



May River Watershed Action Plan Advisory Committee Meeting

Thursday, June 27, 2024 at 3:00 PM

Theodore D. Washington Municipal Building, Henry "Emmett" McCracken Jr. Council Chambers,
20 Bridge Street, Bluffton, SC

AGENDA

I. CALL TO ORDER

II. ROLL CALL

III. ADOPTION OF MINUTES

- [1.](#) Adoption of the March 28, 2024 Minutes
- [2.](#) Adoption of the May 23, 2024 Minutes

IV. PUBLIC COMMENT

V. NEW BUSINESS

- [1.](#) May River Watershed Action Plan Advisory Committee (WAPAC) Tour of the Phase I Bridge Street Streetscape Stormwater Best Management Practices (BMPs) - Dan Rybak, Project Manager

VI. ADJOURNMENT

NEXT MEETING DATE: July 25th, 2024

“FOIA Compliance – Public notification of this meeting has been published and posted in compliance with the Freedom of Information Act and the Town of Bluffton policies.”

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 ("ADA"), the Town of Bluffton will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities. The Town of Bluffton Council Chambers are ADA compatible. Auditory accommodations are available. Any person requiring further accommodation should contact the Town of Bluffton ADA Coordinator at 843.706.4500 or adacoordinator@townofbluffton.com as soon as possible but no later than 48 hours before the scheduled event.

Executive Session – The public body may vote to go into executive session for any item identified for action on the agenda.

**Please note that each member of the public may speak at one public comment session and a form must be filled out and given to the Town Clerk. To submit a public comment online, please click here:*

<https://www.townofbluffton.sc.gov/FormCenter/Town-15/Public-Comment-60>

Public comment is limited to 3 minutes per speaker.

May River Watershed Action Plan Advisory Committee Meeting

Theodore D. Washington Municipal Building, Henry “Emmett” McCracken Jr. Council Chambers, 20
Bridge Street, Bluffton, SC

March 28, 2024

I. CALL TO ORDER

Chairman Rogers called the meeting to order at 3:07pm.

II. ROLL CALL

PRESENT

Amber Kuehn

Chair, Stan Rogers

Jessie White

Chris Kehrer

ABSENT

Chris Shoemaker

Vice-Chairman, Al Stokes

Larry Toomer

III. ADOPTION OF THE AGENDA

1. Adoption of the March 28, 2024, Agenda

- Motion made by White to amend the agenda to add a staff update to the committee on the wetland buffer ordinance recently passed by the Planning Commission

Seconded by Kehrer.

Voting Yea: Chairman Rogers, White, Kuehn and Kehrer

- Motion made by White to amend the agenda to add a discussion on the April meeting schedule.

Seconded by Kuehn.

Voting Yea: Chairman Rogers and Kehrer

- Motion made by Kehrer to adopt the agenda as amended by

Seconded by Kuehn.

Voting Yea: Chairman Rogers, White, Kuehn, and Kehrer

IV. ADOPTION OF MINUTES

1. Adoption of the February 22, 2024, Minutes

Motion made by White.

Seconded by Kehrer.

Voting Yea: Kuehn, Chairman Rogers, White, Kehrer

V. PUBLIC COMMENT

VI. OLD BUSINESS

- 1. Development of the Strategic Plan Priority Five (5) to Establish an Agreement with Beaufort County to Implement the May River Watershed Action Plan within the County's Jurisdiction of the Watershed for Both Structural Stormwater Projects and Non-Structural Programs such as Implementing the Green Print Map within the Rural & Critical Lands Program** - Beth Lewis, Water Quality Program Manager

The committee reviewed and edited a memorandum detailing their recommendation to Town Council, on Strategic Plan Priority Five (5).

Motion made by Kehrer to adopt the memorandum as amended and recommend it go to Town Council for consideration.

Seconded by Kuehn.

Voting Yea: Kuehn, Chairman Rogers, White, Kehrer

Unanimous ayes.

