



Congaree River Coal Tar/Sediment Cleanup

Public Meeting
March 30, 2022

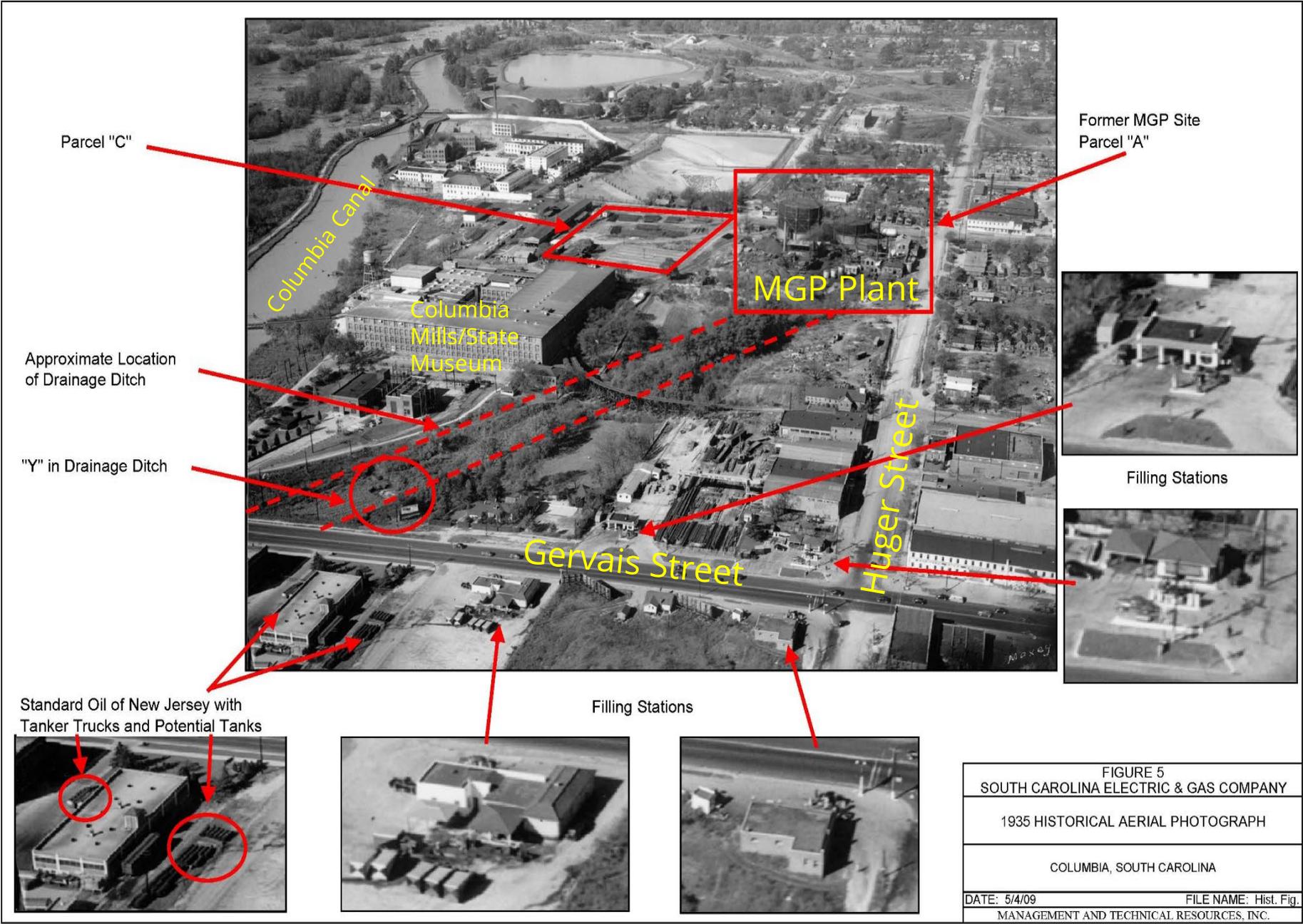


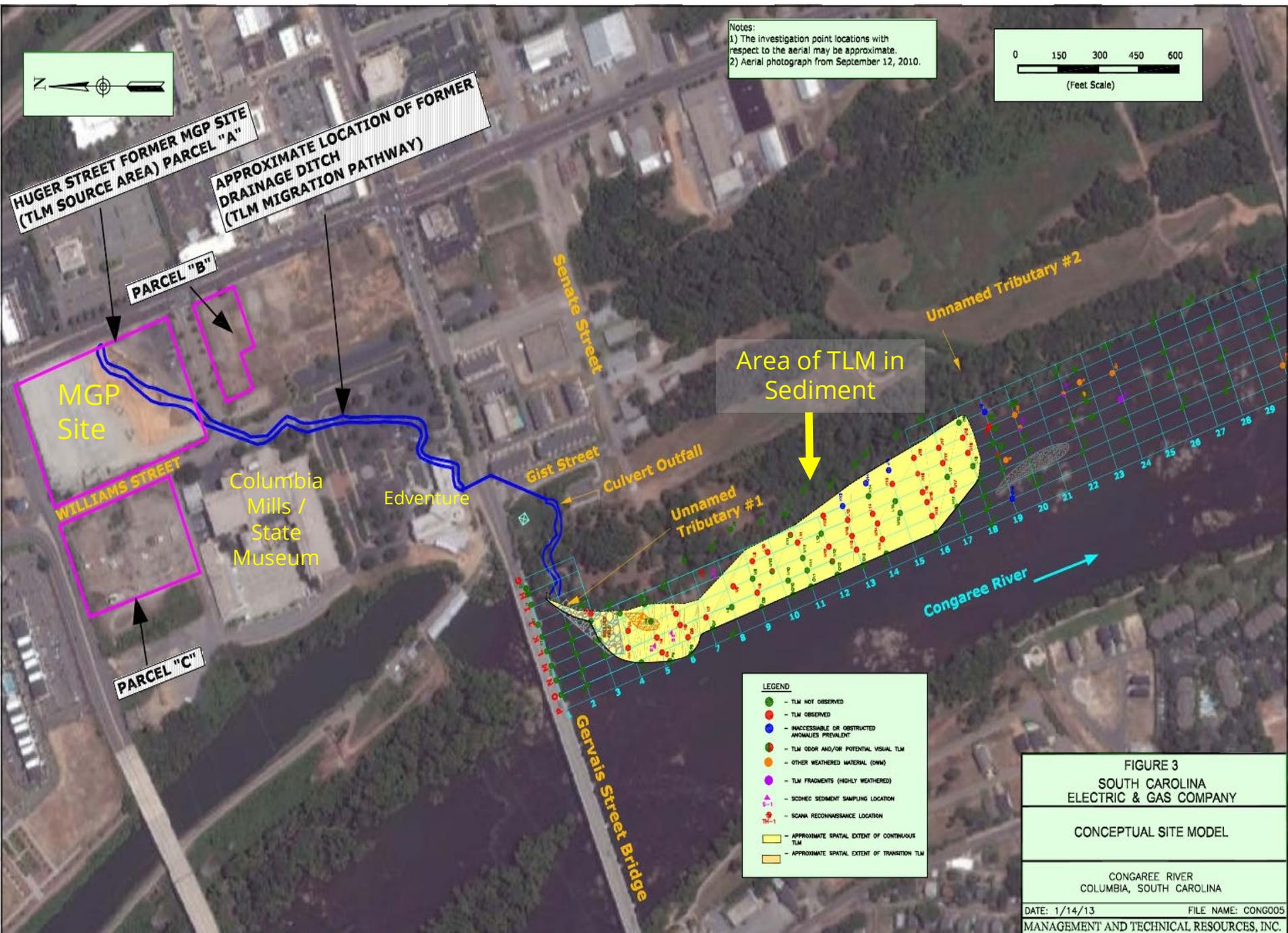
Agenda

- Presentation
 - Site History
 - Selected Remedy
 - Path Forward
- Questions

Manufactured Gas Plant History

- Located on Huger Street
- Operated from 1900-1950
- Plant burned coal to produce gas for production of the predecessor to natural gas
- Created large amounts of byproduct (coal tar)
- Operated as the City Bus Terminal from 1950s- 2008
- Contract between DHEC and Dominion Energy (DEC) to assess and cleanup Manufactured Gas Plant (MGP) in 2002
