National Marine Fisheries Service Coordination

Williams, Lee

From: lee.williams@mbakerintl.com
Subject: FW: EXTERNAL: FW: Your email has been received. Re: S-30 over Black River NMFS Section 7 SERO PBE concurrence

From: nmfs ser esa consultations - NOAA Service Account <nmfs.ser.esa.consultations@noaa.gov>
Sent: Monday, March 23, 2026 2:22 PM
To: McGoldrick, William, R. <MCGOLDRIWR@scdot.gov>
Subject: Your email has been received. Re: S-30 over Black River NMFS Section 7 SERO PBE concurrence

This auto reply confirms that we have received your email.

For all Endangered Species Act Section 7 Consultation requests:

- We are running about 6 weeks out from receiving the consultation request to assigning it. Our consultation delays are solely due to our incompatible workload and staffing levels.
- We carry out all projects in the order in which they were received in order to be fair to all applicants. Individual consultation completion times are impacted by the consultation type, complexity, completeness of information, and our consultation biologist's workload, and then further affected by the workload of the reviewers and other actions being handled in our office. Consultation timelines currently range between 2-5 months from the date we have all information necessary to complete the consultation, also known as the initiation date.
- Once your consultation is logged in you will receive an email with the NMFS Tracking number. If you don't receive a tracking number within 10 days, please reply to this email asking for a status update.

For all requests for Technical Assistance:

- We will respond as soon as we are able.
- Please include sufficient detail about your project to help us help you.

For requests for species lists:

- To determine species that would be present in the project area, please visit our Section 7 Mapper which identifies consultation area recommendations for species and critical habitats across our region. This online mapping tool helps action agencies more accurately and efficiently determine the species, life stages, and habitats that may be affected by their proposed projects, resulting in enhanced, easily accessible guidance to action agencies and more accurate, consistent policy determinations for listed species and critical habitats. The Section 7 Mapper can be found at: https://www.fisheries.noaa.gov/resource/map/southeast-region-esa-section-7-mapper

Thank you.

Williams, Lee

From: McGoldrick, William, R. <MCGOLDRIWR@scdot.gov>
Sent: Monday, March 23, 2026 2:20 PM
To: nmfs.ser.esa.consultations@noaa.gov
Cc: Cleaver, Caycee, C.; Williams, Lee
Subject: S-30 over Black River NMFS Section 7 SERO PBE concurrence
Attachments: NMFS PBE S30BlackRiver_application.pdf

Dear NMFS,
Please find attached a submittal requesting review and concurrence of a project for qualification under the NMFS/FHWA SERO PBE. The PDF contains relevant information per the PBE supporting the project. Please let me know if you have any questions.

Respectfully,

Will McGoldrick
Environmental Program Manager
P 803-737-1326 **E** mcgoldriwr@scdot.gov
South Carolina Department of Transportation
955 Park Street, P.O. Box 191, Columbia, SC 29202-0191

South Carolina
Department of Transportation

March 23, 2026

Mr. David Bernhart
Assistant Regional Administrator for Protected Resources
National Marine Fisheries Service
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

Re: Request for Concurrence under NMFS/FHWA SERO PBO for Section 7(a)(2) of the Endangered Species Act for S-30 bridge replacement over the Black River, Williamsburg County, SC, P043746

Dear Mr. Bernhart:

The South Carolina Department of Transportation (SCDOT) and Federal Highway Administration (FHWA) proposes to authorize and fund the proposed project as described below. Please accept information package for concurrence with the *Programmatic Biological Evaluation (NLAA) on the Effects of Transportation Activities and Projects Regularly Undertaken in North Carolina, South Carolina, and Georgia* (PBE) under section 7(a)(2) of the Endangered Species Act (ESA) for the above mentioned project. A determination has been made that the proposed activity **may affect, but is not likely to adversely affect** the Atlantic sturgeon due to compliance with stipulations outlined in the PBE. Supporting documentation per the PBE is provided for review.

Pursuant to the PBE instruction, we are providing the following information:

- A description of the proposed action
- A description of the action area
- Additional project information from checklist/application
- A completed application form with completed checklist for applicable project design criteria (PDCs) for the project
- A location map and bridge drawing

Proposed Action

This proposed project is intended to replace the S-30 (Simms Reach Rd) bridge over the Black River and demolish the existing bridge (see Attachment 2). Work is expected to commence in 2027-28 and last 6-9 months.

The proposed bridge replacement project will involve the following activities:

- Installation of sediment and erosion control measures.
- Establishment of construction staging areas in uplands.

- Installation of temporary work trestles or barges for bridge construction access.
- Demolition and removal of the existing bridge structures.
- Installation of new bridge piers within the Black River.
- Construction of the new bridge bents and super structures.
- Removal of temporary work trestles.

The application and all applicable PDCs (general and project activity specific) are identified in the attached checklist (Attachment 1). There will be no blasting associated with the bridge demolition. This project will be completed using a Design-Build method. Therefore, the contractor will be responsible for defining the final footprint of erosion and sediment control measures. Any activities outside the evaluated area will be the contractor's responsibility to re-evaluate and will be coordinated through SCDOT.

Description of the Action Area

The Black River is a typical low-gradient, coastal, blackwater river flowing through South Carolina's coastal plain, including a substantial reach through Williamsburg County, before joining the Pee Dee River near Georgetown. The portion of the Black River located within the PSA is approximately 180 feet wide, and streambed substrate is predominantly unconsolidated sand. Consistent with other coastal plain blackwater rivers, there appears to be a lack of gravel and cobble substrate. This portion of the Black River is also freshwater habitat, does not contain seagrass species, and does not provide habitat for any sea turtle species. Other than the extreme margins along the banks, vegetation is sparse throughout most of the river. The adjacent BlackRiver floodplain within the PSA consists predominantly of forested and disturbed uplands and forested and disturbed wetlands, The current disturbance of upland and wetland habitats within the PSA is due to SCDOT right-of-way (ROW) and utility easement maintenance.

Additional Project Information from Checklist/Application

The project is being reviewed under FHWA's NEPA regulations. No regulatory permits have been requested at present but once final design is developed, all required state and federal permits will be obtained. The project is anticipated to require a SC State Navigable Waters permit and USACE 404 Regional General Permit.

Conclusion

Through compliance with Section 4.4 of the PBE, relevant documentation is being provided to nmfsgenericemailaddress@noaa.gov for processing and request for concurrence within 15 days of receipt.

Sincerely,

Will McGoldrick, DBIA
Alternative Delivery Environmental Manager
South Carolina Department of Transportation

All Activities/Projects		
Title	**Format**	**Description**
Date Sent to NMFS	3/23/2026	This is the date the email with the project review information was sent to NMFS
FHWA PM/POC Last Name	Dawson/McGoldrick	Provide your last name only
Permit Used	USACE Regional General Permit 4; see additional information	The permit instrument used to authorize the activity
Any other component of project issued under different permit instrument?	No	Was any activity authorized under a different programmatic or separate Section 7 consultation?
Identify any other permit instrument used.	Yes, SCDES State Navigable Waters Permit; see additional information	If the answer to previous question was "Yes," then describe the permit type used to authorize the other project component.
Permit Tracking Number	TBD, Permit application has not been submitted to the USACE	This is the permit number assigned by USACE to the project.
Project Address	497 County Rd S-45-30 Kingstree, SC 29556	Address of the project site
County	Williamsburg	County the project site is located
Latitude	33.555717	This shall be formatted in decimal degrees to 5 places.
Longitude	-79.707786	This shall be formatted in decimal degrees to 5 places. Please provide a negative symbol before the longitude to denote the Western Hemisphere.
Waterbody	Black River	Provide easily identifiable name/names of waterbody where project will take place.
Seagrass(es) in project footprint?	No	Type "Yes" if seagrasses are located within the project footprint.
Impacts to seagrass(es)?	No	Calculate the square feet of impacts to seagrasses.
Located in Atlantic Sturgeon Critical Habitat Unit?	Unit 6, Black River	Provide the critical habitat unit that the project occurs within the boundaries of critical habitat even if it does not impact the essential features or select "N/A" if not located in geographic area of any critical habitat under NMFS PRD purview.
Atlantic Sturgeon CH Impacts to Physical and Biological Features.	175 sqaure feet	Calculate the square feet of impacts to essential features. Review the document for the definition of essential features.
AP1: Relevant BMPS?	Yes	If no, explain and provide justification for not adhering.
AP2: Adhere to Sea Turtle and Sawfish Construction Conditions?	No for turtles and sawfish but Yes for sturgeon.	If no, explain and provide justification for not adhering.
AP3: Vessel, equipment conditions?	Yes	If no, explain and provide justification for not adhering.