VII. NEW BUSINESS

- 1. Wetland Buffer Ordinance Update** - Bill Baugher, Watershed Management Division Manager

Staff updated the committee on the wetland buffer ordinance they presented to Planning Commission on March 27, 2024. They provided background information that led to the ordinance being passed and allowed the committee to ask questions. Staff stated that the Planning Commission approved the proposed wetland buffer ordinance and that it would go to Town Council for first reading in April.

- 2. Schedule for the April Watershed Action Plan Advisory Committee Meeting**

Motion made by White to hold the April meeting on April 24th, 2024 at 3:00pm at Town Hall

Seconded by Kuehn.

Voting Yea: Kuehn, Chair Rogers, White, Kehrer

Unanimous ayes.

VIII. ADJOURNMENT

Motion made by Kuehn.

Seconded by White.

Voting Yea: Kuehn, Chairman Rogers, White, Kehrer

All were in favor and the motion passed. Meeting Adjourned at 4:42pm.

NEXT MEETING DATE: April 24th, 2024

May River Watershed Action Plan Advisory Committee Meeting

The Rotary Community Center at Oscar Frazier Park, 11 Recreation Court, Bluffton, SC

May 23, 2024

I. CALL TO ORDER

Chairman Rogers called the meeting to order at 3:00pm.

II. ROLL CALL

PRESENT

Amber Kuehn

Vice Chair Al Stokes

Chair Stan Rogers

Jessie White

Larry Toomer

ABSENT

Chris Shoemaker

Chris Kehrer

III. ADOPTION OF MINUTES

1. Adoption of the March 28, 2024, Minutes

Adoption of the March minutes was moved to next month due to lack of quorum at the beginning of the meeting.

IV. PRESENTATIONS, CELEBRATIONS, AND RECOGNITIONS

1. May River Watershed Action Plan Project Implementation Status Report - Dan Rybak, Project Manager

Dan Rybak presented on the status of different May River Watershed Action Plan projects and allowed the committee time to ask questions.

V. PUBLIC COMMENT

Jim Lawton - 52 Oyster Street - Mr. Lawton requested the creation of shellfish monitoring stations at Alljoy Boat Landing and Boathouse Creek.

Kathie Coburn - Ms. Coburn expressed an interest in increased water quality monitoring within the Alljoy Area.

Laura Wilson - Ms. Wilson expressed an interest in increased water quality monitoring within the Alljoy Area.

VI. OLD BUSINESS

1. Progress Report on the May River Watershed Baseline Assessment - Beth Lewis, Water Quality Program Manager

Beth Lewis provided the status report from Department of Natural resources on the May River Watershed Baseline Assessment currently being completed. The committee was given time to ask questions.

VII. DISCUSSION

1. Development of Strategic Plan Priority Ten (10) to complete a third-party assessment in FY24 of the stormwater regulations and Design Manual in the Unified Development Ordinance, particularly the Better Site Design element, to ensure intended outcomes are being met and modify the regulations if necessary - Andrea Moreno, MS4 Program Manager

Bill Baugher informed the committee of the work being done by the Town to update the Stormwater Regulations and Design Manual in the Unified Development work. During this discussion, the committee expressed an interest in visiting the New Riverside Barn Park, a Town project, during their June meeting.

VIII. ADJOURNMENT

Moved to Adjourn at 4:03pm.

