

FIREMEN'S TRAINING CENTER

DEPARTMENT OF PUBLIC WORKS

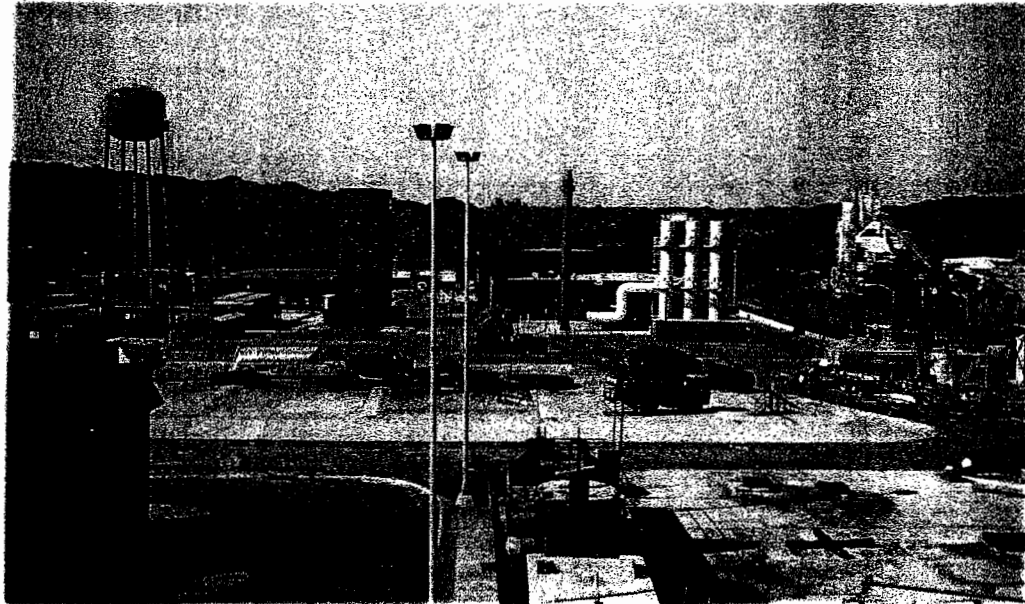
Nassau County

Long Island, New York



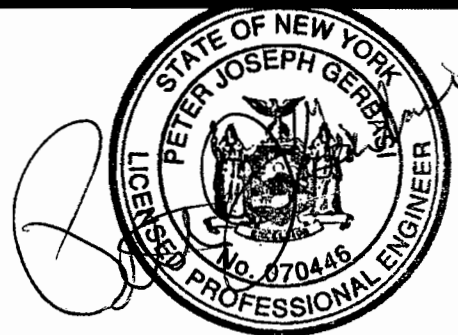
**ENGINEER'S CONSTRUCTION
CERTIFICATION REPORT**

MARCH 2005



PETER GERBASI, P.E.

COMMISSIONER



**Fireman's Training Center Groundwater Remediation Facility
Engineer's Certification Report
May 2004**

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SECTION 1

INTRODUCTION

1.1 Purpose

The following Engineer's Construction Certification Report (ECCR) has been prepared for the Fireman's Training Center Site (FTC), Bethpage, New York in accordance with the New York State Department of Environmental Conservation (NYSDEC) requirements. The ECCR provides a summary of the site's remedial construction work, including lists of construction contractors, variances, change orders and a summary of the remediation facility's testing and startup.

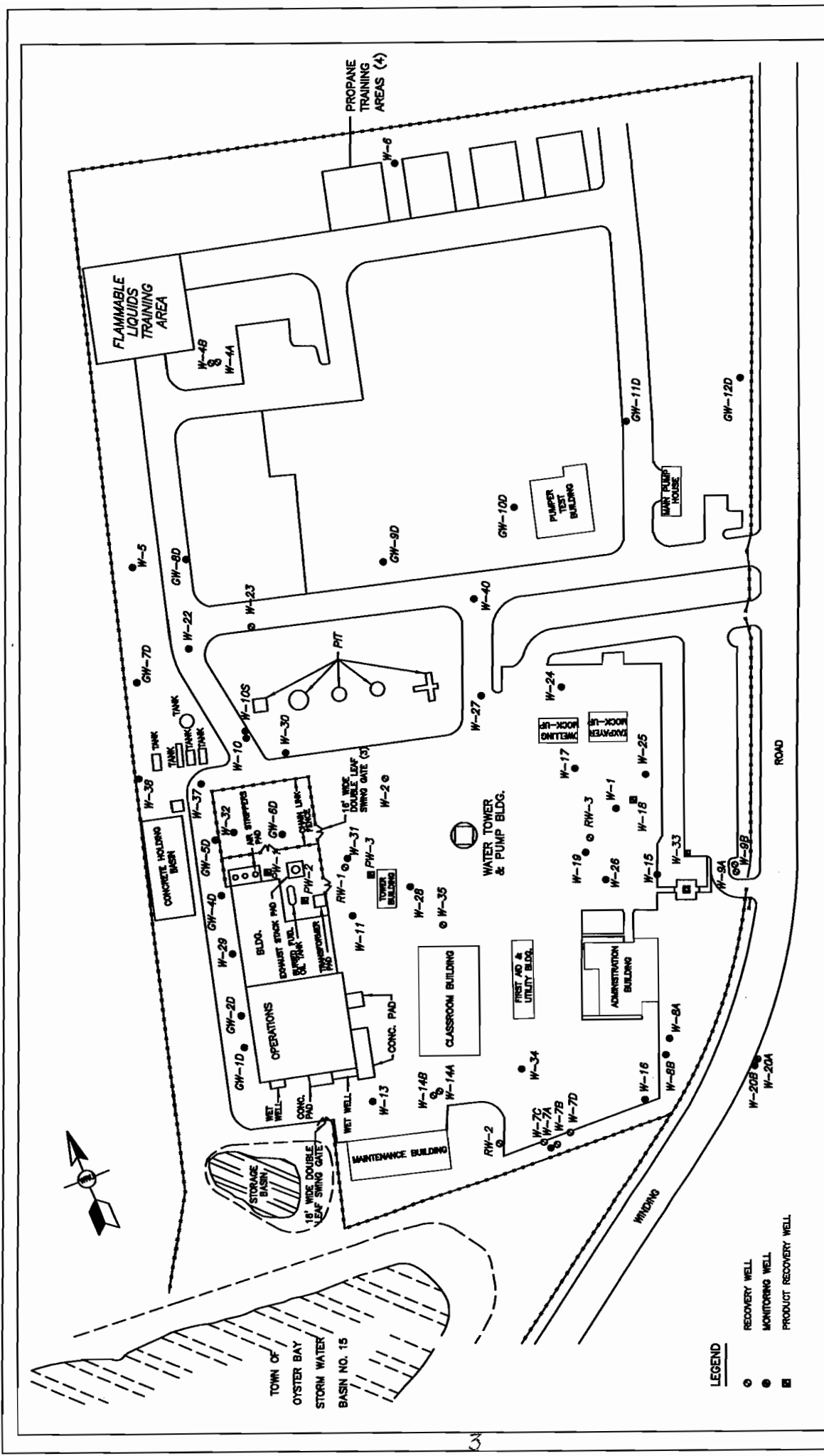
1.2 Site Description and History

The FTC is located on a 12-acre site on Winding Road near Round Swamp Road in Old Bethpage, New York. It is bordered on the north and west by the former Old Bethpage Landfill, and on the south and east by Bethpage State Park (Figure 1). The site has been used since 1960 to conduct advanced fire fighting training for volunteer firemen, and continues today to serve these activities. Training exercises occur in open burn areas and in mock-up buildings located across the site (Figure 2).

Between 1970 and 1980, waste solvents, in addition to fuel oil and gasoline, were accepted at the site for use in training exercises. This practice was discontinued in 1980 and, since then, training exercises have been performed using only fuel oil and gasoline to ignite wooden pallets and straw.

The site contamination occurred primarily in the open burn areas, where fuel was poured directly onto the ground, and in the mock-up fields. In the mock-up buildings, unburned fuel and solvents were washed out of the buildings into drywells after each training session. These unlined drywells inadvertently served as conduits, carrying contamination down to the groundwater and contaminating the soils beneath the site.

In 1984, site improvements were made by the Nassau County Department of Public Works (NCDPW) to cap the burn areas and seal the drainage system leading to the drywells. A new drainage system was installed, including an oil/water separator to treat training site runoff. The discharge of the oil/water separator is connected to the sanitary sewer system.

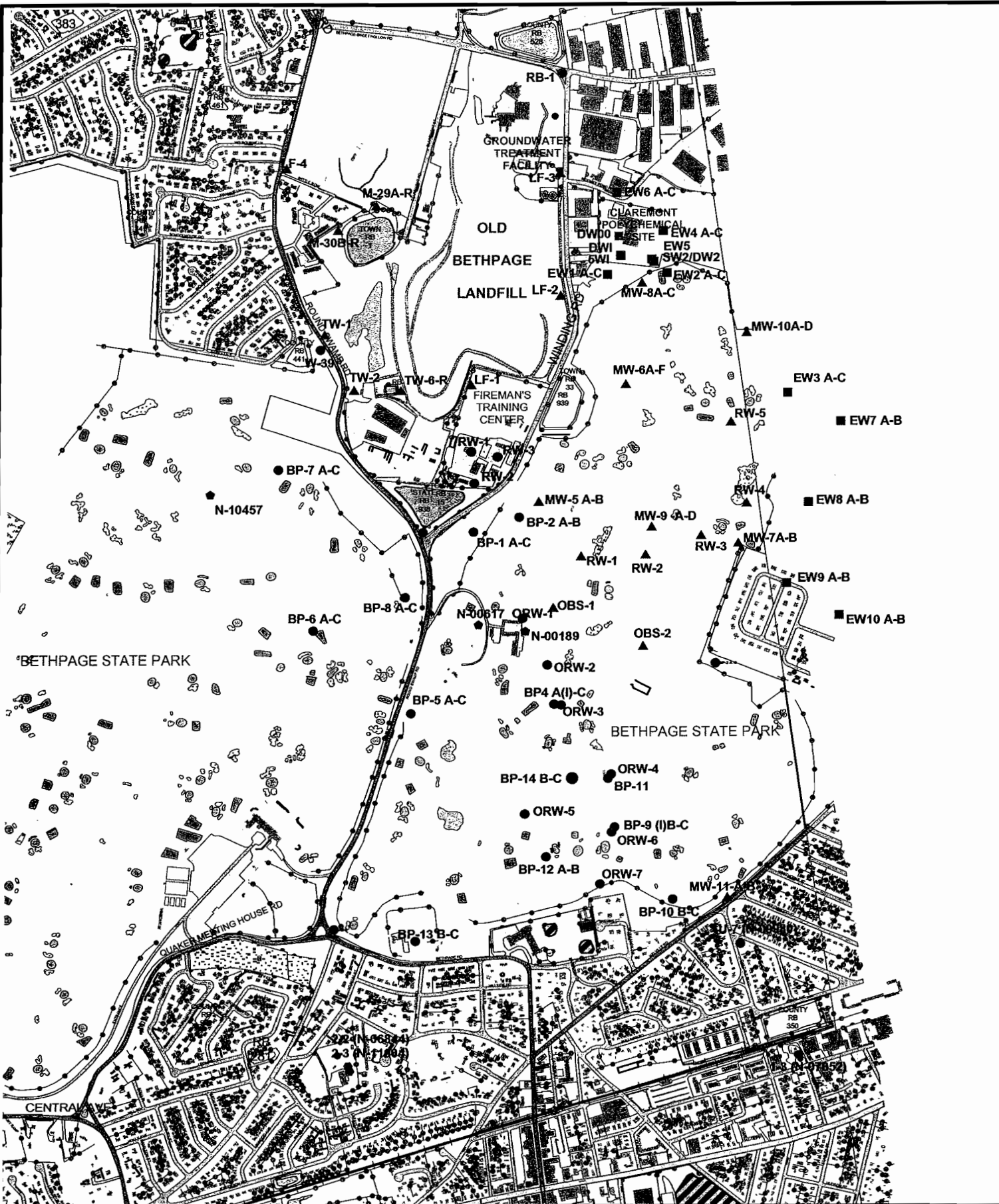


SITE PLAN
OCTOBER, 1988
FIREMEN'S TRAINING CENTER
OLD BETHPAGE, N.Y.
FIGURE 2

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
SANITATION & WATER SUPPLY
WATER RESOURCES UNIT

NO.	REVISION DESCRIPTION	DATE	BY	CHECKED BY	DATE	METER PLANNING	METER	BLDG	BLDG NO.	DATE	SCALE	NOT TO SCALE	FILE NAME	CONTRACT NUMBER	SHEET NO.
2	LAYERED DATA CONCENTRATION CONCENTRATIONS	4-89											EA\VA\PTC\Public\plan1988		1 OF 1
1	11-94 OPERATIONS BLDG SITE PLAN (SHT. C-D)	1-88													
0	ORIGINAL RELEASE	4-24-81													

LEGEND
 ○ RECOVERY WELL
 ● MONITORING WELL
 □ PRODUCT RECOVERY WELL



LEGEND

Fireman's Training Center Area Wells

- Bethpage State Park Inactive Well
- Bethpage State Park Inactive Well
- Closed/Polychlorinated Site Detection Well or Well Cluster
- Closed/Polychlorinated Site Monitoring Well or Well Cluster
- Closed/Polychlorinated Site Proposed Monitoring Well or Well Cluster
- Nassau County Injection Well
- Nassau County Monitoring Well or Well Cluster
- Nassau County Recovery Well
- Fireman's HD Public Supply Well
- ▲ T. of Outer Bay Monitoring Well or Well Cluster
- ▲ T. of Outer Bay Recovery Well
- ▲ V. of Farmingdale Public Supply Well

Figure 1

Location Map

**FIREMAN'S TRAINING CENTER
SITE AREA
WITH WELL LOCATIONS**

Prepared By: - NCDPW -
Water Resources Unit

Scale: 1" = 1200

Nassau County

Geographic Information System

Copyright 1993-2002
County of Nassau
New York

Date: 10/24/00

1.2 Site Description and History (Cont.)

Based on NCDPW investigations conducted at the site, the New York State Department of Environmental Conservation (NYSDEC) added the FTC site to the State's Registry of Inactive Hazardous Waste Disposal Sites in December 1987, and upgraded the site to Class 2 level, one that poses a significant threat to the public or the environment, in March 1988. An Order of Consent was signed by the County in February 1989, requiring a Remedial Investigation/Feasibility Study (RI/FS) to be performed. The RI/FS was completed in 1992.

A record of decision (ROD) that described the remedial program for the site was subsequently approved by the NYSDEC in February 1993. The ROD called for an asphalt/concrete cap with institutional controls for shallow soils, pumping and treating on-site groundwater using three extraction wells, and pumping and treating off-site groundwater using seven extraction wells.

Camp Dresser & McKee (CDM) was the project's design consultant. CDM completed the design in October 1994. The project's construction plans and specifications went out to bid in November 1994. The November 1994 bids subsequently were rejected, due to issues concerning the contractors' responsibilities for one (1) year following the facility's startup. Revisions were made to the project's plans and specifications, limiting the contractors' role to just the facility's startup. The revised plans and specifications were re-bid in March 1995 and the construction contracts were awarded in February 1996.

SECTION 2

Summary of Remedial Construction Work

2.1 SUMMARY OF REMEDIAL CONSTRUCTION WORK

The work generally consists of the construction of groundwater extraction, treatment, and recharge facilities at and around the Nassau County Fireman's Training Center.

The work was performed under four prime contracts:

1. General Construction, Contract No. S81021G, Silverite Construction Co., Inc., Hicksville, N.Y.
2. Heating Ventilation and Air Conditioning, Contract No. S81021H, J.K.B. Contracting Inc., Hicksville, N.Y.
3. Plumbing, Contract No. S81021P, James McCullagh Co. Inc., Plainview, N.Y.
4. Electrical, Contract No. S81021E, Welsbach Electric Corp. L.I., Plainview, N.Y.

The following is a general summary of the construction work associated with the FTC Groundwater Treatment Facility:

1. Construction of groundwater extraction wells in Bethpage State Park (offsite) and at the Fireman's Training Center (onsite).
2. Construction of product recovery wells onsite.
3. Construction of the groundwater treatment facility. The elements of the treatment system train consist of: oil/water separation, metals precipitation, fluidized bed biological treatment, sand filtration, and air stripping of the groundwater. The treatment facility also includes equipment for sludge thickening, sludge dewatering and chemical feed systems.
4. Construction of an effluent discharge recharge basin and injection wells.
5. All site work, including site preparation, excavation, backfill, grading and site restoration.
6. Pumps, valves, piping and miscellaneous equipment.
7. Buildings, structures and facilities necessary for the complete and proper finish of the contract.

