



BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD AGENDA
Wednesday, July 19, 2017
2:00 p.m.
Executive Conference Room, Administration Building
Beaufort County Government Robert Smalls Complex
100 Ribaut Road, Beaufort, South Carolina
843.255.2805

In accordance with South Carolina Code of Laws, 1976, as amended, Section 30-4-80(d), all local media was duly notified of the time, date, place and agenda of this meeting.

1. CALL TO ORDER – 2:00 p.m.
 - A. Approval of Agenda
 - B. Approval of Minutes – May 17, 2017 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
 - A. June Stormwater Manager Report – Eric Larson, P.E. ([backup](#))
 - B. Utility Update – Eric Larson, P.E. ([backup](#))
 - C. Monitoring Update – Eric Larson, P.E. ([backup](#))
 - D. Stormwater Implementation Committee Report – Eric Larson, P.E. ([backup](#))
 - E. Stormwater Related Projects – Eric Larson, P.E. ([backup](#))
 - F. Upcoming Professional Contracts Report – Eric Larson, P.E. ([backup](#))
 - G. Regional Coordination – Eric Larson, P.E. ([backup](#))
 - H. Municipal Reports – Eric Larson, P.E. ([backup](#))
 - I. MS4 Update – Eric Larson, P.E. ([backup](#))
 - J. Maintenance Projects Report – David Wilhelm ([backup](#))
5. UNFINISHED BUSINESS
6. NEW BUSINESS
 - A. Special Presentation: Town of HHI – EWP Efforts
 - B. SC170 Drainage Issues
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. August 16, 2017 ([backup](#))
9. ADJOURNMENT



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

May 17, 2017 at 2:00 p.m. in Executive Conference Room, Administration Building, Beaufort County Government Robert Smalls Complex, 100 Ribaut Road, Beaufort, South Carolina

Draft Minutes 05/25/2017

Board Members

Present

Don Smith
William Bruggeman
Marc Feinberg
Allyn Schneider
James Fargher

Absent

Larry Meisner
Patrick Mitchell

Ex-Officio Members

Present

Andy Kinghorn
Kim Jones
Van Willis

Absent

Scott Liggett

Beaufort County Staff

Josh Gruber
Eric Larson
David Wilhelm
Rebecca Baker
Melissa Allen
Carolyn Wallace
Chad Stanley
Rob McFee

Visitors

Alice Howard, County Council District 4
Alan Warren, USCB WQL
Neil Pugliese, City of Beaufort
Lamar Taylor, City of Beaufort

1. Meeting called to order – Don Smith

A. Agenda – Approved with modification.

- 6D – SC170 Drainage Issues to be rescheduled for June 21st meeting.

B. April 19, 2017 Minutes - Approved.

2. Introductions – Completed.

3. Public Comment(s) – None.

4. **Reports** – Mr. Eric Larson and Mr. David Wilhelm provided a written report which is included in the posted agenda and can be accessed at:

<http://www.bcgov.net/departments/Administrative/beaufort-county-council/boards-and-commissions/council-appointed/board-list/stormwater-management-utility-board/agendas/2017/051717.pdf>

A. **Utility Update** – Eric Larson

In reference to item #3, Mr. Eric Larson explained that there is a new process for reviewing and approving Enterprise Funds for FY18, which applies to the proposed Stormwater budget.

B. Monitoring Update – Eric Larson

Please reference the report which is included in the posted agenda. No additional updates.

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

Please reference the report which is included in the posted agenda. No additional updates.

D. Stormwater Related Projects – Eric Larson

In reference to item #2 Mr. Larson indicated that he met with Mr. York Glover, representative for District 3 St. Helena, and went over the status of different projects.

E. Professional Contracts Report – Eric Larson

Please reference the report which is included in the posted agenda. No additional updates.

F. Regional Coordination – Eric Larson

Mr. Larson explained that the chart and map mentioned in item #3 are for informational purposes. The chart provides a summary of design standards for various jurisdictions in Beaufort and Jasper Counties. In response to a question, Mr. Larson explained that the black outlined area on the map is the MS4 boundary and it will be discussed later during agenda item 6C.

Mr. Andy Kinghorn asked about Battery Creek Pond (item #2). Mr. Larson explained there appears to be a seepage problem in the weir and some type of impediment in the outflow structure. The County is doing a maintenance check to identify and correct any issues and is working on drafting an operations and maintenance manual for the project between the County and City of Beaufort.

G. Municipal Reports – Eric Larson

Mr. Van Willis mentioned that the Town of Port Royal is wrapping up four small projects related to the wetlands.

H. Municipal Separate Storm Sewer System (MS4 Update) – Eric Larson

Mr. Larson noted that items #3 and #7 will be discussed under item 6C MS4 Resolution by Permit.

I. Maintenance Projects Report – David Wilhelm

Mr. David Wilhelm noted that there were only four minor projects completed for May. He indicated that next month the County will be reporting on three major projects (HWY 278 ponds, Salem Dr. East, and Gamecock Way) that are close to completion.

J. Financial Report – Carolyn Wallace

Mrs. Carolyn Wallace provided a brief overview of the revenue and expenditures which are noted on the FY 2016 actuals provided. A question was asked about the capital improvement fund.

In response to questions from board members: Mrs. Wallace clarified that \$104,000 is not the balance of the capital improvement fund, but the amount of the CIP fund reserve transferred to fund the CIP efforts. She explained that the County purchases aerial photography out of the general fund every other year; however, the utility needs to view

updated aerials yearly during the tax run so this expense is budgeted from the utility fund on the off years. Mrs. Wallace explained that the contingency fund doesn't roll over to the next FY; it is kept in reserve utilization funds.

Mr. Larson reported that approximately \$496K was the FY16 balance for capital improvements and the current balance is around \$1,665,000, \$500,000 of which is in reserve so the balance of the fund is \$1.1 million. The numbers look deceiving as the utility will not receive any more revenue until December and Hurricane Matthew put us behind schedule on some projects.

5. Unfinished Business – None.

6. New Business

A. Special Presentation: Boundary Street Project – Mr. Neal Pugliese gave an overview of the Boundary Street project and the areas impacted by and involved in the reconstruction of Boundary Street. He explained the objectives, key players and challenges of the project. The new stormwater installation is 80% complete and the overall progress of the project is noted to be at 58% complete.

Mr. Andy Kinghorn asked about the stormwater enhancements specific to the Boundary Street project, to include a depressed median. Mr. Pugliese indicated that the depressed median is no longer part of the design and that he could have additional information prepared to be presented at a later date, if the Board is interested in the stormwater design details.

Mr. Don Smith addressed a question regarding the water quality issues that have been found in the upper end of the Battery Creek as a result of runoff from Boundary Street. He mentioned that stormceptor systems have been installed at the outfalls going into Battery Creek.

[The Boundary Street Project presentation is attached to the minutes.](#)

B. Discussion to Consider Reviewing Rate Structure Related to Agriculture and Silviculture – Discussion took place about the following:

- Why silviculture is different from crop agriculture in regard to how fees are assessed.
- Staff recommending the results of two reports (ATM & Raftelis) that were presented during the last board meeting.
- Nemours appeal failing due to lack of motion or recommendation by the board and Gary Kubic's decision to uphold staff's determination.
- Whether or not the financial impact of all silviculture and cropland has been viewed individually.
- Ways in which stormwater fees are assessed throughout the country and current fee trends found throughout the country and other communities within South Carolina.
- The use of assumed run off factors to calculate stormwater fees for silviculture and agriculture land.
- Silviculture grow back and maturity timeline to determine an average assumed runoff factor.
- Agriculture land being protected from future rate increases by the 2009 law.
- Why there is not a weighted average or separation in disturbed and undisturbed on a parcel and why it is classified as one or the other.
- When a property can be reclassified as undisturbed.
- What prompts staff to review parcels.

- Property owners ability to request a review of their parcel.

As a result of the discussion, no additional actions were taken.

C. MS4 Resolution by Permit – Mr. Larson explained that the 2015 Resolution to apply for an MS4 permit would be amended to become Countywide rather than the MS4 area only, referenced by the black line on the map provided in the packet. The advantage would be an expedited process for the development community when dealing with DHEC and the County in the permitting process.

The board voted unanimously (5:0) to accept the amendment to the Resolution proposed for the MS4 Permit by Rule.

D. SC170 Drainage Issues

This agenda item was removed from the agenda and rescheduled for the June 21, 2017 Stormwater Utility Board meeting.

E. Stormwater MOA for Monitoring and IDDE – Mr. Larson explained that the County and Town of Bluffton both have an obligation to monitor outfalls and it was discovered that both parties were sampling at the same time in four locations. The County and Town of Bluffton have agreed to divide testing in these identified locations and share the results. The MS4 permit requires a written agreement to delegate authority; therefore, the MOA will cover this requirement and allow one party to test in the identified shared areas on behalf of the other.

The board voted unanimously (5:0) to approve the MOA between Beaufort County and the Town of Bluffton.

F. Voting for Stormwater Management Utility Board Chairman and Vice Chairman

The board voted unanimously (5:0) to retain Mr. Don Smith as Chairman and Allyn Schneider as Vice Chairman.

7. Public Comment(s) – None.

8. Executive Session

A motion was made to go into Execution Session. The Board unanimously (5:0) approved to go into Executive Session.

9. Matters Arising Out of Executive Session – None.

10. Next Meeting Agenda – Approved with additions.

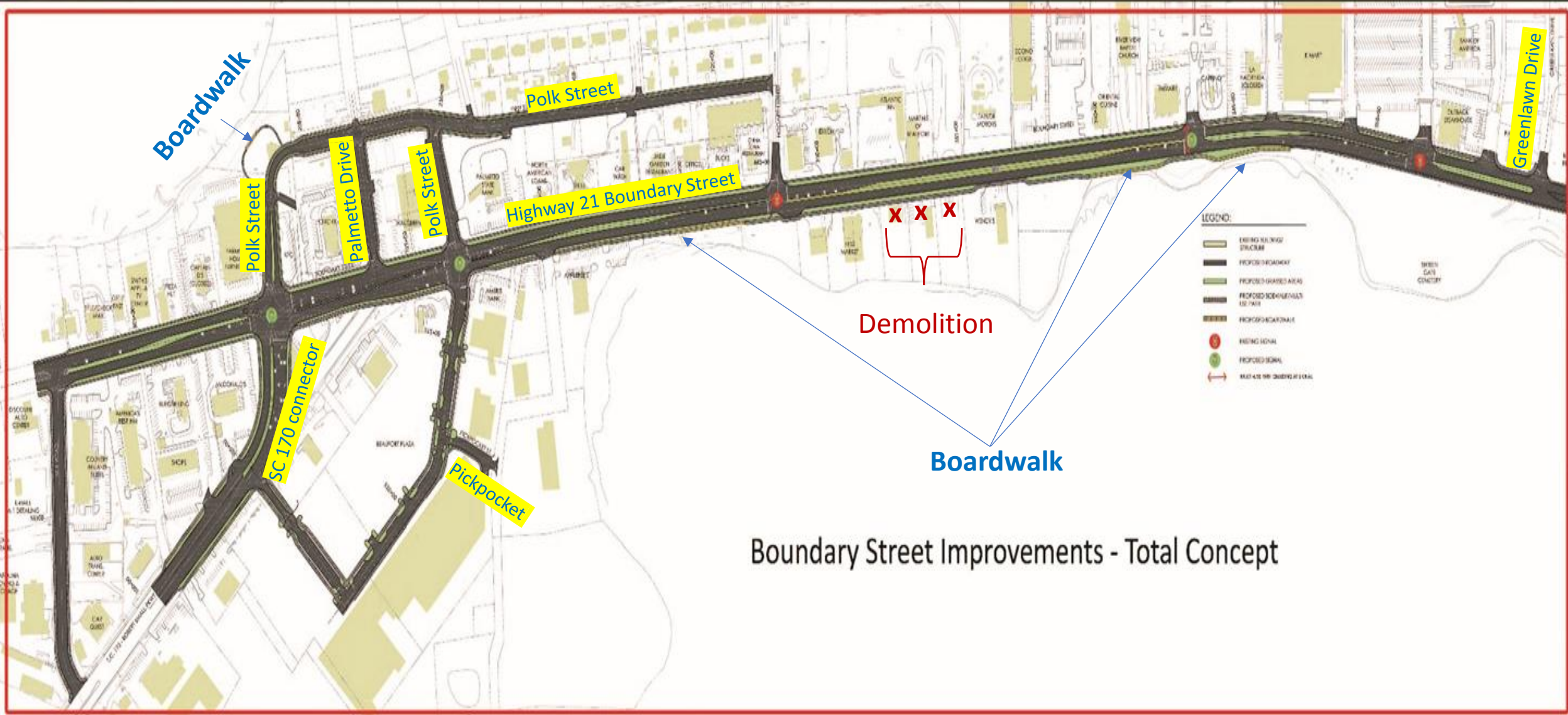
Addition for June 21st

- 6B – SC170 Drainage Issues

11. Meeting Adjourned



Boundary Street Project





Objectives

- Improve Safety & Traffic Flow
- Re-locate utility network below ground
- Create a gateway entrance (Improved scenery)
- Promote business redevelopment
- Balance vehicles & pedestrian traffic (4 Boardwalks)



Key Players (14)

- US Government (FHWA)
- SCDOT
- Beaufort County
- City of Beaufort
- Preferred Materials Incorporated (Prime Contractor)
- Infrastructure Consulting Engineering (Engineering)
- Alpha Marine (Boardwalk)
- Barnett (Ducting & Storm Drainage)
- Southern Concrete (Concrete)
- Roebuck (Signal & Lighting)
- SCE&G – Electric & Gas
- Hargray Communications
- CenturyLink Communications
- BJWSA



Fun Facts

- 2.0 (+) mile long project
 - Includes Pickpocket, Polk Street, SC 170, Hwy 21 (Boundary)
- 2.7 miles of duct bank with 40 miles of conduit to house underground utilities
- 6.1 miles of curbing
- 2.75 miles cabling on the boardwalk
- Directly affects 100 parcels within the corridor
- 20,850 tons of asphalt
- 7 signals
- Funding Sources:
 - Federal Tiger Grant 12,635,000
 - County Sales Tax 11,346,115
 - COB TIF II 8,223,000
 - Beaufort County Road Impact fees 1,369,243
 - **Total 33,573,358**



Progress to date

- South side duct bank completed & utilities converted underground
- North side duct bank about half way completed
- New storm water installation 80% complete
- All new mast arms have been installed
- Polk Street substantially completed (Final asphalt to be applied)
- 58 % total project complete
- Project substantially on budget
- Engineering will commence on Pickpocket shortly



Projected Progress

- North side duct bank completed in Summer 17'
- All traffic signals energized in Summer 17'
- SC 170 connector completed Summer 17'
- Polk Street connector (Chick-fil-A) completed Summer 17'
- Center median construction Fall 17'
- Substantial project completion Winter 18'



Challenges

- Duct bank completion & business disruptions
 - Business viability during construction
- Conversion of overhead utilities into the duct bank & aerial pole removal
- Connecting utility service to businesses from the duct bank
- Center median construction
- Demolition of Huddle House, Old Fire Station & Sea Eagle
- Completion of the Boardwalk
- Socializing drivers to the traffic pattern (limited U turns)
- **Availability of a qualified workforce**



Summary

- The Boundary Street Project is an incredibly complex undertaking involving 14 key players & not including many subcontractors.
- Given the size, scope & impact probably the most ambitious undertaking by this small municipality has ever committed.
- Projections indicate business development will be kickstarted once construction is substantially completed
 - The COB comprises, principally, a working class population that will benefit long term from this project.



