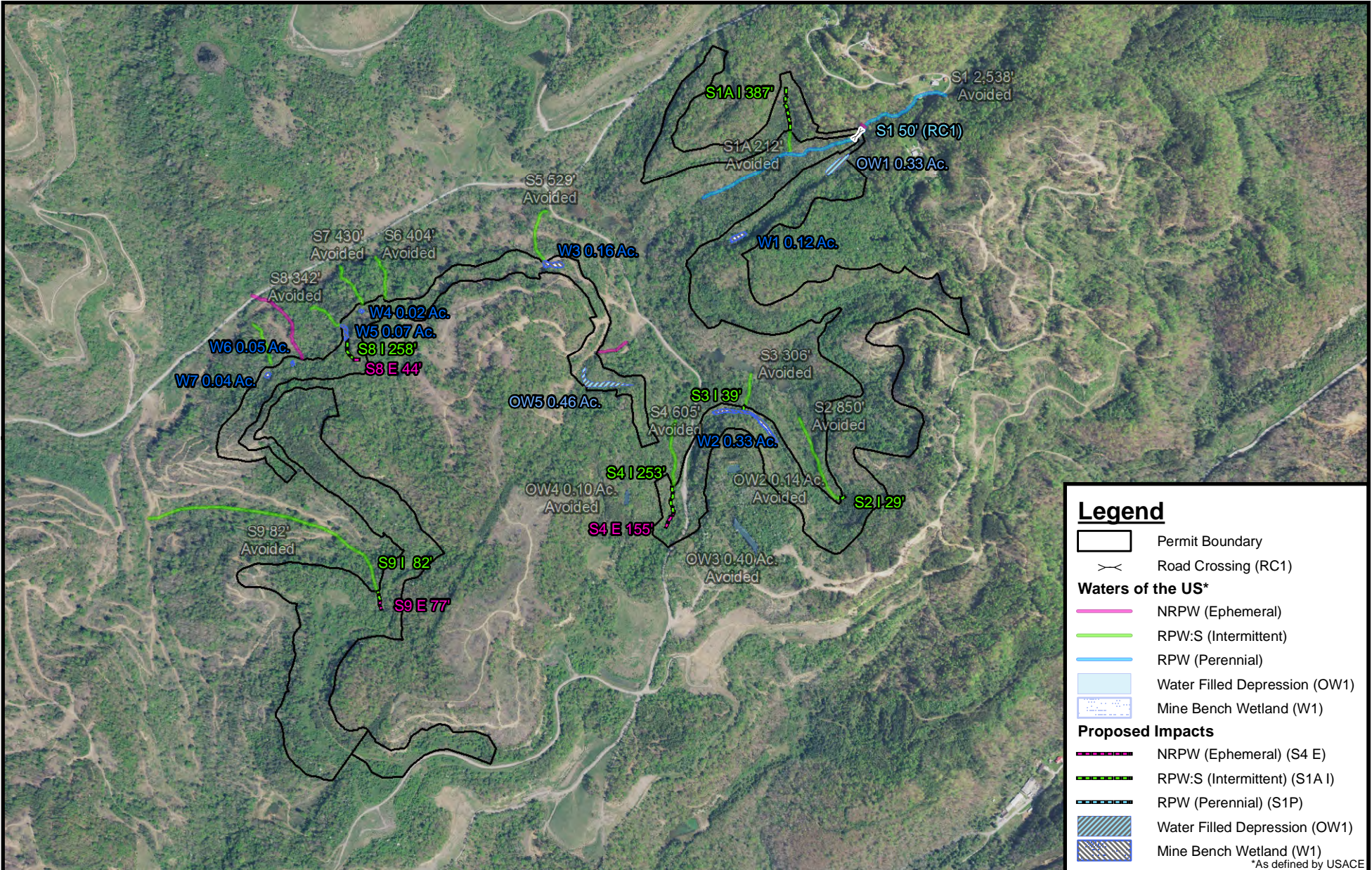
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**Figure 2: Proposed Impacts to Waters of the US
 Davis Creek Area 6**

BSC#: 218091		Permit Number: Pending
DATE: January 23, 2019		USACE#: LRN 2018-00397
Drawn By: BES	Checked By: JRR	

0 650 1,300 2,600
 Feet


Source: LaFollette, TN 7.5' USGS Topographic Quadrangles
 PCS: NAD 1983 StatePlane Tennessee FIPS 4100 Feet



Legend

- Permit Boundary
- Road Crossing (RC1)
- Waters of the US***
 - NRPW (Ephemeral)
 - RPW:S (Intermittent)
 - RPW (Perennial)
 - Water Filled Depression (OW1)
 - Mine Bench Wetland (W1)
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 P.O. Box 54954, Lexington, KY 40555
 (859) 263-4142

Prepared for:
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**Figure 3: Proposed Impacts to Waters of the US
Davis Creek Area 6**

BSC#: 218091		Permit Number: Pending
DATE: January 23, 2019		USACE#: LRN 2018-00397
Drawn By: BES		Checked By: JRR

0 650 1,300 2,600
 Feet

Source: 2016 National Agricultural Imagery Program
 State Mosaics
 PCS: NAD 1983 StatePlane Tennessee FIPS 4100
 Feet

Log Vane

Intended Use

Log Vanes are single arm wooden structures that are partially embedded into the streambed and streambank such that they are submerged during base flow conditions. Log Vanes are typically installed along meander bends in order to create secondary flow circulation and thereby promoting the development of scour pools for habitat. Log Vanes can be installed in pairs or with other in-stream habitat and stabilization structures in order to direct flow away from streambanks until vegetation can become established.

Components

A Log Vane should consist of:

- Logs that are smooth, uniform and free of tree roots and branches.
- Anchor and Footer Stones.
- Soil stabilization matting.

Effective Uses and Limitations

- Log Vanes may be used in systems that are not severely entrenched and incised.
- Log Vanes should be used carefully in severely eroded and entrenched stream conditions and should only be used if measures have been taken to reduce channel entrenchment and/or channel incision.

The following limitations apply to Log Vanes:

- Log Vanes may not be compatible with bedrock stream types due to limitations for scour pool development.
- Streambanks opposite these structures should be monitored for excessive erosion.

Material Specifications

- **Logs:** Single logs should be from recently timber and/or cleared areas, species that are native to the area and free from disease, and preferable hardwood.
- **Anchor and Footer Stones:** Stone should be of angular, rectangular, and blocky type such that they are stackable to create a uniform surface condition and that will resist the shear stress forces of movement during the full range of flow events. Anchor and footer stones shall be properly sized to resist the tractive forces utilizing empirical relationships for shear stress for the anticipated design storm event. See Figure 1 (Rosgen, 2006) or other approved design specification.

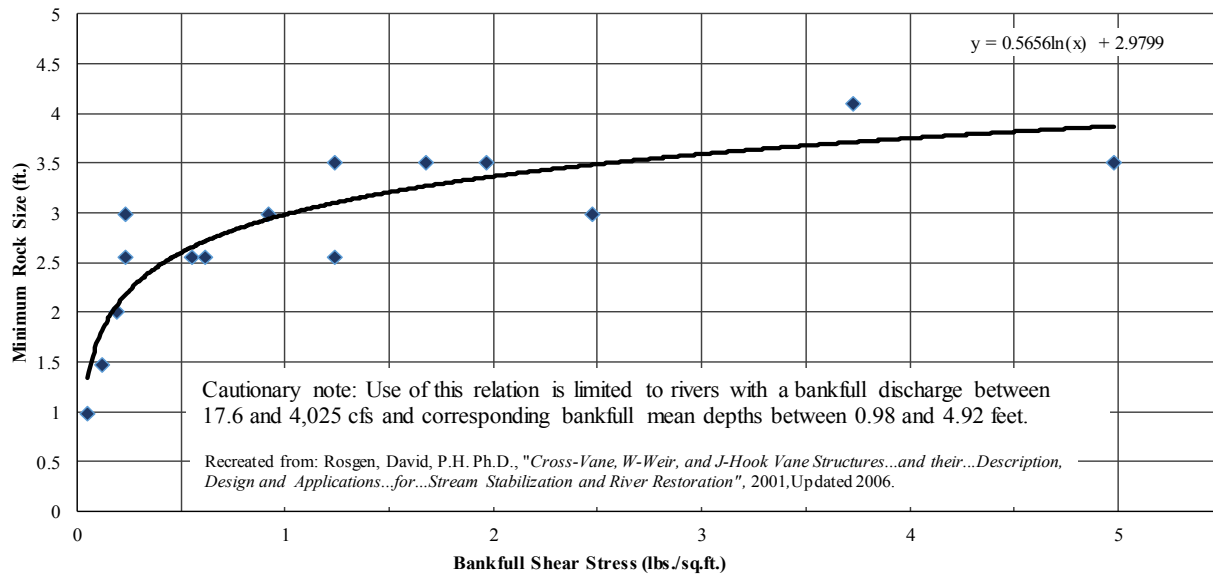



Figure 1. Minimum rock size as a function of bankfull shear stress.

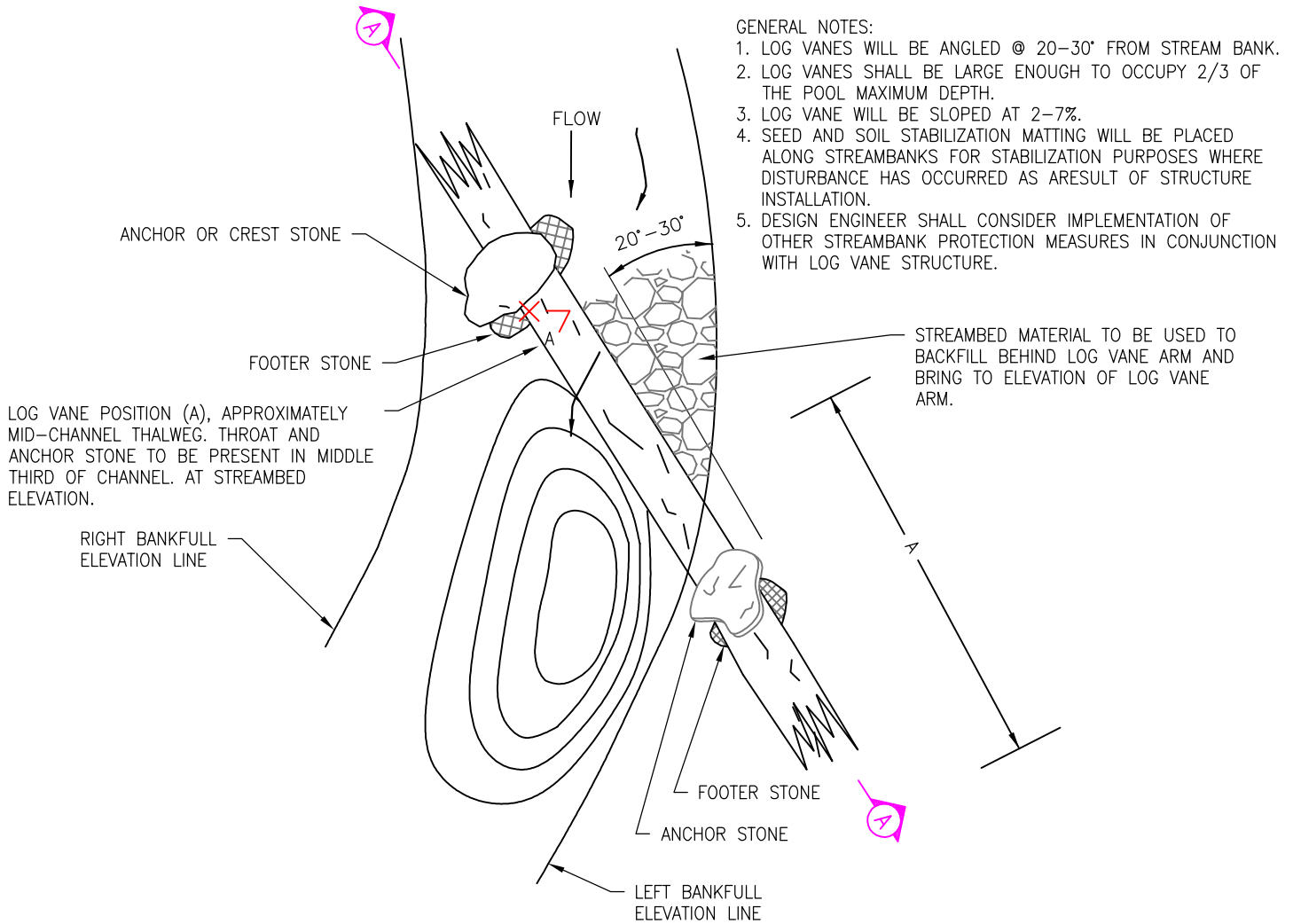
LOG VANE

Construction Guidelines

1. Flow from the stream should be diverted away from the work area
2. Log Vanes should be angled 20 to 30 degrees from the upstream bank. Log Vane arms should be installed with a vertical angle along the vane arm ranging from two to seven percent. Log Vanes should span approximately one-half to two-thirds of the bankfull channel width.
3. Excavate the trench and prepare area along streambank and in streambed for placement of footer rocks. Footer rocks should be installed at both the streambank and thalweg locations to insure proper footing of the Log Vane structure and to eliminate scour at key tie-in locations.
4. Place log onto footer rocks such that the Log Vane arm that ties into the streambank will be installed at the bankfull elevation and the other end of the Log Vane arm will be embedded into the streambed at the thalweg elevation and will be located within the middle third of the bankfull channel width.
5. Anchor rocks should be installed on top of both ends of the Log Vane. Anchor stones in the streambed will be offset to the upstream side of the Log Vane and placed to minimize rolling of anchor stone and will not protrude from the streambed elevation more than one-third the thickness of the anchor rock. Anchor rocks will be placed along the streambank position of the Log Vane arm in similar fashion and will not extend more than one-third the thickness of the anchor rock.
6. The Log Vane arm that ties into the streambank should extend a minimum of 5 to 6 feet into the streambank. Additionally, the thalweg end of the structure should be embedded a minimum of 2 to 3 feet. When two or more smaller logs are used to accomplish the design specifications of the Log Vane, the logs should be secured together with cables or rebar material based upon manufacturing specifications. Log Vanes should be anchored into the streambed with support pilings and/or duckbill anchors with lengths exceeding the potential of long-term bed degradation and/or scour depths.
7. Placement of salvaged streambed material obtained during trench excavation will be placed along the upstream side of the Log Vane arm and between the streambank to create a uniform slope between the Log Vane arm and the streambank. At a minimum, streambed gravel will be placed to the elevation of the sloping Log Vane arm on the upstream side of Log Vane.