2.2 GENERAL REQUIREMENTS

2.2.1 On-Site Inspection

The construction phase of the project was originally managed under a construction management agreement between Lockwood, Kessler & Bartlett, Inc., Syosset, N.Y. (LKB) and Nassau County. LKB was selected based upon their experience in the engineering design, construction management, and operation of a similar remediation facility at the Town of Oyster Bay's Old Bethpage Landfill, immediately adjacent to the FTC site. LKB also had on-staff, Chemical, Mechanical, Environmental and Electrical Engineers, and survey crews, which were assigned to the project, and provided services as needed. County engineers, operators and inspectors performed the shakedown and startup of the remediation facility. The following is a summary of the project's construction management:

Resident Engineer and Inspection Services:

- Review each bid and evaluate for completeness and accuracy.
- Prepare a health and safety plan for on-site employees.
- Ensure compliance with OSHA requirements.
- Coordinate with existing Fireman's Training Center Operations personnel.
- Coordinate with Bethpage State Park personnel.
- Perform required QA/QC material testing.
- Maintain quantities of work performed and ensure compliance with the terms of the contract.
- Prepare daily inspector reports.
- Provide a Hydro-geologist to monitor the installation of all wells.
- Prepare and review change orders.
- Schedule periodic job progress and coordination meetings.
- Settle all conflicts among various trades, conflicts with scheduling and resolving physical coordination conflicts.
- Review all applications for progress payments.

Submittal Review:

- Review and approve the contractor's bid breakdowns.
- Review and approve shop drawings, manufacturers technical data, and all other submittals.
- Review manufacturers' certifications.
- Review design calculations.
- Review all layout and installation drawings.
- Review progress drawings.
- Review operation and maintenance manuals.
- Review proposed deviations and substitutions.

Design Services:

- Review/evaluate proposed or required design changes, additions or deletions to the work.
- Perform the required engineering and design calculations.
- Prepare revised specifications and/or drawings.
- Prepare cost estimates for changes, additions or deletions.
- Witness testing as required.

Construction Schedule:

- Review proposed construction schedule.
- Provide a baseline schedule.
- Procurement schedule.
- Prepare schedule updates.
- Prepare a monthly cost requisition book.
- Prepare monthly progress reports and CPM updates.

2.2.2 Record Drawings:

Each prime contractor was required to maintain a daily record of work installed and modifications or changes made. The contractor was required to periodically submit progress drawings during the duration of the project showing the work completed and changes made. After all work was completed, one set of paper prints of the record drawings was submitted for review and acceptance. After acceptance, the Contractors submitted the mylar reproducibles and one set of paper prints.

2.2.3 Construction Photographs:

The General Contractor engaged the services of an experienced photographer to take job photographs. Preliminary photographs of the site prior to commencement of work were taken as directed by the engineer.

Thereafter, photographs were taken periodically as work progressed during the construction phase of the project. These photographs indicated the view, and general description of what the photograph represents. All photographs are on file with the NCDPW – Environmental Construction Unit and are available upon request.

2.2.4 Subcontractors:

General Contractor:

James McCullagh Co. Inc.	Mechanical
LaFramboise Well Drilling Inc.	Well drilling
Radon Construction Corp.	Pre-engineered building
Jacobson & Company Inc.	Drywall, acoustic ceiling and wall panels
MDS Environmental Services, Inc.	Environmental testing
Donaldson Acoustics Co., Inc.	Drywall and acoustic panels
Baybrent Tile Corp.	Ceramic tile
Amendola's Fence Co.	Chain-line fence
PMC Rebar, Inc.	Reinforcing steel
Falco Construction Corp.	Steel sheeting
United Iron Inc.	Miscellaneous metals
Eldor Contraction Corp.	Instrumentation and controls
McKeon Rolling Door Co., Inc.	Roll-up doors
Penn Equipment & Tool Corp.	Miscellaneous equipment and tools
D.A.G. Floors, Inc.	Resilient flooring
Industrial/Construction Services Inc.	Aluminum louvers
Dalma Painting Corp.	Painting
Darling Landscaping, Inc.	Landscaping
Diamond Storefronts, Inc.	Aluminum doors, windows and glazing
Truck Services, Inc.	Monorail System
Stonhard, Inc.	Seamless flooring

General Contractor (Cont.)

Materials Testing Lab, Inc.	Testing
Carlo Lizza & Sons Paving Inc.	Asphalt paving
C K Steel	Steel erection
Independent Metal System Inc.	Erection of metal wall panels
Hampton CF Corp.	Cured-in-place liner
Griffin Remediation Services	Install vertical drains
Island Inst. Systems & Controls, Inc.	Conduit for fluid beds
RGM Liquid Waste Removal Corp.	Removal of sediment/sludge
Sign Designers of NY, Inc.	Signs

HVAC:

Aqua X Conservation Inc.	Install fuel oil tank
Pyramid Sheetmetal	Sheetmetal/Ductwork
Remi Insulation	Insulation
South Shore Electric	Electrical work
Code Inspections	Air balancing and testing
Bain Industries, Inc.	Boiler start-up and fuel oil tank testing
Cascade Water Service	Water treatment
1 st Purity Inc.	Water treatment

Electrical:

Premise Electrical Services	Miscellaneous electrical work
Ronsco Electric, Inc.	Electrical work

SECTION 3

Description of Variances and Change Orders

3.1 GENERAL CONTRACTOR - VARIANCES AND CHANGE ORDERS

CONTRACT NO. S81021G

CONTRACTOR - SILVERITE CONSTRUCTION COMPANY

<u>CO#1</u>	Provide Necessary treatment of the development water associated with off site recovery wells in Bethpage State Park.	\$60,328.00
<u>CO#2</u>	Revise test boring in recharge basin, including deeper borings, split spoon sampling & percolation tests.	\$26,798.00
<u>CO#3</u>	Install three additional on-site product recovery wells.	\$161,828.00
<u>CO#4</u>	Change size of bearing bars for pipe trench grating.	\$ 8,486.00
<u>CO#5</u>	Modify lower platform of the air stripper towers.	\$13,523.00
<u>CO#6</u>	(a) Replace three inch water supply piping servicing the Tower Building. (b) Provide Shut-off valve on new water main that supplies water to the new Groundwater Treatment Facility Building.	\$ 5,269.00
<u>CO#7</u>	Modify the acid wash system.	\$89,927.00
<u>CO#8</u>	(a) Install gate on the fence for the recharge basin (b) Supply sleeves in the valve & injection well vaults in the Recharge Basin.	\$ 1,956.00
<u>CO#9</u>	Install a house trap pit for the operations building.	\$ 1,505.00
<u>CO#10</u>	Remove excess material & silt from the bottom of the recharge basin.	\$30,474.00
<u>CO#11</u>	Raise off-site Recovery Well #4 & install a vertical drain.	\$ 6,188.00

<u>CO#12</u>	Remove a concrete chamber under a metal building and a concrete obstruction on Winding Road.	\$ 6,717.00
<u>CO#13</u>	Perform additional well development of injection wells.	\$33,240.00
<u>CO#14</u>	Provide a cargo storage box.	\$ 3,300.00
<u>CO#15</u>	(a) Provide additional Durrock panels & doors for the mini-cabinet heaters (b) Steel reinforcing for expansion joints between the slab on grade and the arch over the wet wells.	\$ 3,138.00
<u>CO#16</u>	Provide hand railings for the steps at the recharge basin bulkhead wall	\$ 4,726.00
<u>CO#17</u>	Change stairs adjacent to the sludge thickener tank from fixed construction to removable bolted construction.	\$ 7,405.00
<u>CO#18</u>	Install submersible cable at three on-site wells.	\$ 4,077.00
<u>CO#19</u>	(a) Provide isolation valves on chemical lines (b) Provide bypass system between on site and off-site piping trains.	\$ 4,855.00
<u>CO#20</u>	Modify sulfuric acid piping & move sulfuric acid pump #5.	\$20,977.00
<u>CO#21</u>	Replace existing polymer suction piping with a three (3") header pipe from the polymer bulk storage tanks & provide three (1") vertical takeoffs from the header to each of the polymer blending units.	\$ 4,877.00
<u>CO#22</u>	Provide a seal water system for the air stripper cleaning/recycle pump.	\$ 2,327.00
<u>CO#23</u>	Modify the Injection Wells for the piezometers & probes.	\$ 6,628.00
<u>CO#24</u>	Provide three schedule 80 PVC check valves on the suction piping at the cleaning recycle pump in the Operations Building.	\$ 1,862.00

CO#25 Modify the forklift. \$ 2,321.00

CO#26 (a) Provide three pressure relief valves on the air scour system
(b) Four air vacuum relief valves on the flocculation tanks & clarifiers. \$11,891.00

CO#27 (a) Provide bypass the on-site influent flow past the metal precipitation system directly to the fluidized bed,
(b) Bypass the off-site influent flow past the metal precipitation system to the intermediate wet well.
(c) Redirect the on-site flow through the off-site metal precipitation train & rapid mix tank to the clarifier sump.
(d) Modify both on-site & off-site rapid mix weirs.
(e) Provide two M-8 222/SNBP/TF/VT/VT with air exhaust mufflers and a Wilden surge dampener model NO-D2-SAP-TF-TF). \$48,366.00

CO#28 Credit for unused portion of the contract bid items as follows:

A) Disposal of Contaminated Excavation.	(\$225,000.00)
B) Incremental Cost for Work in Protection Level "C".	(\$55,000.00)
C) Cost of Sulfuric Acid during Performance Testing.	(\$56,443.62)
D) Cost of Caustic during Performance Testing.	(\$67,725.49)
E) Cost of Polymer during Performance Testing.	(\$30,950.89)
F) Cost for Nutrient during Performance Testing.	(\$ 7,120.00)
G) Cost for Sludge Disposal during Performance Testing.	(\$18,000.00)
H) Cost for Waste Oil Disposal during Performance Testing.	(\$51,000.00)
I) Patching Soil Concrete Caps.	(\$10,000.00)
J) Lab. Testing & Checking Required by Tech. Specifications.	(\$ 5,495.00)
K) Temporary Heat & Ventilation after Construction Completion.	(\$50,000.00)
L) Minority Apprenticeship Training Program. (Painter).	(\$15,000.00)
<u>Total</u>	(\$441,735.00)

CO#29 (a) Provide an air station in the maintenance shop and
(b) Change the pistons on Caustic Pumps #3 & #4. \$ 5,045.00

<u>CO#30</u>	(a) Provide bypass piping to run on-site influent through the off-site metal precipitation system while off-site influent is run through the bypass to the intermediate wet well.	
	(b) Insulation on this piping and previously installed piping train bypass revisions.	\$12,004.00
<u>CO#31</u>	(a) Provide modify filter sludge piping, relocate polymer blend feed pump #3 & provide additional polymer.	
	(b) Repair three of the on-site/off-site BW level switches & purchase four new BW level switches.	\$ 9,261.00
<u>CO#32</u>	Provide insulation on various piping systems.	\$34,476.00
<u>CO#33</u>	Relocate the air stripper influent water flow FIT-251-1, FIT-251-2, FIT-251-3, and the on-site influent flow FIT-220 pressure transmitters from the outside to the inside of the building.	\$ 6,872.00
<u>CO#34</u>	(a) Remove & replace five Barish air diaphragm pump control panels and	
	(b) Substitute non-metallic hangers & support material for the specified metallic materials in the chemical storage & pump areas.	\$ 7,080.00
<u>CO#35</u>	Perform a supplementary acceptance test of the Netzsch Sludge Filter Press.	\$ 4,436.00
	<u>Total</u>	\$210,428.00

3.2 ELECTRICAL CONTRACTOR - VARIANCES AND CHANGE ORDERS

CONTRACT NO. S81021E CONTRACTOR - WELSBACH ELECTRIC

<u>CO#1</u>	(a) Install temperature switch in the off-site & on-site well vaults.	
	(b) Provide conduit & wire for the relocated eyewash station in room #122.	
	(c) Supply disconnect switches for the control & effluent valves.	\$ 5,140.00
<u>CO#2</u>	Upgrade panel boards DP-1, DP-1A & DP-2A.	\$12,977.00

<u>CO#3</u>	Perform electrical revisions required in the valve and injection well vaults.	\$15,495.00
<u>CO#4</u>	Revise lighting fixtures in the Operations Building.	\$22,012.00
<u>CO#5</u>	Modify the electrical service.	\$48,495.00
<u>CO#6</u>	Modify the lightning protection system on the Operation Bldg.	\$ 5,068.00
<u>PENDING CO#7 Contract Settlement.</u>		(\$169,829.59)
<u>Total</u>		(\$60,642.59)

3.3 PLUMBING CONTRACTOR - VARIANCES AND CHANGE ORDERS

**CONTRACT NO. S81021P
CONTRACTOR - JAMES McCULLAGH, COMPANY, INC.**

<u>CO#1</u>	(a) Provide a new sanitary house trap along with the necessary Plumbing work for a sanitary waste line located on the East side of the operations Building.	
	(b) Provide two 2" ball valves, one 2.5" ball valve and one 2.5" check valve on the piping to the emergency water storage tanks.	\$ 2,000.00
<u>CO#2</u>	Credits for the unused allowance items.	
	(a) Incremental cost for work in Protection Level "C".	
	(b) Laboratory Testing Required by Technical Specifications.	<u>(\$12,700.00)</u>
<u>Total</u>		(\$10,700.00)

3.4 HVAC CONTRACTOR - VARIANCES AND CHANGE ORDERS

**CONTRACT NO. S81021H
J.K.B. CONTRACTING INC.**

<u>CO#1</u>	(a) Modify ductwork.	
	(b) Modify boiler ignition system.	
	(c) Credit for incomplete punch-list work.	(\$20,949.00)

3.5 PROJECT'S VARIANCES AND CHANGE ORDERS ANALYSIS

The Nassau County DPW has instituted Contract Closeout Procedures (CCP) to determine whether there have been excessive impact costs due to errors and omissions on the part of the designer, and provides a basis for cost recovery, if warranted. The CCP is a two (2) step analysis, the first step being a generic analysis of the impact costs compared to generic limit or "threshold" expected for various project sizes in dollars; the second step, performed if the first step exceeds the generic threshold, is a more detailed Project Specific Analysis.

The FTC project size, the dollar value of all contracts, was \$18,157,160, which places it on the Generic Project Threshold Table between project sizes of 3,650,000 and 24,300,000. The generic threshold percentage for the FTC project would therefore be between 2.5 % and 3.0%. A copy of the Generic Project Threshold Table for the period January 2002 and January 2004 can be found in Appendix B. The FTC project's actual cost of all change orders as a percentage of the project's total awarded cost is 0.65%. This value is well below the 2.5% - 3.0% generic threshold Limit and, therefore, indicates a project that did not have excessive change orders. As such, step 2, a Project Specific Analysis is not warranted.

	<u>Original Contract Amount</u>	<u>Total Change Orders</u>	<u>CO % of Contract</u>
<u>General Contract</u>			
	\$15,250,000.00	\$210,000.00	1.38%
<u>HVAC Contract</u>			
	\$595,000.00	(\$20,949.00)	N/A*
<u>Plumbing Contract</u>			
	\$324,670.00	(\$10,700.00)	N/A*
<u>Electrical Contract</u>			
	\$1,988,000.00	(\$61,392.90)	N/A*
<u>TOTAL</u>			
	\$18,157,670.00	\$117,386.10	0.65%

* Total amount of Change Orders resulted in no increase to the cost of the prime contractor's original awarded contract cost.

SECTION 4

System Testing and Startup

4.1 DESCRIPTION OF GROUNDWATER TREATMENT SYSTEM

The Fireman's Training Center Groundwater Remediation Facility (FTCGRF) was constructed to extract groundwater from three (3) onsite and seven (7) offsite recovery wells, treat the water to meet the State's required standards, and discharge the treated water to a County recharge basin and/or three groundwater injection wells. The treatment plant was constructed for a maximum combined influent flow of 2.6 million gallons per day (mgd) or 1800 gallons per minute (gpm). The offsite recovery well network provides a maximum influent flow of 1500 gpm. The onsite recovery well network provides a maximum influent flow of 300 gpm.

