

**JOINT**  
**PUBLIC NOTICE**

**CHARLESTON DISTRICT, CORPS OF ENGINEERS**  
**69A HAGOOD AVENUE**  
**CHARLESTON, SC 29403-5107**  
**and**  
**THE S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL**  
**Water Quality Certification and Wetlands Section**  
**2600 Bull Street**  
**Columbia, South Carolina 29201**

REGULATORY DIVISION  
Refer to: SAC-2019-02019

May 5, 2023

Pursuant to Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1341), an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

**Mr. Elliott Botzis**  
**Vulcan Construction Materials, LLC**  
**201 Brown Road**  
**Piedmont, South Carolina 29673**

**Mr. Brandon Wall**  
**Sligh Environmental Consultants, Inc.**  
**31 Park of Commerce Way, Suite 200B**  
**Savannah, Georgia 31405**  
**b\_wall@slighec.com**

for a permit to construct a new granite quarry for the production of construction aggregates in

**unnamed streams and wetlands**

located on a 588-acre portion of an 891-acre timber tract leased for mineral rights southeast of the intersection of Interstate 77 and State Road SC S-20-41 (Old River Road) near Winnsboro, Fairfield County, South Carolina (Latitude: 34.3925 °, Longitude: - 80.9736 °), Flint Hill Quad.

In order to give all interested parties an opportunity to express their views

**NOTICE**

is hereby given that written statements regarding the proposed work will be received by the **Corps** until

**15 Days from the Date of this Notice,**

and **SCDHEC** will receive written statements regarding the proposed work until

**30 Days from the Date of this Notice**

from those interested in the activity and whose interests may be affected by the proposed work.

**NOTE: This public notice and associated plans are available on the Corps' website at: <http://www.sac.usace.army.mil/Missions/Regulatory/PublicNotices> .**

**Applicant's Stated Purpose**

According to the applicant, the purpose of the proposed project is to construct a new granite quarry to accommodate the growing demand for construction aggregates in the Columbia, South Carolina area.

**Project Description**

The proposed work consists of the discharge of fill material, excavation, re-alignment, and piping in 0.29 acre of wetlands and 5,991 linear feet (0.937 acre) of streams to construct a Phase 1 quarry pit, haul roads, shop, parking area, overburden storage areas, and associated facilities including office space, processing plant, scales, and stockpile areas. In detail, the applicant proposes to excavate 2,162 linear feet (0.310 acre) of streams for the Phase 1 quarry pit, to discharge fill material into 1,418 linear feet (0.195 acre) of streams for an overburden area, and to re-align 306 linear feet (0.036 acre) of stream, pipe 941 linear feet (0.201 acre) of streams, and to discharge fill material into 1,164 linear feet (0.195 acre) of streams and 0.29 acre of wetlands for three haul roads, an overburden area, and a shop/parking area. The Phase 1 quarry pit will be 55-acres and approximately 400 feet deep. The applicant has requested a 10-year permit with an automatic 10-year extension clause.

Blasting will be used as part of the mining process. The applicant expects blasting to be conducted 2-4 times per month, increasing to 2-3 times per week at full production and typically during mid-day hours.

All transportation of stone products will be by trucks on public highways. The applicant expects most truck traffic will travel west on Old River Road to Interstate 77. Other truck routes include west on Old River Road to Winnsboro and other locations along U.S. Highway 321, and east on Old River Road to access U.S. Highway 21.

The applicant estimates the Phase 1 pit will produce approximately 25 million tons of aggregate over 40-50 years. The applicant's long-term strategy is to reclaim the Phase 1 pit once those reserves have been exhausted and open a Phase 2 quarry pit southwest

of the project area. Overburden from the Phase 2 pit would be used to reclaim the Phase 1 pit. The applicant estimates that the Phase 2 pit would begin in uplands and that additional impacts to waters of the United States may not be needed for the first 40-50 years of the Phase 2 pit. The applicant states that its long-term strategy may be subject to change due to factors including demand, technological/equipment advancements, life of mine, and/or various market factors. The subject of this public notice is the application for the Phase 1 quarry pit.

### **Avoidance and Minimization**

The applicant has stated that the proposed Phase 1 project will avoid and minimize impacts to the aquatic environment by designing a long-term development master plan strategy that avoids 23,504 linear feet of streams and 5.5 acres of wetlands on the 588-acre Phase 1 portion of the 891-acre timber tract leased for mineral rights. The applicant followed a step-wise screening process of 16 sites in Fairfield County based on factors including location, size, geology, levels of social impacts, and availability. Three of those sites were carried forward and evaluated for environmental impacts to determine the applicant's preferred site. Various long-term mine plans were evaluated for the applicant's preferred site to avoid impacts and minimize impacts to wetlands and streams.

All development activities will use sediment and erosion control best management practices (silt fencing, grassed slopes, etc.) All culverts have been sized to maintain natural upstream and downstream flows at road crossings. Side slopes of 3 (horizontal):1 (vertical) will reduce the footprint of overburden storage and road crossings while providing stable slopes. Overburden storage was designed around natural topographic features including valleys, gullies, and ephemeral drainages to minimize the chance of runoff and sedimentation into avoided streams. Natural buffers will be maintained in their natural state to protect water quality, provide wildlife corridors and habitat, and to buffer air, noise, and visual effects from the project. Discharge material will be clean fill and free of pollutants. The applicant will use storm water ponds and sediment basins to treat stormwater and discharges.

### **Proposed Compensatory Mitigation**

The applicant has proposed to mitigate for impacts to wetlands and/or waters of the United States by preserving a total of 69.767 acres on-site that include 4.975 acres of wetlands and 18,120 linear feet of streams with 75-foot wide upland buffers on both sides of each resource, purchasing wetland credits from mitigation bank(s), and completing a permittee-responsible plan for stream credits. The applicant states that the proposed Phase 1 work would require 32,321 stream credits and 2.81 wetland credits. The applicant proposes a 25% reduction in required credits due to on-site preservation of a portion of the wetlands and streams, which could result in 24,241 stream credits and 2.11 wetland credits to be required for Phase 1 impacts. The applicant states, "*Several small, lower quality intermittent streams with limited streamside management zones which extend away from the higher quality perennial tributaries are not proposed for*

*preservation.”*

The applicant conducted a search of approved mitigation banks that serve the Wateree River Basin watershed (8-digit Hydrologic Unit Code [HUC] 03050104). The applicant has stated that at the time of application per the USACE’s Regulatory In-Lieu Fee Bank Information Tracking System (RIBITS) database, all four of the banks that serve the project site did not have sufficient credits available in the Primary and Secondary Service Areas. The application states that *“Even considering future releases, this project would consume the majority of commercial mitigation credits in the area, making it difficult for other permittees to find mitigation solutions in the future.”*

The applicant has proposed to purchase wetland credits from a mitigation bank that serves the project site. If insufficient wetland credits are available, the applicant states that it would pursue wetland credits outside of the watershed.

The applicant has proposed a detailed permittee responsible mitigation (PRM) plan on property adjacent to the quarry site to generate 26,685 stream credits. The proposed PRM site is in the same 12-digit sub-basin 0305010403 Little Wateree Creek as the quarry site. The proposed PRM plan would enhance, restore and/or preserve approximately 12,742 linear feet of streams and 0.94 acres of wetlands on a 103.8-acre site.

The plan states that streams proposed for restoration have been degraded by past land use practices. *“Over time, ongoing commercial forestry and maintenance of established practices have resulted in degraded wetland and stream conditions.”* The plan states that all streams on the site have varying levels of riparian buffer impacts from ongoing silviculture.

Proposed restoration and enhancement activities include: reconnecting channels with historic floodplain, installation of in-stream structures to improve bedform diversity, habitat diversity, and stream stability, grading, replanting riparian buffer to increase diversity, and invasive species management. The site will be monitored for a minimum of five (5) years post construction and two (2) bankfull events and evaluated using performance standards. A conservation easement is proposed to be held by Congaree Land Trust to protect the PRM site owned by Weyerhaeuser.

The Corps has not verified the delineation of aquatic resources at this time for the proposed PRM site. The District Engineer has not reached a decision as to the proposed compensatory mitigation plan's compliance with the 2008 Compensatory Mitigation Rule and the Charleston District's Guidelines for Preparing a Compensatory Mitigation Plan.

### **South Carolina Department of Health and Environmental Control**

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the certifying authority, South Carolina Department of Health and Environmental Control, in accordance with provisions of Section 401 of the Clean Water Act (CWA). The CWA Section 401 Certification Rule

(Certification Rule, 40 CFR 121), effective September 11, 2020, requires certification, or waiver, for any license or permit that authorizes an activity that may result in a discharge. The scope of a CWA Section 401 Certification is limited to assuring that a discharge from a Federally licensed or permitted activity will comply with water quality requirements. The applicant is responsible for requesting certification and providing required information to the certifying authority. In accordance with Certification Rule part 121.12, the Corps will notify the U.S. Environmental Protection Agency Administrator when it has received a Department of the Army (DA) permit application and the related certification. The Administrator is responsible for determining if the discharge may affect water quality in a neighboring jurisdiction. The DA permit may not be issued pending the conclusion of the Administrator's determination of effects on neighboring jurisdictions.

This activity may also require evaluation for compliance with the S. C. Construction in Navigable Waters Permit Program. State review, permitting and certification is conducted by the S. C. Department of Health and Environmental Control. The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review.

### **Essential Fish Habitat**

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact 1.227 acres of freshwater streams and wetlands well inland of estuarine substrates and emergent wetlands utilized by various life stages of species comprising the shrimp, and snapper-grouper management complexes. The District Engineer's initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). The District Engineer's final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

### **Endangered Species**

Pursuant to the Section 7 of the Endangered Species Act of 1973 (as amended), the Corps has reviewed the project and based on the location of the project and available information, the following species may be present in the County(s) where the work will occur: no Federally listed endangered or threatened species.

Based on all information provided by the applicant and the most recently available information, the District Engineer has determined the following:

The project will have no effect on Federally listed endangered or threatened species and will not result in the destruction or adverse modification of designated or proposed critical habitat.

This public notice serves as a request to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for any additional information they may have on whether any listed or proposed endangered or threatened species or designated or proposed critical habitat may be present in the area which would be affected by the activity.

### **Cultural Resources**

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

In accordance with Section 106 of the NHPA, the District Engineer has consulted South Carolina ArchSite (GIS), for the presence or absence of historic properties (as defined in 36 C.F.R. 800.16)(1)(1)), and has initially determined that no historic properties are present; therefore, there will be no effect on historic properties. To ensure that other historic properties that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office and any other interested parties to provide any information they may have with regard to historic properties. This public notice serves as a request for concurrence within 30 days from the SHPO (and/or Tribal Historic Preservation Officer).

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-identified permit area.

### **Corps' Evaluation**

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps cannot undertake to adjudicate rival claims.