**BEAUFORT COUNTY
STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2805 Facsimile (843) 255-9436**



June 21, 2017

Stormwater Manager's Report for the Stormwater Utility Board Meeting

Utility Update

1. FY 18 SWU Management fee
 - a) Town of Hilton Head Island - The Staff recommendation to change the rate structure to "Option E" passed first reading by Town Council on June 13. The Town Council will consider second and final reading at the June 20, 2017 meeting. Option E is a combination of three fee components. Admin. charge of \$24, IA charge of \$105, and GA charge of \$21. For the typical single family resident, the "equivalent" fee, or ERU, as compared to last year's fee of \$108.70, would increase to \$150 meet increased funding needs.
 - b) Town of Port Royal – The Town is expecting a slight increase in fees for TY 17.
 - c) All municipalities are required to submit their approved fee amounts to the Utility Staff by June 30, 2017.
2. FY 18 Budget – The proposed County Stormwater Department FY 17-18 budget received second reading on June 12. A public hearing and third and final reading will occur at the County Council meeting on June 26.
3. Tax Run 2017 – Stormwater Staff submitted a time line to the Auditor's office that completes the billing work by the end of September to aid a October 15 billing deadline set by County Council during the TY 16 tax run process. Staff has already begun data review.
4. Right-of-Way Manager and Stormwater Easements – Due to a trending shift in workload for the County's work on road ROW and Stormwater easement acquisition, Manager Patricia Wilson has been transferred to Public Works and is now supervised by Eric Larson, Stormwater Utility Manager.
5. Stormwater staff attended the quarterly SCASM meeting in Columbia June 8. The training topic was on regulatory enforcement at the state and local levels.

Monitoring Update

1. Lab Update (From Dr. Alan Warren and Lab Manager Danielle Mickel) – No update was available at the time of this report.
2. MOA with the Town of Bluffton to share monitoring and to address coordinated IDDE work – The Town's approved the MOA at the June 13, 2017 meeting.

Stormwater Implementation Committee (SWIC) Report

1. The SWIC committee has not met in the last month.

Stormwater Related Projects

1. Okatie West / SC 170 Widening Retrofit (Design and Construction = \$915,000 Budget) – USACE permitting for wetland mitigation was submitted this month. DHEC has informed the County that funding for the grant has been programmed to end early. Fortunately, the project is ahead of schedule and staff has agreed to modify the work plan to meet the new schedule. The project is now scheduled for completion by July 31, 2018.
2. Easements – Staff is working on numerous easement requests and meets monthly to review status. Easements for Project PP may be discussed in Executive Session.
3. SC 170 Widening and ongoing project issues – County staff in stormwater and engineering met with County Councilmen Stu Rodman and Mike Covert to brief them on the history of issues related to the widening project and current action items. No additional action items resulted from the meeting.

Professional Contracts Report

1. Stormwater Management Plan (Master Plan) Update – (\$475,000 Budget; \$239,542 County portion) – Staff received a project update from project manager Joe Mina. He is close to preparing a recommendation on changes to the CIP list. In general, he is finding that the 2006 projects that have yet to be completed are not supported by the modeling. It appears that the projects recommended were based on criteria other than water quality modeling and/or hydraulic modeling. Other factors, such as complaints and DHEC designated use restriction, are being considered when making recommendations for the existing CIP list and new projects identified in the 2016 update.
2. FY 17 CIP projects – Staff is in the process of preparing a RFP for the FY 17 and FY 18 CIP projects. An advertisement should be issued in July or August. These include the Brewer Memorial Park retrofit and demonstrate project, the Salt Creek South M1 project, and the Shanklin Road M2 project from the 2014 CIP list.
3. Clemson Extension services to Beaufort County – A proposal to partner with Clemson Extension on the Brewer Memorial Park project is pending.

Regional Coordination

1. Factory Creek Watershed Regional Detention Basin “Phase II” (Design Cost = \$63,390, Tree Mitigation Cost is pending, Construction Cost by the Developer) – Staff is reviewing the design plans for 3 stages (or phases) of the project. Permitting applications for the 2nd and 3rd stage is underway.
2. Battery Creek Watershed Pond retrofit / EPA 319 grant project –O&M manual is still

- in development. The City staff is leading this effort.
3. Polk Village / Riverbank Drive outfall pipe – The County staff met with City of Beaufort staff to review a needed project to slip-line an existing pipe that serves both County and City areas as well as SCDOT roads. County and City staff have resolved to send a letter to DOT requesting they perform this work since the pipe is DOT owned and within an existing DOT easement.

Municipal Reports

1. Town of Hilton Head Island (From Jeff Netzinger, Stormwater Manager and Brian Eber, MS4 Coordinator)
 - i. A Special presentation on Stormwater infrastructure cleanup from Hurricane Matthew will be presented during today's SWUB meeting. This is a brief summary of that work.
 - The exigency work was completed with assistance via an NRCS EWP Exigency Grant on February 19.
 - The Town is currently working to clean the rest of the drainageways via NRCS EWP Standard Grant Assistance engaging Crowder Gulf to perform the work. This effort began on May 15 and is roughly 33% complete.
 - The Town is also coordinating with FEMA to provide additional assistance once the EWP funds are exhausted.
 - The Town anticipates that work will continue on this effort for 2-3 months.
 - The Town has applied to FEMA requesting disaster recovery assistance to correct electrical system deficiencies at the Jarvis Creek stormwater pump station via immediate Category F eligibility.
 - The Town is also applying to FEMA for assistance to make long-term improvements to our stormwater pump station infrastructure at Jarvis Creek, Wexford and Sea Pines via the Hazard Mitigation Grant Program (HMGP). These improvements would involve installation of debris screens and debris removal systems at key locations
2. Town of Bluffton (From Kim Jones, Watershed Management Division Director)
 - i. [See attached report.](#)
 - ii. The monthly May River Watershed Action Plan Advisory Committee (WAPAC) was canceled.
 - iii. SESWA Photo contest – Congratulations to the Town of Bluffton Stormwater staff for being selected as a winner in the annual photo contest by the Southeast Stormwater Association. Their floating wetland project will be featured on the website and association publications for the next year. [Photo contest winners attached.](#)
3. City of Beaufort (From Neil Desai, Asst. Public Works Director)
 - i. No information was available at the time of this report.

4. Town of Port Royal (From Van Willis, Town Manager and Tony Maglione, consultant)
 - i. Cypress Wetland – The Town continues to work on a plan to modify the Cypress Wetland system.
 - ii. No other information was available at the time of this report.

MS4 Report

1. Plan Review – A summary of monthly activity was not available at the time of this report.
2. Monthly Inspection summary - A summary of monthly activity was not available at the time of this report.
3. MS4 permit by rule – The Natural Resources Committee considered this resolution amendment at the June 19, 2017 meeting. It will be considered by the County Council at the June 26 meeting.
4. MS4 Program Inspections – Staff has working on or completed inspections of County facilities to evaluate stormwater best management practices on each site. This is part of Minimum Control Measure 6 on the MS4 permit.
5. Public Education – Lowcountry Stormwater Partners, via Carolina Clear, continues to work on several initiatives towards public education and outreach. Members of the SWIC are meeting monthly with Clemson Extension staff to review progress.
 - i. Upcoming Events:
 - a) Beaufort County Pond Conference is scheduled to be held in October.
6. DHEC NPDES permitting transition – A third coordination meeting was held on June 13, 2017. Numerous DHEC staff from the local office, Charleston District Office, and Columbia’s Central office attended along with Staff from the County, Town of Bluffton, and Town of Hilton Head Island. The transition will occur on July 1, 2017. The County Staff plan on preparing a direct email to the development community and a press release. During the meeting, we discussed the DHEC and OCRM review process changes.
7. County permitting and inspection procedures – on May 23, staff from Stormwater and Planning/Zoning met to review a proposed flow chart and inspection checklist to further define and clarify the plan review and inspection process for both development and stormwater permitting.
8. Community Development Department (formerly Planning & Zoning) and Stormwater Department staff met with a product vendor and are considering a new permitting and plan review tracking software for FY 18.

ACTIVITY - PROJECTS	STATUS
Septic Conversion to Sanitary Sewer	Buck Island/Simmonsville Road (BIS) Phases I, II, and III are completed. Toy Fields is completed. Current project updates are included in Engineering Consent Agenda under "Sewer & Water."
May River 319 Grant Phase 1 - New Riverside Pond (Grant award of \$483,500 in 2009)	Completed in 2013. Weekly water quality testing on-going. A statistically significant reduction in fecal coliform bacteria concentration exists pre-pond versus post-pond. However, bacteria levels re-load to previous levels prior to discharging into the May River. This leads to management decisions with BMP placement as well as BMPs in-series to maintain bacteria reductions. An amendment to 319 Grant Phase 2 allows a portion of remaining funds to be reallocated to purchase and install Filtrexx bacteria removal media filter socks in the ditch downstream from the pond outfall to prevent bacteria re-load prior to discharging to the May River. Current project updates are included in Engineering Consent
May River 319 Grant Phase 2 - Pine Ridge (Grant award of \$290,000 in 2011)	Project completed and post-installation data collection ongoing.
May River 319 Grant Phase 3 - May River Preserve (Grant award of \$231,350 in 2015)	This project includes construction of a shallow pond known as a Green Tree Reservoir. Current project updates are included in Engineering Consent Agenda.
Stoney Creek Wetlands Restoration: Preliminary Design Phase	Wetlands restoration project with the goal to reduce stormwater volume reaching the May River. Current project updates are included in Engineering Consent Agenda.
May River Watershed Water Quality Model	Preliminary 2002 Palmetto Bluff Duck Pond Drainage area watershed model complete. Completed New Riverside BMP model for comparison to field observations. Rose Dhu Creek sub-watershed "Existing Conditions" portion of the Headwaters Water Quality Model is underway. Currently proposed for completion in FY19 following the
ACTIVITY - POLICY	STATUS
May River Watershed Action Plan Update (Grant award of \$55,000 in 2017)	To be completed with direction and input from staff, the public, Water Quality Technical Advisory Committee, May River Watershed Advisory Committee, and Town Council. Notified verbally on 4/7/17 that due to anticipated Federal Budget cuts to the EPA, SCDHEC rescinded the grant. Action Plan Update is currently not budgeted for
ACTIVITY - FINANCIAL	STATUS
Additional Funding Opportunities	No updates.

ACTIVITY - PROGRAMS	STATUS
Sewer Connection Program	In FY17 Council allocated \$200,000 for a Sewer Connection Program as well as \$10,000 for assistance to connect income-qualified individuals to existing sanitary sewer as part of the Neighborhood Assistance Program. The May River Watershed Action Plan Advisory Committee (WAPAC) adopted the Sewer Connection policy on September 22, 2016. Staff is gathering information on components of the policy to bring forward to Council for consideration. Completed to date include meetings with Hilton Head Island PSD #1, BJWSA and Community Foundation of the Lowcountry. Staff released a Request for Information (RFI) to local banks who might be willing to offer low interest construction loans to owners wishing to connect to sanitary sewer. A similar RFI was released to plumbers holding a Town business license in January. An overview of the findings was given to Council during Strategic Plan Update. Draft findings memo is under review and revision by Town attorney. Attorney is compiling legal
Septic System Maintenance Program	FY17 funding is \$10,000. On-going assistance offered to Town residents regardless of financial status through Neighborhood Assistance Program. Current updates are included in Engineering Consent Agenda Attachment 8.
Water Quality Monitoring Program	<ol style="list-style-type: none"> 1. Bacterial "hot spot" monitoring 2. BMP efficacy monitoring 3. SCDHEC Shellfish monitoring results 4. Proposed MS4 monitoring program under review by SCDHEC 5. Illicit Discharge investigation and monitoring 6. Bacterial source tracking monitoring efforts to identify potential locations of human sources of bacteria received TAC and WAPAC input. <p>Current updates are included in Engineering Consent Agenda</p>
Sediment & Erosion Control Program	Sediment and erosion control inspections with escalating enforcement response continue. Current updates are included in Engineering Consent Agenda Attachment 5.
Ditch Inspection/Maintenance Program	Continued coordination with SCDOT, Beaufort County and Town Public Works to inspect and maintain ditches within the Town's jurisdiction. Town is initiating an easement acquisition program. Current updates are included in Engineering Consent Agenda Attachment 7 and under "Public Works "
Infrastructure Mapping/GIS	Data points continue to be collected as new development occurs to populate water quality model and meet MS4 requirements. Current updates are included in Engineering Consent Agenda Attachment 10.
Public Outreach/Participation/Involvement	Outreach and involvement efforts continue through county-wide partnership with Carolina Clear as Lowcountry Stormwater Partners - Neighbors for Clean Water and through local cleanups and school classes.
Development Plan Review Program	Staff supports development plan review process to ensure current BMPs for water quality and quantity are incorporated into new developments. Current updates are included in Engineering Consent Agenda Attachment 4.

