



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

Project Summary: Forrest Field Road

Project #: 2009-073

Completed: Mar-09

**Narrative Description of Project:**

Project improved 5,262 L.F. of outfall ditch and workshelf. Bush hogged 150 L.F. of outfall ditch. Reconstructed 4,962 L.F. of workshelf and 5,112 L.F. of outfall ditch. Installed (8) access pipes, and (8) bleeder pipes to correct elevation. Cleaned out (1) catch basin. Jetted 88 L.F. of outfall pipe and 218 L.F. of roadside pipe. Installed rip rap and hydroseeded for erosion control.

**Material Cost, Rental Equipment Summary, and Labor**

Material	Unit	Cost/Unit	Qty	Cost
12" HDPE Pipe	linear feet	\$4.86	290.0	\$1,409.40
24" HDPE Pipe	linear feet	\$13.89	80.0	\$1,111.20
36" HDPE Pipe	linear feet	\$26.41	160.0	\$4,225.60
16ft Gate	each	\$235.35	5.0	\$1,176.75
Gate Accessories				\$87.29
Fill Dirt	ton	\$1.00	312.9	\$312.85
Rip Rap	ton	\$49.22	78.3	\$3,852.94
Recycled Concrete	ton	\$1.00	269.33	\$269.33
Filter Blanket Woven	sy	\$0.63	231.9	\$146.12
Turf Staples	each	\$0.03	210.0	\$6.30
Silt Fence	sy	\$0.24	35.8	\$8.59
Quickrete Concrete	bag	\$3.19	6.0	\$19.14
10-10-10 Fertilizer	bag	\$14.55	15.5	\$225.53
Hydrogel	cup	\$2.82	15.5	\$43.71
Hydromulch	bale	\$16.75	31.0	\$519.25
Hydromax Liquid Fertilizer	bag	\$2.93	15.5	\$45.42
Annual Rye Grass Seed	50lb bag	\$29.85	15.5	\$462.68
Water	gallon	\$0.01	9,500	\$95.00
Pin Flags	each	\$0.06	48.0	\$2.88
Caution Tape	roll	\$0.04	120.0	\$4.80
Debris	ton	\$16.00	66.7	\$1,067.84
Gas	gallon	\$1.81	192.0	\$347.52
Diesel	gallon	\$1.66	1,775.5	\$2,947.33
Labor	hours		1,964	\$69,427.28

**Total Cost of Materials, Rental Equip., and Labor** \$87,814.74

Note: Labor cost includes the employee's salary plus fringe benefits.

**Site Photographs**

Before



During



After



**Forrest Field Project Summary Con't**

Project #: 2009-073

**Equipment Cost**

Item	Asset	Cost/Hou	Hrs.	Cost
Cat 325 Excavator	16649	\$58.61	157.0	\$9,201.77
Komatsu Mini Excavator	23000	\$18.65	6.0	\$111.90
Komatsu Urban Excavator	19325	\$37.50	4.0	\$150.00
Bobcat T200	22782	\$17.40	29.0	\$504.60
Bobcat T300	22847	\$20.10	3.0	\$60.30
Cat Dozer	23125	\$35.50	63.0	\$2,236.50
John Deere Loader 444J	23271	\$29.75	1.0	\$29.75
JCB Backhoe	22810	\$36.50	3.5	\$127.75
Hydroseeder	18909	\$10.70	19.0	\$203.30
Vacuum Truck	22812	\$20.30	5.5	\$111.65
Lowboy	23118	\$34.64	3.0	\$103.92
Dump Trucks		\$16.68	385.5	\$6,430.14
Pickup Trucks		\$5.43	523.0	\$2,839.89
<b>Total Equipment Cost</b>				<b>\$22,111.47</b>

Cost/hour excludes fuel cost.

Total Cost: \$109,926.21

**Site Photographs**

Before



During



After







Project: Forest  
Field Outfall  
Map 1

Activity: Drainage  
Improvement

Project #:  
2009-073

Township: Port  
Royal Island

Completed:  
March 2009

### Legend

#### Drainage Type

- River
- Stream
- Outfall
- Lateral
- Roadside
- - - Crossline
- - - D/W
- - - Access
- - - Piped
- Bleeder
- Parcels

