NOTICE OF CONTRACT AMENDMENT

TO: BRANCH GROUP, INC.
    DBA REXEL
    2721 DORR AVENUE
    FAIRFAX, VA 22031

DATE ISSUED: JUNE 14, 2013

CONTRACT NO.: 325-10

AMENDMENT NO.: 2

THIS IS A NOTICE OF CONTRACT AMENDMENT AND NOT AN ORDER. NO WORK IS AUTHORIZED UNTIL THE VENDOR RECEIVES A VALID COUNTY PURCHASE ORDER ENCUMBERING CONTRACT FUNDS.

The above referenced contract is amended as follows:

1) Refer to Amendment Number 2 to Agreement No. 325-10

EMPLOYEES NOT TO BENEFIT:
NO COUNTY EMPLOYEE SHALL RECEIVE ANY SHARE OR BENEFIT OF THIS CONTRACT NOT AVAILABLE TO THE GENERAL PUBLIC.

VENDOR CONTACT: BRUCE CREE
VENDOR PHONE: 703-560-2500
VENDOR FAX: 703-560-1059
VENDOR EMAIL: BRUCE.CREE@REXELUSA.COM

COUNTY CONTACT: GERRY WATKINS
COUNTY TEL. NO.: 703-228-6891
COUNTY EMAIL: GWATKINS@ARLINGTONVA.US

CONTRACT AUTHORIZATION

Elizabeth Dooley, CPF, CPEH
Assistant Purchasing Agent

DISTRIBUTION

VENDOR: 1
BID FOLDER: 1

DATE 6/27/13
ARLINGTON COUNTY, VIRGINIA

AGREEMENT NO. 325-10
AMENDMENT NUMBER 2

This Amendment Number 2 ("Amendment") is made on the date of execution of the Amendment by the County and amends Agreement Number 325-10 dated May 5, 2011, as amended by Amendment No. 1 ("Main Agreement as Amended") and made between Branch Group, Inc., dba Rexel, 2721 Dorr Avenue, Fairfax, VA 22031 ("Contractor") and the County Board of Arlington County, Virginia ("County").

Whereas the County and the Contractor desire to amend the Work called for and the amounts to be paid under the Main Agreement, as amended the Contractor and the County, in consideration of the promises and other good and valuable consideration specified in this Amendment, amend the Main Agreement as follows:

Exhibit A (Scope of Services) shall be amended to add equipment and services listed in this Amendment.

The County shall pay the Contractor $230,000.00 in addition to the amount specified in the Main Agreement for the equipment and services listed this Amendment in accordance with Pricing Schedule.

All other terms and conditions of the Main Agreement, as amended shall remain in full force and effect.

WITNESS THESE SIGNATURES:

THE COUNTY BOARD OF ARLINGTON COUNTY, VIRGINIA

SIGNED BY: [Signature]
PRINT NAME: RICHARD D. WARREN, JR.
AND TITLE: PURCHASING AGENT
DATE: 6.11.13

BRANCH GROUP, INC. DBA REXEL

SIGNED BY: [Signature]
PRINT NAME: WILLIAM M. TUCKER VP REXEL
AND TITLE: [Title]
DATE: 6.10.13

Agreement No. 325-10
Amendment No. 2
Agreement 325-10
Amendment No. 2

Scope of Services

Exhibit A to the Main Agreement (Scope of Services) is amended to include the following equipment and services as part of the tasks indicated, in addition to the services, goods and equipment originally called for.

PROJECT BACKGROUND:
The Process Control System (PCS) at the Arlington County Water Pollution Control Plant ("ACWPCP") currently includes Rockwell Automation 1756-L63 processors, ENBT Ethernet modules, CNBR ControlNet modules, and SRM processor redundancy modules. Human Machine Interface (HMI) software consists of FactoryTalk View SE Version 5.0. Rexel ("the Contractor") shall upgrade the PCS hardware and software in accordance with the requirements detailed below. These upgrades will allow the ACWPCP to sustain reliable PCS control by ensuring performance and compatibility of the various hardware and software components that make up the PCS.