2017 SESWA Photo Contest Winners

Congratulations! Here is more information about the current projects in the Stormwater field from your photo contest winners:



City of Atlanta Department of Watershed - Green Roof

Sam Nunn Atlanta Federal Center serves as the home of several federal agencies, including the GSA and EPA Region 4, and is one of Atlanta's most environmentally friendly facilities. For example, the high-rise building of the Samuel Nunn Atlanta Federal Center houses a forested courtyard with a stand of approximately 50 maple trees, flowering cherry trees, and various other deciduous species, as well as native drought-resistant vegetation and paths of semi-pervious concrete pavers. Utilizing American Recovery and Reinvestment Act funds, the \$2.6 million project renovation's goals, consistent with the General Services Administration's (GSA) roofing program, were to provide thermal and moisture protection; conserve energy and the environment; reduce utility costs; and help attain energy security by meeting Energy Independence and Security Act requirements; the project meets Sustainability Executive Order 13514.



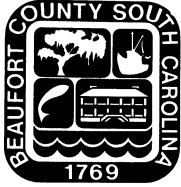
Oldcastle Precast - Solar Powered Stormwater Harvesting System

An overhead view of the completed solar powered stormwater harvesting system for the new Ultra-Green Inner-City Development know as Encore Tampa in Florida.



Town of Bluffton - Floating Wetlands

Using EPA Section 319 Grant funds the Town of Bluffton's Watershed Management Division retrofitted an existing drainage system in a fecal coliform hotspot in the May River headwaters and added a stormwater wet detention pond. The goal of the project was to mitigate the levels of fecal coliform bacteria reaching the May River, which is currently listed on the South Carolina Department of Health & Environmental Control's 303d list due to a fecal coliform impairment. The pond, which was completed in 2013 has had several observed algae blooms and nutrients from the pond's influent have been of concern. Utilizing the remaining grant funds the Town of Bluffton purchased and installed 15 floating wetlands from Biohaven and native plants from Baker Environmental. The goal of this component of the project is to use the native wetland plants, which grow through the floating wetland matrix, and have their roots suspended in the water to absorb excess nutrients that could otherwise lead to aquatic weed growth, harmful algae blooms, and ultimately fish kills.



MEMORANDUM

Date: June 21, 2017

To: Stormwater Management Utility Board

From: David Wilhelm, P. E., Public Works Director

Re: **Maintenance Project Report**

This report will cover five major projects and two minor projects. The Project Summary Reports are attached.

Major Projects – Storm Drainage System Improvements:

- **278 Retrofit Pond – Bluffton (SWUD 9):** This approximately one acre pond off Berkeley Hall Road in Bluffton was the fourth and final pond constructed to control stormwater from Highway 278. The scope of work included constructing 260 feet of channel, installing a sediment pad, 40 feet of channel pipe and hydroseeded. The total cost project was **\$169,254.90.**
- **Folly Road – St. Helena Island (SWUD 8):** This project improved 390 feet of drainage system. The project scope included clearing 390 feet of workshelf, cleaning out 390 feet of channel, installing access and bleeder pipes, rip rap and hydroseeding. The total cost was **\$38,246.32**
- **Warsaw Island Road/Gardner Drive – St. Helena Island (SWUD 8):** This project improved 3,574 feet of drainage system. The project scope included cleaning out 3,566 feet of roadside ditch, extending one driveway pipe. Jet cleaning six access pipes, five crossline pipes, twenty-nine driveway pipes and rip rap. The total cost was **\$35,034.18.**
- **Dean Hall Road – Sheldon (SWUD 5):** This project improved 120 feet of drainage system. The project scope included installing two catch basins, one crossline pipe and eighty-eight feet of roadside pipe. The total cost was **\$19,536.42.**
- **Trask Parkway Channel 2 – Sheldon (SWUD 5):** The project scope included removing blockages, replacing three access pipes and rip rap. The total cost was project was **\$19,536.42.**

Minor or Routine Projects:

- **Royal Pines Boulevard – Lady’s Island (SWUD 7):** This project improved 2,944 feet of drainage system. The project scope included cleaning 2,944 feet of channel. The total cost was **\$14,709.94.**
- **Joe Allen Drive/Patterson Road – Port Royal Island (SWUD 6):** This project improved 3,163 feet of drainage system. The project scope included cleaning out 3,163 feet of roadside ditch, jetting ten driveway pipes, three crossline pipes and hand seeding. The total cost was **\$14,241.28.**



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Highway 278 Retrofit Pond 38

Activity: Water Quality

Narrative Description of Project:

Duration: 1/15/15 - 2/23/17

Constructed a retrofit pond and 260 L.F. of channel. Installed sediment pad, 40 L.F. of channel pipe, sediment logs, rip rap and hydroseeded for erosion control.

2014-338 / Hwy 278 Retrofit Pond 38	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	3.5	\$82.22	\$0.00	\$0.00	\$0.00	\$46.31	\$128.52
CCON / Channel - constructed	90.0	\$1,958.50	\$667.63	\$279.49	\$0.00	\$1,102.80	\$4,008.42
CREC / Channel - reconstructed	50.0	\$1,235.20	\$301.04	\$43.74	\$0.00	\$691.60	\$2,271.58
DEBREM / Debris Removal - Jobsite	51.0	\$1,117.38	\$228.94	\$45.54	\$0.00	\$710.22	\$2,102.08
FENINST / Fence Installation	0.0	\$0.00	\$0.00	\$0.00	\$1,515.00	\$0.00	\$1,515.00
GRR / Grass Seed - Rye	34.0	\$716.21	\$30.60	\$108.98	\$0.00	\$442.60	\$1,298.39
HAUL / Hauling	859.0	\$19,190.03	\$7,885.30	\$14,249.59	\$0.00	\$12,535.70	\$53,860.62
LM / Loading Materials	467.5	\$10,753.80	\$3,939.34	\$3,197.03	\$0.00	\$6,691.55	\$24,581.72
ONJV / Onsite Job Visit	92.0	\$2,763.43	\$267.16	\$129.21	\$0.00	\$1,769.66	\$4,929.46
PAM / Preparing Ariel Maps	6.0	\$131.26	\$7.20	\$7.08	\$0.00	\$83.82	\$229.36
PGC / Pond - Grubb and Clear	240.0	\$5,307.00	\$2,443.77	\$846.48	\$0.00	\$3,348.84	\$11,946.09
PI / Project Inspection	20.0	\$473.90	\$36.00	\$19.80	\$0.00	\$307.20	\$836.90
PL / Project Layout	33.0	\$809.30	\$97.14	\$50.43	\$0.00	\$531.18	\$1,488.05
PM / Ponds - Maintenance	80.0	\$1,742.20	\$72.00	\$42.75	\$0.00	\$858.60	\$2,715.55
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$14,116.90	\$0.00	\$14,116.90
PRRECON / Project Reconnaissance	21.0	\$502.91	\$36.10	\$34.06	\$0.00	\$322.18	\$895.25
PS / Push up soil	86.0	\$1,938.96	\$817.22	\$143.28	\$0.00	\$1,211.42	\$4,110.88
RB / Remove blockage from flowline	23.0	\$510.60	\$52.13	\$15.63	\$0.00	\$322.80	\$901.16
RD / Rainy Day	6.0	\$122.73	\$32.10	\$19.80	\$0.00	\$86.52	\$261.15
RMTRW / Remove trees - Workshelf	27.0	\$646.21	\$183.80	\$226.32	\$0.00	\$436.77	\$1,493.10
RRI / Rip Rap - Installed	80.0	\$1,742.20	\$132.90	\$119.72	\$0.00	\$1,102.80	\$3,097.62
SC / Sediment Control	228.0	\$5,171.85	\$1,037.13	\$674.57	\$1,223.77	\$3,136.69	\$11,244.01
SCR / Sediment Control - Removed	157.0	\$3,532.09	\$273.06	\$168.30	\$0.00	\$2,280.29	\$6,253.74
SG / Shoot Grade	28.0	\$633.92	\$25.20	\$19.95	\$0.00	\$380.24	\$1,059.31
SPI / Sediment Pad - Installed	87.0	\$2,015.80	\$182.13	\$55.42	\$0.00	\$1,303.32	\$3,556.67
STBY / Stand By	74.0	\$1,573.79	\$300.08	\$116.03	\$0.00	\$1,082.99	\$3,072.89
TC / Traffic Control - Jobsite	10.0	\$240.89	\$18.00	\$8.85	\$0.00	\$138.25	\$405.99
UB / Underbrush	40.0	\$891.40	\$80.20	\$31.68	\$0.00	\$565.80	\$1,569.08
UTLOC / Utility locates	8.5	\$219.67	\$0.00	\$8.85	\$0.00	\$133.58	\$362.10
WSDR / Workshelf - Dressed	30.0	\$660.50	\$36.00	\$55.48	\$0.00	\$429.30	\$1,181.28
WSGRB / Workshelf - Grubbed	56.0	\$1,218.76	\$443.87	\$105.72	\$0.00	\$767.28	\$2,535.63
WSSHN / Workshelf - Shinn cut	18.0	\$422.18	\$311.56	\$209.88	\$0.00	\$282.78	\$1,226.40
2014-338 / Hwy 278 Retrofit Pond 38	3,005.5	\$68,324.89	\$19,937.60	\$21,033.66	\$16,855.67	\$43,103.07	\$169,254.90
Sub Total							
Grand Total	3,005.5	\$68,324.89	\$19,937.60	\$21,033.66	\$16,855.67	\$43,103.07	\$169,254.90

Before



During



After



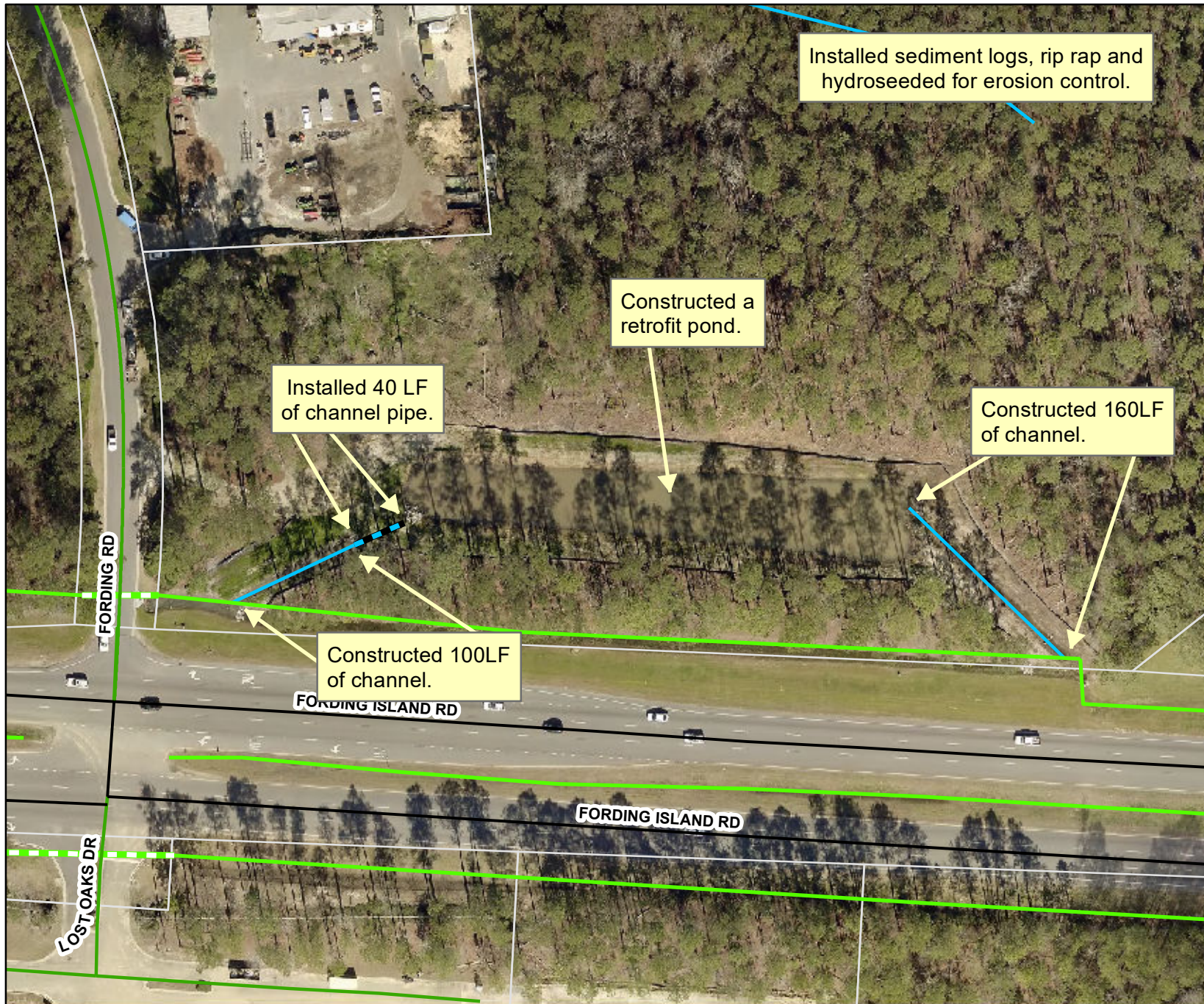
**Project: Hwy 278
Retrofit Pond 38**

**Activity: Water
Quality**

**Project #:
2014-338**

**Township/SW Dist:
Bluffton/9**

**Completed:
December 2016**



Installed sediment logs, rip rap and hydroseeded for erosion control.

Constructed a retrofit pond.

Installed 40 LF of channel pipe.

Constructed 160LF of channel.

Constructed 100LF of channel.

Drainage Type

	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Creek/Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 104 feet

Prepared By: BC Stormwater Management Utility

Date: Print 06/13/2017

File: C:\Project Summary Maps\2014-200\Hwy 278 Retrofit Pond 38



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Folly Road Channel

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 390 L.F. of drainage system. Grubbed and cleared 390 L.F. of workshelf. Cleaned out 390 L.F. of channel. Installed (2) access pipes, (2) bleeder pipes, rip rap and hydroseeded for erosion control. Jetted (1) driveway pipe.

