

# COUNTY COUNCIL OF BEAUFORT COUNTY

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BEAUFORT, SOUTH CAROLINA 29901-1228  
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JOSHUA A. GRUBER  
COUNTY ATTORNEY

SUZANNE M. RAINEY  
CLERK TO COUNCIL

## AGENDA PUBLIC FACILITIES COMMITTEE Monday, December 16, 2013 2:00 p.m. Conference Room, Building 2 Beaufort Industrial Village 102 Industrial Village Road, Beaufort

### Committee Members:

Gerald Dawson, Chairman  
Steve Fobes, Vice Chairman  
Cynthia Bensch  
Rick Caporale  
Brian Flewelling  
William McBride  
Jerry Stewart

### Staff Support:

Rob McFee, Division Director

### 1. CALL TO ORDER – 2:00 P.M.

### 2. DISCUSSION ITEMS

- A. Palmetto Electric Cooperative (PEC) Agreement for Bluffton Parkway Phase 5A Segment ([backup](#))
- B. Change Order #4 for Bluffton Parkway Phase 5A Segment 2 Construction ([backup](#))
- C. Change Order #12 for SC Highway 170 Widening ([backup](#))

### 3. ADJOURNMENT





COUNTY COUNCIL OF BEAUFORT COUNTY  
BEAUFORT COUNTY ENGINEERING DIVISION

Building 3, 102 Industrial Village Road  
Post Office Drawer 1228, Beaufort, SC 29901-1228  
Phone: (843) 225-2700 Fax: (843) 225-9420

TO: Councilman Gerald Dawson, Chairman, Public Facilities Committee

VIA: Gary Kubic, County Administrator  
Bryan Hill, Deputy County Administrator  
Alicia Holland, Chief Financial Officer  
Robert McFee, Director of Engineering and Infrastructure  
Monica Spells, Compliance Officer  
Dave Thomas, Purchasing Director

FROM: Colin Kinton, County Traffic & Transportation Engineer

SUBJ: **PALMETTO ELECTRIC COOPERATIVE (PEC) AGREEMENT  
FOR BLUFFTON PARKWAY PHASE 5A SEGMENT 2**

DATE: December 2, 2013

**BACKGROUND.** Beaufort County has received an agreement from PEC for the relocation of their overhead electrical power lines located on the southern side of the Hilton Head Island causeway. The agreement will relocate PEC infrastructure as part of the construction of the Bluffton Parkway Phase 5A Segment 2 roadway/flyover bridges with a total estimated cost of \$267,150. Utility relocation costs for the Bluffton Parkway Phase 5 construction are paid for from sales tax project funds, Account #33401-54500.

**FOR ACTION.** Information only item presentation to the Public Facilities Committee on December 16, 2013.

**RECOMMENDATION.** The PEC utility relocation agreement for the Bluffton Parkway Phase 5A Segment 2 Sales Tax Project is presented for information only. No formal action is required. The relocation of utility infrastructure conflicts during the construction process is inherent to the utility's ownership and has to be completed by the utility.

CK/mjh

Attachment: PEC Utility Agreement

Contract/BP5ASeg2/PEC Utility Reloc



One Cooperative Way

Hardeeville, SC 29927-5123

843-208-5551

November 11, 2013

Rob McFee, PE  
Engineering Manager, Beaufort County  
South Carolina Department of Transportation  
102 Industrial Village Drive, Bldg. 3  
Beaufort, SC 29906

Re: Utility Agreement – Hilton Head Island Causeway

Dear Rob:

Please find enclosed the proposal for the relocation of the overhead electrical power lines located on the southern side of the Hilton Head Island Causeway. We are working with William Barrett on securing the necessary environmental permits and SCDOT on an encroachment permit adjacent to the new roadway for splice pit locations.

The updated estimate for this work is Two Hundred Sixty-seven Thousand One Hundred Fifty (\$267,150.00) Dollars.

Thank you for your assistance and cooperation regarding this matter. Please contact me at (843) 208-5508 or via email [bcasavant@palmetto.coop](mailto:bcasavant@palmetto.coop) if you have any questions or if I may be of further assistance.

Sincerely,

**PALMETTO ELECTRIC COOPERATIVE, INC.**

A handwritten signature in black ink, reading "Robert J. Casavant", with a long horizontal flourish extending to the right.

Robert J. Casavant, PE  
Manager, Engineering Services

RJC:sdr  
Encl.



Agreement # \_\_\_\_\_

### UTILITY AGREEMENT

S. C. File No. \_\_\_\_\_ Route (or Road No.) Bluffton Parkway 5A Causeway

F. A. Project No. \_\_\_\_\_ State Project No. \_\_\_\_\_

This Agreement made this 15th day of November, 2013, by and between Beaufort County, hereinafter called "County" and the

Palmetto Electric Cooperative, Inc. hereinafter called "Company".

### W I T N E S S E T H :

1. It is mutually agreed by and between the parties hereto that the Company shall perform or cause to be performed, the following work to its utility property facilities as shown on the attached plans and estimate:

General description: Remove Existing Overhead Power Line and Poles and replace with Underground Power Line.

All cable to be installed in conduit using Trenchless Boring Technologies from East Bound Ramp Station # 166+00 to MacKey Creek Bridge approximate Station # 194+00.

2. The Company hereby agrees to relocate its utility facilities in conflict with highway construction in accordance with the provisions set forth in the Federal Highway Administration's FAPG 23 CFR 645A; and also in accordance with the South Carolina Department of Transportation "A Policy for Accommodating Utilities on Highway Rights-of-Way" in the estimated amount of Two Hundred Sixty Seven Thousand One Hundred Dollars.

\$ 267,150.00.

County Share 100%

Utility Share 0%

- (a) The Company (☒does, ☐does not) have the right of occupancy in its existing location by reason of holding the fee, an easement, or other real property interest, the damaging or taking of which is compensable in eminent domain. If the Company does not have the right of occupancy in its existing location by reason of holding the fee, an easement or other real property interest, (Explain)

Existing Line was originally placed in service in 1954 to serve Hilton Head Island and has been maintained continually since.

Easement for this project is filed in Beaufort

(County)

Beaufort, SC

(City and State)

- (b) This section of line (for purposes of establishing right-of-way priorities only) has been in service for approximately 70 years or more.

- (c) Such work as is necessary to relocate, alter or maintain the facility will be done in such a manner that it will not in any way interfere with or endanger the safety of the general public in their use of the roads as a highway. Traffic control and signing will be coordinated with the County's contractor and will be in accordance with "The South Carolina Manual on Uniform Traffic Control Devices for Streets and Highways" (SCMUTCD).

3. The Company shall begin said work promptly upon notification in writing by the County or County agent and dispatch to its completion as promptly as is practicable. The Company shall provide advance notice to the County's Project Engineer or County agent of the date on which work is expected to begin.

4. The Company will perform the work provided for in this agreement by the method checked below, in accordance with the provisions of Sec.645.115 of FAPG 23 CFR 645A:

☒ ( X ) BY COMPANY'S REGULAR FORCES

☒ ( X ) BY CONTRACT: (State one of recognized reasons for necessity of performing work in this manner)

Trenchless boring requires specialized equipment and crews.

The Company, therefore, subject to prior approval, proposes to contract a portion of or all of the work covered by this agreement. The items of work to be accomplished by contract are noted in the estimate. Where the Company elects to solicit competitive bids from a list of qualified contractors rather than through advertising in a publication, the names and addresses of those contractors so circularized shall be noted on the estimate or furnished to the County or County agent in advance of the Company's solicitation of bids.

☐ ( ) BY EXISTING CONTINUING CONTRACT: Subject to prior approval and inspection by the County or County agent and the prior approval of the contract method by the Federal Highway Administration, the Company proposes to use an existing continuing contract under which it is demonstrated that such work is regularly performed for the Company under such contracts at reasonable costs. The provisions relating to contracts under this paragraph also apply to Contract Engineering.

5. The County will reimburse the utility company for costs incurred in accordance with the agreement as shown and on accurate records supporting all expenditures incurred on account of said work. The method of developing the relocation costs shall be one of the following alternatives.

☒ ( x ) (a) Actual and related direct costs accumulated in accordance with a work order accounting procedure prescribed by the applicable Federal or State regulatory body.

☐ ( ) (b) Unit costs, such as broad gauge units of property, as used in own operations. (This method must have prior approval.)

☐ ( ) (c) Lump Sum

The County may not pay for any item of work not provided for in the plan or in the cost estimate except as modified by the County Engineer or County agent followed by written notification to the County or County agent.

6. All work performed by the Company pursuant hereto, shall be performed according to the plans and estimates approved by the County or County agent.

7. Attached hereto, and by reference made a part hereof, is one copy of plans and estimates of the work to be performed by the Company showing the existing facilities, permanent changes to be made therein, and the stages by which these changes are to be accomplished.

8. Credits for accrued depreciation (expired service life) and/or betterment of the facility have been allowed as outlined in Sec.645.117(h) of FAPG 23 CFR 645A.

9. Periodic progress billings of incurred costs may be made by the Company to the County through the County agent not to exceed monthly intervals and amounting to at least \$2500.00; however, total progress billing payments shall not exceed the approved nonbetterment estimated amount.

Upon completion of the work and no later than six months thereafter, the Company shall, at the earliest date practicable, furnish the County or County agent with five (5) copies of its final and complete billing of all costs incurred in connection with the work performed hereunder, such statement to follow as closely as possible the order of the items contained in the estimate. The totals for labor, overhead construction cost, travel expense, transportation, equipment, material and supplies, handling cost and other services shall be shown in such a manner as will permit ready comparison with the approved plans and estimates. Items of materials shall be itemized where they represent major components.