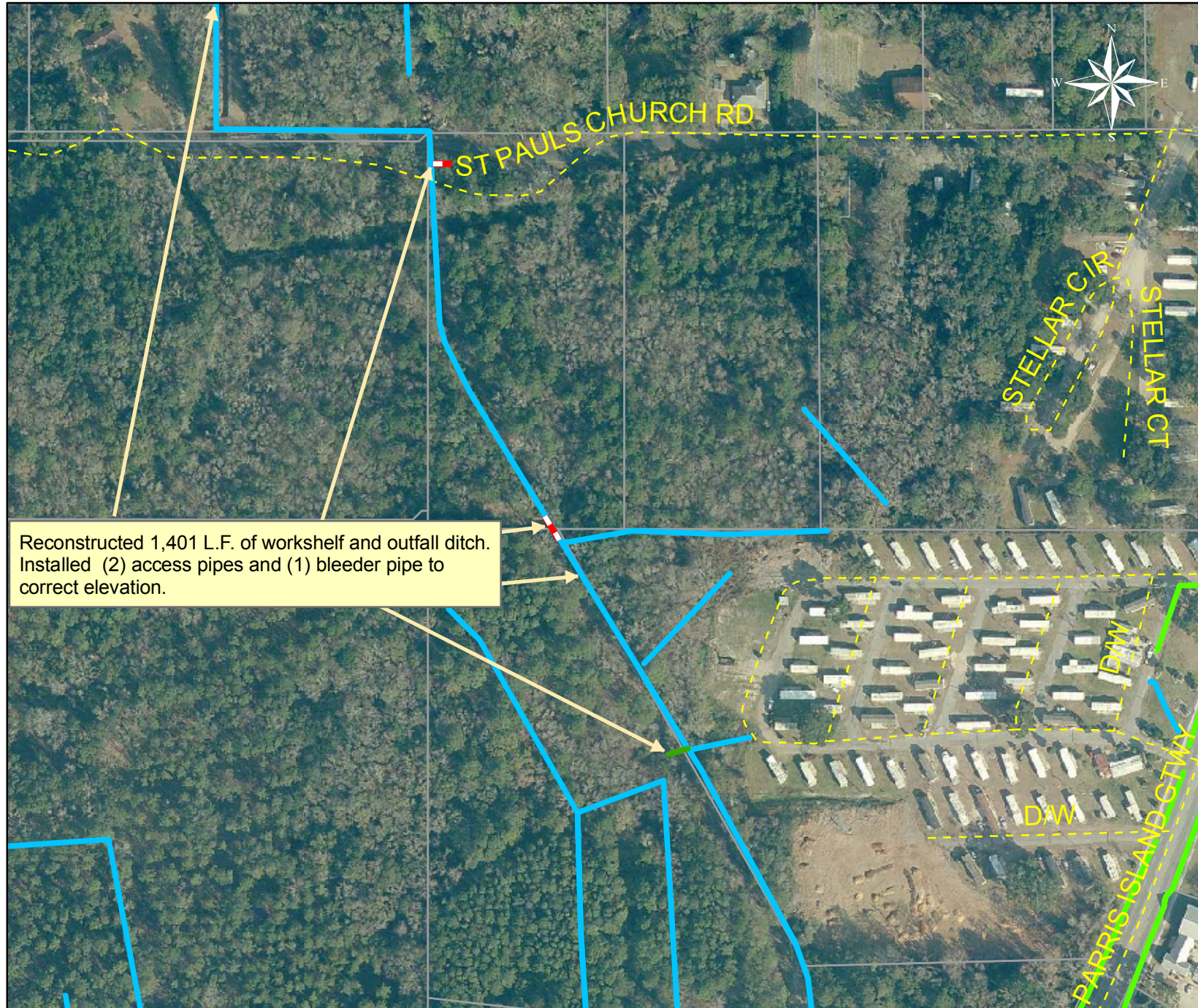
0 70 140 280 420 560  
Feet

1 inch equals 235.68 feet

Prepared By: BC Stormwater Management Utility  
Date Print: 8/31/09

File: C:\sethdata\projects\projectmaps\forest field outfall map1 2009-73





Project: Forest  
Field Outfall  
Map 2

Activity: Drainage  
Maintenance

Project #:  
2009-073

Township: Port  
Royal Island

Completed:  
March 2009

### Legend

#### Drainage Type

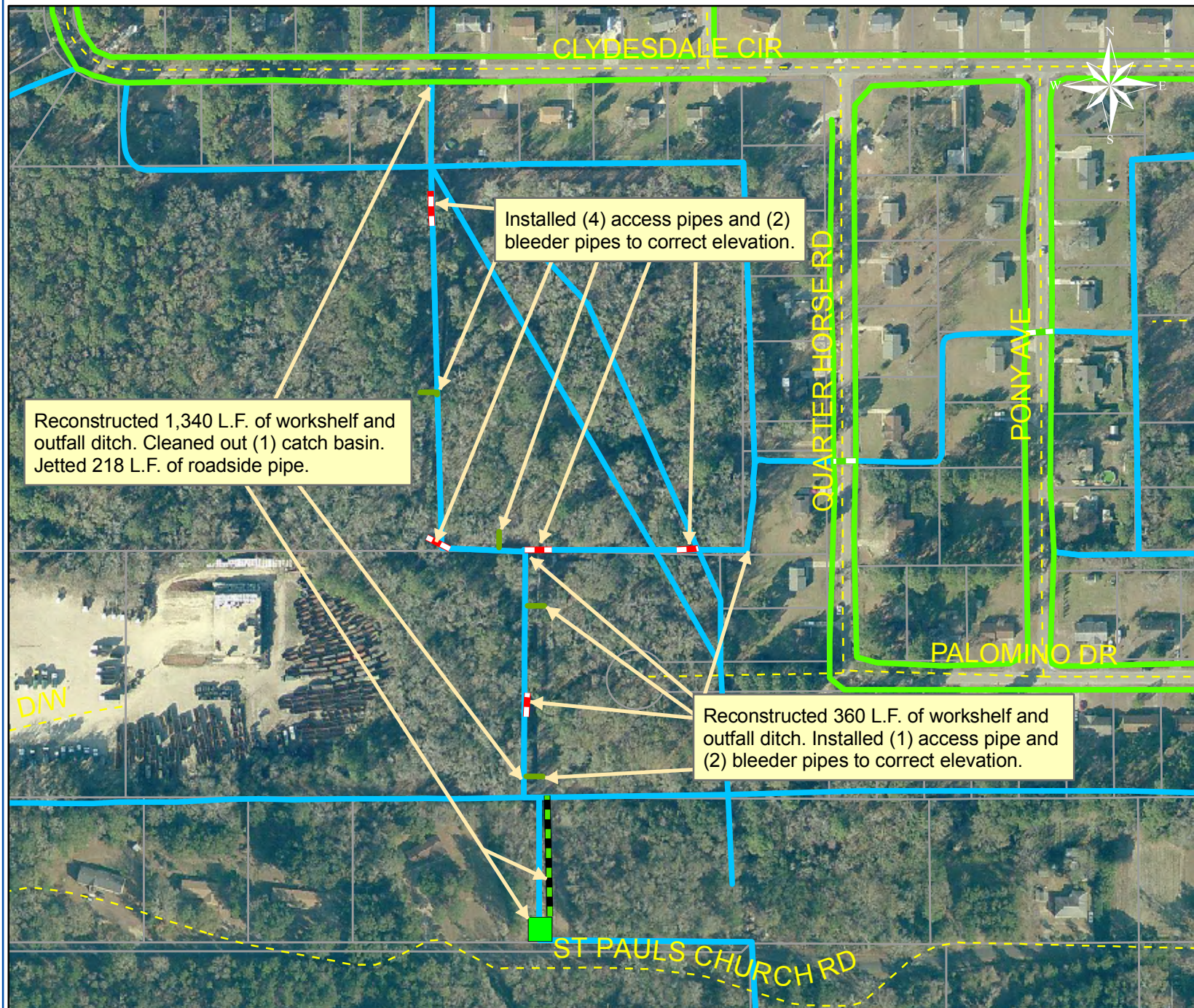
- River
- Stream
- Outfall
- Lateral
- Roadside
- - - Crossline
- - - D/W
- - - Access
- - - Piped
- Bleeder
- Parcels

Prepared By: BC Stormwater Management Utility

Date Print: 8/31/09

File: C:\sethdata\projects\projectmaps\Forest Field Outfall Map2 2009\_073





Project: Forest  
Field Road  
Map 3

Activity: Drainage  
Improvement

Project #:  
2009-073

Township: Port  
Royal Island

Completed:  
March 2009

## Legend

### Drainage Type

- River
- Stream
- Outfall
- Lateral
- Roadside
- - - Crossline
- - - D/W
- - - Access
- - - Piped
- Bleeder
- Parcels

