

BERKELEY-CHARLESTON-DORCHESTER COUNCIL OF GOVERNMENTS
BOARD OF DIRECTORS MEETING

August 28, 2023
11:00 AM

Barrett Lawrimore Conference Room
5790 Casper Padgett Way
North Charleston, SC 29406

AGENDA

- I. Call to Order
 - a) Invocation/Pledge of Allegiance/Announcement of Proxies
- II. Consideration of Minutes: June 20, 2023 Board Meeting
- III. Affordable Housing – Craig Logan, Housing Fellow, Charleston Metro Chamber of Commerce
- IV. 208 Water Quality Management Plan Major Amendment – Town of Harleyville Wastewater Treatment Plan Upgrade – Request for Approval
- V. Rural Transportation Improvement Program Amendment – Request for Approval – Sarah Cox
- VI. Rural Planning Work Program Amendment – Request for Approval – Sarah Cox
- VII. Financial Status Report/Revolving Loan Fund Report – Robin Mitchum
- VIII. General Public Comment
- IX. Executive Director's Time
- X. Chairman's Time
- XI. Adjournment

BERKELEY-CHARLESTON-DORCHESTER COUNCIL OF GOVERNMENTS
BOARD OF DIRECTORS
Meeting Notes
June 20, 2023

The Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) Board of Directors met on Tuesday, June 20, 2023 at 11:00 a.m. in the Barrett Lawrimore Conference Room at the BCDCOG located at 5790 Casper Padgett Way in North Charleston, South Carolina.

MEMBERSHIP: Charles Ackerman; Jan Anderson; Ross Appel; Craig Ascue; Robbie Ballentine; Joe Boykin; Gary Brewer; Ron Brinson; Nancy Calvary; Melinda Chambers; Johnny Cribb; Eddie Crosby; David Dennis, Jr.; Enoch Dickerson, III; Todd Friddle; Robert Gannon; Timothy Goodwin; Stephen Grant; Miriam Green; John Gregg; Greg Habib; Kevin Hart; Will Haynie; Kevin Hollinshead; Clarence Hughes; Joseph Jefferson; Allen June; Kathy Landing; Tim Mallard; Summer Massey; Susan Milliken; Elaine Morgan; Chardale Murray; Tommy Newell; Patrick O'Neil; Caroline Parker; Caldwell Pinckney, Jr.; Roy Pipkin; Ashley Powell; Dan Prickett; Teddie Pryor; Christie Rainwater; Robert Reid, Jr.; Robby Robbins; Herb Sass; Keith Summey; John Tecklenburg; Ricky Waring; Buckey Waters; Spencer Wetmore; Adrian Williams; Melvin Williams; Paul Wimberly; Bill Woolsey

MEMBERS PRESENT: Charles Ackerman; Jan Anderson; Joe Boykin; Gary Brewer; Melinda Chambers; Johnny Cribb; David Dennis, Jr.; Enoch Dickerson, III; Todd Friddle; Kathy Landing; Tim Mallard; Summer Massey; Elaine Morgan; Caldwell Pinckney, Jr.; Robert Reid, Jr.; Herb Sass; Melvin Williams

PROXIES: Gregory Saxton for Miriam Green; Elaine Morgan for Joseph Jefferson; Cameron Spencer for Christie Rainwater; Amanda Redick for Robby Robbins; Robert Somerville for John Tecklenburg

OTHERS PRESENT: CT York (SCDOT-via conference call); Scott Donahue (SCDOT-OPT); Jeff Webster (BGRM); Eileen Duffy (City of North Charleston); Frank Rainwater (SC Revenue & Fiscal Affairs Office); Jason Carraher (Dorchester County); Luis Marquez (JBC); Abraham Champagne (WSP); Garth Lynch (HNTB); Bryan Kizer (Stantec); Clara Cullum

BCDCOG STAFF: Ron Mitchum; Andrea Kozloski; Robin Mitchum; Sarah Cox; Kim Coleman

I. Call to Order:

A) Invocation: Chairman Pinckney called the meeting to order at 11:00 a.m. followed by the Invocation, the Pledge of Allegiance and a quorum determination.

B) Announcement of Proxies: Mr. Saxton for Mayor Green; Ms. Morgan for Rep. Jefferson; Mr. Spencer for Mayor Rainwater; Ms. Redick for Rep. Robbins; Mr. Somerville for Mayor Tecklenburg

II. Consideration of Minutes: April 17, 2023 Board Meeting

Rev. Reid made a motion to approve the April 17, 2023 Meeting Notes as presented.

Mr. Dennis seconded the motion. The motion was unanimously approved.

III. SC Demographics Changes and Challenges– Frank A. Rainwater, Executive Director – South Carolina Revenue and Fiscal Affairs Office

Chairman Pinckney introduced Frank Rainwater, Executive Director of the South Carolina Revenue and Fiscal Affairs Office. Mr. Rainwater delivered a presentation on the changes and challenges of demographics in South Carolina. He discussed SC population trends and changes from 2010 to 2020 as well as the components of population change. Mr. Rainwater reviewed charts that depicted SC demographic projections through 2030, SC's projected population through 2030 and the age groups and genders. He discussed total population by county for 2030 noting the five largest counties being Greenville, Horry, Charleston, Richland and Spartanburg and the five smallest counties being Allendale, McCormick, Bamberg, Calhoun and Lee. Mr. Rainwater discussed SC's workforce trends and challenges noting pre-pandemic employment levels, employment by industry and the ages of the workforce population. He discussed unemployed persons per job opening and wage and salary growth. Mr. Rainwater also discussed population comparisons in the Tri-County region and addressed questions and comments. The Board of Directors received the SC Demographics Changes and Challenges Presentation as information.

IV. FY21-FY27 Rural Transportation Improvement Program Amendment – Request for Approval – Sarah Cox

Sarah Cox, Senior Transportation Planner, presented the FY21-FY27 Rural Transportation Improvement Program (RTIP) Amendment. She noted that the amendment will be advertised for public comment through July 6, 2023. Subject to no comments and Board approval, the following additions/adjustments will be transmitted for inclusion in the State TIP (STIP). SCDOT's new implementation plan for the delivery of improvements to the I-26 corridor from MM154 to MM187 reduces project programming from three segments to two segments: I-26 Widening (MM165 to MM176): At the request of SCDOT, delete/remove project from the TIP, since project's extents are covered or absorbed by the adjustments made in the following items: I-26 Corridor Improvement (MM154 to MM172): At the request of SCDOT, add new project for the improvement of mainline I-26 from MM154 to MM172, and program \$30.54M for preliminary engineering, \$15M for right-of-way and \$280M for construction, for a total project cost of \$325.54M; I-26 Widening (MM176 to MM187): At the request of SCDOT, adjust project extents from MM176 to MM187 to I-26 Widening from MM172 to MM187, and increase programming for preliminary engineering from \$6 million to \$25 million in FY2023. Ms. Cox addressed questions and comments. She then introduced CT York, Assistant Program Manager with SCDOT. Mr. York delivered a presentation regarding Interstate Improvements in South Carolina. He discussed the miles that have been completed in the region as well as the 50 miles (at a cost of approximately \$2 billion) that are under construction. Mr. York discussed the more than 250 miles in planning and design and addressed questions and comments. The Board of Directors received the Interstate Improvements presentation as information.

***Mayor Ackerman made a motion to approve the Rural Transportation Improvement Program Amendment as presented. Mr. Mallard seconded the motion.
Mr. Brewer, Ms. Massey and Mr. M. Williams abstained. The motion was approved.***

V. Financial Status Report/Revolving Loan Fund Report – Robin Mitchum

Financial Status Report: Robin Mitchum, Deputy Director of Finance and Administration, presented the Financial Status Report consisting of the Statement of Revenues and Expenditures for the period ending April 30, 2023. The report depicts unexpended funds of \$488,672.05. Ms. Mitchum stated that the agency is slightly under budget, remains in good shape and that no issues are anticipated. The Board of Directors received the Financial Status Report as information.

Revolving Loan Fund Report: Ms. Mitchum presented the RLF activity report as of May 31, 2023. She noted that all loans are current. Ms. Mitchum discussed the Revolving Loan Fund Activity noting that funds available for lending in the BCDCOG Revolving Loan Fund are \$1,267,408.93 and funds available for lending in the North Charleston Revolving Loan Fund are \$243,963.81 for a total of \$1,511,372.74 available for lending. The Board of Directors received the Revolving Loan Fund Report as information.

VI. General Public Comments

There were no General Public Comments.

VII. Executive Director's Time

Mr. Mitchum updated the Board of Directors on the LCRT project stating that the project continues to move forward. He noted that the RIA SCIIP projects that were funded are underway. Mr. Mitchum stated that the DHEC Summit has been paused and the pilot will be held here. He noted that the Long-Range Transportation Plan continues to move forward as well as numerous planning projects. Mr. Mitchum encouraged survey participation regarding the transit studies and addressed questions and comments. The Board of Directors received Mr. Mitchum's report as information.

VIII. Chairman's Time

Chairman Pinckney thanked everyone for attending today's meeting.

IX. Adjourn

There being no further business before the Board, Chairman Pinckney adjourned the meeting at 12:05 p.m.

Respectfully submitted,
Kim Coleman

Berkeley-Charleston-Dorchester Council of Governments

MEMORANDUM

Date: August 17, 2023
To: BCDCOG Board of Directors
From: Ron Mitchum, Executive Director
Subject: 208 Water Quality Management Plan (WQMP) Major Amendment for the expansion of the Harleyville Wastewater Treatment Facility

The Town of Harleyville is seeking to amend the 208 Water Quality Management Plan for the expansion of their existing wastewater treatment facility from a permitted treatment capacity of 150,000 gpd (0.15 mgd) to 225,000 gpd (.225 mgd). The plant is located at the end of Range Road in Harleyville and discharges into Tom and Kate Branch.

In addition to amending the 208 WQMP, expansion of the treatment facility will require DHEC approval of the permit reissuance and a modification to existing NPDES Permit No. SC0038504. The expansion efforts will include the following upgrades to the existing WWTF and its components:

- Demolish the existing storage shed that exhibits severe corrosion and shows structural defects.
- Demolish the entire former rotating biological contactor (RBC) plant that had been abandoned in 2003.
- Demolish the existing sludge drying bed that is not performing to standards.
- Replace the existing influent screen with a new influent screen that can treat an increased peak hourly flow of 1.1 mgd.
- Install a flow splitter downstream of the proposed new influent screen that splits the flow to the existing 0.15 mgd treatment system and the proposed new 0.075 mgd treatment system.
- Install a new 0.075 mgd Purestream package wastewater treatment system with a process design similar to the existing 0.15 mgd system.
- Replace the existing UV system with a new dual-unit open channel UV that is capable of treating the peak hourly flow of 1.1 mgd. With one unit offline, the other unit is capable of treating 0.55 mgd of flow, which is approximately 80% of the anticipated future peak hourly flow of 0.675 mgd.
- Install a SCADA system with alarming and warning functions.
- Replace fence, pipes, blowers, and mixers as needed.
- Construct a road inside the plant.

The Town issued a Public Notice for the 208 WQMP Major Amendment in the Dorchester Eagle Record beginning May 11, 2023. The notice was posted to the BCDCOG website, and a copy of the Preliminary Engineering Report was made available for public review at both Town Hall and the BCDCOG office. The Town's consulting engineer, Ardurra, Inc., presented the proposed project during a public meeting that was hosted at Town Hall on May 25, 2023. No public comments were recorded at the meeting.

Additionally, no written comments or questions were received during the public comment period which ended on June 5, 2023. The Technical Advisory Committee and Environmental Committees are recommending approval of this request.



PRELIMINARY ENGINEERING REPORT

**HARLEYVILLE WASTEWATER
TREATMENT PLANT UPGRADE
SRF No. 801-01**

**APRIL 2023
REVISED JUNE 2023**



6/13/2023

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ONLY THE CLIENT OR ITS DESIGNATED REPRESENTATIVES MAY USE THIS DOCUMENT AND ONLY FOR THE SPECIFIC PROJECT FOR WHICH THIS REPORT WAS PREPARED.



A Report Prepared for:

Honorable Charles Ackerman Mayor
Town of Harleyville
122 W. Main Street
PO Box 35
Harleyville, SC 29448t
Phone: 843-462-7676

**HARLEVILLE WASTEWATER TREATMENT PLANT UPGRADE
PRELIMINARY ENGINEERING REPORT**

TOWN OF HARLEVILLE, SC

Prepared by:

A handwritten signature in blue ink, appearing to read "Bo Zhang", written over a horizontal line.

Bo Zhang, P.E.
Sr. Project Manager

Reviewed by:

A handwritten signature in black ink, appearing to read "Daniel Huggins", written over a horizontal line.

Daniel Huggins, P.E.
Sr. Project Manager

ARDURRA
4000 Faber Place Drive, Suite 330
North Charleston, SC 29405
Phone: 843-628-3352
Ardurra Project No: 100467.05



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Appendix C	Cost and Effectiveness Certification Form, DHEC 3152
Appendix D	Proposed Improvements at Harleyville WWTP
Appendix E	FEMA Flood Map
Appendix F	Design Calculations
Appendix G	Process Flow Diagram

1 GENERAL INFORMATION

1.1 Project Sponsor

Town of Harleyville
122 W. Main Street
PO Box 35
Town of Harleyville, SC 29448
Phone: 843-462-7676
Sponsor Contact: Honorable Charles Ackerman Mayor

1.2 Engineering Design Firm

Ardurra, Inc
4000 Faber Place Drive, Suite 330
North Charleston, SC 29405
Phone: 843-628-3352
Engineer in responsible charge: Dan Huggins

1.3 Description of Service Area

The Town of Harleyville is a community of less than 1,000 people. It is located in Dorchester County, in the Charleston region of South Carolina, which is one of the fastest-growing areas in the state. Growth is expected to occur, especially in portions of Harleyville that are near interstate 26. The largest industries in Harleyville, SC are manufacturing, educational and health care services, transportation, warehousing and utilities. Land use within the Town is primarily agricultural and residential. Commercial and additional institutional land uses are concentrated along several major roads in the Town.

The Town's overall population growth is at a rate slower than the County's rate, and has fluctuated considerably throughout the 20th and 21st centuries. It expanded to an estimated high of 961 residents in 2011, and shrank to an estimated low of 624 residents in 2016. The last official US Census in 2020 recorded the population at 666. Population projections were calculated by the BCDCOG at 5-year intervals going forward through 2040 assuming the trend in the Town's growth rate would continue as seen in ESRI's projections from 2020 to 2025 (a 2.5% population increase per 5-year period). At this continued rate of increase, the Town expects to have a population of approximately 715 residents by 2030, 733 residents by 2035, and 752 residents by 2040.

The Town is located within the Saluda-Edisto watershed, which is part of the Edisto River Basin in the Middle Atlantic Coastal Plain of South Carolina. The Edisto River Basin is subdivided into 13 watersheds, flowing from the Sandhills region to the Upper and Lower Coastal Plain and Coastal Zone regions. There are three sub-watersheds within the Town of Harleyville's limits, including the Lower Indian Field Swamp, Dam Branch-Four Hole Swamp and Walnut Branch. The Spring Branch-Four Hole Swamp watershed lies just outside of Town limits to the northwest. Other major hydrologic features of the area include the headwater reaches of the Tom and Kate Branch of the Edisto River, which originate in the northern end of town, generally flowing west then southward. The Little Walnut Branch of the Edisto River also originates in the northern end of town and flows generally southeast. Hence, the wetlands surrounding much of the Town are predominantly freshwater forest or shrub.

1.4 Customers to be Served

The Town of Harleyville's wastewater collection and treatment system is a local system that serves mostly residential and commercial users located in the Town. The Town maintains a sewer system throughout the town. The plant is located at the west end of Range Road, about 500 ft east of the Tom and Kate branch. Outside of the Town, water and sewer services are provided by Dorchester County.

Harleyville's sewer collection and treatment system currently provides service to 303 customers, consisting of 268 residential and 35 commercial users. Because the Town's population is projected to increase from 681 in 2020 to 752 in 2040, more users would be served by the Town's sewer collection and treatment system.

2 DISCUSSION OF NEEDS

The Harleyville WWTP was last upgraded in 2003, constructing a treatment system to replace the previous Rotating Biological Contactor (RBC) based treatment system. The facilities associated with the former RBC plant had been abandoned in place.

2.1 Treatment Capacity

The existing treatment system has a design capacity of 0.15 million gallons per day (mgd) of average daily flow. The treatment process consists of bar screening, flow equalization, aeration/nitrification, denitrification, and settling with a clarifier. Sludge is periodically wasted from the secondary clarifier by means of an airlift pump to a sludge thickening tank. The thickened sludge is sent to a sludge drying bed prior to being periodically removed for offsite disposal. The supernatant is transferred from the thickening tank back to the anoxic tank. **Table 1** below lists the design parameters for the existing system.

Table 1. Design Parameters

Design Parameter	Influent	Effluent
Average Daily Flow (mgd)	0.15	
BOD ₅ (mg/L)	210	10
TSS (mg/L)	284	10
NH ₄ -N (mg/L)	25	1
TKN (mg/L)		10
pH		7

The plant has been well operated, producing an effluent that has been meeting the requirements set forth in the current NPDES permit (SC0038504) most of the time except during the period when the influent flow considerably exceeded the design flow of 0.15 MGD. As indicated in the recent Discharge Monitoring Reports (DMRs), the influent flow has frequently approached or exceeded 80% of the design/permitted flow of 0.15 MGD, i.e., 0.12 MGD. Therefore, considering the increase of the wastewater flow to be conveyed to and treated at the WWTP, the current treatment capacity of 0.15 MGD is insufficient and needs to be increased. A request was made to the SCDHEC in June 2021 for a new wasteload allocation. The SCDHEC reviewed and approved the request. As indicated in **Appendix A**, the Town obtained the new wasteload allocation for the WWTP based upon the anticipated increased flow of 0.225 mgd. **Table 2** lists the key effluent limitations that are currently being required, as well as the anticipated future limitations.

Table 2. Key Effluent Limits

Parameter	Current Effluent Limit	Anticipated		Limit Type
		Future Limit	Effluent	
Flow Basis (mgd)	0.15	0.225		Design flow
BOD ₅ (mg/L)	15	9.27		monthly average
TSS (mg/L)	30	30		monthly average
NH ₄ -N (Mar-Oct) (mg/L)	2.05	2.08		monthly average
NH ₄ -N (Nov-Feb) (mg/L)	2.1	N/A		monthly average
Total Phosphorus (mg/L)	MR	MR		once/quarter
Total Nitrogen (mg/L)	MR	MR		once/quarter
UOD (lbs/day)	26.95	26.95		monthly and weekly average
pH	6.0-8.5	6.0-8.5		Weekdays

2.2 Other Improvement Needs

Although the Town has completed various updates in recent years to improve efficiencies and ensure adequate conveyance capacity to meet the town's needs, limited repairs have been performed for the Harleyville WWTP. No major upgrade has been completed since 2003. As shown in **Figure 1**, several structures and equipment exhibit either severe corrosion or structural defects, indicating that several components of the existing plant are in poor to fail condition, requiring a repair or replacement. A facility upgrade is necessary to ensure protection of the water quality for the Kate & Tom branch that flows into the Edisto River via the Indian Field Swamp.

Following an onsite assessment of the plant conditions and an interview with the plant operator, the following improvement needs have been identified:

- Demolish the existing storage shed that exhibits severe corrosion and shows structural defects.
- Demolish the entire former RBC plant that had been abandoned in 2003.
- Demolish the existing sludge drying bed that is not performing to standards.
- Replace the existing influent screen with a new influent screen that can treat an increased peak hourly flow of 1.1 mgd.
- Install a flow splitter downstream of the proposed new influent screen that splits the flow to the existing 0.15 mgd treatment system and the proposed new 0.075 mgd treatment system.
- Install a new 0.075 mgd Purestream package wastewater treatment system with a process design similar to the existing 0.15 mgd system.

- Replace the existing UV system with a new dual-unit open channel UV that is capable of treating the peak hourly flow of 1.1 mgd. With one unit offline, the other unit is capable of treating 0.55 mgd of flow, which is approximately 80% of the anticipated future peak hourly flow of 0.675 mgd.
- Install a SCADA system with alarming and warning functions.
- Replace fence, pipes, blowers, and mixers as needed.
- Construct a road inside the plant.

Appendix D shows the above-proposed improvements. All proposed improvements will be within the fence of the existing plant.

1



2



3



4



5



1. Storage Shed
2. Former RBC Treatment Facilities (abandoned in place)
3. Former RBC Treatment Facilities (abandoned in place)
4. Sludge Drying Beds
5. Influent Pipes

Figure 1. Existing Facilities at the Plant Site

3 ALTERNATIVES CONSIDERED

3.1 Alternative #1 No Action

The “No Action” alternative would not take any action to improve the wastewater treatment plant. The facilities would continue to operate and be maintained in the current condition. This action will result in potentially more frequent permit violations due to the expected increase in influent pollutants and hydraulic loads that would exceed the treatment capacity of the existing plant. Consequently, this will bring negative impacts to all Harleyville customers, and deteriorate the surface water quality of the Edisto River watershed.

3.2 Alternative #2 Regionalization

The nearby wastewater treatment plant is the Upper Dorchester WWTP, located in St George, SC. The Upper Dorchester WWTP is owned and operated by Dorchester County, with a permitted flow of 0.8 mgd. In recent years, the Upper Dorchester WWTP has been receiving an influent flow that has frequently exceeded 0.8 mgd. Therefore, diverting the 0.225 mgd wastewater flow from Harleyville to Upper Dorchester WWTP would require an expansion of the existing Upper Dorchester WWTP.

In addition, the existing sewer collection system operated by Dorchester County would need to be upgraded to convey the wastewater from Harleyville to Upper Dorchester WWTP. Although the Dorchester County recently received \$4.2M in federal funds in March 2022, to design and construct *The Greater St. George Wastewater Project* for the purpose of expanding its sewer system in this area, it would take multiple years before the infrastructure is ready to receive wastewater from Harleyville.

Finally, the Town intends to maintain its own sewer and treatment facilities without losing control. For these reasons, the option of consolidating the existing Harleyville WWTP into a regional wastewater plant was less favored.

3.3 Alternative #3 Expansion of WWTP

The existing treatment plant is a packaged system manufactured by Purestream (Model #: PETC-150). Despite that the system was installed nearly 20 years ago and would require repairs, the entire system is structurally solids and is capable of treating the wastewater and producing an effluent that reliably meets the permit limitations. Thus, adding a new 0.075

system to the existing site, which will also be designed and supplied by Purestream, will bring the total treatment capacity up to 0.225 mgd.

4 COST AND EFFECTIVENESS ANALYSIS OF ALTERNATIVES

Table 3 provides a summary of estimated costs for all three (3) above-described alternatives that have been considered for this project. Based upon the Clean Water SRF requirement, the O&M costs were estimated for 20 years and converted to the present worth.

Table 3. Summary of Alternatives

	Alternative	Capital Cost	O&M Cost/YR	Salvage Value	NPV
1	No Action	\$ -	\$ 12,039	\$ 150,000	\$ 90,779
2	Regionalization (Connect to Upper Dorchester WWTP)	\$ 6,979,000	\$ 60,000	\$ 3,489,500	\$ 4,689,500
3	Plant expansion by adding a 0.075 mgd treatment train	\$ 2,478,264	\$ 18,058	\$ 2,828,000	\$ 11,424

The Cost and Effectiveness Certification Form, DHEC 3152 is attached in **Appendix A**.

5 RATIONALE FOR THE SELECTED ALTERNATIVE

Alternative #1 is ruled out because taking “No Action” would result in more frequent permit violations, which would cause degradation of the water quality.

