

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

January 7, 2015 at 2:00 p.m. in Beaufort Industrial Village Building #3 Conference Room

Board Members

Present

Allyn Schneider
Don Smith
William Bruggeman
Marc Feinberg
Larry Meisner

Absent

James Fargher
Patrick Mitchell

Ex-Officio Members

Present

Andy Kinghorn
Scott Liggett
Van Willis

Absent

Kimberly Jones

Beaufort County Staff

Eric Larson
Gary Kubic
Josh Gruber
Eddie Bellamy
Carolyn Wallace
Danny Polk
Kevin Pitts

Visitors

Alice Howard, Beaufort County Council
Tony Maglione, ATM
Denise Parsick, Bft Soil & Water Conservation Dist
Kristina Wetzel, Citizen
Paul Moore, Ward Edwards

1. Meeting called to order – Don Smith

A. Agenda – Approved.

B. November 5, 2014 Minutes – Approved.

December 3, 2014 Minutes - No quorum to approve the minutes.

2. Introductions – Completed.

3. Public Comment(s) – None.

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

A. Utility Update – Eric Larson

Staff Vacancy – This coming Friday, we are advertising for an Administrative Technician for the Stormwater Management staff.

New Board Members – We held orientation for Mr. Marc Feinberg and Mr. Larry Meisner earlier this week.

B. MS4 Update – Eric Larson

Please see attached written report.

C. Monitoring Update – Eric Larson

USCB Lab – Mr. Larson provided Dr. Alan Warren's update on the certification of the lab in the manager's report. The only update to the report is the turbidity PT study was approved.

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

The committee will resume their regular schedule meetings next week.

E. Stormwater Related Projects – Eric Larson

County Administration Complex Parking Lot Retrofit – The rain gardens are in and the contractor has begun laying the pavers.

Okatie West/SC 170 Widening Retrofit Land Purchase – County Council approved the purchase. Closing is pending. There is a development plan approved by the Town of Bluffton and the Rural and Critical Land Trust will have to go through a process to get it removed.

Graves Property – The County Council is interested in this property and Mr. Larson would like to look at it from a stormwater point of view and he has a proposal on his desk for a feasibility study.

F. Professional Contracts Report – Eric Larson

Please see attached written report.

G. Regional Coordination - Eric Larson

Old Woodland Plantation Stormsewer System Repairs – This project is 70% complete. The crew is having issues because there are driveway pipes installed by the property owners that are the wrong size or installed at the wrong elevation and some property owners are not completely satisfied with the work caused by these limitations.

H. Financial Report

Copies of the November financials were provided.

I. Maintenance Projects Report – Mr. Eddie Bellamy submitted his written report in advance ([please see attachment](#)) on four major and fourteen minor or routine projects.

5. Unfinished Business – None.

6. New Business

Fiscal Year 2014 Actuals – Mrs. Carolyn Wallace provided a presentation on the actual revenue received and expended by the SW utility for FY 2014 ([please see attachment](#)). The reserve utilization for FY 2015, the set up of the USCB lab, the capital improvement fund and the uncollected SWU fees were some of the topics discussed.

January 22nd SW Workshop – Mr. Gary Kubic provided background information on the county's stormwater efforts and commented on some of the upcoming challenges. Mr. Larson and Mr. Tony Maglione discussed the draft agenda for the workshop.

Status of the 2014 Goals and Review of the 2015 Goals – Mr. Larson reviewed the status of the 2014 goals. Then he presented on the draft of the 2015 goals. The Water Budget Study, the county's collection efforts of the military's delinquent SWU fees, driveway permits in the county's right of ways, possibility of "stream restoration" as a water quality control, were some of the topics discussed. Mr. Smith said the utility needs to develop criteria to compare and rank capital projects. Recently, new projects have been identified and given high priority for funding without a thorough comparison to the other capital projects that have been identified and been on a priority list since the 2006 Master Plan. He asked that this be added to the 2015 list. Pursuant to Mr. Larry Meisner's comments and the ensuing discussion, Mr. Larson also added "Continuing to look for opportunities for wetland and stream bank restorations, restoring fresh water channels to mimic natural waterways, stabilizing banks, and establishing vegetated buffers" to the 2015 goals.

Mr. Larson asked the board members to provide their input within the next two weeks.

7. Public Comment(s) – None.

8. Next Meeting Agenda – Approved.

9. Meeting Adjourned.



BEAUFORT COUNTY STORMWATER UTILITY
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January 7, 2015

Stormwater Manager's Report for the Stormwater Utility Board Meeting

Utility Update

1. Stormwater and Public Works staff conducted an orientation briefing to new County Council member Alice Howard.
2. Staff is working on the Department's 2014 successes and FY 2016 goals in preparation for the County Council retreat in February. They will be presented to the Board for review at the January or February meeting.
3. Carolyn Wallace and Eric Larson conducted audits of utility fee credit applicants and on-lot volume control exemption applicants in December. Seven sites were done and included Berkeley Hall, Belfair, Oldfield, Dataw Island, Sun City, Habersham, Coosaw Point, and Somerset Point. No violations were found and only minor suggestions were offered.
4. The County Utility, and most of the Towns and City, responded to the bi-annual SESWA Utility survey. The data is published as a rate study and shared with members.
5. We are advertising for an Administrative Technician for the Stormwater Management staff. This was budgeted to be filled mid-year.

MS4 Update

1. MS4 Permit Application – DHEC reports the permit will not be issued by January 1, 2015 as we had hoped. No timeline was given.
2. Eric Larson and our consultant, ATM, have been working on the presentations for January 22, 2015 workshop. A preview of that workshop will be given during the January Board meeting.
3. Stormwater Workshop for County Council – The half day workshop for the County Council will be held January 22, 2015 from 12:30pm to 5pm at the County Council Chambers in the Administration Building on Ribaut Road. The Board and public are invited to attend. The agenda will include a summary of the background of the MS4 program regulations, a presentation of the current planning activities the Utility is performing, a look at needs in future years, and a review of the stormwater department's funding needs. At the end of the workshop, the staff hopes to receive feedback from the Council so that the program can implement the recommendations from the meeting.

Monitoring Update

1. USCB Lab – Dr. Warren and staff have provided us with the following update:
As an update from last month, we were seeking certification for “in-situ” parameters to include pH, Specific Conductivity, Salinity, Temperature, Dissolved Oxygen, and Turbidity. This type of certification was suggested by the SCDHEC Laboratory Certification Officer, Benny Cockerel. Following the required protocol for certification; PT study (SpC, pH and Turbidity, the other parameters do not require a PT study), start-up data, Initial Demonstration of Capabilities, SOPs, QAM, we have finished the PT study for SpC and pH. The turbidity PT study closed 12/29/14, so we have to wait for those results before we can send the rest of the required data to Benny.
In addition, the lab has recently analyzed samples for coliform bacteria (e. coli and fecal coliform) collected from the RiverPort development in Jasper Co. It’s good to be involved in such an important project that has the potential to influence water quality within the Savannah National Wildlife Refuge.

Stormwater Implementation Committee (SWIC) Report

1. Storm drain markers – The SWIC has been reviewing various storm drain marker designs for use throughout the community.
2. 2015 Pond Conference – Beaufort Conservation District is working on our behalf to apply for an educational grant from the Women in Philanthropy with the Community Foundation of the Low County. This will help offset costs and keep registration fees low.
3. Public Education MOA – The MOAs have been executed for the cost share of the stormwater public education and outreach contract with Beaufort Conservation District.
4. The Town of Bluffton is working on an informational pamphlet that will educate the public on the MS4 program, and its programmatic elements.

Stormwater Related Projects

1. US 278 Retrofit Ponds (\$356,000 budget) – Clearing should begin early January. Stormwater Infrastructure crews have begun constructing the site entrances. Permitting for the spoil site at Buckwalter Park is still pending.
2. County Admin. Complex Retrofit Project (\$327,768 budget) – Ongoing. The project will likely be completed ahead of schedule.
3. Turtle Lane Paving on Lady’s Island (stormwater add-on) (\$8,940 budget) – We accepted the proposal from the design-build consultant to address the design. We are waiting on the deliverable.
4. Okatie West / SC 170 widening retrofit land purchase (\$160,415 budget) – County Council approved the purchase. Closing is expected in January.
5. Graves Property stormwater project feasibility study – I am soliciting a proposal to evaluate the site to construct a regional BMP to serve the area and runoff from US 278.
6. Middleton Place subdivision on Hilton Head Island – The County and Town of Hilton Head Island have jointly offered to perform needed maintenance of a portion of the private system that receives runoff from the County and Town. Further, the Town has offered to assume future maintenance of a detention basin if the easement is granted. Discussion with the POA is on-going.

Professional Contracts Report

1. Financial Analysis of the Stormwater Utility (\$28,791 budget) – ATM has been reviewing the fee structure for the Utility. A draft report is scheduled for the January Board meeting. Findings will be presented to the County Council in January workshop. (See MS4 report above.)

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 – The Pine Grove volume reduction project using CWA Section 319 grant dollars is on-going. A request for proposals is open until January 9th. ToB had a voluntary pre-submittal meeting that was attended by representatives from eight consulting firms. The proposed project involves installing an irrigation system using the existing lagoon network as the water source. Stormwater reuse for irrigation from the lagoons should reduce the amount of stormwater runoff that leaves the site, and ultimately reaches the May River. The Stoney Creek watershed plan is on-going. (Jeremy Ritchie or Kim Jones may also report).
3. Salinity Study (\$25,000 budget – county portion) - On going. The Watershed Advisory Committee is meeting in late January to review the data analysis and recommend action items. A final report is expected in the upcoming months.
4. Sea Level Rise and Future Planning – On going. The Sea Grant staff is continuing work on the final report. A draft report is being reviewed by stakeholders. The report will likely be presented to the Planning Commission and Natural Resources Committee at a future date.
5. Drainage Issue on H.E. McCracken Circle in Bluffton – On going. Stormwater staff is evaluating the field data and defining possible actions.
6. Drainage Issue in Plantation Park in Bluffton – The County and Town staff are working together to determine a solution to a failing private stormsewer system and a request from the POA for government acceptance and repair. Discussions are on-going.
7. Old Woodland Plantation stormsewer system repairs – The County crews have been working with the Town of Hilton Head Island staff to perform routine maintenance to this subdivision which has a combination of Town owned and County owned infrastructure.



MEMORANDUM

Date: January 7, 2015

To: Stormwater Management Utility Board

From: Eddie Bellamy, Public Works Director

Re: **Maintenance Project Report for January 2015**

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

2. Major Projects:

- A. **Booker T. Washington Circle Channel**, completed in November in Big Estate, District 5; we Shinn cut and reconstructed 2,053 feet of channel, constructed 2,053 feet of workshelf, installed two access pipes and two bleeder pipes, and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$54,525**.
- B. **Charleston Drive Channel #1**, completed in November in the Grays Hill area of Port Royal Island, District 6; we reconstructed 315 feet of channel, constructed 315 feet of workshelf, installed one access pipe and one access gate, and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$18,965**.
- C. **Huron Drive**, completed in November in the Mink Point area of Port royal Island, District 6; we installed one catch basin and 228 feet of channel pipe and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$25,816**.
- D. **McNeal Circle/Crystal Street**, completed in November in the Stuart Point area of Port Royal Island, District 6; We cleaned out 3,903 feet of roadside ditch and jetted out five crossline pipes and 19 driveway pipes. Total cost of the project was **\$20,500**.

3. Minor or Routine Projects:

- A. **Sheldon Washout Repair – Backache Acres**, completed in July in District 5; we repaired 475 feet of workshelf.
- B. **Bluffton Township Valley Drains**, completed in August in District 9; we cleaned 16,008 feet of valley drains on four roads.
- C. **Sea Pines Drive**, completed in September in District 8; we installed one driveway pipe and cleaned out 54 feet of roadside ditch.

