

COUNTY COUNCIL OF BEAUFORT COUNTY
 ADMINISTRATION BUILDING
 BEAUFORT COUNTY GOVERNMENT ROBERT SMALLS COMPLEX
 100 RIBAUT ROAD
 POST OFFICE DRAWER 1228
 BEAUFORT, SOUTH CAROLINA 29901-1228
 TELEPHONE: (843) 255-2180
 www.bcgov.net

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AGENDA
PUBLIC FACILITIES COMMITTEE

Monday, May 15, 2017
 4:00 p.m.

Executive Conference Room, Administration Building
 Beaufort County Government Robert Smalls Complex
 100 Ribaut Road, Beaufort

Committee Members:
 Stu Rodman, Chairman
 York Glover, Vice Chairman
 Rick Caporale
 Michael Covert
 Alice Howard
 Jerry Stewart
 Roberts "Tabor" Vaux

Staff Support:
 Colin Kinton, Division Director
 Transportation Engineering
 Eric Larson, Division Director
 Environmental Engineering
 Robert McFee, Division Director
 Facilities and Construction Engineering

1. CALL TO ORDER – 4:00 P.M.
2. CONSIDERATION OF REAPPOINTMENTS AND APPOINTMENTS
 - A. SOLID WASTE AND RECYCLING BOARD
3. DISCUSSION / PLANTATION BUSINESS PARK ROAD TRANSFER
4. UPDATE / LOCAL PREFERENCE
5. CONSIDERATION OF CONTRACT AWARD / HAULING SERVICES FOR BEAUFORT COUNTY (\$1,195,176) (backup)
6. APPROVAL OF LETTER OF INTENT TO CONTRACT FOR 41 AIR CONDITIONING REPLACEMENT UNITS
7. DISCUSSION / SIDEWALKS AND PATHWAYS (backup)
8. U.S. 278 GATEWAY CORRIDOR (backup)
 - A. APPROVAL OF \$2 MILLION ENVIRONMENTAL ASSESSMENT GUARANTEE WITH SCDOT
 - B. DISCUSSION OF LONG-TERM FUNDING ALTERNATIVES
9. ADJOURNMENT

Dialog With Staff / Open Issues / Future Agenda Items
 Maintenance of Municipality Acquired Roads
 Marshside Mama Sublease Agreements
 Myrtle Park Office Complex
 Solid Waste and Recycling

2017 Strategic Plan Committee Assignments
 Long-Term County Offices Plan
 Detention Center (\$3 Million)
 Solid Waste curbside Pick Up/Recycling Implementation
 County Facilities Condition Assessment and Plan
 County Roads Update/Financing Plan
 Arthur Horne Building





COUNTY COUNCIL OF BEAUFORT COUNTY

PURCHASING DEPARTMENT

106 Industrial Village Road, Bldg. 2, Post Office Drawer 1228
 Beaufort, South Carolina 29901-1228

David L Thomas, Purchasing Director
 dthomas@bcgov.net 843.255.2353

TO: Councilman Stu Rodman, Chairman, Public Facilities Committee

FROM: David L Thomas. CPPO. Purchasing Director

SUBJ: **New Contract as a Result of Solicitation**
 RFP 042017, Hauling Services for Beaufort County

DATE: 05/10/2017

BACKGROUND:

Beaufort County issued a Request for Proposal (RFP) to solicit proposals from qualified firms to provide services to Beaufort County Public Works Department Solid Waste and Recycling section to provide hauling services for County Convenience Centers. Services include the removal and transport of full containers to the appropriate landfill for disposal within time limits specified by contract and the leasing of containers for each center. A pre-proposal meeting was held March 23, 2017, and proposals were opened on May 20, 2017. The County received proposals from three firms listed below.

The staff evaluation committee reviewed the proposals for capability, the firms' experience, performance capability and proposed cost. Evaluation committee members consisted of David Wilhelm, Public Works Director; Jim Minor, Solid Waste Manager; John Miller, Public Works Operations Manager, Bradley McAbee Solid Waste Operations Superintendent and Cindy Carter, Solid Waste Data Analyst/Information Coordinator. The panel ranked the firms according to the RFP selection criteria and determined Republic Services to be the top ranked firm.

VENDOR INFORMATION:

COST:

Republic Services, Beaufort, SC	\$1,195,176
Waste Pro, Hardeeville, SC	\$1,463,961
Waste Management, Ridgeland, SC	\$1,937,168.64

FUNDING:


Solid Waste and Recycling Account 10001340-51165. New contract will be effective July 1, 2017 (Fiscal Year 2018).

Funding approved: By: Date:

FOR ACTION: Public Facilities Committee on May 15, 2017.

RECOMMENDATION:

The Purchasing Department recommends that the Public Facilities Committee approve and recommend to County Council the contract award to Republic Services in the amount of \$1,195,176.00. (Estimate based on average number of container pulls which will vary.)

Attachment:  Recommendation Memo Hauling Attachment 05102017.pdf
308.56 KB

cc: Gary Kubic, County Administrator

Approved: Date:

Check to override approval: Overridden by: Override Date:

Joshua Gruber, Deputy County Administrator/Special Counsel
Approved: Date:

Check to override approval: Overridden by: Override Date:

Alicia Holland, Assistant County Administrator, Finance
Approved: Date:

Approved: Date:

Check to override approval: Overridden by: Override Date: ready for admin:

Approved: Date:

Check to override approval: Overridden by: Override Date: ready for admin:

Approved: Date:

Check to override approval: Overridden by: Override Date: ready for admin:

After Initial Submission, Use the Save and Close Buttons

PROJECTS using Recurring Funds What types qualify?

SCDOT provides the following guidance to CTCs for selecting projects:

“C funds are for transportation projects on public property and must be accessible to the public.”



PROJECTS using Recurring Funds

What types qualify?

- Resurfacing
- Widening and/or realignments
- Extending shoulders
- Traffic signs/signals
- Intersection Improvements
- Turning lanes
- Sidewalks
- Pavement markings



EXAMPLES OF INELIGIBLE PROJECTS

- Projects located on private property
- Projects not accessible to the public
- Projects not related to transportation
- Recreational projects such as tennis courts, ball fields, walking paths, or running tracks



278 Gateway Corridor Funding Alternatives

Costs

Cost = \$270 million

Workforce = \$100 million / year

Unrealistic Options

1. **Bonded Property Tax:**
 - Tough sell politically
 - Must couple w/ other large projects
2. **Gas Tax:**
 - Very political
 - At best - too little, too late
3. **Electronic by the Mile:**
 - Attractive future mechanism
 - But, it is in the future

Remaining Options

1. **FHA & SCDOT:**
 - Preferred
 - Lengthy process
 - Historically problematic
2. **Public-Private Partnerships:**
 - Toll pledged revenue bonds
 - Use tax = most acceptable tax
 - Not calendar dependent
 - Eliminates the \$2 million guarantee risk
3. **Bonded Sales Tax:**
 - Unattractive - string of failed referenda
 - Must couple w/ other large projects
 - Blocks other needs for 10 years
 - Permitted only at General Elections

ADD-ONS

The document(s) herein were provided to Council for information and/or discussion after release of the official agenda and backup items.

Topic: Pathway Project Costs Breakdown
Date Submitted: May 15, 2017
Submitted By: Colin Kinton
Venue: Public Facilities Committee

Prioritization	Schedule	Points
Homes	0-100	1
	101-250	2
	251-400	3
	401+	4
Schools	Yes	3
Parks	Yes	3
Sufficient Existing Right-of-way	Yes	2
Connection with existing Paths	Yes	2
traffic volume	<500	1
	501-1500	2
	1501-3000	3
	3001-7000	4
	7001+	5
Pathway Phases	<=\$500K	3
	>\$500K	1
Retail/Shopping Access	Yes	3
Other Government Services	Yes	2
Children adjacent to pathway to school	0-25	2
	26-65	3
	66-100	4
	100+	5

Topic: Pathway Project Costs Breakdown
Date Submitted: May 15, 2017
Submitted By: Colin Kinton
Venue: Public Facilities Committee

