

Division of Environmental Remediation

Site Name: Kleigman Brothers OU#1

Site Number: 2-41-031

Contract Number: D006547

Location: Town of Glendale

Queens County, New York

Contract Documents

URS Corporation



Date: April 2007

New York State Department of Environmental Conservation
ELIOT SPITZER, *Governor*

ALEXANDER B. GRANNIS, *Commissioner*

Table of Contents

Page

SECTION I	<i>Advertisement and Notice to Bidders</i>	I-1
SECTION II	<i>Terms and Definitions</i>	II-1
SECTION III	<i>Bidding Information and Requirements</i>	
Article 1	Address for Notices	III-1
Article 2	Interpretation of Bidding Documents	III-1
Article 3	Bid Instructions	III-1
Article 4	Modification or Withdrawal of Bid	III-3
Article 5	Required Bid Submittals	III-3
Article 6	Bid Security and Bonds	III-5
Article 7	Approval of "Or Equal" or Substitution Equipment, Systems, or Items	III-5
Article 8	Other Contracts and Occupancy	III-5
Article 9	Taxes	III-5
Article 10	Experience and Financial Statements	III-6
Article 11	Preliminary Progress Schedule	III-6
Article 12	Bid Breakdown	III-7
Article 13	Subsurface and Technical Information	III-7
Article 14	Underground Facilities	III-7
Article 15	Examination of Bidding Documents and Site	III-8
Article 16	Subcontractors, Suppliers or Others	III-9
Article 17	Award of Contract	III-9
Article 18	Time is of the Essence	III-9
Article 19	Applicability of Federal, State and Local Law	III-10
Article 20	M/WBE and EEO Requirements	III-10
Article 21	Permissible Contacts During a Procurement and Prohibition of Inappropriate Lobbying Influence	III-11
SECTION IV	<i>Supplementary Bidding Information and Requirements</i>	
Article 1	Location and Description of Project	IV-1
Article 2	Department Representatives	IV-1
Article 3	Pre-Bid Conference	IV-1
Article 4	Additional Bid Submittals	IV-1
Article 5	Other Available Documents	IV-1
Article 6	M/WBE-EEO Utilization Plan	IV-2
Article 7	Subcontracting	IV-2
Article 8	Type of Schedule	IV-2
Article 9	Wage Rates	IV-2
SECTION V	<i>Bid Forms and Attachments</i>	
Article 1	Items Submitted with Bid	V-1
a)	Contract Bid Form and Acknowledgement	
b)	Non-Collusive Bidding Certification	
c)	MacBride Fair Employment Principles Clauses	
d)	State Ethics Law Provision	
e)	Permissible Contacts During a Procurement and Prohibition of Inappropriate Lobbying Influence	
f)	Use of Best Available Retrofit Technology and Ultra Low Sodium Diesel (ULSD) Provision Certification	
g)	Page to Attach Bid Security	
h)	Bid Bond Form	
i)	Offerer Disclosure of Prior Non-Responsibility Determinations	
Article 2	Forms Submitted by Apparent Low Bidder 5 Days After Notification	V-15
a)	Corporate Resolution and Certification	
b)	Statement of Surety's Intent	
c)	NYS Directory of Certified Minority and Women-Owned Business	
d)	M/WBE-EEO Opportunity Program Workplan	
e)	NYS Uniform Contracting Questionnaire Instructions	
f)	NYS Uniform Contracting Questionnaire	
g)	Affidavit of No Change	

Article 3 Forms Submitted 14 Days from Date of Notice of Intent to Award Letter V-33

a) Instructions for Certificate of Insurance

b) Certificate of Insurance

c) Instructions for Performance Bond and Labor and Material Payment Bond

d) Performance Bond Form

e) Labor and Material Payment Bond Form

f) Consultant/Contractor Detailed M/WBE-EEO Utilization Plan

Article 4 Forms Submitted During Contract V-48

a) Contractor's Application for Payment

b) Final Payment Release

c) Payment Affidavit

d) Prime-Contractor's and Subcontractor's Certifications

SECTION VI Agreement

Article 1 Defined Terms VI-1

Article 2 Work VI-2

Article 3 Engineer VI-2

Article 4 Contract Documents VI-2

Article 5 Contractor's Representations VI-2

Article 6 Contract Time VI-3

Article 7 Alterations and Omissions VI-4

Article 8 Determinations as to Variances VI-4

Article 9 Payment Procedures VI-4

Article 10 No Estimate on Contractor's Non-Compliance VI-5

Article 11 Delays, Inefficiencies and Interference VI-5

Article 12 Postponement, Suspension or Termination VI-6

Article 13 Completion of Physical Work and Final Acceptance VI-6

Article 14 Final Payment VI-6

Article 15 Disposition of Documents and Data VI-7

Article 16 Applicable Law, Jurisdiction; Service of Legal Process VI-7

Article 17 Sales and Use Tax Exemption VI-7

Article 18 Effective Date VI-8

Article 19 Contract Price VI-8

SECTION VII Appendix A and Appendix B VII-1

SECTION VIII General Conditions

Article 1 Preliminary Matters VIII-1

Article 2 Contract Documents: Intent, Amending, Reuse VIII-2

Article 3 Availability of Lands; Physical Conditions; Reference Points VIII-4

Article 4 Bonds and Insurance VIII-8

Article 5 Contractor's Responsibilities VIII-11

Article 6 Other Work VIII-25

Article 7 Department's Responsibilities VIII-25

Article 8 Engineer's Status During Construction VIII-26

Article 9 Changes in the Work VIII-28

Article 10 Change of Contract Price or Time VIII-30

Article 11 Unit Price Work and Cash Allowances VIII-38

Article 12 Warranty & Guarantee; Tests & Inspection; Correction, Removal or
Acceptance of Defective Work VIII-40

Article 13 Payments to Contractor and Completion VIII-45

Article 14 Suspension of Work and Termination VIII-49

Article 15 Disputes VIII-51

Article 16 Miscellaneous VIII-52

SECTION IX Supplementary Conditions IX-1

SECTION X Standard Specifications X-1

SECTION XI Supplementary Specifications XI-1

SECTION XII Measurement for Payment XII-1

SECTION XIII Wage Rates and Associated Contract Requirements XIII-1

CONTRACT DRAWINGS BOUND SEPARATELY

SECTION I

Advertisement and Notice to Bidders

New York State Department of Environmental Conservation

Project Name: Kleigman Brothers Site OU#1, NYS Site Number: 2-41-031, Contract Number: D006547

Sealed bids for the **Kleigman Brothers Site OU#1 Remedial Action** ("project"), will be received by the New York State Department of Environmental Conservation, Division of Management and Budget Services, 10th Floor, 625 Broadway, Albany, New York, 12233-5027, Attn: Bureau of Expenditures until the time of **1:00 P.M.** and on the date of **Thursday, July 12, 2007**. The bids will be publicly opened and read aloud at the above time and date. Telegraphic or other electronically transferred bids are not acceptable.

The project involves the implementation of remedial activities at the **Kleigman Brothers Site OU#1 in the Town of Glendale, Queens County, New York**. These include, but are not necessarily limited to, the following: **Installation and operation of a soil vapor extraction (SVE) system at a former warehouse and distributor of dry cleaning supplies. Operation, monitoring, and maintenance of the new SVE system and an existing SVE system for a period of twelve weeks following start-up.**

The estimated range for this work is: **\$ 250,000 to \$ 500,000.**

Drawings, specifications and proposal forms may be purchased for a non-refundable fee of \$49.00 from the Division of Management and Budget Services, 10th Floor, 625 Broadway, Albany, New York, 12233-5027, Attn: Bureau of Expenditures at (518) 402-9307. Individual checks for each set shall be made payable to the New York State Department of Environmental Conservation.

Proposals will be accepted only from bidders who purchase contract documents. All proposals must be made on the official proposal form and enclosed in the envelope furnished with the contract documents. Each proposal must be accompanied by a deposit or a bid bond in the amount of 5% of bid amount.

Prospective Bidders are cautioned concerning the use of the Post Office Box address as telegraphic and overnight delivery cannot be sent to Post Office Boxes.

All Bidders must attend a Pre-Bid Conference to discuss special requirements for the contract, to be held on **Wednesday, June 20, 2007** at **the Site (76-01 77th Avenue in the Town of Glendale, Queens County)** starting at **11:00 A.M.** prevailing local time. **ATTENDANCE IS MANDATORY AS A CONDITION OF BIDDING.**

Minority and Women owned businesses are encouraged to submit bids in response to this solicitation. The New York State Department of Environmental Conservation is an Equal Opportunity/Affirmative Action Employer.

The Contractor shall adhere to the New York State Department of Environmental Conservation Guidelines Regarding Permissible Contacts During a Procurement and the Prohibition of Inappropriate Lobbying Influence.

For the purpose of this Notice to Bidders, the Director of the Division of Environmental Remediation, 12th Floor, 625 Broadway, Albany, New York, 12233-7011, shall be the Department's designated Representative. Any questions, however, shall be directed to **David J. Chiusano**, the Department's Project Manager and designated Contact, at (518) 402-9814.

Commissioner
Alexander B. Grannis

SECTION II

Terms and Definitions

Wherever used in the Contract Documents the following terms (or pronouns in place of terms) have the meanings indicated which are applicable to both the singular and plural thereof:

Addenda - Written or graphic instruments issued prior to the date for opening of Bids which interpret or modify the Contract Documents by way of changes, clarifications, or corrections.

Administrative Agreement - A written explanation of the Contract Documents, signed by **Department, Engineer** and **Contractor** on or after the Effective Date of the Agreement and dealing with procedural or administrative aspects of the Contract Documents which do not change the contract price.

Agreement - The written agreement between **Department** and **Contractor** covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.

Application for Payment - The form furnished by **Department** on which **Contractor** must request progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

Bid - The written offer or proposal of the Bidder, submitted pursuant to Article 5 of Section III of the Bidding Documents on form provided.

Bidder - The person, partnership, corporation, joint venture or other combination thereof, who has submitted a Bid.

Bid Security - The security designated in the Bidding Documents to be furnished by the Bidder as guarantee that he/she will enter into a Contract with **Department** for the performance of the Work, if the Work involved in the Bid is awarded to that Bidder.

Bidding Documents - The Advertisement and Notice to Bidders, Bidding Information and Requirements, the Bid Forms and Attachments, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

Bonds - Instruments of security furnished by **Contractor** and its surety in accordance with the Contract Documents. This refers to the labor and material payment Bond, performance Bond and those other instruments of security required by the Contract Documents.

Change Order - A document prepared and recommended by **Engineer**, which is reviewed by **Department** and has been signed by **Contractor** and **Department** and approved by Comptroller. It authorizes an addition, deletion or revision in the Work, or an adjustment in Contract Price or Contract Time, or any combination thereof, issued on or after the Effective Date of the Agreement.

Commissioner - Commissioner of the New York State Department of Environmental Conservation.

Comptroller - The Comptroller of the New York State Department of Audit and Control.

Contract Documents - The Agreement, Addenda (which pertain to the Contract Documents), **Contractor's** Bid including documentation accompanying the Bid and any post-Bid documentation submitted prior to the Notice of Award, all bid forms and attachments required by Section V, the General Conditions, the Supplementary Conditions, the Standard Specifications, the Supplementary Specifications, Appendix A, Appendix B, Measurement for Payment, Advertisement, Terms and Definitions, Bidding Information and Requirements, Supplementary Bid Information and Requirements, and the Drawings, together with all amendments, modifications and supplements issued pursuant to paragraphs 2.4 and 2.5 of Article 2 of the General Conditions on or after the Effective Date of the Agreement.

Contract Price - The money payable by **Department** to **Contractor** under the Contract Documents.

Contract Time - The number of days permitted by the Agreement for completion of Work. This number may be stated or implied by a requirement that all work be completed by a certain date.

Contractor - The person, partnership, corporation, joint venture, or other combination thereof, who has entered into the Contract with **Department** for the Work. The term "**Contractor**" means **Contractor** or its authorized representative.

Correction Period - The period of time within which **Contractor** shall promptly, without cost to **Department** and in accordance with **Department's** written instructions, either correct Defective Work or if it has been rejected by **Department**, remove it from the site and replace it with nondefective Work, pursuant to paragraph 12.12 of the General Conditions.

Cost and Pricing Data - Refers to all data available to and relied upon by **Contractor** in negotiating, pricing or performing Work covered by a Change Order or a Proposed Change Order, or involved in a claim. Sample Cost and Pricing Data include data and supporting documents pertaining to labor wages and material rates, crew mixes, labor productivity, payroll costs, price catalogs, quotations from and payments to Subcontractors, Suppliers or others, equipment production rates, equipment costs, sales and use taxes, cost of premiums for Bonds and Insurances, costs related to the determination of general and administrative overhead, site office overhead, profit, estimates and estimating guides, **Contractor's** computations and projections, and all of the relevant assumptions made by **Contractor** in pricing or figuring increases or decreases in Contract Price or Contract Time.

Cost of the Work Involved - The sum of all costs necessarily incurred and paid by **Contractor** in the proper performance of the Work involved.

Day - A calendar day of 24 hours lasting from midnight one day to midnight the next day.

Defective Work - Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to **Engineer's** recommendation of final payment (unless responsibility for the protection thereof has been assumed by **Department** at Substantial Completion in accordance with paragraphs 13.8 or 13.10).

Delivery - Shall be effected on the date of receipt by the addressee.

Department - New York State Department of Environmental Conservation.

Department Representative(s) - Employee(s) of **Department** engaged in **Department** activities relating to the work but who is not responsible for day to day administration of the Project.

Design Engineer - The individual, partnership, corporation, joint venture, or any combination thereof, who prepared and sealed the Contract Documents that were bid by **Department**.

Designated Contact(s) - Individuals to whom all contacts can properly be made during the Restricted Period in relation to the Permissible Contacts During a Procurement and Prohibition of Inappropriate Lobbying Influence clause of the contract documents. The Project Manager shall serve as the Department's Designated Contact for the contract.

Designated Representative - **Department** employee responsible for resolving all disputes between contractor and Project Manager, as identified in the Supplementary Bidding Information and Requirements.

Drawings, Plans - The Drawings, Plans or reproductions thereof, which show location, character, dimensions, and details of the Work to be performed and which are referred to in the Contract Documents.

Effective Date of the Agreement - The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is approved and filed by Comptroller.

Employee - Any person working on the project mentioned in the contract of which these specifications are a part, and who is under the direction or control, or receives compensation from **Contractor** or Subcontractor.

Engineer - The individual, partnership, corporation, joint venture, or any combination thereof, any entity named as **Engineer** in the Agreement who will have the rights and authority assigned to **Engineer** in the Contract Documents. The term "**Engineer**" means the **Engineer** or its authorized representative.

Equipment - All machinery and equipment, together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction and acceptable completion of the Work.

Field Order - A written order issued by **Engineer** to **Contractor** which orders minor changes in the Work in accordance with paragraph 9.2 of the General Conditions not involving an adjustment in the Contract Price or the Contract Time.

Law(s) - Applicable laws, rules, regulations, ordinances, codes or orders of a federal or New York State court.

Material - Any approved material acceptable to **Department** and conforming to the requirements of the specifications.

Notice of Award - **Department** written notice of bid acceptance and filing by the New York Office of the State Comptroller and stating pertinent information **Contractor** shall comply with.

Notice of Intent to Award - The written notice by **Department** to a Bidder stating that upon compliance by that Bidder with the conditions precedent enumerated therein, within the time specified, **Department** intends to process contract through the appropriate New York State contract reviews.

Notice to Proceed - The written notice issued by **Department** to **Contractor** establishing the Date for Commencement of the Contract Time and, where applicable authorizing **Contractor** to proceed with the Work at the site.

Overhead - General and administrative costs (whether at the site or in **Contractor's** principal or branch offices) and all other miscellaneous costs not assigned to a specific payment item as identified in Articles 9, 10 and 11 of the General Conditions.

Partial Utilization - Placing a portion of the Work in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the Work.

Physical Completion - The Work and all parts thereof have been completed to the satisfaction of **Department**.

Progress Schedule - Drawings, data computer reports, and narratives disclosing **Contractor's** approach to the Work; the associated Early Schedule, Late Schedule and Float times, as supported by the Critical Path Method (CPM) or Bar Chart Diagram; the Schedule of Values; and the Schedule of Shop Drawing submissions.

Project - The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

Project Field Representative - **Department** employee assigned responsibility for the day to day administration of the Project.

Project Manager - **Department** employee identified in the Supplementary Bidding Information and Requirements, responsible for administration of work required by Contract Documents and supervision of the Project Field Representative(s).

Proposed Change Order - A document prepared on a form furnished by **Department** which is to be used: 1) by **Department** when requiring that **Contractor** figure the potential effect on Contract Price or Contract Time of a proposed change, (the proposed change is ordered upon signing by **Department**), or 2) by **Contractor** to notify **Department** that in the opinion of **Contractor** a change is required to respond to differing or unforeseen physical conditions under which the Work is to be performed as provided in paragraph 3.11 or 3.12 of Article III of the General Conditions or to emergencies under paragraph 5.22 of Article V of the General Conditions, or has been ordered in a Field Order, or in **Engineer's** approval of a Shop Drawing or sample, or in **Engineer's** written interpretation or clarification of the requirements of the Contract Documents. When signed by **Department**, a Proposed Change Order may or may not fully adjust Contract Price or Contract Time, but is evidence that the change directed or documented by the Proposed Change Order will be incorporated in a subsequently issued Change Order following negotiations as to its effect, if any, on Contract Price or Contract Time.

Resident Engineer - The authorized representative of **Engineer** who is assigned to the site or any part thereof.

Resident Project Representative - Person acting as assistant to the Resident Engineer who is assigned to the site or any part thereof.

Restricted Period - The time period which runs from contract bid advertisement to contract approval by the New York State Office of the State Comptroller.

Retainage - A percentage of a progress payment withheld from a contractor as assurance that all the contract requirements will be satisfactorily completed.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for **Contractor** to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by **Contractor** to illustrate material or equipment for some portion of the Work.

Site - The area within the vertical boundaries of the location where the Contract Documents require Work by **Contractor**.

Specifications - Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

Subcontractor - An individual, partnership, corporation, joint venture or other combination thereof, having a direct contract with **Contractor** or with any other Subcontractor for the performance of a part of the Work at the site.

Substantial Completion - The Work, or a specified part thereof, has progressed to the point where in the opinion of **Engineer** as evidenced by **Engineer's** definitive Certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents (with the exception of the minor items identified during inspection described in paragraph 13.6 of the General Conditions), so that it can be utilized continuously for the purposes for which it is intended. Substantial Completion of the Work, or specified part thereof, may be achieved either upon completion of Pre-operational Testing or Start-up Testing, depending upon the requirements of the Contract Documents. The terms "substantially complete" and "substantially completed" as applied to any Work refer to Substantial Completion thereof.