- D. **Mary Elizabeth Drive**, completed in September in District 7, we jetted one crossline pipe, repaired a sinkhole, constructed a swale, and installed sod for erosion control.
- E. **Pine Grove Road**, completed in September in District 6; we repaired washout and hydroseeded for erosion control.
- F. **Evelyns Way**, completed in October in District 9; we bush hogged and cleaned out 1,075 feet of roadside ditch, jetted out three crossline and three driveway pipes, and hydroseeded for erosion control.
- G. **Wiggfall Road, Channel #1**, completed in October in District 8; we grubbed and cleaned out 253 feet of channel, jetted out one crossline pipe, installed two access pipes, and installed rip-rap and hydroseeded for erosion control.
- H. **Sea Island Parkway Channel #2**, completed in October in District 8; we cleaned out 598 feet of channel and hydroseeded for erosion control.
- I. **Ashepool Drive**, completed in October in District 9, we cleaned out a perforated box.
- J. **Relative Lane**, completed in November in District 7; we installed one driveway pipe.
- K. **Pleasant Point Drive Channel**, completed in November in District 7, we cleaned out 472 feet of channel and reset four catch basin lids.
- L. **Capers Island Circle**, completed in November in District 8, we cleaned out 135 feet of roadside ditch and 545 feet of channel, jetted one access pipe and one crossline pipe, installed one driveway pipe, and installed rip-rap for erosion control.
- M. **Sheldon Bush Hogging**, completed in November in District 5; we bush hogged 43,717 feet of channel and workshelf. Total cost of the effort was **\$26,181** or **\$.60** per linear foot.
- N. **Joe Capers Road**, completed in November in District 8; we replaced one crossline pipe, cleaned out 120 feet of roadside ditch, and installed rip-rap for erosion control.



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Booker T. Washington Circle Channel

Activity: Drainage Improvement

Narrative Description of Project:

Project improved 2,053 L.F. of drainage system. Shinn cut and reconstructed 2,053 L.F. of channel. Constructed 2,053 L.F. of workshelf. Installed (2) access pipes, (2) bleeder pipes, rip rap and hydroseeded for erosion control.

Completion: Nov-14

2011-030 / Booker T. Washington Circle	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APINS / Access pipe - installed	46.0	\$1,022.32	\$141.35	\$129.88	\$0.00	\$657.08	\$1,950.64
AUDIT / Audit Project	1.5	\$30.69	\$0.00	\$0.00	\$0.00	\$19.85	\$50.54
BPINST / Bleeder pipe - Installed	40.0	\$903.00	\$195.24	\$337.42	\$0.00	\$484.20	\$1,919.86
DLO / Ditch Layout	40.0	\$926.30	\$368.68	\$160.47	\$0.00	\$628.40	\$2,083.85
HAUL / Hauling	154.0	\$3,395.76	\$1,433.80	\$2,376.15	\$0.00	\$2,153.22	\$9,358.93
HYDR / Hydroseeding	22.0	\$518.36	\$93.20	\$285.35	\$0.00	\$352.44	\$1,249.35
LM / Loading Materials	20.0	\$470.20	\$240.00	\$137.25	\$0.00	\$319.50	\$1,166.95
ODCO / Channel - cleaned out	100.0	\$2,288.00	\$1,266.52	\$450.18	\$0.00	\$1,542.30	\$5,547.00
ODGRB / Channel - grubbed	6.0	\$151.67	\$90.38	\$9.15	\$0.00	\$105.57	\$356.77
ODREC / Channel - reconstructed	70.0	\$1,592.20	\$430.24	\$648.71	\$0.00	\$1,070.40	\$3,741.55
ODSHN / Channel - Shinn cut	79.5	\$2,010.37	\$1,059.12	\$532.23	\$0.00	\$1,399.37	\$5,001.08
ONJV / Onsite Job Visit	60.5	\$2,091.78	\$200.91	\$149.50	\$0.00	\$1,435.97	\$3,878.16
PL / Project Layout	7.0	\$309.89	\$25.34	\$23.92	\$0.00	\$237.72	\$596.87
PP / Project Preparation	10.0	\$265.80	\$0.00	\$0.00	\$0.00	\$187.20	\$453.00
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$1,800.00	\$0.00	\$1,800.00
PRRECON / Project Reconnaissance	5.0	\$206.92	\$18.10	\$11.96	\$0.00	\$154.07	\$391.05
RMTRW / Remove trees - Workshelf	20.0	\$482.10	\$253.76	\$134.20	\$0.00	\$331.40	\$1,201.46
TC / Traffic Control - Jobsite	15.0	\$360.95	\$18.10	\$9.15	\$0.00	\$248.05	\$636.25
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
WSCON / Workshelf - Constructed	28.5	\$685.77	\$203.95	\$131.15	\$0.00	\$471.30	\$1,492.16
WSDR / Workshelf - Dressed	15.0	\$343.35	\$58.70	\$18.30	\$0.00	\$231.85	\$652.20
WSL / Workshelf - Level	30.0	\$723.15	\$372.26	\$225.70	\$0.00	\$497.10	\$1,818.21
WSREC / Workshelf - Reconstructed	30.0	\$663.20	\$205.76	\$164.70	\$0.00	\$441.60	\$1,475.26
WSSHN / Workshelf - Shinn cut	134.0	\$3,270.04	\$1,394.76	\$768.60	\$0.00	\$2,253.83	\$7,687.22
2011-030 / Booker T. Washington Circle (Sub Total	934.5	\$22,722.05	\$8,070.17	\$6,703.98	\$1,800.00	\$15,229.02	\$54,525.21
Grand Total	934.5	\$22,722.05	\$8,070.17	\$6,703.98	\$1,800.00	\$15,229.02	\$54,525.21

Before



During



After



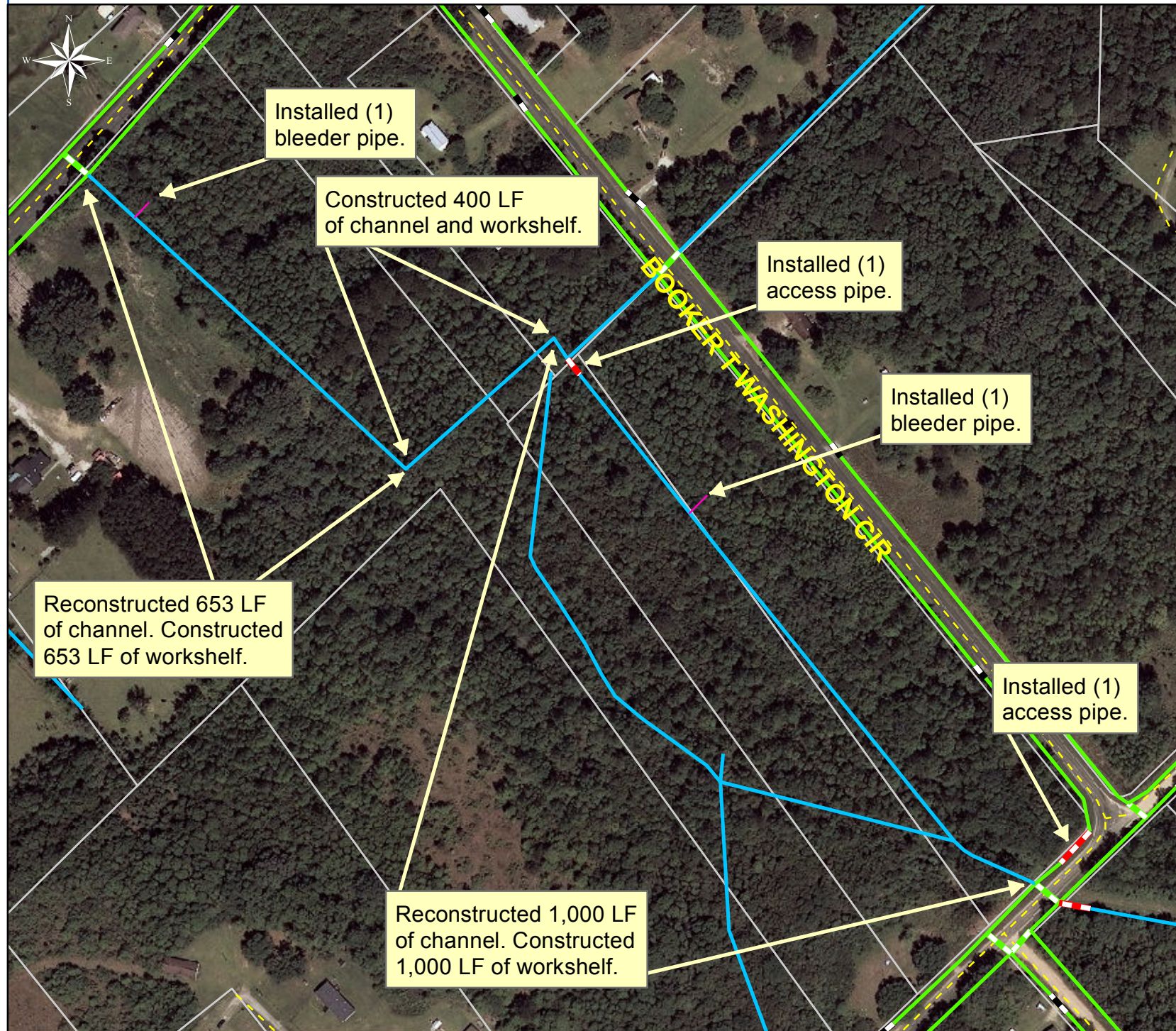
Project: Booker T Washington Circle

Activity: Drainage Improvement

**Project #:
2011-030**

**Township:
Sheldon**

**Completed:
November 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 = 209 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/1/14

File:C:/sethdata/projects/projectmaps/Booker T Washington Cir 2011-030



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Charleston Drive Channel #1

Activity: Routine/preventive Maintenance

Narrative Description of Project:

Project improved 335 L.F. of drainage system. Reconstructed 315 L.F. of channel. Constructed 315 L.F. of workshelf. Installed 20 L.F. of channel pipe, (1) access gate, (1) access pipe, rip rap and hydroseeded for erosion control.

Completion: Nov-14

2015-004 / Charleston Drive Channel #1	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	86.0	\$1,870.62	\$877.40	\$1,438.40	\$0.00	\$1,249.16	\$5,435.58
HYDR / Hydroseeding	10.0	\$222.20	\$18.10	\$89.38	\$0.00	\$133.35	\$463.02
ODCO / Channel - cleaned out	40.0	\$891.40	\$235.00	\$40.35	\$0.00	\$565.80	\$1,732.55
ODGRB / Channel - grubbed	13.0	\$291.14	\$137.38	\$33.37	\$0.00	\$179.94	\$641.83
OFPI / Channel Pipe - Installation	40.0	\$891.40	\$195.24	\$406.84	\$0.00	\$565.80	\$2,059.28
ONJV / Onsite Job Visit	59.0	\$1,799.52	\$206.34	\$62.79	\$0.00	\$1,128.49	\$3,197.14
PRRECON / Project Reconnaissance	8.0	\$245.40	\$21.72	\$20.93	\$0.00	\$158.32	\$446.37
WSDR / Workshelf - Dressed	19.0	\$432.28	\$106.54	\$59.53	\$0.00	\$270.09	\$868.44
WSGRB / Workshelf - Grubbed	90.0	\$2,013.20	\$642.44	\$162.40	\$0.00	\$1,286.40	\$4,104.44
2015-004 / Charleston Drive Channel #1 Sub Total	365.5	\$8,667.39	\$2,440.16	\$2,313.97	\$0.00	\$5,543.96	\$18,965.49
Grand Total	365.5	\$8,667.39	\$2,440.16	\$2,313.97	\$0.00	\$5,543.96	\$18,965.49