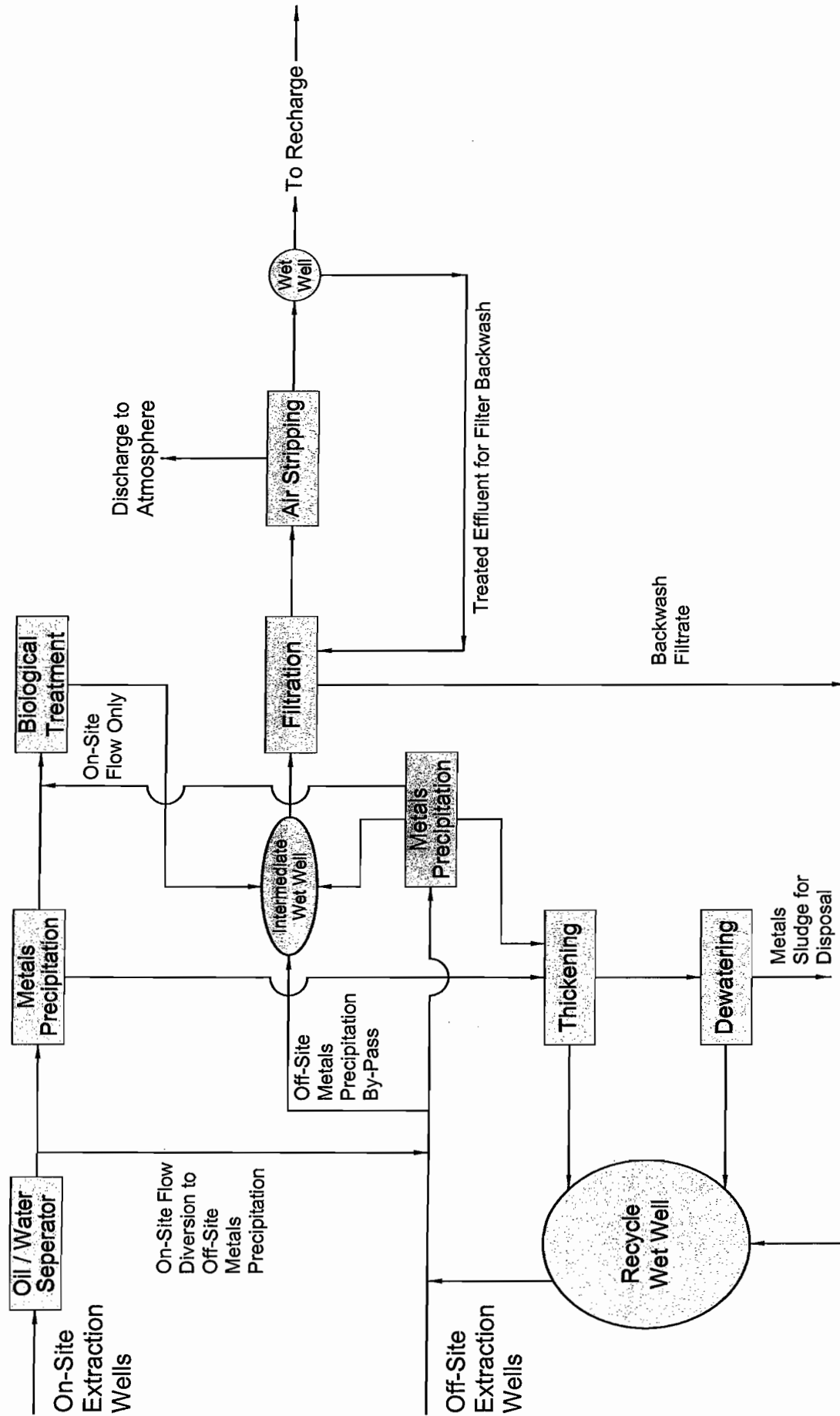
In accordance with the State's Record of Decision (ROD), the treatment process consists primarily of air stripping the groundwater. Oil/water separation, metals removal and sand filtration prior to the air strippers to optimize the stripping process and to enable the eventual recharge of the treated effluent back to the groundwater system. Biological destruction of certain organic compounds had been proven by a past pilot study to be more efficient than air stripping, thus a biologic fluidized bed unit was installed on the onsite treatment train. The entire treatment process system is presented in schematic form in Figure 3.

4.2 ON-SITE TREATMENT SYSTEM TESTING AND STARTUP

In order to simulate an on-site flow of 300 gpm, a temporary bypass was installed. Piping was dis-assembled on the influent side of the oil/water separator and the Venturi flowmeter along with the instrumentation tubing was reinstalled and situated as to allow proper function of simulated flow rates through the temporary bypass pump and piping.

Upon completion of the above, simulated flow rates of 100, 200 and 300 gpm's were tested. During the tests all floats and modulation float valves were assessed. Upon the on-site Engineer's request, float elevations were modified, as needed. Any fine-tuning of modulating valves #V-226-2 and V-237-2 was also done.

All rotating devices such as augers and mixers were run during this procedure for a total of 8 hours each. Variable speeds for mixers were demonstrated for a one-day period.



FILE NAME: \SCHEMATIC-TREATMENT...		CONTRACT NUMBER: X		SHEET NO. 1 OF 1	
SCALE: NTS	DWG. NO. X	DRAWN BY: J. Welber	DATE: 7/30/01	DATE: 7/30/01	DATE: 7/30/01
DESIGNED BY: J. Welber	DATE: 7/30/01	CHECKED BY: Peter Wilkowschi	DATE: 7/30/01	DATE: 7/30/01	DATE: 7/30/01
ORIGINAL RELEASE	XX				
NO.	REVISION DESCRIPTION	DATE			

Fireman's Training Center
Schematic of Treatment Process Train
Figure 3

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
SANITATION & WATER SUPPLY
WATER RESOURCES UNIT

The Fluidized Bed - GAC system was run and monitored by an onsite factory representative. All required readings for the system's pumps, gauges and oxygen generation equipment were recorded. The on-site influent pumps and fluidized bed pumps were all yellow-tagged in accordance with their respective pump curves.

4.3 OFF-SITE TREATMENT SYSTEMS TESTING AND STARTUP

The off-site treatment system is similar to the on-site system with the exception of the fluidized bed system. In order to simulate an off-site treatment system flow, all tanks, vessels along with the recycle, intermediate, effluent and clear wells were filled with water to normal operating levels.

The following flow sequence took place. The recycle well submersible pumps #1 and 2 were on at the same time. Water was pumped to the off-site influent piping, through the metals precipitation system then discharged into the intermediate wet well. At that time all rotating devices (augers/mixers) were operated at their various expected speeds. Three of the four intermediate vertical turbine pumps were pumped at approximately 2,040 gpm through two of the three dual media sand filters. Flow from the sand filters then proceeded via a common 12" header pipe to the system's three air stripping units. Following air stripping water was discharged into the clear wells beneath each stripping tower and then flowed by gravity to a common effluent wet well.

To begin testing, one (1) effluent pump pumped water from the effluent wet well at approximately 1,800 gpm; 480 gpm was diverted to the recycle wet well to compensate for lost water and the balance bypassed to the intermediate wet well to complete a closed loop. Throttling of valves was needed to maintain equal flow rates of various pumps.

At this time, any adjustments of floats, surge relief valves, modulating valves and instrumentation was done, as requested by the Field Engineer. After all field adjustments were made a backwash sequence of the dual media sand filters was completed. The entire offsite treatment train was operated as a complete system for 8 hours.

4.4 ON-SITE/OFF-SITE SLUDGE SYSTEMS

Air operated diaphragm pumps are used for the removal, transfer and recirculation of on-site and off-site sludge. These pumps operate in a wide range of flows. However, the systems had to wait for the generation of a sufficient volume of sludge to be tested. The same was true for the filter press and the sludge thickener; their testing would be done once a sufficient volume of sludge was generated.

Due to the low generation of sludge at the FTC facility, it was determined that another source of iron sludge was needed to complete the testing and acceptance of the sludge treatment systems. The County was involved in another groundwater remediation, the Purex Site in Mitchel Field. The Purex Site was similar to the FTC Site in that both required treatment of volatile organics in the groundwater and both sites needed to address naturally existing iron, as a byproduct. Therefore, with State approval, on October 3, 2001, the County had transported 3,600 gallons of iron sludge from the Purex Site to the FTC facility. After several filter press runs, the FTC filter press performed as specified in the contract documents, and was accepted by the County. A more detailed description of these tests, along with approval letters can be found in Appendix D.

SECTION 5

Construction Schedule Narrative

The NCFTC project specified that the County would retain and pay for a Critical Path Method (CPM) consultant to assist the contractors in the preparation of a detailed working plan and schedule, and in subsequent updates. Lockwood, Kessler & Bartlett, Inc., (LKB) was the construction manager for the County on the NCFTC project. LKB utilized James R. Beach & Associates, Inc., as their sub-consultant to perform the construction scheduling services for the project.

The only specified milestone was the completion and testing of the treatment facility required to start treatment of existing groundwater contamination. The notice to proceed, original contract completion date and date of beneficial occupancy date were as follows:

Notice to Proceed	April 1, 1996
Original Contract Completion Date	April 1, 1998
Date of Beneficial Occupancy	July 16, 1999

During the first months of the project, through the end of 1996, there were minimal delays associated with two identified critical paths, the trenching work in Bethpage State Park and the construction of the treatment building's slab.

The schedule updates during the first quarter of 1997 indicated a third critical path impacting the completion date. The delivery of the local control panels (LCP), installation of conduit, wire pulling and terminations started to impact the schedule. Delays associated with the trenching work in the park and the completion of the building panels also impacted the schedule. As of March 31, 1997 the projected completion date was June 17, 1998, 55 days behind schedule.

By the end of the 2nd quarter of 1997, the CPM report indicated the project was back on schedule due to the electrical prime contractor agreeing to reduce his schedule durations for wiring and termination activities that follow the LCP delivery. All major mechanical equipment had been delivered with the exception of the air stripper equipment and the vertical turbine pumps. The critical path at that time was the delivery of the LCP's.

The schedule slipped in the 3rd quarter of 1997, due to delays in installation of instrumentation and control (I&C) devices and LCP software development. The ability of the general contractor's instrumentation subcontractor (ANVIC) to complete the loop diagrams and development of software had become a major concern. As of September 30, 1997, the projected completion was June 3, 1998, 63 calendar days behind schedule.

The schedule continued to slip in the 4th quarter of 1997, due to delays in installation of field instruments & control (I&C) devices, loop diagrams/wiring diagrams and LCP software development. As of January 8, 1998, the projected completion date was August 3, 1998, 125 calendar days behind schedule.

The schedule continued to slip in the 1st quarter of 1998, due to delays in the completion of wiring diagrams, interconnection diagrams, installation of conduit, wiring, and terminations followed by startup and testing. As of March 31, 1998, the projected completion date was August 10, 1998, 132 calendar days behind schedule.

Lockwood, Kessler & Bartlett, Inc., (LKB), and their sub-consultant, James R. Beach & Associates, Inc., ceased all engineering services associated with the project as of May 8, 1998. Thereafter, the County's in-house scheduler updated the project schedule.

The project's critical path continued to be the completion of wire pulling and terminations required prior to startup testing, and the performance of the 30-day test. As of July 13, 1998, the projected completion date was October 22, 1998, 204 calendar days behind schedule.

During the 3rd quarter of 1998 the project's critical path was associated with coordination and completion of the yellow and blue tag testing of equipment and control instrumentation. Slippage of the schedule continued throughout this quarter. As of September 17, 1998, the projected completion date was December 1, 1998, 244 calendar days behind schedule.

Delays continued during the 4th quarter of 1998. The critical path was associated with the completion of blue tag testing and system start up testing. As of January 15, 1999 the projected completion date was March 29, 1999, which was 362 calendar days behind schedule.

During the 1st quarter of 1999 the contractors continued operational training of County personnel and submission of Operation and Maintenance (O&M) Manuals. Preliminary operation of the on-site and off-site treatment system had commenced. The Envirex fluidized bed was seeded the week of April 26, 1999, with the 30-day operational test to follow. An incomplete work list/punch list called the "open items list" was being utilized at this time to track the status of all incomplete work, shop drawing submittals, O&M manuals, As-built drawings training etc.

By June of 1999, all the components necessary to schedule the 30-day operational test were in place. The schedule indicated a completion date of July 13, 1999 as the completion date of the test. The actual completion date of the 30-day test was July 16, 1999. At the completion of the 30-day testing period the County accepted the building for beneficial use and began operating the treatment facility.

After the completion of the 30-day test, and the facility was being operated by County personnel, no further CPM updates were performed. Bi-monthly meetings continued to be held during the closeout period, wherein the open items list was updated, to track the status of all outstanding work until it was complete. The open item list tracked all submittals, as-built drawings and O&M's until they were approved. Additionally, it tracked change order processing, spare part transmittal, training and punch list work.

Certificates of completion were issued after all outstanding issues were resolved and the contract specified two (2) year maintenance and guarantee period was completed. The dates of completion were as follows:

Plumbing Prime - Certificate of Completion - accepted as of January 5, 2001.

Electrical Prime - Certificate of Completion - accepted as of April 15, 2002.

HVAC Prime - Certificate of Completion - accepted as of July 1, 2002.

General Contractor - Certificate of Completion - accepted as of December 22, 2003.

While a significant period of time elapsed between the Date of Beneficial Occupancy, July 16, 1999 and issuance of the final Certificate of Completion, December 22, 2003, the work was substantially complete. All major equipment items and building systems were installed and operational, only Punch List items and administrative issues remained. These items were addressed at a deliberate pace to ensure a satisfactory outcome. The County continued to operate the facility during this time period, therefore, the groundwater remediation was not impacted.

APPENDIX A



COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1194 Prospect Avenue
Westbury, NY 11590-2723

March 30, 2005

New York State Department of
Environmental Conservation
Division of Environmental Remediation
Bureau of Remedial Construction
625 Broadway
Albany, NY 12233

Re: NCFTC – Site No. 1-30-042
Engineer's Construction Certification Report
As – Built Drawing Certification

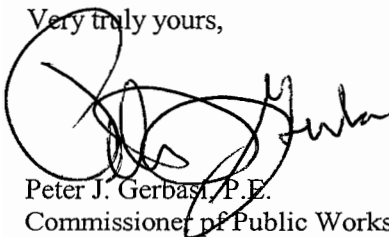
Gentlemen:

This Department has supervised and inspected the construction of Fireman's Training Center Groundwater Remediation Facility in Old Bethpage, New York. All prime contractors were required by General Condition 36 (GC36) of each contract to submit Record Drawings As-Built, however, GC36 did not obligate the contractors to provide Professional Engineer certification of the Record Drawings.

The Record Drawings As-Built have been previously submitted as Appendix A to the Engineer's Construction Certification Report. Members of my staff have reviewed these drawings and found them to be a true and accurate record of the work as constructed

If you have any questions, please contact Mr. Peter J. Witkowski at (516) 571-6970.

Very truly yours,



Peter J. Gerbasi, P.E.
Commissioner of Public Works



P.E. Stamp

PJG:PJW:cs

c: Joseph L. Davenport, Deputy Commissioner
Kenneth G. Arnold
Joseph N. Walker
Ed Visone, Environmental Construction

**PLEASE SEE ATTACHED
RECORD DRAWINGS**

APPENDIX B

**GENERAL CONTRACTOR
CHANGE ORDERS**

DATE OF ADVISEMENT <u>04.17.97</u>	FUND <u>C.A.P.</u>	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER <u>81.0.2.1.6</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>81</u> PROJECT: <u>0.2.1</u>	<u>4</u>	<u>000</u>	<u>1</u>	Fireman's Training Center Groundwater Treatment Facility

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: 0.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: +\$60,328.00	REVISED AMOUNT: \$15,310,328.00
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NATURE OF CHANGE:

Additional labor and material to provide the necessary treatment of the development water associated with the offsite recovery wells in Bethpage State Park.

\$60,328.00
Cost this Revision

G-2

CONTRACTOR: SILVERITE CONSTR. CO.

BY: Frank Chiodo
VIC PRES DATE: 4-14-97

TITLE: _____

RECOMMENDED: [Signature] DATE: 4/17/97

COMMISSIONER, DPW

FORM APPROVED: [Signature] DATE: 4/24/97

COUNTY ATTORNEY

APPROVED: [Signature] DATE: 4/30/97

COUNTY EXECUTIVE

SEE ATTACHMENTS

GRANT NUMBER: 8102160
(Applicable)

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the fund to be charged.

[Signature]
Name: _____
COUNTY COMPTROLLER

Title: _____
Date: 4/29/97

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____
Date: 4/25/97

DATE OF ADVISEMENT <u>04 24 97</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>8.1.0.2.1.6</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>81</u> PROJECT: <u>021</u>	<u>4</u>	<u>000</u>	<u>2</u>	<u>Fireman's Training Center Groundwater Treatment Facility</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>\$60,328.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>+\$26,798.00</u>	REVISED AMOUNT: <u>\$15,337,126.00</u>
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NATURE OF CHANGE:

An allowance item to revise the test borings in the recharge basin. The revisions include deeper borings, additional split spoon sampling and percolation tests.