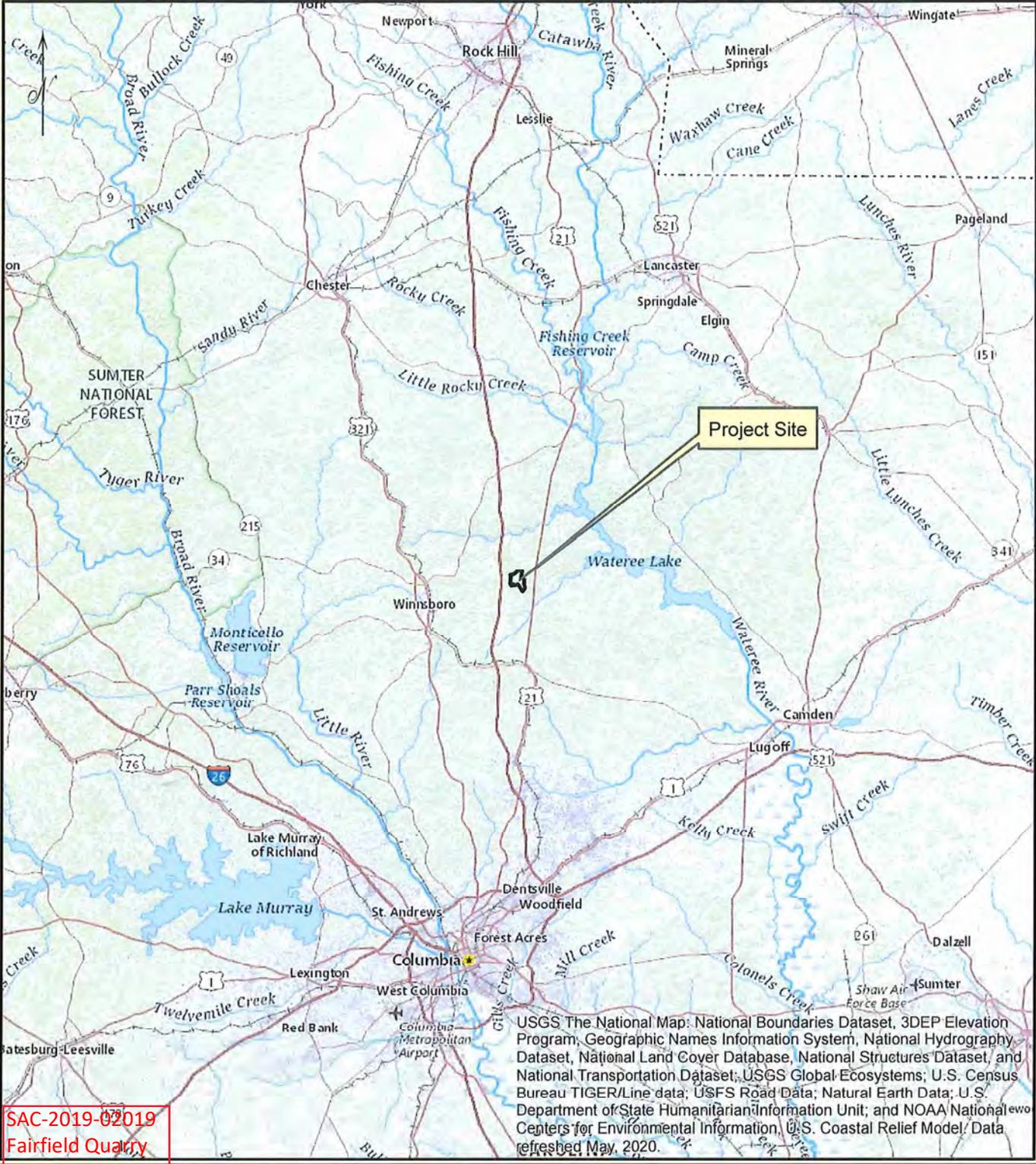
**Solicitation of Public Comment**

The Corps is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity. Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

**Please submit comments in writing, identifying the project of interest by public notice/file number (SAC-2019-02019), to [Amy.e.Cappellino@usace.army.mil](mailto:Amy.e.Cappellino@usace.army.mil) or the following address:**

**U.S. Army Corps of Engineers  
ATTN: REGULATORY DIVISION  
1519 TAYLOR STREET  
COLUMBIA, SC 29201-2918**

If there are any questions concerning this public notice, please contact Amy Cappellino, Project Manager, at (803) 253-3444, toll free at 1-866-329-8187, or by email at [Amy.e.Cappellino@usace.army.mil](mailto:Amy.e.Cappellino@usace.army.mil).



SAC-2019-02019  
 Fairfield Quarry  
 May 5, 2023  
 Sheet 1 of 18

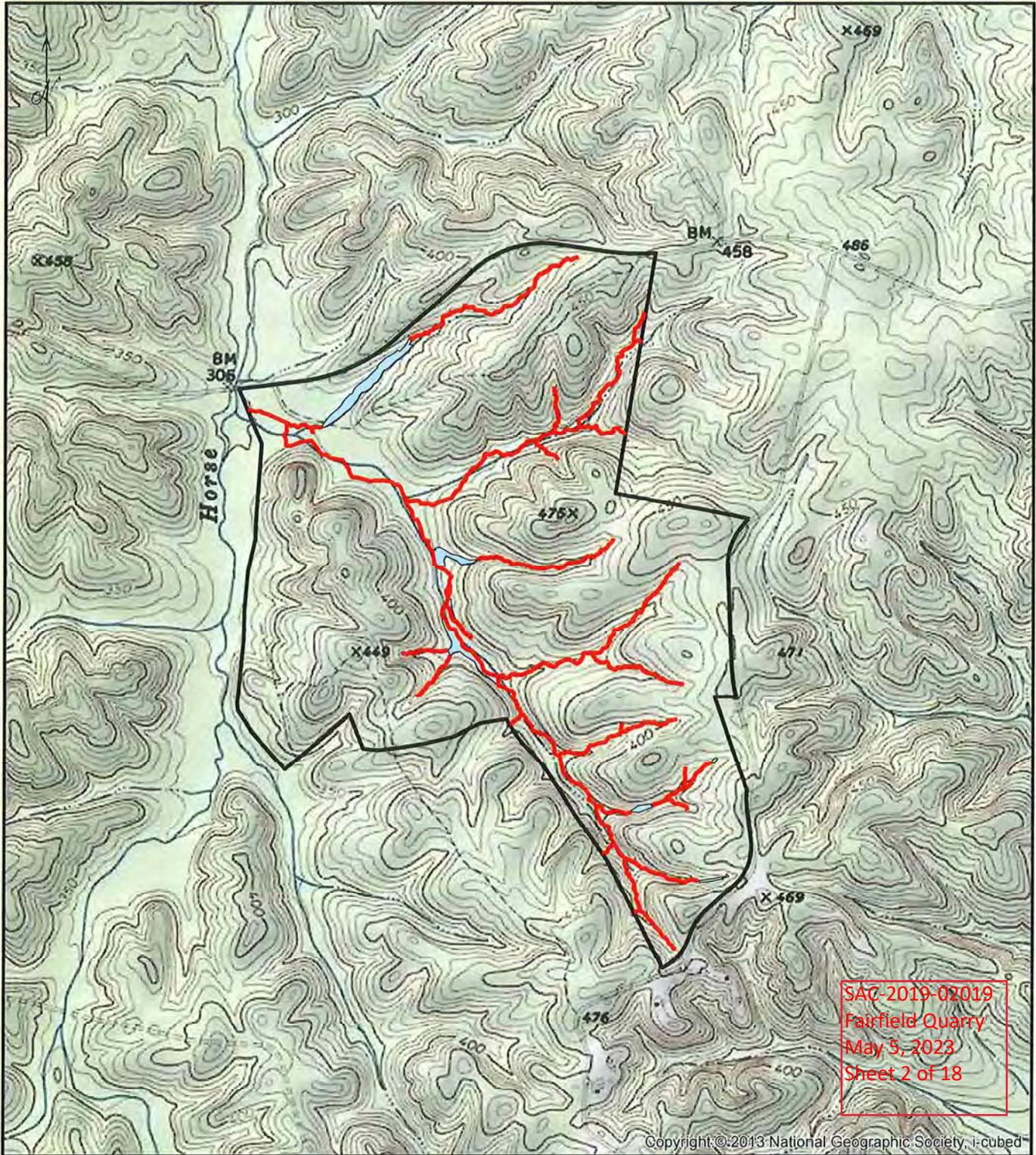
Project Limits  
 (+/- 588 acres)

Prepared By:  
**sligh** environmental consultants, inc.  
 31 Park of Commerce Way, Suite 200B  
 Savannah, Georgia 31405  
 phone (912) 232-0451  
 fax (912) 232-0453  
 www.slighc.com

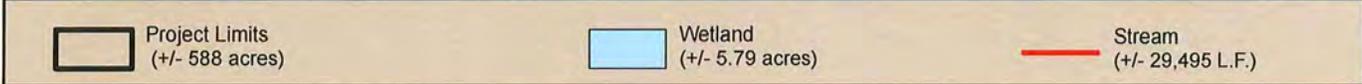
Project Location Map  
 Fairfield Quarry  
 Fairfield County, South Carolina

1 inch = 10 miles

Exhibit Date: April 21, 2020
Drawn By: TCT
Reviewed By: BWW
Job Number: 01-18-062



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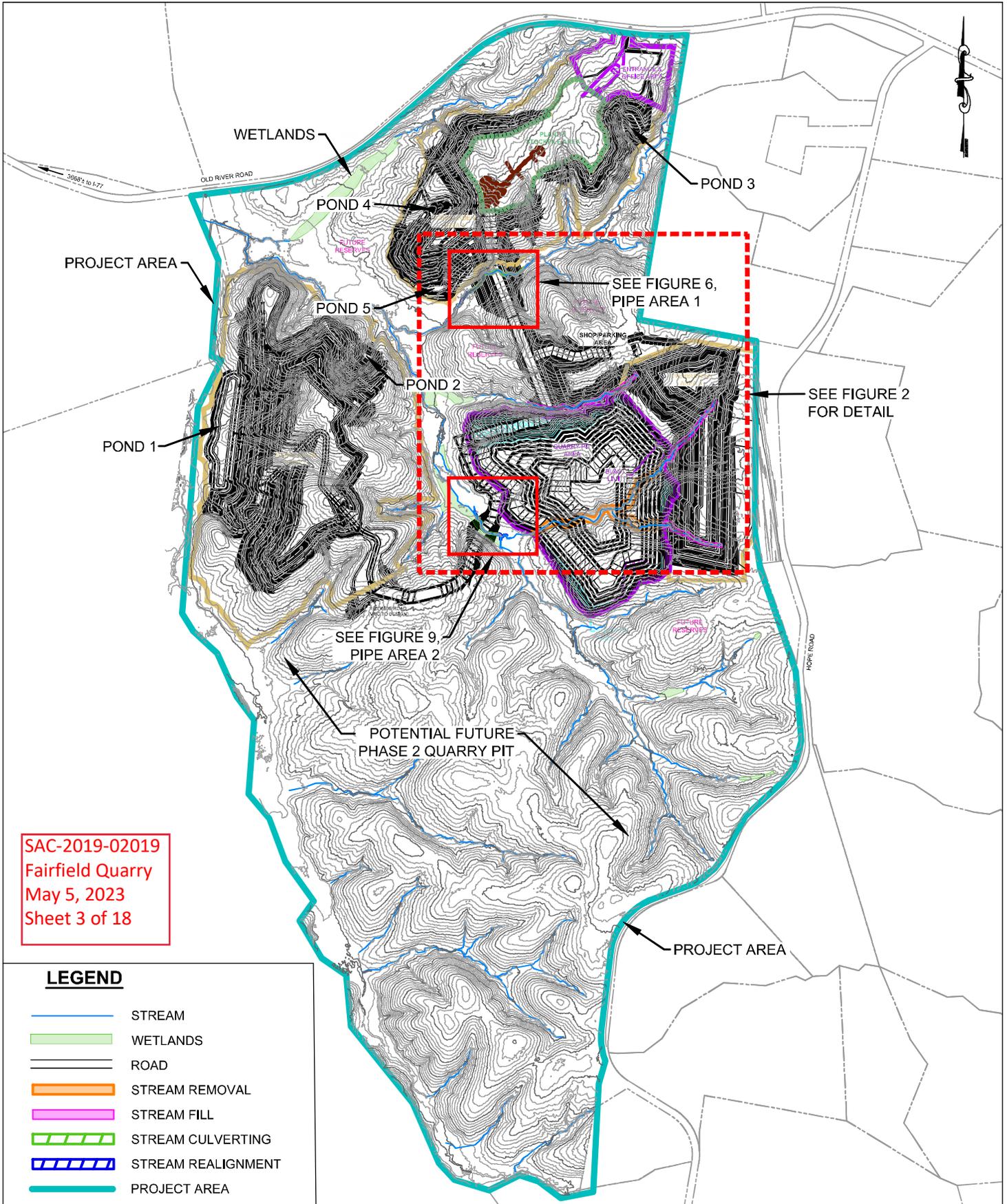


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 Savannah, Georgia 31405  
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 fax (912) 232-0453  
 www.sligh.com

**Wetland Exhibit - USGS**  
**Fairfield Quarry**  
 Fairfield County, South Carolina

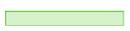
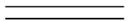
1 inch = 1,500 feet

Exhibit Date: April 21, 2020
Drawn By: TCT
Reviewed By: BWW
Job Number : 01-18-062



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 Fairfield Quarry  
 May 5, 2023  
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**LEGEND**

-  STREAM
-  WETLANDS
-  ROAD
-  STREAM REMOVAL
-  STREAM FILL
-  STREAM CULVERTING
-  STREAM REALIGNMENT
-  PROJECT AREA