	LOG VANE		
	DRAWN BY: R. WASIK	DATE: 9/8/15	
	CHECKED BY: A. BIRMINGHAM, PE <small>NWP49 & NWP14 Applications LRN #2018-00397 OSMRE #3333</small>	SHEET NO. 2 OF 3	PAGE NO. 44 OF 80

LOG VANE - PLAN VIEW



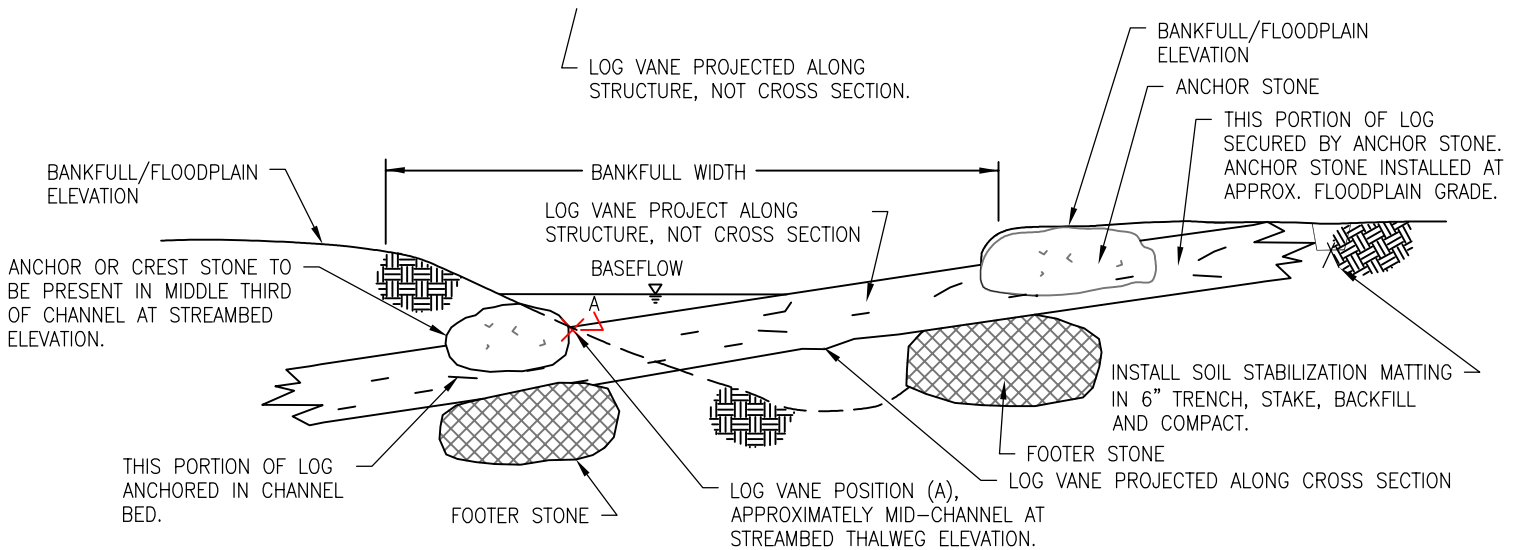
GENERAL NOTES:

1. LOG VANES WILL BE ANGLED @ 20-30° FROM STREAM BANK.
2. LOG VANES SHALL BE LARGE ENOUGH TO OCCUPY 2/3 OF THE POOL MAXIMUM DEPTH.
3. LOG VANE WILL BE SLOPED AT 2-7%.
4. SEED AND SOIL STABILIZATION MATTING WILL BE PLACED ALONG STREAMBANKS FOR STABILIZATION PURPOSES WHERE DISTURBANCE HAS OCCURRED AS A RESULT OF STRUCTURE INSTALLATION.
5. DESIGN ENGINEER SHALL CONSIDER IMPLEMENTATION OF OTHER STREAMBANK PROTECTION MEASURES IN CONJUNCTION WITH LOG VANE STRUCTURE.

LOG VANE POSITION (A), APPROXIMATELY MID-CHANNEL THALWEG. THROAT AND ANCHOR STONE TO BE PRESENT IN MIDDLE THIRD OF CHANNEL. AT STREAMBED ELEVATION.

STREAMBED MATERIAL TO BE USED TO BACKFILL BEHIND LOG VANE ARM AND BRING TO ELEVATION OF LOG VANE ARM.

LOG VANE - SECTION VIEW A-A



LOG VANE

DRAWN BY: R. WASIK

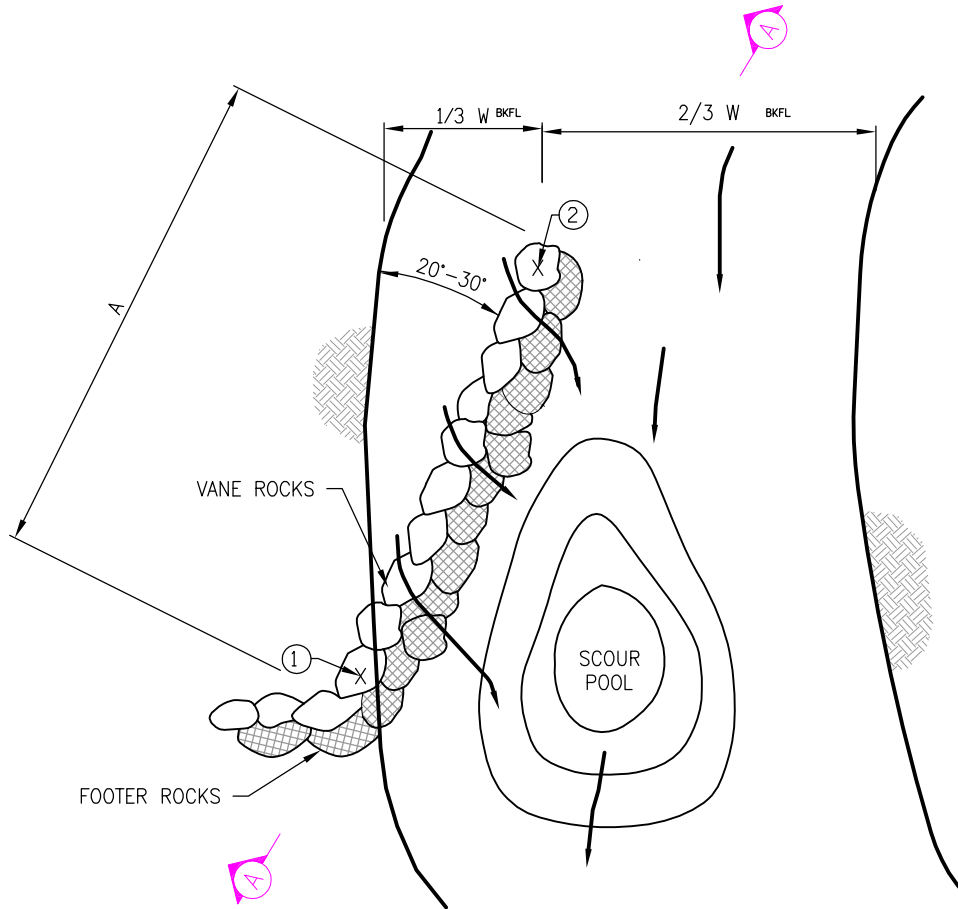
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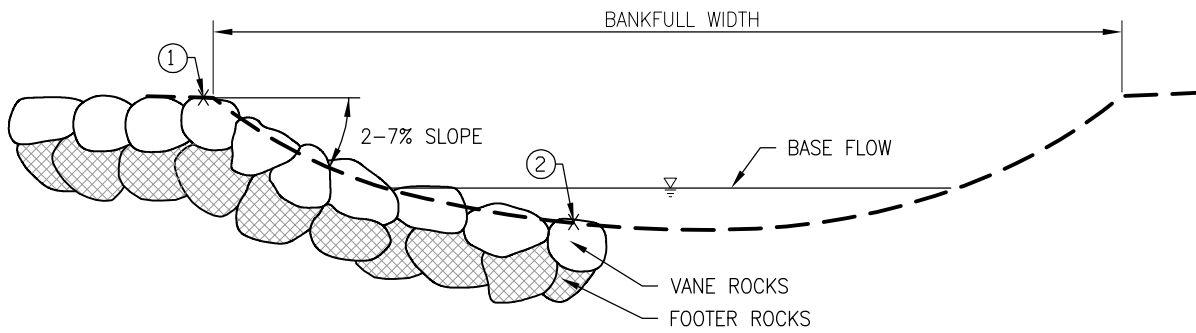
SHEET NO. 3 OF 3

PAGE NO. 45 OF 80

ROCK VANE - PLAN VIEW



ROCK VANE - SECTION VIEW A-A



STRUCTURE SCHEDULE

NAME	STATION	STRUCTURE	LENGTHS/FT.		INVERT ELEVATIONS (FT)	
			A	1	2	

GENERAL NOTES:

1. NO GAPS OR VOIDS WILL EXIST BETWEEN FOOTER AND VANE ROCKS.
2. STRUCTURE VANE ARMS WILL BE KEYED INTO THE STREAMBANK A MINIMUM OF 5'-0" UNLESS OTHERWISE DIRECTED.

ROCK VANE

DRAWN BY: R. WASIK

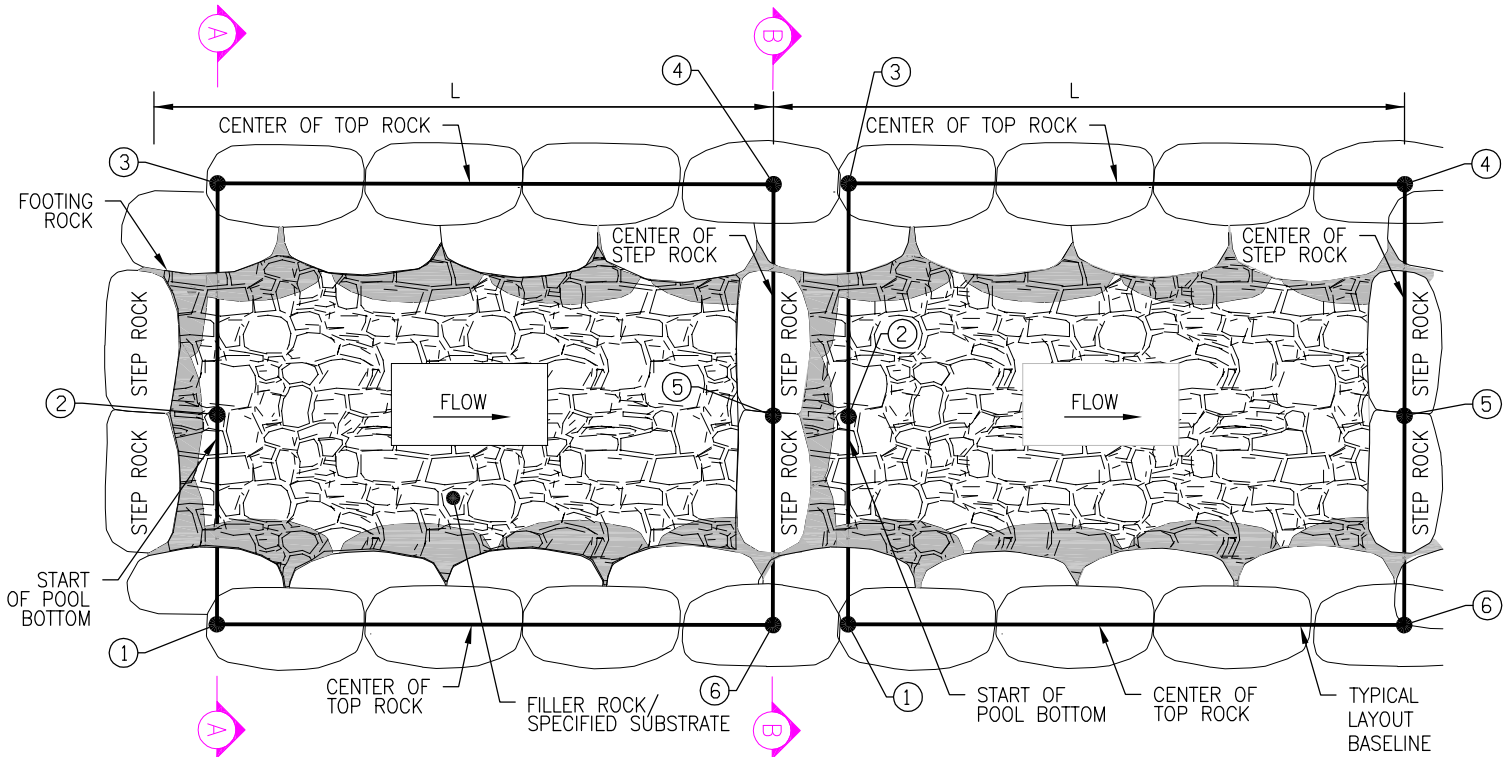
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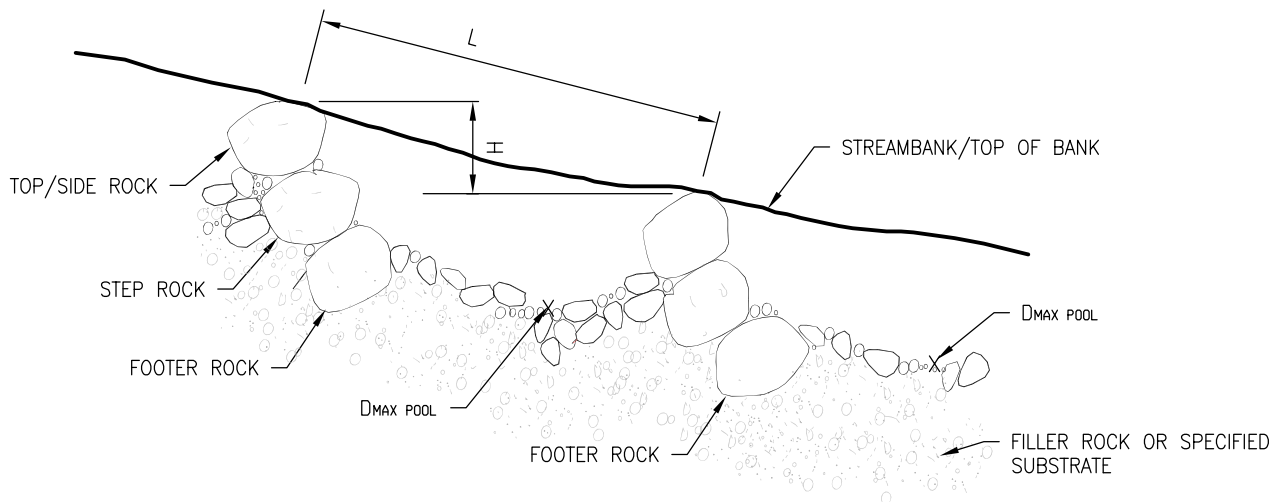
SHEET NO. 3 OF 3

PAGE NO. 60 OF 80

ROCK STEP POOL WITH BOULDER TOE - PLAN VIEW



ROCK STEP POOL WITH BOULDER TOE - PROFILE VIEW



GENERAL NOTES:

1. NO GAPS OR VOIDS WILL EXIST BETWEEN FOOTER, CASCADE, AND TOP ROCK.
2. FOOTER, CASCADE AND SIDE ROCKS EXTEND ALONG STREAMBANK BETWEEN ROCK STEPS TO CREATE A BOULDER TOE WALL ALONG STREAMBANK.
3. INSTALLATION OF GEOTEXTILE FABRIC MAY NEED TO BE CONSIDERED BASED UPON STREAM SLOPE, WET WEATHER CONDITIONS, AND OTHER ELEMENTS DETERMINED THROUGH SITE ASSESSMENT.