The Contractor shall provide the County with project management and oversight services, technical expertise, Rockwell Automation and related software, software configuration and testing, hardware and firmware upgrades and testing, startup support, network connections and verification, and warranty phase parts and services in accordance with the requirements detailed below.

The project will be implemented in 2 phases. Phase 1 is the Virtualization Phase which entails upgrading the PCS base operating systems and Rockwell software. Phase 2 is the Hardware/Firmware Upgrade Phase which follows Phase 1 due to the logical connections needed. Software and firmware updates available after the project will be provided and implemented in accordance with the provisions of the Main Agreement.

The Contractor shall work with the County appointed Project Officer and his/her support staff throughout project implementation. The Project Officer will be responsible for obtaining any internal authorizations, approvals, and signoffs required for the Contractor to proceed. The Project Team will consist of Contractor and County staff members with a working knowledge of the County's PCS software and hardware systems. If the Contractor discovers or asserts that the Project Officer is not performing the duties outlined above effectively or timely, it shall promptly notify the Project Team of the issues or concerns in writing.

At the completion of this project FactoryTalk View SE, Transaction Manager and Asset Center will be running on Virtual Machine Servers with Virtual Machine Clients. All twenty one (21) DCUs will be running version 20 of RSLinx5000.

CONTRACTOR PERFORMANCE REQUIREMENTS:
The Contractor's Team will consist of an onsite Project Manager, who will also serve as the technical lead, and the offsite Program Manager. The Project Manager will be responsible for technical completion of the work on schedule and within budget. The Program Manager will ensure the Project
Manager has the necessary resources to meet the project schedule and budget, and will address any issues that require escalation above the Project Manager. The Contractor must thoroughly understand the performance requirements and shall correlate the requirements with workable plans to provide the parts and services required.

The Contractor shall implement the PCS software and hardware upgrades as detailed below. Throughout the duration of the Project, the County will continue to have a completely functional PCS, including DCU hardware, Data servers, Human Machine Interface (HMI) services, and related Alarms, Historian and Asset Management functions. At no time shall these services be interrupted except briefly during pre-scheduled transition to new hardware. Such shut downs for transitions shall be authorized by the Project Officer who will coordinate with AOWPCC Operations staff. Shut down schedules and durations shall be approved by the County Project Officer in advance.

For the duration of this project, the Contractor will perform the following minimum tasks for each milestone of the project until complete:

1. **Knowledge Transfer**: The Contractor shall provide complete system knowledge transfer throughout the project to the County Project Officer. The knowledge transfer will include understanding of the software configuration, configuration management, troubleshooting, and ongoing operational maintenance of the improvements. The Contractor will achieve knowledge transfer through demonstration to the Project Officer during implementation, as well as transfer of manufacturer’s documentation.

2. **Project Manager**: To ensure consistency in the management of the Project, the County Project Officer reserves the right to approve assignment of the Contractor’s key project management positions for this project. The Contractor’s project manager shall remain involved in the project and accessible throughout the project implementation and testing phases. The project manager or suitable alternate staff shall be identified and remain accessible as the point of contact during the warranty phase.

3. **Project Control**: The Contractor shall maintain a detailed project schedule, which shall be regularly updated and distributed to the County Project Officer.

4. **Risk Management**: The Contractor will identify, track, prioritize and resolve or mitigate all project-related risks and issues.

5. **Issue Management**: The Contractor will identify, track, prioritize, and resolve or mitigate all project-related issues. Issues and nonconformities shall be documented in a format approved by the County Project Officer, and the Contractor shall promptly complete any tasks identified to address such issues.

6. **Decision Management**: The Contractor will identify, track, prioritize, and document all key project decisions. Decisions shall be documented in a format approved by the County Project Officer. The decision shall be tracked through resolution and closed when complete.

7. **Milestones**: There are two (2) project milestones associated with payment in accordance with the Pricing Schedule. Requirements for completion of each milestone are defined in this scope.

8. **Invoices**: Timely, detailed invoices that clearly document the milestone achieved are required. All work under the milestone must be approved by the County Project Officer before payment may be made.
9. **Work Location:** All work shall be performed at the project site, which is the Arlington County Water Pollution Control Plant, 3402 S. Glebe Road, Arlington, VA 22202.