Duration: 2/29/16 - 12/7/16

2015-001 / Folly Road Channel	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APINS / Access pipe - installed	39.0	\$885.16	\$174.85	\$290.16	\$0.00	\$552.90	\$1,903.07
AUDIT / Audit Project	1.5	\$35.24	\$0.00	\$0.00	\$0.00	\$19.85	\$55.08
BPINST / Bleeder pipe - Installed	40.0	\$968.70	\$216.78	\$236.42	\$0.00	\$555.10	\$1,977.00
CCO / Channel - cleaned out	40.0	\$968.70	\$394.67	\$76.39	\$0.00	\$555.10	\$1,994.86
CGRB / Channel - grubbed	111.0	\$2,810.32	\$969.01	\$143.90	\$0.00	\$1,560.83	\$5,484.06
CPRP / Channel Pipe - Replaced	40.0	\$934.80	\$335.78	\$332.89	\$0.00	\$545.30	\$2,148.77
DEBREM / Debris Removal - Jobsite	30.0	\$731.50	\$231.32	\$28.65	\$0.00	\$453.50	\$1,444.97
DPJT / Driveway Pipe - Jetted	4.0	\$91.52	\$17.36	\$13.87	\$0.00	\$59.40	\$182.15
HAUL / Hauling	196.5	\$4,400.83	\$1,909.95	\$1,829.49	\$0.00	\$2,808.07	\$10,948.34
HYDR / Hydroseeding	10.0	\$230.10	\$80.20	\$90.13	\$0.00	\$149.55	\$549.98
LM / Loading Materials	38.0	\$923.30	\$448.24	\$30.56	\$0.00	\$581.40	\$1,983.50
ONJV / Onsite Job Visit	11.0	\$375.98	\$39.60	\$35.80	\$0.00	\$269.17	\$720.55
PL / Project Layout	2.0	\$91.20	\$7.24	\$3.58	\$0.00	\$67.92	\$169.94
PRRECON / Project Reconnaissance	10.0	\$222.85	\$17.70	\$10.74	\$0.00	\$133.15	\$384.44
RMTRW / Remove trees - Workshelf	80.0	\$1,940.00	\$798.91	\$171.28	\$0.00	\$1,112.30	\$4,022.49
WSGRB / Workshelf - Grubbed	90.0	\$2,121.50	\$622.19	\$196.73	\$0.00	\$1,336.70	\$4,277.12
2015-001 / Folly Road Channel	743.0	\$17,731.69	\$6,263.80	\$3,490.59	\$0.00	\$10,760.23	\$38,246.32
Sub Total							
Grand Total	743.0	\$17,731.69	\$6,263.80	\$3,490.59	\$0.00	\$10,760.23	\$38,246.32

Before

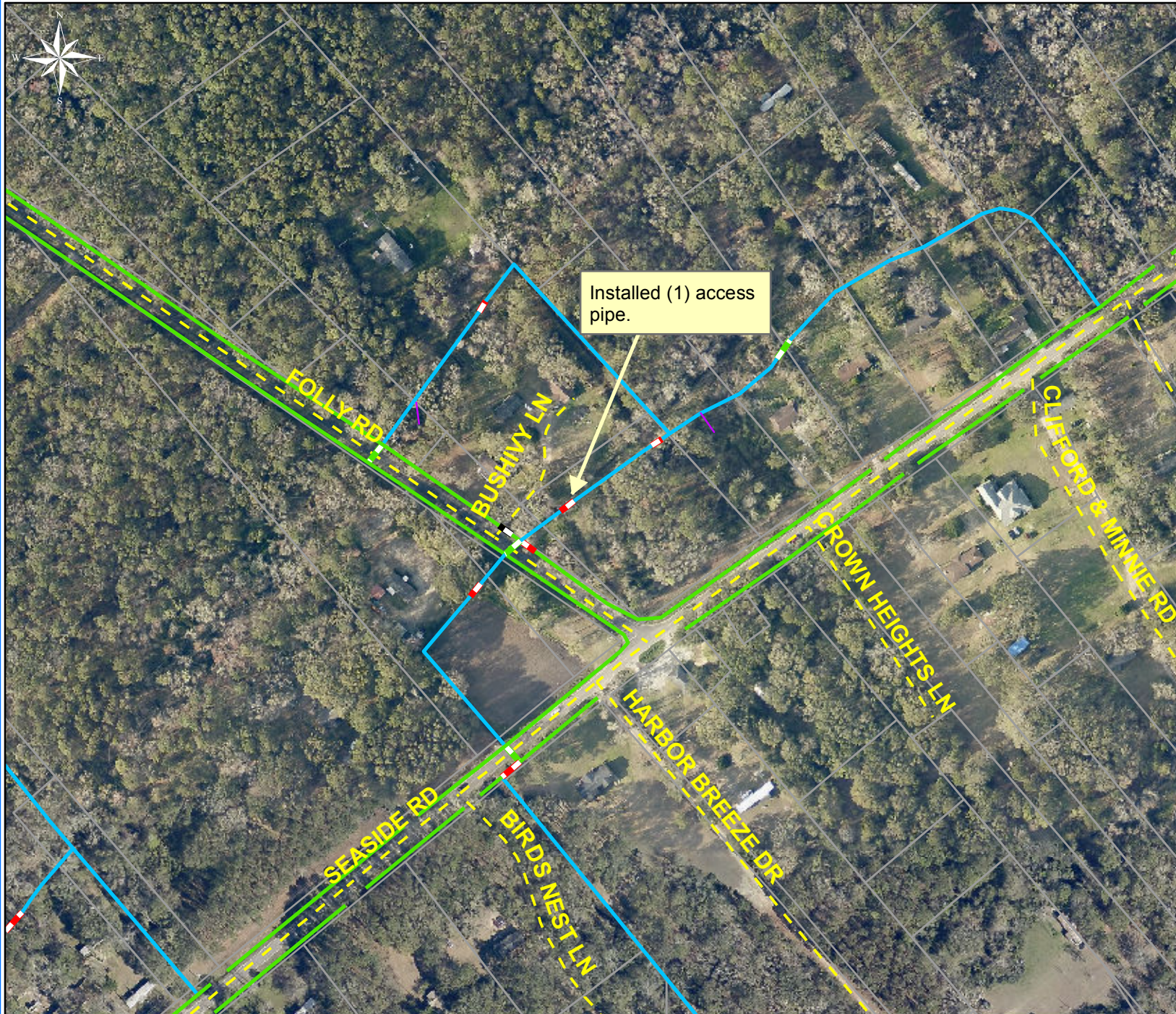


During



After





Project: Folly Road Channel Map #1

Activity: Routine/ Preventive Maintenance














Project #: 2015-001

Township/SW Dist: St. Helena Island/8

Completed: December 2016

Legend

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe

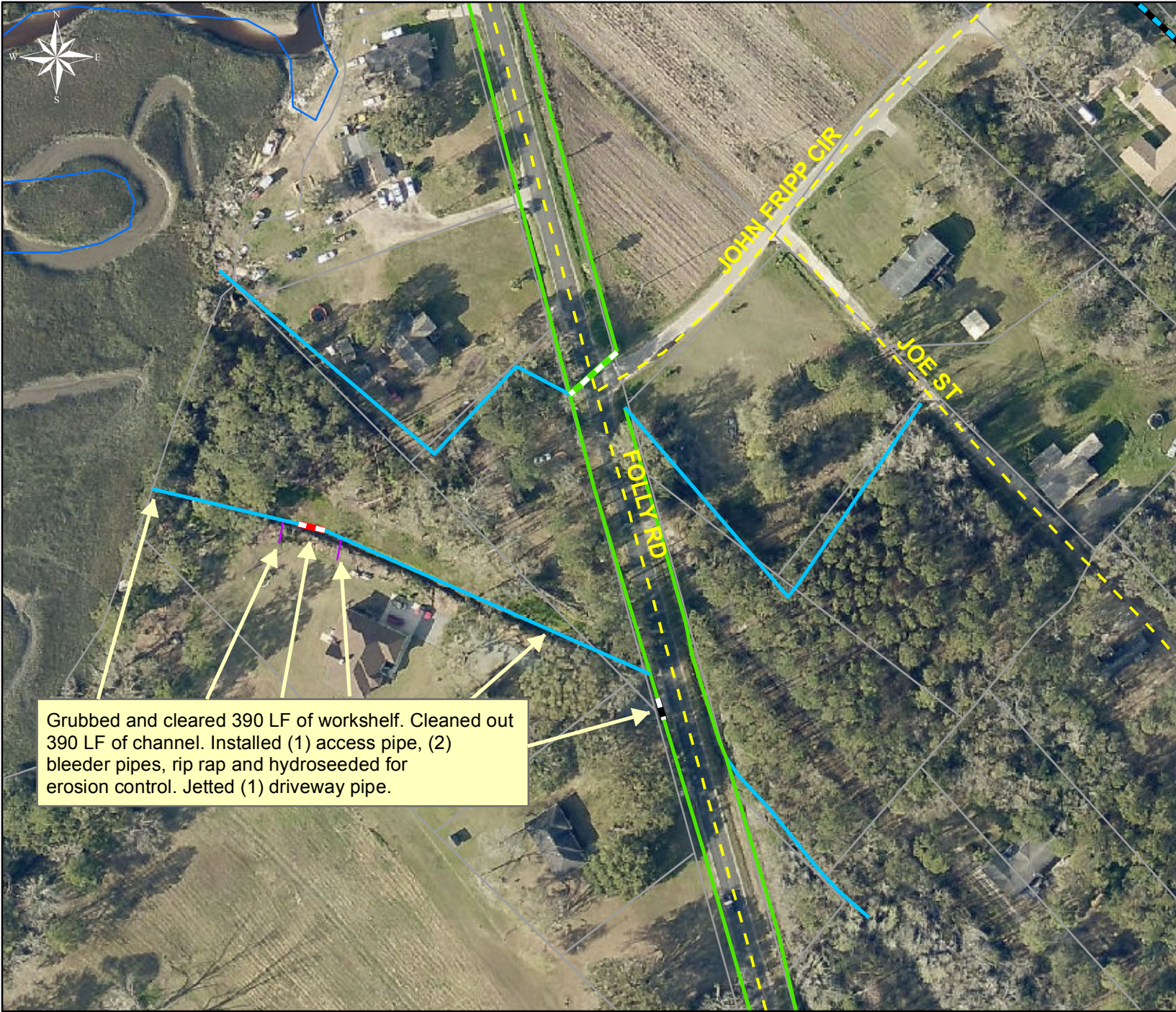


1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 6/13/17

File: C:\project summaries map\Folly Road Channel Map #1_2015-001



Project: Folly Road Channel Map #2

Activity: Routine/ Preventive Maintenance

Project #: 2015-001

Township/SW Dist: St. Helena Island/8

Completed: December 2016

Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe

Grubbed and cleared 390 LF of workshelf. Cleaned out 390 LF of channel. Installed (1) access pipe, (2) bleeder pipes, rip rap and hydroseeded for erosion control. Jetted (1) driveway pipe.



1 inch = 130 feet



**Beaufort County
Public Works
Stormwater Infrastructure
Project Summary**

Project Summary: Warsaw Island Road and Gardner Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 3,574 L.F. of drainage system. Cleaned out 3,566 L.F. of roadside ditch. Extended (1) driveway pipe. Jetted (6) access pipes, (5) crossline pipes and (29) driveway pipes. Installed rip rap for erosion control.

Duration: 8/25/16 - 10/4/16

2017-512 / Warsaw Island Rd/Gardner Dr	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APJT / Access pipe - jetted	10.0	\$230.10	\$43.40	\$43.65	\$0.00	\$149.55	\$466.70
AUDIT / Audit Project	1.0	\$23.49	\$0.00	\$0.00	\$0.00	\$13.23	\$36.72
DPEX / Driveway Pipe - Extended	40.0	\$881.40	\$110.31	\$109.55	\$0.00	\$553.50	\$1,654.76
DPJT / Driveway Pipe - Jetted	56.0	\$1,313.00	\$312.48	\$172.21	\$0.00	\$849.42	\$2,647.11
HAUL / Hauling	173.0	\$4,115.15	\$1,551.01	\$920.15	\$0.00	\$2,716.06	\$9,302.37
RSDCL / Roadside Ditch - Cleanout	501.5	\$11,073.29	\$2,305.01	\$429.97	\$0.00	\$6,988.90	\$20,797.17
UC / Utility Coordination	2.0	\$49.40	\$8.04	\$7.52	\$0.00	\$26.46	\$91.42
UTLOC / Utility locates	1.0	\$24.70	\$0.00	\$0.00	\$0.00	\$13.23	\$37.93
2017-512 / Warsaw Island Rd/Gardner Dr Sub Total	784.5	\$17,710.53	\$4,330.25	\$1,683.06	\$0.00	\$11,310.34	\$35,034.18
Grand Total	784.5	\$17,710.53	\$4,330.25	\$1,683.06	\$0.00	\$11,310.34	\$35,034.18

