

Beaufort County Stormwater Management Utility Board (SWMU Board)
Meeting Minutes

October 1, 2014 at 2:00 p.m. in Beaufort Industrial Village Building #3 Conference Room

Board Members

Present Absent

Don Smith
Allyn Schneider
William Bruggeman
Patrick Mitchell
James Fargher

Ex-Officio Members

Present Absent

Andy Kinghorn
Kimberly Jones
Scott Liggett
Van Willis

Beaufort County Staff

Eric Larson
Rob McFee
Eddie Bellamy
Carolyn Wallace
Danny Polk
Kevin Pitts

Visitors

Denise Parsick, Bft Soil & Water Conservation Dist
Shelby Berry, Bft Soil & Water Conservation Dist
Paul Moore, Ward Edwards

1. Meeting called to order – Don Smith

- A. Agenda – Approved with “Administrative Business” added to New Business.
- B. September 3, 2014 Minutes – Approved.

2. Introductions – Completed.

3. Public Comment(s) – None.

4. Reports – (Mr. Larson submitted his written report in advance. [Please see attachment.](#))

- A. **Special Presentation** – Mr. Eric Larson provided a presentation on the county’s draft of their Notice of Intent (NOI) to South Carolina’s Department of Health and Environmental Control (DHEC) ([please see attachment](#)). He requested board members review the application and provide comments as soon as possible.
- B. **Utility Update** – Eric Larson
 - Personnel* – Mr. Larson introduced the new Stormwater Inspector, Mr. Kevin Pitts.
 - Planning Department’s Development Review Team (DRT)* – Mr. Larson has been appointed by Mr. Rob McFee to sit on this committee as the representative from the Engineering Department.
 - Outfall Channels Draining SCDOT Roads* – Mr. Larson met with engineers with SCDOT to discuss ongoing confusion concerning outfall channels (ditches) that drain state right of ways to receiving water bodies. Given that the County’s Extent of Service (EOS) plan specifically excludes stormwater infrastructure that does not drain county roads and properties, and that the State’s policies seem to exclude these areas as well, it leaves these ditches unmaintained. The county is working to reach an understanding with SCDOT and “close the gap” in operational coverage.
- C. **MS4 Update** – Eric Larson

Stormwater Public Education and Outreach – Mr. Larson provided a draft copy of the recommendation to County Council’s Natural Resources Committee to approve the contract with Beaufort County Soil and Water Conservation District ([please see attachment](#)). He provided a presentation on the scope of the contract ([please see attachment](#)). The board members recommend that County Council approve the contract.

D. Monitoring Update – Eric Larson

Please see attached written report.

E. Stormwater Implementation Committee (SWIC) Report – Eric Larson

Please see attached written report.

F. Stormwater Related Projects – Eric Larson

Please see attached written report.

G. Professional Contracts Report – Eric Larson

Please see attached written report.

H. Regional Coordination - Eric Larson

Please see attached written report.

I. Financial Report – Alan Eisenman

Copies of the August financials were provided.

J. Maintenance Projects Report – Mr. Eddie Bellamy submitted his written report in advance ([please see attachment](#)) on six major and fifteen minor projects. Mr. Van Willis complimented the Stormwater Infrastructure Section on the Basil Green Complex (soccer fields) project. Mr. Bellamy said it is the section’s first time constructing this type of project (underground vault) and it works well. He said the project was designed by Mr. Ezekiel Miller.

5. Unfinished Business

6. New Business – Eric Larson

Shadow Moss Drainage Easement - A new development adjacent to the property, Shadow Moss, is re-routing a drainage pipe via stormsewer through the development. The County’s responsibility for maintenance of the ditch would end with this construction. Mr. Larson provided a draft copy of the recommendation to County Council’s Natural Resources Committee to release the easement ([please see attachment](#)). The board recommended County Council release the easement.

Administrative Business – Mr. Larson would like the board members to review the information on annual attendance report, review their information on the roster, and complete the Conflict of Interest Reaffirmation form by the next board meeting. The most current draft will be e-mailed to the board members.

7. Public Comment(s) – None.

8. Next Meeting Agenda – Mr. Larson said he would like to add the approval of the 2015 SWMU Board meeting calendar. The agenda was approved with this addition.

9. Meeting Adjourned.



BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2801 Facsimile (843) 255-9478



October 1, 2014

Stormwater Manager's Report for the Stormwater Utility Board Meeting

Utility Update

1. The Utility has added a new employee. Kevin Pitts started last week. Kevin will serve as a Stormwater Utility Inspector, assisting Danny Polk with duties related to monitoring, project management, and MS4 permit implementation. He is a graduate of Tennessee Tech University with a B.S. in wildlife and fisheries science. Most of Kevin's work at the university was concentrated in fisheries science with water quality being a large component of those studies. Prior to joining Beaufort County's Stormwater Utility staff, he was a Biologist with SC-DNR, spending the past year working collaboratively with researchers and county officials to determine the sensitivity of Beaufort County tidal creeks to freshwater runoff. Part of his responsibilities was to develop protocols for a monitoring program of several waters in Beaufort County. He helped design and implement the program to measure tidal cycle, salinity, dissolved oxygen, and flow rate of several creek systems in the county and was responsible for data collection, management, and logistics of field work in four watersheds simultaneously. One of the first steps to getting the project off the ground was establishing mutually supportive relationships with property owners to allow monitoring equipment on their property.
2. Board Vacancies – Nothing new to report. I did receive one inquiry but no action at this time.
3. Danny Polk and Eric Larson attended the quarterly SCASM meeting in Columbia this past month. The agenda topics were focused on MS4 permit MCM 6 – Municipal facility operations and water pollution prevention. The information was very helpful and will be used to develop our own plan for the MS4 permit.
4. Eric Larson has been appointed to the Planning Department's Development Review Team (DRT) on behalf of the Engineering department to provide review on private projects. This was done to facilitate stormwater review. This has increased workload slightly.
5. Eric Larson met with engineers with SCDOT to discuss ongoing confusion concerning outfall channels (ditches) that drain state right of ways to receiving water bodies. Given that the County's Extent of Service (EOS) plan specifically excludes stormwater infrastructure that does not drain county roads and properties, and that the State's policies seem to exclude these areas as well, it leaves these ditches unmaintained. We are working to reach an understanding with SCDOT and "close the gap" in operational coverage.
6. I spoke to the Marsh Association, a group of private development property managers, on the topic of the Utility's Credit program. The program currently has only 4 participants. As a result of the presentation, we have 4 pre-application meetings pending.

7. The Utility is finalizing a credit application for Belfair Plantation. It will save the POA approx. \$9,500 per year.

MS4 Update

1. MS4 permit application – A draft version of the permit application is being distributed at the October 1, 2014 meeting for review and discussion. It will be presented again in a final draft version at the November 5, 2014 meeting.
2. Stormwater Public Education and Outreach – The selection committee, made up of the SWIC members, met with the Beaufort Soil and Water Conservation District on September 25, 2014. A recommendation for an award will be made at the October 1, 2014 Utility Board meeting.

Monitoring Update

1. USCB Lab – Lab Manager Danielle Mickel reports that the lab has submitted their application for certification to SCDHEC Lab Certification for analysis of enterococci and total coliform/e.coli following methods Enterolert and SM9223B-2004, respectively. As mentioned previously, there was much documentation required for and included in the SCDHEC certification application; Quality Assurance Manual, Analysis Records, Training Records, QC Records(media, temperatures, sterility checks, QT sealer checks, autoclave checks), Resumes, Laboratory Director Designation letter, Standard Operating Procedures, and Qualifications for each employee and their responsibilities. The application was received by SCDHEC Lab Certification on 9/12/2014, in which SCDHEC has 45 days from receipt to reply and let the lab know what the next step is. A visit to the lab is required, in which SCDHEC has 3 months from the 45 days.

Stormwater Implementation Committee (SWIC) report

1. The next meeting is scheduled for November. The SWIC will be reviewing draft NOI applications for the MS4 permits.

Stormwater Related Projects

1. Shadow Moss Subdivision / Riley Road easement release – I have attached a [recommendation to the Natural Resources Committee](#) to release an easement serving Riley Road. A new development adjacent to the property, Shadow Moss, is re-routing a drainage pipe via stormsewer through the development. The County's responsibility for maintenance of the ditch will end with this construction. I request the Board recommend the approval of the easement release.

Professional Contracts Report

1. US 278 retrofit ponds (\$356,000 budget) – The project is moving forward. The site plan for the stockpile area is slightly behind schedule due to a delay in field surveying. Construction is now scheduled to start in late December or early January.

2. County Admin. Complex Retrofit Project (\$327,768 budget) – The contract and bonds from JS Construction have been received. We will be holding a pre-construction conference within the next month.
3. SC 170 widening and stormwater (\$14,000 budget) – The conceptual design study for the road corridor is complete and a final draft has been submitted to our office. I will be sharing the report with the County Administrator in the upcoming month. I will make the study available to the Board as soon as it is finalized.

Regional Coordination

1. Battery Creek Pond funded by an EPA 319 grant (\$132,609 budget – county portion) – On going. County and City staff are continuing to work with the property owner to negotiate an easement. (Lamar Taylor may also report)
2. May River Watershed Action Plan – Kim Jones may report.
3. Salinity Study (\$25,000 budget – county portion) - On going. The advisory group met last month to review the preliminary data and review the trend analysis performed to date. The committee made recommendations to the DNR staff on how to use the data and analysis to support recommendations for policy changes, technical standards, and/or capital projects.
4. Sea Level Rise and future planning – I have attached [the summary report](#) from the public meeting held in August. The Sea Grant staff is continuing work on the final report.
5. Drainage issue on H.E. McCracken Circle in Bluffton – On going. The Town of Bluffton staff has delivered additional field work to support a conceptual solution. I am still reviewing the data.
6. Stormwater / Water Quality segment for The County Channel – I have been working with County staff to develop a TV segment on the topic of water quality. This is at the request of State Representative and former County Council chairman Weston Newton. The project is in conjunction with Water Quality Protection Week to be held in October.



BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2801 Facsimile (843) 255-9478



TO: Councilman Brian Flewelling Chairman, Natural Resources Committee

FROM: Robert McFee, PE, Division Director for Engineering and Infrastructure
Eric W. Larson, Beaufort County Stormwater Utility *Eric W. Larson*

SUBJECT: Stormwater Drainage Easement Conveyance to Centex Homes - Shadow Moss Phase 4

Date: September 12, 2014

BACKGROUND: The Trask Family conveyed a 25' drainage easement to Beaufort County located in the Shadow Moss, Phase 4 Subdivision in May of 2010. An open ditch was then constructed by Stormwater to handle water runoff from Riley Road onto Phase 4 of the Shadow Moss Subdivision as shown on the attached Exhibit "A". Centex Homes, who has subsequently purchased the property from the Trask Family, has now approached the County to request the return of this drainage easement as they are now developing the property and are designing a storm sewer system to re-route runoff that is currently conveyed by the ditch. It is their desire to re-route the drainage across Phase 4 using a buried pipe.

Upon such conveyance, Centex Homes would be responsible for the construction and maintenance of the re-routed drainage easement and Beaufort County would be released from all responsibility.

FOR ACTION: Natural Resources Committee meeting occurring on October 13, 2014.

RECOMMENDATION: Staff recommends the Natural Resources Committee of County Council endorse the conveyance of the above-referenced drainage easement to Centex Homes with the provision that they are responsible for the construction and ongoing maintenance of same and release Beaufort County for all future responsibility.

CC: Gary Kubic, County Administrator *OK Gary Kubic*

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PB
NC

Prepared by and return to:
Beaufort County Staff Attorney
P.O. Drawer 1228
Beaufort, SC 29901-1228
(843) 255-2055, (843) 470-5383 FAX

Riley/Fair Road (drainage easement)

BEAUFORT COUNTY SC - ROD
BK 02969 PG 2263 - 2263 H
FILE NUM 2010034015
07/01/2010 04:43:16 PM
REC'D BY P BAXLEY RCPT# 621139
RECORDING FEES 0.00

STATE OF SOUTH CAROLINA

DRAINAGE EASEMENT

COUNTY OF BEAUFORT

KNOW ALL MEN BY THESE PRESENTS, THAT We William Davis Trask, James Heide Trask, John Donald Trask, Harold E. Trask, Jr., Margaret Scheper Trask, and Robert Edward L. Holt, III, (collectively, the "Grantor") in the State aforesaid, for and in consideration of the sum of ONE AND NO/100 DOLLARS (\$1.00) and improvement of drainage on Grantor's land, the receipt whereof is hereby acknowledged, to us in hand paid at and before the sealing of these presents by Beaufort County, P.O. Drawer 1228, Beaufort, South Carolina 29901-1228, have granted and conveyed unto the said Beaufort County (the "Grantee") its Successors and Assigns, a non-exclusive 25' drainage easement (the "Easement") as set forth on that certain plat entitled "TRACT 1, TRACT 2 & A 25' DRAINAGE EASEMENT BEING A PORTION OF SHADOW MOSS PHASE 4" prepared by Thomas & Hutton Engineering Co., dated September 16, 2009 and recorded in the Beaufort County Register of Deeds Office in Plat Book 130 at Page 37 (the "Easement Map"), said property being situated in the Town of Port Royal, County of Beaufort, State of South Carolina.

For or in connection with the construction of a ditch to improve the drainage on the above described lands, such construction to include excavation, widening, or deepening, etc. for or in connection with the operation, maintenance, and inspection of such a ditch.

1. This easement includes the right of ingress and egress at any time over and upon the above described land, for the purpose of construction, inspection, and maintenance of ditches as referred to above.
2. There is reserved to the Grantee, Beaufort County, the right and privilege to use the above described land of the Grantor for the purposes of maintaining the drainage ditch system.
3. The Grantee is responsible for operating and maintaining the work of improvement herein described, and shall remove and dispose of all excess material, soil, and debris generated by the construction or maintenance of the ditch by Grantee.
4. Special Provisions
 - a. The Grantee shall have the right to clear and remove all brush and trees to a width necessary to excavate and/or improve the above drainage ditches. Provided, however, if the Grantor desires to salvage merchantable timber from the area to be cleared, he will do so prior to the time the contractor begins work. It is understood that the Grantee will advise the Grantor at least 10 days in advance of construction.
 - b. Proposed drainage ditches will be constructed within the boundaries of the Easement location shown on the Easement Map.


- c. If the Grantor desires to salvage levees, fences, culverts, or bridges that interfere with the construction or maintenance of drainage ditches, he will have the opportunity to do so prior to construction and maintenance work.
- d. The Grantee acknowledges and agrees that the real property owned by Grantor and burdened by the Easement granted herein is shown as "Tract 3" on a plat recorded in Plat Book 129, at Page 13, in the office of the Register of Deeds for Beaufort County, South Carolina ("Grantor's Parcel"). Grantor (or its successors in title to Grantor's Parcel) intends to develop Grantor's Parcel as an additional phase of a residential subdivision, and has the right to apply to Beaufort County for a development permit based upon construction plans which could potentially change the location and design of the drainage facilities to be constructed on Grantor's Parcel for such development from the location and design of the facilities to be constructed by Grantee as shown on the Easement Map.
- e. Upon the later to occur of (i) the date upon which Grantor (or its successors in title) records a final subdivision plat for Grantor's Parcel on which a street right-of-way is shown to connect to Riley Road, or (ii) the completion by Grantor of street and drainage improvements on Grantor's Parcel that are sufficient in design and capacity to accommodate storm water run-off from Riley Road, the location of the Easement herein granted shall be deemed amended and relocated to and within the street right-of-way shown on such final subdivision plat, without the necessity of any further action by either party.
- f. It is agreed that buildings, fences, signs or other obstructions will not be erected by Grantee, its successors, assigns, or administrators within the limits of the easement herein conveyed.


TO HAVE AND TO HOLD the aforesaid easement in, over and upon the above described land of the Grantor, with all the rights, privileges and appurtenances thereto belonging or in any wise appertaining, unto the Grantee, its successors and assigns, forever, subject to the relocation (if applicable) by Grantor as provided in paragraph (e) above.

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this
13th day of May, 2010.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:


Witness #1


Notary Public as Witness #2

GRANTOR:


William Davis Trask

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 13th day of May, 2010, and acknowledged the due execution of the foregoing instrument.

Patricia A. Johnson (L.S.)
Notary Public for the State of South Carolina

My Commission expires: 6-27-2015

~~Notary Public as Witness #2~~

STATE OF SOUTH CAROLINA

COUNTY OF BEAUFORT

ACKNOWLEDGEMENT

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 25th day of May, 2010, and acknowledged the due execution of the foregoing instrument.

Mary L McForman (L.S.)
Notary Public for the State of South Carolina

My Commission expires: June 16, 2019

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this
25th day of May, 2010.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

[Signature]
Witness #1

Mary L McForman
Notary Public as Witness #2

GRANTOR:

[Signature]
James Heide Trask

STATE OF South Carolina

~~ACKNOWLEDGEMENT~~

~~I, the undersigned notary public, do hereby certify that the within named Grantor personally~~
appeared before me this _____ day of _____, 2009, and
acknowledged the due execution of the foregoing instrument.

Notary Public for the State of South Carolina (L.S.)

~~My Commission expires: _____~~

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this
26th day of MAY, ~~2009~~ ²⁰¹⁰.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

GRANTOR:

Janette Wager
Witness #1

Robert Edward L. Holt III
Robert Edward L. Holt, III

Bernard L. Buchhaber
Notary Public as Witness #2

STATE OF South Carolina
COUNTY OF Charleston

ACKNOWLEDGEMENT

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 26th day of MAY, ^{2010 (BKA)}~~2009~~, and acknowledged the due execution of the foregoing instrument.

