# **CHANGE ORDER APPROVAL FORM**

PROJECT: Blackrock Road Corridor Improvements	CHANGE ORDER NUMBER:1
	DATE: 10-15-13
	CONTRACT NUMBER: CM2034
TO CONTRACTOR: Petticoat-Schmitt Civil Cont	tractors Inc.
Reason for Change Order: Reduction or elimination of pay item quatotal project cost of \$2,680,676.59. These design revisions are detailed in attached Exhibit B.	
Original Contract Sum	eement. \$00
Amount of This Change Order (Add/Deduct)	\$ (1,209,676.59)
New Contract Sum Including this Change Order	\$ 2,680,676.59
APPROVED BY: Scott Herring, Public Works Director	DATE: 10(15(13
APPROVED BY:  Ted Selby, County Manager	DATE: 11/4/13
APPROVED BY:  David Hallman, County Attorney	DATE:11-4-13
APPROVED BY: Daniel B. Leeper, Chair	DATE: <u>11-4-13</u>
ATTEST: John A. Crawford, Clerk of Courts	DATE: 11/6/13
ME	50.13

# Peters and Yaffee Analysis for Blackrock Road Bid Evaluation (Petticoat-Schmitt) "Exhibit A"

# **OPTION 1**

# **Cost Reduction Analysis**

#### A. Pavement Design Revision

Elimination of the Friction Course (FC-9.5)(1") and replace with Type (SP-9.5)(1") for travel lanes and driveways. This option also reduces the proposed Type (SP-9.5) from 1.5" to 1". The final pavement design will be 2" of Type (SP-9.5). This design option allows for 12' Travel Lanes, however changes the Pavement Design to accommodate the reduced Structural Number needed. The elimination of Friction Course is based on the proposed traffic volume per FDOT Flexible Pavement Design Manual 2008, Chapter 4 (Friction Course Policy).

#### B. Shoulder Pavement Revision

The option would eliminate the proposed paved shoulder for the Blackrock Road Project. This design option will provide an unpaved stabilized shoulder width of 2'. This design option does meet AASHTO's Guidance for minimum shoulder width requirement of 2'.

# C. Drainage Improvements Revision

With the elimination of the proposed paved shoulder the roadway improvements will tie into the existing ditch front slope. This approach would eliminate the need for the majority of the ditch regrading and sidedrain improvements. However, several cross-drains will need improvements in order to meet clear zone criteria. The improvements at Heron Isle Parkway will remain in place to accommodate the roadway widening.

# D. Sod Revision

This option would only use Performance Sod at the unpaved shoulders, proposed sidewalk locations and at drainage features. Performance Sod would also be provided at the areas disturbed due to shoulder construction and minor regrading.

#### E. Sidewalk Improvements Revision

If Options B and C are executed, a reduction in removing and constructing proposed sidewalk will occur. This will allow for much of the existing sidewalk to remain in place and reduce the amount of proposed sidewalk needed.

# F. First Coast Rail Road Improvements

This option would transition the roadway width using striping in order to utilize the existing typical section at the Rail Road Crossing.

With the revisions for the above Cost Reduction Items the *Project Grand Total* = \$2,680,676.59 based on Bid pricing submitted by Petticoat-Schmitt Construction.

PROJECT: LOCATION: BID NUMBER BID OPENING DATE:

BLACKROCK ROAD CORRIDOR IMPROVEMENTS YULEE, FLORIDA NC13-035 WEDNESDAY, SEPTEMBER 11, 2013

COST REDUCTION ANALYSIS - OPTION 1 "EXHIBIT B"