AP4: Using erosion devices/turbidity curtains?	Yes	If no, explain and provide justification for not adhering.
AP5: Petroleum products?	Yes	If no, explain and provide justification for not adhering.
AP6: Material cleaning?	Yes	If no, explain and provide justification for not adhering.
AP7: Interaction/injury reporting?	Yes	If no, explain and provide justification for not adhering.
AP8: Entanglement PDCs?	Yes	If no, explain and provide justification for not adhering.
AP9: Noise PDCs?	Yes	If no, explain and provide justification for not adhering.
AP10: SAV impacts?	Yes	If no, explain and provide justification for not adhering.
AP11: Daylight hours?	Yes	If no, explain and provide justification for not adhering.
AP12: Sea turtle nesting beaches?	No, no beaches or sea turtle habitat is located within the project area	If no, explain and provide justification for not adhering.
AP13: Elevated structures?	Yes	If no, explain and provide justification for not adhering.
AP14: Mouths of sturgeon rivers?	No, The project is not located near the mouths/inlets of spawning rivers/estuaries.	If no, explain and provide justification for not adhering.
AP15: Construction personnel?	Yes	If no, explain and provide justification for not adhering.
All PDCs met?	Yes, for all applicable PDCs.	If no, explain and provide further justification for not adhering.
New Construction or Repair/Replacement	Replacement, The existing bridge would be replaced along existing alignment. No change in use, widening, or increase in traffic would occur as a direct result of the project.	If no, explain and provide justification for not adhering.

General information about document and Project Design Criteria (PDCs). Project must comply with applicable PDCs. Not all PDCs will be applicable for each project. Check Yes for compliance and N/A if not applicable. Standard measures apply regardless. Determine if your project is located in an identified "Hot Spot" and indicate accordingly.				
The PDCs are provided in the following format:				
	1	**General PDCs** that apply to all projects.		
	2	**Activity-specific PDCs** for each category of activity/project.		
	3	**Critical habitat-specific PDCs** are provided at the end of each category when additional protections are required for a specific critical habitat unit.		
Hot Spots: "Hot spots" are biologically significant areas of exceptional importance for the conservation of species that will not be included in this programmatic consultation. These include:			Yes	N/A
	1	Mouths/inlets of spawning rivers/estuaries where sturgeon are known to migrate for spawning purposes.	☐	☑
	2	The Savannah River in Allendale County, SC and Screven County, GA, including 5 kilometers upstream and downstream of the US-301 Bridge.	☐	☑
	3	The Great Pee Dee River in Marlboro County, SC, including 2 kilometers upstream and downstream of the SC-34 (Cashua Ferry Rd) Bridge.	☐	☑
	4	Sea turtle nesting beaches and ocean waters occurring waterward of those beaches.	☐	☑
PA Division Headings/Subheadings	**PA Section Reference**	**Project Design Criteria**		
4.1.1 General PDCs Applicable to All Projects				
Standard measures reducing potential species effects	1	Wetland avoidance/minimization/compensation	✓	
	2	Clearly delineating vegetative clearing limits; maintaining riparian buffers/minimizing impacts to riparian buffers.	✓	
	3	Compliance with State water quality standards through Storm Water Pollution Prevention Plans (SWPPP), which include erosion and sediment control, spill control, runoff detention, and treatment (further described in AP4.)	✓	
General PDCs	AP1	All projects will adhere to the sea turtle measures in the most current version of NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions* , when a project is located in areas where sea turtles occur. These conditions will also apply to projects located in areas where Atlantic and shortnose sturgeon occur (the Conditions include protections for listed species in general). This includes the requirement that construction stops temporarily if an ESA-listed species is sighted within 50 feet of mechanical construction equipment.	☑	☐
	AP2	Vessel Traffic and Construction Equipment: All vessel operators will watch for and avoid collision with species protected under the ESA. Vessel operators will avoid potential interactions with protected species and operate in accordance with the following protective measures:	☑	☐
Construction Equipment:				
	AP2.1	All vessels associated with the construction project will operate at "Idle Speed/No Wake" at all times while operating in water depths where the draft of the vessel provides less than a 4-foot (ft) clearance from the bottom, and after a protected species has been observed in and has departed the area.	☑	☐
	AP2.2	All vessels will follow marked channels and/or routes using the maximum water depth whenever possible.	☑	☐
	AP2.3	Operation of any mechanical construction equipment, including vessels, will cease immediately if a listed species is observed within a 50-ft radius of construction equipment and cannot resume until the species has departed the area of its own volition.	☑	☐
All Vessels:	AP2.4	Sea turtles: Do not approach within 150 ft.	☐	☑
	AP3	Turbidity Control Measures during Construction: Turbidity must be monitored and controlled. Prior to initiating any of the work covered under this programmatic consultation, the Permittee will install turbidity barriers (including fencing and curtains) as described below. In some instances, the use of turbidity curtains may be waived if the project is deemed too minimal to generate turbidity or if the current is too strong for the curtains to stay in place or if the water is too shallow for a curtain. Turbidity barrier specifications:	☑	☐
	AP3.1	Use turbidity barriers throughout construction to control erosion and siltation and ensure that turbidity levels within the project area do not exceed background conditions (i.e., the normal water quality levels from natural turbidity).	☑	☐
	AP3.2	Position turbidity barriers in a way that does not block species' entry to or exit from designated critical habitat.	☑	☐
	AP3.3	Install floating turbidity curtains with weighted skirts around all work areas that are in, or adjacent to, surface waters. All turbidity curtains should extend to 1 ft. or less from the bottom (acceptable to lay on the bottom, especially at low tides).	☑	☐
	AP3.4	Monitor and maintain turbidity barriers in place until the authorized work has been completed and the water quality in the project area has returned to background conditions.	☑	☐
	AP4	Petroleum products, chemicals, live (uncured) concrete, or water contaminated by these will not be allowed to enter flowing waters.	☑	☐
	AP4.1	To the maximum extent practicable, refueling of machinery will be done at least 250 feet from any water body and be outside of active stream channels, outside of any tidal areas, and away from ditches or channels that enter flowing waters; designated refueling sites in upland areas at least 250 feet away from receiving waters are preferred. Refueling of boats and heavy machinery such as cranes positioned atop temporary work platforms over the water will take all relevant precautions to avoid spills into waterbodies.	☑	☐