- MGP removal conducted from 2009-2012
- Coal Tar discovered in Congaree River in 2010







Cleanup Challenges

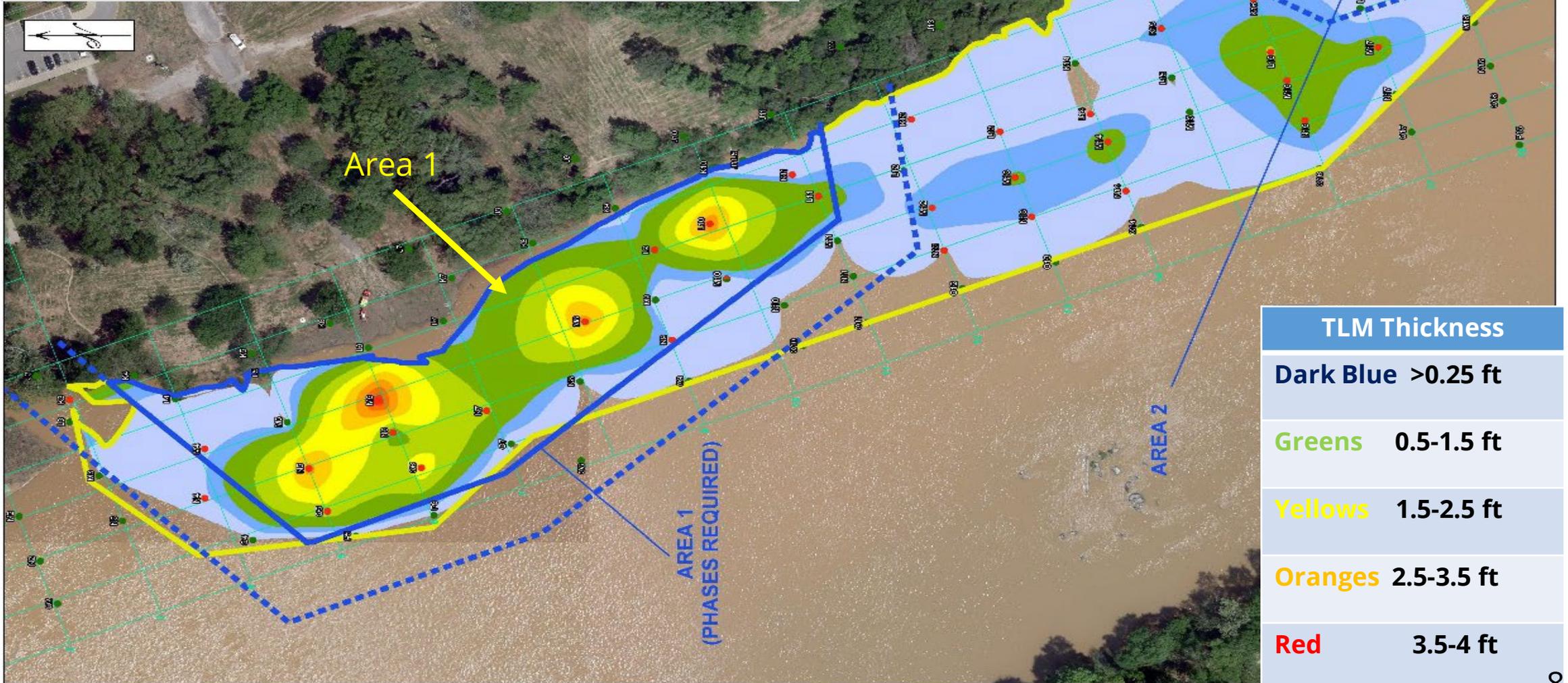
- Civil war munitions deposited in this portion of the Congaree River
 - Potential Unexploded Ordnance (UXO)
 - Worker Safety Concerns
 - Preserving Historical Artifacts
- 2015 Flood deposited up to 5 feet of sediment in the area of concern
- River has bedrock bottom making metal piling options infeasible
- Dynamic river conditions
- Limited timeframes for work in the river