Before



During



After



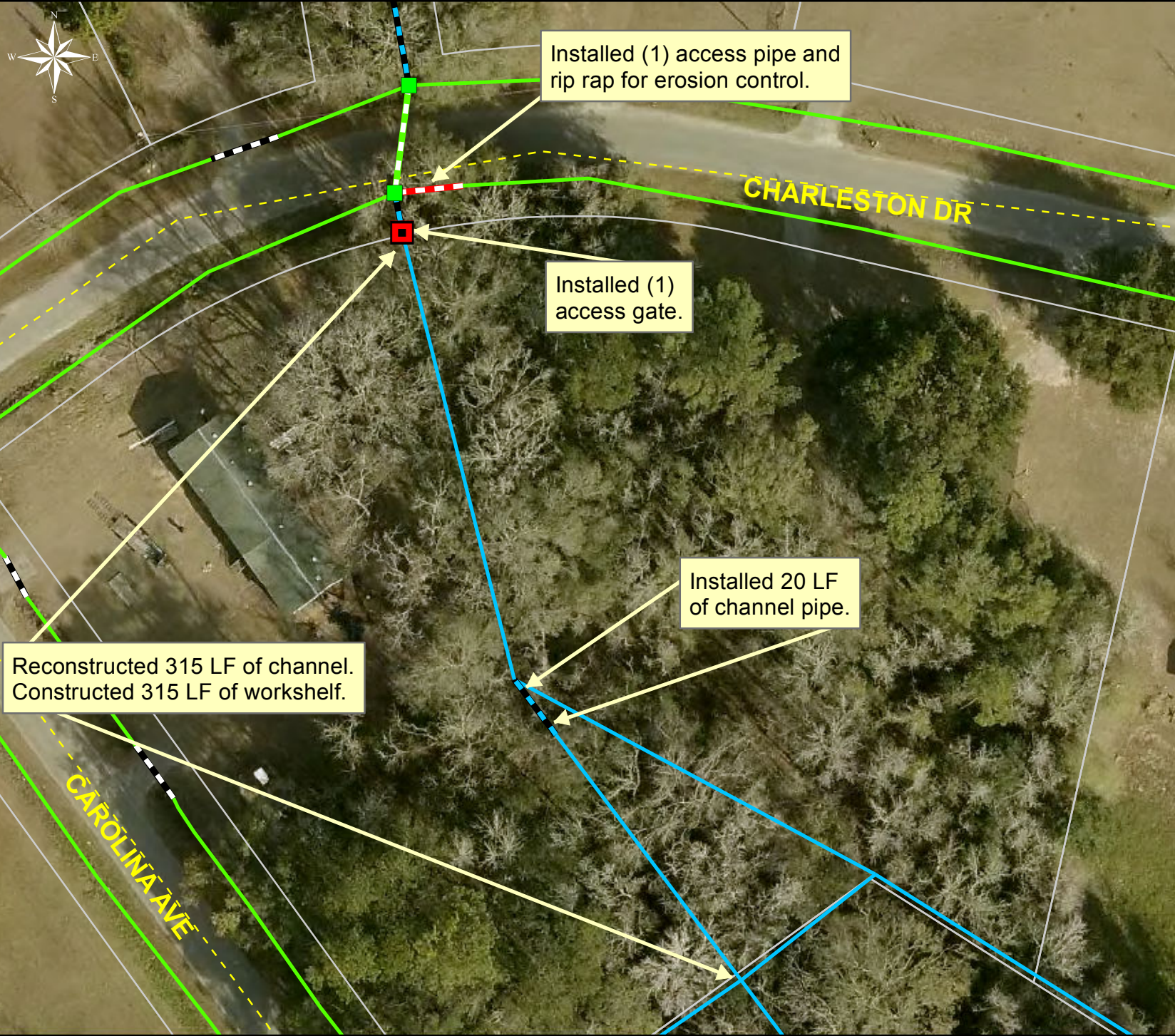
Project: Charleston Drive Channel #1

Activity: Routine/ Preventive Maintenance

Project #: 2015-004

Township: Port Royal Island

Completed: November 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

TYPE

- Catch Basin



1 inch = 52 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Huron Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 228 L.F. of drainage system. Installed (1) catch basin, 228 L.F. of channel pipe, rip rap and hydroseeded for erosion control.

Completion: Nov-14

2015-005 / Huron Drive	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
ASBUILT / Asbuilt - Project	2.0	\$88.54	\$7.24	\$5.82	\$0.00	\$67.92	\$169.52
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
BKFILL / Back Fill	13.0	\$265.98	\$113.06	\$50.33	\$0.00	\$171.99	\$601.36
CBIR / Catch Basin - Inlet Raised	77.0	\$1,654.44	\$156.50	\$257.91	\$0.00	\$1,046.61	\$3,115.45
ESTP / Estimating Project	8.0	\$354.16	\$0.00	\$0.00	\$0.00	\$271.68	\$625.84
HAUL / Hauling	96.5	\$2,113.40	\$925.55	\$1,430.63	\$0.00	\$1,414.13	\$5,883.71
HYDR / Hydroseeding	12.0	\$274.72	\$39.36	\$147.57	\$0.00	\$173.40	\$635.05
OFPI / Channel Pipe - Installation	190.0	\$4,136.52	\$471.07	\$3,423.92	\$0.00	\$2,616.80	\$10,648.31
ONJV / Onsite Job Visit	49.0	\$1,505.45	\$206.34	\$80.73	\$0.00	\$940.46	\$2,732.98
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$64.56	\$0.00	\$64.56
STAGING / Staging Materials	30.0	\$667.71	\$140.12	\$80.61	\$0.00	\$417.05	\$1,305.49
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-005 / Huron Drive Sub Total	478.5	\$11,081.38	\$2,059.24	\$5,477.52	\$64.56	\$7,133.27	\$25,815.97
Grand Total	478.5	\$11,081.38	\$2,059.24	\$5,477.52	\$64.56	\$7,133.27	\$25,815.97

Before



During



After



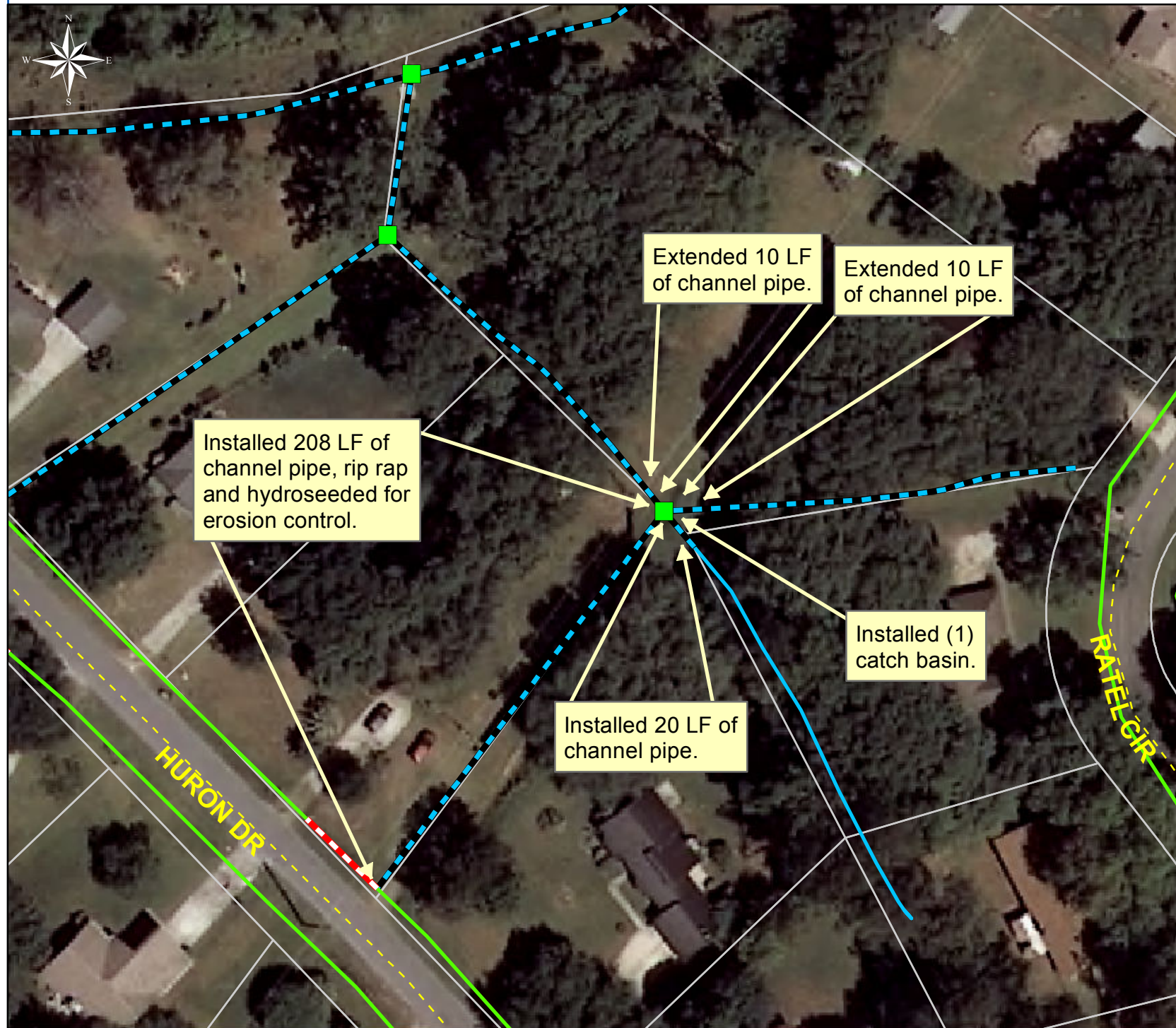
Project: Huron Drive

Activity: Drainage Improvement

**Project #:
2015-005**

**Township: Port
Royal Island**

**Completed:
November 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
- Catch Basin

0 15 30 60 90 120
Feet

1 inch = 65 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/29/14

File:C:/sethdata/projects/projectmaps/Huron Dr 2015-005



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: McNeal Circle/ Crystal Street

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Nov-14

Project improved 3,903 L.F. of drainage system. Cleaned out 3,903 L.F. of roadside ditch. Jetted (5) crossline pipes and (19) driveway pipes.

2015-537 / McNeal Circle/Crystal 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
CLPJT / Crossline Pipe - Jetted	38.0	\$837.41	\$284.02	\$179.15	\$0.00	\$558.88	\$1,859.46
COVD / Cleaned Out Valley Drains	35.0	\$810.25	\$123.92	\$80.32	\$0.00	\$549.30	\$1,563.79
HAUL / Hauling	70.0	\$1,514.10	\$874.28	\$509.35	\$0.00	\$1,009.40	\$3,907.13
HYDR / Hydroseeding	21.0	\$470.68	\$50.22	\$233.82	\$0.00	\$315.98	\$1,070.70
LP / Locate Pipe	9.0	\$201.72	\$10.86	\$5.98	\$0.00	\$135.42	\$353.98
ODCO / Channel - cleaned out	30.0	\$672.40	\$157.84	\$41.72	\$0.00	\$451.40	\$1,323.36
ONJV / Onsite Job Visit	29.0	\$984.40	\$97.74	\$77.74	\$0.00	\$728.61	\$1,888.49
PI / Project Inspection	1.0	\$44.27	\$3.62	\$5.98	\$0.00	\$33.96	\$87.83
PL / Project Layout	2.0	\$88.54	\$7.24	\$5.98	\$0.00	\$67.92	\$169.68
RSDCL / Roadside Ditch - Cleanout	176.0	\$4,037.18	\$884.68	\$248.64	\$0.00	\$2,728.96	\$7,899.46
TC / Traffic Control - Jobsite	7.0	\$151.41	\$74.90	\$15.25	\$0.00	\$100.94	\$342.50
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-537 / McNeal Circle/Crystal Street Sub Total	419.0	\$9,832.82	\$2,569.32	\$1,403.92	\$0.00	\$6,694.00	\$20,500.06
Grand Total	419.0	\$9,832.82	\$2,569.32	\$1,403.92	\$0.00	\$6,694.00	\$20,500.06

Before



During



After



Project: Crystal Street & McNeal Circle Map 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-537

Township: Port Royal Island

Completed: November 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 = 208 feet

Project: Crystal Street & McNeal Circle Map 2

Activity: Vacuum Truck

Project #: 2015-537

Township: Port Royal Island

Completed: November 2014















Jetted (19) driveway pipes.

Jetted (3) crossline pipes.

Jetted (2) crossline pipes.