Supplier - A manufacturer, fabricator, supplier, distributor, material man or vendor.

Testing, Pre-Operational - All testing, associated trimout activities and specified manufacturer or supplier training required prior to placing the facilities in service, including but not limited to manufacturer or supplier installation checks; leak, disinfection and pressure tests; removal or erection of temporary components; tie-ins; flushing and chemical/mechanical cleaning operations; specified performance tests; and other necessary non-operating adjustments, cold-alignment checks, corrections, housekeeping and spare parts stocking required of **Contractor** to demonstrate to **Department** and **Engineer** that individual components of the Work have been properly erected and do operate in accordance with the Contract Documents, and that they can be placed in service and utilized continuously for their intended purposes.

Testing, Start-Up - Follows Pre-operational Testing. Start-up Testing commences by placing portions of the Work in service under interim conditions, continues through initial utilization of the facilities under design media, and culminates with predefined trial utilization tests during which **Contractor** is to operate the Work, or specified parts thereof, under actual and simulated operating conditions and performing as defined in the Contract Documents, for the purposes of: a) making such minor adjustments and changes as may be found necessary to comply with the requirements of the Contract Documents, and b) complying with the Start-up Test requirements outlined in the Contract Documents.

Total Float - Number of working days by which a part of the Work identified in the progress schedule may be delayed without necessarily extending the corresponding Contract Time, or Contract Times.

Underground Facilities - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed under ground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, chemicals, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

Work - Any and all obligations, duties, responsibilities, labor, materials, equipment, temporary facilities, and incidentals, and the furnishing thereof necessary to complete the construction assigned to, or undertaken by **Contractor** pursuant to the Contract Documents. Also, the entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor, and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

SECTION III

Bidding Information and Requirements

ARTICLE 1 - Address for Notices

It is understood and agreed between the parties that **Department's** Representatives for the implementation of this Agreement, or for approval and direction called for therein, shall be the individuals named in Article 2 of Section IV, "Supplementary Bidding Information and Requirements."

Whenever it is provided in this Agreement that notice shall be given or other communications sent to **Department**, such notices or communications shall be delivered or sent to the Project Manager at the address set forth in Article 2 of Section IV, "Supplementary Bidding Information and Requirements." However, the Bid submittal should be addressed as stated in Article 3 below.

ARTICLE 2 - Interpretation of Bidding Documents

No interpretation of the meaning of the Bidding Documents will be made orally: all questions regarding the intent or meaning of the Bidding Documents shall be submitted in writing to the Project Manager at the address set forth in Article 2 of Section IV, "Supplementary Bidding Information and Requirements". The reply to the same, when deemed necessary, will be sent by addendum to all persons who have purchased Bidding Documents. To be given consideration, all inquiries must be received in writing at the above address at least **ten** days prior to the date fixed for the opening of Bids. Any and all interpretations and any supplemental instructions will be in the form of written Addenda which, if issued, will be sent by certified or registered mail with return receipt requested or telegraph, to all purchasers of Bidding Documents at the respective addresses furnished for such purposes. Failure of any Bidder to receive any such Addenda shall not relieve said Bidder from any obligation under its Bid as submitted. All Addenda so issued shall become part of the Bidding Documents.

All pre-bid inquiries answered by means other than Addenda shall not be binding.

ARTICLE 3 - Bid Instructions

Department invites sealed Bids on the forms attached hereto, and submitted in the envelopes provided to: Division of Management and Budget Services, New York State Department of Environmental Conservation, 10th Floor, 625 Broadway, Albany, New York, 12233-5027, **Attn.:** Bureau of Expenditures.

The outside of the envelopes must bear the name and address of the Bidder, the Project name and Project designation number from the cover of the specification book, and be clearly marked as "Bid."

Department may consider non-responsive any Bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or irregularities in or may reject any or all Bids. Bids that are illegible or that contain any omission, erasures, alterations, additions, conditions, or items not called for in the Bidding Documents or that contain other irregularities of any kind, may be rejected as non-responsive. The failure or omission of any Bidder to obtain or examine any form, instrument, document or Bidding Documents or any part thereof, shall in no way relieve any Bidder from any obligation in respect to its Bid. Complete sets of Bidding Documents shall be used in preparing Bids; neither **Department** nor **Engineer** assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

Department is responsible for providing Addenda only to those persons or firms listed in its plan sales ledger as having purchased Bidding Documents from **Department**. Persons or firms which obtain Bidding Documents from sources other than **Department** bear the sole responsibility for obtaining any Addenda issued for the Project.

Department and **Engineer** make copies of Bidding Documents available only for the purpose of obtaining Bids on the Work and do not authorize any other use of the Bidding Documents.

Each Bid must be submitted on the official form which is furnished by **Department**. All blank spaces in the Bid must be filled in as noted, and no change shall be made in the phraseology of the Bid or in the items mentioned therein.

The Bidder shall sign, in the space provided in the Bid form, with his or her usual signature. An officer of a corporation or a member of a partnership signing for the Bidder, shall place his or her signature and title after the word "By" under the name of the **Contractor**. The same procedure shall apply to the Bid of a joint venture by two or more Bidders; however, if the signature is by an agent or attorney-in-fact for the joint venturers, then the Bid shall be accompanied by evidence of his or her authority to act on behalf of all of the joint venturers.

The Bidder shall complete that portion of the Bid form requesting a statement of the Addenda which have been received, by Addenda number and date. If no Addenda have been received, insert the word, "NONE." Failure to complete this portion of the Bid form may result in a bid being declared non-responsive at **Department's** option.

Each Bid shall specify in words and figures, the correct gross sum, in the manner hereafter described for which the Work shall be performed according to the Bidding Documents together with a unit price expressed in words and figures for each separate items for which such a price is required. The lowest Bid shall be determined by **Department** on the basis of the total sum for which the entire Work will be performed, arrived at by a correct computation of all items specified in the Bidding Documents at the prices stated in the Bid. **Department** reserves the right to reject any Bid in which the Bid prices appear to constitute an unbalanced Bid for the work.

In the event there is a discrepancy in any Bid between the unit prices and the extended totals, the unit prices shall govern. In the event there is a discrepancy in any Bid between the prices written in figures and the unit or lump sum prices written in words, the prices written in words shall govern. **Department** may reject as non-responsive bids which do not contain a price for every numbered item contained in the Bid form, or may insert a zero for every numbered item that doesn't contain a price.

Unless **Department** gives instructions to the contrary, the Bidder shall use no more than three decimal places in the cents column under unit Bid price items. If Bidder uses more than three decimal places without such instructions, **Department** may round off the Bid item to three decimal places.

The Bidder is responsible for examining supplemental information which is available for inspection at the address for notices in Article 1 of this Section.

Department will not accept any Bid which has been transmitted via Facsimile, Telephone, Telegraph or which has been received after the designated bid opening time except where there is evidence that the bid arrived on time, but was mishandled by the **Department**. A late Bid will be returned unopened with notification of the reason for non-acceptance.

Bids will only be accepted from Bidders who have purchased Contract Documents from **Department**.

Permissible Contacts During a Procurement and Prohibition of Inappropriate Lobbying Influence - Pursuant to State Finance Law §§139-j and 139-k, this contract includes and imposes certain restrictions on communications between a Governmental Entity and an Offerer/Bidder during the procurement process. An Offerer/bidder is restricted from making contacts from the earliest notice of intent to solicit bids through final award and approval of the Procurement Contract by the Department of Environmental Conservation (Department) and, if applicable, Office of the State Comptroller (“restricted period”) to other than designated staff unless it is a contact that is included among certain statutory exceptions set forth in State Finance Law §139-j(3)(a). Designated staff, as of the date hereof, is identified on page I-1 of Section I, Advertisement and Notice to Bidders. Department employees are also required to obtain certain information when contacted during the restricted period and make a determination of the responsibility of the Offerer/bidder pursuant to these two statutes. Certain findings of non-responsibility can result in rejection for contract award and in the event of two findings within a 4 year period, the Offerer/bidder is debarred from obtaining governmental Procurement Contracts. Further information about these requirements, including a copies of the new lobbying law, can be found at <http://www.ogs.state.ny.us/aboutOgs/regulations/defaultAdvisoryCouncil.html>.

ARTICLE 4 - Modification or Withdrawal of Bid

Permission will not be given to modify or explain by letter, telegram, telephone or otherwise, any Bid after it has been deposited with **Department** except that a Bid may be withdrawn, modified, and resubmitted prior to the date and time for opening the Bids. After such date and time, no Bid may be withdrawn by a Bidder except as provided by law, and provided further that: 1) the Bidder files a duly signed written notice of a Bid mistake with **Department** within two business days after the day of the Bid opening, and 2) within 3 business days thereafter demonstrates to the reasonable satisfaction of **Department** that there has been a material and substantial mistake in the preparation of the Bid. If these two conditions are not met, then the bid bond would be forfeited.

Prior to submittal of Bid, a Bidder may alter or correct a unit price, or a lump sum item, which has been entered on the Bid form by crossing out the entry, entering the new figure above or below the crossed-out entry, and initialing on the line of change. The crossing out of entries shall be with ink, or typed. All new entries and initials shall be legibly handwritten with ink, or typed. Any ambiguity arising from entries altered or corrected on the Bid Form may be cause for **Department's** rejection of the Bid as non-responsive.

If the Bid is made by an individual, the business address shall be given. If made by a corporation, the names and business addresses of the president, secretary and treasurer shall be given. If made by a partnership, the names and business addresses of the partners shall be given.

Department reserves the right to disqualify Bids, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of the Bidder.

All Bids submitted by an individual, firm or partnership, a corporation or association which submits more than one Bid for the same Work under the same or different name shall be rejected.

ARTICLE 5 - Required Bid Submittals

The following are to be submitted within the time periods indicated. At the option of **Department**, failure to make or amend a submittal will constitute proof that the Bidder has abandoned all rights and interests in the contract; that the Bid Security is forfeited to **Department** as liquidated damages; and that the Work may be awarded to another Bidder in a manner consistent with Law.

- a) The following items are to accompany Contractor's Bid to **Department**:
- Form of Bid filled out
 - Bid Bond or Certified Check
 - Non-Collusion Certificate
 - MacBride Fair Employment Principles (signed)
 - Offerer's Affirmation of Understanding of and Agreement pursuant to State Finance Law §139-j (3) and § 139-j (6) (b) (signed)
 - Use of Best Available Retrofit Technology (BART) and Ultra Low Sodium Diesel (ULSD) Provision (signed)
 - Offerer Disclosure of Prior Non-Responsibility Determinations (signed)
- b) The following items shall be submitted within **5 days** of notification that the Bidder is the apparent low Bidder:
- Off-site permitted facility to receive material along with a copy of the facilities permit
 - Plan of Operations (Work Plan) and Progress Schedule, Health and Safety Plan, Sampling Plan, and QA/QC Plan
 - Statement of Surety's intent, complete and signed by and duly authorized surety company licensed to do business in the State of New York
 - A copy of the proposed site Pollution Liability insurance policy demonstrating that the bidder has the required \$1 million of Pollution Liability insurance and the additional \$4 million (for a total of \$5 million) of Pollution Liability insurance if required by the **Department** on a specific project basis. If the Bidder is unable to obtain the \$4 million of site specific Pollution Liability insurance, Department requires letters from three (3) sureties stating that the additional Pollution Liability insurance is unavailable.
 - A description of projects completed by Bidder documenting its experience in this type of work
 - Proof of Availability of insurance or Certificate of insurance with endorsements including written verification that the insurance carrier(s) are licensed in New York State. Licensed insurance carriers can be verified at <http://www.ins.state.ny.us/>. If the Contractor proposes to use non-admitted carrier(s) for pollution or professional liability insurance, then three declinations on forms required by New York State Insurance Regulation 41 (i.e., Part A - Affidavit by Excess Line Broker or Part C - Affidavit by Producing Broker) must be submitted. Pollution or professional liability insurance provided by excess line carriers shall be from a carrier who is a member of the Excess Line Association of New York (ELANY). All other insurance must be through carriers licensed to do business in New York State. All carriers must be properly identified by complete name, address, National Association of Insurance Commissioners (NAIC) number and whether or not they are a member of ELANY (if applicable) in the submittal. Refer to Article 4, Bonds and Insurance, of the General Conditions for additional information.

- NYS Uniform Contracting Questionnaire (completed) or affidavit of no change (if appropriate)
 - Policy Statement and M/WBE Workplan
 - Any other information that demonstrates the Bidder's ability to perform the work described herein
 - Low bidders may be asked to submit additional information to demonstrate competency
- c) The following items shall be submitted by the apparent low Bidder within **14 days** from the date of the Notice of Intent to Award letter from **Department**:
- Executed Agreement and Rider to Appendix B (six copies with original signatures)
 - Performance Bond with Power of Attorney & Surety Financial Statement (original and five copies)
 - Labor & Materials Bond with Power of Attorney & Surety Financial Statement (original & five copies)
 - Bid Breakdown of Items (original)
 - Certificates of Insurance (original and five copies)
 - Consultant/Contractor Detailed M/WBE-EEO Utilization Plan (original and five copies)

ARTICLE 6 - Bid Security and Bonds

Bid Security shall be made payable to **Department** in an amount not less than five percent (5%) of the Bidder's gross sum Bid. The Bid Security shall be in the form of either a certified or bank check upon an incorporated bank or trust company, or a Bid Bond issued by a surety satisfactory to **Department**.

Department will accept only Bonds from a surety company licensed to write Bonds of such character and amount under the laws of New York State and which are listed on the U.S. Treasury Department Circular 570.

Attorneys-in-fact who sign Bonds shall file with such Bonds a certified copy of their Power of Attorney to sign Bonds and to conduct business in the State of New York.

The Bid Security of a Bidder awarded a Contract for the Work will be retained until such Bidder has executed the Agreement and furnished the required bonds and insurance, whereupon the Bid Security will be returned. If the Bidder fails to execute and deliver the Agreement, other required documents and furnish the required bonds and insurance within fourteen (14) days after the Notice of Intent to Award, **Department** may annul the Notice of Intent to Award, and the Bid Security of that Bidder will be forfeited to **Department**. The Bid Security of any Bidder whom **Department** believes to have a reasonable chance of receiving the award may be retained by **Department** until the earlier of the 45th day after the Bid opening or seven (7) days after the Effective Date of the Agreement, whereupon Bid Security furnished by such Bidders will be returned. Bid Security of other Bidders will be returned after the Bid opening.

ARTICLE 7 - Approval of "or Equal" or Substitution Equipment, Systems or Items

There shall be no approval given by **Engineer** during the bidding period or prior to Award of Contract for any "or equal" or substitution equipment, systems or items.

ARTICLE 8 - Other Contracts and Occupancy

Department may award other contracts in connection with this Work. **Contractor** shall not have exclusive occupancy of the real property within or adjacent to the limits of the Work.

In case of interference between the operations of utility owners and different contractors, **Department** will be the sole judge of the rights of each contractor and the sequence of work necessary to expedite the completion of the entire Project. In all such cases, **Department's** decision shall be accepted as final.

ARTICLE 9 - Taxes

Department is exempt from the payment of sales and compensating use taxes of the State of New York and of cities and counties on all materials, equipment and supplies sold to **Department** pursuant to this Contract. Also exempt from such taxes are purchases by **Contractor** and its Subcontractors of materials, equipment and supplies to be sold to **Department** pursuant to this Contract, including tangible personal property to be incorporated in any structure, building or other real property forming part of the Project. These taxes are therefore not to be included in the Bid. The cost of all other taxes under the Contract shall be included in the Bid prices for the several items of the Contract.

ARTICLE 10 - Experience and Financial Statements

In accordance with New York State Executive Order No. 170, a Contract shall only be awarded to a responsible Bidder capable of performing and completing the Work in a satisfactory manner. The **New York State Uniform Contracting Questionnaire**, which is included in Section V, "Bid Forms and Attachments" must be completed and submitted to **Department** by the apparent low Bidder within five (5) days after the apparent low Bidder has been so notified. The completed questionnaire or the affidavit of no change (if appropriate) must be addressed to:

NYS Department of Environmental Conservation
Division of Management and Budget Services
Minority and Women's Business Programs Unit
625 Broadway, 10th Floor
Albany, NY 12233-5027, Attn: Ken Wilson

The envelope should be clearly marked "NYS Uniform Contracting Questionnaire." Failure of the apparent low Bidder to timely submit the complete, properly executed questionnaire within five (5) days may result in disqualification.

Before **Department** will consent to any subcontracts over \$10,000, the proposed subcontractor must submit the complete, properly executed "NYS Uniform Contracting Questionnaire" through **Contractor**. Any delay in the progression of work caused by the failure of a subcontractor to comply with these requirements will be attributable to **Contractor** and any additional costs will be **Contractor's** responsibility.

The low Bidder shall demonstrate its responsibility to perform and complete Work by submitting a statement of its experience and the experience of any Subcontractor which the low Bidder intends to use to perform the Work.

Department may require the low Bidder to further demonstrate its responsibility to perform and complete Work by submitting an additional experience and financial statement or information seven (7) days after bid opening or within seven (7) days of **Department** request, which shall include at a minimum, information pertaining to the Bidder's financial resources. The submitted financial information shall be certified by a Certified Public Accountant, and shall be submitted in the form required by **Department**. This can also apply to **Contractor's** subcontractors.

ARTICLE 11 - Preliminary Progress Schedule

The Preliminary Progress Schedule shall consist of three copies of a narrative description and a time-scaled critical path method diagram or bar chart diagram as specified in the Contract Documents. The narrative in the Preliminary Progress Schedule shall describe the order in which Bidder proposes to perform the Work pursuant to the specified Contract Time(s) and Work sequence conditions indicated in or required by the Bidding Documents. It shall also indicate proposed starting and completion dates for Work expressed in terms of days elapsed from the Notice to Proceed associated with each division of the Specifications within each major structure or geographical area of Work. Activities shall further identify significant submittals, approvals and associated deliveries, significant testing, major **Department** responsibilities, and responsibilities of affected utilities and third parties. The narrative shall include monthly percentages of completion for the Work in relation to the rate of progress anticipated in the Preliminary Progress Schedule.

ARTICLE 12 - Bid Breakdown

The Bid breakdown shall be submitted by the apparent low Bidder within fourteen (14) days after the date of the Notice of Intent to Award letter. Discrepancies, ambiguities or conflicts in the Bid breakdown shall be resolved in accordance with the terms and conditions set forth in Article 15 of the General Conditions.

A Bidder submitting a Bid breakdown and awarded a Contract for the Work agrees and understands that those prices for separable parts of the Work disclosed on the Bid breakdown, where they are applicable and determined to be reasonable by **Department** may be used for the purposes of: a) measurement and payment, b) increase(s) or decrease(s) in the Contract Price due to adjustments in quantities to the separable parts of the Work, and c) Change Orders or Proposed Change Orders which add or deduct like Work.