Modified Removal Action (Selected Remedy)

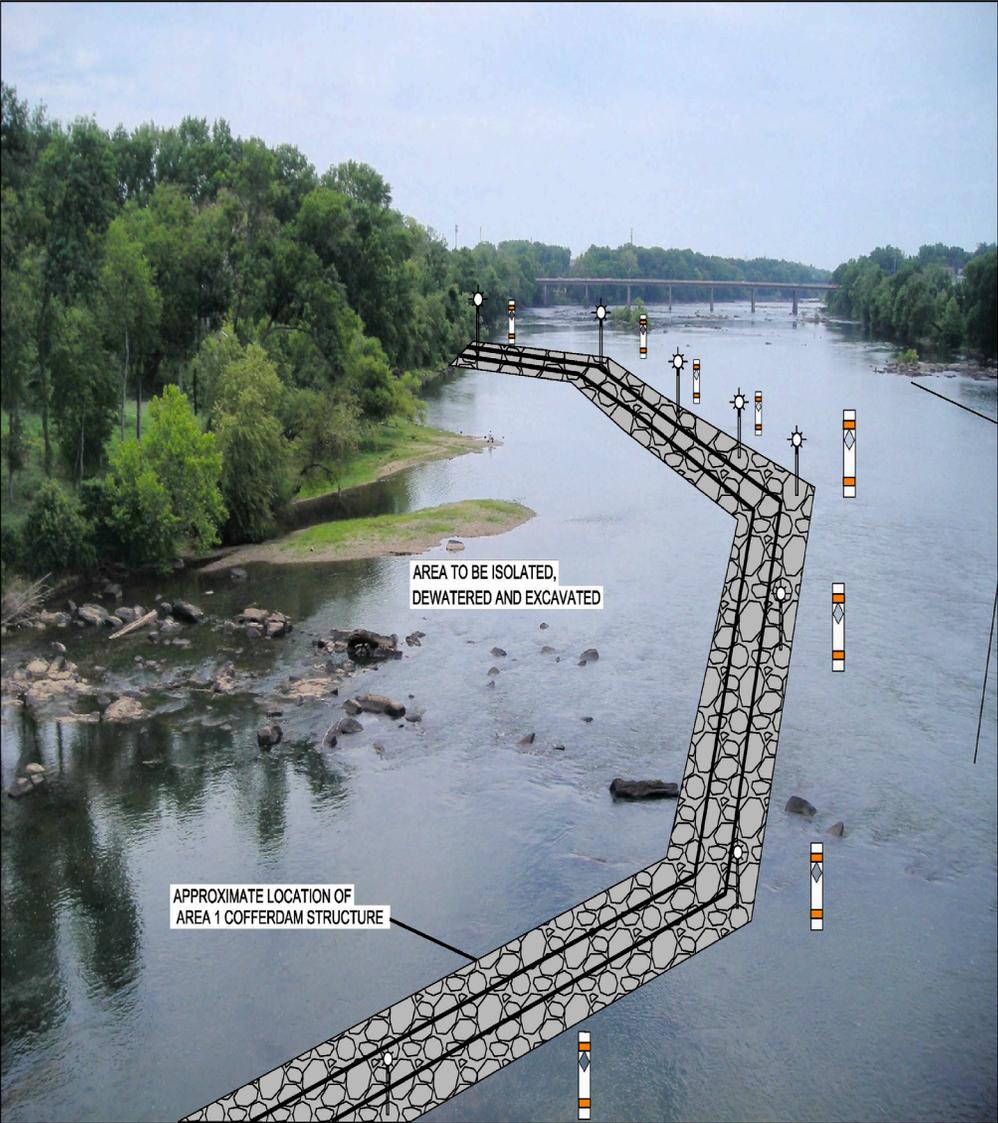
- Approximately **70-75% of total Tar-Like Material (TLM) will be removed** from the Congaree River
- TLM will be removed from areas of the river that are **most accessed** and where the **majority of TLM volume** exists in the river
 - **Two (2) separate areas (Area 1 and Area 2)**
- Reduces impact of river rise on west bank to < 1 foot

This figure shows the average TLM thickness in the Congaree River. Areas 1 and 2 will be removed.

