JOINT PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS 69A Hagood Avenue Charleston, South Carolina 29403 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: P/N REVISED SAC 2015-0807

February 22, 2021

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 <u>et.seq.</u>), an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

South Carolina Department of Transportation Post Office Box 191 Columbia, South Carolina 29202

for a permit to discharge fill material in wetlands and waters adjacent to and within

Sawmill Branch

for the proposed roadway at a location immediately adjacent to Sawmill Branch, starting at the existing end of the Berlin G. Myers Parkway (Latitude: -33.002, Longitude: -80.185) and continuing parallel along Sawmill Branch and then branching west (away from Sawmill Branch) to the proposed end of the new roadway connecting into US-17A (Latitude: 32.981, Longitude: -80.233). Alterations to Sawmill Branch itself will occur starting near the existing end of the Berlin G. Myers Parkway (Latitude 33.002, Longitude -80.185) and will continue in Sawmill Branch down to its intersection with Dorchester Road (Latitude: 32.953, -80.170). All work is within the Town of Summerville, Dorchester County, South Carolina.

In addition, pursuant to Section 14 of the Rivers and Harbors Act of 1899, amended and codified at 33 USC 408 (Section 408), a request has also been received for Department of the Army Section 408 permission for alteration of the federally-authorized Sawmill Branch small flood control project. The request to alter the Sawmill Branch project will be reviewed as outlined below in order to determine whether the alteration proposed will be injurious to the public interest or impair the usefulness of the project.

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** and **SCDHEC** 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.

Proposed Project

SCDOT previously submitted an application to the Corps of Engineers for the construction of phase 3 of the Berlin G. Myers Parkway and a public notice was issued by the Corps on May 16, 2018. SCDOT has since submitted revisions to the project, which largely consist of additional floodplain mitigation work, located south and downstream of the previously advertised project. This REVISED public notice represents the currently proposed project, as modified by SCDOT.

The project consists of the construction of approximately 3.25 miles of new roadway on new location between US 17A and SC 165 (East Carolina Avenue), referred to as Phase 3 of the Berlin Myers Parkway. The design for the major portion of Phase 3 of Berlin Myers Parkway will consist of two travel lanes in each direction (12-foot wide outer lane and 12.5-foot-wide inner lane), with curb and gutter. The median will be 14 feet wide, consisting of 2-foot curb and gutter on each side and 10-foot wide planted section in the middle. The project will also include a single point urban interchange (SPUI) at the intersection of Berlin Myers Parkway and East Carolina Avenue. The project includes a relocation of a portion of the Sawmill Branch Walk/ Bike Trail between East Carolina and Luden Drive. A new segment of trail would be constructed between Greenwave Boulevard and Luden Drive that connects to a sidewalk adjacent to the proposed roadway. Because the project is being proposed in a floodplain and in the vicinity of a Civil Works project, the proposed work also includes various floodplain mitigation efforts which directly impact the Civil Works flood risk management project (Sawmill Branch). Specifically, these efforts include the work along and in Sawmill Branch to increase its hydraulic capacity adjacent to the proposed roadway project and downstream to Dorchester Road.

In detail, the proposed work will result in a total of 51.06 acres of impacts to wetlands and other waters of the United States associated with Sawmill Branch. Wetland impacts total 50.93 acres, which include 41.44 acres of fill and rip-rap, 5.47 acres of excavation, and 4.02 acres of clearing. The proposed project is estimated to impact 1,300 linear feet (LF) and 0.13 acre of streams, including 247 LF of culvert or pipe, 841 LF of armoring, 212 LF of morphologic changes. Of the 841 LF of armoring, 50 LF will occur in portions of Sawmill Branch that are tidally influenced.

It is noted that the proposed project would impact wetlands protected under restrictive covenant as part of the compensatory mitigation for Phase 2 of Berlin Myers Parkway. SCDOT has determined that 4.53 acres of previously protected wetlands would be affected, including 3.93 acres of permanent fill, 0.11 acre of excavation, and 0.49 acre of clearing within the protected wetlands. The restrictive covenants protecting the 4.53 acres of wetlands prohibit the clearing and filling of wetlands areas and as such, SCDOT has requested USACE and South Carolina Department of Health and Environmental Control (SCDHEC) consider an amendment to the current restrictive covenant to allow for this impact.

SCDOT proposes to mitigate for the proposed project impacts to the protected wetlands, as well as the wetlands removed from compensatory mitigation for Phase 2 of Berlin Myers Parkway.

Project Purpose

The applicant has stated that the proposed project, Phase 3 of the Berlin G. Myers Parkway, will be the final phase of the parkway and will link Phases 1 and 2 to US 17A, southwest of Summerville. This will complete the "loop" south of Summerville and will provide system linkage, reduce congestion and improve safety on surrounding roadways, including 17A and Bacons Bridge Road (SC 165).

Proposed Work in Sawmill Branch

In 1971, a federal project was completed wherein 9 miles of channel were constructed in Sawmill Branch. As such, any work or alterations to Sawmill Branch are subject to the provisions of 33 USC § 408 (Section 408), which states that the alteration, occupation, or use of a USACE civil works project may be authorized by the Secretary of the Army, on the recommendation of the Chief of Engineers of USACE, if it is determined that the occupation or use will not be injurious to the public interest and will not impair the usefulness of such work.

The following is an excerpt from SCDOT's application, specifically regarding the work related to Sawmill Branch:

"Extensive efforts have been made throughout the design process to mitigate any impacts to the function of the existing Federal Project as the result of the proposed project. The primary alteration to the Federal Project resulting from the Proposed Project is the physical construction of the roadway within the floodplain / floodway associated with Sawmill Branch. The construction of the embankment in and of itself creates a loss of conveyance for the floodwaters carried by Sawmill Branch and its natural floodplain. Extensive efforts have been made to offset this loss of conveyance and mitigate impacts to the function of the existing Federal Project. To that end, the project also includes additional excavation, bridges, and hydraulic structures to mitigate the potential impacts to conveyance along Sawmill Branch. These proposed alterations / modifications to the existing Sawmill Branch floodplain are located both inside and outside of the federal right-of-way for Sawmill Branch.

The Proposed Project includes the following proposed alterations resulting from construction activities within the existing federal right-of-way / easements:

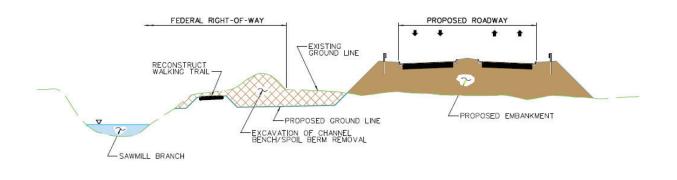
- Excavation Adjacent to the Sawmill Branch Channel This is necessary to offset the existing conveyance area impacted as a result of the roadway embankment placed in the floodplain outside of the federal right-of-way. The excavation increases the overall conveyance area between the main channel and new roadway embankment within the construction area of the roadway project.
- Reconstruction of the Luden Drive Bridge over Sawmill Branch This bridge is proposed to be replaced as required by the improved roadway geometry and to provide additional conveyance area under the bridge.

• Reconstruction of the Existing Sawmill Branch Walking Trail – The excavation adjacent to the Branch will require that the trail be reconstructed. The new trail will be at a slightly lower elevation than the existing trail.

- Excavation Adjacent to Sawmill Branch Downstream of the roadway project area, excavation will be included adjacent to the existing Sawmill Branch channel to create a floodplain bench. The excavation for the floodplain bench will be performed for approximately 2,000 feet just downstream of the roadway project area as well as along Sawmill Branch between Bacons Bridge Road Dorchester Road. The floodplain bench will vary between 5 and 15 feet with minimal impacts to the Sawmill Branch Walk / Bike Trail. Existing pipe outfalls within construction areas for the floodplain bench will be stabilized with riprap protection.
- Stormwater Improvements Various improvements to stormwater conveyance are proposed associated with the construction of the roadway project and reconstruction of the walking trail.
- Utility Improvements
 - The existing waterline will need to be lowered within the excavation area in order to maintain cover over the line.
 - Sanitary sewer alterations will be limited to modifications to the existing manholes to match the new ground surface in the channel excavation area.

Outside of the existing federal right-of-way / easement, proposed project construction includes the following:

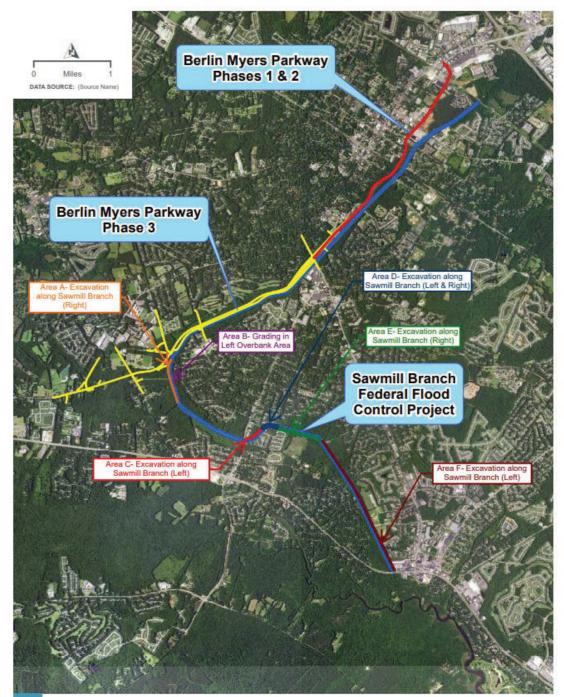
- Roadway Embankment Construction Placement of fill material for construction of proposed roadway within floodplain/floodway and associated stormwater improvements and cross-line structures.
- Bridges along Berlin Myers Parkway and Side Roads Project includes five (5) bridges designed specifically to maintain conveyance along Sawmill Branch.
- Retaining Walls Roadway retaining walls are proposed in several areas to reduce wetland and right-of-way impacts and to maximize conveyance.



Representative Cross Section of Proposed Project (Adjacent to Roadway) Typical Section Looking Downstream

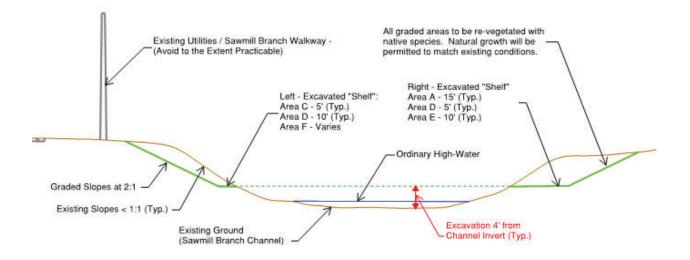
Typical Design Cross Section (Adjacent to Roadway) Looking Upstream





Floodplain Mitigation Plan (Downstream Areas- *Revised* Portion of Project)





SCDOT's Proposed Construction Sequencing (excerpt from application)

Stage 1 of Construction: Initial on-site construction activities will begin with floodplain mitigation, as allowed by the Section 408 approval. This primarily includes the channel excavation and associated improvements. Work activities in this phase include the improvements to the existing water line and sanitary sewer line. Within the project area adjacent to roadway construction, the channel excavation will be performed as a mass grading exercise with large earth moving equipment. In areas downstream of the roadway project, excavation and grading will be performed with smaller construction equipment to minimize the disturbance and impacts from construction traffic. Material will be removed from the floodplain and stored/disposed of in upland areas outside the project site.

During Stage 1, the Sawmill Branch Walk/Bike Trail within the roadway project area will be closed and will remain closed throughout construction. Grading and drainage activities for the new Sawmill Branch Walk/Bike Trail in the roadway project area can be performed in Stage 1; however, the trail shall remain closed throughout construction.

Stage 1 will also include the excavation adjacent to the channel in the downstream areas. In these areas, the Sawmill Branch Walk / Bike Trail will be closed in the work areas and areas needed for access. The duration of these closures will be limited to the time needed for the proposed excavation in these specific areas. Once excavation areas are constructed the trail will be reopened. The closure in these areas is not tied to the full duration of the roadway construction project.

Stage 1 Summary:

- Sawmill Branch Walk/Bike Trail closure
- Installation of site BMPs
- Mass grading for the channel excavation and benching
- Utility relocations

Stage 2 of Construction: Upon completion of the activities associated with Stage 1, mass grading for the roadway can be initiated. The grading associated with Stage 2 will also be performed with large earth moving equipment. In addition to the proposed grading, Stage 2 will include the installation of stormwater features as well as the construction of bridges and other structures as needed. Stage 2 will include no construction within the Sawmill Branch area except of the construction for the Luden Road Bridge over Sawmill Branch.

The final grading/paving for the roadway should not be completed until the floodplain bridges are in place and the appropriate conveyance at each bridge structure is achieved. Excavation at each floodplain mitigation structure should be performed as part of the initial grading activities.

Stage 2 Summary:

- General roadway construction
- Stormwater construction
- Bridge construction
- Reopen Sawmill Branch Walk/Bike Trail

Avoidance and Minimization Measures

According to the applicant, avoidance and minimization measures have been incorporated into the final design for their preferred alternative. Specifically, the applicant states that various strategies and techniques have been incorporated to minimize wetland impacts and floodplain impacts. The following is a summary of the avoidance and minimization measures identified by the applicant:

Specific measures have been incorporated in an effort to reduce the overall impact to wetlands and other waters of the US. Most notably, the roadway typical section has been reduced to the minimum width required to accommodate the purpose and need while complying with current SCDOT and FHWA design standards. The roadway embankment slopes were reduced from 6:1 to 2:1 through the use of guardrail, which allows the steeper slope. In addition, curb and gutter was utilized throughout the project, instead of roadside ditches, to further minimize the project footprint. Clearing impacts have also been minimized by reducing the areas needed for BMP maintenance to the minimum width allowed in accordance with SCDOT design standards. Finally, slight alignment modifications have been incorporated as an effort to minimize impacts. These minimization strategies have resulted in a reduction of fill impact from 49.9 acres to 41.49 acres (41.42 acres wetland and 0.07 acres of stream impacts) along with a reduction in clearing impact from 6.2 acres to 4.02 acres. During final design, stream impacts have increased from 385 LF to 1,275 LF because of the inclusion of impacts associated with an access road and floodplain mitigation work along Sawmill Branch. The preferred alternative requires the relocation of the Summerville CPW access road to a pump station near Sawmill Branch (see Sheet 18, Station 165). This access road was not included in the initial alternatives analysis, and will result in 212 LF of impact to Tributary V. The impact to Tributary V was minimized by shifting the channel adjacent to the new access road and maintaining flow, instead of piping or filling the stream channel. In several locations, tributaries discharge into Sawmill Branch and a new rip-rap pad will be constructed on the bank of Sawmill Branch to protect the tributary outfall and

slope along Sawmill Branch from erosion caused by outfall flows. In most cases, impacts were avoided by shifting the rip-rap pad above the OHWM of Sawmill Branch. However, in 19 locations, the rip-rap will extend below the OHWM, impacting 781 LF of stream channel. The rip-rap will not impact the centerline of Sawmill Branch, or impede flows.

The applicant has identified numerous floodplain mitigation measures that have been incorporated to minimize impacts to the floodplain. The majority of these measures have been developed to facilitate flood water conveyance and storage capacity along the floodplain. Specific measures include additional bridging/structures, cross culverts, localized grading, and excavation along the floodplain. Under normal circumstances, bridging would be considered a minimization measure. However, a key component of the floodplain mitigation strategy is lowering the existing elevation of the floodplain and excavating under the bridges. As such, excavation is required, even along areas of bridging and other conveyance structures. As a result, the applicant states that their preferred alternative would result in a total of 5.47 acres of excavation impact.

In summary, various avoidance and minimization measures have been incorporated that effectively minimize the dominant impact (i.e. fill material) associated with the project. Specifically, fill impact has been reduced by 8.33 acres, which represents a reduction of approximately 17 percent.

Compensatory Mitigation for Impacts to waters of the United States, including wetlands

According to the applicant, the proposed impacts will require a total of 3,687.5 stream mitigation credits and 709.9 wetland mitigation credits. Project impacts to protected wetlands within the restrictive covenants were doubled when calculating required mitigation credits. The SCDOT proposes to purchase credits from a combination of available mitigation banks and conduct permittee-responsible mitigation (PRM) on a 600-acre site adjacent to the Cooper River (known as Lewisfield Plantation).

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

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The work shown on this application must also be certified as consistent with applicable provisions of the Coastal Zone Management Program (15 CFR 930). 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.

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 50 linear feet of tidally influenced substrates and approximately 51 acres of wetlands located upstream of those substrates 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.

Pursuant to the Section 7 of the Endangered Species Act of 1973 (as amended), the Corps has reviewed the project area, examined all information provided by the applicant, and the District Engineer has determined that the project is not likely to adversely affect any Federally endangered, threatened, or proposed species or result in the destruction or adverse modification of designated or proposed critical habitat. This public notice serves as a request for written concurrence from the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service on this determination.

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)(I)(1)), and has initially determined that there are historic properties present, but has made no determination whether historic properties will be affected by the proposed undertaking. Consultation with the Advisory Council on Historic Properties (ACHP) and State Historic Preservation Office (SHPO) is being led by the FHWA as the lead agency pursuant to NEPA. The District Engineer's final determination relative to project impacts and the need for mitigation measures will be made following the conclusion of FHWA's consultation.

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.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the 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. 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.

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. Please submit comments in writing, identifying the project of interest by public notice number, to the following address:

U.S. Army Corps of Engineers ATTN: REGULATORY DIVISION 69 A Hagood Avenue Charleston South Carolina 29403

PLEASE NOTE: THIS PROJECT WAS PREVIOUSLY PLACED ON PUBLIC NOTICE ON MAY 16, 2018. THE PROJECT HAS SINCE BEEN REVISED TO INCLUDE MODIFICATIONS TO THE PREVIOUSLY ADVERTISED WORK. ONLY COMMENTS RECEIVED IN RSPONSE TO <u>THIS</u> PUBLIC NOTICE WILL BE CONSIDERED.

Section 408 Compliance Review

The Sawmill Branch Flood Control Project was endorsed on October 5, 1966, by the authority contained in Section 205 of the Flood Control Act of 1948, Public Law 858, 80th Congress, 2d Session, as amended by Section 205 of the Flood Control act of 1962, Public Law 874, 87th Congress. Construction of the project was completed on April 27, 1971.

The proposed project described in this notice would require permission pursuant to Section 14 of the Rivers and Harbors Act of 1899, 33 USC 408 (Section 408). Permission for an alteration under Section 408 may be granted when, in the judgment of the Secretary of the Army, the alteration will not be injurious to the public interest and will not impair the usefulness of the project. Decisions on proposed alterations are delegated to the District Commander unless one or more criteria requiring elevation are triggered.

Section 408 is based on factors which are outlined in Engineering Circular (EC) 1165-2-220. Review of the requests for modification will be reviewed by a USACE technical review team considering the following factors:

1. Impair the Usefulness of the Project Determination. The review team will determine if the proposed alteration would limit the ability of the federally authorized project to function as authorized, or would compromise or change any authorized project conditions, purposes or outputs. All appropriate technical analyses including geotechnical, structural, hydraulic and hydrologic, real estate, and operations and maintenance requirements, must be conducted and the technical adequacy of the design must be reviewed. The Charleston District is working closely with the requestor to ensure that all required technical plans, maps, drawings, and specifications necessary for these analyses are provided and complete. In order to approve a request for modification, it must be determined that the usefulness of the authorized project will not be negatively impacted.

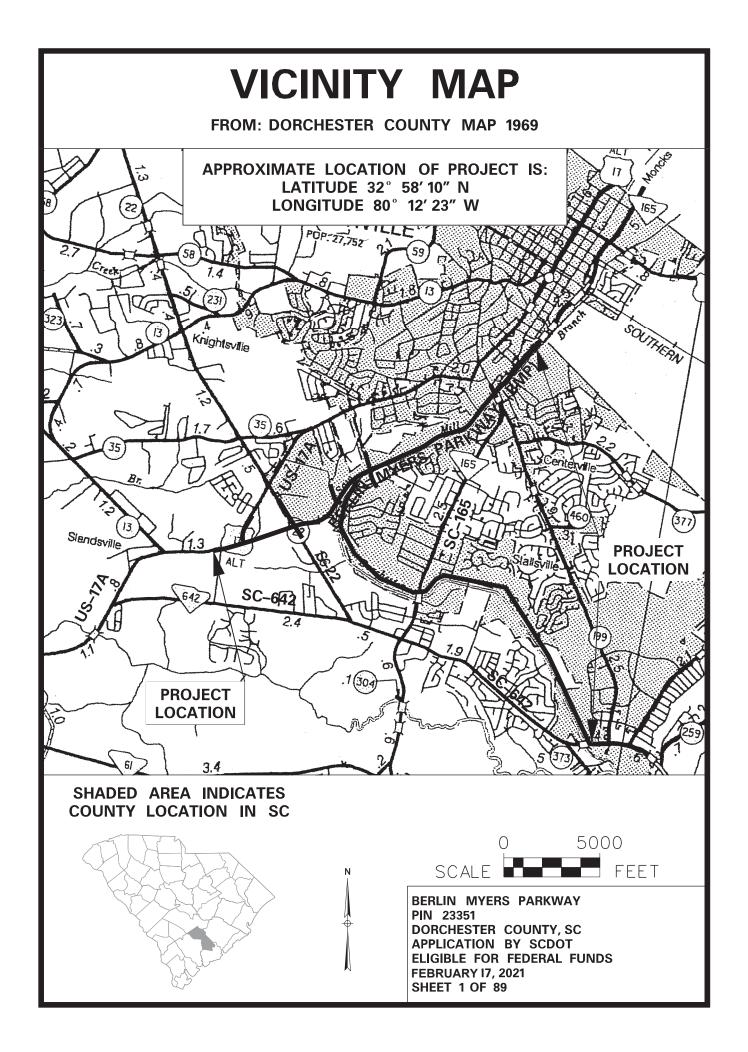
2. Injurious to the Public Interest Determination. Proposed alterations will be reviewed to determine the probable impacts, including cumulative impacts, on the public interest. Evaluation of the probable impacts that the proposed alteration to the USACE project may have on the public interest requires a careful weighing of all those factors that are relevant in each particular case. Factors that

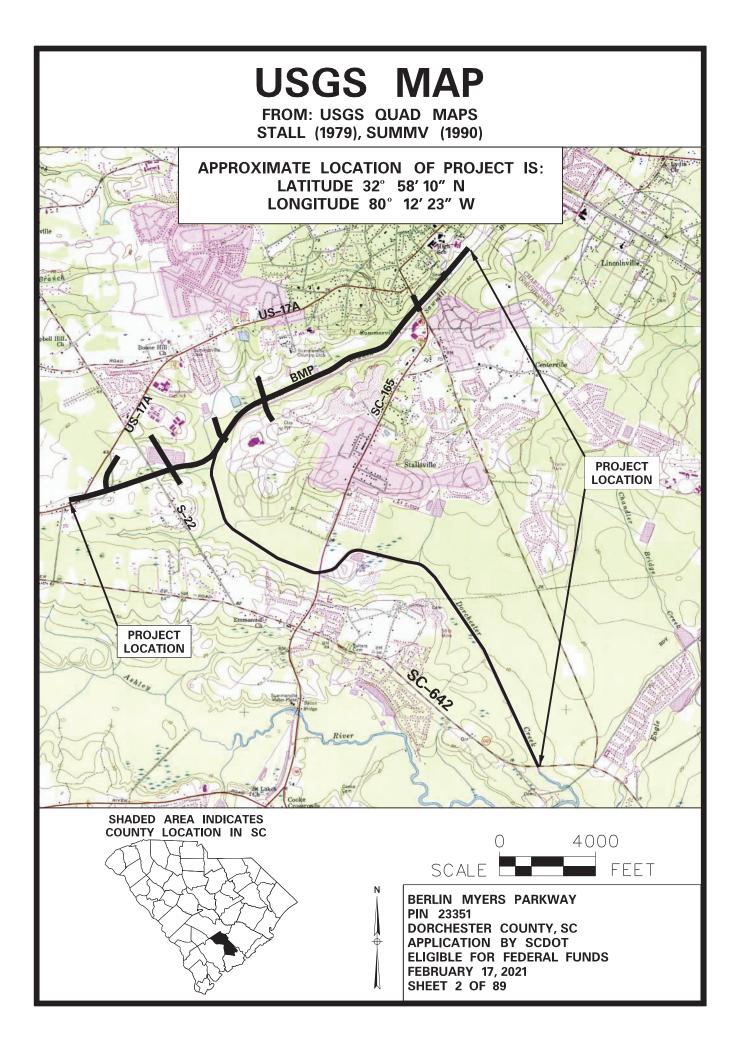
may be relevant to the public interest depend upon the type of USACE project being altered and may include, but are not limited to, such things as conservation, economic development, historic properties, cultural resources, environmental impacts, water supply, water quality, flood hazards, floodplains, residual risk, induced damages, navigation, shore erosion or accretion, and recreation. The decision whether to approve an alteration will be determined by the consideration of whether benefits are commensurate with risks. If the potential detriments are found to outweigh the potential benefits, then it may be determined that the proposed alteration is injurious to the public interest. This determination is not the same as the "contrary to the public interest determination" that is undertaken pursuant to Sections 10/404/103.

