

RESOLUTION NO. 2015-142

A RESOLUTION AUTHORIZING THE ISSUANCE OF AN AMENDATORY SUPPLEMENTAL CHANGE ORDER NO. 3, TO CONTRACT NO. C14-0075 ISSUED TO TN WARD COMPANY, ARDMORE, PA, IN THE AMOUNT OF \$152,257.92.

WHEREAS, the City Council of the City of Vineland, on May 27, 2014, adopted Resolution No. 2014-221, entitled "A RESOLUTION AWARDED A CONTRACT TO TN WARD COMPANY, ARDMORE, PA, FOR CONSTRUCTION SERVICES FOR SCR INSTALLATION FOR THE VINELAND MUNICIPAL ELECTRIC UTILITY"; and

WHEREAS, N.J.A.C. 5:30-11.9 sets forth the procedures for processing change orders which exceed the 20 percent limitation; and

WHEREAS, the management personnel of Vineland Municipal Electric Utility has requested that an amendment be made to contract awarded to TN Ward Company, Ardmore, PA for Construction Services for SCR Installation for the Vineland Municipal Electric Utility as authorized by Resolution No. 2014-221: said amendment is necessary for the replacement of power cable and cable bus, the correction of deficiencies in the fabrication of the SCR for which the manufacturer will be back charged and various miscellaneous items, for a total additional amount of \$432,209.92; and

WHEREAS, Resolution No. 2014-221 included a contingency in the amount of \$429,000.00 of which \$149,048 was charged for Change Orders #1 and #2 with a remaining balance of \$279,952.00, therefore, an additional \$152,257.92 is requested to provide for this change order; and

WHEREAS, the City of Vineland desires to comply with said requirements of N.J.A.C. 5:30-11.1, et seq., and to that end herewith files with the governing body a report stating the facts involved and indicating that the proposed change order may be allowed under these regulations; and

WHEREAS, the City Comptroller has certified the availability of funds for the amendatory supplemental change order for which authorization is requested in the amount of \$152,257.92; now, therefore,

BE IT RESOLVED by the Council of the City of Vineland that said amendatory supplemental change order to Contract No. C14-0075, issued to TN Ward Company, Ardmore, PA, in the amount of \$152,257.92, be and the same is hereby ratified and approved.

Adopted:

President of Council

ATTEST:

City Clerk



March 17, 2015

REPORT

TO: THE MAYOR AND COUNCIL

Amendatory Supplemental Change Order No. 3
Contract No. C14-0075
TN Ward Company, Ardmore, PA for Construction Services for SCR Installation for the
Vineland Municipal Electric Utility

We are requesting that an amendatory supplemental change order be issued to Contract No. C14-0075, issued to TN Ward Company, Ardmore, PA for Construction Services for SCR Installation for the Vineland Municipal Electric Utility. This contract was authorized by Resolution No. 2014-221, adopted by City Council on May 27, 2014.

The original contract was awarded in the amount of \$2,860,000.00 plus a contingency in the amount of \$429,000.00, for a total authorized amount of \$3,289,000.00. Change Order No. 1 (\$95,938) and Change Order No. 2 (\$53,110) were charged to the contingency, leaving a contingency balance of \$279,952.00.

The proposed Change Order #3 for a total amount of \$432,209.92 consists of the replacement of power cable and cable bus, the correction of deficiencies in the fabrication of the SCR for which the manufacturer will be back charged and various miscellaneous items. After deducting the contingency balance of \$279,952.00, the additional amount needed to provide for this change is **\$152,257.92**.

This change order, plus change orders #1 and #2 represents an increase of approximately 20.3237% over the original contract amount of \$2,860,000.00.

The amendatory supplemental change order which exceeds the 20% limitation, for which authorization is herein requested, may be authorized in accordance with N.J.A.C. 5:30-11.9.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Robert Dickenson", is written over the typed name.

Robert Dickenson
Assistant Business Administrator

RD/wr
Encl.

Reid Wanda

From: Lewis Yvonne
Sent: Monday, March 16, 2015 3:22 PM
To: Reid Wanda; Dickenson Bob
Cc: Colla Joseph; Foster Gustav; Isabella Joseph; Boyle John
Subject: TN Ward - Change Order No. 3

Received Change Order #3 request for TN Ward for the Selective Catalytic Reduction System for Combustion Turbine at West Station.