SID OPENING DATE:		WEDNESDAY, SEPTEMBER 11, 2013		EST.	Engineer's Estimate		[Low Bidder]		
			UNIT	QUAN.		TOTAL AMOUNT		OTAL AMOUNT	Cost Differential
1	101-1	MOBILIZATION	LS	1	\$50,000.00	\$50,000.00		\$280,000.00	
2	102-1	MAINTENANCE OF TRAFFIC	LS	1	\$25,000.00	\$25,000.00		\$80,000.00	
3	104-10-2	HAY BALES	EA	274	\$8.50	\$2,329.00		\$5,301.90	
4	104-10-3	SEDIMENT BARRIER	LF	6933	\$0.87	\$6,031,71		\$10,399.50	
5	104-11	FLOATING TURBIDITY BARRIER	LF	549	\$3.50	\$1,921.50		\$7,274.25	
6	110-1-1	CLEARING & GRUBBING	LS	1	\$17,500.00	\$17,500.00		\$125,000.00	
7		REMOVAL OF EXISTING CONCRETE PAVEMENT	SY	1271	\$5.50	\$6,990.50		\$9,024.10	
8		MAILBOX, F&I SINGLE	EA	50	\$129.08			\$6,250.00	
9	120-1	REGULAR EXCAVATION	CY	3907.5	\$5.57			\$27,938.63	
10	120-6	EMBANKMENT	CY	5979	\$6.83			\$32,884.50	
11	160-4	TYPE B STABILIZATION	SY	8695	\$2.58			\$44,689.73	
12	285-701	OPTIONAL BASE (BASE GROUP 1) (4° LIMEROCK) (LBR 100)	SY	1250	\$5.25			\$12,187.50	
13	285-703	OPTIONAL BASE (BASE GROUP 3) (5.5" LIMEROCK) (LBR 100)	SY	1970	\$8.25			\$23,443.00	
14	285-706	OPTIONAL BASE (BASE GROUP 6) (8" LIMEROCK) (LBR 100)	SY	1720	\$10.04			\$23,048.00	
15	300-1	FULL DEPTH RECLAMATION (PULVERIZATION)	SY	29125	\$1.85			\$275,231.25	
16	300-2	CEMENT TREATED BASE	TN	219	\$72.00			\$35,478.00	
17		EMULSION	GAL	93200	\$1.35			\$251,640 00	
18		BASE MATERIALS (LIMEROCK OR CRUSHED CONCRETE)	CY	1170	\$60.00			\$97,110.00	
19	334-1-13	SUPERPAVE ASPH. CONC. (TRAFFIC C) (SP-9.5)	TN	3658.5	\$84.79			\$343,898.44	
20	337-7-42	ASPHALT CONC. FRICTION COURSE (TRAFFIC C) (FC-9.5) (PG 76-22) (1")	TN	0	\$96.50			\$0.00	
21	339-1	MISCELLANEOUS ASPHALT PAVEMENT	TN	24.4	\$121.44			\$6,344.00	
22		INLETS, DT BOT, TYPE C, <10'	EA	1	\$1,864.01			\$1,495.00	
23	425-1-541	INLETS, DT BOT, TYPE D, <10'	EA	7	\$2,520.33			\$14,700.00	
24	425-1-551	INLETS, DT BOT, TYPE E. <10"	EA	4	\$2,787.97			\$8,140.00	
25	425-1-581	INLETS, DT BOT, TYPE H, <10"	EA	2	\$5,188.02			\$5,740.00	
26	425-2-91	MANHOLE, J-8, <10	EA	1	\$4,734.63			\$4,920.00	
27		PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 18"SD	LF	62	\$41.83			\$1,984.00	
28		PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELLIP/ARCH, 18°SD	LF	83	\$50.46			\$3,187.20	
29		PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 24°SD	LF	32	\$49.42			\$4,132.80	
30		PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELLIP/ARCH, 24°SD	LF	219	\$41.35			\$11,826.00	
31		PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELLIPFARCH, 30°SD	LF	0	\$54.55			\$0.00	
32		PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 18" S/CD	LF	87	\$41.83			\$2,697.00	
33		PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELLIP/ARCH, 18" S/CD	LF	686	\$40.98			\$30,527.00	
34		PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 24°S/CD	LF	55	\$54.23			\$2,667.50	
35		PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELLIP/ARCH, 24"S/CD	LF LF	792	\$56.99			\$47,124.00	
36		PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 30" S/CD		211	\$58.04			\$13,187.50	
37	430-175-230	PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELLIPIARCH, 30°S/CD	LF	271	\$73.74			\$32,520.00	
38	430-963-2	PVC PIPE, FOR BACK OF SIDEWALK, NON STANDARD DIAMETER	LF	57	\$27.40			\$1,510.50	
39		MITERED END SECTION, OPTIONAL -ELLIPTICAL / ARCH, 30° CD	EA	2	\$1,451.28			\$5,080.00	
40	430-984-125	MITERED END SECTION, OPTIONAL ROUND, 18" SD	EA	4	\$772.05			\$4,300.00	
41		MITERED END SECTION, OPTIONAL -ELLIPTICAL / ARCH, 18° SD	EA	4	\$801.25			\$4,580.00	
42		MITERED END SECTION, OPTIONAL ROUND, 24° SD	EA	2	\$881.13			\$2,730.00	
43	430-984-629	MITERED END SECTION, OPTIONAL -ELLIPTICAL / ARCH, 24" SD	EA	10	\$1,388.56			\$20,800.00	
44		MITERED END SECTION, OPTIONAL -ELLIPTICAL / ARCH, 30" SD	EA	0	\$1,452.65			\$0.00	
45	515-2-321	PED/BICYCLE RAILING, ALUMINIUM ONLY, 54", TYPE I	LF	364.5	\$71.00			\$29,706.75	
46	520-1-8	CONCRETE CURB AND GUTTER, RIBBON CURB	LF	107	\$22.30			\$2,541.25	
47	520-1-10	CONCRETE CURB AND GUTTER, TYPE F	LF	62	\$13.12			\$1,255.50	
48	522-1	SIDEWALK CONC. (4" THICK)	SY	1703	\$26.97			\$53,218.75	
49	522-2	SIDEWALK CONC. (6" THICK)	SY	390	\$34.92			\$13,650.00	
50	524-1-2	CONCRETE DITCH PAVEMENT, NON REINFORCED, 4"	SY	125	\$41.89			\$5,343.79	
51	527-1	DETECTABLE WARNING ON WALKING SURFACE, RETROFIT	EA	17	\$403.78			\$8,245.00	
52	530-3-4	RUBBLE RIPRAP, DITCH LINING	TN	4.0	\$55.34			\$1,040.00	
53	536-1-1	GUARDRAIL, ROADWAY	LF	475	\$16.08			\$10,925.00	
54	536-73	GUARDRAIL, REMOVE	LF	326	\$1.62	\$528.12	\$4.25	\$1,385.50	\$857