		Yes	N/A
AP4.2	To the maximum extent practicable, concrete washout pits/pans/pools will be located at least 500 feet from any water body and be outside of active stream channels, outside of any tidal areas, and away from ditches or channels that enter flowing waters. Designated sites in upland areas at least 500 feet away from receiving waters are preferred.	☑	☐
AP4.3	A Spill Plan will be created, and the plan and all materials necessary to implement the plan shall be accessible on site.	☑	☐
AP5	Construction personnel will ensure all materials placed in the water, including sheet piles, concrete piles, and erosion control materials, will be free of sediments and/or contaminants.	☑	☐
AP6	Reporting of interactions with protected species:	☑	☐
AP6.1	Any collisions(s) and/or injuries to any sea turtle or sturgeon occurring during the construction of a project, will be reported immediately to NMFS's Protected Resources Division (PRD) at (1-727-824-5312) or by email to takereport.nmfsser@noaa.gov. Sea turtle stranding/rescue organizations' contact information is available by region at http://www.nmfs.noaa.gov/pr/health/networks/htm.	☑	☐
AP6.2	Dead sturgeon must be reported to 1-844-788-7491 or email nmfs.ser.sturgeonnetwork@noaa.gov	☑	☐
AP6.3	Stranded, injured, or dead sea turtles will be reported to 1-877-942-5343.	☐	☑
AP7	Entanglement: All turbidity curtains and other in-water equipment will be properly secured with materials that reduce the risk of entanglement of marine species (described below). Turbidity curtains likewise will be made of materials that reduce the risk of entanglement of marine species.	☑	☐
AP7.1	In-water lines (rope, chain, and cable, including the lines to secure turbidity curtains) will be stiff, taut, and non-looping. Examples of such lines are heavy metal chains or heavy cables that do not readily loop and tangle. Flexible in-water lines, such as nylon rope or any lines that could loop or tangle, will be enclosed in a plastic or rubber sleeve/tube to add rigidity and prevent the line from looping and tangling. In all instances, no excess line will be allowed in the water.	☑	☐
AP7.2	Turbidity curtains and other in-water equipment will be placed in a manner that does not entrap species within the construction area or block access for them to navigate around the construction area.	☑	☐
AP8	All projects will follow the PDCs defined in Section 5.2 ("Noise") and Appendix A. .	☑	☐
AP8.1	Projects will not result in noise in excess of the established thresholds for physical injury or behavioral modification (single strike and cumulative exposure) for ESA-listed sea turtles and sturgeon. FHWA/State DOTs will ensure all pile installation activities not exceed these thresholds, but may accomplish this using relevant best management practices and other methods to avoid and minimize hydroacoustic impacts. A series of pile types, sizes, and hammer types have been analyzed in Section 5.2 and Appendix A, for use as reference/models. Projects that adhere to these previously analyzed scenarios will not need further review. However, projects that do not conform to these previously analyzed scenarios must conduct project-specific hydroacoustic analyses and submit these analyses to NMFS as part of the programmatic submission document(s). This hydroacoustic information should be clearly marked in a separate section of submittal materials for ease of review.	☑	☐
AP8.2	From January to May and/or August to November, installation of piles and sheet piles in rivers where sturgeon are known to use for migration and spawning are limited to drilled-shafts or those activities labeled "A" in section 5.2 ("Noise"). Appropriate/specific timeframes for individual sturgeon migration and spawning rivers are found in Appendix H of the FHWA/NMFS-SERO BMP Manual.	☑	☐
AP9	Impacts (both temporary and permanent) to living submerged aquatic vegetation (SAV) are limited to 250 ft2 for a single, complete project (to include all activities/aspects of projects, e.g., cofferdams, piles, and temporary work platforms).	☑	☐
AP10	All in-water work activities will be performed during daylight hours.	☑	☐
AP11	Construction on, or waterward of, beaches used by sea turtles for nesting will not occur.	☐	☑
AP12	All over-water structures will incorporate measures to maximize ambient light transmission and minimize shading. Such measures include, but are not limited to, maximizing the height of the structure and minimizing the width of the structure, minimizing the number of instream pilings/piers, and using grated decking material. The optimal height-width (HW) ratio of newly constructed (new or replacement) bridges, piers, multi-use paths, or docks is 0.7 or greater. This ratio is also recommended for temporary work structures such as trestle systems/work bridges.	☑	☐
AP13	Projects located near the mouths/inlets of spawning rivers/estuaries where sturgeon are known to migrate/spawn are not eligible to use this programmatic informal consultation.	☐	☑
AP14	All construction personnel are responsible for observing water-related activities to detect the presence of these species and avoid them.	☑	☐

4.1.2 Activities Common to Several Project Types

Activity #1 – Installation, Maintenance, and Removal of Temporary Erosion, Turbidity, and Sediment Control Devices PDCs		Yes	N/A
A1.1	Temporary erosion, turbidity, and sediment control devices are required to be installed prior to any clearing and grubbing activities, to the maximum extent practicable. In areas where clearing and grubbing is necessary to provide access and area for the installation of temporary erosion, turbidity, and sediment control devices, those devices should be installed immediately following the minimal amount of clearing and grubbing that is necessary.	☑	☐
A1.2	Temporary erosion, turbidity, and sediment control devices are required on all project-related areas, including off-site use areas, staging areas, and in/around temporary access roads and other areas.	☑	☐
A1.3	All devices will be regularly inspected for effectiveness and promptly repaired or replaced if they have been damaged or are ineffective.	☑	☐
A1.4	All temporary devices designed to control erosion, turbidity, and sedimentation throughout the construction process will be removed immediately following project completion.	☑	☐

	A1.5	Installation of silt/turbidity curtains will be shore-parallel (anchored on the shore at both ends) and may not exceed 550 feet in length; curtains must be securely anchored and will not impede or obstruct movement of listed species.	☑	☐
	A1.6	Silt/turbidity curtains will not extend more than 10-feet waterward from the shoreline. In waterways 40-feet wide or less, silt/turbidity curtains will not encroach more than 25% from the Mean High Water Line (MHWL) in intertidal areas or Ordinary High Water Mark (OHWM) in rivers/streams.	☑	☐
	A1.7	Silt/turbidity curtains will avoid impacts to submerged aquatic vegetation (i.e., seagrasses), to the maximum extent practicable; curtains will not enclose more than 100 ft2 of submerged aquatic vegetation.	☑	☐
	A1.8	Siltation control fence or other stationary measures will be placed parallel to the shoreline and may not be placed waterward of the MHWL or OHWM; measures will not impede or obstruct movement of listed species.	☑	☐
Critical Habitat-specific PDCs:				
	A1.9	Installation of erosion, turbidity, and sediment control devices will not occur in Atlantic Sturgeon critical habitat, where the following PBF is present:	☑	☐
		• Suitable hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range [ppt]) for settlement of fertilized eggs and refuge, growth, and development of early life stages.	☑	☐
	A1.10	Silt/turbidity curtains will only extend waterward into depths no greater than 1.1 meters (3.6 ft) in main river channels; curtains will not impede/obstruct movement of sturgeon.	☑	☐
Activity #2 - Staging Areas--Specific PDCs				
	A2.1	Staging areas will be located in upland areas and have appropriate temporary erosion, turbidity, and sediment controls, including, but not limited to stabilized construction exists/entrances and sediment control fence.	☑	☐
	A2.2	Staging areas will not be located in active channels (e.g., streams, tidal creek creeks, or rivers) or open water areas and will not be located in tidal areas (e.g., all staging areas will be located above MHWL); staging areas shall be setback a minimum of 15 feet from the OHWM and MHWL.	☑	☐
	A2.3	Staging area activities will not impede or obstruct movement of listed species.	☑	☐
Critical Habitat-specific PDCs:				
	A2.4	Staging areas will not be located in Atlantic Sturgeon critical habitat, where the PBFs are present.	☑	☐
	A2.5	Staging areas will be setback a minimum of 75 feet from the active channel (bankfull width) and MHWL in intertidal areas.	☑	☐
Activity #3 - Site Preparation--Specific PDCs				
	A3.1	To the maximum extent practicable, site preparation (e.g., earthwork, obstruction removal, etc.) will begin following installation of temporary erosion, turbidity, and sedimentation control measures, including perimeter sediment control fence.	☑	☐
	A3.2	Riparian and shoreline clearing, grading, and preparing that occurs in areas where ESA-listed species are present will be completed by hand or with construction machinery (e.g., mini- excavator or bobcat/skid-steer); whichever method best avoids and minimizes erosion, sedimentation, and turbidity. All appropriate precautions will be taken to avoid and minimize erosion, sedimentation, and turbidity.	☑	☐
	A3.3	Construction machinery will not be located in an active channel or below the OHWM or MHWL for site preparation purposes; machinery may reach (e.g., mini-excavator arm with bucket) approximately 5 ft waterward and 5 ft below the OHWM or MHWL for site preparation purposes. Machinery may be placed atop work structures, such as work trestles, mats, or barges.	☑	☐
	A3.4	In areas where ESA-listed species are present, riparian and shoreline vegetation will not be cleared, trimmed, or otherwise altered if the area is not essential for project construction or facilitation of construction.	☑	☐
	A3.5	Site preparation will not impede or obstruct movement of listed species.	☑	☐
Critical Habitat-specific PDCs:				
	A3.6	Clearing will take place by hand or with construction machinery – whichever method best avoid and minimizes erosion, sedimentation, and turbidity - in Atlantic sturgeon critical habitat areas, where the PBFs are present. waterward and 2 ft below the OHWM or MHWL for site preparation purposes. Machinery may be placed atop work structures, such as work trestles, mats, or barges.	☑	☐
	A3.7	Construction machinery will not be located in an active channel or below the OHWM or MHWL in Atlantic sturgeon critical habitat, where the PBFs are present, for site preparation purposes; machinery may reach (e.g., mini-excavator arm with bucket) approximately 2 ft	☑	☐
Activity #4 - Geotechnical Drilling and Hazardous Waste Sampling--Specific PDCs			Yes	N/A
	A4.1	Bore holes for geotechnical drilling and hazardous waste sampling are limited to 13.54 inches in diameter (144 inches2; 1 ft2) and only the minimum amount of vegetation clearing required for access will occur.	☑	☐
	A4.2	Drilling in aquatic, intertidal, or wetland areas will occur from existing structures (e.g., bridges, temporary work trestles), barges, vessels, or low ground bearing pressure tracked rigs.	☑	☐
	A4.3	All drilling will avoid submerged aquatic vegetation (i.e., seagrass beds).	☐	☑
	A4.4	All areas will be restored to pre-drilling/pre-sampling conditions and elevations.	☑	☐
	A4.5	Drilling and sampling will be timed to avoid the presence of sturgeon and sea turtles, to the extent practicable; drilling and sampling will not impede or obstruct movement of listed species.	☑	☐