Credit shall be given for usable materials recovered from permanent or temporary installations. The final billing shall show the description and site of the project, the Federal Aid Project Number if applicable, the date on which the first work was performed; or, if preliminary engineering or right-of-way items are involved, the date on which the earliest item of billed expense was incurred, the completion date and the location where the records and accounts billed can be audited. The Company shall make adequate reference in the billing to its records, accounts and other documents. Contractors and any subcontractors are to maintain all books, documents, papers, accounting records and other evidence pertaining to costs incurred and to make such materials available at their respective offices at all reasonable times during the contract for inspection by the County, County agent, Federal Highway Administration or any authorized representatives of the Federal or State Government and copies thereof shall be furnished if requested.

Final billings of incurred costs submitted by the Company shall carry a statement certifying that all items claimed have been reviewed and are in conformity with the provisions of the agreement; that credits have been given for all salvaged materials as required, and that all contractor's bills incurred have been paid in full. This statement shall be signed by an authorized representative of the Company.

In the event a final and complete billing has not been received by the County or County agent prior to six months following the completion of work and the Company has not during that period demonstrated to the County's or the County agent's satisfaction a hardship in completing that billing, the County may, in its sole discretion, consider the last payment made to be the final payment due under this Agreement.

10. The County, County Agent, and the Federal Highway Administration shall have the right to inspect recovered materials from the permanent facility prior to disposal by sale or scrap. This requirement will be satisfied by the Company giving notice to the County or County agent of the time and place the materials will be available for inspection. This notice is the responsibility of the Company and it may be held accountable for full value of materials disposed of without notice. The County, County agent, and the Federal Highway Administration shall have the right to inspect all recovered materials, which are not reusable by the Company, for temporary use. The Company shall furnish a listing on final billings of major items not eligible for salvage credit, and reasons therefor.

11. The Company will abide by the contract cost principles as set forth in FAPG 23 CFR 645A.

12. The Company will not participate directly or indirectly in any practice which subjects persons to discrimination because of their race, color, religion, sex or national origin.

COMPANY: PALMETTO ELECTRIC COOPERATIVE, INC.  
ADDRESS: ONE COOPERATIVE WAY  
HARDEEVILLE, SC 29927

SIGNATURE:



INSTRUCTIONS: Submit one copy of  
agreement form and six prints of drawings  
(or one reproducible print) showing present  
location and proposed location of poles or  
lines with reference to highway survey  
stations and centerline.

BY: ROBERT J. CASAVANT, P.E.  
TITLE: MANAGER, ENGINEERING SERVICES

BEAUFORT COUNTY

BY: \_\_\_\_\_

**DETAILED ESTIMATE OF DIRECT COST**

Beaufort County Bluffton Parkway 5A Flyover Causeway

S.C. File No. \_\_\_\_\_

Route \_\_\_\_\_

**I. DETAIL OF PRELIMINARY ENGINEERING:**

**ESTIMATE**

(a) Labor (8.5%)	\$	20,375.00
(b) Equip. and Mileage (PECI)		
(c) Other expenses (meals, lodgings, etc...)		
(d) Overhead:	(Percent)	
F.O.A.B.	Included in (a) above	
Federal Unemployment		
State Unemployment		
Worker's Compensation		
Public Liability		
Hospital Insurance		
Retirement		
Paid Leave and Holidays		

**II LABOR:**

(a) Temporary Installation		
(b) Removal		15,400.00
(c) Permanent Installation		124,900.00
(d) Other Expenses (Meals, lodgings, etc...)		
(e) Overhead:	(Percent)	
F.O.A.B.	Included in (b) and (c) above	
Federal Unemployment		
State Unemployment		
Worker's Compensation		
Public Liability		
Hospital Insurance		
Retirement		
Paid Leave and Holidays		
<u>Included in Unit Estimates</u>		

**III. MATERIALS:** (Itemize major components or list units)

(a) Temporary Installation		
(b) Permanent Installation		71,650.00
(c) Handling Costs	50%	35,825.00



IV. EQUIPMENT:

ESTIMATE

(a) Mileage and cost per mile (hour)

\_\_\_\_\_

V. RIGHT OF WAY:

(a) Labor

\_\_\_\_\_

(b) Transportation

\_\_\_\_\_

(c) Acquisition Cost

\_\_\_\_\_

(d) Other (meals, lodging, etc...)

\_\_\_\_\_

LESS CREDITS:

I. Betterment (show computations)

\$ \_\_\_\_\_

II. Extended Service Life  
(Show Computations)

\_\_\_\_\_

III. Salvage:

(a) Material recovered from:

1. Permanent Facility

\_\_\_\_\_

2. Temporary Facility

\_\_\_\_\_

(1,000.00)

NET COST OF ADJUSTMENT

267,150.00

Note: If estimate is made on the unit basis, attach separate listing showing unit, quantity, material cost, labor cost, and total for each unit. Show separate listing for temporary installation, removal and permanent installation. Labor on company records must be kept on daily basis showing hours worked and rates of pay.

Submit six copies with agreement.

LISTING OF CHANGES BY STATIONS

See attached plan and profile sheets for pole locations and units referring to stations

**PAGE 3 OF 7**

**SYSTEM:** PALMETTO ELECTRIC COOP.

[illegible]









## **Bluffton Parkway Phase 5A 166+00 to 194+00**

(1) Station 166+00

Splice (3) 750 cables, install (1) UG vault, remove pole and hardware (691-39-007)

Quantity	Description	Cost per Unit	Extended Cost
3	750 MCM Splices	\$ 195.00	\$ 585.00
1	Large Vaults for 750 MCM Cable	\$ 1,800.00	\$ 1,800.00
1	Remove Pole, Hardware & Riser	\$ 1,400.00	\$ 1,400.00
8	4 man UG crew	\$ 300.00	\$ 2,400.00
<b>Subtotal</b>		<b>\$</b>	<b>6,185.00</b>

(2) Station 166+00 to 169+00

Install (3) 750 cables and conduit, remove pole and hardware (691-39-006)

Quantity	Description	Cost per Unit	Extended Cost
300	(3) 750 15Kv Cables in 6.0" PE (bore)	\$ 77.50	\$ 23,250.00
1	Remove Pole, Wire,& Hardware	\$ 800.00	\$ 800.00
			\$ -
<b>Subtotal</b>		<b>\$</b>	<b>24,050.00</b>

(3) Station 169+00 to 171+50

Install (3) 750 cables and conduit, remove pole and hardware (691-39-005)

Quantity	Description	Cost per Unit	Extended Cost
250	(3) 750 15Kv Cables in 6.0" PE (bore)	\$ 77.50	\$ 19,375.00
1	Remove Pole, Wire,& Hardware	\$ 800.00	\$ 800.00
			\$ -
<b>Subtotal</b>		<b>\$</b>	<b>20,175.00</b>

(4) Station 171+50 to 173+80

Install (3) 750 cables and conduit, remove pole and hardware (691-39-004)

Quantity	Description	Cost per Unit	Extended Cost
250	(3) 750 15Kv Cables in 6.0" PE (bore)	\$ 77.50	\$ 19,375.00
1	Remove Pole, Wire,& Hardware	\$ 800.00	\$ 800.00
			\$ -
<b>Subtotal</b>		<b>\$</b>	<b>20,175.00</b>

(5) Station 173+80 to 176+20 --- Land Cables at 175+00

Install (3) 750 cables and conduit, splice cables, remove pole and hardware (691-39-003)

Quantity	Description	Cost per Unit	Extended Cost
250	(3) 750 15Kv Cables in 6.0" PE (bore)	\$ 77.50	\$ 19,375.00
1	Remove Pole, Wire,& Hardware	\$ 800.00	\$ 800.00
3	750 MCM Splices	\$ 195.00	\$ 585.00
			\$ -
<b>Subtotal</b>		<b>\$</b>	<b>20,760.00</b>

(6) Station 176+20 to 178+70

Install (3) 750 cables and conduit, remove pole and hardware (691-39-002)

Quantity	Description	Cost per Unit	Extended Cost
250	(3) 750 15Kv Cables in 6.0" PE (bore)	\$ 77.50	\$ 19,375.00
1	Remove Pole, Wire,& Hardware	\$ 800.00	\$ 800.00
			\$ -
<b>Subtotal</b>		<b>\$</b>	<b>20,175.00</b>

(7) Station 178+70 to 181+20

Install (3) 750 cables and conduit, remove pole and hardware (691-39-001)

Quantity	Description	Cost per Unit	Extended Cost
250	(3) 750 15Kv Cables in 6.0" PE (bore)	\$ 77.50	\$ 19,375.00
1	Remove Pole, Wire,& Hardware	\$ 800.00	\$ 800.00
			\$ -
		<b>Subtotal</b>	<b>\$ 20,175.00</b>

(8) Station 181+20 to 183+70 --- Land Cables at 183+00

Install (3) 750 cables and conduit, splice cables, remove pole and hardware (691-40-006)

Quantity	Description	Cost per Unit	Extended Cost
300	(3) 750 15Kv Cables in 6.0" PE (bore)	\$ 77.50	\$ 23,250.00
1	Remove Pole, Wire,& Hardware	\$ 800.00	\$ 800.00
3	750 MCM Splices	\$ 195.00	\$ 585.00
			\$ -
		<b>Subtotal</b>	<b>\$ 24,635.00</b>

(9) Station 183+70 to 186+20

Install (3) 750 cables and conduit, remove pole and hardware (691-40-004)

Quantity	Description	Cost per Unit	Extended Cost
250	(3) 750 15Kv Cables in 6.0" PE (bore)	\$ 77.50	\$ 19,375.00
1	Remove Pole, Wire,& Hardware	\$ 800.00	\$ 800.00
			\$ -
		<b>Subtotal</b>	<b>\$ 20,175.00</b>

(10) Station 186+20 to 188+70

Install (3) 750 cables and conduit, remove pole and hardware (691-40-003)

Quantity	Description	Cost per Unit	Extended Cost
250	(3) 750 15Kv Cables in 6.0" PE (bore)	\$ 77.50	\$ 19,375.00
1	Remove Pole, Wire, Riser & Hardware	\$ 1,400.00	\$ 1,400.00
			\$ -
		<b>Subtotal</b>	<b>\$ 20,775.00</b>

(11) Station 188+70 to 190+00 --- Land Cables at 189+50

Install (3) 750 cables and conduit, splice cables, remove pole and hardware (691-40-002)