Alternative #2 “regionalization” would meet the needs of adequately treating the increased wastewater, but at a much higher capital and O&M costs that would include expansion of the existing Upper Dorchester WWTP, installation of new force mains and pump stations to convey the wastewater from Harleyville to St. George. In addition, the Town intends to maintain its control of the Town’s own sewer and treatment facilities. Therefore, this alternative is eliminated.

Alternative #3 “expanding the capacity of the existing treatment plant” is expected to achieve the purpose of adequately treating the increased wastewater, and thus enhance the quality of surface water in the Edisto River watershed. The estimated capital cost for this alternative is also lower than the cost for Alternative #2.

Therefore, the most cost-effective approach for expanding the treatment capacity is to keep the existing 0.15 mgd equipment and add a new 0.075 mgd treatment train, along with other improvements, to increase the total treatment capacity to 0.225 mgd. In addition, this approach will allow uninterrupted plant operation during the installation of the new system without having to bypassing the flows, which minimizes the risks of polluting the nearby environment during the construction.

6 COST ESTIMATION FOR THE SELECTED ALTERNATIVE

Table 4 below is an estimation of the capital costs for upgrading the Harleyville WWTP according to the above-described alternative #3. In addition, the estimated annual operation and maintenance costs, including chemical, electricity, sludge hauling and disposal, and parts replacement, are estimated to be approximately \$18,000.

Table 4. Alternative #3 Capital Costs Estimation for Alternative #3

Cost Item	Amount	SRF Funded	SCIIP Funded
Planning and Design	\$157,000	\$72,000	\$85,000
Land	N/A	N/A	N/A
Legal and Appraisal	N/A	N/A	N/A
Construction	\$1,787,250	\$883,000	\$904,250
Contingency for Construction	\$444,514	N/A	\$444,514
Equipment	N/A	N/A	N/A
Materials	N/A	N/A	N/A
Contingency for Materials	N/A	N/A	N/A
Construction Engineering	\$90,000	\$45,000	\$45,000
Loan Closing Fee	N/A	N/A	N/A
Total	\$2,478,264	\$1,000,000	\$1,478,764

7 DESIGN PARAMETERS AND CALCULATIONS FOR THE SELECTED ALTERNATIVE

Ardurra requested plant discharge monitoring data spanning the period January 2018 to October 2022 for the purposes of this evaluation. This data was reviewed to identify the data gaps for this report and analyzed to assess the treatment performance under current operation mode. Additional influent samples were collected and analyzed for ammonia-nitrogen and total Kjeldahl-nitrogen (TKN). **Table 5** summarizes the design parameters for the upgraded treatment plant.

Table 5. Process Design Parameters

Parameter	Anticipated Future Influent Characteristics	Anticipated Future Effluent Limit	Limit Type
Flow (mgd)	0.15	0.225	Average Daily flow
Flow (mgd)	0.387		Peak Daily Flow
	0.675		Peak Hourly Flow
BOD5 (mg/L)	200	9.27	monthly average
TSS (mg/L)	200	30	monthly average
NH4-N (mg/L)	30		-
TKN (mg/L)	35		-
NH4-N (Mar-Oct) (mg/L)		2.08	monthly average
NH4-N (Nov-Feb) (mg/L)		N/A	monthly average
Total Phosphorus (mg/L)		MR	once/quarter
Total Nitrogen (mg/L)		MR	once/quarter
UOD (lbs/day)		26.95	monthly and weekly average
pH	6.9	6.0-8.5	Weekdays

The existing plant consists of the following components:

- 1) A Purestream/Ecofluid USBF packaged wastewater treatment plant with the design average daily flow of 0.15 mgd. The package system consists of a coarse bar screen, a flow equalization tank, an activated sludge system including an anoxic zone, an aerobic zone, and a secondary clarifier, and a sludge storage tank.
- 2) A Trojan UV 3200K PTP system consisting of four (4) UVM 2-64 modules and a total of eight (8) UV lamps. The design peak flow is 0.5 mgd.

Based upon Alternative #3, the additional equipment to be designed and installed at the plant will consist of the following major process components:

- 1) A Purestream/Ecofluid USBF packaged wastewater treatment plant with the design average daily flow of 0.075 mgd. The package system consists of a coarse bar screen, a flow equalization tank, an activated sludge system including an anoxic zone, an aerobic zone, and a secondary clarifier, and a sludge storage tank.
- 2) A Trojan UV 3000K PTP system consisting of four (4) UVM 2-64 modules and a total of eight (8) UV lamps, split into two units. The design peak flow is 1.1 mgd. With the largest flow capacity unit out of service, the remaining unit shall have a design flow capacity of 0.55 mgd, exceeding seventy-five (75) percent of the peak hourly design flow of 0.675 mgd.
- 3) A new flow splitting box that splits the flow to the existing 0.15 mgd system and the new 0.075 mgd system.
- 4) A new ¼ inch static screen that will be installed upstream of the flow splitting box. The hydraulic capacity of this screen would be 1.1 mgd, eq. 750 gpm.

Table 5 summarizes the system design parameters provided by the equipment supplier. The design and operational parameters were reviewed and verified as part of the preparation of this PER.

Table 5. Town of Harleyville WWTP Major Components and Design Capacities

Process	Component	Proposed New Facility		Existing Facility	
		# of Units	Description	# of Units	Description
Influent Flow Splitting	Flow Splitting Box	1	One (1) concrete box, located upstream of the treatment units to split the influent flow	0	Not Applicable
Preliminary Treatment	Manual Bar Screen	1	0.1 inch cylindrical bar screen with flanged inlet and outlet, 860 gpm (1.2 mgd) peak flow capacity	1	¼ inch cylindrical bar screen, 400 gpm (0.575 mgd) peak flow capacity
	Equalization or Surge Tank	1	17'L x 14'W x 12.5'D, providing a retention time of 14.5 hr at the design ADF. Equipped with coarse bubble diffusers	1	34'L x 14'W x 12.5'D, providing a retention time of 14.5 hr at the design ADF. Equipped with coarse bubble diffusers
	Surge Pump	1	50 GPM at 15 ft TDH	2	90 GPM at 15 ft TDH
	Flow Control Chamber	0	Not Applicable, will connect to existing flow control chamber	1	A flow control chamber is mounted on wall separating the EQ tank and the sludge tank
Activated Sludge System	Anoxic Zone	1	17'L x 14'W x 12.5'D, equipped with submersible mixers	2	17'L x 14'W x 12.5'D each, equipped with submersible mixers
	Aerobic Zone	1	17'L x 38'W x 12.5'D, MLSS to be 2000 - 5000 mg/L, equipped with fine bubble diffusers	2	17'L x 38'W x 12.5'D each, MLSS is 2000 - 5000 mg/L, equipped with fine bubble diffusers
	RAS/WAS Pump	1	4" airlift draws sludge to either the anoxic zone or the sludge storage tank. Mixed liquor recycle ratio is 1-3.5; WAS is determined to maintain an SRT of 8-20 days.	2	4" airlift draws sludge to either the anoxic zone or the sludge storage tank. Mixed liquor recycle ratio is 1-3.5; WAS is determined to maintain an SRT of 8-20 days.
	Secondary Clarifiers	1	12 ft diameter x 10 ft depth	2	12 ft diameter x 10 ft depth
Post Aeration	Post Aeration Tank	1	20'L x 3'W x 12.5'D, equipped with fine bubble diffusers	1	20'L x 3'W x 12.5'D, equipped with fine bubble diffusers
Disinfection	UV Disinfection	1	Add a Trojan UV 3200K PTP or equivalent with 1.1 mgd peak flow capacity to the existing UV that will be relocated	1	Glasco UV 3200K PTP with 4 modules and 8 lamps, 0.5 mgd peak flow capacity (to be relocated)
Effluent Flow Measuremnt	Flume	1	One (1) v-notch weir box with an ultrasonic level sensor	1	One (1) v-notch weir box with an ultrasonic level sensor (weir to be demolished, level sensor to be relocated)
Sludge Handling and Processing	Sludge Storage Tank	1	17'L x 5'W x 12.5'D, equipped with coare bubble diffusers	1	34'L x 5'W x 12.5'D, equipped with coarse bubble diffusers
	Blowers	1 set	(2) 1.9 H.P., (2) 7.5 H.P., and (1) 2 H.P. blowers, supplying air to equalization, aeration, post aeration, and sludge holding tanks, as well as the airlift systems	1 set	(3) 5 H.P., (3) 7.5 H.P., and (1) 1.5 H.P. blowers, supplying air to equalization, aeration, post aeration, and sludge holding tanks, as well as the airlift systems

8 LOCATION MAP

The plant is located at the west end of Range Road, about 500 ft east of Tom and Kate branch. **Figure 2** depicts the location of the WWTP and the plant's service area, with a preliminary schematic of the expanded facilities and proposed new pipes to be installed.

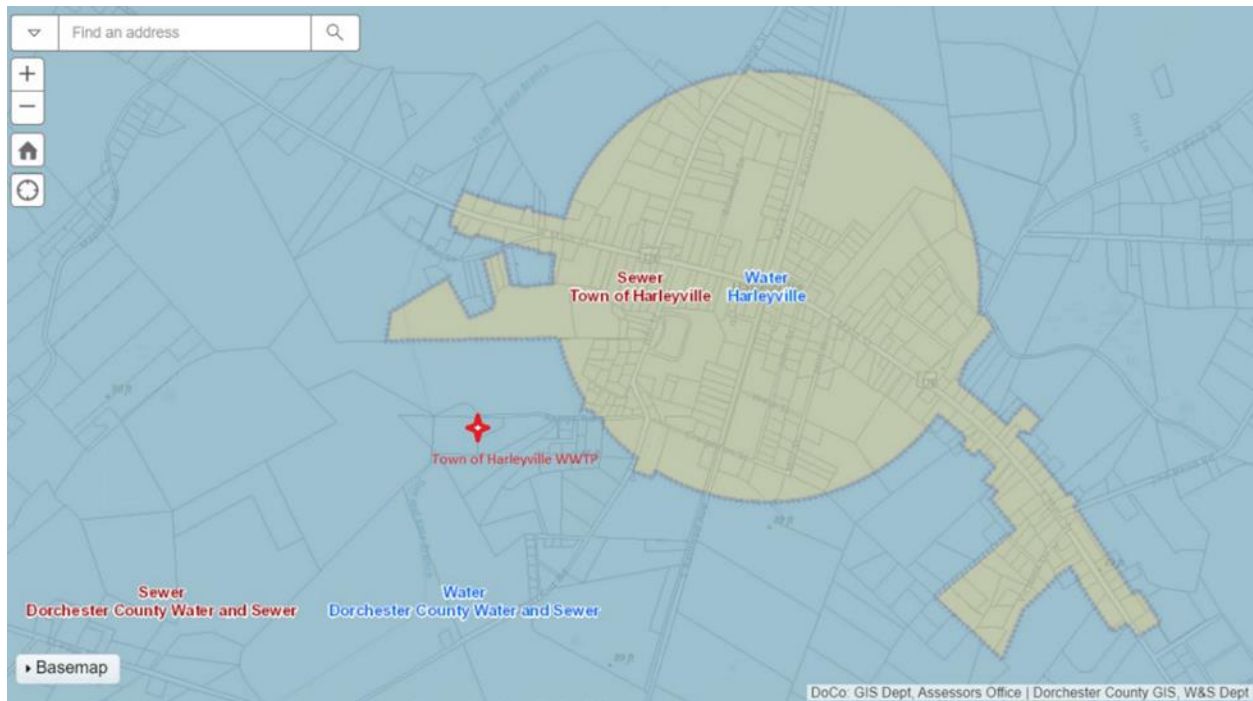


Figure 2. Town of Harleyville Sewer Service Area and Harleyville WWTP Location Map

9 PLANNING AREA MAP

The area planned to be served by the upgraded Harleyville WWTP remains the same, as shown in **Figure 2**.

10 ANY OTHER APPLICABLE INFORMATION REQUIRED BY SECTION R.61-67.200, STANDARDS FOR WASTEWATER FACILITIES CONSTRUCTION

R.61-67.200 has been reviewed and the relevant standards have been incorporated into the preliminary design presented in this report.

11 ENVIRONMENTAL EVALUATION

The environmental evaluation will be added to this report once DHEC completes an assessment of the environmental constraints.

12 PUBLIC PARTICIPATION

A public meeting/hearing will be held during the environmental evaluation being performed by DHEC.

13 EQUIPMENT AND SERVICE FAILURE OR SHUTDOWN

The Town of Harleyville wastewater treatment plant has a Reliability Classification of Class III. The existing facility meets the requirements for backup components and auxiliary power and the expanded facility will meet the requirements for backup components and auxiliary power.

14 FEDERAL FLOOD RISK MANAGEMENT STANDARD

All new construction will take place within the existing fenceline of the facility. As shown in Appendix E, the site is in Zone X, and not within a floodplain, therefore, there will be no impact on floodplains.

APPENDIX A
Wasteload Allocation



BUREAU OF WATER

October 28, 2021

Dan Huggins, Project Manager
 Ardurra
 4000 Faber Place Dr
 North Charleston, SC 29405

RE: Town of Harleyville WWTP – New Wasteload Allocation
 NPDES Permit No. SC0038504
 Dorchester County

Dear Mr. Dan Huggins,

At your request, a wasteload allocation has been obtained for Harleyville WWTP at the proposed flow of 0.225 MGD to Tom and Kate Branch into Indian Field Swamp into the Edisto River. This wasteload allocation will replace or supersede all previous wasteload information provided based on new information presented by the Water Quality Modeling Section.

Based on the wasteload allocation, the NPDES limits can be expected to be as follows (these are generally monthly average values unless noted, additional limits with weekly average and daily maximum concentrations may also be included):

Million Gallons per day of Effluent Flow:				0.225 MGD		
Parameters	Mass limits (lbs./day)			Concentration Limits (mg/L)		
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum
BOD₅	17.40	26.10	---	9.27	13.91	---
TSS	56.30	84.44	---	30	45	---
NH₃-N (Mar-Oct)	3.90	5.85	---	2.08	3.12	---
TRC	0.021	---	0.036	0.011	---	0.019
Dissolved Oxygen	---	---	---	---	---	6.0 min at all times
pH	---	---	---	6.0 – 8.5	---	---
E. Coli/100mL	---	---	---	126/100 ml	---	349/100 ml
UOD	26.95	---	---	---	---	---
Total Phosphorous	MR	MR	---	MR	MR	---
Total Nitrogen	MR	MR	---	MR	MR	----

The following conditions should be noted. The wasteload is informational/speculative only until the following actions occur:

1. A determination whether the project is consistent with the applicable 208 Water Quality Plan must be made on the proposed expansion during the NPDES permit process.

2. In situations where a permittee proposes a new or expanded discharge into surface waters whose quality is greater than water quality standards (i.e., higher quality waters), an alternatives analysis shall be included in the engineering report. The report should also show that the proposal is necessary to important social and economic development in the area of the receiving waters such that the discharge should be allowed under the anti-degradation provisions of Regulation 61-68 (Water Quality Standards). The alternatives analysis shall demonstrate that none of the following applicable alternatives are economically and technologically reasonable:
 - a. Reuse that would minimize or eliminate the need to lower water quality;
 - b. Use of other discharge locations;
 - c. Connection to other wastewater treatment facilities;
 - d. Use of land application;
 - e. Product or raw material substitution; and
 - f. Any other treatment option or alternative, which would minimize or eliminate the need to lower water quality.
3. An NPDES permit application and preliminary engineering report is provided on the proposed expansion. Please note that the NPDES permitting action must be completed in accordance with Regulation 61-9, and no appeals filed, before a Construction Permit could be considered for this project. The Permittee may request coverage under the NPDES General permit for Domestic Wastewater Treatment Plants.
4. Additional metals testing and/or requirements may be necessary subject to information provided with the NPDES application and/or PER. Submission of available effluent metals data may result in specific pollutants to be added or deleted from the limits. Additional analysis of the pollutants listed on the cover page would be helpful in this assessment.
5. Please note that the applicant must comply with the provisions of R.61-9.600 (Viability Requirements) that address entities owning wastewater systems have the technical, managerial, and financial means to comply with the regulations as a prerequisite for receiving a wastewater discharge permit (NPDES). As part of the NPDES process, the permittee may be required to provide additional information (as described in R.61-9.600) to document compliance with this condition. Please refer to R.61-9.600, to determine if additional information is needed.

If you have any questions or comments, please contact me at 803-898-1904 or foulkstn@dhec.sc.gov.

Sincerely,



Tyra N. Foulks
Domestic Wastewater Permitting Section
Water Facilities Permitting Division

Attachments: Wasteload Allocation

cc: Charles Ackerman, Mayor, P.O Box 35 122 West Main St, Harleyville, Sc 29448
Shawn Clarke, PE, Director, Water Facilities Permitting Division
Brenda A. Green, Manager, Water Quality Modeling Permitting Section
Wade Cantrell, Manager, 303(d), WQ Modeling & TMDL Section
Feleke Arega, Water Quality Modeling Section



June 15, 2021

SCDHEC

RE: Town of Harleyville Wasteload Allocation Request

To Whom it May Concern:

On behalf of the Town of Harleyville, we are requesting a wasteload allocation for a discharge of 225,000 gallons per day to Tom and Kate Branch.

Sincerely,
ARDURRA

A handwritten signature in black ink, appearing to read "D. Huggins, Jr.", written over a faint horizontal line.

Daniel J. Huggins, Jr., P.E.
Senior Project Manager



4000 Faber Place Drive
Suite 330
Charleston, SC 29405



843-628-3352



www.tcgeng.com

S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
BUREAU OF WATER
DIVISION OF WATER QUALITY
303(d), MODELING, AND TMDL SECTION

Date: 07/07/2021 Engineer: WLA Type: Request
Discharger: Town of Harleyville NPDES: SC0038504
County: Dorchester WMU: 0203 HUC: 03050206-02-04
Receiving waters: Tom and Kate Branch

I. Water Quality Modeling Section

A. Model Data:

Model used: QUAL2E

Name: tomkate.in

USGS station / site: 02174150

Unit 7Q10 (cfs/mi²): 0.0

Stream critical flow (cfs): 0.00

Critical flow type: 7Q10

Avg. annual flow (cfs): 1.16

Drainage area (mi²): 1.21

Stream Q: waste Q ratio: 0:0.225

Temp critical (F/C): 78.8 / 26

Temp seasonal (F/C): 57.2 / 14

Velocity (ft/s): 0.1264-0.1620

Slope (ft/mi): 3.6-7.1

K1 (d⁻¹): 0.4-0.6

K2 (d⁻¹): 0.813-1.819

K3 (d⁻¹): ---

F ratio: 1.5:1

Stream characteristics: Drains to Indian Field Swamp

B. Model Input Sources

Waters in question? yes

Literature: DHEC/EPA Agreement

Similar waters: _____

Field data available? fair

Describe field data:

C. Model Validity:

Intensive survey? no

Calibrated? no

Verified? no

Analyst's assessment of simulation: fair

Comments: ---

D. Model Outputs:

Ammonia model: chronic toxicity (mg/l): 2.08 critical, 4.36 seasonal

Dissolved oxygen model:

Critical BOD5 (mg/l): 8.05*

Critical NH3-N (mg/l): 0.5*

Effluent DO (mg/l): 6.0

Equivalent UOD: 26.95

UOD formula: $8.34 * Q(0.225 \text{ mgd}) * (1.5 * \text{BOD5}(8.05) + 4.57 * \text{NH3-N}(0.5))$

Predicted minimum instream DO (mg/l): >4

Effluent flow (mgd/cfs): 0.225/0.348

Other parameters: ---

Comments: TP=MR; TN=MR. DO impaired stream, current permit UOD is maintained. Model values only and can vary as long as the UOD and toxicity requirements are met.

E. Have studies been conducted or is information available which would have an influence on the level of wastewater treatment needed? no If yes, attach comments.

F. Stream Classification: FW

G. Could the discharge be considered a wetland discharge? no If yes, attach comments from WQ Certification and Wetland Programs Section as needed.

H. Will the proposed discharge and recommended limits protect the existing uses of the waterbody? yes If no, attach a detailed explanation.

I. Is there evidence that the practical use of the stream is different from its classified use and may warrant alternate consideration? no If yes, attach comments.

J. Is there reason to believe that questionable benefits will result from requiring model recommendations? no If yes, attach comments.

Analyst: Feleke Arega

Date: 07/07/2021

Reviewer: 

Date: 7/20/2021

II. Engineering Section

A. Do the model outputs exceed established technological limits for this type of wastewater? Yes - No If yes, explain below in the space provided.

B. Are there factors which make the model outputs inconsistent with best engineering judgment and/or federal effluent guidelines? Yes - No. If yes, explain below in the space provided.

C. Are there other factors which would make the WLA either more stringent or less stringent? Yes - No. If yes, explain below in the space provided.

D. Are there factors that make the water quality model outputs impractical or unimplementable at this time? Yes - No. If yes, explain below in the space provided.

E. Recommended limits

Flow: _____

BOD5 critical: _____ BOD5 seasonal: _____

NH3-N critical: _____ NH3-N seasonal: _____

UOD critical: _____ UOD seasonal: _____

Effluent DO: _____

Phosphorus: _____

Other parameters: _____

Engineering comments: _____

F. Is there agreement with water quality model outputs? Yes No

Engineer: _____

Date: _____

III. Water Quality Modeling Section

Is full agreement concluded? Yes - No

If full agreement is not reached, see the wasteload allocation procedures for further steps.

If yes, the wasteload allocation is:

Flow: _____

BOD5 critical: _____ BOD5 seasonal: _____

NH3-N critical: _____ NH3-N seasonal: _____

UOD critical: _____ UOD seasonal: _____

Critical limits apply: _____ through _____

Seasonal limits apply: _____ through _____

Effluent DO: _____

Phosphorus: _____

Other parameters: _____

Comments: _____

Approval: _____ Date: _____

SCDHEC Ammonia Toxicity Calculation

Based on 1999 EPA Water Quality Criteria for Ammonia as adopted by S.C. DHEC R.61-68 promulgated December 14, 2000, effective June 22, 2001.

Division of Water Quality

April 23, 2001, updated 10/05

Discharger Name: Town of Harleyville
Permit Number: SC0038504
Receiving Stream: Tom and Kate Branch
Date: 07/07/2021
Analyst: Feleke

Input Data

Upstream Flow (cfs): 0
Upstream Total Ammonia Concentration (mg N/L): 0.11
Critical Stream Temperature (deg. C): 26
Seasonal Stream Temperature (deg. C): 14
Stream pH: 7.5
Discharge Flow (mgd): 0.225
Are Salmonids Present? (yes/no): no
Are Fish ELS Present? (yes/no): yes

Instream Total Ammonia Toxicity Results

Season:	<u>Critical</u>	<u>Seasonal</u>
Criterion Maximum Concentration, CMC (mg N/L):	19.890	19.890
Criterion Continuous Concentration, CCC (mg N/L):	2.082	4.364

Discharge Total Ammonia Results

Season:	<u>Critical</u>	<u>Seasonal</u>
Max. Conc. Protecting Against Acute Toxicity (mg N/L):	19.89	19.89
Max. Conc. Protecting Against Chronic Toxicity (mg N/L):	2.08	4.36

Comments

default pH, temperatures and background NH3

S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
BUREAU OF WATER
DIVISION OF WATER QUALITY
303(d), MODELING, AND TMDL SECTION

Date: 07/07/2021 Engineer: WLA Type: Basin Review
Discharger: Town of Harleyville NPDES: SC0038504
County: Dorchester WMU: 0203 HUC: 03050206-02-04
Receiving waters: Tom and Kate Branch

I. Water Quality Modeling Section

A. Model Data:

Model used: QUAL2E

Name: tomkate.in

USGS station / site: 02174150

Unit 7Q10 (cfs/mi²): 0.0

Stream critical flow (cfs): 0.00

Critical flow type: 7Q10

Avg. annual flow (cfs): 1.16

Drainage area (mi²): 1.21

Stream Q: waste Q ratio: 0:0.225

Temp critical (F/C): 78.8 / 26

Temp seasonal (F/C): 57.2 / 14

Velocity (ft/s): 0.115-0.200

Slope (ft/mi): 3.6-7.8

K1 (d⁻¹): 0.4-0.6

K2 (d⁻¹): 0.581-1.305

K3 (d⁻¹): ---

F ratio: 1.5:1

Stream characteristics: Drains to Indian Field Swamp

B. Model Input Sources

Waters in question? yes

Literature: DHEC/EPA Agreement

Similar waters: _____

Field data available? fair

Describe field data:

C. Model Validity:

Intensive survey? no

Calibrated? no

Verified? no

Analyst's assessment of simulation: fair

Comments: ---

D. Model Outputs:

Ammonia model: chronic toxicity (mg/l): 2.08 critical, 4.36 seasonal

Dissolved oxygen model:

Critical BOD5 (mg/l): 11.31*

Critical NH3-N (mg/l): 1.0*

Effluent DO (mg/l): 6.0

Equivalent UOD: 26.95

UOD formula: $8.34 * Q(0.15 \text{mgd}) * (1.5 * \text{BOD5}(11.31) + 4.57 * \text{NH3-N}(1.0))$

Predicted minimum instream DO (mg/l): <4

Effluent flow (mgd/cfs): 0.15/0.23

Other parameters: ---

Comments: TP=MR; TN=MR. DO impaired stream, current permit UOD is maintained. * only model input values and can vary as long as UOD and Toxicity limits allow

E. Have studies been conducted or is information available which would have an influence on the level of wastewater treatment needed? no If yes, attach comments.