Bernard F. Buckheiser (L.S.)
Notary Public for the State of South Carolina

My Commission expires: My Commission Expires
November 19, 2019

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 13th day of May, 2009, and acknowledged the due execution of the foregoing instrument.

Peter A. Jeter (L.S.)
Notary Public for the State of South Carolina

My Commission expires: 6-27-2015

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this
13th day of May, 2009.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

Eric Lucisall
Witness #1

Peter A. Jeter
Notary Public as Witness #2

GRANTOR:

Margaret Schepher Trask
Margaret Schepher Trask

STATE OF South Carolina
COUNTY OF Beaufort

ACKNOWLEDGEMENT

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this
11 day of May, 2009/2010

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

GRANTOR:

Betty Harvey
Witness #1

John Donald Trask
John Donald Trask

Allyson J. Warriner
Notary Public as Witness #2

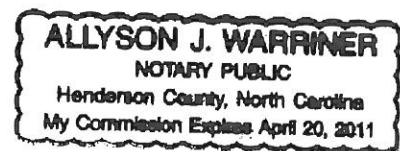
STATE OF North Carolina
COUNTY OF Brunswick

ACKNOWLEDGEMENT

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 11 day of May, 2009, and acknowledged the due execution of the foregoing instrument.

Allyson J. Warriner (L.S.)
Notary Public for the State of ~~South Carolina~~ North Carolina

My Commission expires: April 20, 2010



I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 13th day of May, ~~2009~~, and acknowledged the due execution of the foregoing instrument. 2010

Linda E Sanchez (L.S.)
Notary Public for the State of South Carolina

My Commission expires: 8/14/2016

Approved by County Attorney

[Signature]
Landon P. Howell

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this 13th day of May, ~~2009~~, 2010

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

[Signature]
Witness #1

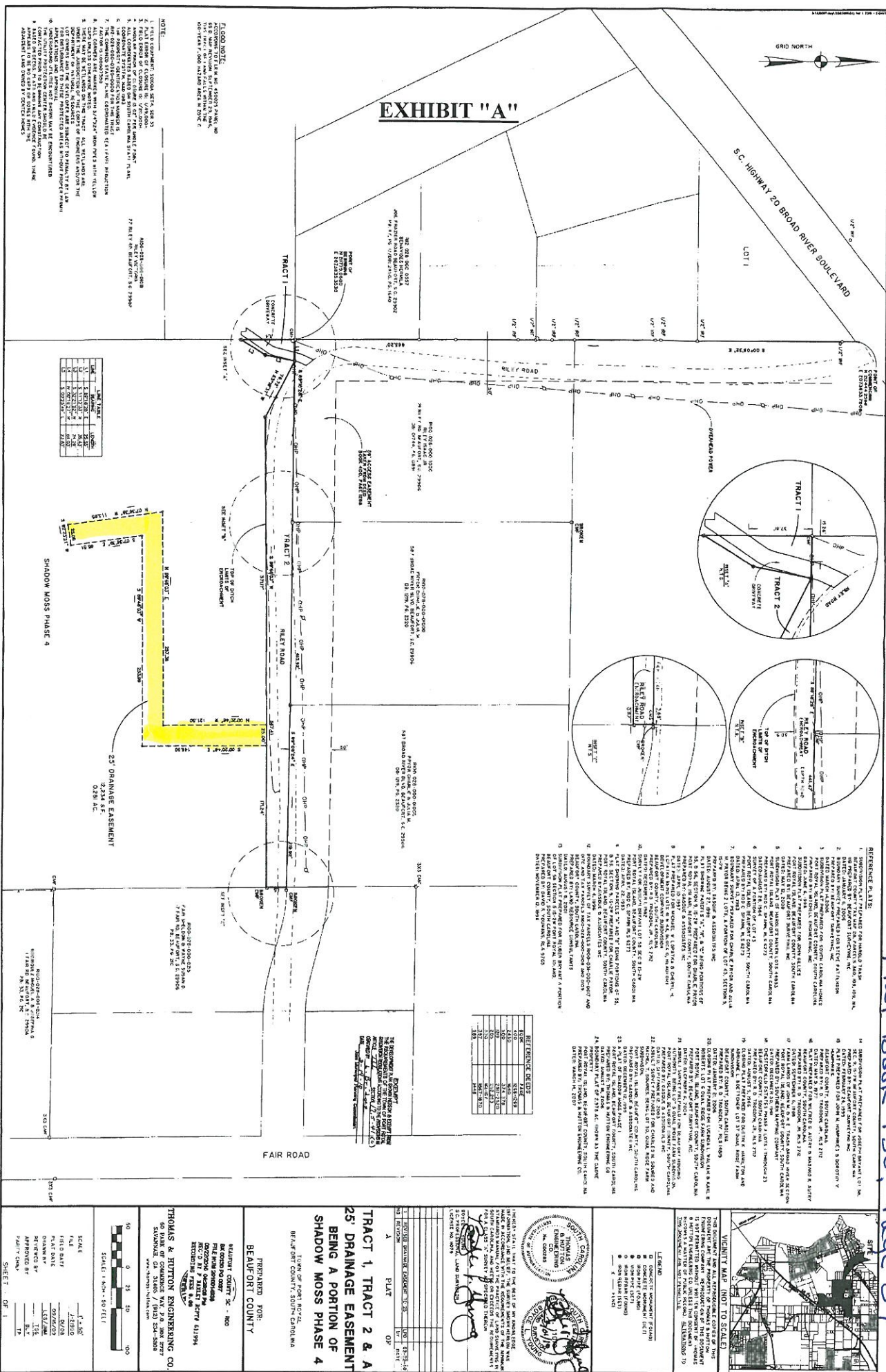
Linda E Sanchez
Notary Public as Witness #2

GRANTOR:

[Signature]
Harold E. Trask, Jr.

STATE OF South Carolina
COUNTY OF Charleston

ACKNOWLEDGEMENT



LEGEND

1. EASEMENT

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TRACT 1

TRACT 2

SHADOW MOSS PHASE 4

27 DRAINAGE EASEMENT 0.234 AC.

FAIR ROAD

RILEY ROAD

S.C. HIGHWAY 20 BROAD RIVER BOULEVARD

LOT 1

POINT OF BEGINNING

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SECTION 97

SECTION 98

SECTION 99

SECTION 100

TRACT 1, TRACT 2 & A
25' DRAINAGE EASEMENT
BEING A PORTION OF
SHADOW MOSS PHASE 4

BEAUFORT COUNTY, SOUTH CAROLINA

PREPARED FOR:
BEAUFORT COUNTY

FILED FOR RECORD
RECORDED BY
RECORDED BY
RECORDED BY

THOMAS & HUTTON ENGINEERING CO.
401 S. BROAD ST. SUITE 200
BEAUFORT, SOUTH CAROLINA 29501

SCALE: 1" = 50'

FIELD DATA
FIELD DATA
FIELD DATA

APPROVED BY
APPROVED BY
APPROVED BY

SHEET 1 OF 1

Beaufort County, SC Public Workshops On Sea Level Rise Adaptation Strategies



Summary Report

September 2014

Research Partners

Sean Bath (S.C. Sea Grant Consortium)
Liz Fly, Ph.D. (S.C. Sea Grant Consortium/CISA)
April Turner (S.C. Sea Grant Consortium)
Seth Tuler, Ph.D. (SERI)
Tom Webler, Ph.D. (SERI)
Jess Whitehead, Ph.D. (N.C. Sea Grant)

Beaufort County Partner

Rob Merchant, AICP (Planning Department)

Additional Facilitators/Note Takers

Amanda Brennan (CISA)
Samantha Bruce (S.C. Sea Grant Consortium)
Blaik Keppler (SC DNR, ACE Basin NERR CTP)
Chris Berg (SD DNR)

www.sites.google.com/site/beaufortslr



Social and Environmental
Research Institute



cisa
carolinas integrated sciences & assessments

Introduction

Project Overview

The workshops discussed in this report are part of a larger project titled, “Using Participatory Scenario Building to Encourage Climate-Resilient Planning in the Coastal Carolinas.” The work is a collaboration among the Beaufort County Planning Department, the South Carolina Sea Grant Consortium, the Social and Environmental Research Institute (SERI), North Carolina Sea Grant, and the Carolinas Integrated Sciences & Assessments (CISA) program at the University of South Carolina. It is funded by the Community Climate Change Adaptation Initiative (CCCAI) through the National Oceanic and Atmospheric Administration’s National Sea Grant Office.

Work on this project began in 2013. Scoping interviews were conducted with local members of county government, municipal government, nonprofit groups, and military facilities. Using the Vulnerability, Consequences, and Adaptation Planning Scenarios ([VCAPS](#)) process, the project team facilitated focus group discussions wherein local residents identified a number of county-wide vulnerabilities to sea level rise, consequences of these vulnerabilities, and potential actions to adapt.

Workshop Overview

The goal of the public workshops was to seek input on the sea level rise adaptation actions developed by the Beaufort County focus group. A press release was distributed to area media and event flyers were distributed on electronic mailing lists.

Session 1: August 25, 2014

Bluffton Branch Library Large Meeting Room
120 Palmetto Way, Bluffton, SC 29910

Session 2: August 26, 2014

St. Helena Branch Library Large Meeting Room
6355 Jonathan Francis Sr. Rd., St. Helena, SC 29920

Workshop Format

Time	Section Title	Description
1:00	Welcome, Introductions, and Overview of Agenda	Presentation 1: Sea Level Rise in Beaufort, SC
1:20	Vulnerability to Sea Level Rise in Beaufort County	Presentation 2: Sea Level Rise Science Presentation 3: Mapping SLR in Beaufort County
1:45	Review of Working Group Findings and Adaptation Strategies	Presentation 4: Potential Options for Adapting to Sea Level Rise in Beaufort County, SC
2:00	Question and Answer	
2:15	Break	
2:25	Small Group Discussions	Facilitated group discussions about adaptation strategies, including a prioritization vote.
3:25	Report-outs and Full Group Discussion	Facilitators share key points of each small group with all participants.
3:50	Next Steps and Wrap-Up	

Presentations

Number	Title of Presentation	Presenter
1	Sea Level Rise in Beaufort, SC	Dr. Elizabeth Fly, <i>Coastal Climate Extension Specialist</i> (S.C. Sea Grant Consortium/CISA)
2	Sea Level Rise Science	Dr. Elizabeth Fly, <i>Coastal Climate Extension Specialist</i> (S.C. Sea Grant Consortium/CISA)
3	Mapping SLR in Beaufort County	Sean Bath, <i>Graduate Student Intern</i> (S.C. Sea Grant Consortium / College of Charleston)
4	Potential Options for Adapting to Sea Level Rise in Beaufort County, SC	Dr. Jessica Whitehead, <i>Coastal Communities Hazards Adaptation Specialist</i> (N.C. Sea Grant)

Small Group Discussions

Participants for each workshop were divided into three or four small groups. Each person was handed a printed sheet of adaptation actions and given five minutes to reflect and write down additional ideas. After five minutes, each person introduced themselves and provided one major reflection or addition they had to the list.

Groups then moved to broader discussion that captured answers to the first three questions below:

Questions:

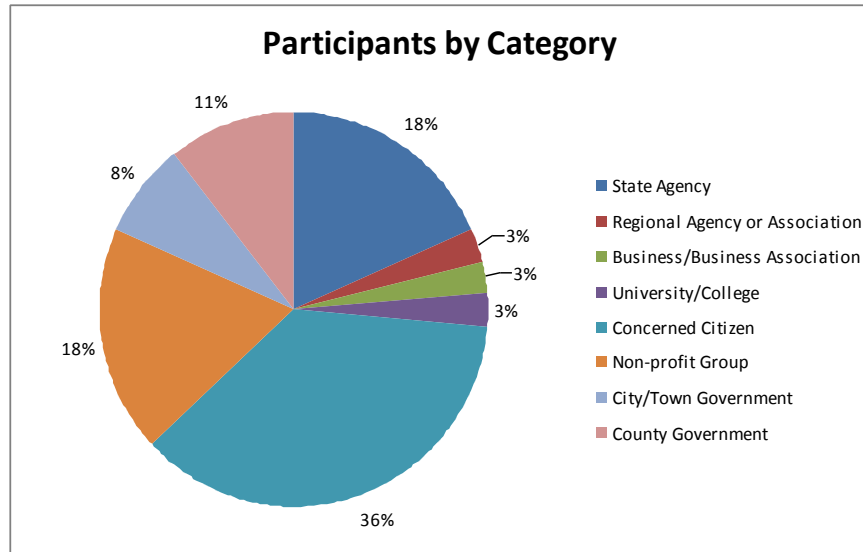
1. Do you have any comments or concerns about the list of suggested adaptation strategies?
2. Would you suggest any alternative strategies?
3. What important trade-offs would you consider with each strategy?

After much discussion on the above questions, participants voted for their top three priority strategies. If priority voting was completed in a timely fashion, group discussion continued emphasizing the following questions:

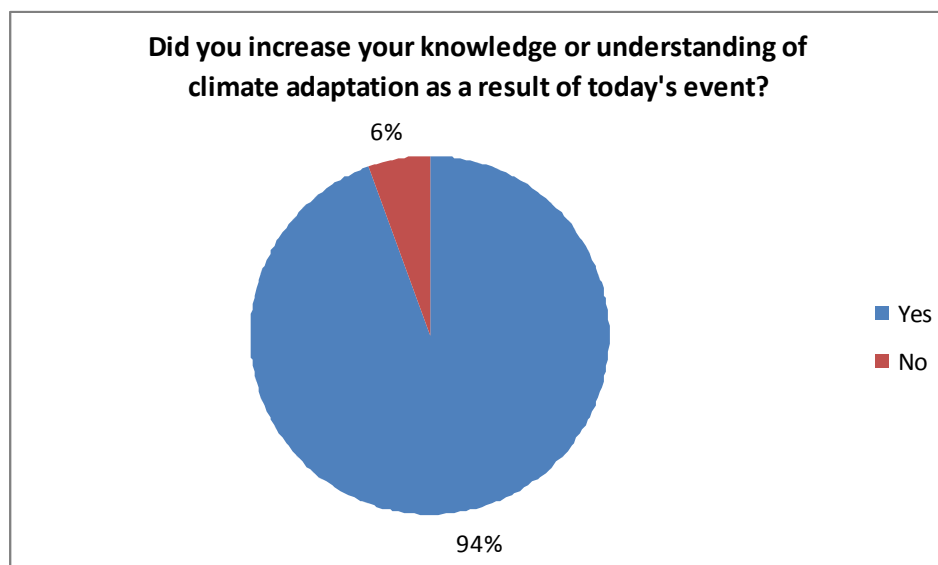
4. What actions do you think can be pursued with currently available resources and political agreement?
5. What additional information would help you make decisions?

At the end of the allotted time, groups decided 3-4 key takeaways from their discussion to share with the larger group.

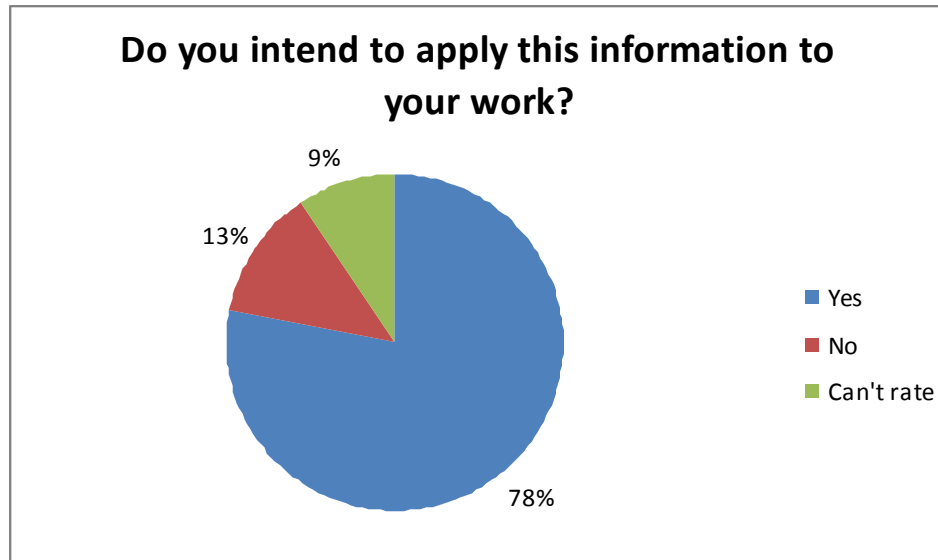
Evaluation Survey Highlights



Seventy-seven individuals attended the two sessions (33 on Monday and 44 on Tuesday). Participants were given an evaluation survey to return by the end of the session. The response rate was 49%. According to this survey, 72% of participants were concerned citizens, nonprofit members, or state agency employees (the three largest groups).



According to the evaluation survey, 94% of participants stated that they increased their knowledge due to the workshop.



Up to 78% of survey respondents intend to apply this information to their work.

What type of obstacles do you foresee to applying this information?

1. Political will (10 comments)
2. Financial Cost (9 comments)

Participants identified political will and financial cost as the primary obstacles to applying adaptation information in Beaufort County.

What additional training or assistance would help address these obstacles?

1. Public education/outreach (13 comments)

Participants emphasized public education as the best means to address obstacles. Specific ideas ranged from more workshops to community-level outreach that could target diverse segments of the population.

What component of today's meeting was most useful to you and WHY?