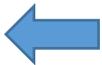


TLM Thickness	
Dark Blue	>0.25 ft
Greens	0.5-1.5 ft
Yellows	1.5-2.5 ft
Oranges	2.5-3.5 ft
Red	3.5-4 ft

Cofferdam Layout View



View from West Columbia Side of River

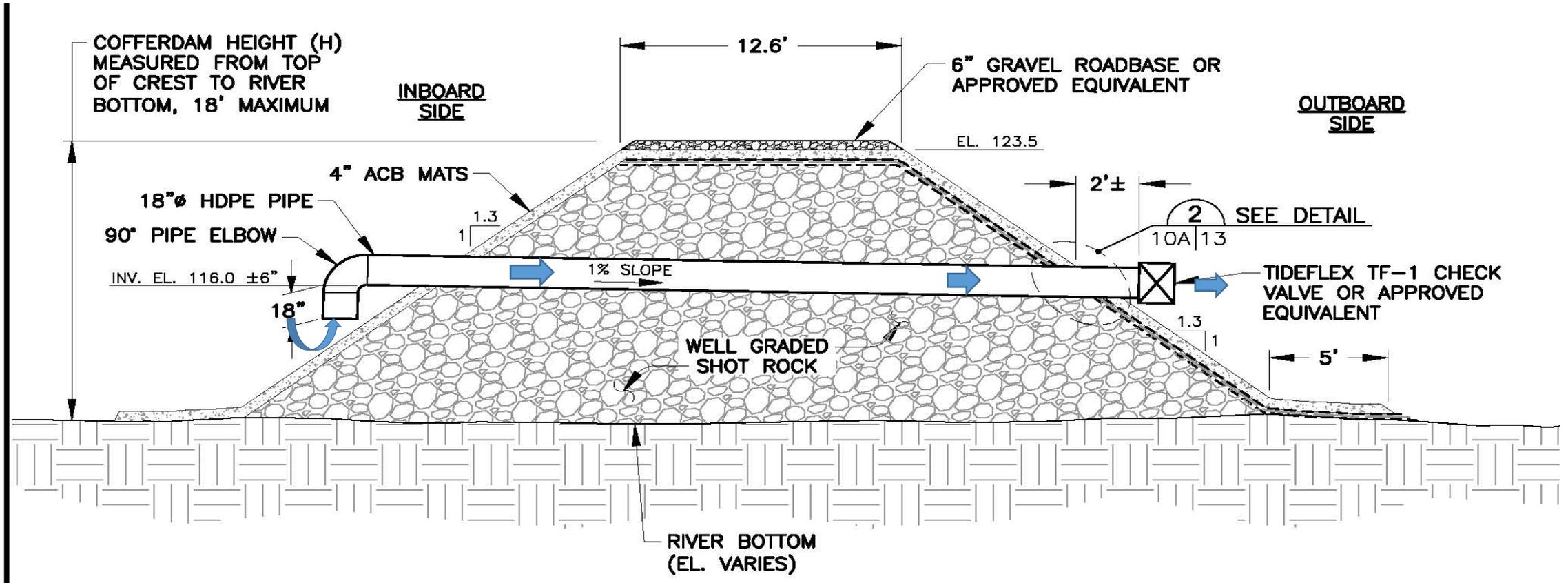


View from Gervais Street Bridge

Reinforced Rockfill Cofferddam

Land Side

River Side



- Designed to be overtopped.
- Drainage pipe built in to remove water.

