

LOCKWOOD FOLLY POA STORM WATER PROJECT C2

Final Report 11-17-09

Purpose

This new drainage system will remove storm flood water from the landlocked area surrounding Pond #6 (Snake Island), as recommended by consultants HDR Engineering, for a 25 year storm. The 18" double walled PVC pipe system connects with an existing 24" galvanized pipe passing under #10 Fairway to Pond #23, and to recent project C1 improvements under Clubhouse Drive and to outfall #C.

Construction

The 18" pipe from a 4'x4' drop inlet control box in the southeast corner of pond #6 to a 3'x3' passes on LFCC property behind #8 green and under #9 tee and two cart path sections to a 3'x3' drop inlet box beside the tee. From there the pipe follows south down the west property line of lot #20 to Windward Village Lane. Here grated 3'x3' drop inlets each side of the road are connected by 18" concrete pipe angled southwest. PVC pipe is continued curving through lot #36A to a new 3'x3' drop inlet beside #10 fairway, attached to the old 24" galvanized pipe. All soil elevations were restored except locally for drop inlets. Hydroseed and sod were used for turf restoration. Marl was used to prepare for cart path and road repaving.

Project Cost Summary

Estimate	Hardee Enterprises Quote	Invoices	Payments
6-11-09	8-11-09		
\$52,448	\$50,822	\$20,000	\$20,000
		\$30,448	\$28,048
	Due on completion of paving	\$ 2,400	
	Hardee payments total	\$50,448	
	Additional Hydroseed	\$ 75	
	Project total	\$50,523	

Project Notes

- RipRap rock was estimated but found unnecessary due to very low pond levels.
 - Actual tree removal was (13) vs. the (50) estimated due to PVC pipe flexibility.
 - PVC pipe cost was \$19.75 vs. \$11.00 estimated.
 - Labor cost was lower than estimate, however some is included in item cost such as box patch (concrete sealing for pipe into boxes).
- Drainage pipe fall is approx. 5 ft. total or 0.5 % for the 870 ft. new pipe length.
Drop inlet elevation data has been provided to the POA. Pipe depth varies between (3) and (11) ft.
Some sod was provided by LFCC at #9 tee.

D.Mills