Before

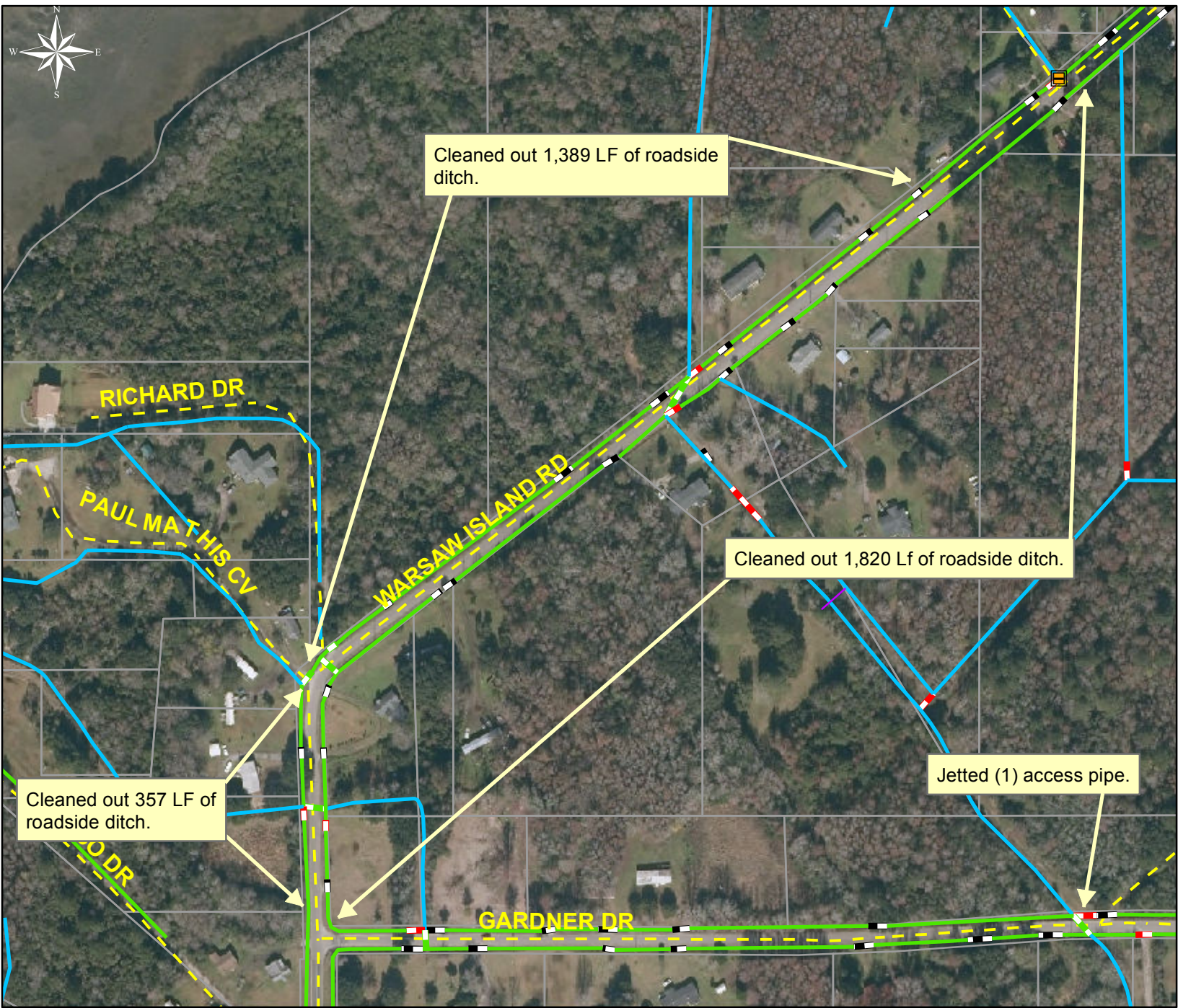


During



After





Project: Warsaw Island Road & Gardner Drive Map #1

Activity: Routine/ Preventive Maintenance

Project #: 2017-512

Township/SW Dist: St. Helena Island/8

Completed: October 2016

Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 250 feet

Prepared By: BC Stormwater Management Utility
Date Print: 06/06/17

File: C:\project summaries map\Warsaw Island Road & Gardner Drive Map #1_2017-512



Project: Warsaw
Island Road &
Gardner Drive
Map #2

Activity: Routine/
Preventive
Maintenance

Project #:
2017-512

Township/SW Dist:
St. Helena Island/8

Completed:
October 2016

Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe

0 40 80 160 240 320
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility

Date Print: 06/05/17

File: C:\project summaries map\Warsaw Island Road & Gardner Drive Map 2_2017-512



Project: Warsaw
Island Road &
Gardner Drive
Map #3

Activity: Routine/
Preventive
Maintenance

Project #:
2017-512

Township/SW Dist:
St. Helena Island/8

Completed:
October 2016

Extended (1) driveway
pipe. Jetted (1) access
pipe.

Jetted (2) access pipes and
(1) crossline pipe.

Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 130 feet

Prepared By: BC Stormwater Management Utility
Date Print: 06/06/17

File: C:\project summaries map\Warsaw Island Road & Gardner Drive Map #3_2017-512



Project: Warsaw
Island Road &
Gardner Drive
Map #4

Activity: Routine/
Preventive
Maintenance














Project #:
2017-512

Township/SW Dist:
St. Helena Island/8

Completed:
October 2016

Legend

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe



1 inch = 330 feet

Prepared By: BC Stormwater Management Utility
Date Print: 06/06/17

File: C:\project summaries map\Warsaw Island Road & Gardner Drive Map #4_2017-512



**Beaufort County
Public Works
Stormwater Infrastructure**
Project Summary

Project Summary: Dean Hall Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 120 L.F. of drainage system. Installed (2) catch basins, (1) crossline pipe and 88 L.F. of roadside pipe.

Duration: 12/20/17 - 2/18/17

2017-515 / Dean Hall Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APREP / Asphalt Preparation	73.0	\$1,564.63	\$159.76	\$81.40	\$0.00	\$991.29	\$2,797.08
AUDIT / Audit Project	1.0	\$23.49	\$0.00	\$0.00	\$0.00	\$13.23	\$36.72
CLPI / Crossline Pipe - Installation	50.0	\$1,181.90	\$235.11	\$910.27	\$0.00	\$689.50	\$3,016.78
CLPINS / Crossline Pipe - Installed	50.0	\$1,179.30	\$254.74	\$231.07	\$0.00	\$687.40	\$2,352.51
DWR / Dewatered Road	8.0	\$169.04	\$7.20	\$13.65	\$0.00	\$106.60	\$296.49
FFRC / Flowable Fill - Road Cut	15.0	\$348.80	\$18.00	\$12.74	\$0.00	\$226.95	\$606.49
HAUL / Hauling	76.0	\$1,751.77	\$665.34	\$1,203.11	\$0.00	\$1,148.52	\$4,768.74
ONJV / Onsite Job Visit	7.0	\$191.14	\$25.20	\$9.10	\$0.00	\$130.62	\$356.06
PP / Project Preparation	40.0	\$907.78	\$74.94	\$50.68	\$0.00	\$564.80	\$1,598.20
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$788.64	\$0.00	\$788.64
RSPI / Roadside Pipe - Installed	92.0	\$2,120.15	\$512.65	\$1,084.82	\$0.00	\$1,252.86	\$4,970.48
STAGING / Staging Materials/Equipment	30.0	\$668.40	\$21.60	\$13.86	\$0.00	\$417.36	\$1,121.22
UTLOC / Utility locates	1.0	\$24.70	\$0.00	\$0.00	\$0.00	\$13.23	\$37.93
WSDR / Workshelf - Dressed	25.0	\$590.95	\$80.40	\$103.58	\$0.00	\$344.75	\$1,119.68
2017-515 / Dean Hall Road Sub Total	468.0	\$10,722.05	\$2,054.94	\$3,714.28	\$788.64	\$6,587.11	\$23,867.02
Grand Total	468.0	\$10,722.05	\$2,054.94	\$3,714.28	\$788.64	\$6,587.11	\$23,867.02

Before



During



After





Project: Dean Hall Road

Activity: Routine/ Preventive Maintenance

Project #: 2017-515

Township/SW Dist: Sheldon/5

Completed: February 2017

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 15 30 60 90 120 Feet

1 inch = 67 feet

Prepared By: BC Stormwater Management Utility
 Date Print: 04/10/17
 File: C:\project summaries map\Dean Hall Road_2017-515



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Trask Parkway Channel #2

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Duration: 7/19/16 - 1/23/17

Removed blockages from flowline. Replaced (3) access pipes. Repaired washouts. Installed rip rap for erosion control.

2017-500 / Trask Parkway Channel #2	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APREM / Access pipe - removed	14.0	\$323.33	\$82.46	\$30.56	\$0.00	\$215.04	\$651.39
APRPL / Access pipe - replaced	88.0	\$1,955.88	\$373.08	\$2,474.06	\$0.00	\$1,217.36	\$6,020.38
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
HAUL / Hauling	83.0	\$1,864.65	\$767.56	\$2,097.74	\$0.00	\$1,210.42	\$5,940.37
RB / Remove blockage from flowline	10.0	\$230.95	\$18.00	\$3.96	\$0.00	\$153.60	\$406.51
RPWO / Repaired Washout	70.0	\$1,602.05	\$364.32	\$116.44	\$0.00	\$989.95	\$3,072.76
RRI / Rip Rap - Installed	40.0	\$903.40	\$192.97	\$65.24	\$0.00	\$563.30	\$1,724.91
STAGING / Staging Materials/Equipment	42.0	\$910.26	\$199.48	\$59.40	\$0.00	\$532.60	\$1,701.74
2017-500 / Trask Parkway Channel #2 Sub Total	347.5	\$7,802.27	\$1,997.87	\$4,847.40	\$0.00	\$4,888.88	\$19,536.42
Grand Total	347.5	\$7,802.27	\$1,997.87	\$4,847.40	\$0.00	\$4,888.88	\$19,536.42

Before



During



After





Project: Trask Parkway Channel #2
Map #1

Activity: Routine/ Preventive Maintenance














Project #: 2017-500

Township/SW Dist: Sheldon/5

Completed: January 2017

Legend

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe



1 inch = 420 feet

Prepared By: BC Stormwater Management Utility
Date Print: 04/04/17
File: C:\project summaries map\Trask Parkway Channel #2 Map#1_2017-500



Project: Trask Parkway Channel #2
Map #2

Activity: Routine/ Preventive Maintenance

Project #: 2017-500

Township/SW Dist: Sheldon/5

Completed: January 2017

Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 420 feet

Prepared By: BC Stormwater Management Utility
Date Print: 04/04/17
File: C:\project summaries map\Trask Parkway Channel #2 Map#2_2017-500



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Royal Pines Boulevard Channel

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 2,944 L.F. of drainage system. Cleaned out 2,944 L.F. of channel.

Duration: 1/25/17 - 2/8/17

2017-532 / Royal Pines Boulevard Channel	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
CCO / Channel - cleaned out	216.0	\$4,769.58	\$1,040.58	\$257.14	\$0.00	\$2,278.82	\$8,346.12
HAUL / Hauling	106.0	\$2,348.82	\$829.50	\$415.37	\$0.00	\$1,350.32	\$4,944.01
SD / Soft Digging	34.0	\$745.52	\$127.24	\$98.17	\$0.00	\$430.52	\$1,401.45
2017-532 / Royal Pines Boulevard Channel Sub Total	356.5	\$7,875.67	\$1,997.32	\$770.68	\$0.00	\$4,066.27	\$14,709.94
Grand Total	356.5	\$7,875.67	\$1,997.32	\$770.68	\$0.00	\$4,066.27	\$14,709.94

Before



During



After



Project: Royal Pines Boulevard Channel

Activity: Routine/ Preventive Maintenance

Project #: 2017-532














Township/SW Dist: Ladys Island/7

Completed: February 2017



Legend

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe



1 inch = 420 feet

Prepared By: BC Stormwater Management Utility

Date Print: 05/03/17

File: C:\project summaries map\Royal Pines Boulevard Channel_2017-532



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Joe Allen Drive & Patterson Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Duration: 2/14/17 - 3/7/17

Project improved 3,163 L.F. drainage system. Cleaned out 3,163 L.F. roadside ditch. Jetted (10) L.F. of driveway pipes and (3) crossline pipes. Handseeded for erosion control.

2017-533 / Joe Allen Dr & Patterson Rd	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
CLPJT / Crossline Pipe - Jetted	20.0	\$445.60	\$86.80	\$35.80	\$0.00	\$286.80	\$855.00
HAUL / Hauling	67.5	\$1,485.48	\$635.85	\$178.20	\$0.00	\$839.40	\$3,138.93
PL / Project Layout	18.0	\$412.75	\$25.20	\$18.96	\$0.00	\$233.32	\$690.23
RSDCL / Roadside Ditch - Cleanout	227.0	\$4,987.31	\$1,236.98	\$191.36	\$0.00	\$3,039.69	\$9,455.34
UTLOC / Utility locates	2.0	\$49.40	\$4.02	\$3.54	\$0.00	\$26.46	\$83.42
2017-533 / Joe Allen Dr & Patterson Rd Sub Total	335.0	\$7,392.28	\$1,988.85	\$427.86	\$0.00	\$4,432.29	\$14,241.28
Grand Total	335.0	\$7,392.28	\$1,988.85	\$427.86	\$0.00	\$4,432.29	\$14,241.28

(Pictures Not Available)



Project: Joe Allen Drive & Patterson Road Map #1

Activity: Routine/ Preventive Maintenance

Project #: 2017-533

Township/SW Dist: Port Royal Island/6

Completed: March 2017

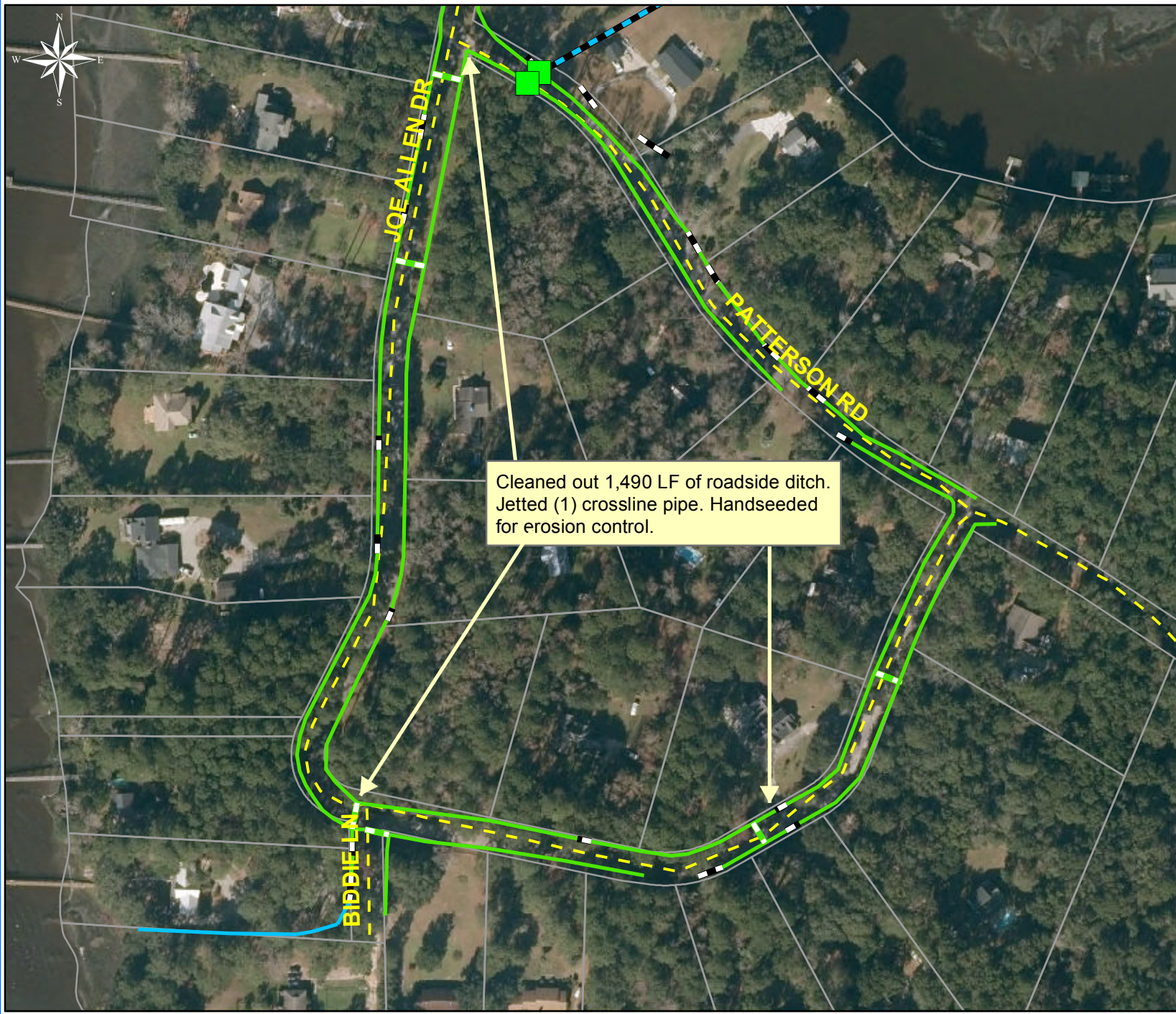
Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 330 feet