After review, just wanted to note that the additional amount that needs to be authorized by City Council for Change Order No. 3 is

\$152,257.92.

This is taking the contingency amount of \$429,000 and deducting the following change orders:

\$429,000.00
-\$95,938.00 (change order #1)
-\$53,110.00 (change order #2)
-\$432,209.92 (change order #3)

\$152,257.92

Thank you

Yvonne Lewis, RPPO
Purchasing Agent
City of Vineland
640 E. Wood Street
PO Box 1508
Vineland, NJ 08360
(856) 794-4000 Ext. 4045
FAX: (856) 405-4605
Email: ylewis@vinelandcity.org

REQUEST FOR CHANGE ORDER



FOR:

Selective Catalytic Reduction System for Combustion Turbine at West Substation

PROJECT NAME

TO: BUSINESS ADMINISTRATION

DEPARTMENT: Electric Utility FROM: Joseph L. Colla

This is a request for change order # 3 to Contract # C14-0075 for:

Project Name Selective Catalytic Reduction System for Combustion Turbine at West Substation

Name/Address of

Contractor: TN Ward Company 129 Couler Avenue, Ardmore, PA 19003

The change order is necessary because: (use additional pages if necessary to explain your reason and you must attach *documentation to support the necessity of this change order.

*(Documentation from contractor, engineer, etc.)

This change order consists of the replacement of power cable and cable bus, the correction of deficiencies in the fabrication of the SCR for which the manufacturer will be back charged and various miscellaneous items.

Original Contract Amount: \$ 2,860,000 + 429,000 (contingency)

Amount of this change order: ^{#3} \$ ~~432,210~~ 432,209.92 (less the Contingency)
 \$ 152,257.92

Previous Change Orders: \$ 149,048 ✓

Total Revised Amount: \$ 3,441,258

APPROVED BY: SA ISABELLA
Print/type

[Signature]
Signature

[Signature]
3/13/15
3/13/15

NOTE:
CHANGE ORDERS CANNOT EXCEED 20% OF THE ORIGINAL CONTRACT AMOUNT

Please provide the account number that the change order will be charged to:

Account # 022-0-00-00-000-2-7511700, E340
CC: Purchasing Division

Change Orders for TN Ward Contract for Construction Services

I. Change order #1		
Additional work described in issued for construction drawings but not shown on RFP drawings		\$95,938.00
II. Change order #2		
Repair of support structure for existing generator cooling air system		\$53,110.00
III. Change order #3		
Purchase of cable bus and installation of power cable and cable bus	\$96,658.00	
Miscellaneous items (implementation completed)	\$115,892.92	
Alterations to the cable bus	\$26,364.00	
Items to be back charged to Turner EnviroLogic	\$72,579.00	
Miscellaneous items (being implemented)	<u>\$120,716.00</u>	
	Subtotal	<u>\$432,209.92</u>
	Total	\$581,257.92

Change Orders for TN Ward Construction Services Contract

Change orders approved by Joe Isabella

Additional work described in Issued for construction drawings but not shown on RFP drawings	\$95,938.00
Repair of support structure for existing generator cooling air system	\$53,110.00
Subtotal	\$149,048.00

Approved change orders for cable and cable bus

Installation of cable and cable bus*	\$72,643.00
Supply of cable bus*	\$20,223.00
Supply and installation of a cable bus support structure*	\$3,792.00
Subtotal	\$96,658.00

Approved change orders for miscellaneous items

Demolition of existing stack and ductwork	\$16,588.00
Increase in electric feeder size to accommodate change from 250 horsepower to 300 horsepower motors for cooling air fans	\$4,617.00
Additional to establish new control points	\$2,193.00
Supply and installation of additional steel to repair existing generator cooling air system	\$10,049.82
Removal of perforated plate from inlet transition #2 to facilitate installation of cooling air housing section	\$7,219.10
Increase in opening on south wall of turbine building to accommodate SCR ductwork	\$6,623.00
Relocation of compressed air bleed line	\$14,299.00
Installation of instrumentation supplied by Turner EnviroLogic	\$39,472.00
Increasing depth of trenches from 32 inches to 42 inches	\$6,018.00
Installation of perforated plate into Inlet transition #2 to facilitate installation of cooling air housing section	\$8,814.00
Subtotal	\$115,892.92

Modifications to the cable bus

Modifications to the cable bus	\$26,364.00
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Change orders to be back charged to Turner EnviroLogic