ARTICLE 13 - Subsurface and Technical Information

If boring logs and other subsurface information were made available for the inspection of Bidders, please note that such data were obtained with reasonable care and were recorded in good faith by **Department**, **Engineer** or the **Design Engineer**.

The soil and rock descriptions shown are as determined by a visual inspection of the samples from the various explorations unless otherwise noted. The observed water levels and/or water conditions indicated thereon are as recorded at the time of the exploration. These levels and/or conditions may vary considerably, according to the prevailing climate, rainfall and other factors, including the passage of time.

Similarly, data concerning leachate were obtained with reasonable care and recorded in good faith. The location and concentrations of leachate may vary considerably according to the prevailing climate, rainfall and other factors, including the passage of time. Bidders may rely upon accuracy of the subsurface technical data as to where (location) and when (exact time) data was obtained; but not upon non-technical data, interpretations or opinions contained therein or for the completeness thereof.

When reports showing data obtained by investigations and tests at the site by **Department, Engineer** or the **Design Engineer** are included with the Bidding Documents, or made available to Bidders as set forth in the Bidding Documents, it is expressly understood and agreed that technical data, but not any non-technical data, interpretations or opinions contained in such reports, are incorporated by reference into the Contract Documents. Bidders may rely upon the accuracy of all such technical data contained in such reports as to where (location) and when (exact time) such technical data was obtained, unless the Bidding Documents limit any other basis upon which such technical data may be relied upon. It is further expressly understood and agreed that the use of any technical data contained in such reports is subject to all of the conditions and limitations set forth in the Bidding Documents.

Subsurface and technical information is made available to Bidders in good faith so that they may be aware of the information utilized for design and estimating purposes. **Department** makes no representations or warranties, express or implied, as to the completeness of this information or data, nor is such disclosure intended as a substitute for personal investigations, interpretations, and judgment of the Bidder.

ARTICLE 14 - Underground Facilities

The locations of Underground Facilities were ascertained with reasonable care and recorded in good faith from various sources, including the records of municipal and other public service corporations, and therefore such locations may only be approximate. **Department** does not assume responsibility for the accuracy or completeness of such locations.

ARTICLE 15 - Examination of Bidding Documents and Site

It is the responsibility of each Bidder, before submitting a Bid to: a) examine the Bidding Documents thoroughly, b) visit and visually inspect the site during the Pre-Bid Conference required pursuant to Article 3 of Section IV, "Supplementary Bidding Information and Requirements," c) become familiar with local conditions that may affect cost, schedule, performance or furnishing of the Work, d) become familiar with applicable Laws that may in any manner affect cost, schedule, performance or furnishing of the Work, e) study and carefully correlate Bidder's observations with the Bidding Documents, and f) notify the Project Manager identified in Article 1 of this section promptly after discovering any conflicts, ambiguities, errors or inconsistencies in the Bidding Documents.

It is the responsibility of each Bidder to obtain any additional documents, information or data which pertain to the physical conditions (surface, subsurface and Underground Facilities) at or contiguous to the site which may affect cost, schedule, progress, performance or furnishing of the Work and which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the Bidding Documents.

The submission of a Bid constitutes an incontrovertible representation by Bidder that Bidder has taken steps reasonably necessary to ascertain the nature and location of the Work, and that Bidder has investigated and accounted for in the preparation of the Bid: a) Governmental requirements and all reasonably foreseeable general and local conditions that may affect cost, schedule, performance or furnishing of the Work. Examples of such conditions include: 1) conditions bearing upon the transportation, disposal, handling and storage of materials, 2) the availability and suitability of labor, water, electric power, telephone, sanitary services, and roads, 3) weather, river stages, tides or similar conditions at or contiguous to the site, 4) physical conditions of the site, and 5) the character of equipment and facilities needed preliminary to and during Work performance, b) character, quality and quantity of surface, subsurface and Underground Facilities at or contiguous to the site insofar as this information is reasonably ascertainable from the Drawings and Specifications included as part of the Bidding Documents, from the reports referenced in the Supplementary Bid Information and from the documents, information and data regarding physical conditions at or contiguous to the site obtained by Bidder,

and c) Bidding Documents to be sufficient in scope and detail to indicate and convey understanding of all terms and conditions affecting cost, schedule, performance and furnishing of the Work.

Any Failure to take the actions described in this Article will not relieve that Bidder from responsibility for estimating properly the difficulty, cost of, and schedule for successfully performing the Work, or from performing the Work successfully without an increase in Contract Price or an extension in Contract Time.

Department, Engineer, or Design Engineer do not assume any responsibility for any conclusions or interpretations made by any Bidder based on the information made available by the Bidding Documents. Nor does **Department**, or **Engineer** assume any responsibility for any understanding reached or representation made concerning conditions which can affect the cost, schedule, progress, furnishing and performance of the Work prior to execution of the Contract, unless that understanding or representation is expressly stated in the Bidding Documents.

In an itemized contract, the estimate of quantities of work to be done and materials to be furnished is approximate and is given only as a basis of calculation upon which the award of the contract is to be made. **Department** does not assume any responsibility that the quantities estimated will be the actual quantities required; **Contractor** may not claim misunderstanding or deception because of such estimates of quantities or of the character of the work, location, or other condition pertaining thereto. **Department** may increase or diminish any or all of the quantities of work mentioned above or omit any of them, as deemed necessary.

ARTICLE 16 - Subcontractors, Suppliers or Others

Unless otherwise agreed in writing by **Department, Contractor** shall subcontract no more than the percentage (%) of the total cost of the work under its contract as may be provided by the Contract Documents in Article 7 of Section IV, "Supplementary Bidding Information and Requirements". Procedures for approval of Subcontractors, Suppliers or other persons or organizations, after execution of the Agreement, are set forth in the General Conditions and the Supplementary Conditions.

ARTICLE 17 - Award of Contract

The Contract(s) will be awarded to the lowest, responsive and responsible Bidder(s) that has prepared acceptable required submittals, in the opinion of **Department**, as stipulated in Article 5 of this Section.

To the extent permitted by applicable Law, **Department** reserves the right to reject any and all Bids, to waive any and all informalities or irregularities, to disregard all nonconforming, nonresponsive, or conditional Bids, or to re-advertise for Bids.

In order to be considered responsive, a Bid shall be completed, signed and be responsive in all respects to the Bidding Documents unless informalities are waived by **Department**.

In order to be considered responsible, a Bidder must establish to the complete satisfaction of **Department** and **Engineer**, as a minimum, that it has adequate and satisfactory experience and financial resources to meet the obligations under the Contract and award of the Contract would be in the best interest of the State. A Bidder's prior experience shall be considered satisfactory when among other factors, its performance of prior work was timely, of good quality, in compliance with any contract requirements including contracted costs and schedule, and in compliance with applicable Law. The Bidder must have a minimum of three (3) years satisfactory experience in construction of the work to be performed.

Department may conduct such investigations as it deems necessary to assist in the evaluation of any Bid and to establish the responsibility in terms of satisfactory experience and financial ability of the Bidder, and of any proposed subcontractors. **Department** may reject the Bid of any Bidder which it deems not to be responsible and may reject performance of Work by any Subcontractor which it deems is not responsible.

It is the intention of **Department** that the work will be awarded within 45 calendar days after the opening of bids to the lowest responsive, responsible Bidder whose bid conforms to the requirements of the Contract Documents. Bids may not be withdrawn, altered or revoked during this 45 day period except as provided by law and specified within Article 4. Even after the expiration of such 45 day period, **Department** may accept a Bid and award the work to any Bidder whose bid has not been unequivocally withdrawn or revoked prior to the mailing of written Notice of the Award to the successful Bidder. For purposes of the preceding sentence, withdrawal or revocation of a Bid shall not occur until **Department** receives an unequivocal written statement to that effect.

ARTICLE 18 - Time is of the Essence

Time is of the essence for the performance of Work required by the Contract Documents.

ARTICLE 19 - Applicability of Federal, State and Local Law

Any Bid and any contract awarded pursuant to a Bid shall be subject to and governed by applicable Law.

It is the responsibility of each Bidder to be informed of and comply with Federal, State and local Laws, affecting the cost, schedule, progress, performance or furnishing of the Work. This requirement includes, but is not limited to, applicable regulations concerning minimum wages, nondiscrimination in employment, affirmative action, protection of public and employee safety and health, environmental protection, fire protection and permits, and fees and licensing.

ARTICLE 20 - M/WBE and EEO Requirements

The selected Bidder shall be required to make good-faith efforts to subcontract at least the percentage stipulated in Section IV, "Supplementary Bidding Information and Requirements", of the contract price to NYS Certified Minority Business Enterprise(s) (MBE) and Women Business Enterprise(s) (WBE), respectively.

The M/WBE and EEO provisions of Appendix B are required provisions for this contract. The Bidder is required to comply with State regulations 9NYCRR Part 543 entitled, "Requirements and Procedures Regarding Business Participation Opportunities for Minorities and Women on State Contracts."

In accordance with Executive Law Article 15-A, **Department** is required to make available the NYS Directory of Certified Minority and Women Owned Business Enterprises. Empire State Development has put the Minority and Women's Business Development Directory on the Internet at www.empire.state.ny.us.

The new system will be available seven (7) days a week, 7:00 a.m. to 10:00 p.m. and the information will be updated daily. Support will be available from 9:00 a.m. to 5:00 p.m., Monday through Friday, except for NYS holidays. If assistance is needed call (518) 474-1979. For additional information and assistance regarding NYS Certified M/WBE's, please contact Vicente Alfonso of the Department's Minority and Women's Business Programs Unit at (518) 402-9311.

Pursuant to New York State Executive Law Article 15-A and the attending rules and regulations, an approvable M/WBE and EEO Workplan shall be required within two weeks of the award of a contract. The workplan is requested to state the M/WBE and EEO goals, the areas of work to be considered for solicitation of M/WBE firms, and a listing of M/WBE firms to be used to supply identified subcontracting work/supplies. A Contractor Detailed EEO and M/WBE Workplan form is included and shall be incorporated into the contract.

Contractor shall be required to provide equal opportunities to minorities and women with regard to all jobs necessary for the performance of work or contracts required by the project. In doing so, **Contractor** agrees to make good-faith efforts to employ minorities and women for at least the percentage stipulated in Section IV, "Supplementary Bidding Information and Requirements" of the work force hours required for the completion of the project. Different occupational category work force participation goals may be used to meet these overall goals for work force participation. **Contractor** shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability, or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons and women are afforded equal opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on-the-job training.

As required by **Department**, **Contractor** shall request of each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding and which is involved in the performance of the contract with the Agency to furnish a written statement that such employment agency, labor union, or representative shall not discriminate because of race, creed, color, national origin, sex, age, disability, or marital status, and that such union or representative will cooperate in the implementation of **Contractor's** obligations hereunder.

Contractor shall include the provisions of Appendix B (VII) in every subcontract or purchase order in such a manner that the subcontractor shall be required to comply with such provisions with respect to its work in conjunction with the contract with **Department**.

ARTICLE 21 - Permissible Contacts During a Procurement and Prohibition of Inappropriate Lobbying Influence

Chapter 1 of the Laws of 2005, as amended by Chapter 596 of the Laws of 2005 (collectively referred to as the "Lobbying Law"), makes major changes to the Legislative Law and State Finance Law relative to lobbying on government procurements. More specifically, the Lobbying Law creates two new sections in the State Finance Law: Section 139-j addresses restrictions on "contacts" during the procurement process; and Section 139-k addresses the disclosure of contacts and the responsibility of offerers¹ during the procurement process. The Lobbying Law applies to all procurements initiated on or after January 1, 2006. In this regard, a procurement means a contract or agreement involving an annual expenditure in excess of \$15,000 for a commodity, service, technology, public work, or construction; purchase, sale or lease of real property; or revenue contract.

In conformity with the Lobbying Law, during a procurement's restricted period² the only New York State Department of Environmental Conservation (Department) officer(s) or employee(s) that the offerer may "contact" is/are the Department designated contact person(s) for that procurement. In this regard, "contact" means any oral, written, or electronic communication under circumstances where a reasonable person would infer that the communication was intended to influence a procurement. Exceptions to this rule include:

¹ Individual or entity, or any employee, agent, consultant or person acting on behalf of such individual or entity, that contacts the Department about a procurement during the restricted period.

² The period of time commencing with the earliest written notice, advertisement or solicitation of a Request for Proposals (RFP), Invitation for Bids (IFB), solicitation of proposals or any other method for soliciting responses from offerers intending to result in a procurement contract by the Department, and ending with the final contract award and approval by the Department, and the Office of the State Comptroller (if required).

- submission of a written proposal in response to an RFP, IFB or any other solicitation method;
- submission of written questions as part of an RFP, IFB or other solicitation method where all written questions and written responses will be provided to all offerers;
- participation in a pre-proposal or pre-bid conference scheduled as part of an RFP, IFB or other solicitation process;
- written complaints by an offerer that the Department designated contact for a procurement fails to respond to in a timely manner;
- negotiations with the Department following tentative award;
- contacts between designated Department staff and offerer to request the review of a contract award; and
- communications with the Department regarding an appeal, protest or other review of a procurement, participation in an administrative or judicial proceeding regarding a procurement, and complaints regarding a procurement made to the Attorney General, Inspector General, District Attorney, or State Comptroller.

An offerer shall not, under any circumstances, attempt to influence a Department procurement in a way that violates or attempts to violate: Public Officers Law Section 73(5), relating to gifts intended to influence; or Public Officers Law Section 74, relating to the code of ethics for employees of state agencies, public authorities and public benefit corporations, members of the New York State Legislature, and Legislative employees.

An offerer who contacts the Department designated contact person for a procurement during the restricted period must be prepared to provide the following information: name, address, telephone number, place of principal employment and occupation of the person or organization making the contact, and whether the person/organization making the contact is the offerer or is retained, employed or designated by or on behalf of the offerer to appear before or contact the Department about the procurement.

An offerer that submits a proposal, bid or other response to a Department RFP, IFB or other solicitation method must: certify that it understands and agrees to comply with these guidelines regarding permissible contacts during a procurement and the prohibition of inappropriate lobbying influence; and disclose whether any governmental entity has, within the prior four years, found the offerer non-responsible due to a violation of the Lobbying Law or the intentional provision of false or incomplete information. Further, all Department procurement contracts will contain: a certification by the offerer that all information provided to the Department with respect to the Lobbying Law is complete, true and accurate; and a provision authorizing the Department to terminate the contract in the event such information is found to be intentionally false or incomplete.

The Department will investigate all allegations of violations of the Department guidelines regarding permissible contacts during a procurement and the prohibition of inappropriate lobbying influence. A finding that an offerer has knowingly and willfully committed such a violation may result in a determination that the offerer and its subsidiaries are non-responsible and therefore ineligible for award of the procurement contract. A second determination of non-responsibility for such a violation within four (4) years of the first such determination may render the offerer and its subsidiaries ineligible to submit a bid or proposal or be awarded a procurement contract for four (4) years from the date of the second determination. The Department will notify the New York State Office of General Services (OGS) of any determination of non-responsibility or debarments due to violations of the Lobbying Law.

If you require further guidance on the new Lobbying Law, you are encouraged to visit the Advisory Council on Procurement Lobbying website at the following address:

<http://www.ogs.state.ny.us/aboutOgs/regulations/defaultAdvisoryCouncil.html>, where Frequently Asked Questions (FAQ's) and answers adopted by the council have been posted. A copy of the new Procurement Lobbying Law is also available on this website.

SECTION IV

Supplementary Bidding Information and Requirements

ARTICLE 1 - Location and Description of Project

The Site Number of this project is **2-41-031**. The Project is located in the **Town of Glendale, Queens County.** **The Site is located at 76-01 77th Avenue.**

This Project primarily includes the construction of a soil vapor extraction (SVE) treatment system. The Contractor shall startup, operate, monitor, and maintain the SVE for a total period of twelve weeks.

ARTICLE 2 - Department Representatives

NAME

ADDRESS

Mr. Robert Knizek, Designated Representative, 625 Broadway-12th Floor, Albany, NY 12233-7017

Mr. George W. Harris, Section Chief, 625 Broadway-12th Floor, Albany, NY 12233-7017

Mr. David J. Chiusano, Project Manager, 625 Broadway-12th Floor, Albany, NY 12233-7017

To Be Determined (TBD), Project Field Representative, TBD

ARTICLE 3 - Pre-Bid Conference

A pre-bid conference will be held on **Wednesday, June 20, 2007, at the Site, at 11:00 A.M. EST** to view the Project area. The pre bid conference is held to discuss the requirements of the Bidding Documents, the protocols for performing the work and the conditions existing at the work site, and to provide for visual inspection of the Site by Bidders. Bidders will be required to sign an attendance sheet to document their presence at the mandatory pre-bid conference. **Department will accept Bids only from those bidders who attend this conference.**

ARTICLE 4 - Additional Bid Submittals

None

ARTICLE 5 - Other Available Documents

The following items are available for contractor's review in preparing the Bid:

1. Record of Decision for the Kleigman Brothers site, Operable Unit No. 1, dated March 2006, prepared by the Department.
2. "Remedial Investigation/Feasibility Study Project"; Remedial Investigation Report, February 2004, prepared by URS Corporation.
3. "Operation and Maintenance Manual and As-Built Drawings for Soil Vapor Extraction System"; Kleigman Brothers Site, Queens County, Site #2-41-031, May 12, 2003, prepared by Envirotrac Ltd. Available in the Limited Site Data document.

ARTICLE 6 - M/WBE-EEO Utilization Plan

- a) The M/WBE-EEO Utilization Plan shall be sent directly to:
- NYS Department of Environmental Conservation
Division of Management and Budget Services
Minority and Women's Business Programs Unit, 10th Floor
625 Broadway
Albany, New York 12233-5028
ATTENTION: Vicente Alfonso
- b) The selected bidder shall be required to make good faith efforts to subcontract at least **28.5 percent** and **18.7 percent** of the contract price to NYS Certified M/WBEs, respectively.
- c) **Contractor** shall be required to provide equal opportunities to minorities and women with regard to all jobs necessary for the performance of work or contracts required by the project. In doing so, **Contractor** agrees to make good-faith efforts to employ minorities for at least **ten (10)** percent of, and women for at least **ten (10)** percent of, the work force hours required for the completion of the project.

ARTICLE 7 - Subcontracting

The maximum subcontracting allowed for this contract is **40 percent** unless a higher percentage is approved by **Department** in writing.

ARTICLE 8 - Type of Schedule

Contractor shall provide **a bar and critical path** type of schedule as described in Section X, Spec 00001 - Progress Schedule.