Contract Management Prepared by: Charlotte J. Young Report Date: 12/13/2012

PROJECT: LOCATION: BID NUMBER BID OPENING DATE:

BLACKROCK ROAD CORRIDOR IMPROVEMENTS YULEE, FLORIDA NC13-035 WEDNESDAY, SEPTEMBER 11, 2013

COST REDUCTION ANALYSIS - OPTION 1 "EXHIBIT B"

				EST.	Engineer's Estimate UNIT PRICE TOTAL AMOUNT		[Low Bidder]		
ce T	500.0	TOWNSON PROPER MICHOSOF LOCATION CO.	UNIT	QUAN.					Cost Differential
55 56	536-8 536-85-24	GUARDRAIL, BRIDGE ANCHORAGE ASSEMBLY, F&I GUARDRAIL END ANCHORAGE ASSEMBLY, PARALLEL	EA EA	4	\$1,797.42	\$7,189.68	\$2,065.00	\$8,260.00	
57	550-10-220	FENCING, TYPE B, 5.1'-6.0', STANDARD	LF	257	\$1,900.12	\$7,600.48	\$1,900.00	\$7,600.00	
58	550-60-223	FENCE GATE, TYPE B, DOUBLE, 12.1'-18.0' OPENING	EA	2	\$1,200.00	\$2,647.10	\$11.00	\$2,827.00	
59	570-1-2	PERFORMANCE TURF, SOD	SY	7289				\$1,750.00	
60	580-1	LANDSCAPE, COMPLETE (TREE PROTECTION)	LS	1 1	\$1.97 \$1.500.00	\$14,359.33 \$1,500.00	\$2.19 \$1,365.00	\$15,962.91 \$1,365.00	
00	300-1		LS	1	31,500.00	\$1,500.00	\$1,365.00	\$1,365.00	-\$135.00
		Signing and Pavement Markings Base Bid							
61	700-20-11	SINGLE POST SIGN, F&I, LESS THAN 12 SF	AS	7	\$253.17	\$1,772.19		\$1,820.00	
62	700-20-12	SINGLE POST SIGN, F&I, 12-20 SF	AS	2	\$679.11	\$1,358.22		\$900.00	
63	700-20-40	SINGLE POST SIGN (RELOCATE)	AS	27	\$84.35	\$2,277.45		\$1,775.25	
64	700-20-60	SINGLE POST SIGN (REMOVE)	AS	2	\$19.16	\$38.32		\$2.10	
65	700-48-18	SIGN PANELS, F&I, 15 OR <	EA	9	\$311.70	\$2,805.30		\$990.00	
66	700-48-48	SIGN PANELS RELOCATE, 15 OR <	EA	22	\$74.79	\$1,645.38		\$1,122.00	
67	700-48-58	SIGN PANELS REPLACE, 15 OR LESS	EA	16	\$91.00	\$1,456.00		\$1,592.00	
68	700-43-60	SIGN PANELS, REMOVE	EA	2	\$115.33	\$230.66		\$29.70	
69	705-10-2	OBJECT MARKER (TYPE 2)	EA	4	\$152.24	\$608.96		\$564.00	
70	706-3	RETRO-REFLECTIVE PAVEMENT MARKER (BI-DIRECTIONAL) (YELLOW)	EA	468	\$3.23	\$1,511.64		\$1,942.20	
71	706-3	RETRO-REFLECTIVE PAVEMENT MARKER (MONO-DIRECTIONAL) (YELLOW)	EA	51	\$3.23	\$164.73		\$211,65	
72	706-3	RETRO-REFLECTIVE PAVEMENT MARKER (BI-DIRECTIONAL) (WHITE/RED)	EA	16	\$3.23	\$51.68		\$66.40	
73	706-3	RETRO-REFLECTIVE PAVEMENT MARKER (BI-DIRECTIONAL) (BLUE)	EA	7	\$3.23	\$22.61	\$4.15	\$29.05	
74	711-11-111	THERMOPLASTIC, STANDARD, WHITE, SOLID, 6"	NM	3.833	\$3,807.78	\$14,595.22		\$21,196.49	
75	711-11-112	THERMOPLASTIC, STANDARD, WHITE, SOLID, 8°	NM	0.064	\$4,250.00	\$272.00		\$460.80	
76	711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12"	LF	1057	\$1.57	\$1,659.49		\$2,272.55	