Beaufort County Transportation Needs Capital Improvement Pathway Projects

Project #	Council District	Pathway Project	Length (mi)	2015 AADT	Volume Score	# Households Within 1/4 Mile	Household Score	# of Schools	Schools Score	Name of Schools	# of Children Along Pathway Adjacent to School	Children Score	# Parks/ PA/LS	Parks Score	Other Benefits/Impacts	Retail Score	Connections Score	Gov't Services Score	Pathway Cost (\$)	Planning and Engineering Costs (\$)	Available Right of Way	Right of Way Cost (\$)	Right-of-Way Score	Contingency (\$)	Total Cost (\$)	Phases Score	Total Score
1	4	Depot Road	0.40	1,200	2	381	3	0	0	N/A	0	0	0	0	Connection to Spanish Moss Trail	0	2	0	\$250,000	\$25,000	45' for 1500' 60' for 610'	\$25,000	0	\$75,000	\$375,000	3	10
2	5	Salem Road/Old Salem Rd/Burton Hill Rd	1.50	est.	3	619	4	0	0	N/A	0	0	0	0	Connection to Spanish Moss Trail, low income subsidized housing and commercial shopping	3	2	2	\$830,000	\$75,000	66'	\$75,000	0	\$249,000	\$1,229,000	3	17
3	9	Bluffton Parkway Phase 1	0.10	24,200	5	505	4	0	0	N/A	0	0	0	0	Completes Bluffton Parkway pathway	3	2	2	\$60,000	\$15,000	120'	\$20,000	0	\$18,000	\$113,000	3	19
4	9	Burnt Church Road, Ulmer Road and Shad Rd	2.00	4,200	4	434	4	1	3	MC Riley Elementary	209	5	1	3	Connection of neighborhoods to Bluffton Pkwy, shopping, schools, parks	3	2	2	\$925,000	\$75,000	66'	\$75,000	0	\$277,500	\$1,352,500	3	29
5	7	Lake Point Drive and Old Miller Rd Pathway Connection	1.00	4,220	4	610	4	0	0	N/A	0	0	0	0	Extends existing pathway connecting to existing development	3	2	0	\$525,000	\$50,000	66'	\$0	2	\$157,500	\$732,500	0	15
6	1/5	Joe Frazier Road	2.10	7,900	4	201	2	1	3	Battery Creek High School	41	3	1	3	Connects to existing sidewalk on Broad River Blvd, schools and parks	0	2	0	\$1,100,000	\$100,000	100'	\$0	2	\$330,000	\$1,530,000	0	19
7	3	Meridian Road	1.60	2,000	3	141	2	1	3	Beaufort High School	16	2	1	3	Connects to sidewalks on Sea Island and Lady's Island Dr	3	2	0	\$700,000	\$75,000		\$150,000	0	\$210,000	\$1,135,000	0	18
8	2	Middle Road	2.40	5,300	4	524	4	1	3	Coosa Elementary	80	4	0		Connects neighborhoods to schools	0	2	0	\$1,100,000	\$75,000	66'	\$125,000	0	\$330,000	\$1,630,000	0	17
9	1	Stuart Point	2.00	1,600	2	130	2	2	6	Whale Branch Middle School Whale Branch Elementary	73	4	0		Connects neighborhoods to schools	0	0	0	\$1,050,000	\$75,000	66'	\$75,000	0	\$315,000	\$1,515,000	3	17
10	1	US-17 Pathway Extension	0.65	11,100	5	22	1	0	0	N/A	0	0	0	0	Extension of multi-use pathway from Big Estate Rd to Jenkins Rd	0	2	0	\$375,000	\$50,000	200'	\$0	2	\$112,500	\$537,500	0	10
11	1	Big Road	0.65	est.	2	115	2	0	0	N/A	0	0	0	0	Connect Bruce K Smalls to Trask Pkwy	0	2	0	\$360,000	\$50,000	66'	\$75,000	0	\$108,000	\$593,000	0	6
12	1	Seabrook Rd	1.2	850	2	97	1	3	3	Whale Branch Middle School Whale Branch Elementary	13	2	0	0	Connect/Continuation of Spanish Moss Trail	0	0	2	\$680,000	\$75,000	66'	\$75,000	0	\$204,000	\$1,034,000	0	10
13	1	Pine Grove Rd/Burton Wells Rd	1.5	1,350/1,100	2	146	2	0	0	N/A	0	1	3	0	Connection to Burton Wells County Park	0	2	0	\$830,000	\$75,000	66'	\$75,000	0	\$249,000	\$1,229,000	3	12
14	3	Dr. Martin Luther King, Jr. Dr.	0.85	6,000	4	50	1	0	0	N/A	0	2	3	0	Multi-Use Pathway off of roadway right-of-way, Connectivity to County Library, Penn Center and Shopping	3	2	2	\$555,000	\$100,000	66'	\$75,000	0	\$166,500	\$896,500	0	15
15	1	Bruce K Smalls	1.00	3,000	3	108	2	0	0	N/A	0	0	0	0	Extension of Existing Sidewalk	0	2	0	\$550,000	\$50,000	66'	\$75,000	0	\$165,000	\$840,000	0	7
16	1	Paige Point	1.50	425	1	44	1	0	0	N/A	0	0	0	0	Connects neighborhoods	0	2	0	\$800,000	\$75,000	66'	\$75,000	0	\$240,000	\$1,190,000	3	7
17	1	Big Estate Road	1.40	950	2	42	1	0	0	N/A	0	0	0	0	Connects neighborhood to US-17 Multi-use pathway	0	2	0	\$750,000	\$75,000	66'	\$75,000	0	\$225,000	\$1,125,000	0	5
18	9	Alljoy Road	1.5	2,200	3	494	4	1	3	MC Riley Elementary	33	3	0	0	Connects neighborhoods to schools, parks, shopping	0	0	2	\$200,000	\$50,000	75'	\$75,000	0	\$60,000	\$385,000	3	18
19	1	Laurel Bay Road Pathway Widening	3.4	6,900	4	250	3	0	0	N/A	0	1	3	0	Connection to Spanish Moss Trail, Neighborhoods, Military and Commercial	3	2	2	\$1,000,000	\$75,000	160'	\$0	2	\$300,000	\$1,375,000	3	22
20	4	Ribaut Rd (S.M.T. to Russell Bell Bridge)	0.2	24,800	5	200	2	0	0	N/A	0	1	3	0	Connects Spanish Moss Trail to Parris Island Gateway shoulders. Extension of East Coast Greenway	0	3	0	\$220,000	\$25,000		\$50,000	0	\$66,000	\$361,000	0	13
21	4	Broad River Dr.	1	est.	2	343	3	1	3	Lowcountry Montessori	15 est.	2	1	3	Part of the East Coast Greenway	3	0	0	\$520,000	\$50,000	50'	\$50,000	0	\$156,000	\$776,000	0	16
22	3	Chowan Creek Bif	0.6	1,000	2	25	1	1	3	Lady's Island Elementary	2	2	0	0	Connection to sidewalk on US 21	0	2	0	\$325,000	\$20,000	66'	\$25,000	0	\$97,500	\$467,500	0	10
23	5	Broad River Blvd/Riley Rd	1.1	3,100	4	150	2	1	3	Broad River Elementary	63	3	0	0	Connection to Shadow Moss Neighborhood	0	2	0	\$600,000	\$50,000	66'	\$75,000	0	\$180,000	\$905,000	3	17
24	1	Spanish Moss Trail Extension to Detour Rd	1.4	17,100	5	50	1	0	0	N/A	0	1	3	0	Part of the East Coast Greenway	0	2	0	\$750,000			\$400,000	0	\$225,000	\$1,375,000	0	11

\$15,055,000 **\$1,385,000** **\$1,745,000** **\$4,516,500** **\$22,701,500**

Beaufort County Transportation Needs Capital Improvement Pathway Projects

Priority	Council District	Pathway Project	Length (mi)	Total Cost (\$)	Total Score	Notes
1	9	Burnt Church Road, Ulmer Road and Shad Rd	2.00	\$1,352,500	29	Multiple Phases
2	1	Laurel Bay Road Pathway Widening	3.4	\$1,375,000	22	Multiple Phases
3	9	Bluffton Parkway Phase 1	0.10	\$113,000	19	
4	1/5	Joe Frazier Road	2.10	\$1,530,000	19	Marsh/Causeway
5	3	Meridian Road	1.60	\$1,135,000	18	
6	9	Alljoy Road	1.5	\$385,000	18	
7	5	Salem Road/Old Salem Rd/Burton Hill Rd	1.50	\$1,229,000	17	Multiple Phases
8	2	Middle Road	2.40	\$1,630,000	17	Multiple Phases
9	1	Stuart Point	2.00	\$1,515,000	17	Multiple Phases
10	5	Broad River Blvd/Riley Rd	1.10	\$905,000	17	Multiple Phases
11	4	Broad River Dr.	1.00	\$776,000	16	Residential Property
12	7	Lake Point Drive and Old Miller Rd Pathway Connection	1.00	\$732,500	15	Contingent on extending roadway
13	3	Dr. Martin Luther King, Jr. Dr.	0.85	\$896,500	15	Marsh Crossing
14	4	Ribaut Rd to P.I. Gtwy	0.20	\$361,000	13	Both Sides of Rd
15	1	Pine Grove Rd/Burton Wells Rd	1.5	\$1,229,000	12	Multiple Phases
16	1	Spanish Moss Trail Extension	1.40	\$1,375,000	11	Marsh/SCDOT R/W
17	1	Seabrook Rd	1.2	\$1,034,000	10	
18	4	Depot Road	0.40	\$375,000	10	In City of Beaufort
19	3	Chowan Creek Blf	0.60	\$467,500	10	
20	1	US-17 Pathway Extension	0.65	\$537,500	10	
21	1	Bruce K Smalls	1.00	\$840,000	7	
22	1	Paige Point	1.50	\$1,190,000	7	Multiple Phases
23	1	Big Road	0.65	\$593,000	6	
24	1	Big Estate Road	1.40	\$1,125,000	5	

TOTAL \$22,701,500

Topic: Plantation Business Park Documents
Date Submitted: May 15, 2017
Submitted By: Eric Larson
Venue: Public Facilities Committee

Date: February 5, 2016

To: Danny Polk – Beaufort County Stormwater

From: Paul Moore

Subject : **Stormwater Inventory & Evaluation
Plantation Business Park
Project: 150251**

Background:

It is our understanding that County has been asked to take ownership of Plantation Business Park Drive and the associated stormwater infrastructure serving the commercial subdivision. The ownership and maintenance responsibilities for the drainage structures are uncertain, as the common infrastructure was never dedicated to the County as originally intended. The County's research into the original design and stormwater master plan didn't produced the documents needed to definitively determine the original intent, nor adequately map the drainage system. Ward Edwards was contracted by the County to help to research, map, inventory, and inspect the common infrastructure. As part of the services, the County also requested a summary of needed repairs and cost estimates for those repairs. The results will be used by the County to decide on whether or not to take ownership and maintenance of the common infrastructure; and any conditions required should the County decide to take ownership.