ROCK STEP POOL WITH BOULDER TOE

DRAWN BY: R. WASIK

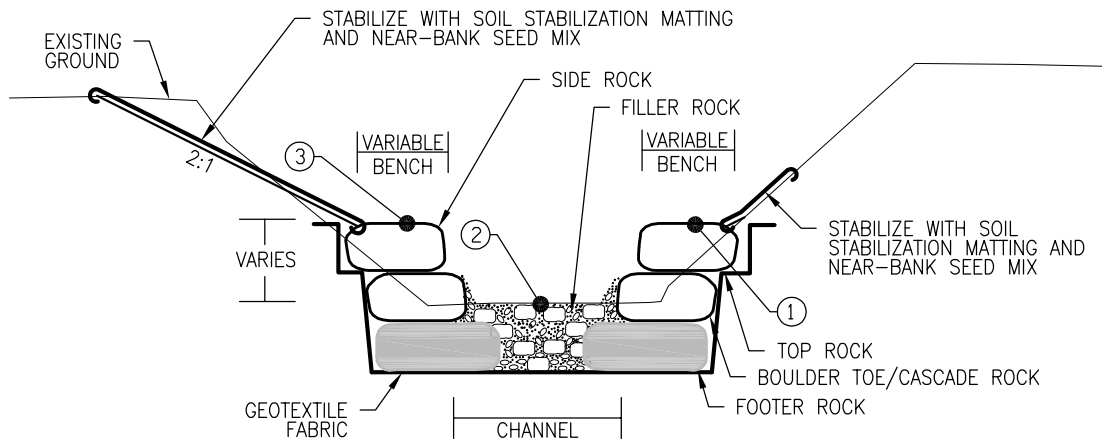
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NWP49 & NWP14 Applications | LRN #2018-00397 | OSMRE #3333

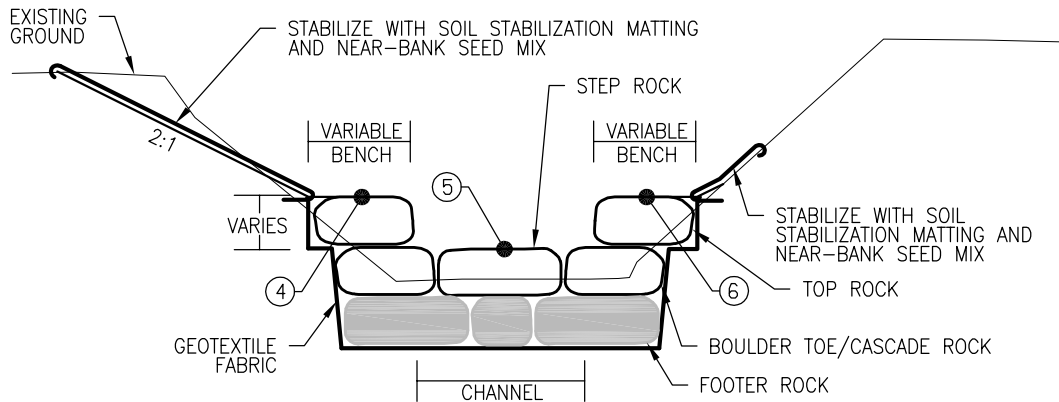
SHEET NO. 4 OF 5

PAGE NO. 68 OF 80

ROCK STEP POOL WITH BOULDER TOE - SECTION VIEW A-A



ROCK STEP POOL WITH BOULDER TOE - SECTION VIEW B-B



ROCK STEP POOL WITH BOULDER TOE

DRAWN BY: R. WASIK

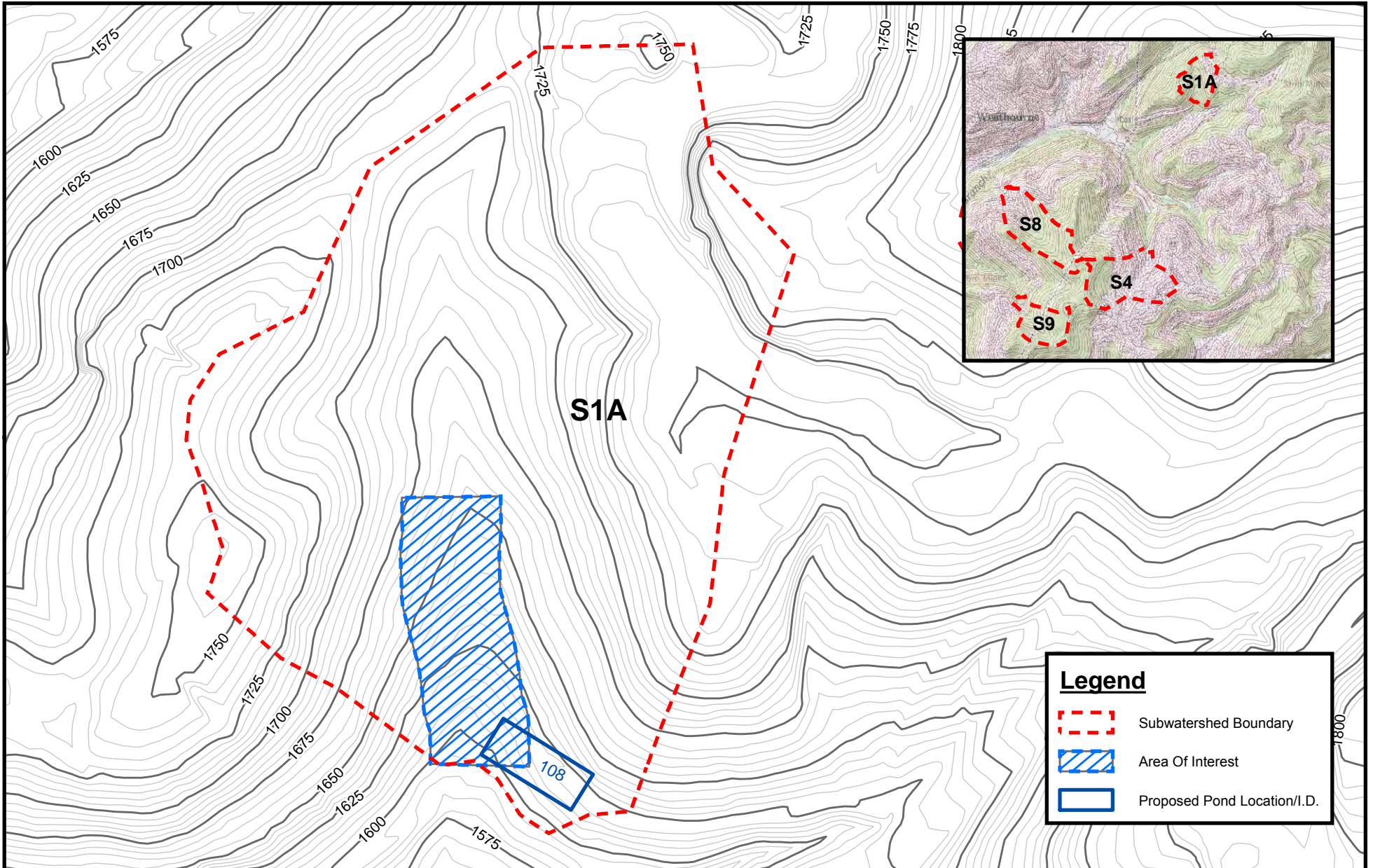
DATE: 9/8/15

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SHEET NO. 5 OF 5

PAGE NO. 69 OF 80

Appendix E
Stream 1A Restoration Design and Proposed HGM Score



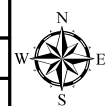
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BIOLOGICAL SYSTEMS CONSULTANTS, INC.
 P.O. Box 54954, Lexington, KY 40555
 (859) 263-4142

Prepared for:
Davis Creek Energy, LLC

Subwatersheds Map - S1A (Rich Mountain)

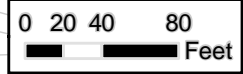
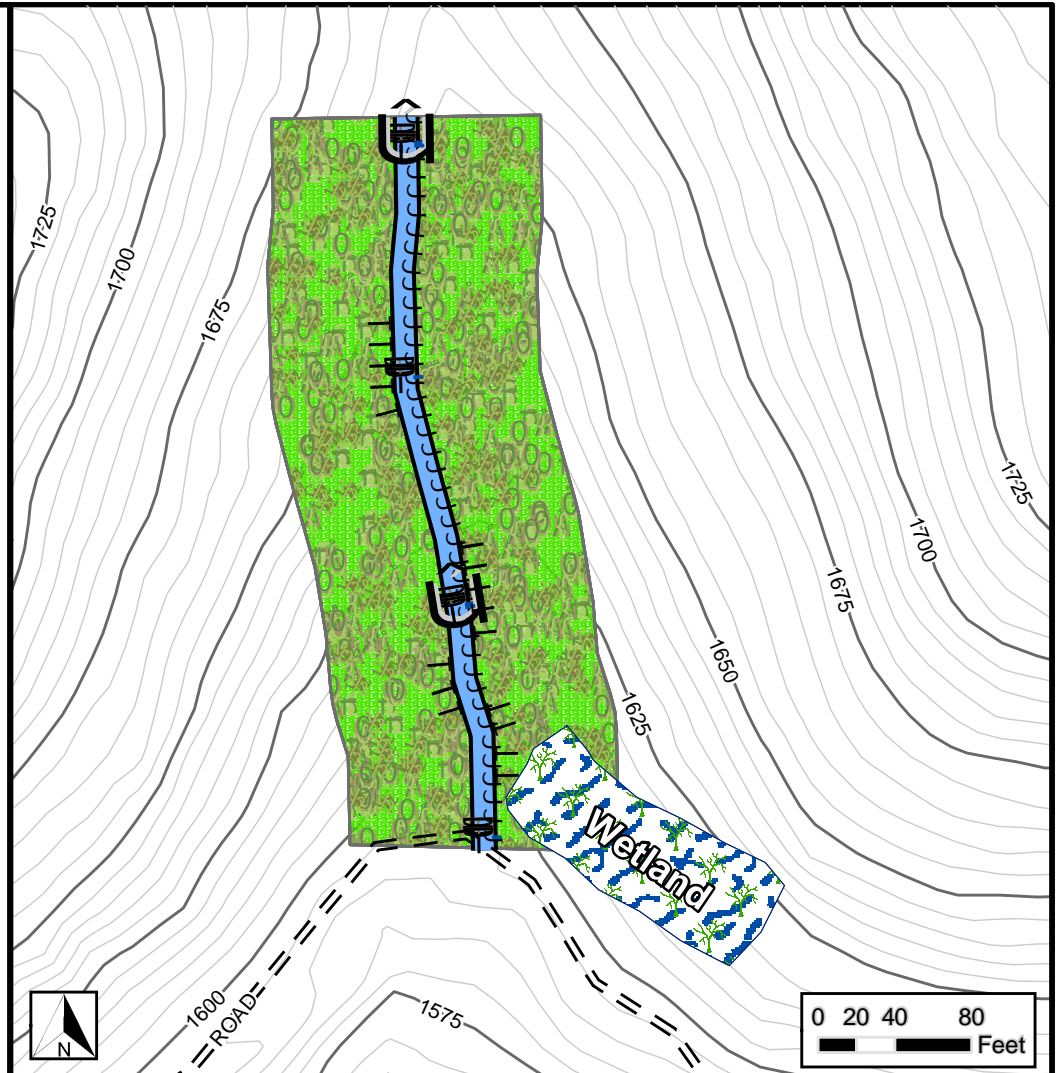
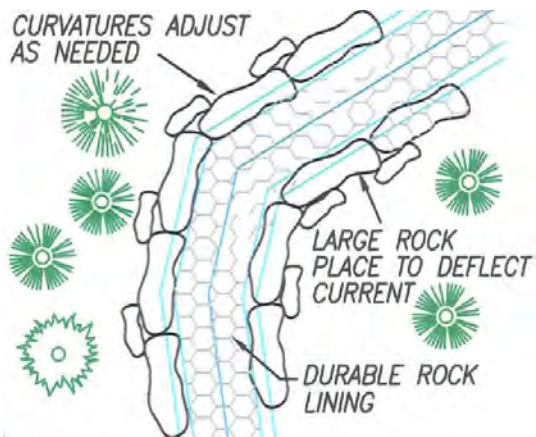
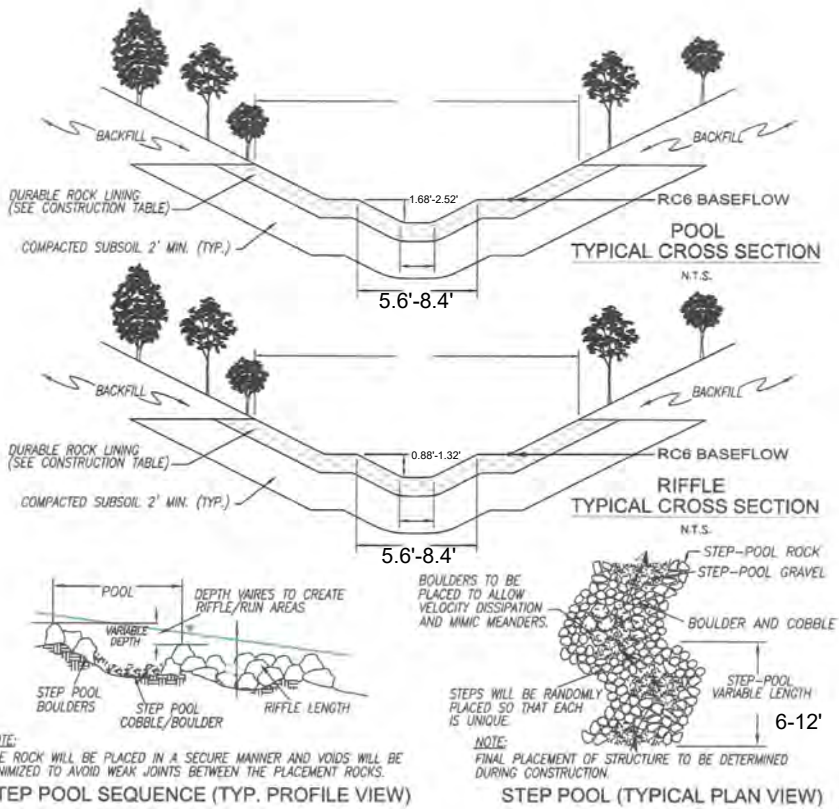
BSC#: 218091
 DATE: October 24, 2018
 Drawn By: BES



OSM#: Pending
 USACE#: LRN 2018-00397
 Checked By: JRR



Source: LaFollette, TN 7.5' USGS Topographic Quadrangles
 PCS: NAD 1983 StatePlane Tennessee FIPS 4100 Feet



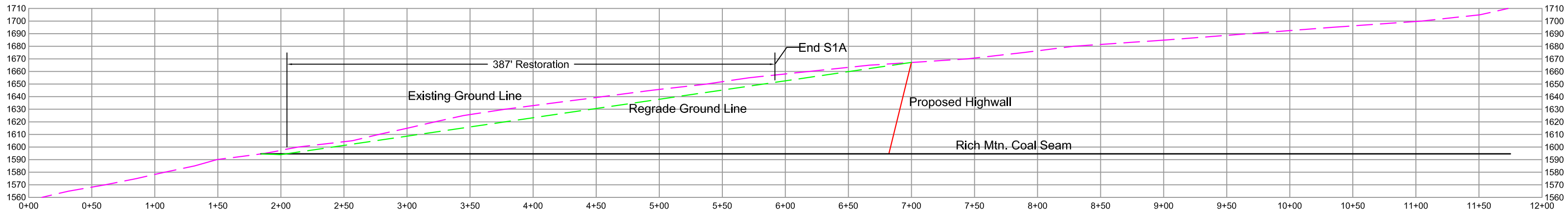
Legend

- Wetland Area
- 50' Riparian Zone
- Rock Deflector
- Riffle
- Rock Vane Structure
- Log Vane Structure