0 65 130 260 390 520  
Feet

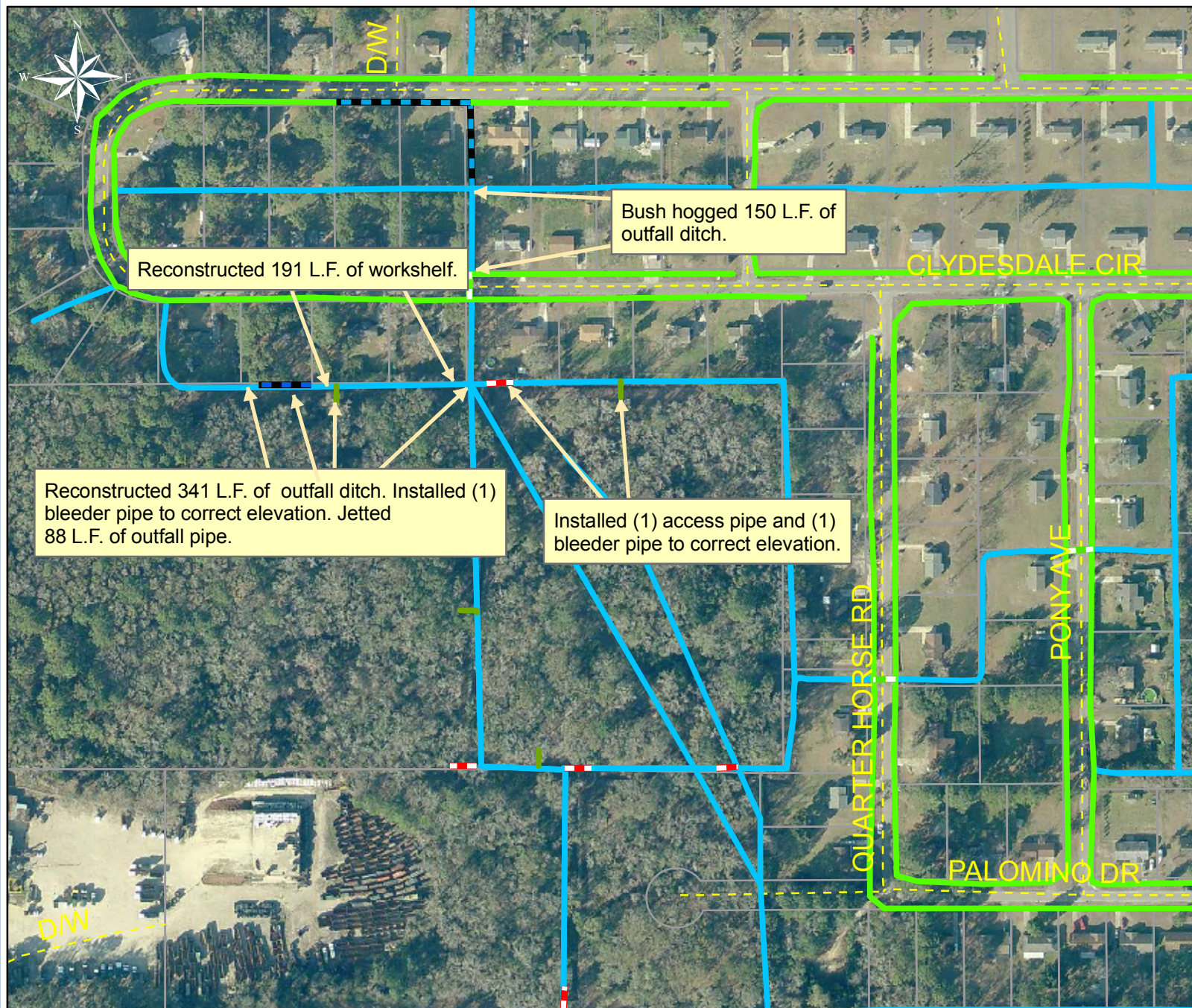
1 inch equals 235.68 feet

Prepared By: BC Stormwater Management Utility

Date Print: 8/31/09

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Project: Forest  
Field Outfall  
Map 4

Activity: Drainage  
Maintenance

Project #:  
2009-073

Township: Port  
Royal Island

Completed:  
March 2009

### Legend

#### Drainage Type

- River
- Stream
- Outfall
- Lateral
- Roadside
- - - Crossline
- - - D/W
- - - Access
- - - Piped
- Bleeder
- Parcels

0 62.5 125 250 375 500  
Feet

1 inch equals 240.76 feet

Prepared By: BC Stormwater Management Utility

Date Print: 8/31/09

File: C:\sethdata\projects\project maps\Forest Field Outfall Map4\_2009\_073





Project: Forest  
Field Outfall  
Map 5

Activity: Gate  
Installation

Project #:  
2009-073

Township: Port  
Royal Island

Completed:  
March 2009

### Legend

#### Drainage Type

- River
- Stream
- Outfall
- Lateral
- Roadside
- - - Crossline
- - - D/W
- - - Access
- - - Piped
- Bleeder
- Parcels

0 155 310 620 930 1,240  
Feet

1 inch equals 563.51 feet

Prepared By: BC Stormwater Management Utility

Date Print: 8/31/09

File: C:\sethdata\projects\projectmaps\Forrest Field Outfall Map5\_2009\_073