Prepared By: BC Stormwater Management Utility
Date Print: 05/03/17

File: C:\project summaries map\Joe Allen Drive & Patterson Road Map #1_2017-533



Project: Joe Allen Drive & Patterson Road
Map #2

Activity: Routine/ Preventive Maintenance

Project #: 2017-533

Township/SW Dist: Port Royal Island/6

Completed: March 2017

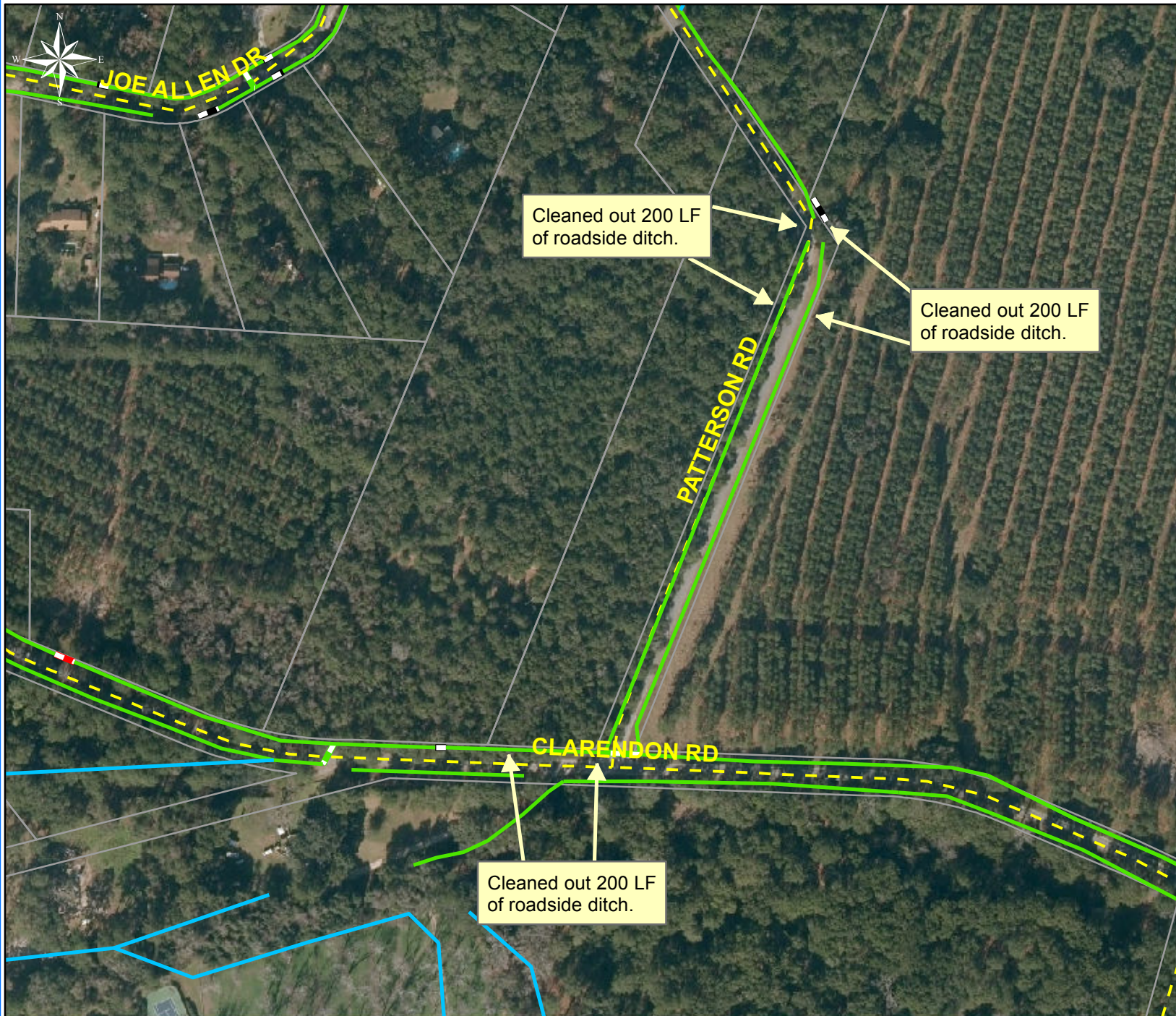
Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 210 feet

Prepared By: BC Stormwater Management Utility
Date Print: 05/03/17

File: C:\project summaries map\Joe Allen Drive & Patterson Road Map #2_2017-533



Project: Joe Allen Drive & Patterson Road
Map #3

Activity: Routine/ Preventive Maintenance














Project #: 2017-533

Township/SW Dist: Port Royal Island/6

Completed: March 2017

Legend

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe

0 60 120 240 360 480 Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility
Date Print:05/03/17

File:C:\project summaries map\Joe Allen Drive & Patterson Road Map #3_2017-533



BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD AGENDA
Wednesday, July 19, 2017
2:00 p.m.
Executive Conference Room, Administration Building
Beaufort County Government Robert Smalls Complex
100 Ribaut Road, Beaufort, South Carolina
843.255.2805

In accordance with South Carolina Code of Laws, 1976, as amended, Section 30-4-80(d), all local media was duly notified of the time, date, place and agenda of this meeting.

1. CALL TO ORDER – 2:00 p.m.
 - A. Approval of Agenda
 - B. Approval of Minutes – June 21, 2017 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
 - A. Utility Update – Eric Larson, P.E. ([backup](#))
 - B. Monitoring Update – Eric Larson, P.E. ([backup](#))
 - C. Stormwater Implementation Committee Report – Eric Larson, P.E. ([backup](#))
 - D. Stormwater Related Projects – Eric Larson, P.E. ([backup](#))
 - E. Upcoming Professional Contracts Report – Eric Larson, P.E. ([backup](#))
 - F. Regional Coordination – Eric Larson, P.E. ([backup](#))
 - G. Municipal Reports – Eric Larson, P.E. ([backup](#))
 - H. MS4 Update – Eric Larson, P.E. ([backup](#))
 - I. Maintenance Projects Report – David Wilhelm ([backup](#))
 - J. Financial Report – Chanel Lewis ([backup](#))
5. UNFINISHED BUSINESS
6. NEW BUSINESS
 - A. Special Presentation: Town of Port Royal Cypress Wetlands Modification Project - Tony Maglione, Consultant
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. August 16, 2017 ([backup](#))
9. ADJOURNMENT





**BEAUFORT COUNTY
STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2805 Facsimile (843) 255-9436**

July 19, 2017

Stormwater Manager's Report for the Stormwater Utility Board Meeting

**** The June 2017 report is included in this report and attached to the Board Packet ****

Utility Update

1. Passing of Jimmie Stanley

The June meeting of the SWUB was canceled to pay respects to a fallen colleague. On June 15, 2017, Jimmie Stanley passed away at his home. He was the Superintendent of Roads and Drainage South, but had ties to the Stormwater Department. When Jimmie joined Public Works in 2002 as a member of the Stormwater section, he progressed rapidly. He was an expert operator of heavy equipment; he understood the technical skill and safety considerations required to install drainage systems that we refer to as horizontal construction. Whether it was on the job or on the water, Jimmie shared his experience and knowledge with everyone that was willing to learn. He was promoted in 2005 to Foreman in the Stormwater section. Jimmie continued to serve the citizens of Beaufort County leading his staff by example. In 2013, he was promoted to the Superintendent's position over Roads and Drainage South. He and his crew performed in an exemplary fashion. Jimmie was scheduled to transfer back to Stormwater as the Superintendent in late June.

He was a sincere, earnest and valued member of the Public Works team. We will carry our memories of him with us forever. Many know his brother Jerry and nephew Chad also work with us in Public Works. Our thoughts continue for the family as they heal.

2. FY 18 SWU Management fee

a) Town of Hilton Head Island - The Town Council approved a rate structure change to Option E for TY 17.

b) All municipalities submitted their fee amounts for TY 17.

i) Town of Hilton Head Island – \$24 Admin., \$105 / IA, \$24 / GA

ii) Town of Bluffton – \$98 / SFU

iii) City of Beaufort – \$5 Admin., \$80 / IA, \$20 / GA

iv) Town of Port Royal – \$5.07 Admin., \$43.50 / IA, \$11.43 / GA

v) Beaufort County – \$12 Admin., \$65 / IA, \$10 / GA

3. FY 18 Budget – The County Stormwater Department FY 17-18 budget was approved on June 26.

4. Tax Run 2017 – Work began July 1. We are working towards an October 15 completion date.

Monitoring Update

1. Lab Update (From Dr. Alan Warren and Lab Manager Danielle Mickel) –
 - a. Beaufort County:
 - i. Completion of MS4 quarterly sampling and analyses for both wet and dry events for the first two quarters.
 - ii. Sampled and analyzed for a suspect illicit at 3008 Palmetto Ridge Rd.
 - iii. Continual weekly sampling for Battery Creek 319 Pond Project. Results need to be analyzed to determine trends and effectiveness.
 - iv. Continual efforts for structural system to complete discharge task at specific MS4 site.
 - v. Data reduction/reporting.
 - vi. Special data requests.
 - b. Town of Bluffton:
 - i. Continual analysis of weekly, bi-weekly, and quarterly samples.
 - ii. Data reduction/reporting.
 - iii. Review/revision of MOU between USCB and TOB.
 - c. Palmetto Bluff:
 - i. Monthly sampling and analyses for wet and dry events.
 - ii. Data reduction/reporting.
 - d. GEL-HHI:
 - i. Analysis for Hilton Head Island E.coli samples 4x/Qtr.
 - ii. Data reduction/reporting.
 - e. Leamington Community:
 - i. Collection and analyses of Leamington's stormwater lagoon system (Qtrly)
 - ii. Data reduction/reporting.
 - iii. Monthly report.
 - iv. Consultation.
 - f. USCB Lab:
 - i. Monthly (and as needed) calibration of equipment and instruments.
 - ii. Certification Upkeep-including review of QA/QC, logbooks, COC's.
 - iii. On-going efforts to obtain additional certification; no new certs obtained during this Qtr.
 - iv. Monthly sterility checks on Lab water for TOC, TRC, HPC, Conductivity, metals.
 - v. Assessments and consultations.
2. Staff from multiple jurisdictions and USCB lab met with a vendor that focuses on forecast based Stormwater controls. We are exploring whether or not this technology would be beneficial in our area.
3. Staff is developing a monitoring schedule for the CIP FY 18 Grouping Stormwater Projects. See Professional Contracts. The goal is to establish need for the BMP and a baseline to measure post construction effectiveness.

Stormwater Implementation Committee (SWIC) Report

1. The SWIC committee has not met in the last month.

Stormwater Related Projects

1. Okatie West / SC 170 Widening Retrofit (Design and Construction = \$915,000 Budget) – Nothing new to report.
2. Easements – Staff is working on numerous easement requests and meets monthly to review status.
 - a) The request for easement from Mr. Greg Bennett in the Pleasant Point area has been resolved. A contract has been entered into between Mr. Bennett and the County in which he agrees to own and maintain the outfall ditch and pipe under Bennett Drive. Per the agreement, failure to maintain the ditch resulting to negative impacts to adjacent properties or the County is the liability of Mr. Bennett. Staff is working to acquire the additional easements needed for the project.
3. SC 170 Widening and ongoing project issues – Mr. Tom Zinn has requested to address the SWUB concerning the project. This item will be discussed further in New Business

Professional Contracts Report

1. Stormwater Management Plan (Master Plan) Update – (\$475,000 Budget; \$239,542 County portion) – Nothing new to report.
2. CIP FY 18 Grouping Stormwater Projects – Four projects from the 2006 Stormwater Management Plan, further defined by the 2011 Retrofit Study were advertised for Engineering Design Services in June. Proposals were due on July 19th. Staff will be evaluating proposals and making a recommendation to the SWUB at the August meeting. The four projects are:
 - a) Brewer Memorial Park Demonstration Wet Pond Project - \$79,500 total budget
 - b) Sawmill Creek Overtopping / Forby land - \$300,000 total budget
 - c) Salt Creek South M1 - \$4,090,000 total budget
 - d) Shanklin Road M2 - \$6,680,000 total budget
3. Clemson Extension services to Beaufort County – A proposal to partner with Clemson Extension on the Brewer Memorial Park project is pending. Given the CIP FY 18 grouping project scope, Clemson’s involvement will likely be a phase II to expand upon the work done by the CIP.