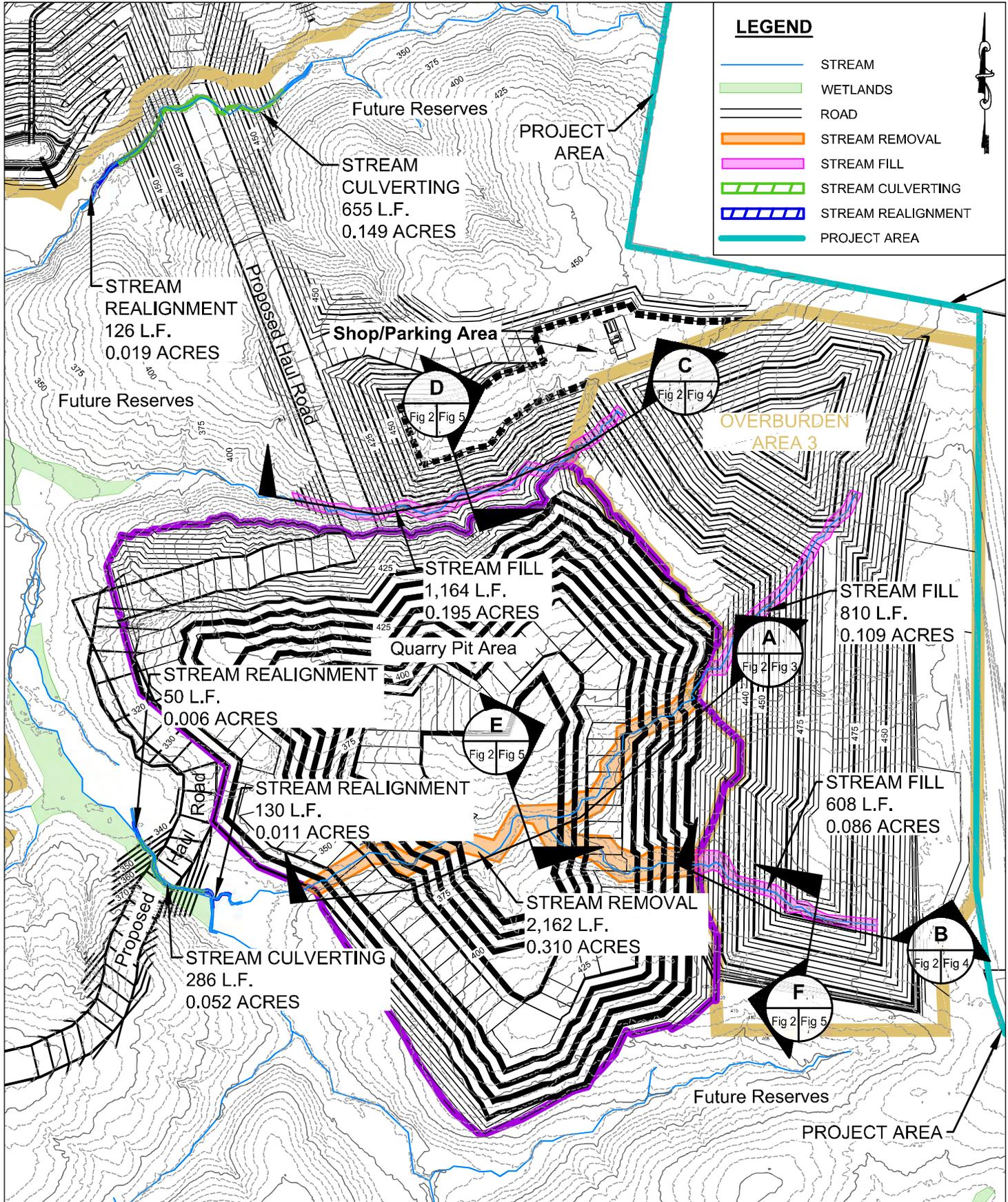


148 RIVER STREET, SUITE 220  
 GREENVILLE, SOUTH CAROLINA 29601  
 PHONE 864-421-9999  
 www.synterracorp.com

DRAWN BY: C. NEWELL DATE: 07/05/2022  
 PROJECT MANAGER: B. GREEN REV.: D  
 LAYOUT: FIGURE 1 REV. DATE: 04/17/2023

**FIGURE 1  
 STREAM MODIFICATIONS  
 VULCAN MATERIALS  
 FAIRFIELD QUARRY  
 WINNSBORO, SOUTH CAROLINA**





SAC-2019-02019  
 Fairfield Quarry  
 May 5, 2023  
 Sheet 4 of 18



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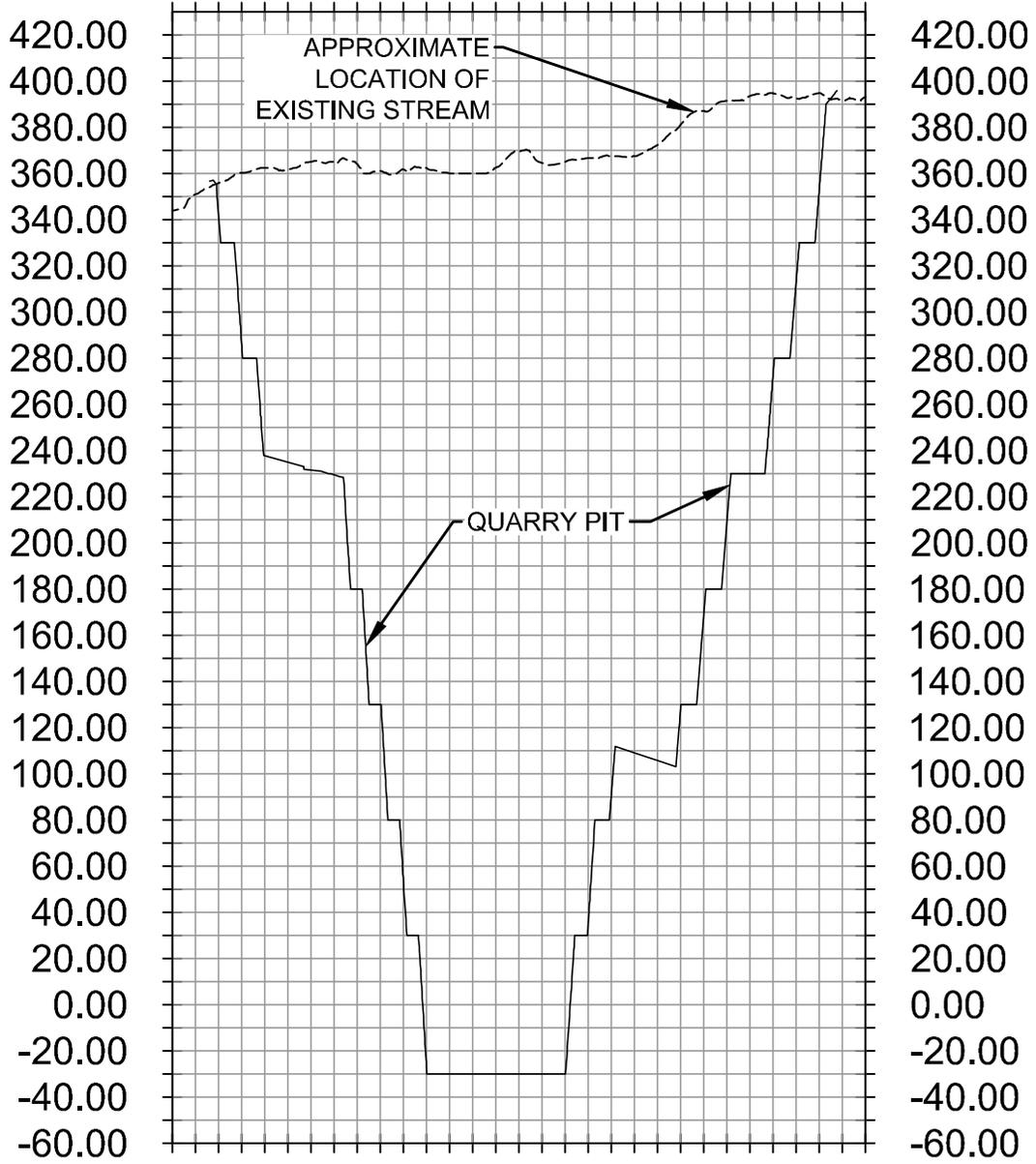
DRAWN BY: C. NEWELL DATE: 07/05/2022  
 PROJECT MANAGER: B. GREEN REV.: D  
 LAYOUT: FIGURE 2 REV. DATE: 04/17/2023

04/17/2023 3:23 PM P:\Vulcan Construction Materials\963\18, Fairfield Quarry\00,4801,00 Mine Permit Map\CAD\4801,00-CORPS FIGURES-REV D.dwg

**FIGURE 2**  
**STREAM MODIFICATIONS**  
**VULCAN MATERIALS**  
**FAIRFIELD QUARRY**  
**WINNSBORO, SOUTH CAROLINA**

Elevation

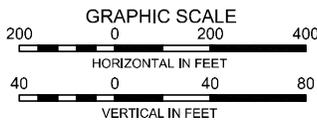
Elevation



0+00.00 1+00.00 2+00.00 3+00.00 4+00.00 5+00.00 6+00.00 7+00.00 8+00.00 9+00.00 10+00.00 11+00.00 12+00.00 13+00.00 14+00.00 15+00.00

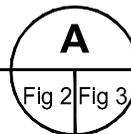
Station

SAC-2019-02019  
 Fairfield Quarry  
 May 5, 2023  
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PROFILE

SCALE: AS SHOWN

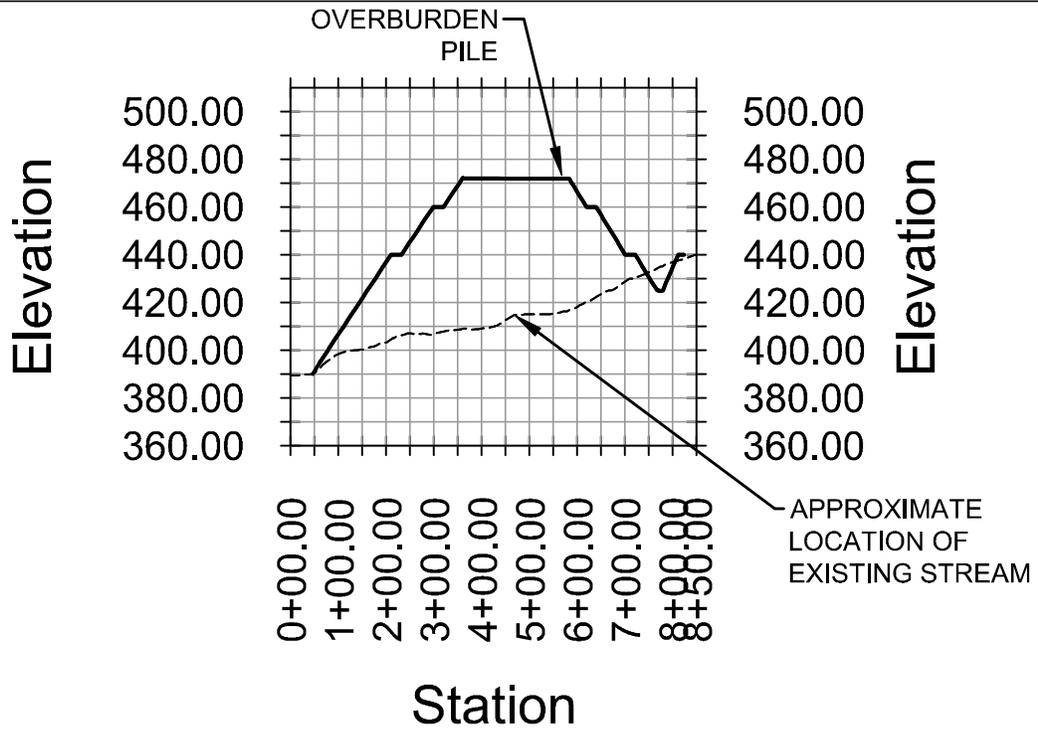


SCALE: AS SHOWN

148 RIVER STREET, SUITE 220  
 GREENVILLE, SOUTH CAROLINA 29601  
 PHONE 864-421-9999  
 www.synterracorp.com

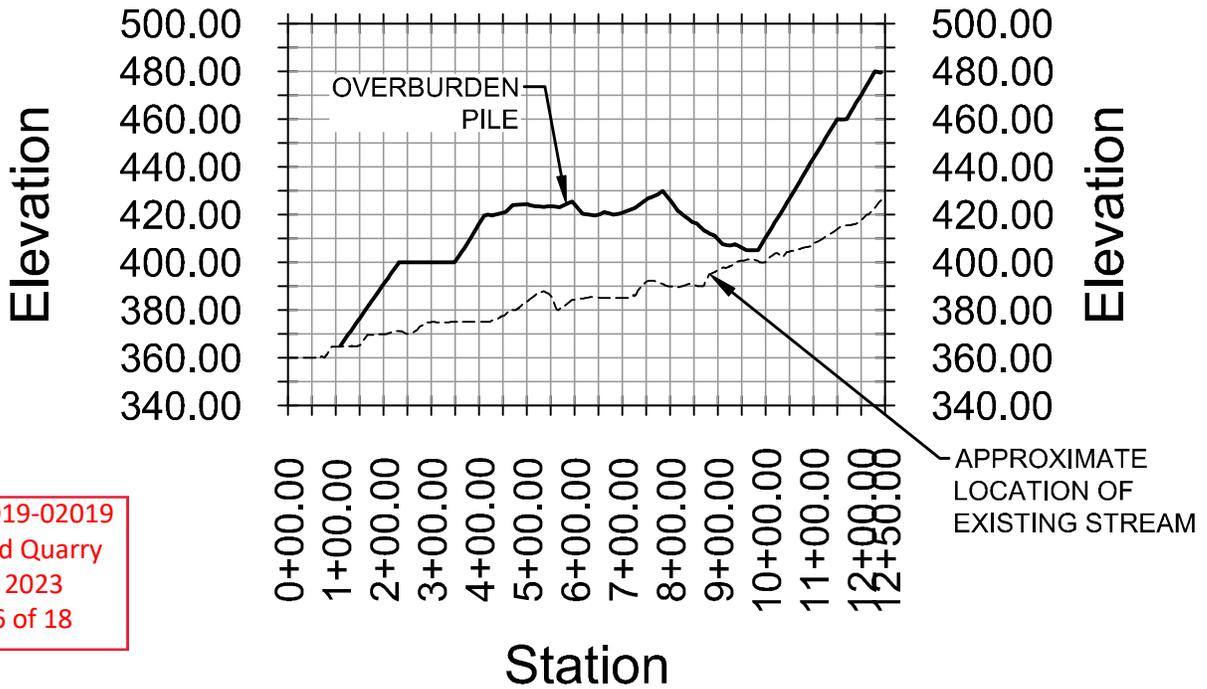
DRAWN BY: J. COLEMAN DATE: 02/06/2023  
 PROJECT MANAGER: B. GREEN REV.: C  
 LAYOUT: FIGURE 3 REV. DATE: 02/06/2023