Critical Habitat-specific PDCs:				
			Yes	N/A
	A4.6	Geotechnical drilling and hazardous waste sampling will not occur in Atlantic sturgeon critical habitat, where the following PBF is present:	☑	☐
		• Suitable hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range [ppt]) for settlement of fertilized eggs and refuge, growth, and development of early life stages.	☑	☐
	A4.7	Tracked rigs will not be used in critical habitat, where the PBFs are present, unless they are operating atop mats, barges, or other temporary work structures..	☑	☐
Activity #5 – Installation, Maintenance, and Removal of Scientific Survey Devices--Specific PDCs			Yes	N/A
	A5.1	The amount of impact from a single project will not exceed 25 ft2 and impacts to seagrasses will not exceed 15 ft2.	☐	☑
	A5.2	The installation, maintenance, and removal of temporary devices are allowed if they are intended to measure and/or record scientific data in tidal and freshwater areas, such as staff gages, tide and current gages, biological observation devices, water quality testing and improvement devices, and similar instruments.	☐	☑
	A5.3	Temporary structures will not block access of species to an area such as preventing movement in or out of a river or channel.	☐	☑
	A5.4	No later than 24 months from initial installation, or upon completion of data acquisition, whichever comes first, the measuring device and any other structure or fill associated with that device (e.g., anchors, buoys, lines) will be removed and the site must be restored to pre- construction elevations.	☐	☑
	A5.5	Projects are not authorized seaward of sea turtle nesting beaches or in estuarine inlets of sturgeon migration/spawning rivers.	☐	☑
Critical Habitat-specific PDCs:				
	A5.6	Installation of scientific survey devices will not occur in Atlantic Sturgeon critical habitat, where the following PBF is present:	☐	☑
		• Suitable hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range [ppt]) for settlement of fertilized eggs and refuge, growth, and development of early life stages.	☐	☑
	A5.7	The amount of impact from a single project will not exceed 25 ft2 in Atlantic sturgeon critical habitat, where the PBFs are present.	☐	☑
Activity #6 - Temporary Platforms, Access Fills (including rock/rip rap jetties), and Cofferdams				
Examples of temporary platforms and fills includes:				
		• Space-frame structures (i.e., truss-like, lightweight rigid structure constructed from interlocking struts in a geometric pattern) that provide high capacity working platforms which are capable of spanning large decks, including traversing along the length of a bridge; underslung girders and trusses		
		• Pontoons		
		• Work trestles (i.e., a rigid frame used as a support, especially referring to a bridge composed of a number of short spans supported by such frames)		
		• Temporary haul road fill (i.e., temporary roads of fill created in or adjacent to the waterbody to transport equipment and materials).		
		• Fill platforms (i.e., temporary islands or access roads of fill created to support equipment, including those composed of rock riprap).		
Activity-specific PDCs for temporary platforms, access fills, and cofferdam activities:				
	A6.1	All [water dependent] activities will be limited to a total of 120 days or less ("temporary" is defined as 120 days or less), except temporary work platforms/work trestles. Temporary work platforms/work trestles are limited to 24 months or less.	☑	☐
	A6.2	Temporary platforms/work trestles will be installed/constructed following the PDCs outlined in Section 5.2 ("Noise") below and Appendix A.	☑	☐
	A6.3	The combined temporary impacts from temporary platforms/access fills/cofferdams are limited to a total of 0.5 acres or less in waters of the U.S. (e.g., below OHWM or MHWL) for a single, complete project. Of the total 0.5 acres of temporary impacts, individual activity breakdowns are as follows:	☑	☐
	A6.3.1	Temporary platforms are limited to those with substrate impacts (e.g., footprint of pilings equaling less than 500 ft2 (0.011 acres).	☑	☐
	A6.3.2	Temporary access fills are limited to 0.5 ac of clean fill (e.g., riprap free of debris) in waters of the U.S. (e.g., below OHWM or MHWL) at any given time.	☑	☐
	A6.3.3	Individual temporary cofferdams are limited to:		
		A. 500 ft2 (0.011 ac) or less in size and a maximum of 2 cofferdams (regardless of size) may be installed/in place at any given time; a maximum of 8 cofferdams (regardless of size) may be installed for a single, complete project.	☑	☐
		or		
		B. 1000 ft2 (0.023 ac) or less in size and a maximum of 1 cofferdam (regardless of size) may be installed/in place at any given time; a maximum of 4 cofferdams (regardless of size) may be installed for a single, complete project.	☑	☐
	A6.4	Placement of geotextile barriers is required prior to placement of the platform/access fills to ensure that the fill will be removed completely at the end of construction.	☑	☐
	A6.5	Temporary fill materials will be placed in a manner that will not be eroded by high water flows. Temporary fills will be removed in their entirety and the affected areas returned to pre- construction conditions/elevations.	☑	☐

			Yes	N/A
	A6.6	The navigability of the waterway will remain uninterrupted and freely open for species movement in/out of the area.	☑	☑
	A6.6.1	Cofferdams and fills will be limited to no more than 50% of the width of a waterbody. In tidal areas (e.g., tidal creeks), the width of the water body should be considered/measured at mean low water (MLW).	☑	☐
	A6.7	Projects will not appreciably impact surface water flow into or out of any waters of the U.S.	☑	☐
	A6.8	Appropriate measures will 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 the construction sites.	☑	☐
	A6.9	Temporary steel sheet pile cofferdams will be installed/removed by vibratory hammers only.	☑	☐
	A6.10	For temporary inflatable cofferdams, the footprints of the walls will be included into the overall impacts area.	☑	☐
	A6.11	All activities will avoid impacts to submerged aquatic vegetation (i.e., seagrasses), to the maximum extent practicable; activities will not impact more than 100 ft2 of submerged aquatic vegetation.	☑	☐
	A6.12	Activities are not authorized at the mouths of rivers where sturgeon are known to migrate for spawning purposes.	☑	☐
Critical Habitat-specific PDCs:				
	A6.13	Temporary platforms/work trestles in Atlantic sturgeon critical habitat, where the following PBF is present, are limited to 24 months or less and those with total substrate impacts (e.g., footprint of pilings) of 250 ft2 (0.005 acres) or less, do not impede or obstruct sturgeon movement, and will be installed outside of the spawning/migration season.	☑	☐
		• Suitable hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range [ppt]) for settlement of fertilized eggs and refuge, growth, and development of early life stages.	☑	☐
	A6.14	Temporary access fills in Atlantic sturgeon critical habitat, where the following PBF is present, are limited to 0.25 acre of total temporary impacts or less, and will be installed and removed outside of the spawning/migration (moratoria) season(s):	☑	☐
		• Suitable hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range [ppt]) for settlement of fertilized eggs and refuge, growth, and development of early life stages.	☑	☐
	A6.15	Temporary cofferdams in Atlantic sturgeon critical habitat, where the following PBF is present, are limited to 2000 ft2 (0.04 acres) of total temporary impacts or less (must adhere to the same individual size restrictions as A6.3.3), and will be installed and removed outside of the spawning/migration (moratoria) season(s):	☑	☐
		• Suitable hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range [ppt]) for settlement of fertilized eggs and refuge, growth, and development of early life stages.	☑	☐
Activity #7 - Pile Installation and Removal--Specific PDCs				
	A7.1	All temporary and permanent piles will be installed/constructed following the PDCs outlined in Section 5.2 ("Noise") below and Appendix A.	☑	☐
	A7.1.1	Pile installation/construction/removal activities will not produce noise to levels that are considered "injurious" to sturgeon or sea turtles.	☑	☐
	A7.1.2	When necessary (when levels may be injurious or cause behavioral modification) noise attenuation devices will be used to decrease underwater noise to levels below those that are considered "injurious" or to cause behavioral modifications. Typical attenuation includes:	☑	☐
		(1) air bubble curtains; and, (2) isolation casings, which can be coordinated with NMFS.		
	A7.2	One of the following methods will be used to give any listed animals the opportunity to leave an area prior to full-force pile driving on each project. These procedures will be used for a minimum of 10 minutes prior to full-force pile driving:	☑	☐
		• "Ramp up" method (i.e., pile driving starts at a very low force and gradually builds up to full force),		
		• "Dry firing" method (i.e., operating the pile hammer by dropping the hammer with no compression), or		
		• "Soft start" method (i.e., noise from hammers is initiated for 15 seconds, followed by a 1-minute waiting period – this sequence is repeated multiple times).		
	A7.3	Pile installation (both in-water and "in the dry" [behind cofferdam]), will take place only during daylight hours.	☑	☐
	A7.4	Where appropriate, silt or turbidity curtains will be used to reduce the impact of suspended sediments and potential for siltation/sedimentation of adjacent habitats.	☑	☐
	A7.5	Piles will be placed in a way that does not impede the navigability of the waterway for species movement in/out of an area.	☑	☐
	A7.5.1	Pile placement in rivers, streams or tidal creeks (including at the mouths of rivers, streams or tidal creeks) is limited to no more than 50% of the width of the waterbody (combined or continuous width of piles/sheet piles may not exceed 50%). In tidal areas (e.g., tidal creeks), the width of the water body should be considered/measured at MLW.	☑	☐
	A7.6	Water jetting will be avoided, to the maximum extent practicable, in areas with fine sediments to reduce turbidity plumes and the release of nutrients and contaminants. If jetting is necessary, silt curtains will be used.	☑	☐
	A7.7	Vibratory hammers will be used to remove piles. Piles that cannot be removed with vibratory hammers will be cut off at or below the mud line.	☑	☐
			Yes	N/A