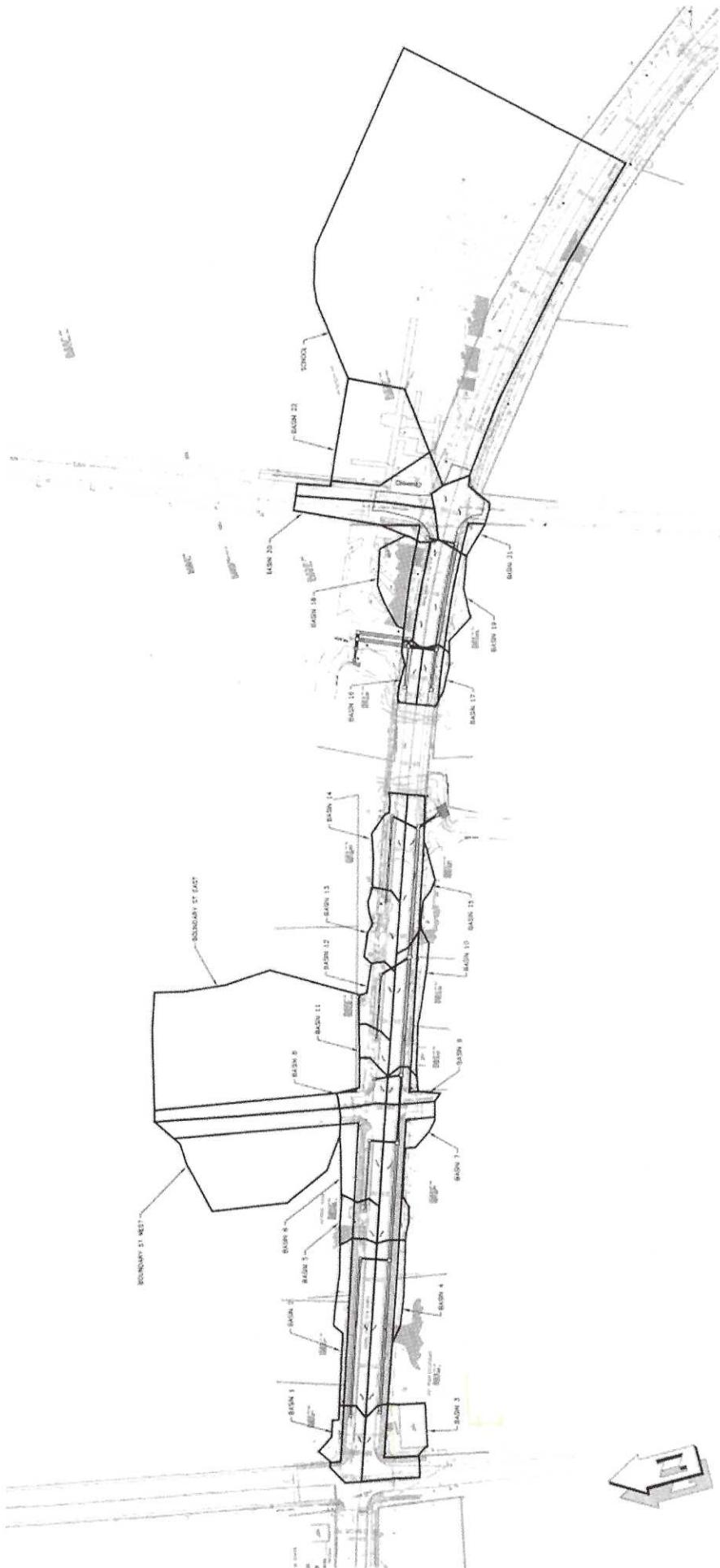
Motion made by Kuehn, Seconded by White.

Voting Yea: Kuehn, Vice Chair Stokes, Chair Rogers, White, Toomer.

NEXT MEETING DATE: June 27, 2024

BMP SUMMARY TABLE

BMP Number	Drainage Basin No. (Plan Set Sheet D1)	Contributing Drainage Area (sf)	CDA Turf Cover (sf)	CDA Impervious Cover (sf)	Target/ Req'd SWrv* (cf)	Available SWrv (cf)	Excess SWrv Available (cf)
BMP-01A	1 & 2	10,545	3,545	7,000	1,137.5	2,196.4	1,058.9
BMP-01B	3 & 4	11,729	3,416	8,313	1,350.9	1,378.0	27.1
BMP-01C	5 & 6	7,440	3,426	4,014	652.3	733.2	80.9
BMP-01D	7	5,892	2,532	3,360	546.0	1,073.0	527.0
BMP-01E	8, 9, 10 & Boundary E & W	61,565	35,792	25,773	4,188.1	1,456.0	(2,732.1)
BMP-01F	11 & 12	4,041	1,892	2,149	349.2	693.2	344.0
BMP-01G	13 & 14	6,509	3,136	3,373	548.1	1,127.8	579.7
BMP-01H	15	4,696	1,521	3,175	515.9	1,602.0	1,086.1
System 01 Sub-total		112,417	55,260	57,157	9,288.0	10,259.6	971.6
BMP-02A	18, 19, 20 & 21	19,552	9,892	9,660	1,569.8	1,353.0	(216.8)
BMP-02B	17	2,037	808	1,229	199.7	202.0	2.3
BMP-02C	16	1,526	638	888	144.3	207.0	62.7
BMP-02D	-	-	-	-	-	1,274.0	1,274.0
System 02 Sub-total	-	23,115	11,338	11,777	1,913.8	3,036.0	1,122.2
BMP-03	22	14,559	4,862	9,697	1,575.8	110.0	(1,465.8)
System 03 Sub-total	-	14,559	4,862	9,697	1,575.8	110.0	(1,465.8)
Project Total	-	150,091	71,460	78,631	12,777.5	13,405.6	628.1