77	711-11-124	THERMOPLASTIC, STANDARD, WHITE, SOLID, 18"	LF	35	\$2.36	\$82.60		\$140.00	
78	711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24"	LF	390	\$3.58	\$1,396.20		\$2,145.00	
79	711-11-170	THERMOPLASTIC, STANDARD, WHITE, SOLID, ARROW	EA	5	\$55.34	\$276.70		\$408.00	
80	711-11-211	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 6"	NM	1.941	\$3,806.69	\$7,388.79		\$10,733.73	
81	711-11-224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18"	LF	328	\$10.15	\$3,329.20		\$1,312.00	
82	711-11-231	THERMOPLASTIC, STANDARD, YELLOW, 10-30 SKIP, 6"	GM	1.446	\$1;749.84	\$2,530.27		\$2,458.20	
83	711-11-251	THERMOPLASTIC, STANDARD, YELLOW, GUIDELINE, 6"	LF	776	\$0.88	\$682.88	\$1.45	\$1,125.20	\$442.3
		GRS-IBS Bridge Base Bid							
84	110-3A	REMOVAL OF EXISTING STRUCTURE	LS	1	\$5,000.00	\$5,000.00	\$15,663.07	\$15,663.07	\$10,663.0
85	110-3B	EXISTING PEDESTRIAN BRIDGE RELOCATION	LS	1	\$5,000.00	\$5,000.00	\$10,300.00	\$10,300.00	
86	120-72	GRAVEL FILL (SELECT BACKFILL)	CY	1450	\$41.56	\$60,262.00	\$45.00	\$65,250.00	\$4,988.0
87	400-2-4	CONC CLAS II (SUPERSTRUCTURE)	CY	30.2	\$489.24	\$14,775.05	\$710.00	\$21,442.00	\$6,666.9
88	400-2-10	CONC CLASS II (APPROACH SLABS)	CY	2.2	\$300.46	\$661,01	\$710.00	\$1,562.00	
89	415-1-4	REINF STEEL (SUPERSTRUCTURE)	LB	5305	\$0.76	\$4,031.80	\$2.10	\$11,140.50	
90	415-1-9	REINF STEEL (APPROACH SLABS)	LB	420	\$0.89	\$373.80		\$882.00	
91	450-3-15	15 INCH PRESTRESSED SLAB UNITS (15" X 48")	LF	352	\$160.00	\$56,320.00	\$220.00	\$77,440.00	\$21,120.0
92	450-3-95	15 INCH PRESTRESSED SLAB UNITS (15" X 30.5")	LF	88	\$159.00	\$13,992.00		\$25,080,00	
93	458-1-11	BRIDGE DECK EXPANSION JOINT, POURED JOINT	LF	23	\$25.00	\$575.00	\$23.00	\$529.00	
94	521-5-1	CONCRETE TRAFFIC RAILING-BRIDGE (32" F-SHAPE)	LF	88	\$71.74	\$6,313.12	\$103.00	\$9,064.00	
95	530-3-3	RIPRAP, RUBBLE, BANK AND SHORE	TN	340	\$70.79	\$24,068.60		\$34,000.00	
96	530-74	BEDDING STONE	TN	170	\$60.70	\$10,319.00		\$11,560.00	
97	549-2	GRS BRIDGE ABUTMENT	SF	2340	\$26.00	\$60,840.00	\$110.00	\$257,400.00	\$196,560.0
	SE BID (ITEMS					\$1,475,373.17		\$2,680,676.55	
		PART I - WATER MAIN CONSTRUCTION							
JEA-1		MOBILIZATION	LS	1			\$9,000.00	\$9,000.00	
JEA-2		SITE PREPARATION	LS	1			\$5,000.00	\$5,000.00	
JEA-3		MAINTENANCE OF TRAFFIC	LS	1			\$4,500.00	\$4,500.00	
JEA-4		FIRE HYDRANT	EA	4			\$2,700.00	\$10,800.00	
JEA-5		WATER MAIN, PVC, 6°	LF	28			\$135.00	\$3,780.00	
JEA-6		GATE VALVE - 6"	EA	4			\$885.00	\$3,540.00	