Quantity	Description	Cost per Unit	Extended Cost
200	(3) 750 15Kv Cables in 6.0" PE (bore)	\$ 77.50	\$ 15,500.00
3	750 MCM Splices	\$ 195.00	\$ 585.00
1	Remove Pole, Wire,& Hardware	\$ 800.00	\$ 800.00
		<b>Subtotal</b>	<b>\$ 16,885.00</b>

(12) Station 189+50 to 194+00

Install (3) 750 MCM Cables and conduit, terminate in PMH-3 (691-40-001)

Quantity	Description	Cost per Unit	Extended Cost
450	(3) 750 15Kv Cables in 6.0" PE (bore)	\$ 77.50	\$ 34,875.00
3	750 MCM Stress Cones	\$ 195.00	\$ 585.00
8	4 man UG crew	\$ 300.00	\$ 2,400.00
		<b>Subtotal</b>	<b>\$ 37,860.00</b>

Cost of Install Labor	\$ 124,650.00
Cost of Retirement Labor	\$ 15,500.00
Cost of Material	\$ 72,000.00
Material Handling and Overhead (50%)	\$ 36,000.00
Salvage	\$ (1,000.00)
Estimated Engineering Cost (8%)	\$ 20,000.00
Estimated R-O-W Cost (0%)	\$ -
<b>TOTAL JOB COST</b>	<b>\$ 267,150.00</b>





COUNTY COUNCIL OF BEAUFORT COUNTY  
BEAUFORT COUNTY ENGINEERING DIVISION

Building 3, 102 Industrial Village Road  
Post Office Drawer 1228, Beaufort, SC 29901-1228  
Phone: (843) 225-2700 Fax: (843) 225-9420

TO: Councilman Gerald Dawson, Chairman, Public Facilities Committee

VIA: Gary Kubic, County Administrator  
Bryan Hill, Deputy County Administrator  
Alicia Holland, Chief Financial Officer  
Robert McFee, Director of Engineering & Infrastructure  
Monica Spells, Compliance Officer  
Dave Thomas, Purchasing Director

FROM: Colin Kinton, County Traffic & Transportation Engineer

SUBJ: **CHANGE ORDER # 4 FOR BLUFFTON PARKWAY PHASE 5A  
SEGMENT 2 CONSTRUCTION**

DATE: December 5, 2013

**BACKGROUND.** On 2/25/13, Beaufort County Council awarded a contract to R. R. Dawson Bridge Company, LLC, for the construction of Bluffton Parkway Phase 5a Segment 2 roadway and flyover bridges. The total contract award amount was \$36,665,629.96.

As part of the construction of the flyover bridges, a test shaft is constructed to better analyze foundation performance with present soil conditions. As a result of the test shaft load data, the design engineer and the construction manager have recommended that certain drill shafts be extended/lengthened. The contractor R. R. Dawson has provided Change Order #4 totaling \$482,201.85 for additional costs associated with the lengthening of the shafts. The extension of shafts is required to ensure safety and stability of the flyover bridge foundations.

This project is funded by the 1% Sales Tax Referendum and \$15,000,000 from the 2012 Federal Highway Match administered by SCDOT.

**FOR ACTION.** Information only item presentation to the Public Facilities Committee on December 16, 2013.

**RECOMMENDATION.** Change Order #4 is presented as any information only item. No formal action is required by either the Public Facilities Committee or County Council.

CK/mjh

Attachments: 1) F & ME 11/12/13 ltr  
2) CO 4 Request Form  
3) R. R. Dawson 10/18/13 ltr  
4) ICA Engineering 9/5/13 ltr

Contract/STP01/PFCappCO4

# F&ME CONSULTANTS

C8300-LTR042

November 12, 2013

Mr. Robert McFee  
Director of Engineering and Infrastructure  
Beaufort County Engineering Division  
102 Industrial Village Road  
Beaufort, SC 29906

**RE: Bluffton Parkway 5A – Segment 2**  
**SC File #: 07.041794**  
**Beaufort County Project #: BEAU(001)**  
**F&ME Project No. C8300.00**  
**Subject: Bluffton Parkway 5A – Segment 2: LPA Change Order 004 – Drill Shaft Extensions**  
**(Executive Summary)**

Dear Mr. McFee,

Per the Contract Documents, a test shaft was constructed by RR Dawson Bridge Company on 7/19/13. The test shaft was constructed in order to confirm the assumptions made during the design of the Bluffton Parkway 5A – Flyover Bridge.

Following the LoadTest performed on the test shaft on 7/25/13, the results yielded unforeseen end bearing movements. With the test data, the Engineer of Record (ICA Engineering) recommended that certain drill shafts be extended to counter the end bearing movement. Attached is a summary of drill shaft extension lengths.

A change order was submitted by Dawson on 10/18/13 for additional costs associated with the drill shaft lengthening. The total additional cost for lengthening the shafts is \$482,201.85.

Back-up documentation and the LPA Change Order 004 form follow this Executive Summary.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

*John Nguyen*

John Nguyen  
Project Manager  
F&ME Consultants  
1536 Fording Island Road, Suite 105  
Hilton Head Island, SC 29926

Attachments: Drill Shaft Extension Summary Chart

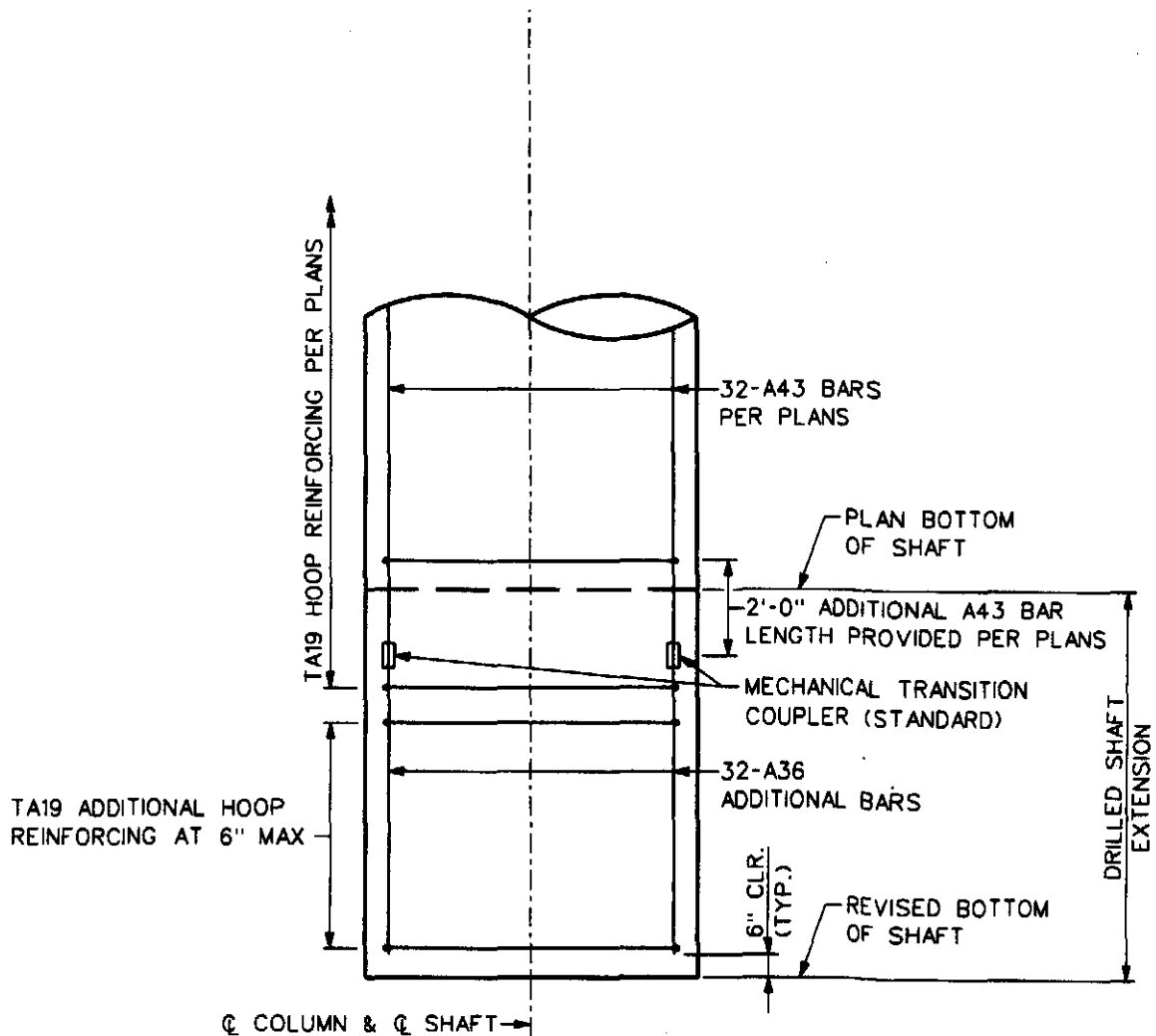
cc: A. Shannon, F&ME  
A. Jones, F&ME  
C. Kinton, BC  
G. Kubic, BC  
M. Hickman, BC  
K. Green, SCDOT  
File