BRIDGE ST
PROJECT SUB-BASIN
DRAINAGE AREAS

SECTION 319 GRANT PROJECT #5 - POINTS LOAD REDUCTION BMP
IN SUPPORT OF THE MAY RIVER WATERSHED ACTION PLAN,
PHASE V- BRIDGE STREET STREETScape PROJECT

Work Flow Update Schematic

- 319 GRANT B.Y.P.-3

□ - 319 Grant BMP's related structures

MATERIAL	C-1	C-2
ASPHALT	4.9"	2"
BASE	0 - 40" (SILTY FINE SAND)	0 - 48" (SILTY FINE SAND)

INFLTRATION RATE	1-1
	10.5 in/hr

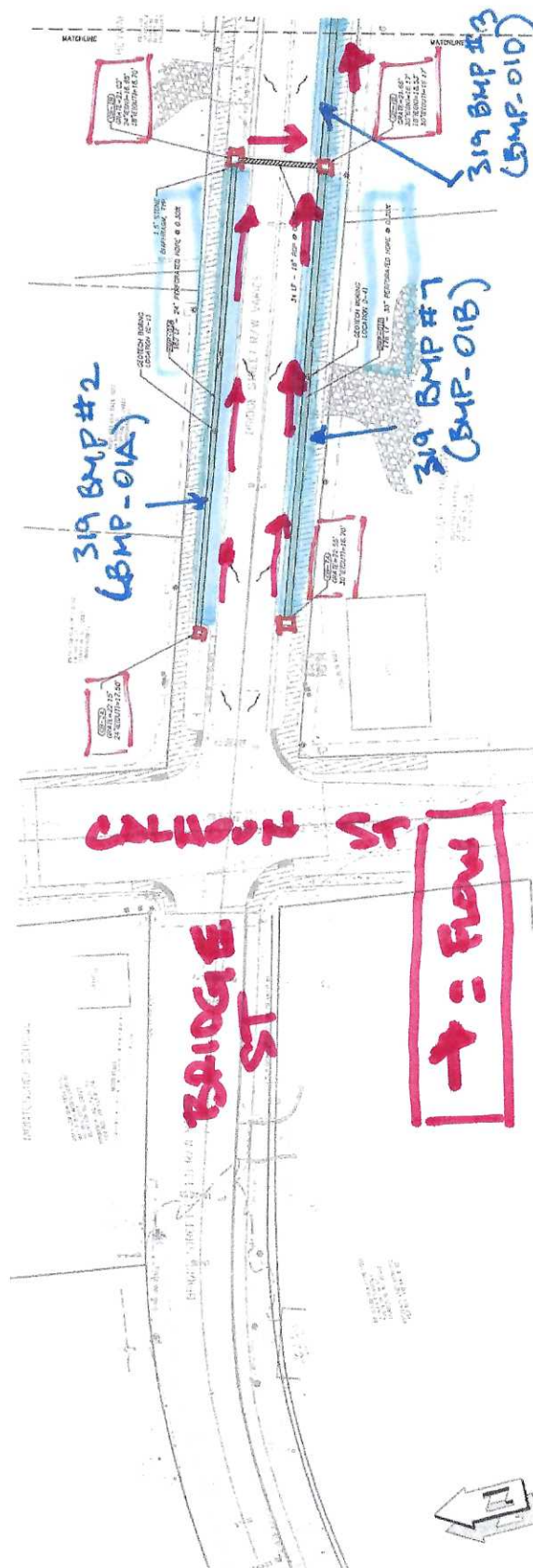
	1-2	1-3	1-4
MATERIAL			
ASPHALT	4	8	4
BASE	2 1/2 (SAND ASPHALT)	NONE	3 1/2 (SAND ASPHALT)