F. Stream Classification: FW

G. Could the discharge be considered a wetland discharge? no If yes, attach comments from WQ Certification and Wetland Programs Section as needed.

H. Will the proposed discharge and recommended limits protect the existing uses of the waterbody? yes If no, attach a detailed explanation.

I. Is there evidence that the practical use of the stream is different from its classified use and may warrant alternate consideration? no If yes, attach comments.

J. Is there reason to believe that questionable benefits will result from requiring model recommendations? no If yes, attach comments.

Analyst: Feleke Arega

Date: 07/07/2021

Reviewer: _____

Date: 7/20/2021

SCDHEC Ammonia Toxicity Calculation

Based on 1999 EPA Water Quality Criteria for Ammonia as adopted by S.C. DHEC R.61-68 promulgated December 14, 2000, effective June 22, 2001.

Division of Water Quality

April 23, 2001, updated 10/05

Discharger Name: Town of Harleyville
Permit Number: SC0038504
Receiving Stream: Tom and Kate Branch
Date: 07/07/2021
Analyst: Feleke

Input Data

Upstream Flow (cfs): 0
Upstream Total Ammonia Concentration (mg N/L): 0.11
Critical Stream Temperature (deg. C): 26
Seasonal Stream Temperature (deg. C): 14
Stream pH: 7.5
Discharge Flow (mgd): 0.15
Are Salmonids Present? (yes/no): no
Are Fish ELS Present? (yes/no): yes

Instream Total Ammonia Toxicity Results

Season:	<u>Critical</u>	<u>Seasonal</u>
Criterion Maximum Concentration, CMC (mg N/L):	19.890	19.890
Criterion Continuous Concentration, CCC (mg N/L):	2.082	4.364

Discharge Total Ammonia Results

Season:	<u>Critical</u>	<u>Seasonal</u>
Max. Conc. Protecting Against Acute Toxicity (mg N/L):	19.89	19.89
Max. Conc. Protecting Against Chronic Toxicity (mg N/L):	2.08	4.36

Comments

default pH, temperatures and background NH3

APPENDIX B
Vendor Provided Purestream Equipment Design Proposal



DATE: 02/21/23

TO: All bidding contractors

PAGE 1 of 6

RE: Sewage Treatment Equipment for:
Harleyville Expansion

Proposal No. BJB-110421-HV(Rev2)

We are pleased to present for your consideration 1 PURESTREAM ES, LLC Biologically Enhanced Single Sludge Treatment (BESST) System; Model PES-75-C sewage treatment plant equipment package capable of treating 75,000 G.P.D. of raw sewage with a strength of 210 mg/l B.O.D., 284 mg/l TSS, 40 mg/l free ammonia, and 8 mg/l phosphorus, as manufactured by Purestream ES, LLC, Florence, KY. The treatment plant shall consist of all necessary clarifiers, weirs, baffles, internal piping, and the following items:

SURGE CONTROL EQUIPMENT

- 1 Aerated surge tank piping package with air headers, diffuser drops, and diffusers.
- 1 3 way flow splitter box
- 1 EQ tank blower, 2 Hp for 38 CFM with fiberglass housing

BASE UNIT & AIR SUPPLY

- 1 Anoxic compartment piping package
- 2 1.9 HP mixers with slide rails
- 1 Aeration compartment piping package with air headers, diffuser drops, and fine bubble diffusers
- 1 Prewired control panel with starters, breakers and timers in a NEMA rated 12 [X] painted steel Enclosure, relay type controls
- 1 Clarifier with a total volume of 13,493 gallons. Clarifier will be complete with a baffled effluent trough with adjustable weir plates. The clarifier will be fabricated of painted steel.
- 1 Aerated sludge storage tank piping package with air headers, diffuser drops, and coarse bubble diffusers
- 1 Adjustable Halliday hoist with hoist sockets as necessary for retrieval of submerged equipment
- 2 Process blowers, 7.5 Hp for 129 CFM with fiberglass housings
- 1 SHT blower, 2 Hp for 38 CFM with fiberglass housing
- 1 RAS airlift blower, 2 HP for 30 CFM with fiberglass housing
- 2 Bridges with grating and handrail to service tank equipment

THE FOLLOWING ITEMS ARE NOT COVERED BY THE QUOTATION AND SHALL BE PROVIDED BY OTHERS. PLEASE NOTE THAT THIS LIST IS NOT ALL INCLUSIVE AND ONLY THE ITEMS SPECIFICALLY LISTED WITHIN THIS PROPOSAL ARE INCLUDED IN THIS OFFERING.

Excavation
Removing tank from truck
Electric to control panel
Finish grading & seeding

Crane to set tank on pad
Hook up of prewired components
Field erection
Sewage lines

External piping
Backfilling
Water to fill tank

Fencing
Concrete
Anchors & turnbuckles

The tankage shall be shipped to the jobsite in multiple pieces.
The heaviest piece shall weigh approximately 17,500 lbs.

TOTAL NET PRICE [X] F.O.B. Factory, Freight allowed to jobsite..... [REDACTED]
(Price does not include any Local, State or Federal taxes.)

OPTIONAL EQUIPMENT ADD PRICING

One (1) Replacement blower motor unit for existing plant..... [REDACTED]
One (1) Replacement EQ Pump for existing plant..... [REDACTED]
One (1) Replacement Mixer for existing plant..... [REDACTED]

Delivery after receipt of order & approval drawings 22-26 weeks.

Open for Acceptance for 30 days until 11:59 PM ET on 03/22/23

PAYMENT TERMS: 10% Due With Purchase Order, 40% Due With Release for Fabrication, 45% Due prior to loading for Shipment, 5% Due Upon Completion of Start-Up and Not To Exceed 90 Days from Date of Shipment

Time is of the essence in this contract. Once the contractor has been notified that the treatment plant is ready to ship, they **MUST** receive shipment within thirty (30) days of notification. If shipment does **NOT** occur within thirty (30) days because of delays out of Purestream ES, LLC’s control (delays consisting of, but not limited to, bad site conditions, weather, approval delays, acts of God, war, terrorism, etc.), immediate payment of 95% must be paid or the Buyer will be in breach of this contract and Purestream ES, LLC may seek a remedy through any legal means at their disposal. In addition, there will be a 2% per month finance charge on the full amount of the Purchase Order, which **MUST** be paid before the plant will ship.

NOTE: This order is subject to terms and conditions contained herein and Purchaser agrees to be bound thereby.

TERMS AND CONDITIONS

I. SCOPE OF PROPOSAL

A. The Proposal attached herein reflects the full scope of services and equipment to be provided by **Purestream** and no other services are included by implication. Specifically, **Purestream** does not and will not (a) characterize the wastewater to be treated, (b) determine the volume of wastewater in need of treatment, (c) determine the amount of pre-treatment equalization or filtering needed, if any, or (d) ascertain the discharge limits applicable to purchaser’s Project.

B. It is expressly understood by Purchaser that Purchaser is responsible for providing **Purestream** with accurate information relating to the characteristics of the wastewater (including but not limited to flow rate, waste strength, and water temperature) to be treated by the **Purestream** system quoted herein (the “System”), the applicable discharge limits, and the degree of variability, if any, anticipated in the wastewater characteristics. Purchaser understands that **Purestream** will rely on this information from Purchaser to calculate the size of the System, and select appropriate equipment such as pumps, blowers, and other items. Purchaser acknowledges and agrees that **Purestream** is not responsible for deficient System performance if information provided to it does not reflect the actual conditions to which the System is subjected. By placing an order in response to this Proposal, Purchaser represents that it has provided accurate information and that **Purestream** is relying reasonably thereon in making the Proposal.

II. CREDIT TERMS

Any order given to, or received by, **Purestream** is subject to credit approval by **Purestream**. Payment requirements are as outlined in the Proposal. A service charge of up to one and one-half per cent (1 ½%) per month may be assessed against **Purchaser** on any amount due and not paid when due.

III. PRICE ESCALATION

The price quoted herein is firm on all orders for sixty (60) days from the effective date of any contract between **Purchaser** and **Purestream** resulting from this proposal. The project must be released for production by the **Purchaser** within this sixty (60) day period. If the project is not released for production by the **Purchaser** within this sixty (60) day period, the price quoted by **Purestream** is no longer guaranteed, but may, at **Purestream's** discretion, be adjusted based on changing market conditions, including, but not limited to, increases in costs of materials, components, or shipping.

IV. CANCELLATION

Purchaser acknowledges that the System contemplated by this Proposal is custom made for **Purchaser's** specific application, and therefore, any order made in response to this Proposal cannot be cancelled without **Purestream's** prior written consent. In case of cancellation, **Purchaser** agrees to reimburse **Purestream** for all costs incurred, plus liquidated damages in the amount of either twenty percent (20%) of the expenses incurred at the point of cancellation, or ten percent (10%) of the amount of the order, whichever is greater. Expenses, for purposes of this section, include costs incurred in fabrication, costs incurred to third party vendors, and in-house labor expended at rates prevailing at the time.

V. STORAGE

Purestream will withhold shipment of the equipment purchased hereunder at **Purchaser's** request without charge for fifteen (15) days from the originally scheduled shipment date; provided however, **Purchaser** will be invoiced for equipment as of the date the equipment is completed and ready for shipment. After such fifteen (15) days, a storage charge of one hundred dollars (\$100.00) per day will be assessed and added to the purchase price hereunder, at the option of **Purestream**. If the equipment is paid for in advance, it may be stored for sixty (60) days beyond the scheduled date at no charge to the **Purchaser**.

VI. TAXES and TRANSPORTATION ISSUES

Any and all sales, use, excise or other tax levied upon the Equipment contemplated by the system or upon the sale, use, receipt, manufacture, delivery or transportation of such equipment, or upon **Purestream** by reason of the performance of an order made in response to this Proposal, shall be added to the purchase price and shall be separately stated on **Purestream's** invoice at the time of billing. Responsibility for the payment of any such tax shall be the **Purchaser's**. Any increase in transportation rates, for whatever reason, shall be borne and paid by the **Purchaser**.

Delivery of the equipment covered hereby to a common carrier shall be deemed delivery to **Purchaser**, and thereupon the risk of loss or damage in transit shall be **Purchaser's**. In the absence of specific instructions, **Purestream** will select the carrier.

Upon delivery, **Purchaser** and/or **End User** and/or any agents or representatives thereof shall be responsible for timely inspecting all equipment, materials, and other items shipped as part of the System. **Purchaser** and/or **End User** must inform **Purestream** within ten (10) days of delivery, in accordance with the instructions provided with **Purestream**, of any missing or damaged items. **Purestream** will provide and/or replace, at its cost, any missing or damaged items identified within this ten (10) day period. If **Purchaser** and/or **End User** fails to provide notice to **Purestream** of missing or damaged items within this ten (10) day time period, all items listed on the equipment packing lists shall be deemed to have been shipped and received, free of damage, and **Purestream** shall have no further responsibility to provide replacement items at its cost, except as provided in Section VII., below.

VII. TITLE TRANSFERS UPON DELIVERY AND FINAL PAYMENT

Title to the goods listed in this Proposal shall not pass to **Purchaser** until such goods are paid for in accordance with the payment terms outlined in the Proposal and incorporated into any order made in response to this Proposal.

Any warranty offered by a third-party manufacturer of any equipment included in this Proposal that is, by its terms, transferrable, will be deemed transferred by **Purestream** to **Purchaser** upon receipt final payment to **Purestream**. Whether the third-party warranty is transferrable from **Purchaser** to any separate **End User** or other assignee is determined solely by the terms and conditions of the third-party warranty.

VIII. WARRANTY

A. EQUIPMENT WARRANTY: For a period of two (2) years from the date of start-up and not to exceed 30 months from date of shipment of the equipment set forth herein, **Purestream** warrants that said equipment will be in kind and quality as described herein and will be free from defects in workmanship, if properly installed and operated under normal use and service and in accordance with the plant Operation and Maintenance manual. **Purestream's** obligation hereunder is limited solely to furnishing without charge, f.o.b. factory, replacement parts for the equipment or any part thereof which have been found by **Purestream** to have been defective within the warranty period; provided however, that **Purchaser** notifies **Purestream** in writing of such defect, as soon as the alleged defect becomes apparent.

B. LIMITED CONDITIONAL PERFORMANCE WARRANTY: **Purestream** warrants that within 60 days of startup, the System will adequately perform to reduce the strength of the waste to the effluent levels listed in the Proposal, provided that all of the below conditions stated in this "Limited Conditional Performance Warranty" section are met for the initial sixty (60) day start up period. Thereafter, provided that all such conditions are met for a period of 90 days (or the number of days since start up, whichever is shorter) preceding any claim made under this Limited Conditional Performance Warranty, **Purestream** warrants that the System will adequately perform to reduce the strength of the waste to the effluent levels listed in the Proposal. The conditions required to be met for this Performance Warranty to be effective are:

1. The project engineer for **Purchaser** and/or **End User** has personally confirmed the basis of design for the System, has reviewed all sizing and air requirement calculations performed by **Purestream**; and has approved the final approval submittals.
2. The System was properly installed and has not undergone any modifications without **Purestream's** prior written approval.
3. The System is, at all times, operated in accordance with the Operation and Maintenance Manual provided with the System by **Purestream**, unless specifically directed otherwise by **Purestream**, and with all components in working order.

4. The System is, at all times, operated by a licensed wastewater treatment plant operator who spends at least 8 hours per week on site operating the plant.
5. Purchaser / End User keeps daily logs (5 days per week or more, for every week) that record the following process control data based on bench / on-site testing: (a) influent ammonia, nitrate, nitrite, pH and temperature; (b) anoxic tank dissolved oxygen and pH; (c) aerobic tank dissolved oxygen and pH; (d) effluent ammonia, nitrate, nitrite, pH and temperature; (e) gallons of wasted sludge; (f) clarifier settleability; and (h) flow.
6. Independent laboratory testing on samples taken, on average, at least every 10 days, of influent and effluent for at least each constituent on Purchaser / End User's discharge permit, but including at least the following: CBOD5, ammonia, TKN (Total Kjeldahl Nitrogen), nitrate, nitrite, pH, and total suspended solids.
7. None of the influent waste characteristics exceed the values given to Purestream as the basis of design (including flow rate and temperature) by more than ten percent (10%) of the basis of design. Whether a value deviates from the basis of design by more than ten percent (10%) shall be determined by the average of no less than 8 test results from testing of plant influent by independent laboratories over the ninety (90) days preceding any warranty claim.
8. None of the influent waste characteristics exceed the values given to Purestream as the basis of design (including flow rate and temperature) show a spike or slug loading wherein any influent waste characteristic's value deviates by more than twenty-five percent (25%) from the basis of design at any point over the ninety (90) days preceding any warranty claim, as shown in either process control data, independent laboratory testing, or under Extended Testing Protocols.
9. The influent does not contain toxic compounds or compounds generally recognized to inhibit performance of biological wastewater treatment processes above the concentrations listed in Table 5-2 from *Wastewater Engineering, Treatment, Disposal, Reuse*, Metcalf & Eddy (3rd Edition).

EXCEPT FOR CONDITIONS 1 AND 2, THE FAILURE OF THESE CONDITIONS TO BE MET CONTINUOUSLY FOR A PERIOD OF 90 DAYS PRIOR TO ANY WARRANTY CLAIM BEING MADE SHALL OPERATE TO RELIEVE PURESTREAM OF ANY AND ALL OBLIGATIONS WITH RESPECT TO THE INADEQUATE PERFORMANCE OF THE SYSTEM AND THE REMEDIATION THEREOF. CONDITIONS 1 AND 2 SHALL BE DEEMED TO HAVE BEEN CONTINUOUSLY MET ONCE SATISFIED FOR THE FIRST TIME, EXCEPT THAT SO MUCH OF CONDITION 2 THAT REQUIRES THAT THE SYSTEM NOT BE MODIFIED WITHOUT PURESTREAM'S PRIOR WRITTEN APPROVAL IS AN ONGOING CONDITION THAT MUST BE CONTINUOUSLY MET.

The System will be deemed to have adequately performed to reduce the strength of the waste to the effluent levels listed in the Proposal if the average concentration or amount of each constituent listed in the target effluent in the Proposal over any fourteen day (14 day) period is equal to or lower than the effluent levels stated in the proposal, whether or not conditions 7 and 8 are met.

Purestream's obligations under this Limited Conditional Performance Warranty are limited to performing, at its cost (unless otherwise noted), the following functions: (a) review of all testing data; (b) directing and reviewing Extended Testing Protocols, as needed; (c) providing a factory-authorized representative to perform up to 10-days of on-site diagnostic work, training, and implementing recommendations to improve System performance; and (d) providing up to a total of Five Thousand and 00/100 Dollars (\$5,000.00) for parts and labor for the alteration or modification of the System to improve performance. For purposes of this Limited Conditional Performance Warranty, "Extended Testing Protocols" means influent and effluent laboratory testing for a period of time and at a frequency determined by Purestream or its factory-authorized representative to be reasonably necessary to evaluate System performance, the cost of which shall be borne by Purchaser (or End User). The failure by Purchaser (or End User) to provide testing data timely upon request by **Purestream**, or to permit Extended Testing Protocols, or to permit **Purestream** or its factory-authorized representative access to the System, or the modification of the System without the prior approval of **Purestream**, shall render this Limited Conditional Performance Warranty null and void, notwithstanding compliance with the above conditions. Under no circumstances shall this Limited Conditional Performance Warranty extend to any constituent of the influent waste that is not capable of removal by biological means, such as dissolved solids. Further, equipment defects are governed exclusively by the Equipment Warranty set forth in Section VII.A. of these Terms and Conditions. Inadequate System performance attributable to an equipment defect, failure, or breakdown does not give rise to any obligation on Purestream's part to repair or replace the equipment in order to establish or re-establish adequate system performance, unless the Equipment Warranty applies.

THIS WARRANTY IS EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS. IN THE EVENT ANY IMPLIED WARRANTY IS NONETHELESS IMPOSED BY OPERATION OF LAW, THE DURATION OF ANY SUCH IMPLIED WARRANTY IS LIMITED TO ONE YEAR FROM THE DATE OF SHIPMENT OF THE PRODUCT, AS SET FORTH IN THE FIRST PARAGRAPH OF THIS SUBSECTION.

Any Warranty from **Purestream** granted hereunder is fully transferrable to any **End User** who is a successor or assign of the Purchaser, and any further successors and assignees of the **End User** during the period of time any Warranty is in effect. No such transfer shall in any way re-start the warranty period or otherwise extend the warranty period stated herein.

IX. LIABILITY

Purestream shall not be liable for incidental or consequential damages or expenses relating directly or indirectly, to the sale or use of the equipment, including but not limited to costs and expenses charged by the operator of the System. **Purestream's** liability hereunder is expressly limited to furnishing replacement parts / components (or, at **Purestream's** sole election, crediting **Purchaser** with an amount equal to the purchase price of such replacement part), or, for matters falling within the scope of a Warranty offered hereunder, rendering performance, where due, under the terms and conditions of the applicable warranty. Under no circumstances shall **Purestream** be responsible or liable for any damages or losses from errors or performance deficiencies arising from matters not within the scope of its proposal, including but not limited to site preparation, construction, installation or operation of the System; the failure to accurately predict flow rates; the failure to accurately characterize influent wastewater; the failure to properly monitor, test, and operate the system; and the like. Further, **Purestream** shall not be liable for damages, losses, expenses or delays due to or caused by labor shortage, fire, transportation difficulties, strike or other labor disputes, civil or military authority, insurrection, riot, war, mass casualty events, accident, shortage of labor and/or material, flood, storm, acts of the

Purchaser, priorities in allocations, pandemics (including governmental restrictions imposed to contain same), or any other cause or circumstances whether like or unlike the foregoing, beyond **Purestream's** reasonable control. Acceptance by **Purchaser** of the equipment comprising the **System** from the carrier shall constitute a waiver of any claim for losses or damages due to delay, whether or not excused by the foregoing, and a waiver of the right to revoke such acceptance for any reason.

UNDER NO CIRCUMSTANCES SHALL PURESTREAM BE LIABLE FOR ANY LIQUIDATED, SPECIAL OR CONSEQUENTIAL DAMAGES OR FOR ANY FINES OR PENALTIES, WHETHER ANY SUCH DAMAGES ARE CHARACTERIZED AS DIRECT OR INDIRECT.

Purestream shall not be liable for damages, losses or expenses incurred by reason of tank floatation, shall not be responsible for keeping the tank or excavation free from mud or debris.

X. INSURANCE COVERAGE

Purestream carries commercial general liability insurance coverage with policy limits of \$1,000,000.00 per occurrence / \$2,000,000.00 aggregate, umbrella coverage with policy limits of \$2,000,000.00 per occurrence / \$2,000,000.00 aggregate, and workers compensation coverage with policy limits of \$500,000.00 per accident / \$500,000.00 aggregate. Any Additional Coverages or Higher Limits of Liability required as per the final signed contract can be obtained; **PROVIDED, HOWEVER, ANY ADDITIONAL LIMITS OR COVERAGES REQUIRED WILL BE AT THE PURCHASER'S EXPENSE**

XI. GENERAL TERMS AND DEFINITIONS

A. In the event of a conflict between the general terms and conditions stated herein and the terms and conditions stated in the **Purchaser's** purchase order, or elsewhere, these general terms and conditions shall govern. **Purchaser's** signed acceptance of this proposal, purchase order, or any other expression of acceptance shall be deemed to be a written confirmation and acceptance of these general terms and conditions. Further, acceptance of this order is expressly limited to these general terms and conditions. Any conduct of performance by **Purestream** regarding the existence of a contract shall not constitute an acceptance of or assent to any additional or different terms or provisions proposed by **Purchaser**. Any modification of these Terms and Conditions must occur through a writing signed by an authorized representative of **Purestream** employed by its home office in Walton, Kentucky, to be effective. **Outside sales representatives of Purestream do not have the authority to alter these Terms and Conditions.**

B. The validity, construction and effect of this order and of these general terms and conditions, including all warranties and warranty disclaimers, shall be governed by the laws of the Commonwealth of Kentucky, without regard to choice of law principles. Any dispute arising in any way out of this proposal shall be resolved via arbitration in accordance with the then-effective provisions of the Construction Industry Arbitration Rules of the American Arbitration Association, including the arbitrability of the dispute in question is subject to this provision. The arbitration hearing shall take place within 25 miles of **Purestream's** office. The award rendered by an arbitrator shall be final, and the award may be reduced to a judgment by any court whose jurisdictional borders include the location of the hearing. A demand for arbitration shall be filed within a reasonable time after a dispute arises. In no case, however, shall the demand be made more than one year after the date of startup of the System.