1. Breakout sessions (18 comments)
2. Presentations (13 comments)

Participants were particularly happy with the productivity of breakout group sessions. They enjoyed the opportunity to hear different perspectives and appreciated the way they could prioritize actions. Participants also complimented the quality of presentations introducing the topic.

The top priorities identified among the breakout groups were:

- Collect more information
- Public education*
- Maintain or strengthen setback policy on growing shorelines
- Elevate existing roads and change future elevation requirements.
- Coordination with key players.

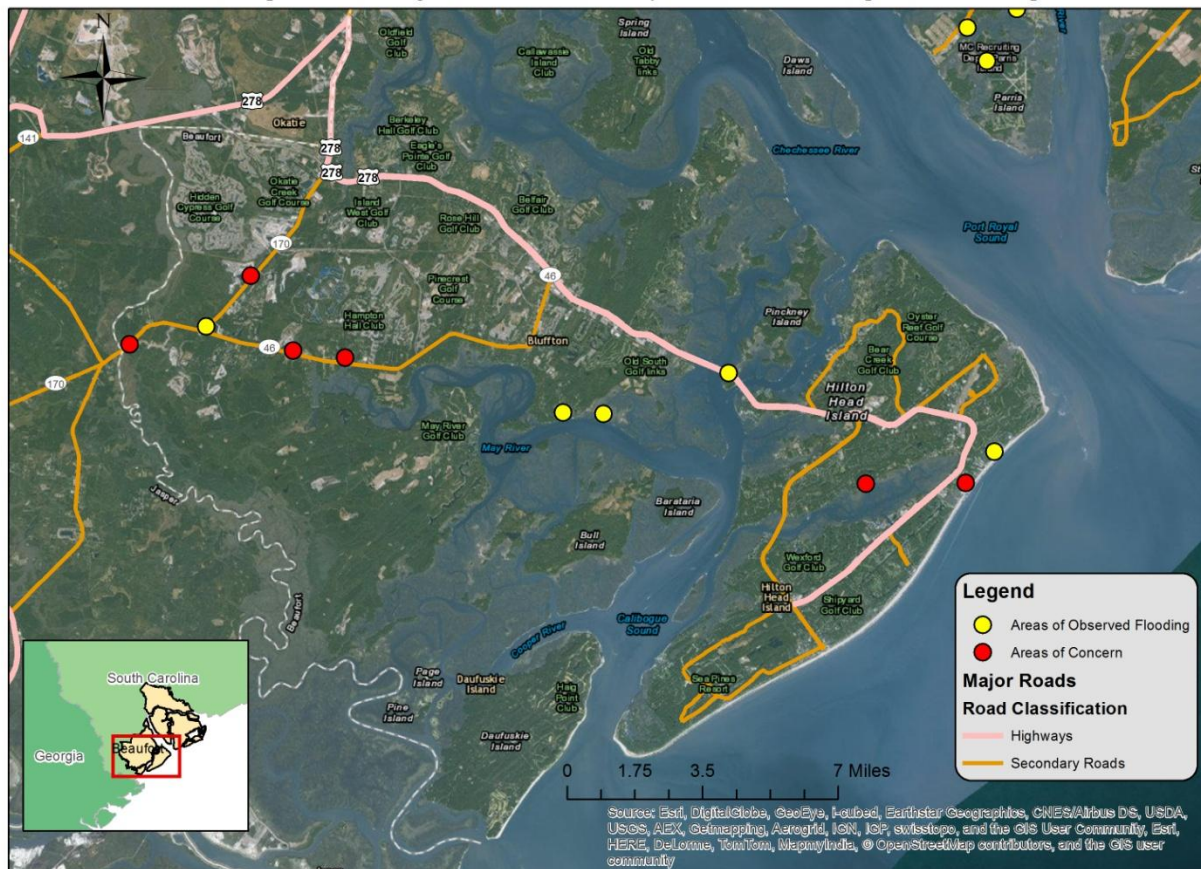
*This was a new strategy not specifically identified in the focus group.

Breakout groups discussed the adaptation strategies identified by the original focus group. They proposed key edits to action items such as combining similar items (i.e. creating one category of increasing collaboration with key players) and expanding items (i.e. making setback policies more stringent.) Participants also proposed new comprehensive items like living shorelines and low impact development. In many cases, participants used their unique local knowledge to contribute important contextual information. For example, participants noted that homeowners associations (HOAs), planned unit developments (PUDs), and churches were ideal vehicles for community education efforts and important players themselves in determining how the landscape might be affected by sea level rise.

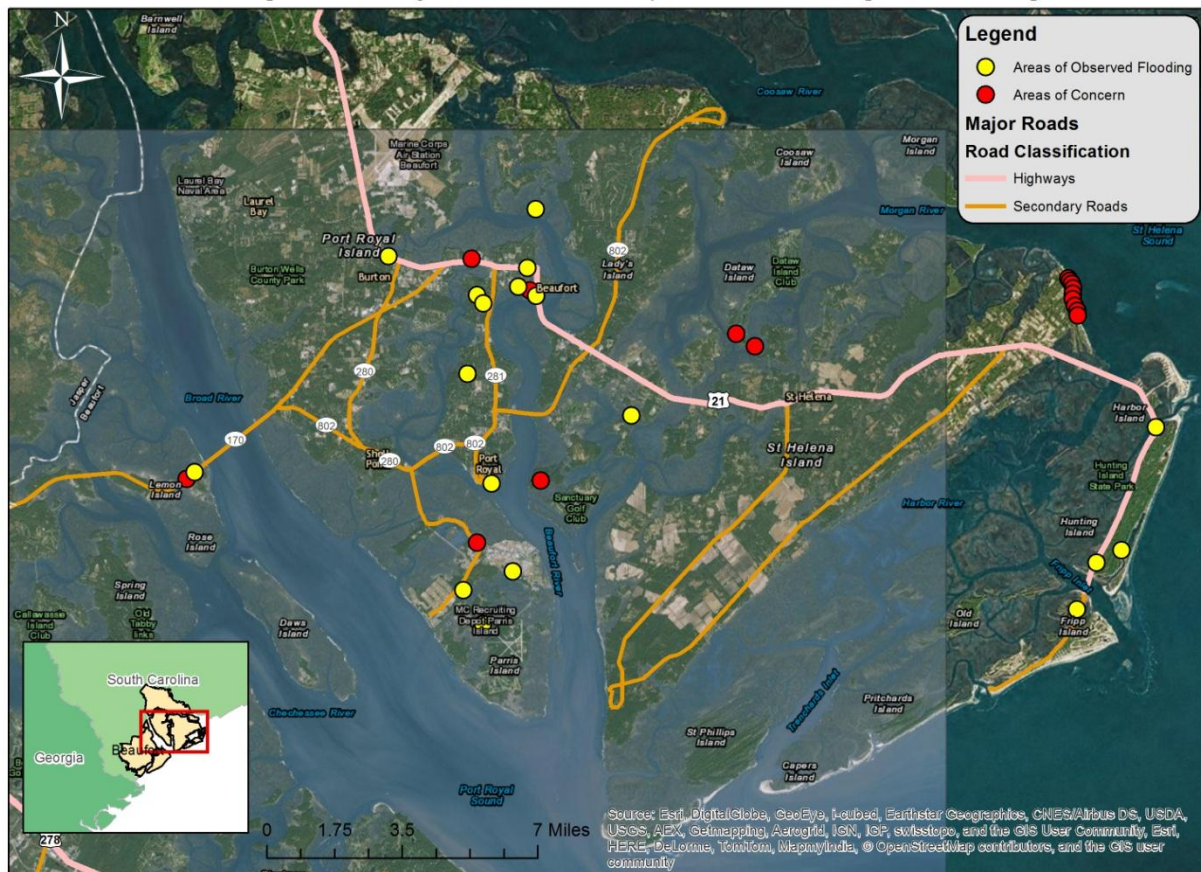
Participatory Mapping

Maps of Beaufort County were displayed during the workshops. Yellow sticker dots were available for participants to mark areas where they had observed flooding. Red sticker dots were available for participants to mark areas of concern. These maps have been digitized and are displayed below.

Public Input on Flooding at the Beaufort County Sea Level Rise Adaptation Workshop



Public Input on Flooding at the Beaufort County Sea Level Rise Adaptation Workshop



Next Steps

The project team will use participant input to write a report on adaptation options for Beaufort County. The document will review the study methodology, highlight findings, and provide a series of recommendations derived from Beaufort County participants.

Relevant Links

NOAA Coastal Services Center Sea Level Rise and Coastal Flooding Impacts Viewer

<http://www.csc.noaa.gov/digitalcoast/tools/slrviewer>

DHEC SC King Tides Initiative

<http://mycoast.org/sc/king-tides>

Climate Central Surging Seas Tool

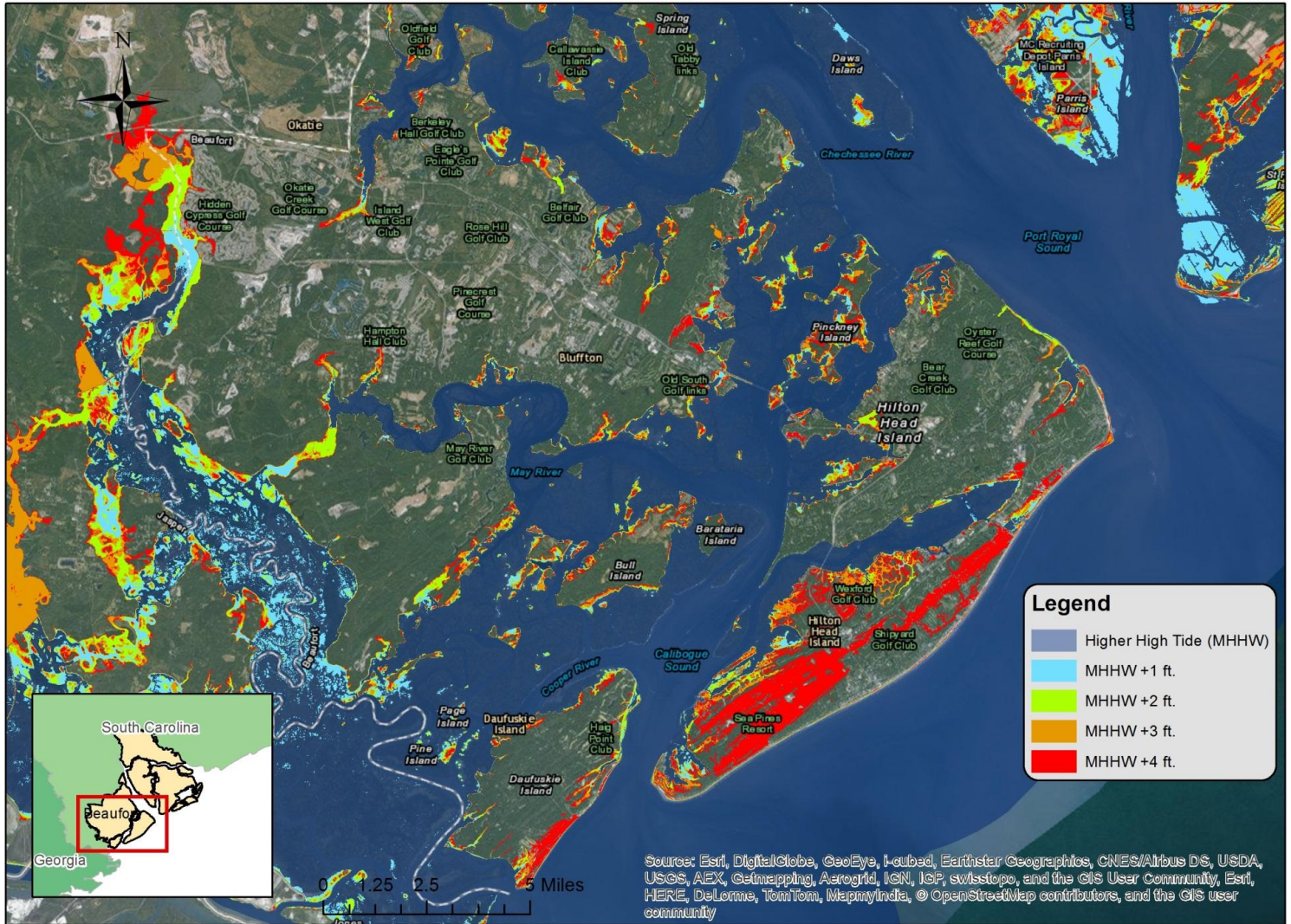
<http://sealevel.climatecentral.org/>

APPENDIX A

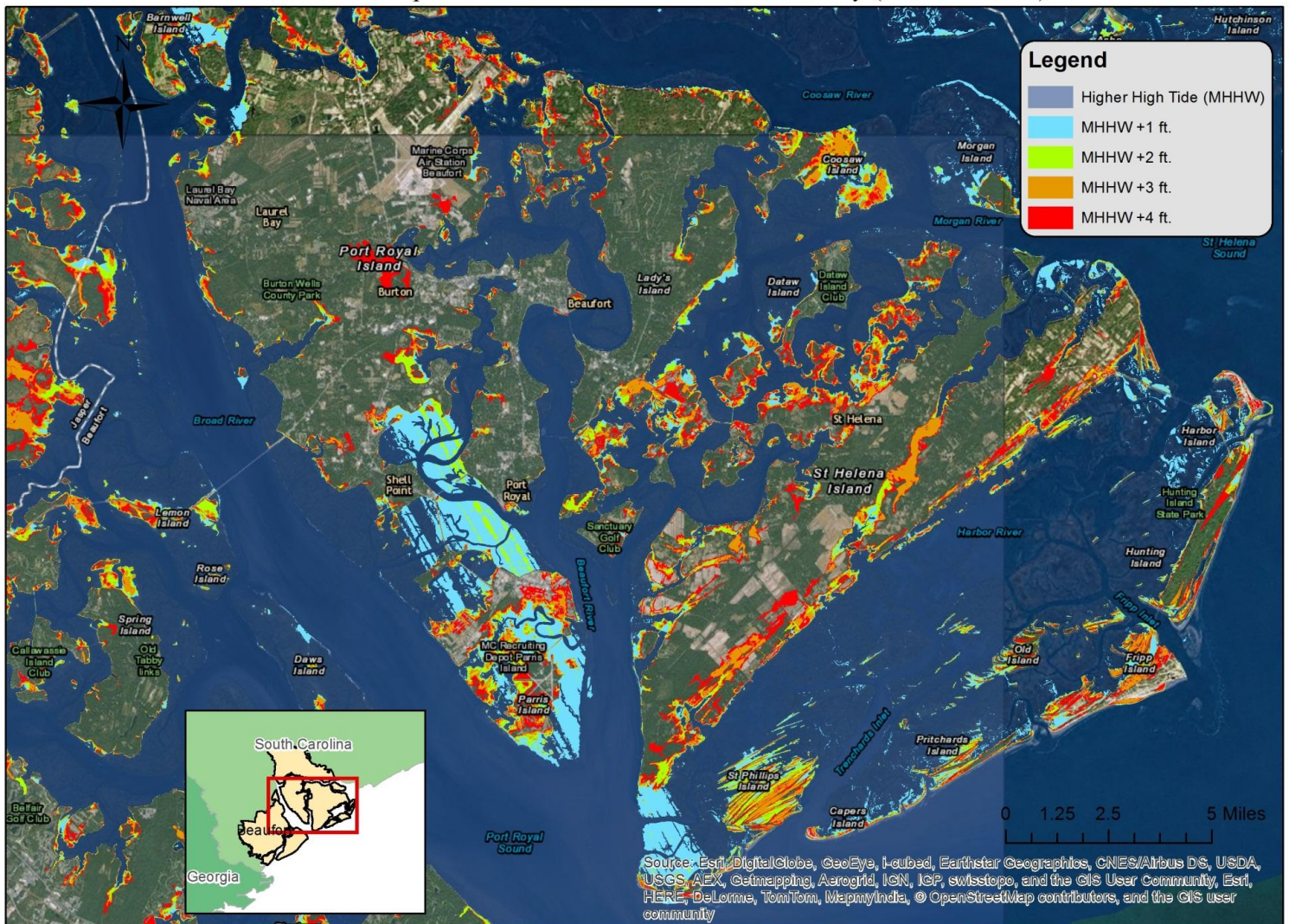
Sea Level Rise Model of Beaufort County

Mean Higher High Water is the average of the higher of the two daily tides over a ~20 year period. Extreme high tides frequently peak at 1-2 ft. above MHHW. When base sea level rises 1-2 ft., regular extreme tides may peak 3-4 ft. above MHHW.