	1-1	1-2	1-3
SUPPL. RATE	45 M/HR	40 M/HR	35 M/HR

MATERIAL	B-1	B-2
SILTY FINE SAND	18"	6"
FINE SAND	5'	22"

Pipe Name	Material	Inner Diameter	Start Steelwork	Start Invert Elevations	End Structure	End Invert Elevation	Length (Feet)	Flow (cfs)
100" DIA	100%	34.000	CU-2A	17.500	CU-2B	30.950	142	10.60
60" DIA	50%	50.000	CU-2A	16.750	CU-2B	36.170	136	10.70
72" DIA	50%	48.000	CU-2A	13.750	CU-2B	38.500	24	10.00
100" DIA	100%	30.000	CU-2A	50.120	CU-2B	50.120	0	0.00

Source	Type	Inner Length	Inner Width	Time/Min	Relaxation Factor
Exp. 24	Open Joint	105,000	265,000	22	1.12
Exp. 28	Open Joint	265,000	300,000	21	1.070
Exp. 29	Open Joint	300,000	300,000	22	1.070
Exp. 30	Open Joint	300,000	437,000	22	1.028
Exp. 31	Open Joint	437,000	488,000	21	1.048



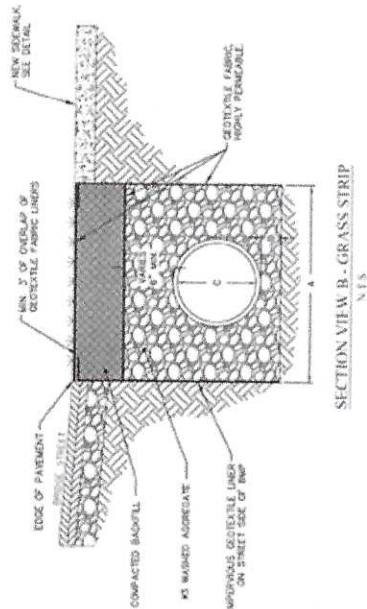
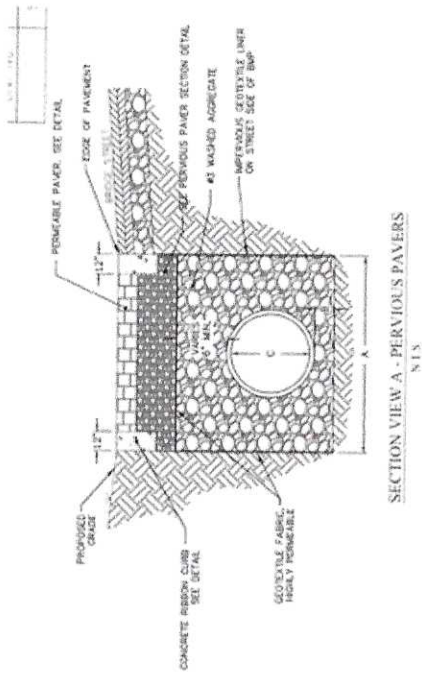
THE FOLLOWING DRINKS CONTAINED IN THE SCOT STANDARD
INSURANCE FOR ROAD CONSTRUCTION APPLY TO THIS PLAN
711-605-00 715-000-01 714-003-01 715-000-01 710-000-02
711-605-00 715-000-02 714-003-01 715-000-01 710-000-02
A TRUCKER'S 715-000-01 714-003-01 715-000-01 710-000-02