10. **Work Week:** Allowable project work hours at the ACWPCP are from 7:00 am to 5:00 pm Eastern Time, Monday through Friday, excluding County approved holidays. On-site Contractor staff is expected to work within these hours or on a schedule as otherwise approved by the County Project Officer. No additional payment will be approved for work outside the above specified project work hours.

11. **Staff Performance:** Issues identified by the County Project Officer regarding performance of any Contractor employee or subcontractor shall be addressed immediately and proposed resolution must be approved by the County Project Officer, leading to replacement of staff, if necessary, within thirty (30) calendar days.

12. **Non-Project Work:** While on-site, Contractor staff working on the County project shall not undertake business development activities.

13. **Testing & Acceptance Procedures:** The County will review and/or test each phase of the project as detailed below. After the specified testing period, the work will be deemed accepted unless otherwise noted by the County Project Officer. If testing cannot adequately demonstrate success of the work within the specified testing duration, the County shall notify the Contractor prior to the end of the testing period. After such notice, and at no additional cost to the County, the Contractor shall make the requested or required revisions or modifications and then request a re-test. All re-tests shall conform to the specified testing period. If the Contractor believes that the revisions or modifications or other remediation is outside of the scope of services, it shall notify the Project Officer in writing immediately.

The following identifies the minimum tasks required for implementation of the PCS Software and Hardware Upgrades:

**WBS 1.0 Project Management and Oversight Services**
The Contractor shall provide Project management and oversight services. The Contractor shall coordinate all Project activities including, but not necessarily limited to, the following Project Management services:

- Coordination of project resources and work so that project milestones are met in an efficient manner; tasks will be designed so as to reasonably minimize implementation time and cost;
- Serve as the main point of contact for the County Project Officer; and
- Provide periodic updates to the work schedule from the project start date until the project completion date.

The County will provide access to the project work areas, including network/virtual access as required, including desks, chairs, telephones and workstations with network access to printers and to the application databases. Infrastructure, including phones and network access, shall be used only for project purposes.

The Contractor shall assign an onsite senior-level Project Manager to provide subject matter expertise, monitor and manage project resources and budget, and ensure quality delivery of services. The Contractor’s Project Manager will report to the Contractor’s offsite Program Manager who will provide
additional oversight and serve as an escalation point for any issues or concerns that are not resolved by the Contractor’s Project Manager. The Contractor’s Project Manager is the County’s first escalation point for any issues that arise during the course of the project implementation.

The Contractor’s Project Manager shall monitor the project resources to ensure quality delivery of services and that the work is completed on time and in accordance with the project requirements.

WBS 2.0 Virtualization Phase (Phase 1)
This phase will include creating Windows Data Center 2008 Virtual Machine (VM) images and Windows 7 images. The server images shall have FactoryTalk View SE, Transaction Manager and Asset Center installed. Two (2) Windows 7 images shall be configured, including one as a FactoryTalk View SE Operator Work Station client and the other as a ControlLogix Engineering Work Station. The current versions of Rockwell Automation Software shall be used for the new installations.

VM Development
The Contractor shall create the following new VM’s with Windows 2008 and Windows 7 (32bit and 64bit) prior to onsite deployment (VM Development Period):

- PMC-HMI1-VM
- PMC-HMI2-VM
- PMC-HIST-VM
- PMC-ASSET-VM
- PMC-DAT1-VM
- PMC-DAT2-VM
- OWS-WIN7-VM
- EWS-WIN7-VM

a. Backup all applications
b. Create six (6) Windows Data Center 2008 images
c. Configure two (2) images as FactoryTalk View SE Redundant HMI Servers
d. Configure two (2) images as FactoryTalk View SE Redundant Data Servers
e. Configure one (1) image with FactoryTalk Transaction Manager
f. Configure one (1) image with Asset Center
g. Create two (2) Windows 7 images (OWS & EWS)
h. Configure one (1) Windows 7 image as a FactoryTalk View SE Client

Deliverables: completed software images as defined in items a. through h. above.