\$26,798.00

Cost this Revision

G-3

CONTRACTOR: SILVERITE CONSTRUCTION

BY: Frank Chikoff
VIC-PRES. 4-21-97

TITLE: _____ DATE

RECOMMENDED: [Signature] 4/25/97
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 5/8/97
COUNTY ATTORNEY DATE

APPROVED: [Signature] 5/14/97
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: 810216
(if Applicable)

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: [Signature]
COUNTY COMPTROLLER

Title: _____
Date: 5/12/97

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: [Signature]
Date: 5/19/97

DATE OF ADVISEMENT 04.17.97	FUND C.A.P.	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 81021G
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:		COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA 8,1	PROJECT 0,2,1	4	000	3	Fireman's Trainig Center

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$87,126.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$161,828.00	REVISED AMOUNT: \$15,498,954.00
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NATURE OF CHANGE:

Additional labor and material to install three additional on site product recovery wells and associated equipment at the Fireman's Training Center.

\$161,828.00
Cost this Revision

G-1

CONTRACTOR: SILVERITE CONSTR CO INC

BY: Frank Chiodo
VIC. PRES. 4-14-97

TITLE: DATE

RECOMMENDED: [Signature] 4/17/97
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 4/24/97
COUNTY ATTORNEY DATE

APPROVED: [Signature] 4/30/97
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)
81021G

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]
Name:
COUNTY COMPTROLLER

Title:
4/29/97
Date:

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name:
4/25/97
Date:

DATE OF ADVISEMENT <u>05.21.97</u>	FUND <u>C.A.P.</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>810216</u>
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VENDOR NAME: SILVERITE CONSTRUCTION, CO. VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>8,1</u> PROJECT: <u>0,2,1</u>	<u>4</u>	<u>000</u>	<u>4</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$248,954.00</u>	MARK APPROV CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$8,486.00</u>	REVISED AMOUNT: <u>\$15,507,440.00</u>
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NATURE OF CHANGE:

Additional labor and material to change the size of the bearing bars for the pipe trench grating.

\$8,486.00
Cost this Revision

G-4

CONTRACTOR: SILVERITE CONSTRUCTION CO

BY: Frank Chiodi
VICE PRES 5/16/97
TITLE: _____ DATE

RECOMMENDED: [Signature] 5/22/97
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 6/5/97
COUNTY ATTORNEY DATE

APPROVED: [Signature] 6/11/97
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: _____ (If Applicable)

TRF 810216
COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]
Name: _____
COUNTY COMPTROLLER
Title: _____
Date: 6/10/97

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____
Date: 6/19/97

J. Sullivan

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

S&WS/ DMP

DATE OF ADVISEMENT <u>06.30.97</u>	FUND <u>C.A.P.</u>	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER <u>810216</u>
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VENDOR NAME: **SILVERITE CONSTRUCTION** VENDOR IDENTIFICATION: **VF 11-2098433**

LINE #	PROJECT ID:		COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA <u>81</u>	PROJECT <u>021</u>	<u>4</u>	<u>000</u>	<u>5</u>	Fireman's Training Center

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$257,440.00	MARK APPROV CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$13,523.00	REVISED AMOUNT: \$15,520,963.00
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NATURE OF CHANGE:

Additional labor and material to modify the lower platform of the air stripper towers.

\$13,523.00

Cost this Revision

G-8

CONTRACTOR: SILVERITE CONSTE

BY: Frank Chiodo
VIC. PRES 6-25-97

TITLE: _____ DATE _____

RECOMMENDED: [Signature] 7/3/97
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 7/17/97
COUNTY ATTORNEY DATE

APPROVED: [Signature] 7/24/97
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)
810216

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]
Name: _____
COUNTY COMPTROLLER

Title: 7/23/97
Date: _____

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____

7/21/97
Date: _____

DATE OF ADJUSTMENT <u>P. 8, 26, 97</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>8,1,0,2,1,G</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:		COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA <u>8,1</u>	PROJECT <u>0,2,1</u>	<u>4</u>	<u>000</u>	<u>6</u>	<u>FIREMAN'S TRAINING CENTER</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$270,963.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$5,269.00</u>	REVISED AMOUNT: <u>\$15,526,232.00</u>
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NATURE OF CHANGE:

Additional labor and material to provide the following at the Fireman's Training Center.

- 1) Replace the 3 inch water supply piping, servicing the Tower Building. (\$4,608.00)
- 2) Install a shut-off valve on the new water main that supplies water to the new Groundwater Treatment Facility Building. (\$661.00)

\$5,269.00

Cost this Revision:

G-6

CONTRACTOR: SILVERITE CONSTR. CO.

BY: Frank Chiodo
VIC PRES. 8-18-97

TITLE: _____ DATE _____

RECOMMENDED: [Signature]

COMMISSIONER, DPW _____ DATE _____

FORM APPROVED: [Signature] 9/25/97

COUNTY ATTORNEY _____ DATE _____

APPROVED: [Signature] 10/1/97

COUNTY EXECUTIVE _____ DATE _____

SEE ATTACHMENTS

GRANT NUMBER: _____ (If Applicable)

8102160

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]

Name: _____

COUNTY COMPTROLLER

Title: 9/30/97

Date: _____

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]

Name: _____

9/29/97

Date: _____

DATE OF ADVISEMENT <u>09.09.97</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>8,1,0,2,1,G</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>81</u> PROJECT: <u>021</u>	<u>4</u>	<u>000</u>	<u>7</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$276,232.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$89,927.00</u>	REVISED AMOUNT: <u>\$15,616,159.00</u>
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NATURE OF CHANGE:

Additional labor and material to modify the acid wash system at the Fireman's Training Center.

\$89,927.00

Cost this Revision

G-7

CONTRACTOR: SILVERITE CONSTR. CO.

BY: Frank Chiodo
VICE PRES 4-2-97

TITLE: _____ DATE

RECOMMENDED: [Signature] 9/10/97
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 9/25/97
COUNTY ATTORNEY DATE

APPROVED: [Signature] 10/1/97
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)

810216

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: [Signature]
COUNTY COMPTROLLER

Title: _____
9/30/97

Date: _____

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: [Signature]

DATE OF ADVISEMENT <i>02 06 98</i>	FUND <i>C.A.P.</i>	ACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER <i>81021G</i>
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VENDOR NAME: **SILVERITE CONSTRUCTION** VENDOR IDENTIFICATION: **VF** *11-2098433*

LINE #	PROJECT ID: AREA PROJECT	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	<i>81 021</i>	<i>4</i>	<i>000</i>	<i>8</i>	Fireman's Training Center

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$366,159.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$1,956.00	REVISED AMOUNT: \$15,618,115.00
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NATURE OF CHANGE:

Additional labor and material to do the following extra work at the Fireman's Training Center:

- 1) Install a gate on the fence for the recharge basin.
- 2) Supply sleeves in the valve and injection well vaults in the Recharge Basin.

\$1,956.00
Cost this Revision

G-12

CONTRACTOR: <i>SILVERITE CONSTR. CO</i>
BY: <i>Frank Chiodo</i> <i>NIC. PRES 12/24/97</i>
TITLE: _____ DATE: _____
RECOMMENDED: <i>[Signature]</i> <i>7/6/98</i>
COMMISSIONER, DPW _____ DATE: _____
FORM APPROVED: <i>[Signature]</i> <i>2/26/98</i>
COUNTY ATTORNEY _____ DATE: _____
APPROVED: <i>[Signature]</i> <i>3/1/98</i>
COUNTY EXECUTIVE _____ DATE: _____

<input type="checkbox"/> SEE ATTACHMENTS	GRANT NUMBER: <i>(If Applicable)</i>
81021G # COMPTROLLER'S CERTIFICATION:	
I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.	
<i>[Signature]</i> Name: _____ COUNTY COMPTROLLER	
Title: <i>3/2/98</i> Date: _____	

CERTIFICATE OF ACCEPTANCE INTO NUMIS
I certify that this document was accepted into NUMIS.
<i>[Signature]</i> Name: _____ Date: <i>3/2/98</i>

DATE OF ADVISEMENT 01 27 98	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 81021G
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VENDOR NAME: SILVERITE CONSTRUCTION
 VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA: 81 PROJECT: 021	4	000	9	FIREMAN'S TRAINING CENTER

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$368,115.00	MARK APPRO CIRCLE O - (+)	THIS REVISION: \$1,505.00	REVISED AMOUNT: \$15,619,620.00
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NATURE OF CHANGE:

Additional labor and material to install a house trap pit for the operations building

\$1,505.00

Cost this Revision

G-17

CONTRACTOR: SILVERITE CONSTR

BY: FRANK CHICCO
VIC. PRES 1/16/98

TITLE: _____ DATE: _____

RECOMMENDED: [Signature] 1/26/98
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 2/11/98
COUNTY ATTORNEY DATE

APPROVED: [Signature] 2/19/98
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)
81021G

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: [Signature]
COUNTY COMPTROLLER

Title: [Signature] 2/17/98
Date:

CERTIFICATE OF ACCEPTANCE

INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: [Signature]
Date: 2/13/98

DATE OF ADVISEMENT <u>01.27.98</u>	FUND <u>C.A.P.</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>81021G</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>8,1</u> PROJECT: <u>0,2,1</u>	<u>4</u>	<u>000</u>	<u>10</u>	<u>FIREMAN'S TRAINING CENTER</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$369,620.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$30,474.00</u>	REVISED AMOUNT: <u>\$15,650,094.00</u>
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NATURE OF CHANGE:

Additional labor and equipment to remove excess material and silt from the bottom of the recharge basin.

\$30,474.00
Cost this Revision

G-13

CONTRACTOR: SILVERITE CENTER

BY: FRANK CHICCO
M.C. PRES 1/16/98
TITLE: _____ DATE

RECOMMENDED: [Signature] 1/20/98
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 2/11/98
COUNTY ATTORNEY DATE

APPROVED: [Signature] 2/19/98
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: _____ (If Applicable)

81021-C-1
COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: [Signature]
COUNTY COMPTROLLER

Title: _____
Date: 2/17/98

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: [Signature]
Date: 2/13/98

DATE OF ADVISEMENT <u>02.13.98</u>	FUND <u>GAP</u>	SECTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER <u>8,1,02,1,G</u>
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VENDOR NAME: **SILVERITE CONSTRUCTION** VENDOR IDENTIFICATION: **VF** 11-2098433

LINE #	PROJECT ID: AREA PROJECT	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	<u>8.1</u> <u>0.2.1</u>	<u>4</u>	<u>000</u>	<u>11</u>	Fireman's Training Center

ORIGINAL BID AMOUNT \$15,250,000	PREVIOUS REVISIONS: +\$400,094.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$6,188.00	REVISED AMOUNT: \$15,656,282.00
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NATURE OF CHANGE:

Additional labor and materials to raise off-site Recovery Well No. 4 and install a vertical drain adjacent to the well.

\$6,188.00

Cost this Revision

G-9

CONTRACTOR: SILVERITE CONSTR CO

BY: Frank Chiodo
VIC-PRES. 2-6-98
TITLE: _____ DATE

RECOMMENDED: [Signature] 2/17/98
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 2/26/98
COUNTY ATTORNEY DATE

APPROVED: [Signature] 3/1/98
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: _____
(If Applicable)

810214
COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be Changed.

[Signature]
Name: _____
COUNTY COMPTROLLER
Title: _____
Date: _____

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____
3/2/98
Date: _____

DATE OF ADVISEMENT <u>2.13.98</u>	FUND <u>C.A.P.</u>	ACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>810 216</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:		COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA <u>8.1</u>	PROJECT <u>0 2 1</u>	<u>4</u>	<u>000</u>	<u>12</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$406,282.00</u>	MARK APPROV CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$6,717.00</u>	REVISED AMOUNT: <u>\$15,662,999.00</u>
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NATURE OF CHANGE:

Additional labor and materials to remove a concrete chamber under a metal building and a concrete obstruction on Winding Road.

\$6,717.00
Cost this Revision

G-14

CONTRACTOR: <u>SILVERITE CONSTR. CO.</u>	<input type="checkbox"/> SEE ATTACHMENTS	GRANT NUMBER: (If Applicable)
BY: <u>Frank Chavira</u> <u>VICE PRES. - 2-6-98</u>	<u>810216 #</u> COMPTROLLER'S CERTIFICATION: I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed. <u>Richard K. ...</u> Name: _____ COUNTY COMPTROLLER Title: _____ <u>3/3/98</u> Date: _____	
RECOMMENDED: <u>[Signature]</u> <u>3/17/98</u> COMMISSIONER, DPW DATE		
FORM APPROVED: <u>[Signature]</u> <u>3/24/98</u> COUNTY ATTORNEY DATE		
APPROVED: <u>[Signature]</u> <u>3/4/98</u> COUNTY EXECUTIVE DATE		
	CERTIFICATE OF ACCEPTANCE INTO NUMIS I certify that this document was accepted into NUMS. <u>[Signature]</u> Name: _____ <u>3/17/98</u> Date: _____	

CAPITAL CONTRACT CHANGE ORDER

DATE OF ADVISEMENT <u>10.4.1.1.98</u>	FUND <u>CAP</u>	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER <u>8,1,0,2,1,6</u>
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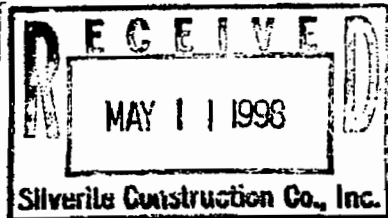
VENDOR NAME: **SILVERITE CONSTRUCTION** VENDOR IDENTIFICATION: **VF** 11-2090433

LINE #	PROJECT ID	ROOT GROUP	QTY	CHANGE ORDER #	DESCRIPTION
<u>1</u>	<u>8,1</u> <u>0,2,1</u>	<u>4</u>	<u>000</u>	<u>13</u>	<u>Groundwater Treatment Facilities Fireman's Training Center</u>

ORIGINAL AMOUNT <u>\$15,250,000.00</u>	+	CHANGE <u>\$412,999.00</u>	NEW AMOUNT <u>\$15,662,999.00</u>
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NATURE OF CHANGE:

Additional labor and material to perform additional well development of the Injection Wells.



File	<u>AS, FC, BG</u>
Accounting	<u>AS, FC, BG</u>
Print Mat	<u>AS, FC, BG</u>
Field	<u>AS, FC, BG</u>
AS, FC, BG	<u>AS, FC, BG</u>
Address	

6009210.00
Cost this Revision

G 11

CONTRACTOR: SILVERITE CONSTR

BY: Frank Chirco
VICE PRESIDENT 4-14-98

TITLE: _____ DATE _____

RECOMMENDED: [Signature] 4/17/98
COMMISSIONER, DPW

FORM APPROVED: [Signature] 4/23/98
COUNTY ATTORNEY DATE

APPROVED: [Signature] 5/11/98
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: 81021600
(If Applicable)

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this certificate project in the appropriation to be changed.

Name: [Signature]

COUNTY COMPTROLLER

Title: _____

Date: 4/27/98

CERTIFICATE OF ACCEPTANCE INTO NIMS

I certify that this document was accepted into NIMS.

Name: [Signature]

Date: 4/27/98

DATE OF ADVISEMENT 05 27 98	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 81021
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VENDOR NAME: SILVERITE CONSTRUCTION CONSTRUCTION CO. VENDOR IDENTIFICATION: VE 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA: 81 PROJECT: 021	4	000	14	Fireman's Training Center

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$446,239.00	MARK APPRO CIRCLE ○ - ● +	THIS REVISION: \$3,300.00	REVISED AMOUNT: \$15,699,539.00
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NATURE OF CHANGE:

Additional labor and material to provide a cargo storage box at Fireman's Training Center Ground Water Treatment Facility.

\$3,300.00

Cost this Revision

G-18

CONTRACTOR: SILVERITE CONSTR.
 BY: Frank Chiodo
 VIC. PRES 5/15/98
 TITLE: DATE

RECOMMENDED: [Signature] 5/28/98
 COMMISSIONER DATE

FORM APPROVED: [Signature] 6/4/98
 COUNTY ATTORNEY DATE

APPROVED: [Signature] 6/15/98
 COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: 810216

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: [Signature]
 COUNTY COMPTROLLER

Title: [Signature]
 Date: 6/9/98

CERTIFICATE OF ACCEPTANCE

INTO NUMIS

I certify that this document was accepted into NUMS.

Name: [Signature]
 Date: 6/18/98

DATE OF ADVISEMENT <u>Feb 15, 98</u>	FUNC. <u>C.A.P.</u>	TRANSACTION CODE <u>FTC</u>	CNTM	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>810210</u>
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VENDOR NAME: SILVERITE CONSTRUCTION *file* VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>81</u> PROJECT: <u>021</u>	<u>4</u>	<u>000</u>	<u>15</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$449,539.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$3,138.00</u>	REVISED AMOUNT: <u>\$15,702,677.00</u>
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NATURE OF CHANGE:

Additional labor and material for the following extra work at Fireman's Training Center:

1. Provide additional Durrock panels and doors for the mini-cabinet heaters.
2. Steel reinforcing for the expansion joints between the slab on grade and the arch over the wet wells.