South Carolina 811

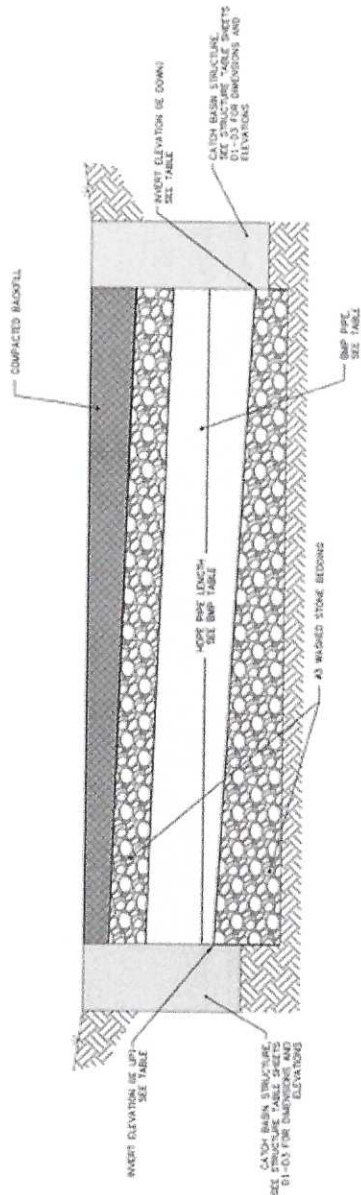
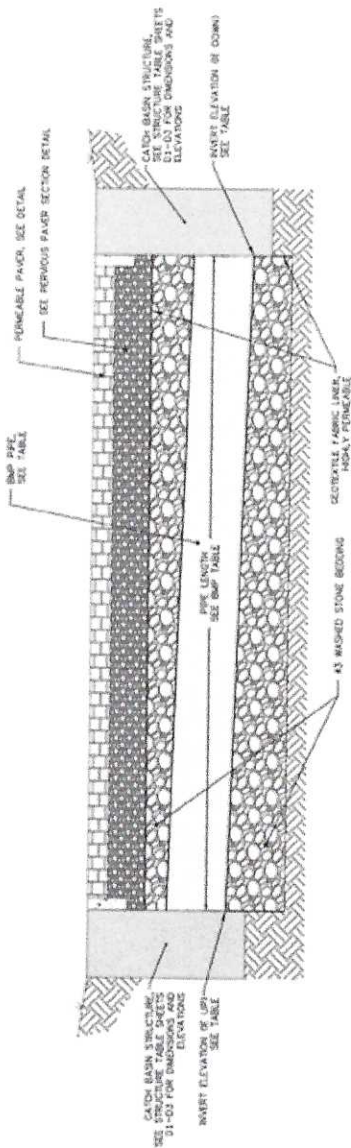


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BMP DETAILS



**Bridge Street Streetscape
SoLoCo Plan Compliance
Design Compliance/MEP Narrative**

The following is a presentation of the Stormwater objectives for Bridge Street Streetscape project in Bluffton, SC. The project has incorporated SoLoCo Stormwater Design Manual and Ordinance (adopted by The Town of Bluffton on September 14, 2021) plan presentation requirements to serve as a model for future Development Plan Applications required to meet the newly adopted Stormwater requirements.

Bridge Street Streetscape Stormwater Design Objectives

The project was not obligated to meet the requirements of the new SoLoCo Stormwater Design Manual and Ordinance due to the time of application submittal and the fact that this is a Town of Bluffton municipal, public project that is reviewed for approval under a separate administrative procedure. However, as part of the Town’s Impervious Area Restoration/Stormwater Retrofit Program and acquisition of 319 Grant, the Town implemented Water Quality BMPs within the scope of work for the Bridge Street Streetscape Project.

Most of the work being performed within the project’s limits of disturbance includes road surface milling and repaving operations as well as road/impervious surface removal. Pavement restoration is considered maintenance and runoff reduction is not required for the maintenance portion of projects. The impervious area within the limits of disturbance is reduced by approximately 5,775 square feet (0.13 acres). This equates to an overall impervious area reduction of 8% for the contributing drainage area to the three BMP systems discussed below.

The Town’s design objective, or Required Stormwater Runoff Volume (SWrv), for the project to be compliant with the 319 Grant was to capture and treat 1.95” of rainfall from the impervious areas within the Contributing Drainage Area (CDA) to each BMP system. The Target/Required SWrv is the volume of stormwater from a site for which the site is required to achieve retention, per the SoLoCo Design Manual.