Contract Management Prepared by: Charlotte J. Young Report Date: 12/13/2012

BLACKROCK ROAD CORRIDOR IMPROVEMENTS YULEE, FLORIDA NC13-035

PROJECT: LOCATION: BID NUMBER BID OPENING

COST REDUCTION ANALYSIS - OPTION 1 "EXHIBIT B"

BID OPENING DATE:	WEDNESDAY, SEPTEMBER 11, 2013								
		UNIT	QUAN.	Engineer's Estimate		[Low Bidder]			
				UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	Cost Differential	
JEA-7	ADJUST VALVE AND COVER	EA	11			\$300.00	\$3,300.00		
JEA-8	RESTRAINED JOINTS - 6"	EA	8			\$235.00	\$1,880.00		
JEA-9	RELOCATE WATER METER	EA	5			\$870.00	\$4,350.00		
	SUBTOTAL - PART I WATER MAIN CONSTRUCTION:						\$46,150.00		
	SWA_Account						\$1,000.00		
	TOTAL - PART I WATER MAIN CONSTRUCTION:						\$47,150.00		
	PART II - SEWER MAIN CONSTRUCTION								
JEA-10	SANITARY FORCEMAIN, PVC, 6"	LF	14			\$63.00	\$882.00		
JEA-11	SANITARY FORCEMAIN, PVC, 10"	LF	2680			\$20.00	\$53,600,00		
JEA-12	45° BEND - 10"	EA	10			\$685 00	\$6,850.00		
JEA-13	10"x6" TEE	EA	1			\$920.00	\$920.00		
JEA-14	GATE VALVE - 6"	EA	1			\$1,410.00	\$1,410.00		
JEA-15	GATE VALVE - 10°	EA	6			\$1,810.00	\$10,860.00		
JEA-16	AIR RELEASE VALVE	EA	1			\$3,965.00	\$3,965,00		
JEA-17	6" CUT-IN SLEEVE	EA	1			\$1,275,00	\$1,275.00		
JEA-18	10" CUT-IN SLEEVE	EA	3			\$1,640.00	\$4,920.00		
JEA-19	10" PLUG	EA	4			\$560.00	\$2,240.00		
JEA-20	RESTRAINED JOINTS - 10"	EA	65			\$210.00	\$13,650.00		
JEA-21	RESTRAINED JOINTS - 6"	EA	2			\$94.00	\$188.00		
JEA-22	SANITARY FORCEMAIN, 6", REMOVAL	LF	11			\$18.50	\$203.50		
JEA-23	SANITARY FORCEMAIN, 10", REMOVAL	LF	2685			\$7.50	\$20,137.50		
JEA-24	5000 GALLON PUMP TRUCK (6 HRS. PER CONFLICT)	HR	48			\$330.00	\$15,840.00		
	SUBTOTAL - PART II SEWER MAIN CONSTRUCTION:						\$136,941.00		
	SWA Account						\$8,000.00		
	TOTAL - PART II SEWER MAIN CONSTRUCTION:		1				\$144,941.00		
	RECAPITULATION								
	BASE BID (NASSAU COUNTY)				\$1,475,373,17		\$2,680,676,59	\$1,205,303.4	
	TOTAL - PART I WATER MAIN CONSTRUCTION:		1				\$47,150.00		
	TOTAL - PART II SEWER MAIN CONSTRUCTION:			1			\$144,941.00		
	TOTAL JEA_ALTERNATE BID						\$192,091.00		
	TOTAL BASE BID PLUS JEA ALTERNATE BID						\$2,872,767,59	i	