\$3,138.00

Cost this Revision

G-16,G-20

CONTRACTOR: <u>SILVERITE CONSTR</u>	<input type="checkbox"/> SEE ATTACHMENTS	GRANT NUMBER: <u>81021G</u> <small>(if Applicable)</small>
BY: <u>Frank Ch... VIC. PRES 6/18/98</u>	81021G COMPTROLLER'S CERTIFICATION: I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed. <u>Michael...</u> Name: _____ COUNTY COMPTROLLER Title: _____ Date: <u>7/6/98</u>	
TITLE: DATE		
RECOMMENDED: <u>[Signature]</u> <u>6/6/98</u> COMMISSIONER, DPW DATE		
FORM APPROVED: <u>[Signature]</u> <u>7/10/98</u> COUNTY ATTORNEY DATE		
APPROVED: <u>[Signature]</u> <u>7/11/98</u> COUNTY EXECUTIVE DATE	CERTIFICATE OF ACCEPTANCE INTO NUMIS I certify that this document was accepted into NUMIS. <u>L. Solimine</u> Name: _____ <u>713198</u> Date: _____	

DATE OF ADVISEMENT <u>07 01 98</u>	FUNC <u>C.A.P.</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>8 1 0 2 1</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>8 1</u> PROJECT: <u>0 2 1</u>	<u>4</u>	<u>000</u>	<u>16</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$452,677.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$4,726.00</u>	REVISED AMOUNT: <u>\$15,707,403.00</u>
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NATURE OF CHANGE:

Additional labor and material to provide hand railings for the steps at each end of the recharge basin bulkhead wall for the Fireman's Training Facility Groundwater Treatment Facility Project.

\$4,726.00
Cost this Revision

G-19

CONTRACTOR: <u>SILVERITE CONSTR. CO</u>	<input type="checkbox"/> SEE ATTACHMENTS	GRANT NUMBER: (If Applicable) <u>810216</u>
BY: <u>Frank Chiodo</u> <u>VIC PRES</u> <u>6/22/98</u> DATE	<u>810216</u> COMPTROLLER'S CERTIFICATION: I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed. <u>[Signature]</u> Name: _____ COUNTY COMPTROLLER Title: _____ <u>7/23/98</u> Date: _____	
RECOMMENDED: <u>[Signature]</u> <u>7/2/98</u> DATE		
FORM APPROVED: <u>[Signature]</u> <u>7/16/98</u> DATE		
COMMISSIONER, DPW		
COUNTY ATTORNEY	CERTIFICATE OF ACCEPTANCE INTO NUMIS I certify that this document was accepted into NUMIS. <u>[Signature]</u> Name: _____ <u>7/20/98</u> Date: _____	
APPROVED: <u>Cheryl Petri</u> <u>7/27/98</u> DATE	COUNTY EXECUTIVE	

V. Song

DATE OF ADVISEMENT <u>07.21.98</u>	FUND <u>C.A.P.</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>81021G</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>8,1</u> PROJECT: <u>0,2,1</u>	<u>4</u>	<u>000</u>	<u>17</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$457,403.00</u>	MARK APPRO CIRCLE <input type="radio"/> <input checked="" type="radio"/>	THIS REVISION: <u>\$7,405.00</u>	REVISED AMOUNT: <u>\$15,714,808.00</u>
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NATURE OF CHANGE:

Additional labor and material to change the stairs adjacent to the sludge thickener tank from fixed construction to removable bolted construction.

\$7,405.00
Cost this Revision

G-5

CONTRACTOR: SILVERITE CONSTR. CO INC

BY: Frank Chiodo
VIC. PRES. 7/13/98
DATE

RECOMMENDED: [Signature] 7/21/98
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 7/30/98
COUNTY ATTORNEY DATE

APPROVED: Cheryl Pitta 8/11/98
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)

81021G
COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]
Name: _____
COUNTY COMPTROLLER

8/6/98
Date: _____

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____
8/11/98
Date: _____

DATE OF ADVISEMENT <u>08.14.98</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>81021G</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>8,1</u> PROJECT: <u>0,2,1</u>	<u>4</u>	<u>000</u>	<u>18</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$464,808.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$4,077.00</u>	REVISED AMOUNT: <u>\$15,718,885.00</u>
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NATURE OF CHANGE:

Additional labor and material to install submersible cable at three on-site wells.

\$4,077.00
Cost this Revision

G-22

CONTRACTOR: SILVERITE CONSTR

BY: Frank Chiodo
VIC PRES 8/3/98
DATE

RECOMMENDED: [Signature] 8/17/98
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 8/27/98
COUNTY ATTORNEY DATE

APPROVED: Cheryl Pita 9/5/98
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS GRANT NUMBER: 81021G
(If Applicable)

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: [Signature]
COUNTY COMPTROLLER

Title: 9/2/98
Date:

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: [Signature]
Date: 9/01/98

DATE OF ADVISEMENT <u>09/14/98</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>8,1,02,1,G</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID.	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>81</u> PROJECT: <u>021</u>	<u>4</u>	<u>000</u>	<u>19</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$468,885.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$4,855.00</u>	REVISED AMOUNT: <u>\$15,723,740.00</u>
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NATURE OF CHANGE:

Additional labor and material to perform extra work at the Fireman's Training Facility Groundwater Treatment Facility Project as follows:

- 1) Provide isolation valves on all chemical lines at points of entry and discharge.
- 2) Provide a bypass system between the on-site & off-site piping trains.

\$4,855.00

Cost this Revision

G-24,25

CONTRACTOR: SILVERITE CONSTR. CO

BY: Frank Chiodo
VIC. PRES 9/8/98
TITLE: _____ DATE

RECOMMENDED: [Signature] 9/14/98
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 9/22/98
COUNTY ATTORNEY DATE

APPROVED: Cheryl Petri 10/5/98
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)
81021G

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: [Signature]
COUNTY COMPTROLLER

Title: 9/28/98
Date:

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: L. Solimano
Date: 9/25/98

copy

DATE OF ADVISEMENT <u>11/18/98</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>810216</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID.	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>81</u> PROJECT: <u>021</u>	<u>4</u>	<u>000</u>	<u>20</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$473,740.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$20,977.00</u>	REVISED AMOUNT: <u>\$15,744,717.00</u>
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NATURE OF CHANGE:

Additional labor and material to modify the sulfuric acid piping and move sulfuric acid pump number five at the Fireman's Training center Ground Treatment Facility Operations Building.

\$20,977.00
Cost this Revision

G-22

CONTRACTOR: SILVERITE CONSTR CO INC

BY: Frank Christ
TITLE: VIC PRES DATE: 11/12/98

RECOMMENDED: [Signature] DATE: 11/16/98

COMMISSIONER, DPM: [Signature] DATE: 11/16/98

FORM APPROVED: [Signature] DATE: 11/23/98

COUNTY ATTORNEY: _____ DATE: _____

APPROVED: Cheryl Petri DATE: 12/11/98

COUNTY EXECUTIVE: _____ DATE: _____

SEE ATTACHMENTS

GRANT NUMBER: 810216 (if applicable)

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: [Signature]
Title: COUNTY COMPTROLLER
Date: 12/9/98

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: [Signature]
Date: 12/8/98

CA. Vesore

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

S&WS / dmp

DATE OF ADVISEMENT 11 18 98	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 8 1 0 2 1 G
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA: 81 PROJECT: 0 2 1	4	000	21	Fireman's Training Center

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$494,717.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$4,877.00	REVISED AMOUNT: \$15,749,594.00
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NATURE OF CHANGE:

Additional labor and material to replace the existing polymer suction piping with a three inch (3") header pipe from the polymer bulk storage tanks, and provide three one (1) inch vertical takeoffs from the header to each of the polymer blending units.

\$4,877.00

Cost this Revision

G-29

CONTRACTOR: SILVERITE CONSTR. CO INC

BY: Frank Chiodo
VIC. PRES. 11/12/98

RECOMMENDED: [Signature] 11/16/98
COMMISSIONER, DPW

FORM APPROVED: [Signature] 12/3/98
COUNTY ATTORNEY

APPROVED: Cheryl Petri 12/11/98
COUNTY EXECUTIVE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)

81021G

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present for the appropriation to be changed.

[Signature]
Name: _____
Title: COUNTY COMPTROLLER
Date: 12/2/98

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____
Date: 12/18/98

4.T.C. Side

CAPITAL CONTRACT CHANGE ORDER

COUNTY OF NASSAU, NY

S&WS/dmp

DATE OF ADVISEMENT 12/2/98	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 81021G
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VENDOR NAME: SILVERITE CONSTRUCTION
 VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA 81 PROJECT 0 2 1	4	000	22	Fireman's Training Center

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$499,594.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$2,327.00	REVISED AMOUNT: \$15,751,921.00
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NATURE OF CHANGE:

Additional labor and material to provide a seal water system for the air stripper cleaning/recycle pump in the Fireman's Training Center Groundwater Treatment Facility Operations Building.

\$2,327.00

Cost this Revision

G-26

CONTRACTOR: SILVERITE CONSTR CO
 BY: Frank Chiodo
 TITLE: VIC PRES DATE: 11/19/98

RECOMMENDED: [Signature] DATE: 12/2/98
 COMMISSIONER, DPW

FORM APPROVED: [Signature] DATE: 10/27/98
 COUNTY ATTORNEY

APPROVED: Cheryl Petri DATE: 12/24/98
 COUNTY EXECUTIVE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)

COMPROLLER'S CERTIFICATION:
 I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.
 [Signature]
 Name: _____
 COUNTY COMPROLLER
 Title: _____
 Date: 12/24/98

CERTIFICATE OF ACCEPTANCE INTO NUMIS
 I certify that this document was accepted into NUMIS.
 [Signature]
 Name: J. Solimeno
 Date: 12/18/98

t.l.c. *[Signature]*

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

S&WS / dmp

DATE OF ADVISEMENT <u>12.02.98</u>	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER <u>81021G</u>
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VENDOR NAME: **SILVERITE CONSTRUCTION** VENDOR IDENTIFICATION: **VF 11-2098433**

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA: <u>81</u> PROJECT: <u>021</u>	<u>4</u>	<u>000</u>	<u>23</u>	Fireman's Training Center

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$501,921.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$6,628.00	REVISED AMOUNT: \$15,758,549.00
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NATURE OF CHANGE:

Additional labor and material to modify the Injection Wells for the piezometers and probes associated with the Fireman's Training Center Groundwater Treatment Facility Project.

\$6,628.00

Cost this Revision

G-27

CONTRACTOR: SILVERITE CONSTR.

BY: Frank Chiodo

TITLE: MIC. PRES DATE: 11/24/98

RECOMMENDED:

[Signature] DATE: 12/2/98

COMMISSIONER, DPW

FORM APPROVED:

[Signature] DATE: 12/17/98

COUNTY ATTORNEY

APPROVED:

Cheryl Petru DATE: 12/24/98

COUNTY EXECUTIVE

SEE ATTACHMENTS

GRANT NUMBER: 81021G (if Applicable)

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]

Name: _____

COUNTY COMPTROLLER

Title: _____

12/24/98

Date: _____

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]

Name: _____

12/18/98

Date: _____

F. V. Cole

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

S&WS/dmp

DATE OF ADVISEMENT <u>12 02 98</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>8 1 0 2 1 G</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:		COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
	AREA	PROJECT				
<u>1</u>	<u>81</u>	<u>0 2 1</u>	<u>4</u>	<u>000</u>	<u>24</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$508,549.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$1,862.00</u>	REVISED AMOUNT: <u>\$15,760,411.00</u>
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NATURE OF CHANGE:

Additional labor and material to provide three schedule 80 PVC check valves on the suction piping at the cleaning recycle pump in the Fireman's Training Center Operations Building.

\$1,862.00

Cost this Revision

G-32

CONTRACTOR: SILVERITE CONSTRUCTION

BY: Frank Chiodo
VIC. P.P.S. 11/24/98
DATE

RECOMMENDED: [Signature] 12/2/98
DATE

COMMISSIONER, DPW: [Signature] 10/17/98
DATE

COUNTY ATTORNEY: [Signature]
DATE

APPROVED: Cheryl Petri 12/24/98
DATE

COUNTY EXECUTIVE: [Signature]
DATE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable) 81021 G w

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: [Signature]
COUNTY COMPTROLLER

Title: _____
Date: 12/21/98

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: [Signature]
Date: 12/18/98

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

S&WS/dmp

DATE OF ADVISEMENT <u>03 25 99</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>810216</u>
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VENDOR NAME: <u>SILVERITE CONSTRUCTION</u>	VENDOR IDENTIFICATION: <u>VF 11-2098433</u>
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LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA <u>81</u> PROJECT <u>021</u>	<u>4</u>	<u>000</u>	<u>25</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$510,411.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$2,321.00</u>	REVISED AMOUNT: <u>\$15,762,732.00</u>
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NATURE OF CHANGE:

Additional labor and material to modify the fork lift for the Fireman's Training Center Operations Building.

\$2,321.00

Cost this Revision

G-31

CONTRACTOR: <u>SILVERITE CONSTR CO</u>
BY: <u>Frank Chiodo</u> VIC. PRES <u>3-23-99</u> DATE
RECOMMENDED: <u>[Signature]</u> <u>3/26/99</u> COMMISSIONER, DWA DATE
FORM APPROVED: <u>[Signature]</u> <u>4/8/99</u> COUNTY ATTORNEY DATE
APPROVED: <u>Cheryl Petri</u> <u>4/19/99</u> COUNTY EXECUTIVE DATE

<input type="checkbox"/> SEE ATTACHMENTS	GRANT NUMBER: (If Applicable)
<u>810216-w</u> COMPTROLLER'S CERTIFICATION: I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed. <u>[Signature]</u> Name: _____ COUNTY COMPTROLLER Title: _____ Date: <u>4/12/99</u>	
CERTIFICATE OF ACCEPTANCE INTO NUMIS I certify that this document was accepted into NUMIS. <u>[Signature]</u> Name: _____ <u>4/19/99</u> Date: _____	

CAPITAL CONTRACT CHANGE ORDER

DATE OF ADVISEMENT 12 10 98	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 81021G
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA 81 PROJECT 0 2 1	4	000	26	Fireman's Training Center

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$512,732.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$11,891.00	REVISED AMOUNT: \$15,774,623.00
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NATURE OF CHANGE:

Additional labor and material to provide the following in the Fireman's Training Center Groundwater Treatment Facility Operations Building:

- 1) Three pressure relief valves on the air scour system.
- 2) Four air vacuum relief valves on the flocculation tanks and clarifiers.

\$11,891.00
Cost this Revision

G-28, 30

CONTRACTOR: SILVERITE CONSTR CO INC

BY: Frank Chiodo
VIC. PRES 12/17/98
DATE

RECOMMENDED: [Signature] 12/10/98
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 12/17/98
COUNTY ATTORNEY DATE

APPROVED: Cheryl Petre 12/21/98
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: 81021G-2
(If Applicable)

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]
Name: _____
COUNTY COMPTROLLER

Title: _____
Date: 12/21/98

CERTIFICATE OF ACCEPTANCE

INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____

Date: 12/18/98

CAPITAL CONTRACT CHANGE ORDER

DATE OF ADVISEMENT 03/19/00	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 81021G
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA 81 PROJECT 021	4	000	27	Fireman's Training Center Groundwater Treatment Facility

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$524,623.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$48,366.00	REVISED AMOUNT: \$15,822,989.00
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NATURE OF CHANGE:

- Additional labor and material to provide the following:
1. Bypass the onsite influent flow past the metal precipitation system directly to the fludized bed.
 2. Bypass the offsite influent flow past the metal precipitation system to the intermediate wet well.
 3. Redirect the onsite influent flow through the offsite metal precepitation train and rapid mix tank to the clairifier sump.
 4. Modify both the onsite and offsite rapid mix tank weirs and install adjustable weirs.
 5. Provide two M-8 Wilden diaphragm pumps, model No. M-8 222/SNPB/TF/VT/VT with air exhaust mufflers and a Wilden surge dampener, model No. D2-SAP-TF-TF.

\$48,366.00
Cost this Revision

G-36

CONTRACTOR: Silverite Construction Co., Inc.