**BLUFFTON PARKWAY PHASE 5A BRIDGE  
SHAFT EXTENSION SUMMARY  
SEPTEMBER 13, 2013**

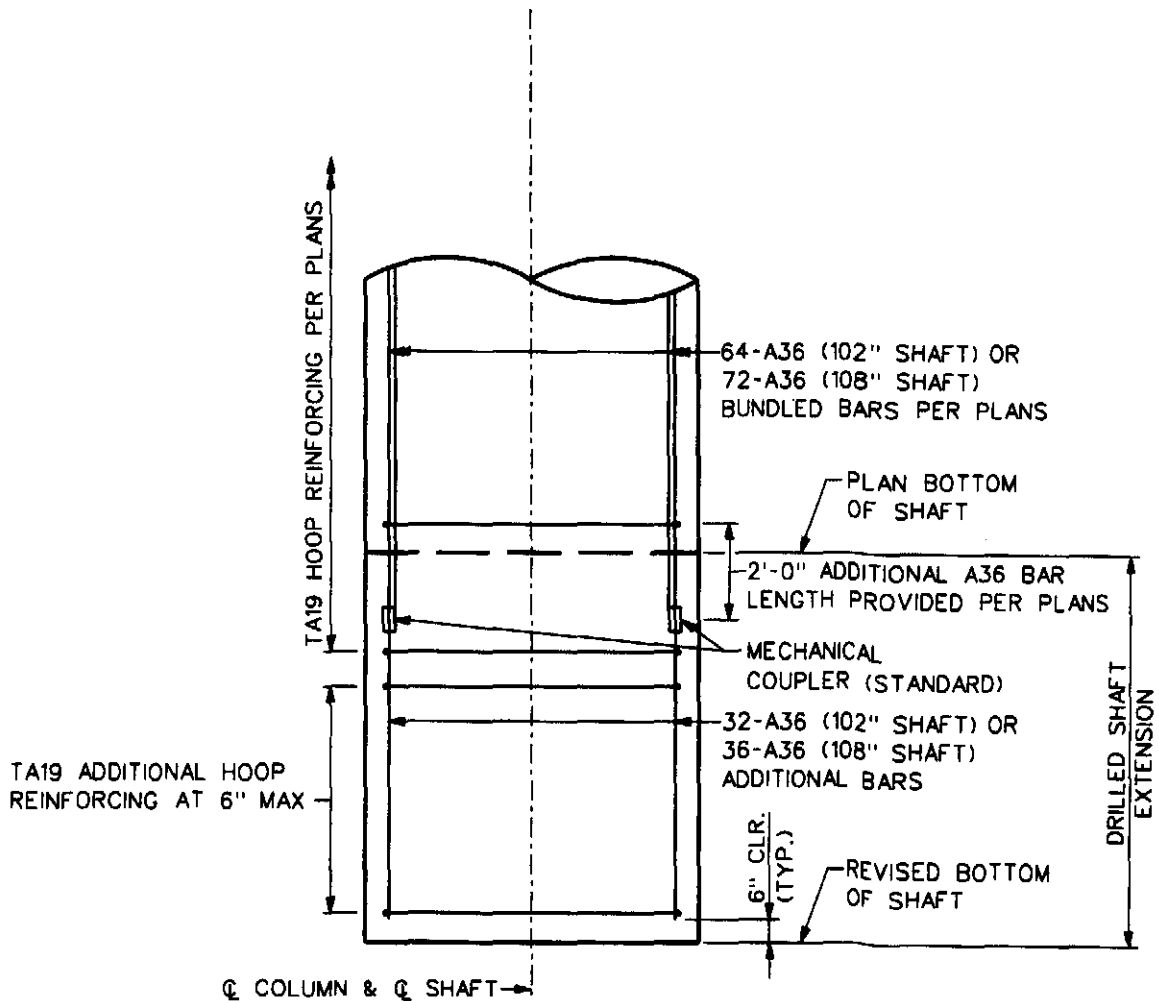
DRILLED SHAFTS				LONGITUDINAL BARS							HOOPS						
Bent	Number per Bent	Diameter (in.)	Extension Length (ft)	Mark	Wt (lbs/ft)	No	L (ft)	Additional Wt (lbs)	Original Wt (lbs)	TOTAL WT (lbs)	Mark	Wt (lbs/ft)	No.	L (ft)	Additional Wt (lbs)	Original Wt (lbs)	TOTAL WT (lbs)
ML-2	2	84	2.0	A36	5.313	0	0.0	0	70156	70156	TA19	1.502	0	18.5	0	12833	12833
ML-8	2	84	4.5	A36	5.313	32	2.5	850	73306	74156	TA19	1.502	5	18.5	278	14231	14509
ML-9	2	84	1.0	A36	5.313	0	-1.0	0	73435	73435	TA19	1.502	0	18.5	0	14307	14307
EB-1	1	102	13.0	A36	5.313	32	11.0	1870	52609	54479	TA19	1.502	22	23.3	771	9544	10315
EB-2	1	102	20.5	A36	5.313	32	18.5	3145	52949	56094	TA19	1.502	37	23.3	1297	9621	10918
EB-3	1	102	7.5	A36	5.313	32	5.5	935	53521	54456	TA19	1.502	11	23.3	386	9544	9930
EB-6	1	102	21.0	A36	5.313	32	19.0	3230	50607	53837	TA19	1.502	38	23.3	1332	9695	11027
EB-7	1	102	26.0	A36	5.313	32	24.0	4080	49546	53626	TA19	1.502	48	23.3	1682	9764	11446
EB-8	1	102	22.0	A36	5.313	32	20.0	3400	48590	51990	TA19	1.502	40	23.3	1402	9345	10747
EB-9	1	102	3.5	A36	5.313	32	1.5	255	47548	47803	TA19	1.502	3	23.3	105	8961	9066
WB-1	1	102	18.0	A36	5.313	32	16.0	2720	53605	56325	TA19	1.502	32	23.3	1121	9838	10959
WB-2	1	102	27.0	A36	5.313	32	25.0	4250	53502	57752	TA19	1.502	50	23.3	1752	9801	11553
WB-3	1	102	25.5	A36	5.313	32	23.5	3995	54438	58433	TA19	1.502	47	23.3	1647	10018	11665
WB-4	1	108	14.5	A36	5.313	36	12.5	2391	57475	59866	TA19	1.502	25	24.9	936	10005	10941
WB-6	1	108	8.0	A36	5.313	36	6.0	1148	57347	58495	TA19	1.502	12	24.9	449	9979	10428
WB-7	1	108	8.0	A36	5.313	36	6.0	1148	56797	57945	TA19	1.502	12	24.9	449	11214	11663
WB-8	1	108	12.0	A36	5.313	36	10.0	1913	56988	58901	TA19	1.502	20	24.9	748	11118	11866
WB-9	1	108	27.5	A36	5.313	36	25.5	4877	56974	61851	TA19	1.502	51	24.9	1909	10804	12713
WB-10	1	108	25.0	A36	5.313	36	23.0	4399	55476	59875	TA19	1.502	46	24.9	1722	10525	12247
WB-11	1	108	24.0	A36	5.313	36	22.0	4208	54584	58792	TA19	1.502	44	24.9	1647	10141	11788

**TOTAL 48816 lbs**

**TOTAL 19632 lbs**



**SHAFT EXTENSION DETAIL - 84" DIAMETER SHAFTS**  
NOT TO SCALE



**SHAFT EXTENSION DETAIL - 102" OR 108" DIAMETER SHAFTS**  
NOT TO SCALE

## LPA Change Order Request Form

Before directing changes in the work within the provisions of the Contract, the Local Public Agency (LPA) shall submit to the SCDOT Local Public Agency Administration office (LPAA), this completed request for review and approval for change order work along with the appropriate documentation listed below.

Local Public Agency: BEAUFORT COUNTY

Contact Person: ROBERT MCFEE Title: DIRECTOR OF ENGINEERING AND INFRASTRUCTURE

Address: 100 RIVANT RD, PO BOX 1225, BEAUFORT, SC 29902 Phone: 843-255-2730

Project Name: BLUEFORD PARKWAY 5A- SEGMENT 2

County: BEAUFORT Master PIN: 41794-PE01

Contract Number: BEAU (001) File Number: 07-041794 IFB No. 13-54500-0810-05

Date of Agreement: OCTOBER 9, 2012 Maximum Funding: \_\_\_\_\_

Change Order Number: 004

Type of Change Order: Supplemental Agreement ☐ Contract Modification ☒ Time Extension ☐ Other ☐

Date of Executed Contract between Owner and Contractor: OCTOBER 25, 2013

Original Completion Date: OCTOBER 15, 2015 Revised Completion Date: OCTOBER 15, 2015

Original Contract Price: \$136,665,629.96 Revised Contract Price: LPA CO 001: \$36,667,906.88

**This change order request shall include the following documentation:**

- ☒ Detailed explanation for change order request
- ☒ Itemized listing of each change order item with price
- ☒ Total cost of change order request
- ☒ Additional contract time with revised completion date (if necessary)
- ☒ Prime Contractor signature and date

LPA CO 002: \$36,669,456.58  
LPA CO 003: STILL NEGOTIATING  
LPA CO 004: \$37,151,655.43

Submitted:

\_\_\_\_\_  
Local Public Agency Date

Recommended:

\_\_\_\_\_  
Resident Construction Engineer Date

Recommended:

\_\_\_\_\_  
District Engineering Administrator Date

Approved:

\_\_\_\_\_  
Local Public Agency Administrator Date

**NOTE:** Approval of this change order does not increase SCDOT's contract maximum funding for this project. Any cost beyond the contract amount will be the sole responsibility of the LPA, as stated in the LPA's signed Participation Agreement with SCDOT.

November 7, 2013

Mr. Robert McFee, PE  
Director of Engineering and Infrastructure  
Beaufort County Engineering  
100 Ribaut Road  
P.O. Box 1228  
Beaufort, SC 29902

**RE: Bluffton Parkway 5A – Segment 2**  
**SC File #: 07.041794**  
**Beaufort County Project #: BEAU(001)**  
**F&ME Project No. C8300.00**  
**Subject: RR Dawson: LPA Change Order 004: Drill Shaft Extensions**

Dear Mr. McFee,

Please see the following change order associated to the revisions to drill shaft lengths for Bluffton Parkway 5A – Segment 2. Revised quantities and contract documents have been provided to the Contractor for construction.

RR Dawson has provided a proposal associated to extensions of the drill shafts that amounts to \$482,201.85. Pending the approval of the LPA Change Order 004, the revised contract price will total \$37,151,658.43. Please note that LPA Change Order 003 (Concrete Strain Poles) is currently under negotiations with the Contractor.

The change order amount recommended for approval and payment totals \$482,201.85 with no additional contract time added to the project duration.