**FIGURE 3  
 PROFILE A  
 STREAM MODIFICATIONS  
 VULCAN MATERIALS  
 FAIRFIELD QUARRY  
 WINNSBORO, SOUTH CAROLINA**



**PROFILE ALONG EXISTING STREAM**

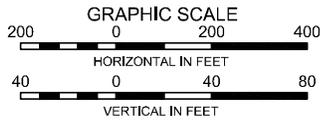
**PROFILE B**  
SCALE: AS SHOWN  
Fig 2 | Fig 4



**PROFILE ALONG EXISTING STREAM**

**PROFILE C**  
SCALE: AS SHOWN  
Fig 2 | Fig 4

SAC-2019-02019  
Fairfield Quarry  
May 5, 2023  
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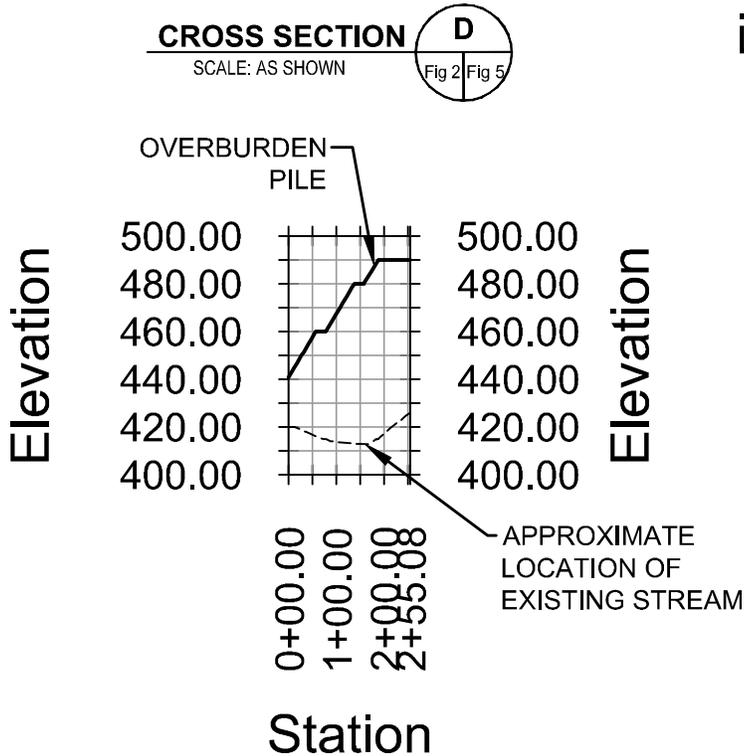
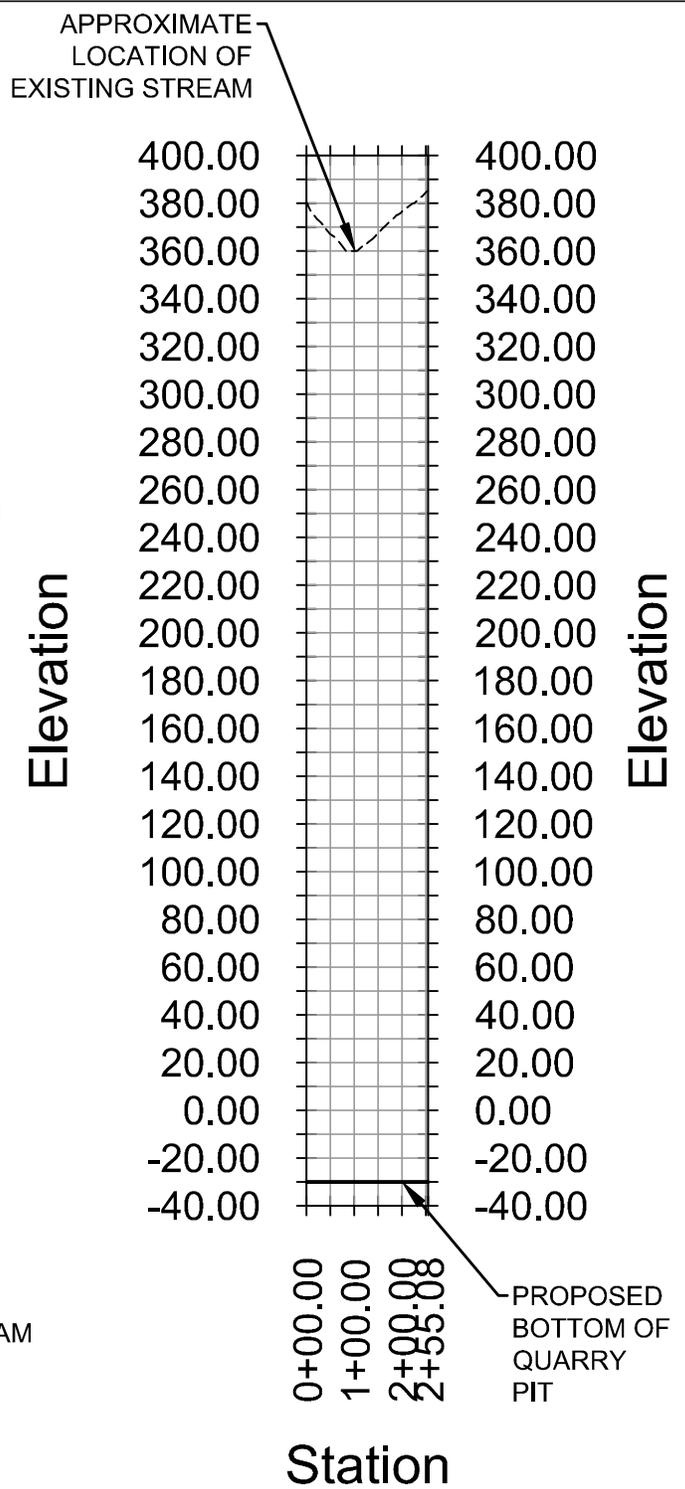
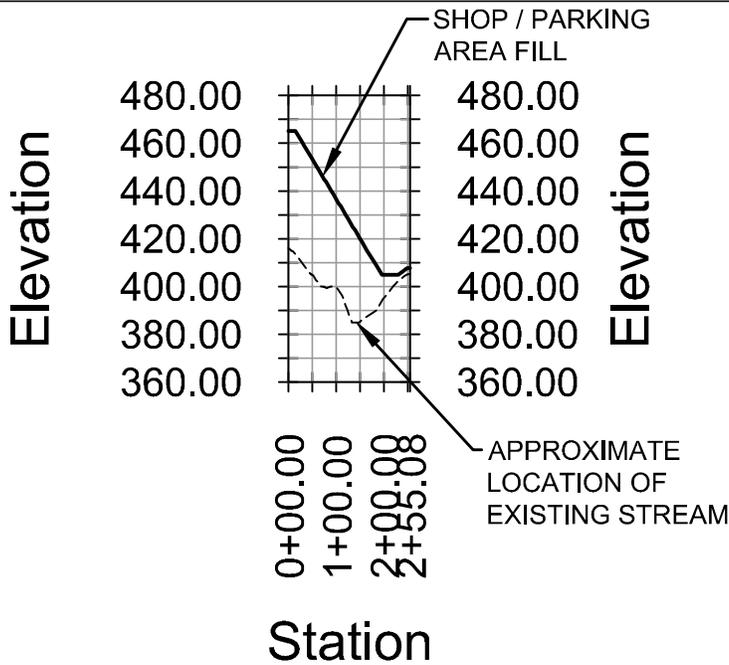


SCALE: AS SHOWN

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DRAWN BY: J. COLEMAN DATE: 02/06/2023  
PROJECT MANAGER: B. GREEN REV.: C  
LAYOUT: FIGURE 4 REV. DATE: 02/06/2023

**FIGURE 4  
PROFILES B AND C  
STREAM MODIFICATIONS  
VULCAN MATERIALS  
FAIRFIELD QUARRY  
WINNSBORO, SOUTH CAROLINA**



SAC-2019-02019  
Fairfield Quarry  
May 5, 2023  
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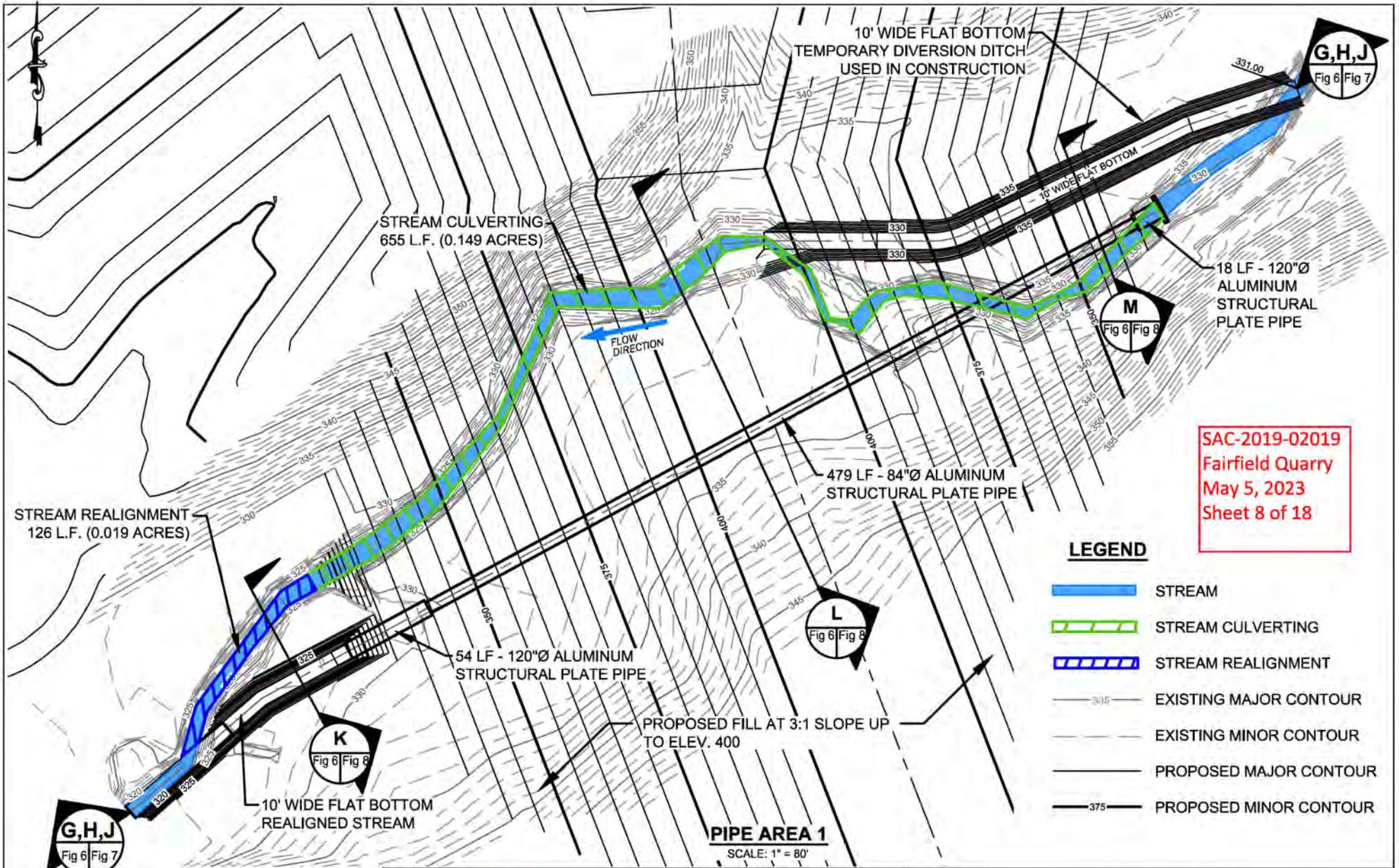


SCALE: AS SHOWN

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DRAWN BY: J. COLEMAN DATE: 02/06/2023  
PROJECT MANAGER: B. GREEN REV.: C  
LAYOUT: FIGURE 5 REV. DATE: 02/06/2023

**FIGURE 5  
CROSS SECTIONS D, E, AND F  
STREAM MODIFICATIONS  
VULCAN MATERIALS  
FAIRFIELD QUARRY  
WINNSBORO, SOUTH CAROLINA**



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 Fairfield Quarry  
 May 5, 2023  
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**LEGEND**

- STREAM
- STREAM CULVERTING
- STREAM REALIGNMENT
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR

PROFILE G IS THE CENTERLINE OF EXISTING STREAM.