Cofferdam Construction

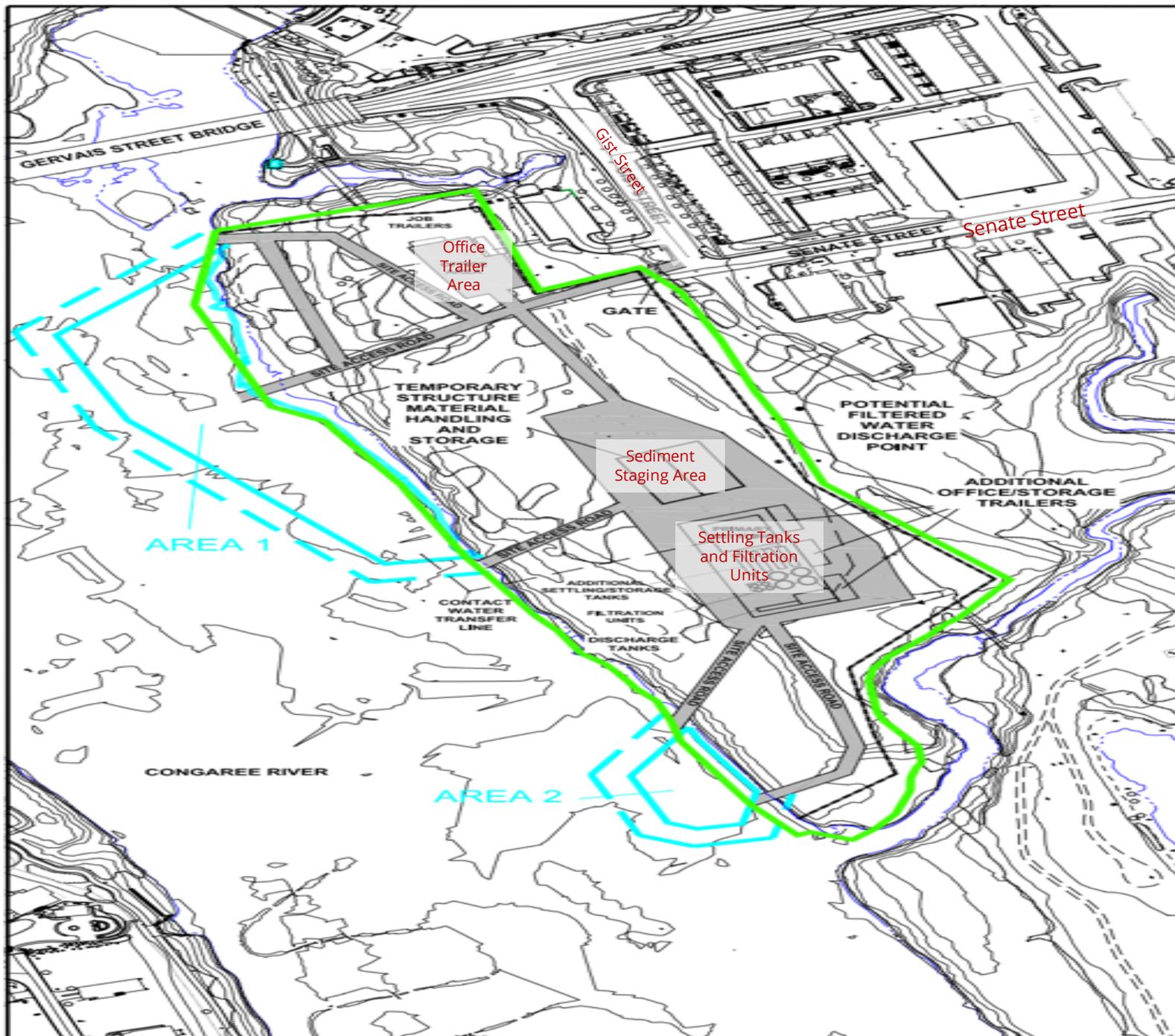


Examples of articulated concrete block mats that will be used to reinforce the rockfill cofferdam on sides and top.



Milestones Since November 2020 Public Meeting

Date	Milestones
December 2021	Army Corps of Engineers (ACOE) issued Nationwide 38 Permit DHEC's BOW Certification to Construct under ACOE Permit
February 2022	DHEC's Action Memorandum to document selection of Modified Removal Action
March 2022	ACOE Recertification of Nationwide 38 Permit



Conceptual Site Operations Plan

	<p>Access to and from the river will be restricted within the project footprint</p>
	<p>Operating Hours: 7 am–6 pm M-F</p>
	<p>Trucks will move material from 9 am – 4 pm</p>
	<p>Security measures will be in place at the site 24/7 during the project</p>