Preliminary Research Results:

Ward Edwards requested the original design documents from SCDHEC-OCRM through the Freedom of Information Act (FOIA) program. OCRM provided scanned copies of the original approved design documents, showing the stormwater infrastructure related to the stormwater master plan. The plans provided showed two separate storm sewer networks, one at each end of the original Plantation Park Drive. The western network collects runoff from the west dead-end portion of the subdivision road and conveys it to a detention pond located to the southwest. The eastern system collects runoff from the eastern dead-end road and conveys it to a ditch located to the southeast. The two original dead-ends are long longer terminated in cul-de-sacs; having since been extended to connect to other roads by Beaufort County. The original design plans indicate that reinforced concrete pipe is used within the road right-of-way and high density polyethylene pipe is used in the areas outside of the road right-of-way (2-ft wide drainage easements running in between subdivision lots).

Inspection Procedures and Results:

Ward Edwards applied numbering nomenclature to each structure and pipe deemed to be part of the original common infrastructure and created an exhibit with these labels. This exhibit was provided to JS Construction to direct them on which pipes and boxes to clean and inspect. Initial cleaning revealed that many of the pipes had accumulated sediment to occupy as much as 75% of the pipe cross sections. Although some sediment accumulation is expected, this amount far exceed expectations. The sediment accumulation in the downstream pond and ditch likely resulted in reduced flow within the pipe system and higher than normal sediment accumulation. High tailwater conditions in the downstream pond and ditches also resulted in the need to construct coffer dams to prevent water from flowing back into the

Topic: Plantation Business Park Documents
Date Submitted: May 15, 2017
Submitted By: Eric Larson
Venue: Public Facilities Committee

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pipe system during inspection. All pipes and boxes within the system were eventually cleaned via vacuum trucks, with the material being hauled offsite for disposal. After cleaning was complete, a remote control wheeled camera system was used to video tape the full length of each pipe and to inspect the pipe joints. The following notes detail the findings for each pipe and structure.

Structures:

The structures and pipes were labeled based on the type of structure (junction box, curb inlet, etc...) and a number based on the order of inspection by the contractor.

Structure Labeling Nomenclature:

JB = Junction Box

CI = Curb Inlet

GI = Grate Inlet

FES = Flared End Section (type of pipe end)

JB-1- significant root intrusion. The intrusion appears to be coming from the seal, but has caused the entire side to crack. We would recommend immediate repairs. The roots are not only a structural risk, but could also be a conduit for sediment which could result in ground subsidence around the structure – high priority.

JB-2 – Appears to be in good condition. No action needed.

CI-3 – Appears an entire side was removed for a culvert connection and voids replaced with brick. Brick need to be resealed/relined to provide a better seal and prevent sediment intrusion.

CI-4 – The area surrounding the pipe connections needs to be better sealed to prevent sediment intrusion.

CI-5 – Pipe connection seals needs maintenance.

CI-6 - Culvert penetration needs to be sealed.



Figure 1 - Example of culvert penetration needing to be sealed with new grout.

GI-7 – Appears to be in good condition. No action needed.

CI-8 – Pipe connection seals need maintenance.

CI-9 - Appears to be in good condition. No action needed.

CI-10 - Appears to be in good condition. No action needed.

CI-11 – Sink holes are occurring outside of the box. Sediment appears to be infiltrating through the yard inlet pipe connection inside the box.

FES – The top of the flared end section is below the sediment elevation in drainage ditch. The ditch needs to be cleaned and re-graded to provide positive drainage to the next downstream structure. The FES structure appears to be in good condition.

Outlet ditch – The ditch is overgrown and has heavy sediment accumulation as indicated in the FES-12 comments. Ditch cleaning will require vegetation being cut/cleared and sediment being dredged

Detention Pond – Heavy sediment accumulation and significant vegetation growth has occurred in the pond. The pond will require dredging and cutting/clearing vegetation.

Pipes:

JB1-JB2 HDPE Pipe: Significant root intrusion is occurring within multiple portions of the pipe. Severe deflection is occurring within other sections of the pipe, resulting in large, visible cracks in the inner wall. There are two noticeable punctures within the inner pipe walls as well. Significant root intrusion is occurring within multiple portions of the pipe. Visual estimation of the deflection shows typical vertical deflections around 3" (10%), far exceeding the maximum allowed 7.5% deflection. Per SCDOT inspection requirements, pipes with greater than 7.5% of deflection require removal and replacement. These conditions indicate improper handling and installation of the pipe during construction and likely would not be a result of long term settlement or poor maintenance.

JB1-FES HDPE Pipe: Severe deflection is occurring within some sections of the pipe, resulting in large, visible cracks in the inner wall. Deflection is also occurring at some joints, with noticeable gaps in the inner walls. There are frequent buckling occurring along the entire length, with the worst sections being near the flared end section. Visual estimation of the deflection shows typical vertical deflections around 2" (8%), exceeding the maximum allowed 7.5% deflection. Per SCDOT inspection requirements, pipes with greater than 7.5% of deflection require removal and replacement. Significant root intrusion is occurring within multiple portions of the pipe. These conditions indicate improper handling and installation of the pipe during construction and likely would not be a result of long term settlement or poor maintenance.

JB2-CI3 HDPE Pipe: This pipe is exhibiting severe deflection/compression, such that the pipe appear elliptical in the inspection video. Visual estimation of the deflection shows typical vertical deflections around 3" (10%), far exceeding the maximum allowed 7.5% deflection. Per SCDOT inspection requirements, pipes with greater than 7.5% of deflection require removal and replacement. Significant root intrusion is occurring within multiple portions of the pipe. Severe deflection is occurring within other sections of the pipe, resulting in large, visible cracks in the inner wall. There are two noticeable punctures within the inner pipe walls as well. These conditions indicate improper handling and installation of the pipe during construction and likely would not be a result of long term settlement or poor maintenance.



Figure 2 – Pipe JB2-C13: Pipe is experiencing sever deflection and joint separation/buckling

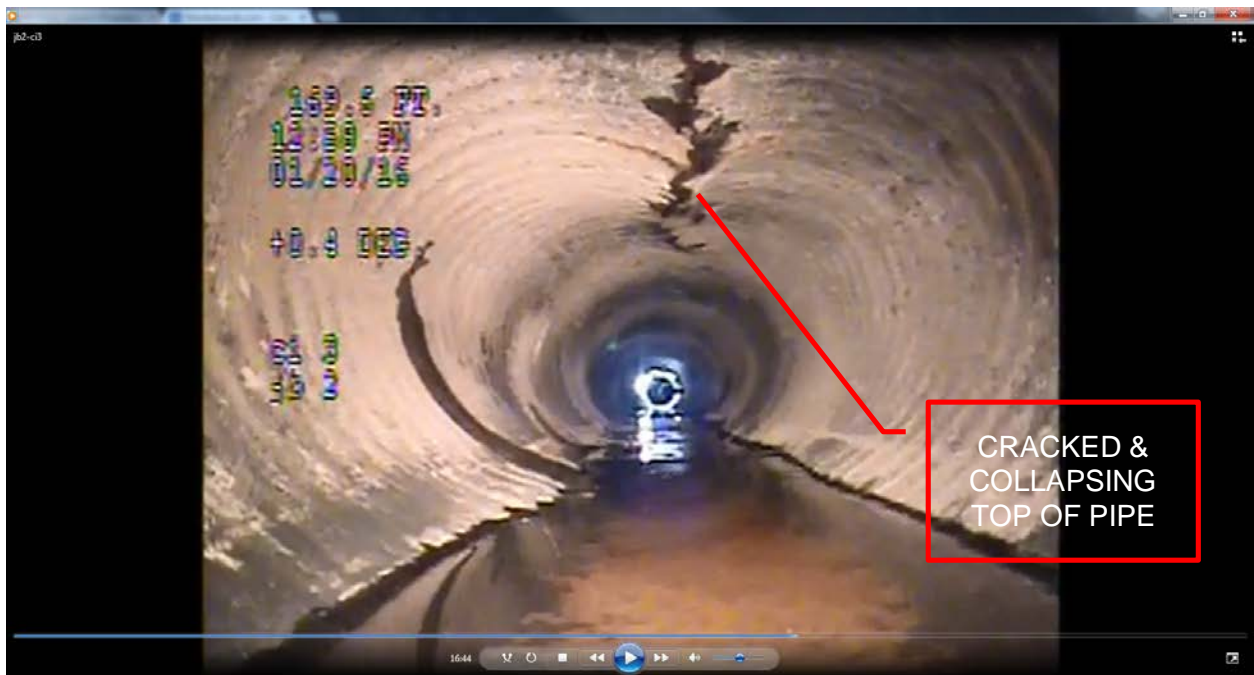


Figure 3 - Pipe JB2-C13: Deflection/buckling is resulting in cracking at the top of the pipe.



Figure 4 - Pipe JB2-CI3: Example of pipe joint failure with rubber gasket out of place.



Figure 5 - Pipe JB2-CI3: Large cracks with debris penetration.

CI4-CI3 Concrete Pipe: This pipe is generally in fair condition. The joints appear to be solid with no evidence of infiltration. Each pipe has a hole in the top of the pipe centered along the length of each joint. The holes are stuffed with what appears to be filter fabric. These holes were likely drilled by the contractor and used to hoist the pipes into place via and eye bolt through the hole. The holes were likely plugged with the filter fabric and grouted over on the outside. However, grout on the exterior of the holes can't be verified without excavating over the pipes.