Regional Coordination

1. Factory Creek Watershed Regional Detention Basin “Phase II” (Design Cost = \$63,390, Tree Mitigation Cost is pending, Construction Cost by the Developer) – Nothing new to report.
2. Battery Creek Watershed Pond retrofit / EPA 319 grant project – Nothing new to report.
3. Polk Village / Riverbank Drive outfall pipe – No progress has been made on this project within the past month. The County staff has action items to complete.
4. Municipal “County” Infrastructure – In June, the County Council authorized the County Administrator Gary Kubic to discuss the recent South Carolina Attorney General’s opinion on County roads within incorporated areas with the Town and City Managers

within the County. While the initial issue was roads, the focus has expanded to other infrastructure such as Stormwater ditches and pipes. It is the desire of the County to seek some resolution on the operational responsibility of historic County maintained systems. As discussed in previous SWUB meetings and reports, the County's SWU fee billing structure is set up to reflect the equity of asking citizens receiving the benefit of the infrastructure to pay fees for it. While this may have been a temporary solution, staff would prefer a delegation of duties so that maintenance responsibilities are not intermingled among other jurisdictional areas. This would eliminate the need for the Countywide Infrastructure (CWI) fee with the understanding the municipalities may have to adjust SWU rates to assume the increased workload. Staff from the County, Towns, and City continues to discuss this issue in hopes to properly advise their respective leadership. We will report on this topic more in future meetings.

Municipal Reports

1. Town of Hilton Head Island (From Jeff Netzing, Stormwater Manager and Brian Eber, MS4 Coordinator)
 - i. A special presentation on Stormwater infrastructure cleanup from Hurricane Matthew will be presented during today's SWUB meeting. This is a brief summary of that work.
 - The exigency work was completed with assistance via an NRCS EWP Exigency Grant on February 19.
 - The Town is currently working to clean the rest of the drainage ways via NRCS EWP Standard Grant Assistance engaging Crowder Gulf to perform the work. This effort began on May 15 and is roughly 33% complete.
 - The Town is also coordinating with FEMA to provide additional assistance once the EWP funds are exhausted.
 - The Town anticipates that work will continue on this effort for 2-3 months.
 - The Town has applied to FEMA requesting disaster recovery assistance to correct electrical system deficiencies at the Jarvis Creek stormwater pump station via immediate Category F eligibility.
 - The Town is also applying to FEMA for assistance to make long-term improvements to our stormwater pump station infrastructure at Jarvis Creek, Wexford and Sea Pines via the Hazard Mitigation Grant Program (HMGP). These improvements would involve installation of debris screens and debris removal systems at key locations
2. Town of Bluffton (From Kim Jones, Watershed Management Division Director)
 - i. [See attached report.](#)
3. City of Beaufort (From Neil Desai, Asst. Public Works Director)
 - i. No information was available at the time of this report.
4. Town of Port Royal (From Van Willis, Town Manager and Tony Maglione, consultant)
 - i. No information was available at the time of this report.

MS4 Report

1. Plan Review – There were 29 projects reviewed in May and June to Beaufort County Stormwater staff.

Projects Name	SRT Review Date	Review Type	Comments
Bluffton Dollar General/St James Pritchardville	5/3/2017	Final	Approved
Lot 5 Lost Island River Buffer	5/3/2017	River Buffer Waiver	Approved
Colleton River Bluffton Fire Station #36	5/3/2017	Final	Approved
Kitties Crossing Lot 4	5/3/2017	Final	Approved
Dataw Island Lot 52 Bulk Head	5/24/2017	Bulkhead	Deferred
Dataw Island Lot 53 Bulk Head	5/24/2017	Bulkhead	Deferred
Dataw Island Lot 52 Bulk Head	5/24/2017	Bulkhead	Deferred
Dataw Island Lot 53 Bulk Head	5/24/2017	Bulkhead	Deferred
Beaufort County Animal Services 170	5/24/2017	Final	Approved w/conditions - Access needs additional review to provide a northside connection.
Belfair Plantation East Gate	5/31/2017	Discussion	Approved
Myrtle Park Bridge Pointe Condos Phase 3	5/31/2017	Discussion	Buffer wetland, hardship
Okatie Center PUD-Sprenger Healthcare East Gate	5/31/2017	Discussion	Approved
Ferguson Forest Products	5/31/2017	Discussion	Apply for setback buffer
Okatie Center PUD-Sprenger Healthcare East Gate	5/31/2017	Discussion	Approved
Ferguson Forest Products	5/31/2017	Discussion	Apply for setback buffer
BJWSA Solar Array	6/7/2017	Discussion	Approved
Salt Creek Development Short Term Rentals	6/7/2017	Discussion	Needs commercial Lodging use
Windmill Harbor Lot 15	6/7/2017	River Buffer	Approved
Greene Acres	6/7/2017	Special Use	Denied. Needs mining permit
DESC Warehouse Solar Array	6/7/2017	Conceptual	Approved with Conditions
Moss Creek Gate Access	6/28/2017	Discussion	Requires Permitting
St. Gregory Parish Life Center	6/28/2017	Conceptual	Approved
Grayco	6/28/2017	Amendment	Approved with Conditions
Dataw Island Lot 52 Bulk Head	6/28/2017	Bulkhead	Approved with Conditions

Dataw Island Lot 53 Bulk Head	6/28/2017	Bulkhead	Approved with Conditions
Okatie Center PUD-Sprenger Healthcare East Gate	6/28/2017	Amendment	Deferred
Ferguson Forest Products	6/28/2017	Special Use revisit	Approved
Ernest Mine Drive	6/28/2017	Amendment	Approved with Conditions. Scheduled for ZBOA 7/27/17

2. Stormwater Permits – There were 7 permits issued in May and June:

Stormwater Permits Issued
St. James Pritchardville Residential
Dollar General St. James Pritchardville
Colleton River Bluffton Fire Station #36
Fripp Island Lot 120 Spy Glass
Moss Creek Plantation
Lot 17 Browns Island Bulkhead
Village at Oyster Bluff- Pond Change

3. Monthly Inspection summary

- a) Number of active permits = 45
- b) Number of inspections performed = 134
- c) Number of drainage related complaints investigated = 4
- d) Number of IDDE issues received and investigated = 3
- e) Number of Violations (verbal, written, fines, or stop work orders) = 5
- f) Number of Development Permit certificates of completion = 1

4. MS4 permit by rule – The County Council approved the resolution to amend the MS4 permit to “permit by rule” at the June 26 meeting. A letter requested the change was submitted to DHEC.

5. MS4 Program Inspections – Staff continues inspections of County facilities to evaluate stormwater best management practices on each site. This is part of Minimum Control Measure 6 on the MS4 permit.

6. Public Education – Lowcountry Stormwater Partners, via Carolina Clear, continues to work on several initiatives towards public education and outreach.

- a) Members of the SWIC are meeting monthly with Clemson Extension staff to review progress.
- b) June 6th - Ellen Comeau from Carolina Clear spoke on the Making It Grow segment. Ellen covered what the consortium is, how stormwater affects our waterways, and the success of the recent Master Pond Manager course.
- c) June 9th, Amy Scaroni, Ellen, and others presented at the Environmental Educators Association of South Carolina summer conference. The presentation was a preview of a workshop training called BioDISCOVERY that was co-created by Carolina Clear and SC SeaGrant Consortium. The workshop was based upon a Maryland SeaGrant workshop where students explore biofilm communities. They previewed the workshop

to 17 secondary educators and 14 elementary educators. You can find picture from the workshop on the [Lowcountry Stormwater Partners Facebook page](#). The post is currently pinned to the top of the page.

d) Upcoming Events:

- i. July 18th - LSP consortium meeting, 2:30pm-4:30pm at BJSWA conference room.
 - ii. August 22nd - MS4 / Municipality Education and Involvement Update Meeting, 8:30-10:30am at BJSWA conference room.
 - iii. October 19, 2017 Pond Management Conference/Workshop
 - Event Time: 8AM-4PM
 - Location: USCB Gateway Campus - Campus Center (Multi-purpose Rm) & Library Rm 267/237
 - Expected number of participants: 100
 - Parking: Free
7. DHEC NPDES permitting transition – The County began NPDES permitting as an MS4 and on behalf of DHEC on July 1, 2017.
 8. Community Development Department continues to negotiate with Energov, a product vendor, for a new permitting and plan review tracking software for FY 18.

ACTIVITY - PROJECTS	STATUS
Septic Conversion to Sanitary Sewer	Buck Island/Simmons Road (BIS) Phases I, II, and III are completed. Toy Fields is completed. Current project updates are included in Engineering Consent Agenda under "Sewer & Water."
May River 319 Grant Phase 1 - New Riverside Pond (Grant award of \$483,500 in 2009)	Completed in 2013. Weekly water quality testing on-going. A statistically significant reduction in fecal coliform bacteria concentration exists pre-pond versus post-pond. However, bacteria levels re-load to previous levels prior to discharging into the May River. This leads to management decisions with BMP placement as well as BMPs in-series to maintain bacteria reductions. An amendment to 319 Grant Phase 2 allows a portion of remaining funds to be reallocated to purchase and install Filtrexx bacteria removal media filter socks in the ditch downstream from the pond outfall to prevent bacteria re-load prior to discharging to the May River. Current project updates are included in Engineering Consent Agenda under "May River 319 Grant Phase 2."
May River 319 Grant Phase 2 - Pine Ridge (Grant award of \$290,000 in 2011)	Project completed and post-installation data collection ongoing. Current project updates are included in Engineering Consent Agenda.
May River 319 Grant Phase 3 - May River Preserve (Grant award of \$231,350 in 2015)	This project includes construction of a shallow pond known as a Green Tree Reservoir. Current project updates are included in Engineering Consent Agenda.
Stoney Creek Wetlands Restoration: Preliminary Design Phase	Wetlands restoration project with the goal to reduce stormwater volume reaching the May River. Current project updates are included in Engineering Consent Agenda.
May River Watershed Water Quality Model	Preliminary 2002 Palmetto Bluff Duck Pond Drainage area watershed model complete. Completed New Riverside BMP model for comparison to field observations. Rose Dhu Creek sub-watershed "Existing Conditions" portion of the Headwaters Water Quality Model is underway. Currently proposed for completion in FY19 following the Action Plan Update.
ACTIVITY - POLICY	STATUS
May River Watershed Action Plan Update (Grant award of \$55,000 in 2017)	To be completed with direction and input from staff, the public, Water Quality Technical Advisory Committee, May River Watershed Advisory Committee, and Town Council. Notified verbally on 4/7/17 that due to anticipated Federal Budget cuts to the EPA, SCDHEC rescinded the grant. Action Plan Update is currently not budgeted for completion in FY18.
ACTIVITY - FINANCIAL	STATUS
Additional Funding Opportunities	No updates.

ACTIVITY - PROGRAMS	STATUS
Sewer Connection Program	<p>In FY17 Council allocated \$200,000 for a Sewer Connection Program as well as \$10,000 for assistance to connect income-qualified individuals to existing sanitary sewer as part of the Neighborhood Assistance Program. The May River Watershed Action Plan Advisory Committee (WAPAC) adopted the Sewer Connection policy on September 22, 2016. Staff is gathering information on components of the policy to bring forward to Council for consideration. Completed to date include meetings with Hilton Head Island PSD #1, BJWSA and Community Foundation of the Lowcountry. Staff released a Request for Information (RFI) to local banks who might be willing to offer low interest construction loans to owners wishing to connect to sanitary sewer. A similar RFI was released to plumbers holding a Town business license in January. An overview of the findings was given to Council during Strategic Plan Update. WAPAC reviewed and recommended possible revisions to the existing sewer connection ordinance and policy for Town Council consideration at the Quarterly July Town Council Workshop.</p>
Septic System Maintenance Program	<p>FY17 funding is \$10,000. On-going assistance offered to Town residents regardless of financial status through Neighborhood Assistance Program. Current updates are included in Engineering Consent Agenda Attachment 8.</p>
Water Quality Monitoring Program	<ol style="list-style-type: none"> 1. Bacterial "hot spot" monitoring 2. BMP efficacy monitoring 3. SCDHEC Shellfish monitoring results 4. Proposed MS4 monitoring program under review by SCDHEC 5. Illicit Discharge investigation and monitoring 6. Bacterial source tracking monitoring efforts to identify potential locations of human sources of bacteria received TAC and WAPAC input. <p>Current updates are included in Engineering Consent Agenda Attachments 2, 3 and 6.</p>
Sediment & Erosion Control Program	<p>Sediment and erosion control inspections with escalating enforcement response continue. Current updates are included in Engineering Consent Agenda Attachment 5.</p>
Ditch Inspection/Maintenance Program	<p>Continued coordination with SCDOT, Beaufort County and Town Public Works to inspect and maintain ditches within the Town's jurisdiction. Town is initiating an easement acquisition program. Current updates are included in Engineering Consent Agenda Attachment 7 and under "Public Works."</p>

<p>Infrastructure Mapping/GIS</p>	<p>Data points continue to be collected as new development occurs to populate water quality model and meet MS4 requirements. Current updates are included in Engineering Consent Agenda Attachment 10.</p>
<p>Public Outreach/Participation/Involvement</p>	<p>Outreach and involvement efforts continue through county-wide partnership with Carolina Clear as Lowcountry Stormwater Partners - Neighbors for Clean Water and through local cleanups and school classes.</p>
<p>Development Plan Review Program</p>	<p>Staff supports development plan review process to ensure current BMPs for water quality and quantity are incorporated into new developments. Current updates are included in Engineering Consent Agenda Attachment 4.</p>



MEMORANDUM

Date: July 19, 2017

To: Stormwater Management Utility Board

From: David Wilhelm, P. E., Public Works Director

Re: **Maintenance Project Report**

This report will cover one major project and four minor projects. The Project Summary Reports are attached.