3. Legal and Policy Compliance. A determination will be made as to whether the proposal meets all legal and policy requirements. This includes the National Environmental Policy Act (NEPA) and other environmental compliance requirements, as well as USACE policy. While ensuring compliance is the responsibility of USACE, the requester is required to provide all information that the Charleston District identifies as necessary to satisfy all applicable federal laws, executive orders, regulations, policies, and ordinances.

408 Process Overview: The basic 408 process for this application is outlined in EC 1165-2-220, ¶¶ 7.h. (4). In cases in which a Section 408 permission (except for Section 408 decisions that must be made by the Division Commander, per paragraph 8.c.) and a Regulatory standard individual permit are both required for the same proposed alteration/activity, the district will conduct these evaluations in a coordinated and concurrent manner resulting in a single decision document. Note that implementing regulations and policies for the Regulatory permit require the evaluation of proposed activities and their compatibility with the purposes of a federal project. The Section 408 analysis informs the compatibility with the purposes of a federal project for Regulatory purposes. In addition, there will be a single transmittal letter to the requester that includes as attachments both the Section 408 decision letter and the Regulatory permit. The District Commander is the deciding official for the single decision document for these cases, although he or she may further delegate these combined decisions following the same requirements as in paragraph 8.d.

If there are any questions concerning this public notice, please contact Elizabeth Williams at 843-329-8099 or toll free at 1-866-329-8187, or by email at <u>Elizabeth.g.williams@usace.army.mil</u>



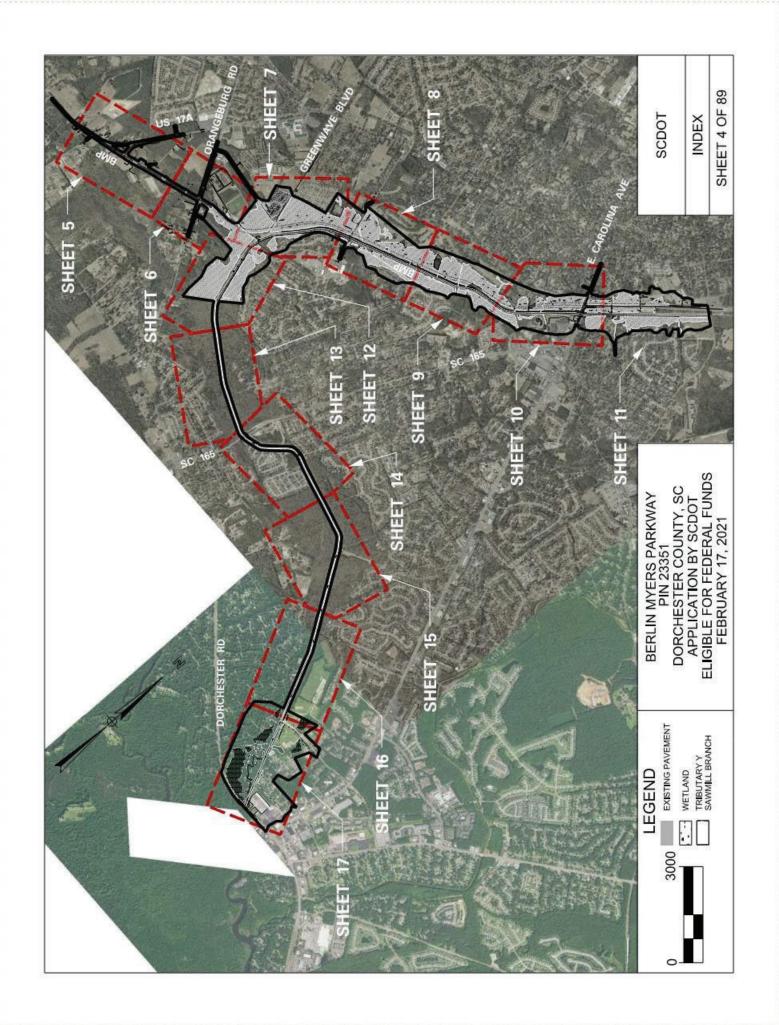


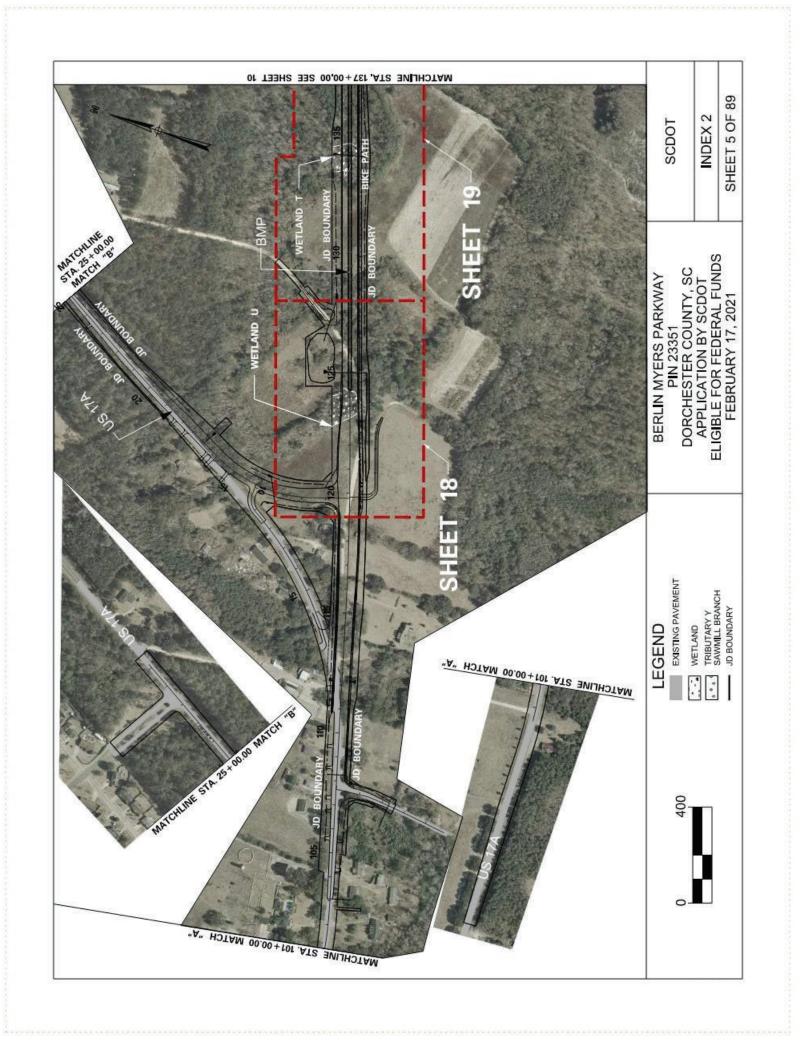
Project Impacts to Waters of the U.S.					
	Jurisdictional Wetland (Acres)	Open Water (Acres)	Jurisdictional Tributary (LF)	Jurisdictional Tributary (Acres)	
Permanent Fill	41.55	0.08			
Excavation	5.47				
Clearing	4.02				
Culvert			191	0.01	
Pipe			56	0.01	
Armoring			791	0.10	
Morphologic			212		
Section 10 Waters			50	0.01	
Totals	51.04	0.08	1,300	0.13	
Jurisdictional Barrier Fence		39,600 LF			

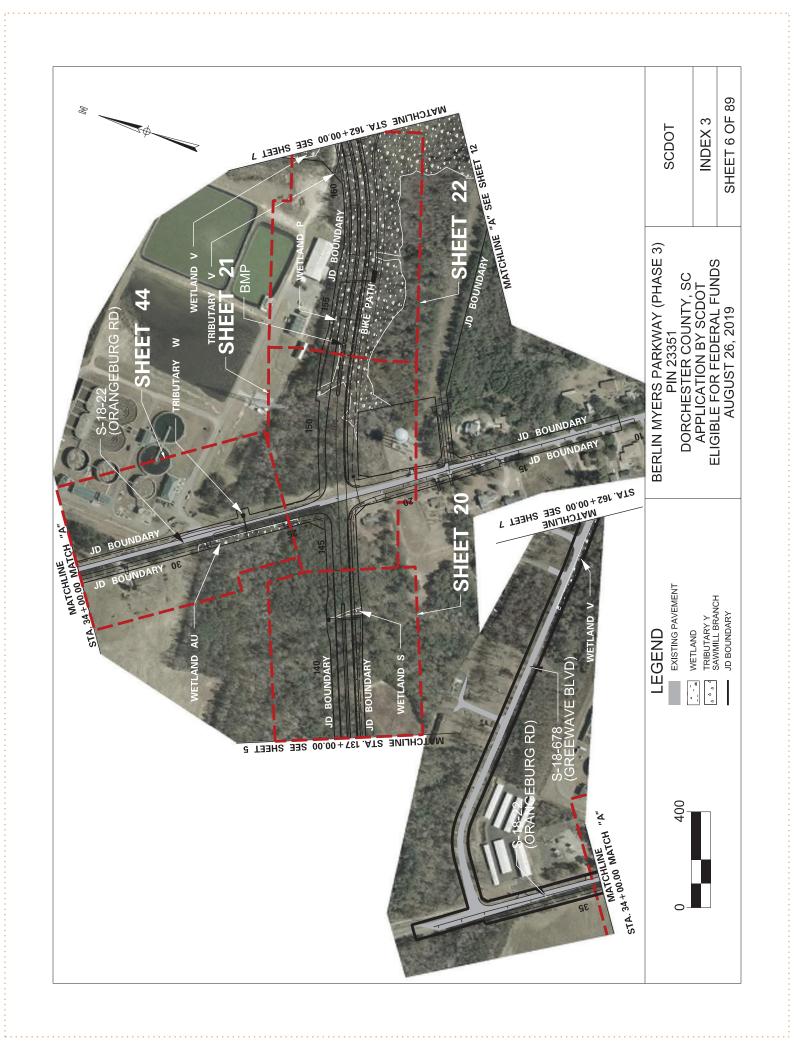
BERLIN MYERS PARKWAY					
PIN 23351					
DORCHESTER COUNTY, SC					
APPLICATION BY SCDOT					
ELIGIBLE FOR FEDERAL FUND	S				
FEBRUARY 17, 2021					

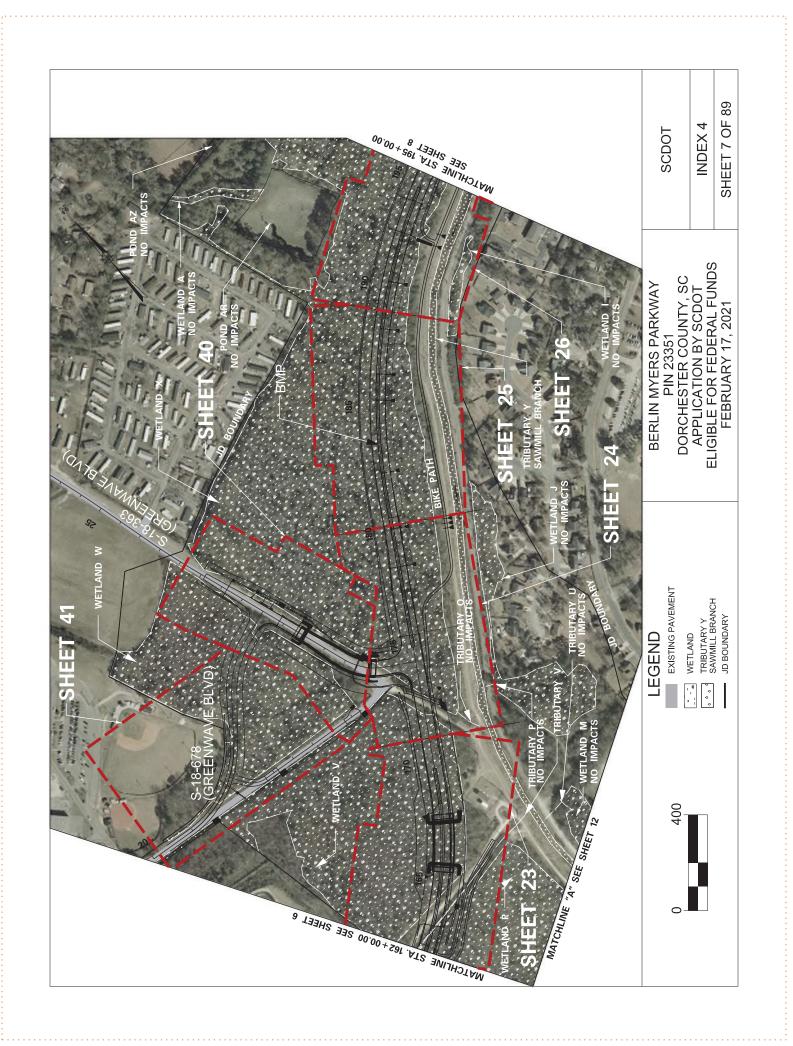
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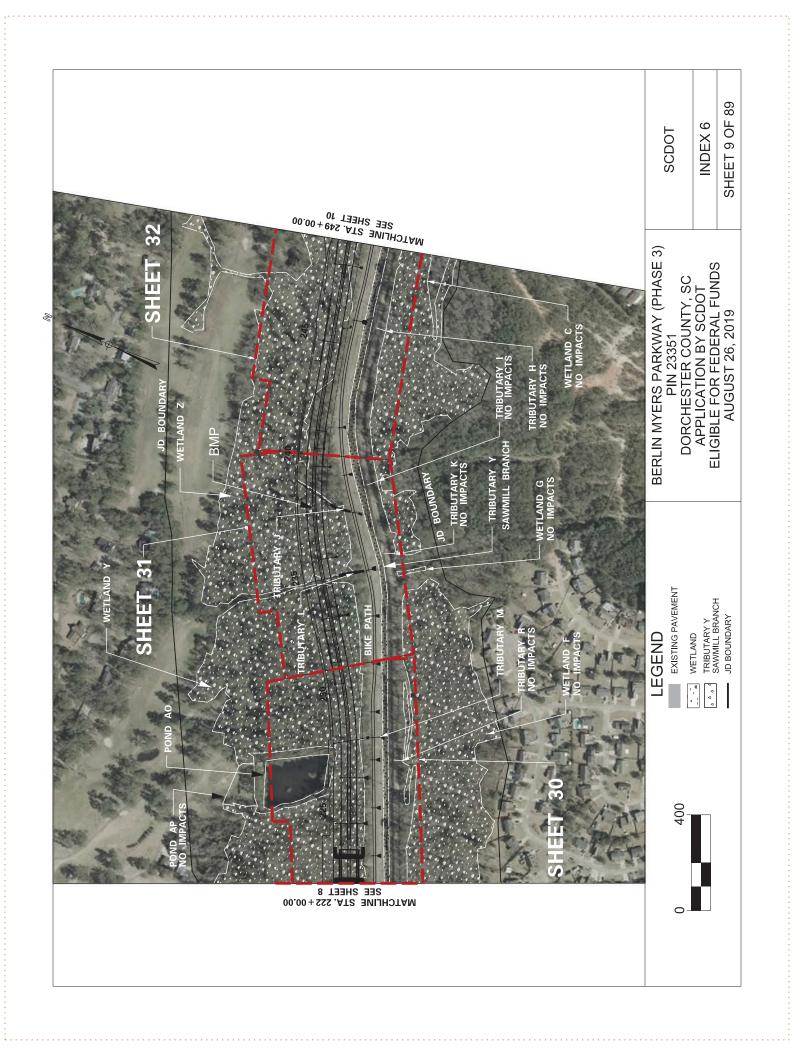