	A7.8	All holes left by removed piles will be filled with clean, native sediments.	☑	☐
	A7.9	In intertidal areas, all piles will be installed/removed during low tide periods when sediments are exposed and work can proceed temporarily "in-the-dry"	☐	☑
	A7.10	Follow "Equipment" PDCs, including, but not limited to, A10.8 and A10.8.1:	☑	☐
	A10.8	The maximum speed equipment and items can be lowered into the water shall be no great than 60 feet/minute at times of the year when sturgeon or sea turtles may be present.	☑	☐
	A10.8.1	Extreme care will be taken when lowering equipment below the water line (and into/onto the bottom). Equipment and materials include, but are not limited to: excavator buckets, piles, spuds, casings, etc.	☑	☐
	A7.11	Piles/columns/footings will avoid impacts to submerged aquatic vegetation (i.e., seagrasses) to the maximum extent practicable; piles will not impact more than 100 ft2 of submerged aquatic vegetation.	☐	☑
	A7.12	Pile/column/footing installation is not authorized at the mouths/inlets of rivers/estuaries where sturgeon are known to migrate to/from spawning grounds.	☑	☐
	A7.13	Substrate impacts from pile/column/footing installations are limited to 200 ft2 (0.004 acres), unless otherwise noted.	☑	☐
Activity #8 Blasting--Specific PDCs				
	A8.1	Only confined blasts with stemmed charges will be used; blast mats will be employed to contain "fly rock."	☐	☑
	A8.2	Time delays that turn the overall blast into a series of lesser-charged explosions will be used: the minimum delay between individual charges will be at least 9 milliseconds to minimize hydroacoustic impacts to ESA-listed species.	☐	☑
	A8.3	The maximum sized charge will be 5 lbs.	☐	☑
	A8.4	A Danger Zone around the blast area will be determined based on the maximum explosive weight per delay. A buffer zone beyond the zone of influence will also be used (as a "heads- up" zone).	☐	☑
	A8.5	Pre-blast meetings will be held to discuss all requirements, concerns, and procedures prior to the commencement of blasting activities. Blasting plans will be submitted to NMFS.	☐	☑
	A8.6	Blasting is not authorized if ESA-listed species are present.	☐	☑
	A8.6.1	Blasting will only occur during times of the year when species are absent from the project site; or,	☐	☑
	A8.6.2	Are determined to be excluded or absent from the blasting area (danger zone + buffer zone).	☐	☑
	A8.7	Blasting will not occur in freshwater rivers when sturgeon are migrating or spawning.	☐	☑
	A8.8	Blasting will not occur at the mouths/inlets of rivers/estuaries where sturgeon are known to migrate to/from spawning grounds.	☐	☑
	A8.9	In areas of rivers where sturgeon are known to migrate and spawn, typically extending from the salt front to the upper extent of sturgeon distribution (at or below the Fall Line), blasting will only occur between June 15 and July 15. In known migration/spawning rivers, sturgeon forage and shelter throughout all of the year in the lower half (1/2) to third (1/3) of the river (closest to, and encompassing, estuaries). Therefore, blasting will only occur in the upper one half (1/2) of spawning rivers from June 15 to July 15.	☐	☑
Critical Habitat-specific PDCs:				
	A8.10	Activities will not occur in Atlantic Sturgeon critical habitat, where the following PBF is present:	☐	☑
		• Suitable hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range [ppt]) for settlement of fertilized eggs and refuge, growth, and development of early life stages.	☐	☑
	A8.11	Blasting will only occur in Atlantic Sturgeon critical habitat (except for areas mentioned in A8.10) at times of the year when sturgeon will not be present.	☐	☑
Activity #9 – Dredging/underwater excavation--Specific PDCs				
	A9.1	Minor dredging for (1) work site access; (2) placement of erosion and scour control-measures or shoreline stabilization (usually required to embed geotextile fabric or riprap to avoid reducing the navigable depth of channels or waterways, or so the toe of the slope can be stabilized to allow smooth transition of the work to the natural surrounding elevation); (3) creation of "pilot holes" for pilings; and (4) to remove pilings/footers is allowed. Minor dredging is limited to -5.0 ft MLW and limited in size to 1000 ft².	☐	☑
	A9.2	All spoil material will be placed in an approved upland disposal site, EPA-designated open water disposal site, USACE Dredged Material Management Area, or USACE approved beneficial use sites for mitigation or restoration and shall employ erosion control measures such as upland erosion control or in-water turbidity curtains. Return water from an upland contained dredged material disposal area is allowed provided the quality of the return water meets Section 401 certification. Beneficial use and ocean disposal sites must have undergone Section 7 consultation to determine the potential effects of disposal on ESA-listed species and critical habitat. Projects will not include placement of material on beaches within USACE jurisdiction (e.g., sand could be placed in the uplands beyond the jurisdiction of the USACE).	☐	☑
	A9.3	Dredging will not occur in freshwater rivers when sturgeon are migrating or spawning.	☐	☑
	A9.4	Dredging will not occur at the mouths/inlets of rivers/estuaries where sturgeon are known migrate to/from spawning grounds.	☐	☑
	A9.5	Dredging will avoid impacts to submerged aquatic vegetation (i.e., seagrasses), to the maximum extent practicable; dredging will not impact more than 100 ft2 of submerged aquatic vegetation.	☐	☑
	A9.6	Hydraulic dredging will not occur.	☐	☑
Critical Habitat-specific PDCs:			Yes	N/A