ARTICLE 9 - Wage Rates

The **Department** requires, for the work under this contract, that the **Contractor** and its subcontractor pay at least the prevailing wage rate and pay or provide the prevailing supplements, including premium rates for overtime pay, as issued by the State Labor Department. The current wage rates are included within the contract documents, Section XIII.

“The **Contractor** is responsible for any additional costs related to new determinations of the wage rates. The annual determination of the prevailing rates of wages and supplements are usually published on May 31st of each year and are in effect July 1st through June 20th. New determinations will supersede the original schedule or any prior issued annual determination. Any rate change from a previously issued determination becomes effective July 1st, regardless of whether the new determination has been received by the **Contractor**.”

Every contractor and subcontractor shall submit to the Engineer within thirty days after issuance of its first payroll, and every thirty days thereafter, a transcript of the original payroll records, subscribed and affirmed as true under penalty of perjury, as provided by Article 8, Section 220, of the NYS Labor Law. The Engineer shall receive and maintain such payroll records. The original payrolls and transcripts must be preserved for three years from the date of completion of the project. The current prevailing wage rate schedule must be posted in a prominent and accessible place on the site of the public work project.”

SECTION V

ARTICLE 1(a) - Contract Bid Form and Acknowledgment for Construction of

Contract Number _____, NYS Site Number _____

To The New York State Department of Environmental Conservation

The Bidder hereby declares that either personally or through authorized representative(s), Bidder has carefully examined all Bidding Documents and has personally or through authorized representative(s) inspected the actual location of the work, together with the local sources of supply; and understands all terms and conditions of Bidding Documents. Bidder further understands that in signing this Bid, the right to plead any misunderstanding regarding the same is waived.

Pursuant to and in compliance with the Bidding Documents, the Bidder hereby offers to furnish all labor, materials, supplies, equipment and other facilities and things necessary or proper for, or incidental to the construction and completion of this Contract, as required by and in strict compliance with the applicable provisions of all Contract Documents, for the following unit and/or lump sum prices.

The undersigned shall meet the required submittal time periods listed in Article 5 - Required Bid Submittals of the Bidding Information and Requirements, Section III.

The undersigned hereby designates the following office as the office to which such Notice of Intent to Award and Notice of Award may be mailed, telegraphed or delivered:

Fax Number () _____ - _____

BID
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
KLIEGMAN BROTHERS OU #1 SITE REMEDIAL ACTION
CONTRACT NUMBER D006547, NYS SITE NUMBER 2-41-031

UNIT PRICE ITEMS						
Payment Item Number	Description	Estimated Quantity	Unit	Unit or Lump Sum Price		Total Amount (\$)
				Words	Figures	
UC-1	Shallow SVE Well	2	Each			
UC-2	Intermediate SVE Well	2	Each			
UC-3	Deep SVE Well	2	Each			
UC-4	SVE System Operation – First Two Weeks	2	Weeks			
UC-5	SVE System Operation – Subsequent Ten Weeks	10	Weeks			
UC-6	Health and Safety	10	Days			
UC-7	Vapor Phase Carbon	32,000	Lbs.			
UC-8	SVE Air Samples	167	Each			
UC-9	Soil and Debris Disposal	12	Tons			
UC-10	Vacuum Monitoring Points	5	Each			
UC-11	Indoor Air Samples	10	Each			

Signature _____

BID
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
KLIEGMAN BROTHERS OU #1 SITE REMEDIAL ACTION
CONTRACT NUMBER D006547, NYS SITE NUMBER 2-41-031

LUMP SUM ITEMS						
Payment Item Number	Description	Estimated Quantity	Unit	Unit or Lump Sum Price		Total Amount (\$)
				Words	Figures	
LS-1	Site Preparation (limited to 5% of total bid)	1	LS			
LS-2	Site Services (limited to 5% of total bid)	1	LS			
LS-3	SVE Treatment System	1	LS			
LS-4	SVE Underground Piping Installation	1	LS			
LS-5	Survey	1	LS			
LS-6	Well Decommissioning	1	LS			

Signature _____

New York State Department of Environmental Conservation

Kleigman Brothers OU#1 Site Remedial Action

Contract Number: D006547, NYS Site Number: 2-41-031

<i>Item No.</i>	<i>Item Description</i>	<i>Unit</i>	<i>Estimated Quantity</i>	<i>Unit or Lump Sum Price</i>		<i>Total Amount (\$)</i>
				<i>Words</i>	<i>Figures</i>	
	Pollution Liability Insurance	LS	1			
	<p><u>This item is not to be calculated in the base Bid for the project.</u> Contractor is referred to Article 4 of the General Conditions in the Contract Documents. The limits for Pollution Liability Insurance will be the same as defined in Article 4 of the General Conditions. After opening of bids, Department will determine if it is in Department's best interest to have Contractor obtain an additional \$4,000,000 Pollution Liability Insurance on a site specific basis, and if so, Contractor will be paid separately at the actual documented cost to obtain this additional insurance. The Bidder is required to fill in the above price if it can obtain site-specific Pollution Liability Insurance. This Bid amount will be the upper limit for payment of this item. The Department is to be listed on the Bidder's Company Policy as an additional insured at no additional cost to the Department.</p>					
	<p>_____</p>					
	Contractor Authorized Representative			Contractor Name	Date	

The undersigned acknowledges the receipt of the following Addenda and agrees to be bound by all Addenda whether or not listed herein.

<i>Addendum Number</i>	<i>Date of Addendum</i>
------------------------	-------------------------

_____	_____
_____	_____
_____	_____
_____	_____

Accompanying this proposal is bid security in the amount of \$ _____; said security is in the form of \$ _____ certified check or checks, and \$ _____ Bid Bond which shall become the property of the **Department** if this proposal shall be accepted by **Department**, and the undersigned shall fail to execute and return the contract in a timely manner or fail to comply with the requirements of the Bidding Documents.

Corporate Seal
(If no seal, write "No Seal" and sign)

Legal Name of Person, Partnership or Corporation

By _____
Print Name

Signature

Date _____

Please Complete Information Requested Below:

The P.O. address of the bidder is: _____

Federal Identification Number is: _____

If a Corporation

<i>Name</i>	<i>Address</i>
_____, President	_____
_____, Secretary	_____
_____, Treasurer	_____

If a Partnership

<i>Name</i>	<i>Address</i>
_____, President	_____
_____, Secretary	_____
_____, Treasurer	_____

CONTRACT NUMBER: D006547

(CORPORATE ACKNOWLEDGMENT WITH SEAL)

State of)
County of) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____ to me known, who being duly sworn, did depose and say that (s)he resides in _____, New York; that (s)he is _____ (*title*) of _____ (*firm*) the corporation described in and which executed the above instrument; that (s)he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that (s)he signed his(her) name thereto by like order.

Seal

Notary Public

(CORPORATE ACKNOWLEDGMENT WITHOUT SEAL)

State of)
County of) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____, to me known, who being duly sworn, did depose and say that (s)he resides in _____, New York; that (s)he is an officer of _____ (*firm*); namely, the _____ (*title*) of _____ (*firm*); that (s)he is authorized by the governing body of said corporation to sign contracts; and that (s)he did sign the foregoing instrument on behalf of, and with authority to bind said corporation.

Notary Public

(CO-PARTNERSHIP ACKNOWLEDGMENT)

State of)
County of) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____ to me known and known to me to be a member of _____, the firm described in and which executed the foregoing instrument, and (s)he acknowledged to me that (s)he subscribed the name of said firm thereto on behalf of said firm for the purpose therein mentioned.

Seal

Notary Public

(INDIVIDUAL ACKNOWLEDGMENT)

State of)
County of) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____ to me personally known, and known to me to be the individual described in, and who executed the foregoing instrument, and (s)he duly acknowledged to me that (s)he executed the same.

Seal

Notary Public

Bidder's/Proposer's Certification (Page 1 of 2)

**Non-Collusive Bidding and Nondiscrimination in Employment in Northern Ireland
MacBride Fair Employment Principles**

BY SUBMISSION OF THIS BID AND BY SIGNING HEREUNDER THE BIDDER/PROPOSER, AND EACH PERSON SIGNING ON BEHALF OF SUCH PARTY CERTIFIES, AND IN THE CASE OF A JOINT BID/PROPOSAL, EACH PARTY THERETO CERTIFIES AS TO ITS OWN ORGANIZATION, UNDER PENALTY OF PERJURY, THAT TO THE BEST OF HIS/HER KNOWLEDGE AND BELIEF:

Article 1(b) - Non Collusion, State Finance Law §139-d

- 1) The prices in this Bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor;
- 2) Unless otherwise required by law, the prices which have been quoted in this Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly, to any other Bidder or to any competitor; and
- 3) No attempt has been made or will be made by the Bidder to induce any other person, partnership or corporation to submit or not to submit a Bid for the purpose of restricting competition.

Article 1(c) - MacBride Fair Employment Principles, State Finance Law §165(5)

- 1) it or any individual or legal entity in which the Bidder/Proposer holds a 10% or greater ownership interest, or any individual or legal entity that holds a 10% or greater ownership in the Bidder/Proposer, either: (answer yes or no to one or both of the following, as applicable).
- 2) Has business operations in Northern Ireland:
Yes _____ or No _____ (check answer) If yes, complete #3
- 3) Shall take lawful steps in good faith to conduct any business operations that it has in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to non-discrimination in employment and freedom of workplace opportunity, regarding such operations in Northern Ireland and shall permit independent monitoring of its compliance with such Principles. (Check Answer):
Yes _____ or No _____ (check answer)

NOTE: All references to “bid” “bidder” shall be deemed to include “proposer” “proposal.”

Date

Print Name and Title

Signature

Bidder's/Proposer's Certification (Page 2 of 2)

Offerer's Affirmation of Understanding of and Agreement Pursuant to State Ethics Law Provision and State Finance Law §139-j (3) and §139-j (6) (b)

BY SUBMISSION OF THIS BID AND BY SIGNING HEREUNDER THE BIDDER/PROPOSER, AND EACH PERSON SIGNING ON BEHALF OF SUCH PARTY CERTIFIES, AND IN THE CASE OF A JOINT BID/PROPOSAL, EACH PARTY THERETO CERTIFIES AS TO ITS OWN ORGANIZATION, UNDER PENALTY OF PERJURY, THAT TO THE BEST OF HIS/HER KNOWLEDGE AND BELIEF:

Article 1(d) - State Ethics Law Provision

By submittal of this bid, the undersigned hereby certifies, for and on behalf of the bidder, that he is familiar with the following provisions of the State Ethics Law provisions applicable to post employment restrictions affecting former state employees: POL § 73(8)(a)(i) the two year ban, and § 73(8)(a)(ii), the life time bar, and that submittal of this bid is not in violation of either provision, and that no violation will occur by entering into a contract or in performance of the contractual services, and further that the bidder recognizes that the Department may rely upon this certification.

Except as follows: (attach information if needed)

(Proposer is to make full disclosure of any circumstances which could affect its ability to perform in complete compliance with the cited laws. Any questions as to the applicability of these provisions should be addressed to the New York State Ethics Commission, 39 Columbia Street, Albany, NY 12207:telephone #1-800-87-ETHICS.)

Article 1(e) - Permissible Contacts During a Procurement and Prohibition of Inappropriate Lobbying Influence, State Finance Law §139-j and §139-k

Offerer affirms that it understands and agrees to comply with the procedures of the New York State Department of Environmental Conservation relative to permissible contacts as required by State Finance Law §139-j (3) and §139-j (6) (b).

Use of Best Available Retrofit Technology (BART) and Ultra Low Sodium Diesel (ULSD) Pursuant to Environmental Conservation Law Section 19-0323

Article 1(f) - Use of Best Available Retrofit Technology (BART) and Ultra Low Sodium Diesel (ULSD) Provision

The Contractor certifies and warrants that all heavy duty vehicles, as defined in New York State Environmental Law (ECL) section 19-0323, to be used under this Contract, will comply with the specifications and provisions of ECL section 19-0323 and any regulations promulgated pursuant thereto, which requires the use of Best Available Retrofit Technology (BART) and Ultra Low Sodium Diesel (ULSD), unless specifically waived by the Department. Qualification for a waiver under this law will be the responsibility of the Contractor.

NOTE: All references to "bid" "bidder" shall be deemed to include "proposer" "proposal."

Date

Print Name and Title

Signature

Bid Security

If Bid Security is a Bid Bond, use Bid Bond form and provide certified power of attorney.

ARTICLE 1(h) - Bid Bond

Know all men by these presents, that we, the undersigned, _____, as Principal, and _____, as Surety, are hereby held and firmly bound unto New York State Department of Environmental Conservation in the penal sum of _____ for the payment of which, will and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns. Signed this _____ day of _____, 20_____.

The condition of the above obligation is such that whereas the Principal has submitted to New York State Department of Environmental Conservation certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for the

Now, Therefore

- a) If said Bid shall be rejected, or in the alternate,
- b) If said Bid shall be accepted and the principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for the faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid.

Then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligation of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bids; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

(Seal)

Principal

Surety

By _____

(ACKNOWLEDGMENT BY SURETY COMPANY)

State of _____)
County of _____) s.s.:

On this _____ day of _____, 20____ before me personally came _____ to me known, who being by me duly sworn, did depose and say that he/she resides in _____, that he/she is the _____ (*title*) of the _____ (*firm*), the corporation described in and which executed the within instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation and the he/she signed his name thereto by like order; and that the liabilities of said company do not exceed its assets as ascertained in the manner provided by the laws of the State of New York.

(Seal)

Notary Public

(CORPORATE ACKNOWLEDGMENT WITH SEAL)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____ to me known, who being duly sworn, did depose and say that (s)he resides in _____, New York; that (s)he is _____ (*title*) of _____ (*firm*) the corporation described in and which executed the above instrument; that (s)he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that (s)he signed his(her) name thereto by like order.

Seal

Notary Public

(CORPORATE ACKNOWLEDGMENT WITHOUT SEAL)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____, to me known, who being duly sworn, did depose and say that (s)he resides in _____, New York; that (s)he is an officer of _____ (*firm*); namely, the _____ (*title*) of _____ (*firm*); that (s)he is authorized by the governing body of said corporation to sign contracts; and that (s)he did sign the foregoing instrument on behalf of, and with authority to bind said corporation.

Notary Public

(CO-PARTNERSHIP ACKNOWLEDGMENT)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20____, before me personally came _____ to me known and known to me to be a member of _____, the firm described in and which executed the foregoing instrument, and (s)he acknowledged to me that (s)he subscribed the name of said firm thereto on behalf of said firm for the purpose therein mentioned.

Seal

Notary Public

(INDIVIDUAL ACKNOWLEDGMENT)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20____, before me personally came _____ to me personally known, and known to me to be the individual described in, and who executed the foregoing instrument, and (s)he duly acknowledged to me that (s)he executed the same.

Seal

Notary Public

**ARTICLE 1(i) - Offerer Disclosure of Prior Non-Responsibility Determinations
(Page 1 of 2)**

Name of Individual or Entity Seeking to Enter into the Procurement Contract:

Address: _____

Name and Title of Person Submitting this Form: _____

Contract Procurement Number: _____

Date: _____

1. Has any Governmental Entity made a finding of non-responsibility regarding the individual or entity seeking to enter into the Procurement Contract in the previous four years? (Please circle):

No Yes

If yes, please answer the questions 2 - 4, if no, go to question 5:

2. Was the basis for the finding of non-responsibility due to a violation of State Finance Law §139-j? (Please circle):

No Yes

3. Was the basis for the finding of non-responsibility due to the intentional provision of false or incomplete information to a Governmental Entity? (Please circle):

No Yes

4. If you answered yes to any of the above questions, please provide details regarding the finding of non-responsibility below.

Governmental Entity: _____

Date of Finding of Non-responsibility: _____

Basis of Finding of Non-Responsibility: _____

(Add additional pages as necessary)

5. Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above-named individual or entity due to the intentional provision of false or incomplete information? (Please circle):

No

Yes

6. If yes, please provide details below.

Governmental Entity: _____

Date of Termination or Withholding of Contract: _____

Basis of Termination or Withholding: _____

(Add additional pages as necessary)

Offerer Certification:

Offerer certifies that all information provided to the New York State Department of Environmental Conservation with respect to State Finance Law §139-k is complete, true and accurate.

By: _____ Date: _____

Signature

ARTICLE 2(a) - Corporate Resolution and Certification

"This Article 2(a) is not applicable"

ARTICLE 2(b) - Statement of Surety's Intent

To: ***New York State Department of Environmental Conservation***

We have reviewed the Bid of _____ (Contractor)

of _____ (Address)

for _____ (Project)

Contract Number : D006547

NYS Site Number: 2-41-031

Bids for which will be received on _____ (insert Bid Opening Date) and wish to advise that should this Bid of Contractor be accepted and the Contract awarded to Contractor, it is our present intention to become surety on the Performance Bond and Labor and Material Payment Bond required by the Contract.

Any arrangement for the Bonds required by the Contract is a matter between Contractor and ourselves and we assume no liability to Department or third parties if for any reason we do not execute the requisite bonds.

We are duly licensed to do business in the State of New York.

Attest:

Corporate Seal

(If no seal, write "No Seal" and sign)

Surety's Authorized Signature(s)

Telephone Number for Bonding Company

Telephone Number for Bonding Broker

Attach Power of Attorney

ARTICLE 2(c) - NYS Directory of Certified Minority and Women-Owned Business

The New York State Directory of Certified Minority and Women-Owned Business Enterprises has been developed to assist public and private purchases of goods and services in locating and using bonafide minority and women-owned business as defined in accordance with Article 15-A of the Executive Law and Article 4(a) of the Economic Development Law.

M/WBE Directory on the Internet

Empire State Development has put the Minority and Women's Business Development Directory on the Internet. The Internet address is **www.empire.state.ny.us**, just follow the links to the M/WBE Directory.

The new system will be available seven (7) days a week, 7:00 a.m. to 10:00 p.m. and the information will be updated daily. Support will be available from 9:00 a.m. to 5:00 p.m., Monday through Friday, except for NYS holidays. If assistance is needed call (518) 474-1979.

**ARTICLE 2(d) - MINORITY AND WOMEN'S BUSINESS-EQUAL EMPLOYMENT
OPPORTUNITY PROGRAM WORKPLAN**

Policy Statement

The _____ commits to carrying out the intent of the New York State
(Name of Contractor or Municipality)
Executive Law, Article 15-A which assures the meaningful participation of Minority and
Women-Owned Business Enterprises (M/WBE) in contracting and the meaningful participation
of
minorities and women in the workforce on activities financed by public funds.

Minority Business Officer

_____ is designated as the Minority Business Enterprise
Officer
(Name of Designated Officer)
responsible for administering the Minority and Women's Business-Equal Employment
Opportunity (M/WBE-EEO) program.