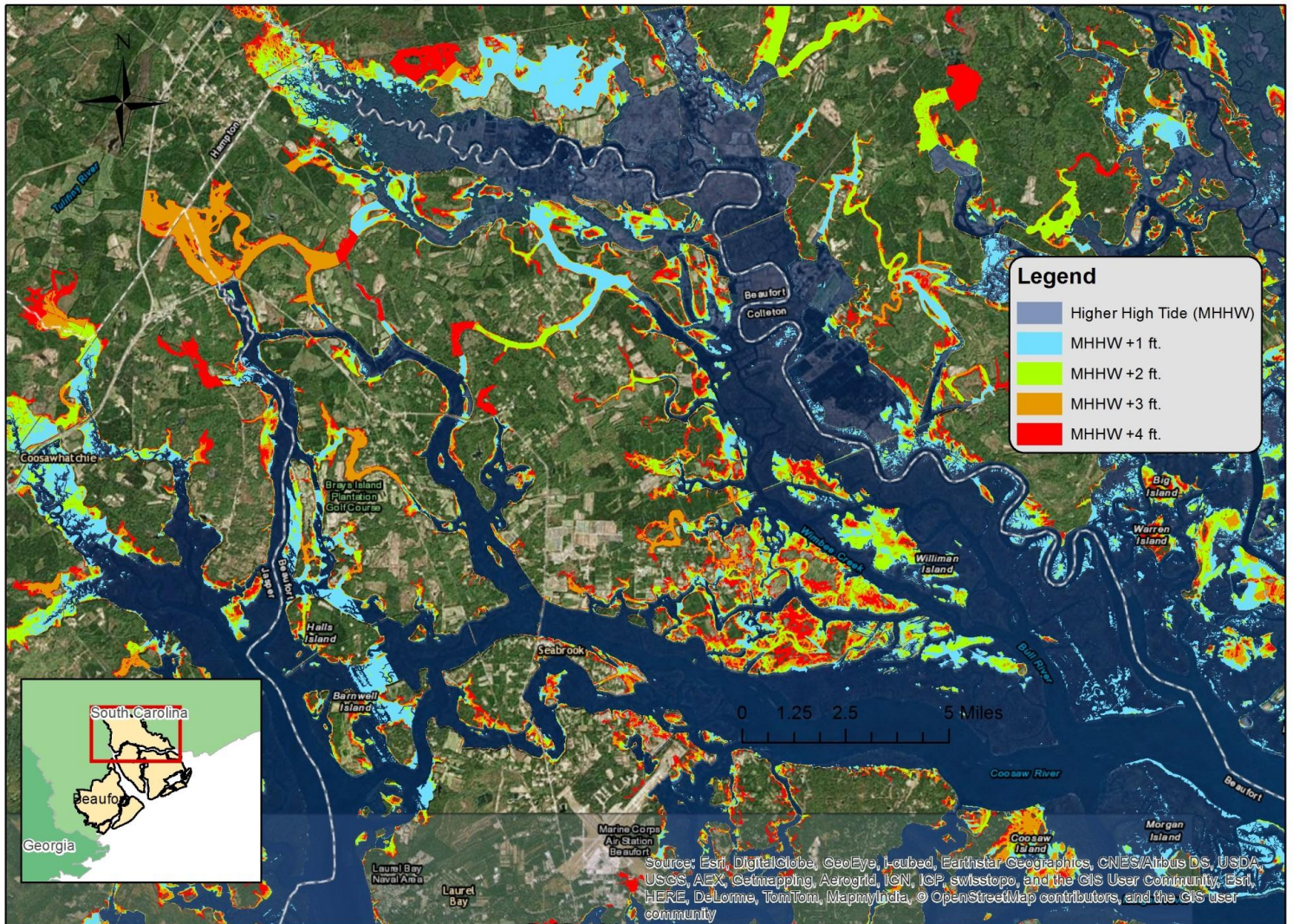
Potential Impact of Sea Level Rise in Beaufort County (south section)



Potential Impact of Sea Level Rise in Beaufort County (middle section)



Potential Impact of Sea Level Rise in Beaufort County (north section)



APPENDIX B
Beaufort County Sea Level Rise Adaptation Strategies
Identified and Ranked by Working Group
WORKING DOCUMENT

Rank	Action	Notes
	Maintain setback policy on shorelines	
2	Improve coordination with relevant state agencies (DHEC, DOT, etc.)	
3	Provide disclosure notice that the county will not be held liable for damages to high risk properties or from not maintaining services	
4	Use sea level rise information to inform disaster recovery plan	
5	Elevate existing roads and causeways	
6	Begin a dialogue on how to balance public & private interests	
7	Coordinate efforts with municipalities	
8	Identify planning thresholds (i.e. determine when sea level rise should be addressed by policy)	
9	Change road elevation requirements	
10	Provide sea level rise information on county website to inform & educate	
11	Collect more information (on flooding locations, sea level trends, erosion patterns, infrastructure vulnerabilities, etc.)	
12	Improve regional planning efforts	
13	Revise building codes to higher quality standards & use incentives	
14	Consider social & cultural vulnerability & resilience	
15	Establish new regulations for septic systems	
16	Monitor the health of salt marshes	
17	Require lagoon / storm water pond maintenance	

WORKING DOCUMENT

[illegible]

South Carolina Department of Health and Environmental Control's Small Municipal Separate Storm Sewer System (SMS4) Notice of Intent (NOI)

A Summary of Beaufort County
Stormwater Utility's Permit
Application

SWUB - October 1, 2014



Attachments included with permit application

- Current map of the MS4 system showing critical facilities, outfalls, etc.
- Current ordinances and regulations related to stormwater management, if applicable
- Listing of current stream impairments
- List of staff certifications for plan review, inspections
- Inventory of Municipal Facilities



Section 1 – Public Ed. & Outreach

Proposed Best Management Practices

- Brochures, printed guidance – used in various ways to educate citizens
- Website – provides education and input from citizens
- Event Participation – festivals, volunteer events, speaking engagements
- School Stormwater programs – EnviroScape, etc.
- Surveys – measure citizen knowledge of issues
- Data Management



Section 2 – Public Involvement

Proposed Best Management Practices

- Storm Drain Stenciling
- Public Meetings – seek input on permit, programs, guidance development
- Community Clean Ups
- Volunteer Speakers – create a “Speakers Bureau” to educate others
- Data Management



Section 3 – Illicit Discharge, Detection, and Elimination

Proposed Best Management Practices

- Adequate Legal Authority – develop written guidance and establish enforcement
- Outfall Inventory Map
- Outfall Screening for illicit discharges – field inspection
- Prioritize other potential illicit discharges and non-stormwater discharges – monitor “hot spots”
- Education on illicit discharge – staff and public
- Enforcement program / data management



Section 4 – Construction Site Runoff

Proposed Best Management Practices

- Revise Stormwater Management Ordinance – add to BMP Manual to provide guidance and legal authority
- Develop Construction site control Best Management Practices – erosion & sediment and waste
- Create plan review procedures
- Define site inspection procedures and enforcement
- Receipt of Public Inquiries – website / hot line
- Data Management



Section 5 – Post Construction Stormwater Management

Proposed Best Management Practices

- Revise Stormwater Management Ordinance – add to BMP Manual to provide legal authority
- Review and Revise practices defined in BMP Manual
- Mechanism for long term O&M of BMPs – agreements / contracts / deed restrictions
- Define inspection procedures
- Enforcement
- Data Management



Section 6 – Pollution Prevention / Good Housekeeping for Municipal Operations

Proposed Best Management Practices

- Create / modify Spill Prevention plans for critical facilities
- Training of staff
- Create a spill response plan and train staff
- Parking lot and street cleaning – reduce amount of pollutants in stormwater runoff
- Inventory system condition, prioritize needs
- Data Management





COUNTY COUNCIL OF BEAUFORT COUNTY
PURCHASING DEPARTMENT
102 Industrial Village Road, Building 3
Post Office Drawer 1228
Beaufort, South Carolina 29901-1228

TO: Councilman Brian Flewelling, Chairman, Natural Resources Committee

FROM: Dave Thomas, CPPO, Purchasing Director

SUBJ: **RFP # 08192014 Request for Proposal to provide Education and Outreach Consulting Services for Stormwater Management**

DATE: October 13, 2014

BACKGROUND: Beaufort County Purchasing Department issued a Request for Proposal (RFP) for Education and Outreach Consulting Services for Stormwater Management to assist with the department's programs and projects. The proposal requested that the consultant staff and facilitate stormwater education and outreach within the County and to perform duties and responsibilities necessary to bring and keep Beaufort County compliant with all Federal, State, and local laws/regulation regarding stormwater management for fiscal year 2015, with the option to renew every year for up to four (4) consecutive years. The Evaluation Committee consisted of five (5) representatives of the Beaufort County Stormwater Implementation Committee (SWIC) including Bryan McIlwee with the Town of Hilton Head Island, Kim Jones with the Town of Bluffton, Lamar Taylor with the City of Beaufort, Anthony Maglione representing the Town of Port Royal as a consultant, and Eric Larson with Beaufort County Stormwater Management.

The scope of services to provide stormwater education and outreach is unique and not widely marketed by for-profit businesses. The SWIC wrote the RFP scope of services to solicit non-profit organizations and educational institutions. Many groups such as these exist in Beaufort County and it was a goal to find a consultant that could organize these groups and efficiently utilize our existing resources. Beaufort County received one (1) response to the RFP from Beaufort Soil and Water Conservation District. The Committee reviewed and evaluated the RFP and decided to interview the vendor. Beaufort Soil and Water Conservation District's proposal meets the goals set forth by the SWIC and was unanimously approved by the Evaluation Committee.

The initial contract term is effective October 14, 2014 to June 30, 2015. Contract fee for the term will be a negotiated amount not to exceed \$50,000.00.

FUNDING: Primary Funding - 50250011-51160, Stormwater Fees, as part of the cost share MOU with the Towns of Hilton Head Island, Bluffton, and Port Royal and the City of Beaufort. The County's portion is \$25,218.

PROPOSED YEARLY COST: \$50,000

FOR ACTION: Natural Resources Committee meeting October 13, 2014.

RECOMMENDATION: The Purchasing Department recommends that the Natural Resources Committee approve the contract award to Beaufort Soil and Water Conservation District for Education and Outreach Consulting Services for Stormwater Management.

CC: Gary Kubic, County Administrator
Josh Gruber, Deputy Administrator
Alicia Holland, Chief Financial Officer
Robert McFee, Director of Engineering and Infrastructure
Eric W Larson, Stormwater Manager

Stormwater Education and Outreach Consulting Services Proposal by Beaufort Soil and Water Conservation District

A Report to Beaufort County
Stormwater Utility Board
October 1, 2014



Structure of the Beaufort Soil & Water Conservation District

Commissioner Chairperson Appointed by DNR Board	Commissioner Vice-Chairperson Appointed by DNR Board
Alan A. Ulmer, Jr.	Claude M. McLeod, Jr.

Commissioner Sec/Treasurer Elected	Commissioner Elected	Commissioner Elected
Denise M. Parsick Education Chairperson & Educator	Luke Inabinett	Mac Sanders

Associate Commissioners Voted in by Board		
Art Holland Retired USDA-SCS (NRCS)	Dean Moss Retired Director B/WSA	Carol Murphy Previous SWCD Manager & Educator

Staff Member	Title
Shelby Berry	District Manager, & Educator
Pam Floyd	Education Coordinator
Debra Way	Education Specialist
Kathryn Madden	Education Specialist

Additional Education Specialist
Laura Lee Rose Clemson Extension

Proposed Scope of Work

- Public Survey via internet, email, paper
- Public Open House(s) for MS4 input
- Neighbors for Clean Water campaign
 - Printed booklets
 - Website
- Community Education Programs
- School education program using Envirosearch
- Public/School Fact Sheets and Brochures



Proposed Scope of Work cont.

- Pond Clinic for Public, Staff
- Exhibiting at festivals, community events
 - Giveaways, Flyers, Activities, etc.
- Storm Drain Marker program
- Rain Barrel Program
- Rain Garden workshops
- Training for staff, developers, contractors
- MS4 reporting





MEMORANDUM

Date: October 1, 2014

To: Stormwater Management Utility Board

From: Eddie Bellamy, Public Works Director

Re: **Maintenance Project Report for October 2014**

1. This report will cover six major and fifteen minor or routine projects. The Project Summary Reports are attached.

2. Major Projects:

- A. **Basil Green Complex**, completed in May in the City of Beaufort, District 1; we corrected a long standing flooding issue in the sports complex by installing a catch basin and an underground detention vault. Total cost of the project was **\$38,396**.
- B. **Bonaire Circle**, completed in July in the Burton area of Port Royal Island, District 6; we bush hogged and cleaned out 495 feet of channel and installed 149 feet of channel pipe. Total cost of the project was **\$28,150**.
- C. **Rhumblin Road**, completed in July on Lady's Island, District 7; we grubbed, cleared, and constructed 180 feet of workshelf, reconstructed 320 feet of channel, upsized one driveway pipe, and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$18,658**.
- D. **Burton Wells Lake Repair**, completed in August in the Burton area of Port Royal Island, District 6; we installed one drainage basin, six inline grates, and 300 feet of pipe. We then constructed 100 feet of swale, repaired the washouts, installed reinforcement matting and straw matting, and hydroseeded for erosion control. Total cost of the project was **\$23,441**.
- E. **Burton Wells Sports Complex Pond Maintenance**, completed in August in the Burton area of Port Royal Island, District 6; cleaned out the detention pond and 385 feet of channel, trimmed the perimeter of the pond, and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$31,527**.
- F. **Administration Building Detention Ponds**, completed in September in the City of Beaufort, District 1; we grubbed, cleared, and reconstructed two existing ponds, extended an inlet pipe 24 feet, and installed straw mat, rip-rap and hydroseeded for erosion control. Total cost of the project was **\$64,863**.

3. Minor or Routine Projects:

- A. **Sheldon Washout Repairs –Backache Acres**, completed in March in the Lobeco area of Sheldon Township, District 5; we repaired three washouts.

- B. **Port Royal Island Washout Repairs**, completed in June in the Burton area of Port Royal Island, District 6; we repaired three washouts on two channels.
- C. **Ardmore Avenue**, completed in June on Lady's Island, District 7; we cleaned out and repaired a catch basin and sinkhole.
- D. **Airport Circle**, completed in June on Lady's Island, District 7; we bush hogged 467 feet of channel and cleaned out 220 feet of channel.
- E. **Persimmon Street**, completed in June in Bluffton Township, District 9; we replaced a missing catch basin lid.
- F. **Eustis Landing Road**, completed in June on Lady's Island, District 7; we repaired a sinkhole.
- G. **Old Dawson Acres**, completed in June in the Gardens Corner area of Sheldon Township, District 5; we removed a bleeder pipe that was no longer needed.
- H. **St. Helena Tree Removal**, completed in June on St. Helena Island, District 8; we removed two fallen trees from two different channels/workshelves.
- I. **Sheldon Bush Hogging**, completed in July in Sheldon Township, District 5; we bush hogged 79,883 feet of channel and the associated workshelves and the perimeter of one pond. Total cost of the effort was **\$38,491**, or **\$.48/foot**.
- J. **Parkside Drive**, completed in July in Bluffton Township, District 9; we repaired a catch basin lid and a washout.
- K. **Irongate Subdivision**, completed in July in the Burton Area of Port Royal Island, district 6; we cleaned out 130 feet of channel.
- L. **Pin Oak Street/Able Street**, completed in July in Bluffton Township, District 9; we repaired a curb inlet and two sinkholes.
- M. **Red Cedar Street**, completed in August in Bluffton Township, District 9; we repaired two sinkholes.
- N. **Hanna Avenue**, completed in August in the Grays Hill area of Port Royal Island, District 6; we cleaned out 437 feet of roadside ditch.
- O. **Holly Hall Road**, completed in August on Lady's Island, District 7; we repaired a washout and installed rip-rap for erosion control.



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Basil Green Complex

Activity: Drainage Improvement

Narrative Description of Project:

Project improved 63 L.F. of drainage system. Installed (1) catch basin, underground detention vault and sod for erosion control.

Completion: May-14

2014-002 / Basil Green Complex	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
BKFILL / Back Fill	3.0	\$64.89	\$61.46	\$27.63	\$0.00	\$43.26	\$197.24
CBINS / Catch basin - installed	40.0	\$865.30	\$392.71	\$9,177.26	\$0.00	\$573.90	\$11,009.17
CLJS / Cleaned up jobsite	40.0	\$841.77	\$218.26	\$110.93	\$0.00	\$542.80	\$1,713.76
EDO / Equipment Drop Off	6.0	\$161.46	\$80.14	\$43.44	\$0.00	\$104.10	\$389.14
HAUL / Hauling	88.0	\$1,999.69	\$870.80	\$7,519.60	\$0.00	\$1,327.44	\$11,717.53
ONJV / Onsite Job Visit	57.0	\$1,868.20	\$248.82	\$135.75	\$0.00	\$1,286.13	\$3,538.90
PI / Project Inspection	2.0	\$88.54	\$7.24	\$6.00	\$0.00	\$67.92	\$169.70
PP / Project Preparation	16.0	\$573.50	\$23.87	\$6.37	\$0.00	\$426.30	\$1,030.04
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$750.00	\$0.00	\$750.00
PRRECON / Project Reconnaissance	7.0	\$254.44	\$25.34	\$24.00	\$0.00	\$190.27	\$494.05
SC / Sediment Control	36.0	\$755.28	\$341.78	\$150.50	\$0.00	\$550.56	\$1,798.12
SI / Sod - Installation	91.0	\$1,839.23	\$164.02	\$817.94	\$0.00	\$1,149.94	\$3,971.13
SODW / Sod - Watered	10.0	\$225.69	\$155.12	\$62.44	\$0.00	\$151.92	\$595.17
STAGING / Staging Materials	12.0	\$265.28	\$14.48	\$6.74	\$0.00	\$176.64	\$463.14
UC / Utility Coordination	0.0	\$0.00	\$0.00	\$0.00	\$525.00	\$0.00	\$525.00
2014-002 / Basil Green Complex Sub Total	409.0	\$9,823.73	\$2,604.04	\$18,088.60	\$1,275.00	\$6,604.41	\$38,395.78
 Grand Total	 409.0	 \$9,823.73	 \$2,604.04	 \$18,088.60	 \$1,275.00	 \$6,604.41	 \$38,395.78

Before



During



After



**Project: Basil
Green Complex**

**Activity: Drainage
Improvement**

**Project #:
2014-002**

**Township: City
of Beaufort**

**Completed:
May 2014**

Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



Prepared By: BC Stormwater Management Utility

Date Print: 9/18/14

File: C:/sethdata/projects/projectmaps/Basil Green Complex 2014-002



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Bonaire Circle South

Activity: Drainage Improvement

Narrative Description of Project:

Completion: Jun-14

Proejct improved 644 L.F. of drainage system. Bush hogged and cleaned out 495 L.F. of channel. Installed 149 L.F. of channel pipe and sod for erosion control.