	A9.7	Activities will not occur in Atlantic Sturgeon critical habitat, where the following PBFs are present:	☐	☑
		• Suitable hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range [ppt]) for settlement of fertilized eggs and refuge, growth, and development of early life stages.	☐	☑
		• Water of appropriate depth and absent physical barriers to passage (e.g., locks, dams, reservoirs, gear, etc.) between the river mouth and spawning sites necessary to support: (i) unimpeded movement of adults to and from spawning sites; (ii) seasonal and physiologically dependent movement of juvenile Atlantic sturgeon to appropriate salinity zones within the river estuary; and (iii) staging, resting, or holding of subadults or spawning condition adults - water depths in main river channels must also be deep enough (at least 1.2 m) to ensure continuous flow in the main channel at all times when any sturgeon life stage would be in the river.	☐	☑
	A9.8	Minor dredging is limited to -5.0 ft MLW and limited in size to 500 ft2 (0.01 acres) in Atlantic Sturgeon critical habitat, provided projects adhere to A9.7.	☐	☑
Activity #10 - Equipment--Specific PDCs				
	A10.1	Equipment will only be used for its primary/intended purpose.	☑	☐
	A10.2	All equipment will be checked daily for leaks; all projects will have, at a minimum, 1 spill kit readily available at all times.	☑	☐
	A10.3	Equipment will not be used until leaks, or other maintenance issues, are repaired or new equipment is brought in for replacement.	☑	☐
	A10.4	To the maximum extent practicable, all equipment maintenance and other work that may release pollutants/toxicants will occur in contained maintenance areas at least 500 feet (preferred) from any water body and be outside of active stream channels, outside of any tidal areas, and away from ditches or channels that enter flowing waters.	☑	☐
	A10.5	Heavy equipment such as excavators, cranes, and bulldozers will not be located in the water to conduct work; buckets or extensions may reach into the water from atop the bank/platform/trestle to conduct work.	☑	☐
	A10.6	Drilling equipment, such as low ground bearing pressure tracked rigs, may be used in-water, but not in the main channel of streams, creeks, or rivers, and must be in-water for the least amount of time necessary to complete work.	☑	☐
	A10.7	Vessels shall operate at “no wake/idle” speeds.	☑	☐
	A10.8	The maximum speed equipment and items can be lowered into the water will be no great than 60 feet/minute at times of the year when sturgeon or sea turtles may be present.	☑	☐
	A10.8.1	Extreme care will be taken to avoid striking individuals when lowering equipment below the water line (and into/onto the bottom). Equipment and materials include, but are not limited to: excavator buckets, piles, spuds, casings, etc.	☑	☐
	A10.9	Spudding will occur, provided all other PDCs are adhered to.	☑	☐
Critical Habitat-specific PDCs:				
	A10.10	Heavy equipment or drilling equipment is not authorized in (below the water line) Atlantic Sturgeon critical habitat, where the PBFs are present. Equipment shall only be positioned on barges, temporary fill (rip rap pads), temporary work trestles, existing bridges, or in other upland areas.	☑	☐
	A10.11	To the maximum extent practicable, barge grounding will be avoided in all Atlantic Sturgeon critical habitat areas and will be limited to 30 days for a given location. Barge grounding is not authorized in Atlantic Sturgeon critical habitat, where the following PBFs are present:	☑	☐
		• Suitable hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range [ppt]) for settlement of fertilized eggs and refuge, growth, and development of early life stages.	☑	☐
4.1.2 Specific Transportation Project Types Project Type #1 - New Alignments/Roadways and Road Widening (Roadway Construction) PDCs				
	P1.1	New alignments/roadways and road widening projects will occur, provided earthen fill or other project components will not be placed below the OHWM or MHWL of a waterbody where sturgeon or sea turtles occur (e.g., no in-water components).	☐	☑
	P1.2	Projects will not impede or restrict normal flows in/out of areas where sturgeon or sea turtles occur.	☐	☑
	P1.3	Projects will not occur if they contribute sediments, toxicants, or pollutants into receiving waters where sturgeon or sea turtles occur; projects will not occur if they lead to reduction in natural sediments/sediment patterns in areas where sturgeon occur.	☐	☑
	P1.4	Projects will use stormwater collection and treatment systems that discharge stormwater that meets or exceeds State Water Quality Standards into waters where sturgeon or sea turtles occur.	☐	☑
Critical Habitat-specific PDCs:				
	P1.5	New alignments/roadways and road widening projects will not occur in Atlantic Sturgeon critical habitat, where the PBFs are present, if any permanent earthen fill is necessary.	☐	☑

Project Type #2 - New Bridge, Bridge Replacement, and Bridge Widening; New Piers and Replacement/Relocated Piers--Specific PDCs P2.1 New Bridges/new crossings				
	P2.1.1	Installation of new bridges/crossings that span (no in-water piers/piles/columns) the waterbody (e.g., river, stream, or tidal creek) will occur; new bridges/crossings with any in- water structures are not authorized; new crossings with in-water structures are not covered under this agreement.	☐	☑

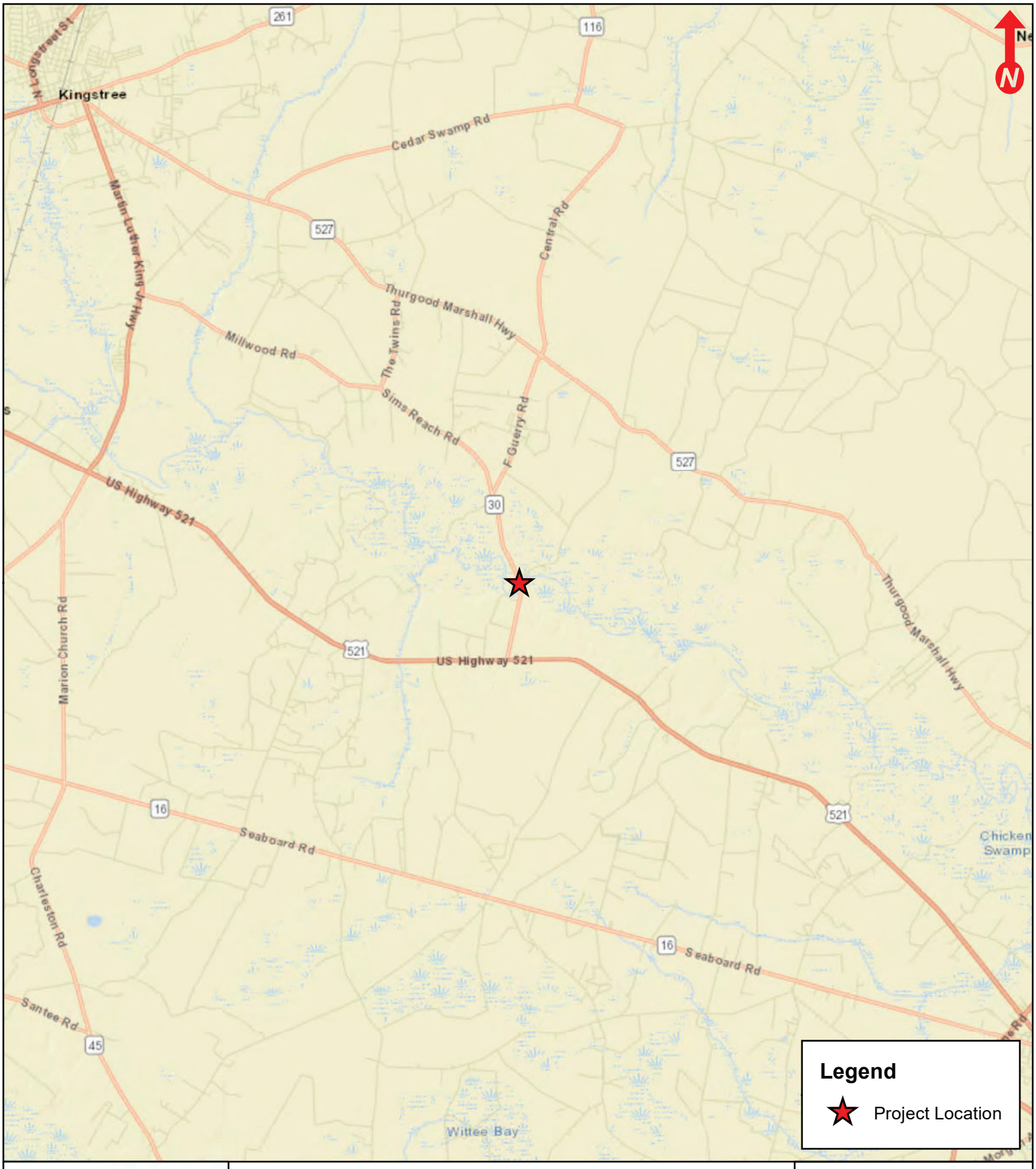
			Yes	N/A
	P2.1.2	Approach/causeway fill will not be placed below the OHWM or MHWL of the waterbody or impede or restrict normal flows.	☐	☑
	P2.1.3	Shoreline stabilization for new bridges (approaches/causeway/embankment) will adhere to Shoreline Stabilization PDCs (Project Type #5; see below).	☐	☑
	P2.1.4	New bridges that span the water body, will not allow fishing in areas where swimming sea turtles or sturgeon are known to occur; "no fishing," "fishing prohibited," or "It is illegal to fish here" signs will be used when practicable.	☐	☑
P2.2 New Piers/Replacement Piers				
	P2.2.1	Installation of new piers in areas where swimming sea turtles or sturgeon are known to occur are not authorized.	☐	☑
	P2.2.2	Replacement or relocated piers in areas where swimming sea turtles or sturgeon are known to occur are not authorized.	☐	☑
	P2.2.3	New or replacement piers within 0.25miles of areas where sea turtles or sturgeon are known to occur, or where Atlantic sturgeon critical habitat is present, will adhere to the following:	☐	☑
	P2.2.3.1	Take-off/causeway fill for piers will not be placed below the OHWM or MHWL of the waterbody or impede or restrict normal flows.	☐	☑
	P2.2.3.2	Shoreline stabilization activities for new or replacement piers (approaches/causeway/embankment) will adhere to Shoreline Stabilization PDCs (Project Type #5; see below)	☐	☑
P2.3 Bridge Replacements				
	P2.3.1	Bridge replacements on existing or parallel alignments are authorized, provided the original/existing structure is completely removed and the projects follow the PDCs outlined in Section 5.2 ("Noise") below and Appendix A, and all other relevant PDCs, including P2.1.2.	☑	☐
	P2.3.1	Bridge replacements on existing or parallel alignments that span the waterbody and remove all old/existing structures from the waterway are authorized.	☑	☐
	P2.3.3	Replacement bridges will not allow fishing in areas where swimming sea turtles are known to occur (i.e. the salt/freshwater interface); "no fishing," "fishing prohibited," or "It is illegal to fish here" signs will be used.	☑	☐
	P2.3.4	Replacement bridges will generally be the same size/shape as the original/existing bridges.	☑	☐
	P2.3.4.1	Increases in length and height from original/existing bridges are authorized; decreases in height are not authorized.	☑	☐
	P2.3.4.2	Increases of up to 100% of the original width is authorized. For example, if the original bridge is 28 feet wide, the replacement bridge could be up to 56 feet wide.	☑	☐
P2.4 Bridge Widening				
	P2.4.1	Bridge widening projects are authorized, provided projects follow the PDCs outlined in Section 5.2 ("Noise") below and Appendix A, and all other relevant PDCs, including P2.1.2	☐	☑
	P2.4.2	Widened bridges will not allow fishing in areas where swimming sea turtles or sturgeon are known to occur (i.e the salt/freshwater interface and all known sturgeon rivers and streams); "no fishing," "fishing prohibited," or "It is illegal to fish here" signs will be used.	☐	☑
	P2.4.3	Widening of up to 100% of the original width of the bridge is authorized. For example, if the original bridge is 25 feet wide, the widened bridge could be up to 50 feet wide.	☐	☑
P2.5 Bottom substrate/habitat impacts				
	P2.5.1	Impacts from piles/columns/footings and other substructure components of bridges and piers in the bottom substrate/habitat will be limited to 200 ft2 (0.004 acre) or less for any bridge or pier project. This is the total impact of newly installed, constructed or cast-in-place structures, not measured as the NET impact area (e.g., area of new structures minus the area of old structures that will be removed).	☑	☐
	P2.5.2	Projects should avoid impacts to submerged aquatic vegetation (i.e., seagrasses), to the maximum extent practicable; projects will not impact more than 100 ft2 of submerged aquatic vegetation.	☑	☐
Critical Habitat-specific PDCs:				
	P2.7	Bridge/pier replacements within the same footprint of the original/existing structure are authorized. Increases in impact area of piles/columns/footings from the originally authorized structures are not authorized.	☑	☐
	P2.8	Bridge/pier replacement parallel to the original/existing structure is authorized, provided the original/existing structure is completely removed and the total impact area of newly installed, constructed, or cast-in-place structures is 200 ft2 (0.004 acres) or less.	☑	☐
	P2.9	Bridge widening is authorized, provided the total impact area of newly installed, constructed, or cast-in-place structures is 100 ft2 (0.002 acres) or less.	☑	☐
	P2.10	All bridge components installed, constructed, or cast-in-place in Atlantic sturgeon critical habitat, where the following features are present, are limited to substrate impacts of 100 ft2 (0.002 acres) or less AND work must be completed outside of the spawning/migration season:	☑	☐
		• Suitable hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range [ppt]) for settlement of fertilized eggs and refuge, growth, and development of early life stages.	☑	☐
Project Type #3 - Bridge Repair, Maintenance, and Retrofit; Pier Repair and Maintenance--Specific PDCs			Yes	N/A