CI5-CI6 Concrete Pipe: This pipe is generally in fair condition. The joints appear to be solid although there is evidence of infiltration at some joints. Each pipe has a hole in the top of the pipe centered along the length of each joint. The holes are stuffed with what appears to be filter fabric. These holes were likely drilled by the contractor and used to hoist the pipes into place via and eye bolt through the hole. The holes were likely plugged with the filter fabric and grouted over on the outside. However, grout on the exterior of the holes can't be verified without excavating over the pipes. A couple of the holes in this pipe show evidence of water seepage and soil infiltration.

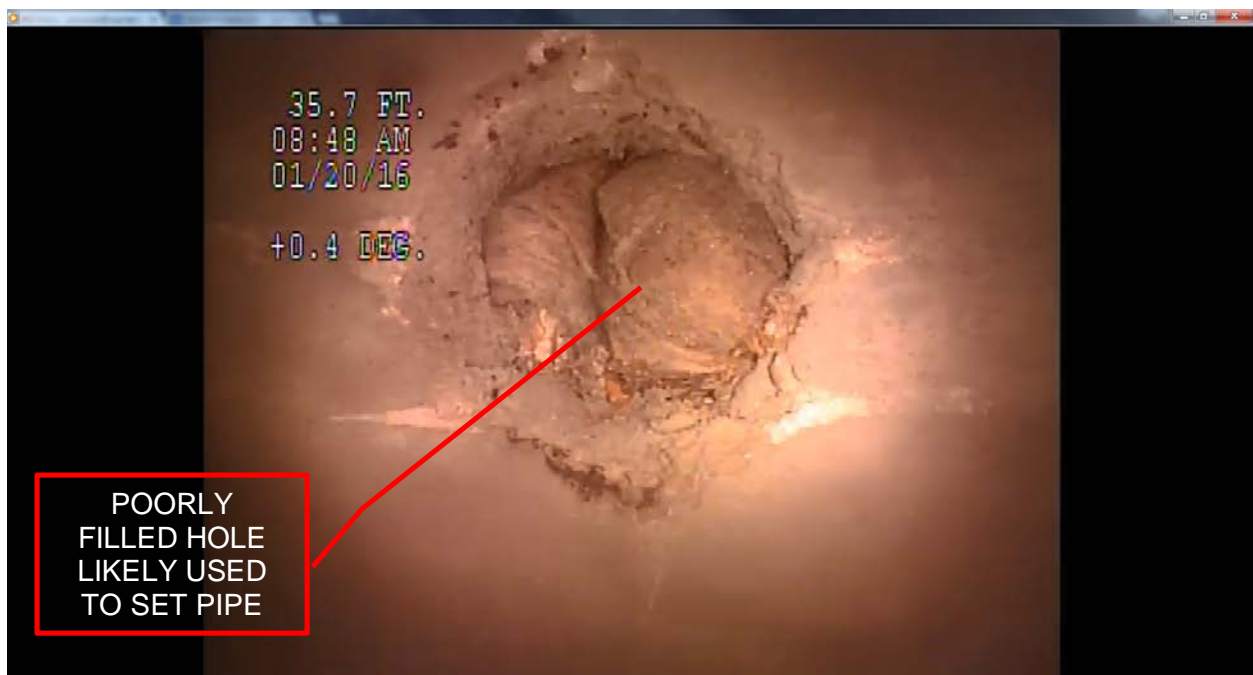


Figure 6 - Pipe CI5-CI6: Lifting eye holes plugged with fabric but not properly grouted.



Figure 7 - Pipe C15-C16: Evidence of water infiltration through pipe joints

C15-JB2 HDPE Pipe: This pipe is exhibiting severe deflection/compression, such that the pipe appear elliptical in the inspection video. Visual estimation of the deflection shows typical vertical deflections around 3" (10%), far exceeding the maximum allowed 7.5% deflection. Per SCDOT inspection requirements, pipes with greater than 7.5% of deflection require removal and replacement. Significant root intrusion is occurring within multiple portions of the pipe. Severe deflection is occurring within other sections of the pipe, resulting in large, visible cracks in the inner wall. Much of the deflection is occurring at the invert of the pipe section, creating an uneven flowline. These conditions indicate improper handling and installation of the pipe during construction and likely would not be a result of long term settlement or poor maintenance.



Figure 8 - Pipe CI5-JB2: Severe deflection and buckling beyond allowable limits



Figure 9: Pipe CI5-JB2: Severe deflection such that pipe is beginning to collapse.

G17-PONDEND HDPE Pipe: This pipe is in very poor condition. Severe deflection is occurring within some sections of the pipe, resulting in large, visible cracks in the inner wall. Deflection is also occurring at some joints, with noticeable gaps in the inner walls. There are frequent buckling occurring along the entire length. Visual estimation of the deflection shows typical vertical deflections around 2" (8%), exceeding the maximum allowed 7.5% deflection. Per SCDOT inspection requirements, pipes with greater than 7.5% of deflection require removal and replacement. These conditions indicate improper handling and installation of the pipe during construction and likely would not be a result of long term settlement or poor maintenance.



Figure 10: Pipe G17-PONDEND: Severe joint deflection and damage likely resulting during improper installation.

G17-G18 HDPE Pipe: This pipe is in very poor condition. There appears to be some sort of small utility (irrigation or electrical conduit) pipe drilled through the storm pipe. Severe deflection is occurring within some sections of the pipe, resulting in large, visible cracks in the inner wall. Deflection is also occurring at some joints, with noticeable gaps in the inner walls. There are frequent buckling occurring along the entire length, making the invert of the pipe uneven along the length. This would result in flow restriction within the pipe. Visual estimation of the deflection shows typical vertical deflections around 2" (8%), exceeding the maximum allowed 7.5% deflection. Per SCDOT inspection requirements, pipes with greater than 7.5% of deflection require removal and replacement. Significant root intrusion is occurring within multiple portions of the pipe. These conditions indicate improper handling and installation of the pipe during construction and likely would not be a result of long term settlement or poor maintenance.



Figure 11: Pipe GI7-GI8: Irrigation pipe or electrical conduit drilled through pipe.



Figure 12: Pipe GI7-GI8: Joint damage likely from improper installation.

CI9-CI8 Concrete Pipe: This pipe is generally in fair condition. The joints appear to be solid although there is evidence of infiltration at some joints. Some pipes have a hole in the top of the pipe centered along the length of each joint. The holes are stuffed with what appears to be filter fabric. These holes were likely drilled by the contractor and used to hoist the pipes into place via and eye bolt through the hole. The holes were likely plugged with the filter fabric and grouted over on the outside. However, grout on the exterior of the holes can't be verified without excavating over the pipes.

CI9-CI10 Concrete Pipe: This pipe is generally in fair condition. There is apparent soil and root infiltration at the majority of joints, with significant sediment buildup along the lower halves of the joints. This is a possible indication that the joints were not properly wrapped with filter fabric during installation. Some pipes have a hole in the top of the pipe centered along the length of each joint. The holes are stuffed with what appears to be filter fabric. These holes were likely drilled by the contractor and used to hoist the pipes into place via and eye bolt through the hole. The holes were likely plugged with the filter fabric and grouted over on the outside. However, grout on the exterior of the holes can't be verified without excavating over the pipes.

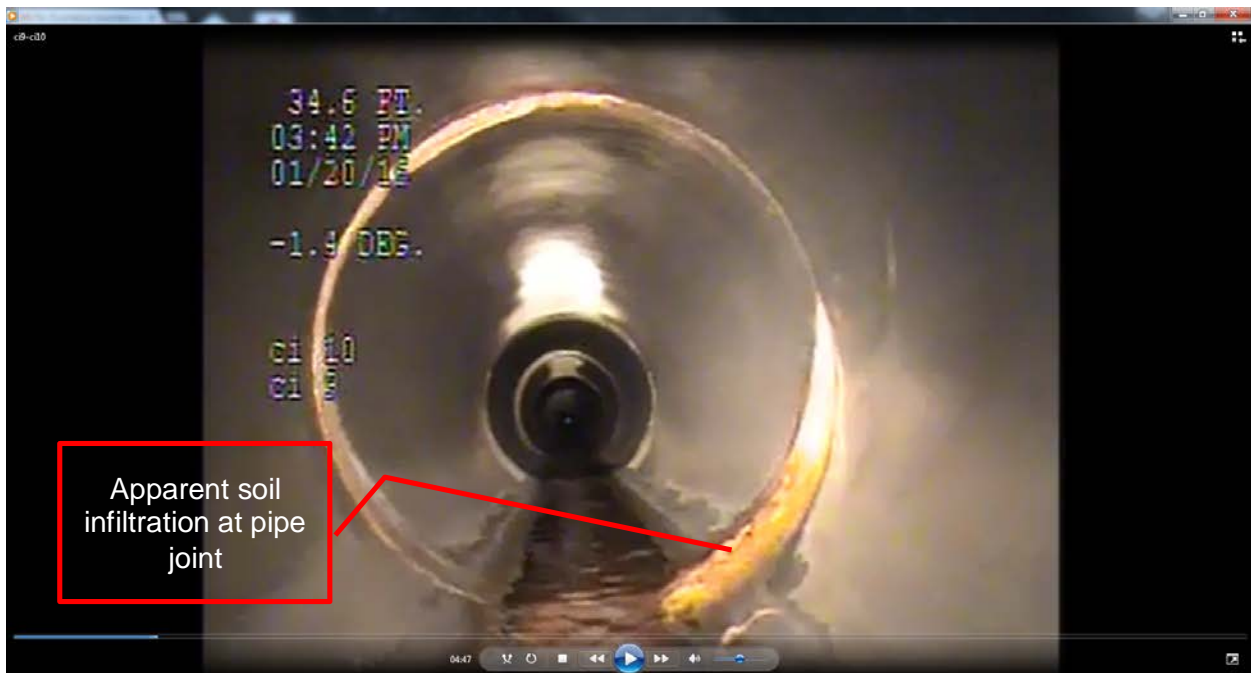


Figure 13: Pipe CI9-CI10: Sediment accumulation at pipe joint likely from infiltration through joint.