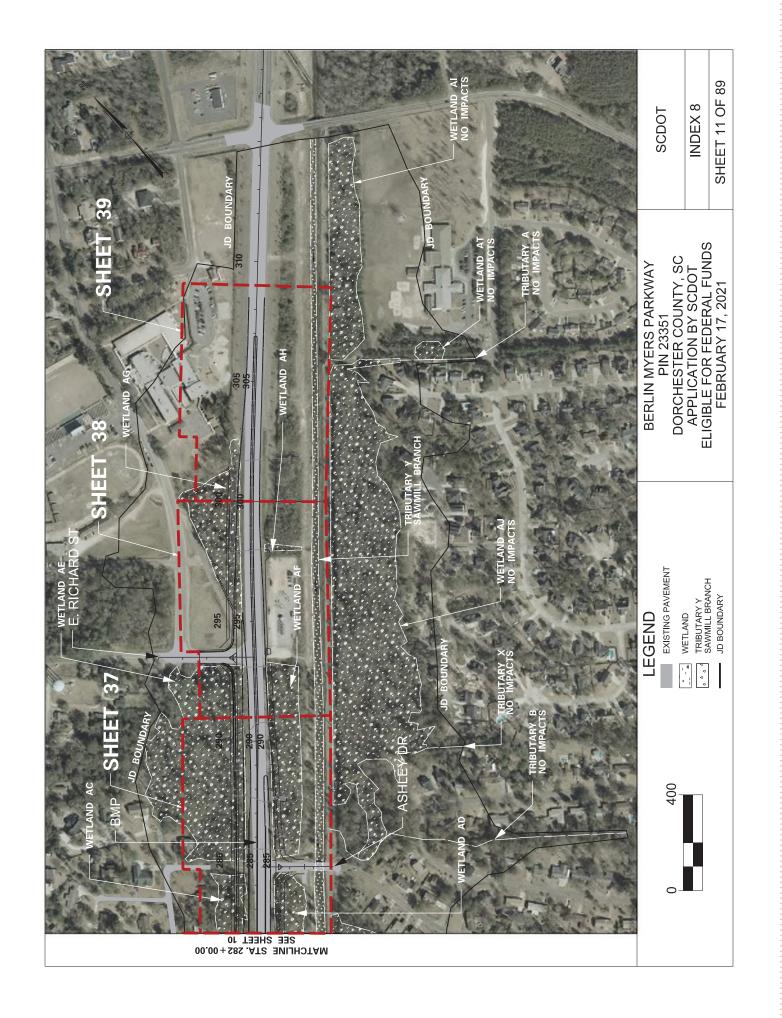


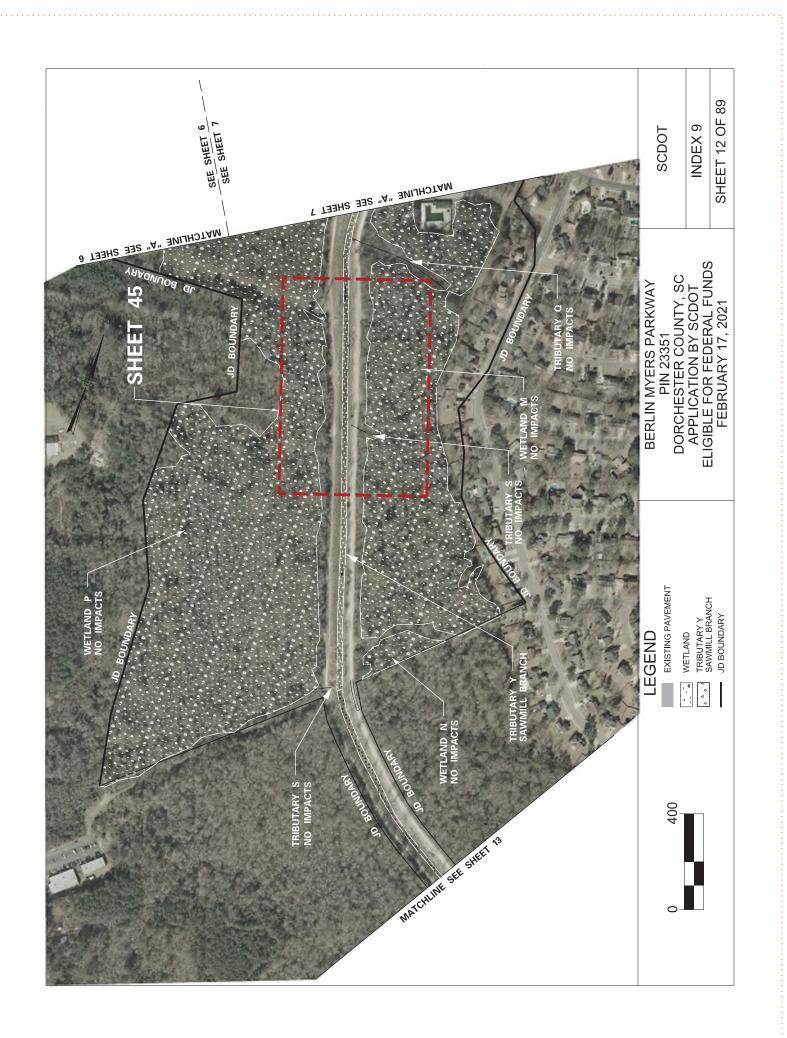




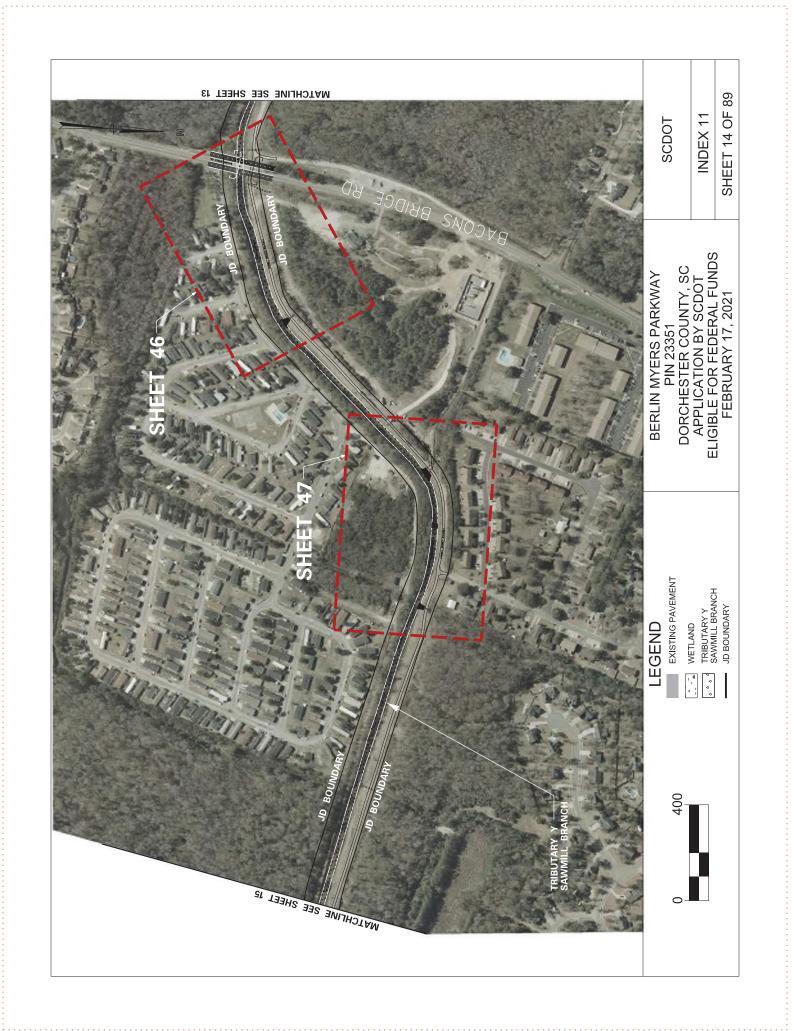


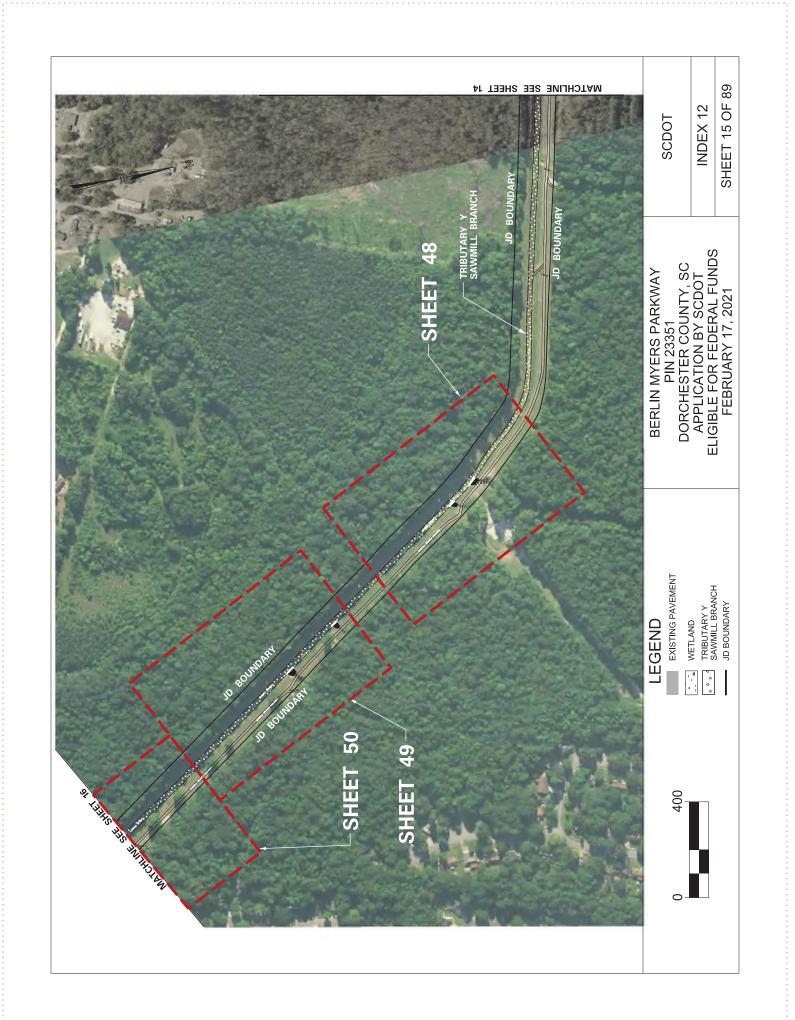


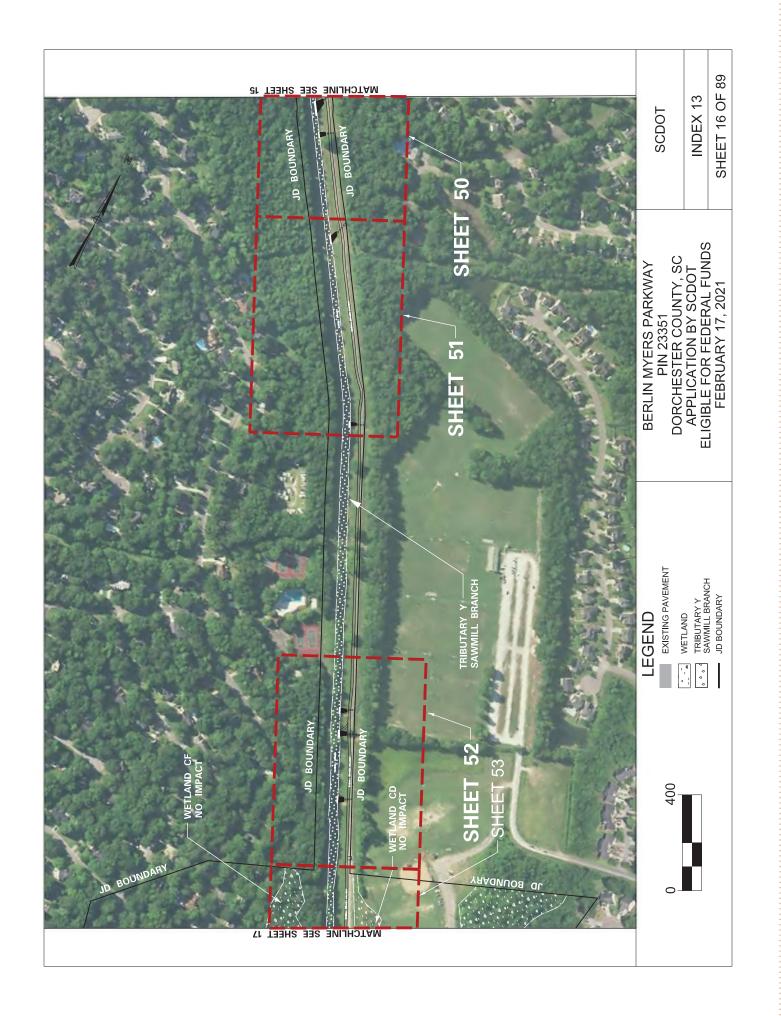


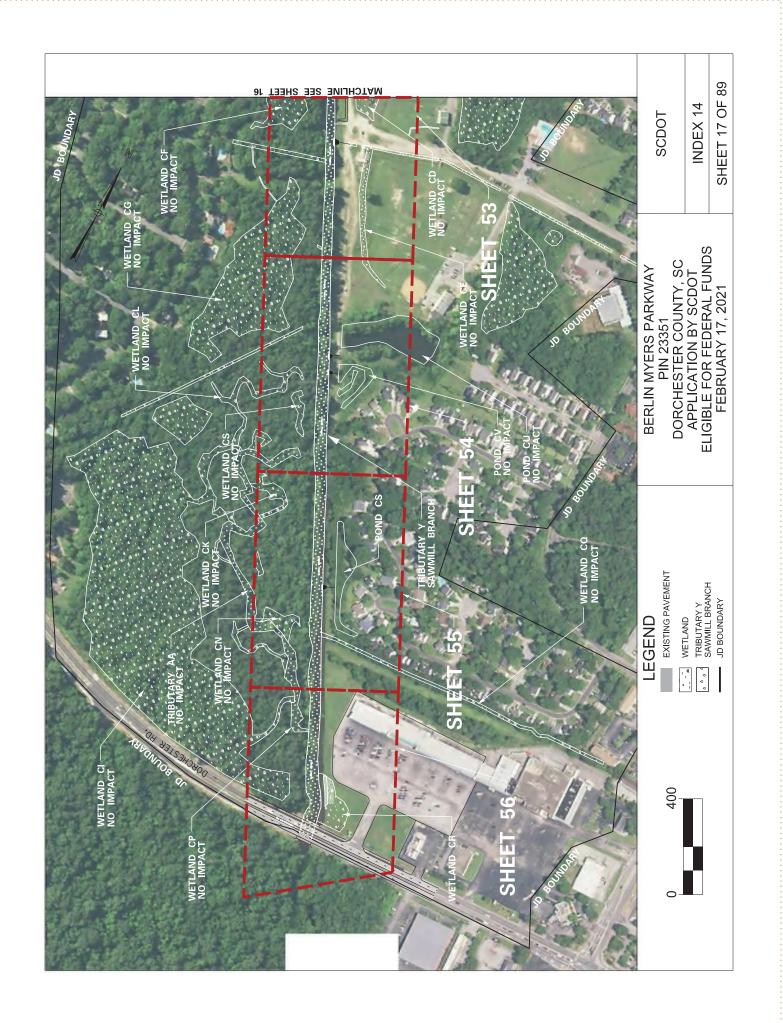


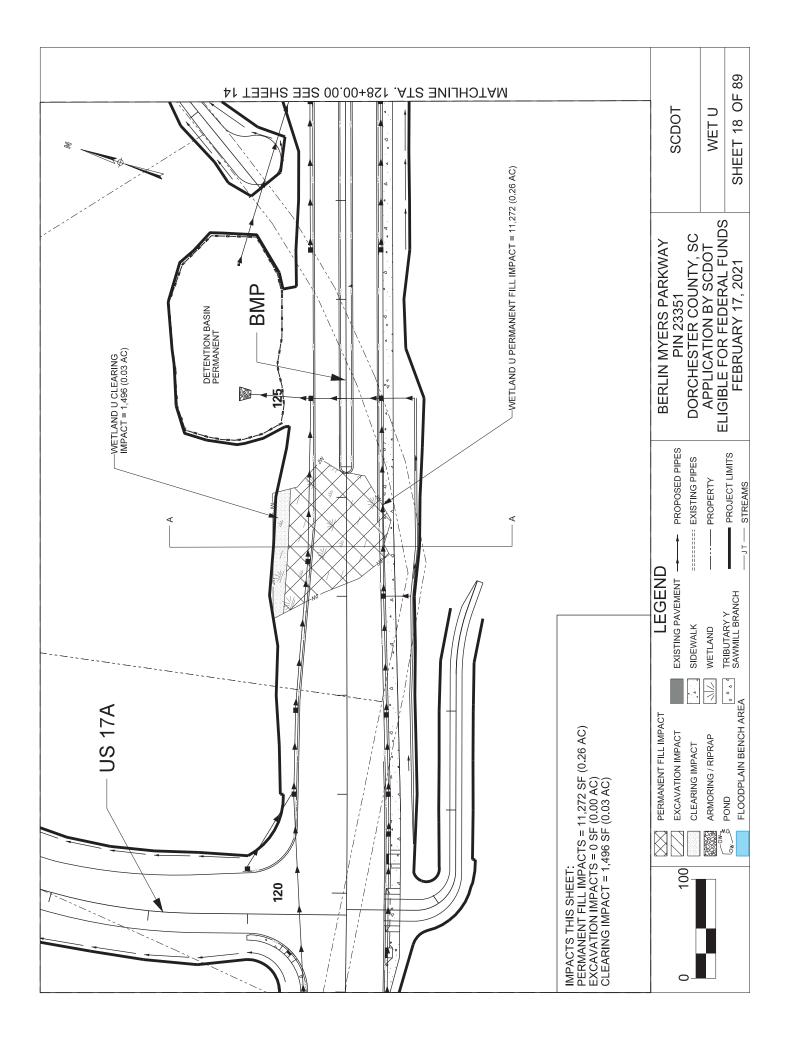


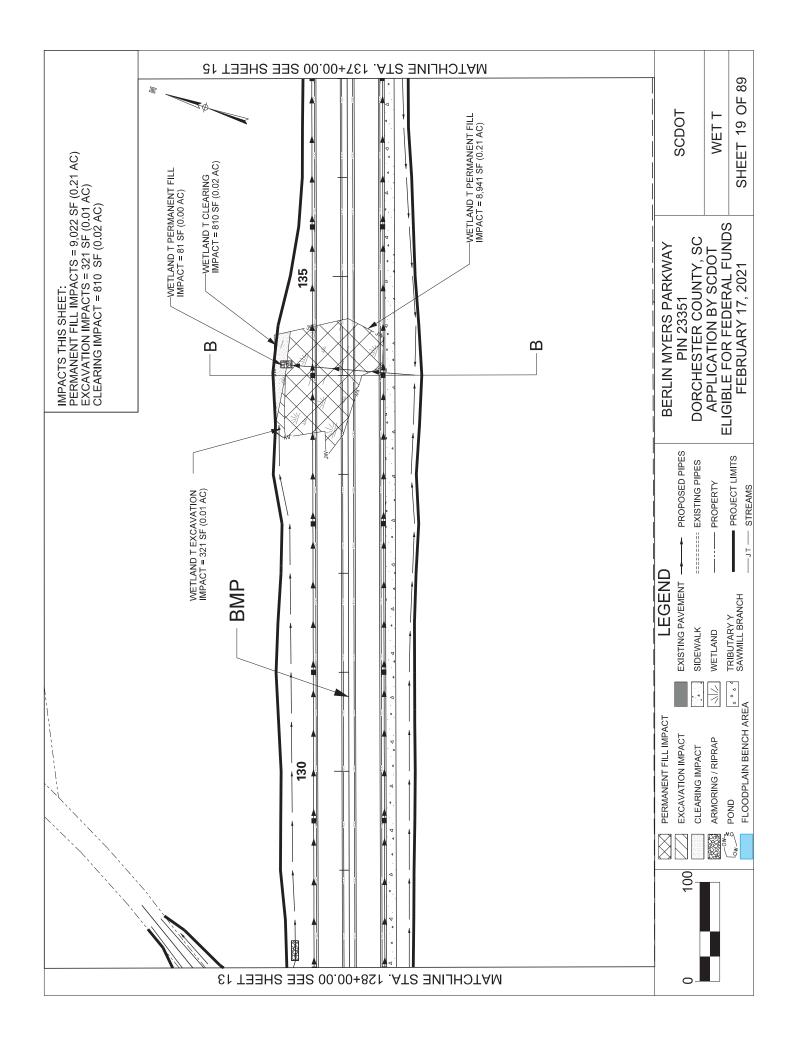


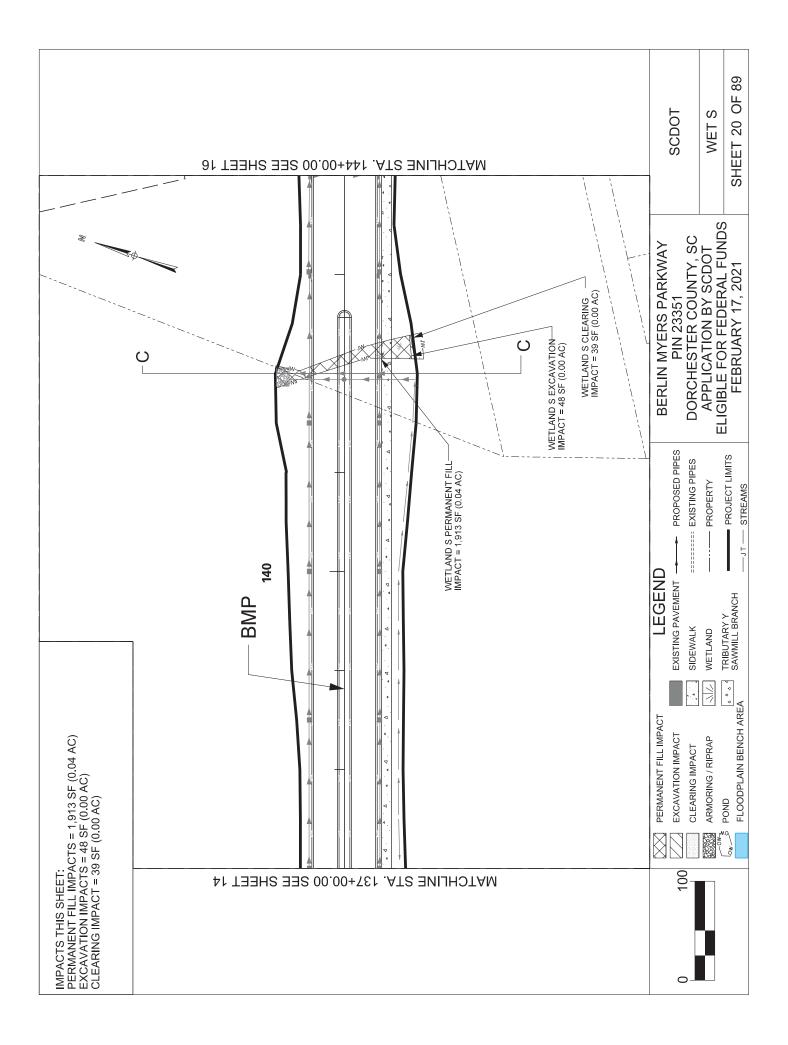


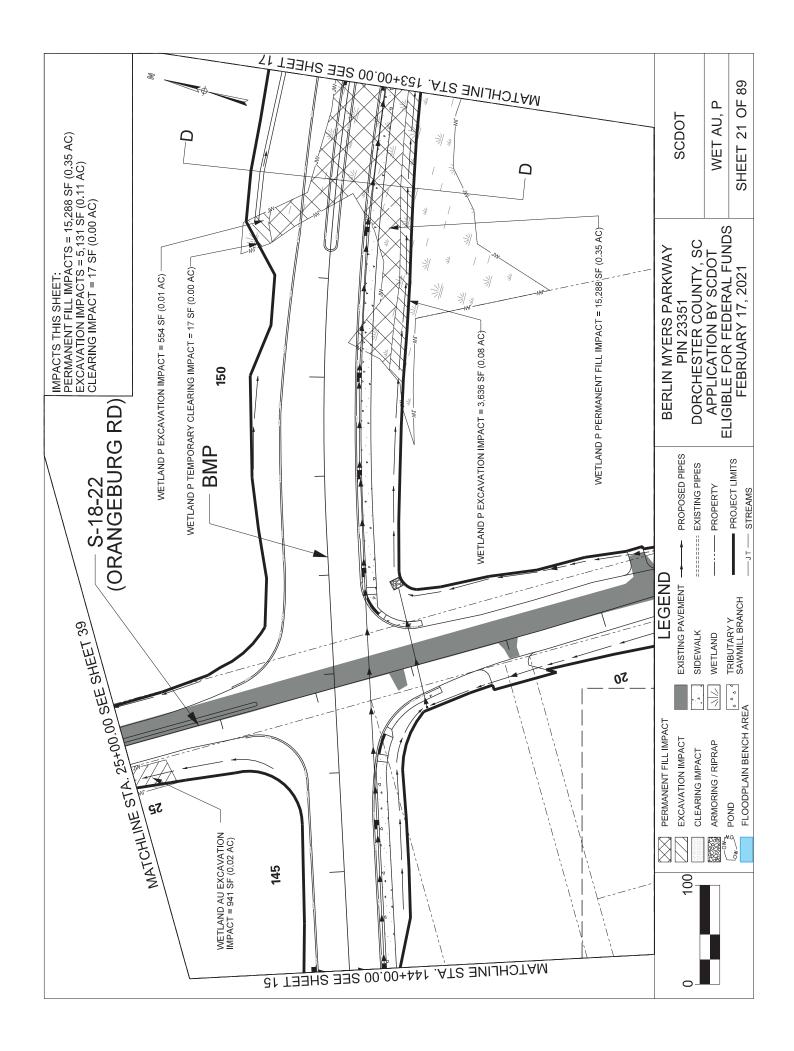