PROFILE H IS THE CENTERLINE OF THE PROPOSED STREAM REALIGNMENT AND PIPE.

PROFILE J IS THE CENTERLINE OF THE TEMPORARY DIVERSION DITCH.



**PIPE AREA 1**  
 SCALE: 1" = 80'

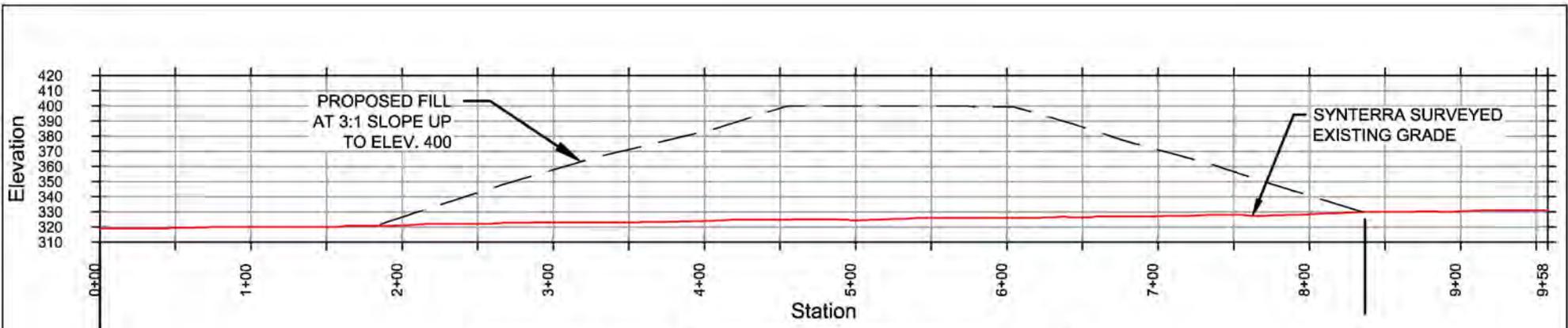
**GRAPHIC SCALE**  
 40 0 40 80  
 IN FEET

148 RIVER STREET, SUITE 220  
 GREENVILLE, SOUTH CAROLINA 29601  
 PHONE 864-421-9999  
 www.synterracorp.com

DRAWN BY: C. NEWELL DATE: 08/04/2022  
 PROJECT MANAGER: B. GREEN REV.: C  
 LAYOUT: FIGURE 6-AREA 1-PLAN REV. DATE: 02/06/2023

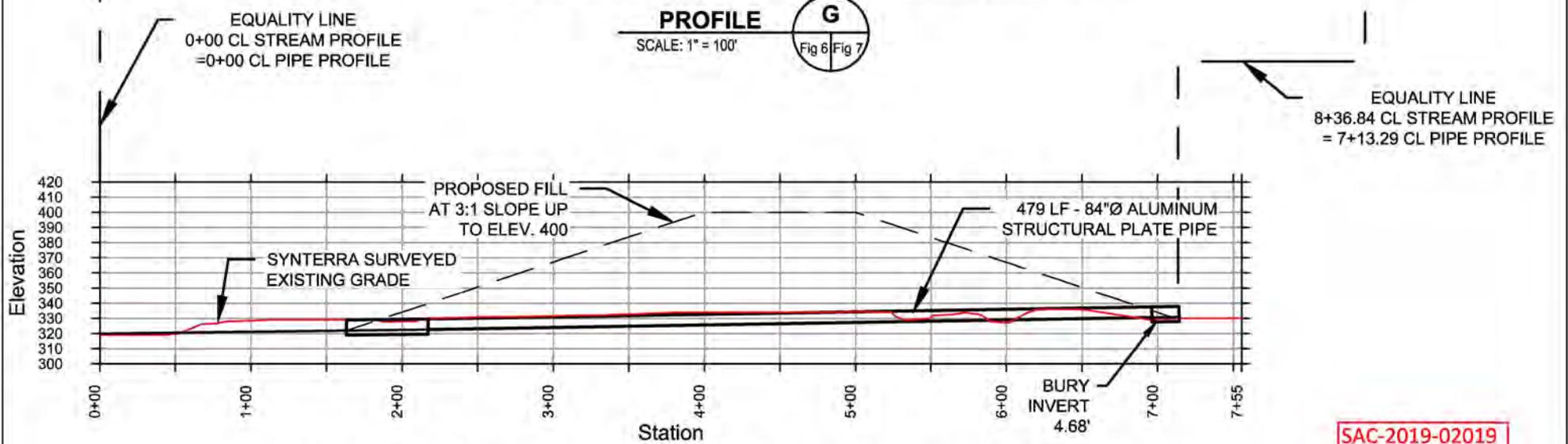
02/14/2023 10:41 AM P:\vulcan Construction Materials\963\18. Fairfield Quarry\00.4801.00 Mine Permit Map\CAD\4801.00-CORPS P1\E CROSSINGS-REV C.dwg

**FIGURE 6**  
**STREAM MODIFICATIONS**  
**VULCAN MATERIALS**  
**FAIRFIELD QUARRY**  
**WINNSBORO, SOUTH CAROLINA**



**PROFILE ALONG CENTERLINE OF EXISTING STREAM**

**PROFILE G**  
SCALE: 1" = 100'  
Fig 6 | Fig 7



**PROFILE ALONG CENTERLINE OF PROPOSED STREAM REALIGNMENT AND PIPE**

**PROFILE H**  
SCALE: 1" = 100'  
Fig 6 | Fig 7

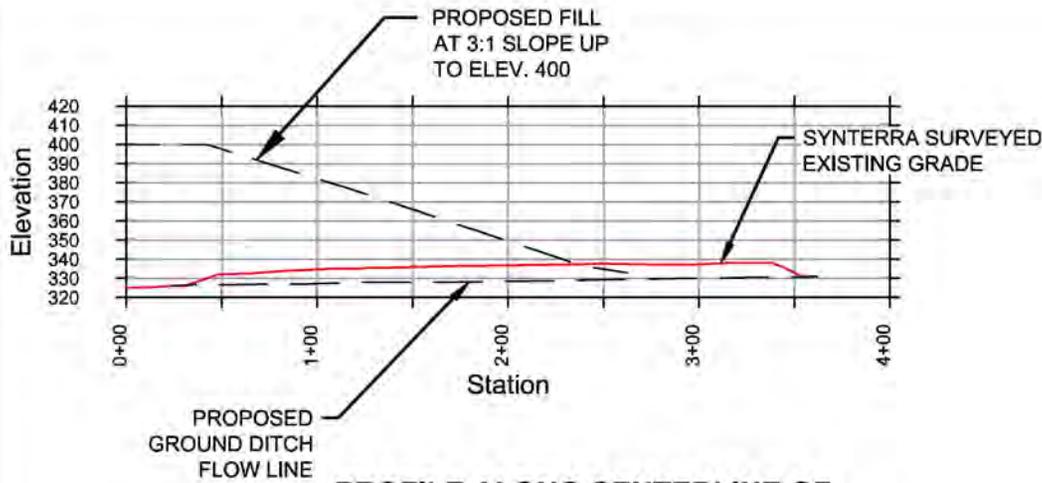
SAC-2019-02019  
Fairfield Quarry  
May 5, 2023  
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**ABBREVIATIONS:**  
CL = CENTERLINE

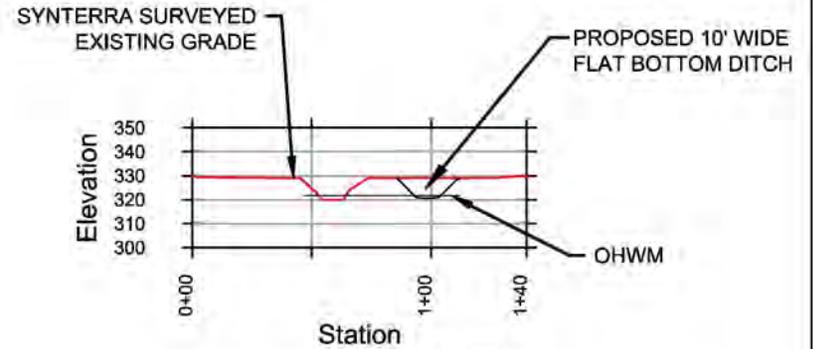


SCALE: AS SHOWN  
148 RIVER STREET, SUITE 220  
GREENVILLE, SOUTH CAROLINA 29601  
PHONE 864-421-9999  
www.synterracorp.com  
DRAWN BY: C. NEWELL DATE: 08/04/2022  
PROJECT MANAGER: B. GREEN REV.: C  
LAYOUT: FIGURE 7-AREA 1-SECTS 1 REV. DATE: 02/06/2023  
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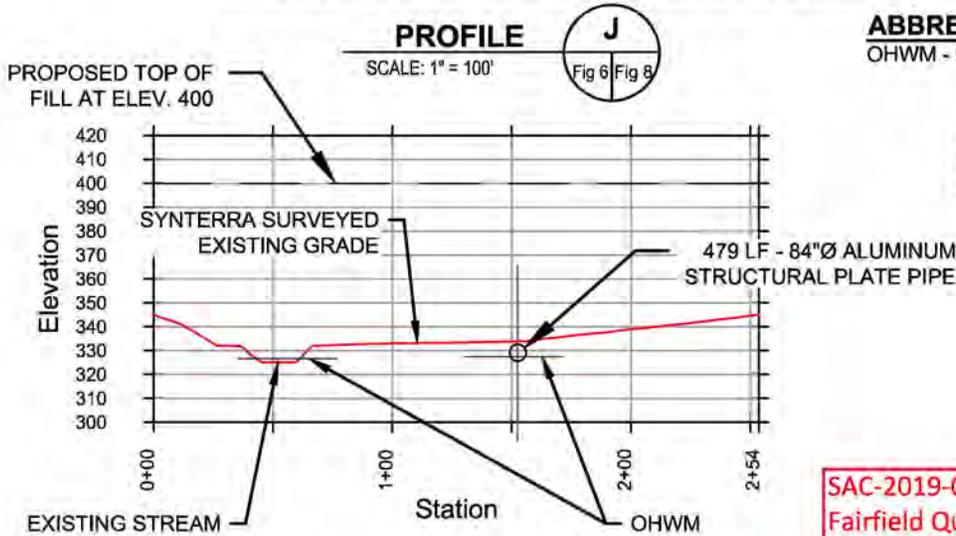
**FIGURE 7**  
**PROFILES G AND H**  
**STREAM MODIFICATIONS**  
**VULCAN MATERIALS**  
**FAIRFIELD QUARRY**  
**WINNSBORO, SOUTH CAROLINA**