CI11-CI10 Concrete Pipe: This pipe is generally in good condition, without the root and soil infiltration that is occurring in the other runs of concrete pipe. Similar to the other concrete pipes, some pipes have a hole in the top of the pipe centered along the length of each joint, likely used to lift the pipes in place. The holes were likely plugged with the filter fabric and grouted over on the outside. However, grout on the exterior of the holes can't be verified without excavating over the pipes.

Recommendations:

There are multiple indications that the pipe system was not installed to the County's standards typically required for infrastructure that is to be owned and maintained by the County. The following repairs/improvements are recommended to mitigate the observed problems.

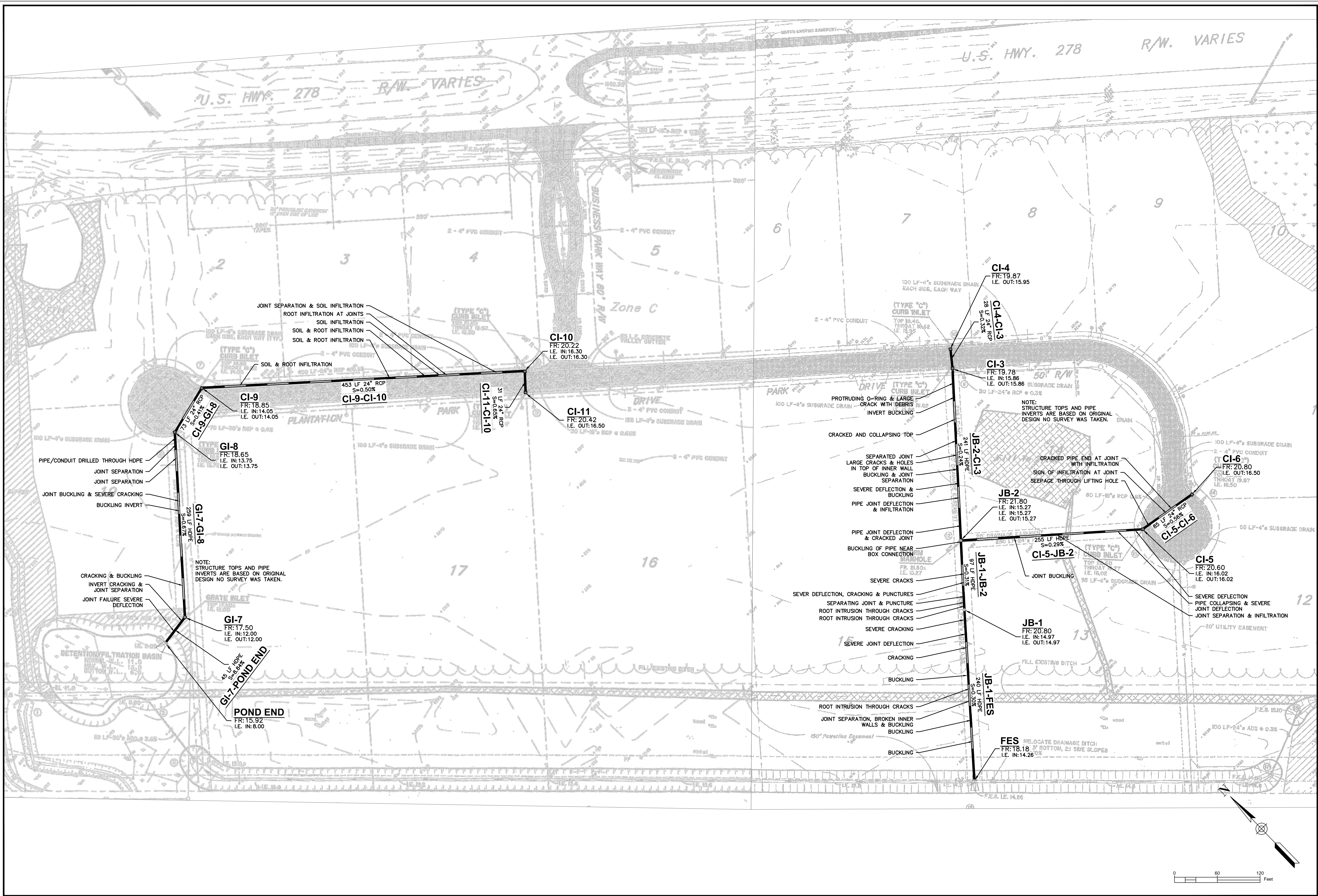
- The conditions of all of the HDPE pipe sections are so poor that they likely require removal and replacement. Given that the HDPE pipe is located within landscape areas and within drainage easements; excavation, removal, and replacement with new RCP is likely the best option.
- The concrete pipe sections are generally in fair condition, but there is evidence of some installation problems given the soil infiltration at some joints and some of the poorly plugged lifting eye holes. Structurally, the RCP pipes are functional, but the observed soil infiltration would require more frequent cleaning. Additionally, over time the soil infiltration will result in sink holes and pavement failure in the road. Given that the RCP is located under pavement, removal and replacement would be cost prohibitive. The RCP could be slip lined with a plastic pipe, but this would result in a decrease in the internal diameter and the flow capacity of the pipe. Slip lining 24" RCP would reduce the cross sectional area to the equivalent of an 18" RCP. This is not recommended because it could create upstream drainage problems. The better alternative is cured in place plastic (CIPP) lining. This is more expensive than slip lining but doesn't result in a reduction in flow capacity.
- The existing detention pond, outfall structures, and outfall ditches are all in need of routine maintenance. The pond should be cleaned back to the original design depths, removing all accumulated sediment and vegetation. The existing downstream outfall ditch needs to be cleaned and re-graded to reestablish positive drainage. The inundation condition in the downstream ditch resulted in high sediment accumulation in portions of the pipe system, with sediment clogging as much as 75% of the pipe sections. Although the pipes have now been cleaned for the purpose of this inspection, the ditch condition will result is quicker than normal accumulation of sediment in the pipes. The existing outfall structures and pipes should be cleaned and inspected as well. The pipes appear to be HDPE material, so it is possible they are in similar condition to the HDPE pipes inspected. There is no indications of drainage/maintenance easements along the existing outfall ditch, so easements may need to be acquired for the maintenance work to occur.

It is recommended that the County not take ownership of the drainage system without first requiring repair/replacement of much of the infrastructure. Attached is as Engineer's Estimate of Probable Costs to implement the recommended repairs. The estimate result is approximately \$343,000, excluding the cost of acquiring any easements needed for the offsite ditch cleaning. Easement acquisition is beyond Ward Edwards' area of expertise.

Plantation Business Park: Engineer's Estimate of Probable Cost

No.	Description	Unit	Quantity	Unit Price	Total Price
1	GENERAL				
	Mobilization / Demobilization / Traffic Control / Management	LS	1	\$ 5,000.00	\$ 5,000.00
	Testing Services	LS	1	\$ 5,000.00	\$ 5,000.00
	Surveying (Layout & Asbuilts)	LS	1	\$ 3,500.00	\$ 3,500.00
	General Subtotal				\$ 13,500.00
2	DEMOLITION & CLEANING				
	Clean existing Detention Pond	LS	1	\$ 90,000.00	\$ 90,000.00
	Clean Existing Ditch	LF	3000	\$ 5.00	\$ 15,000.00
	Demolition - Remove Existing Storm Drainage	LF	1120	\$ 10.00	\$ 11,200.00
	Demolition Subtotal				\$ 116,200.00
3	EROSION CONTROL				
	Erosion Control - Sediment Tube	EA	8	\$ 150.00	\$ 1,200.00
	Erosion Control - Silt Fence	LF	2400	\$ 3.50	\$ 8,400.00
	Erosion Control - Temporary Seeding	SY	4000	\$ 0.25	\$ 1,000.00
	Erosion Control - Permanent Seeding	SY	4000	\$ 0.50	\$ 2,000.00
	Erosion Control - Concrete Washout	EA	1	\$ 1,250.00	\$ 1,250.00
	Erosion Control Subtotal				\$ 13,850.00
4	STORM DRAINAGE				
	Replace HDPE with 24-inch Reinf. Conc. Pipe	LF	1120	\$ 50.00	\$ 56,000.00
	Cured In Place Plastic Lining of Existing Conc. Pipe	LF	670	\$ 100.00	\$ 67,000.00
	Storm Drain - Junction Box	EA	3	\$ 5,000.00	\$ 15,000.00
	Storm Drainage Subtotal				\$ 138,000.00
5	SOFT COSTS				
	Engineering, Surveying & Construction Inspection	LS	1	\$ 30,000.00	\$ 30,000.00
	Soft Cost Subtotal				\$ 30,000.00
	SUMMARY				
	GENERAL				\$ 13,500.00
	DEMO & CLEANING				\$ 116,200.00
	EROSION CONTROL				\$ 13,850.00
	STORM DRAINAGE				\$ 138,000.00
	SOFT COSTS				\$ 30,000.00
				Sub-total	\$ 311,550.00
				10% Contingency	\$ 31,155.00
				Total	\$ 342,705.00