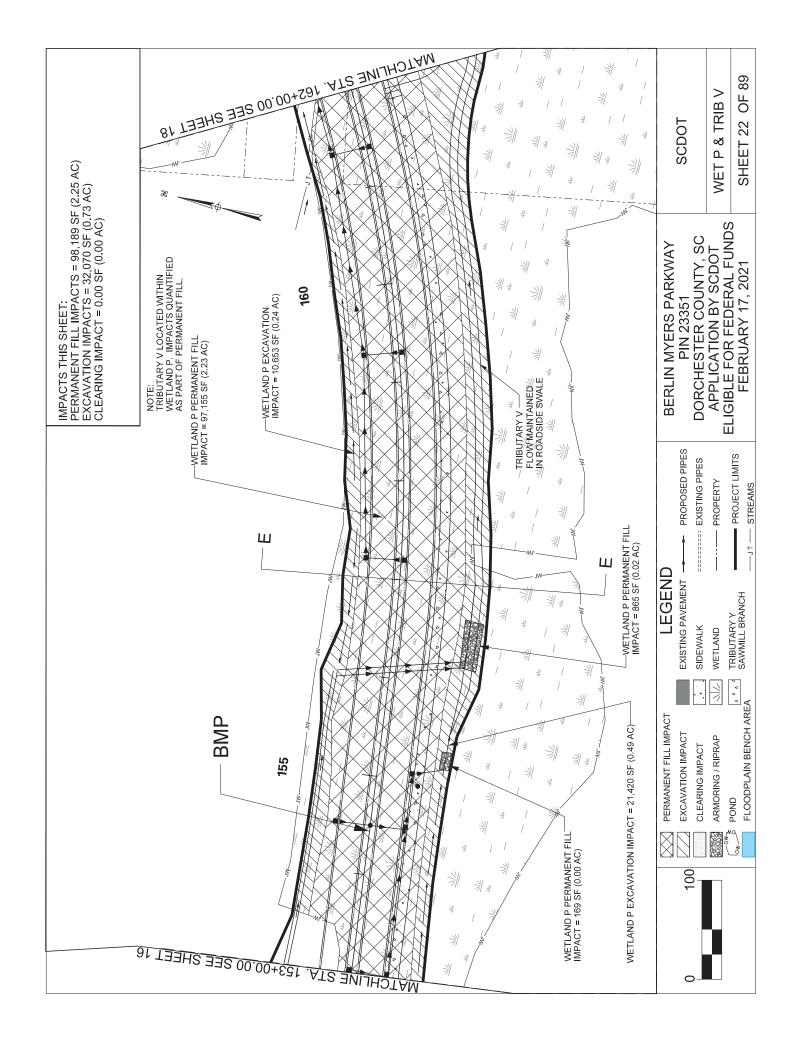


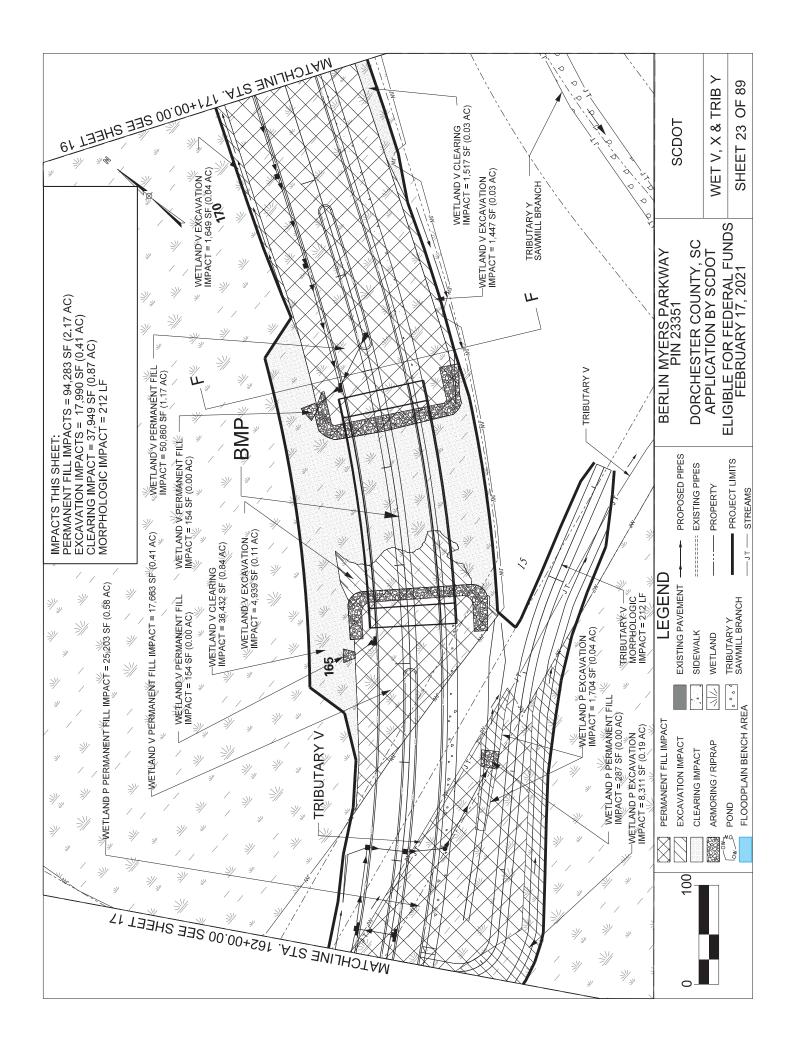


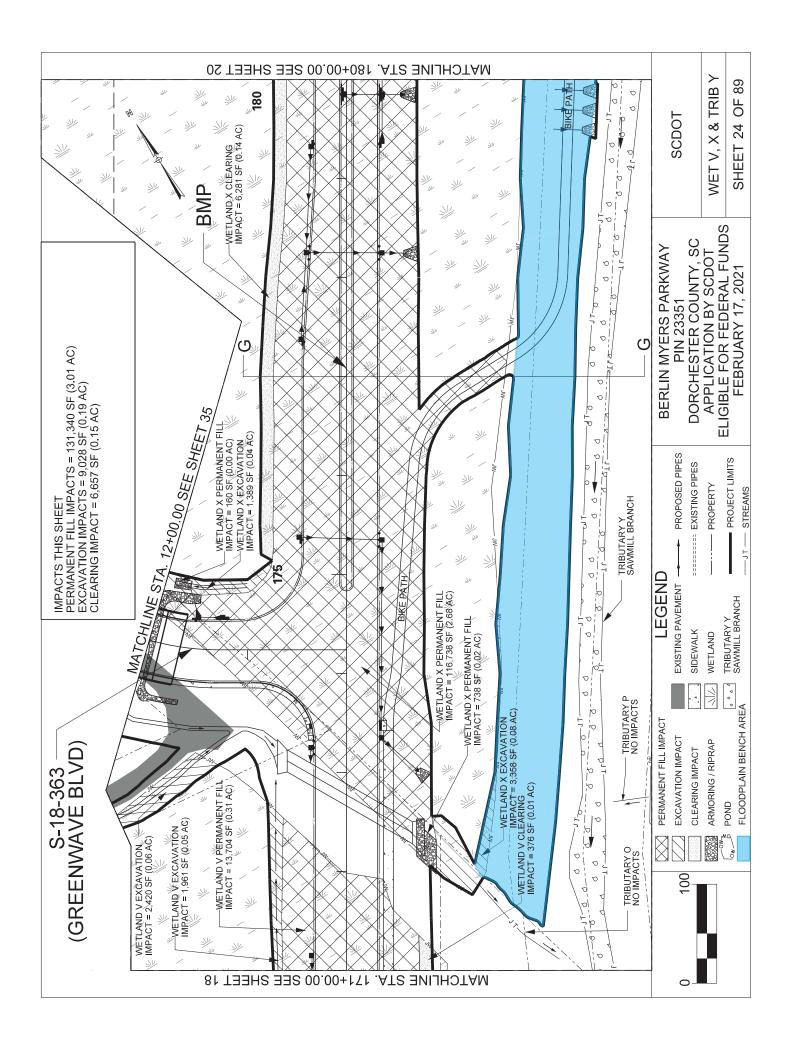


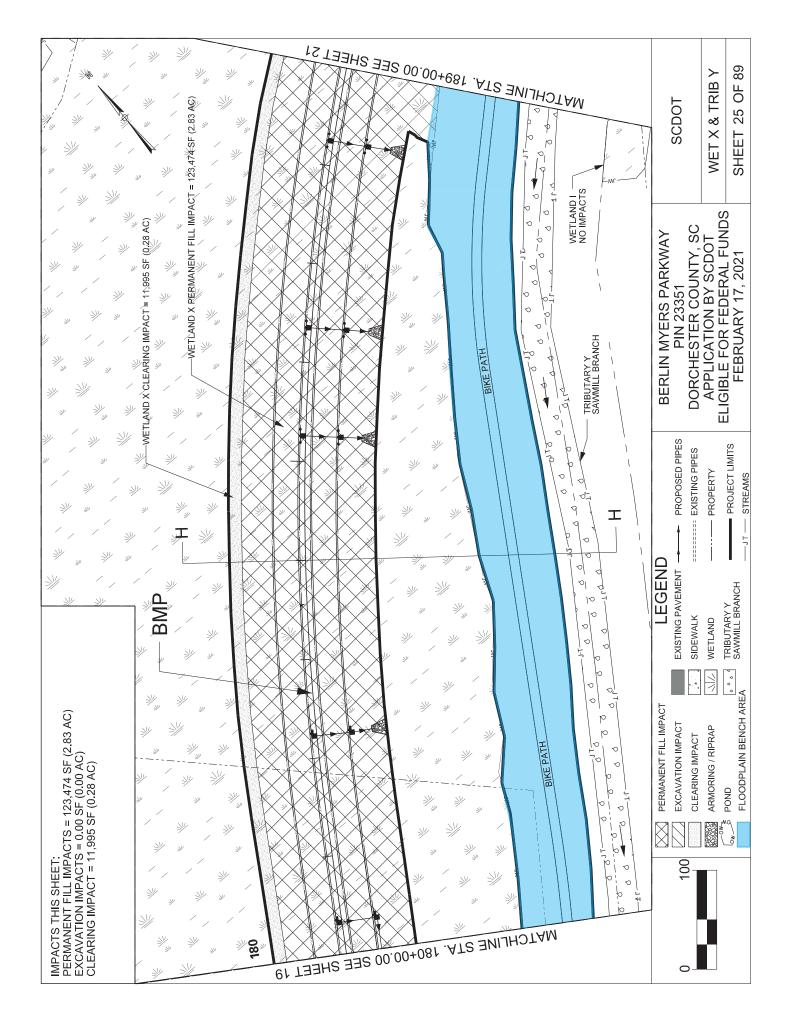


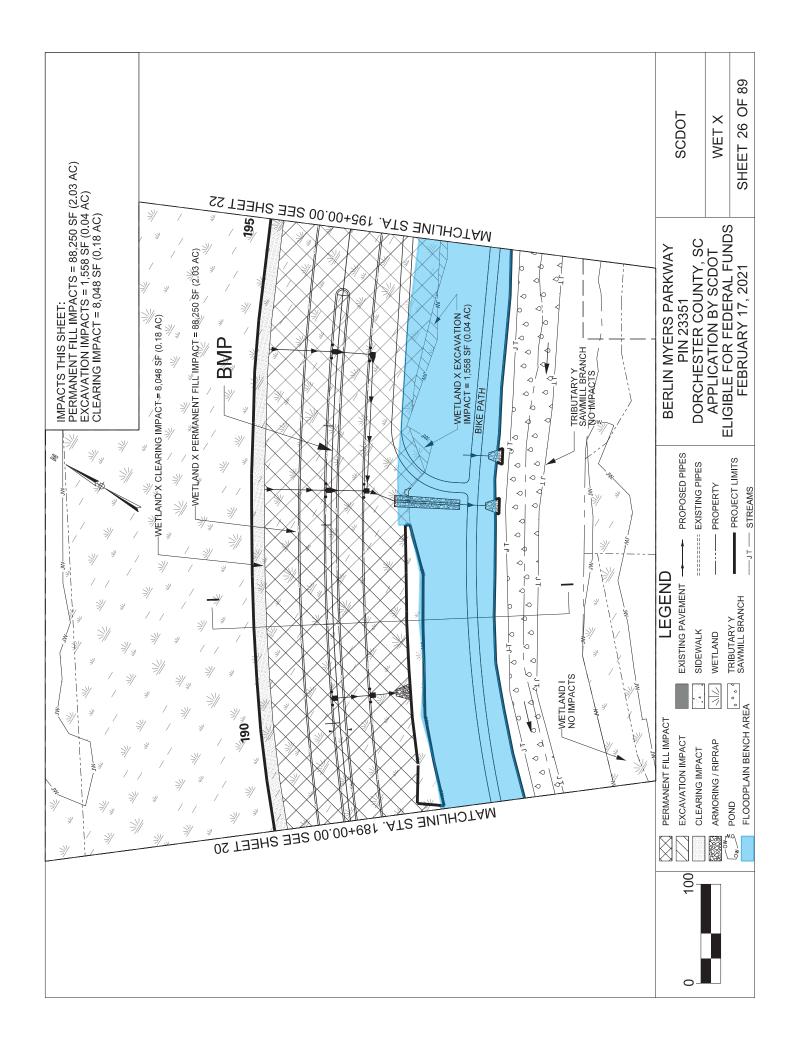


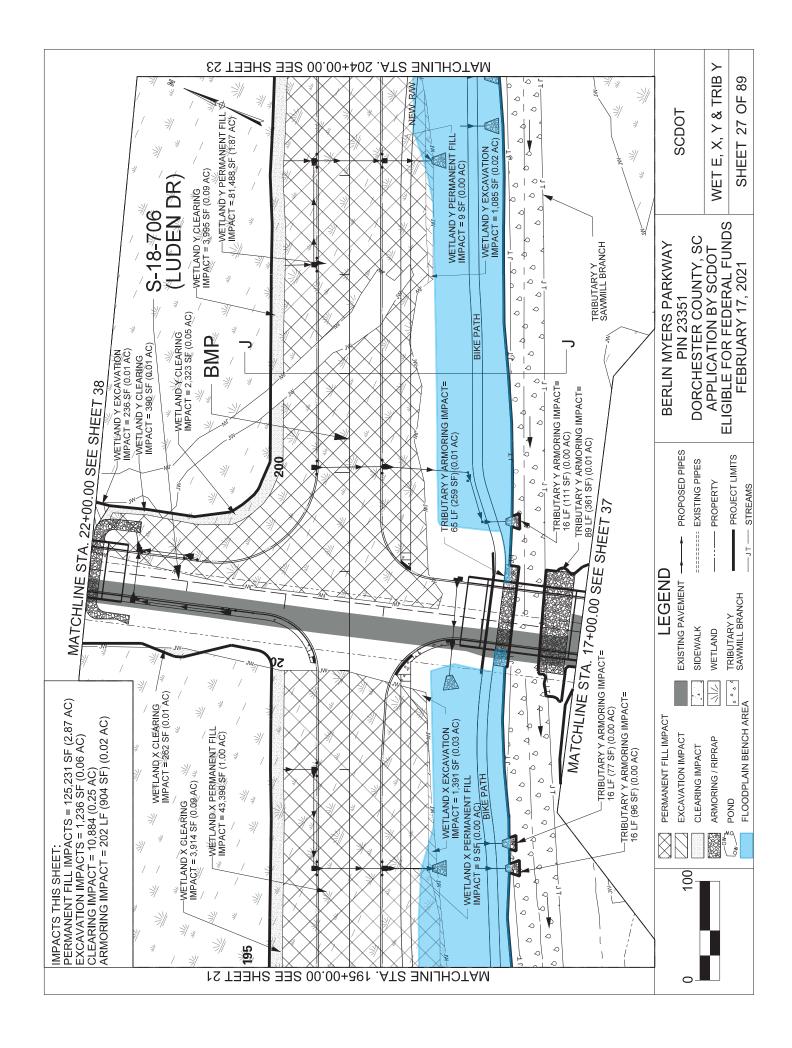


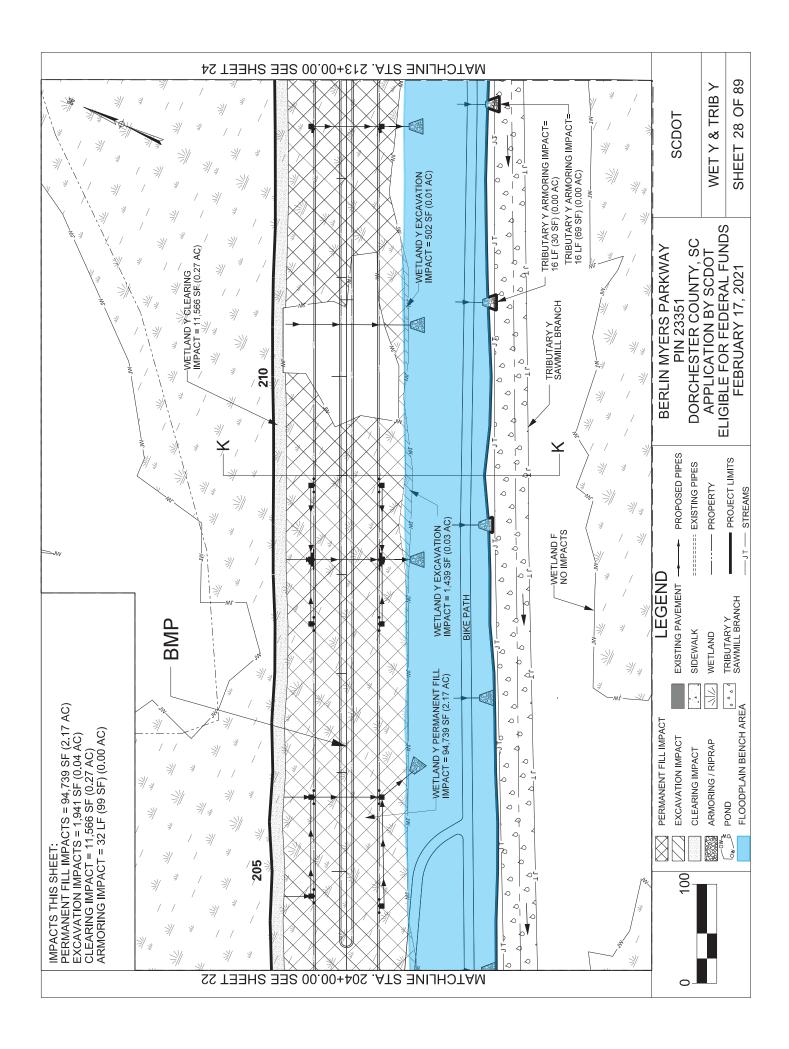


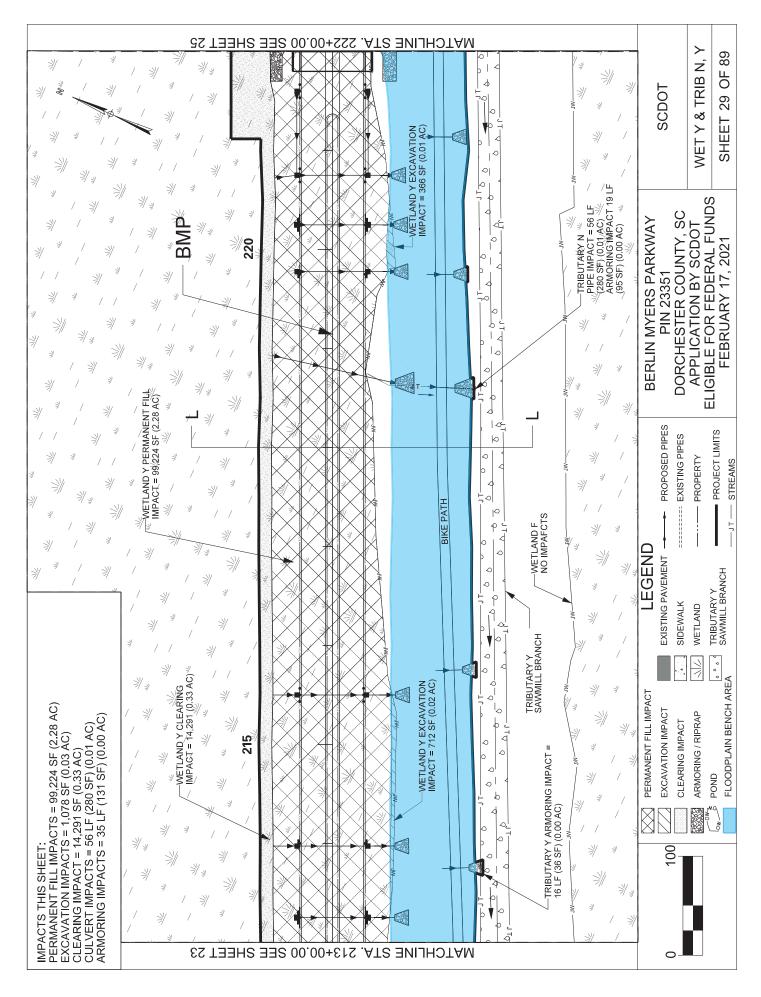


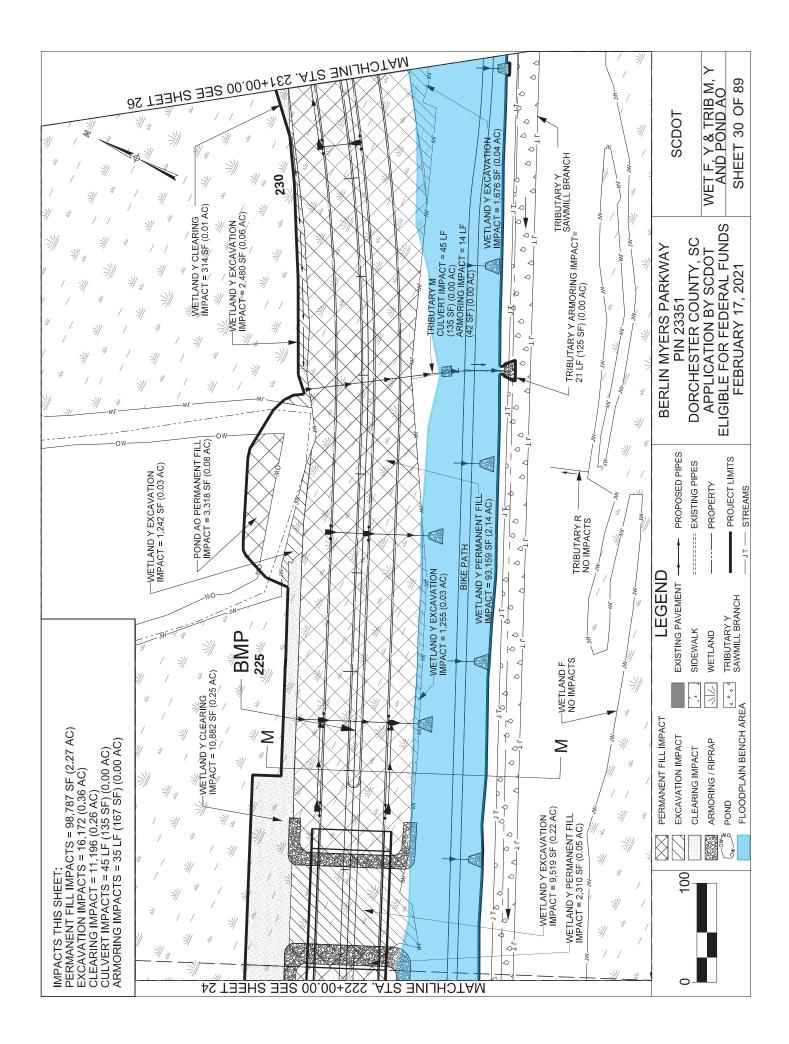


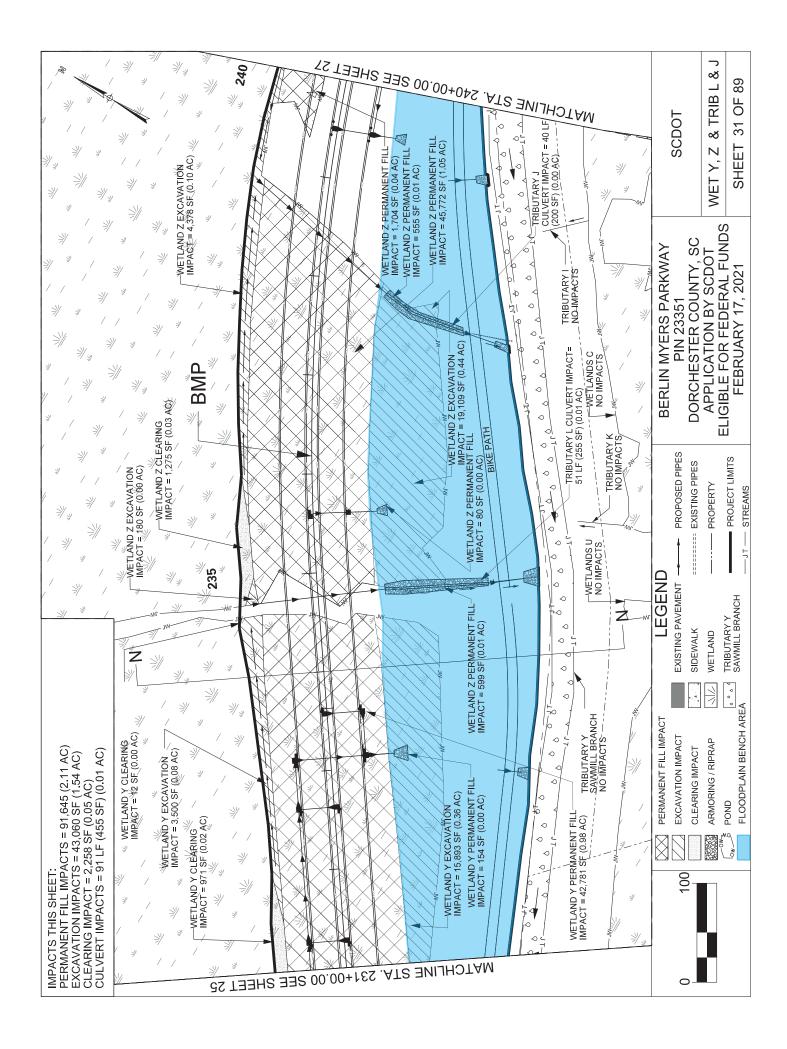