M/WBE Contract Goals

_____ % Minority Business Enterprise Participation

_____ % Women's Business Enterprise Participation

EEO Contract Goals

10% Minority Labor Force Participation

10% Female Labor Force Participation

(Authorized Representative)

Title: _____

Date: _____

**M/WBE-EEO WORKPLAN
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

Contractor or Municipality		Grant/Project Number	
Address		City	Zip Code
Authorized Representative		Authorized Signature	
Address		City	Zip Code
			Phone No.
Minority Business Enterprise Officer		Fax No.	
Project Description (list separate contracts & estimates)			
Contract No.	Description		Estimate
_____	_____		_____
_____	_____		_____
_____	_____		_____

PROJECTED EEO AND M/WBE CONTRACT SUMMARY

	%	Amount		%	No./Employees
1. Total Project Dollar Value			5. Total Employees		
2. MBE Project Goal			6. Total Minority Employees/Goal		
3. WBE Project Goal			7. Total Female Employees/Goal		
4. M/WBE Totals Combined			8. EEO Total Combined		

OFFICE OF MINORITY & WOMEN'S BUSINESS PROGRAMS USE ONLY

Proposed Goals		Date Approved	Date Disapproved	Initials
MBE (%)	EEO-Minorities (%)			
WBE (%)	EEO-Women (%)			

Number/Types of Contracts	Contract Breakdown	Amount

SAMPLE

Number/Types of contracts	Contract Breakdown	Amount
<u>General Construct.</u> (Contract No. 1)	Paving Demolition Paining Masonry Miscellaneous Metals Glazing Excavation and Backfill Fencing Concrete Finishing Reinforcing Steel Roofing Waterproofing	\$150,000 30,000 200,000 260,000 50,000 3,000 210,000 12,000 20,000 240,000 658,000 30,000 \$1,273,000
<u>Electrical</u> (Contract No. 2)	Underground Duct Banks Equipment Supply Lightening Protection	110,000 260,000 <u>20,000</u> 390,000
<u>H.V.A.C.</u> (Contract No. 3)	Electrical Wiring Ductwork Controls Equipment Supply	10,000 45,000 25,000 <u>60,000</u> 140,000
<u>Plumbing</u> (Contract No. 4)	Underground Piping Equipment Supply	20,000 <u>25,000</u> 45,000
<u>Sewer Rehab</u> (Contract No. 5)	Cleaning & TV Inspection Joint Testing & Sealing Chemical Root Treatment Manhole Rehabilitation Excavation & Backfill Pavement Replacement Material Supply	35,000 45,000 4,000 8,000 6,000 12,000 <u>5,000</u> 115,000
<u>Sewer Rehab.</u> (Contract No. 6)	Cleaning & TV Inspection Joint Testing & Sealing Chemical Root Treatment Manhole Rehabilitation Excavation & Backfill Pavement Replacement Material Supply	58,000 126,000 3,000 15,000 3,000 2,800 <u>1,000</u> 208,800
	Total	\$2,171,000

ARTICLE 2(e) - NYS Uniform Contracting Questionnaire Instructions

* Please Read Before Completing Questionnaire

1. Complete all sections of the Questionnaire.
2. Submit this form as required by the contracting agency after being announced the low bidder for any competitively bid contract of \$10,000 or more, or when proposed for subcontract work valued at \$10,000 or more. If you have submitted one within 6 months of the bid date with any contracting agency, as long as the information remains unchanged and accurate, you may submit a complete certified copy of that form, together with an Affidavit of No Change, to the Agency with which you are bidding. A contracting agency may require additional information deemed necessary for its review. Whenever more space is needed to answer any question or you wish to give further explanation, complete by attaching extra pages. All questions must be answered.
3. For question #16, if your firm has OSHA citations, attach copies of each citation. Add additional explanatory material for any other affirmative answers.
4. A certified annual financial disclosure will be acceptable in lieu of completing the financial disclosure in the questionnaire.
5. If you wish material in this disclosure form to be held as confidential and exempt from disclosure under Freedom of Information, be sure to place an asterisk in front of all information you do not want disclosed to outside sources.
6. This questionnaire is generally valid for one calendar year, unless major changes have occurred (firm purchased by another business, bankruptcy, etc.)

The NYS Uniform Contracting Questionnaire, which is included in Section V, "Bid Forms and Attachments," must be completed and submitted to **Department** by the apparent low bidder. The complete questionnaire must be received by **Department** within three (3) business days after the apparent low bidder has been so notified. The completed questionnaire or the affidavit of no change (if appropriate) must be addressed to:

NYS Department of Environmental Conservation
Division of Management and Budget Services
Minority and Women's Business Programs Unit, 10th Floor
625 Broadway
Albany, NY 12233-5027, Attn.: Ken Wilson

The envelope should be clearly marked "**NYS Uniform Contracting Questionnaire.**" Failure of the apparent low bidder to timely submit the complete, properly executed questionnaire may result in disqualification of the low bidder.

Before **Department** will consent to any subcontracts over \$10,000, the proposed subcontractor must submit a complete, properly executed questionnaire through **Contractor**.

Any delay in the progression of work caused by the failure of a subcontractor to comply with these requirements will be attributable to **Contractor** and any additional costs will be **Contractor's** responsibility.

**NEW YORK STATE
UNIFORM CONTRACTING QUESTIONNAIRE**

INSTRUCTIONS

Submit this form as required by the contracting agency after being announced the low bidder for any competitively bid contract of \$10,000 or more, or when proposed for subcontract work valued at \$10,000 or more. If you have submitted one within 6 months of the bid date with any contracting agency, as long as the information remains unchanged and accurate, you may submit a complete certified copy of that form, together with an Affidavit of No Change, to the agency with which you are bidding. A contracting agency may require additional information deemed necessary for its review. **Whenever more space is needed to answer any question, or you wish to give further explanation, complete by attaching extra pages. All questions must be answered.**

NOTE: Please indicate whether you believe that any of the information supplied herein is confidential and should be exempt from disclosure under the Freedom of Information Law: ___yes, ___no. If you checked "yes" you must identify the information you feel is confidential by placing an asterisk in front of the appropriate question number(s) and you are requested to attach an additional sheet(s) upon which the basis for such claim(s) is explained.

GENERAL INFORMATION

1. NAME OF FIRM _____
 DBA NAME, IF ANY _____
 MAILING ADDRESS _____ PHONE NO. (____) _____
 CITY _____ COUNTY _____ STATE _____ ZIP _____ FAX NO. (____) _____
 ACTUAL LOCATION _____
 E-MAIL ADDRESS _____
2. TYPE OF FIRM (check only one) ___ CORPORATION ___ PARTNERSHIP ___ PROPRIETORSHIP ___ JOINT VENTURE ___ LLC ___ LLP
3. HOW MANY YEARS HAS THE FIRM BEEN IN BUSINESS? _____ UNDER THE SAME NAME? _____ FORMER NAME: _____
4. WHAT IS THE FIRM'S BONDING RANGE? \$ _____ SINGLE PROJECT \$ _____ AGGREGATE (ALL PROJECTS)
5. ARE YOU CERTIFIED AS A DBE ___ MBE ___ WBE ___ IF SO, WITH WHOM? _____

OWNERSHIP, MANAGEMENT, AFFILIATION

6. Identify each person who is, or has been within the past five years, an owner of 5.0% or more of the firm's shares, or one of the five largest shareholders or a director, an officer, a partner or a proprietor. Joint ventures: provide information for all firms involved. Fill in name, % owned, office held; indicate by Y or N whether director, officer or partner:

FIRST NAME	MI	LAST NAME	DATE OF BIRTH	% OWNED	DIRECTOR (Y or N)	OFFICER (Y or N)	TITLE	PARTNER (Y or N)

7. Identify any other firms in which, now or in the past five years, the firm or any of the individuals listed in question six above, either owned or owns 5.0% or more of the shares of, or was or is one of the five largest shareholders or as a director, officer, partner or proprietor of said other firm:

FEDERAL ID NO.	% OWNED	FIRM/COMPANY NAME	FIRM/COMPANY ADDRESS

8. Identify any affiliate not listed in your answers to questions 6 and 7. For purposes of this question your firm and another are affiliates when, either directly or indirectly, one controls or has the power to control the other, or a third party or parties controls, or has the power to control both:

FEDERAL ID NO.	COMPANY NAME	ADDRESS

9. Identify any and all shareholders, directors, officers, owners, partners, or proprietors in common between your firm and any firm listed in response to questions 6,7 or 8:

FEDERAL ID NO.	FIRST NAME, MI & LAST NAME	POSITION	OTHER FIRM

10. List the ten most recent contracts the firm has completed. If less than ten, include most recent subcontracts on projects up to that number:

AGENCY/OWNER, CONTACT PERSON & TELEPHONE NO.	CONTRACT NO.	PRIME OR SUB	DESIGN ARCHITECT AND/OR DESIGN ENGINEER	AWARD DATE	AMOUNT	DATE COMPLETED
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

11. List all current uncompleted construction contracts:

AGENCY/OWNER, CONTACT PERSON & TELEPHONE NO.	CONTRACT NO.	PRIME OR SUB	DESIGN ARCHITECT AND/OR DESIGN ENGINEER	TOTAL \$ AMOUNT OF FIRM'S CONTRACT (OR SUBCONTRACT)	\$ AMOUNT SUBLET TO OTHERS	UNCOMPLETED \$ AMOUNT OF FIRM'S CONTRACT (OR SUBCONTRACT)

GRAND TOTAL: _____

12. Gross Sales for Firm's Previous 3 Fiscal Years: Average Backlog for Firm's Previous 3 Fiscal Years:
(Estimated total value of uncompleted work on outstanding contracts)
- | <u>YEAR</u> | <u>YEAR</u> |
|----------------|----------------|
| _____ \$ _____ | _____ \$ _____ |
| _____ \$ _____ | _____ \$ _____ |
| _____ \$ _____ | _____ \$ _____ |
13. Has the firm, or any firm listed in response to questions 6,7 or 8, defaulted or been terminated on, or had its surety called upon to complete, any contract awarded within the past five years? NO { } YES { } If, yes, give date(s), agency(ies)/owner(s), project(s), contract numbers, and describe including the result: _____
14. For all contracts within the past five years: (a) list and describe all liens or claims over \$25,000 filed against the firm and remaining undischarged or unsatisfied for more than 90 days; and (b) list and describe all liquidated damages assessed _____

FINANCIAL INFORMATION

15. Complete the attached financial statement or attach a copy of the firm's most recent annual financial statement and accompanying notes.

OTHER INFORMATION

16. Within the past five years has the firm, any affiliate, any predecessor company or entity, or any person identified in question number 6 above been the subject of any of the following: (respond to each question and describe in detail the circumstances of each affirmative answer; attach additional pages if necessary)
- | | | |
|---|------|-------|
| (a) a judgment of conviction for any business-related conduct constituting a crime under local, state or federal law? | no__ | yes__ |
| (b) a criminal investigation or indictment for any business-related conduct constituting a crime under local, state or federal law? | no__ | yes__ |
| (c) a grant of immunity for any business-related conduct constituting a crime under local, state or federal law? | no__ | yes__ |
| (d) a federal, state or local suspension or debarment? | no__ | yes__ |
| (e) a rejection of any bid for lack of qualifications, responsibility or because of the submission of an informal, non-responsive or incomplete bid? | no__ | yes__ |
| (f) a rejection of any proposed subcontract for lack of qualifications, responsibility or because of the submission of an informal, non-responsive or incomplete bid? | no__ | yes__ |
| (g) a denial or revocation of prequalification? | no__ | yes__ |
| (h) a voluntary exclusion from bidding/contracting agreement? | no__ | yes__ |
| (i) any administrative proceeding or civil action seeking specific performance or restitution in connection with any public works contract except any disputed work proceeding? | no__ | yes__ |
| (j) an OSHA Citation and Notification of Penalty containing a violation classified as serious? | no__ | yes__ |
| (k) an OSHA Citation and Notification of Penalty containing a violation classified as willful? | no__ | yes__ |
| (l) a prevailing wage or supplement payment violation? | no__ | yes__ |
| (m) a State Labor Law violation deemed willful? | no__ | yes__ |
| (n) any other federal, state or local citations, Notices, violation orders, pending administrative hearings or proceedings or determinations of a violation of any labor law or regulation? | no__ | yes__ |

- (o) any criminal investigation, felony indictment or conviction concerning formation of, or any business association with, an allegedly false or fraudulent women's, minority or disadvantaged business enterprise? no__ yes__
- (p) any denial, decertification, revocation or forfeiture of Women's Business Enterprise, Minority Business Enterprise or Disadvantaged Business Enterprise status? no__ yes__
- (q) rejection of a low bid on a State contract for failure to meet statutory affirmative action or M/WBE requirements? no__ yes__
- (r) a consent order with the NYS Department of Environmental Conservation, or a federal, state or local government enforcement determination involving a violation of federal, state or local environmental laws? no__ yes__
- (s) any bankruptcy proceeding? no__ yes__
- (t) any suspension or revocation of any business or professional license? no__ yes__
- (u) any citations, Notices, violation orders, pending administrative hearings or proceedings or determinations of a violation of:
 - * federal, state or local health laws, rules or regulations no__ yes__
 - * federal, state or local environmental laws, rules or regulations no__ yes__
 - * unemployment insurance or workers compensation coverage or claim requirements no__ yes__
 - * ERISA (Employee Retirement Income Security Act) no__ yes__
 - * federal, state or local human rights laws no__ yes__
 - * federal, state or local security laws? no__ yes__
- (v) a request to withdraw a bid submitted to a public owner or any claim of an error on a bid submitted to a public owner? no__ yes__

CERTIFICATION

The undersigned recognizes that this questionnaire is submitted for the express purpose of inducing the State of New York or its agencies and instrumentalities to award a contract, or approve a subcontract; acknowledges that the State or its agencies and instrumentalities may in its discretion, by means which it may choose, determine the truth and accuracy of all statements made herein; and states that the information submitted in this questionnaire and any attached pages is true, accurate and complete. It is further acknowledged that intentional submission of false or misleading information may constitute a felony under Penal Law Section 175.35 or may constitute a misdemeanor under Penal Law Sections 175.30, 210.35 or 210.45, and may also be punishable by a fine and/or imprisonment of up to five years under 18 USC Section 1001 and may result in a denial of contract award or contract termination.

Sworn to before me this

_____ day of _____, 20____

Signature of Officer

Notary Public

Title

Commission Expiration Date

Officer Name (Please Print)

As of (date): _____

		<u>ASSETS</u>	
<u>Current Assets</u>			
1. Cash		\$	_____
2. Accounts receivable - less allowance for doubtful accounts			_____
Retainers included in accounts receivable		\$	_____
Claims included in accounts receivable not yet approved or in litigation			_____
3. Notes receivable - due within one year			_____
4. Inventory - materials			_____
5. Contract costs in excess of billings on uncompleted contracts			_____
6. Accrued income receivable			_____
Interest			_____
Other (list) _____			_____
_____			_____
Total accrued income receivable			_____
7. Deposits			_____
Bid and plan _____			_____
Other (list) _____			_____
_____			_____
Total deposits			_____
8. Prepaid Expenses			_____
Income Taxes			_____
Insurance			_____
Other (list) _____			_____
_____			_____
Total prepaid expenses			_____
9. Other current Assets			_____
(list) _____			_____
_____			_____
Total other current assets			_____
10. Total Current Assets			_____
11. <u>Investments</u>			_____
Listed securities-present market value			_____
Unlisted securities-present value			_____
Total investments			_____
12. Fixed Assets			_____
Land			_____
Building and improvements			_____
Leasehold Improvements			_____
Machinery and equipment			_____

12. Fixed Assets (Continued)

Automotive equipment _____
Office furniture and fixtures _____
Other (list) _____

Total _____
Less: accumulated depreciation _____
Total fixed assets - net _____

13. Other Assets

Loans receivable - officers _____
 - employees _____
 - shareholders _____

Cash surrender value of officers' life insurance _____
Organization expense - net of amortization _____
Notes receivable - due after one year _____
Other (list) _____

Total Other Assets _____

14. TOTAL ASSETS

=====

LIABILITIES

Current Liabilities

15. Accounts payable		\$ _____
16. Loans from shareholders - due within one year		_____
17. Notes payable - due within one year		_____
18. Mortgage payable - due within one year		_____
19. Other payables - due within one year		\$ _____
(list) _____		_____
_____		_____
Total other payables - due within one year		_____
20. Billings in excess of costs and estimated earnings	_____	
21. Accrued expenses payable - salaries and wages	_____	
- payroll taxes	_____	
- employees' benefits	_____	
- insurance	_____	
- other	_____	
Total accrued expenses payable		_____
22. Dividends payable	_____	
23. Income taxes payable		
- state	_____	
- federal	_____	
- other	_____	
Total income taxes payable		_____
24. Total Current Liabilities		_____
25. <u>Deferred Income Taxes Payable</u>		
- state	_____	
- federal	_____	
- other	_____	
Total deferred income taxes		_____
26. <u>Long Term Liabilities</u>		
Loans from shareholders - due after one year	_____	
Notes payable - due after one year	_____	
Mortgage - due after one year	_____	
Other payables - due after one year	_____	
(list) _____	_____	
_____	_____	
Total long term liabilities		_____
27. <u>Other Liabilities</u>		
(list) _____	_____	
_____	_____	
Total other liabilities		_____
28. TOTAL LIABILITIES		_____

NET WORTH

29. Net Worth (if proprietorship or partnership) \$ _____

30. Stockholders' Equity

Common stock issued and outstanding _____

Preferred stock issued and outstanding _____

Retaining earnings _____

Total _____

Less: Treasury stock _____

31. TOTAL STOCKHOLDERS' EQUITY _____

32. TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY _____

NOTE: IF ADDITIONAL SPACE IS REQUIRED, PLEASE NOTE AND ATTACH SCHEDULE TO STATEMENT

Dated this _____ day of _____, 20__.

Name of Organization

By: _____
Signature and Title

Name (please print)

Article 2(g) - Affidavit of No Change

State of _____)
County of _____) s.s.:

The undersigned, being duly sworn, deposes and says:

- 1) I am an officer/owner of _____ (hereinafter the "Contractor"), which is currently submitting a bid on a State Contract.
- 2) Contractor previously submitted a NYS Uniform Contracting Questionnaire within one year prior to the date hereof to _____ in connection with a bid on another State Contract.
- 3) Attached is an accurate and true copy of such previously submitted NYS Uniform Contracting Questionnaire.
- 4) I hereby certify that, with the exception of the information specified in questions 10 and 11, there has been no material change in the information pertaining to the Contractor specified on such attached Questionnaire, except as follows: _____

- 5) I hereby certify that there has been no change in the information pertaining to the uncompleted construction contracts of the Contractor specified in question 11 on the attached Questionnaire, except as follows:

On this _____ day of _____ 20____, before me personally came _____ to me known to be the person described herein, and who executed the foregoing instrument, and severally acknowledged that (s)he executed the same.