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NO.	DESCRIPTION	DATE
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6		
5		
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1		

Ward Edwards
ENGINEERING

P.O. BOX 381, BLUEFORD, SOUTH CAROLINA 29910
PH: (803) 837-5350 / FAX: (803) 837-2356
WWW.WARDEDWARDS.COM







PLANTATION BUSINESS PARK
BEAUFORT COUNTY, SOUTH CAROLINA
BEAUFORT COUNTY, SOUTH CAROLINA
INSPECTION EXHIBIT

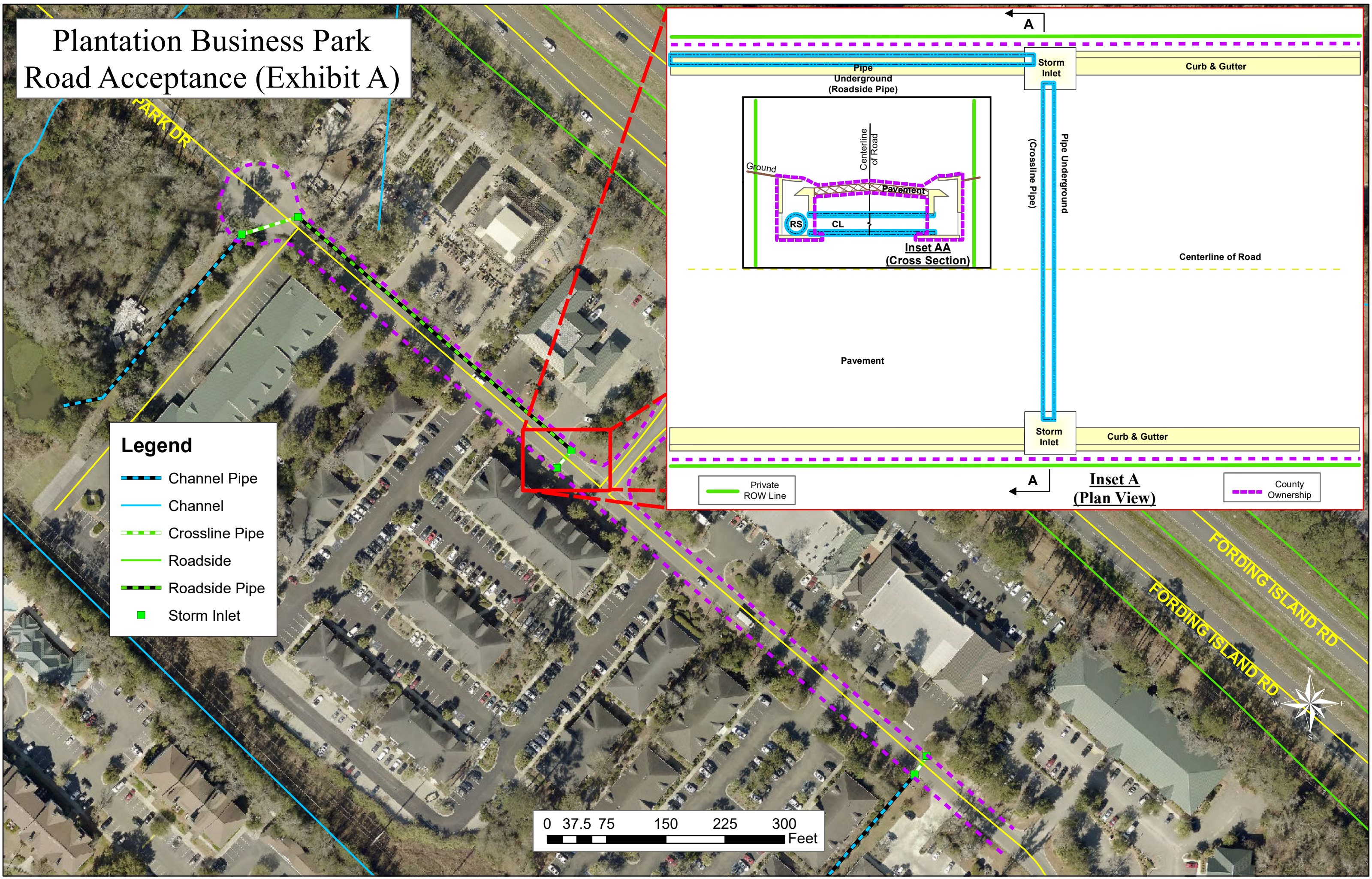
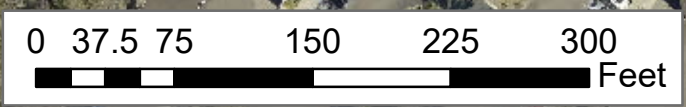
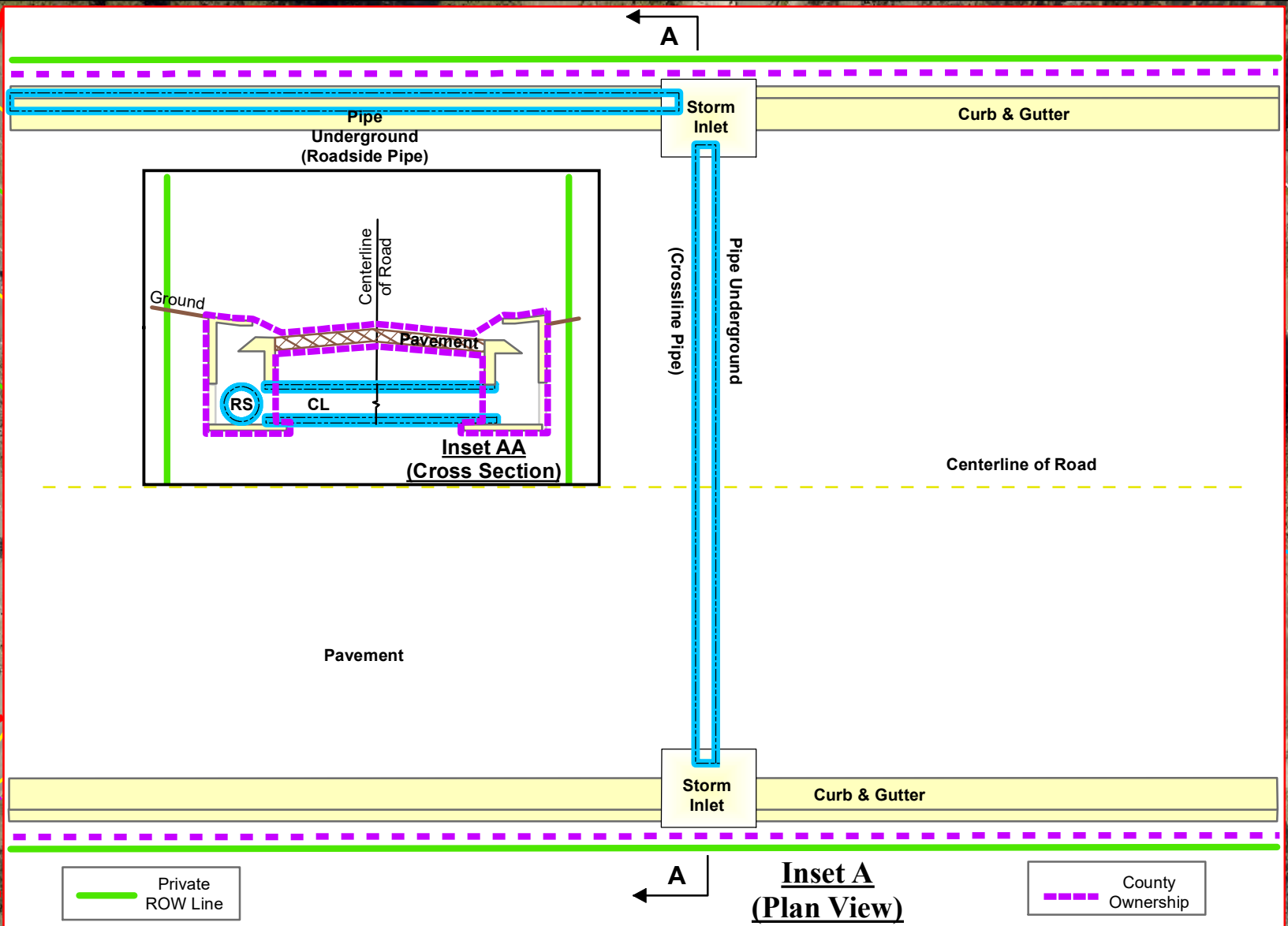
PROJECT #:	150251
DATE:	2/01/16
DESIGNED BY:	RDB
CHECKED BY:	PRM
SCALE:	1"=60'