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 = 194 feet



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Sheldon Washout Repair - Backache Acres

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Repaired 475 L.F. of workshelf.

Completion: Jul-14

2015-503 / 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	6.0	\$129.78	\$64.20	\$67.00	\$0.00	\$77.68	\$338.66
ONJV / Onsite Job Visit	2.0	\$59.68	\$7.24	\$6.40	\$0.00	\$36.46	\$109.78
PRRECON / Project Reconnaissance	10.0	\$225.78	\$9.05	\$6.40	\$0.00	\$144.43	\$385.65
RPWO / Repaired Washout	44.0	\$982.57	\$249.74	\$178.90	\$0.00	\$638.32	\$2,049.53
WSREP / Workshelf - Repair	10.0	\$221.54	\$79.88	\$25.28	\$0.00	\$142.00	\$468.70
2015-503 / Sheldon Washout Repair Sub Total	72.5	\$1,629.58	\$410.11	\$283.98	\$0.00	\$1,045.50	\$3,369.17
Grand Total	72.5	\$1,629.58	\$410.11	\$283.98	\$0.00	\$1,045.50	\$3,369.17

(Pictures Not Available)

Project: Backache Acres

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-503**

**Township: Port
Royal Island**

**Completed:
July 2014**

Repaired 475 LF
of workshelf.

BACKACHE ACRES

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 = 117 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/29/14

File: C:/sethdata/projects/projectmaps/Backache Acres 2015-503



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Bluffton Valley Drains

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 16,008 L.F. of drainage system. Cleaned 16,008 L.F. of valley drains. This project consisted of the following areas:
Buck Point Road (3,250 L.F.), Ballfield Road (2,730 L.F.), Lake View Court (7,000 L.F.) and Mammy Grant Road (3,028 L.F.)

Completion: Aug-14

2015-315 / Bluffton Valley Drains	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
COVD / Cleaned Out Valley Drains	40.0	\$841.81	\$160.40	\$150.19	\$0.00	\$553.00	\$1,705.40
HAUL / Hauling	17.0	\$367.71	\$181.90	\$108.24	\$0.00	\$211.99	\$869.84
ONJV / Onsite Job Visit	2.0	\$66.36	\$7.24	\$9.09	\$0.00	\$48.94	\$131.63
2015-315 / Bluffton Valley Drains Sub Total	59.5	\$1,286.11	\$349.54	\$267.52	\$0.00	\$820.55	\$2,723.71
Grand Total	59.5	\$1,286.11	\$349.54	\$267.52	\$0.00	\$820.55	\$2,723.71

Before



During



After



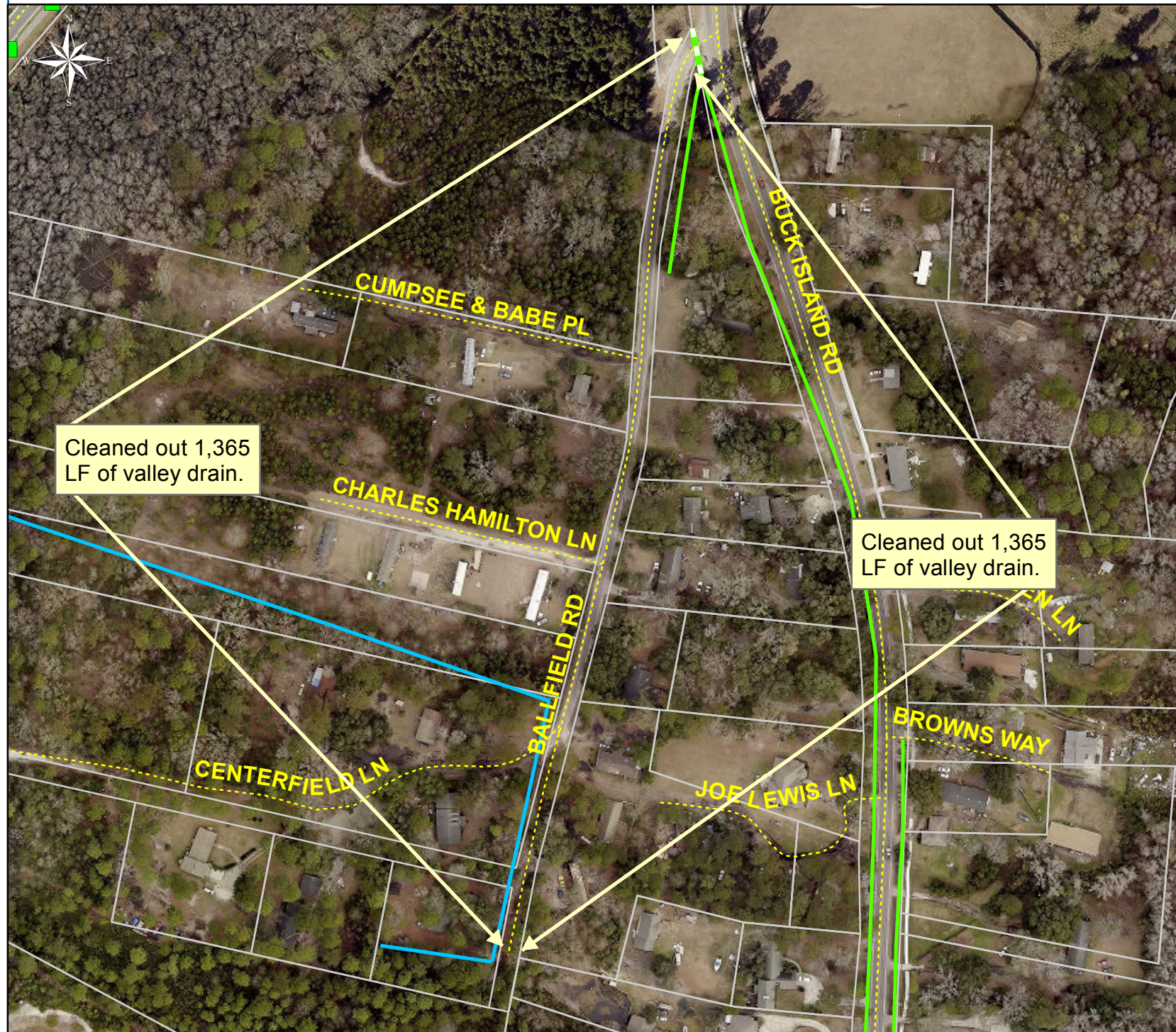
Project: Ballfield Road

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-315**

**Township:
Bluffton**

**Completed:
August 2014**



Cleaned out 1,365
LF of valley drain.

Cleaned out 1,365
LF of valley drain.

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 = 202 feet

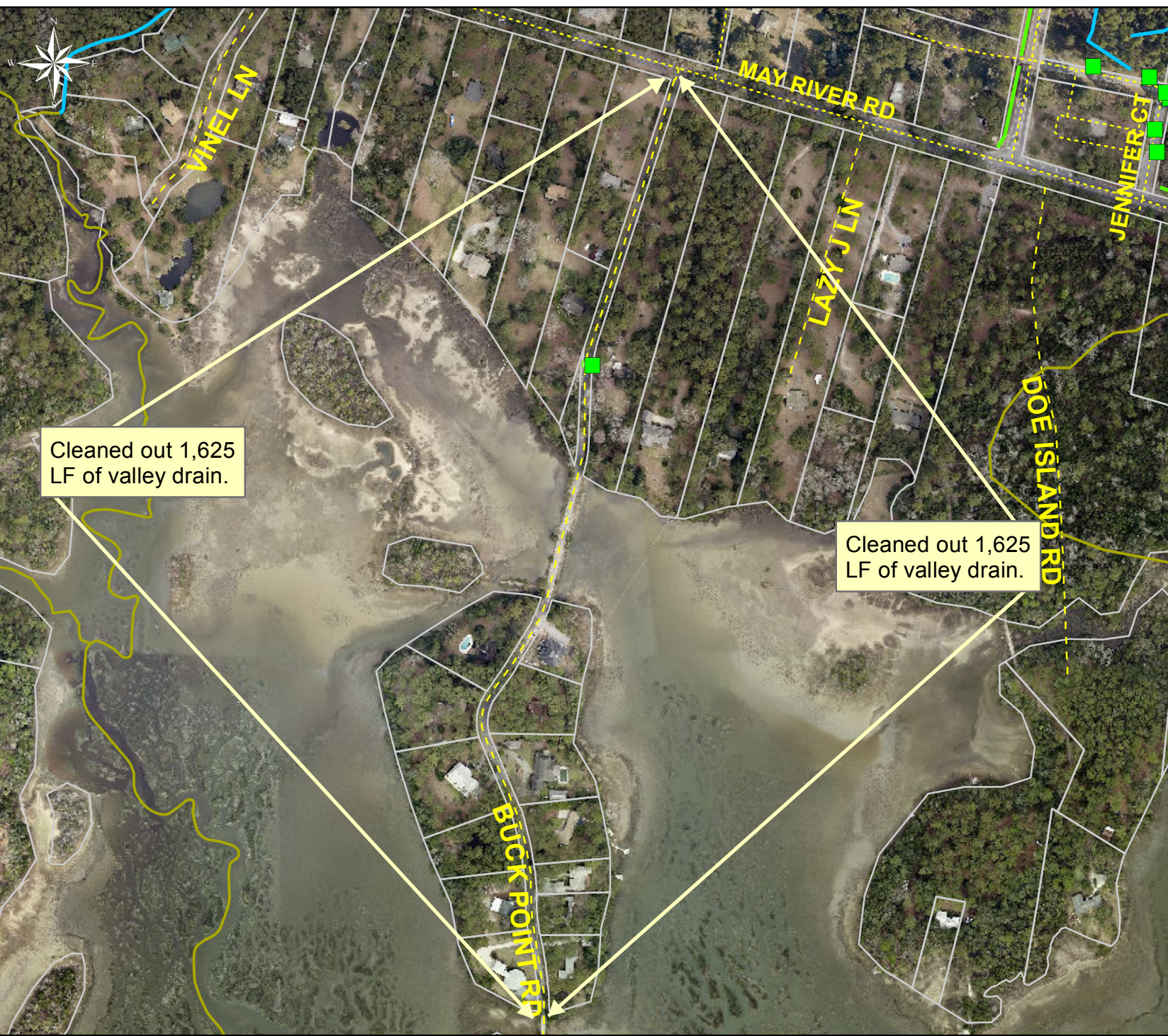
Project: Buck Point Road

Activity: Routine/
Preventive
Maintenance

Project #:
2015-315

Township:
Bluffton

Completed:
August 2014



Cleaned out 1,625
LF of valley drain.

Cleaned out 1,625
LF of valley drain.

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 = 371 feet

Project: Lake View Court

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-315**

**Township:
Bluffton**

**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



1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/29/14

File:C:/sethdata/projects/projectmaps/Lake View Ct 2015-315

Project: Mammy Grant Road

**Activity: Routine/
Preventive
Maintenance**















**Project #:
2015-315**

**Township:
Bluffton**

**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



Cleaned out 1,514 LF of valley drain.

Cleaned out 1,514 LF of valley drain.



1 inch = 167 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Sea Pines Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 54 L.F. of roadside ditch. Cleaned out 54 L.F. of roadside ditch. Installed (1) driveway pipe.

Completion: Sep-14

2015-506 / Sea Pines 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
DPINS / Driveway Pipe - Installed	15.0	\$336.19	\$78.92	\$61.11	\$0.00	\$225.70	\$701.92
HAUL / Hauling	10.0	\$216.30	\$107.00	\$59.89	\$0.00	\$144.20	\$527.39
ONJV / Onsite Job Visit	5.0	\$165.90	\$18.10	\$18.30	\$0.00	\$122.35	\$324.65
UTLOC / Utility locates	3.5	\$71.61	\$14.07	\$6.10	\$0.00	\$46.31	\$138.09
2015-506 / Sea Pines Drive Sub Total	34.0	\$800.23	\$218.09	\$145.40	\$0.00	\$545.17	\$1,708.89
Grand Total	34.0	\$800.23	\$218.09	\$145.40	\$0.00	\$545.17	\$1,708.89

During



After



Project: Sea Pines Drive

Activity: Routine/ Preventive Maintenance

Project #: 2015-506

Township: St. Helena 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



1 inch = 264 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Mary Elizabeth Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Jetted (1) crossline pipe. Repaired sinkhole. Constructed swale for runoff. Installed sod for erosion control.