Three BMP systems are proposed to treat runoff from the contributing drainage area. The BMP systems feature in-series infiltration practices which provide a treatment train. Pervious parking areas receive runoff from the contributing areas, with excess runoff collecting in underground detention systems comprised of perforated pipe fully encompassed in a stone reservoir. As the underground detention system also serves as primary stormwater conveyance to the outfalls, weirs were strategically placed in structures to accommodate the required stormwater retention volume and allow excess flows to pass safely through the system.

Geotechnical explorations were performed to confirm soil type, infiltration rate and groundwater table elevation. This testing confirmed infiltration BMPs are suitable for meeting the Target/Required SWrv and water quality goals of the project.

BMP System 01 collects runoff from the Bridge Street right-of-way (ROW) and adjacent properties between Calhoun Street and the Heyward Cove Bridge, as well as portions of the Boundary Street ROW

and adjacent properties between Green Street & Bridge Street. System 01 outfalls into Heyward Cove. Contributing drainage to this system is comprised of 2.58 acres, approximately 51% impervious cover, with a Target/Required SWrv of 9,288 cubic feet (cf). BMP System 01 provides an available retention volume of 10,259.6 cf.

BMP System 02 collects runoff from the Bridge Street right-of-way (ROW) and adjacent properties between the Heyward Cove Bridge and Pritchard Street, as well as portions of the Pritchard Street ROW and adjacent properties. System 02 outfalls into Heyward Cove. Contributing drainage to this system is comprised of 0.53 acres, approximately 51% impervious cover, with a Target/Required SWrv of 1,913.8 cf. BMP System 02 provides an available retention volume of 3,036 cf. This system was sized to convey flows from a portion of MC Riley Elementary School to provide capacity for future stormwater improvements by others. The approximately 2.29 acres of additional runoff at 70% impervious was excluded from the SWrv calculations provided for the Bridge Street Streetscape project.

BMP System 03 collects runoff from a portion of the Pritchard Street right-of-way (ROW) and Bluffton Town Hall through a roof drain connection. The primary outfall mechanism for System 03 is infiltration, however excess runoff during larger storm events overflows to BMP System 02. Contributing drainage to this system is comprised of 0.33 acres, approximately 67% impervious cover, with a target SWrv of 1,575.8 cf. BMP System 03 provides an available retention volume of 110 cf.

The following table presents a summary of the contributing drainage area to each BMP; the Target/Required SWrv for each system based on the impervious cover in the contributing drainage area; the available SWrv in each system; and the excess or deficit volume available in each system. While not all individual BMPs provide adequate storage for the Target/Required SWrv, the use of treatment trains allows for the SWrv to be retained in the downstream practice. The three BMP systems currently provide an excess treatment volume of 2,461 cubic feet over the Target/Required SWrv. There is enough excess volume in the BMP treatment system to provide additional treatment of 628.1 cubic feet to accommodate future development within the right-of-way areas.

Definitions

- *Best management practice (BMP)* – Structural or nonstructural practice that minimizes the impact of stormwater runoff on receiving waterbodies and other environmental resources, especially by reducing runoff volume and the pollutant loads carried in that runoff.
- *Contributing drainage Area (CDA)* – Area contributing runoff to a BMP.
- *Impervious cover* – A surface area that has been compacted or covered with a layer of material that impedes or prevents the infiltration of water into the ground, examples include conventional streets, parking lots, rooftops, sidewalks, pathways with compacted sub-base, and any concrete, asphalt, or compacted gravel surface and other similar surface.
- *Infiltration* – The passage or movement of surface water through the soil profile.
- *Retention* – Keeping a volume of stormwater runoff on site through infiltration, evapotranspiration, storage for non-potable use, or some combination of these.
- *Retention capacity* – The volume of stormwater that can be retained by a stormwater BMP or land cover.
- *Runoff* – The portion of precipitation (including snow-melt) that travels over the land surface, and also from rooftops, either as sheetflow or as channel flow, in small trickles and streams, into the main water courses.
- *Stormwater retention volume (SWRV)* – Volume of stormwater from a site for which the site is required to achieve retention.

Source: Center for Watershed Protection (2020). Southern Lowcountry Stormwater Design Manual.