	P3.1	Scour repair projects are limited to the minimum amount necessary to achieve the project goal, which includes: (1) the area of previously authorized scour protection (e.g., original footprint of previously authorized riprap around columns/piers/piles), and (2) 0.5 acre of new riprap for scour protection (typically upstream or adjacent to columns/piers/piles). Total scour protection (new + previously authorized) will not exceed 0.5 acre.	☐	☑
	P3.1.1	Scour holes at the base of bridge piers or abutments will be repaired by placing the minimum amount of riprap necessary to mitigate the scour.	☐	☑
	P3.2	Scour repair projects will not use poured concrete, reinforced concrete, or concrete mattresses for scour protection outside of the originally authorized project footprint. Only riprap will be used for scour protection outside of the originally authorized project footprint.	☐	☑
	P3.3	Maintenance projects are authorized, provided there is no introduction of debris, pollutants, toxicants, sediments, or other materials or chemicals into the waterbody. Full containment, such as diaper curtains, will be used when necessary, to avoid/eliminate any possible introductions of materials or chemicals.	☐	☑
	P3.4	Installation of pile jackets, cathodic protection, and seismic retrofit components are authorized, provided there is no increase in impact area to the bottom (substrate) and the construction of the structure has been authorized by the U.S. Coast Guard under Section 9 of the Rivers and Harbors Act of 1899 or other applicable laws.	☐	☑
	P3.5	Water-dependent project activities will be timed to avoid the presence of sturgeon and sea turtles.	☐	☑
	P3.6	Riprap will be placed in a slow, deliberate manner so as to not effect slow moving ESA-listed species. Contractors will minimize “dropping” riprap into the water from above the waterline.	☐	☑
	P3.7	Projects will avoid impacts to submerged aquatic vegetation (i.e., seagrasses), to the maximum extent practicable; projects will not impact more than 25 ft2 of submerged aquatic vegetation.	☐	☑
Critical Habitat-specific PDCs:				
	P3.8	Projects will not occur in Atlantic Sturgeon critical habitat, where the PBFs are present, if the project will result in substrate impacts (square feet) additional to those of the originally authorized project footprint, or in a different location than those of the originally authorized project footprint.	☐	☑

Project Type #4 - Culvert Installation, Replacement, Repair, Maintenance, and Cleaning--Specific PDCs			Yes	N/A
	P4.1	New and replacement culverts will be sized to handle all expected/predicted flows, including low-flow conditions, normal flows, high flows, storm flows, and the full range of tidal flows.	☐	☑
	P4.1.1	Channel width, depth, velocity, and slope that provide upstream and downstream passage of aquatic organisms will be preserved or enhanced according to current NMFS criteria or as developed in cooperation with NMFS to accommodate site-specific conditions.	☐	☑
	P4.1.2	Culvert replacement projects that will decrease the culvert size will not be undertaken. P4.1.3 Culverts may be replaced with small bridges.	☐	☑
	P4.1.4	New and replacement culverts will be limited to 1000 linear feet or less of total shoreline/bank impacts (500 linear feet for each side of the bank) and total bottom/substrate impacts of 0.5 acre or less.	☐	☑
	P4.2	Modified or disturbed portions of streams, banks, and riparian areas will be restored to natural and stable contours (elevations, profile, and gradient) following completion of work.	☐	☑
	P4.3	All structures necessary for in-water work will be removed immediately following completion of in-water work.	☐	☑
	P4.4	Appropriate measures will be taken to maintain normal flows during work activities. Culvert projects will be limited to blocking no more than 50% of the width of the waterbody at any given time. In tidal areas (e.g., tidal creeks), the width of the water body should be considered/measured at mean low water (MLW).	☐	☑
	P4.5	Culvert projects will not allow heavy machinery into a channel with water. Work may take place from an upland area, work trestle, inside a dewatered cofferdam, or other area.	☐	☑
	P4.6	For culvert installation, replacement, repair, and maintenance projects undertaken in areas where juvenile sturgeon may occur, water-dependent activities will be conducted only in-the- dry (in dewatered cofferdams).	☐	☑
	P4.6.1	Cofferdam installation will follow all other relevant PDCs (e.g., cofferdams used for culvert projects will not obstruct or block more than 50% of the flow in a waterway).	☐	☑
	P4.7	Scour holes at culvert inlets will be repaired by placing the minimum amount of riprap necessary to mitigate the scour and no more than 0.1 acre for a single, complete project.	☐	☑
	P4.8	Projects should avoid impacts to submerged aquatic vegetation (i.e., seagrasses), to the maximum extent practicable; projects will not impact more than 100 ft2 of submerged aquatic vegetation.	☐	☑
Critical Habitat-specific PDCs:				
	P4.9	Projects will not occur in Atlantic Sturgeon critical habitat where the PBFs are present.	☐	☑