C. As used in these terms and conditions:

"Purestream" refers to either Purestream, Inc., a Kentucky corporation, or Purestream ES, LLC, a Kentucky limited liability company, whichever company is the entity making the proposal to which these Terms and Conditions relate.

The term **"End User"** means the person or entity that ultimately will own the System described in this Proposal when the System is installed and started up, if not the same person or entity as the Purchaser. End User may include, as the context may require, any person or entity acting on Purchaser's behalf including contractors, engineers, or architects retained by End User.

The term **"Purchaser"** means the person or entity issuing a purchase order for the purchase of the System, if a person or entity other than the End User. Purchaser may include, as the context may require, any person or entity acting on Purchaser's behalf including contractors, engineers, or architects retained by Purchaser.

The Term **"Proposal"** means the proposal made by or on behalf of Purestream ES, LLC for the sale of certain wastewater treatment equipment and specifically enumerated ancillary services (including, to the extent listed in the proposal start up and training services, and tank sizing recommendations).

The term **"System"** means the equipment listed in the Proposal (including any tanks) assembled and operating for the purpose of wastewater treatment.

Agreed to by:

Purchaser: _____

Print Name and Company: _____

Date: _____

PROPOSAL NO. BJB-110421-HV(Rev2)

PAGE 6 OF 6

DATE 2/22/23

THE ABOVE PROPOSAL WILL RESULT IN A FIRM ORDER WHEN ACCEPTED BY THE PURCHASER AND ONLY WHEN APPROVED BY AN AUTHORIZED OFFICER OF PURESTREAM ES, LLC.

SUBMITTED BY:
PURESTREAM ES, LLC.

Brian J. Bell

Brian J. Bell

DATE: 02/22/23

APPENDIX C
Cost and Effectiveness Certification Form, DHEC 3152



Cost and Effectiveness Certification



SRF Project Number SRF No. 801-01

Project Name Harleyvill WWTP Upgrade

Project Sponsor Town of Harleyville, SC

Section 602(b)(13) of the Federal Water Pollution Control Act (FWPCA) requires a recipient of a loan to certify that the recipient:

- 1) has studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is sought under the Clean Water State Revolving Fund Loan Program; and
- 2) has selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account –
 - (i) the cost of constructing the project or activity;
 - (ii) the cost of operating and maintaining the project or activity over the life of the project or activity; and
 - (iii) the cost of replacing the project or activity.

Pursuant to Section 602(b)(13) of the FWPCA, all Project Sponsors will evaluate and certify that cost and effectiveness has been addressed as part of the Preliminary Engineering Report.

Certification

Pursuant to Section 602(B)(13), we certify that the requirements of Section 602(B)(13), as set forth in items (1) and (2) above, have been completed.

Signature of Project Engineer

Dan Huggins

Printed Name of Project Engineer

Signature of Project Sponsor's Representative

Honorable Charles Ackerman

Printed Name of Project Sponsor's Representative

Submit by email to DHEC project manager or by mail to:
SRF Section - Water Facilities Permitting Division, S.C. DHEC, 2600 Bull Street, Columbia, SC 29201

INSTRUCTIONS – DHEC 3152

PURPOSE: The *Cost and Effectiveness Certification* is used to certify that an SRF Project Sponsor has complied with the actions required by Section 602(b)(13) of the Federal Water Pollution Control Act (FWPCA).

GENERAL INFORMATION: Pursuant to Section 602(b)(13) of the FWPCA, US EPA requires SRF Project Sponsors to conduct a cost and effectiveness analysis and to select, to the maximum extent practicable, a project or activity that maximizes the potential for water and energy conservation, as appropriate. This requirement applies to any Clean Water project (e.g., wastewater, stormwater, non-point source) where the Project Questionnaire was submitted on or after October 1, 2015.

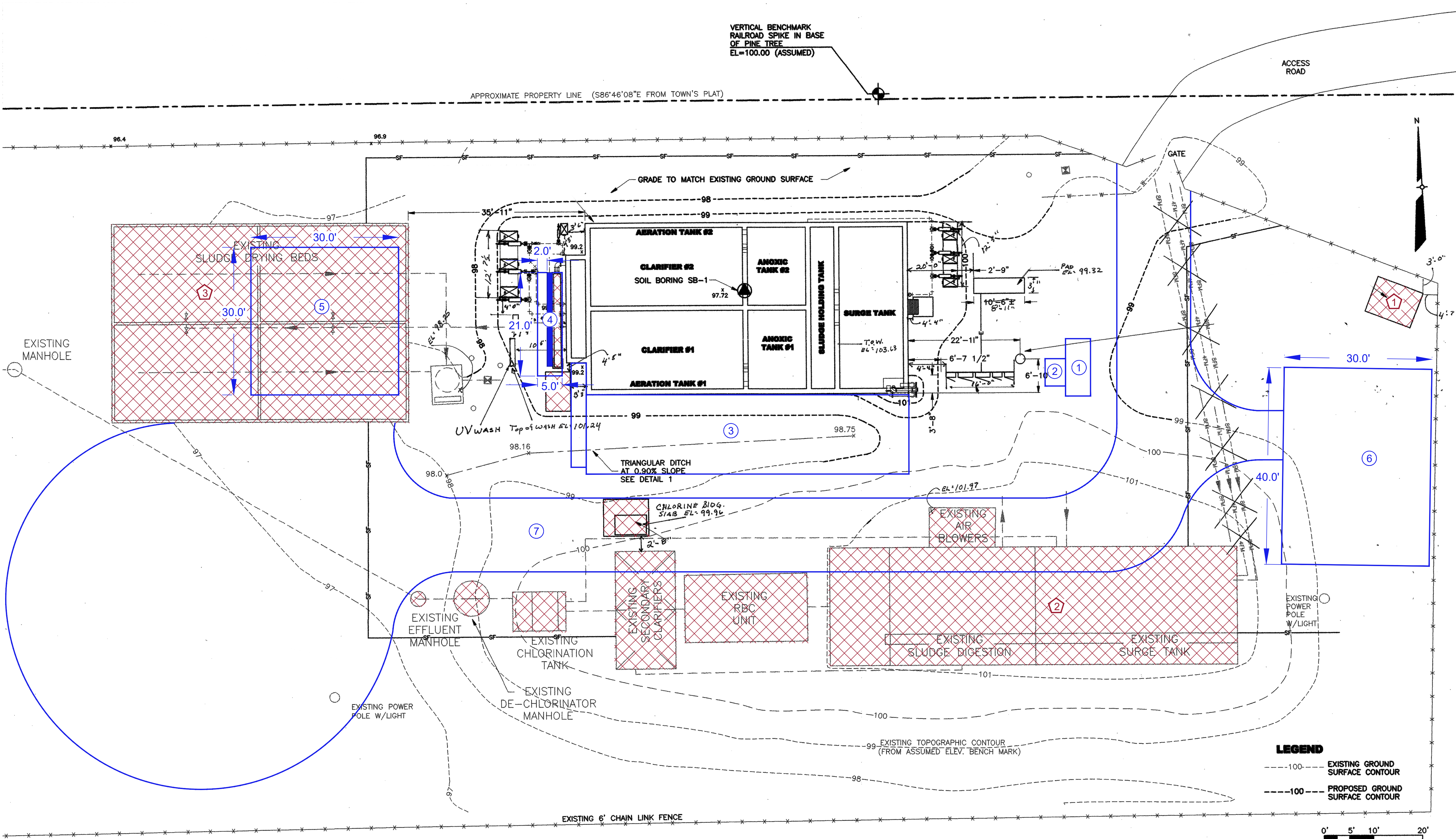
INSTRUCTIONS: The Project Engineer or the Project Sponsor's Representative enters the project information. The Project Engineer and the Project Sponsor's representative sign the Certification.

Submit this form with the Preliminary Engineering Report for the proposed project.

DHEC REVIEW AND FILING: The SRF Section will use this form to document compliance with Section 602(b)(13) of the FWPCA by an SRF project. The form will be kept in the PER file for the named project and will be retained for twenty years following the final SRF disbursement to the Project Sponsor - per Retention Schedule 15796.

APPENDIX D
Proposed Improvements at Harleyville WWTP

H:\PROJECT FILES\100467.05 - HARLEYVILLE PER TO UPGRADE WWTP\200 STUDY\285 DRAFT REPORTS\ATTACHMENTS\CAD\PER EXHIBIT - PRELIM DESIGN.DWG
 REUSE OF DOCUMENTS: THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CONSULTING ENGINEERING. HOWEVER, THIS SHALL NOT PROHIBIT THE REUSE OF THIS DOCUMENT BY THE CLIENT AS PROVIDED FOR BY THE CONTRACT.

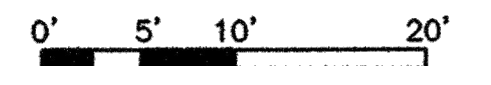


- DEMOLISH:**
- EXISTING MAINTENANCE SHED
 - PREVIOUS TREATMENT SYSTEM
 - EXISTING SLUDGE DRY BED

- NEW:**
- INFLUENT SCREEN
 - FLOW SPLITTER
 - 75,000 GPD PURESTREAM PACKAGE PLANT
 - UV SYSTEM
 - FUTURE ROTARY PRESS FOR SLUDGE DEWATERING
 - FUTURE MAINTENANCE/ STORAGE/ SCADA BUILDING
 - ROAD

LEGEND

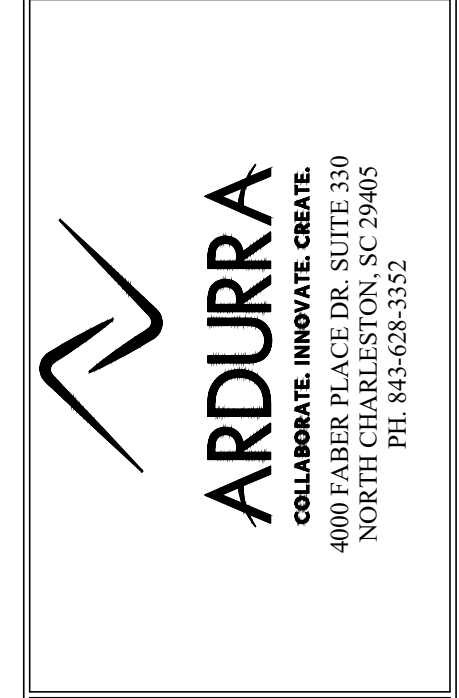
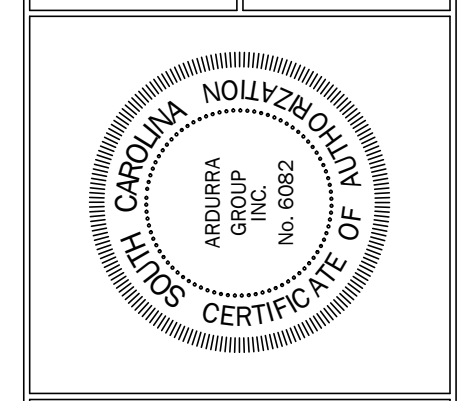
- - - 100 - - - EXISTING GROUND SURFACE CONTOUR
 - - - 100 - - - PROPOSED GROUND SURFACE CONTOUR



ENGINEER SEAL

NO.	DATE	DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVISION	BY	APVD

HARLEYVILLE UPGRADE TO WWTP



FILE	SEE LEFT
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING	
DATE	FEBRUARY 2023
PROJ.	100467.05
DWG.	

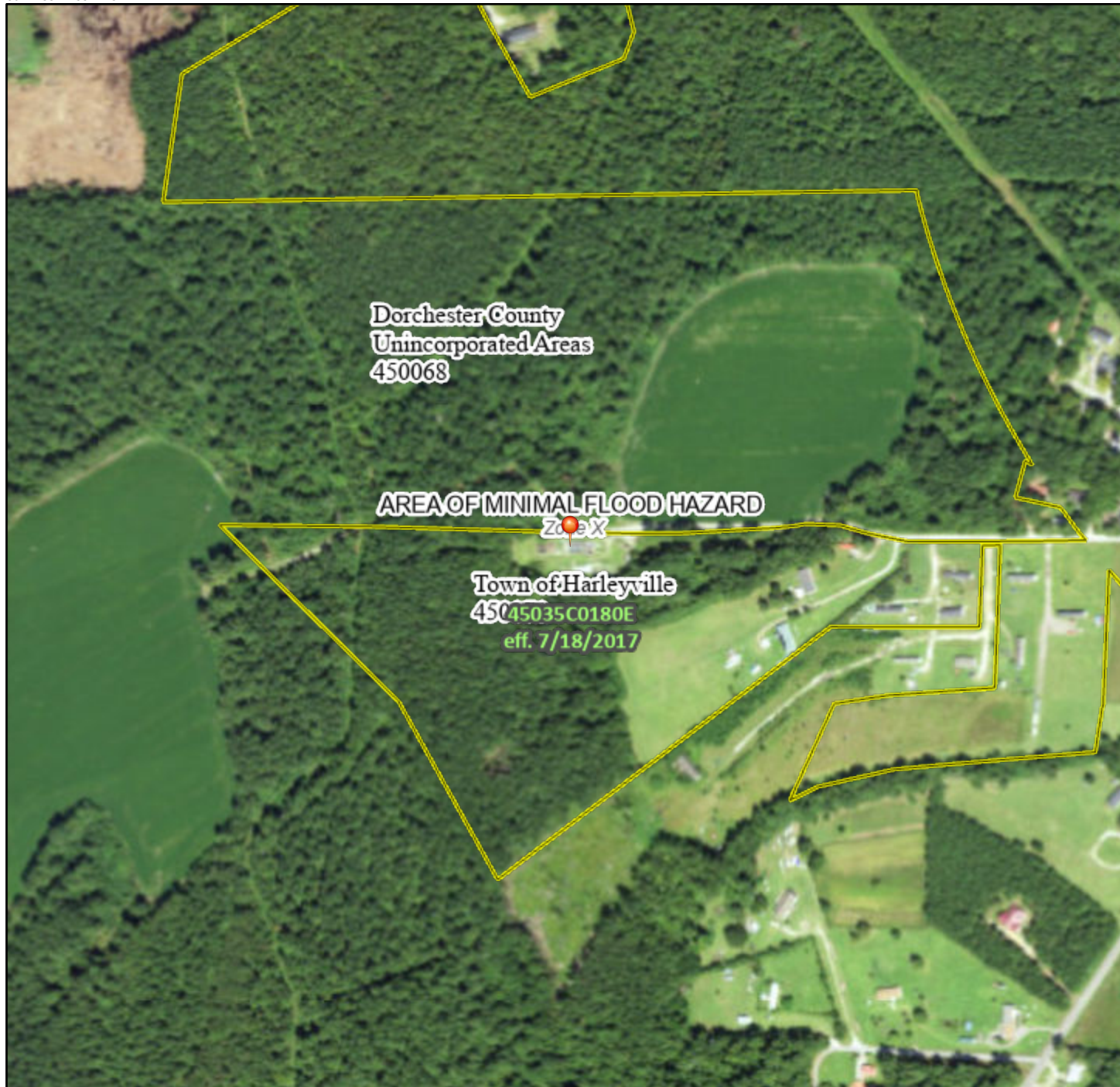
PRELIMINARY

APPENDIX E
FEMA Flood Map

National Flood Hazard Layer FIRMMette



80°27'53"W 33°12'51"N



Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard <i>Zone D</i>
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **4/10/2023 at 8:53 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX F
Design Calculations

BESST PROGRAM AND FORMULA LISTING

The following variable and formula lists represent the program listing for the computer model used to design and size the BESST system. Not all of the formulas are listed due to copyright and patent protection. Formulas that are NOT shown are mainly sub-formulas of those listed. For formula verification see Metcalf & Eddy: Wastewater Engineering; and K.R. Imhoff: Taschenbuch der Stadtentwässerung. 28. Auflage, Oldenbourg München - Wien 1993.

INPUT VALUES

1.)	B	Sludge Load (kg BOD / kg VSS)	0.03 to 0.20
2.)	N_x	Flux Flow (kg ds / m² / h) function of temperature (use @ 20 degrees Celsius)	6.00
3.)	V_L	Limit Hydraulic Loading (m / h)	0.99 to 1.1
4.)	V_x	Sludge Volume (mL / L)	4.0 to 0.7
5.)	KI	Sludge Index (mL / g)	70 to 120
6.)	p	Volatile Suspended Solids (%)	0.62 to 0.68
7.)	Y	Maximum Yield Coefficient (kg VSS / kg BOD)	0.53 to 0.6
8.)	k_{ac}	Decay Rate (d) constant	0.09
9.)	Q	Flow Rate (m³ / d)	
10.)	Q_Q	Flow Variation	1.5 to 3
11.)	S_o	Influent BOD (kg / m³)	
12.)	S_r	Effluent BOD (kg / m³)	
13.)	N_o	Influent Ammonia (kg / m³)	
14.)	N	Effluent Ammonia (kg / m³)	typically 0.005

INPUT VALUES

15.)	N_3	Effluent Nitrates N-NO ₃ (kg / m ³)	typically	0.001 to 0.015
16.)	NL _o	Influent TSS (kg / m ³)		
17.)	NL	Effluent TSS (kg / m ³)		
18.)	min	Minimum Water Temperature (°C)		
19.)	max	Maximum Water Temperature (°C)		
20.)	a	Oxygen Transfer Coefficient (g / Nm ³)		15 to 50
21.)	SV	Ratio, Separation Surface to Separation Volume		
22.)	m _i	Specific Growth Rate of Nitrificants	constant	1.37
23.)	pH	pH		6.0 to 8.0
24.)	m _{id}	Specific Growth Rate of Denitrificants	constant	0.1 to 0.3
25.)	O _k	Peak Load of Aeration	constant	1.3

Nitrification and Denitrification

Nitrogen is removed by the nitrification and denitrification processes. Nitrification is autotrophic and all Purestream ES, LLC integrated bioreactors are designed for complete nitrification of ammonia to NO_3 (please see Metcalf & Eddy, Third Edition, Chapter 11-6).

Denitrification, however, is heterotrophic and requires a carbon source. Conventional plants' "separate sludge denitrification" requires that carbon is added, typically in the form of methanol. This adds to operating costs, and if used in excess, to increased BOD_5 content. BESST technology's "single-sludge denitrification" approach uses an endogenous carbon source to maintain denitrifiers. Influent is combined with nitrified mixed liquor in the anoxic compartment providing the carbon source needed for denitrification. Relatively high mixed liquor recycle rates are employed and sufficient denitrification retention times provided.

Total nitrogen reduction ($\mathbf{N_T}$) is a subject of not only providing sufficient anoxic volume for denitrification and keeping temperature above a certain minimum, but also a function of Recycled Activated Sludge (RAS) flow rate. The efficiency of $\mathbf{N_T}$ reduction is expressed as follows:

$$\eta = (1 - 1/(1 + n)) \times 100$$

Where n = RAS flow multiple of average flow Q .

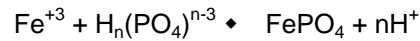
The following are typical efficiencies and RAS flow multiples used / required:

	n	η (%)
Domestic	2	66
	3	75
	4	80
Slaughterhouse Wastewater	14	93
Hog Manure	29	97

BESST technology delivers not only high efficiency reduction of organic matter, but also increased efficiency of phosphorous removal. Two processes, biological and chemical precipitation are employed with advantage

The mechanics of biological phosphorous removal, known as "Luxury Uptake", are due to exposure of activated sludge to alternating oxic and anoxic conditions. Under these conditions, the cells store more energy in the form of phosphorous than needed for their survival. If strictly oxic conditions are maintained during subsequent clarification, phosphorous will be retained by the cells and will eventually be removed with the excess sludge. Unlike most other methods of clarification, these conditions are maintained by the BESST process, and biological phosphorous reduction to less than 3 mg/L are readily achievable.

The basic reaction involved in the precipitation of phosphorous with iron is as follows:



In the case of iron, 1 mole will precipitate 1 mole of phosphate. The advantage of the process is its low chemical consumption, close to stoichiometric, and consequently, the reduction of ballast sludge production. Followed by microfiltration, reductions to 0.5 mg/L are possible.

If yet further reduction of phosphorous is required, ferric sulfate precipitation after the bioreactor followed by microfiltration must be used.

BESST

BIOLOGICALLY ENGINEERED SINGLE SLUDGE TREATMENT

PES JOB NO.	BJB-110421-HV(Rev2)	DATE	11/4/21
JOB NAME	Town of Harleyville Expansion		

INFLUENT

Flow (gpd)	75,000	GPD
Peaking Factor	2	2,2.5, or 3
BOD	210	mg/l
TSS	284	mg/l
Ammonia	25	mg/l
Phosphorous	8	

BIOLOGICAL KINETICS

F/M RATIO	0.14	0.1 TO .2
Sludge Volume	0.6	0.4 to 0.7
SVI	100	70 to 120
VSS %	0.65	0.62 to 0.68
Y	0.6	0.53 to 0.6

EFFLUENT

BOD	9	mg/l
TSS	10	mg/l
AMMONIA	1	mg/l
TN OR TKN	10	mg/l
Phosphorous	3	

TEMPERATURE

T minimum	10
T maximum	25

REP FIRM

Buddy Cox

ADDITIONAL TANKAGE REQUIREMENTS

ST Length (ft)	0		ST Volume	0 gallons
SHT Length (ft)	0		SHT Volume	0 gallons
CCT	n	Y or N	CCT Volume	0 gallons
DeChlor Tank	n	Y or N	DeCCT Volume	0 gallons

BESST TANK DIMENSIONS AND VOLUMES

DIMENSIONS

Total Length	47.85 Feet
Width	14 Feet
Height	12 Feet
1st Clarifier	12.27 Feet
2nd Clarifier	12.27 Feet
Anoxic Zone	7.90 Feet
1st Aerobic Zone	7.70 Feet
2nd Aerobic Zone	7.70 Feet
Clarifier Angle	57 Degrees

VOLUMES

Aeration	23,685 gallons
Anoxic	15,435 gallons
Clarifier	13,493 gallons
Total Volume	52,613 gallons

HYDRAULIC INFORMATION

HRT	12.5 hours
Surface Settling	218 gal/day/sq.ft.
Clarifier RT	4.3 hours

PES Project #	BJB-110421-HV(Rev2)	Date:	11/4/21
Job Name:	Town of Harleyville Expansion		
QTY & Flow			

BESST DESIGN CALCULATIONS

1) **B_x** Actual Sludge Load [kg BOD₅ / kg VSS / d]

$$\begin{aligned}
 B_x &= B \times 1.02^{(t_{min}-20)} \\
 B_x &= 0.140 \times 1.02^{(10-20)} \\
 B_x &= 0.1148 \text{ kg BOD}_5 / \text{kg VSS} / \text{d}
 \end{aligned}$$

2) **A** Sludge Age [days]

$$\begin{aligned}
 A &= (1 / (YB_x)) \times (1 - 0.5((YB_x) / k_{ac})) + (\text{Sqrt}(1 + ((YB_x) / 2k_{ac})^2)) \\
 A &= (1 / (0.60 \times 0.1148)) \times (1 - 0.5 \times ((0.60 \times 0.1148) / 0.090)) + \\
 &\quad (\text{Sqrt}(1 + ((0.60 \times 0.1148) / (2 \times 0.090))^2)) \\
 A &= 24.4952 \text{ days}
 \end{aligned}$$

3) **k_d** Actual Rate of Decay [d⁻¹]

$$\begin{aligned}
 k_d &= k_{ac} / (1 + Ak_{ac}) \\
 k_d &= 0.090 / (1 + (24.4952)(0.090)) \\
 k_d &= 0.0281 \text{ d}^{-1}
 \end{aligned}$$

4) **X** Sludge Concentration [kg ss / m³]

$$\begin{aligned}
 X &= 1000 \times V_x / KI \\
 X &= 1000 \times 0.600 / 100 \\
 X &= 6.0000 \text{ kg ss} / \text{m}^3
 \end{aligned}$$

PES Project #	BJB-110421-HV(Rev2)	Date:	11/4/21
Job Name:	Town of Harleyville Expansion		
QTY & Flow	0		

BESST DESIGN CALCULATIONS, Cont'd.