**S1A Planview
and Restoration Details**

BSC#: 218090	OSM#: 3333	Prepared by:	BIOLOGICAL SYSTEMS CONSULTANTS, INC. <small>P.O. Box 54954, Lexington, KY 40555 (859) 263-4142</small>
DATE: 07/03/19	USACE#: LRN 2018-00397	Prepared for:	
Drawn By: BES	Checked By: JRR	Davis Creek Energy, LLC	

S1A Profile and Restored Channel Schedule



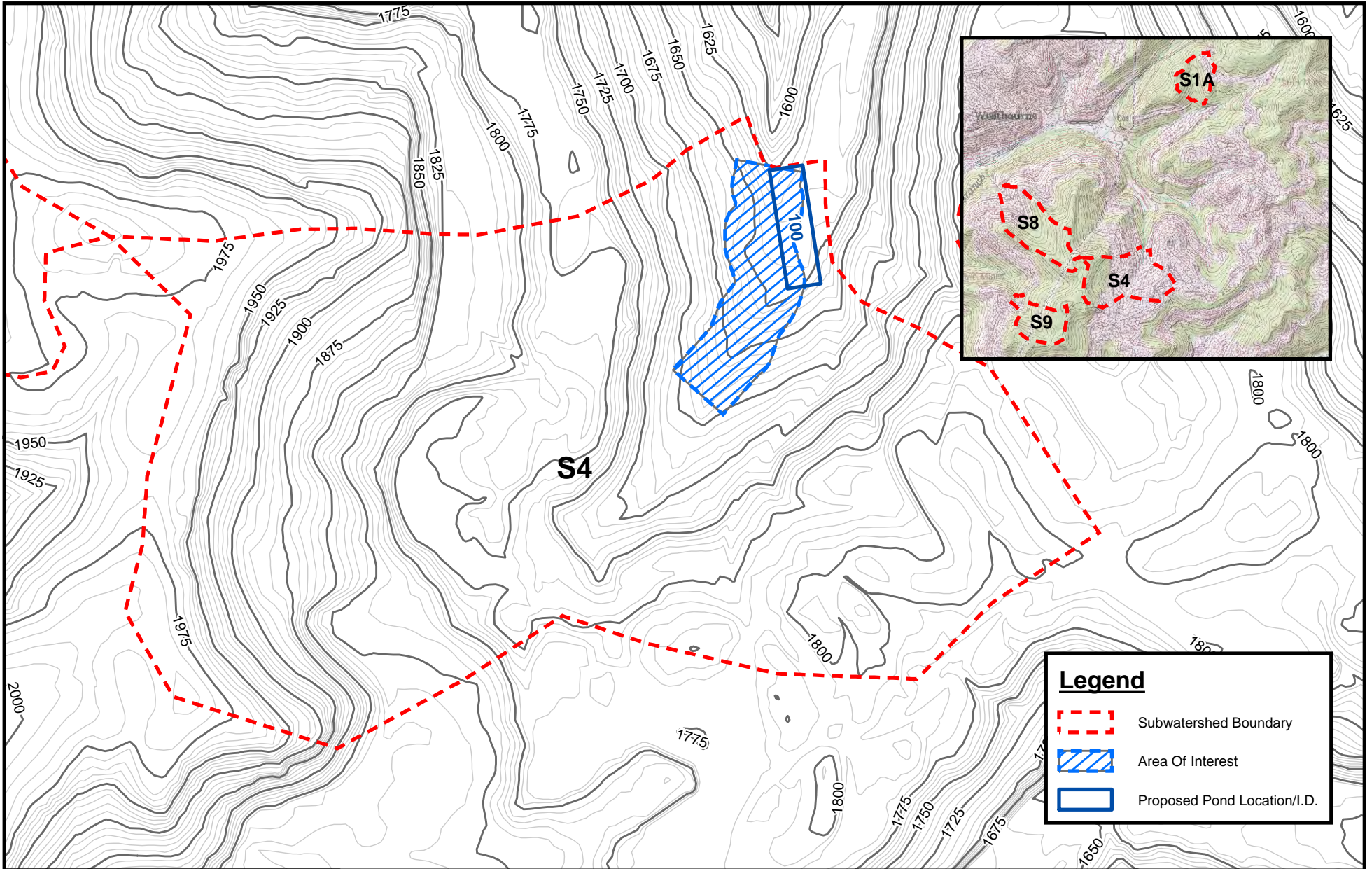
Restored Stream Channel Schedule and Summary Table for Rich Mountain Intermittent Stream Restoration

Longitudinal Profile			
CATEGORY	Proposed Range	Proposed Target	Reference Streams
<i>Proposed Restoration Length (ft)</i>	N/A	N/A	N/A
<i>Proposed Replacment Length (ft)</i>	N/A	N/A	N/A
<i>Average Channel Slope (%)</i>	12-18	15	15
<i>Average Length Riffles (ft)</i>	17.6-26.4	22	22
<i>Average Length Steps (ft)</i>	2.4-3.6	3	3
<i>Average Length Pools (ft)</i>	4.8-7.2	6	6
<i>Pool-Pool Spacing (ft)</i>	20-30	25	25
<i>Sinuosity (ft)</i>	0.88-1.32	1.1	1.1

Cross-section			
CATEGORY	Proposed Range	Proposed Target	Reference Streams
<i>Avg. Bankfull Width (Riffles) (ft)</i>	5.6-8.4	7	7
<i>Avg. Bankfull Width (Pools) (ft)</i>	5.6-8.4	7	7
<i>Cross-section Area (Riffles) (ft)</i>	6.4-9.6	8	8
<i>Cross-sectional Area (Pools) (ft)</i>	8.8-13.2	11	11
<i>Width/Depth Ratio</i>	5.12-7.68	6.40	6.40
<i>Mean Bankfull Depth (Riffles) (ft)</i>	0.88-1.32	1.1	1.1
<i>Max Bankfull Depth (Pools) (ft)</i>	1.68-2.52	2.1	2.1
<i>Entrenchment Ratio</i>	0.8-1.2	1.0	1.0

S1A Profile And Restored Channel Schedule			
BSC#: 218091	OSM#: 3333	Prepared by:	
DATE: 07/03/19	USACE#: LRN 2018-00397	Prepared for:	
Drawn By: BES	Checked By: JRR	Davis Creek Energy, LLC	

Appendix F
Stream 4 Restoration Design and Proposed HGM Score



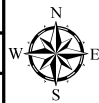
Prepared by:

BIOLOGICAL SYSTEMS CONSULTANTS, INC.
 P.O. Box 54954, Lexington, KY 40555
 (859) 263-4142

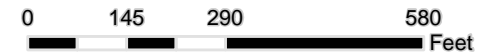
Prepared for:
Davis Creek Energy, LLC

Subwatersheds Map - S4 (Rich Mountain)

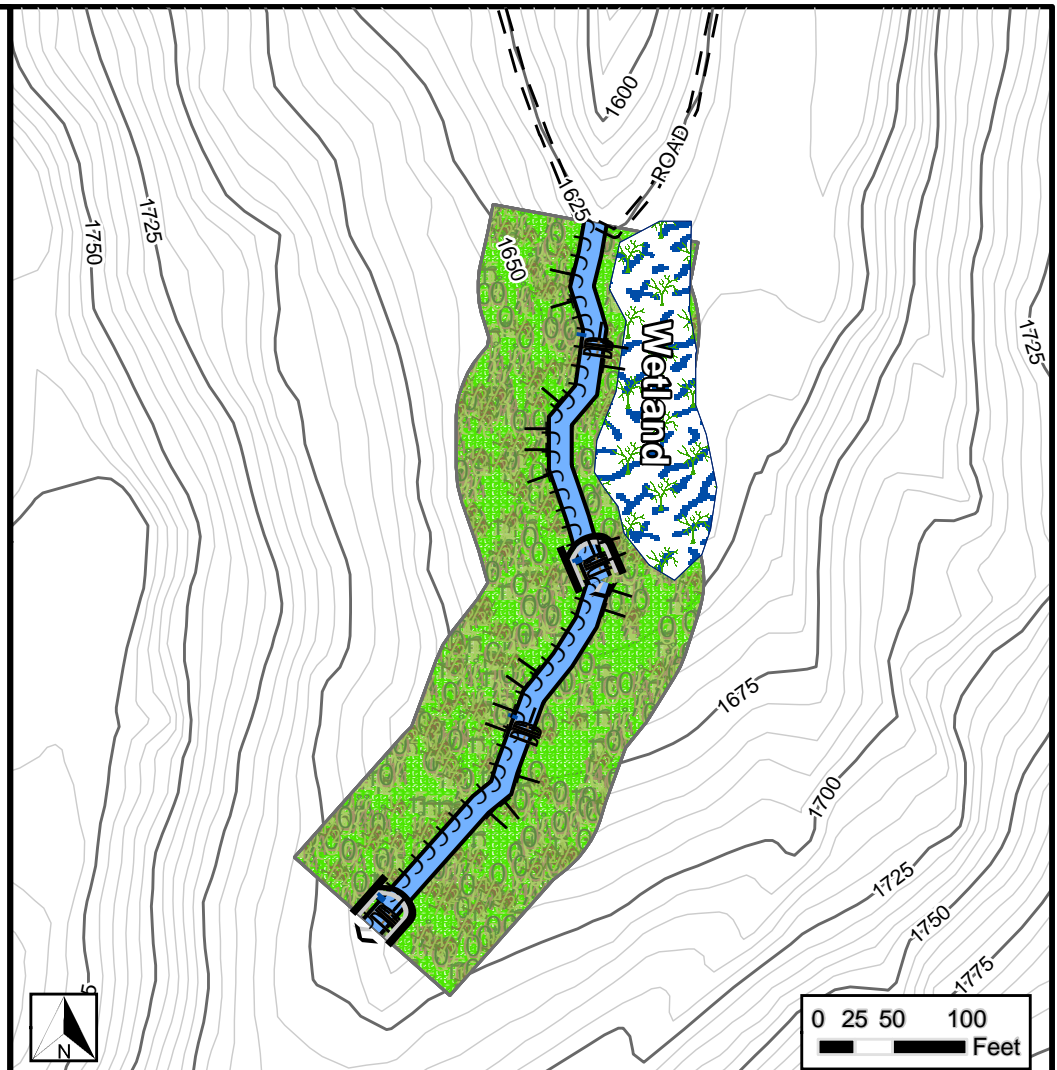
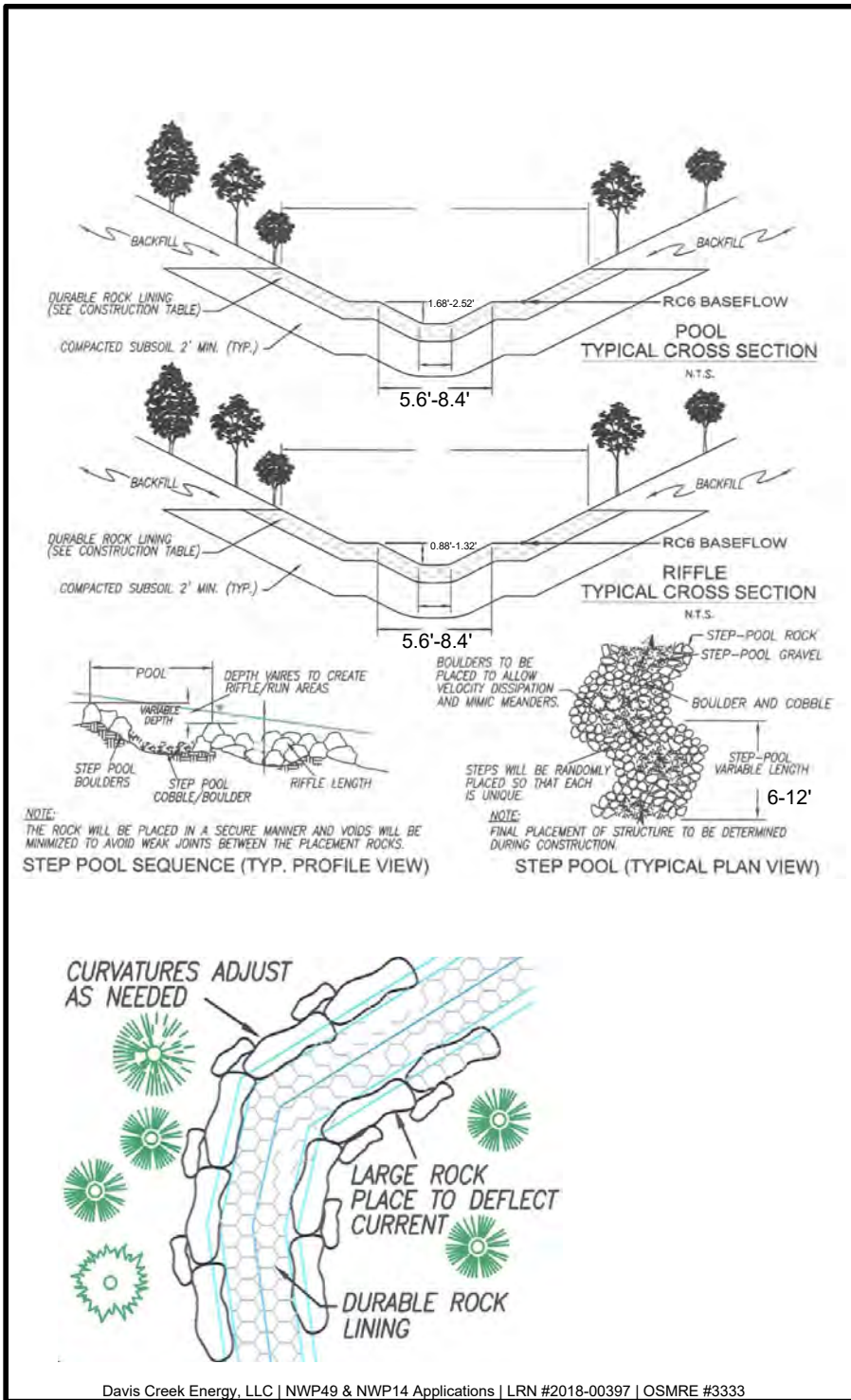
BSC#: 218091
 DATE: October 24, 2018
 Drawn By: BES



OSM#: Pending
 USACE#: LRN 2018-00397
 Checked By: JRR



Source: LaFollette, TN 7.5' USGS Topographic Quadrangles
 PCS: NAD 1983 StatePlane Tennessee FIPS 4100 Feet

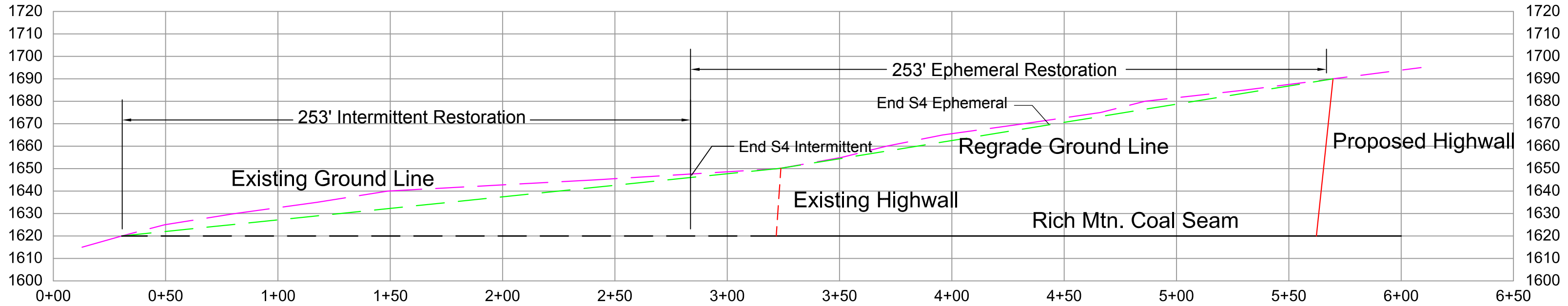


Legend			
	Wetland Area		Rock Deflector
	50' Riparian Zone		Riffle
	Rock Vane Structure		Log Vane Structure