The attachments provided illustrate the record of negotiation and history associated to LPA Change Order 004.

Pending your satisfaction of the attached LPA Change Order 004 and associated documentation, please sign as the Local Public Agency and return the LPA Change Order Request Form to my attention for continuing signature distribution.

Should you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

*John Nguyen*

John Nguyen  
Project Manager  
F&ME Consultants  
1536 Fording Island Road, Suite 105  
Hilton Head Island, SC 29926

# R.R. DAWSON BRIDGE COMPANY LLC

P. O. BOX 28 • LEXINGTON, KENTUCKY 40588-0028 • (859) 269-4644 • FAX (859) 266-7378

MEMBERS:  
R. R. DAWSON, JR.  
GEORGE D. MARTIN  
THOMAS C. DAWSON

October 18, 2013

John Nguyen  
F&ME Consultants  
1536 Fording Island Road, Suite 105  
Hilton Head, SC 29926

Re: Additional Costs associated with the Drilled Shaft Lengthening-Bluffton Parkway

File #: 07.041794  
Project #: BEAU (001)

Dear Mr. Nguyen,

Per the revised drilled shaft lengths, R.R. Dawson Bridge Company hereby submits the costs for the additional materials. In the attached spreadsheet, the costs are broken down per bent on both Main Line as well as Eastbound and Westbound Bents. The couplers that have to be used are Zap Lock Couplers due to reinforcing steel that has been ordered per plan lengths as suggested by F&ME. As a result, the bottom of each drilled shaft cage cannot have standard couplers attached to the extended lengths since they are not threaded. Freight and installation costs are included for these additional couplers. R.R. Dawson has also included the additional CSL tubes that are needed for the extended lengths as well as the unions necessary to extend the CSL tubes to the bottom of the reinforcing steel cages.

It is Dawson's understanding, that any overruns of linear footage is paid for by the bid amount. The original bid is as follows:

7031200	REINF. STEEL FOR STRUCTURES (BRIDGE)	4,200,698.00	LB	0.85	*	3,570,593.30
7031220	HOOP REINF. STEEL FOR STRUCTURES (BRIDGE)	500,284.00	LB	1.15	*	575,326.60
7120221	DRILLED SHAFT W/WET & DRY EXCAV. 84" DIA.	2,787.00	LF	900.00	*	2,508,300.00
7120251	DRILLED SHAFT W/WET & DRY EXCAV. 102" DIA.	884.00	LF	1,000.00	*	884,000.00
7120261	DRILLED SHAFT W/WET & DRY EXCAV. 108" DIA.	638.00	LF	1,100.00	*	701,800.00
				TOTAL		8,240,019.90

The new quantities are shown below:

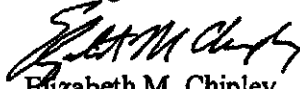
7031200	REINF. STEEL FOR STRUCTURES (BRIDGE)	4,249,514.00	LB	0.85	*	3,612,086.90
7031220	HOOP REINF. STEEL FOR STRUCTURES (BRIDGE)	519,916.00	LB	1.15	*	597,903.40
7120221	DRILLED SHAFT W/WET & DRY EXCAV. 84" DIA.	2,805.00	LF	900.00	*	2,524,500.00
7120251	DRILLED SHAFT W/WET & DRY EXCAV. 102" DIA.	1,068.00	LF	1,000.00	*	1,068,000.00
7120261	DRILLED SHAFT W/WET & DRY EXCAV. 108" DIA.	757.00	LF	1,100.00	*	832,700.00
				TOTAL		8,635,190.30



The amount for the overrun of the contract quantities is \$395,170.40 and the additional items that are required to extend the drilled shafts total \$87,031.45. The overall amount equates to \$482,201.85.

Please review and if there are any further questions or concerns, please do not hesitate to contact us. Please send a change order to us upon approval and we appreciate Beaufort County, ICA, SCDOT and F&ME for the coordinated partnering in regards to the revised drilled shaft lengths.

Best regards,



Elizabeth M. Chipley  
Project Coordinator  
R.R. Dawson Bridge Co., LLC

Cc: Mr. Gerry Hargis (RRDBC)  
Mr. Adam Shannon (F&ME)



f/k/a Florence & Hutcheson, Inc.

September 5, 2013

Mr. Colin Kinton, P.E.  
Beaufort County Traffic & Transportation Engineer  
Beaufort County Engineering Division  
102 Industrial Village Road  
Beaufort, SC 29906

RE: **Draft Addendum to the Geotechnical Report**  
Bluffton Parkway Phase 5A Segment 2

Dear Mr. Kinton:

ICA Engineering presents this addendum letter to our original geotechnical report which was dated February 8, 2010 to reflect the changes in the drilled shaft lengths based on the results of the load test performed on a test shaft. We have reviewed the *Report on Drilled Shaft Load Testing (Osterberg Method)* prepared by LOADTEST and dated July 30, 2013 and subsequent correspondence from LOADTEST dated August 8, 2013. After review of this information, we feel that the measured skin friction values are reliable; however, we feel that the results of the test relating to end bearing are inconclusive. These two referenced reports provided by LOADTEST are included in Appendix II.

The initial report prepared by LOADTEST dated July 30, 2013 showed a unit end bearing of 4.2 KSF. This value is extremely low for the soil conditions at this test shaft location. This is verified through the following multiple factors that are discussed in detail below:

1. Using the unit end bearing formulas for drilled shafts tipped in cohesionless material from the AASHTO LRFD Bridge Design Specifications, estimated end bearing values would range from 19 KSF to 31 KSF for the soils which were observed beneath the test shaft tip elevation in the nearby Boring B-2. Typically, formulas such as these in design specifications are conservative and load testing nearly always confirms these capacities and more often than not shows higher capacities than what is calculated.
2. Per the LOADTEST *Submittal (Method Statement) for Installation and Load Testing of Test Shaft Using the Osterberg Cell Method*, Issue 2, dated May 30, 2013, LOADTEST anticipated a unit end bearing value of 50 KSF, which was used to determine the placement of the O-cell in the test shaft.
3. Based on our experience and from discussions with other geotechnical engineers with regional expertise, unit end bearing values ranging from 25 KSF to 50 KSF are regularly used in the design of drilled shafts similar to these and have been observed in load tests conducted in this region and in similar soil conditions. One example is a STATNOMIC Axial Load Test that was performed on a 60 inch diameter shaft for the SC 802 Bridge over the Beaufort River in Beaufort County. The reported unit end bearing on this shaft ranged from 42 KSF to 44 KSF depending on the displacement. Another example is an O-cell LOADTEST that was performed on a 96 inch diameter shaft for the SC 170 Widening project in Beaufort. The reported unit end bearing on this shaft was 50 KSF. Both of these examples are in close proximity to our test shaft and the end bearing geology for these shafts are very similar.
4. In Figure 8 of 9 in LOADTEST's original report dated July 30, 2013, a unit end bearing of approximately 8 KSF is achieved at approximately one inch of downward displacement. After this, the unit end bearing begins to decrease as the downward shaft base displacement increases. It is our opinion that, as the downward displacement increases, the unit end bearing should increase and eventually plateau once the ultimate end bearing is reached. This is a fundamental concept of soil mechanics.

In an effort to utilize the information obtained from the load test, we have evaluated the drilled shaft capacities and anticipated vertical displacements utilizing several different approaches. We have ultimately decided to use a hybrid approach to verify that the factored resistance of the drilled shafts satisfies the Strength Limit State. This hybrid approach takes advantage of the fact that the skin friction values have been measured during a load test but also accounts for the inconclusive nature of the end bearing measurement as previously discussed. In this approach, we have analyzed the shafts two different methods:

1. Factored resistance determined by using the skin resistance values from the load test with a resistance factor based on load test verification along with AASHTO-computed end bearing resistance values with a resistance factor associated with not performing a load test. The unit side resistances for each zone were derived using the Unit Side Shear plots from the load test at 2% of the test shaft diameter which was 1.68 inches of displacement. A resistance factor of 0.65 was utilized for the side resistance for multi-column bents and a resistance factor of 0.52 was utilized for the single column bents. For the end bearing, we utilized Equation 10.8.3.5.2c-1 in the AASHTO LRFD Bridge Design Specifications, 2012. The resistance factors applied to the tip resistance was 0.5 for multi-column and 0.4 for single column bents. A sample calculation and summary of this Method 1 is provided in Appendix I.
2. Factored resistance determined by using the skin resistance values from the load test along with end bearing resistance values estimated in LOADTEST's revised analysis dated August 8, 2013. The resistance factor associated with load testing was used for both the skin and base resistance in this approach. For this approach, the unit side shear resistance values were calculated the same as the previous method except for what we have described in the calculations in Appendix I as "Zone 1". We further broke out Zone 1 into soils with SPT "N" values less than 60 BPF and SPT "N" values greater than 60 BPF. The zone was divided due to information from other load test data in similar soil conditions where unit side shear values are typically at 3.0 KSF or slightly higher. So, we used a unit side shear of 1.43 KSF in SPT "N" values less than 60 BPF and we used a unit side shear of 3.0 KSF in SPT "N" values greater than 60 BPF.

For the end bearing, we utilized a value of 28 KSF which was calculated from the updated analysis by LOADTEST dated August 8, 2013. This end bearing value was taken at 3.5% of the shaft diameter which is an average of the typical displacement criteria of 2% and 5% of shaft diameter when evaluating load test information. A sample calculation and summary of this Method 2 is provided in Appendix I.

In addition, we also checked the drilled shaft lengths against the service loads with regard to displacements. From the load test results, after 1 inch of downward displacement, the load test unit end bearing values are highly suspect as we have previously stated. However, prior to the 1-inch of upward and downward displacement, the load test displacement proceeds at an anticipated and expected rate. For the bridge design, 0.5 inches or less of displacement is desired for the service loads on the drilled shafts. So, we checked the service loads against the displacement of 0.5 inches to verify that the unit side shear and unit end bearing from the load test were able to carry the service loads. A value of 6 KSF for the end bearing was utilized in this method.

In most cases, the average length of the drilled shafts from Methods 1 and 2 above was then compared to the lengths currently shown in the plans and in cases where this average length is greater than the plan lengths, we are recommending lengthening the drilled shafts. Due to the inconclusive nature associated with the unit end bearing reported from LOADTEST (original report and updated analysis), we choose to use the average in most situations. The average was used since Method 1 involved the irregular "blending" of two resistance factors and Method 2 was based on assumptions that were made in order to account for irregular measurements taken from the load test. A couple of exceptions are mentioned in the calculations in Appendix I for the shafts at WB-2, WB-3, WB-9, WB-10 and WB-11, where the average was not used and the additional lengths were based solely on Method 1 due to excessive service capacity

calculated at those lengths. Also, for the shafts at ML-2 and ML-10, from the service load displacement calculations, the shaft lengths were required to be slightly lengthened. A summary of the recommended shaft lengths based on the results of the load test is provided in the table below.

**TABLE 1 – Recommended Shaft Tip Elevations**

Bent No.	Boring No.	Shaft Dia (ft)	Service Load (KIPS)	Factored Load (KIPS)	Bottom of Construction Casing Elev (ft)	Bottom of Shaft Elev (ft)	Additional Shaft Length (ft)
ML-1	1	5	556	756	-31.5	-67.5	-
ML-2	2	7	1190	1680	-23.5	-85.0	2.0
ML-3	3	7	1190	1680	-25.9	-85.9	-
ML-4	4	7	1110	1550	-28.9	-86.9	-
ML-5	5	7	1210	1690	-30.9	-86.9	-
ML-6	6	7	1210	1690	-30.9	-86.9	-
ML-7	7	7	1120	1570	-25.9	-86.9	-
ML-8	8	7	1210	1700	-30.9	-91.3	4.4
ML-9	9	7	1210	1700	-30.9	-87.7	0.8
ML-10	10	7	1140	1600	-30.9	-86.4	1.5
ML-11	11	7	880	1130	-30.9	-84.9	-
ML-12	13	7	1030	1330	-25.9	-84.9	-
ML-13	15	7	1090	1396	-25.9	-84.9	-
ML-14	17	7	860	1100	-25.9	-84.9	-
WB-1	24	8.5	1760	2420	-20.9	-95.2	7.3
WB-2	25	8.5	1740	2390	-20.9	-104.9	19.0
WB-3	26	8.5	1780	2450	-20.9	-106.8	18.9
WB-4	27	9	1620	2220	-19	-89	5.0
WB-6	29	9	1676	2300	-20.5	-89.6	4.1
WB-7	30	9	1766	2430	-20.9	-89.8	3.9
WB-8	31	9	1766	2430	-25.9	-93.9	6.0
WB-9	32	9	1550	2090	-25.9	-106.2	18.3
WB-10	33	9	1756	2420	-25.9	-105.0	17.1
WB-11	34	9	1736	2390	-25.9	-102.3	14.4
WB-12	34	5	750	1000	-25	-87	-
EB-1	18	8.5	1630	2246	-20.9	-92.2	6.3
EB-2	19	8.5	1630	2246	-20.9	-97.7	11.8
EB-3	20	8.5	1560	2140	-20.9	-89.6	3.7
EB-6	42	8.5	1690	2320	-19.5	-90.1	10.6
EB-7	42	8.5	1756	2420	-19.5	-93.5	14.0
EB-8	42	8.5	1700	2340	-19.5	-90.6	11.1
EB-9	56	8.5	1726	2380	-20	-81.7	1.7
EB-10	56	5	750	1000	-17.9	-84.3	-

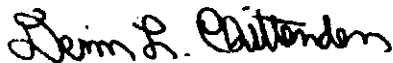
Colin Kinton, P.E.  
September 5, 2013  
Page 4 of 4

We believe that the procedure that we have used for determining the revised shaft lengths is a rational, reasonable approach which takes advantage of the load test while addressing the issues associated with the measured end bearing. There is a relatively high level of confidence in the measured skin resistance values and therefore both analysis methods take full advantage of the confirmation of the skin resistance by using a higher resistance factor. The major questions surrounds the end bearing values and we believe both approaches utilized for determination of the end bearing are sufficiently conservative since both yielded unit end bearing values that are below the values measured during nearby load tests in similar end bearing geology.

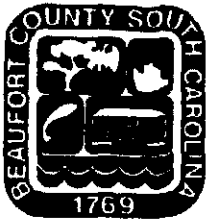
Please feel free to call if you have any questions regarding this matter.

Sincerely,

ICA ENGINEERING, INC.

A handwritten signature in black ink, reading "Devin L. Chittenden". The signature is written in a cursive, flowing style.

Devin L. Chittenden, P.E.  
Senior Project Engineer – Geotechnical



COUNTY COUNCIL OF BEAUFORT COUNTY  
BEAUFORT COUNTY ENGINEERING DIVISION

Building 3, 102 Industrial Village Road  
Post Office Drawer 1228, Beaufort, SC 29901-1228  
Phone: (843) 470-2625 Fax: (843) 470-2630

TO: Councilman Gerald Dawson, Chairman, Public Facilities Committee

VIA: Gary Kubic, County Administrator  
Bryan Hill, Deputy County Administrator  
Alicia Holland, Chief Financial Officer  
Robert McFee, Director of Engineering and Infrastructure  
Monica Spells, Compliance Officer  
Dave Thomas, Purchasing Director

FROM: Colin Kinton, County Traffic & Transportation Engineer

SUBJ: Change Order #12 for SC 170 Widening Construction

DATE: December 5, 2013

**BACKGROUND.** On 7/23/12, Beaufort County Council awarded a contract to Cleland Site Prep, Inc., for the widening construction of SC 170 from US 278 (McGarvey's Corner) to SC 46. Total contract award was \$14,998,972.30. The original design was reviewed and approved by SCDOT.

Change Order #12 is submitted to cover the additional costs incurred by the contractor caused by the unforeseen three month delay on the issuing of the SCDHEC/OCRM Land Disturbance Permit. This permit had to be in place prior to the contractor commencing construction operations. Total value of Change Order #12 is \$59,683.56. This represents a contract increase of .4%.

County staff, the project construction manager and SCDOT have reviewed Change Order #12 request for increase to the contract value by Cleland Site Prep and agreed with its total adjustment.

This project is funded from the 1% Sales Tax Road Improvement Program, Acct# 33403-54500. In February 2012, the South Carolina State Transportation Infrastructure Bank had approved a grant funding up to \$24.9 million for this project. All construction costs to include change orders are reimbursable items by the SIB.

**FOR ACTION.** Information only item presentation to the Public Facilities Committee on December 16, 2013.

**RECOMMENDATION.** Change Order #12 is presented as any information only item. No formal action is required by either the Public Facilities Committee or County Council.

CK/mjh

Attachments: 1) Change Order 12  
2) Cleland Site Prep 11/21/13 ltr

Contracts/STP/SC170/CO12

## Change Order Report

Contract ID: LPA07.036938A

Change Order Nbr: 012 Force Acct ID: 0

Change Order Type: Extension

CO Description: Adding time and cost for delay in obtaining the SCDHEC NOI.

Zero Dollar Change Order: No

Project Nbr	Item Nbr	Catg	Item Code	Unit	Unit Price	Bid Qty	Prev Apprvd Qty	Curr CO Qty	Curr Apprvd Qty	Amount of Change
036938MTO1	0013	0001	9800100	LS	\$59,683.58	0	0	1	0	This Chng: \$59,683.58

Item Description CHANGE ORDER ITEM CO Item Description 91 time delay and cost (NOI)

Supplemental Description1 Adding time and cost for delay in obtaining the SCDHEC NOI.

Supplemental Description2

Prev Revised: \$0.00  
New Revised: \$59,683.58  
Bid Contract: \$0.00  
Net Change: \$59,683.58  
Pct Change:

Total Value for Change Order 012 = \$59,683.58

## Change Order Report: Contract Completion Date Time Adjustment

Original Compl Date: 2014/05/18 Adj Compl Date: 2014/08/27 Adj No. of Days: 101

Explanation: This time extension is being granted for the 91 day delay in obtaining the NOI. The additional 10 days is to correct an input error in the SCDOT site manager system, which showed the original completion date of May 18, 2014. The actual completion date should have been May 28, 2014 based off Beaufort County letter dated November 14, 2012.

## General or Standard Change Order Explanation

Cleland Site Prep has given notice that they expect to be compensated for additional costs associated with this 91 day delay. Beaufort County and the SCDOT have agreed that additional compensation is justified.

The total additional cost resulting from this change is \$59,683.58. The contract total to date is \$15,552,769.97 which overruns the original contract by a cumulative percentage of 3.36%.

Recommended by:

Alan M. Wertz

date:

12/3/13

Accepted by:

Colin Kinton

date:

**General or Standard Change Order Explanation**

Pursuant to Section 104.04 of the Standard Specifications on the above referred to project, we (Prime Contractor), agree to the unit price stipulated above, for performing the work items listed, as part of our contract on this project. The work shall be performed under and in accordance with the specifications and contract requirements of our contract. The compensation and time extension, (if any), provided in this supplemental agreement constitute complete satisfaction for all direct, indirect, impact, and delay costs relating to this work.

**JUSTIFICATION OF COST:**

\_\_\_ Based upon quantities involved, field conditions and type of construction, these prices are reasonable.

FIRM: \_\_\_\_\_

BY: \_\_\_\_\_





November 21, 2013

Mr. Alan Wertz  
I.C.E.  
33 Munch Drive  
Beaufort, SC 29906

RE: SC Hwy 170 Claim for Delay – 91 day

Dear Mr. Wertz:

Please find the attached request for equitable adjustment in contract pricing for the 91 calendar day delay in the owner not obtaining the OCRM Land Disturbance Permit so that the project could start based on our 2<sup>nd</sup> Notice to Proceed dated November 29, 2012. The attached costs represent the additional monies that were spent by Cleland Site Prep, Inc. performing work on the roadway during the period between the NTP and the OCRM Permit date that we have not been compensated for.

Total Additional Work Performed:	\$ 38,220.00
Additional Mobilization	\$ 3,125.00
Additional CPM Schedule Updates	\$ 712.80
Additional Traffic Control	\$ 12,200.00
Sub- Total	\$ 54,257.80
Additional Home Office Overhead ( 10% )	\$ 5,425.78
Total	\$ 59,683.58

Should you have any further questions concerning this matter, please contact me.

Regards,

  
P. Logan Crowther  
Vice President

CC: Chris Smith, SCDOT RCE  
Colin Kinton, Beaufort County Traffic Engineer  
CSP Project File # 4204

Cleland Site Prep, Inc.

PO Box 3822

Bluffton, SC 29910

11/1/2013

RE: HWY 170 Widening Claim for 91 Day Delay

Roadway Maintenance Crew Costs - Patching

Supervisor w/ Pick up	\$ 80.00	Hr
Foreman w/ Pick up	\$ 75.00	Hr
Wheel Loader	\$ 85.00	Hr
Laborer	\$ 25.00	Hr
Laborer	\$ 25.00	Hr
Laborer	\$ 25.00	Hr
Compactor	\$ 20.00	Hr
Total	\$ 335.00	Hr

Ditch cleaning and Excavation Crew

Supervisor w/ Pick up	\$ 80.00	Hr
Foreman w/ Pick up	\$ 75.00	Hr
Excavator	\$ 105.00	Hr
Wheel Loader	\$ 85.00	Hr
Laborer	\$ 25.00	Hr
Laborer	\$ 25.00	Hr
Laborer	\$ 25.00	Hr
Compactor	\$ 20.00	Hr
Total	\$ 440.00	Hr

Roadway Maintenance Crew Costs - Maintenance of Traffic

Supervisor w/ Pick up	\$ 80.00	Hr
Foreman w/ Pick up	\$ 75.00	Hr
Laborer	\$ 25.00	Hr
Laborer	\$ 25.00	Hr
Laborer	\$ 25.00	Hr
Compactor	\$ 20.00	Hr
Total	\$ 250.00	Hr

<u>Date</u>	<u>Work Description</u>	<u>Hours</u>		<u>Cost</u>	<u>Total</u>
12/6/2012	Project Management - Dunn	3	Hr	\$ 80.00	\$ 240.00
12/13/2012	Project Management - Dunn	3	Hr	\$ 80.00	\$ 240.00
01/04/13	M.O.T. Crew	6.5	Hr	\$ 250.00	\$ 1,625.00
01/05/13	M.O.T. Crew	5	Hr	\$ 250.00	\$ 1,250.00
01/17/13	M.O.T. Crew	5	Hr	\$ 250.00	\$ 1,250.00
01/28/13	Project Management - Dunn	2	Hr	\$ 80.00	\$ 160.00
01/29/13	Project Management - Dunn	2	Hr	\$ 80.00	\$ 160.00
01/30/13	Project Management - Dunn	2	Hr	\$ 80.00	\$ 160.00
01/31/13	Project Management - Dunn	2	Hr	\$ 80.00	\$ 160.00

02/01/13	M.O.T. Crew	2.5	Hr	\$	250.00	\$	625.00
02/01/13	Project Management - Dunn	1	Hr	\$	80.00	\$	80.00
02/01/13	Supervision - Savarese	5	Hr	\$	80.00	\$	400.00
02/04/13	Project Management - Dunn	2	Hr	\$	80.00	\$	160.00
02/04/13	Supervision - Keiffer	2	Hr	\$	80.00	\$	160.00
02/04/13	Supervision - Savarese	5	Hr	\$	80.00	\$	400.00
02/05/13	Project Management - Dunn	2	Hr	\$	80.00	\$	160.00
02/05/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/06/13	Project Management - Dunn	2	Hr	\$	80.00	\$	160.00
02/06/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/06/13	Supervision - Savarese	2	Hr	\$	80.00	\$	160.00
02/07/13	Project Management - Dunn	3	Hr	\$	80.00	\$	240.00
02/07/13	Supervision - Keiffer	0.5	Hr	\$	80.00	\$	40.00
02/07/13	Supervision - Savarese	2	Hr	\$	80.00	\$	160.00
02/08/13	Project Management - Dunn	2	Hr	\$	80.00	\$	160.00
02/08/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/08/13	Supervision - Savarese	1	Hr	\$	80.00	\$	80.00
02/11/13	Project Management - Dunn	2	Hr	\$	80.00	\$	160.00
02/11/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/11/13	Supervision - Savarese	1	Hr	\$	80.00	\$	80.00
02/12/13	Project Management - Dunn	3	Hr	\$	80.00	\$	240.00
02/12/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/13/13	Project Management - Dunn	3	Hr	\$	80.00	\$	240.00
02/13/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/14/13	Project Management - Dunn	3	Hr	\$	80.00	\$	240.00
02/14/13	Supervision - Keiffer	0.5	Hr	\$	80.00	\$	40.00
02/15/13	Project Management - Dunn	2	Hr	\$	80.00	\$	160.00
02/15/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/18/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/19/13	M.O.T. Crew	1	Hr	\$	250.00	\$	250.00
02/19/13	Project Management - Dunn	4	Hr	\$	80.00	\$	320.00
02/19/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/19/13	Supervision - Savarese	1	Hr	\$	80.00	\$	80.00
02/20/13	Project Management - Dunn	5	Hr	\$	80.00	\$	400.00
02/20/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/21/13	Project Management - Dunn	5	Hr	\$	80.00	\$	400.00
02/21/13	Supervision - Keiffer	0.5	Hr	\$	80.00	\$	40.00
02/21/13	Supervision - Savarese	1	Hr	\$	80.00	\$	80.00
02/21/13	Traffic Control Inspection	1	Hr	\$	80.00	\$	80.00
02/22/13	Project Management - Dunn	4	Hr	\$	80.00	\$	320.00
02/22/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/25/13	Patching Potholes	5	Hr	\$	335.00	\$	1,675.00
02/25/13	Project Management - Dunn	4	Hr	\$	80.00	\$	320.00
02/25/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/25/13	Supervision - Savarese	5	Hr	\$	80.00	\$	400.00
02/26/13	Clean ditches due to flooding	6.5	Hr	\$	440.00	\$	2,860.00
02/26/13	M.O.T. due to flooding	6	Hr	\$	250.00	\$	1,500.00
02/26/13	Patching Potholes	2	Hr	\$	335.00	\$	670.00
02/26/13	Project Management - Dunn	4	Hr	\$	80.00	\$	320.00
02/26/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00

02/26/13	Supervision - Savarese	10	Hr	\$	80.00	\$	800.00
02/26/13	Supervision - Nelson	2	Hr	\$	80.00	\$	160.00
02/27/13	Clean ditches due to flooding	8	Hr	\$	440.00	\$	3,520.00
02/27/13	Patching Potholes	11	Hr	\$	335.00	\$	3,685.00
02/27/13	Project Management - Dunn	5	Hr	\$	80.00	\$	400.00
02/27/13	Supervision - Savarese	5	Hr	\$	80.00	\$	400.00
02/27/13	Supervision - Nelson	4	Hr	\$	80.00	\$	320.00
02/28/13	Clean ditches due to flooding	5.5	Hr	\$	440.00	\$	2,420.00
02/28/13	Patching Potholes	7	Hr	\$	335.00	\$	2,345.00
02/28/13	Project Management - Dunn	5	Hr	\$	80.00	\$	400.00
02/28/13	Supervision - Nelson	2	Hr	\$	80.00	\$	160.00
02/28/13	Supervision - Keiffer	1	Hr	\$	80.00	\$	80.00
02/28/13	Traffic Control Inspection	1	Hr	\$	80.00	\$	80.00
	Materials for Patching	1				\$	3,305.00

**Total Additional Work** **\$ 38,220.00**

**Additional Mobilization**

Lowboy	25	Hr	\$	125.00	\$	3,125.00
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**Total Additional Mobilization** **\$ 3,125.00**

**Additional Traffic Control Items ( Loss of Use )**

Traffic Barrels ( Purchased for project but unable to use)	1200	Ea	\$	2.50	\$	3,000.00
Crash Trucks ( Purchased for project, but unable to use ) 2 Ea @ 1 Mo	2	Mo	\$	1,200.00	\$	2,400.00
Message Boards ( Purchased for project but unable to use ) 4 Ea @ 1 Mo	4	Mo	\$	1,700.00	\$	6,800.00

**Total Additional Mobilization** **\$ 12,200.00**

**Cleland Site Prep, Inc.**  
PO Box 3822  
Bluffton, SC 29910

**8/5/2013**

**RE: HWY 170 Widening Claim for 91 Delay**  
**CPM SCHEDULE**

Delays in starting construction on the projet due to not having an NOI so that land disturbance could begin. This has caused additional overhead, management, and increased material costs above what was budgeted for the project.

OLH Schedule Updates - Feb 2013	\$ 288.00
OLH Schedule Updates - March 2013	<u>\$ 360.00</u>
 Total Additional Months Costs	 \$ 648.00
10% Sub Markup	<u>\$ 64.80</u>
 Total	 \$ 712.80

## Protection Services Inc

4841-A Edinburg Hwy.  
West Columbia, SC 29170  
Phone 803-755-6529 Fax 803-955-0209

DATE: August 22, 2012  
TO: Jason R. Dunn  
Cleland Site Prep, Inc.  
FROM: Sherita Evans, Office Manager  
Office - 803-755-6529  
Mobile - 803-309-4131  
RE: Hwy. 170 Widening

BID ITEM	OUR QUOTE
➤ 4.00 ea - Const. Zone Elect. Changeable Message Signs	➤ \$1,700.00/monthly rental or \$13,200.00ea + tax - purchase
➤ ??? ea - Drums w Tire Rings	➤ \$39.00 ea - Price for quantity of 1000+
➤ 1,100.00 sf - Permanent Construction Signs (Ground Mounted)	➤ \$5.25 sf - Limited to rent, install, provide maintenance to when notified, and remove at completion of project.
➤ 700.00 sf - Permanent Construction Signs (Barricade Mounted)	➤ \$5.25 sf - Same As Above
➤ 136.00 lf - Barricade - Type II	➤ \$21.00 lf - Same As Above
➤ 610.00 lf - Barricade - Type III	➤ \$24.75lf - Same As Above
➤ 1,550.00 sf - Flat Sht, TyIII, Fixed Sz & Msg Sn	➤ \$23.30sf - Sale & Installation
➤ 3,880.00 lf - Post for Sign Supports-2.25 Sq Tube	➤ \$5.75 lf - Sale & Installation
➤ 10.00 lf - Post for Sign Bracing - 2.25 Sq Tube	➤ \$5.75lf - Sale & Installation
➤ 1.00 ea - Port Term. Impact Atten-Test Level 3	➤ \$8,000.00 ea - PSI will install, maintain, and remove. *Contractor to provide Asphalt Base for Impact Attenuator.
➤ 1.00 ea - Anchor Kit - Port Term Atten (TL 3)	➤ \$700.00 ea - Same As Above
➤ 1.00 ea - Traffic Control	➤ \$1,650.00/day - Lane Closure (Basic <=35MPH) ➤ \$2,100.00/day - Lane Closure (Primary Route) *Please call to discuss traffic control pricing. If numerous days needed can look at lump sum and/or lower daily rate. If only 1 day needed, may have to add mobilization for primary route.
	➤ We request 10 business days advance notice for preparation and notification to utilities.

Thank you for this opportunity to be of service to you. Please call me if you have any questions.

- Permanent Construction Signs quoted above are per SCDOT Standard Drawing #605-010-01, #605-010-02, or #605-015-00.

# B. C. CANNON COMPANY, INC.

2501 RUTHERFORD RD. • GREENVILLE, S.C. 29609 • PHONE: (864) 235-7979 • FAX: (864) 235-7676  
P.O. BOX 3889 • GREENVILLE, S.C. 29608

## QUOTATION December 6, 2012

Page 1 of 3

### Road & Resurfacing Projects

<u>SC COUNTY/PROJ.</u>	<u>Permanent Const. Signs Ground Mounted</u>	<u>Unit Price</u>	<u>Additional Line Items</u>	<u>Unit Price</u>
Beaufort Co. / Widening of SC 170 from SC 46 to US 278	1,100 Sf	*\$7.00 Sf	610 Lf Type III Barricade 136 Lf Type II Barricade 700 Sf Permanent Construction signs Barr. Mtd 1,550 Sf Flat Sheet, Type III Fixed Sz & Msg 3,880 Lf U-Section Post for sign supports - 3P 10 Lf U-Section Post for Sign Bracing - 2P 1,350 Sf Det. Warning Surface (Material Only) 1.00 Ls Mobilization for above signage #2 Ea Crash Truck w/ Arrow Panel	\$29.85 Lf \$35.00 Lf \$12.50 Sf \$18.00 Sf \$11.00 Lf \$9.00 Lf \$14.50 Sf \$1,100.00 <del>\$3,200.00 Ea</del> per month

Price includes initial installation on ground mount post & mobilization unless otherwise noted. Does not include lay-out of signage.

Quantities are approximate. Maintenance is excluded.

Traffic Control to be provided by Contractor

Additional charge of \$12.00 ea. to cover Permanent Construction signs if required.

Please examine the Terms & Conditions of this Quote on Page 2.

Barrier, Bridge & Span Wire Sign Mounts Excluded.

**\*RENTAL PRICE**

**\*\*RENTAL RATE BASED ON 12 MONTH RENTAL. LESS THAN 12 MONTH REVERT TO PRICE LIST RATES.**

Prices Subject to change without notice due to fluctuating material and fuel cost.

## CERTIFIED DBE SCDOT

[www.bccannon.com](http://www.bccannon.com)



Contracting Services  
Barricade - Flasher Leasing  
Traffic Control & Safety Consultants  
Highway, Street & Airport Construction



# B.C. CANNON COMPANY, INC

2501 RUTHERFORD RD, GREENVILLE, S.C. 29609 PH. (864) 235-7979 FAX (864) 235-7676  
P.O. BOX 3889 GREENVILLE, S.C. 29608

All SCDOT Projects December 2012

Traffic Control

Page 3 of 3

Lane Closure Signs & Equipment

	<u>Roll-Up</u>	<u>Composite</u>
48x48 Road Work (Example: 1 mile; ½ mile; Etc)	\$148.00 ea.	\$110.00 ea.
48x48 Right Lane Closed (Example: 1500 Ft; ½ mile; Etc)	\$148.00 ea.	\$110.00 ea.
48x48 Men Working/Flagger	\$148.00 ea.	\$110.00 ea.
48x48 Lane Shift L/R	\$148.00 ea.	\$110.00 ea.
48x48 Advanced Speed Limit Ahead	\$189.00 ea.	\$140.00 ea.
48x60 Speed Limit 45	\$189.00 ea.	\$140.00 ea.
48x60 Do Not Pass	\$189.00 ea.	\$140.00 ea.
48x60 Keep Right / Left	\$189.00 ea.	\$140.00 ea.
48x24 Arrow	\$105.00 ea.	\$55.00 ea.
48x30 Road Closed	\$119.00 ea.	\$81.00 ea.
60x30 Road Closed ___ Miles Ahead	\$139.00 ea.	\$102.00 ea.
Type II Barricade	\$55.00 ea. H.L.P.	\$105.00 *D.G.
Type III Barricade 6' Wide	\$121.00 ea.H.L.P.	\$179.00 *D.G.
Type A or C Lights	\$21.00 ea.	
Type B Flashing Light	\$72.00 ea.	
Type B Flashing Light Solar Powered	\$83.00 ea.	
6v Batteries	\$2.75 ea.	
Exit Arrow	\$144.00 ea.	
48" Yield	\$144.00 ea.	
48x48 Yield Ahead	\$189.00 ea.	
36x24 No Accel Lane	\$60.00 ea.	
Left Plates/Overlays	\$30.00 ea.	
Wind Resistant Rollup Sign Stand	\$148.00 ea.	
42" Oversize Cone 4x6 Stripes	\$31.00 ea.	
36"Cone	\$12.00 ea.	
36" w/ refl collar	\$17.50 ea.	
28" Cone	\$10.00 ea.	
28" Cone w/ refl collar	\$14.50 ea.	
18" Cone	\$6.00 ea.	
Warning Flags	\$3.00 ea.	
*New Style SCDOT / NCDOT Approved Drum (4 - 6" H.L.P. Stripes) < 100-\$55.00 ea. / 100-499 \$52.00 ea.		
/ 500-1000 \$47.00 ea / 1000+ \$41.00 Delivered		
Magnum Light Tower-Diesel, 30' Mast w/ 4-1000 watt lights	\$7,600.00 ea.	
Arrow Board 15 Lamp Solar LED	Purchase \$3,995.00	
	Rental \$75.00/Day \$250.00/Wk \$450.00/Month	
Electric Changeable Message Sign	Purchase \$20,500 / Econo Model \$16,900.00	
	Rental \$250.00/Day \$800.00/Wk \$1,500.00/Month	
Truck Mount Attenuator w/ Arrow Panel	Rental \$800.00/Day, \$1800.00/wk, \$3200.00/mo.	
Skid Mount Full Matrix Message Sign	92"x54" \$11,615.00	
Truck Mount Attenuator Kit Test Level III	\$12,600.00 ea	
Crash Attenuator Test Level II w/Anchor Kit -45 mph	\$7,600.00 ea. 30" WIDE-- \$8500.00	
Crash Attenuator Test Level III w/Anchor Kit-60 mph	\$11,400.00 ea.	
Crash Attenuator Test Level III w/Anchor Kit-70 mph	\$13,800.00 ea.	
Extra Anchor Kits	\$425.00 ea.	
Waterfill Barrier Wall 6 LF.	\$335.00 ea.	
8" Round Top Mount Barrier Wall Reflector (100+)	\$7.00 ea.	
JD1 Stick On Side Mount Barrier Wall Reflector (100+)	\$1.60 ea.	
Side Mount Barrier Wall Reflector	\$1.95 ea.	

- No set up or delivery included
- All materials meet SCDOT & FHWA NCHRP 350 Requirements
- For Larger Quantity Prices - Call Bruce Cannon 864 235-1255
- Prices subject to change without notice
- SCDOT Specification change effective June 2012

**CERTIFIED DBE SCDOT**





Protection Services Inc.  
835 Lucknow Rd.  
Harrisburg, PA 17110  
(717) 238-9307



FEDERAL  
ID NO.  
23-2001876

W. Columbia, SC (803) 765-8829 Fax: (803) 985-0209

ORDER NUMBER	ORDER DATE	TERMS	INVOICE DATE	INVOICE NUMBER
238825	1/8/2013	Net 30 Days	1/10/2013	69585

INVOICED TO:

Cleland Site Prep Inc  
PO Box 3822  
Bluffton SC 29910

SHIP TO:

Cleland Site Prep Inc  
PO Box 3822  
Bluffton SC 29910

SHIPMENT VIA	FREIGHT TERMS	SALES PERSON	BRANCH
			20005400

Service Charge of 1.25% Per Month 15% Annual to All Past Due

CUSTOMER PO #: SC170 Widening-Beeufort/Jasper	PROJECT LOCATION: Jason Dunn-Direct Ship
WORK ORDER #: 20005400	ACCOUNT NUMBER: 86738

ITEM	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	AMOUNT
234969	DRUMS W/ TIRE RINGS DRUM B500 4-6"HP	1200.00	EA	36.00	\$48,800.00

SALES TOTAL	\$48,800.00
6.2% SALES TAX	\$2,808.00
INVOICE TOTAL	\$48,808.00

RECEIVED  
JAN 14 2013  
CLELAND  
site prep

PO# 4204-04

~~6244 604 20005400~~

OK  
(2100)

ENTERED

PO130219 R1