VM Deployment
The Contractor shall:
1) Convert FactoryTalk View SE Application from version 5.0 to 6.1
2) Install FactoryTalk Transaction Manager version 10.10
3) Install FactoryTalk AssetCenter version 6.1 (configuration not in the scope of this project)
4) Deploy Virtual Machine Images
5) Update communication links as required to support firmware upgrades.
6) Create new HMI network and verify no network errors exist prior to testing period.
7) Establish host and client connections on three (3) clients and primary servers.
8) Establish host and client connections on three (3) additional clients and secondary servers.
9) Initiate Primary to Secondary replication and verify communication with new ASSET and HIST VM’s.
10) Provide Startup Support.

Deliverables: successful completion of work as defined in items 1 through 10 above.

VM Testing
After completion of the VM Development and VM Deployment steps above there will be a thirty (30) calendar day testing period on new VM running parallel to existing system.
During this phase the Contractor shall monitor the County use of the new software and identify errors that occur in the software during use. The Contractor shall then resolve any errors that occur so that the software is able to meet the County’s operational needs. If any issues arise that cannot be resolved in a timely fashion as determined by the Project Officer, the Contractor shall implement a fail over to existing control system.

VM Cutover
Upon completion of the VM Testing period, and with the County Project Officer’s approval, the Contractor will prepare for cutover to the new system. At a time selected by the County Project Officer and agreed upon by the Contractor, the County will begin to use the newly activated software. When the County commences live operations the Contractor will be on-site for a minimum of eight (8) consecutive hours at the time agreed between the County and the Contractor, and accessible by phone throughout the VM verification period.
Deliverables: PCS successfully running on the new VM software, as defined above.

VM Verification
Upon successful cutover there will be a thirty (30) calendar day VM Verification period.

- **Milestone #1** shall be satisfied upon County Project Officer’s acceptance of the successful VM Verification Period.

VM Warranty
Upon successful completion of the VM Verification period a one (1) year warranty on labor and equipment supplied under Phase 1 will begin as of date of written acceptance of Phase 1 by the County Project Officer. All repairs and/or replacements under the warranty will be completed at no cost to the County.

WBS 3.0 Hardware/Firmware Upgrade Phase (Phase 2)
During the second phase the hardware/firmware will be upgraded as required to support version 20 of RSLogix5000. The firmware in all twenty one (21) DCU L6 series processors shall be upgraded from version 16 to version 20 of RSLogix5000. The obsolete SRM modules will be replaced with newer RM modules. ENBT and CNBR modules in a redundant pair are not compatible with the newer RM modules and will be replaced with EN2T and CN2R modules. All CNBR modules that exist in RIO chassis are compatible and will not be upgraded. The I/O configuration shall be modified to reflect the hardware change and the ControlNet Network shall be rescheduled.

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Work on Phase 2 can commence during Phase 1 VM Deployment period with prior approval of the County Project Officer.

Parts Acquisition
The Contractor shall purchase all parts and equipment needed to complete the project. Hardware/Firmware parts acquisition may commence at any time after execution of Amendment No. 2 by the County. The parts and equipment shall be pre-ordered with consideration of the delivery lead time to be available for installation at time of Phase 2 implementation. An advance payment shall be made by Arlington County to assist the Contractor with upfront costs of purchasing parts and equipment required to complete this project, as detailed in the Pricing Schedule.

Hardware and Firmware Upgrade
The Contractor shall complete the following tasks:

1) **Transition Requirements:** The first two (2) DCUs will be upgraded one (1) week before the upgrade of the second pair of DCUs. Two (2) DCUs will be upgraded per day once the first two DCU upgrades have been fully commissioned. Arlington County’s Project Officer shall specify DCU upgrade order and dates, to be determined on a weekly basis.

2) Remove and install new hardware/firmware in the eight (8) DCUs listed below, following this procedure:
   - Backup required ControlLogix Programs
   - Backup required ControlNet Networks
   - Replace required hardware
     - DCU-DCB5
     - DCU-PADF1
     - DCU-NFF
     - DCU-PTB
     - DCU-FMRL
     - DCU-WSPSB
     - DCU-FCPS
     - DCU-SSB