Project Type #5 - Installation, Maintenance, and Removal of Shoreline Stabilization--Specific PDCs			Yes	N/A
	P5.1	Installation of new shoreline stabilization:	☐	☑
	P5.1.1	Will not exceed 500 feet in length (for any type: e.g., seawalls, riprap, revetments). Seawalls/Bulkheads/Retaining Walls	☐	☑
	P5.1.2	Will not extend any further waterward than 12 inches as measured from the mean high water line (MHWL).	☐	☑
Riprap/Revetments				
	P5.1.3	Will not extend more than 2.5 feet waterward of the MHWL (including the toe).	☐	☑

	P5.1.4	Shoreline stabilization materials will be free of debris and are limited to sand cement, concrete, and quarry stone. Slope paving, poured concrete, or reinforced concrete is not authorized.	☐	☑
Living Shorelines				
	P5.1.5	Living shoreline projects will adhere to NOAA guidance and criteria provided in Guidance for Considering the Use of Living Shorelines, 2015. Artificial reef projects are not authorized.	☐	☑
	P5.1.6	Living shorelines are limited to 500 linear feet in length, no more than 30 feet waterward of the high tide line/ordinary high water mark or 5 feet waterward of the existing wetlands (whichever distance is greater), or result in no more than 0.5 acre area between the natural shoreline and outermost structure (breakwater).	☐	☑
	P5.1.7	All shore-parallel wave attenuation structures will include a minimum 5 ft opening/gap between structures at least every 100 feet and may be staggered or overlapped or left open so long as the five-foot separation between sections is maintained.	☐	☑
	P5.1.8	Discharge of earthen fill material, other than material associated with vegetative planting is not authorized.	☐	☑
	P5.1.6	Living shoreline projects will be developed in cooperation with NMFS to accommodate site-specific conditions.	☐	☑
P5.2 Maintenance/replacement of existing shoreline stabilization:				
	P5.2.1.	Is only allowed in the previously authorized (permitted) footprint of the original/existing shoreline stabilization (i.e., no waterward extension or lateral expansion beyond the previous footprint).	☐	☑
	P5.3	Removal of any length of shoreline stabilization (e.g., seawall, riprap) is allowed, provided the shoreline is stabilized.	☐	☑
	P5.4	Shoreline stabilization construction/activities are not authorized at the mouths/inlets of rivers/estuaries where sturgeon are known to migrate to/from spawning grounds.	☐	☑
	P5.5	Placement of backfill is authorized if it is necessary for stabilization/leveling.	☐	☑
	P5.6	Shoreline stabilization structures other than vertical walls shall be no steeper than a 2H:1V slope.	☐	☑
	P5.7	Construction and/or repairs to groins, jetties, breakwaters that are perpendicular to shore, and beach nourishment/renourishment are not authorized.	☐	☑
	P5.8	Projects should avoid impacts to submerged aquatic vegetation (i.e., seagrasses), to the maximum extent practicable; projects will not impact more than 100 ft2 of submerged aquatic vegetation.	☐	☑
Critical-Habitat specific PDCs:				
	P5.9	Shoreline stabilization repair/replacement within the same footprint of the original/existing shoreline stabilization (i.e., no waterward extension or lateral expansion beyond the previous footprint) are authorized.	☐	☑
	P5.10	Installation of new shoreline stabilization is limited to 500 linear feet and may not extend waterward more than 12-inches (for seawalls/bulkheads/retaining walls) or 24-inches (for riprap/revetments).	☐	☑
	P5.11	Installation of new shoreline stabilization is not authorized in Atlantic Sturgeon critical habitat, where the following PBF is present:	☐	☑
		• Suitable hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range [ppt]) for settlement of fertilized eggs and refuge, growth, and development of early life stages.	☐	☑
	P5.12	Living shorlines are restrited to areas that are in water depths less than/shallower than -6 feet (2 m) MHWL/OHWM.	☐	☑
Project Type #6 - Pavement Preservation--Specific PDCs				
	P6.1	Projects are authorized, provided there is no introduction of debris, pollutants, toxicants, sediments, or other materials or chemicals into waterbodies where sea turtles and sturgeon are known to occur. Projects will be timed in a way, or containment methods will be used, to avoid/eliminate any possible introductions of materials or chemicals into receiving waters.	☑	☑
	P6.2	Projects that increase the impact area (footprint) of the existing structure/roadway are not authorized.	☐	☑

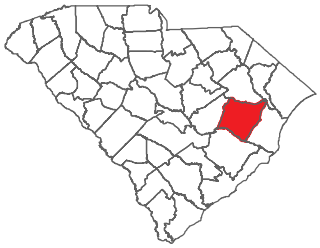


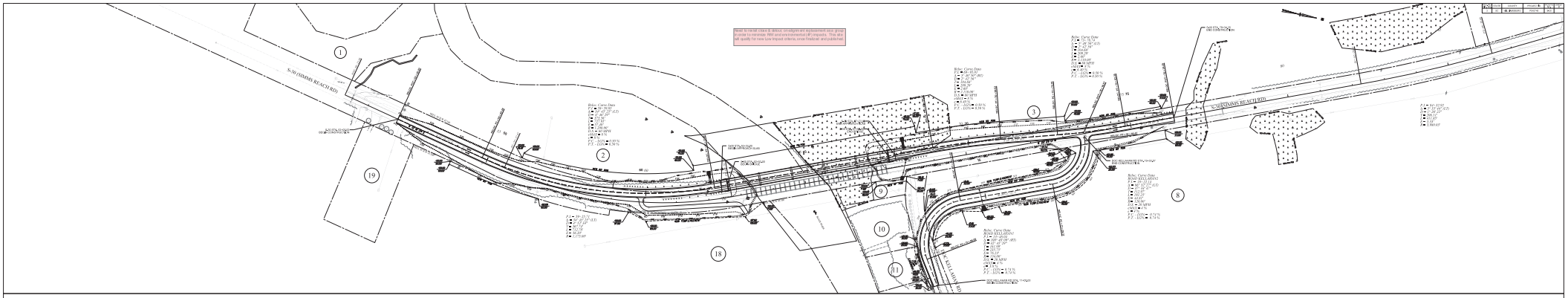
South Carolina Department of Transportation

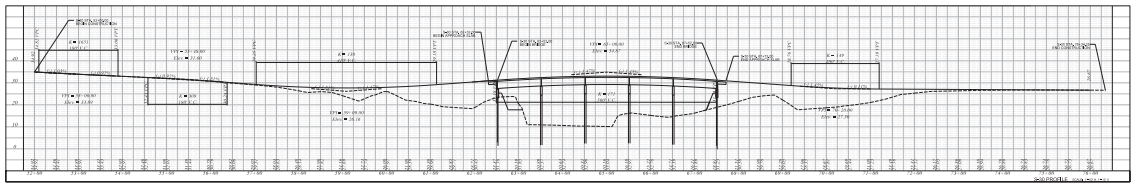
Attachment 1
Project Location
S-30 Bridge Replacement over Black River
SCDOT PID P043746
Williamsburg County, SC

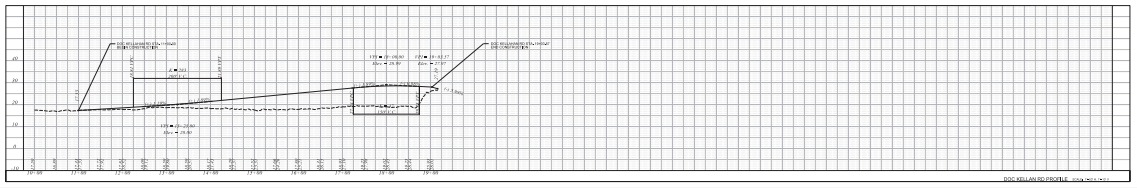
2 1 0 2 Miles

Source:ESRI World Streets Map









PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

S-30 OVER BLACK RIVER

PLAN AND PROFILE ROLL PLOT