Completion: Sep-14

2015-535 / Mary Elizabeth 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
CLPJT / Crossline Pipe - Jetted	16.0	\$375.06	\$177.28	\$94.12	\$0.00	\$255.12	\$901.58
HAUL / Hauling	15.0	\$324.45	\$160.50	\$64.00	\$0.00	\$216.30	\$765.25
ONJV / Onsite Job Visit	12.0	\$398.16	\$43.44	\$40.88	\$0.00	\$293.64	\$776.12
PI / Project Inspection	2.0	\$88.54	\$7.24	\$11.68	\$0.00	\$67.92	\$175.38
PRRECON / Project Reconnaissance	2.0	\$88.54	\$7.24	\$8.76	\$0.00	\$67.92	\$172.46
SCON / Swale - Constructed	39.8	\$872.82	\$44.52	\$21.02	\$0.00	\$581.17	\$1,519.53
SI / Sod - Installation	15.0	\$336.20	\$18.10	\$47.04	\$0.00	\$225.70	\$627.04
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-535 / Mary Elizabeth Drive Sub Total	102.8	\$2,504.23	\$458.32	\$287.51	\$0.00	\$1,721.00	\$4,971.05
Grand Total	102.8	\$2,504.23	\$458.32	\$287.51	\$0.00	\$1,721.00	\$4,971.05

Before



After



Project: Mary Elizabeth Drive Map 1

Activity: Routine/ Preventive Maintenance















Project #: 2015-535

Township: Lady's Island

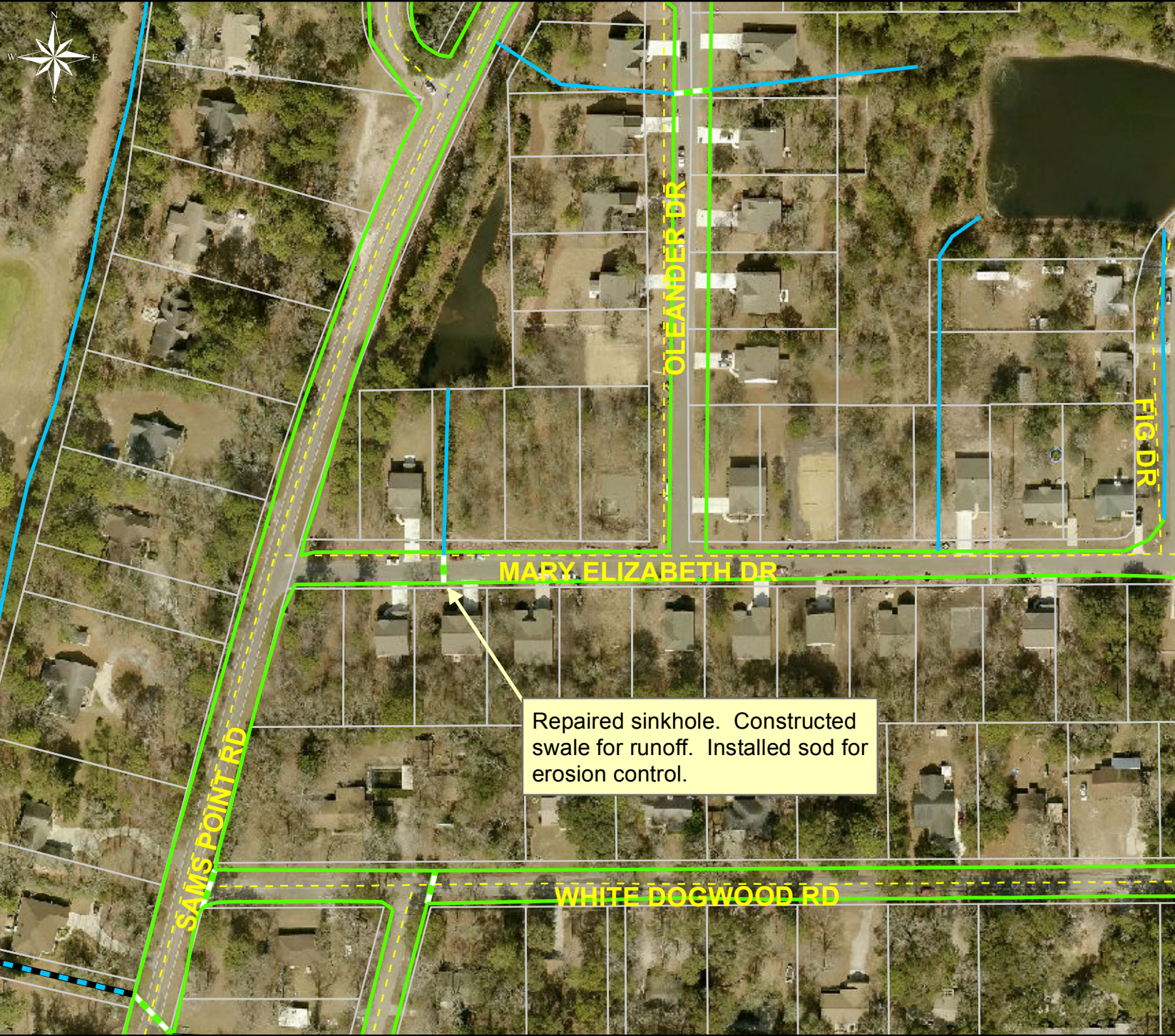
Completed: September 2014

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

Repaired sinkhole. Constructed swale for runoff. Installed sod for erosion control.



1 inch = 151 feet

Project: Mary Elizabeth Drive Map 2

Activity: Vacuum Truck















Project #: 2015-535

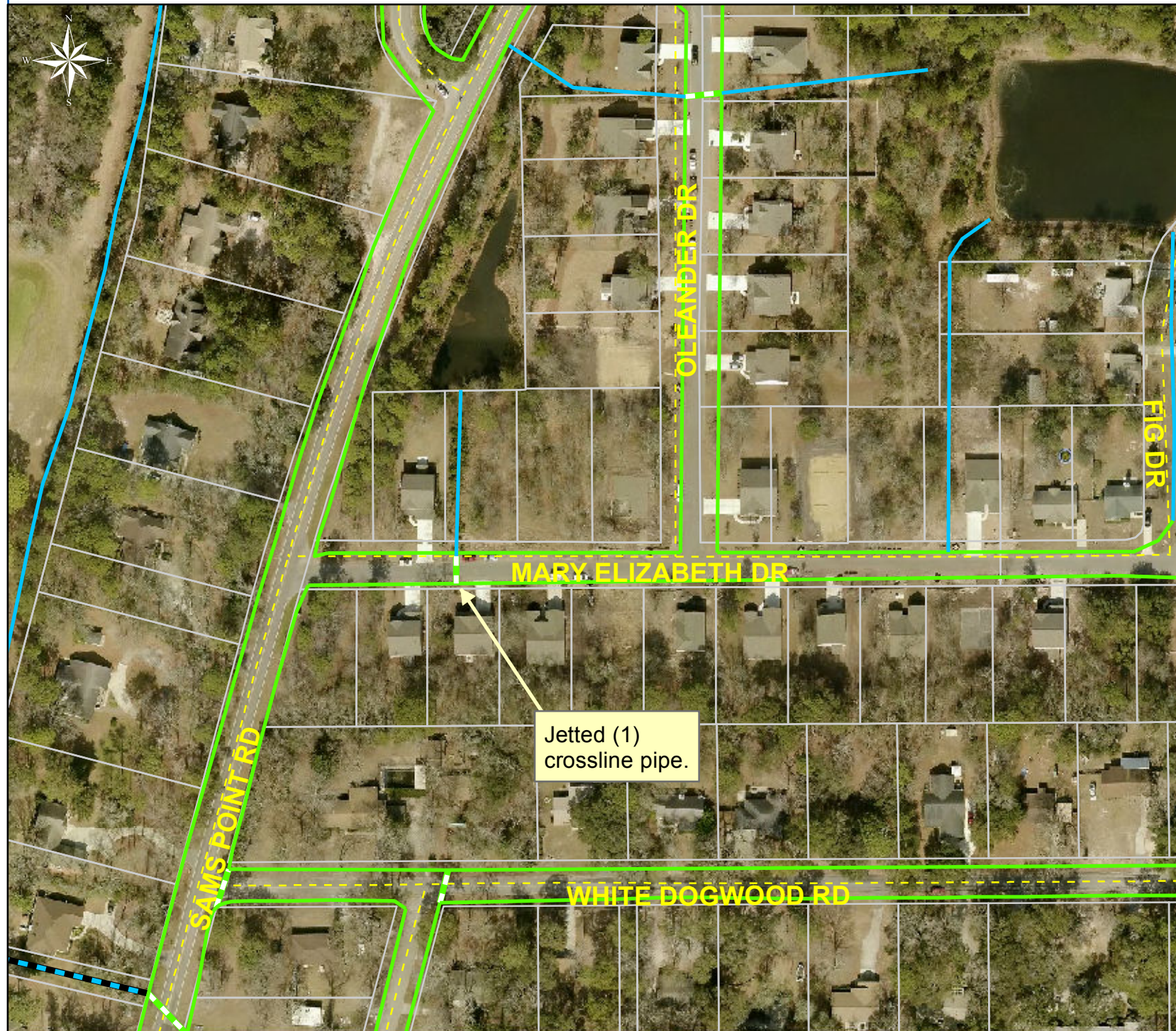
Township: Lady's Island

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



1 inch = 151 feet



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Pine Grove Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Repaired washout. Hydroseeded for erosion control.

Completion: Sep-14

2015-541 / Pine Grove 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	\$22.93	\$0.00	\$28.84	\$116.43
ONJV / Onsite Job Visit	2.0	\$59.68	\$7.24	\$3.05	\$0.00	\$36.46	\$106.43
RPWO / Repaired Washout	11.0	\$243.18	\$45.30	\$96.04	\$0.00	\$153.06	\$537.58
2015-541 / Pine Grove Road Sub Total	15.5	\$356.35	\$73.94	\$122.02	\$0.00	\$224.98	\$777.29
Grand Total	15.5	\$356.35	\$73.94	\$122.02	\$0.00	\$224.98	\$777.29

(Pictures Not Available)