2014-623 / Bonaire Circle	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
HAUL / Hauling	94.0	\$2,033.22	\$1,005.80	\$1,970.62	\$0.00	\$1,320.12	\$6,329.76
ODBH / Outfall ditch - bushhogged	40.0	\$923.76	\$119.75	\$57.51	\$0.00	\$592.56	\$1,693.58
ODCO / Outfall ditch - cleaned out	103.0	\$2,372.98	\$624.40	\$176.72	\$0.00	\$1,510.32	\$4,684.42
OFPI / Outfall Pipe - Installation	110.0	\$2,607.56	\$470.98	\$2,324.78	\$0.00	\$1,631.90	\$7,035.23
ONJV / Onsite Job Visit	45.0	\$1,525.98	\$152.04	\$89.60	\$0.00	\$1,027.83	\$2,795.45
PI / Project Inspection	1.0	\$44.27	\$3.62	\$6.40	\$0.00	\$33.96	\$88.25
PL / Project Layout	4.0	\$101.14	\$7.24	\$10.02	\$0.00	\$70.38	\$188.78
PRRECON / Project Reconnaissance	5.0	\$155.88	\$18.10	\$22.40	\$0.00	\$103.63	\$300.01
SCR / Sediment Control - Removed	15.0	\$301.00	\$18.10	\$6.40	\$0.00	\$194.20	\$519.70
SI / Sod - Installation	90.0	\$2,003.78	\$271.83	\$87.99	\$0.00	\$1,258.59	\$3,622.19
STAGING / Staging Materials	19.0	\$439.32	\$10.86	\$16.00	\$0.00	\$288.66	\$754.84
TRAIN / Training	1.0	\$19.28	\$0.00	\$0.00	\$0.00	\$12.21	\$31.49
UTLOC / Utility locates	1.5	\$42.60	\$0.00	\$0.00	\$0.00	\$30.21	\$72.81
2014-623 / Bonaire Circle Sub Total	529.5	\$12,591.23	\$2,702.72	\$4,768.44	\$0.00	\$8,087.80	\$28,150.19
 Grand Total	529.5	\$12,591.23	\$2,702.72	\$4,768.44	\$0.00	\$8,087.80	\$28,150.19

Before



During



After



Project: Bonaire Circle South

Activity: Drainage Improvement

**Project #:
2014-623**

**Township: Port
Royal Island**

**Completed:
July 2014**



Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 35 70 140 210 280
Feet

1 inch = 141 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/3/14

File: C:/sethdata/projects/projectmaps/Bonaire Cir S 2014-623



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Rhumblin Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Jul-14

Project improved 320 L.F. of drainage system. Grubbed, cleared and constructed 180 L.F. of workshelf. Reconstructed 320 L.F. of channel. Upsized (1) driveway pipe. Installed rip rap and hydroseeded for erosion control. Jetted (2) driveway pipes. Rework - Repaired washout.

2014-006 / Rhumblin Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
ADS / Administrative Support	2.0	\$66.36	\$7.24	\$9.60	\$0.00	\$48.94	\$132.14
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
DPINS / Driveway Pipe - Installed	40.0	\$903.10	\$274.76	\$410.23	\$0.00	\$567.50	\$2,155.59
DPJT / Driveway Pipe - Jetted	10.0	\$223.38	\$110.80	\$46.07	\$0.00	\$149.55	\$529.80
ESTP / Estimating Project	2.0	\$88.54	\$0.00	\$0.00	\$0.00	\$67.92	\$156.46
HAUL / Hauling	67.0	\$1,449.21	\$716.90	\$2,046.23	\$0.00	\$921.94	\$5,134.28
HYDR / Hydroseeding	46.0	\$1,037.74	\$141.90	\$246.88	\$0.00	\$651.57	\$2,078.09
LM / Loading Materials	46.0	\$1,082.14	\$256.72	\$53.21	\$0.00	\$676.88	\$2,068.95
ODCO / Outfall ditch - cleaned out	30.0	\$686.80	\$235.00	\$57.26	\$0.00	\$423.30	\$1,402.36
ODGRB / Outfall ditch - grubbed	53.0	\$1,238.27	\$300.16	\$105.29	\$0.00	\$773.54	\$2,417.26
ONJV / Onsite Job Visit	19.0	\$605.84	\$68.78	\$38.40	\$0.00	\$396.55	\$1,109.57
PI / Project Inspection	2.0	\$88.54	\$7.24	\$9.60	\$0.00	\$67.92	\$173.30
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$300.00	\$0.00	\$300.00
PRRECON / Project Reconnaissance	5.0	\$155.88	\$7.24	\$9.60	\$0.00	\$103.63	\$276.35
RRI / Rip Rap - Installed	12.0	\$250.20	\$36.48	\$20.10	\$0.00	\$159.44	\$466.22
UTLOC / Utility locates	6.0	\$122.76	\$12.06	\$9.60	\$0.00	\$79.38	\$223.80
2014-006 / Rhumblin Road Sub Total	341.0	\$8,019.22	\$2,175.28	\$3,062.07	\$300.00	\$5,101.29	\$18,657.86
Grand Total	341.0	\$8,019.22	\$2,175.28	\$3,062.07	\$300.00	\$5,101.29	\$18,657.86

Before

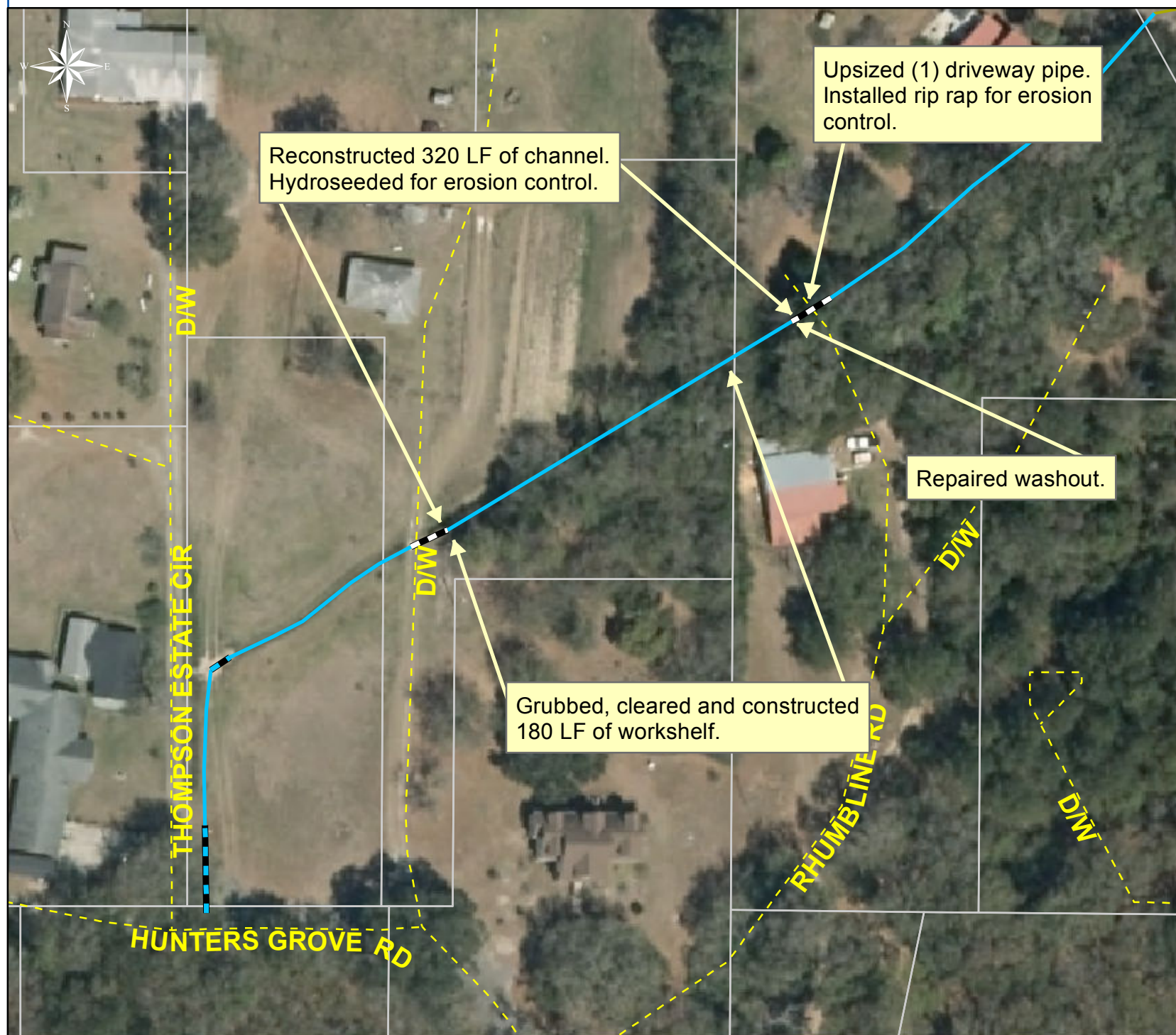


During



After





Project: Rhumbline Road Map 1

**Activity: Routine/
Preventive
Maintenance**















Project #:
2014-006

Township: St. Helena Island

**Completed:
July 2014**

Legend

TYPE

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe

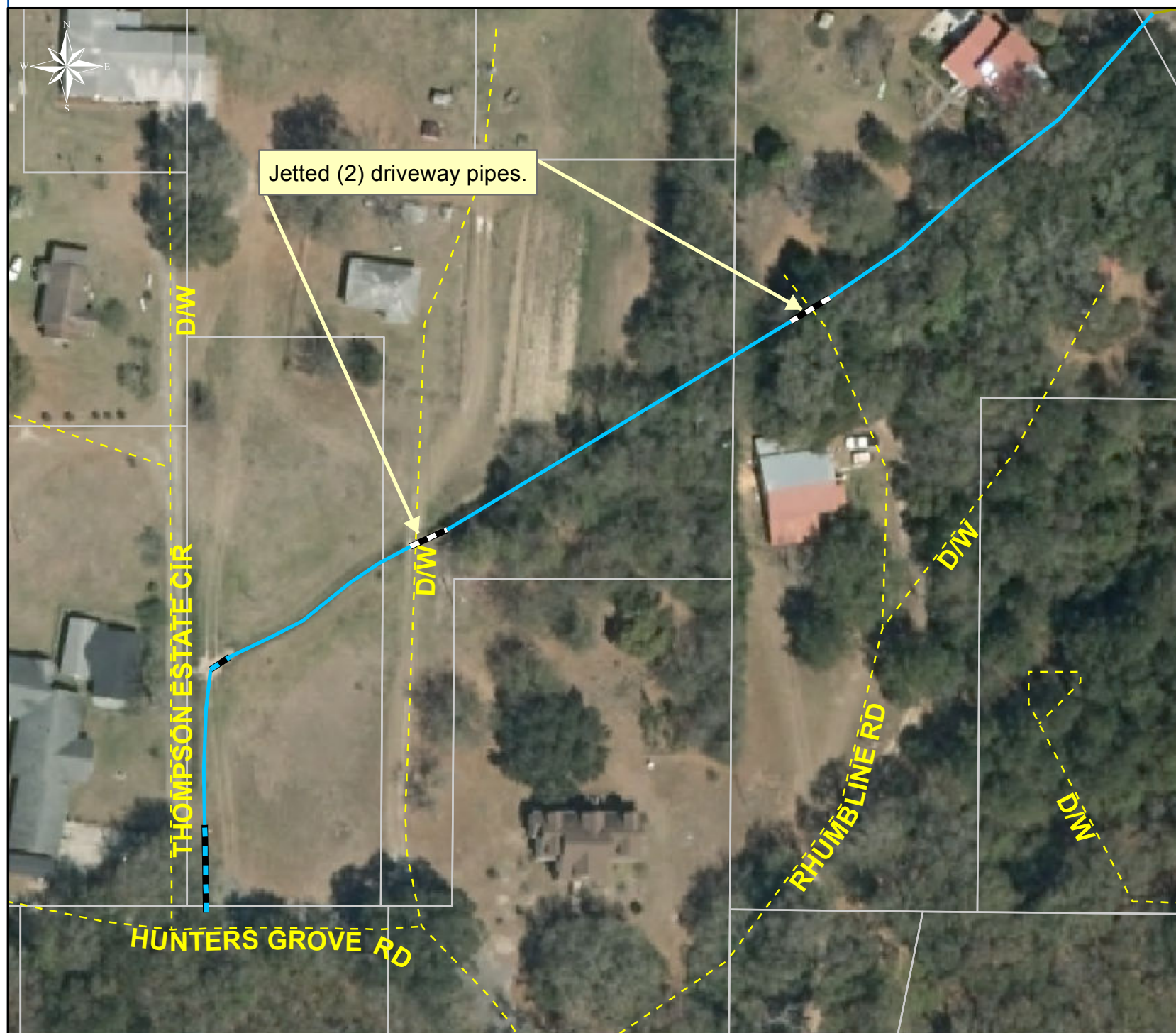
Project: Rhumbline Road Map 2

Activity: Vacuum Truck

Project #:
2014-006

Township: St.
Helena Island

Completed:
July 2014



Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/9/14

File: C:/sethdata/projects/projectmaps/Vac/Rhumbline 2014-006 Map2



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Burton Wells Lake Repair

Activity: Drainage Improvement

Narrative Description of Project:

Completion: Aug-14

Project improved 400 L.F. drainage system. Installed (1) drain basin, (6) inline grates 300 L.F. of channel pipe, reinforcement mat, strawmat and hydroseeded for erosion prevention. Constructed 100 L.F. of swale. Repaired washouts.

2014-004 / Burton Wells Lake Repair	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
CLJS / Cleaned up jobsite	88.0	\$2,035.44	\$308.16	\$137.97	\$0.00	\$1,307.86	\$3,789.43
HAUL / Hauling	40.0	\$907.96	\$428.00	\$460.38	\$0.00	\$613.75	\$2,410.09
HYDR / Hydroseeding	48.0	\$1,107.63	\$130.25	\$258.00	\$0.00	\$713.46	\$2,209.34
OFPI / Outfall Pipe - Installation	90.0	\$2,017.40	\$359.16	\$5,895.30	\$0.00	\$1,301.80	\$9,573.66
ONJV / Onsite Job Visit	41.0	\$1,325.65	\$148.82	\$54.54	\$0.00	\$882.24	\$2,411.25
PI / Project Inspection	2.0	\$88.54	\$7.24	\$6.06	\$0.00	\$67.92	\$169.76
PL / Project Layout	9.0	\$398.43	\$32.58	\$21.21	\$0.00	\$305.64	\$757.86
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$607.47	\$0.00	\$607.47
UTLOC / Utility locates	27.0	\$629.34	\$25.34	\$18.18	\$0.00	\$426.77	\$1,099.63
WEED / Weedeating	10.0	\$210.45	\$18.10	\$12.12	\$0.00	\$138.25	\$378.92
2014-004 / Burton Wells Lake Repair	356.0	\$8,741.30	\$1,457.65	\$6,863.75	\$607.47	\$5,770.92	\$23,441.10
Sub Total							
 Grand Total	 356.0	 \$8,741.30	 \$1,457.65	 \$6,863.75	 \$607.47	 \$5,770.92	 \$23,441.10

Before



During



After



**Project: Burton Wells Complex
Lake Repair**

**Activity: Drainage
Improvement**

**Project #:
2014-004**

**Township: Port
Royal Island**

**Completed:
August 2014**

Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



0 30 60 120 180 240
Feet

1 inch = 116 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/15/14

File: C:/sethdata/projects/projectmaps/



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Burton Wells Sports Complex Pond Maintenance

Activity: Pond Maintenance

Narrative Description of Project:

Project improved 385 L.F. of drainage system. Cleaned out pond and 385 L.F. of channel. Weedeat perimeter of pond. Installed rip rap and hydroseeded for erosion control.