BY: *[Signature]*
V.P. of Operations DATE: 2-11-00

RECOMMENDED: *[Signature]* DATE: 3/15/2000
COMMISSIONER, DPW

FEDERAL APPROVED: *[Signature]* DATE: 3/23/00
COUNTY ATTORNEY

APPROVED: *[Signature]* DATE: 4/10/00
COUNTY EXECUTIVE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)
810216

COMPTROLLER'S CERTIFICATION:
I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: *[Signature]*
COUNTY COMPTROLLER
Title: *[Signature]*
Date: 3/27/00

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: *[Signature]*
Date: 3/24/00

CIPW00000027

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

S&WS / dmp

DATE OF ADVISEMENT 03.13.00	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 81021G
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA 81 PROJECT 0 2 1	4	000	28	Fireman's Training Center Groundwater Treatment Facility

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$ 572,989.00	MARK APPRO CIRCLE <input checked="" type="radio"/> - <input checked="" type="radio"/>	THIS REVISION: (\$441,735.00)	REVISED AMOUNT: \$15,381,254.00
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NATURE OF CHANGE:

A credit for the unused portion of the contract bid items as follows:

SUMMARY OF CREDIT QUANTITIES

ITEM NO.	DESCRIPTION	CONTRACT UNIT PRICE	COST TO DATE	CREDITS
#08	Disposal of Contaminated Excavation	\$225,000.00	\$0.00	(\$225,000.00)
#09	Incremental Cost for Work in Protection Level "C"	\$5,000.00	\$0.00	(\$5,000.00)
#10	Cost of Sulfuric Acid during Performance Testing	\$12,000.00	\$5,556.38	(\$6,443.62)
#11	Cost of Caustic during Performance Testing	\$81,000.00	\$13,274.51	(\$67,725.49)
#12	Cost of Polymer during Performance Testing	\$37,000.00	\$6,049.11	(\$30,950.89)
#13	Cost for Nutrient during Performance Testing	\$8,000.00	\$880.00	(\$7,120.00)
#14	Cost for Sludge Disposal during Performance Testing	\$18,000.00	\$0.00	(\$18,000.00)
#15	Cost for Waste Oil Disp. during Performance Testing	\$1,000.00	\$0.00	(\$1,000.00)
#17	Patching Soil Concrete Caps	\$10,000.00	\$0.00	(\$10,000.00)
#18	Lab. Testing & Checking Required by Tech. Spec.	\$10,000.00	\$4,505.00	(\$5,495.00)
#19	Temp. Heat & Ventilation after Const. Completion	\$50,000.00	\$0.00	(\$50,000.00)
#21	Minority Apprenticeship Training Program (Painter)	\$15,000.00	\$0.00	(\$15,000.00)
			TOTAL	(\$441,735.00)

(\$441,735.00)
Cost this Revision

G-37

CONTRACTOR: Silverite Construction Co., Inc.

BY: [Signature]
VP. of Operations DATE: 2.11.00

RECOMMENDED: [Signature] DATE: 3/13/2000

COMMISSIONER DPW

FORM APPROVED: [Signature] DATE: 3/23/00

COUNTY ATTORNEY

APPROVED: [Signature] DATE: 4/10/00

COUNTY EXECUTIVE

SEE ATTACHMENTS GRANT NUMBER: (If Applicable)

81021G

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]
Name: _____

COUNTY COMPTROLLER

Title: _____ Date: 3/22/00

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____ Date: 3/24/00

CAPITAL CONTRACT CHANGE ORDER

CIPW 0000049
S&WS/dmp

COUNTY OF NASSAU, NY

DATE OF ADVISEMENT <u>04 17 00</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>8 10 216</u>
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ENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA <u>81</u> PROJECT <u>021</u>	<u>4</u>	<u>000</u>	<u>29</u>	Fireman's Training Center Groundwater Treatment Facility

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$131,254.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$5,045.00	REVISED AMOUNT: \$15,386,299.00
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NATURE OF CHANGE:

- Additional labor and material to provide the following:
1. An air station in the maintenance shop.
 2. Change the pistons on caustic pumps No. 3 & 4.

\$5,045.00
Cost this Revision

G-36

CONTRACTOR: <u>Silverite Const. Co. Inc</u>	GRANT NUMBER: (If Applicable)
BY: <u>[Signature]</u> V.P. of Operations	
TITLE: _____ DATE: _____	
RECOMMENDED: <u>[Signature]</u> <u>4/17/00</u> DATE	
COMMISSIONER OF PW <u>[Signature]</u> <u>5/4/00</u> DATE	
COUNTY ATTORNEY <u>[Signature]</u> _____ DATE	
APPROVED: <u>[Signature]</u> <u>5/18/00</u> DATE	
COUNTY EXECUTIVE <u>[Signature]</u> _____ DATE	

SEE ATTACHMENTS

810216

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriate fund.

AS PER CHARTER 2002

ENCUMBRANCE PURPOSES

Name: _____

COUNTY COMPTROLLER

Title: _____
Date: 5/8/00

CERTIFICATE OF ACCEPTANCE

INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____
Date: 5/8/00

0150M

07/24/00 810

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

S&WS/dmp

DATE OF ADVISEMENT 07.07.00	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 810216
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA 81 PROJECT 21	4	000	30	Fireman's Training Center Groundwater Treatment Facility

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$136,299.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$12,004.00	REVISED AMOUNT: \$15,398,303.00
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NATURE OF CHANGE:

Additional labor and material to provide bypass piping to run onsite influent through the offsite metal precipitation system while offsite influent is run through the bypass to the intermediate wet well. Additionally, this revision will provide insulation on this piping, and previously installed piping train bypass revisions.

\$12,004.00
 Cost this Revision

G-38

CONTRACTOR: SILVERITE CONST. CO. INC.

BY: *[Signature]*
V.P. of Operations 7-3-00 DATE

RECOMMENDED: *[Signature]* 7/7/00 DATE
COMMISSIONER, DPW

FORM APPROVED: *[Signature]* 7/17/00 DATE
COUNTY ATTORNEY

APPROVED: *[Signature]* 7/31/00 DATE
COUNTY EXECUTIVE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)

810216
COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered release sufficient to cover this contract is present in the attached schedule.

AS PER STATE POLICY ENCOMBERANCE BIDDING

[Signature]
COUNTY COMPTROLLER

Title: *[Signature]*
Date: 7/24/00

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name:
Date: 7/24/00

DATE OF ADVISEMENT 08.23.00	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 8
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA 81 PROJECT 2 1	4	000	31	Fireman's Training Center Groundwater Treatment Facility

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$148,303.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$9,261.00	REVISED AMOUNT \$15,407,564.00
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NATURE OF CHANGE:

Additional labor and material to provide the following.

1. Modify the filter sludge piping, relocate polymer blend feed pump No. 3, and provide additional polymer.
2. Repair 3 of the on-site/off-site BW level switches and purchase 4 new BW level switches.

\$9,261.00

Cost this Revision

0-39

CONTRACTOR: Silverite Const Co Inc

BY: [Signature]
VP of Operations

TITLE: _____ DATE: 8.15.00

RECOMMENDED: [Signature] 8/25/2000
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 9/7/00
COUNTY ATTORNEY DATE

APPROVED: [Signature] 9/10/00
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS GRANT NUMBER: _____ (If Applicable)

810216
COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is available for the appropriation to be changed for the following purposes:

AS PER CHARTER FOR FINANCIAL PURPOSES

Name: _____

COUNTY COMPTROLLER

Title: _____ Date: 9/10/00

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: [Signature] Date: 9/11/00

7-11-00
 CIPW 422666102
 S&WS/dmp

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

DATE OF ADVISEMENT 09 11 00		FUND CAP	TRANSACTION CODE CNTM		DEPARTMENT PW	CONTRACT NUMBER 8 10 210
VENDOR NAME: SILVERITE CONSTRUCTION			VENDOR IDENTIFICATION: VF 11-2098433			
LINE # 1	PROJECT ID: AREA 81 PROJECT 2 1	COST GROUP 4	OBJ 000	CHANGE ORDER # 32	DESCRIPTION: Fireman's Training Center Groundwater Treatment Facility	
ORIGINAL BID AMOUNT \$15,250,000.00		PREVIOUS REVISIONS: +\$157,564.00		MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$34,476.00	REVISED AMOUNT: \$15,442,040.00

NATURE OF CHANGE:

Additional labor and material to provide insulation on various piping systems in the Operations Building.

\$34,476.00
 Cost this Revision

G-40

CONTRACTOR: <u>Silverite Const Co Inc</u> BY: <u>[Signature]</u> <u>V.P. of Operations</u> 9-6-00 TITLE: _____ DATE		<input type="checkbox"/> SEE ATTACHMENTS	GRANT NUMBER: (If Applicable)
RECOMMENDED: <u>[Signature]</u> 9-12-00 COMMISSIONER, DPW DATE		COMPTROLLER'S CERTIFICATION: I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed. <u>[Signature]</u> COUNTY COMPTROLLER Title: _____ Date: <u>9/28/00</u>	
FOR WARE APPROVED: <u>[Signature]</u> 9/21/00 COUNTY ATTORNEY DATE			
APPROVED: <u>[Signature]</u> 10/3/00 COUNTY EXECUTIVE DATE			
		CERTIFICATE OF ACCEPTANCE INTO NUMIS I certify that this document was accepted into NUMIS. <u>[Signature]</u> Name: _____ Date: <u>9/28/00</u>	

CAPITAL CONTRACT CHANGE ORDER

DATE OF ADVISEMENT <u>11/16/00</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>81021G</u>
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA <u>81</u> PROJECT <u>21</u>	<u>4</u>	<u>000</u>	<u>33</u>	<u>Fireman's Training Center Groundwater Treatment Facility</u>

ORIGINAL BID AMOUNT <u>\$15,250,000.00</u>	PREVIOUS REVISIONS: <u>+\$192,040.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$6,872.00</u>	REVISED AMOUNT: <u>\$15,448,912.00</u>
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NATURE OF CHANGE:

Additional labor and material to relocate the air stripper influent water flow FIT-251-1, FIT-251-2, FIT-251-3, and the on-site influent flow FIT-220 pressure transmitters from the outside to the inside of the building.

\$6,872.00
Cost this Revision

0-41

12/14/00

CONTRACTOR: Silverite Const Co Inc

BY: [Signature]
V.P. of Operations 11-9-00
TITLE: _____ DATE

RECOMMENDED:
[Signature] 11-16-00
COMMISSIONER, OPW DATE

FORN APPROVED:
[Signature] 12/14/00
COUNTY ATTORNEY DATE

APPROVED:
[Signature] 11/8/01
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER. (If Applicable)

COMPTROLLER'S CERTIFICATION:
81021G
I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: Craig W. Fore, CPA
COUNTY COMPTROLLER

Title: _____
Date: 12/18/00

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____
Date: 12/18/00

5-VISOR

CIPW 02 000015
S&WS/dmp

COUNTY OF NASSAU, NY CAPITAL CONTRACT CHANGE ORDER

DATE OF ADVISEMENT 01 25 02	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 8 1 0 2 1 6
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VENDOR NAME: SILVERITE CONSTRUCTION VENDOR IDENTIFICATION: VF 11-2098433

LINE #	PROJECT ID	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA 81 PROJECT 2 1	4	000	34	Fireman's Training Center Groundwater Treatment Facility

ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$198,912.00	MARK APPRO CIRCLE ○ - ○ +	THIS REVISION: \$7,080.00	REVISED AMOUNT \$15,455,992.00
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NATURE OF CHANGE:

Additional labor and material to perform the following:

1. Remove and replace five (5) Barish air diaphragm pump control panels.
2. Substitute non-metallic hangers and support material for the specified Metallic materials in the chemical storage and pump areas.

\$7,080.00

Cost this Revision

G-42

CONTRACTOR: Silverite Const Co Inc

BY: Robert Blay
VP 70

TITLE: _____ DATE: 1-15-02

RECOMMENDED: [Signature]
COMMISSIONER, DPW DATE: 2/7/02

FORM APPROVED: [Signature]
COUNTY ATTORNEY DATE: 2-7-02

APPROVED: [Signature]
COUNTY EXECUTIVE DATE: 2/21/02

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)
810216

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: _____
COUNTY COMPTROLLER

Title: _____
Date: 2/19/02

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: [Signature]
Date: 2/8/02

CJW 2000029
S&WS/dmp

CAPITAL CONTRACT CHANGE ORDER

COUNTY OF NASSAU, NY

DATE OF ADVISEMENT 04 02 02	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 8 1 0 2 1 G
VENDOR NAME: SILVERITE CONSTRUCTION		VENDOR IDENTIFICATION: VF 11-2098433		

LINE # 1	PROJECT ID: AREA 81 PROJECT 2 1	COST GROUP 4	OBJ 000	CHANGE ORDER # 35	DESCRIPTION: Fireman's Training Center Groundwater Treatment Facility
ORIGINAL BID AMOUNT \$15,250,000.00	PREVIOUS REVISIONS: +\$205,992.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$4,436.00	REVISED AMOUNT: \$15,460,428.00	

NATURE OF CHANGE:

Additional labor and material to perform a supplementary acceptance test of the Netzsch Sludge Filter Press.

\$4,436.00

Cost this Revision

G-43

CONTRACTOR: SILVERITE CONST Co INC
BY: <i>Robt Blyss</i>
TITLE: <i>V.R. 10</i> DATE: <i>3-26-02</i>
RECOMMENDED: <i>[Signature]</i> DATE: <i>4/1/02</i>
COMMISSIONER, DPW
FORM APPROVED: <i>[Signature]</i> DATE: <i>4-18-02</i>
COUNTY ATTORNEY
APPROVED: <i>[Signature]</i> DATE: <i>4/26/02</i>
COUNTY EXECUTIVE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)

8102160

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]

Name: _____

COUNTY COMPTROLLER

Title: _____

APR 23 2002

Date: _____

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]

Name: _____

4/21/02

Date: _____

**ELECTRICAL CONTRACTOR
CHANGE ORDERS**

DATE OF ADVISEMENT 07 09 98	FUN C.A.P.	TRANSACTION CODE CNTM F.T.C. File	DEPARTMENT PW	CONTRACT NUMBER 8,1021
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VENDOR NAME: WELSBACH ELECTRIC
 VENDOR IDENTIFICATION: VF 11-2354251

LINE #	PROJECT ID.	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION
1	AREA: 8.1 PROJECT: 021	4	000	1	Fireman's Training Center

ORIGINAL BID AMOUNT \$1,988,000.00	PREVIOUS REVISIONS: 0.00	MARK APPRO CIRCLE ○ - ●	THIS REVISION: \$5,140.00	REVISED AMOUNT: \$1,993,140.00
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NATURE OF CHANGE:

Additional labor and material to perform the following extra work at the Fireman's Training Center Groundwater Treatment Facility:

1. Install temperature switch in the offsite & onsite well vaults.
2. Provide conduit & wire for the relocated eyewash station in room number 122.
3. Supply disconnect switches for the control & effluent valves.

\$5,140.00

Cost this Revision

E7,8 & 11

CONTRACTOR:	<input type="checkbox"/> SEE ATTACHMENTS	GRANT NUMBER: (If Applicable)
BY: <i>[Signature]</i> G.M. DATE: 6-24-98	<p>81021 EC</p> <p>COMPTROLLER'S CERTIFICATION:</p> <p>I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.</p> <p><i>[Signature]</i> Name: _____ COUNTY COMPTROLLER</p> <p>Title: _____ Date: 7/23/98</p>	
RECOMMENDED: <i>[Signature]</i> DATE: 7/9/98		
COMMISSIONER, DPW		
FORM APPROVED: <i>[Signature]</i> DATE: 7/16/98		
COUNTY ATTORNEY	<p>CERTIFICATE OF ACCEPTANCE INTO NUMIS</p> <p>I certify that this document was accepted into NUMIS.</p> <p><i>[Signature]</i> Name: _____ Date: 7/20/98</p>	
APPROVED: <i>[Signature]</i> DATE: 7/27/98	<p>COUNTY EXECUTIVE</p>	

DATE OF ADVISEMENT <u>7.9.98</u>	F <u>C P</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>8.1.0.2.1</u>
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VEHICLEOR NAME: Welsbach Electric VENDOR IDENTIFICATION: VF 11-2354251

LINE #	PROJECT ID:		COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA <u>8 1</u>	PROJECT <u>0 2 1</u>	<u>4</u>	<u>000</u>	<u>2</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$1,988,000.00</u>	PREVIOUS REVISIONS: <u>+\$5,140.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> - <input type="radio"/>	THIS REVISION: <u>\$12,977.00</u>	REVISED AMOUNT: <u>\$2,006,117.00</u>
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NATURE OF CHANGE:

Additional laobr and material to upgrade panelboards DP-1, DP-1A & DP-2A at the Fireman's Training Center Treatment Facility.