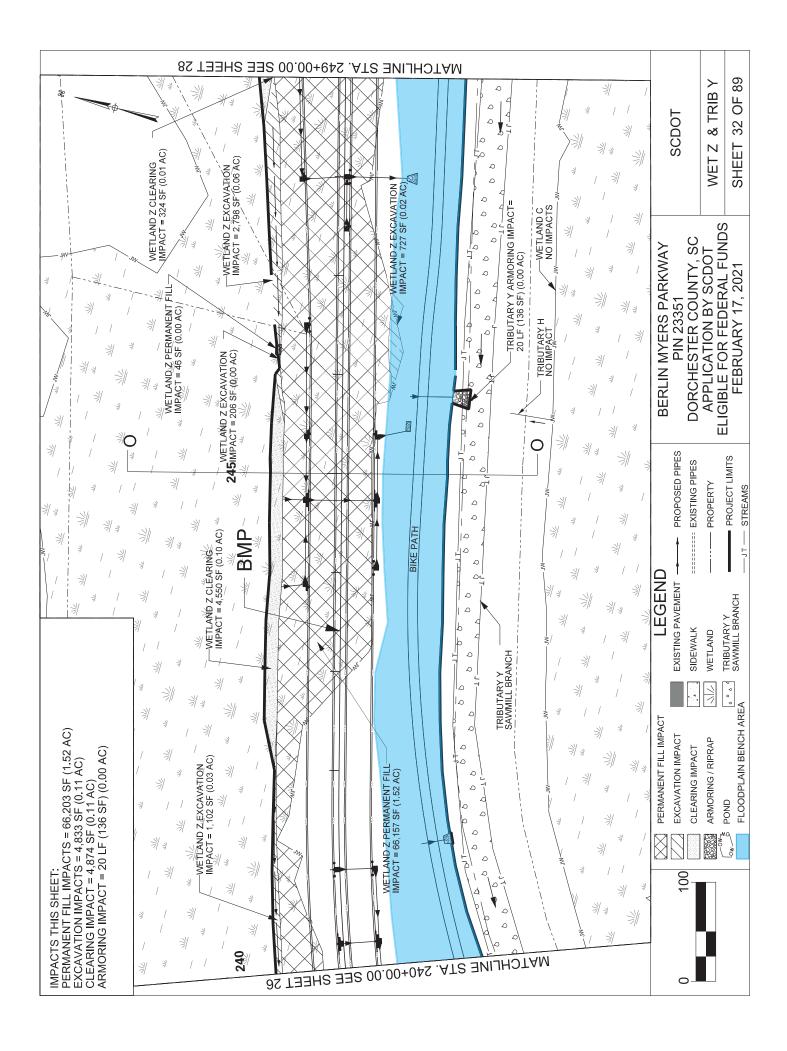


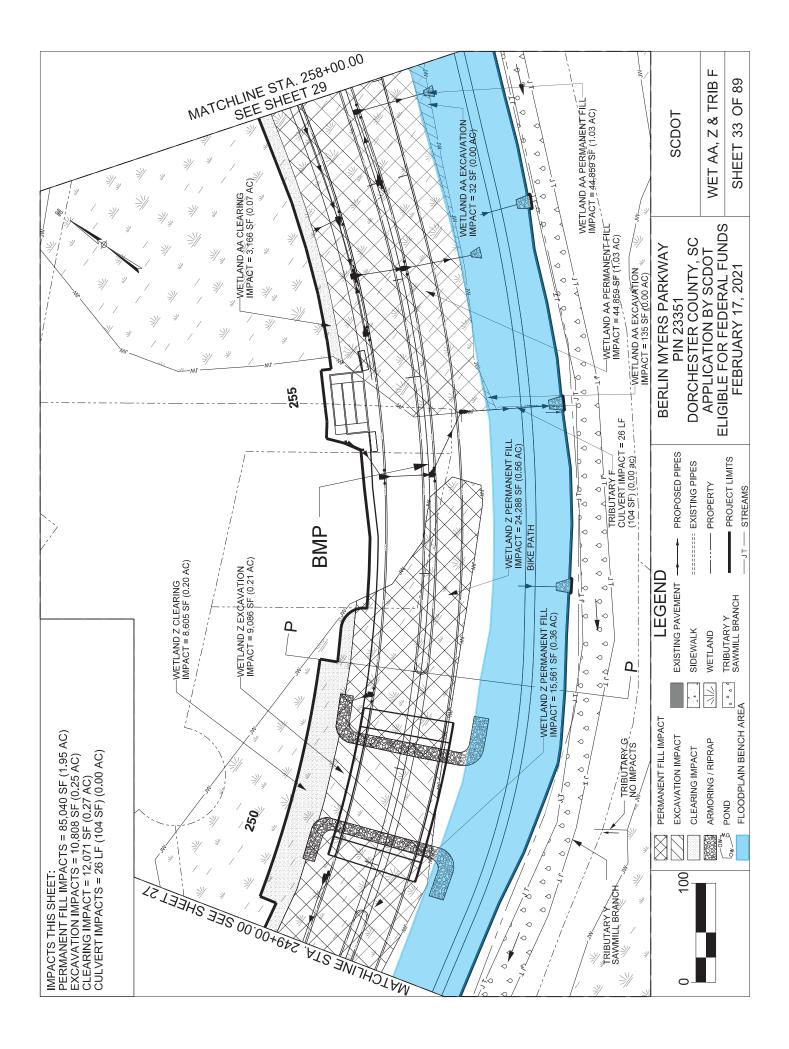


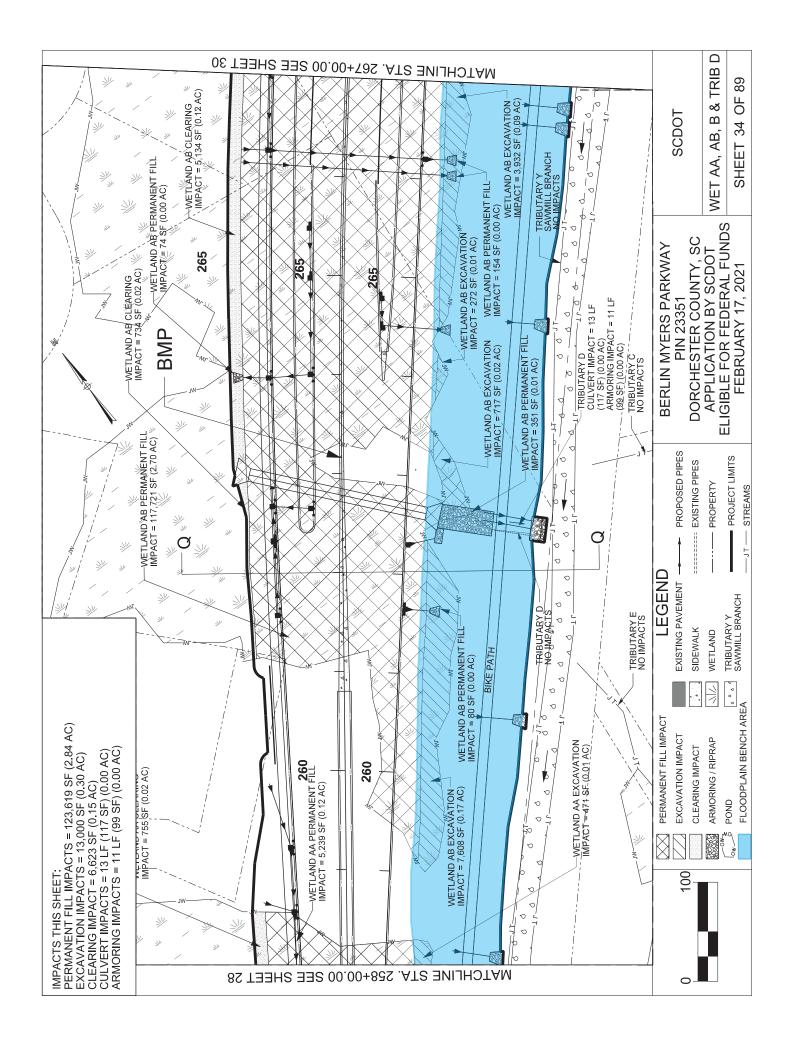


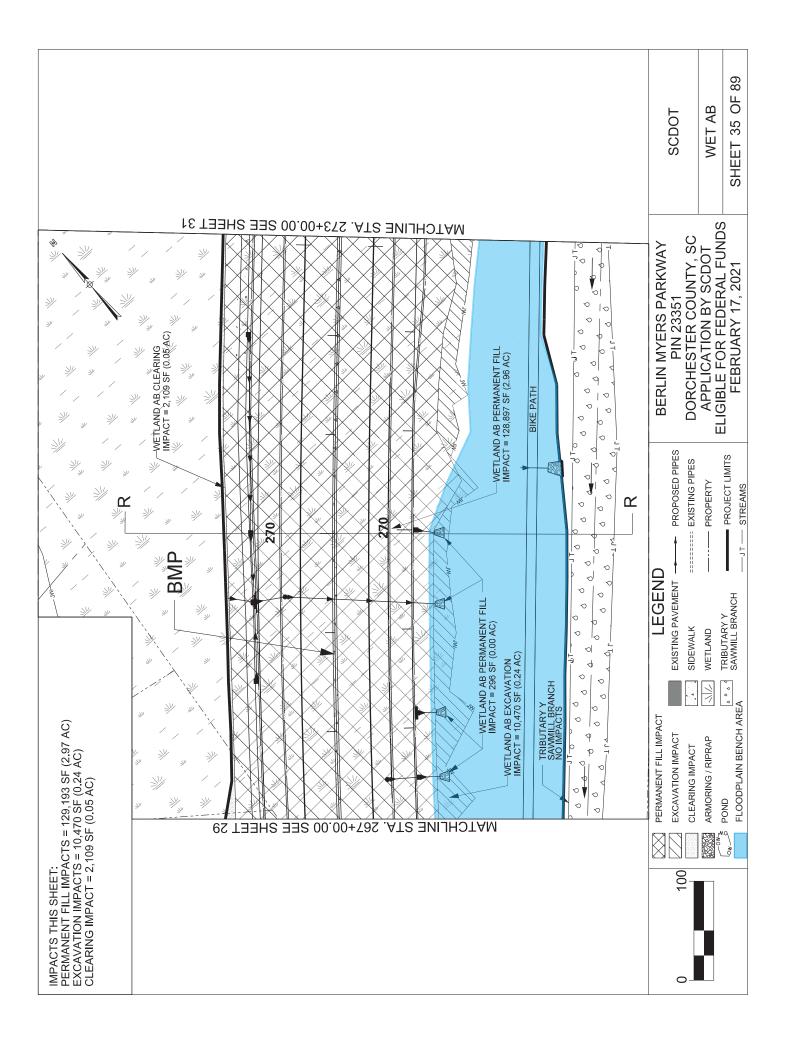


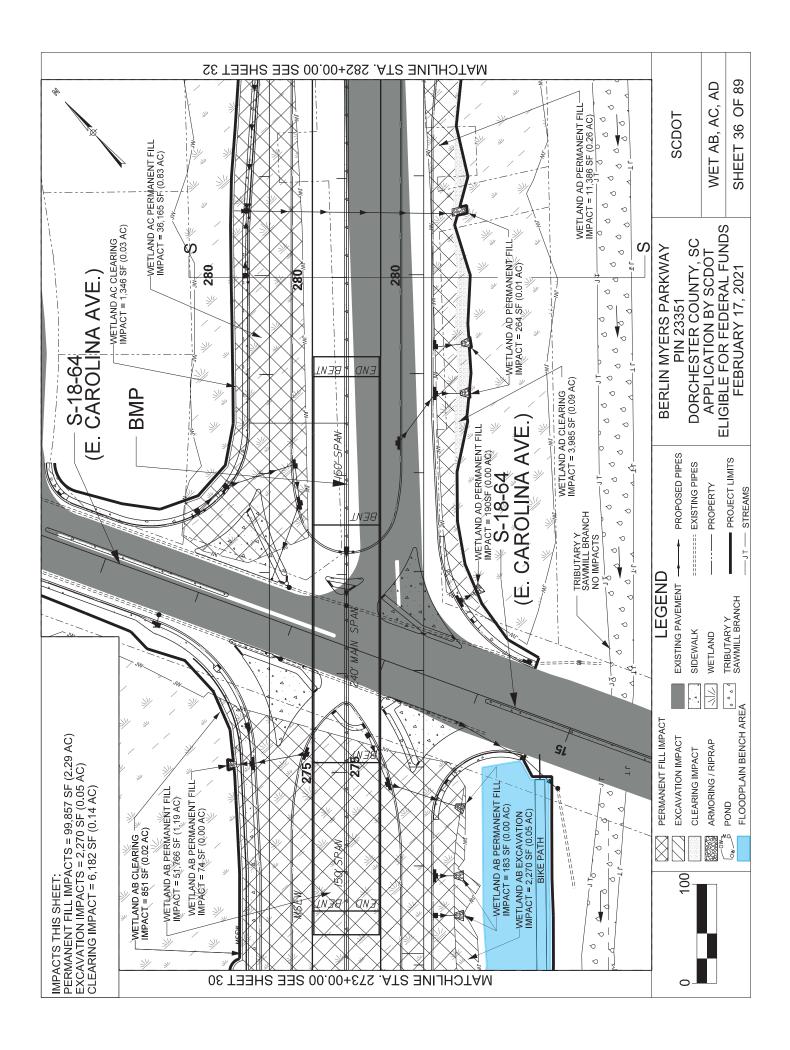


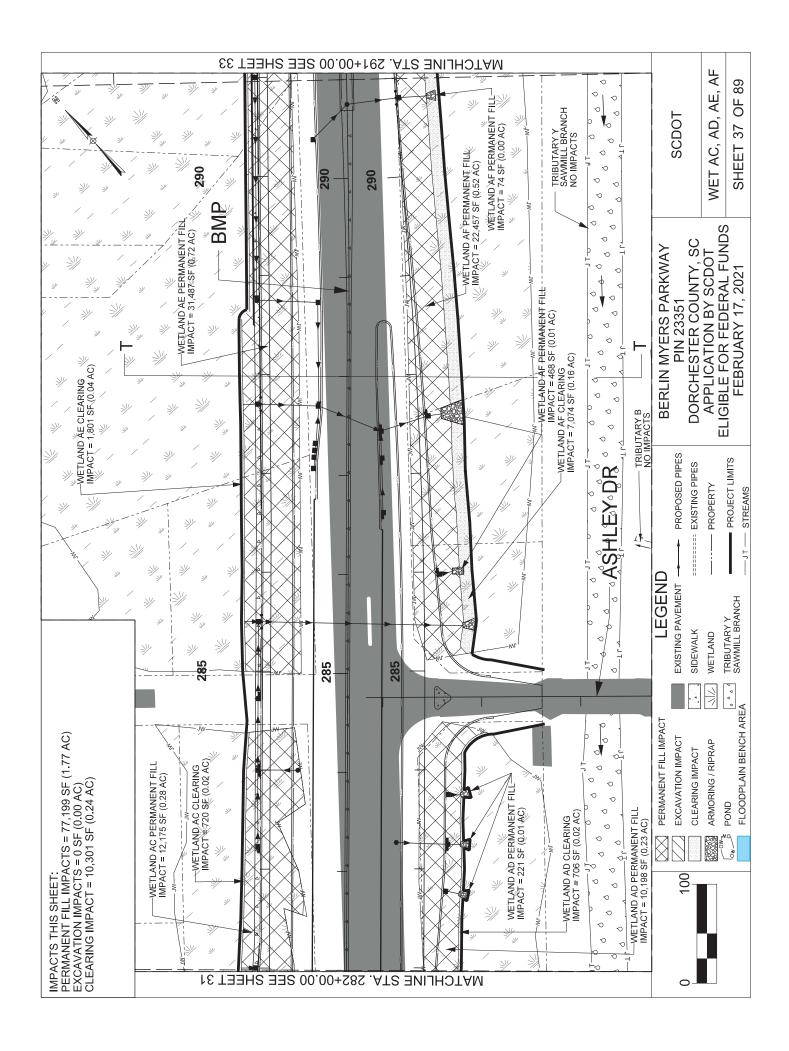


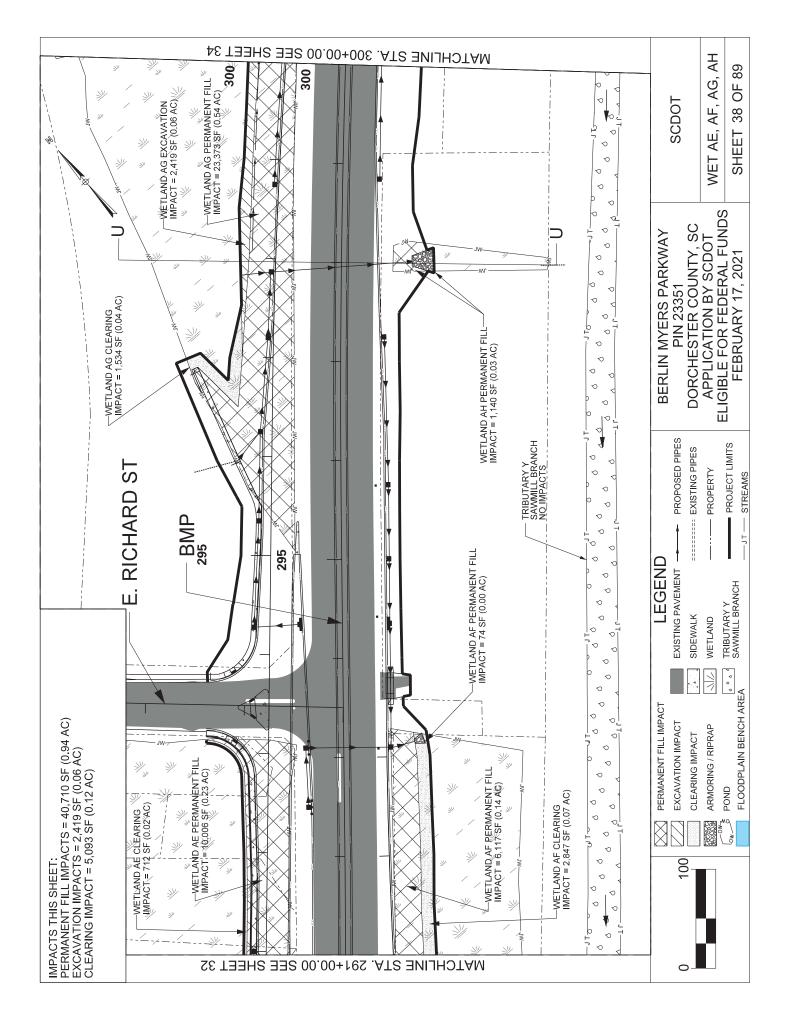


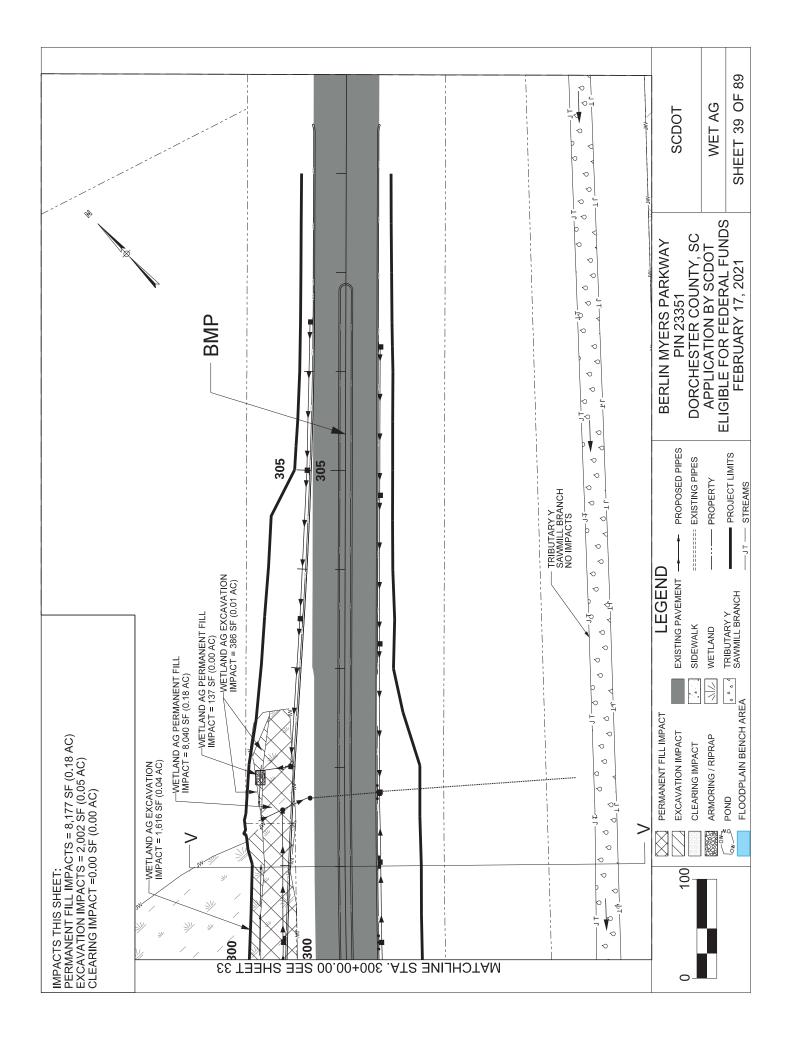


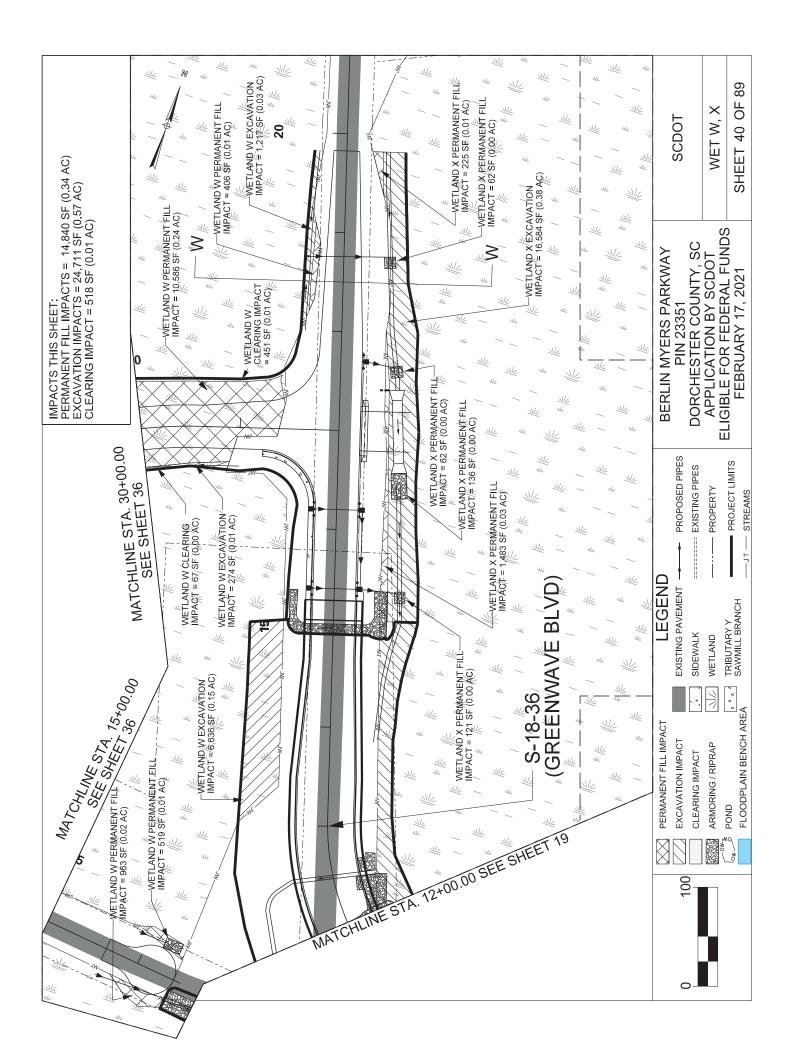


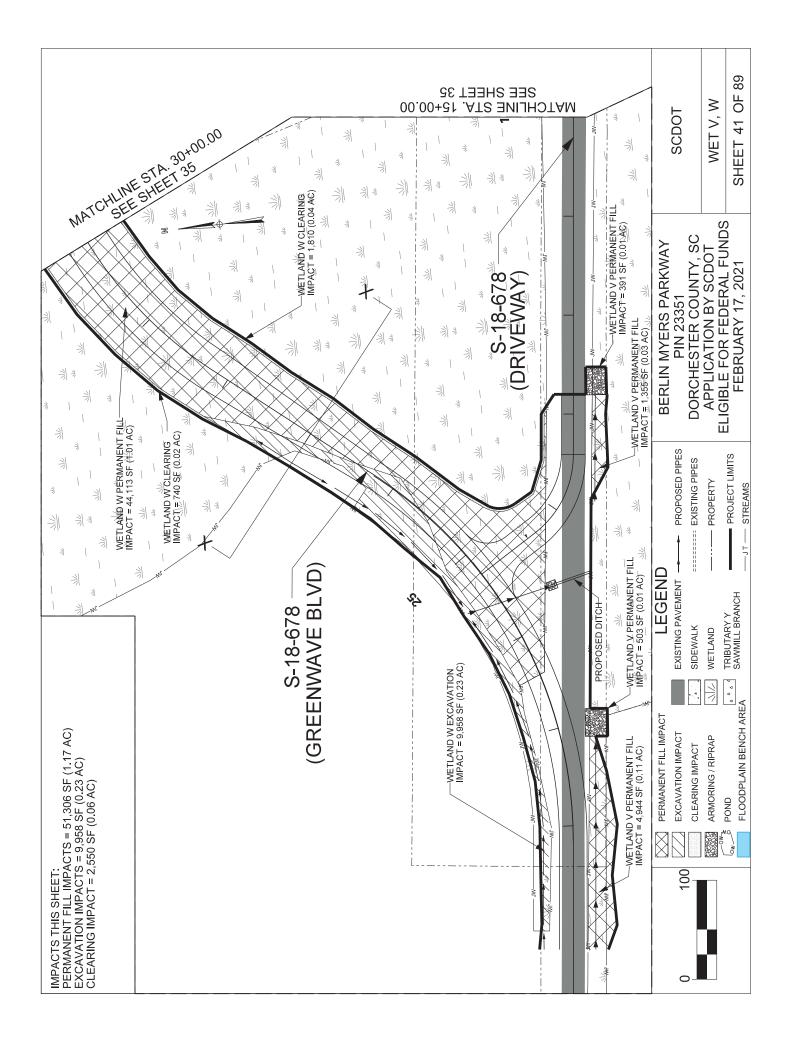