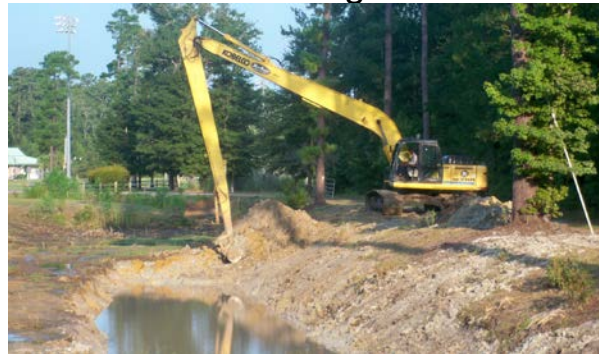
Completion: Aug-14

2015-320 / Burton Wells Sports Complex Pond	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.5	\$30.69	\$0.00	\$0.00	\$0.00	\$19.85	\$50.54
HAUL / Hauling	200.5	\$4,550.67	\$2,314.87	\$1,864.39	\$0.00	\$2,802.23	\$11,532.15
HYDR / Hydroseeding	30.0	\$698.40	\$129.30	\$266.65	\$0.00	\$474.00	\$1,568.35
LM / Loading Materials	4.0	\$86.52	\$83.67	\$16.40	\$0.00	\$57.68	\$244.27
ODCO / Outfall ditch - cleaned out	45.5	\$1,020.19	\$113.50	\$136.76	\$0.00	\$672.62	\$1,943.07
ONJV / Onsite Job Visit	46.0	\$1,567.04	\$173.76	\$112.11	\$0.00	\$1,089.48	\$2,942.39
PM / Ponds - Maintenance	172.0	\$3,790.36	\$229.38	\$550.04	\$0.00	\$2,277.12	\$6,846.90
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$5,474.32	\$0.00	\$5,474.32
RR1 / Rip Rap - Installed	20.0	\$451.50	\$93.41	\$81.82	\$0.00	\$298.05	\$924.78
2015-320 / Burton Wells Sports Complex Pond Sub Total	519.5	\$12,195.37	\$3,137.89	\$3,028.17	\$5,474.32	\$7,691.02	\$31,526.77
 Grand Total	 519.5	 \$12,195.37	 \$3,137.89	 \$3,028.17	 \$5,474.32	 \$7,691.02	 \$31,526.77

Before



During



After



Project: Burton Wells Sports Complex Pond

Activity: Pond Maintenance

**Project #:
2015-320**

Township: Port Royal Island

**Completed:
August 2014**

Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



0 25 50 100 150 200 Feet

1 inch = 111 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/18/14

File: C:/sethdata/projects/projectmaps/Burton Wells Complex Pond 2015-320



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Beaufort County Administration Building Pond

Activity: Pond Maintenance

Narrative Description of Project:

Grubbed, cleared and reconstructed (2) existing ponds. Extended 24 L.F. of channel pipe. Installed strawmat, rip rap and hydroseeded for erosion control.

Completion: Sep-14

2014-321 / Beaufort County Admin Building Pond	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.5	\$30.69	\$0.00	\$0.00	\$0.00	\$19.85	\$50.54
HAUL / Hauling	311.3	\$7,099.20	\$3,537.87	\$4,038.46	\$0.00	\$4,696.28	\$19,371.81
HYDR / Hydroseeding	160.0	\$3,585.90	\$714.34	\$1,218.05	\$0.00	\$2,186.10	\$7,704.39
LM / Loading Materials	89.0	\$2,224.07	\$468.65	\$391.46	\$0.00	\$1,166.94	\$4,251.12
OFPI / Outfall Pipe - Installation	85.5	\$2,016.24	\$653.09	\$557.86	\$0.00	\$1,178.81	\$4,406.00
ONJV / Onsite Job Visit	40.0	\$1,596.57	\$144.80	\$94.43	\$0.00	\$1,178.87	\$3,014.67
PGC / Pond - Grubb and Clear	160.0	\$3,675.86	\$575.93	\$244.73	\$0.00	\$2,066.55	\$6,563.08
PI / Project Inspection	2.0	\$88.54	\$7.24	\$6.06	\$0.00	\$67.92	\$169.76
PL / Project Layout	14.0	\$619.78	\$50.68	\$24.24	\$0.00	\$475.44	\$1,170.14
PM / Ponds - Maintenance	56.0	\$1,324.20	\$246.56	\$181.43	\$0.00	\$821.52	\$2,573.71
PP / Project Preparation	15.0	\$458.90	\$21.72	\$18.18	\$0.00	\$312.14	\$810.94
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$6,136.82	\$0.00	\$6,136.82
RRI / Rip Rap - Installed	84.0	\$1,875.34	\$495.45	\$328.41	\$0.00	\$1,141.98	\$3,841.18
SC / Sediment Control	52.0	\$1,188.42	\$57.92	\$141.91	\$0.00	\$728.04	\$2,116.29
UTLOC / Utility locates	2.0	\$40.92	\$0.00	\$0.00	\$0.00	\$26.46	\$67.38
WSL / Workshelf - Level	60.0	\$1,394.30	\$277.04	\$194.97	\$0.00	\$749.00	\$2,615.31
2014-321 / Beaufort County Admin Building Pond	1,132.3	\$27,218.93	\$7,251.29	\$7,440.19	\$6,136.82	\$16,815.90	\$64,863.13
Sub Total							
Grand Total	1,132.3	\$27,218.93	\$7,251.29	\$7,440.19	\$6,136.82	\$16,815.90	\$64,863.13

Before



During



After



**Project: Beaufort
County
Administration
Building Pond**

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2014-321**

**Township: Port
Royal Island**

**Completed:
September 2014**

Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



0 30 60 120 180 240
Feet

1 inch = 120 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/18/14

File: C:/sethdata/projects/projectmaps/BC Admin Pond 2014-321



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Sheldon Washout Repair - Backache Acres

Activity: Routine/Preventive Maintenance

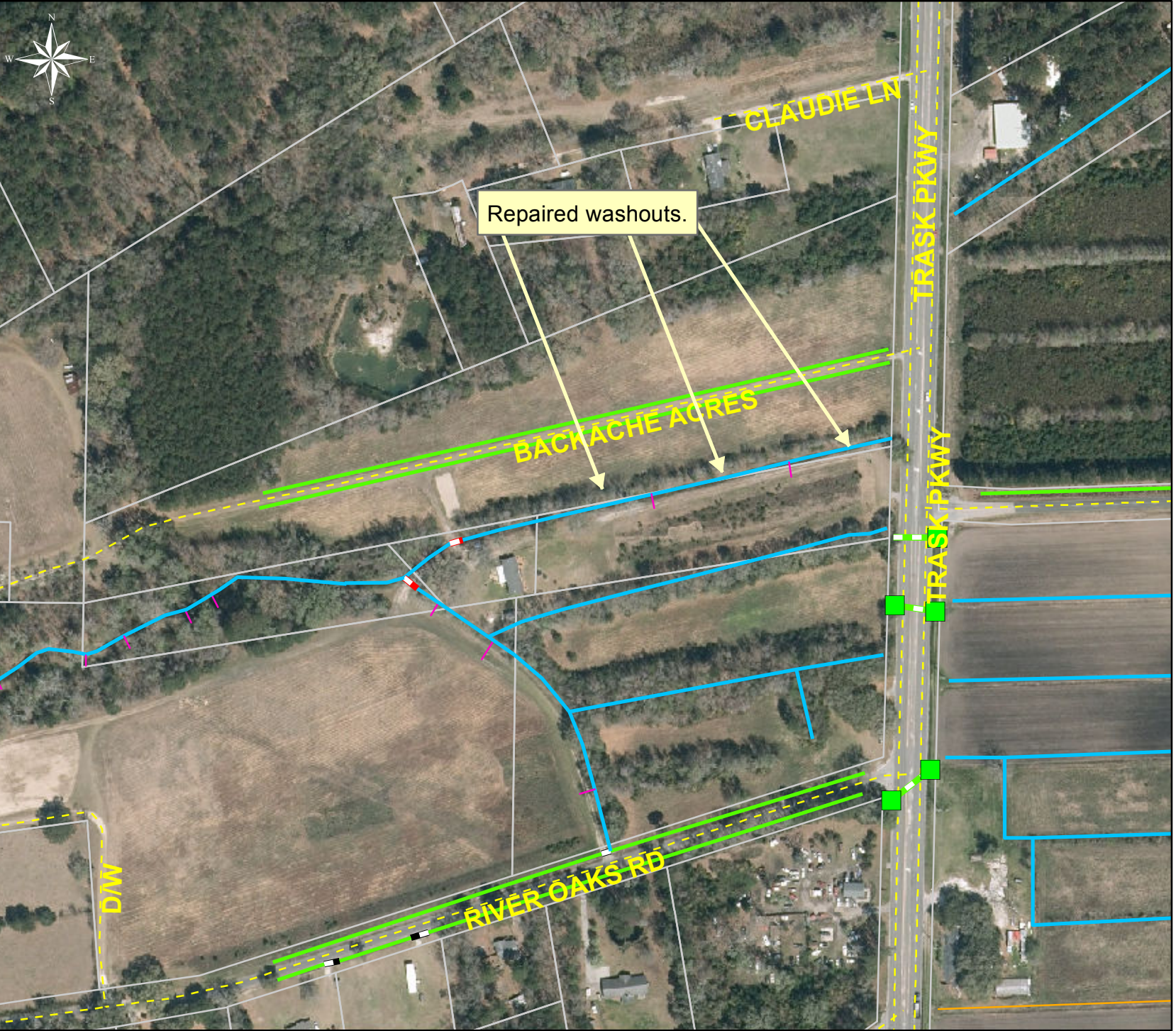
Narrative Description of Project:

Completion: Mar-14

Repaired washouts.

2014-516A / Sheldon Washout Repair	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	9.0	\$206.42	\$96.30	\$31.82	\$0.00	\$140.03	\$474.57
RPWO / Repaired Washout	10.0	\$210.44	\$40.10	\$0.00	\$0.00	\$132.30	\$382.84
2014-516A / Sheldon Washout Repair Sub Total	19.5	\$427.09	\$136.40	\$31.82	\$0.00	\$278.94	\$874.25
Grand Total	19.5	\$427.09	\$136.40	\$31.82	\$0.00	\$278.94	\$874.25

(Pictures Not Available)



Project: Backache Acres

Activity: Routine/ Preventive Maintenance

Project #: 2014-516A

Township: Port Royal Island

Completed: March 2014

Legend	
TYPE	
	River
	Creek/Stream
	River/Creek/Marsh BANK
	Channel (fka Outfall)
	Channel Pipe
	Lateral
	Lateral Pipe
	Roadside
	Roadside Pipe
	Road Pipe
	Crossline Pipe
	Driveway Pipe
	Access Pipe
	Bleeder Pipe



1 inch = 256 feet



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Port Royal Island Washout Repairs - Powell Drive and Salem Drive West

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Jun-14

Repaired washouts.

2014-524 / Port Royal Island Washout Repairs	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	5.0	\$104.64	\$53.50	\$32.27	\$0.00	\$72.10	\$262.51
RPWO / Repaired Washout	16.0	\$336.71	\$66.36	\$44.44	\$0.00	\$221.20	\$668.70
2014-524 / Port Royal Island Washout Repairs	21.5	\$451.58	\$119.86	\$76.71	\$0.00	\$299.92	\$948.06
Sub Total							
Grand Total	21.5	\$451.58	\$119.86	\$76.71	\$0.00	\$299.92	\$948.06

(Pictures Not Available)

Project: Powell Drive

**Activity: Routine/
Preventive
Maintenance**















**Project #:
2014-524**

**Township: Port
Royal Island**

**Completed:
June 2014**

Legend

TYPE

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



0 30 60 120 180 240
Feet

1 inch = 122 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/8/14

File: C:/sethdata/projects/projectmaps/Powell Dr 2014-524

Project: Salem Drive West

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2014-524**

**Township: Port
Royal Island**

**Completed:
June 2014**



Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 45 90 180 270 360
Feet

1 inch = 183 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/8/14

File: C:/sethdata/projects/projectmaps/Salam Dr W 2014-524



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Ardmore Avenue - Rework

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Cleaned out (1) catch basin. Repaired catch basin and sinkhole.

Completion: Jun-14

2014-620R / Ardmore Avenue - Rework	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CBCO / Catch basin - clean out	13.0	\$292.92	\$199.44	\$52.82	\$0.00	\$197.07	\$742.25
CBREP / Catch basin - repaired	34.0	\$790.54	\$136.28	\$174.39	\$0.00	\$522.12	\$1,623.33
ONJV / Onsite Job Visit	6.0	\$185.72	\$21.72	\$12.80	\$0.00	\$121.86	\$342.10
TRAIN / Training	1.0	\$19.28	\$0.00	\$0.00	\$0.00	\$12.21	\$31.49
2014-620R / Ardmore Avenue - Rework Sub Total	54.5	\$1,298.69	\$357.44	\$240.01	\$0.00	\$859.88	\$2,756.01
Grand Total	54.5	\$1,298.69	\$357.44	\$240.01	\$0.00	\$859.88	\$2,756.01

Before



During



After



Project: Ardmore Avenue

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2014-620R**

**Township: Lady's
Island**

**Completed:
June 2014**



Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 45 90 180 270 360
Feet

1 inch = 175 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/18/14

File: C:/sethdata/projects/projectmaps/Ardmore 2014-620R



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Airport Circle

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: June-14

Project improved 467 L.F. of drainage system. Bush hogged 467 L.F. of channel. Cleaned out 220 L.F. of channel.

2014-633 / Airport Circle	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
DLO / Ditch Layout	6.0	\$143.88	\$7.24	\$10.13	\$0.00	\$92.74	\$253.99
HAUL / Hauling	11.5	\$248.75	\$123.05	\$52.32	\$0.00	\$165.83	\$589.95
ODBH / Outfall ditch - bushhogged	6.0	\$134.10	\$40.10	\$22.49	\$0.00	\$86.67	\$283.36
ODCO / Outfall ditch - cleaned out	30.0	\$719.40	\$152.61	\$55.09	\$0.00	\$463.70	\$1,390.80
ONJV / Onsite Job Visit	3.0	\$89.52	\$10.86	\$15.95	\$0.00	\$54.69	\$171.02
PRRECON / Project Reconnaissance	2.0	\$88.54	\$7.24	\$6.38	\$0.00	\$67.92	\$170.08
2014-633 / Airport Circle	59.0	\$1,434.42	\$341.10	\$162.36	\$0.00	\$938.17	\$2,876.04
Sub Total							
Grand Total	59.0	\$1,434.42	\$341.10	\$162.36	\$0.00	\$938.17	\$2,876.04