**PROFILE ALONG CENTERLINE OF PROPOSED TEMPORARY DIVERSION DITCH**

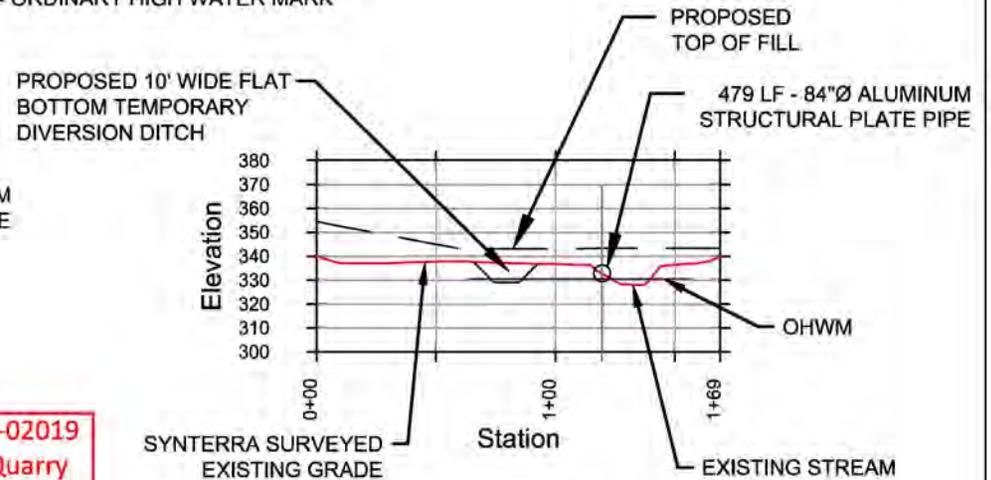


**CROSS SECTION K**  
SCALE: 1" = 80'  
Fig 6 Fig 8



**PROFILE J**  
SCALE: 1" = 100'  
Fig 6 Fig 8

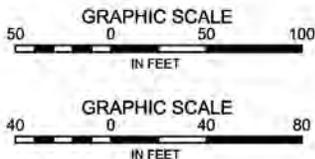
**ABBREVIATIONS:**  
OHWM - ORDINARY HIGH WATER MARK



**CROSS SECTION L**  
SCALE: 1" = 80'  
Fig 6 Fig 8

**CROSS SECTION M**  
SCALE: 1" = 80'  
Fig 6 Fig 8

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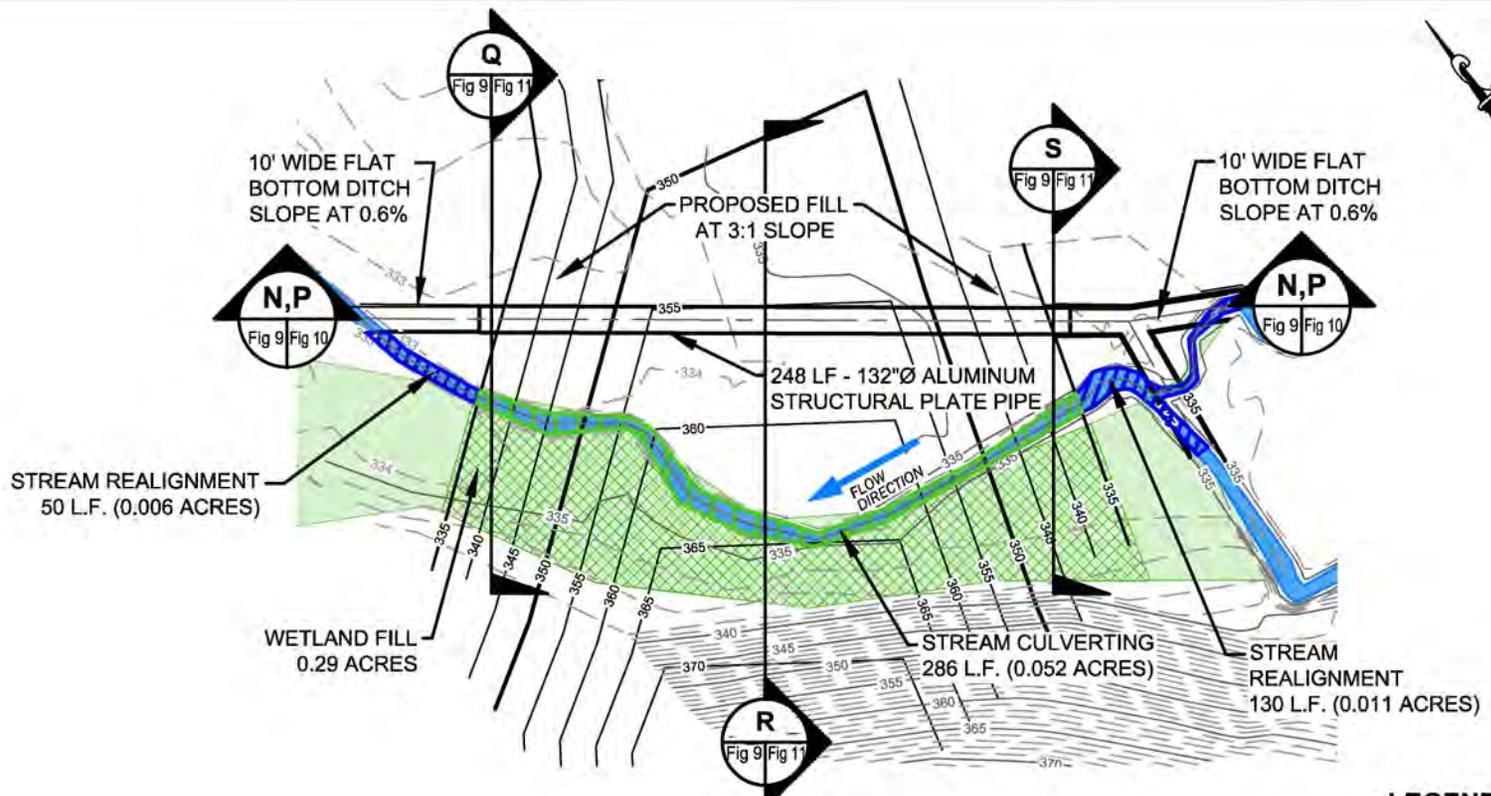


SCALE: AS SHOWN

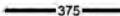
148 RIVER STREET, SUITE 220  
GREENVILLE, SOUTH CAROLINA 29601  
PHONE 864-421-9999  
www.synterracorp.com

DRAWN BY: C. NEWELL DATE: 08/04/2022  
PROJECT MANAGER: B. GREEN REV.: C  
LAYOUT: FIGURE 8-AREA 1-SECTS 2 REV. DATE: 02/06/2023

**FIGURE 8**  
**PROFILE J, CROSS SECTIONS K, L, AND M**  
**STREAM MODIFICATIONS**  
**VULCAN MATERIALS**  
**FAIRFIELD QUARRY**  
**WINNSBORO, SOUTH CAROLINA**



**PIPE AREA 2**  
SCALE: 1"=80'

- LEGEND**
-  STREAM
  -  STREAM CULVERTING
  -  STREAM REALIGNMENT
  -  WETLAND / WETLAND FILL
  -  EXISTING MAJOR CONTOUR
  -  EXISTING MINOR CONTOUR
  -  PROPOSED MAJOR CONTOUR
  -  PROPOSED MINOR CONTOUR

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PROFILE N IS THE CENTERLINE OF EXISTING STREAM.  
PROFILE P IS THE CENTERLINE OF THE PROPOSED STREAM REALIGNMENT AND PIPE.



GRAPHIC SCALE



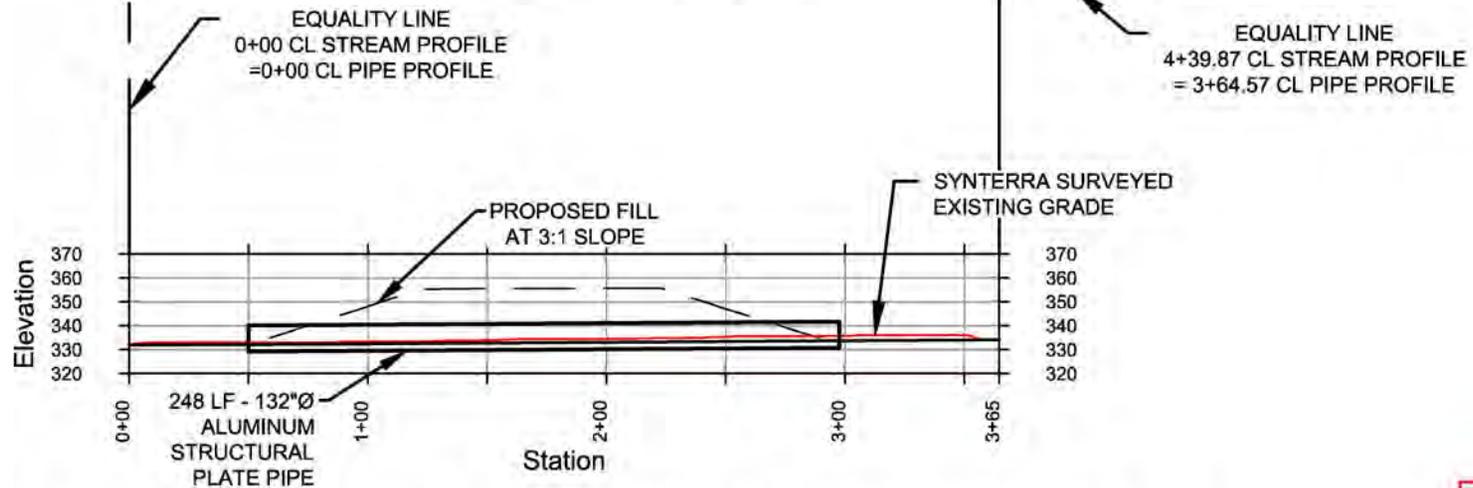
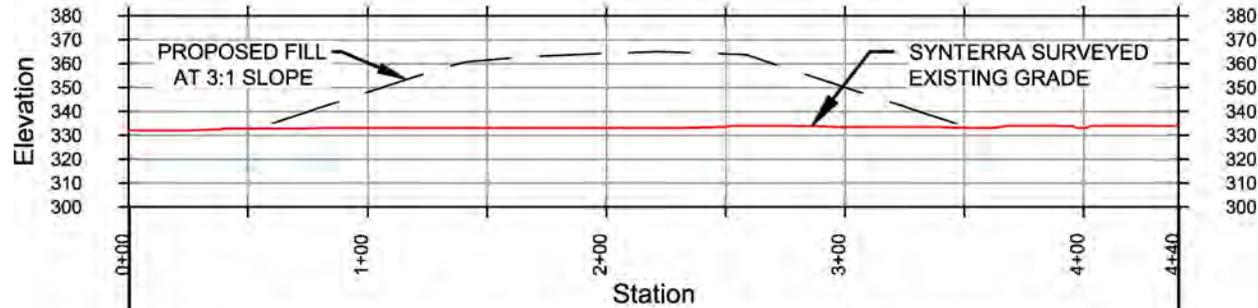
IN FEET

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DRAWN BY: C. NEWELL      DATE: 08/04/2022  
PROJECT MANAGER: B. GREEN      REV.: C  
LAYOUT: FIGURE 9-AREA 2-PLAN      REV. DATE: 02/09/2023

02/14/2023 10:57 AM P:\Vulcan Construction Materials\963\18. Fairfield Quarry\00.4801.00 Mine Permit Map\CAD\4801.00-CORPS PIPE CROSSINGS-REV C.dwg