3) Flash ControlLogix Processors to be upgraded to firmware Version 20 for the twenty one (21) DCUs listed below following this procedure:
   - Backup required ControlLogix Programs
   - Backup required ControlNet Networks
   - Flash firmware
     - DCU-SFF
     - DCU-DCB5
     - DCU-PADF1
     - DCU-PADF2
     - DCU-MFF
     - DCU-DAFT
     - DCU-NFF
     - DCU-NMB
     - DCU-DWB1
     - DCU-DWB2
     - DCU-PTB
     - DCU-FMRL
     - DCU-WSPSB
     - DCU-FCPS
• DCU-SSB
• DCU-RPS
• LCP1
• LCP2
• LCP3
• LCP4
• LCP5
4) Re-schedule ControlNet.
5) Verify device communication with network and redundant controller.
6) Verify HMI, ETTM and SQL communication and tag registers.
7) Force fail-over to verify IP transfer and communication transfer.

Deliverables: successfully upgraded PCS hardware and software as defined above.

Hardware and Firmware Verification
1) Upon successful upgrade of all DCUs as described above there will be a thirty (30) calendar day HW/FW Verification period.

• **Milestone #2** shall be satisfied upon County Project Officer’s acceptance of the successful HW/FW Verification Period.

Hardware and Firmware Warranty
Upon successful completion of the HW/FW Verification period a one (1) year warranty on labor and equipment supplied under Phase 2 will begin as of date of written acceptance of Phase 2 by the County Project Officer. All repairs and/or replacements under the warranty will be completed at no cost to the County.

**WBS 4.0 Optional Additional Work**
The Contractor agrees that the County may request the following additional work through another contract Amendment. This work is not included in the base price and will be paid for in accordance with hourly labor rates of the Main Agreement. Any additional equipment and materials used for this additional work shall be reimbursed at Contractor’s cost.

In the event that an ENBT module on an RIO needs to be replaced, an EN2T module shall be used as a replacement. In the event that a CNBR module on an RIO needs to be replaced a CN2R module shall be used as a replacement and additional configuration in the ControlLogix Processor shall be performed to integrate the module.
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Pricing Schedule

Payments for work completed in accordance with the Scope of Services shall be made in accordance with the following Pricing Schedule. Work shall be completed in accordance with the Days for Completion assigned below.

<table>
<thead>
<tr>
<th>Milestone #</th>
<th>Main Description</th>
<th>Days for Completion</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Advance payment</td>
<td>Hardware/Firmware parts acquisition. Payment within 30 days after execution of Amendment No. 2 by the County.</td>
<td></td>
<td>$57,500.00</td>
</tr>
<tr>
<td>1</td>
<td>Completion of VM Development</td>
<td>60 Days</td>
<td></td>
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<tr>
<td></td>
<td>Completion of VM Deployment</td>
<td>30 Days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Completion of VM Testing</td>
<td>30 Days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Completion of VM Verification</td>
<td>30 Days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Payment within 30 days of County Project Officer’s approval of Contractor’s invoice following the Project Officer’s written acceptance of the successful VM Verification Period</td>
<td></td>
<td>57,500.00</td>
</tr>
<tr>
<td>2</td>
<td>HW/FW Parts Acquisition</td>
<td>30 Days</td>
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<td>HW/FW Upgrade</td>
<td>90 Days</td>
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<td></td>
<td>HW/FW Verification</td>
<td>30 Days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Payment within 30 days of County Project Officer’s approval of Contractor’s invoice following the Project Officer’s written acceptance of the successful HW/FW Verification Period</td>
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<tr>
<td>Total</td>
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<td>300 Days</td>
<td>$230,000.00</td>
</tr>
</tbody>
</table>

Note 1: Completion of work phases outlined above shall be approved by the County Project Officer before the Contractor proceeds to the next phase of the project, except as described in Note 3 below.

Note 2: Phase 2 can commence during Phase 1 VM Deployment period with prior approval of the County Project Officer.

Note 3: Hardware/Firmware parts acquisition may commence at any time after execution of Amendment No. 2 by the County.

Any additional work necessary to complete the project, but not included in the Scope of Work, shall be paid for in accordance with the hourly labor rates of the Main Agreement. Any additional equipment and materials shall be reimbursed at Contractor’s cost. All such payments will be made within thirty (30) calendar days of the County Project Officer’s approval of the Contractor’s itemized hourly invoice and the corresponding equipment and material invoices.