Start of erection delay caused by late delivery of expansion joint	\$12,801.00
Lifting lug failure	\$28,527.00
Cooling air fan conduit change	\$6,122.00
Modification to conduit vertical supports	\$6,925.00
Alterations to cooling air elbow	\$14,851.00
Rotation of cooling air fan dampers	\$3,353.00
Subtotal	\$72,579.00

Change orders for miscellaneous items (just issued)

Painting including touchup painting	\$8,880.00
Installation of liner plates to cover fabric expansion joint	\$16,933.00
Installation of fabric expansion joint	\$53,474.00
Additional work shown on Issued for construction drawings	\$35,329.00
Grounding grid modifications	\$6,100.00
Subtotal	\$120,716.00

Total \$581,257.92

TN Ward Contract Contingency

Following competitive bidding earlier this year a fixed price contract in the amount of \$2,860,000 was awarded to TN Ward for construction services to install a selective catalytic reduction unit on the combustion turbine at west substation. The only other proposal was submitted by Durr Mechanical Construction in the amount of \$3,334,000. The resolution authorizing award of a purchase order to TN Ward included \$429,000 (15%) in contingency which is unknown to TN Ward. It was anticipated that contingency would be needed because final construction drawings were not available for inclusion in the request for proposals. The delay in issuing final construction drawings was the result of a four month delay in awarding a contract for the SCR. The delay in contract award was caused by the need to conduct two rounds of bidding leading to an award to Turner EnviroLogic. Although award of a contract for the SCR was delayed by four months, the project completion date of May 1, 2015 remained unchanged. Contingency was anticipated to be needed to fund any additional work described in the more detailed issued for construction drawings and potential design or fabrication deficiencies in the Turner SCR.

Two and a half months after award of the construction contract and following issuance of final construction drawings, TN Ward submitted a request for a change order in the amount of \$331,069. They said the change order was needed to cover the additional work reflected in the issued for construction drawings. A change order in the amount of \$95,938 or 29% of the amount requested was negotiated.

One of the initial construction activities, demolition of the combustion turbine stack and exhaust flue, exposed sections of the generator cooling air system that were not previously visible. It was discovered that the support structure for the cooling air system was badly deteriorated and in need of repair. Fresh Meadow Power, a mechanical subcontractor to TN Ward, executed the repairs. The cost of the repairs was \$63,160.

During erection of the SCR, it was discovered that the cable bus duct and power cable connecting the generator to the distribution transformer had to be removed in order to install

the SCR ductwork. The cable bus duct and power cable were located on the roof of the combustion turbine and ran its entire length. The replacement and relocation of the cable bus duct and power cable had been planned and budgeted as a separate project to be implemented at a later date. There was not sufficient time to purchase the cable bus duct and power cable in accordance with New Jersey procurement requirements and complete the installation to meet the scheduled startup of the combustion turbine. In order to meet the project target completion date Bob Napier decided to have TN Ward purchase the cable bus duct and install it along with the power cable. Change orders having an aggregate value of \$96,658 were awarded to TN Ward for this work. An additional change order in the amount of \$26,364 for modifications to the cable bus was received last week. When contingency equal to 15% of the fixed price contract awarded to TN Ward was established, it was not anticipated any of the contingency would be used to purchase and install cable bus duct and power cable.

The attached table entitled "Change Orders for TN Ward Contract for Construction Services" lists the change orders approved to date. The total amount of approved change orders is \$361,598 of which \$255,756 or 71% consist of the three previously discussed items. The remaining approved change orders total \$105,842 and consist of various miscellaneous items.

During erection of the SCR, unanticipated problems requiring immediate corrective action were experienced. Examples include failure of a lifting lug supplied by Turner EnviroLogic resulting in extensive damage to the cooling air housing, major alterations to the cooling air duct elbow supplied by Turner, and rotation of the cooling air fan dampers and modifications to the electric supply system to one of the cooling air fans because of errors in drawings supplied by Turner EnviroLogic. Change orders amounting to \$72,579 for the work required to correct these problems were negotiated with TN Ward and will be back charged to Turner EnviroLogic.

At the present time the project is in the final stages of construction, and commissioning is scheduled to begin. Fabrication errors by Turner EnviroLogic requiring corrective action continue to be discovered. Change orders required to correct fabrication errors will be back charged to Turner EnviroLogic. The total for approved and pending approval change orders is \$581,258 or 20.3% of the original contract.