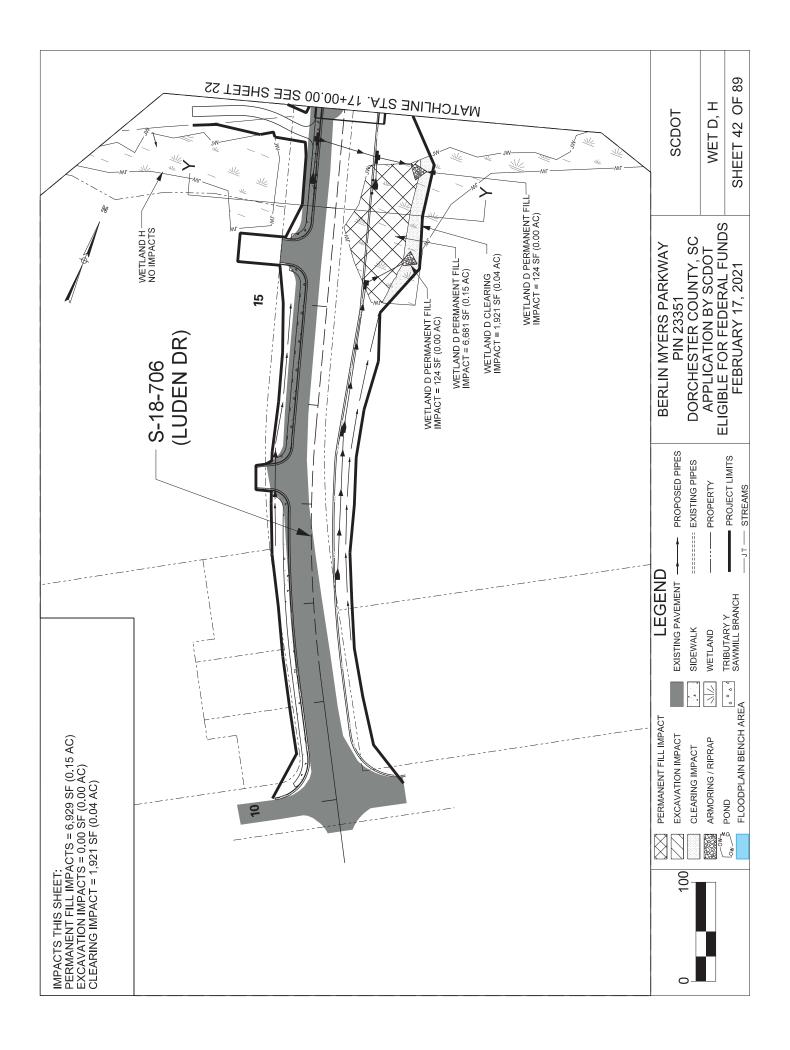


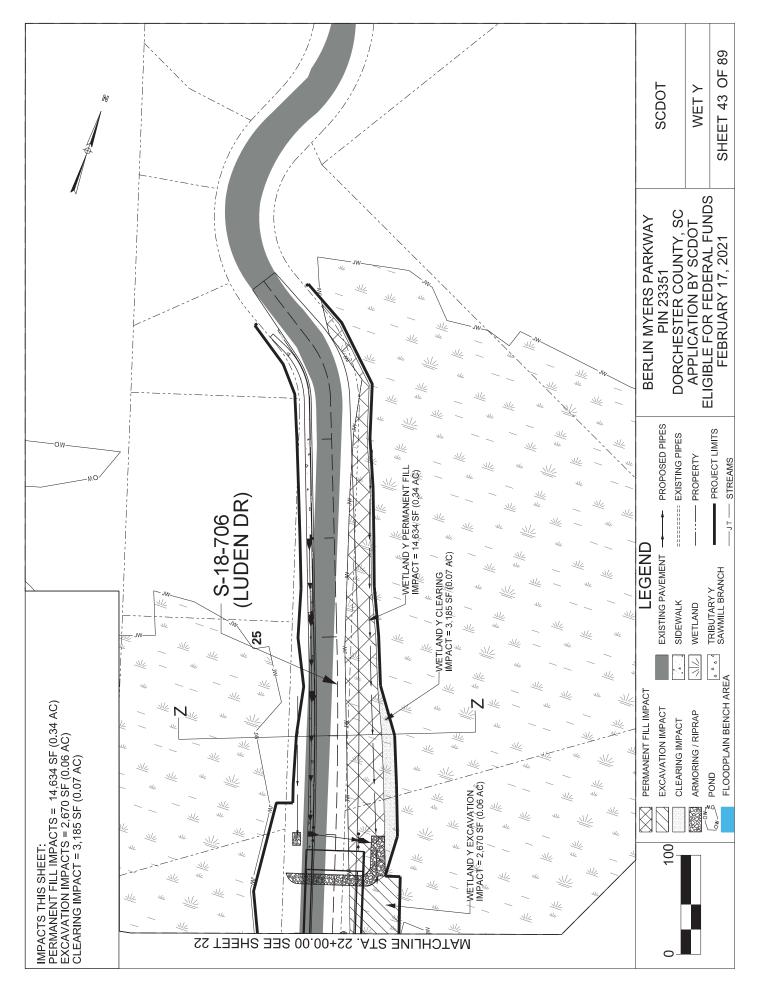


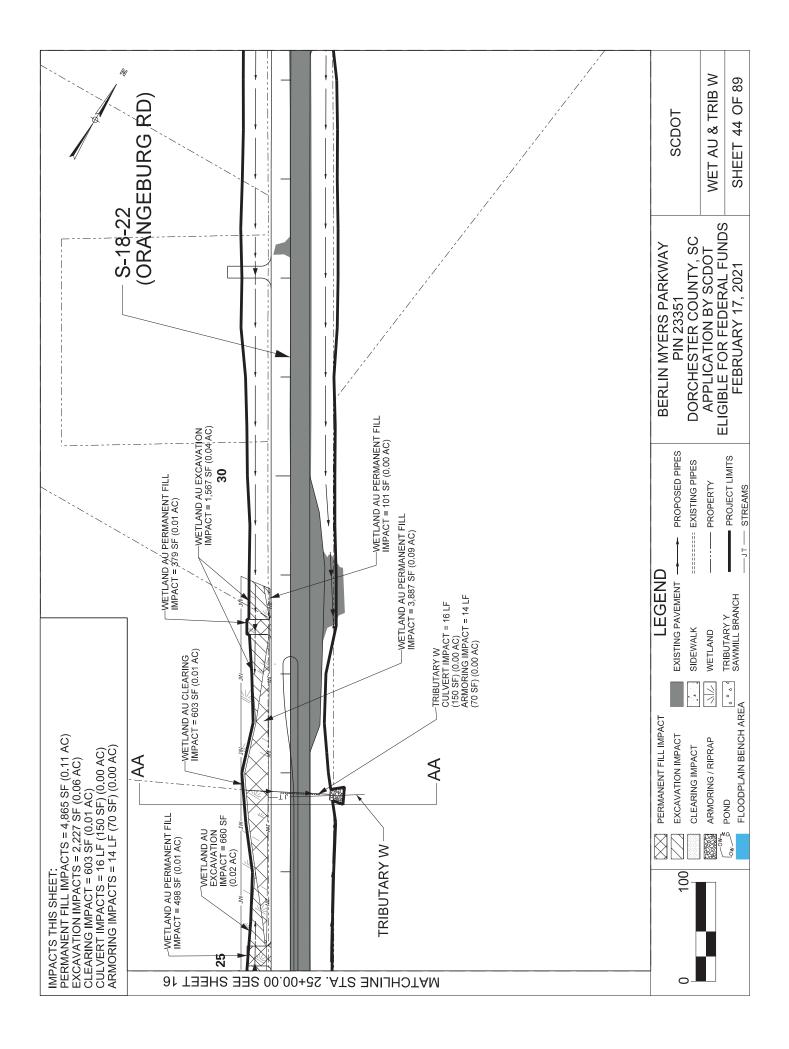




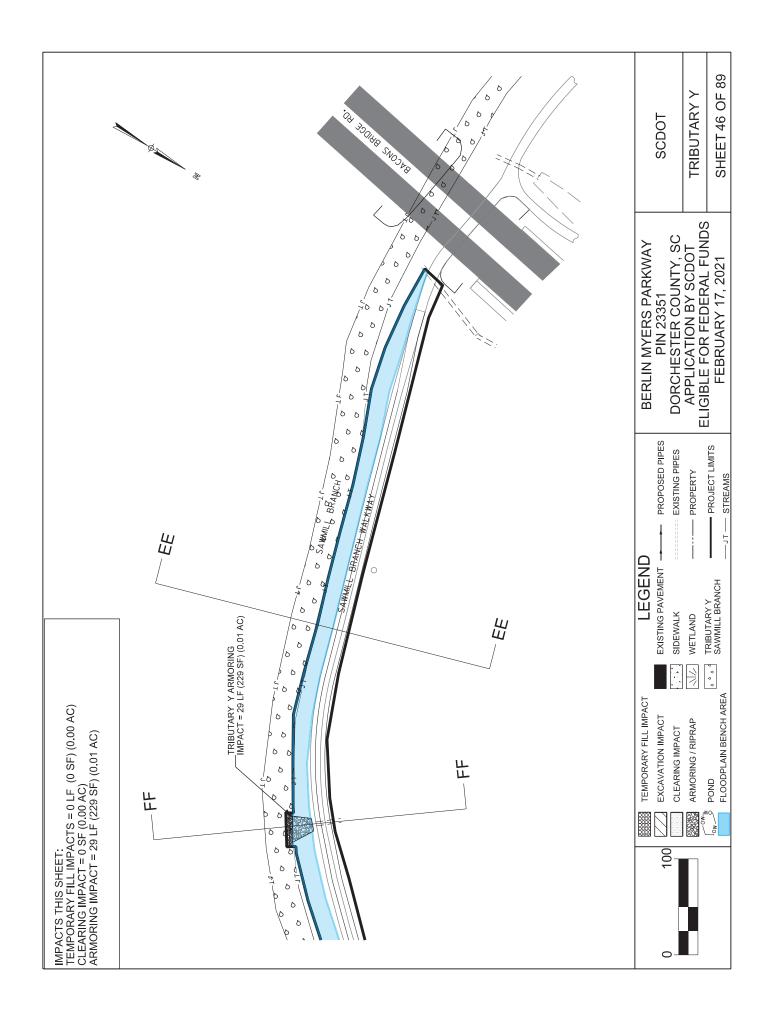


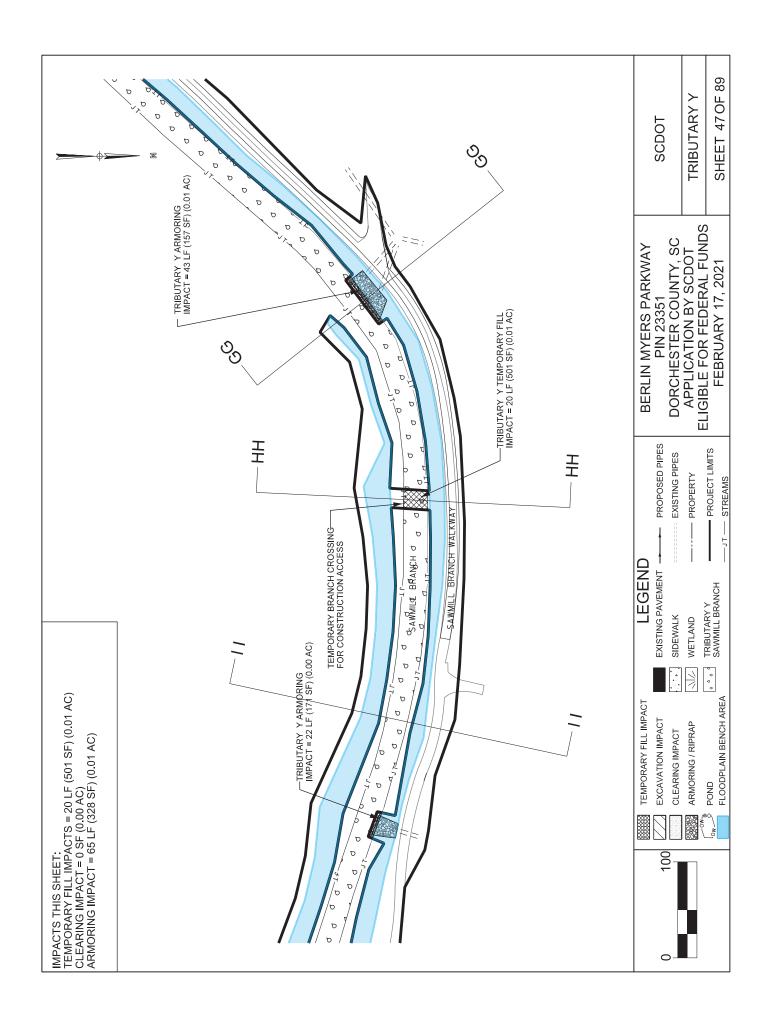


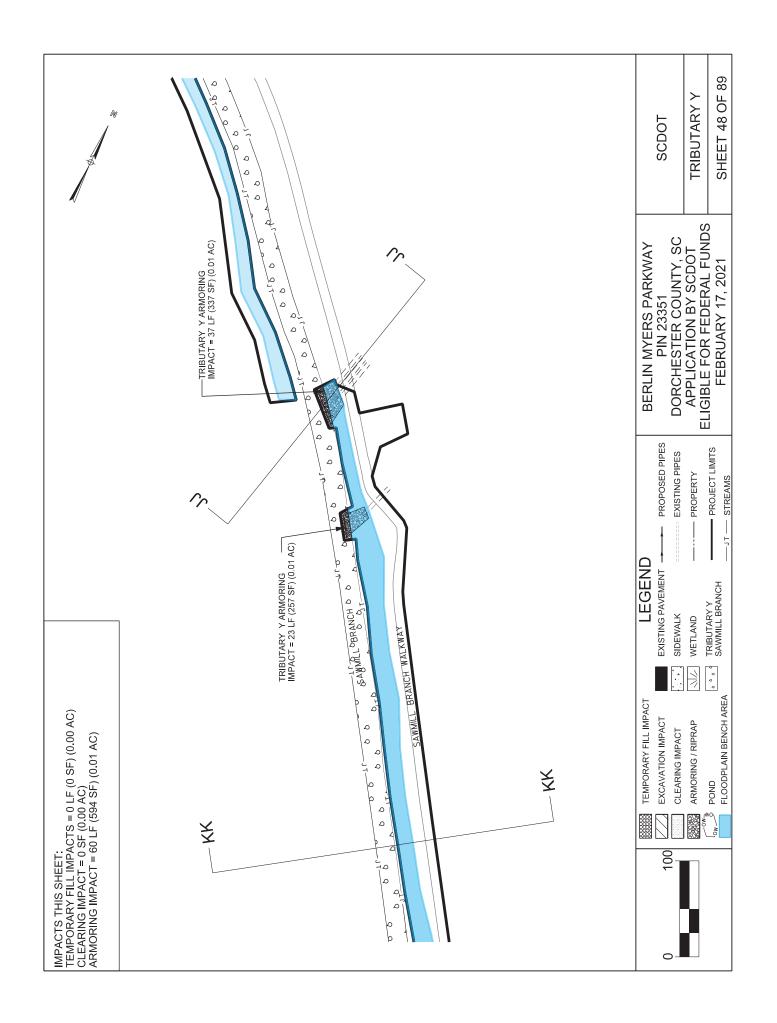


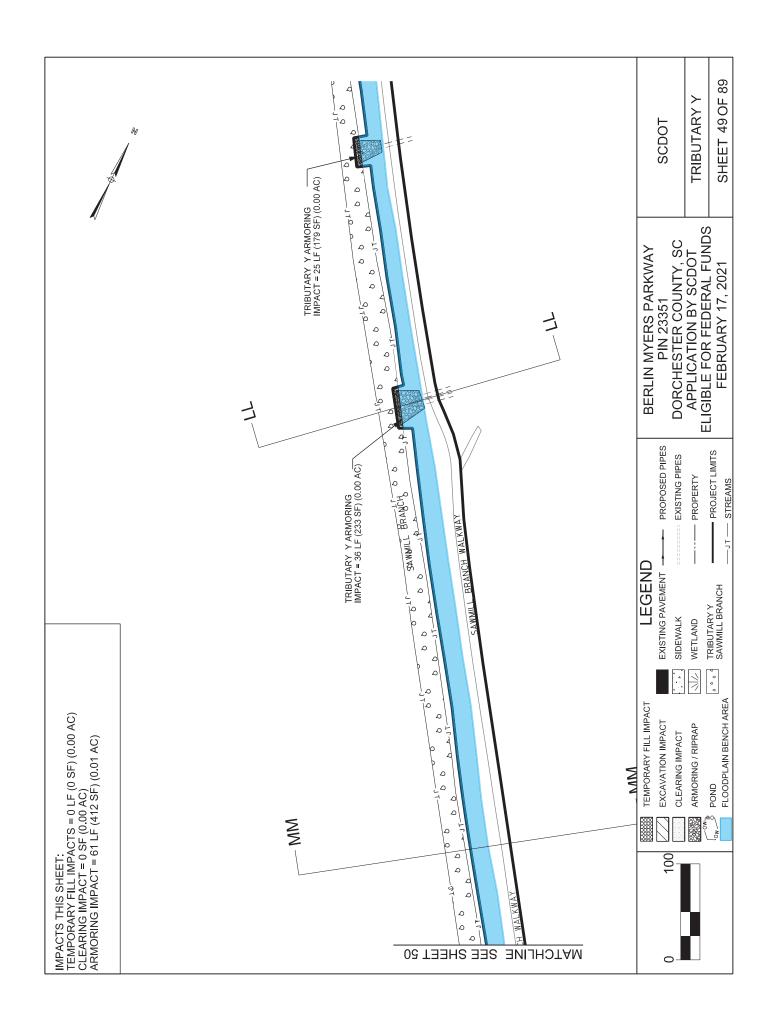


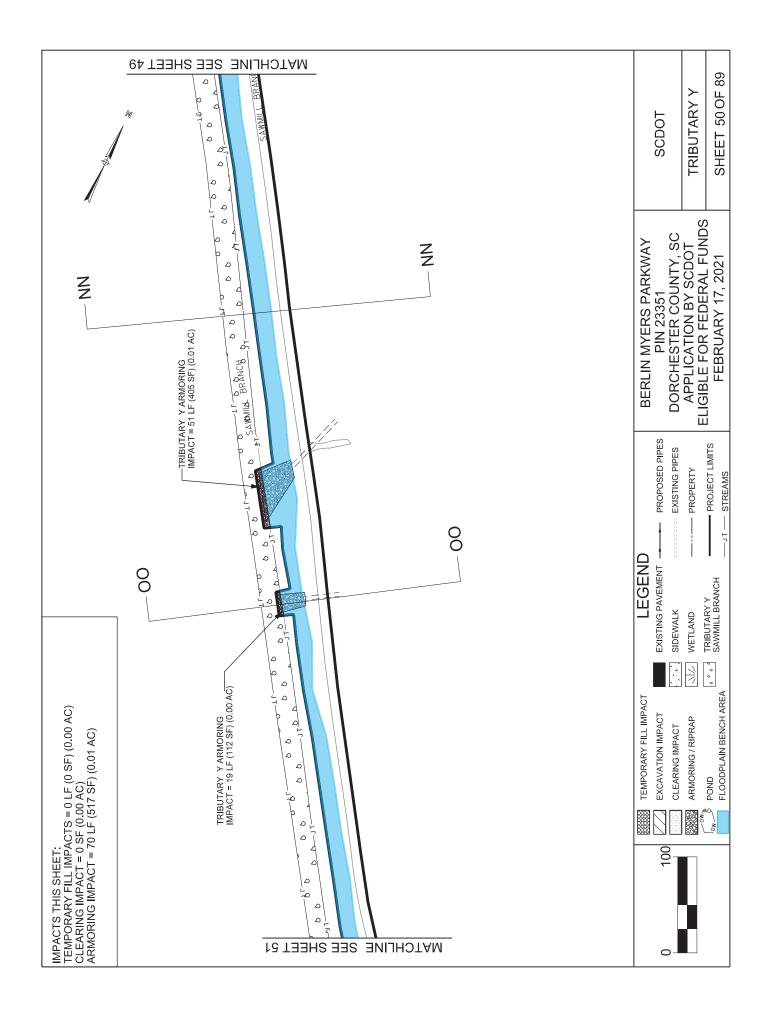
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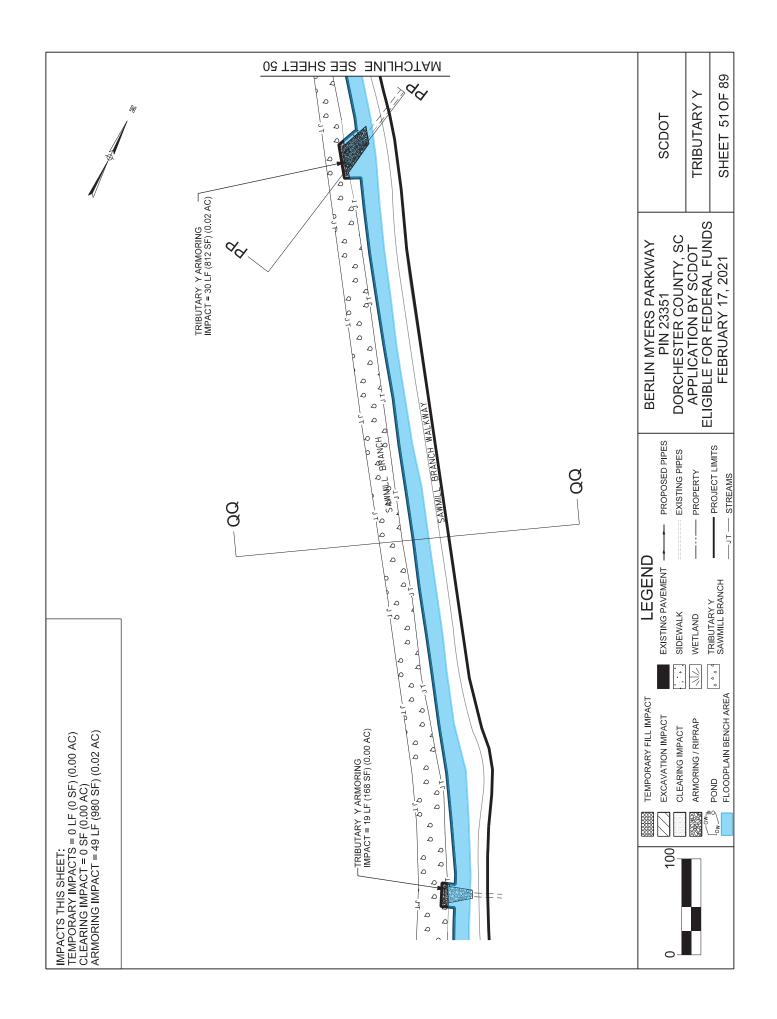