SHEET
EX.01







IF THIS SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

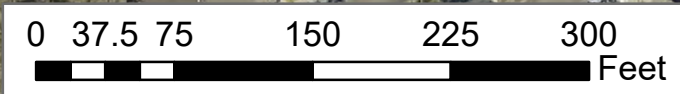
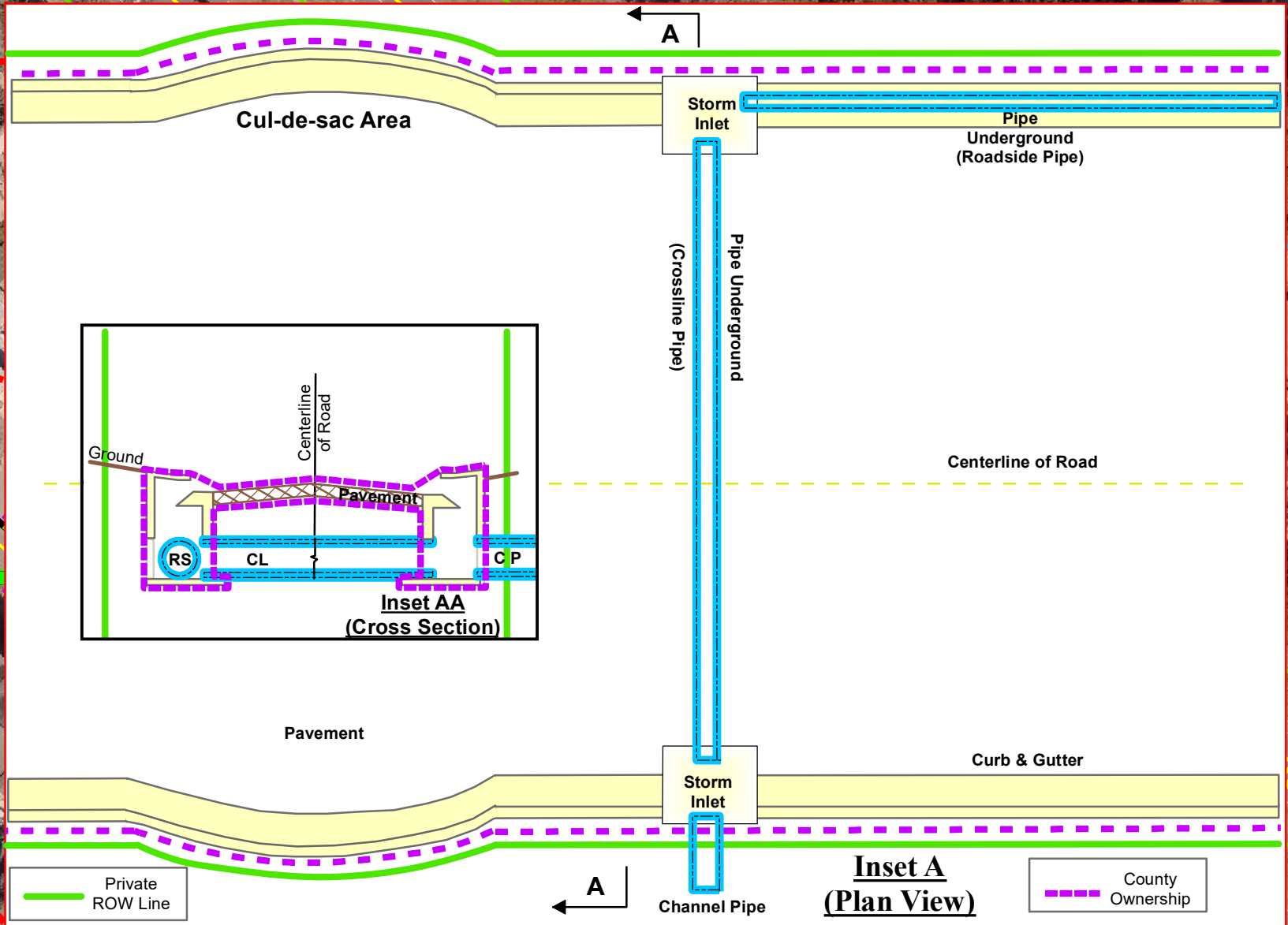
Plantation Business Park Road Acceptance (Exhibit A)

- Legend**
-  Channel Pipe
 -  Channel
 -  Crossline Pipe
 -  Roadside
 -  Roadside Pipe
 -  Storm Inlet









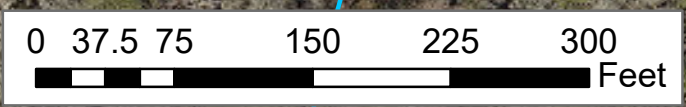
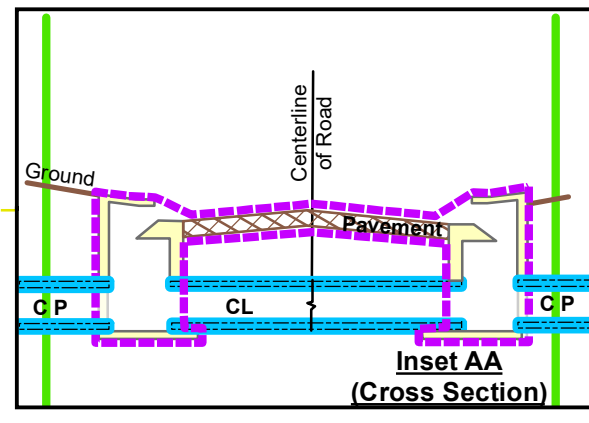
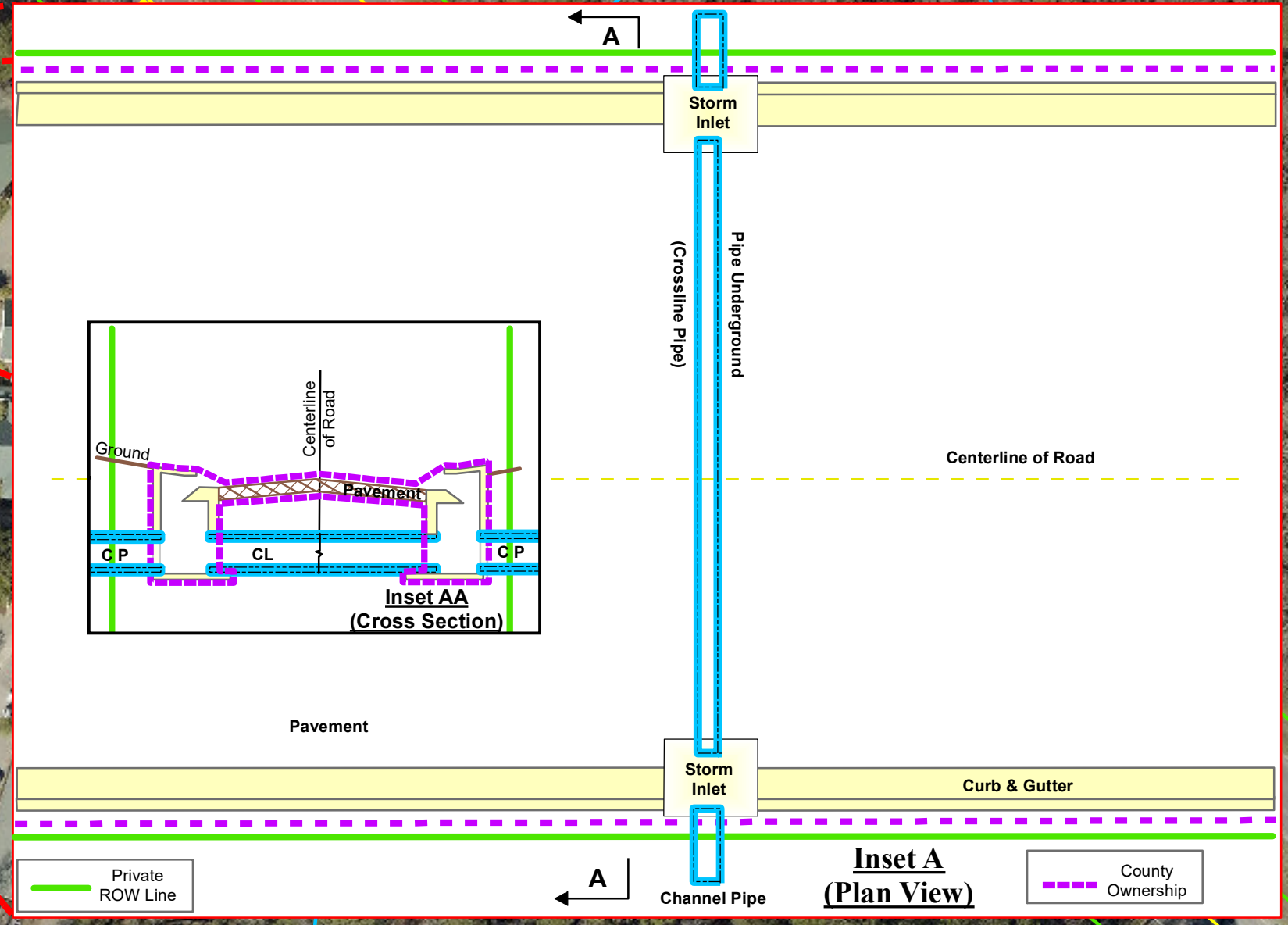
Plantation Business Park Road Acceptance (Exhibit B)

- Legend**
-  Channel Pipe
 -  Channel
 -  Crossline Pipe
 -  Roadside
 -  Roadside Pipe
 -  Storm Inlet