S4 Planview and Restoration Details

BSC#: 218090	OSM#: 3333	Prepared by:	 BIOLOGICAL SYSTEMS CONSULTANTS, INC. P.O. Box 54954, Lexington, KY 40555 (859) 263-4142
DATE: 07/03/19	USACE#: LRN 2018-00397	Prepared for:	
Drawn By: BES	Checked By: JRR	Davis Creek Energy, LLC	

S4 Profile and Restored Channel Schedule




Restored Stream Channel Schedule and Summary Table for Rich Mountain Intermittent and Ephemeral Stream Restoration

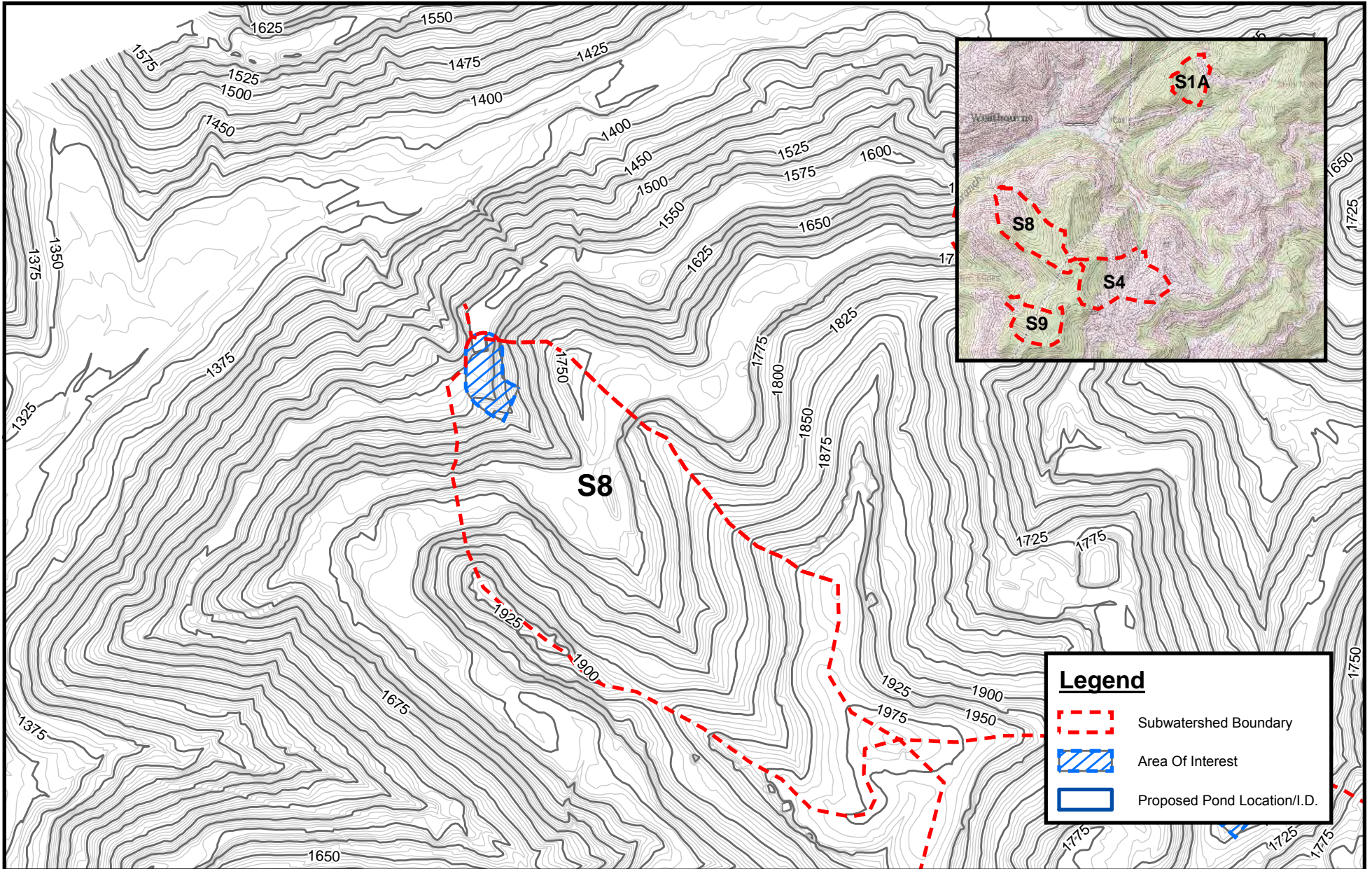
Longitudinal Profile			
CATEGORY	Proposed Range	Proposed Target	Reference Streams
Proposed Restoration Length (ft)	N/A	N/A	N/A
Proposed Replacment Length (ft)	N/A	N/A	N/A
Average Channel Slope (%)	12-18	15	15
Average Length Riffles (ft)	17.6-26.4	22	22
Average Length Steps (ft)	2.4-3.6	3	3
Average Length Pools (ft)	4.8-7.2	6	6
Pool-Pool Spacing (ft)	20-30	25	25
Sinuosity (ft)	0.88-1.32	1.1	1.1

Cross-section			
CATEGORY	Proposed Range	Proposed Target	Reference Streams
Avg. Bankfull Width (Riffles) (ft)	5.6-8.4	7	7
Avg. Bankfull Width (Pools) (ft)	5.6-8.4	7	7
Cross-section Area (Riffles) (ft)	6.4-9.6	8	8
Cross-sectional Area (Pools) (ft)	8.8-13.2	11	11
Width/Depth Ratio	5.12-7.68	6.40	6.40
Mean Bankfull Depth (Riffles) (ft)	0.88-1.32	1.1	1.1
Max Bankfull Depth (Pools) (ft)	1.68-2.52	2.1	2.1
Entrenchment Ratio	0.8-1.2	1.0	1.0




S4 Profile and Restored Channel Schedule

BSC#: 218091	OSM#: 3333	Prepared by:  P.O. Box 54854, Lexington, KY 40555 (859) 283-4142
DATE: 07/03/19	USACE#: LRN 2018-00397	
Drawn By: BES	Checked By: JRR	
		Prepared for: Davis Creek Energy, LLC

Appendix G
Stream 8 Restoration Design and Proposed HGM Score



Legend

-  Subwatershed Boundary
-  Area Of Interest
-  Proposed Pond Location/I.D.

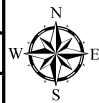
Prepared by:

BIOLOGICAL SYSTEMS CONSULTANTS, INC.
 P.O. Box 54954, Lexington, KY 40555
 (859) 263-4142

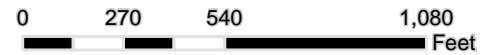
Prepared for:
Davis Creek Energy, LLC

Subwatersheds Map - S8 (Rich Mountain)

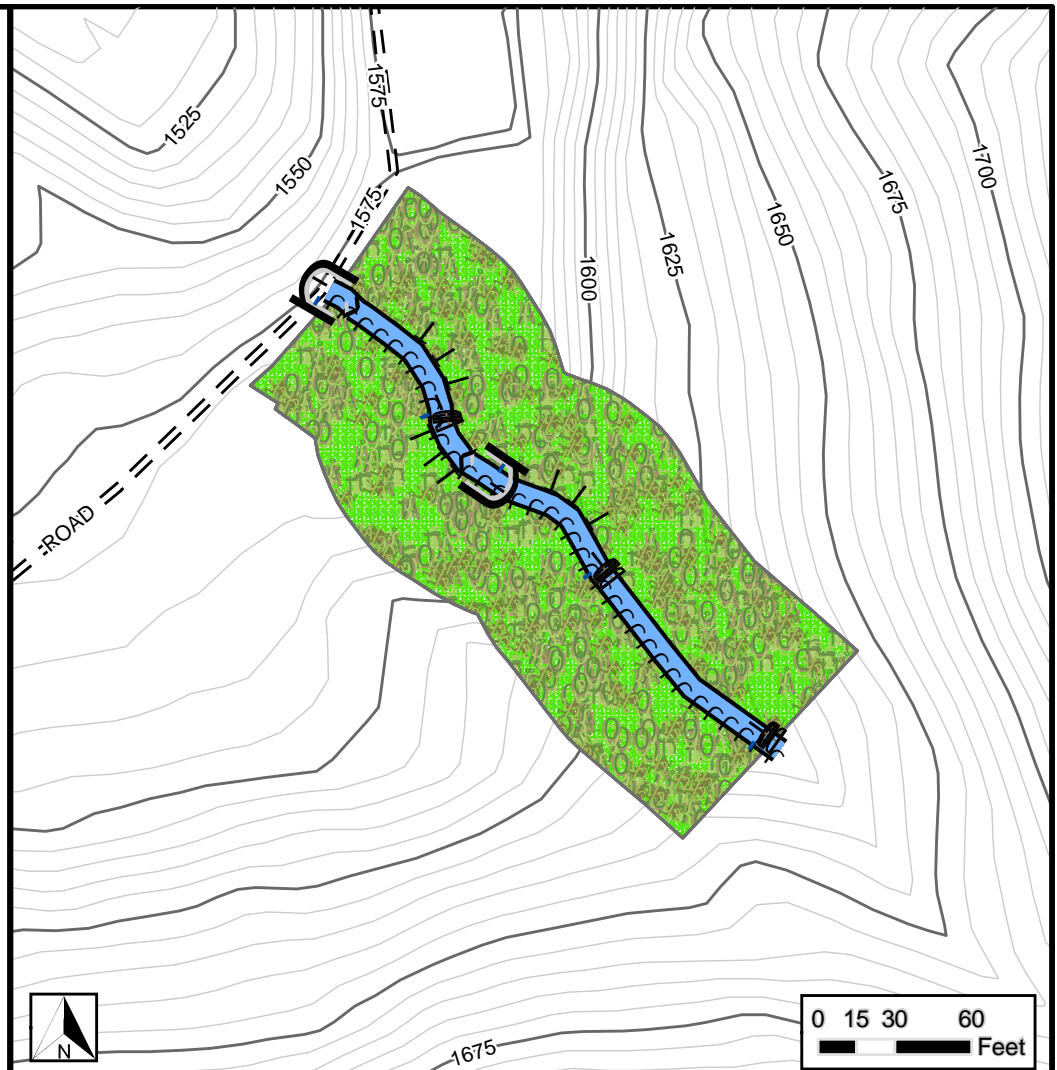
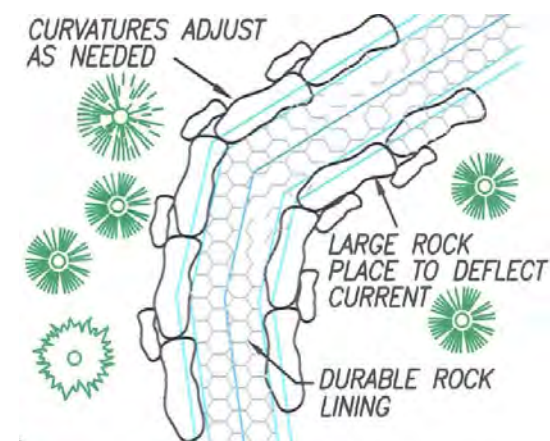
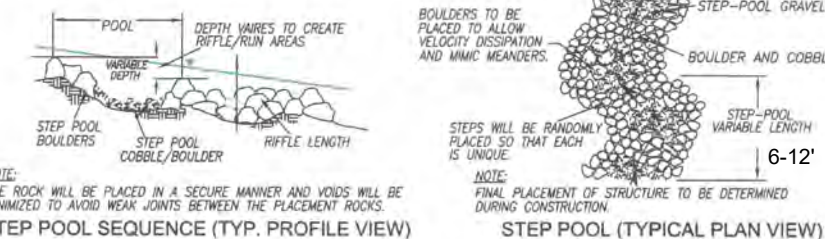
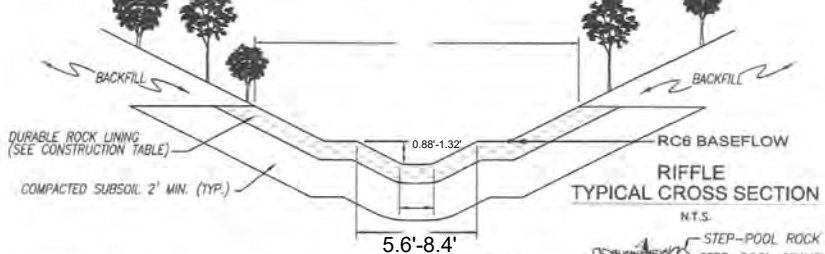
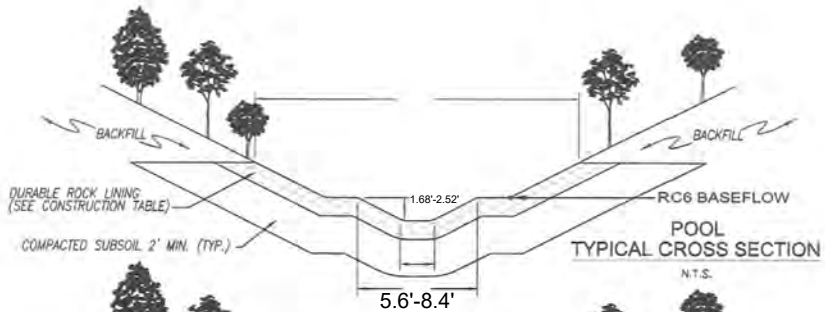
BSC#: 218091
 DATE: October 24, 2018
 Drawn By: BES



OSM#: Pending
 USACE#: LRN 2018-00397
 Checked By: JRR



Source: LaFollette, TN 7.5' USGS Topographic Quadrangles
 PCS: NAD 1983 StatePlane Tennessee FIPS 4100 Feet