Before



During



After



Project: Airport Circle

Activity: Routine/
Preventive
Maintenance

Project #:
2014-663

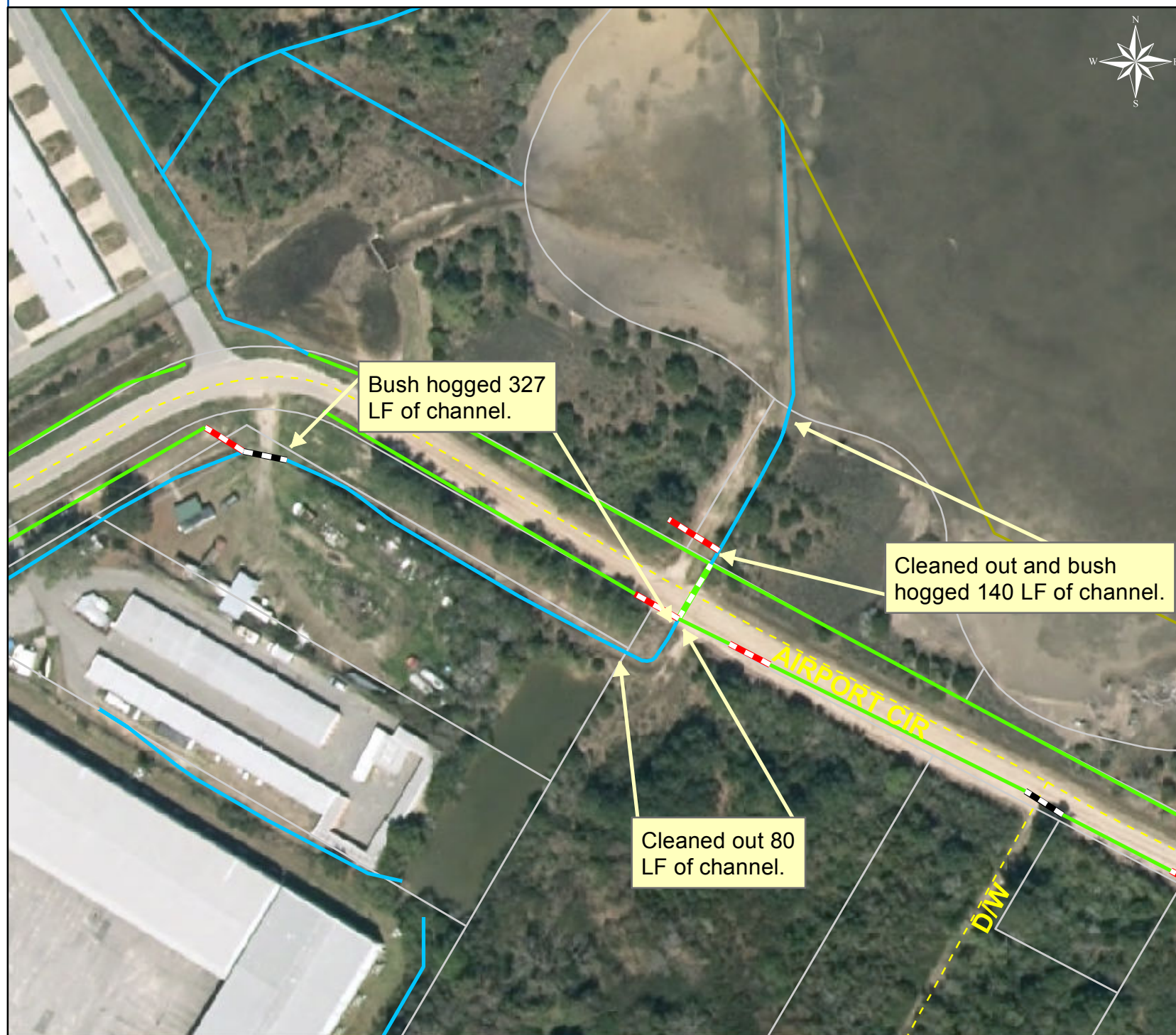
Township: Lady's
Island

Completed:
June 2014

Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



0 25 50 100 150 200
Feet

1 inch = 109 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/4/14

File: C:/sethdata/projects/projectmaps/Airport Cir 2014-663



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Persimmon Street

Activity: Routine/Preventive Maintenance

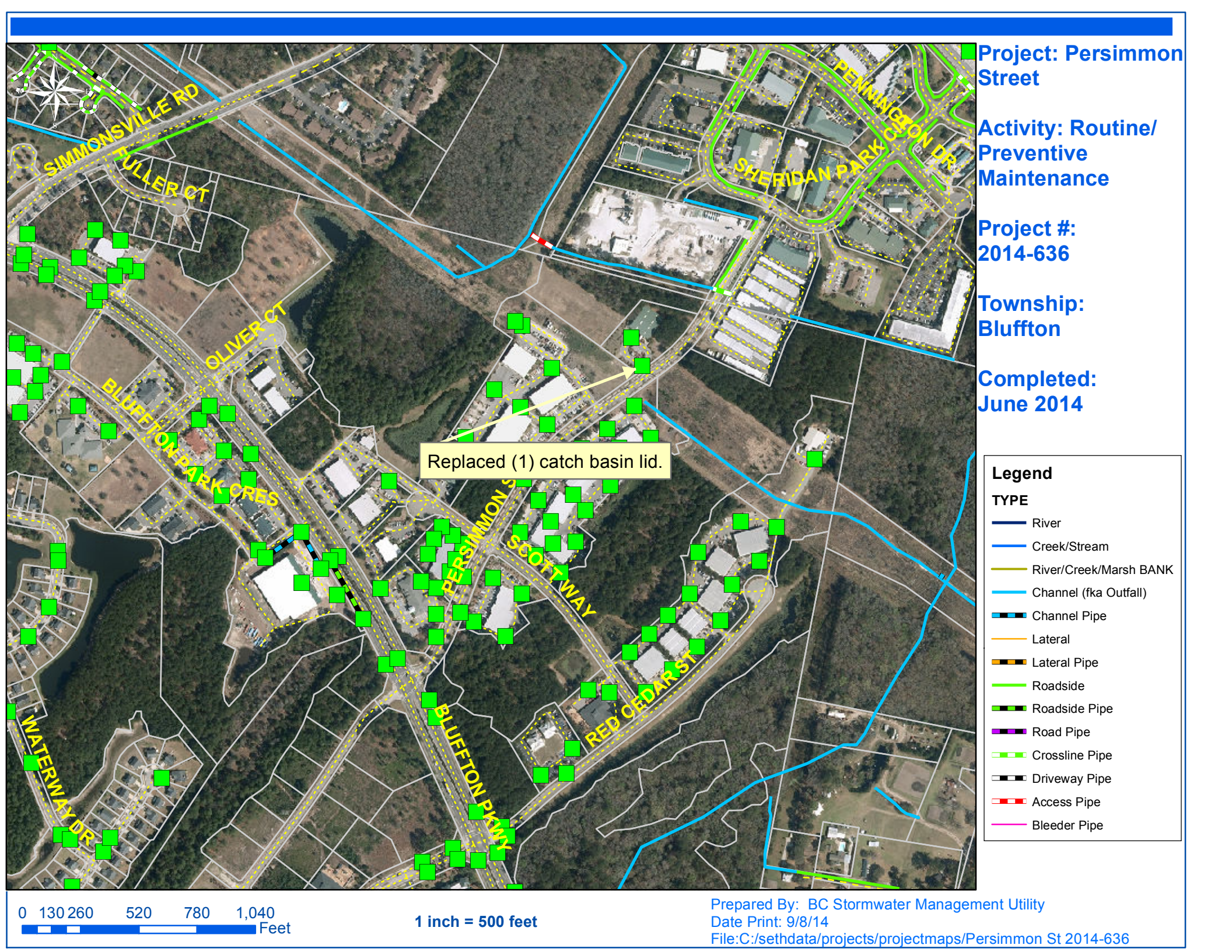
Narrative Description of Project:

Completion: Jun-14

Replaced (1) catch basin lid.

2014-636 / Persimmon Street	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CBLI / Catch Basin Lid - Installed	12.0	\$268.20	\$21.72	\$290.38	\$0.00	\$173.34	\$753.64
2014-636 / Persimmon Street Sub Total	12.5	\$278.43	\$21.72	\$290.38	\$0.00	\$179.96	\$770.49
 Grand Total	 12.5	 \$278.43	 \$21.72	 \$290.38	 \$0.00	 \$179.96	 \$770.49

(Pictures Not Available)



Project: Persimmon Street

Activity: Routine/
Preventive
Maintenance

Project #:
2014-636

Township:
Bluffton

Completed:
June 2014

Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 130 260 520 780 1,040
Feet

1 inch = 500 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/8/14

File: C:/sethdata/projects/projectmaps/Persimmon St 2014-636



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Eustis Landing Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Jun-14

Repaired sinkhole.

2014-637 / Eustis Landing Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	2.0	\$43.26	\$21.40	\$2.66	\$0.00	\$28.84	\$96.16
SR / Sinkhole repair	4.0	\$89.40	\$7.24	\$12.00	\$0.00	\$57.78	\$166.42
2014-637 / Eustis Landing Road Sub Total	6.5	\$142.89	\$28.64	\$14.66	\$0.00	\$93.24	\$279.43
Grand Total	6.5	\$142.89	\$28.64	\$14.66	\$0.00	\$93.24	\$279.43

(Pictures Not Available)

Project: Eustis Landing Road

**Activity: Routine/
Preventive
Maintenance**















**Project #:
2014-637**

**Township: Lady's
Island**

**Completed:
June 2014**

Legend

TYPE

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



Prepared By: BC Stormwater Management Utility

Date Print: 9/3/14

File: C:/sethdata/projects/projectmaps/Eustis Landing Rd 2014-637



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Old Dawson Acres

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Jun-14

Removed (1) bleeder pipe.

2014-638 / Old Dawson Acres	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
BPR / Bleeder Pipe - Removed	16.0	\$380.04	\$31.11	\$13.48	\$0.00	\$243.36	\$667.99
HAUL / Hauling	4.0	\$86.52	\$42.80	\$28.82	\$0.00	\$57.68	\$215.82
ONJV / Onsite Job Visit	3.0	\$89.52	\$10.86	\$9.57	\$0.00	\$54.69	\$164.64
2014-638 / Old Dawson Acres Sub Total	23.5	\$566.31	\$84.77	\$51.87	\$0.00	\$362.35	\$1,065.29
Grand Total	23.5	\$566.31	\$84.77	\$51.87	\$0.00	\$362.35	\$1,065.29

Before



After



Project: Old Dawson Acres

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2014-638**

**Township:
Sheldon**

**Completed:
June 2014**



Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 30 60 120 180 240
Feet

1 inch = 117 feet

Prepared By: BC Stormwater Management Utility

Date Print: 7/24/14

File:C:/sethdata/projects/projectmaps/Old Dawson Acres 2014-638



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: St. Helena Island Tree Removal - Tombee Road and No Man Land Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Removed fallen trees from workshelf and channel.

Completion: Jun-14

2014-555A / St. Helena Island Tree Removal	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	4.0	\$86.52	\$42.80	\$22.89	\$0.00	\$57.68	\$209.89
RMTRD / Remove trees - Ditch	15.0	\$346.41	\$43.72	\$38.96	\$0.00	\$222.21	\$651.30
RMTRW / Remove trees - Workshelf	12.0	\$298.20	\$31.11	\$12.80	\$0.00	\$194.52	\$536.63
2014-555A / St. Helena Island Tree Removal Sub Total	31.5	\$741.36	\$117.63	\$74.65	\$0.00	\$481.03	\$1,414.67
Grand Total	31.5	\$741.36	\$117.63	\$74.65	\$0.00	\$481.03	\$1,414.67

Before



After





**Project: No Man
Land Road Tree
Removal**

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2014-555A**

**Township: St.
Helena Island**

**Completed:
June 2014**

Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/22/14

File: C:/sethdata/projects/projectmaps/No Man Land 2014-555A

**Project: Tombee
Road Tree Removal**

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2014-555A**

**Township: St.
Helena Island**

**Completed:
June 2014**



Removed fallen tree
from workshelf.

Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 30 60 120 180 240
Feet

1 inch = 125 feet

Prepared By: BC Stormwater Management Utility
Date Print: 9/22/14
File: C:/sethdata/projects/projectmaps/Tombee Rd 2014-555A



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Sheldon Bush Hog

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Jul-14

First Rotation from May 2014 to July 2014. Project improved 79,883 L.F. of drainage system. Bush hogged 79,883 L.F. of channel and perimeter of pond. This project consisted of the following areas: Mitchell Road (4,958 L.F.), Paige Point Bluff (577 L.F.), Robinson Hill Road (1,820 L.F.), Rail Bed (1,470 L.F.), Johnson Road (3,737 L.F.), Archie Sumpter Road (1,720 L.F.), Cuthbert Farm Road (890 L.F.), George Williams Lane (3,403 L.F.), William Campbell Road (1,596 L.F.), Fire Station Lane (907 L.F.), Huspah Drive (665 L.F.), Huspah Circle South (2,291 L.F.), Huspah Circle North (784 L.F.), Bailey Road (2,700 L.F.), Nix Road (1,155 L.F.), Bailey Circle (1,300 L.F.), Prescott Road (1,689 L.F.), Albertha Fields Circle (2,102 L.F.) Horse Tail Road (1,536 L.F.), African Baptist Church Road (2,634 L.F.), Big Estate Road (2,022 L.F.), Joseph Lane (1,459 L.F.), Swallowtail Lane (2,265 L.F.), Newberry Circle (1,050 L.F.), Twickenham Road (7,541 L.F.), Gray Road (3,252 L.F.), Big Estate Circle (2,042 L.F.), Jenkins Road (635 L.F.), Stroban Road (2,774 L.F.), Horace Dawson Lane (8,931 L.F.), Dean Hall Road (348 L.F.), Pap-Kee Lane (1,394 L.F.), River Oak Road (2,707 L.F.) and Jasmine Hall Road (5,529 L.F.).

2015-303 / Sheldon Bush Hog	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	2.0	\$40.92	\$0.00	\$0.00	\$0.00	\$26.46	\$67.38
ODBH / Outfall ditch - bushhogged	748.0	\$15,303.94	\$14,437.22	\$2,812.00	\$0.00	\$5,470.08	\$38,023.24
ONJV / Onsite Job Visit	1.0	\$33.18	\$3.62	\$9.60	\$0.00	\$24.47	\$70.87
PDBH / Ponds - bushhogged	6.0	\$134.10	\$54.86	\$53.61	\$0.00	\$86.67	\$329.24
2015-303 / Sheldon Bush Hog Sub Total	757.0	\$15,512.14	\$14,495.70	\$2,875.20	\$0.00	\$5,607.68	\$38,490.73
 Grand Total	 757.0	 \$15,512.14	 \$14,495.70	 \$2,875.20	 \$0.00	 \$5,607.68	 \$38,490.73

Before



During



After





Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Parkside Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Jul-14

Repaired (1) catch basin lid and washout.

2015-501 / Parkside Drive	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CBLREP / Catch Basin Lid - Repaired	22.0	\$496.71	\$19.91	\$26.05	\$0.00	\$312.13	\$854.79
ONJV / Onsite Job Visit	8.0	\$238.72	\$28.96	\$16.00	\$0.00	\$145.84	\$429.52
RPWO / Repaired Washout	12.0	\$274.72	\$14.48	\$28.80	\$0.00	\$169.32	\$487.32
2015-501 / Parkside Drive	42.5	\$1,020.38	\$63.35	\$70.85	\$0.00	\$633.90	\$1,788.48
Sub Total							
 Grand Total	 42.5	 \$1,020.38	 \$63.35	 \$70.85	 \$0.00	 \$633.90	 \$1,788.48

Before



During



After



Project: Parkside Drive

**Activity: Routine/
Preventive
Maintenance**















**Project #:
2015-501**

**Township:
Bluffton**

**Completed:
July 2014**

Legend

TYPE

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe

Repaired (1) catch
basin lid and washout.

0 20 40 80 120 160
Feet

1 inch = 77 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/8/14

File: C:/sethdata/projects/projectmaps/Parkside Dr 2015-501



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Iron Gate Subdivision

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Jul-14

Project improved 130 L.F. of drainage system. Cleaned out 130 L.F. of channel.

2015-509 / Iron Gate Subdivision	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	4.0	\$86.52	\$42.80	\$3.27	\$0.00	\$48.84	\$181.43
ODCO / Outfall ditch - cleaned out	9.0	\$184.10	\$50.62	\$13.08	\$0.00	\$82.95	\$330.75
ONJV / Onsite Job Visit	2.0	\$59.68	\$7.24	\$3.20	\$0.00	\$36.46	\$106.58
2015-509 / Iron Gate Subdivision Sub Total	15.5	\$340.53	\$100.66	\$19.55	\$0.00	\$174.87	\$635.61
Grand Total	15.5	\$340.53	\$100.66	\$19.55	\$0.00	\$174.87	\$635.61

Before



During



After



Project: Iron Gate Drive

**Activity: Routine/
Preventive
Maintenance**















**Project #:
2015-509**

**Township: Port
Royal Island**

**Completed:
July 2014**

Legend

TYPE

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



0 15 30 60 90 120
Feet

1 inch = 74 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/3/14

File: C:/sethdata/projects/projectmaps/Iron Gate Dr 2015-509



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Pin Oak Street/Able Street

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Jul-14

Repaired curb inlet and sinkholes.

2015-510 / Pin Oak Street/Able Street	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	19.0	\$410.97	\$203.30	\$166.96	\$0.00	\$260.72	\$1,041.95
ONJV / Onsite Job Visit	14.0	\$432.19	\$50.68	\$48.00	\$0.00	\$270.95	\$801.82
RCI / Repaired Curb Inlet	42.0	\$945.98	\$63.69	\$132.73	\$0.00	\$598.45	\$1,740.85
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-510 / Pin Oak Street/Able Street Sub Total	76.0	\$1,809.60	\$317.67	\$347.69	\$0.00	\$1,143.35	\$3,618.30

Grand Total	76.0	\$1,809.60	\$317.67	\$347.69	\$0.00	\$1,143.35	\$3,618.30
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Before



During



After



Project: Pin Oak Street and Able Street

**Activity: Routine/
Preventive
Maintenance**















**Project #:
2015-510**

**Township:
Bluffton**

**Completed:
July 2014**

Legend

TYPE

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



0 35 70 140 210 280
Feet

1 inch = 142 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/18/14

File:C:/sethdata/projects/projectmaps/Pin Oak St 2015-510



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Red Cedar Street

Activity: Routine/Preventive Maintenance

Narrative Description of Project:
Repaired (2) sinkholes.

Completion: Aug-14

2015-514 / Red Cedar Street	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
PRRECON / Project Reconnaissance	2.0	\$66.36	\$7.24	\$9.09	\$0.00	\$48.94	\$131.63
RPWO / Repaired Washout	21.0	\$437.85	\$54.54	\$86.88	\$0.00	\$279.02	\$858.29
SD / Soft Digging	10.0	\$223.38	\$110.80	\$33.80	\$0.00	\$149.55	\$517.53
2015-514 / Red Cedar Street Sub Total	33.5	\$737.82	\$172.58	\$129.77	\$0.00	\$484.13	\$1,524.29
Grand Total	33.5	\$737.82	\$172.58	\$129.77	\$0.00	\$484.13	\$1,524.29

Before



After





Project: Red Cedar Street

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-514**

**Township:
Bluffton**

**Completed:
August 2014**

Repaired (2) washouts.

RED CEDAR ST

TENTH AVE

RED CEDAR ST (FUTURE)

NINTH AVE

Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 30 60 120 180 240
Feet

1 inch = 120 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/11/14

File:C:/sethdata/projects/projectmaps/Red Cedar St 2015-514



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Hanna Avenue

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 437 L.F. of drainage system. Cleaned out 437 L.F. of roadside ditch.