\$12,977.00

Cost this Revision

E-6

CONTRACTOR: _____

BY: [Signature]
Q.M. DATE: 6-23-98

TITLE: _____ DATE: _____

RECOMMENDED BY: [Signature] DATE: 7/9/98

COMMISSIONER, DCA

FORM APPROVED: [Signature] DATE: 7/16/98

COUNTY ATTORNEY

APPROVED: Cheryl Petri DATE: 7/27/98

COUNTY EXECUTIVE

SEE ATTACHMENTS

GRANT NUMBER: _____ (if applicable)

8/10/21/EC

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]
Name: _____

COUNTY COMPTROLLER

Title: _____

Date: 7/23/98

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____

Date: 7/20/98

DATE OF ADVISEMENT 07/17/98	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 81021E
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VENDOR NAME: WELSBACH ELECTRIC VENDOR IDENTIFICATION: VF 11-2354251

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA: 81 PROJECT: 021	4	000	3	Fireman's Training Center

ORIGINAL BID AMOUNT \$1,988,000.00	PREVIOUS REVISIONS: +\$18,117.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$15,495.00	REVISED AMOUNT: \$2,021,612.00
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NATURE OF CHANGE:

Additional labor and material to perform electrical revisions required in the valve and injection well vaults.

\$15,495.00

Cost this Revision

E-5

<p>CONTRACTOR: _____</p> <p>BY: <u>W. Wood</u> G.M. 7-13-98</p> <p>TITLE: _____ DATE</p> <p>RECOMMENDED: <u>[Signature]</u> 7/10/98 COMMISSIONER, DPW DATE</p> <p>FORM APPROVED: <u>[Signature]</u> 7/30/98 COUNTY ATTORNEY DATE</p> <p>APPROVED: <u>[Signature]</u> 8/14/98 COUNTY EXECUTIVE DATE</p>	<p><input type="checkbox"/> SEE ATTACHMENTS GRANT NUMBER: _____ (If Applicable)</p> <p style="text-align: center;"># 81021E COMPTROLLER'S CERTIFICATION:</p> <p>I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be charged.</p> <p style="text-align: center;"><u>[Signature]</u> Name: _____ COUNTY COMPTROLLER</p> <p>Title: _____ 8/6/98 Date: _____</p>	<p>CERTIFICATE OF ACCEPTANCE INTO NUMIS</p> <p>I certify that this document was accepted into NUMS.</p> <p style="text-align: center;"><u>[Signature]</u> Name: _____ 8/14/98 Date: _____</p>
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E. Visone

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

S&WS / dmp

DATE OF ADVISEMENT <u>11-17-98</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>81021E</u>
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VENDOR NAME: WELSBACH ELECTRIC VENDOR IDENTIFICATION: VF 11-2354251

LINE # <u>1</u>	PROJECT ID: AREA <u>81</u> PROJECT <u>021</u>	COST GROUP <u>4</u>	OBJ <u>000</u>	CHANGE ORDER # <u>4</u>	DESCRIPTION: <u>Fireman's Training Center</u>
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ORIGINAL BID AMOUNT <u>\$1,988,000.00</u>	PREVIOUS REVISIONS: <u>+\$33,612.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$22,012.00</u>	REVISED AMOUNT: <u>\$2,043,624.00</u>
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NATURE OF CHANGE:

Additional labor and material to revise some of the lighting fixtures in the Fireman's Training Center Operations Building.

\$22,012.00

Cost this Revision

E-2

CONTRACTOR: _____

BY: Walsbach
Gen. Man 11-10-98
TITLE: _____ DATE

RECOMMENDED: [Signature] 11/17/98
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 12/3/98
COUNTY ATTORNEY DATE

APPROVED: Cheryl Petri 12/11/98
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)
81021E

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: _____
COUNTY COMPTROLLER
Title: _____
Date: 12/9/98

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____
Date: 12/18/98

DATE OF ADVISEMENT <u>11 17 98</u>	FUND <u>CAP</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>81021E</u>
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VENDOR NAME: WELSBACH ELECTRIC VENDOR IDENTIFICATION: VF 11-2354251

LINE #	PROJECT ID:		COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
<u>1</u>	AREA <u>8 1</u>	PROJECT <u>0 2 1</u>	<u>4</u>	<u>000</u>	<u>5</u>	<u>Fireman's Training Center</u>

ORIGINAL BID AMOUNT <u>\$1,988,000.00</u>	PREVIOUS REVISIONS: <u>+\$55,624.00</u>	MARK APPRO CIRCLE <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	THIS REVISION: <u>\$48,495.00</u>	REVISED AMOUNT: <u>\$2,092,119.00</u>
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NATURE OF CHANGE:

Additional labor and material to modify the electric service at the Fireman's Training Center.

\$48,495.00

Cost this Revision

E-4

CONTRACTOR: _____

BY: [Signature]
Gen. Man. 11-8-98

TITLE: _____ DATE

RECOMMENDED: [Signature] 11/17/98
COMMISSIONER, DPW DATE

FORM APPROVED: [Signature] 12/3/98
COUNTY ATTORNEY DATE

APPROVED: [Signature] 12/11/98
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: 81021E
(If Applicable)

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

Name: _____
COUNTY COMPTROLLER

Title: _____
12/9/98

Date: _____

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

Name: [Signature]
Date: 12/8/98

E. V. Sone

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

S&WS/dmp

DATE OF ADVISEMENT <u>12/14/98</u>	FUND <u>C A P</u>	TRANSACTION CODE <u>CNTM</u>	DEPARTMENT <u>PW</u>	CONTRACT NUMBER <u>81021E</u>
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VENDOR NAME: WELSBACH ELECTRIC VENDOR IDENTIFICATION: VF 11-2354251

LINE # <u>1</u>	PROJECT ID: AREA <u>81</u> PROJECT <u>021</u>	COST GROUP <u>4</u>	OBJ <u>000</u>	CHANGE ORDER # <u>6</u>	DESCRIPTION: <u>Fireman's Training Center</u>
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ORIGINAL BID AMOUNT <u>\$1,988,000.00</u>	PREVIOUS REVISIONS: <u>+\$104,119.00</u>	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: <u>\$5,068.00</u>	REVISED AMOUNT: <u>\$2,097,187.00</u>
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NATURE OF CHANGE:

Additional labor and material to modify the lightning protection system on the Fireman's Training Center Groundwater Treatment Facility Operations Building.

\$5,068.00

Cost this Revision

E-12

CONTRACTOR: <u>BY <i>[Signature]</i></u> <u>Gen Manager</u> <u>12-16-98</u> TITLE: _____ DATE	
RECOMMENDED: <u><i>[Signature]</i></u> <u>12/15/98</u> COMMISSIONER, DPW DATE	
FORM APPROVED: <u><i>[Signature]</i></u> <u>12/31/98</u> COUNTY ATTORNEY DATE	
APPROVED: <u><i>[Signature]</i></u> <u>1/7/99</u> COUNTY EXECUTIVE DATE	

<input type="checkbox"/> SEE ATTACHMENTS	GRANT NUMBER: (If Applicable)
<p><u>81021E</u></p> <p>COMPTROLLER'S CERTIFICATION:</p> <p>I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.</p> <p><u><i>[Signature]</i></u> Name: _____</p> <p>COUNTY COMPTROLLER</p> <p>Title: _____</p> <p><u>1/5/99</u> Date: _____</p>	
<p>CERTIFICATE OF ACCEPTANCE INTO NUMIS</p> <p>I certify that this document was accepted into NUMIS.</p> <p><u><i>[Signature]</i></u> Name: _____</p> <p><u>1/5/99</u> Date: _____</p>	

C.C. [Signature] CIPW 04 000 011

COUNTY OF NASSAU, NY CAPITAL CONTRACT CHANGE ORDER S&WS / dmp

DATE OF ADVISEMENT: 03-29-04	FUND CAP	TRANSACTION CODE: CNTM	DEPARTMENT PW	CONTRACT NUMBER 81021E
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VENDOR NAME: WELSBACH ELECTRIC OF L.I.	VENDOR IDENTIFICATION: VF 11-2354251
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LINE #	PROJECT ID: AREA PROJECT	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	81 021	4	000	7	FIREMAN'S TRAINING CENTER

ORIGINAL BID AMOUNT: \$1,988,000.00	PREVIOUS REVISIONS: +\$109,187.00	MARK APPRO CIRCLE ● - ○ +	THIS REVISION: (\$170,579.90)	REVISED AMOUNT: \$1,926,607.10
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NATURE OF CHANGE:
A net credit which reconciles all remaining extra work and credit items.

- E-1 Additional labor and material to furnish and install supplemental fire protection equipment and associated conduit and wiring. \$12,241.00
- E-3 Additional labor and materials to upgrade the acid wash system. \$2,644.30
- E-9 Additional labor and material to install conduit and wiring for preventive maintenance devices (limit switches and automatic oilers), for the effluent, backwash and intermediate pumps and air stripper blowers. \$9,870.06
- E-10 Additional labor and material to install conduit and wiring between control panel 280-3 and an associated flow indicating transmitter and also from local control panel LCP-3 and an associated solenoid valve and pressure switch. \$5,488.17
- E-13 Additional labor and material to repair buried conduit and power feeder cables and to replace a section of fiber optic cable damaged during excavation operations between offsite recovery wells No. 4 and No. 5. \$9,987.69
- E-14 Additional labor and material to provide: a) An enclosure, devices, conduit and wiring for thermostatic control of a heat trace system for exterior piping. b) Conduit repair and rewiring for recycle wet well pump No. 2. \$5,264.69
- E-15 Additional labor and material for conduit and wiring to the speed pickup units associated with the sludge transfer pumps. \$685.90
- E-17 Additional labor and material to install conduit and wiring for the fuel tank level monitor and overflow alarm panels. \$1,076.60
- E-18 Additional labor and material to provide electric power, lighting, heating and ventilation for the storage trailer used by operations personnel. \$9,054.57
- E-19 A credit for uninstalled telephone system components. (\$1,521.26)
- E-20 Credit for an unused allowance items as follows:

Item No	Description	Bid Quantity	Amount Used	Credit
22	Protection in Level "C"	\$15,000.00	\$0.00	(\$15,000.00)
21	Laboratory Testing	\$7,500.00	\$0.00	(\$7,500.00)
24	Temp Light & Power	\$350,000.00	\$162,128.38	(187,871.62)
25	Apprentice Training	\$15,000.00	\$0.00	(\$15,000.00)
			TOTAL NET CREDIT	(\$170,579.90)

(\$170,579.90)
Cost this Revision

E-20

CONTRACTOR:
WELSBACH ELECTRIC OF L.I.

BY: [Signature] DATE: 3/26/04

TITLE: Pres. / CEO

RECOMMENDED BY: [Signature] DATE: 3/27/04

COMMISSIONER DPW

FORM APPROVED: [Signature] DATE: 4-9-04

COUNTY ATTORNEY

APPROVED: [Signature] DATE: 4/2/04

COUNTY EXECUTIVE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)

CNTM PW 81021E

COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be Changed.

[Signature]
Name: _____
Title: DEPUTY COUNTY COMPTROLLER
Date: April 16, 2004

CERTIFICATE OF ACCEPTANCE

IN NUMIS

I certify that this document was accepted into NUMIS

[Signature]
Name: _____
Date: 4/16/04

**PLUMBING CONTRACTOR
CHANGE ORDERS**

DATE OF ADVISEMENT 02.18.98	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 81021P
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VENDOR NAME: JAMES MCCULLAGH, CO., INC. VENDOR IDENTIFICATION: VF 11-1798851

LINE #	PROJECT ID: AREA PROJECT	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION
1	8.1 0.2.1	4	000	1	Firemen's Training Center

ORIGINAL BID AMOUNT \$324,670.00	PREVIOUS REVISIONS: 0.00	MARK APPRO CIRCLE <input type="radio"/> - <input checked="" type="radio"/> +	THIS REVISION: \$2,000.00	REVISED AMOUNT: \$326,670.00
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NATURE OF CHANGE:

Additional labor and material to do the following extra work at Firemen's Training Center:

1. Provide a new sanitary house trap along with the necessary plumbing work, for sanitary waste line located on the east side of the Operations Building, in accordance with the plumbing code.
2. Provide two (2) 2" ball valves, one (1) 2½" ball valve and one (1) 2½" check valve on the piping to the emergency water storage tanks.

\$2,000.00
Cost this Revision

P-1

CONTRACTOR: JAMES McCullagh Co.

BY: *[Signature]* DATE: 2/14/98

TITLE: PROJECT MANAGER

RECOMMENDED: *[Signature]* DATE: 2/19/98

COMMISSIONER, DPW

FORM APPROVED: *[Signature]* DATE: 2/26/98

COUNTY ATTORNEY

APPROVED: *[Signature]* DATE: 3/6/98

COUNTY EXECUTIVE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)

81021P #
COMPTROLLER'S CERTIFICATION:

I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]
Name: _____
COUNTY COMPTROLLER

Title: _____
Date: _____

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____
Date: 3/2/98

E. Visone

CIPW 06/06/00 72
S&WS/dmp

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

DATE OF ADVISEMENT 06/14/00	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 81021P
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VENDOR NAME: JAMES MCCULLAGH, CO., INC. VENDOR IDENTIFICATION: VF 11-1798851

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA 81 PROJECT 021	4	000	2	Fireman's Training Center Groundwater Treatment Facility

ORIGINAL BID AMOUNT \$324,670.00	PREVIOUS REVISIONS: +\$2,000.00	MARK APPRO CIRCLE <input checked="" type="radio"/> - <input type="radio"/> +	THIS REVISION: (\$12,700.00)	REVISED AMOUNT: \$313,970.00 ✓
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NATURE OF CHANGE:

A credit for unused allowance items as follows:

ITEM NO.	ITEM	ALLOWANCE	USED	CREDIT
2	Incremental cost for work in Protection Level "C"	\$7,700.00	-0-	\$7,700.00
3	Laboratory Testing Required by Technical Specifications	\$5,000.00	-0-	\$5,000.00

(\$12,700.00)

Cost this Revision

P-26

CONTRACTOR: JAMES MCCULLAGH CO., INC.
 BY: John W. Clarkes
 JOHN W. CLARKES, II, VICE PRES. 6/13/00
 TITLE: DATE

RECOMMENDED:
 [Signature] 6-14-00
 COMMISSIONER DPW DATE

FORM APPROVED:
 [Signature] 6/29/00
 COUNTY ATTORNEY DATE

APPROVED:
 [Signature] 7/31/00
 COUNTY EXECUTIVE DATE

SEE ATTACHMENTS GRANT NUMBER: (If Applicable)

81021P
COMPTROLLER'S CERTIFICATION:
 I hereby certify that an unencumbered balance sufficient to cover this contract is presently available for the proposed ENCUMBRANCE PURPOSES.
 [Signature]
 COUNTY COMPTROLLER
 Title: _____
 Date: 7/18/00

CERTIFICATE OF ACCEPTANCE INTO NUMIS
 I certify that this document was accepted into NUMIS.
 [Signature]
 Name: _____
 Date: 7/17/00

**HVAC CONTRACTOR
CHANGE ORDERS**

4.T.C. file *CTPW 02 000 052*

COUNTY OF NASSAU, NY

CAPITAL CONTRACT CHANGE ORDER

S&W/S / dmp

DATE OF ADVISEMENT 07 01 02	FUND CAP	TRANSACTION CODE CNTM	DEPARTMENT PW	CONTRACT NUMBER 8 1 0 2 1 H
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VENDOR NAME: **J K B CONTRACTING INC.** VENDOR IDENTIFICATION: **VF** 11-2575963

LINE #	PROJECT ID:	COST GROUP	OBJ	CHANGE ORDER #	DESCRIPTION:
1	AREA 81 PROJECT 2 1	4	000	1	Fireman's Training Center Groundwater Treatment Facility

ORIGINAL BID AMOUNT \$595,000.00	PREVIOUS REVISIONS: +\$0.00	MARK APPRO CIRCLE <input checked="" type="radio"/> - <input type="radio"/> +	THIS REVISION: (\$20,949.00)	REVISED AMOUNT: \$615,948.00
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NATURE OF CHANGE:

Various Modifications:

1. Modify electric room and process area duct work
2. Modify boiler ignition system
3. Incomplete punch-list item credit

(\$20,949.00)

Cost this Revision

H-1

CONTRACTOR:
BY: *[Signature]* **S. SONDHI**
Project Manager 7/11/02
TITLE: JKB Contracting Inc. DATE

RECOMMENDED:
[Signature] 7/3/02
COMMISSIONER OPW DATE

FORM APPROVED:
[Signature] 7-11-02
COUNTY ATTORNEY DATE

APPROVED:
[Signature] 7/8/02
COUNTY EXECUTIVE DATE

SEE ATTACHMENTS

GRANT NUMBER: (If Applicable)

COMPTROLLER'S CERTIFICATION:
81021 H w
I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be changed.

[Signature]
Name: _____
DEPUTY COUNTY COMPTROLLER
Title: _____
Date: 7/12/02

CERTIFICATE OF ACCEPTANCE INTO NUMIS

I certify that this document was accepted into NUMIS.