5) X_v Volatile Suspended Solids Concentration [kg VSS / m³]

$$\begin{aligned}
 X_v &= (X)(p) \\
 X_v &= 6.0000 \times 0.65 \\
 X_v &= 3.9000 \text{ kg VSS / m}^3
 \end{aligned}$$

6) v Actual Hydraulic Loading [m / h]

$$\begin{aligned}
 v &= \text{Lesser of } v_l \text{ or } v_c, \text{ where } v_l = 1 \\
 v_c &= (N_x / X) \times e^{0.03(t_{min}-20)} \\
 v_c &= (6.0000 / 6.0000) (e^{0.03 * (10 - 20)}) \\
 v_c &= 0.7408 \text{ m / h}
 \end{aligned}$$

7) V_B Aeration Volume [m³]

$$\begin{aligned}
 S_R &= S_T - (0.966(p)(NL)) \\
 V_B &= (Q(S_O - S_R)) / X_v B_x \\
 V_B &= ((283.876)(0.2100 - 0.0027)) / (3.900)(0.1148) \\
 V_B &= 131.37 \text{ m}^3
 \end{aligned}$$

8) S_s Clarifier Surface Area [m²]

$$\begin{aligned}
 S_s &= ((Q_Q)(Q)) / 24v \\
 S_s &= ((2)(283.876)) / (24 * 0.7408) \\
 S_s &= 31.933 \text{ m}^2
 \end{aligned}$$

9) V_s Clarifier Volume [m³]

$$\begin{aligned}
 V_s &= S_s / SV \\
 V_s &= 31.933 / 0.63 \\
 V_s &= 50.687 \text{ m}^3
 \end{aligned}$$

PES Project #	BJB-110421-HV(Rev2)	Date:	11/4/21
Job Name:	Town of Harleyville Expansion		
QTY & Flow	0		

BESST DESIGN CALCULATIONS, Cont'd.

10) P_X Net Mass of Volatile Suspended Solids Produced [kg VSS / d]

$$P_X = (Y / (1 + Ak_d))(Q)(S_O - S_R)$$

$$P_X = (0.60 / (1 + (24.4952) (0.0281)) (283.88) (0.2100 - 0.0027))$$

$$P_X = 20.916 \text{ kg VSS / d}$$

11) P_t Sludge Production [kg ss / d]

$$P_t = P_X / p$$

$$P_t = 20.916 / 0.6500$$

$$P_t = 32.178 \text{ kg ss / d}$$

12) V_N Nitrification Volume [m³]

$$V_N = (Q(N_O - N)) / (p_N m_U X_V)$$

$$V_N = (283.876 (0.0250 - 0.0010)) / ((0.0320) (0.6085) (3.9000))$$

$$V_N = 89.646 \text{ m}^3$$

13) V_D Denitrification Volume [m³]

$$V_D = (QN_O Y) / (0.75 m_Z X_V)$$

$$V_D = (283.88 ((0.0250) (0.60))) / (0.75 (0.0250) (3.9000))$$

$$V_D = 58.231 \text{ m}^3$$

14) V_A Volume of Aeration [m³]

$$V_A = \text{Larger of } V_{AB} \text{ or } V_N$$

$$V_{AB} = V_B - V_D ((1 + Ak_d) / (2.77 (Am_Z)))$$

$$V_{AB} = 131.37 - 58.231 ((1 + (24.4952) (0.0281)) / (2.77 (24.4952) (0.0250)))$$

$$V_{AB} = 73.425$$

$$V_A = 89.646 \text{ m}^3$$

PES Project #	BJB-110421-HV(Rev2)	Date:	11/4/21
Job Name:	Town of Harleyville Expansion		
QTY & Flow	0		

BESST DESIGN CALCULATIONS, Cont'd.

15) V_T Total Volume of Reactor [m³]

$$\begin{aligned}
 V_T &= V_A + V_D + V_S \\
 V_T &= 89.646 + 58.231 + 50.687 \\
 V_T &= 198.56 \text{ m}^3
 \end{aligned}$$

16) O_2 Oxygen Consumption [kg O₂ / d]

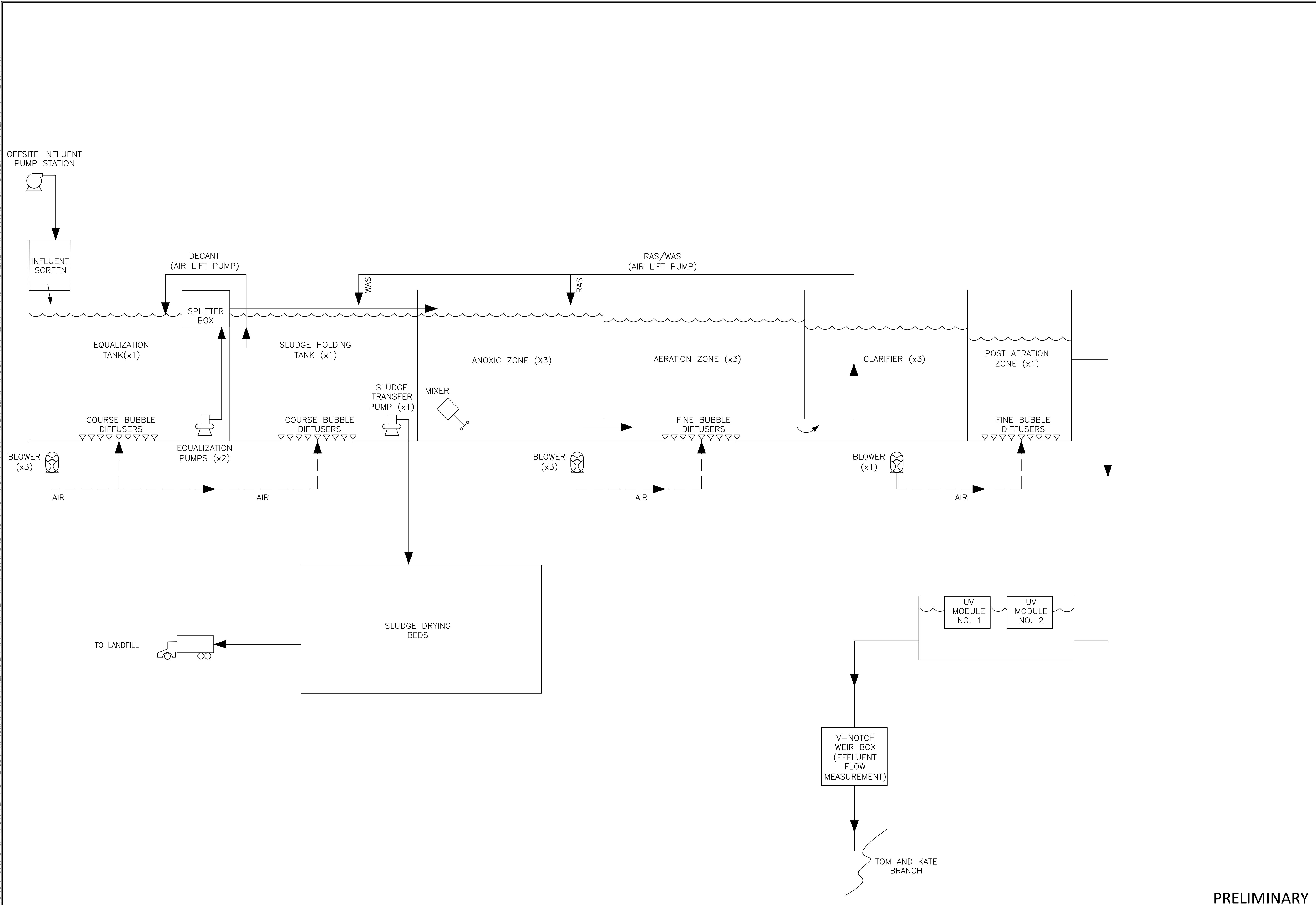
$$\begin{aligned}
 O_2 &= Q((S_O - S_R) / 0.68) - 1.42P_X + 4.57Q(N_O - N) \\
 O_2 &= 283.88 ((0.2100 - 0.0027) / 0.68) - 1.42 (20.916) \\
 &\quad + 4.57 (283.88) (0.0250 - 0.0010) \\
 O_2 &= 87.967 \text{ kg O}_2 / \text{d}
 \end{aligned}$$

17) Nm Air Consumption [Nm³ / h]

$$\begin{aligned}
 Nm &= O_2(c_S / (c_S - 2))(o_k / (0.024a)) \\
 Nm &= 87.967 (8.1224 / (8.1224 - 2)) \\
 &\quad (1.3000 / (0.024 (30))) \\
 Nm &= 210.71 \text{ Nm}^3 / \text{h}
 \end{aligned}$$

APPENDIX G
Process Flow Diagram

H:\PROJECT FILES\100467.06 HARLEYVILLE WWTP EXPANSION\300 DESIGN\365 PRELIMINARY DRAWINGS\00 GENERAL\APFD.DWG REUSE OF DOCUMENTS. THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN ARE AN INSTRUMENT OF PROFESSIONAL SERVICE AND ARE THE PROPERTY OF CONSTANTINE ENGINEERING. HOWEVER, THIS SHALL NOT PROHIBIT THE REUSE OF THIS DOCUMENT BY THE CLIENT AS PROVIDED FOR BY THE CONTRACT. JUNE 13, 2023



<p>PROPOSED PROCESS FLOW DIAGRAM</p> <p>TOWN OF HARLEYVILLE WWTP EXPANSION</p>	<p>ENGINEER SEAL</p> <p>DATE: 4/20/2023</p> <p>DESIGNED BY: DJH</p> <p>CHECKED BY: MAG</p> <p>APPROVED BY: JPK</p>
<p>FILE: SEE LEFT</p> <p>VERIFY SCALE</p> <p>BAR IS ONE INCH ON ORIGINAL DRAWING</p> <p>DATE: APRIL 2023</p> <p>PROJ.: 100157.01</p> <p>DWG.: G00.10</p>	

PRELIMINARY

MEMORANDUM

Date: August 28, 2023
To: BCDCOG Board of Directors
From: Ron Mitchum, Executive Director
Subject: Amendment to the FY 2021- 2027 RTIP

BCDCOG Rural TIP Amendment

Attached for your review and approval is an amendment to the FY 2021-2027 Rural Transportation Improvement Program (RTIP). This amendment is advertised for public comment through September 6th, 2023. Subject to no comments and the approval of the Board, additions or adjustments to projects will be transmitted for inclusion in the State TIP (STIP).

RTIP Amendments

AMENDMENT #18 – AUGUST 28, 2023

Projects Exempt from Guidesshare

1. Taylor Pond Rd (S-139) Bridge Replacement: At the request of SCDOT, shift/move construction programming from FY 2022 to FY 2027, and increase construction funds from \$1,940,470 to \$2,431,250.
 - Shift/move \$1,940,470 (CON) STBG-Bridge Program funds for construction from FY 2022 to FY 2027
 - Increase STBG-Bridge Program funds programmed in FY 2027 by \$490,780 from \$1,940,470 to \$2,431,250

Federal Transit Administration (FTA)

1. Tri-County Link (TCL) On-Demand Rural Transit Development Plan: Add new project for the FTA's Areas of Persistent Poverty Grant (FY 2023) awarded to BCDCOG to develop the Tri-County Link (TCL) On-Demand Rural Transit Development Plan for a total of \$380,000 for planning activities.
 - Add \$342,000 (PL) FTA federal funds and \$38,000 (PL) local match funds in FY 2024 for planning activities

BCDCOG RURAL TRANSPORTATION FINANCIAL STATEMENT (Cost in Thousands)

PIN #	Guideshare Projects	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	TIP COST (2021-2027)	REMAINING COST (2028+)	Total Project Cost	FUNDING
1 Cost-Share	US 78 Phase IIA (US 178 to SC-27S) (US 178 to Ridgeville Rd)	\$797 \$8,510 \$7,950 \$220										\$17,477	BCDCOG Rural Guideshare BCDCOG Rural Guideshare TIGER Funding Dorchester Co. Sales Tax
	US 78 Phase IIB* (SC-27S to S-18-22) (Ridgeville Rd to Orangeburg Road)	\$2,948 \$5,300 \$861 \$4,871		\$6,329 ACC						\$6,329		\$20,309	BCDCOG Rural Guideshare BCDCOG Rural Guideshare TIGER Funding Dorchester Co. Sales Tax Dorchester Co. Sales Tax
2 Cost-Share	INTERSECTION IMPROVEMENT - US 17A @ SC 6	\$1,191										\$1,191	BCDCOG Rural Guideshare
	US 17 A (Phase III) (Widen to 5 Lanes from S-9 to Near SC 6 in Moncks Corner)	\$3,401										\$3,401	BCDCOG Rural Guideshare
RLRTP #1, #2, #3	US 17 @ SC 165 & US 17 @ New Rd - Intersection Improvement (Traffic Control/Bike & Ped.)				\$50 PL	\$389 PE	\$250 R	\$3,028 C		\$3,717		\$3,717	BCDCOG Rural Guideshare
RLRTP #5	US 52 @ SC 402 - Intersection Improvement				\$30 PL	\$50 PE	\$462 C			\$542		\$542	BCDCOG Rural Guideshare
RLRTP #7, #12	SC 165 - Hollywood Town Limit to Town Council Rd (Bike/Pedestrian)				\$250 PE	\$850 R			\$1,950 C	\$3,050		\$3,050	BCDCOG Rural Guideshare
RLRTP #8, #9, #14	SC 162 @ SC 165 & SC 162 @ Gibson Rd - Inter. Improvement (Traffic Control/Bike & Ped.)				\$50 PL	\$200 PE	\$200 R	\$1,719 C		\$2,169		\$2,169	BCDCOG Rural Guideshare
RLRTP #10	SC 27 @ S. Railroad Ave - Intersection Improvement				\$50 PL	\$170 PE		\$200 R	\$1,238 C	\$1,658		\$1,658	BCDCOG Rural Guideshare
	GUIDESHARE PROJECT SUBTOTALS	\$16,846	\$0	\$6,329	\$430	\$1,659	\$912	\$4,947	\$3,188	\$17,465		\$53,514	
	GUIDESHARE ALLOCATION		\$2,181	\$2,181	\$2,181	\$2,181	\$2,181	\$2,181	\$2,181				
	CARRYOVER AVAILABLE		\$2,195	\$4,573	\$425	\$2,176	\$2,699	\$3,968	\$1,202				
	BOND PROCEEDS		\$0	\$0	\$0	\$0	\$0	\$0	\$0				
	GUIDESHARE BALANCE		\$4,573 *	\$425	\$2,176	\$2,699	\$3,968	\$1,202	\$196				

* Guideshare Balances from FY 2020 and FY 2021 applied to AC Conversion (ACC) programmed in FY2022

BCDCOG RURAL TRANSPORTATION FINANCIAL STATEMENT (Cost in Thousands)

PIN #	Guideshare Projects	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	TIP COST (2021-2027)	REMAINING COST (2028+)	Total Project Cost	FUNDING
PROJECTS EXEMPT FROM GUIDESHARE													
	Bridge Replacement & Rehab Projects												
	US 78 @ Four Hole Swamp (Replacement)	\$11,175										\$11,175	Bridge Program
	SC 174 @ Store Creek (Replacement)	\$4,771										\$4,771	Bridge Program
	SC 174 @ Sand Creek (Replacement)	\$7,160										\$7,160	Bridge Program
	SC 174 @ Russell Creek (Replacement)	\$11,000										\$11,000	Bridge Program
	SC 165 Caw Caw Swamp No. 1 (Replacement)	\$5,647										\$5,647	Bridge Program
	SC 165 Caw Caw Swamp No. 2 (Replacement)	\$5,260										\$5,260	Bridge Program
	SC 165 Caw Caw Swamp No. 3 (Replacement)	\$5,221										\$5,221	Bridge Program
P027127	US 176 @ Dean Swamp	\$16,094										\$16,094	Bridge Program
P037127	US 15 over Indian Field Swamp	\$7,806										\$7,806	Bridge Program
Amendment 8/28/2023	P037129 Taylor Pond Rd (S-139) (Replacement)	\$832	\$50 R						\$2,431 C	\$2,481		\$3,313	Bridge Program
	P030449 Toogoodoo Rd (S-390) over Swinton Creek (Replacement)			\$760 PE		\$39 R		\$6,804 C		\$7,604		\$7,604	Bridge Program
	Statewide Safety Program												
	US 17A & S-48 (Bethera Rd) & S-97 (Cane Gully Rd) & S-40 (Harristown Rd)	\$1,100										\$1,100	Statewide Safety Program
P039388	US 176 (State Rd)/S-135 (Mudville Rd) - Intersection Safety Improvement	\$250		\$100 R		\$2,000 C				\$2,100		\$2,350	Statewide Safety Program
	Section/Corridor Improvements - Statewide Safety Program (2015 Commission Approved)												Statewide Safety Program
	I-26 Clear Zone Improvements from near MM 180 to near MM 221	\$5,400										\$5,400	HSIP
P029757	I-26 Cable Guardrail Improvements from near MM 168 to MM 199 (Phase II)	\$10,000										\$10,000	HSIP
	Interstate Safety Improvements												
	Repair Refuge Perimeter Rd (Route 100) - Ace Basin National Wildlife	\$1,000										\$1,000	Eastern Federal Lands
	Pavement Projects												STBG
	Safety Projects												STBG
	Pavement Signing & Marking												STBG
	ITS (Interstate)												STBG
	Incident Response Program												STBG
	Appropriation Earmark												STBG
	I-26 New Interchange (Near MM 189)	\$35,000										\$35,000	SC Dept of Commerce
		\$645								\$194,000		\$201,000	SIB
P029263	I-26 Widening from near SC 27 (Exit 187) to near Jedburg Rd (Exit 194)	\$6,355	\$4,000 R										Interstate Program (NHPP)
				\$3,540 C									Interstate Program (NHPP)
				\$186,460 AC									STBG - TAP
					\$62,153 ACC	\$62,153 ACC	\$36,460 ACC	\$25,693 ACC					Interstate Program (NHPP)
P038677	I-26 @ I-95 Interchange Improvement	\$1,000		\$6,000 PE	\$59,657 C					\$239,000		\$240,000	Interstate Program (NHPP)
					\$173,343 AC	\$79,543 ACC	\$79,543 ACC	\$14,257 ACC					Interstate Program (NHPP)
	I-26 Widening (MM 154 to MM 172)				\$5,000 PE			\$7,500 R		\$45,540	\$280,000	\$325,540	Interstate Program (NHPP)
					\$25,540 PE/AC	\$12,770 PE/ACC	\$12,770 PE/ACC	\$7,500 R/AC	\$7,500 R/ACC				Interstate Program (NHPP)
	I-26 Widening (MM172 to MM 187)				\$25,000 PE					\$25,000		\$25,000	Interstate Program (NHPP)
	Interstate Preservation & Construction - I-26 (MM 149-MM172)	\$59,200										\$59,200	Interstate Program (NHPP)
P028590	S-98 (Halfway Creek Rd) Resurfacing and shoulder improvement		\$55 PE \$71 PE		\$867 C \$1,561 C					\$2,553		\$2,553	Federal Lands Pavements-Non FA Federal Lands Pavements-Non FA
PROJECTS EXEMPT FROM GUIDESHARE SUBTOTAL*			\$194,916	\$4,176	\$12,828	\$153,811	\$154,505	\$154,466	\$28,562	\$9,931	\$518,278	\$280,000	\$993,194

*Does not include STIP-Referenced Projects

BCDCOG RURAL TRANSPORTATION FINANCIAL STATEMENT (Cost in Thousands)

PIN #	Guideshare Projects	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	TIP COST (2021-2027)	REMAINING COST (2028+)	Total Project Cost	FUNDING
FEDERAL TRANSIT ADMINISTRATION													
BERKELEY CITIZENS													
	Purchase of Service	\$218	\$50	\$50	\$50					\$150		\$368	FTA Section 5310
	Capital	\$60										\$60	FTA Section 5310
	Vehicle Acquisition	\$90										\$90	FTA Section 5310
ENHANCED MOBILITY													
	BCDCOG - Mobility Management	\$67	\$40	\$40	\$40					\$120		\$187	FTA Section 5310
	BCD RTMA - Operations	\$126										\$126	FTA Section 5310
TRI-COUNTY LINK (BCD RTMA)													
	Administration, Operating, & Capital	\$5,524		\$1,001	\$1,229					\$2,231		\$7,755	FTA Section 5311 - Federal
		\$219		\$243	\$247					\$491		\$710	FTA Section 5311 - SMTF
	BCD RTMA - Section 5311 (ARP Act)				\$95							\$95	FTA Section 5311 - ARP Act 2021
	COVID-19 Research Demonstration Grant (FY 2020)		\$575 CA							\$575		\$575	FTA - Federal Funds
			\$100 CA							\$100		\$100	Local match - Charleston Co. TST
Amendment 8/28/2023	Areas of Persistent Poverty Grant (FY 2023)					\$342	PL			\$342		\$380	FTA - Federal Funds
	Tri-County Link (TCL) On-Demand Rural Transit Development Plan					\$38	PL			\$38		\$380	Local match
FTA FUNDED PROJECTS SUBTOTAL		\$6,304	\$765	\$1,335	\$1,661	\$380		\$0	\$0	\$0	\$4,141	\$10,445	
TRANSPORTATION ALTERNATIVE PROJECTS													
P28051900719	McClellanville Bicycle Pedestrian Connection - Pinckney St/Old Cemetery/Kitt Hall Rd	\$400										\$900	STBG
		\$100											2019 RTP
		\$400											Match - Local/County
Wambaw Cycle Trail													
P28051900919	Enhancement Project	\$50										\$300	2019 RTP
P28052001820	Enhancement Project	\$88											2020 RTP
P28052101321	Enhancement Project		\$80	C						\$100			2021 RTP
P28052201422	Enhancement Project				\$50	C				\$63			2022 RTP
			\$20	C	\$13	C							Match - Local/County
P28051700517	Courthouse Park Recreation Trail	\$100										\$125	2017 RTP
		\$25											Match - Local/County
P28052100621	Awendaw East Coast Greenway Phase 2		\$100	C						\$125		\$125	2021 RTP
			\$25	C									Match - Local/County
TA PROJECTS SUBTOTAL		\$1,163	\$225	\$63						\$288		\$1,450	
RURAL TIP GRAND TOTAL			\$219,229	\$5,166	\$20,554	\$155,902	\$156,544	\$155,378	\$33,509	\$13,119	\$540,172	\$1,058,603	

KEY: PE - Preliminary Engineering R - Right of Way C - Construction VA - Vehicle Acquisition OP - Operating Expenses CA - Capital Expenses PS - Purchase of Service PL - Planning RTP - Recreation Trails Program SIB - State Infrastructure Bank

¹ AC (Advanced Construction) reflects the use of state funds to initiate a project. Represents the commitment of state funds to satisfy the programming levels exceeding available federal funding in a given year.

² AC Conversion (Advanced Construction Conversion) reflects the conversion of state funds to federal funds in the future.