**FIGURE 9**  
**STREAM MODIFICATIONS**  
**VULCAN MATERIALS**  
**FAIRFIELD QUARRY**  
**WINNSBORO, SOUTH CAROLINA**



**PROFILE ALONG CENTERLINE OF PROPOSED STREAM REALIGNMENT AND PIPE**

**ABBREVIATIONS:**  
CL = CENTERLINE



SCALE: AS SHOWN

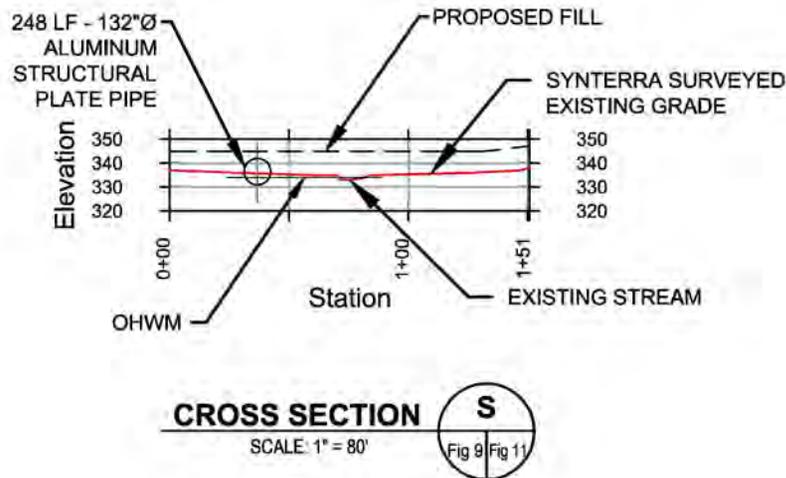
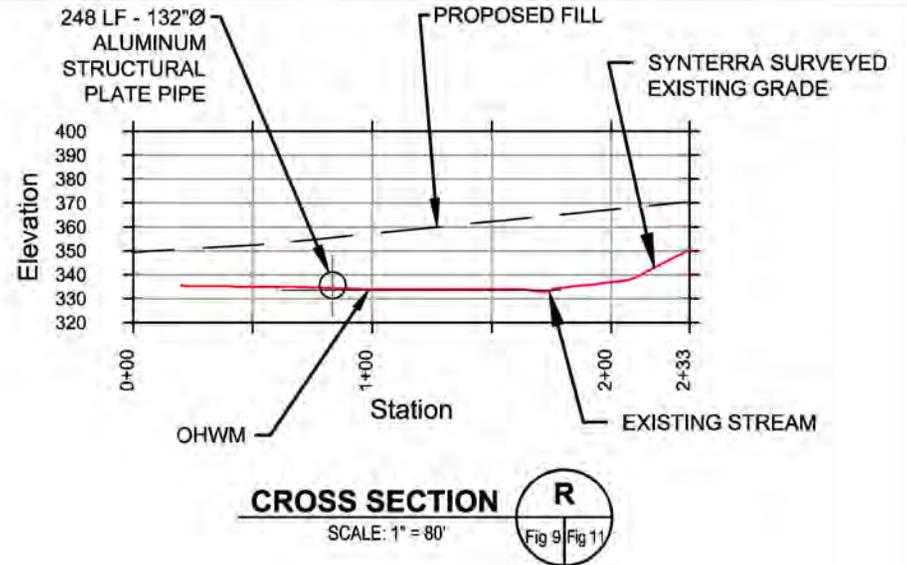
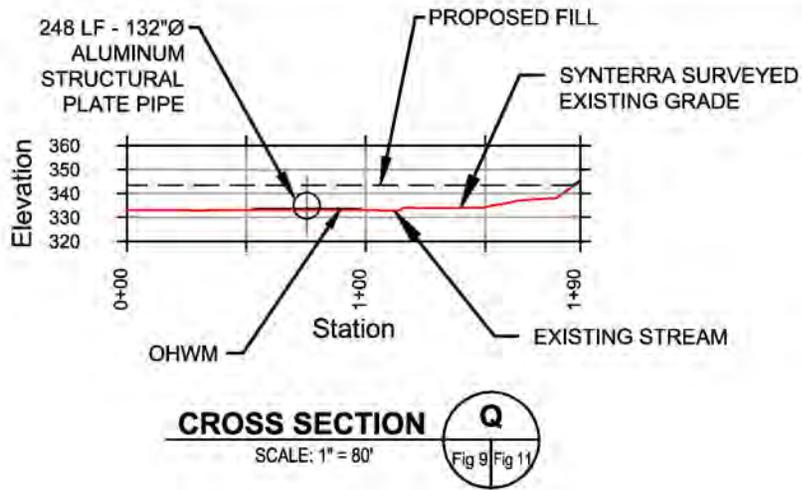
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DRAWN BY: C. NEWELL DATE: 08/04/2022  
PROJECT MANAGER: B. GREEN REV.: C  
LAYOUT: FIGURE 10-AREA 2-SECTS 1 REV. DATE: 02/09/2023

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**FIGURE 10**  
**PROFILES N AND P**  
**STREAM MODIFICATIONS**  
**VULCAN MATERIALS**  
**FAIRFIELD QUARRY**  
**WINNSBORO, SOUTH CAROLINA**

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**ABBREVIATIONS:**  
OHWM - ORDINARY HIGH WATER MARK

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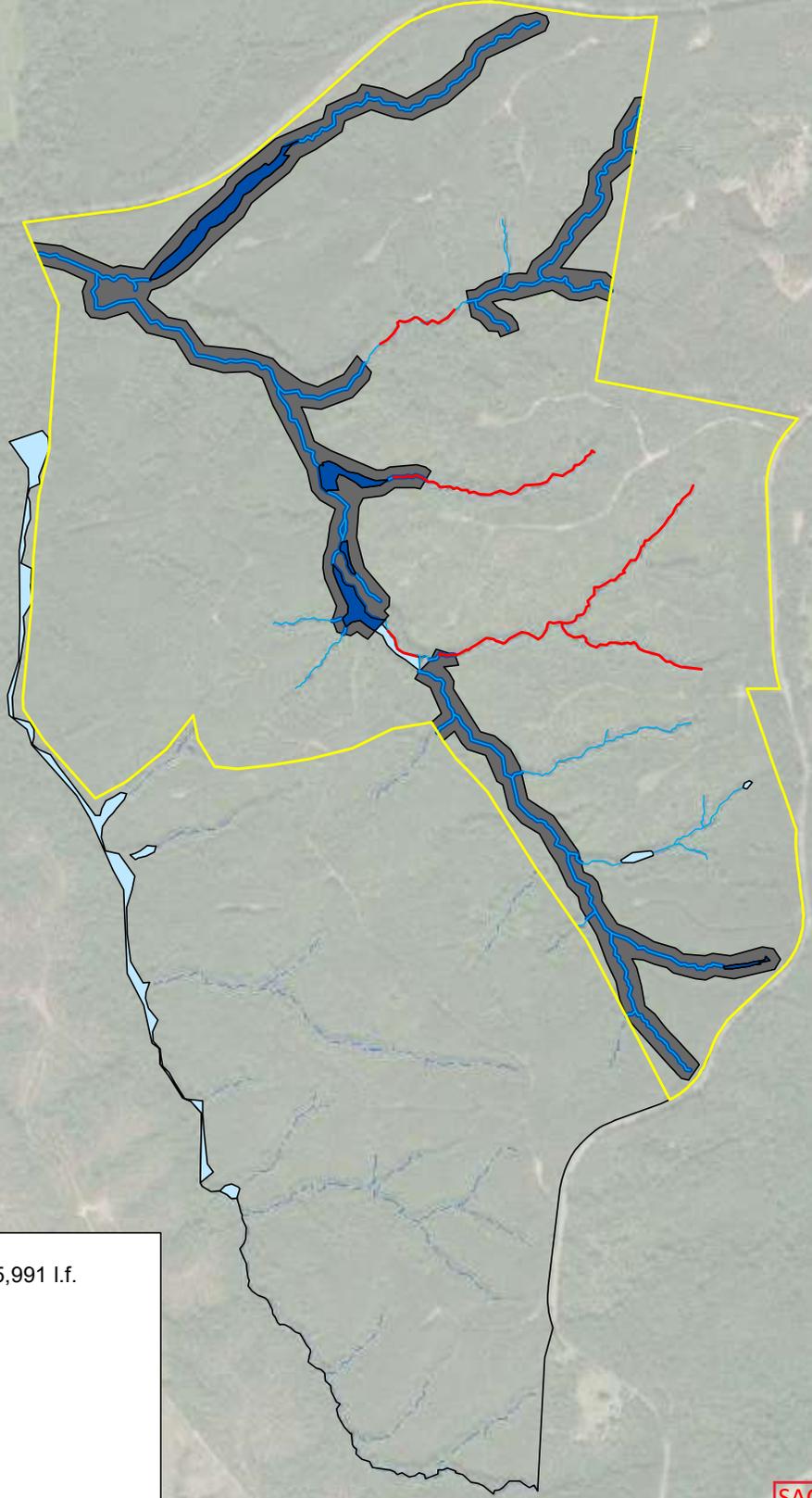
SCALE: AS SHOWN

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PROJECT MANAGER: B. GREEN REV.: C  
LAYOUT: FIGURE 11-AREA 2-SECTS 2 REV. DATE: 02/09/2023

**FIGURE 11**  
**CROSS SECTIONS Q, R, AND S**  
**STREAM MODIFICATIONS**  
**VULCAN MATERIALS**  
**FAIRFIELD QUARRY**  
**WINNSBORO, SOUTH CAROLINA**

# Conceptual On-Site Stream/Wetland Preservation Exhibit

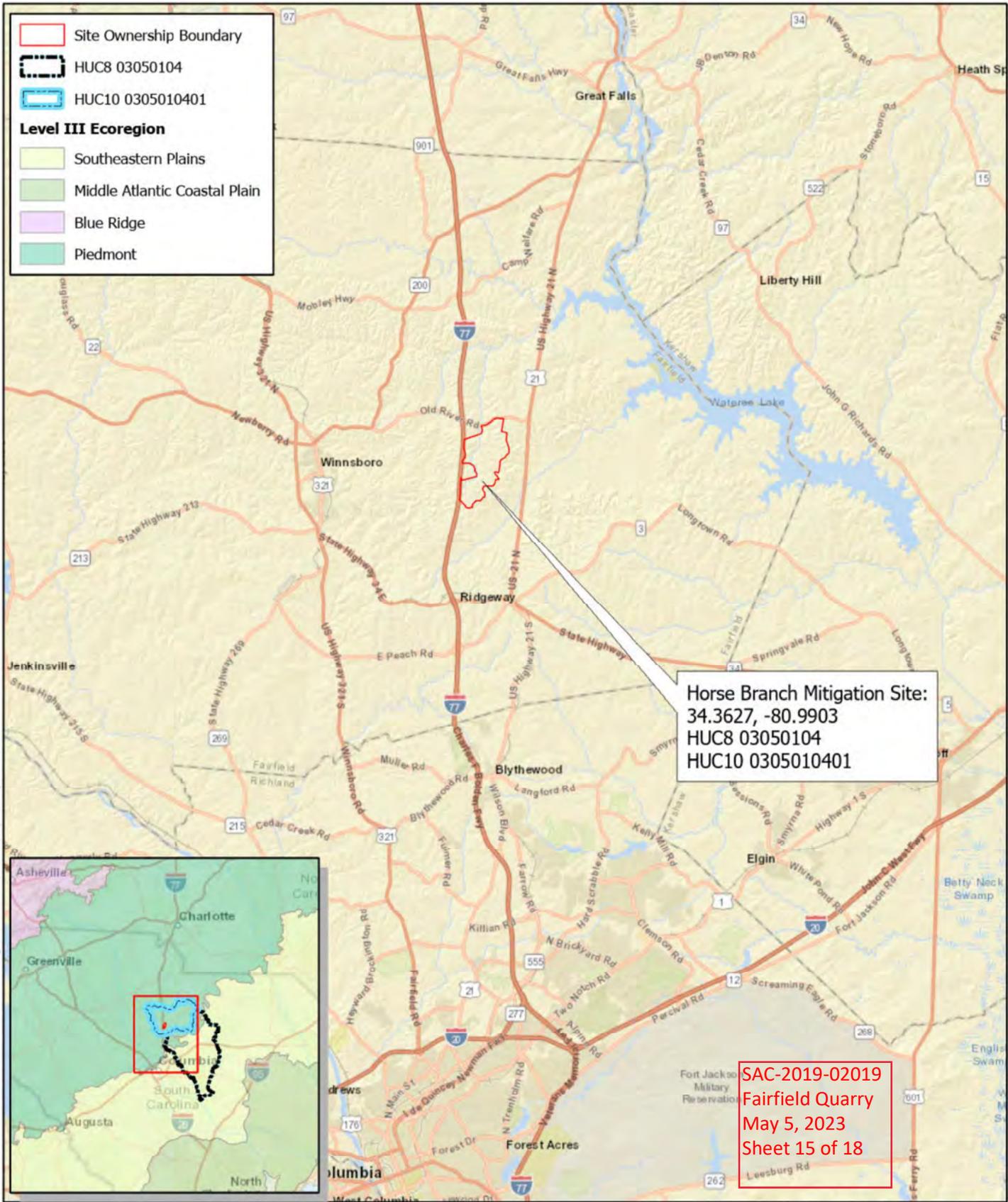


- Proposed Stream Impacts ~ 5,991 l.f.
- ▭ Lease Boundary
- ▭ Permit Area ~ 588.0 Ac.
- - - Existing Stream
- ▭ Existing Wetland
- ▬ Proposed Stream Preservation ~ 18,120 l.f.
- ▭ Proposed Wetland Preservation ~ 4.975 Ac.
- ▭ Proposed Preservation ~ 69.767 Ac. (incl wetland/stream acreage)

1" = 800'

This exhibit is intended for illustrative purposes only. All acreages and linear footages are approximate and subject to change.