[Signature]
Name: _____
Date: 7/12/02

APPENDIX C



COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1550 FRANKLIN AVENUE
MINEOLA, NEW YORK 11501 - 4822

January 15, 2004

CERTIFICATE OF COMPLETION

CONTRACTOR

Silverite Construction Company, Inc.
C.S. 1818 Old County Road West
Hicksville, NY 11801

Contract No. S81021-G

PROJECT DESCRIPTION/LOCATION

Fireman's Training Center Groundwater Treatment Facility

THIS IS TO CERTIFY THAT THE WORK PERFORMED UNDER THIS CONTRACT HAS BEEN INSPECTED AND FOUND ACCEPTABLE AS OF December 22, 2003 .

RECOMMENDED FOR APPROVAL:

Richard A. Webber, P.E.
Sanitary Engineer IV

Joseph L. Davenport, P.E.
Acting Div. Head of San. & Water Supply

APPROVED AND ACCEPTED:

Peter J. Gerbasi, P.E.
Commissioner of Public Works

JLD:EFV

- c: Clerk of Legislature
Comptroller
Division of San. & W.S.
Accounts Unit
Contracts File-Legalities
Bureau of Real Estate & Insurance



COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1550 FRANKLIN AVENUE
MINEOLA, NEW YORK 11501 - 4822

April 22, 2004

CERTIFICATE OF COMPLETION

CONTRACTOR

Welsbach Electric Corp., L.I.
300 Newtown Rd.
Plainview, NY 11803

Contract No. S81021-E

PROJECT DESCRIPTION/LOCATION

Fireman's Training Center Groundwater Treatment Facility

THIS IS TO CERTIFY THAT THE WORK PERFORMED UNDER THIS CONTRACT HAS BEEN INSPECTED AND FOUND ACCEPTABLE AS OF April 15, 2002.

RECOMMENDED FOR APPROVAL:

Richard A. Webber, P.E.
Sanitary Engineer IV

Joseph L. Davenport, P.E.
Acting Div. Head of San. & Water Supply

APPROVED AND ACCEPTED:

Peter J. Gerbasi, P.E.
Commissioner of Public Works

JLD:EFV

- c: Clerk of Legislature
Comptroller
Division of San. & W.S.
Accounts Unit
Contracts File-Legalities
Bureau of Real Estate & Insurance



COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1550 FRANKLIN AVENUE
MINEOLA, NEW YORK 11501 - 4822

February 6, 2001

CONTRACTOR

James McCullah Co., Inc.
75 East Bethpage Road
Plainview, NY 11803-4201
Att: Mr. John W. Clukies, II, P.E.

CERTIFICATE OF COMPLETION

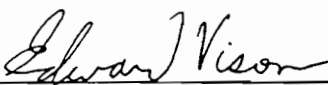
CONTRACT NO. S81021P

PROJECT DESCRIPTION/LOCATION


Fireman's Training Center, Groundwater Treatment Facility-Plumbing

THIS IS TO CERTIFY THAT THE WORK PERFORMED UNDER THIS CONTRACT HAS BEEN INSPECTED AND FOUND ACCEPTABLE AS OF January 5, 2001.

RECOMMENDED FOR APPROVAL:

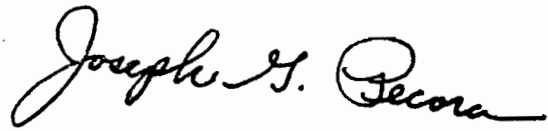


Edward F. Visone, Civil Engineer III



Joseph L. Davenport
Sanitary Engineer IV
Acting Division Head of Sanitation & Water Supply

APPROVED AND ACCEPTED:



Commissioner of Public Works

JGP:EFV

c: Clerk of Legislature
County Comptroller
Division of S & WS
Accounts Unit
Land Acquisition
Bureau of Real Estate & Insurance
Bonding Company: Liberty Mutual Insurance Company
Att: Mr. Paul Krous

THOMAS R. SUOZZI
COUNTY EXECUTIVE



PETER J. GERBASI, P.E.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1550 FRANKLIN AVENUE
MINEOLA, NEW YORK 11501 - 4822

August 19, 2002

CERTIFICATE OF COMPLETION

CONTRACTOR

JKB Contracting Inc.
55 North Broadway
Hicksville, New York 11801

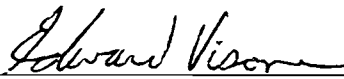
Contract No. S81021-H

PROJECT DESCRIPTION/LOCATION

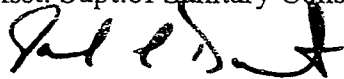
Fireman's Training Center
Groundwater Treatment Facility

THIS IS TO CERTIFY THAT THE WORK PERFORMED UNDER THIS CONTRACT HAS BEEN INSPECTED AND FOUND ACCEPTABLE AS OF July 1, 2002.

RECOMMENDED FOR APPROVAL:



Edward F. Visone
Asst. Supt. of Sanitary Construction



Joseph L. Davenport, P.E.
Acting Div. Head of San. & Water Supply

APPROVED AND ACCEPTED:



Peter J. Gerbasi, P.E.
Commissioner of Public Works

JLD:EFV:ep

- c: Clerk of Legislature
Comptroller
Division of San. & W.S.
Accounts Unit
Land Acquisition
Contracts File-Legalities
Bureau of Real Estate & Insurance
Bonding Co. - Monitor Surety Managers Inc.

APPENDIX D



COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
MINEOLA, NEW YORK 11501-4822

**N.C.F.T.C. GROUNDWATER REMEDIATION FACILITY
SLUDGE FILTER PRESS
ACCEPTANCE TEST RESULTS
OCTOBER 3, 2001**

In an effort to confirm that the Netzsch Filter Press provided by the General Contractor could provide the performance specified by Section 11360 of the contract, a test of the press, using sludge from a different source, was scheduled for October 3, 2001.

Permission was previously obtained from Mr. Carl Hoffman, of the NYSDEC, to use sludge from the Purex Groundwater Remediation for this test. This source was chosen because the facility generates a similar metals sludge, the quantity required was available, and the proximity of the facility.

The sludge was transported to the FTC remediation facility by RGM. Approximately 3,600 gallons of sludge was delivered. This proved to be enough sludge to perform two (2) presses. A hose from the tanker was connected to the sludge handling equipment allowing the sludge transfer pumps to draw the sludge directly from the tanker.

Netzsch was represented by Mr. Tom Madland and Mr. Mark Mikula. After Mr. Mikula returned all control parameters to factory presets the first press was initiated by NCDPW personnel. The sludge was not conditioned in any manner and no polymer was added. Mr. Madland and Mr. Mikula monitored the filter press continuously throughout the entire press. The press was completed without incident. The resultant filter cake was dry and solid. The cake dropped off the plates as they were separated by the filter press. Only minor cleanup would have been required to secure the press. Samples of both the feed sludge and the sludge cake were taken. The percent solids were:

Feed sludge	6.2%
Sludge cake	37.5%

A second press was performed with the remaining sludge from Purex. The press proceeded without incident through the first three cycles. As the press neared the end of the last cycle the

sludge press feed pump increased speed and eventually shut down because of low pressure. Mr. Madland and Mr. Mikula determined that the press was near enough to the end of the last cycle to proceed with opening the press in manual mode. A malfunction of a relay prevented the manual core blow and opening of the press. Mr. Madland made a minor adjustment of the relay, witnessed by Mr. William Tropiano, Plant Maintenance Mechanic II, that allowed the automatic plate shifter to open the filter pack. The first cake was wet and sloppy. This was attributed to feed sludge that was not purged from the core because the core blow was not completed due to the malfunction. The remaining plates were opened exposing filter cake that was dry and solid. The cake dropped off the plates as they were separated by the filter press.

The percent solids were:

Feed sludge	8.9%
Sludge cake	43.3%

A subsequent inspection of the sludge press feed pump and in-line static mixer revealed debris clogging the static mixer and feed pump intake line. The debris consisted of plastics, bits of cloth and pop tops from beverage cans. The pump overspeed and low pressure shutdown were the result of the clogged sludge intake line. The processes that generate the metals sludge at both facilities are closed systems therefor the source of the debris had to be the vac truck used for the sludge transfer. A method for the removal of the debris is being devised by plant operations personnel.

In conclusion, the filter press performed as specified in the contract documents. The sludge cake produced, exceeded 35% solids as required.

Nassau County Department of Public Works	ELAP ID# 10862	
Cedar Creek Special Projects Laboratory	Laboratory Analysis Report	
Wantagh NY 11793	Date Prepared: 10/30/2001	Page 1 of 1

To: MICHAEL FLAHERTY
WATER RESOURCES UNIT
HICKSVILLE, NY

The following analytical results have been obtained for the indicated sample that was submitted to this laboratory:

Location Code: FTCSP22
Sample Description: FTC-SP-22A
Collection Date: 10/03/01
Collection Time: 10:30
Submittal Date: 10/04/01
Submittal Time: 09:24
Sampler: TD

Comments:

Raw sludge from Purex

Sample ID#:	AA13745			
Analyte	Units	Result	MDL	Method
% Total Solids	%	6.2	0.1	SM 18(2540B)

If you have any questions concerning this report contact: Erick Kurz
Vincent Alonge
(516) 571-7353

Nassau County Department of Public Works	ELAP ID# 10862	
Cedar Creek Special Projects Laboratory	Laboratory Analysis Report	
Wantagh NY 11793	Date Prepared: 10/30/2001	Page 1 of 1

To: MICHAEL FLAHERTY
WATER RESOURCES UNIT
HICKSVILLE, NY

The following analytical results have been obtained for the indicated sample that was submitted to this laboratory:

Location Code: FTCSP23
Sample Description: FTC-SP-23
Collection Date: 10/03/01
Collection Time: 10:30
Submittal Date: 10/04/01
Submittal Time: 09:24
Sampler: TD

Comments:

Filtrate

Sample ID#:	AA13746			
Analyte	Units	Result	MDL	Method
Total Suspended Solids	mg/l	1.0	1.0	SM 17 2540D

If you have any questions concerning this report contact: Erick Kurz
Vincent Alonge
(516) 571-7353

Nassau County Department of Public Works	ELAP ID# 10862	
Cedar Creek Special Projects Laboratory	Laboratory Analysis Report	
Wantagh NY 11793	Date Prepared: 10/10/2001	Page 1 of 1

To: MICHAEL FLAHERTY
WATER RESOURCES UNIT
HICKSVILLE, NY

The following analytical results have been obtained for the indicated sample that was submitted to this laboratory:

Location Code: FTCSP30
Sample Description: FTC-30 SLUDGE CAKE
Collection Date: 10/03/01
Collection Time: 12:00
Submittal Date: 10/04/01
Submittal Time: 09:24
Sampler: TD

Comments:

Sample ID#:		AA13747		
Analyte	Units	Result	MDL	Method
% Total Solids	%	37.5	0.1	SM 18(2540B)

If you have any questions concerning this report contact: Erick Kurz
Vincent Alonge
(516) 571-7353

Nassau County Department of Public Works	ELAP ID# 10862	
Cedar Creek Special Projects Laboratory	Laboratory Analysis Report	
Wantagh NY 11793	Date Prepared: 10/30/2001	Page 1 of 1

To: MICHAEL FLAHERTY
WATER RESOURCES UNIT
HICKSVILLE, NY

The following analytical results have been obtained for the indicated sample that was submitted to this laboratory:

Location Code: FTCSP22
Sample Description: FTC-SP-22A
Collection Date: 10/03/01
Collection Time: 12:45
Submittal Date: 10/04/01
Submittal Time: 09:24
Sampler: TD

Comments:

Raw sludge from Porex

Sample ID#:	AA13748			
Analyte	Units	Result	MDL	Method
% Total Solids	%	8.9	0.1	SM 18(2540B)

If you have any questions concerning this report contact: Erick Kurz
Vincent Alonge
(516) 571-7353

Nassau County Department of Public Works	ELAP ID# 10862	
Cedar Creek Special Projects Laboratory	Laboratory Analysis Report	
Wantagh NY 11793	Date Prepared: 10/30/2001	Page 1 of 1

To: MICHAEL FLAHERTY
WATER RESOURCES UNIT
HICKSVILLE, NY

The following analytical results have been obtained for the indicated sample that was submitted to this laboratory:

Location Code: FTCSP23
Sample Description: FTC-SP-23
Collection Date: 10/03/01
Collection Time: 12:45
Submittal Date: 10/04/01
Submittal Time: 09:24
Sampler: TD

Comments:

Filtrate

Sample ID#:	AA13749			
Analyte	Units	Result	MDL	Method
Total Suspended Solids	mg/l	BDL	1.0	SM 17 2540D

If you have any questions concerning this report contact: Erick Kurz
Vincent Alonge
(516) 571-7353

Nassau County Department of Public Works	ELAP ID# 10862	
Cedar Creek Special Projects Laboratory	Laboratory Analysis Report	
Wantagh NY 11793	Date Prepared: 10/10/2001	Page 1 of 1

To: MICHAEL FLAHERTY
WATER RESOURCES UNIT
HICKSVILLE, NY

The following analytical results have been obtained for the indicated sample that was submitted to this laboratory:

Location Code: FTCSP30
Sample Description: FTC-30 SLUDGE CAKE
Collection Date: 10/03/01
Collection Time: 14:15
Submittal Date: 10/04/01
Submittal Time: 09:24
Sampler: TD

Comments:

Sample ID#:		AA13750		
Analyte	Units	Result	MDL	Method
% Total Solids	%	43.3	0.1	SM 18(2540B)

If you have any questions concerning this report contact: Erick Kurz
Vincent Alonge
(516) 571-7353



COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
MINEOLA, NEW YORK 11501-4822

September 21, 2001

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Hazardous Site Control
625 Broadway
Albany, NY 12233

Attn: Carl Hoffman, P.E.
Environmental Engineer II

Re: Filter Press Test
Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

As we discussed several months ago, the County has yet to accept the plate and frame filter press at the Fireman's Training Center site due to its inability to produce a consistent dry cake, as per the unit's specifications. The contractor has had the manufacturer out to the site several times to make adjustments, and has sent samples of our iron sludge to the manufacturer's laboratory for testing. Both the manufacturer and the contractor now contend that the problem with the filter press in not meeting the dry cake specification is a site water chemistry issue, not mechanical, and being so, the County should accept the filter press. However, the County is still not convinced that the problem is not mechanical.

As you know, the Purex site in Mitchel Field also uses a plate and frame filter press to dewater their iron sludge, and has had no problems for the past ten years in producing a consistent dry cake. In order to settle the FTC's filter press performance issue, it has been suggested that a sufficient quantity of Purex site sludge be transported to the FTC site for dewatering. If a satisfactory dry cake can be produced with the Purex sludge, the County will accept the FTC filter press.

Before making the arrangements to transport the approximately 2,000 gallons of Purex site sludge to the FTC site, the County is seeking your concurrence with the proposed test and, if you concur, is requesting your approval to move sludge between the two sites.

If you have any questions concerning the above request, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski
Director of Hazardous Waste Services

PJW:JNW

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply
Frank A. Scicchitano, Director of Environmental Construction
Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Hazardous Site Control, 11th Floor
625 Broadway, Albany, New York 12233-7014
Phone: (518) 402-9564 • FAX: (518) 402-9022
Website: www.dec.state.ny.us



October 16, 2001

Peter J. Wikowski
Director of Hazardous Waste Services
County of Nassau
Department of Public Works
Mineola, New York 11501-4822

Dear Mr. Witkowski:

Re: Plate and Frame Filter Press Test (site code
#130042)

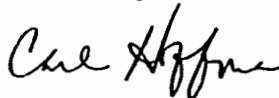
I am responding to your letter of September 21, 2001, regarding the County not having accepted the plate and frame filter press at the Nassau County Fireman's Training Center (FTC) due to a question of the units performance. The manufacturer and contractor have asserted that the problem is related to the nature of the sludge, and not their press. The solution that you have proposed is to run a test batch of iron sludge, which is known to de-water well from the Purex - Mitchell Field site on the FTC press. If that sludge performs well on the press, the County will accept the press.

Knowing that sludge de-watering characteristics can vary widely from past municipal wastewater treatment experience, I agree that your proposed pilot test of 2,000 gallons is a conclusive way to determine whether the problem is related to the press or the sludge.

My understanding is that the iron sludge is non-hazardous, and I concur with your request to perform the test provided that you document that the Purex iron sludge is not a hazardous material prior to transporting it.

I am anxious to learn the results of you pilot test, and in the meantime, if you have any questions, please feel free to contact me at (518) 402-9564.

Sincerely,



Carl Hoffman P.E.
Environmental Engineer 2
Western Investigation Section
Bureau of Hazardous Site Control