(Seal)

Notary Public

ARTICLE 3(a) - Instructions for Certificate of Insurance

Use this form to certify insurance coverage and provide policy information.

Contractor must fill out Section 1 in its entirety before sending to the insurance agent.

Contractor is encouraged to send a copy of Section VIII, "General Conditions," Article 4, along with the Certificate of Insurance Form to its insurance agent in order that all required coverages and provisions are accounted for.

Insurance Agency

- 1) Complete Section 2 of the form.
- 2) Enter N/A if No Excess Umbrella (9) policy is in effect.
- 3) All insurance certificates must have a policy number entered otherwise it will result in rejection of the certificate.
- 4) Certificates must be signed by an authorized representative of the firm.
- 5) Specify policy if Other (10) is in effect, otherwise enter N/A.

Contractor

- 1) Complete Section 1 of the form.
- 2) At the top of the form, check "New" if you are submitting proof of coverage for a new contract. Check "Renewal" if you are submitting proof of renewals.
- 3) Submit original certificate and subsequent renewals to Division of Environmental Remediation, New York State Department of Environmental Conservation, 12th Floor, New York State Department of Environmental Conservation, 625 Broadway, Albany, New York 12233-7017, **Attention: "David J. Chiusano, Project Manager."** (Also see Section IV, Article 2 for name of project manager).

Certificate of Insurance

**New York State Department of Environmental Conservation
 Division of Environmental Remediation
 Remedial Bureau E, 12th Floor
 625 Broadway, Albany, NY 12233-7017**

**NYSDEC-DER Site No. 2-41-031
 Contract Number: D006547
 Certificate of Insurance
 _____New _____Renewal**

SECTION 1

Name and Address of Insured Contractor
 (for Coverages 1,2,3,4,6,7,8,9,10)

Name of Insured or Additional Insured

(for Coverage 5,6,7 & 10)

State of New York & NYS Department of Environmental Conservation
 Engineer
 Aris Food Transit

Location and Description of Work _____

SECTION 2

This is to certify that policies of insurance listed below have been issued to the contractor, named above, and are in force at this time.

<i>Insurance</i>	<i>Policy #</i>	<i>Name of Company Affording Coverage</i>	<i>Expir. Date</i>	<i>Limits of Liability (in thousands)</i>	
				<i>Each Occurrence</i>	<i>Aggregate</i>
1. Contractor's Liability					
2. Contractor's Protective Liability					
3. Complete Operations/Products					
4. Contractual Liability					
5. Owner's Protective Liability					
6. Automobile Liability					
7. Pollution Liability				\$5 million per claim if possible	
8. Worker's Comp. Disability Benefits				Limits as required by Law Limits as required by Law	
9. Excess Umbrella					
10. Other					

Such insurance as is herein certified: 1) applies to all operations of said insured in connection with the work required by the provisions of the documents forming this contract, 2) applies whether or not the contract documents between the insured contractor and the State of New York Department of Environmental Conservation have been executed, and 3) is written in accordance with the company's regular policies and endorsements, subject to the company's applicable manuals or rules and rates in effect as modified by this certificate and the insurance article of the contract.

No policy referred to herein shall be changed, cancelled or coverage terminated for any reason including expiration of the policy or non-payment of premiums until thirty (30) days written notice has been received by the Division of Environmental Remediation, Remedial Bureau E, NYS Dept. of Environmental Conservation, 12th floor, 625 Broadway, Albany, NY 12233-7017. Such notice shall be mailed via certified or registered mail.

Date Issued

By _____
(Signature of Authorized Representative)

Print Insurance Agency Name

Policy coverages must agree with coverages stated on the Certificate. False statements of coverage are punishable under Section 117 of the New York State Insurance Law.

ARTICLE 3(c) - Instruction for Performance Bond and Labor and Material Payment Bond

- 1) The performance bond and the labor and material payment bond are to be only submitted by the bidder who receives the Notice of Intent to Award letter from **Department**.
- 2) Use the forms that are included in the Contract Documents. **DO NOT RETYPE THE FORMS.**
- 3) Attach a **SEPARATE** certified power of attorney and surety financial statement to **EACH** bond (i.e., one set attached to performance bond and one set attached to labor and material payment bond).

ARTICLE 3(d) - Performance Bond

Date Bond Executed _____ NYSDEC-DER Site Number: 2-41-031

Date Contract Executed By Principal _____

Principal (Name and Address) _____

Surety (Name and Address - Indicate State of incorporation and location of principal office) _____

Full and Just Sum of Bond (Express in words) _____

(Express in figures) _____

Know all men by these presents, That we, the **Principal** and **Surety**, above named, are held and firmly bound unto the Department of Environmental Conservation for and on behalf of the People of the State of New York, hereinafter called the Department, in full and just sum of the amount stated above, good and lawful money of the United States of America, to the payment of which said sum, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the **Principal** has entered into a certain written contract with the Department, covering the project and specification above;

Now, Therefore, the condition of this obligation is such, that if the **Principal** shall well, truly and faithfully comply with and perform all of the terms, covenants and conditions of said contract on their (his, its) part to be kept and performed, according to the true intent and meaning of said contract, and shall protect the Department and the People of the State of New York against, and pay any and all amounts, damages, costs and judgments which may or shall be recovered against the Department or the State of New York may be called upon to pay to any person or corporation by reason of any damages arising or growing out of the doing of said work, or the repair or maintenance thereof, or the manner of doing the same, or the neglect of the **Principal**, or their (its) agents or servants, or the improper performance of the work by the **Principal**, or their (its) agents or servants, or the infringement of any patent or patent rights by reason of the use of materials furnished or work done as aforesaid or otherwise, then this obligation shall be null and void, otherwise to remain in full force and virtue.

And the **Surety**, for value received, hereby stipulates and agrees, if requested to do so by the department to fully perform and complete the work mentioned and described in the contract and specifications, pursuant to the terms, conditions and covenants thereof, if for any cause, the **Principal** fails or neglects to so fully perform and complete the work; and the **Surety** further agrees to commence the work of completion within twenty days after notice thereof from the Department, and to complete the work with all due diligence.

And the **Surety**, for value received hereby stipulates and agrees that no change, extension, alteration or addition to the terms of this contract or specifications, accompanying the same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension, alteration or addition.

In Testimony Whereof, the **Principal** and the President and Secretary of the **Surety** have caused this instrument to be signed and sealed on the date shown above.

Signed, sealed and delivered in the presence of _____

Name of Corporation

Corporate Seal of Principal
if a Corporation

By _____

Print Name _____

L.S.

Signature

Date _____

Corporate Seal of Surety Company

Corporation Surety

Business Address

By (President) _____

Attest (Secretary)

Date _____

(CORPORATE ACKNOWLEDGMENT WITH SEAL)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____ to me known, who being duly sworn, did depose and say that (s)he resides in _____, New York; that (s)he is _____ (*title*) of _____ (*firm*) the corporation described in and which executed the above instrument; that (s)he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that (s)he signed his(her) name thereto by like order.

Seal

Notary Public

(CORPORATE ACKNOWLEDGMENT WITHOUT SEAL)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____, to me known, who being duly sworn, did depose and say that (s)he resides in _____, New York; that (s)he is an officer of _____ (*firm*); namely, the _____ (*title*) of _____ (*firm*); that (s)he is authorized by the governing body of said corporation to sign contracts; and that (s)he did sign the foregoing instrument on behalf of, and with authority to bind said corporation.

Notary Public

(CO-PARTNERSHIP ACKNOWLEDGMENT)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20____, before me personally came _____ to me known and known to me to be a member of _____, the firm described in and which executed the foregoing instrument, and (s)he acknowledged to me that (s)he subscribed the name of said firm thereto on behalf of said firm for the purpose therein mentioned.

Seal

Notary Public

(INDIVIDUAL ACKNOWLEDGMENT)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20____, before me personally came _____ to me personally known, and known to me to be the individual described in, and who executed the foregoing instrument, and (s)he duly acknowledged to me that (s)he executed the same.

Seal

Notary Public

(ACKNOWLEDGMENT BY SURETY COMPANY)

State of _____)
County of _____) s.s.:

On this _____ day of _____, 20____ before me personally came _____ to me known, who being by me duly sworn, did depose and say that he/she resides in _____, that he/she is the _____ (*title*) of the _____ (*firm*), the corporation described in and which executed the within instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation and the he/she signed his name thereto by like order; and that the liabilities of said company do not exceed its assets as ascertained in the manner provided by the laws of the State of New York.

(Seal)

Notary Public

ARTICLE 3(e) - New York State Department of Environmental Conservation

Labor and Material Payment Bond

Date Bond Executed _____ NYSDEC-DER Site Number: 2-41-031

Date Contract Executed By Principal _____

Principal (Name and Address) _____

Surety (Name and Address - Indicate State of incorporation and location of principal office) _____

Full and Just Sum of Bond (Express in words) _____

(Express in figures) _____

Know all men by these presents, That We, the **Principal** and the **Surety** above named, are held and firmly bound unto the Department of Environmental Conservation for and on behalf of the People of the State of New York, in full and just sum of the amount stated above, good and lawful money of the United States of America, to the payment of which said sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the **Principal** has entered into a certain written contract with the Department of Environmental Conservation, covering the project and specification indicated above.

Now, Therefore, the condition of this obligation is such, that if the **Principal** shall promptly pay all moneys due to all persons furnishing labor and materials to him or his subcontractors in the prosecution of the work provided for in the contract, then this obligation shall be void, otherwise to remain in full force and effect;

Provided, however, that the Comptroller of the State of New York having required the **Principal** to furnish this bond in order to comply with the provisions of Section 137 of the State Finance Law, all rights and remedies on this bond shall inure solely to such persons and shall be determined in accordance with the provisions, conditions and limitations of said Section to the same extent as if they were copied at length herein; and

Further, provided, that the place of trial of any action on this bond shall be in the county in which the contract was to be performed, or if the contract was to be performed in more than one county, then in any such county, and not elsewhere.

In Testimony Whereof, the **Principal** and the President and Secretary of the **Surety** have caused this instrument to be signed and sealed on the date shown above.

Signed, sealed and delivered in the presence of _____

Name of Corporation

Corporate Seal of Principal
if a Corporation

By _____

Print Name

L.S.

Signature

Date _____

Corporate Seal of Surety Company

Corporation Surety

Business Address

By (President) _____

Attest (Secretary) _____

Date _____

(CORPORATE ACKNOWLEDGMENT WITH SEAL)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____ to me known, who being duly sworn, did depose and say that (s)he resides in _____, New York; that (s)he is _____ (*title*) of _____ (*firm*) the corporation described in and which executed the above instrument; that (s)he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that (s)he signed his(her) name thereto by like order.

Seal

Notary Public

(CORPORATE ACKNOWLEDGMENT WITHOUT SEAL)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____, to me known, who being duly sworn, did depose and say that (s)he resides in _____, New York; that (s)he is an officer of _____ (*firm*; namely, the _____ (*title*) of _____ (*firm*); that (s)he is authorized by the governing body of said corporation to sign contracts; and that (s)he did sign the foregoing instrument on behalf of, and with authority to bind said corporation.

Notary Public

(CO-PARTNERSHIP ACKNOWLEDGMENT)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20____, before me personally came _____ to me known and known to me to be a member of _____, the firm described in and which executed the foregoing instrument, and (s)he acknowledged to me that (s)he subscribed the name of said firm thereto on behalf of said firm for the purpose therein mentioned.

Seal

Notary Public

(INDIVIDUAL ACKNOWLEDGMENT)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20____, before me personally came _____ to me personally known, and known to me to be the individual described in, and who executed the foregoing instrument, and (s)he duly acknowledged to me that (s)he executed the same.

Seal

Notary Public

(ACKNOWLEDGMENT BY SURETY COMPANY)

State of _____)
County of _____) s.s.:

On this _____ day of _____, 20____ before me personally came _____ to me known, who being by me duly sworn, did depose and say that he/she resides in _____, that he/she is the _____ (*title*) of the _____ (*firm*), the corporation described in and which executed the within instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation and the he/she signed his name thereto by like order; and that the liabilities of said company do not exceed its assets as ascertained in the manner provided by the laws of the State of New York.

Seal

Notary Public

**CONSULTANT/CONTRACTOR DETAILED M/WBE-EEO UTILIZATION PLAN
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

(THE M/WBE-EEO GOALS MUST BE PLACED ON THE ENTIRE PROJECT COST)

Consultant/Contractor Name:			
Contract Type/Number:		Contract Award Date:	
Address:	City:	State:	Zip Code:
Project Owner Name:		Project/Grant No.:	
Address:	City:	State:	Zip Code:
Authorized Representative:		Title:	
Authorized Signature:			

EEO AND MBE/WBE CONTRACT SUMMARY (MUNICIPAL FORCE ACCOUNT N/A)

M/WBE CONTRACT SUMMARY	%	Amount	EEO CONTRACT SUMMARY	%	No./Employ.	Wk./Hrs.
1. Total Dollar Value of the Project			6. Total for all Employees			
2. Total Dollar Value of the Prime Contract			7. Total Goal for Minority Employees			
3. MBE Goal/Amount			8. Total Goal for Female Employees			
4. WBE Goal/Amount			9. EEO Combined Totals			
5. MBE/WBE Combined Totals						

Office of Minority & Women's Business Programs Use Only

Proposed Goals		Date Approved	Date Disapproved	Initials
MBE (%)	EEO-Minorities (%)			
WBE (%)	EEO-Minorities (%)			

SECTION I - MBE INFORMATION

In order to achieve the MBE Goals, New York State Certified MINORITY-OWNED firms are expected to participate in the following manner:

MBE Firm	Projected MBE Contract Amount and Award Date	Description of Work MBE	Contract Schedule/Start Date(s)	Contract Payment Schedule	Project Completion Date
Name: Address: City: State/Zip Code: Telephone No.:	\$ _____ DATE: _____				
Name: Address: City: State/Zip Code: Telephone No.:	\$ _____ DATE: _____				
Name: Address: City: State/Zip Code: Telephone No.:	\$ _____ DATE: _____				

SECTION II - WBE INFORMATION

In order to achieve the WBE Goals, New York State Certified WOMEN-OWNED firms are expected to participate in the following manner:

WBE Firm	Projected WBE Contract Amount and Award Date	Description of Work WBE	Contract Schedule/Start Date(s)	Contract Payment Schedule	Project Completion Date
Name: Address: City: State/Zip Code: Telephone No.:	\$ _____ DATE: _____				
Name: Address: City: State/Zip Code: Telephone No.:	\$ _____ DATE: _____				
Name: Address: City: State/Zip Code: Telephone No.:	\$ _____ DATE: _____				

SECTION III - EEO INFORMATION

In order to achieve the EEO Goals, Minorities and Females are expected to be employed in the following job categories for the specified amount of work hours:

Job Categories	Total Work Hours of Contract	All Employees		Minority Employees			
		Male	Female	African-American	Asian/Pacific Islander	Native American	Hispanic
Officials/ Managers							
Professionals							
Technicians							
Sales Workers							
Office/Clerical							
Craftsman							
Laborers							
Services/ Workers							
Totals							

VERIFICATION

STATE OF (_____ **)**

COUNTY OF(_____ **) SS No.:**

(A)

_____, being duly sworn, states he or she is the owner of (or a partner in) the enterprise making the foregoing Utilization Plan and representations made in the Utilization Plan are true to his or her own knowledge.

(B)

_____, being duly sworn, states that he or she is the

Name of Corporate Officer

_____, of _____, the

Title of Corporate Officer

Name of Corporation

enterprise making the foregoing Utilization Plan, that he or she has read the Utilization Plan and knows its contents, that the statements and representations made in the Utilization Plan are true to his or her knowledge, and that the Utilization Plan is made at the direction of the Board of Directors of the Corporation and/or owners.

Date

Signature

Sworn to before me this _____

day of _____, _____

Notary Public

Person assisting in completing the Utilization Plan:

Print Name

Signature

Telephone No.

CONSULTANT/CONTRACTOR DETAILED
M/WBE-EEO UTILIZATION PLAN

This Utilization Plan must be verified under oath in the following manner:

(A) if the enterprise is a sole proprietorship, by owner, or if the enterprise is a partnership, by partner; or

(B) if the enterprise is a corporation, by the principal officer designated by the Board of Directors. All Applicants/Contractors must read and review all items preceding the verification before signing. These items contain responsibilities of the Applicant, rights retained by the State of New York and penalties that may be applied for false statements.

FIRST, this Utilization Plan form, the supporting documents and any other information provided in support of the Utilization Plan are considered part of the Contract/Application. It is recognized and acknowledged that the information contained in this Utilization Plan is given under oath and that any misrepresentation made in this is subject to both the civil and criminal laws of the State of New York.

SECOND, by filing this Utilization Plan, the Contractor/Applicant consents to periodic examination of its books, records, and an interview of its principals and employees by the OMWBP for the purpose of determining the solicitation and utilization of certified Minority and Woman-Owned Business Enterprises.

THIRD, by filing this Utilization Plan, the Applicant/Contractor consents to inquiries that may be directed by the OMWBP to the Applicant's/Contractor's companies, banking institutions, credit agencies, and contractors for the purpose of ascertaining the Applicant's/Contractor's payments to subcontractors.

FOURTH, the Applicant/Contractor agrees to provide notice to the OMWBP of any material change in the information contained in the original application within fifteen (15) days of such change.

FIFTH, by filing this Utilization Plan, the Applicant/Contractor consents to the OMWBP's sharing reports, summaries, reviews, analyses, recommendations and determinations related to this Utilization Plan with other State agencies, which may request such information as a result of the Applicant/Contractor submitting this Utilization Plan.

I have read and acknowledge the foregoing.

Signature of Owner/Applicant

**CONTRACTOR'S APPLICATION FOR PAYMENT
(UNIT PRICE CONTRACT)**

Payee (Name and Address)	FOR INTERNAL USE ONLY		
	STATE COMPTROLLER'S PRE AUDIT CERTIFIED FOR PAYMENT IN THE SUM OF \$ _____ By: _____	Comptroller's Contract Number	
		Certificate Number	
		Originating Agency	
		Date Prepared	
Work Period Ending	20_____		

With Final Payment Attach Labor Affidavits for Payroll Period to Conform to New York State Labor Law Section 220.