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**HORSE BRANCH PRM MITIGATION SITE**  
Fairfield County, South Carolina

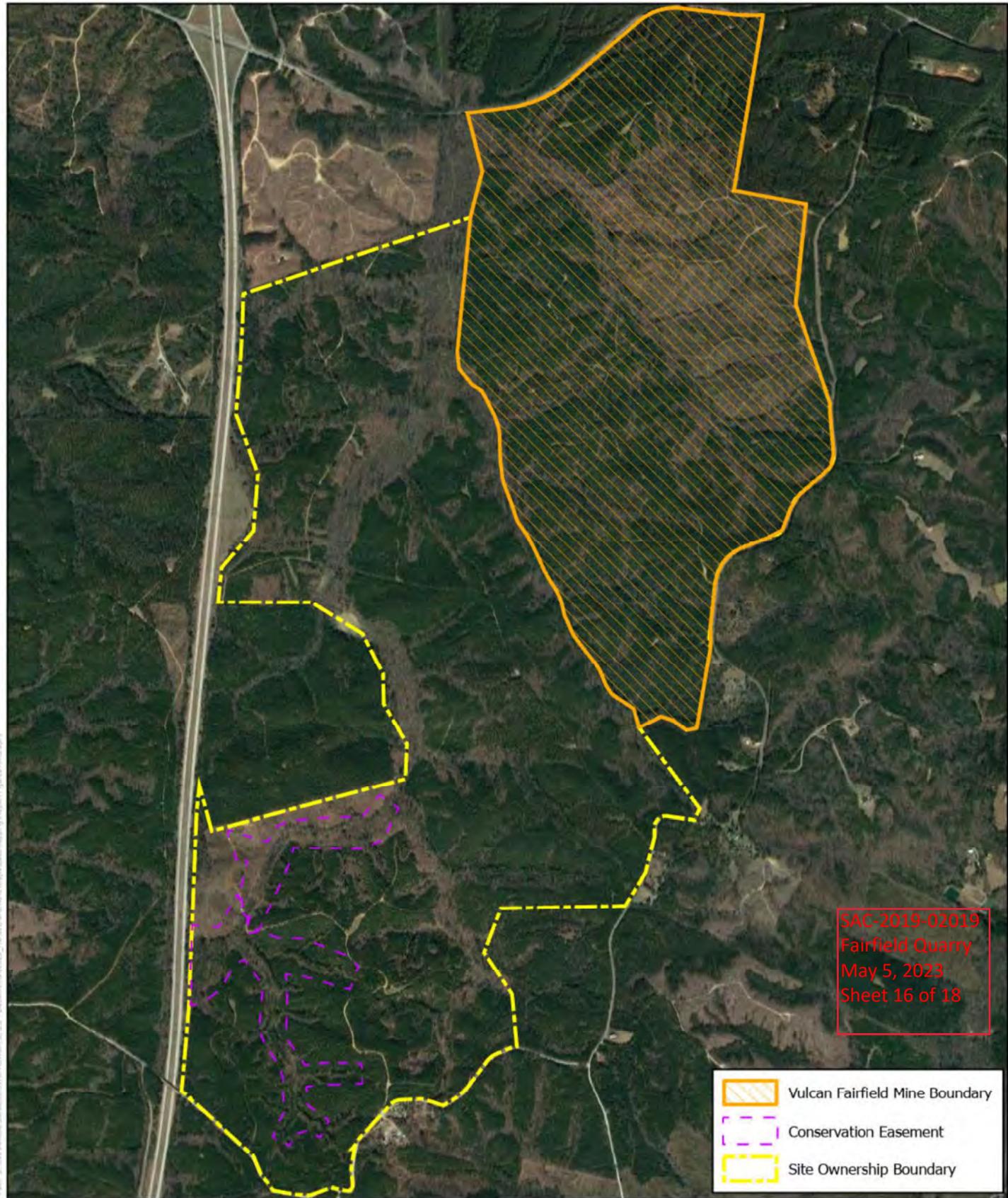
**FIGURE 1. SITE LOCATION**

Background:	World Imagery (GIS)
Scale:	1:316,800
Created By:	AMB
Reviewed By:	TJT
SWCA Project No.:	65528
Date Produced:	September 26, 2022

NAD 1983 StatePlane South Carolina FIPS 2000 Feet Int.

0 2.5 5 Miles

0 5 10 Kilometers



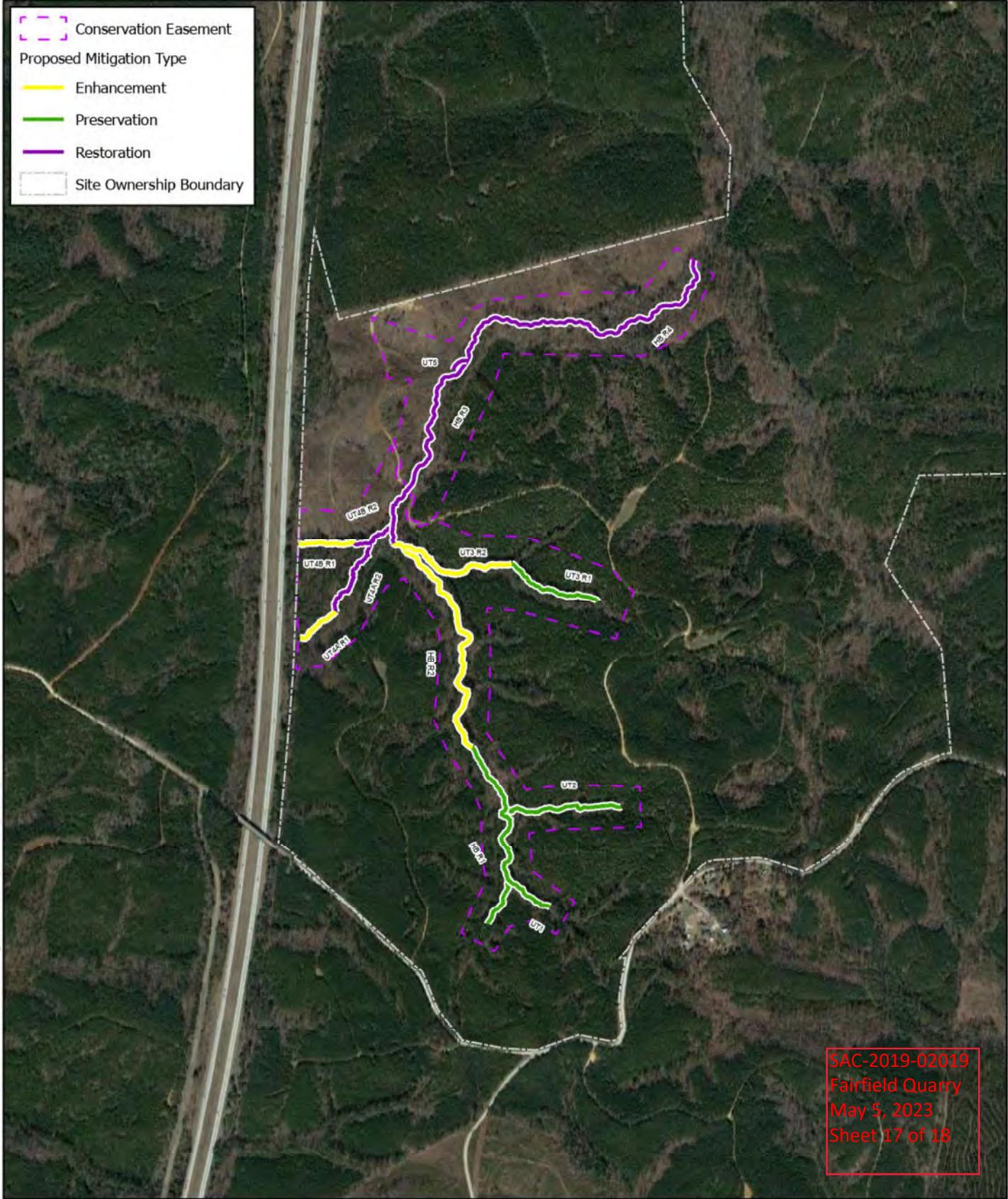
File: C:\external\swca\10104\4\FIELD\_HorseBranch\GIS\Map\Basemap.mxd Report Figure AMB-895



**HORSE BRANCH PRM MITIGATION SITE**  
 Fairfield County, South Carolina

**FIGURE 2. SITE PROXIMITY TO IMPACTS**

	Background:	USGS Topographic Maps
	Scale:	1:24,000
	Created By:	AMB
	Reviewed By:	TJT
	SWCA Project No.:	65528
Date Produced:	September 26, 2022	
NAD 1983 StatePlane South Carolina FIPS 3000 Feet Int.		



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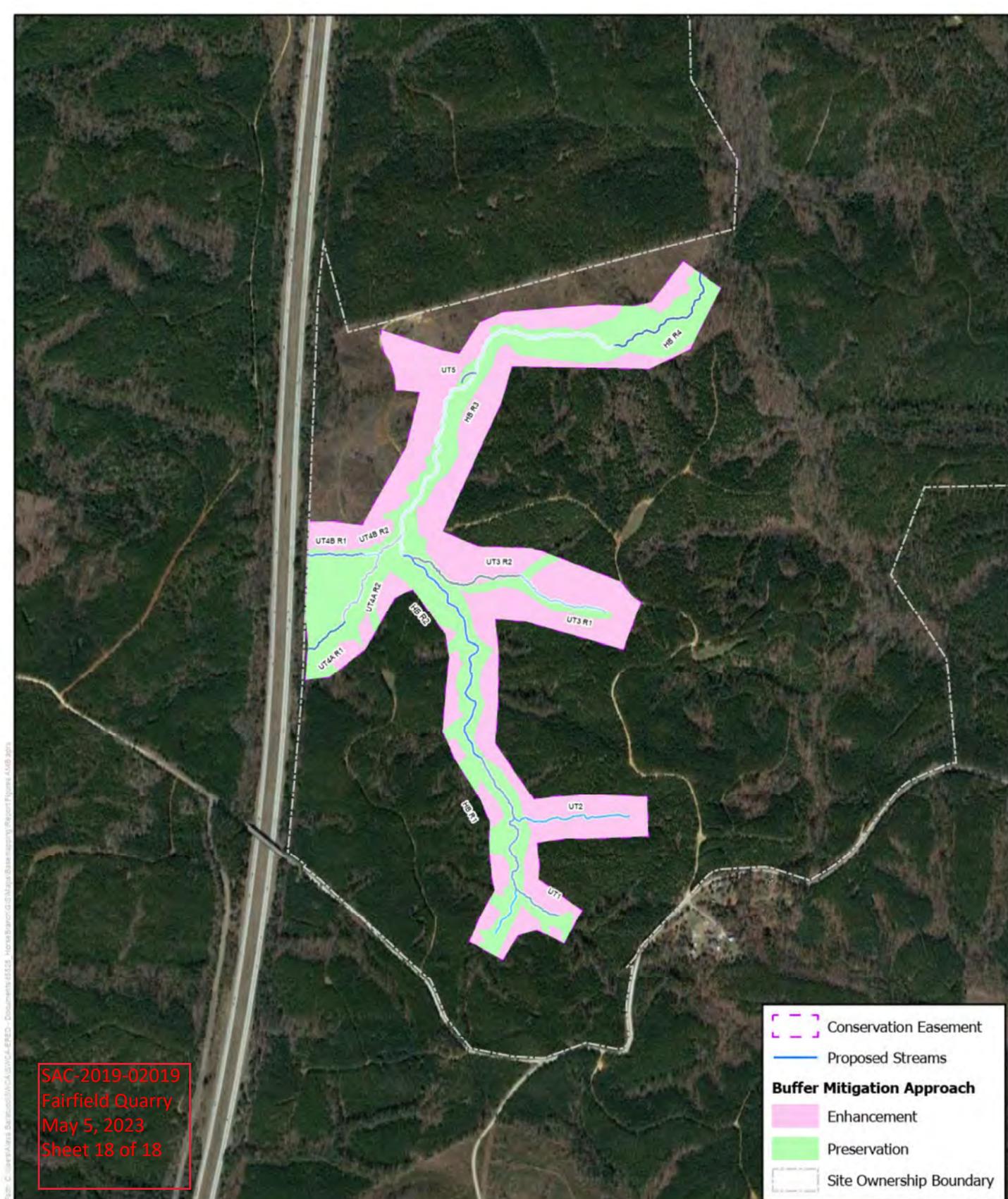
Path: C:\Users\jw... \Documents\65528 - Horse Branch PRM Mitigation Site\Report\Figure 11-17.dwg



**HORSE BRANCH PRM MITIGATION SITE**  
 Fairfield County, South Carolina  
**FIGURE 11. MITIGATION PLAN**

Background:	2020 Imagery
Scale:	1:12,000
Created By:	AMB
Reviewed By:	TJT
SWCA Project No.:	65528
Date Produced:	September 26, 2022

NAD 1983 StatePlane South Carolina FIPS 3002 Feet



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	Conservation Easement
	Proposed Streams
<b>Buffer Mitigation Approach</b>	
	Enhancement
	Preservation
	Site Ownership Boundary



**HORSE BRANCH PRM MITIGATION SITE**  
 Fairfield County, South Carolina  
**FIGURE 12. BUFFER ENHANCEMENT**

	Background:	2020 Imagery
	Scale:	1:12,000
	Created By:	AMB
	Reviewed By:	TJT
	SWCA Project No.:	65528
	Date Produced:	September 26, 2023
<small>ROAD 1983 StatePlane South Carolina FIPS 3103 Feet</small>		