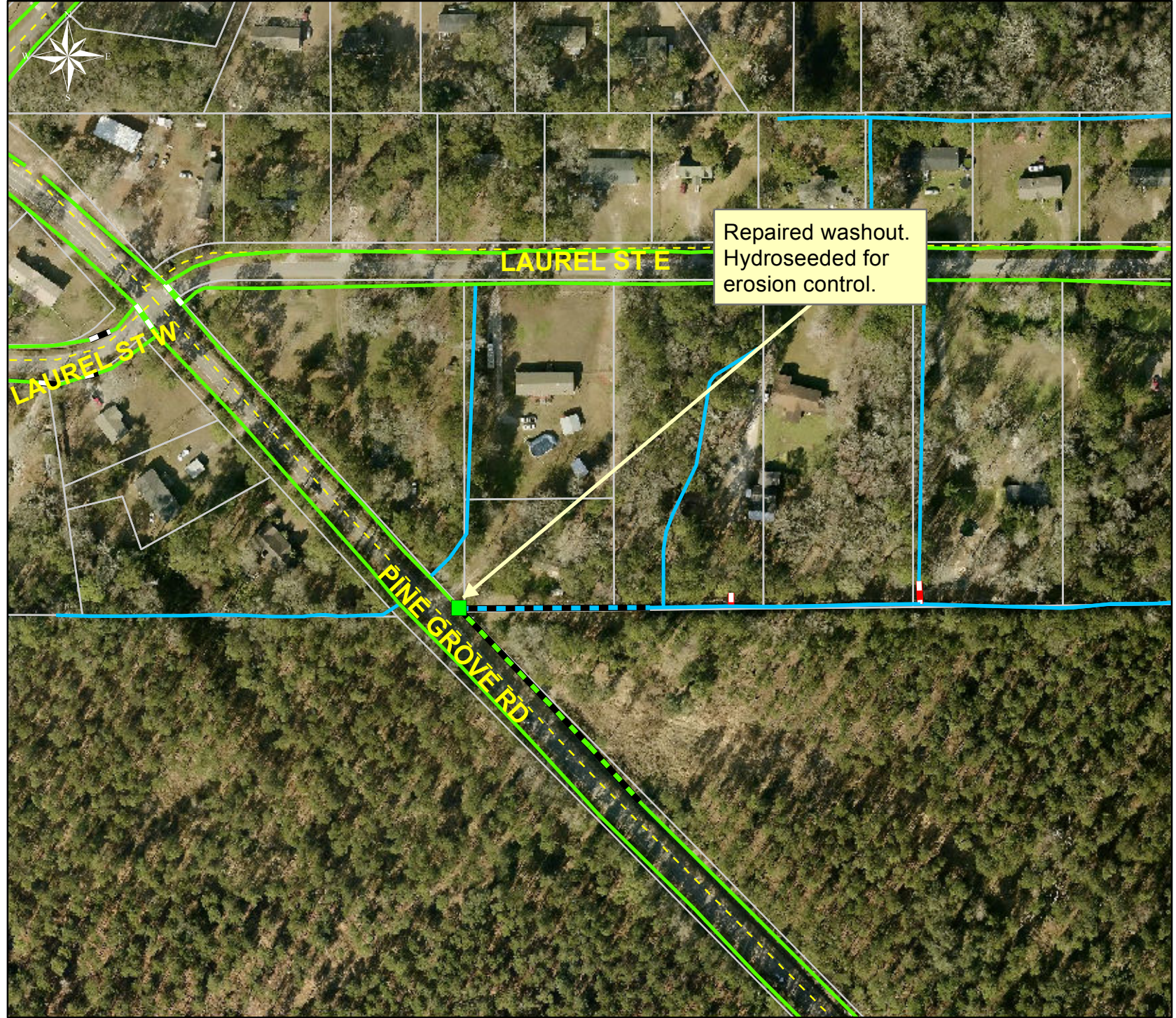
Project: Pine Grove Road

Activity: Routine/ Preventive Maintenance

Project #: 2015-541















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



1 inch = 180 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Evelyns Way

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 1,075 L.F. of drainage system. Bush hogged and cleaned out 1,075 L.F. of roadside ditch. Hydroseeded for erosion control. Jetted (3) crossline pipes and (3) driveway pipes.

Completion: Oct-14

2015-543 / Evelyns Way	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
CLPJT / Crossline Pipe - Jetted	20.0	\$432.56	\$221.60	\$112.10	\$0.00	\$164.70	\$930.96
HAUL / Hauling	30.0	\$648.90	\$321.00	\$152.36	\$0.00	\$432.60	\$1,554.86
HYDR / Hydroseeding	30.0	\$648.90	\$109.46	\$165.98	\$0.00	\$429.30	\$1,353.64
ODBH / Channel- bushhogged	34.0	\$735.35	\$288.94	\$137.25	\$0.00	\$504.90	\$1,666.44
ONJV / Onsite Job Visit	15.0	\$497.70	\$54.30	\$38.87	\$0.00	\$367.05	\$957.92
RSDCL / Roadside Ditch - Cleanout	70.0	\$1,525.70	\$315.68	\$89.65	\$0.00	\$1,013.00	\$2,944.03
2015-543 / Evelyns Way Sub Total	199.5	\$4,499.34	\$1,310.98	\$696.21	\$0.00	\$2,918.17	\$9,424.70
Grand Total	199.5	\$4,499.34	\$1,310.98	\$696.21	\$0.00	\$2,918.17	\$9,424.70

Before



During



After



Project: Evelyns Way Map 1

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-543**















**Township:
Bluffton**

**Completed:
November 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 = 208 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/30/14

File: C:/sethdata/projects/projectmaps/Evelyns Way 2015-543 Map1

Project: Evelyns Way Map 2

Activity: Vacuum Truck

**Project #:
2015-543**

**Township:
Bluffton**

**Completed:
November 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 = 199 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/29/14

File:C:/sethdata/projects/projectmaps/Vac/Evelyns Way 2015-543 Map2



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Wiggfall Road Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 253 L.F. of drainage system. Grubbed and cleaned out 253 L.F. of channel. Installed (2) access pipes, rip rap and hydroseeded for erosion control. Jetted (1) crossline pipe.

Completion: Oct-14

2015-006 / Wiggfall Road Ch #1	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APINS / Access pipe - installed	40.0	\$891.40	\$97.02	\$526.20	\$0.00	\$565.80	\$2,080.42
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CLPJT / Crossline Pipe - Jetted	8.0	\$178.70	\$88.64	\$38.00	\$0.00	\$119.64	\$424.98
ESTP / Estimating Project	3.0	\$132.81	\$0.00	\$0.00	\$0.00	\$101.88	\$234.69
HAUL / Hauling	62.0	\$1,357.48	\$642.00	\$1,505.65	\$0.00	\$901.66	\$4,406.79
HYDR / Hydroseeding	9.0	\$201.72	\$23.30	\$67.66	\$0.00	\$135.42	\$428.10
ODCO / Channel - cleaned out	40.0	\$891.36	\$277.28	\$104.06	\$0.00	\$565.80	\$1,838.50
ODGRB / Channel - grubbed	67.0	\$1,537.19	\$368.82	\$120.50	\$0.00	\$761.11	\$2,787.62
ONJV / Onsite Job Visit	25.0	\$813.74	\$79.64	\$44.85	\$0.00	\$537.39	\$1,475.62
PL / Project Layout	6.0	\$265.62	\$21.72	\$26.91	\$0.00	\$203.76	\$518.01
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$450.00	\$0.00	\$450.00
PRRECON / Project Reconnaissance	2.0	\$59.68	\$7.24	\$5.98	\$0.00	\$36.46	\$109.36
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-006 / Wiggfall Road Channel #1 Sub Total	263.0	\$6,350.16	\$1,605.66	\$2,439.81	\$450.00	\$3,942.15	\$14,787.78
 Grand Total	 263.0	 \$6,350.16	 \$1,605.66	 \$2,439.81	 \$450.00	 \$3,942.15	 \$14,787.78

Before

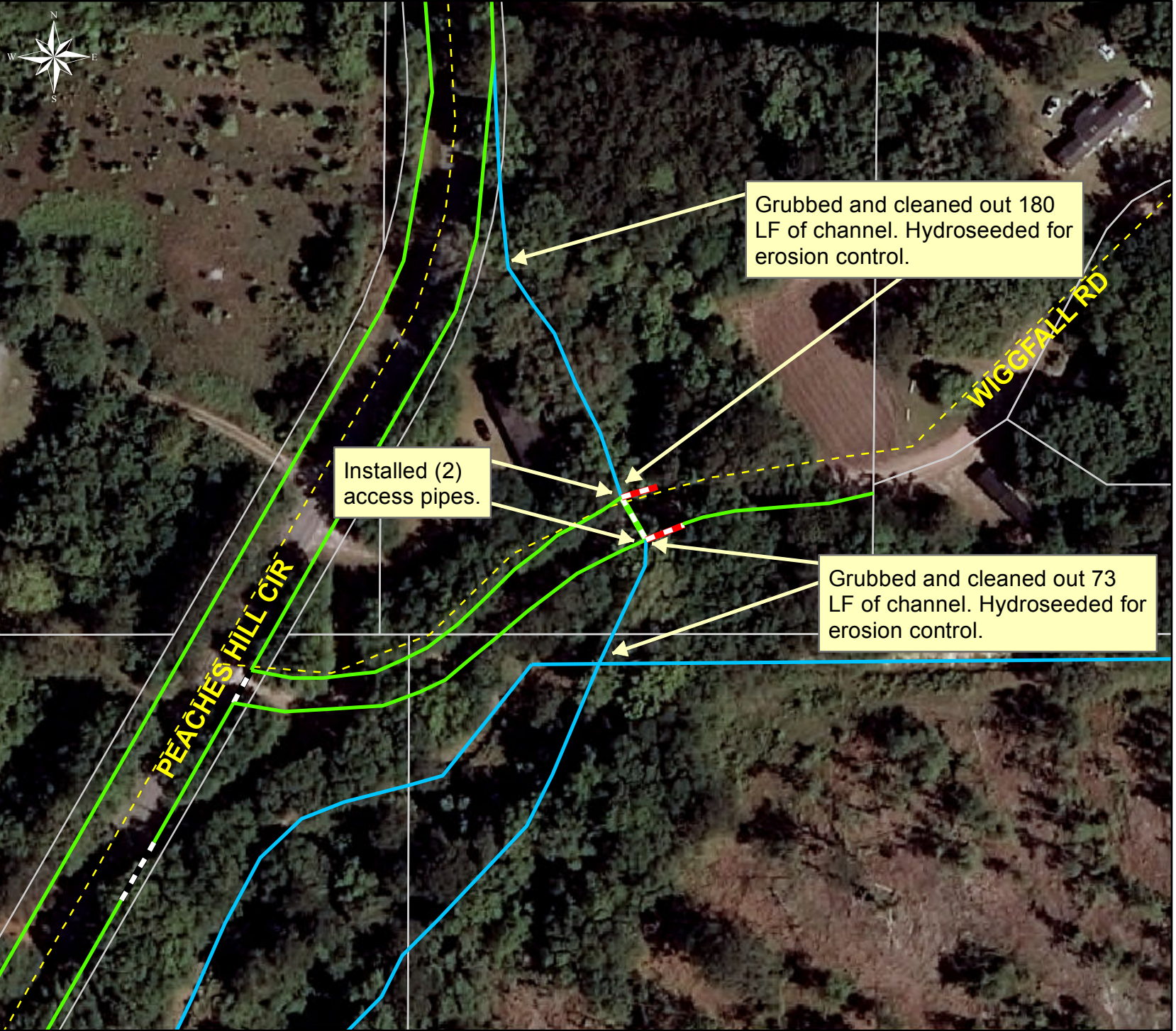


During



After





Project: Wiggfall Road Channel #1 Map 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-006

Township: St. Helena Island

Completed: October 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 = 91 feet