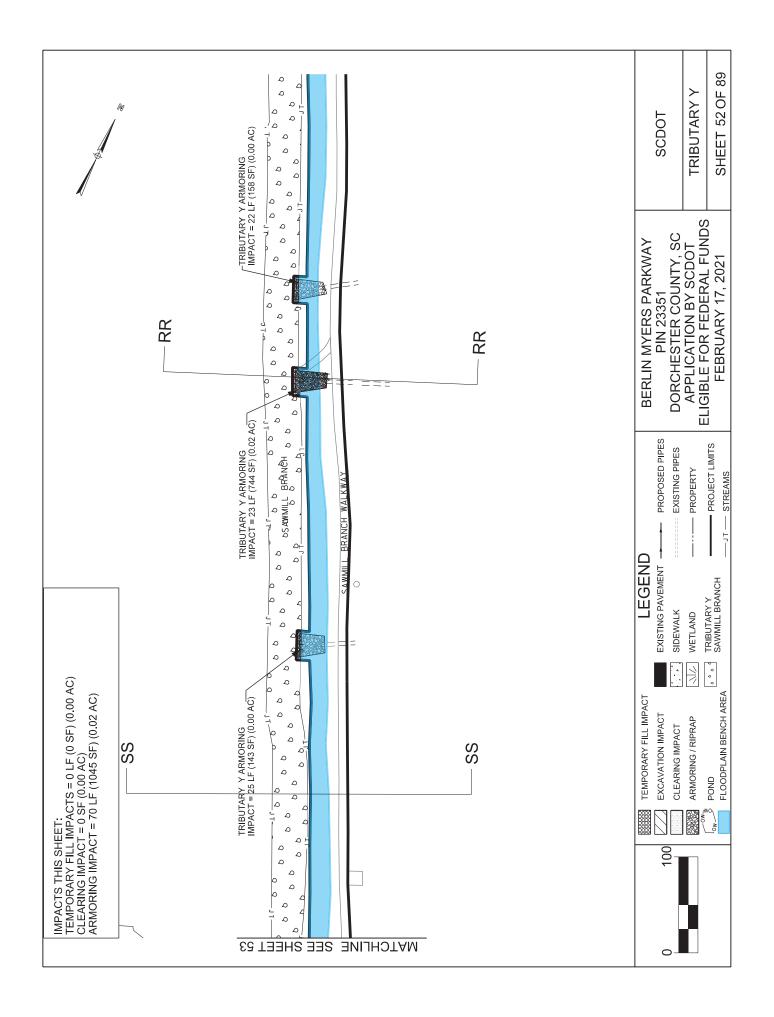


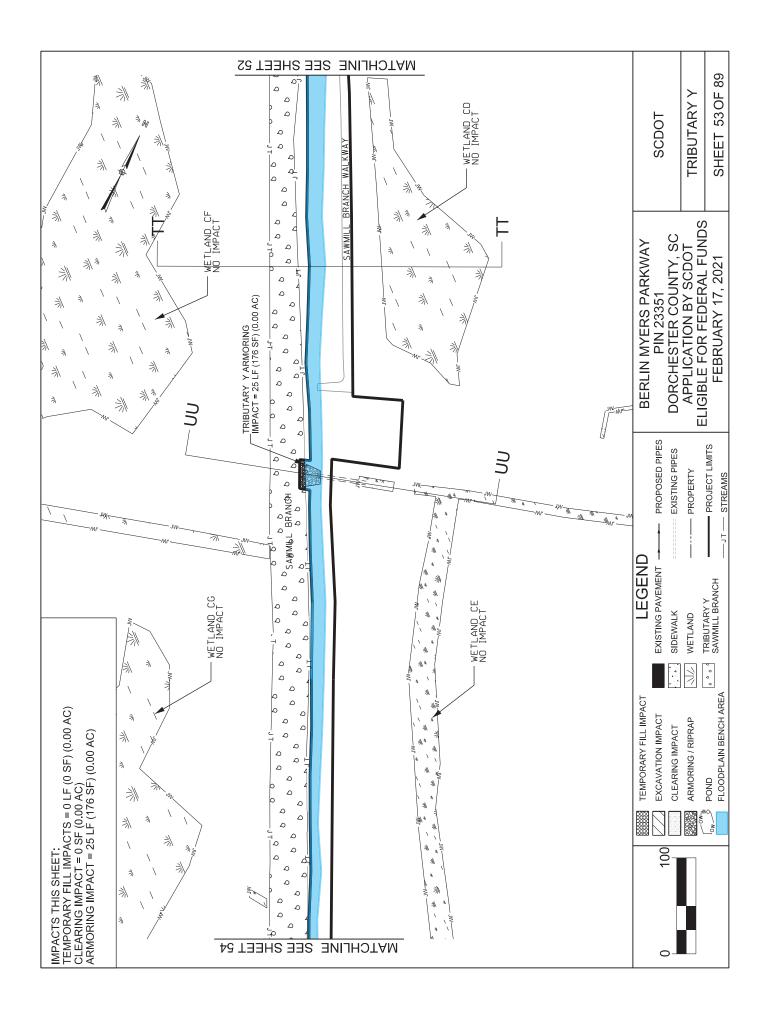


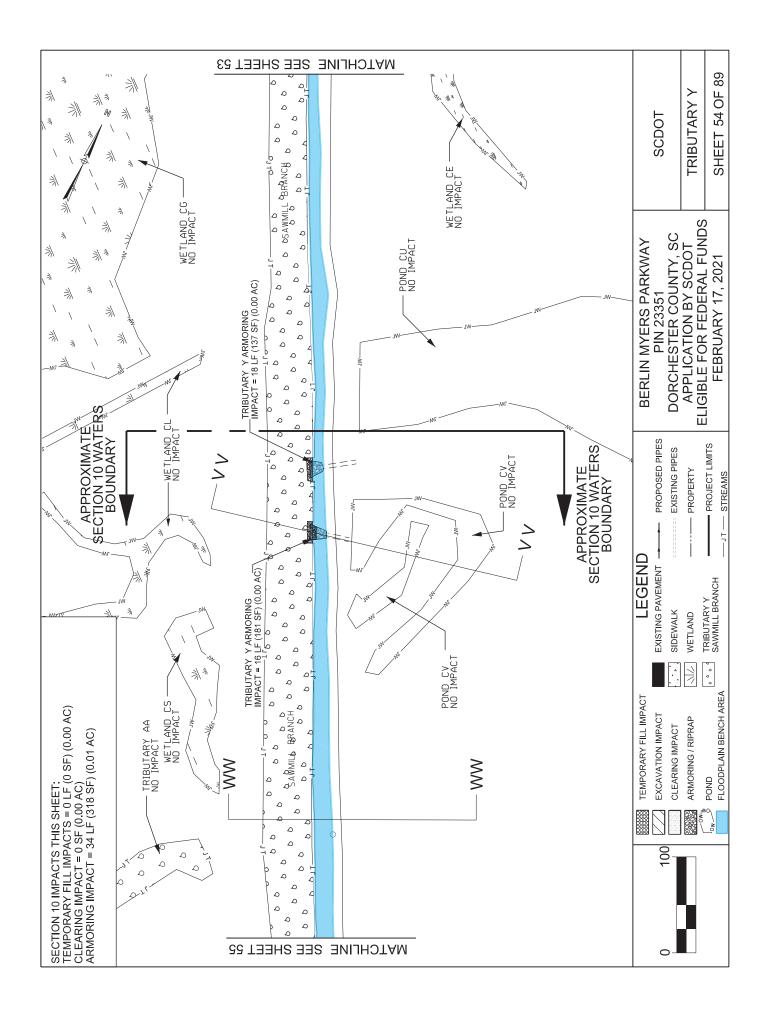


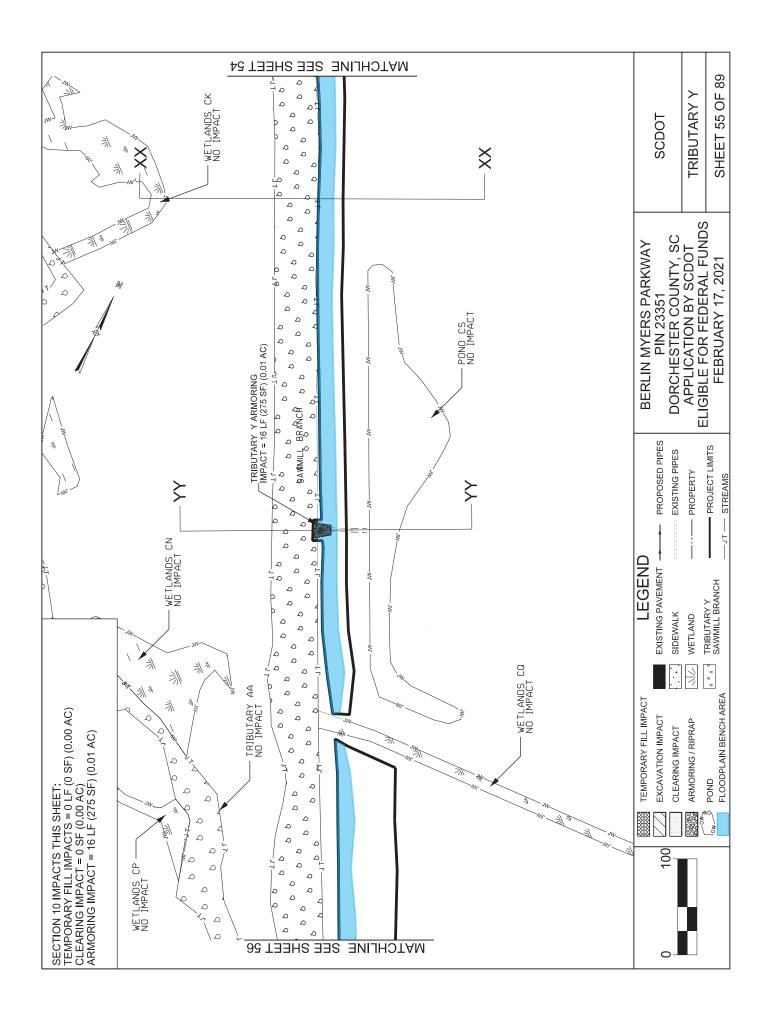


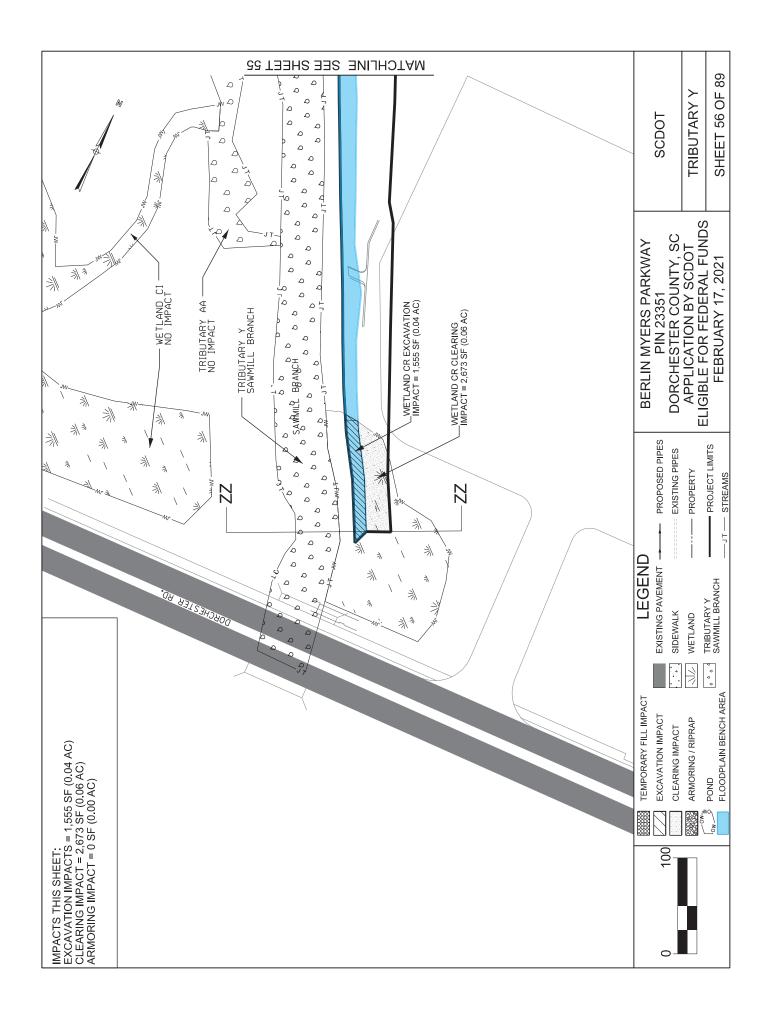






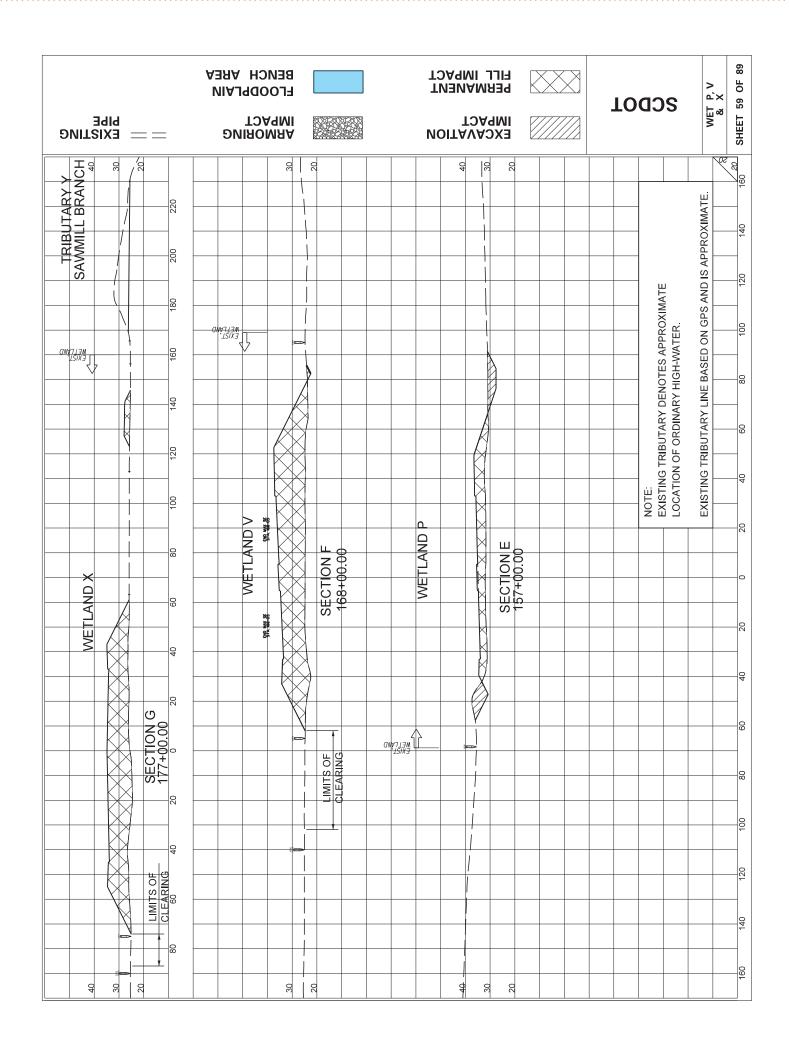




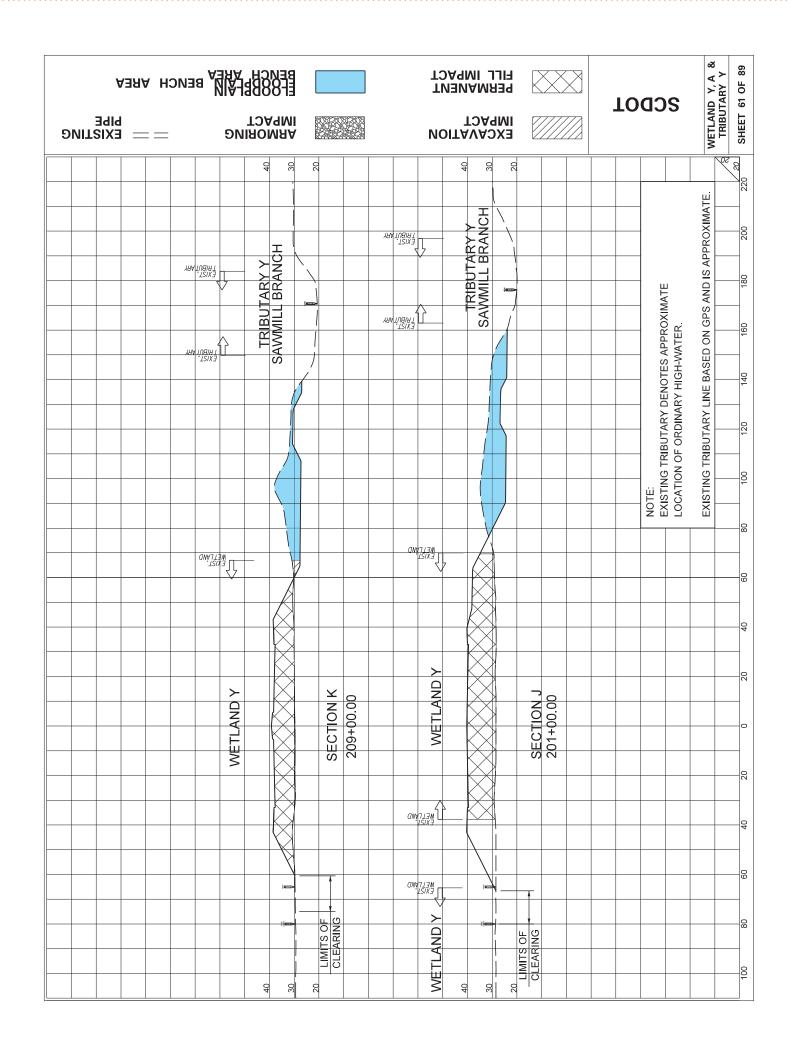


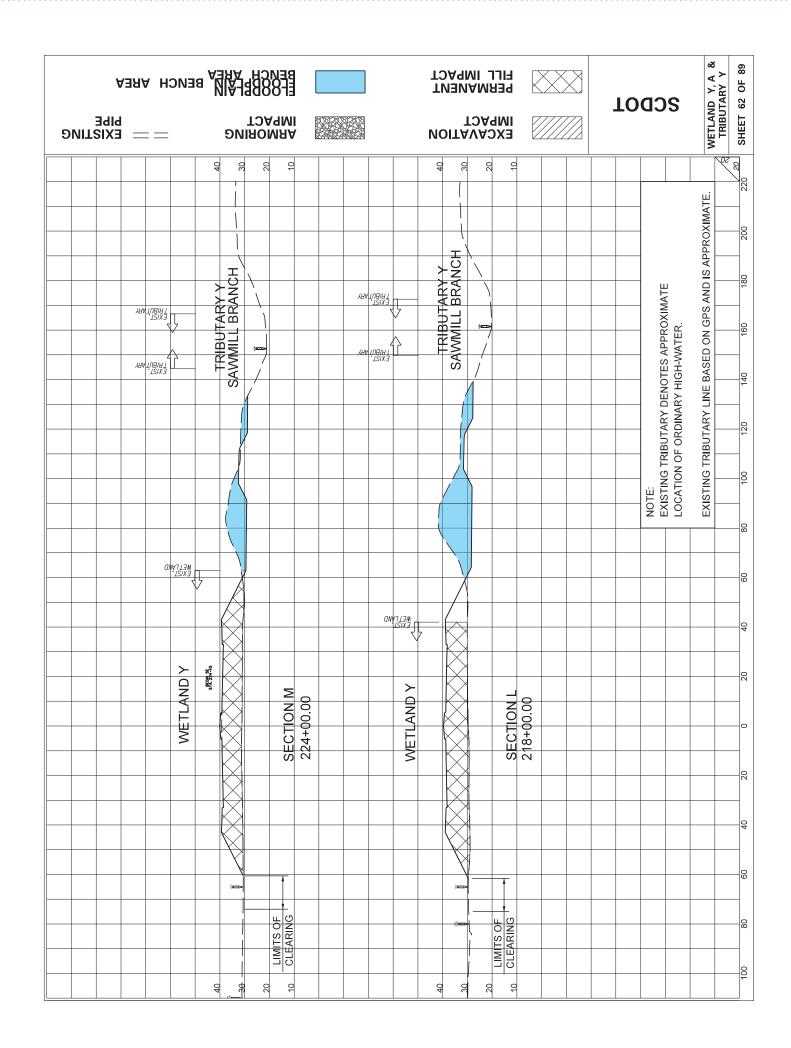
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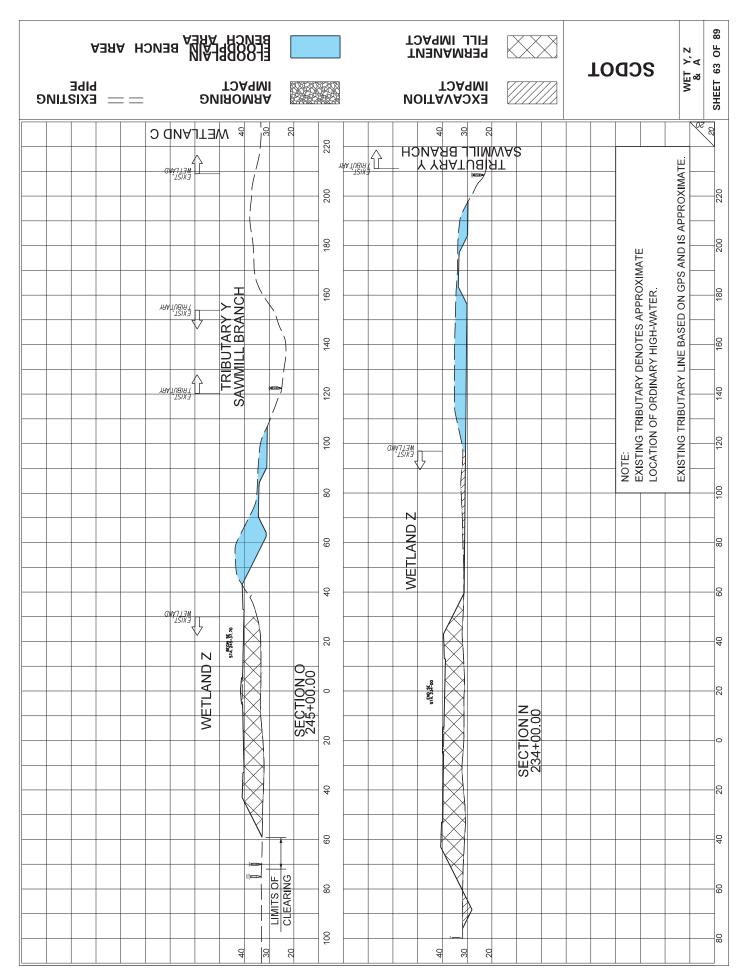
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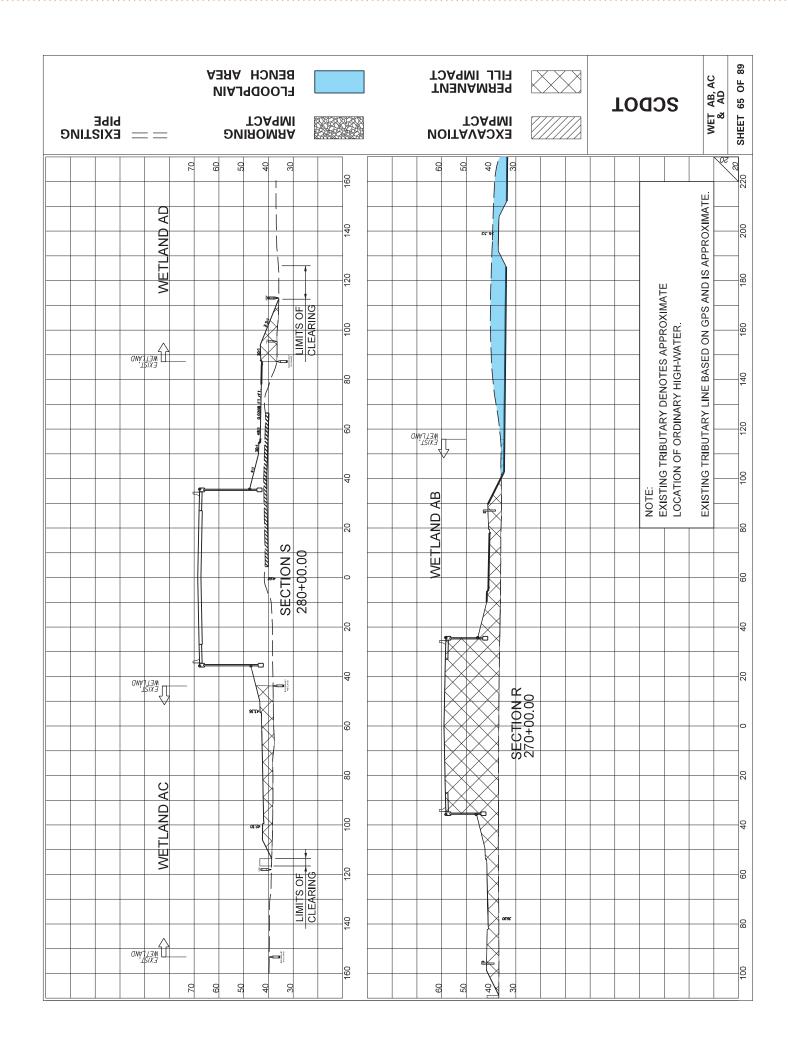
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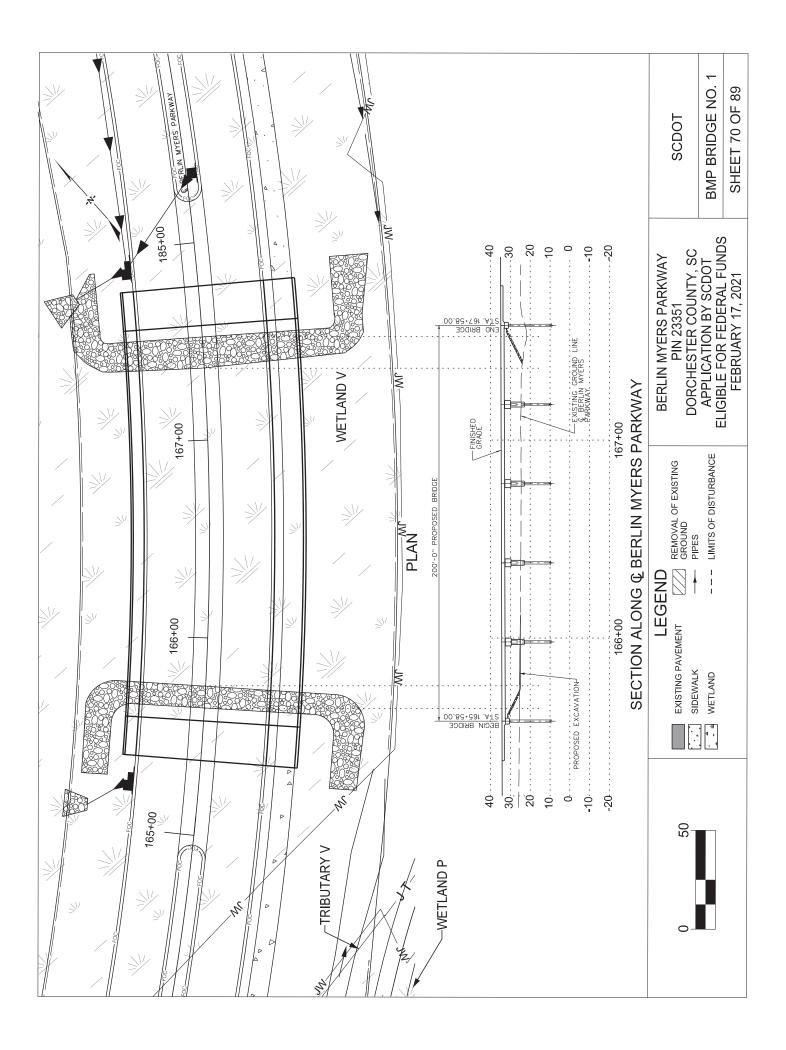


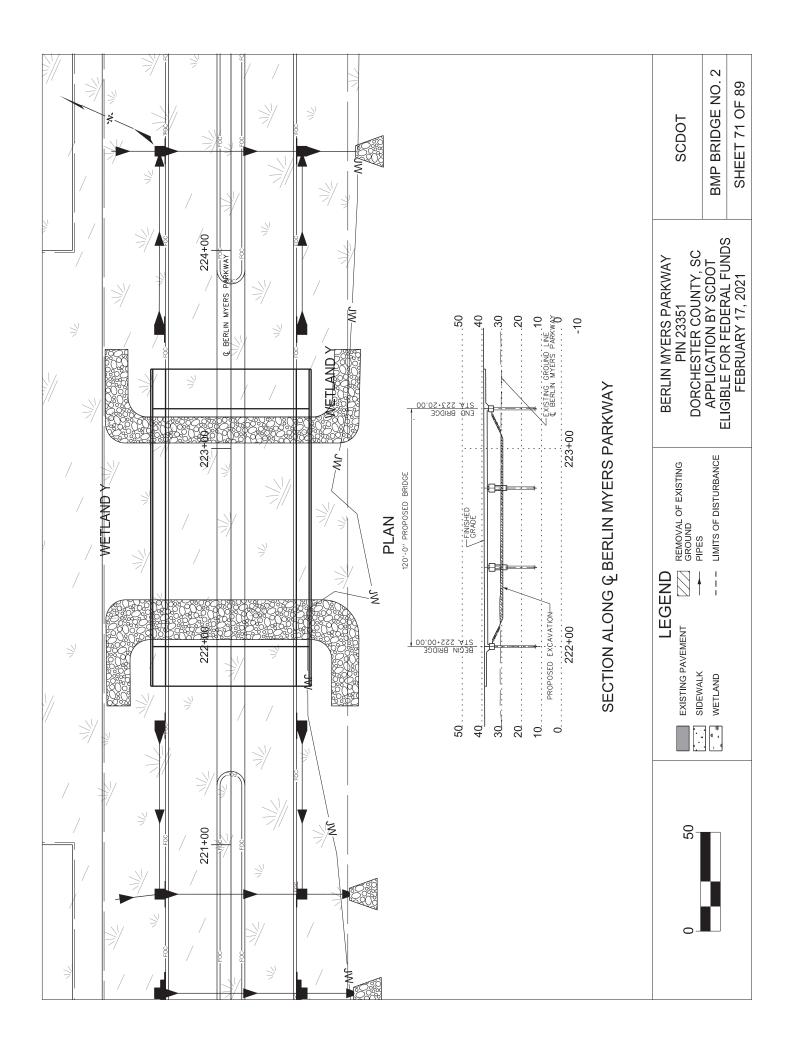
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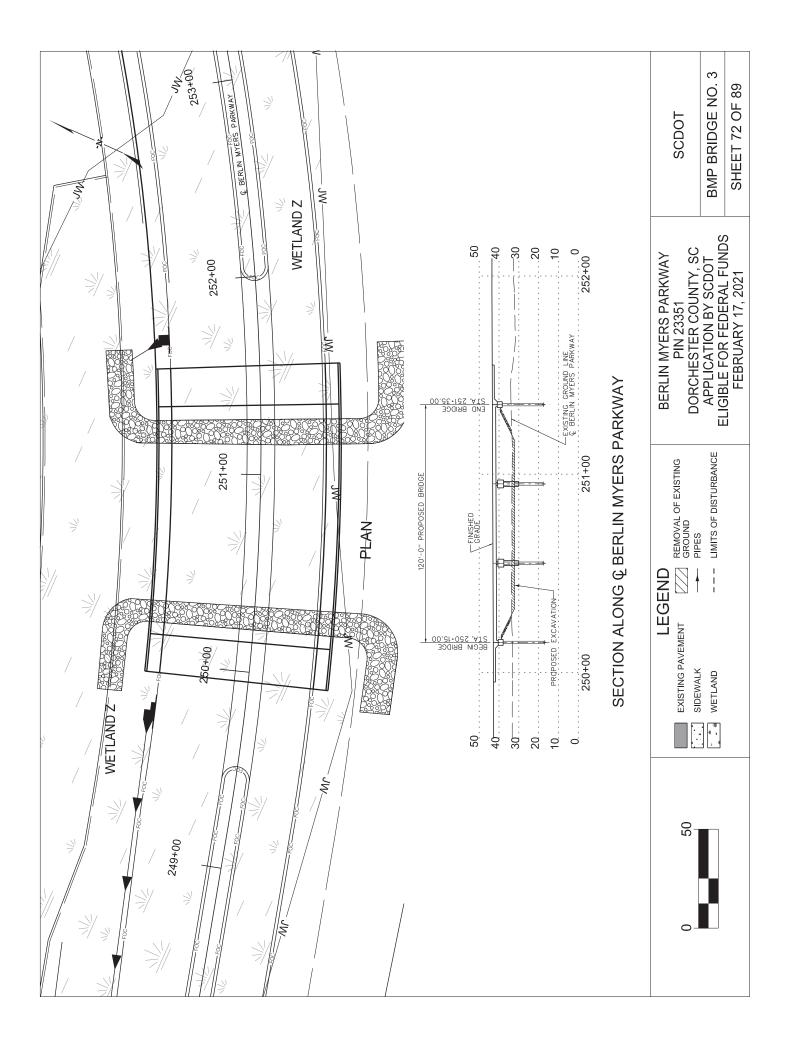
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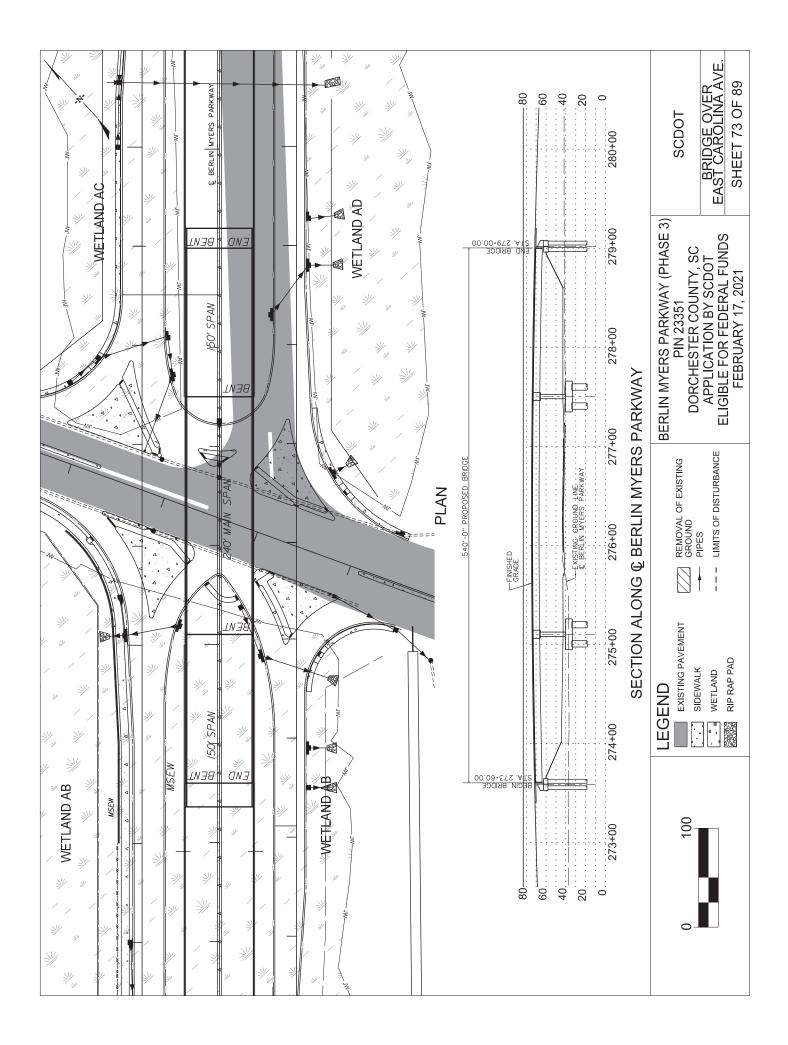
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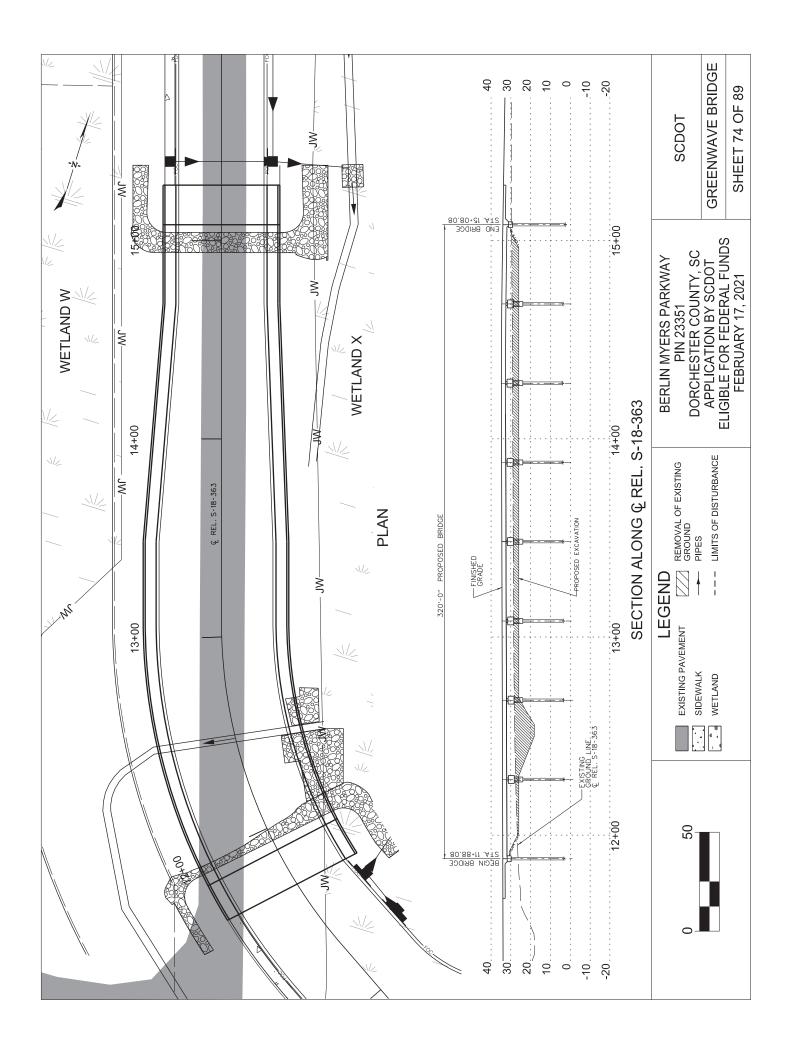
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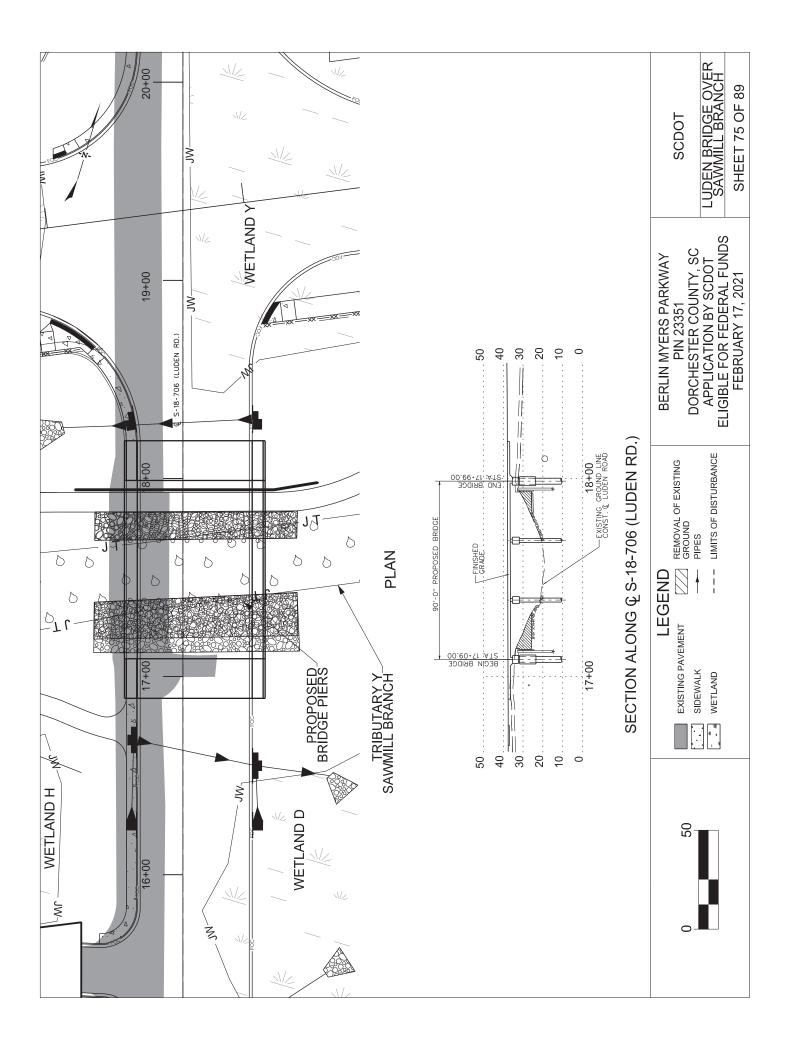


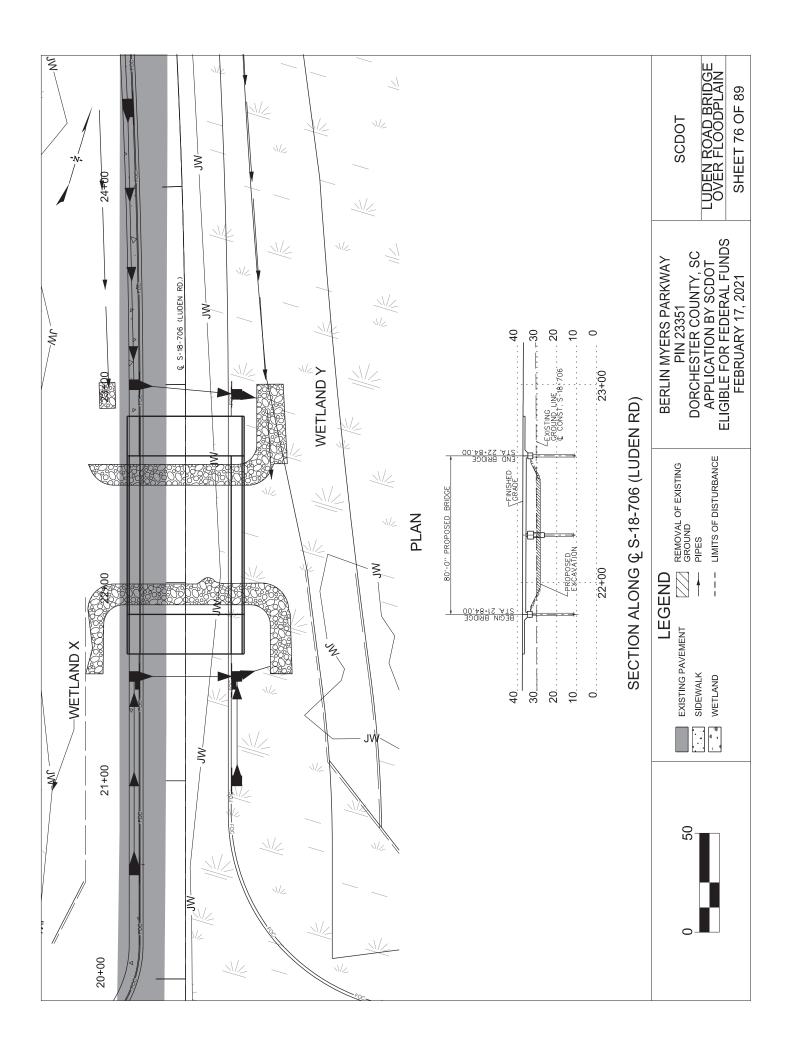






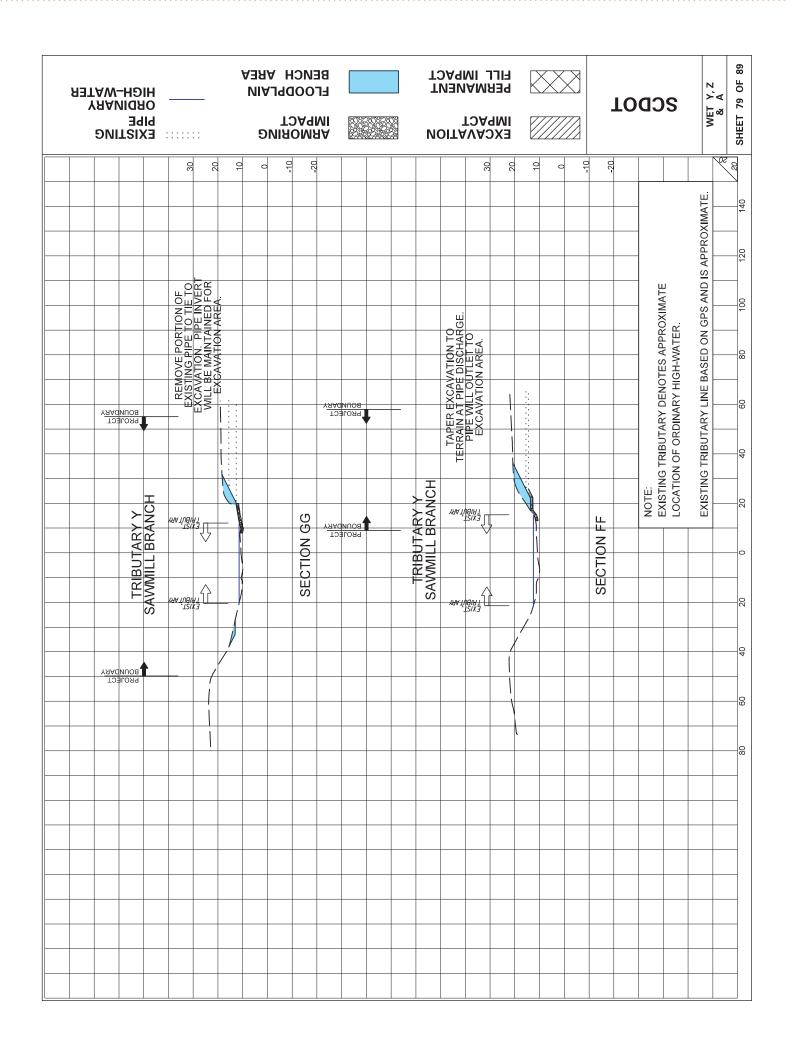






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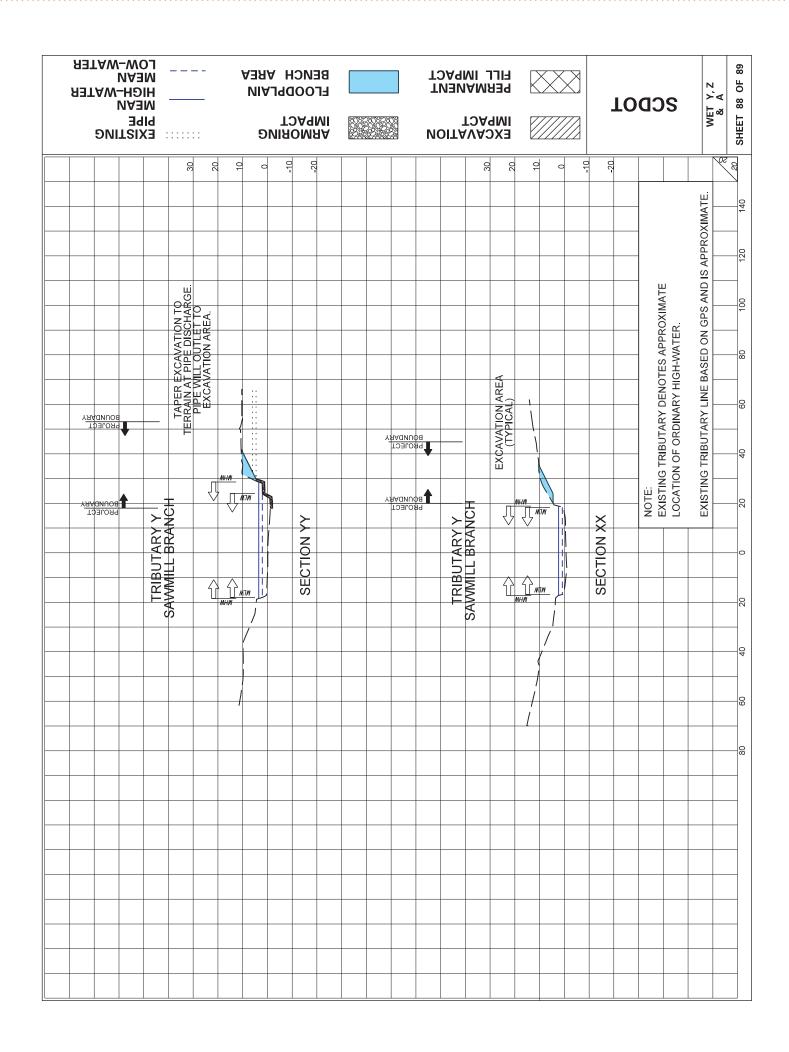
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