Completion: Aug-14

2015-517 / Hanna Avenue	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	10.0	\$239.80	\$107.00	\$52.48	\$0.00	\$164.70	\$563.98
ONJV / Onsite Job Visit	5.0	\$165.90	\$18.10	\$18.18	\$0.00	\$122.35	\$324.53
PRRECON / Project Reconnaissance	3.0	\$99.54	\$10.86	\$9.09	\$0.00	\$73.41	\$192.90
RSDCL / Roadside Ditch - Cleanout	24.0	\$537.92	\$120.19	\$58.65	\$0.00	\$263.44	\$980.20
2015-517 / Hanna Avenue Sub Total	42.5	\$1,053.39	\$256.15	\$138.40	\$0.00	\$630.52	\$2,078.45
 Grand Total	 42.5	 \$1,053.39	 \$256.15	 \$138.40	 \$0.00	 \$630.52	 \$2,078.45

Before

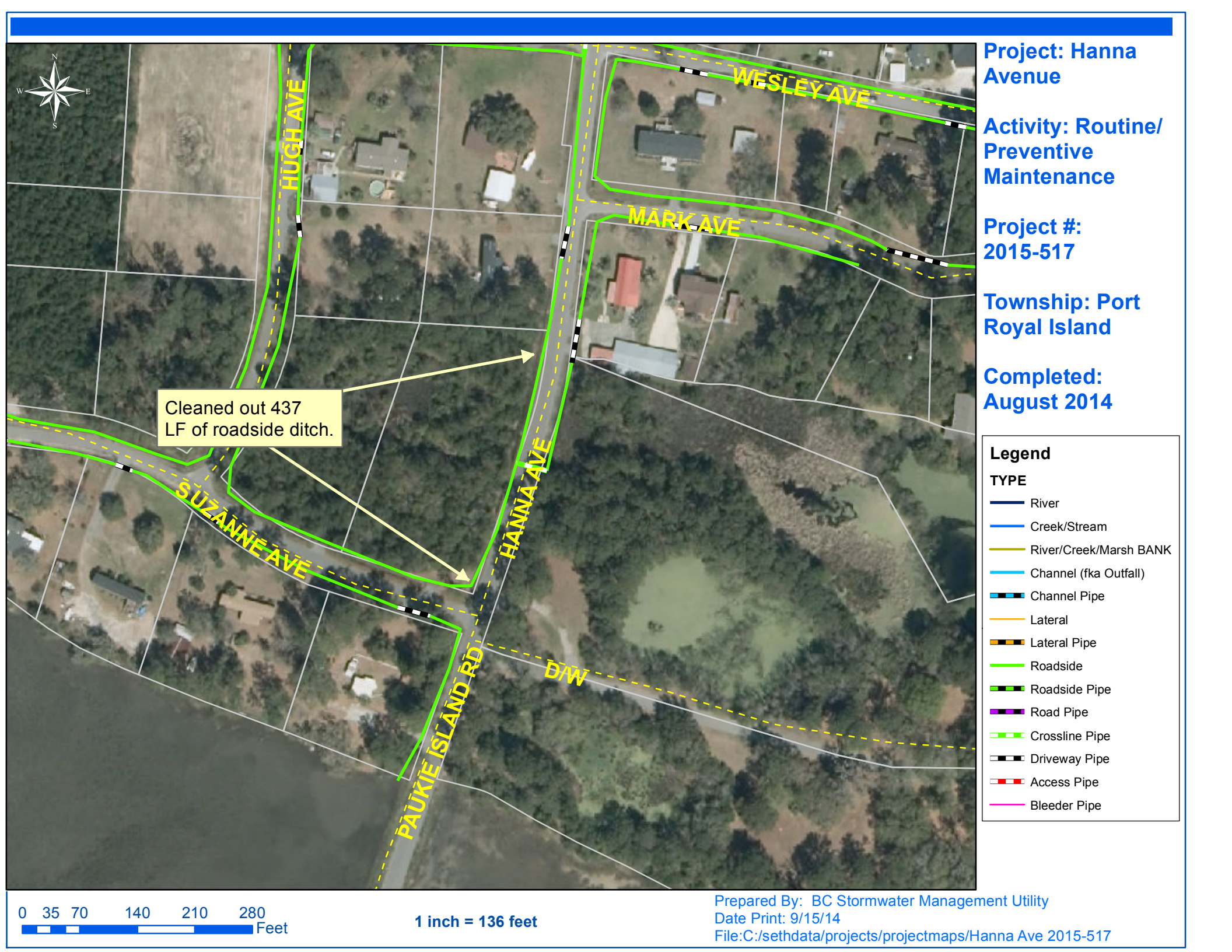


During



After







Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Holly Hall Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Repaired washout. Installed rip rap for erosion control.

Completion: Aug-14

2015-521 / Holly Hall Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	5.0	\$102.30	\$0.00	\$0.00	\$0.00	\$66.15	\$168.45
HAUL / Hauling	4.0	\$86.52	\$42.80	\$434.97	\$0.00	\$57.68	\$621.97
ONJV / Onsite Job Visit	2.0	\$66.36	\$7.24	\$9.09	\$0.00	\$48.94	\$131.63
RPWO / Repaired Washout	24.0	\$502.70	\$58.20	\$44.44	\$0.00	\$328.09	\$933.43
2015-521 / Holly Hall Road Sub Total	35.0	\$757.88	\$108.24	\$488.49	\$0.00	\$500.86	\$1,855.47
Grand Total	35.0	\$757.88	\$108.24	\$488.49	\$0.00	\$500.86	\$1,855.47

During



After



Project: Holly Hall Road

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-521**

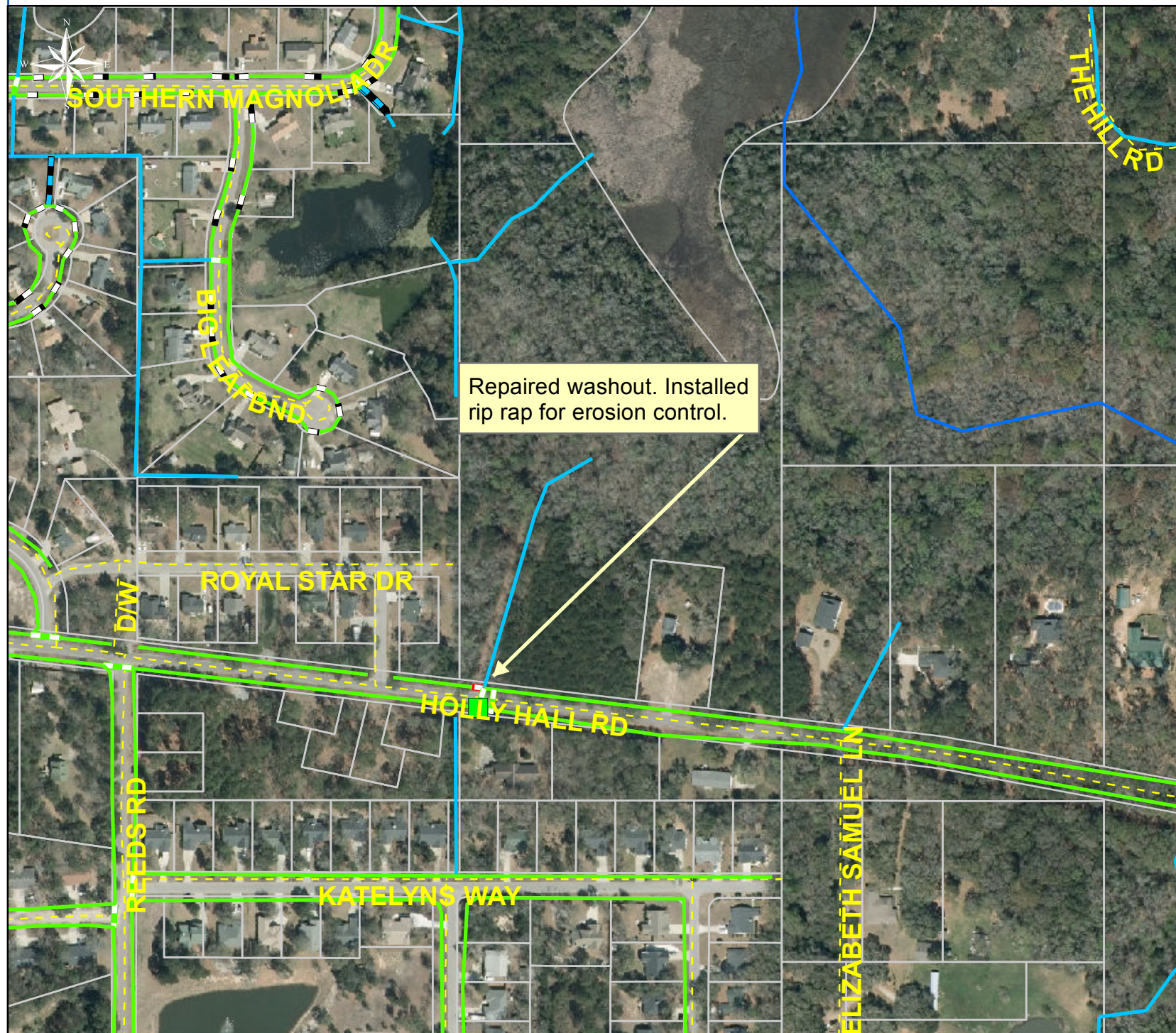
**Township: Lady's
Island**

**Completed:
August 2014**

Legend

TYPE

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



0 70 140 280 420 560
Feet

1 inch = 279 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/10/14

File: C:/sethdata/projects/projectmaps/Holly Hall Rd 2015-521



BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2801 Facsimile (843) 255-9478



TO: Councilman Brian Flewelling Chairman, Natural Resources Committee

FROM: Robert McFee, PE, Division Director for Engineering and Infrastructure
Eric W. Larson, Beaufort County Stormwater Utility *Eric W. Larson*

SUBJECT: Stormwater Drainage Easement Conveyance to Centex Homes - Shadow Moss Phase 4

Date: September 12, 2014

BACKGROUND: The Trask Family conveyed a 25' drainage easement to Beaufort County located in the Shadow Moss, Phase 4 Subdivision in May of 2010. An open ditch was then constructed by Stormwater to handle water runoff from Riley Road onto Phase 4 of the Shadow Moss Subdivision as shown on the attached Exhibit "A". Centex Homes, who has subsequently purchased the property from the Trask Family, has now approached the County to request the return of this drainage easement as they are now developing the property and are designing a storm sewer system to re-route runoff that is currently conveyed by the ditch. It is their desire to re-route the drainage across Phase 4 using a buried pipe.

Upon such conveyance, Centex Homes would be responsible for the construction and maintenance of the re-routed drainage easement and Beaufort County would be released from all responsibility.

FOR ACTION: Natural Resources Committee meeting occurring on October 13, 2014.

RECOMMENDATION: Staff recommends the Natural Resources Committee of County Council endorse the conveyance of the above-referenced drainage easement to Centex Homes with the provision that they are responsible for the construction and ongoing maintenance of same and release Beaufort County for all future responsibility.

CC: Gary Kubic, County Administrator *OK Gary Kubic*

9
PB
NC

Prepared by and return to:
Beaufort County Staff Attorney
P.O. Drawer 1228
Beaufort, SC 29901-1228
(843) 255-2055, (843) 470-5383 FAX

Riley/Fair Road (drainage easement)

BEAUFORT COUNTY SC - ROD
BK 02969 PG 2263 - 2263 H
FILE NUM 2010034015
07/01/2010 04:43:16 PM
REC'D BY P BAXLEY RCPT# 621139
RECORDING FEES 0.00

STATE OF SOUTH CAROLINA

DRAINAGE EASEMENT

COUNTY OF BEAUFORT

KNOW ALL MEN BY THESE PRESENTS, THAT We William Davis Trask, James Heide Trask, John Donald Trask, Harold E. Trask, Jr., Margaret Scheper Trask, and Robert Edward L. Holt, III, (collectively, the "Grantor") in the State aforesaid, for and in consideration of the sum of ONE AND NO/100 DOLLARS (\$1.00) and improvement of drainage on Grantor's land, the receipt whereof is hereby acknowledged, to us in hand paid at and before the sealing of these presents by Beaufort County, P.O. Drawer 1228, Beaufort, South Carolina 29901-1228, have granted and conveyed unto the said Beaufort County (the "Grantee") its Successors and Assigns, a non-exclusive 25' drainage easement (the "Easement") as set forth on that certain plat entitled "TRACT 1, TRACT 2 & A 25' DRAINAGE EASEMENT BEING A PORTION OF SHADOW MOSS PHASE 4" prepared by Thomas & Hutton Engineering Co., dated September 16, 2009 and recorded in the Beaufort County Register of Deeds Office in Plat Book 130 at Page 37 (the "Easement Map"), said property being situated in the Town of Port Royal, County of Beaufort, State of South Carolina.

For or in connection with the construction of a ditch to improve the drainage on the above described lands, such construction to include excavation, widening, or deepening, etc. for or in connection with the operation, maintenance, and inspection of such a ditch.

1. This easement includes the right of ingress and egress at any time over and upon the above described land, for the purpose of construction, inspection, and maintenance of ditches as referred to above.
2. There is reserved to the Grantee, Beaufort County, the right and privilege to use the above described land of the Grantor for the purposes of maintaining the drainage ditch system.
3. The Grantee is responsible for operating and maintaining the work of improvement herein described, and shall remove and dispose of all excess material, soil, and debris generated by the construction or maintenance of the ditch by Grantee.
4. Special Provisions
 - a. The Grantee shall have the right to clear and remove all brush and trees to a width necessary to excavate and/or improve the above drainage ditches. Provided, however, if the Grantor desires to salvage merchantable timber from the area to be cleared, he will do so prior to the time the contractor begins work. It is understood that the Grantee will advise the Grantor at least 10 days in advance of construction.
 - b. Proposed drainage ditches will be constructed within the boundaries of the Easement location shown on the Easement Map.


- c. If the Grantor desires to salvage levees, fences, culverts, or bridges that interfere with the construction or maintenance of drainage ditches, he will have the opportunity to do so prior to construction and maintenance work.
- d. The Grantee acknowledges and agrees that the real property owned by Grantor and burdened by the Easement granted herein is shown as "Tract 3" on a plat recorded in Plat Book 129, at Page 13, in the office of the Register of Deeds for Beaufort County, South Carolina ("Grantor's Parcel"). Grantor (or its successors in title to Grantor's Parcel) intends to develop Grantor's Parcel as an additional phase of a residential subdivision, and has the right to apply to Beaufort County for a development permit based upon construction plans which could potentially change the location and design of the drainage facilities to be constructed on Grantor's Parcel for such development from the location and design of the facilities to be constructed by Grantee as shown on the Easement Map.
- e. Upon the later to occur of (i) the date upon which Grantor (or its successors in title) records a final subdivision plat for Grantor's Parcel on which a street right-of-way is shown to connect to Riley Road, or (ii) the completion by Grantor of street and drainage improvements on Grantor's Parcel that are sufficient in design and capacity to accommodate storm water run-off from Riley Road, the location of the Easement herein granted shall be deemed amended and relocated to and within the street right-of-way shown on such final subdivision plat, without the necessity of any further action by either party.
- f. It is agreed that buildings, fences, signs or other obstructions will not be erected by Grantee, its successors, assigns, or administrators within the limits of the easement herein conveyed.


TO HAVE AND TO HOLD the aforesaid easement in, over and upon the above described land of the Grantor, with all the rights, privileges and appurtenances thereto belonging or in any wise appertaining, unto the Grantee, its successors and assigns, forever, subject to the relocation (if applicable) by Grantor as provided in paragraph (e) above.

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this
13th day of May, 2010.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:


Witness #1


Notary Public as Witness #2

GRANTOR:


William Davis Trask

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 13th day of May, 2010, and acknowledged the due execution of the foregoing instrument.

Patricia A. Johnson (L.S.)
Notary Public for the State of South Carolina

My Commission expires: 6-27-2015

~~Notary Public as Witness #2~~

STATE OF SOUTH CAROLINA

COUNTY OF BEAUFORT

ACKNOWLEDGEMENT

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 25th day of May, 2010, and acknowledged the due execution of the foregoing instrument.

Mary K McForman (L.S.)
Notary Public for the State of South Carolina

My Commission expires: June 16, 2019

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this
25th day of May, 2010.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

[Signature]
Witness #1

Mary K McForman
Notary Public as Witness #2

GRANTOR:

[Signature]
James Heide Trask

STATE OF South Carolina

~~ACKNOWLEDGEMENT~~

I, ~~the undersigned notary public, do hereby certify that the within named Grantor personally~~
appeared before me this _____ day of _____, 2009, and
acknowledged the due execution of the foregoing instrument.

Notary Public for the State of South Carolina (L.S.)

My Commission expires: _____

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this
26th day of MAY, ~~2009~~ ²⁰¹⁰.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

GRANTOR:

Janette Wager
Witness #1

Robert Edward L. Holt III
Robert Edward L. Holt, III

Bernard L. Buchhaber
Notary Public as Witness #2

STATE OF South Carolina
COUNTY OF Charleston

ACKNOWLEDGEMENT

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 26th day of MAY, ^{2010 (BKA)}~~2009~~, and acknowledged the due execution of the foregoing instrument.

Bernard F. Buckheiser (L.S.)
Notary Public for the State of South Carolina

My Commission expires: My Commission Expires
November 19, 2019

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 13th day of May, 2009, and acknowledged the due execution of the foregoing instrument.

Peter A. Jeter (L.S.)
Notary Public for the State of South Carolina

My Commission expires: 6-27-2015

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this
13th day of May, 2009.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

Eric Lucisall
Witness #1

Peter A. Jeter
Notary Public as Witness #2

GRANTOR:

Margaret Schepher Trask
Margaret Schepher Trask

STATE OF South Carolina
COUNTY OF Beaufort

ACKNOWLEDGEMENT

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this
11 day of May, 2009/2010

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

GRANTOR:

Betty Harvey
Witness #1

John Donald Trask
John Donald Trask

Allyson J. Warriner
Notary Public as Witness #2

STATE OF North Carolina

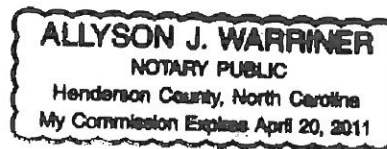
COUNTY OF Brunswick

ACKNOWLEDGEMENT

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 11 day of May, 2009, and acknowledged the due execution of the foregoing instrument.

Allyson J. Warriner (L.S.)
Notary Public for the State of ~~South Carolina~~ North Carolina

My Commission expires: April 20, 2010



I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 13th day of May, ~~2009~~, and acknowledged the due execution of the foregoing instrument. 2010

Linda E Sanchez (L.S.)
Notary Public for the State of South Carolina

My Commission expires: 8/14/2016

Approved by County Attorney

[Signature]
Landon P. Howell

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this 13th day of May, ~~2009~~, 2010

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

[Signature]
Witness #1

Linda E Sanchez
Notary Public as Witness #2

GRANTOR:

[Signature]
Harold E. Trask, Jr.

STATE OF South Carolina
COUNTY OF Charleston

ACKNOWLEDGEMENT