Major Projects – Storm Drainage System Improvements:

- **Mint Farm Subdivision Pond – Port Royal Island (SWUD 6):** This project improved 234 feet of drainage system. The scope of work included lowering the water elevation in the pond, installing three catch basins, 234 feet of channel pipe, sod and hydroseeding. The total cost project was **\$39,958.62**

Minor or Routine Projects:

- **Gardner Drive – St. Helena Island (SWUD 8):** This project improved 1,294 feet of drainage system. The project scope included cleaning 1,294 feet of roadside ditch. The total cost was **\$7,478.14**.
- **Red Cedar Street – Bluffton (SWUD 9):** The project scope included repairing a sinkhole. The total cost was **\$5,312.39**.
- **Pleasant Point Pond – Lady's Island (SWUD 7):** This project scope included lowering the water elevation in the pond. The total cost was **\$4,640.74**.
- **Vineyard Point Road – St Helena Island (SWUD 8):** The project scope included installing one driveway pipe. The total cost was **\$4,228.57**.



**Beaufort County
Public Works
Stormwater Infrastructure
Project Summary**

Project Summary: Mint Farm Subdivision Pond

Activity: Drainage Improvement

Narrative Description of Project:

Project improved 234 L.F. of drainage system. Dewatered pond to safe elevation. Installed (3) catch basins, 234 L.F. of channel pipe, sod and hydroseeded for erosion control.

Duration: 1/24/17 - 2/21/17

2017-322 / Mint Farm Subdivision Pond	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$23.49	\$0.00	\$0.00	\$0.00	\$13.23	\$36.72
CBINS / Catch basin - installed	105.0	\$2,413.06	\$637.32	\$3,389.92	\$0.00	\$1,455.39	\$7,895.69
CBLI / Catch Basin Lid - Installed	25.0	\$586.95	\$64.63	\$107.37	\$0.00	\$350.10	\$1,109.05
CPI / Channel Pipe - Installation	190.0	\$4,371.50	\$910.42	\$3,891.39	\$0.00	\$2,497.10	\$11,670.41
DWP / Dewatered Pond	80.0	\$1,912.00	\$174.31	\$75.24	\$0.00	\$1,123.50	\$3,285.05
EQRENT / Equipment Rental	0.0	\$0.00	\$0.00	\$0.00	\$293.28	\$0.00	\$293.28
HAUL / Hauling	82.0	\$1,844.97	\$719.87	\$1,729.56	\$0.00	\$1,079.24	\$5,373.64
HYDR / Hydroseeding	30.0	\$663.60	\$90.84	\$133.34	\$0.00	\$401.10	\$1,288.88
LP / Locate Pipe	40.0	\$934.40	\$54.00	\$18.59	\$0.00	\$564.75	\$1,571.74
PL / Project Layout	22.0	\$548.46	\$19.80	\$4.55	\$0.00	\$329.01	\$901.82
SC / Sediment Control	52.0	\$1,260.90	\$46.80	\$87.86	\$0.00	\$717.78	\$2,113.34
SI / Sod - Installation	50.0	\$1,173.90	\$184.10	\$185.09	\$0.00	\$700.20	\$2,243.29
SPSWI / Special Project - SWI	4.0	\$89.12	\$17.36	\$6.94	\$0.00	\$57.36	\$170.78
STAGING / Staging Materials/Equipment	44.5	\$1,058.04	\$216.59	\$25.74	\$0.00	\$565.80	\$1,866.17
TT / Travel Time	2.0	\$52.66	\$7.20	\$3.96	\$0.00	\$37.02	\$100.84
UTLOC / Utility locates	1.0	\$24.70	\$0.00	\$0.00	\$0.00	\$13.23	\$37.93
2017-322 / Mint Farm Subdivision Pond Sub Total	728.5	\$16,957.75	\$3,143.24	\$9,659.55	\$293.28	\$9,904.81	\$39,958.62
Grand Total	728.5	\$16,957.75	\$3,143.24	\$9,659.55	\$293.28	\$9,904.81	\$39,958.62

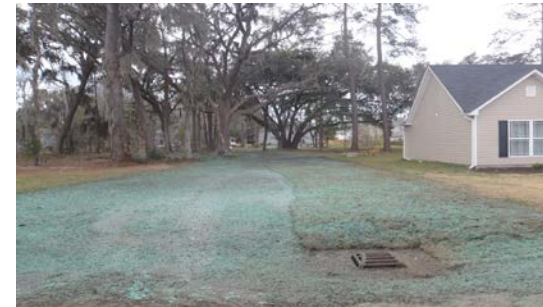
Before



During



After



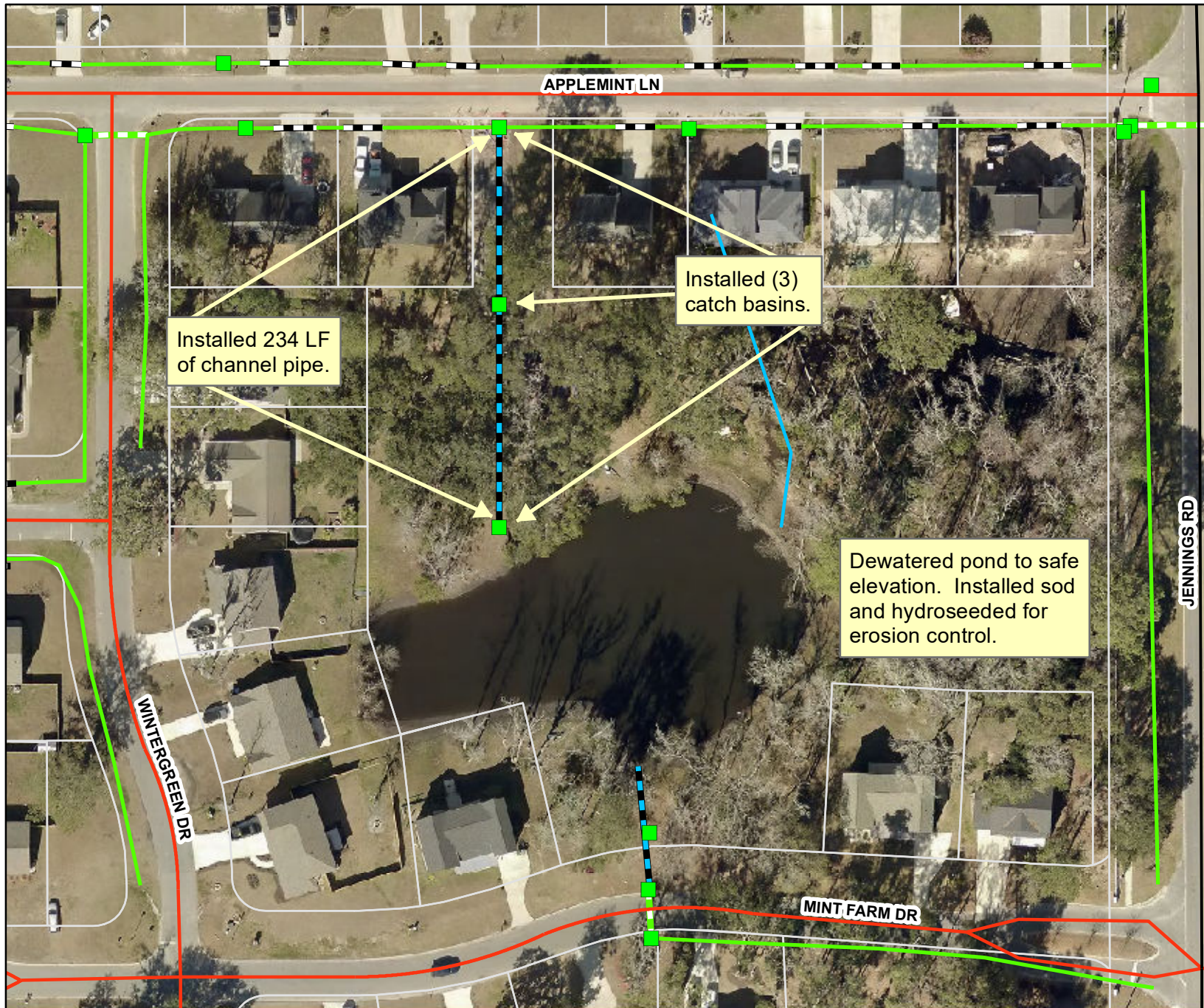
Project: Mint Farm Subdivision Pond

Activity: Drainage Improvement

**Project #:
2017-322**

**Township/SW Dist:
Port Royal Island/6**

**Completed:
February 2017**



Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Creek/Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 83 feet

Prepared By: BC Stormwater Management Utility
Date: Print 07/11/2017
File: C:\Project Summary Maps\Mint Farms S-D Pond 2017-322





Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Gardner Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 1,294 L.F. of drainage system. Removed blockage from flowline. Cleaned out 1,294 L.F. of roadside ditch.

Duration: 1/11/17 - 2/16/17

2017-527 / Gardner Drive

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
HAUL / Hauling	58.0	\$1,279.66	\$499.26	\$160.38	\$0.00	\$825.31	\$2,764.61
RSDCL / Roadside Ditch - Cleanout	122.0	\$2,665.59	\$498.07	\$82.89	\$0.00	\$1,416.69	\$4,663.24
UTLOC / Utility locates	1.0	\$24.70	\$0.00	\$0.00	\$0.00	\$13.23	\$37.93
2017-527 / Gardner Drive Sub Total	181.5	\$3,981.70	\$997.33	\$243.27	\$0.00	\$2,261.85	\$7,484.14
Grand Total	181.5	\$3,981.70	\$997.33	\$243.27	\$0.00	\$2,261.85	\$7,484.14

Before



During



After





Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Red Cedar Street

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Repaired sinkhole.

Duration: 3/1/17 - 3/6/17

2017-517 / Red Cedar Street	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APREP / Asphalt Preparation	40.0	\$866.90	\$43.58	\$25.74	\$0.00	\$551.40	\$1,487.62
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
HAUL / Hauling	20.0	\$494.00	\$188.40	\$263.79	\$0.00	\$329.40	\$1,275.59
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$498.20	\$0.00	\$498.20
SD / Soft Digging	19.0	\$423.32	\$86.80	\$63.56	\$0.00	\$272.46	\$846.14
SR / Sinkhole repair	30.0	\$656.30	\$36.00	\$75.08	\$0.00	\$419.10	\$1,186.48
2017-517 / Red Cedar Street Sub Total	109.5	\$2,452.27	\$354.78	\$428.17	\$498.20	\$1,578.98	\$5,312.39
Grand Total	109.5	\$2,452.27	\$354.78	\$428.17	\$498.20	\$1,578.98	\$5,312.39

(Pictures Not Available)



Project: Red Cedar Street

Activity: Routine/ Preventive Maintenance

Project #: 2017-517

Township/SW Dist: Bluffton/4

Completed: March 2017

Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 130 feet



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Pleasant Point Pond

Activity: Pond Maintenance

Narrative Description of Project:

Dewatered pond to safe elevation.

Duration: 1/24/17 - 1/30/17

2017-323 / Pleasant Point Pond

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
DWP / Dewatered Pond	106.0	\$2,407.56	\$401.03	\$255.89	\$0.00	\$1,557.90	\$4,622.38
2017-323 / Pleasant Point Pond Sub Total	106.5	\$2,419.31	\$401.03	\$255.89	\$0.00	\$1,564.52	\$4,640.74

Grand Total **106.5** **\$2,419.31** **\$401.03** **\$255.89** **\$0.00** **\$1,564.52** **\$4,640.74**

(Pictures Not Available)

Project: Pleasant Point Pond

Activity: Pond Maintenance

Project #: 2017-323

Township/SW Dist: Lady's Island/7

Completed: January 2017



Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Creek/Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 156 feet

Prepared By: BC Stormwater Management Utility
Date: Print 07/12/2017
File: C:\Project Summary Maps\Pleasant Pt Pond 2017-323





Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Vineyard Point Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Installed (1) driveway pipe.

Duration: 5/15/17 - 5/16/17

2017-551 / Vineyard Point Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APREP / Asphalt Preparation	20.0	\$433.45	\$64.78	\$85.44	\$0.00	\$270.60	\$854.27
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
DPINS / Driveway Pipe - Installed	50.0	\$1,145.40	\$223.46	\$97.78	\$0.00	\$677.60	\$2,144.24
HAUL / Hauling	10.0	\$207.75	\$94.20	\$837.65	\$0.00	\$72.10	\$1,211.70
2017-551 / Vineyard Point Road Sub Total	80.5	\$1,798.35	\$382.44	\$1,020.87	\$0.00	\$1,026.91	\$4,228.57
Grand Total	80.5	\$1,798.35	\$382.44	\$1,020.87	\$0.00	\$1,026.91	\$4,228.57

Before



During



After



Project: Vineyard Point Road

Activity: Routine/ Preventive Maintenance














Project #: 2017-551

Township/SW Dist: St. Helena/8

Completed: May 2017



Installed (1) driveway pipe.

Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Creek/Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 125 feet

Prepared By: BC Stormwater Management Utility
Date: Print 07/11/2017
File: C:\Project Summary Maps\Vineyard Point Rd 2017-551



BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD AGENDA
Wednesday, August 16, 2017
2:00 p.m.
Executive Conference Room, Administration Building
Beaufort County Government Robert Smalls Complex
100 Ribaut Road, Beaufort, South Carolina
843.255.2805

In accordance with South Carolina Code of Laws, 1976, as amended, Section 30-4-80(d), all local media was duly notified of the time, date, place and agenda of this meeting.

1. CALL TO ORDER – 2:00 p.m.
 - A. Approval of Agenda
 - B. Approval of Minutes – July 19, 2017 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
 - A. Utility Update – Eric Larson, P.E. ([backup](#))
 - B. Monitoring Update – Eric Larson, P.E. ([backup](#))
 - C. Stormwater Implementation Committee Report – Eric Larson, P.E. ([backup](#))
 - D. Stormwater Related Projects – Eric Larson, P.E. ([backup](#))
 - E. Upcoming Professional Contracts Report – Eric Larson, P.E. ([backup](#))
 - F. Regional Coordination – Eric Larson, P.E. ([backup](#))
 - G. Municipal Reports – Eric Larson, P.E. ([backup](#))
 - H. MS4 Update – Eric Larson, P.E. ([backup](#))
 - I. Maintenance Projects Report – David Wilhelm ([backup](#))
 - J. Financial Report – Chanel Lewis ([backup](#))
5. UNFINISHED BUSINESS
6. NEW BUSINESS
 - A. Special Presentation: Town of Port Royal Cypress Wetlands Modification Project - Tony Maglione, Consultant
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. September 20, 2017 ([backup](#))
9. ADJOURNMENT