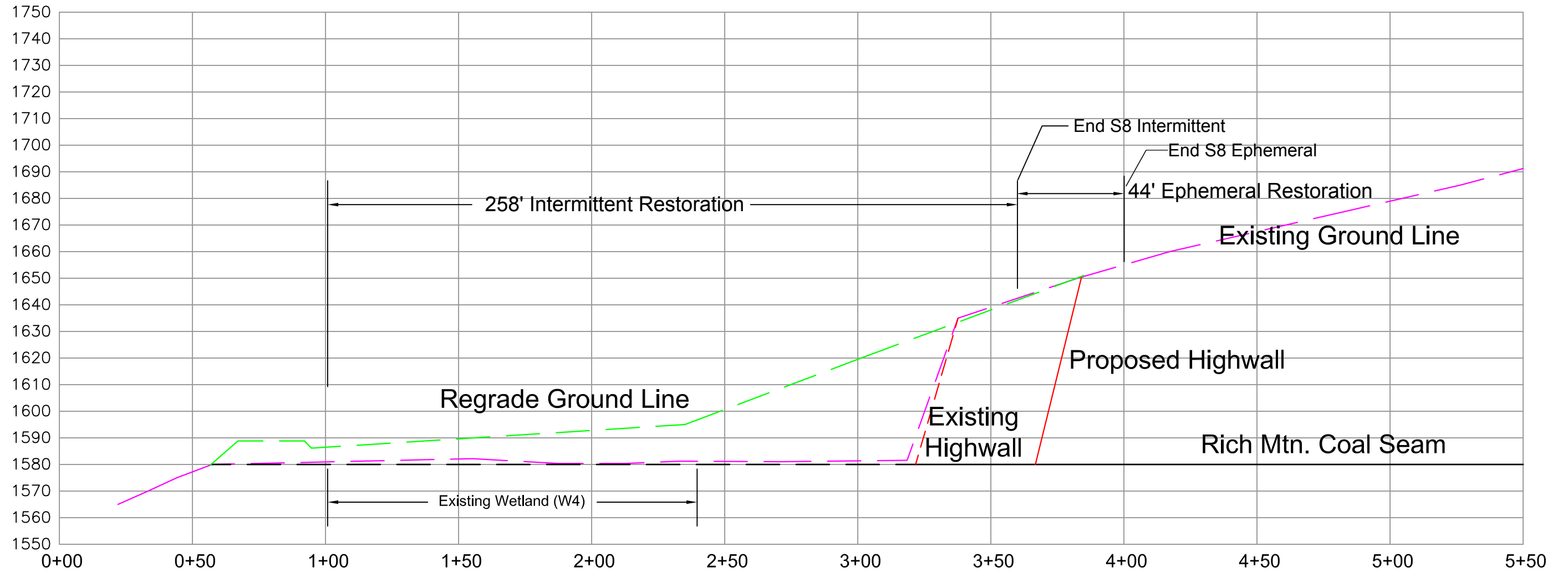
Legend

- 50' Riparian Zone
- Riffle
- Log Vane Structure
- Rock Deflector
- Rock Vane Structure

S8 Planview and Restoration Details

BSC#: 218090	OSM#: 3333	Prepared by:	 BIOLOGICAL SYSTEMS CONSULTANTS, INC. <small>P.O. Box 54954, Lexington, KY 40555 (859) 263-4142</small>
DATE: 07/03/19	USACE#: LRN 2018-00397		
Drawn By: BES	Checked By: JRR	Prepared for:	Davis Creek Energy, LLC


S8 Profile and Restored Channel Schedule



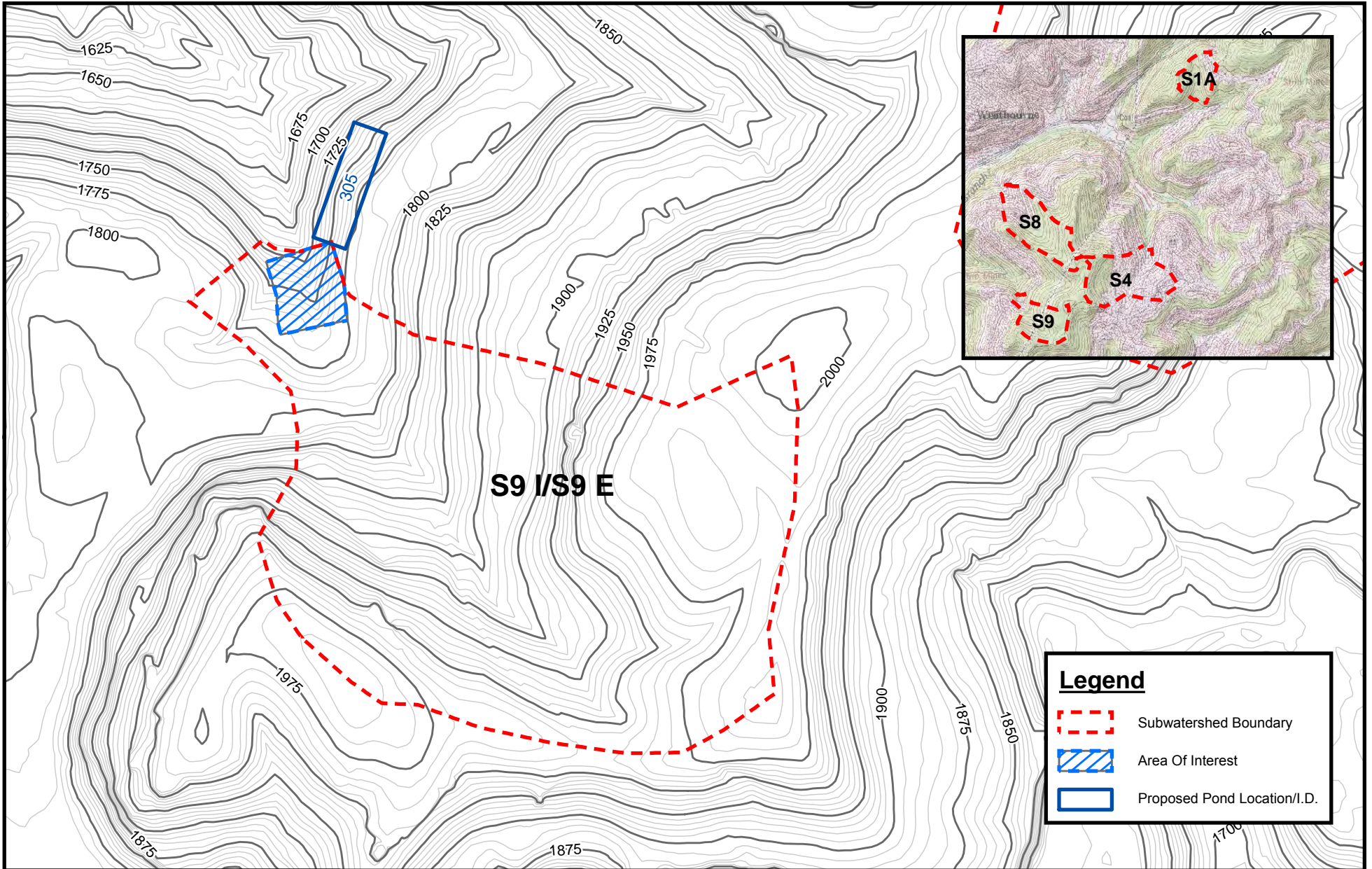
Restored Stream Channel Schedule and Summary Table for Rich Mountain Intermittent and Ephemeral Stream Restoration

Longitudinal Profile			
CATEGORY	Proposed Range	Proposed Target	Reference Streams
<i>Proposed Restoration Length (ft)</i>	N/A	N/A	N/A
<i>Proposed Replacment Length (ft)</i>	N/A	N/A	N/A
<i>Average Channel Slope (%)</i>	12-18	15	15
<i>Average Length Riffles (ft)</i>	17.6-26.4	22	22
<i>Average Length Steps (ft)</i>	2.4-3.6	3	3
<i>Average Length Pools (ft)</i>	4.8-7.2	6	6
<i>Pool-Pool Spacing (ft)</i>	20-30	25	25
<i>Sinuosity (ft)</i>	0.88-1.32	1.1	1.1




Cross-section			
CATEGORY	Proposed Range	Proposed Target	Reference Streams
<i>Avg. Bankfull Width (Riffles) (ft)</i>	5.6-8.4	7	7
<i>Avg. Bankfull Width (Pools) (ft)</i>	5.6-8.4	7	7
<i>Cross-section Area (Riffles) (ft)</i>	6.4-9.6	8	8
<i>Cross-sectional Area (Pools) (ft)</i>	8.8-13.2	11	11
<i>Width/Depth Ratio</i>	5.12-7.68	6.40	6.40
<i>Mean Bankfull Depth (Riffles) (ft)</i>	0.88-1.32	1.1	1.1
<i>Max Bankfull Depth (Pools) (ft)</i>	1.68-2.52	2.1	2.1
<i>Entrenchment Ratio</i>	0.8-1.2	1.0	1.0

S8 Profile and Restored Channel Schedule			
BSC#: 218091	OSM#: Pending	Prepared by:	 BIOLOGICAL SYSTEMS CONSULTANTS, INC.
DATE: 07/03/19	USACE#: LRN 2018-00397	Prepared for:	
Drawn By: BES	Checked By: JRR	Davis Creek Energy, LLC	

Appendix H
Stream 9 Restoration Design and Proposed HGM Scores



Legend

-  Subwatershed Boundary
-  Area Of Interest
-  Proposed Pond Location/I.D.


Prepared by:

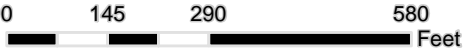
BIOLOGICAL SYSTEMS CONSULTANTS, INC.
 P.O. Box 54954, Lexington, KY 40555
 (859) 263-4142

Prepared for:
Davis Creek Energy, LLC

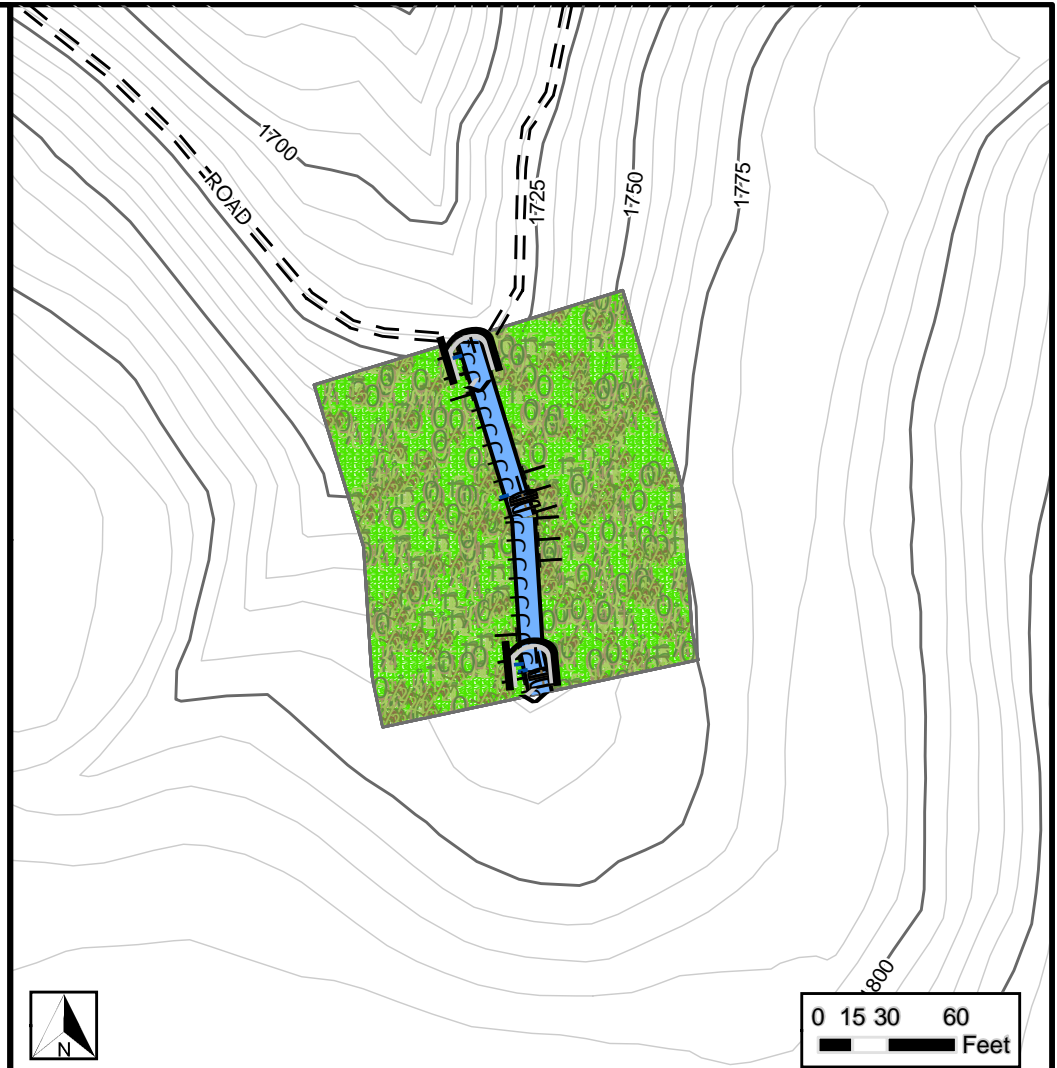
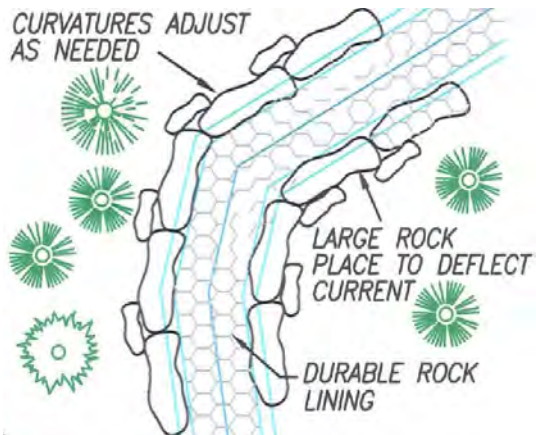
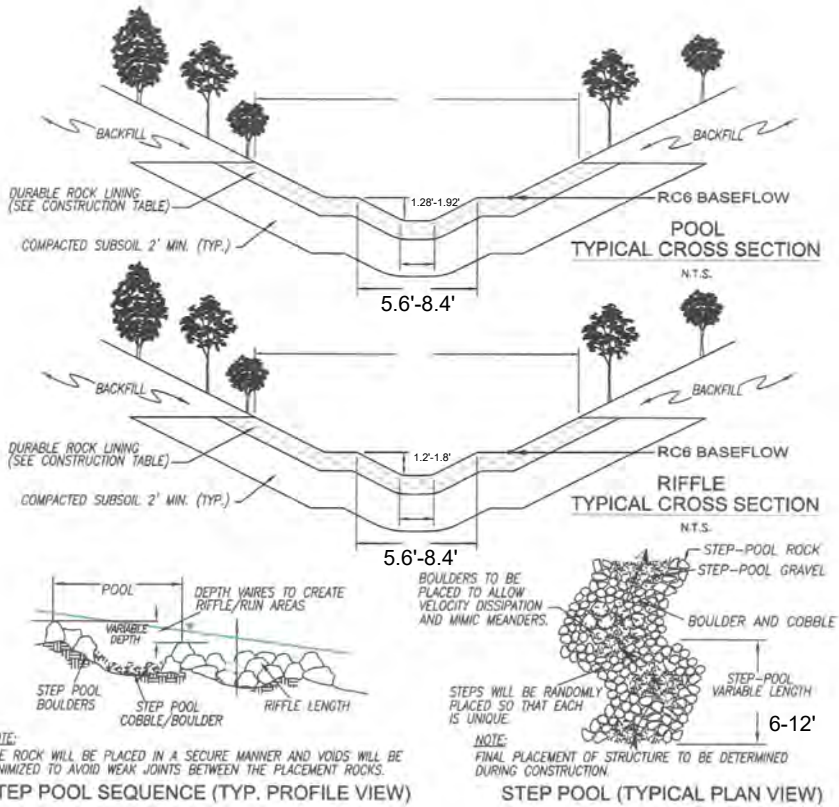
Davis Creek Energy, LLC | NWP49 & NWP14 Applications | EBN #2018-00397 | OSMRE #3333