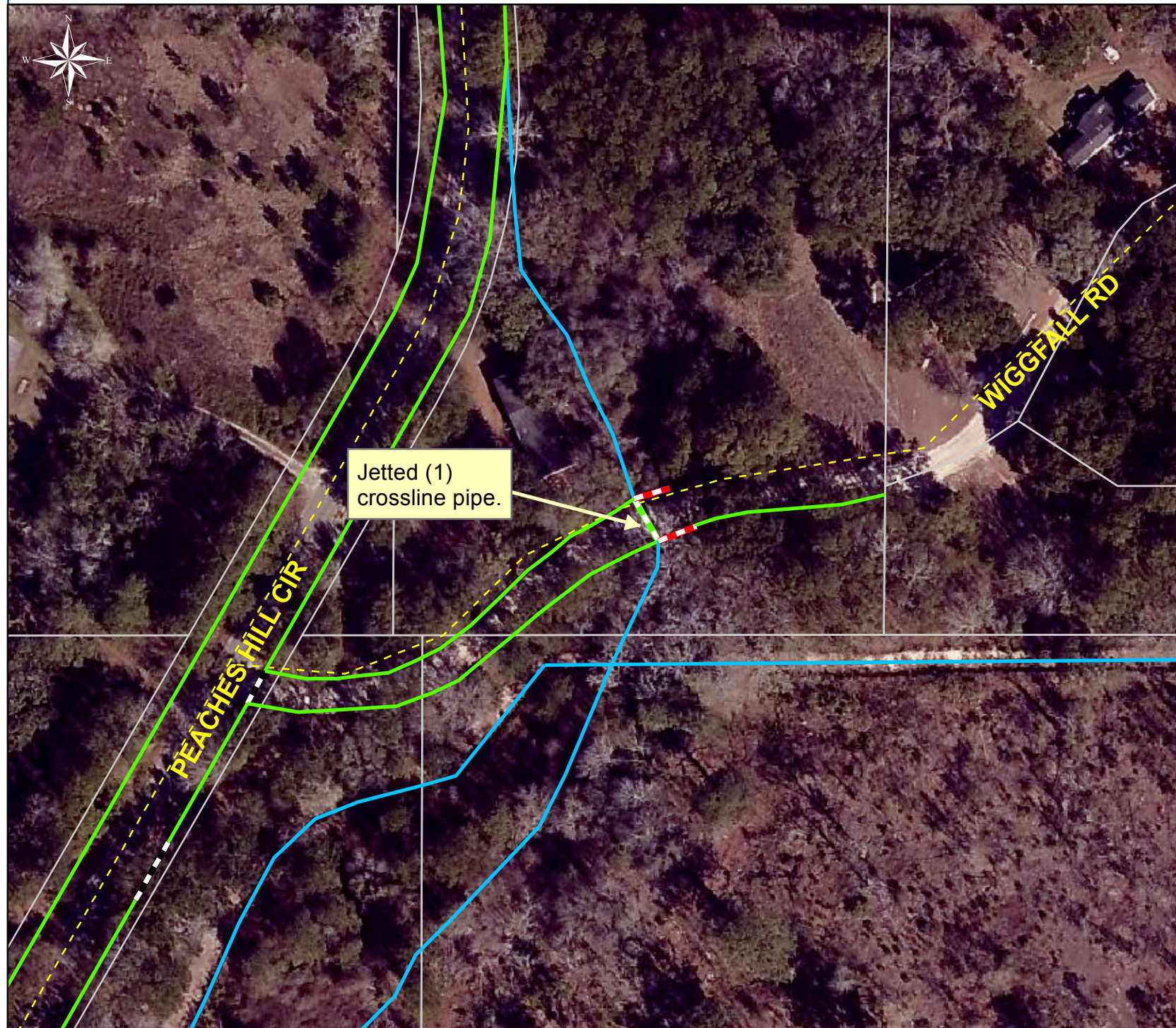
**Project: Wiggfall Road Channel #1
Map 2**

Activity: Vacuum Truck

**Project #:
2015-006**















**Township: St.
Helena Island**

**Completed:
October 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 = 91 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Sea Island Parkway Channel #2

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 598 L.F of drainage system. Cleaned out 598 L.F. of channel. Hydroseeded for erosion control.

Completion: Oct-14

2015-548 / Sea Island Parkway Ch #2	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	20.0	\$432.60	\$214.00	\$204.61	\$0.00	\$288.40	\$1,139.61
HYDR / Hydroseeding	6.0	\$143.88	\$23.30	\$79.89	\$0.00	\$98.79	\$345.86
ODCO / Channel - cleaned out	60.0	\$1,297.80	\$346.09	\$76.96	\$0.00	\$858.60	\$2,579.45
ONJV / Onsite Job Visit	18.0	\$641.60	\$65.16	\$35.88	\$0.00	\$478.42	\$1,221.06
UC / Utility Coordination	1.5	\$30.69	\$6.03	\$5.98	\$0.00	\$19.85	\$62.55
2015-548 / Sea Island Parkway Ch #2	106.0	\$2,556.80	\$654.58	\$403.32	\$0.00	\$1,750.67	\$5,365.37
Sub Total							
Grand Total	106.0	\$2,556.80	\$654.58	\$403.32	\$0.00	\$1,750.67	\$5,365.37

Before



During



After



Project: Sea Island Drive Channel #2

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-548**

**Township: St.
Helena Island**

**Completed:
October 2014**



Cleaned out 598 LF of channel.
Hydroseeded for erosion control.

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
- TYPE**
- Catch Basin



1 inch = 223 feet



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Rivers End Subdivision- Ashepoo Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Cleaned out perforated box.

Completion: Oct-14

2015-546 / Rivers End Subdivision- Ashepo	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
SCON / Swale - Constructed	2.0	\$45.61	\$1.81	\$3.59	\$0.00	\$30.81	\$81.81
2015-546 / Rivers End Subdivision- Ashep Sub Total	2.5	\$55.84	\$1.81	\$3.59	\$0.00	\$37.42	\$98.66
Grand Total	2.5	\$55.84	\$1.81	\$3.59	\$0.00	\$37.42	\$98.66

(Pictures Not Available)

**Project: Rivers End
Subdivision -
Ashepool Drive**

**Activity: Routine/
Preventive
Maintenance**















**Project #:
2015-546**

**Township:
Bluffton**

**Completed:
October 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

TYPE

-  Catch Basin



0 20 40 80 120 160
Feet

1 inch = 95 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/11/14

File: C:/sethdata/projects/projectmaps/Ashepool Drive 2015-546



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Relative Lane

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Installed (1) driveway pipe.

Completion: Nov-14

2015-554 / Relative Lane	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
ARR / Add rock	12.0	\$274.72	\$36.48	\$18.30	\$0.00	\$173.40	\$502.90
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
BKFILL / Back Fill	12.0	\$238.44	\$65.72	\$33.55	\$0.00	\$152.64	\$490.35
DPINS / Driveway Pipe - Installed	15.0	\$343.38	\$51.36	\$16.78	\$0.00	\$216.75	\$628.26
HAUL / Hauling	13.5	\$297.88	\$144.45	\$103.56	\$0.00	\$199.80	\$745.69
ONJV / Onsite Job Visit	12.0	\$358.08	\$43.44	\$14.95	\$0.00	\$218.76	\$635.23
STAGING / Staging Materials	4.0	\$79.48	\$29.24	\$12.20	\$0.00	\$50.88	\$171.80
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-554 / Relative Lane Sub Total	69.5	\$1,612.44	\$370.69	\$199.34	\$0.00	\$1,025.45	\$3,207.92
Grand Total	69.5	\$1,612.44	\$370.69	\$199.34	\$0.00	\$1,025.45	\$3,207.92

Before



During



After



Project: Relative Lane

**Activity: Routine/
Preventive
Maintenance**












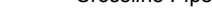
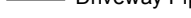
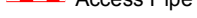

**Project #:
2015-554**

**Township: Lady's
Island**

**Completed:
November 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
-  Catch Basin



1 inch = 84 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/4/14

File:C:/sethdata/projects/projectmaps/Relative Ln 2015-554



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Pleasant Point Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 472 L.F. of drainage system. Reset (4) catch basin lids. Cleaned out 472 L.F. of channel.

Completion: Nov-14

2015-542 / Pleasant Point 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
CBREP / Catch basin - repaired	6.0	\$119.22	\$32.86	\$12.20	\$0.00	\$76.32	\$240.60
HAUL / Hauling	5.5	\$124.84	\$58.85	\$48.80	\$0.00	\$84.44	\$316.93
LM / Loading Materials	8.0	\$158.96	\$36.48	\$27.45	\$0.00	\$101.76	\$324.65
ODCO / Channel - cleaned out	45.0	\$1,030.18	\$137.45	\$73.23	\$0.00	\$650.25	\$1,891.10
ONJV / Onsite Job Visit	20.0	\$514.70	\$143.20	\$39.53	\$0.00	\$326.50	\$1,023.93
2015-542 / Pleasant Point Drive Sub Total	85.0	\$1,958.13	\$408.84	\$201.21	\$0.00	\$1,245.88	\$3,814.05
Grand Total	85.0	\$1,958.13	\$408.84	\$201.21	\$0.00	\$1,245.88	\$3,814.05

Before



During



After



Project: Pleasant Point Drive Channel #1

Activity: Routine/ Preventive Maintenance
















Project #: 2015-542

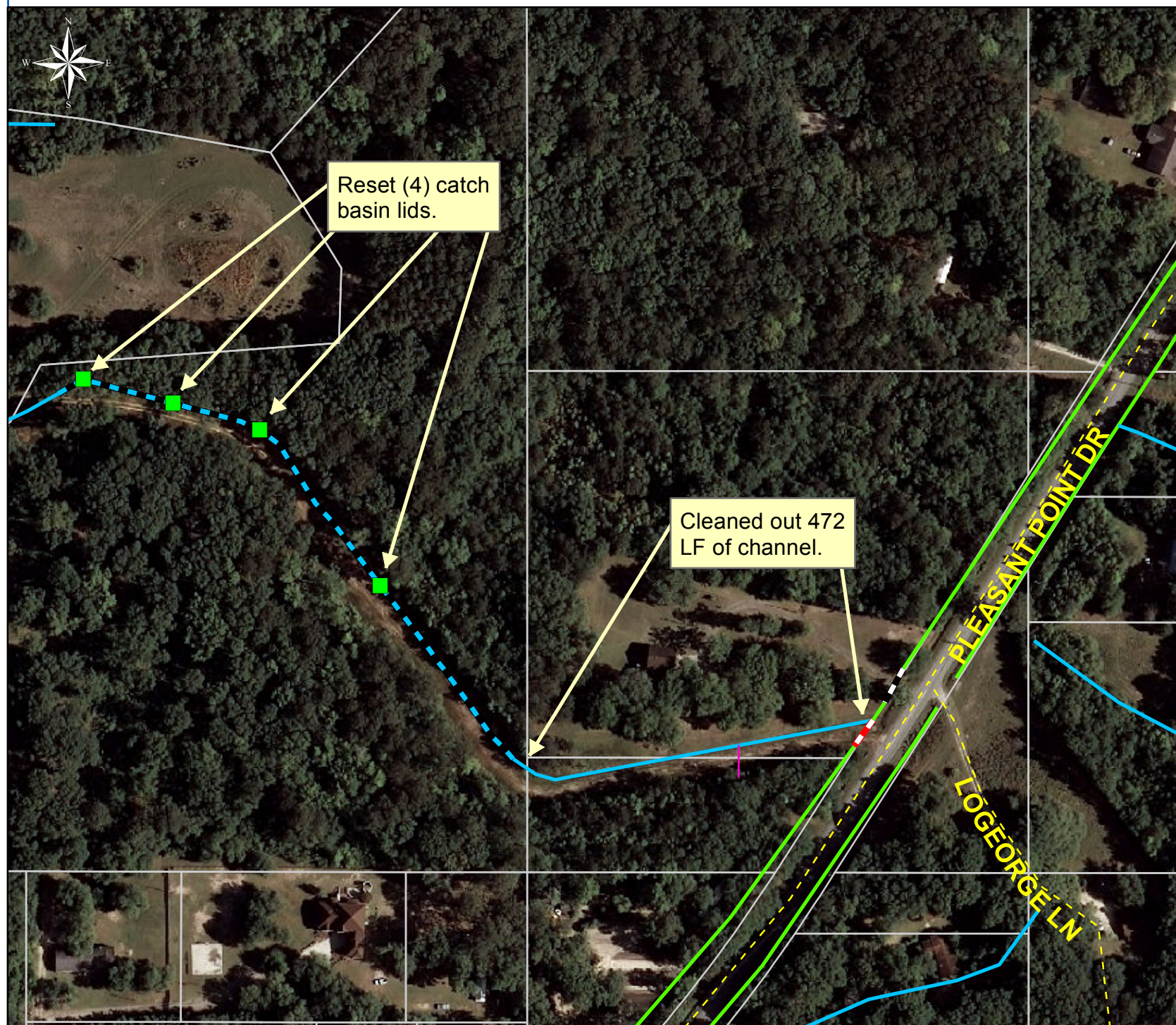
Township: Lady's Island

Completed: November 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
-  Catch Basin



1 inch = 178 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Capers Island Circle

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 680 L.F. of drainage system. Cleaned out 135 L.F. of roadside ditch and 545 L.F. channel. Jetted (1) access pipe and (1) crossline pipe. Replaced (1) crossline pipe. Installed (1) driveway pipe and rip rap for erosion control.