SCHEDULE I FINANCIAL STATEMENT

CONTRACT AND CHANGE ORDER AMOUNTS		WORK COMPLETED TO DATE	
Line		Line	
1. Original Bid Price (Schedule V, Col. 1)	\$	1. Contract Work Performed (Schedule V, Col. 2)	\$
2. Change Order (Schedule VI, Col. 1)	\$	2. Change Orders (Schedule VI, Col. 2)	\$
3. Net Contract Amount	\$	3. Value earned to Date	\$
4. Maximum Retainage (5% of Line 3)	\$	4. Less Retainage (5% up to Maximum)	\$
		5. Value Earned to Date Less Retainage , Damages, & Credits	\$
		6. Less Prior Payments	\$
		7. This Payment	\$

SCHEDULE II CERTIFICATION BY CONTRACTOR

I _____ (Name) do hereby certify that I am _____ (Title) of the Company/Corporation herein referenced and contractor for the work described in the foregoing application for payment. According to my knowledge and belief all items and amounts shown on the face of this application for payment are correct, all work has been performed and/or materials supplied, the foregoing is a true and correct statement of the contract account up to and including the last day of the period covered by this application.

_____ Date _____ Signature

SCHEDULE III CERTIFICATION OF INSPECTOR

I certify that I have checked and verified the above application for payment; that to the best of my knowledge and belief it is a true and correct statement of work performed and/or material supplied by the contractor; that all work/or material included in this application has been inspected by me and/or by my duly authorized representative or assistants and that the work has been performed and/or materials supplied in full accordance with requirements of the referenced contract; and that payment claimed and requested by the contractor is correctly computed on the basis of work performed and/or material supplied to date.

_____ Date _____ Architect/Engineer

SCHEDULE IV ENDORSED BY DEPARTMENT OF ENVIRONMENTAL CONSERVATION

EXAMINED AND APPROVED BY RESPONSIBLE DIVISION OR BUREAU				APPROVED FOR PAYMENT BY DIVISION OF FISCAL MANAGEMENT			
_____ DATE	_____ SIGNATURE			_____ DATE	_____ SIGNATURE		

EXPENDITURES							LIQUIDATION				
Dept	Cost Center	Var	Yr	Object	Accum		Amount	Orig. Agency	PO/Contract	Line	F/P
					Dept	Statewide					

Project:	Contract Number
	Work Period

SCHEDULE V JOB PROGRESS

Itemized Proposal					Work Completed to Date		
Item No.	Unit Price	Estimated Quantity	Type of Work	COLUMN 1 Contract Amount	Actual Quantity	COLUMN 2 Amount	Code
				\$		\$	
Liquidated Damages						(\$)	
Credits						(\$)	
			Totals	\$		\$	

SCHEDULE VI APPROVED CHANGE ORDERS

COLUMN 1			WORK %		COLUMN 2			COLUMN 1			WORK %		COLUMN 2	
No.	+ -	Additions - Deductions	Prior	New	Value Earned to Date	No.	+ -	Additions-Deductions	Prior	New	Value Earned to Date			Value Earned to Date
		\$			\$			\$						\$
(SUB) TOTAL		\$			\$	TOTAL		\$			\$			\$

Project:	Contract Number
	Work Period

SCHEDULE V JOB PROGRESS

Item	Type of Work	COLUMN 1 Detailed Estimate	Work %		COLUMN 2 Value Earned to Date	Code
			Prior	New		
Liquidated Damages					(\$)	
Credits					(\$)	
	TOTALS	\$			\$	

SCHEDULE VI APPROVED CHANGE ORDERS

COLUMN 1			WORK %		COLUMN 2			COLUMN 1			WORK %		COLUMN 2				
No.	+ -	Additions - Deductions	Prior	New	Value Earned to Date	No.	+ -	Additions-Deductions	Prior	New	Value Earned to Date	No.	+ -	Additions-Deductions	Prior	New	Value Earned to Date
		\$			\$			\$									
(SUB) TOTAL		\$			\$	TOTAL		\$			\$						\$

Final Payment Release

For and in consideration of the receipt of final payment on the contract hereinafter identified, and in order to induce the New York State Department of Environmental Conservation (**Department**) to make such payment, the **Contractor** hereby releases the **Department** for any and all claims, of any nature whatsoever, arising under or in connection with the contract, except for the following claims:

(List any exempted claims)

For and in consideration of the receipt of final payment on the contract hereinafter identified, and in order to induce the **Department** to make such payment, the **Contractor** hereby states that it has paid all moneys due subcontractors, subconsultants, suppliers, material, men or others due payment for work or services performed in furtherance of this contract, except as follows:

(List all subcontractors, subconsultants, suppliers, etc. who have outstanding claims for payment or who have not been paid in full. A complete explanation of the facts and circumstances should be set forth on a separate sheet and attached hereto)

The **Contractor** hereby indemnifies and holds the **Department** and the State of New York harmless from any losses from claims, demands, payments, suits, actions, liens, recoveries and judgments of every nature and description brought or recovered against it by reason of failure to make such payments.

Contract Number: D006547

Firm

Print Name

Signature

Date

(CORPORATE ACKNOWLEDGMENT WITH SEAL)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____ to me known, who being duly sworn, did depose and say that (s)he resides in _____, New York; that (s)he is _____ (*title*) of _____ (*firm*) the corporation described in and which executed the above instrument; that (s)he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that (s)he signed his(her) name thereto by like order.

Seal

Notary Public

(CORPORATE ACKNOWLEDGMENT WITH SEAL)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____ to me known, who being duly sworn, did depose and say that (s)he resides in _____, New York; that (s)he is _____ (*title*) of _____ (*firm*) the corporation described in and which executed the above instrument; that (s)he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that (s)he signed his(her) name thereto by like order.

Seal

Notary Public

(CORPORATE ACKNOWLEDGMENT WITHOUT SEAL)

State of _____)
County of _____) s.s.:

On the ____ day of _____, 20 ____, before me personally came _____, to me known, who being duly sworn, did depose and say that (s)he resides in _____, New York; that (s)he is an officer of _____ (*firm*) ; namely, the _____ (*title*) of _____ (*firm*); that (s)he is authorized by the governing body of said corporation to sign contracts; and that (s)he did sign the foregoing instrument on behalf of, and with authority to bind said corporation.

Notary Public

ARTICLE 4(c)

Payment Affidavit

This Article 4(c) is not applicable

**Office of the State Comptroller
 Division of Pre-Audit and Accounting Records
 BUREAU OF STATE EXPENDITURES**

New York State Labor Law, Section 220-a
 Prime Contractor’s Certification

- 1) That I am an officer of _____ and am duly authorized to make this affidavit on behalf of the prime contractor on public contract No. _____.
- 2) That I fully comprehend the terms and provisions of Section 220-a of the Labor Law.
- 3) That, except as herein stated, there are no amounts due and owing to or on behalf of laborers employed on the project by the contractor. (Set forth any unpaid wages and supplements, if none, so state).

Name	Amount
<hr/>	

- 4) That the contractor hereby files every verified statement(s) required to be obtained by the contractor from the subcontractor(s).
- 5) That, upon information and belief, except as stated herein, all laborers (exclusive of executive or supervisory employees) employed on the project have been paid and prevailing wages and supplements for their services through _____, (if more than one subcontractor list name and date separately) the last day worked on the project by their subcontractor(s), (Set forth any unpaid wages and supplements, if none, so state and utilize clause 5 (A)).

Name	Amount
<hr/>	

- (5a) That the contractor has no knowledge of amounts owing to or on behalf of any laborers of its subcontractor(s).
- 6) In the event it is determined by the Commissioner of Labor that the wages or supplements or both of any such subcontractor(s) have not been paid or provided pursuant to the appropriate schedule of wages and supplants, then the contractor shall be responsible for payment of such wages and supplants pursuant to the provision of Section 223 of the Labor Law.

_____ Signature	_____ Print Name	_____ Title
--------------------	---------------------	----------------

Acknowledgment:

STATE OF _____)
) SS:
 COUNTY OF _____)

On the _____ day of _____, 20____, before me personally came _____, to me known and known to me to be the person described in an executed for foregoing instrument and acknowledged to me that (s)he executed the same.

_____ Notary Public	_____ County
-------------------------------	------------------------

If this affidavit is verified by an oath administered by a notary public in a foreign country other than Canada, it must be accompanied by a certificate authenticating the authority of the notary who administers the oath. (See CPLR § 2309(c); Real Property Law, § 311, 312).

Office of the State Comptroller
Division of Pre-Audit and Accounting Records
BUREAU OF STATE EXPENDITURES

New York State Labor Law, Section 220-a, Subcontractor's Certification

- 1) That I am an officer of _____ a subcontractor on public Contract Number _____ and I am duly authorized to make this affidavit on behalf of the firm.
- 2) That I make this affidavit in order to comply with the provisions of Section 220-a of the Labor Law.
- 3) That on _____ we received from _____ the prime contractor a copy of the initial/revised schedule of wages and supplements Prevailing Rate Schedule Case Number _____ (PRC) specified in the public improvement contract.
- 4) That I have reviewed such schedule(s), and agree to pay the applicable prevailing wages and to pay or provide the supplements specified therein.

Signature

Print Name

Title

Acknowledgment

STATE OF _____)
) SS:
 COUNTY OF _____)

On the _____ day of _____, 20____, before me personally came _____, to me known and known to me to be the person described in and who executed for foregoing instrument and acknowledged to me that (s)he executed the same.

Notary Public

If this affidavit is verified by an oath administered by a notary public in a foreign country other than Canada, it must be accompanied by a certificate authenticating the authority of the notary who administers the oath. (See CPLR § 2309(c); Real Property Law, § 311, 312).

SECTION VI

Agreement

This Agreement by and between the **New York State Department of Environmental Conservation**, (hereinafter referred to as **Department**) having offices at 625 Broadway, Albany, New York 12233 and

_____ a corporation organized and existing under the laws of the State of _____

_____ a partnership, consisting of

_____ an individual conducting business as

the location of whose principal office is _____ hereinafter called "**Contractor.**"

WITNESSETH

Whereas, **Department** is empowered by law to obtain services; the performance of these services is essential to **Department**; and **Department**, after fully examining all of its internal capabilities and thoroughly investigating all possible alternative approaches, has determined that certain tasks can best be accomplished through a contract;

Whereas, **Contractor** hereby represents that it is capable of providing the services which are the subject matter of this Contract;

Now Therefore, **Department and Contractor**, in consideration of the mutual covenants hereinafter set forth agree as follows:

ARTICLE 1 - Defined Terms

Terms used in the Agreement which are defined in the Contract Documents have the intent and meanings assigned to them in the Contract Documents.

ARTICLE 2 - Work

As indicated or specified in the Contract Documents, **Contractor** shall complete in a timely and workmanlike manner, any and all obligations, duties and responsibilities, and provide any and all labor, materials, equipment, temporary facilities, and incidentals necessary to complete the construction generally identified and shown on the plans and Contract Documents entitled:

New York State Department of Environmental Conservation
Site Name: Kleigman Brothers Operable Unit No. 1
Contract Number: D006547
Date: April 2007

ARTICLE 3 - Engineer

Camp, Dresser, and McKee (CDM) shall assume all duties and responsibilities of and have the rights and authority assigned to **Engineer** in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 4 - Contract Documents

The Documents which comprise the entire Contract between **Department** and **Contractor** concerning the Work consist of the following:

- 4.0 Appendices A and B
- 4.1 Rider to Appendix B
- 4.2 **Engineer's** written clarifications and interpretations
- 4.3 Change Orders
- 4.4 Administrative Agreements
- 4.5 Field Orders
- 4.6 Proposed Change Orders signed by **Department**
- 4.7 Approved Shop Drawings
- 4.8 Addenda
- 4.9 Agreement
- 4.10 Measurement for Payment
- 4.11 Bid Forms and Attachments Exclusive of Bonds and Insurance Certificates
- 4.12 Drawings, Plans
- 4.13 Supplementary Specifications
- 4.14 Supplementary Conditions
- 4.15 Standard Specifications
- 4.16 General Conditions
- 4.17 Supplementary Bidding Information and Requirements
- 4.18 Bidding Information and Requirements
- 4.19 Terms and Definitions
- 4.20 Advertisement
- 4.21 Bonds and Insurance Certificates

In the event of a conflict between the documents set forth above, they shall be entitled to priority according to the order in which they are listed.

ARTICLE 5 - Contractor's Representations

In order to induce **Department** to enter into this Agreement, **Contractor** makes the following representations:

- 5.1 **Contractor** has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and applicable Laws that in any manner may affect cost, schedule, progress, performance or furnishing of the Work.
- 5.2 **Contractor** has studied carefully all reports of explorations and tests of subsurface conditions and drawings of physical conditions which are identified in Information to Bidders, as provided in the General Conditions, and accepts the determination set forth in said Section to the extent of the technical data contained in such reports and drawings upon which **Contractor** is entitled to reply.
- 5.3 **Contractor** has obtained and carefully studied all such examinations, investigations, explorations, tests, reports and studies which pertain to the subsurface or physical conditions at or contiguous to the site or

otherwise may affect the cost, schedule, progress, performance or furnishing of the Work as **Contractor** considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Article 3 of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by **Contractor** for such purposes.

- 5.4 **Contractor** has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said Underground Facilities are or will be required by **Contractor** in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Article 3 of the General Conditions.
- 5.5 **Contractor** has correlated (or assumes responsibility for correlating) the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.
- 5.6 **Contractor** has given **Engineer** written notice of all conflicts, errors or discrepancies that he (she) has discovered in the Contract Documents and any written resolution thereof is acceptable to **Contractor**.

ARTICLE 6 - Contract Time

The number of days within which, or alternatively, the dates by which, the Work, or any specified part thereof, is to be completed (the Contract Times) are set forth as follows:

- 6.1 The Work will be Substantially Completed within **one hundred eighty calendar (180) days** from the date established in the Notice to Proceed.
- 6.2 Separable parts of the Work, if specified in an Attachment A to this Agreement, will be Substantially Completed within the number of days stated in Attachment A from the date established in the Notice to Proceed.
- 6.3 The Work will be completed and ready for final payment in accordance with the General Conditions within **two hundred ten calendar (210) days** from the date established in the Notice to Proceed or within 60 days of substantial completion, whichever is sooner.
- 6.4 **Department** and **Contractor** recognize that the Contract Time(s) specified in paragraphs 6.1, 6.2, and 6.3 above are of the essence of this Agreement, and that **Department** may suffer financial loss if the Work is not completed within the Contract Time(s) specified above, plus any extensions thereof allowed in accordance with the General Conditions, as amended or supplemented in the Supplementary Conditions.
- 6.5 Accordingly, **Contractor** agrees to forfeit and pay **Department** as liquidated damages, and not as a penalty, the amount of **nine hundred dollars (\$900)** for each day that expires after the Contract Time specified in paragraph 6.1 above for Substantial Completion until the Work is Substantially Complete. **Contractor** further agrees to pay **Department** as liquidated damages, and not as a penalty, each of the amounts set forth in attachment a to this agreement for each day that expires after each of the contract times specified in paragraph 6.2 above for substantial completion until the each of the separable parts of the work is substantially complete. After substantial completion of the work, if **Contractor** shall neglect, refuse or fail to complete the remaining work within the contract time or any proper extension thereof granted by **Department**, **Contractor** shall pay **Department** as liquidated damages, and not as

a penalty, the amount of **five hundred eighty dollars (\$580)** for each day that expires after the Contract Time specified in paragraph 6.3 above for completion and readiness for payment. These liquidated damages are additive and represent a reasonable estimate, in lieu of any such proof, of **Department's** extra expenses for Inspection, engineering services, administrative costs, and Interim excess operating costs for each day that expires after the associated Contract Time.

- 6.6 In addition to the liquidated damage amounts set forth in paragraph 6.5 above, **Contractor** agrees to pay **Department's** additional actual damages arising out of the types of expenses itemized below for each day that expires after each of the Contract Times specified in paragraph 6.1 above for Completion of each of the designated parts of the Work until each of the designated parts of the Work achieves the specified completion. These actual damages are additive and shall equal **Department's** expenditures for costs other than those itemized in paragraph 6.5, including, but not limited to, delay damage settlements or awards related to other separate contracts, delay penalties or fines imposed by regulatory agencies, contract damage and loss of use, excess financing costs, and professional fees and related expenses incurred thereto.

ARTICLE 7 - Alterations and Omissions

Department reserves the right, at any time during the progress of the work, to alter the plans or omit any portion of the work as it may deem reasonably necessary for the public interest; making allowances for additions and deductions with compensation made in accordance with the Contract Documents.

ARTICLE 8 - Determinations as to Variances

In case of any ambiguity in the Contract Documents, the matter must be immediately submitted to the Representative of **Department** designated in the Contract Documents, who shall adjust the same, and his (her) decision in relation thereto shall be final and conclusive upon the parties.

ARTICLE 9 - Payment Procedures

Contractor shall submit Applications for Payment on standard form in accordance with the General Conditions. Applications for Payment will be processed by **Engineer** as provided in the General Conditions, as amended or supplemented in the Supplementary Conditions and in accordance with Section 139-f of the State Finance Law.

- 9.1 **Progress Payments.** **Contractor** shall submit Applications for Payments to **Engineer** for review no more frequently than monthly in accordance with paragraph 13.2 of the General Conditions from the date when the Contract Time commences to run. **Department** shall make progress payments against the Contract Price on the basis of **Contractor's** Applications for Payment as recommended by **Engineer** as provided below. All progress payments will be calculated on the basis of the progress of the Work measured by the schedule of values established pursuant to paragraph 1.4.3 of the General Conditions. Progress payments will also be made for materials pertinent to the Contract in accordance with the General Conditions.

- 9.1.1 Prior to Substantial Completion of the Work, progress payments will be made less five percent (5%) the aggregate of payments (i.e. retainage) previously made and less an amount necessary to satisfy any claims, liens, or judgments against **Contractor** which have not been suitably discharged.

- 9.2 **Payment upon substantial completion.** When the work or major portions thereof, as contemplated in the Contract Documents, is substantially completed, **Contractor** shall submit to **Department**, an Application for Payment in accordance with the General Conditions for the remaining amount of the contract balance or amount due for that major portion completed. **Department** will pay the remaining Contract balance, or amount due for that major portion completed, less two times the value of any

remaining items to be completed and an amount necessary to satisfy any claims, liens, judgments against **Contractor** which have not been suitably discharged. Payment for remaining items will be made upon their completion.

- 9.3 **Final Payment.** Upon final completion of the physical Work and acceptance of the Work in accordance with the General Conditions, **Department** shall pay the remainder of the Contract Price as recommended by **Engineer**.

ARTICLE 10 - No Estimate on Contractor's Noncompliance

It is further agreed that so long as **Contractor** has not complied with any lawful or proper direction concerning the work or material given by **Department**, **Contractor** shall not be entitled to have any estimate made for the purpose of payment, nor shall any estimate be rendered on account of work done or material furnished until **Contractor** has fully and satisfactorily complied with such direction.

ARTICLE 11 - Delays, Inefficiencies, and Interference

Contractor agrees to make no claim for any consequential damages attributable to any delays, or act in the performance of this contract which are not directly occasioned by any act or omission to act by the State or any of its representatives. In the event **Contractor** completes the work prior to the contract completion date set forth in the proposal, **Contractor** hereby agrees to make no claim for extra costs due to delays, interferences or inefficiencies in the performance of the work.