Subwatersheds Map - S9 (Log Mountain)

BSC#: 218091		OSM#: Pending
DATE: October 24, 2018		USACE#: LRN 2018-00397
Drawn By: BES		Checked By: JRR



Source: LaFollette, TN 7.5' USGS Topographic Quadrangles
 PCS: NAD 1983 StatePlane Tennessee FIPS 4100 Feet



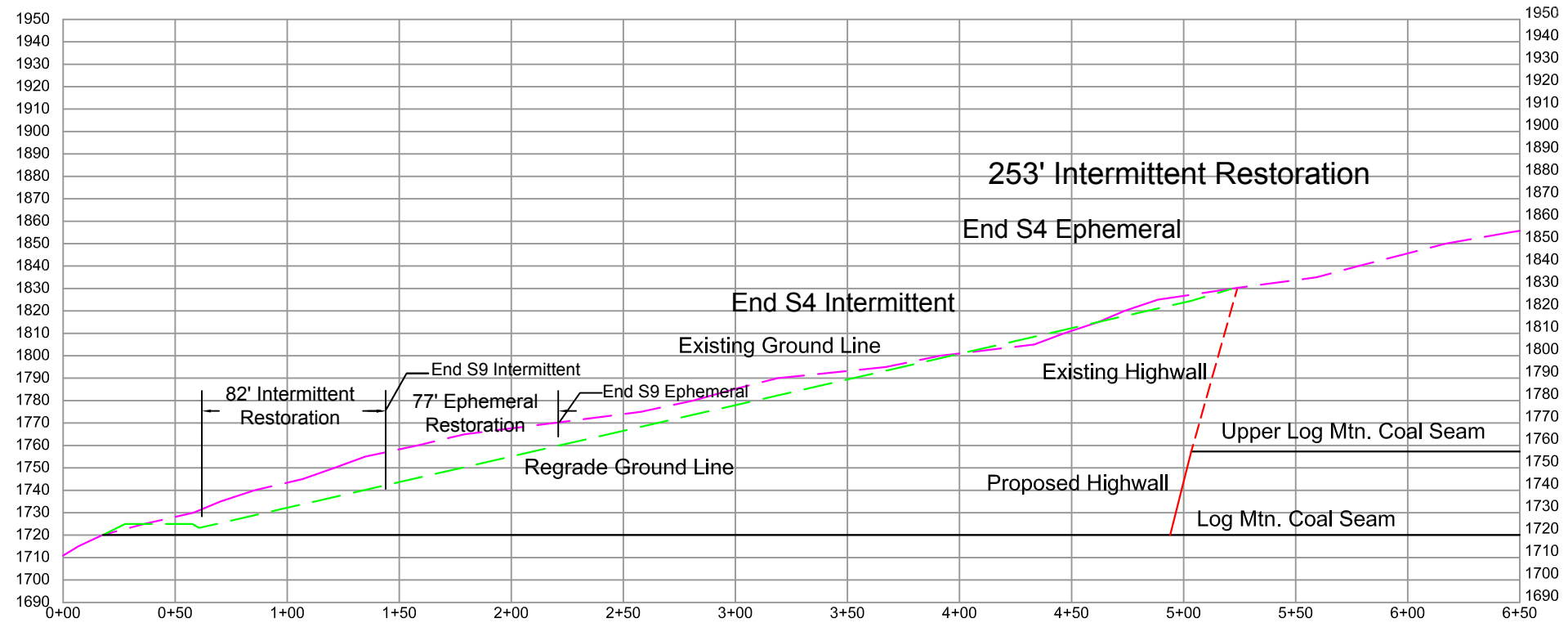
Legend

- Wetland Area
- 50' Riparian Zone
- TTTT Rock Deflector
- Riffle
- Rock Vane Structure
- Log Vane Structure

**S9 Planview
and Restoration Details**

BSC#: 218090	OSM#: 3333	Prepared by:
DATE: 07/03/19	USACE#: LRN 2018-00397	BIOLOGICAL SYSTEMS CONSULTANTS, INC. <small>P.O. Box 54954, Lexington, KY 40555 (859) 263-4142</small>
Drawn By: BES	Checked By: JRR	


S9 Profile and Restored Channel Schedule



Restored Stream Channel Schedule and Summary Table for Rich Mountain Intermittent and Ephemeral Stream Restoration

Longitudinal Profile			
CATEGORY	Proposed Range	Proposed Target	Reference Streams
<i>Proposed Restoration Length (ft)</i>	N/A	N/A	N/A
<i>Proposed Replacment Length (ft)</i>	N/A	N/A	N/A
<i>Average Channel Slope (%)</i>	30.4-45.6	38	31
<i>Average Length Riffles (ft)</i>	75.2-112.8	94	94
<i>Average Length Steps (ft)</i>	2.4-3.6	3	3
<i>Average Length Pools (ft)</i>	4.8-7.2	6	6
<i>Pool-Pool Spacing (ft)</i>	20-30	25	25
<i>Sinuosity (ft)</i>	0.88-1.32	1.1	1.1

Cross-section			
CATEGORY	Proposed Range	Proposed Target	Reference Streams
<i>Avg. Bankfull Width (Riffles) (ft)</i>	2.4-3.6	3	3
<i>Avg. Bankfull Width (Pools) (ft)</i>	4-6	5	5
<i>Cross-section Area (Riffles) (ft)</i>	3.2-4.8	4	4
<i>Cross-sectional Area (Pools) (ft)</i>	6.4-9.6	8	8
<i>Width/Depth Ratio</i>	1.6-2.4	2.00	2.00
<i>Mean Bankfull Depth (Riffles) (ft)</i>	1.2-1.8	1.5	1.5
<i>Max Bankfull Depth (Pools) (ft)</i>	1.28-1.92	1.6	1.6
<i>Entrenchment Ratio</i>	0.8-1.2	1.0	1.0

S9 Profile and Restored Channel Schedule			
BSC#: 218091	OSM#: Pending	Prepared by:	
DATE: 07/03/19	USACE#: LRN 2018-00397	 BIOLOGICAL SYSTEMS CONSULTANTS, INC. <small>P.O. Box 54854, Lexington, KY 40555 (859) 253-4142</small>	
Drawn By: BES	Checked By: JRR	Prepared for: Davis Creek Energy, LLC	

Appendix I
Riparian Zone Revegetation Information

Suggested Riparian Species List

The species on list are only suggestions. Native species that are appropriate for a given site may be proposed.

Tree Species

Pin Oak	<i>Quercus palustris</i>
Cherrybark Oak	<i>Quercus pagoda</i>
Bur Oak	<i>Quercus macrocarpa</i>
Swamp Chestnut Oak	<i>Quercus michauxii</i>
Shingle Oak	<i>Quercus imbricaria</i>
Northern Red Oak	<i>Quercus rubra</i>
Post Oak	<i>Quercus stellata</i>
Red Maple	<i>Acer rubrum</i>
Green Ash	<i>Fraxinus pennsylvanica</i>
Shellbark Hickory	<i>Carya laciniosa</i>
Blackgum	<i>Nyssa sylvatica</i>
American Elm	<i>Ulmus americana</i>
Eastern Cottonwood	<i>Populus deltoides</i>
Black Walnut	<i>Juglans nigra</i>
River Birch	<i>Betula nigra</i>
Yellow Poplar	<i>Liriodendron tulipifera</i>
Persimmon	<i>Diospyros virginiana</i>
Black Walnut	<i>Juglans nigra</i>
Ohio Buckeye	<i>Aesculus glabra</i>
Sugar Maple	<i>Acer saccharum</i>
Sycamore	<i>Plantanus occidentalis</i>
Persimmon	<u><i>Diospyros virginiana</i></u>

Shrubs

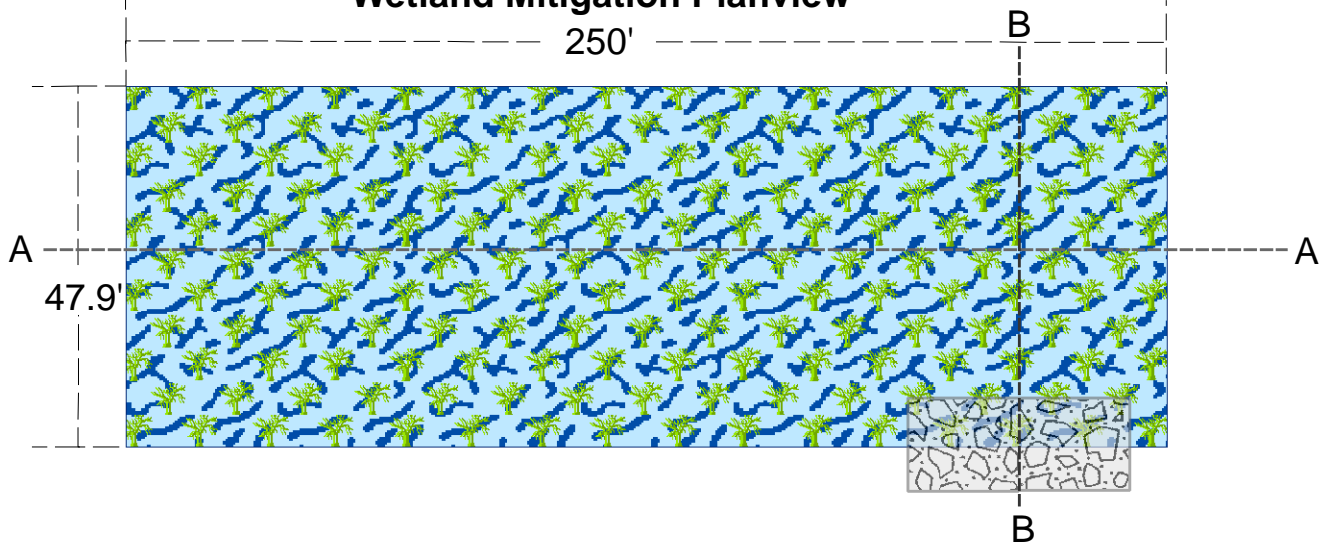
Arrow-wood	<i>Viburnum dentatum</i>
American Plum	<i>Prunus americana</i>
Deciduous Holly	<i>Ilex decidua</i>
Gray Dogwood	<i>Cornus racemosa</i>
Silky Dogwood	<i>Cornus amomun</i>
Spicebush	<i>Lindera benzoin</i>
Sassafras	<i>Sassafras albinum</i>
American Elder	<i>Sambucus canadensis</i>
Button Bush	<i>Cephalanthus occidentalis</i>
River Cane	<i>Arundinaria gigantea</i>
Coralberry	<i>Symphoricarpos orbiculatus</i>

Herbaceous Species

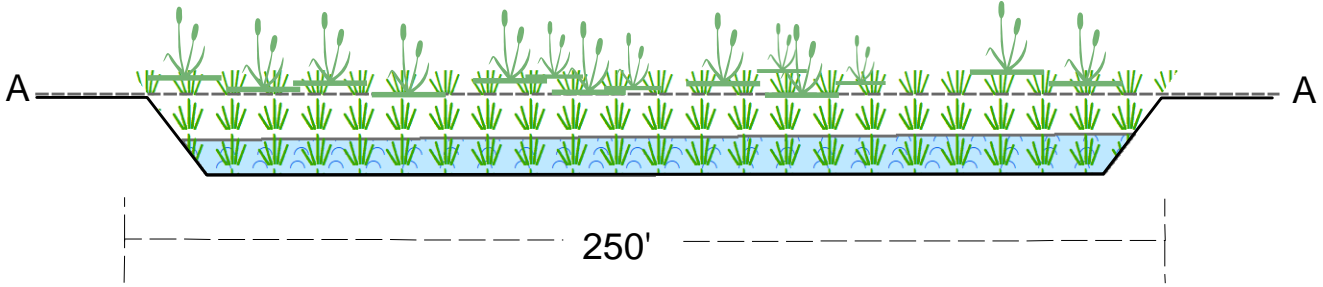
Rice cutgrass	<i>Leersia oryzoides</i>
Managrass	<i>Glyceria striata</i>
Spangle grass	<i>Chasmanthium latifolium</i>
Switchgrass	<i>Panicum virgatum</i>
Annual rye	<i>Secale cereale</i>
Wild rye	<i>Elymus virginicus</i>
Deertongue grass	<i>Panicum clandestinum</i>
Panic grass	<i>Panicum microcarpon</i>
Giant Cane Bambo	<i>Arundinaria gigantea</i>
Boneset	<i>Eupatorium perfoliatum</i>
Big Bluestem	<i>Andropogon gerardii</i>
Prairie cordgrass	<i>Spartina pectinata</i>
Water Plantain	<i>Alisima subcordatum</i>
Common Milkweed	<i>Asclepias syriaca</i>
Beggar's Ticks	<i>Biden polyeps</i>
Canada Brome	<i>Bromus pubescens</i>
American Bellflower	<i>Campanula americana</i>
Frank's Sedge	<i>Carex frankii</i>
Sedge	<i>Carex granularis</i>
Shallow Sedge	<i>Carex lurida</i>
Hop Sedge	<i>Carex lupulina</i>
River Oats	<i>Chasmanthium latifolium</i>
Riverbank Wild rye	<i>Elymus riparius</i>
Downy Wild rye	<i>Elymus villosus</i>
Joe-pie Weed	<i>Eupatorium maculatum</i>
Fowl Manna Grass	<i>Glyceria striata</i>
Rush	<i>Juncus sp.</i>
Western Panic grass	<i>Panicum acuminatum</i>
Switchgrass	<i>Panicum virginica</i>
Foxglove Beardtongue	<i>Penstemon digitalis</i>
Leafcup	<i>Polymnia canadensis</i>
Brown-eyed Susan	<i>Rudbeckia triloba</i>
Dark Green Bulrush	<i>Scirpus cyprinus</i>
Yellow Wingstem	<i>Verbesina alternafolia</i>
White Wingstem	<i>Verbesina virginica</i>

Appendix J
Wetland Design Drawings and Proposed TRAM Score

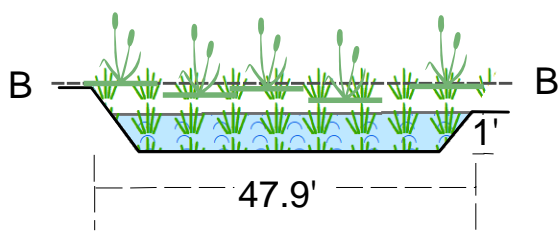
Wetland Mitigation Planview







Wetland Mitigation Cross Section A



Wetland Mitigation Cross Section B



Legend

-  Wetland Mitigation Area
-  Wetland Plants
-  Water Level
-  Spillway

Prepared By:



Prepared For:

DAVIS CREEK ENERGY, LLC

Wetland Mitigation Design

OSMRE#: Pending	BSC#: 218091
DATE: Oct 30, 2018	SCALE: Not to Scale
DRAWN BY: BES	CHECKED BY: JRR

Note: Drawing is for illustration purposes only. Exact locations of wetland features and vegetation may vary.



US Army Corps
of Engineers®

Nashville District

2017 Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

2017 Nationwide Permits Regional and Permit-Specific Conditions COMMONWEALTH OF KENTUCKY

These regional conditions are in addition to, but do not supersede, the requirements in the Federal Register (Volume 82, No. 4 of January 6, 2017, pp 1860).