Berkeley-Charleston-Dorchester Council of Governments

MEMORANDUM

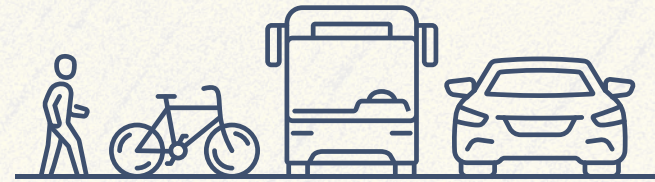
Date: August 28, 2023
To: BCDCOG Board of Directors
From: Ron Mitchum, Executive Director
Subject: Rural Transportation Planning Work Program (RPWP FY24-FY25) – Amendment

The BCD Rural Planning Work Program (RPWP) for transportation related planning activities to be undertaken in the region's rural planning area was adopted for FY2024 & FY2025 in April 2023. The RPWP establishes a two-year program of work that includes goals, objectives and tasks for the prescribed fiscal years that reflects legislative requirements under the planning rule updates to federal surface transportation regulations with changes adopted in the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Fixing America's Surface Transportation (FAST) Act, and the Bipartisan Infrastructure Law (BIL)/Infrastructure Investment and Jobs Act (IIJA) passed in November 2021 which provides five years of continued funding for surface transportation infrastructure planning and investment.

The proposed amendment for consideration includes programming of grant funds secured after the work plan was adopted and adjustment to associated planning activities that will be undertaken in Fiscal Year 2024. Work plan adjustments include:

1. Task C4: Transit Service Assistance – Addition of FTA's FY 2023 Areas of Persistent Poverty (AoPP) Program grant awarded to BCDCOG to develop the Tri-County Link (TCL) On-Demand Rural Transit Development Plan.
2. Task B1: Technical Assistance – Modification of work activities to include planning support in the development and implementation of the Tri-County Link (TCL) On-Demand Rural Transit Development Plan.

An updated document has been posted for public comment through September 7, 2023. Pending no substantive comments and approval by the BCD Board of Directors, the amended rural work plan will be submitted to SCDOT, FHWA, and FTA for their record.



RURAL PLANNING WORK PROGRAM

Fiscal Years 2024 & 2025



BERKELEY-CHARLESTON-DORCHESTER
COUNCIL OF GOVERNMENTS

PLANNING, PARTNERSHIP & PROSPERITY

July 1, 2023 to June 30, 2025

Adopted: April 17, 2023

Draft Amendment



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**RESOLUTION CERTIFYING
THE BCDCOG
RURAL PLANNING WORK PROGRAM FOR FY2024 & FY2025**

WHEREAS, the Berkeley-Charleston-Dorchester Council of Governments has found that the regional agency serving county governments is conducting transportation planning in a continuous, cooperative, and comprehensive manner in accordance with 23 U.S.C. 134 and 49 U.S.C. 1607, as amended;

WHEREAS, the Berkeley-Charleston-Dorchester Council of Governments has found the transportation planning process to be in compliance with Sections 174 and 176 (c) and (d) of the Clean Air Act (42 U.S.C. 7504, 7506 (c) and (d));

WHEREAS, the Berkeley-Charleston-Dorchester Council of Governments has found the Transportation Planning Process to be in full compliance with Title VI of the Civil Rights Act of 1964 and the Title VI Assurance executed by each State under 23 U.S.C. 324 and 29 U.S.C. 794;

WHEREAS, the Berkeley-Charleston-Dorchester Council of Governments has considered how the Transportation Planning Process will affect the involvement of Disadvantaged Business Enterprises in the FHWA and the FTA funded planning projects (Sec. 105(f), Pub. L. 97-424, 96 Stat. 2100, 49 CFR part 23);

WHEREAS, the Berkeley-Charleston-Dorchester Council of Governments has considered how the Transportation Planning Process will affect the elderly and the disabled per the provision of the Americans with Disabilities Act of 1990 (Pub. L. 101-336, 104 Stat. 327, as amended) and the U.S. DOT implementing regulations;

WHEREAS, the Berkeley-Charleston-Dorchester Council of Governments Rural Transportation Improvement Program is a subset of the currently conforming 2040 Rural Long-Range Transportation Plan;

WHEREAS, the Transportation Plan has a planning horizon year of 2040, and meets all the requirements for an adequate Transportation Plan,

NOW THEREFORE, be it resolved that the Berkeley-Charleston-Dorchester Council of Governments Board of Directors certifies the FY2024 and FY2025 Rural Planning Work Program for the Berkeley-Charleston-Dorchester Council of Governments on this the 17th day of April 2023.

READ AND ADOPTED the 17th day of April 2023.


Caldwell Pinckney, Jr., Chairman

Certified true and correct copy of a resolution adopted by the BCDCOG Board of Directors on April 17, 2023.


Ronald E. Mitchum

Executive Director
Title

4/17/23
Date

As a regional agency serving Berkeley, Charleston, and Dorchester counties, the Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) assists the South Carolina Department of Transportation (SCDOT) with statewide planning responsibilities in the tri-county area. BCDCOG will undertake the following transportation planning activities within rural areas of the region during fiscal years 2024 and 2025. This document was made available for public review and comment from April 3, 2023 to April 24, 2023 with no comments received. This final document was approved by the BCDCOG Board of Directors on April 17, 2023.

PURPOSE OF THE FY2024-FY2025 RURAL PLANNING WORK PROGRAM

The Rural Planning Work Program (RPWP) consolidates all transportation planning and directly supporting comprehensive planning activities, anticipated for the non-urbanized area of the Berkeley-Charleston-Dorchester region, during the upcoming fiscal years (FY2024 and FY2025). The rural program is coordinated with comparable activities of the Charleston Area Transportation Study (CHATS) Metropolitan Planning Organization (MPO) to ensure continuity between urban and rural transportation programs. Additionally, the program is intended to provide a mechanism for the coordination of rural transportation planning efforts by local, state, and regional agencies through the BCDCOG.

The U.S. Department of Transportation (USDOT) and its modal administrations - Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and Federal Transit Administration (FTA) - reference this RPWP as a basis and condition for all funding assistance to state, local and regional agencies for transportation planning. SCDOT coordinates with the COG to facilitate an on-going transportation planning process that defines both urban and rural regional transportation priorities as required by 23 CFR 450.218 (a) and (b).

BCDCOG ORGANIZATION & MANAGEMENT

The BCDCOG Rural Planning Area encompasses *non-urbanized* portions of Berkeley, Charleston, and Dorchester counties that are also *not* expected to be urbanized by the year 2040. The boundaries conform to guidelines issued by FHWA and FTA, for establishing transportation study areas. Within the BCDCOG rural area, there are 12 incorporated towns and three county governments. A map showing the BCDCOG Rural Planning Area, updated to account for the 2010 urbanized area, is included on page iii. Amendment to the rural planning area will be made pending CHATS urban area boundary adjustment approval, based on the 2020 urban area designation.

The BCDCOG rural planning area is the responsibility of four agencies operating at different levels of government. Rural transportation policy decisions are designated to the BCDCOG Board of Directors, which is governed by its bylaws. BCDCOG is responsible for providing local technical staff support to the Board of Directors and the Rural Transportation Study Committee. The Rural Transportation Study Committee is engaged as needed, and is tasked with supporting the transportation planning process by providing technical analysis and review of BCDCOG plans (including development of the Rural Long-Range Transportation Plan (LRTP), programs, studies and issues, and offer guidance and recommendation to the BCDCOG Board of Directors. State participation is provided by SCDOT in conjunction with FHWA and FTA.

The RPWP is developed biannually, with updates to the document occurring in intermittent years. While it is the mission of BCDCOG to complete work planned within a program year, task elements may span multiple fiscal years and are carried forward into subsequent work programs until completion.

STAFFING

The work proposed under the RPWP will be accomplished by BCDCOG with the assistance and cooperative support of the participating BCDCOG member governments and private consultants, where appropriate.

BCDCOG Staff

A permanent, interdisciplinary professional planning staff has been assembled to carry out the RPWP. This staff consists of an Executive Director and professional, technical, and support personnel, who pursue specific BCDCOG work program task elements under the direction of the BCDCOG Board of Directors.

SCDOT Staff

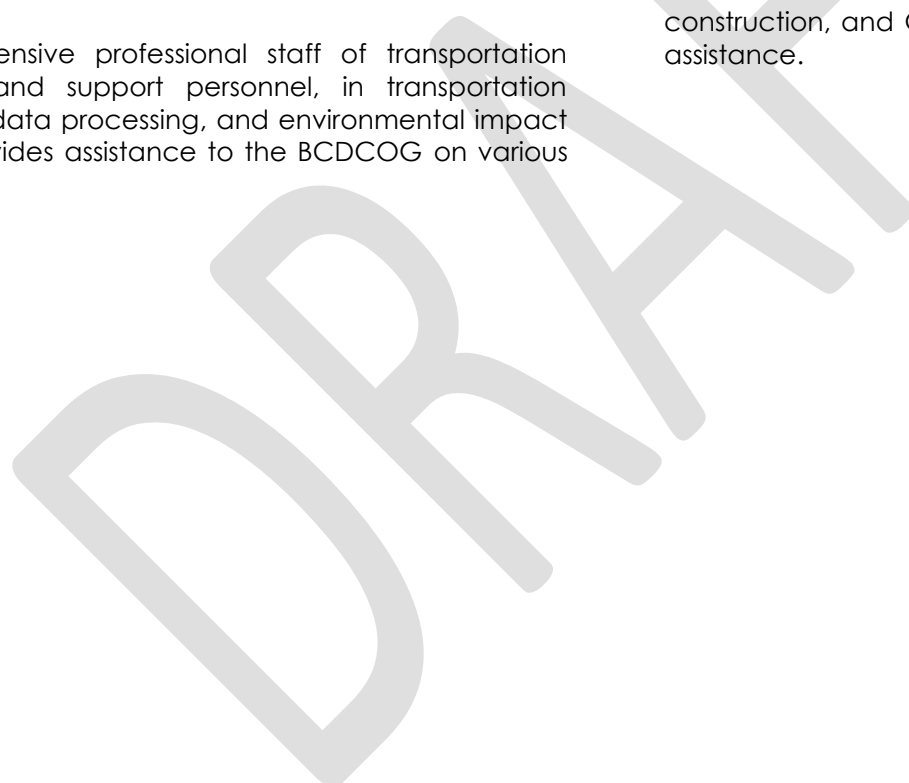
SCDOT has an extensive professional staff of transportation planners, analysts and support personnel, in transportation planning, research, data processing, and environmental impact analysis. SCDOT provides assistance to the BCDCOG on various issues as requested.

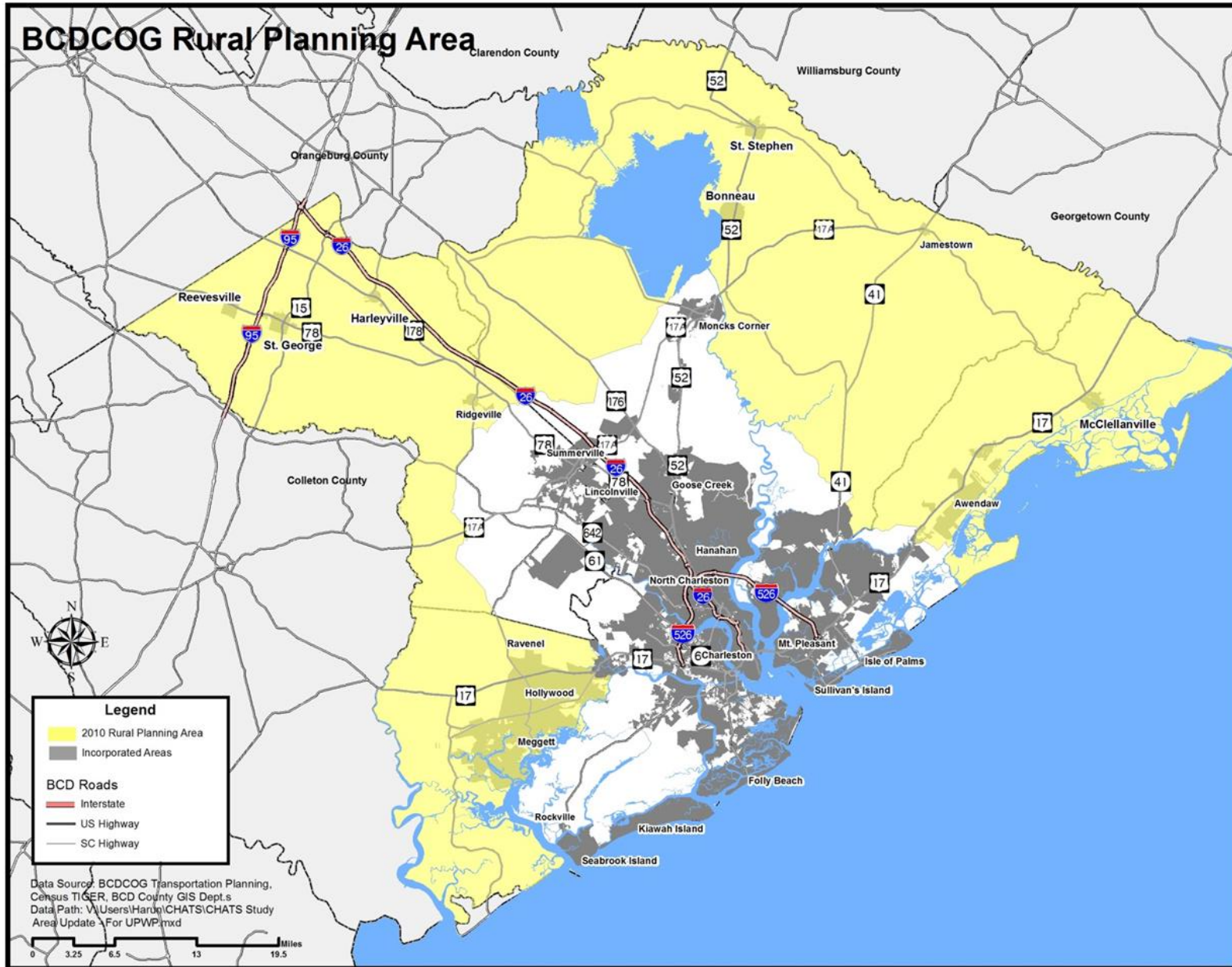
County Planning, Engineering, GIS & Economic Development Staff for Berkeley, Charleston and/or Dorchester counties

Staffs from departments responsible for transportation planning and construction at the county level provide support to this program and the BCDCOG with planning, engineering, construction, and GIS-related data assistance.

Municipal Planning, Engineering, Public Works, GIS & Economic Development Staff

Staff is responsible for transportation planning and construction for municipalities in the region's rural areas. These municipalities coordinate with the BCDCOG for planning, engineering, construction, and Geographic Information System (GIS) services assistance.





TRANSPORTATION PLANNING FRAMEWORK

On November 15, 2021, President Biden signed the Infrastructure Investment & Jobs Act ([Public Law 117-58](#), also known as the Bipartisan Infrastructure Law or “BIL”) into law providing five years of funding for surface transportation infrastructure, water infrastructure, resiliency projects, and broadband. The BIL authorized \$550 billion over fiscal years 2022 through 2026 and maintains the transportation focus on safety, keeps intact the established structure of the various highway-related programs, continues efforts to streamline project delivery, and provides a dedicated source of federal dollars for freight and micromobility projects. With the enactment of the BIL, states and local governments are moving forward with critical transportation projects.

In accord with guidance from FHWA, FTA and SCDOT, BCDCOG has adopted performance goals and measures to assess effectiveness of the region's transportation program during the upcoming fiscal year. The processes used to identify needed transportation improvements and project selection will continue to be guided to achieve the following goals set forth in the federal planning factors (FPF) established by the FAST Act and maintained under BIL:

- FPF-1:** *Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.* The BCDCOG will coordinate transportation projects with SCDOT, local governments and agencies to improve economic competitiveness in the BCD Rural Planning Area.
- FPF-2:** *Increase the safety of the transportation system for motorized and non-motorized users.* BCDCOG will encourage and support transportation projects that include enhanced safety features for transportation in the region. The safety measures to be included are, but are not limited to, pedestrian facilities, bicycle facilities, and complete streets while coordinating with the local and state governments to complete projects.
- FPF-3:** *Increase the security of the transportation system for motorized and non-motorized users.* Coordinated planning efforts will enhance safety and security to residents and provide options for resiliency emergency plans. Security issues will be reflected in the rural planning process as a part of goal development, needs assessment and project identification.
- FPF-4:** *Increase the accessibility and mobility of people and goods.* BCDCOG amends the 2021-2027 Rural Transportation Improvement Program (RTIP) as needed. The region's travel demand modeling capability will continue to be used as a tool to analyze the current highway network and projected future network demand into the rural areas where possible. Mobility of people and freight movement will be addressed through planning for land use development that makes efficient use of the transportation infrastructure.
- FPF-5:** *Protect and enhance the environment, promote energy conservation, and promote consistency between transportation improvements and state and local planned growth, housing, and economic development patterns.* BCDCOG will work with state and local governments and agencies to coordinate transportation projects, including those planned in support of identified centers, Transit Oriented Development (TOD) station areas, and economic development nodes, in a consistent, equitable, affordable, and environmentally sound manner.
- FPF-6:** *Enhance the integration and connectivity of the transportation system across and between modes, for people and freight.* BCDCOG will coordinate activities identified by examining integration of transportation systems for the region. BCDCOG will

administer implementation of the human services transportation coordination plan and provide support in service coordination between the urban and rural transit systems. Transportation projects will also be designed to enhance the interface between modes through programs such as Complete Streets, Transportation Demand Management, Transportation Alternatives Programs, and comprehensive land use planning.

FPF-7: *Promote efficient system management and operation.* BCDCOG will work with SCDOT on funding system improvements that promote efficient operations such as project design, selection and programming.

FPF-8: *Emphasize the preservation of the existing transportation system.* In all plans and projects BCDCOG will examine the existing transportation system before making recommendations for improvements. To facilitate this, the BCDCOG will continue to employ its GIS-based information system, the travel demand model for the region, and the project ranking process that emphasizes multimodal transportation solutions with the greatest benefits at the lowest cost.

FPF-9: *Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.* In all plans and projects, the BCDCOG will continue to examine the impacts of nuisance flooding and climate change/sea level rise projections on the existing transportation system before making recommendations for improvements. To facilitate this, the BCDCOG will continue to coordinate with entities, including but not limited to the Charleston Resiliency Network, to identify strategies for mitigating impacts of nuisance flooding and inadequate stormwater systems while improving the resiliency of the region's infrastructure, including transportation.

FPF-10: *Enhance travel and tourism.* The BCDCOG will continue to coordinate with the Charleston Visitors Bureau and regional chambers of commerce to identify transportation issues and needs for visitors, as well as the mobility of residents employed in tourism related industries.

FHWA-FTA 2021 Planning Emphasis Areas

The FHWA and FTA Offices of Planning jointly issued updated Planning Emphasis Areas (PEAs) in December 2021, for consideration by metropolitan planning organizations, state departments of transportation, transit agencies, and federal land management agencies in the development of Unified Planning Work Programs and Statewide Planning and Research Programs. The eight (8) federal PEAs are as follows:

PEA-1: *Tackling the Climate Crisis – Transition to a Clean Energy, Resilient Future.* Encourages use of the transportation planning process and infrastructure investments to help achieve the national greenhouse gas reduction goals, and increase resilience to extreme weather events and other disasters resulting from the increasing effects of climate change.

PEA-2: *Equity and Justice⁴⁰ in Transportation Planning.* Encourages State DOTs, MPOs, and public transportation providers to advance racial equity and support for underserved and disadvantaged communities.

PEA-3: *Complete Streets.* Encourages State DOTs, MPOs, and public transportation providers to review current policies, rules, and procedures to determine their impact on safety for all road users. Efforts should work to include provisions for safety in future transportation infrastructure, particularly those outside automobiles.

- PEA-4: Public Involvement.** Encourages early, effective and continuous public involvement to bring diverse viewpoints into the decision-making process. State DOTs, MPOs, and public transportation providers are encouraged to increase meaningful engagement in transportation planning by integrating Virtual Public Involvement (VPI) tools into the overall public involvement approach while ensuring continued public participation by individuals without access to computers and mobile devices.
- PEA-5: Strategic Highway Network (STRAHNET)/U.S. Department of Defense (DOD) Coordination.** Encourages State DOTs and MPOs to coordinate with representatives from DOD in the transportation planning and project programming process on infrastructure and connectivity needs for STRAHNET routes and other public roads that connect to DOD facilities including military bases, ports, and depots.
- PEA-6: Federal Land Management Agency (FLMA) Coordination.** Encourages coordination with FLMAs in the transportation planning and project programming process on infrastructure and connectivity needs related to access routes and other public roads and transportation services that connect to Federal lands.
- PEA-7: Planning and Environmental Linkages (PEL).** Encourages State DOTs, MPOs, and public transportation providers to implement PEL as part of the transportation planning and environmental review process. This approach facilitates interagency relationship building among planning, resource and regulatory agencies in the early stages of planning to inform and improve project delivery timeframes, including minimizing duplication and creating one cohesive flow of information.
- PEA-8: Data in Transportation Planning.** Encourages state, MPO, and public transportation providers to incorporate data assets, including data management and data sharing principles, into the transportation planning process.

SUMMARY OF MAJOR PROGRAMMED ACTIVITIES

The FY2024/FY2025 BCDCOG RPWP is based on the BCDCOG 2040 Rural Long-Range Transportation Plan, which was updated and approved by the BCDCOG Board of Directors on June 29, 2020. Emphasis has been placed on developing a program which can be reasonably accomplished with available staff and consultant resources, and which is in keeping with the priorities of the BCDCOG region. This FY2024/FY2025 RPWP emphasizes activities that promote the implementation of the existing plan.

Tasks within this work program are organized into several major categories to facilitate review and management as follows:

Task Group A Program Administration and Support

This task group includes general administration, professional services, public participation, and RPWP development and maintenance.

Task Group B Short-Range Transportation Planning

This task group includes projects which can be implemented in shorter timeframes and is comprised of activities related to providing technical assistance, complete streets planning support, reporting and data collection, and GIS activities.

Task Group C Rural Long-Range Transportation Planning (LRTP)

The majority of RPWP tasks falls under this category, and are either annual activities or long-term projects. Tasks include implementation of the Rural Long-Range Transportation Plan and Regional Human Services Transportation Coordination Plan, activities related to freight and transit planning, and maintenance of the regional travel demand model.

Task Group D Rural Transportation Improvement Program (RTIP)

This category includes various tasks associated with the administration and maintenance of the RTIP. This document identifies projects and programs that receive various sources of federal funds covering highway, transit, and intermodal facilities and programs.

The following matrix summarizes how the FY 2024 & FY 2025 RPWP elements/tasks relate to each of the Federal Planning Factors (FPFs) and Planning Emphasis Areas (PEAs).

RPWP Elements/Tasks and Federal Planning Factors (FPF) & Planning Emphasis Areas (PEA) Matrix

RPWP	Federal Planning Factors (FPF)										Planning Emphasis Areas (PEA)							
	FPF-1	FPF-2	FPF-3	FPF-4	FPF-5	FPF-6	FPF-7	FPF-8	FPF-9	FPF-10	PEA-1	PEA-2	PEA-3	PEA-4	PEA-5	PEA-6	PEA-7	PEA-8
Elements/Tasks	Economic Vitality	Safety	Security	Access & Mobility	Protect & Enhance the Environment	Integration & Connectivity	System Management & Operation	System Preservation	Resiliency & Reliability	Enhance Travel & Tourism	Tackling the Climate Crisis	Equity & Justice40	Complete Streets	Public Involvement	STRAHNET/DOD Coordination	FLMA Coordination	Planning & Environmental Linkages	Data in Transportation Planning
Task Group A: Program Administration & Support																		
A1 – General Administration												X		X				X
A2 – Professional Services	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
A3 – Public Participation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
A4 – RPWP Development & Maintenance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Task Group B: Rural Short-Range Transportation Planning																		
B1 – Technical Assistance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
B2 – Reporting, Data Collection & Analysis	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
B3 – GIS Maintenance & Utilization	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
B4 – Complete Streets	X	X	X	X	X	X	X		X	X	X	X	X					X
Task Group C: Rural Long-Range Transportation Planning																		
C1 – Rural Long-Range Plan	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C2 – Human Service Coordination	X			X		X			X	X	X	X		X				X
C3 – Multimodal Freight & Transit Planning	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C4 – Transit Service Assistance	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X
C5 – Rural Travel Demand Model	X	X		X		X	X	X		X	X							X
Task Group D: Rural Transportation Improvement Program																		
D1 – Rural TIP Development & Maintenance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Berkeley Charleston Dorchester Council of Governments

RURAL PLANNING WORK PROGRAM

FY 2024 & FY 2025

(July 1, 2023 – June 30, 2025)

TASK GROUP A

Program Administration and Support

A1 – General Administration

A2 – Professional Services

A3 – Public Participation

A4 – RPWP Development & Maintenance

Task A1 – General Administration

Objectives: To initiate and manage the transportation planning process, ensuring that it is continuous, cooperative, and comprehensive and that it complies with applicable state/federal laws and regulations.

Methodology:

BCDCOG will provide staff support to the BCDCOG Board of Directors, Executive Committee, and Rural Transportation Study Team, in addition to other permanent and ad-hoc committees. The primary function of staff is to implement the work tasks as described in this RPWP. Other administrative activities include, but are not limited to the following:

- A. Serve as liaison to FHWA, FTA, SCDOT, and other transportation related agencies to ensure coordination and compliance.
- B. In coordination with SCDOT, provide administrative support and technical assistance to the BCDCOG Board of Directors, Executive Committee, Rural Transportation Study Team, and other permanent and ad-hoc committees, as needed.
- C. Maintain financial records of all revenues and expenditures.
- D. Prepare and distribute meeting notices and agenda packages for all BCDCOG committees and subcommittees.
- E. Identify, prepare, and perform administrative procedures, such as quarterly reports, financial statements, and meeting documentation.
- F. Prepare required certification documentation, agreements, resolutions, memoranda of understanding, etc.
- G. Maintain agreements between local governmental agencies and the BCDCOG.
- H. Provide funds for purchase/maintenance of office inventory, including computer hardware/software and network maintenance, to support the BCDCOG planning program.
- I. Administer BCDCOG compliance with Title VI of the Civil Rights Act of 1964, and address Environmental Justice principles and procedures.
- J. Administer BCDCOG compliance with SCDOT and FTA Disadvantaged Business Enterprise (DBE) programs.
- K. Attend SCDOT, FHWA, FTA and other related training sessions, workshops and meetings, as required.

Responsibility/Partners:

BCDCOG, SCDOT, FHWA, FTA, and other agencies as appropriate.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.J.	Maintain documentation of public participation opportunities and activities, including meeting and workshop notices, BCDCOG newsletters, reports, press releases, maps, slide presentations, and maintenance of website(s) – <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
E.	Prepare meeting materials and reports quarterly – <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
K.	Attend quarterly statewide meetings of MPO/COG staff members – <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA

Task A1 Funding Sources FY2024:

FHWA (Rural)	\$10,000.00
LOCAL	\$2,500.00
OTHER	\$0.00
Total	\$12,500.00
% OF TOTAL BUDGET:	2.33%

Funding Sources FY2025*:

FHWA (Rural)	\$10,000.00
LOCAL	\$2,500.00
OTHER	\$0.00
Total	\$12,500.00
% OF TOTAL BUDGET:	8.00%

**RPWP budget and projected work product delivery is illustrative until approved by SCDOT*

Task A2 – Professional Services

Objectives: To enhance staff capacity through utilization of procured consultants for specific engineering, planning, or other technical services as needed in support of various BCDCOG annual planning activities.

Methodology:

Special projects of the BCDCOG may necessitate assistance from expert technical and professional services. BCDCOG will retain services of outside consultants to assist with technical activities and projects that implement this work program in accord with all acceptable and organizational procurement processes as needed. Included within these procedures are:

- A. Preparation and advertisement of Requests for Proposals or Qualifications in coordination with SCDOT.
- B. Review and scoring of submitted proposals.
- C. Recommendation of contracting to the Board of Directors/Executive Committee.
- D. Coordination of contract review by SCDOT.

Responsibility/Partners:

BCDCOG, SCDOT and FHWA.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.-D.	Task orders and contracts for procured technical and professional services to support staff in the various planning activities outlined in the RPWP – <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA

Task A2 Funding Sources FY2024:

FHWA (Rural)	\$2,000.00
LOCAL	\$500.00
OTHER	\$0.00
Total	\$2,500.00
% OF TOTAL BUDGET:	0.47%

Funding Sources FY2025*:

FHWA (Rural)	\$2,000.00
LOCAL	\$500.00
OTHER	\$0.00
Total	\$2,500.00
% OF TOTAL BUDGET:	1.60%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

Task A3 – Public Participation

Objectives: To ensure public involvement in the development of the Rural Long-Range Transportation Plan (LRTP), the RTIP, and special studies by conducting public outreach in a coordinated program to ensure that all segments of the public have an opportunity to comment on long- and short-term transportation planning efforts and specific projects.

Methodology:

As a means of disseminating information to the public about the transportation planning program, staff will continue to advertise STIP/RTIP revisions and communicate public comments to SCDOT prior to SCDOT Commission consideration. Tasks to accomplish include, but are not limited to the following:

- A. Disseminate information through traditional and non-traditional means, including the website, briefings, news releases, annual reports, and presentations to community groups;
- B. Document all public outreach efforts and evaluate strategies on an annual basis to ensure they parallel the procedures promulgated in state and federal legislation.
- C. Assist SCDOT in conducting public hearings and meetings on transportation improvement projects and programs in rural areas of the region.
- D. Coordinate with SCDOT on advertisement of STIP amendments related to regional projects of statewide significance.
- E. Provide education and training to boards, commissions, and elected officials on transportation related processes and issues.

Responsibility/Partners:

BCDCOG, Member Governments, and other agencies as appropriate.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.-E.	Maintain file of public participation opportunities and activities, including notices of meetings, workshops, BCDCOG newsletters, social media contacts, reports, press releases, maps, slide presentations, and maintenance of website(s): <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA

Task A3 Funding Sources FY2024:

FHWA (Rural)	\$1,200.00
LOCAL	\$300.00
OTHER	\$0.00
Total	\$1,500.00
% OF TOTAL BUDGET:	0.28%

Funding Sources FY2025*:

FHWA (Rural)	\$1,200.00
LOCAL	\$300.00
OTHER	\$0.00
Total	\$1,500.00
% OF TOTAL BUDGET:	0.96%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

Task A4 – RPWP Development & Maintenance

Objectives: To maintain a current Rural Transportation Planning Work Program (RPWP) describing rural transportation planning activities to be accomplished by BCDCOG in the upcoming fiscal years.

Methodology:

BCDCOG shall bi-annually prepare and annually review a RPWP with a description of work to be accomplished in the following two fiscal years, with cost estimates by activity or task, division of work responsibility, and identification of work items eligible for State Planning and Research (SPR) funding. Specific tasks to achieve this include, but are not limited to, the following:

- A. Prepare an update to the RPWP annually for consideration and comment by SCDOT.
- B. Submit the RPWP to the BCDCOG Board of Directors for approval prior to the beginning of the fiscal year.
- C. Post and publicize availability of the proposed RPWP for public comment.
- D. Process any necessary modifications to the RPWP with approval by SCDOT.

Responsibility/Partners:

BCDCOG, SCDOT and Member Governments.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.	Prepare draft RPWP for SCDOT review: <u>February 2024, February 2025</u>	X	X	FHWA (Rural)/FTA
B.	Submit RPWP for BCDCOG approval: <u>April 2024, April 2025</u>	X	X	FHWA (Rural)/FTA
C.D.	Prepare necessary modifications to the RPWP: <u>As needed through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA

Task A4 Funding Sources FY2024:

FHWA (Rural)	\$2,000.00
LOCAL	\$500.00
OTHER	\$0.00
Total	\$2,500.00
% OF TOTAL BUDGET:	0.47%

Funding Sources FY2025*:

FHWA (Rural)	\$2,000.00
LOCAL	\$500.00
OTHER	\$0.00
Total	\$2,500.00
% OF TOTAL BUDGET:	1.60%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

Berkeley Charleston Dorchester Council of Governments

RURAL PLANNING WORK PROGRAM

FY 2024 & FY2025

(July 1, 2023 – June 30, 2025)

TASK GROUP B

Rural Short-Range Transportation Planning

B1 – Technical Assistance

B2 – Reporting, Data Collection & Analysis

B3 – Geographic Information System (GIS) Maintenance & Utilization

B4 – Complete Streets

Task B1 – Technical Assistance

Objectives: To provide technical assistance with rural transportation planning and related activities to the counties and jurisdictions within the rural transportation planning area

Methodology:

Provide technical assistance to member governments, public and private organizations, and the general public as needed and requested including, but not limited to the following:

- A. Assist local governments in the assessment, interpretation and enforcement of local land use activities having an impact on transportation systems in the rural area, including provision of training on the use of scenario planning tools.
- B. Provide technical support to the County Transportation Sales Tax programs to develop project evaluation and programming for implementation.
- C. Coordinate transportation projects with the County Transportation Committees (CTCs).
- D. Continue to coordinate with jurisdictions and agencies to enhance bicycle and pedestrian connections consistent with the Palmetto Trail, Francis Marion National Forest master plan and other local and regional plans, including the East Coast Greenway.
- E. Work with SCDOT on pre-screening of rural transportation projects for environmental, historic, environmental justice, and civil rights concerns within proposed project areas.
- F. Assist and support local jurisdictions in developing transportation enhancement projects from inception to application and project execution.
- G. Provide support to SC Works to address the transportation needs of disadvantaged rural residents to/from job training and/or places of employment.
- H. Coordinate with local municipalities on identification of opportunities to expand broadband access in rural areas to promote regional economic activity and reduce demand on the transportation network.
- I. Provide local government assistance for all phases of transportation project development, including procurement of consultants for specific engineering, planning or other required services in support of the on-going planning activities at BCDCOG as needed.
- J. Assist with preparation of transportation elements for all comprehensive plan updates by member jurisdictions.
- K. Attend training related to rural programs and current trends in transportation planning methods (including travel and lodging expenses, registration, purchase of publications and other related expenses) to enhance staff capacity.
- L. Provide support to local transit providers in long-term system and on-going route planning.

- M. Support development of the Tri-County Link (TCL) On-Demand Rural Transit Development Study/Plan (referenced under Task C4 (I)) to identify solutions, including micro-transit service options, provide service planning assistance and support implementation of recommendations.
- N. Coordinate with SCDOT Office of Public Transit to facilitate applications made by regional agencies for FTA Sections 5310 and 5311 formula grant programs reauthorized under IJA/BIL.
- O. Continue the Mobility Management program to facilitate trip planning assistance and related travel information to citizens and transportation demand management to preserve system capacity.

Responsibility/Partners: BCDCOG, Consultant, BCDCOG Member Governments, SCDOT, FHWA, FTA and other agencies as appropriate.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.O.	Copies of meetings and training notices, reports, newsletter articles – <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
B.C.	Copies of County TST/CTC project status reports – <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
J.	Copies of Comprehensive Plan transportation elements: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
N.	Copies of FTA funding grant applications – <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
M.	Support development of Tri-County Link On-Demand Transit Development Plan and implementation of recommendations: <u>October, 2023/2024</u>	X	X	FHWA (Rural)/FTA

Summary of Select Tasks/Projects:

Work	Project/Task	Description	Proposed Procurement	Schedule	Budget	Proposed Funding
M.	TCL On-Demand Rural Transit Development Plan Support & Implementation	Support the development and implementation of an on-demand public transportation service solution that will complement and enhance the efficiency and effectiveness of Tri-County Link's rural operation.	COG/Consultant	FY 2024 – FY 2025	\$30,000	FHWA (Rural)/FTA

Task B1 Funding Sources FY2024:

FHWA (Rural)	\$72,485.00
LOCAL	\$18,121.00
OTHER	\$0.00
Total	\$90,607.00
% OF TOTAL BUDGET:	16.90%

Funding Sources FY2025*:

FHWA (Rural)	\$72,485.00
LOCAL	\$18,121.00
OTHER	\$0.00
Total	\$90,607.00
% OF TOTAL BUDGET:	57.99%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

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Task B2 – Information Reporting, Data Collection & Analysis

Objectives: To collect, analyze and utilize various forms of data and prepare publications of such information in support of daily planning operations of BCDCOG and member jurisdictions.

Methodology:

Staff will collect and disseminate information from and to SCDOT, partner agencies and the public as follows:

- A. Provide maps and mapping services of transportation networks and traffic count locations for the region.
- B. Assist local governments and citizens in accessing and interpreting Census data results through production of publications and responding to individual information requests.
- C. Collect and share statistical information and maps of Census data, population growth trends, building permits, socio-economic data, traffic counts, forecasts and congestion, including non-motorist travel patterns and use of cycling/pedestrian facilities, to individuals, agencies, and organizations in the region.
- D. Analyze data from the Census Transportation Planning Program (CTPP) to delineate commuting patterns in the region.
- E. Publish statistical and program information on the BCDCOG website and in printed publications.
- F. Research and monitor economic development and growth trends.
- G. Compile and report building permit activity throughout the region.
- H. Track issuance of water quality permits and coordinate update of the regional 208 Plan.

Responsibility/Partners:

BCDCOG, SCDOT, and Member Governments.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.H.	Maintain file of reports on regional trends, newsletter articles and web postings: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
G.	Publication of quarterly Construction Activity reports: <u>Quarterly through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA

Task B2 Funding Sources FY2024:

FHWA (Rural)	\$5,200.00
LOCAL	\$1,300.00
OTHER	\$0.00
Total	\$6,500.00
% OF TOTAL BUDGET:	1.21%

Funding Sources FY2025*:

FHWA (Rural)	\$5,200.00
LOCAL	\$1,300.00
OTHER	\$0.00
Total	\$6,500.00
% OF TOTAL BUDGET:	4.16%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

Task B3 – Geographic Information System (GIS) Maintenance & Utilization

Objectives: To create/maintain/manage various database and software systems necessary for BCDCOG GIS support of planning activities.

Methodology:

BCDCOG staff will provide on-going GIS maintenance and technical support for various transportation planning activities including analysis for the Rural LRTP, the Rural TIP, traffic monitoring and congestion management systems, and freight movement. Anticipated activities include:

- A. Conduct on-going GIS maintenance and technical support to include updating and QA/QC of all data layers.
- B. Coordinate GIS activities within the BCDCOG, and with member jurisdictions, state and federal agencies.
- C. Continue to participate in statewide and regional forums to ensure efficient data sharing and avoid duplication of efforts.
- D. Maintain web accessible data feeds, and implement enhanced web mapping applications on a quarterly basis.
- E. Utilize GIS to generate internally and externally requested maps and to perform all spatial analysis in creating office publications.
- F. Create and update a master transportation network database in ArcGIS to centrally store and manage various transportation related datasets, to support the regional travel demand forecasting system.

Responsibility/Partners:

BCDCOG, Member Governments, and other agencies as appropriate

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.-F.	Comprehensively review, update and maintain GIS database in coordination with county and state agencies: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA

Task B3 Funding Sources FY2024:

FHWA (Rural)	\$1,200.00
LOCAL	\$300.00
OTHER	\$0.00
Total	\$1,500.00
% OF TOTAL BUDGET:	0.28%

Funding Sources FY2025*:

FHWA (Rural)	\$1,200.00
LOCAL	\$300.00
OTHER	\$0.00
Total	\$1,500.00
% OF TOTAL BUDGET:	0.96%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

Task B4 – Complete Streets

Objectives: To transform transportation corridors from vehicle-dominated thoroughfares into community-oriented streets which safely and conveniently accommodate all modes of travel.

Methodology:

BCDCOG will assist local jurisdictions and SCDOT in developing plans and projects that are context-sensitive and meet Complete Streets principles by performing activities such as, but not limited to, the following:

- A. Coordinate with local jurisdictions to develop, adopt, and implement complete streets policies.
- B. Coordinate transportation project design activities with SCDOT, County transportation sales tax and CTC programs to assist with development and design review of proposed transportation facilities such that they follow local complete streets policy as well as DOT's complete streets departmental directive.
- C. Continue to maintain/update and implement the regional pedestrian/bicycle plan, integrate targeted safety efforts and solutions within plan and project development, and support implementation of the Transit and Bus Stop Design Guidelines to ensure complete intermodal facilities are included as an integral part of the design of local roads/transportation system improvements.
- D. Attend and/or host staff training on latest planning techniques for complete streets, safety strategies and safe systems approaches, and bicycle/pedestrian facilities.

Responsibility/Partners:

BCDCOG, Member Governments, and other agencies as appropriate.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.	Provide technical assistance to local jurisdictions to develop, adopt and implement complete streets policy: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
B.C.	Assist with development and design review of proposed transportation facilities, in coordination with project partners including SCDOT, local jurisdictions, and local transit providers, such that they follow state and locally adopted complete streets policies or directives: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA

Summary of Select Tasks/Projects:

Work	Project/Task	Description	Proposed Procurement	Schedule	Budget (Fed/Local)	Proposed Funding
A.	Complete Streets policy development	Technical assistance – Dorchester County	COG	FY 2024	\$1,562 / \$390	FHWA (Rural)/FTA
B.C.	Support coordinated plan and project development activities	-	COG	FY 2024	\$1,563 / \$391	FHWA (Rural)/FTA

Task B3 Funding Sources FY2024:

FHWA (Rural)	\$3,125.00
LOCAL	\$781.00
OTHER	\$0.00
Total	\$3,906.00
% OF TOTAL BUDGET:	0.73%

Funding Sources FY2025*:

FHWA (Rural)	\$3,125.00
LOCAL	\$781.00
OTHER	\$0.00
Total	\$3,906.00
% OF TOTAL BUDGET:	2.50%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

Berkeley Charleston Dorchester Council of Governments

RURAL PLANNING WORK PROGRAM

FY 2024 & FY2025

(July 1, 2023 – June 30, 2025)

TASK GROUP C

Rural Long-Range Transportation Planning

C1 – Rural Long-Range Transportation Plan (RLRTP)

C2 – Human Service Transportation Coordination

C3 – Multimodal: Freight & Transit Planning

C4 – Transit Service Assistance

C4 – Rural Travel Demand Forecasting

Task C1 – Rural Long-Range Transportation Plan

Objectives: To implement a long-range transportation plan for the rural planning area that is consistent with SCDOT's Statewide Multimodal Transportation Plan (MTP).

Methodology:

BCDCOG's LRTP, updated every five years, guides the leveraging and coordination of investment in the region's rural transportation infrastructure. Activities to accomplish this task include, but are not limited to:

- A. Collect and maintain socio-economic data and travel characteristics for use in developing plan updates.
- B. Coordinate opportunities for public involvement, visioning and goal-setting, project prioritization, and implementation strategies.
- C. Coordinate with SCDOT to provide current cost estimates and funding projections for projects proposed in the plan.
- D. Provide staff support to the Rural Transportation Study Committee in its implementation of the plan.
- E. Coordinate connectivity of bicycle/ pedestrian networks in rural areas as part of the regional micromobility plan (*WalkBike BCD*).
- F. Coordinate with SCDOT to prepare any amendments needed to ensure the BCDCOG rural plan is consistent with and implements recommendations of the statewide multimodal transportation plan.
- G. Ensure coordination between the Rural LRTP and the CHATS LRTP, County Transportation Committee projects, County Sales Tax and SCDOT Transportation Alternative programs.
- H. Seek funding to implement project-specific, financially-feasible long-range initiatives, addressing system upgrades, intersections/safety, freight, bridges, maintenance/resurfacing, signalization, mass transit, and bicycle/pedestrian elements, with assistance from SCDOT.
- I. Initiate and develop 5-yr update to Rural LRTP, to include consultant assistance if needed.
- J. Coordinate inclusion of goals/targets in the LRTP within 6 months of setting, to meet performance measures established by SCDOT.
- K. Coordinate inclusion of system performance report developed and provided by SCDOT as well as other supplemental reporting undertaken by BCDCOG, in the LRTP.

Responsibility/Partners:

BCDCOG, SCDOT and local jurisdictions.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.-H.	Maintain documentation file of all meeting notices, summaries or minutes and plan amendments – <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
A.-H.	Prepare and publish amendments to the Rural LRTP as needed: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
I.	Develop update to RL RTP: <u>July, 2024</u>	-	X	FHWA (Rural)/FTA
J.	Inclusion of performance measures/targets established by SCDOT into RL RTP: <u>On-going (within 6 months of setting)</u>	X	X	FHWA (Rural)/FTA
K.	Inclusion of system performance report developed by SCDOT into RL RTP: <u>March, 2024</u>	X	-	FHWA (Rural)/FTA

Task C1 Funding Sources FY2024:

FHWA (Rural)	\$8,000.00
LOCAL	\$2,000.00
OTHER	\$0.00
Total	\$10,000.00
% OF TOTAL BUDGET:	1.86%

Funding Sources FY2025*:

FHWA (Rural)	\$8,000.00
LOCAL	\$2,000.00
OTHER	\$0.00
Total	\$10,000.00
% OF TOTAL PL BUDGET:	6.40%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

Task C2 –Human Service Transportation Coordination

Objectives: To provide on-going updates to the Human Services Transportation Coordination Plan and enhance coordination among the region's human service agencies in order to address the existing gaps and opportunities for transportation services provided and eliminate duplication of services.

Methodology:

In order to accomplish this objective, BCDCOG staff will continue to coordinate and facilitate annual meetings of human service agencies, private transportation providers, and interested parties to do the following:

- A. Continue to identify agencies and services that are currently providing transportation to vulnerable population groups and the clientele that is currently being served.
- B. Assess existing services to determine overlaps and deficiencies in service being provided.
- C. Identify strategies and recommendations to address inefficiencies and gaps in services available.
- D. Assist agencies and organizations with implementation of these strategies and recommendations through the BCDCOG's Mobility Management program.

Responsibility/Partners:

BCDCOG, human services agencies, community services organizations and public/private transportation providers.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.D.	Coordinate annual meetings of the human service Coordination Group: <u>Annually through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA

Task C2 Funding Sources FY2024:

FHWA (Rural)	\$2,000.00
LOCAL	\$500.00
OTHER	\$0.00
Total	\$2,500.00
% OF TOTAL BUDGET:	0.47%

Funding Sources FY2025*:

FHWA (Rural)	\$2,000.00
LOCAL	\$500.00
OTHER	\$0.00
Total	\$2,500.00
% OF TOTAL BUDGET:	1.60%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

Task C3 – Multimodal Freight & Transit Planning

Objectives: To conduct multi-modal transportation planning in order to effectively address rural freight and rural public transportation issues as needed.

Methodology:

Anticipated activities include:

- A. Coordinate implementation of the Regional Freight Mobility Plan that affects rural areas of the region.
- B. Provide assistance with collection and/or analysis of freight mobility to use in development of a freight module of the regional travel demand model.
- C. Continue to collect, maintain, and update socioeconomic and land use data for transit planning activities.
- D. Coordinate with local rural jurisdictions, pedestrian and bicycle advocate groups, and regional partners to implement recommended improvements identified in the regional micromobility plan (*WalkBike BCD*).
- E. Provide assistance to local rural jurisdictions preparing comprehensive plan updates to integrate transit and freight mobility within the transportation and land use elements as outlined in the RL RTP.
- F. Participate in the I-95 Corridor Coalition Freight Academy to expand staff freight planning capabilities.