Completion: Nov-14

2015-527 / Capers Island 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
CLPJT / Crossline Pipe - Jetted	12.0	\$268.06	\$132.96	\$48.55	\$0.00	\$179.46	\$629.03
DPINS / Driveway Pipe - Installed	40.0	\$841.70	\$188.25	\$542.99	\$0.00	\$551.40	\$2,124.34
HAUL / Hauling	20.0	\$432.60	\$214.00	\$920.99	\$0.00	\$288.40	\$1,855.99
HYDR / Hydroseeding	10.0	\$222.20	\$18.10	\$96.85	\$0.00	\$133.35	\$470.50
ONJV / Onsite Job Visit	4.0	\$126.04	\$14.48	\$17.94	\$0.00	\$85.40	\$243.86
PI / Project Inspection	2.0	\$88.54	\$7.24	\$5.98	\$0.00	\$67.92	\$169.68
PRRECON / Project Reconnaissance	2.0	\$59.68	\$7.24	\$8.97	\$0.00	\$36.46	\$112.35
RSDCL / Roadside Ditch - Cleanout	40.0	\$783.00	\$157.84	\$83.17	\$0.00	\$498.60	\$1,522.61
STAGING / Staging Materials	39.0	\$823.52	\$100.24	\$90.36	\$0.00	\$540.86	\$1,554.98
TRAIN / Training	20.0	\$385.60	\$0.00	\$0.00	\$0.00	\$0.00	\$385.60
2015-527 / Capers Island Circle Sub Total	189.5	\$4,041.17	\$840.35	\$1,815.80	\$0.00	\$2,388.46	\$9,085.78
Grand Total	189.5	\$4,041.17	\$840.35	\$1,815.80	\$0.00	\$2,388.46	\$9,085.78

Before



During



After



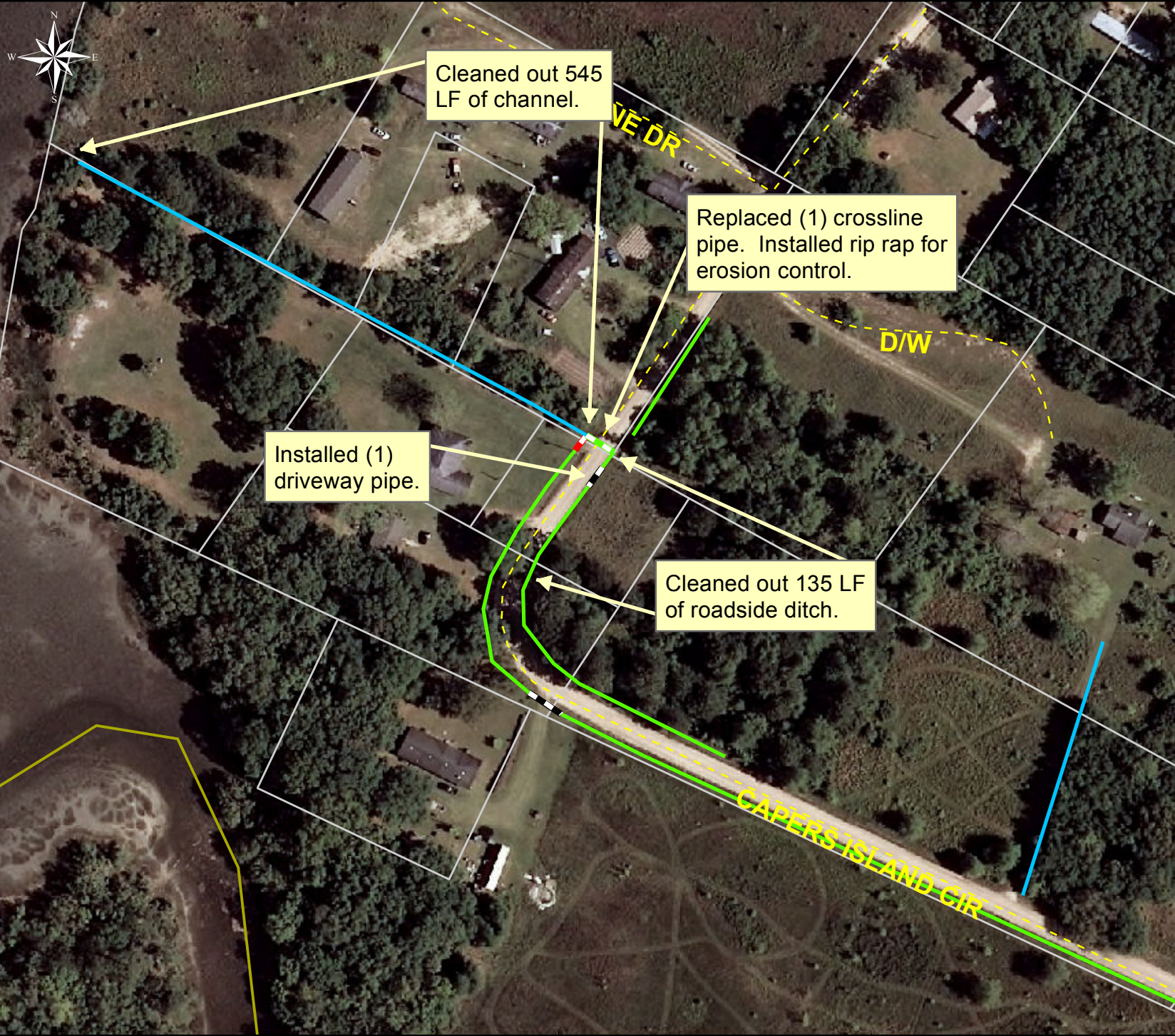
Project: Capers Island Circle Map 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-527

Township: St. Helena Island

Completed: November 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
- Catch Basin



1 inch = 135 feet

Project: Capers Island Circle Map 2

Activity: Vacuum Truck

Project #: 2015-527

Township: St. Helena Island

Completed: November 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
	Catch Basin



1 inch = 135 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Sheldon Bush Hog

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Nov-14

Second rotation from September 2014 to November 2014. Project improved 43,717 L.F. of drainage system. Bush hogged 43,717 L.F. of channel. This project consisted of the following areas: Jasmine Hall Road (4,725 L.F.), Old Dawson Acres (5,297 L.F.), Gum Tree Lane (5,109 L.F.), Hunt Ter (3,669 L.F.), Middlefield Circle (5,749 L.F.), Mount Pisgah Church Road (656 L.F.), Keans Neck Road (863 L.F.), Coker Lane (893 L.F.), Coakley Road (684 L.F.), Oakhurst Road (1,792 L.F.), Spann Circle (1,790 L.F.) and Wimbee Landing Road (12,490 L.F.)

2015-303A / Sheldon Bush Hog	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
ODBH / Channel- bushhogged	505.0	\$10,358.14	\$9,456.59	\$1,700.47	\$0.00	\$4,430.15	\$25,945.35
ONJV / Onsite Job Visit	3.0	\$99.54	\$10.86	\$17.94	\$0.00	\$73.41	\$201.75
2015-303A / Sheldon Bush Hog Sub Total	509.0	\$10,478.14	\$9,467.45	\$1,718.41	\$0.00	\$4,516.79	\$26,180.79
Grand Total	509.0	\$10,478.14	\$9,467.45	\$1,718.41	\$0.00	\$4,516.79	\$26,180.79

Before



During



After





Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Joe Capers Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 120 L.F. of drainage system. Replaced (1) crossline pipe. Cleaned out 120 L.F. of roadside ditch. Installed rip rap for erosion control.

Completion: Nov-14

2015-549 / Joe Capers 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
CLPI / Crossline Pipe - Installation	60.0	\$1,274.40	\$188.25	\$393.16	\$0.00	\$838.10	\$2,693.91
CLPINS / Crossline Pipe - Installed	47.5	\$1,015.73	\$97.02	\$140.18	\$0.00	\$669.75	\$1,922.67
HAUL / Hauling	48.5	\$1,096.06	\$518.95	\$422.86	\$0.00	\$740.37	\$2,778.23
ONJV / Onsite Job Visit	14.0	\$457.84	\$50.68	\$26.91	\$0.00	\$330.10	\$865.53
PRRECON / Project Reconnaissance	3.0	\$99.54	\$10.86	\$11.96	\$0.00	\$73.41	\$195.77
RSDCL / Roadside Ditch - Cleanout	12.0	\$256.05	\$71.68	\$27.70	\$0.00	\$168.48	\$523.91
STAGING / Staging Materials	8.0	\$178.80	\$14.48	\$100.65	\$0.00	\$119.64	\$413.57
TRAIN / Training	10.0	\$192.80	\$0.00	\$0.00	\$0.00	\$0.00	\$192.80
UTLOC / Utility Locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-549 / Joe Capers Road Sub Total	204.0	\$4,591.67	\$951.92	\$1,123.42	\$0.00	\$2,953.08	\$9,620.09
Grand Total	204.0	\$4,591.67	\$951.92	\$1,123.42	\$0.00	\$2,953.08	\$9,620.09

Before



During



After



Project: Joe Capers Road

Activity: Routine/
Preventive
Maintenance
















Project #:
2015-549

Township: St.
Helena Island

Completed:
November 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
-  Catch Basin



1 inch = 83 feet

Beaufort County Public Works Stormwater Utility

FY 2014 Actuals

January 5, 2015

Revenue/Reserve Utilization					
	FY2013 Audited Actual	Requested Board Budget	FY2014 Unaudited Actuals	Variance	FY 2015 Approved Budget
Revenue					
Admin SWU Fees	\$ 311,086	\$ 312,064	\$ 312,900	\$ (836)	\$ 313,460
Utility Activities SWU Fees	2,759,703	3,162,936	2,737,540	425,397	2,766,881
Total Revenue from SWU Fees	3,070,789	3,475,000	3,050,440	424,560	3,080,341
Reimbursable Projects	33,808	2,500	1,197	1,303	2,500
Interest	2,955	6,923	2,771	4,152	2,955
Loss on Sale of Capital Assets	-	-	(38,450)	38,450	-
Other	(2,920)	-	1,198	(1,198)	-
Cost-Share for Joint Efforts	50,403	57,522	139,068	(81,545)	41,689
Reserve Utilization					
Capital Improvement Fund	-	859,705	859,705	0	767,500
Stormwater Utility	90,986	-	(878,672)	878,672	351,091
	\$ 3,246,022	\$ 4,401,650	\$ 3,137,257	\$ 1,264,394	\$ 4,246,076

Efforts (Expenditures)					
	FY2013	FY2014			
Admin	\$ 244,053	\$ 312,064	\$ 317,313	\$ (5,249)	\$ 313,460
Utility Activities					
UA/Control Reg	78,147	73,147	88,418	(15,271)	216,956
UA/WQ Monitoring	174,766	160,000	258,971	(98,971)	120,000
UA/WQ Controls	60,248	200,000	129,604	70,396	-
UA/Annual Maintenance	2,376,048	2,679,069	2,305,871	373,198	2,736,160
UA/Public Information/Outreach	67,665	67,665	(37,233)	104,898	50,000
UA/Drainage Enhancement	2,700	25,000	10,395	14,605	7,000
UA/Additional Studies	242,394	25,000	12,606	12,394	35,000
<i>Utility Activities Subtotal</i>	3,001,968	3,229,881	2,768,632	461,249	3,165,116
*Reserve Utilization					
Capital Improvement Fund					
Admin Parking Lot Retrofit		329,650	2,481	327,169	327,169
Okatie East Retrofit		60,237	19,345	40,892	-
Hwy 278 Retrofit		222,600	14,878	207,722	207,722
Okatie West/SC 170 Retrofit		100,000	-	100,000	100,000
Battery Creek Upper Retrofit		147,218	14,608	132,609	132,609
<i>Reserve Utilization Subtotal</i>	-	859,705	51,312	808,393	767,500
Efforts Total	\$ 3,246,022	\$ 4,401,650	\$ 3,137,257	\$ 1,264,393	\$ 4,246,076

*Efforts funded by utilizing the reserve are spread among all utility activities.

Change in Capital Assets On Balance Sheet

	FY2013	FY2014			
Capital Assets Additions	\$ 146,212	\$ 455,991	\$ 175,460	\$ 280,531	\$ 165,561
Depreciation	(248,463)	(242,119)	(211,656)	(30,463)	(182,523)
	\$ (102,250)	\$ 213,872	\$ (36,196)	\$ 250,068	\$ (16,962)