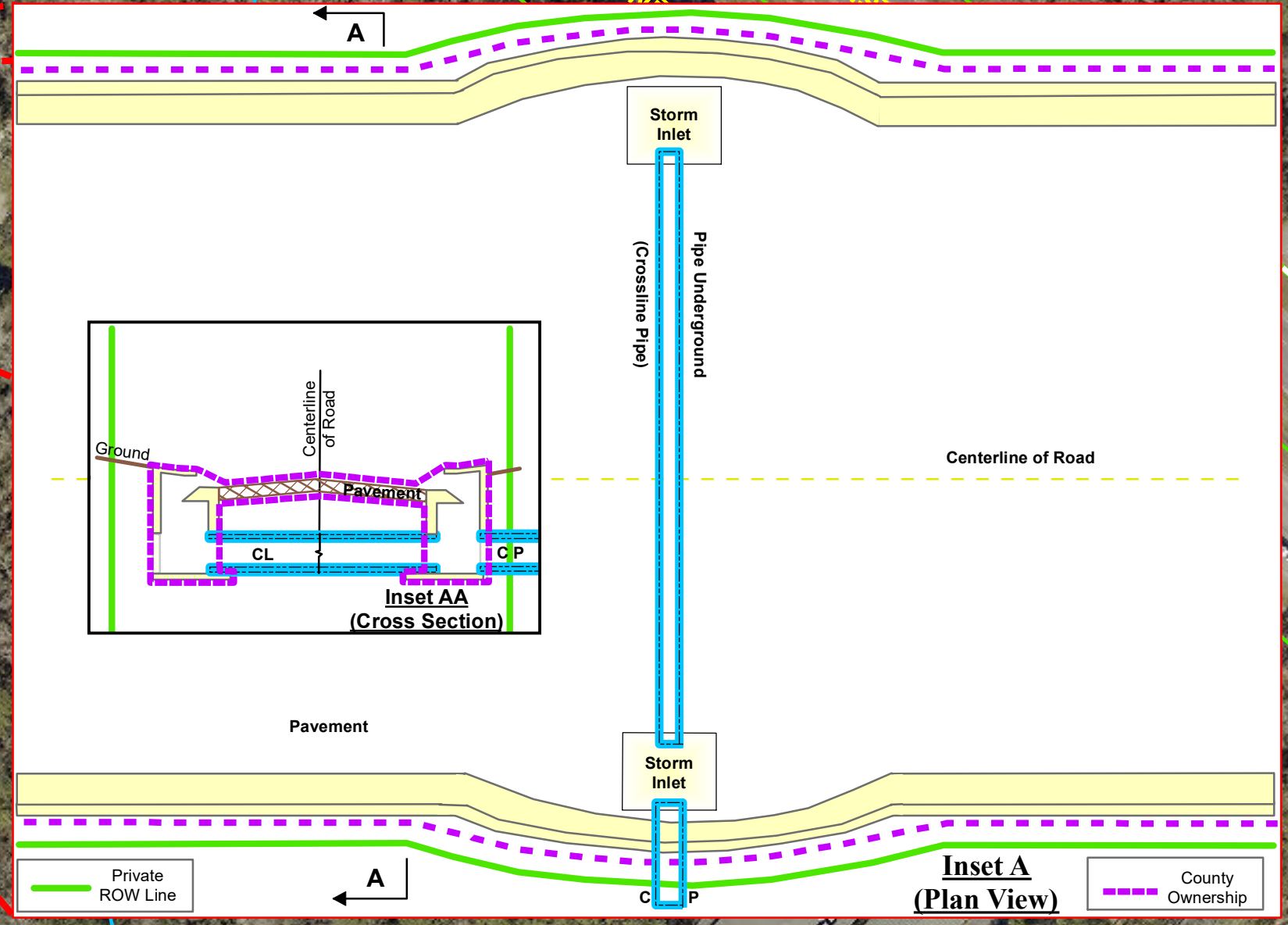
Plantation Business Park Road Acceptance (Exhibit C)

- Legend**
-  Channel Pipe
 -  Channel
 -  Crossline Pipe
 -  Roadside
 -  Roadside Pipe
 -  Storm Inlet



Plantation Business Park Road Acceptance (Exhibit D)

- Legend**
-  Channel Pipe
 -  Channel
 -  Crossline Pipe
 -  Roadside
 -  Roadside Pipe
 -  Storm Inlet



Topic: Plantation Business Park Documents
Date Submitted: May 15, 2017
Submitted By: Tabor Vaux
Venue: Public Facilities Committee

TURNER ELECTRICAL

OF SOUTH CAROLINA, INC.

ELECTRICAL CONTRACTORS

December 28, 2015

Mr. Gary Kubic
Beaufort County Administration
100 Ribaut Rd
Beaufort, SC 29902

RE: Plantation Park Drive

Dear Gary,

As you know I represent the POA, as President, of Plantation Business Park.


We have been discussing with the County for several years the ownership of our frontage road, Plantation Park Drive.

I know you understand the issues well however I would like to bring to your attention, once again the following facts.

1. We always thought that the County owned Plantation Park Drive. We never received a tax bill or any other document showing ownership to our POA. It was only after calling the County about a drain line issue that we were informed that the County did not own the road.
2. Eric Klatt, on December 11, 2013, asked us to find the developer and get title to the road so that the deed could be transferred to the County. (Email attached)
3. We granted a right of way for the connector roads leading to Simmonsville and Buck Island Roads. We did this thinking that the County already owned our road. If we knew otherwise we would have made the ownership of the road a condition.
4. The County spent hundreds of thousands of dollars to build County owned roads that connect to Plantation Park Drive thus making a frontage road to ease traffic on a congested 278.
5. Each week there are thousands of cars, owned by County residents, which use our road as a frontage road.
6. Our property owners contribute approximately \$750,000.00 in tax revenue each year.
7. The excuse that has been used not to incorporate our road is a broken drain line. In good faith, we have had this line repaired.

We all thank you and look forward to a deed transfer in this New Year.

Yours Truly,


Michael J. Turner

41 PLANTATION PARK DR. SUITE 200
BLUFFTON, SC 29910
(843) 757-4111 - FAX (843) 757-4113

1801 AVENUE F.
N. CHARLESTON, SC 29405
(843) 793-3706 - FAX (843) 793-3707

Michael Hawanczak

From: Eric, Klatt <eklatt@bcgov.net>
Sent: Wednesday, December 11, 2013 8:47 AM
To: 'Michael Hawanczak'
Subject: RE: Plantation Business Park

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Red Category

Michael,

Please have the President of the POA write a letter, addressed to me, formally requesting that the Plantation Business Park road(s) be accepted by Beaufort County. The letter should be accompanied by a quit claim deed conveying the road(s) to the County.

The request will then be placed on the Public Facilities Committee (PFC) meeting agenda. If the PFC agrees that the road should be accepted, the request will then sent to County Council for final approval. If the road is not accepted, I will return the deed to you.

As soon as it becomes available, I will send you information regarding the date and time of the PFC meeting.

Eric Klatt
Beaufort County Engineering Div.
P.O. Box 1228
Beaufort, SC 29901-1228

From: Michael Hawanczak [<mailto:diamondmanagement@hargray.com>]
Sent: Tuesday, December 10, 2013 9:05 AM
To: Eric, Klatt
Cc: Mike@turnerelectrical.net
Subject: Plantation Business Park

Eric:

You have had past email discussions with myself and the President of the Plantation Business Park, Mr. Mike Turner, regarding the turnover of the road at Plantation Business Park to the County. We all thought this had been done many years ago but no official record of the transfer could be found. We now have had the road quit claimed to the Plantation Business Park POA by the original developer. How do we proceed with making the transfer to the County?

Michael Hawanczak CMCA, AMS

Diamond Management, Inc.
P.O. Box 1836
Bluffton, SC 29910 (843)815-6540 Office 815-6541 Fax

Office Location : 10-C Johnston Way, Bluffton Village

PLANTATION BUSINESS PARK – ROAD/DRAINAGE POINTS

For purposes of this discussion, the road and drainage easements are considered as one.

1. In our discussions with County officials Mr. Eric Klatt stated he would put this item on the agenda of the Public Facilities meeting and we send him a quit claim deed for the road as per his instructions. These discussions took place approximately 2 years ago. Research then determined that the original developer apparently did not convey the road to the POA. After tracking down the development company, which ceased to exist many years ago, the one principal of the company was sure that the conveyance was done at the same time as the landscape buffers but no recorded or unrecorded instrument could be found by him or his attorney. It is hard to convey title to road if you do not own it, therefore his attorney did a quit claim deed to the POA and then the POA did one to the County.

* If the actual owner of the road was the original developer, that company was shuttered years ago, who and where did the tax bill go?
Based on County procedure, the County should have taken it or sold it for past due taxes years ago.

* The POA has never received correspondence from the County that we own the road.

* If we thought the County was going to reject the quit claim deed and road ownership, we never would have the road deeded to the POA.

2. Plantation Business Park would never have agreed to the connector road, as proposed, if it thought it was the owner of the road.

* The POA has never received a property tax bill for the road parcel when every year it receives one for the landscape buffer parcels on either end of the property.

* When the County negotiated to purchase/condemn the right of way through those landscape parcel buffers there was no mention of POA owning the road.

* If the POA owned the road, wouldn't the County have to negotiate some type of easement for the connector?

* The County has performed repairs on the drainage culverts, especially the one located at the convenience store, when damaged by large trucks.

* There are speed limit signs installed by the County on Plantation Park Drive.

* There are citations issued by Town Police on the road.

Topic: Plantation Business Park Documents
Date Submitted: May 15, 2017
Submitted By: Tabor Vaux
Venue: Public Facilities Committee

3. The County has either taken advantage of PBP or has dealt in bad faith. No reasonable person could justify why the Association would retain title to a road that became a major thoroughfare. The dollar amount of the yearly property taxes generated by Plantation Business Park is 25 times the cost of any repairs. Without the County owning the road, the POA sees nearly a zero return for the taxes in any service whatsoever.
-