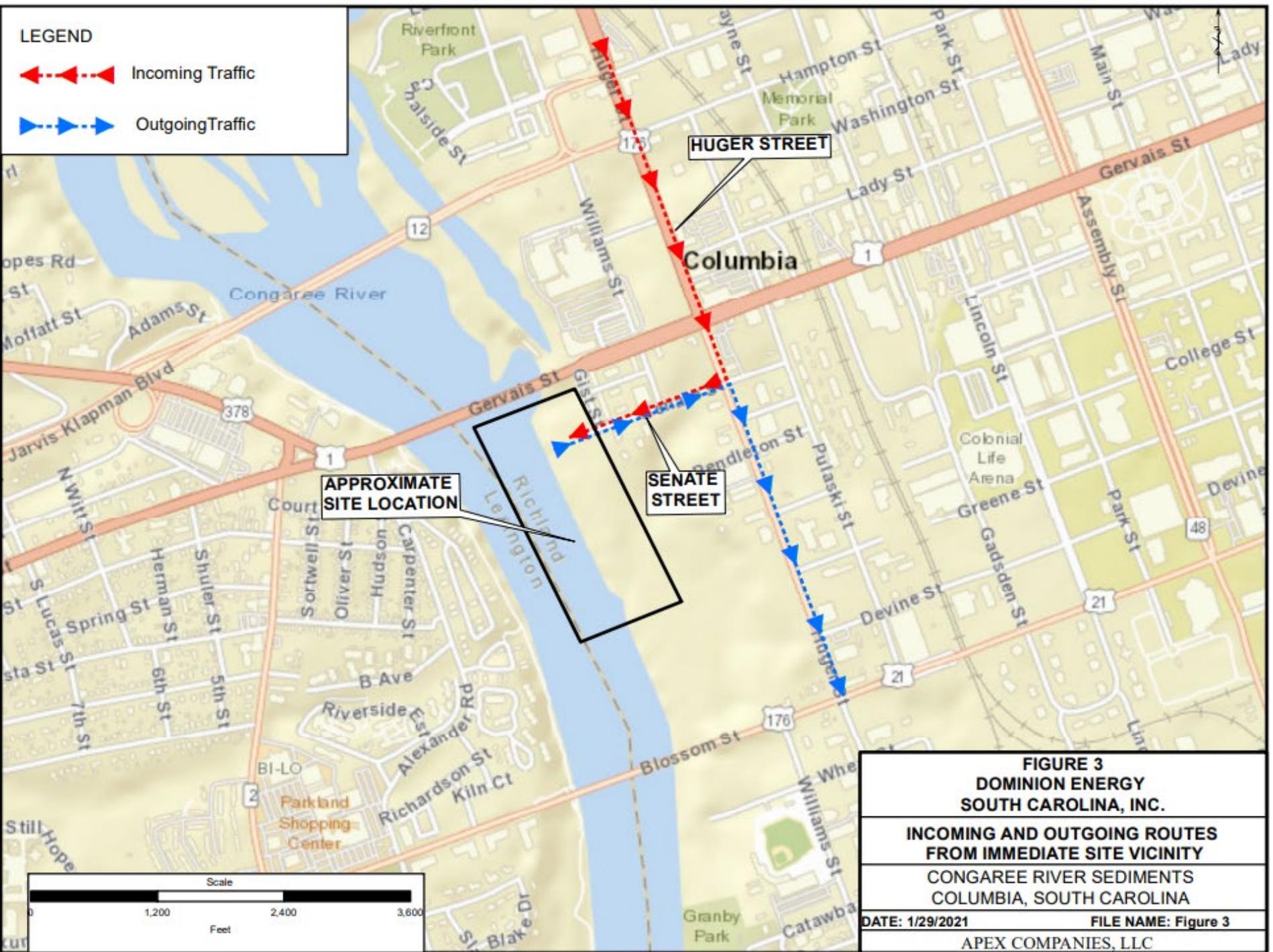


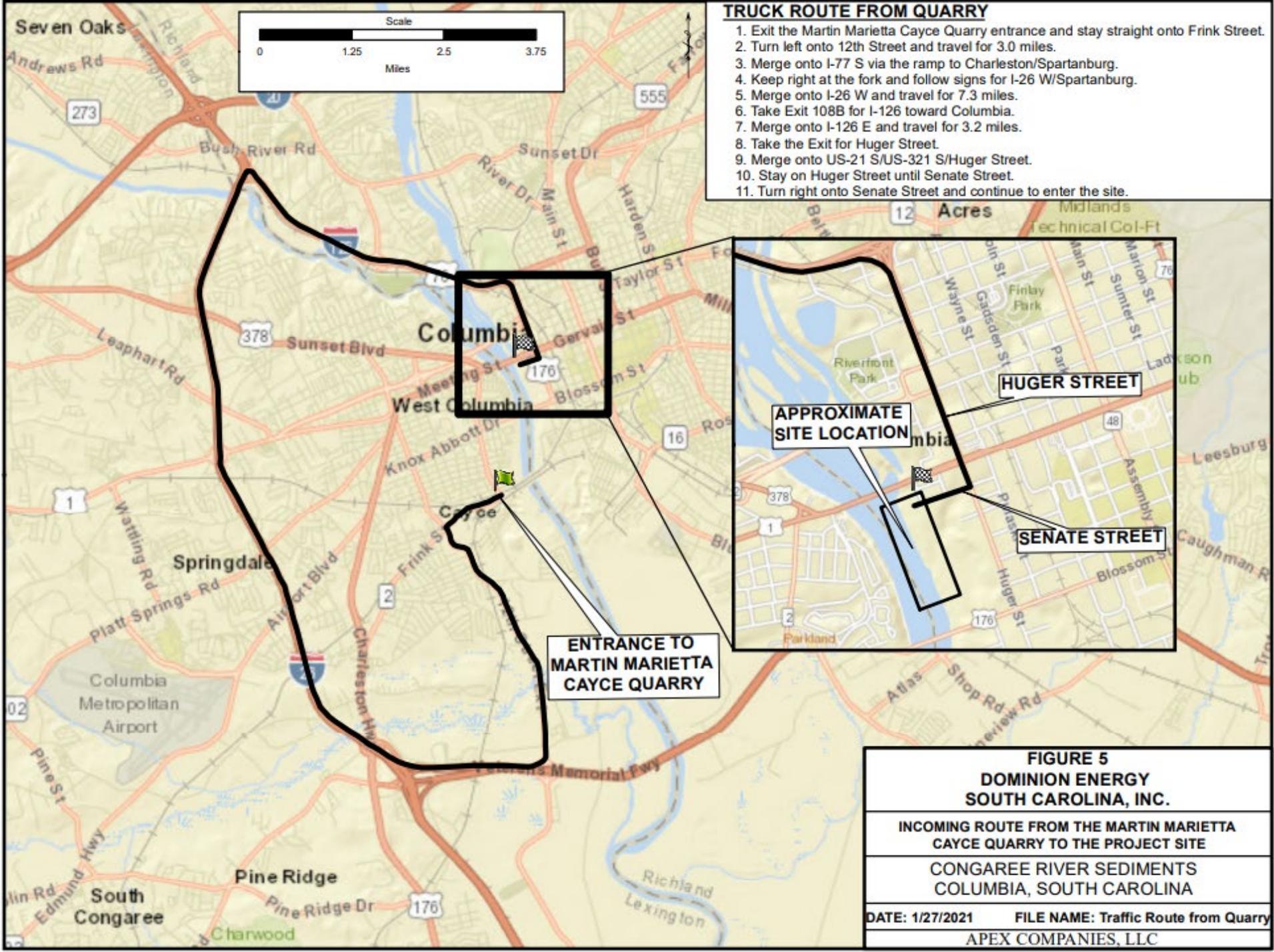
FIGURE 3
DOMINION ENERGY
SOUTH CAROLINA, INC.

INCOMING AND OUTGOING ROUTES
FROM IMMEDIATE SITE VICINITY

CONGAREE RIVER SEDIMENTS
COLUMBIA, SOUTH CAROLINA

DATE: 1/29/2021 **FILE NAME: Figure 3**

APEX COMPANIES, LLC



TRUCK ROUTE FROM QUARRY

1. Exit the Martin Marietta Cayce Quarry entrance and stay straight onto Frink Street.
2. Turn left onto 12th Street and travel for 3.0 miles.
3. Merge onto I-77 S via the ramp to Charleston/Spartanburg.
4. Keep right at the fork and follow signs for I-26 W/Spartanburg.
5. Merge onto I-26 W and travel for 7.3 miles.
6. Take Exit 108B for I-126 toward Columbia.
7. Merge onto I-126 E and travel for 3.2 miles.
8. Take the Exit for Huger Street.
9. Merge onto US-21 S/US-321 S/Huger Street.
10. Stay on Huger Street until Senate Street.
11. Turn right onto Senate Street and continue to enter the site.

**ENTRANCE TO
MARTIN MARIETTA
CAYCE QUARRY**

**APPROXIMATE
SITE LOCATION**

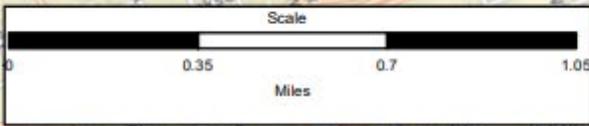
HUGER STREET

SENATE STREET

FIGURE 5 DOMINION ENERGY SOUTH CAROLINA, INC.	
INCOMING ROUTE FROM THE MARTIN MARIETTA CAYCE QUARRY TO THE PROJECT SITE	
CONGAREE RIVER SEDIMENTS COLUMBIA, SOUTH CAROLINA	
DATE: 1/27/2021	FILE NAME: Traffic Route from Quarry
APEX COMPANIES, LLC	

TRUCK ROUTE TO QUARRY

1. Exit site onto Senate Street and turn right onto Huger Street.
2. Turn right (west) onto Blossom Street.
3. Continue west until 12th street.
4. Turn left onto 12th Street.
5. Continue on 12th Street until making a left onto Frink Street.
6. The quarry entrance is at the end of Frink Street.



**APPROXIMATE
SITE LOCATION**

BLOSSOM STREET

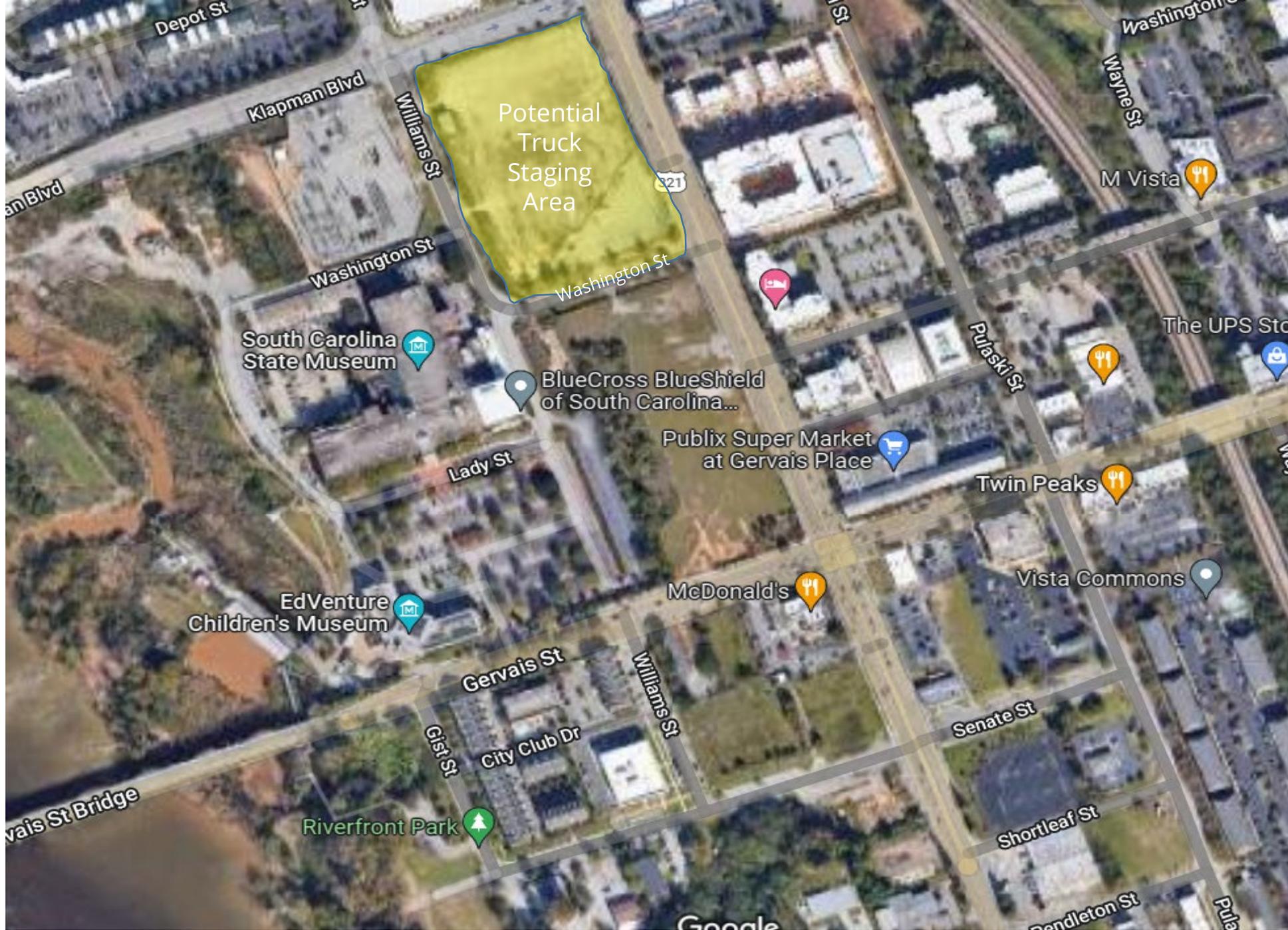
**ENTRANCE TO
MARTIN MARIETTA
CAYCE QUARRY**

**FIGURE 7
DOMINION ENERGY
SOUTH CAROLINA, INC.
OUTGOING ROUTE FROM THE PROJECT SITE
TO THE MARTIN MARIETTA CAYCE QUARRY**

CONGAREE RIVER SEDIMENTS
COLUMBIA, SOUTH CAROLINA

DATE: 1/29/2021 FILE NAME: Traffic Route to Quarry

APEX COMPANIES, LLC



Tentative Schedule

Timeframe	Activity
April	Contractor Selection
	Submit Work Plan to DHEC for Review
	Complete Pre-Mobilization Activities
	Conduct Pilot Test Vibration Monitoring
May	DHEC review and approve Work Plan
	Remediation Contractor Mobilization
	Mobilization Site Set-up
May/June	Begin Importing Stone for Cofferdam
	UXO Screening/Clearing of Area 1 Cofferdam Footprint
June/July	Construct Area 1 Cofferdam

Potential Schedule Setbacks

- Contractor Selection
- River Levels/Water Clarity/Unfavorable Weather
- River Flooding
- Vibration Pilot Study Results
- UXO Removal
- City of Columbia sewer line work

City of Columbia Sewer Line Work



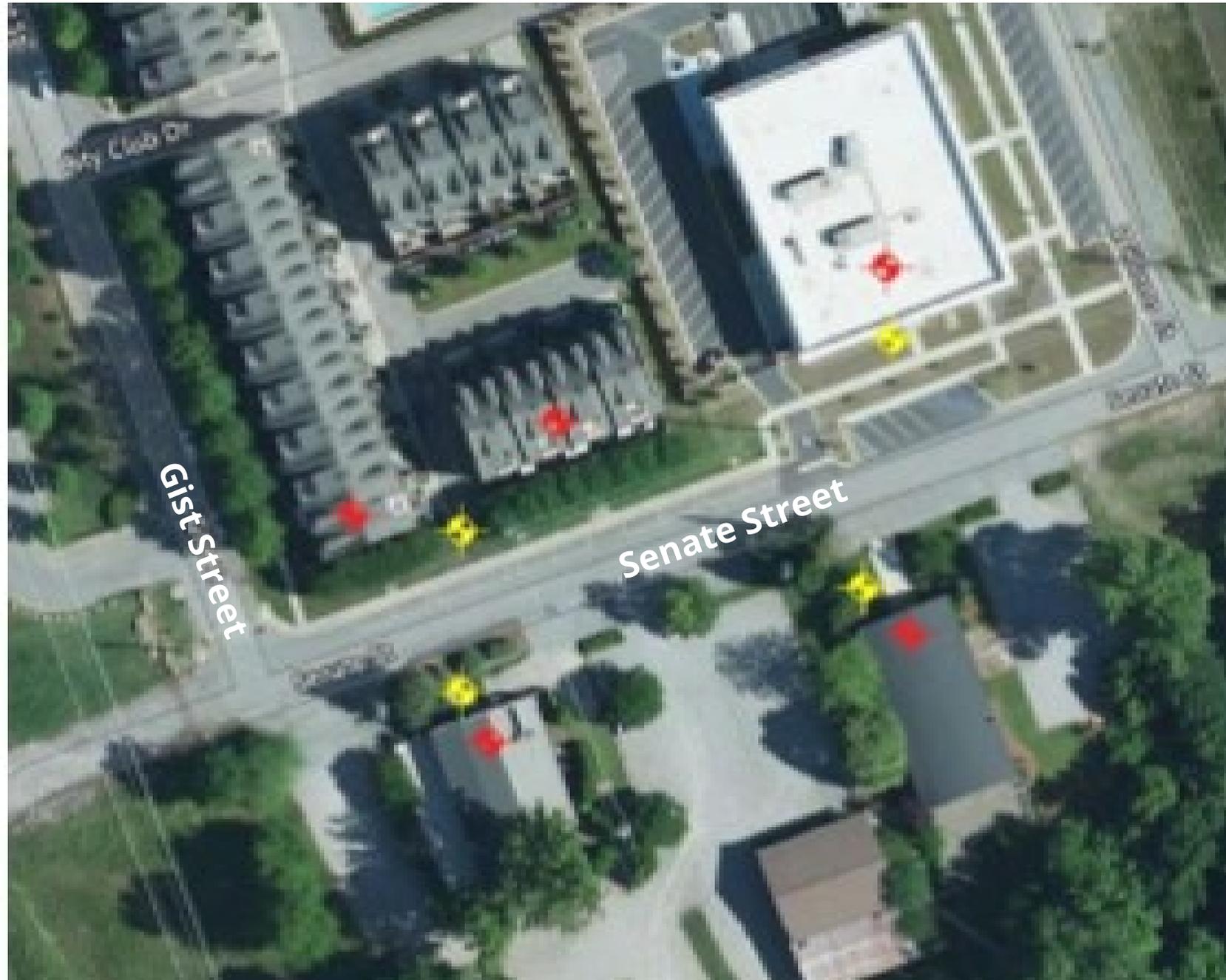
- Senate Street is to be repaved from 100 ft. east of Williams Street to the western end of Senate Street
- Expected to be complete by end of April 2022

Vibration Monitoring Pilot Test

- Measure vibration from simulated truck traffic
- Measure background levels of vibrations during normal traffic flow
- Determine speed and load to minimize vibrations
- Use data to design parameters for trucks entering/exiting along Senate Street

Vibration Monitoring Pilot Test

- Buildings that will be monitored (**Red Dots**)
- Vibration Monitoring Locations (**Yellow Dots**)



Path Forward

- Dominion selects contactor
- Submit work plan to DHEC for review
- 2-3 years of construction
- River access off Senate Street restricted beginning in May 2022
- Construction begins Summer 2022

Collaborative Partners & Stakeholders



Lucas Berresford
Greg Cassidy



Tom Effinger
Rusty Contrael
Paul Biery



Bill Stangler



Contact Us



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