Responsibility/Partners

BCDCOG, SCDOT, FTA, FHWA, SC Ports Authority, transit providers, and other organizations as appropriate.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.B.	Regional Freight Mobility Plan Implementation: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
A.B.	Work with SCDOT on improving Critical Rural Freight Corridors: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
D.	Coordinate with jurisdictions, pedestrian and bicycle advocates, and regional partners on implementation of priority projects identified in <i>WalkBike BCD</i> : <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
F.	Apply to/participate in the "I-95 Corridor Coalition Freight Academy" program to expand staff freight planning capabilities: <u>Spring 2025</u>	-	X	FHWA (Rural)/FTA

Task C3 Funding Sources FY2024:

FHWA (Rural)	\$2,894.00
LOCAL	\$724.00
OTHER	\$0.00
Total	\$3,618.00
% OF TOTAL BUDGET:	0.67%

Funding Sources FY2025*:

FHWA (Rural)	\$2,894.00
LOCAL	\$724.00
OTHER	\$0.00
Total	\$3,618.00
% OF TOTAL BUDGET:	2.32%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

Task C4 – Transit Service Assistance

Objectives: To facilitate regional collaboration, coordination, and cooperation related to transit initiatives that enhance transit efficiency and effectiveness.

Methodology:

Anticipated activities include:

- A. Assist SCDOT with communication and cooperation among rural transportation providers.
- B. Assist public and human service agencies in assessing gaps and barriers in transportation delivery for the general public and disadvantaged groups in the region.
- C. Assist in the assessment of mobility and multimodal needs related to economic development, including implementation of the Rural Workforce Training Study recommendations.
- D. Continue regional Mobility Management activities, to advocate use of alternative transportation services and coordinate transportation for individuals seeking assistance with transportation needs.
- E. Facilitate opportunities for stakeholder meetings related to coordination of transit services, including but not limited to, implementation of the region's Transit Consolidation Plan.
- F. Assist SCDOT in dissemination of announcements and application packages for FTA funding opportunities available to transit and human service organizations, and transportation providers in the region.
- G. Assist SCDOT in evaluation and prioritization of recommended projects to enhance transit and transportation services for disadvantaged populations in rural areas of the region.
- H. Assist Tri-County Link with various planning studies, route evaluations, and technical assistance, including technical support to develop trip planning application, implementing mobile ticketing and AVL systems, etc., to enhance service connecting the rural system routes with service to the urban portions of the region and Charleston Area Regional Transportation Authority (CARTA) transfer points. Also assist Tri-County Link in meeting data reporting requirements to SCDOT.
- I. Develop Tri-County Link On-Demand Rural Transit Development Plan (FTA's AoPP awarded grant), which seeks to improve transit access and connectivity to Areas of Persistent Poverty and Historically Disadvantaged Communities in the TriCounty Link Service Area, and create a plan that connects the region's most vulnerable residents to existing and emerging job centers by filling in gaps in transit service with a modern, efficient, transit system.

Responsibility/Partners

BCDCOG / SCDOT OPT, Transit providers and other organizations as appropriate.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.H.	Anticipated activities: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
I.	Develop Tri-County Link On-Demand Rural Transit Development Plan: <u>October, 2023</u>	X	-	FTA AoPP Grant

Summary of Select Tasks/Projects:

Work	Project/Task	Description	Proposed Procurement	Schedule	Budget	Proposed Funding
I.	TCL On-Demand Rural Transit Development Plan	Develop an innovative on-demand transit service model for TCL to replace circuitous flag stop routing with efficient and reliable transit that expands the coverage area and connects rural areas to jobs and housing.	Consultant	FY 2024	\$342,000	FTA AoPP Grant
					\$38,000	Local Funds

Task C4 Funding Sources FY2024:

FHWA (Rural)	\$10,000.00
LOCAL	\$40,500.00
OTHER	\$342,000.00
Total	\$392,500.00
% OF TOTAL BUDGET:	73.19%

Funding Sources FY2025*:

FHWA (Rural)	\$10,000.00
LOCAL	\$2,500.00
OTHER	\$0.00
Total	\$12,500.00
% OF TOTAL BUDGET:	8.00%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

Task C5 – Rural Travel Demand Forecasting

Objectives: To develop and maintain travel forecasting capability by utilizing the regional travel demand model and applying the tool to rural areas.

Methodology:

BCDCOG will continue to enhance capacity of the current travel demand model particularly in areas outside the Charleston urban area to ensure rational planning and evaluation of the regional transportation systems by conducting the following activities:

- A.** Continue to collect, maintain, and update socio-economic data, land use forecasts, and roadway network geography for rural areas in the travel demand model.
- B.** Update key model components as applicable to stay abreast of current growth trends and reflect a horizon year of at least 25 years from model base conditions.
- C.** Employ the travel demand model to predict variations in travel patterns and utilization of transportation system in response to changes in demographics, development, and transportation infrastructure upgrades.
- D.** Provide technical support and oversight to rural municipalities to evaluate transportation planning projects and/or initiatives within their jurisdictions.

Responsibility/Partners:

BCDCOG, transit providers, SCDOT, and other agencies as appropriate.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.-B.	Identify funding sources for updating/maintaining the travel model database inputs (socio-economic, land use, networks): <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
C.	Develop model outputs: <u>As requested through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
D.	Provide model application & support: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA

Task C5 Funding Sources FY2024:

FHWA (Rural)	\$2,895.00
LOCAL	\$724.00
OTHER	\$0.00
Total	\$3,619.00
% OF TOTAL BUDGET:	0.67%

Funding Sources FY2025*:

FHWA (Rural)	\$2,895.00
LOCAL	\$724.00
OTHER	\$0.00
Total	\$3,619.00
% OF TOTAL BUDGET:	2.32%

*RPWP budget and projected work product delivery is illustrative until approved by SCDOT

Berkeley Charleston Dorchester Council of Governments

RURAL PLANNING WORK PROGRAM

FY 2024 & FY2025

(July 1, 2023 – June 30, 2025)

TASK GROUP D

Rural Transportation Improvement Program (RTIP)

D1 – Rural Transportation Improvement Program (RTIP) Development & Maintenance

Task D1 – Rural Transportation Improvement Program Development & Maintenance

Objectives: Maintain an updated Rural Transportation Improvement Plan (RTIP) which extends out for the seven fiscal years that is reflected in the Statewide TIP.

Methodology:

BCDCOG will coordinate with the Rural Transportation Study Team, SCDOT and local jurisdictions to maintain the current RTIP for FY2021-2027 in accordance with SCDOT STIP Development Schedule. Activities for this task will include:

- A. Continue to meet with local jurisdictional transportation departments and County Transportation Commissions (CTCs) to identify future improvements in local plans, projected costs, and funding sources.
- B. Continue discussions with the Rural Transportation Study Team to consider requested amendments to the RTIP.
- C. Coordinate with SCDOT to ensure the RTIP continues compliance with all federal and state requirements.
- D. Maintain the current and updated RTIP as necessary, in cooperation with the SCDOT and local government agencies.
- E. Coordinate public reviews, final approvals, adoption, and distribution.
- F. In cooperation with SCDOT, ensure the STIP and RTIP are consistent and reflect actions by SCDOT's Commission, including a financial plan and summary of the project's purpose and need, as well as an Act 114 rating procedure and score.
- G. Initiate and develop RTIP update in coordination with the state for the new STIP window.

Responsibility/Partners:

BCDCOG, SCDOT, Member Governments, and other agencies as appropriate.

Work Schedule and End Products:

Work	Products	FY 2024	FY 2025	Proposed Funding
A.B.	Maintain file of Rural Study Team meeting notices and minutes: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
B.F.	Prepare draft RTIP amendments: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
C.-F.	Maintain file of BCDCOG/SCDOT correspondence on STIP/RTIP amendments and corrections: <u>On-going through June 30, 2024/2025</u>	X	X	FHWA (Rural)/FTA
G.	Update BCD RTIP in coordination with SCDOT for the new STIP window: <u>July, 2023</u>	X	-	FHWA (Rural)/FTA

Task D1 Funding Sources FY2024:

FHWA (Rural)	\$2,000.00
LOCAL	\$500.00
OTHER	\$0.00
Total	\$2,500.00
% OF TOTAL BUDGET:	0.47%

Funding Sources FY2025*:

FHWA (Rural)	\$2,000.00
LOCAL	\$500.00
OTHER	\$0.00
Total	\$2,500.00
% OF TOTAL BUDGET:	1.60%

SUMMARY of ANNUAL BUDGET: FY2024 RPWP						
TASK		FUNDING SOURCES				
		PL- Consolidated		Additional Funds		Total
TASK ID	TASK DESCRIPTION	FHWA/FTA - Rural Planning	BCDCOG Match for FHWA/FTA - Rural Planning	Other Federal	Local Match	
A1	General Administration	\$10,000	\$2,500			\$12,500
A2	Professional Services	\$2,000	\$500			\$2,500
A3	Public Participation	\$1,200	\$300			\$1,500
A4	Rural Planning Work Program Development & Maintenance	\$2,000	\$500			\$2,500
Total		\$15,200	\$3,800			\$19,000
B1	Technical Assistance	\$72,485	\$18,121			\$90,607
B2	Reporting, Data Collection and Analysis	\$5,200	\$1,300			\$6,500
B3	Geographic Information System Maintenance and Utilization	\$1,200	\$300			\$1,500
B4**	Complete Streets	\$3,125	\$781			\$3,906
Total		\$82,010	\$20,503			\$102,513
C1	Rural Long Range Transportation Plan	\$8,000	\$2,000			\$10,000
C2	Human Service Transportation Coordination	\$2,000	\$500			\$2,500
C3	Multimodal Freight and Transit Planning	\$2,894	\$724			\$3,618
C4	Transit Service Assistance	\$10,000	\$2,500	\$342,000	\$38,000	\$392,500
C5	Rural Travel Demand Model	\$2,895	\$724			\$3,619
Total		\$25,790	\$5,447	\$342,000	\$38,000	\$412,237
D1	Rural Transportation Improvement Program	\$2,000	\$500			\$2,500
Total		\$2,000	\$500			\$2,500
Grand Total		\$125,000	\$31,250	\$342,000	\$38,000	\$536,250

**Non-federal match for PL funds may be waived on permissible Complete Streets planning activities

SUMMARY of ANNUAL BUDGET: FY2025* RPWP				
TASK			FUNDING SOURCES	
TASK ID	TASK DESCRIPTION	FHWA/FTA - Rural Planning	BCDCOG Match for FHWA/FTA - Rural Planning	Total
A1	General Administration	\$10,000	\$2,500	\$12,500
A2	Professional Services	\$2,000	\$500	\$2,500
A3	Public Participation	\$1,200	\$300	\$1,500
A4	Rural Planning Work Program Development & Maintenance	\$2,000	\$500	\$2,500
Total		\$15,200	\$3,800	\$19,000
B1	Technical Assistance	\$72,485	\$18,121	\$90,607
B2	Reporting, Data Collection and Analysis	\$5,200	\$1,300	\$6,500
B3	Geographic Information System Maintenance and Utilization	\$1,200	\$300	\$1,500
B4**	Complete Streets	\$3,125	\$781	\$3,906
Total		\$82,010	\$20,503	\$102,513
C1	Rural Long Range Transportation Plan	\$8,000	\$2,000	\$10,000
C2	Human Service Transportation Coordination	\$2,000	\$500	\$2,500
C3	Multimodal Freight and Transit Planning	\$2,894	\$724	\$3,618
C4	Transit Service Assistance	\$10,000	\$2,500	\$12,500
C5	Rural Travel Demand Model	\$2,895	\$724	\$3,619
Total		\$25,790	\$5,447	\$32,237
D1	Rural Transportation Improvement Program	\$2,000	\$500	\$2,500
Total		\$2,000	\$500	\$2,500
Grand Total		\$125,000	\$31,250	\$156,250

* RPWP budget and projected work product delivery is illustrative until approved by SCDOT

**Non-federal match for PL funds may be waived on permissible Complete Streets planning activities

Berkeley-Charleston-Dorchester Council of Governments
Statement of Revenues & Expenditures
For the Period Ending June 30, 2023

Time elapsed:
100%

	Original Budget FY23	Revised Budget FY23	Actual	% of Budget
Revenues				
EDA (Planning)	70,000	108,650	88,885.00	82%
PL Funds (UWP)	859,362	859,362	815,450.22	95%
DHEC	89,000	69,115	74,484.98	108%
State Rural Transportation	85,000	125,000	125,000.00	100%
STBG Funds	114,723	202,993	120,077.92	59%
LPA Enhancement	400,000	135,681	26,672.54	20%
Freight Plan	57,209	108,545	-	0%
Bike/Ped Plan Maint. & Impl.	31,000	48,839	30,174.19	62%
Regional Transit Framework Plan Maint	49,600	5,636	10,621.20	188%
Bike/Ped Safety Maint & Impl.	30,400	30,067	22,686.33	75%
Freight Plan Maint. & Impl.	49,600	10,000	930.78	9%
US 52 Corridor Study	40,000	66,861	68,810.95	103%
Travel Demand Model	164,842	166,951	162,951.00	98%
ITS Architecture & Deployment Guide	313,801	279,055	244,604.00	88%
FTA 5307 CARES Act	1,308,332	297,349	329,400.00	111%
FTA TOD Ph.2	860,000	239,741	287,318.00	120%
FTA US 52 (BRT) Route Study	650,000	-	-	N/A
FTA 5307	512,843	516,991	457,041.00	88%
FTA 5307 - FHWA ITS & Planning	160,000	160,000	-	0%
FTA 5307 - Commuter Van Pool	12,000	50,103	39,763.00	79%
FTA 5310	590,249	542,144	183,782.00	34%
FTA 5311	-	-	1,588.40	N/A
FTA 5312 - Research Demo. Grant	51,000	54,860	60,230.00	110%
FTA 5314 - CTAA Mobility Mgmt.	-	3,379	3,378.47	100%
FTA 5339 - Battery Electric Buses	901,380	901,380	901,380.00	100%
EPA - Battery Electric Equipment	143,544	143,545	-	0%
WIOA	3,342,909	3,600,392	3,122,544.07	87%
SCDOI VW EMT - Battery Electric Buse	5,848	5,349	5,349.00	100%
SC Rural Infrastructure Authority	-	20,000	17,771.51	89%
CDBG Planning Grants	147,990	72,673	57,662.66	79%
SC Brownsfields Environmental Site Tr	-	54,411	6,208.00	11%
SC Broadband/SC Digital	-	-	13,000.00	N/A
RLF (Fees)	3,500	500	1,379.46	276%
RLF Administration	-	-	16,846.39	N/A
Local Assistance Contracts	35,000	19,000	17,694.12	93%
Planning Services	119,500	176,500	202,819.68	115%
Dischargers (3D WQ Model)	86,740	86,740	43,535.00	50%
Dischargers (208 WQM)	90,000	90,000	90,000.00	100%
Chs. Co. Workkeys	1,000	1,000	-	0%
Permit Fees	35,000	35,000	33,155.00	95%
Interest Income	-	3,114	6,340.10	204%
Miscellaneous Revenue	-	2,723	3,155.68	116%
CARTA Management Services	75,000	75,000	75,000.00	100%
CARTA - IGA	2,739,219	3,270,246	3,344,375.76	102%
CARTA - Parking Lot Expansion	-	32,730	18,669.49	57%
CARTA - Shelter Engineering	50,000	25,000	-	0%
CARTA - ITS	40,000	119,900	-	0%
CARTA - Route Study	563,000	219,621	130,645.00	59%
Hop Lot	50,000	50,913	50,912.89	100%
Lowcountry Rapid Transit	10,737,306	7,159,711	2,751,628.70	38%
Lowcountry Rapid Transit - TOD Ph.2	215,000	59,935	71,829.31	120%
RTMA - Management Services	50,000	50,000	50,000.00	100%
RTMA - IGA	183,091	138,205	204,663.76	148%
Sale of Publications/Maps	50	50	-	0%
State Appropriation	71,264	299,377	299,377.00	100%
Berkeley County Appropriation	287,326	287,326	287,326.00	100%
Charleston County Appropriation	510,294	510,294	510,294.00	100%
Dorchester County Appropriation	201,925	201,925	201,925.00	100%
TOTAL REVENUES	27,184,847	21,793,882	15,689,337.56	72%

Berkeley-Charleston-Dorchester Council of Governments
Statement of Revenues & Expenditures
For the Period Ending June 30, 2023

Time elapsed:
100%

	Original Budget FY23	Revised Budget FY23	Actual	% of Budget
<u>Expenditures</u>				
<u>Personnel Costs:</u>				
Salaries	4,153,481	3,938,938	3,868,459.34	98%
Other Personnel Costs	13,520	13,520	8,167.25	60%
Unemployment	1,323	1,388	1,211.31	87%
Employee Insurance	424,243	358,087	360,811.16	101%
Retirement: Employer's Share	729,351	691,678	675,175.80	98%
Employer 401k Match	4,200	3,450	3,450.00	100%
FICA: Employer's Share	318,776	302,363	283,374.98	94%
Total Personnel Costs	5,644,894	5,309,424	5,200,649.84	98%
<u>Operating Expenditures:</u>				
Automotive	88,085	111,421	85,798.13	77%
Advertising	6,500	4,000	3,220.00	81%
Professional Services	16,894,376	11,531,728	6,038,727.80	52%
Contract Services	2,156,955	2,506,705	2,016,465.73	80%
Postage	7,059	7,079	9,131.12	129%
Dues & Memberships	21,808	23,576	21,543.32	91%
Equipment Rental	39,689	39,689	37,107.87	93%
Agency Insurance	89,052	93,917	91,083.84	97%
Temporary Outside Help	5,000	23,083	23,082.46	100%
Repairs & Maintenance	21,494	39,175	35,418.59	90%
Travel	11,700	51,138	44,589.16	87%
Books & Publications	7,012	7,024	6,207.76	88%
Equipment Maintenance	494,494	409,512	355,393.42	87%
Supplies	46,000	57,005	62,253.21	109%
Printing	15,350	11,500	1,983.80	17%
Rent	627,130	626,297	624,749.64	100%
Utilities	40,823	40,823	38,608.18	95%
Communications	85,896	85,627	81,577.36	95%
Training & Education (Staff & WIOA)	174,604	329,074	122,396.02	37%
Uniforms	14,000	16,500	16,985.01	103%
Office Equipment	629,226	395,992	207,341.14	52%
New Office Building	20,000	5,000	-	0%
Miscellaneous	36,800	59,170	55,956.83	95%
Total Operating Expenditures	21,533,053	16,475,035	9,979,620.39	61%
<u>Component Unit:</u>				
BCD Regional Development Corp	6,900	9,423	8,323.12	88%
Total Component Unit	6,900	9,423	8,323.12	88%
TOTAL EXPENDITURES	27,184,847	21,793,882	15,188,593.35	70%
Excess (Deficit) of Revenues Over (Under) Expenditures	-	-	500,744.21	

Berkeley-Charleston-Dorchester Council of Governments
General Fund
Balance Sheet
June 30, 2023

ASSETS

Bank of SC - General Fund	-361,973.69
Bank of SC - MMA	2,878,418.68
Investment Pool - General Fund	56,788.34
Petty Cash	100.00
Accounts Receivable	3,235,935.21
Due To/From Special Fund	18,225.85
Prepaid Expenses	391,256.35
Prepaid Expenses - LCRT	6,103,529.63
Accrued Revenue	<u>94,353.68</u>
Total Assets	<u><u>12,416,634.05</u></u>

LIABILITIES

Accrued Payroll & Liabilities	252,358.29
Accounts Payable	1,168,711.36
Unearned Revenue	673,125.61
Unearned Revenue - LCRT	6,103,529.63
Employee Payroll Liabilities	<u>28,324.98</u>
Total Liabilities	8,226,049.87

EQUITY

Current Year Fund Balance	500,744.21
Fund Balance	3,689,006.45
Fund Balance - Non Spendable	<u>833.52</u>
Total Equity	4,190,584.18

Total Liabilities & Fund Equity 12,416,634.05

Berkeley-Charleston-Dorchester Council of Governments
Revolving Loan Fund
Balance Sheet
June 30, 2023

ASSETS

Bank of SC - RLF General	1,148,719.33
Investment Pool (RLF1)	132,208.29
Loans Receivable	<u>335,796.31</u>
Total Assets	<u><u>1,616,723.93</u></u>

LIABILITIES

Due to General Fund	<u>18,225.85</u>
Total Liabilities	18,225.85

EQUITY

Current Year Fund Balance	59,744.13
Fund Balance	<u>1,538,753.95</u>
Total Equity	1,598,498.08

Total Liabilities & Fund Equity 1,616,723.93

Berkeley-Charleston-Dorchester Council of Governments
City of N. Chas. Revolving Loan Fund
Balance Sheet
June 30, 2023

ASSETS

LGIP	<u>245,036.95</u>
Total Assets	<u><u>245,036.95</u></u>

EQUITY

Current Year Fund Balance	9,580.98
Fund Balance	<u>235,455.97</u>
Total Equity	245,036.95
Total Liabilities & Fund Equity	<u><u>245,036.95</u></u>

BCD Council of Governments
RLF Activity as of 7/31/23

	Closing Date	Original Loan Principal	Total Fees Received	Bad Debt	Total Interest Received	Total Principal Repaid	Ending Principal Balance	Interest Rate	Status of Loan
EDA RLF									
White Horses, LLC	6/10/16	127,500.00	6,225.23	0.00	31,129.91	44,956.31	82,543.69	4.50%	Current
Lowcountry Kettle	12/16/19	250,000.00	8,770.32	0.00	22,944.59	84,236.98	165,763.02	4.00%	Current
The Ragnar Group			500.00						
Program Income (Admin.)					0.00				
Other (Inactive)		8,666,608.27	327,522.11	(973,512.43)	1,213,641.29	8,899,814.94			
Checking Int. Earned					376,972.37				
Bank Charges (Wire)					(414.50)				
GRAND TOTAL		9,044,108.27	343,017.66	(973,512.43)	1,644,273.66	9,029,008.23	248,306.71		
PRIOR YEAR COSTS		(9,044,108.27)	(342,517.66)	980,512.43	(1,642,857.59)	(9,026,153.09)			
FY 2024 TOTALS		0.00	500.00	7,000.00	1,416.07	2,855.14			

EDA RLF - CARES									
Gardner Gains	1/11/21	40,000.00	1,000.00	0.00	0.00	40,000.00	0.00	3.25%	Paid Off 12/6/21
Inspired by Annette			500.00						
Tax Connect			250.00						
Lowcountry Kettle	05/06/22	100,000.00	2,453.57	0.00	461.36	16,448.24	83,551.76		Current
Home Watch Care Givers			25.00						
Program Income (Admin.)									
Other (Inactive)		0.00	0.00	0.00	0.00	0.00			
Checking Int. Earned					85.79				
Bank Charges (Wire)					0.00				
GRAND TOTAL		140,000.00	4,228.57	-	547.15	56,448.24	83,551.76		
PRIOR YEAR COSTS		(140,000.00)	(4,228.57)	0.00	(317.93)	(55,365.54)			
FY 2024 TOTALS		0.00	0.00	0.00	229.22	1,082.70			
					1,645.29		331,858.47		

N. Charleston RLF:									
Program Income (Admin.)									
Other (Inactive)		126,600.00	5,006.60	115,118.67	44,027.38	159,678.57	0.00		
Checking Int. Earned					49,211.60				
GRAND TOTAL		126,600.00	5,006.60	115,118.67	93,238.98	159,678.57	0.00		
PRIOR YEAR COSTS		(126,600.00)	(5,006.60)	(115,118.67)	(92,110.31)	(159,678.57)			
FY 2022 TOTALS		0.00	0.00	0.00	1,128.67	0.00			

FUNDS AVAILABLE:	
COG RLF (Cash on Hand)	1,233,016.01
COG RLF CARES (Cash on Hand)	60,994.74
Less: Commitment	(100,000.00)
EDA (Reserved)	0.00
Sub Total	1,194,010.75
N. Chas. RLF	246,165.62
TOTAL ALL FUNDS	1,440,176.37