Notifications for all Nationwide Permits (NWPs) shall be in accordance with General Condition No. 32.

1. For activities that would impact Outstanding State or National Resource Waters (OSNRWs), Exceptional Waters (EWs), Coldwater Aquatic Habitat Waters (CAHs) under the Endangered Species Act for the NWPs listed below, a Pre-Construction Notification (PCN) will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWPs (Section 404 activities), for impacts to these waters.

- NWP 3 (Maintenance)
- NWP 4 (Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities)
- NWP 5 (Scientific Measurement Devices)
- NWP 6 (Survey Activities)
- NWP 7 (Outfall Structures and Associated Intake Structures)
- NWP 12 (Utility Line Activities)
- NWP 13 (Bank Stabilization)
- NWP 14 (Linear Transportation Projects)
- NWP 15 (U.S. Coast Guard Approved Bridges)
- NWP 16 (Return Water from Upland Contained Disposal Areas)
- NWP 17 (Hydropower Projects)
- NWP 18 (Minor Discharges)
- NWP 19 (Minor Dredging)
- NWP 20 (Response Operations for Oil or Hazardous Substances)
- NWP 21 (Surface Coal Mining Activities)
- NWP 22 (Removal of Vessels)
- NWP 23 (Approved Categorical Exclusions)
- NWP 25 (Structural Discharges)
- NWP 27 (Aquatic Habitat Restoration, Establishment, and Enhancement Activities)
- NWP 29 (Residential Developments)
- NWP 30 (Moist Soil Management for Wildlife)
- NWP 31 (Maintenance of Existing Flood Control Facilities)
- NWP 32 (Completed Enforcement Actions)
- NWP 33 (Temporary Construction, Access, and Dewatering)
- NWP 34 (Cranberry Production Activities)
- NWP 36 (Boat Ramps)
- NWP 37 (Emergency Watershed Protection and Rehabilitation)
- NWP 38 (Cleanup of Hazardous and Toxic Waste)
- NWP 39 (Commercial and Institutional Developments)
- NWP 40 (Agricultural Activities)

- NWP 41 (Reshaping Existing Drainage Ditches)
- NWP 42 (Recreational Facilities)
- NWP 43 (Stormwater Management Facilities)
- NWP 44 (Mining Activities)
- NWP 45 (Repair of Uplands Damaged by Discrete Events)
- NWP 46 (Discharges in Ditches)
- NWP 48 (Commercial Shellfish Aquaculture Activities)
- NWP 49 (Coal Remining Activities)
- NWP 50 (Underground Coal Mining Activities)
- NWP 51 (Land-Based Renewable Energy Generation Facilities)
- NWP 52 (Water-Based Renewable Energy Generation Pilot Projects)
- NWP 53 (Removal of Low-Head Dams)
- NWP 54 (Living Shorelines)

2. In addition to the notification and agency coordination requirements in the NWPs, for impacts greater than 0.25 acres in all “waters of the U.S.” for the NWPs listed below, a PCN will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWPs:

- NWP 3 (Maintenance)
- NWP 7 (Outfall Structures and Associated Intake Structures)
- NWP 12 (Utility Line Activities)
- NWP 14 (Linear Transportation Projects)
- NWP 29 (Residential Developments)
- NWP 39 (Commercial and Institutional Developments)
- NWP 40 (Agricultural Activities)
- NWP 41 (Reshaping Existing Drainage Ditches)
- NWP 42 (Recreational Facilities)
- NWP 43 (Stormwater Management Facilities)
- NWP 44 (Mining Activities)
- NWP 51 (Land-Based Renewable Energy Generation Facilities)
- NWP 52 (Water-Based Renewable Energy Generation Pilot Projects)
- NWP 53 (Removal of Low-Head Dams)

3. For activities in all “waters of the U.S.” for the NWPs listed below, a PCN will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWPs:

- NWP 21 (Surface Coal Mining Activities)
- NWP 27 (Aquatic Habitat Restoration, Establishment & Enhancement Activities)
- NWP 49 (Coal Remining Activities)
- NWP 50 (Underground Coal Mining Activities)

4. Nationwide Permit No. 14 – Linear Transportation Projects.

(a) New road alignments or realignments are limited to a permanent loss of 500 linear feet of intermittent or perennial stream length at each crossing. Road crossings with permanent losses greater than 500 linear feet of intermittent or perennial stream associated with new alignments or realignments will be evaluated as an individual permit (i.e., a Letter of Permission or as a Standard Individual Permit).

(b) In addition to the notification requirements contained in NWP 14, the permittee must submit a PCN to the district engineer prior to commencing the activity for the permanent loss of greater than 300 feet of ephemeral, intermittent and perennial stream of all "waters of the U.S." (See General Condition 32 and the definition of "loss of waters of the United States" in the Nationwide Permits for further information.)

5. Notification in accordance with General Condition 32 is required to the Corps for all activities which are subject to jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

6. All applications are required as both a paper copy and in an electronic media format, including electronic mail or compact disc.

7. For all activities, the applicant shall review the U.S. Fish and Wildlife Service's IPaC website: <http://ecos.fws.gov/ipac> to determine if the activity might affect threatened and/or endangered species or designated critical habitat. If federally-listed species or designated critical habitat are identified, a PCN in accordance with General Condition 18 and 32 would be triggered and the official species list generated from the IPaC website must be submitted with the PCN.

Further information:

Outstanding State or National Resource Water (OSNRWs), Exceptional Waters (EWs), and Coldwater Aquatic Habitat Waters (CAHs) are waters designated by the Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet. The list can be found at the following link: <http://eppcapp.ky.gov/spwaters/>

Information on Pre-Construction Notification (PCN) can be found at NWP General Condition No. 32 in the Federal Register (Volume 81, No. 105 of June 1, 2017, pp 35211).

National General Conditions:

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or

otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status. (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights. No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in

designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species or critical habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs. (e) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. (f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required. (g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether “incidental take” permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. (d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the

adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment. (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site). (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal. (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if

practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)). (e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332. (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation. (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)). (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation. (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided. (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)). (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary,

to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs. (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management. (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include: (a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions; (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and (c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN

complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either: (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2). (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information: (1) Name, address and telephone numbers of the prospective permittee; (2) Location of the proposed activity; (3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity; (4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans); (5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the

special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. (7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act; (8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act; (9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and (10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project. (c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals. (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal. (2) Agency coordination is required for: (i) All NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes. (3) When agency coordination is required, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP

37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or email that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. (4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act. (5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).



2017 Nationwide Permit

49. Coal Remining Activities.

Discharges of dredged or fill material into non-tidal waters of the United States associated with the remining and reclamation of lands that were previously mined for coal. The activities must already be authorized, or they must currently be in process as part of an integrated permit processing procedure, by the Department of the Interior Office of Surface Mining Reclamation and Enforcement, or by states with approved programs under Title IV or Title V of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). Areas previously mined include reclaimed mine sites, abandoned mine land areas, or lands under bond forfeiture contracts.

As part of the project, the permittee may conduct new coal mining activities in conjunction with the remining activities when he or she clearly demonstrates to the district engineer that the overall mining plan will result in a net increase in aquatic resource functions. The Corps will consider the SMCRA agency's decision regarding the amount of currently undisturbed adjacent lands needed to facilitate the remining and reclamation of the previously mined area. The total area disturbed by new mining must not exceed 40 percent of the total acreage covered by both the remined area and the additional area necessary to carry out the reclamation of the previously mined area.

Notification: The permittee must submit a pre-construction notification and a document describing how the overall mining plan will result in a net increase in aquatic resource functions to the district engineer and receive written authorization prior to commencing the activity. (See general condition 32.)

(Authorities: Sections 10 and 404)



2017 Nationwide Permit

14. Linear Transportation Projects.

Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 32.)

(Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with [33 CFR 330.6\(d\)](#).

Note 2: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under section 404(f) of the Clean Water Act (see [33 CFR 323.4](#)).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).



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I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): [7/28/2020](#)
 ORM Number: [LRN-2018-00397](#)
 Associated JDs: [LRN-2018-00397, PJD, dated November 13, 2018](#)
 Review Area Location¹: State/Territory: [TN](#) City: [Westbourne](#) County/Parish/Borough: [Campbell](#)
 Center Coordinates of Review Area: Latitude [36.4926587](#) Longitude [-84.0245239](#)

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list **MUST** be selected. Complete the corresponding sections/tables and summarize data sources.

- The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: [N/A or describe rationale.](#)
- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): ³			
(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):			
(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):			
(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):			
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



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D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴				
Exclusion Name	Exclusion Size		Exclusion ⁵	Rationale for Exclusion Determination
S1BE	41	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	S1BE was determined to have an ephemeral flow regime based on an evaluation of the submitted hydrologic determination forms, a site inspection, topographical maps, and online resources including the NHD layer and Stream Stats application. Additionally, no flow was observed in the reach and no aquatic plants or macroinvertebrates were observed.
S4E	283	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	S4E was determined to have an ephemeral flow regime based on an evaluation of the submitted hydrologic determination forms, a site inspection, topographical maps, and online resources including the NHD layer and Stream Stats application. Additionally, no flow was observed in the reach and no aquatic plants or macroinvertebrates were observed.
S8E	44	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	S8E was determined to have an ephemeral flow regime based on an evaluation of the submitted hydrologic determination forms, a site inspection, topographical maps, and online resources including the NHD layer and Stream Stats application. Additionally, no flow was observed in the reach and no aquatic plants or macroinvertebrates were observed.
S9E	77	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	S9E was determined to have an ephemeral flow regime based on an evaluation of the submitted hydrologic determination forms, a site inspection, topographical maps, and online resources including the NHD layer and Stream Stats application. Additionally, no flow was observed in the reach and no aquatic plants or macroinvertebrates were observed.
W1	0.12	acre(s)	(b)(1) Non-adjacent wetland.	W1 was delineated using the 1987 Wetlands Delineation Manual and Regional Supplements. W1 does not abut at least one point or side of a paragraph (a)(1)-(3) water. W1 is not flooded by an (a)(1)-(3) water in a typical year. W1 is not physically separated solely from a paragraph (a)(1)-(3) water by a natural berm, bank, dune, or similar natural feature and it is not physically separated from a paragraph (a)(1)-(3) by an artificial dike, barrier, or similar artificial structure.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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				Therefore, W1 is an excluded water as a non-adjacent water and is not jurisdictional under the Navigation Waters Protection Rule.
W4	0.02	acre(s)	(b)(1) Non-adjacent wetland.	W4 was delineated using the 1987 Wetlands Delineation Manual and Regional Supplements. W4 does not abut at least one point or side of a paragraph (a)(1)-(3) water. W4 is not flooded by an (a)(1)-(3) water in a typical year. W4 is not physically separated solely from a paragraph (a)(1)-(3) water by a natural berm, bank, dune, or similar natural feature and it is not physically separated from a paragraph (a)(1)-(3) by an artificial dike, barrier, or similar artificial structure. Therefore, W4 is an excluded water as a non-adjacent water and is not jurisdictional under the Navigation Waters Protection Rule.
W6	0.05	acre(s)	(b)(1) Non-adjacent wetland.	W6 was delineated using the 1987 Wetlands Delineation Manual and Regional Supplements. W6 does not abut at least one point or side of a paragraph (a)(1)-(3) water. W6 is not flooded by an (a)(1)-(3) water in a typical year. W6 is not physically separated solely from a paragraph (a)(1)-(3) water by a natural berm, bank, dune, or similar natural feature and it is not physically separated from a paragraph (a)(1)-(3) by an artificial dike, barrier, or similar artificial structure. Therefore, W6 is an excluded water as a non-adjacent water and is not jurisdictional under the Navigation Waters Protection Rule.
W7	0.04	acre(s)	(b)(1) Non-adjacent wetland.	W7 was delineated using the 1987 Wetlands Delineation Manual and Regional Supplements. W7 does not abut at least one point or side of a paragraph (a)(1)-(3) water. W7 is not flooded by an (a)(1)-(3) water in a typical year. W7 is not physically separated solely from a paragraph (a)(1)-(3) water by a natural berm, bank, dune, or similar natural feature and it is not physically separated from a paragraph (a)(1)-(3) by an artificial dike, barrier, or similar artificial structure. Therefore, W7 is an excluded water as a non-adjacent water and is not jurisdictional under the Navigation Waters Protection Rule.
OW1	0.33	acre(s)	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake	OW1 was determined to be an abandoned mining pit excavated wholly in uplands. The pond is the result of pre-law mining. A review of Streamstats, USGS topo maps, and historical imagery indicate that the pond was constructed wholly in uplands.



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			or pond is not an impoundment of a jurisdictional water that meets (c)(6).	
OW2	0.14	acre(s)	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).	OW2 was determined to be an abandoned mining pit excavated wholly in uplands. The pond is the result of pre-law mining. A review of Streamstats, USGS topo maps, and historical imagery indicate that the pond was constructed wholly in uplands.
OW3	0.4	acre(s)	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).	OW3 was determined to be an abandoned mining pit excavated wholly in uplands. The pond is the result of pre-law mining. A review of Streamstats, USGS topo maps, and historical imagery indicate that the pond was constructed wholly in uplands.
OW4	0.1	acre(s)	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).	OW4 was determined to be an abandoned mining pit excavated wholly in uplands. The pond is the result of pre-law mining. A review of Streamstats, USGS topo maps, and historical imagery indicate that the pond was constructed wholly in uplands.
OW5	0.46	N/A.	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional	OW5 was determined to be an abandoned mining pit excavated wholly in uplands. The pond is the result of pre-law mining. A review of Streamstats, USGS topo maps, and historical imagery indicate that the pond was constructed wholly in uplands.



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			water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).	
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III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

- Information submitted by, or on behalf of, the applicant/consultant: [Title\(s\) and date\(s\)](#)
This information [is](#) sufficient for purposes of this AJD.
Rationale: From delineation report dated July 20, 2018 and updated on September 12, 2018.
- Data sheets prepared by the Corps: [Title\(s\) and/or date\(s\)](#).
- Photographs: [Select. Title\(s\) and/or date\(s\)](#).
- Corps site visit(s) conducted on: [August 28, 2018](#)
- Previous Jurisdictional Determinations (AJDs or PJDs): [LRN-2018-00397, November 18, 2018](#)
- Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)
- USDA NRCS Soil Survey: [Title\(s\) and/or date\(s\)](#).
- USFWS NWI maps: [Regulatory Viewer](#)
- USGS topographic maps: 1:24,000; La Follette, TN

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Stream stats	Reviewed on July 28, 2020
USGS/WBD/NHD data/maps	Regulatory Viewer, July 28, 2020
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	N/A.

B. Typical year assessment(s): [The Antecedent Precipitation Tool was used to evaluate the project area for the previous 90 days. A single point was used to evaluate the rainfall data and was determined to be sufficient based on the small geographic size of the site. The 90 day period beginning June 29, 2018 was determined to be dryer than normal.](#)

C. Additional comments to support AJD: [N/A or provide additional discussion as appropriate.](#)

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Davis Creek Energy, LLC		File Number: LRN-2018-00397	Date: July 29, 2020
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Brent Sewell
Nashville District, U.S. Army Corps of Engineers
Regulatory Division
501 Adesa Pkwy, Suite B 250
Lenoir City, Tennessee 37771
(615) 417-0240; Brent.j.sewell@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Jacob Siegrist
Regulatory Appeals Review Officer
US Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10524
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699 Fax: (513) 684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number: