### RESOLUTION 2012-068 RESOLUTION AUTHORIZING AND APPROVING CHANGE ORDER

WHEREAS, the Bordentown Sewerage Authority is satisfied that a need for the following change order exists and that it is not reasonably possible to execute a new contract for the additional work; and

WHEREAS, a Certificate of Availability of Funds has been provided by the designated certifying finance officer and is attached hereto.

NOW, THEREFORE, BE IT RESOLVED this 20<sup>th</sup> day of August, 2012, that the following change order be and the same is hereby approved and authorized:

CONTRACT:

Contract No. 5 – Black's Creek Wastewater Treatment Plant

**Energy Audit Improvements** 

CHANGE ORDER NUMBER:

1

CONTRACTOR:

Eagle Construction Services, Inc.

AMOUNT OF ORIGINAL CONTRACT:

\$1,798,514.00

AMOUNT OF PRIOR CHANGE ORDERS:

\$0.00

AMOUNT OF THIS CHANGE ORDER:

\$6,978.87

TOTAL AMOUNT OF CHANGE ORDERS:

\$6,978.87

TOTAL PERCENTAGE OF CHANGE ORDERS:

.388%

REASON FOR THIS CHANGE ORDER:

(1) Provide two vertical supports for two of

the oxidation tank dissolved oxygen probes, and (2) Upgrade DC motors with speed control to AC motors with modern variable frequency drives on sludge dewatering pumps 6A, 6B and 6C only.

THE BORDENTOWN SEWERAGE AUTHORITY

Rv.

Ronald L. Marino, Chairman

ATTEST:

Nancy A. Liberman, Secretary

Stroken Mouson, Asst

I have reviewed this Resolution and the Certificate of Availability of Funds and am satisfied that an appropriate Certificate of Availability has been provided.

Edward A. Kondracki, Esquire

#### **CERTIFICATE OF AVAILABILITY OF FUNDS**

I, Richard D. Eustace, Executive Director and Certifying Finance Officer of The Bordentown Sewerage Authority, do hereby certify, pursuant to the rules of the Department of Community Affairs, Division of Local Government Services (N.J.A.C. 5:34-5.1 et seq.), that there are available adequate funds for the following proposed contract:

CONTRACT:

Black's Creek Wastewater Treatment Plant Energy

Audit Improvements

**CONTRACT NUMBER:** 

Contract No. 5

CONTRACTOR:

Eagle Construction Services, Inc.

CONTRACT AMOUNT:

Change Order for \$6,978.87

**BUDGETARY LINE ITEM:** 

02-004-7649

I certify that the same funds have not been certified as available for more than one pending contract.

8/20/12

Date

Richard D. Eustace

Certifying Finance Officer

#### Special situations (check all that apply):

A.)	The	Authority is operating under a temporary budget and:
	1.	the full cost of the contract is certified against the temporary budget; or
	2.	only the pro rata amount of the contract is charged against the temporary budget and the contract contains a clause making its continuation past the date subject to a further appropriation of sufficient funds.
<u>√</u> B.)		contract is an open-ended contract for goods at a unit price up to a mum amount and:
	1.	the full maximum amount permitted by the contract is being certified; or
	2.	the amount of the purchase shall be certified at the time that such goods are ordered by attaching the certificate of availability to the file copy of the purchase order.
C.)	This	12-month contract does not coincide with the fiscal year and:
	1.	the full cost of the contract is hereby certified against the budget of the year in which the contract is awarded; or
	2.	the amounts for which liability is to be incurred is hereby certified against the two respective budgets at this time.
D.)	This i	s a multi-year contract and:
	1.	this contract is for construction and related services and the full amount of the contract is hereby certified to the current budget; or
	2.	this is not a construction contract, and the availability of funds will be certified to the respective budgets at the time that the goods or services are ordered.
8/20/1	2	Right D D E A
Date		Richard D. Eustace  Certifying Finance Officer



EDWARD VERNICK, PE, CME, President CRAIG F. REMINGTON, PLS, PP, Vice President

EXECUTIVE VICE PRESIDENTS Michael D. Vena, PE, PP, CME (deceased 2006)

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Remington, Vernick

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Cinnaminson, NJ 08077
(856) 303-1249
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(858)

300 Penhorn Avenue, 3rd Floor Secaucus, NJ 07094 (201) 624-2137 (201) 624-2136 (fax) August 16, 2012

Richard Eustace, Executive Director Bordentown Sewerage Authority P.O. Box 396 954 Farnsworth Avenue Bordentown, NJ 08505

RE: Bordentown Sewerage Authority
Contract No. 5 – Black's Creek Wastewater Treatment Plant
Energy Audit Improvements
Change Order Recommendations
Our File #0304M026

Dear Mr. Eustace:

The contractor, Eagle Construction Company has submitted two change orders which we recommend for approval and are summarized below:

Oxidation Tank Dissolved Oxygen Instrument Vertical Supports: \$1,123.09: The proposed four dissolved oxygen probes measure the concentration of dissolved oxygen in the oxidation tanks. Each probe is attached to support piping and a flexible joint that normally extends out of the wastewater and attach to a handrail. The probes require routine cleaning. For the two dissolved oxygen probes on the east side of the tankage to improve their accessibility BSA personnel desire the support piping and flexible joint to be mounted on a removable vertical support. The change order is for the cost to provide these two vertical supports.

Sludge Dewatering Pumps 6A – 6C Control System Upgrade and Motor Replacement: Under the proposed contract the DC motors were to be replaced and pump 6C was relocated to make room for a new grinder. Included in the relocation was the addition of a disconnect switch within view of the pump.

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August 16, 2012
Bordentown Sewerage Authority
Contract No. 5 – Black's Creek Wastewater Treatment Plant Energy Audit Improvements
Change Order Recommendations

Due to the control system for pump 6B failing making the pump inoperable the scope for these three pumps has been re-evaluated. These pumps feed sludge to the belt filter presses and their reliability is of upmost importance to the BSA staff. Therefore, the proposed change order is to change the 22 year old technology of using DC motors with speed control to AC motors with modern variable frequency drives. In addition, pumps 6A and 6B would be provided with disconnect switches within view of the pumps which would be required if the pumps were being installed in a new facility. Within the change order summary a credit of \$22,900.00 is provided for elimination of the DC motors. This reduces the overall change order cost to the \$5,855.78 shown.

This change order recommendation is conditional on the three new VFD's fitting in the existing panel. We have been informed by Willier Electric that the VFD dimensional sheet provided contains dimensions that exceed the VFD units to be provided and all three units are expected to fit in the panel.

Both change orders are also contingent on NJDEP approval after BSA approval.

If you have any questions regarding this correspondence please contact the writer.

Sincerely,

REMINGTON, VERNICK & ARANGO ENGINEERS, INC.

Richard B. Czekanski, P.E., C.M.E.

RBC/rbc enclosure

cc: w/encl

Judith Klim, BSA Craig Dansbury, BSA

Edward Kondracki, BSA Solicitor

David Helfrich, NJDEP

Engle Construction Services, Inc. 1624 Jacksonville Road Burlington, NJ 08016 Phone 609-239-8000 Fax 609-239-8008

## Black Creek WWTP - Energy Audit Improvements Bordentown, NJ 7/30/12 Add Upright at DO probes

	ITEM	QUANTITY		MATERIAL/EQUIPMENT		LABOR		Subs	TOPIC
CODE	DESCRIPTION	#	UNIT	\$ Unit Price	S TOTAL	Labor hours	Total Labor IIRs.		
TBF-3.4 Aluminum Base flange		2	each	250	500	2.00	4		
included 2" schedule 80 capped upright 24"		2	each	0	0	0.00	0	ļ	
	SS Expansion Bolts	8	each	6	48	0.00	0		
	Freight cost	1	lump	50	50	0.00	0		
****	post to have anodized finish							{	
	Sub-Totals				\$598.00		. 4	0	
						7	Potal Man		
							HRs.		
							•		
	Man hours above	4.00	72	288.00					
	Ins/Contrib on labor	0.25		72.00					
	Materials			698.00					
	Subcontractors			0.00					
	Sub Total			958,00					
	Overhead	0.10		95.80					
	Sub Total		•	1063.80					1
	Profit	0.05		52.69	•				·
	Sub Total			1106,49					
	BOND	0.02		16.60					
TOTAL				1123.09					

Eagle Construction Services, Inc. 1624 Jacksonville Road Burlington, NJ 08016 Phone 609-239-8000 Fax 609-239-8008

# Black Creek WWTP - Energy Audit Improvements Bordentown, NJ 8/6/12 Upgrade Direct Motors to AC Motors & VFD's Pumps P-6-A, B, C ONLY

			<del></del>	·		•			<del></del>
	item	QUANTITY		MATERIAL/EQUIPMENT.		LABOR		Subs	TOPIC
CODE	DESCRIPTION	#	זואט	S Unit Price	s TOTAL	Labor hours Total	Labor HRs.		
	Delete 5 HP DC motors	<b>-</b> 3							
		*3 3	each	0	0		0	-22,900	
	Provide 7.5 HP AC Prem Motors		each	0	0	0.00	0	6,168	
	7.5 required do to torque on DC motors VFD Drives 10 HP				•	0.00		7	
	VFD Start Up	3 1	each	0	0	· ·	0	11,600	
	Safety Disconnect built in to VFD	1	lump	0	U	0.00	0	750	
	Modify Existing Control Panel	1	lunan	0	0	0.00	^	000	
	Control Logic Scadia	1	lemp lump	Û	0	0.00 0.00	0	900	•
	3/4" liquidtight (metallic)	, 14	cach	2.75	. 38.5	0.00	. 0	2,000	
	3/4" seal tite conn (str)	. 4	each	2.73	. 36.3	0.15	2 1	1	
	3/4" seal tite conn (90 degree)	4	each	11	24 44	0.15	2		
	3/4" conduit hanger w/bolt	2	each	3	6	0.50	2 1		
	3/8 x 2-1/4 bolt hex head cap screw	28	each	4	112	0.23	7	1	
	#12 THNN CU solid wire	59	lf	0.34	20,06	0.23	1	ĺ	
	switch non fused HD 30A Nema 4X s/s		each	1255	2510	1.50	3	1	
	Unistrut deep	2 20	if	9.5	190	0.18	4		
	cut 12 gauge 1-5/8 x 1-5/8 channel		each	0	130	0.26	r I		
	3/8" spring nuts	4 28	each	2.86	80.08	0,11	3		
	3/8" concrete anchors	16	each	0.75	12	0.28	5	1	
	single post base	4	each	150	600	0.80	3		
Sub-Totals			-	····	\$3,636.64		31	-1,482	
	54b-10tais				201020104	Total		404/1-	•
				HRs.					
	Man hours above	31	73.3	2272,30	. (	Outlead load	reactors	s included (	or distance
	Ins/Contrib on labor			568.08		to panel. Sat	etv disco	nnect inch	ided with
Materials		0.25		3636,64		VFD. HOA swi			
	Subcontractors			-1482.00		exist. Fault lig			
	Sub Total		•	4996,02		VFD's to fit in			
	Overhead	0.10		499.50		VI:D 5 to lit in	paner.		
	Sub Total	5.10	-	6494,52					
	Profit	0.05		274.73					
	Sub Total	V.00	***	5769,24					
	BOND	0.02		86,54					
	TOTAL	0.02	-						
	TOTAL			6855.78					