- 1) **Contractor** further agrees that it has included in its bid prices for the various items of the contract any additional costs for delays, inefficiencies, or interferences affecting the performance or scheduling of contract work caused by, or attributable to, the following instances:
 - a) The work or the presence on the Site of any third party, including but not limited to that of other contractors or personnel employed by the State, or by other public bodies, by railroad, transportation or utility companies or corporations, or by private enterprises, or any delay in progressing such work by any third party.
 - b) The existence of any facility or appurtenance owned, operated, or maintained by any third party.
 - c) The act, or failure to act, of any other public or governmental body, including, but not limited to, approvals, permits, restrictions, regulations or ordinances.
 - d) Restraining orders, injunctions, or judgments issued by a court.
 - e) Any labor boycott, strike, picketing or similar situation.
 - f) Any shortages of supplies or materials required by the contract work.
 - g) Any situation which was, or should have been within, the contemplation of the parties at the time of entering into the contract.

ARTICLE 12 - Postponement, Suspension or Termination

- 12.1 **Department** shall have the right to postpone, suspend or terminate this Contract in whole or in part for the convenience of **Department**. If, after termination for cause of **Contractor** it is determined that no cause existed for termination of **Contractor**, such termination shall be deemed to have been made for the convenience of **Department**.

- 12.2 If this Contract is terminated by **Department** for convenience or cause, **Department** shall make payment on an equitable basis for all work performed in accordance with the Contract Documents prior to termination in accordance with paragraphs 12.3 and 12.4 below.
- 12.3 If this contract is terminated for cause, no payment shall be made for anticipated profit on unperformed work or services. Additionally, **Department** may adjust any payment due to **Contractor** at the time of termination to account for any additional costs to **Department** because of **Contractor's** default.
- 12.4 If this contract is terminated for convenience, payment shall be made for any services rendered and expenses incurred prior to the termination, in addition to termination settlement costs reasonably incurred by **Contractor** which had become firm prior to the termination.
- 12.5 Upon termination of this Contract under this Agreement, **Department** may take over the work or may award or negotiate a contract with another party to complete work required by these Contract Documents.

ARTICLE 13 - Completion of Physical Work and Final Acceptance

The time within which **Department** may bring an action on the Contract against **Contractor** shall be computed from the date of completion of the physical Work. In accordance with Section 138-a of the State Finance Law, **Contractor** shall notify **Department** in writing that the physical Work has been completed. The date of completion must be no more than thirty days prior to the date of the notice. This notice must be delivered personally or by either registered or certified mail, return receipt requested to the exact address given below.

George W. Harris, Chief
Remedial Bureau E, Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233-7017

If **Department** disagrees with the date set forth in the notice, it will so advise **Contractor** in writing within 30 days of receipt of the notice. This notice will be delivered by either registered or certified mail, return receipt requested to **Contractor's** address as shown in this Agreement.

If **Department** accepts **Contractor's** date of completion of physical Work, **Department's** final acceptance of work shall be as of that date.

When, in the opinion of **Department**, **Contractor** has fully performed the physical Work under the Contract, **Department** shall notify **Contractor** in writing of final acceptance.

ARTICLE 14 - Final Payment

After the final acceptance of the work, **Engineer** shall prepare a final agreement of the work performed and the materials placed and shall compute the value of such work and materials under and according to the terms of the contract. This agreement shall be certified, as to its correctness, by **Engineer** and submitted for final approval to **Department**. The Representative of **Department** designated in the Contract Documents shall have the right to reject the whole or any portion of the final agreement, should the said certificate of **Engineer** be found or known to be inconsistent with the terms of the agreement or otherwise improperly given and upon failure of **Contractor** to provide requested documentation including but not limited to that regarding payment of wages, suppliers or subcontractors. All certificates upon which partial payments may have been made being merely estimates, shall be subject to correction in the final certificate or final agreement.

ARTICLE 15 - Disposition of Documents and Data

Upon final acceptance of work under this Contract or termination of this Contract pursuant to this Agreement, or upon written demand of **Department**, **Contractor** shall promptly deliver or otherwise make available to **Department** all data, drawings, reports, estimates, and such other information and materials as may have been accumulated by **Contractor** in performing this Contract.

ARTICLE 16 - Applicable Law; Jurisdiction; Service of Legal Process

Contractor agrees:

- 16.1 That this Agreement is subject to and governed by all applicable federal and New York State law.
- 16.2 To procure all necessary licenses and permits.
- 16.3 To voluntarily and irrevocably submit to the jurisdiction of a New York State Court of competent jurisdiction, to resolve any dispute or controversy arising out of this Contract.
- 16.4 That the venue of any action at law or in equity commenced against **Department** arising out of a Project in one of **Department's** regions, shall be in the county in that Region where **Department** regional headquarters is located.
- 16.5 That the service of legal process or any notices in connection with a dispute or controversy arising out of this Contract, by United States registered mail, postage prepaid, addressed to the Designated representative of **Department** at the address stated in the Contract. Documents shall constitute good and valid service of process upon **Engineer**.
- 16.6 To waive any defense based on or alleging lack of jurisdiction, improper venue, or invalid service, if there is compliance with paragraphs 16.3 and 16.4 in this Article.
- 16.7 This Contract may be presented in court as conclusive evidence of the foregoing agreement.

ARTICLE 17 - Sales and Use Tax Exemption

Contractor represents that this project has been bid in such a manner that **Department** has full advantage of available exemptions from sales and compensating use taxes. Accordingly, **Contractor** agrees to make all payment requests in a manner which affords **Department** full advantage of such exemptions. Further, **Contractor** agrees to complete and to require all subcontractors and material men to complete a Contractor Exempt Purchase Certificate in the name of the New York State Department of Environmental Conservation, which shall be furnished to all persons, firms or corporations from whom they purchase materials, equipment or supplies which are tax exempt by reason of the fact that they will be sold to **Department**, or will be used as an integral component in the construction, rehabilitation, or improvement of any structure of building required by the Contract Documents.

Contractor agrees to maintain and keep, and to contractually require all subcontractors and material men to maintain and keep, records relating to the tax exemption of material, equipment and Supplies for a period of six years. The six year period shall commence to run as of the date of final payment.

ARTICLE 18 - Effective Date

This Contract shall take effect as of the date it is approved and filed by the Comptroller.

ARTICLE 19 - Contract Price

The maximum payment which **Department** shall pay to **Contractor**, and which **Contractor** agrees to accept as full payment for its work under this Contract, is the total of:

1) Bid \$ _____

2) Bid Alternate (Pollution Liability Insurance) \$ _____

Plus change order(s) **Total** \$ _____

IN WITNESS WHEREOF, representatives of the Department and the Contractor have executed this Contract on the day and year written beneath their respective signatures. The signatory for the Department provides the following Agency Certification: "In addition to the acceptance of this contract, I also certify that original copies of this signature page will be attached to all other exact copies of this contract."

FOR DEPARTMENT

By: _____

Title: _____

Date: _____

FOR CONTRACTOR

By: _____

Title: _____

Date: _____

Approved as to Form:

By: _____

For Attorney General

Date: _____

Approved:

**Thomas P. DiNapoli
State Comptroller**

By: _____

Date: _____

This contract is not effective until it is approved by the State Comptroller and filed in his office (Section 112, State Finance Law).

(CORPORATE ACKNOWLEDGMENT WITH SEAL)

State of)
County of) s.s.:

On the ___ day of ___, 20 ___, before me personally came ___ to me known, who being duly sworn, did depose and say that (s)he resides in ___, New York; that (s)he is ___ (title) of ___ (firm) the corporation described in and which executed the above instrument; that (s)he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that (s)he signed his(her) name thereto by like order.

Seal

Notary Public

(CORPORATE ACKNOWLEDGMENT WITHOUT SEAL)

State of)
County of) s.s.:

On the ___ day of ___, 20 ___, before me personally came ___ to me known, who being duly sworn, did depose and say that (s)he resides in ___, New York; that (s)he is an officer of ___ (firm); namely, the ___ (title) of ___ (firm); that (s)he is authorized by the governing body of said corporation to sign contracts; and that (s)he did sign the foregoing instrument on behalf of, and with authority to bind said corporation.

Notary Public

(CO-PARTNERSHIP ACKNOWLEDGMENT)

State of)
County of) s.s.:

On the ___ day of ___, 20 ___, before me personally came ___ to me known and known to me to be a member of ___, the firm described in and which executed the foregoing instrument, and (s)he acknowledged to me that (s)he subscribed the name of said firm thereto on behalf of said firm for the purpose therein mentioned.

Seal

Notary Public

(INDIVIDUAL ACKNOWLEDGMENT)

State of)
County of) s.s.:

On the ___ day of ___, 20 ___, before me personally came ___ to me personally known, and known to me to be the individual described in, and who executed the foregoing instrument, and (s)he duly acknowledged to me that (s)he executed the same.

Seal

Notary Public

STANDARD CLAUSES FOR NYS CONTRACTS

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the State, whether a contractor, licenser, licensee, lessor, lessee or any other party):

1. EXECUTORY CLAUSE. In accordance with Section 41 of the State Finance Law, the State shall have no liability under this contract to the Contractor or to anyone else beyond funds appropriated and available for this contract.

2. NON-ASSIGNMENT CLAUSE. In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the previous consent, in writing, of the State and any attempts to assign the contract without the State's written consent are null and void. The Contractor may, however, assign its right to receive payment without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.

3. COMPTROLLER'S APPROVAL. In accordance with Section 112 of the State Finance Law (or, if this contract is with the State University or City University of New York, Section 355 or Section 6218 of the Education Law), if this contract exceeds \$50,000 (or the minimum thresholds agreed to by the Office of the State Comptroller for certain S.U.N.Y. and C.U.N.Y. contracts), or if this is an amendment for any amount to a contract which, as so amended, exceeds said statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds \$10,000, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services is required when such contracts exceed \$85,000 (State Finance Law Section 163.6.a).

4. WORKERS' COMPENSATION BENEFITS. In accordance with Section 142 of the State Finance Law, this contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.

5. NON-DISCRIMINATION REQUIREMENTS. To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, sexual orientation, age, disability, genetic predisposition or carrier status, or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex, or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the

performance of work under this contract. Contractor is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

6. WAGE AND HOURS PROVISIONS. If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law.

7. NON-COLLUSIVE BIDDING CERTIFICATION. In accordance with Section 139-d of the State Finance Law, if this contract was awarded based upon the submission of bids, Contractor affirms, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further affirms that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the State a non-collusive bidding certification on Contractor's behalf.

8. INTERNATIONAL BOYCOTT PROHIBITION. In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds \$5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2NYCRR 105.4).

9. SET-OFF RIGHTS. The State shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the State's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract with any State department or agency, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.

10. RECORDS. The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively, "the Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter. The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this contract, shall have access to the Records during normal business hours at an office of the Contractor

within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.

11. IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION.

(a) FEDERAL EMPLOYER IDENTIFICATION NUMBER and/or FEDERAL SOCIAL SECURITY NUMBER. All invoices or New York State standard vouchers submitted for payment for the sale of goods or services or the lease of real or personal property to a New York State agency must include the payee's identification number, i.e., the seller's or lessor's identification number. The number is either the payee's Federal employer identification number or Federal social security number, or both such numbers when the payee has both such numbers. Failure to include this number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on its invoice or New York State standard voucher, must give the reason or reasons why the payee does not have such number or numbers.

(b) PRIVACY NOTIFICATION. (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law.

(2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or lease. The information is maintained in New York State's Central Accounting System by the Director of Accounting Operations, Office of the State Comptroller, 110 State Street, Albany, New York 12236.

12. EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITIES AND WOMEN.

In accordance with Section 312 of the Executive Law, if this contract is: (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000.00, whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written agreement in excess of \$100,000.00 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written agreement in excess of \$100,000.00 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project, then:

(a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination. Affirmative action shall mean recruitment,

employment, job assignment, promotion, upgradings, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation;

(b) at the request of the contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the contractor's obligations herein; and

(c) the Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Contractor will include the provisions of "a", "b", and "c" above, in every subcontract over \$25,000.00 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State; or (iii) banking services, insurance policies or the sale of securities. The State shall consider compliance by a contractor or subcontractor with the requirements of any federal law concerning equal employment opportunity which effectuates the purpose of this section. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the Governor's Office of Minority and Women's Business Development pertaining hereto.

13. CONFLICTING TERMS. In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Appendix A, the terms of this Appendix A shall control.

14. GOVERNING LAW. This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

15. LATE PAYMENT. Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article 11-A of the State Finance Law to the extent required by law.

16. NO ARBITRATION. Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.

17. SERVICE OF PROCESS. In addition to the methods of service allowed by the State Civil Practice Law & Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

18. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS. The Contractor certifies and warrants that all wood products to be used under this contract award will be in accordance with, but not limited to, the specifications and provisions of State Finance Law §165. (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the responsibility of the contractor to establish to meet with the approval of the State.

In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in §165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the State.

19. MACBRIDE FAIR EMPLOYMENT PRINCIPLES. In accordance with the MacBride Fair Employment Principles (Chapter 807 of the Laws of 1992), the Contractor hereby stipulates that the Contractor either (a) has no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles (as described in Section 165 of the New York State Finance Law), and shall permit independent monitoring of compliance with such principles.

20. OMNIBUS PROCUREMENT ACT OF 1992. It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

NYS Department of Economic Development
Division for Small Business
30 South Pearl St -- 7th Floor
Albany, New York 12245
Telephone: 518-292-5220
Fax: 518-292-5884
<http://www.empire.state.ny.us>

A directory of certified minority and women-owned business enterprises is available from:

NYS Department of Economic Development
Division of Minority and Women's Business Development
30 South Pearl St -- 2nd Floor
Albany, New York 12245
Telephone: 518-292-5250
Fax: 518-292-5803
<http://www.empire.state.ny.us>

The Omnibus Procurement Act of 1992 requires that by signing this bid proposal or contract, as applicable, Contractors certify that whenever the total bid amount is greater than \$1 million:

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

(b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Contractor agrees to document these efforts and to provide said documentation to the State upon request; and

(d) The Contractor acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

21. RECIPROCITY AND SANCTIONS PROVISIONS. Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 15, 2002, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii. Contact NYS Department of Economic Development for a current list of jurisdictions subject to this provision.

22. PURCHASES OF APPAREL. In accordance with State Finance Law 162 (4-a), the State shall not purchase any apparel from any vendor unable or unwilling to certify that: (i) such apparel was manufactured in compliance with all applicable labor and occupational safety laws, including, but not limited to, child labor laws, wage and hours laws and workplace safety laws, and (ii) vendor will supply, with its bid (or, if not a bid situation, prior to or at the time of signing a contract with the State), if known, the names and addresses of each subcontractor and a list of all manufacturing plants to be utilized by the bidder.

APPENDIX B

Standard Clauses for All New York State Department of Environmental Conservation Contracts

The parties to the attached contract, license, lease, grant, amendment or other agreement of any kind (hereinafter "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract. The word "Contractor" herein refers to any party to the contract, other than the New York State Department of Environmental Conservation (hereinafter "Department").

I. Postponement, suspension, abandonment or termination by the Department: The Department shall have the right to postpone, suspend, abandon or terminate this contract, and such actions shall in no event be deemed a breach of contract. In the event of any termination, postponement, delay, suspension or abandonment, the Contractor shall immediately stop work, take steps to incur no additional obligations, and to limit further expenditures. Within 15 days of receipt of notice, the Contractor shall deliver to the Department all data, reports, plans, or other documentation related to the performance of this contract, including but not limited to source codes and specifications, guarantees, warranties, as-built plans and shop drawings. In any of these events, the Department shall make settlement with the Contractor upon an equitable basis as determined by the Department which shall fix the value of the work which was performed by the Contractor prior to the postponement, suspension, abandonment or termination of this contract. This clause shall not apply to this contract if the contract contains other provisions applicable to postponement, suspension or termination of the contract.

II. Indemnification and Holdharmless The Contractor agrees that it will indemnify and save harmless the Department and the State of New York from and against all losses from claims, demands, payments, suits, actions, recoveries and judgments of every nature and description brought or recovered against it by reason of any omission or tortious act of the Contractor, its agents, employees, suppliers or subcontractors in the performance of this contract. The Department and the State of New York may retain such monies from the amount due Contractor as may be necessary to satisfy any claim for damages, costs and the like, which is asserted against the Department and/or the State of New York.

III. Conflict of Interest (a) Organizational Conflict of Interest. To the best of the Contractor's knowledge and belief, the Contractor warrants that there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as herein defined, or

that the Contractor has disclosed all such relevant information to the Department.

(1) An organizational conflict of interest exists when the nature of the work to be performed under this contract may, without some restriction on future activities, impair or appear to impair the Contractor's objectivity in performing the work for the Department.

(2) The Contractor agrees that if an actual, or potential organizational conflict of interest is discovered at any time after award, whether before or during performance, the Contractor will immediately make a full disclosure in writing to the Department. This disclosure shall include a description of actions which the Contractor has taken or proposes to take, after consultation with the Department, to avoid, mitigate, or minimize the actual or potential conflict.

(3) To the extent that the work under this contract requires access to personal, proprietary or confidential business or financial data of persons or other companies, and as long as such data remains proprietary or confidential, the Contractor shall protect such data from unauthorized use and disclosure and agrees not to use it to compete with such companies.

(b) Personal Conflict of Interest: The following provisions with regard to management or professional level employee personnel performing under this contract shall apply until the earlier of the termination date of the affected employee(s) or the duration of the contract.

(1) A personal conflict of interest is defined as a relationship of an employee, subcontractor employee, or consultant with an entity that may impair or appear to impair the objectivity of the employee, subcontractor employee, or consultant in performing the contract work. The Contractor agrees to notify the Department immediately of any actual, or potential personal conflict of interest with regard to any such person working on or having access to information regarding this contract, as soon as Contractor becomes aware of such conflict. The Department will notify the Contractor of the appropriate action to be taken.

(2) The Contractor agrees to advise all management or professional level employees involved in the work of this contract, that they must report any personal conflicts of interest to the Contractor. The Contractor must then advise the Department which will advise the Contractor

of the appropriate action to be taken.

(3) Unless waived by the Department, the Contractor shall certify annually that, to the best of the Contractor's knowledge and belief, all actual, apparent or potential conflicts of interest, both personal and organizational, as defined herein, have been reported to the Department. Such certification must be signed by a senior executive of the Contractor and submitted in accordance with instructions provided by the Department. Along with the annual certification, the Contractor shall also submit an update of any changes in any conflict of interest plan submitted with its proposal for this contract. The initial certification shall cover the one-year period from the date of contract award, and all subsequent certifications shall cover successive annual periods thereafter. The certification is to be submitted no later than 45 days after the close of the previous certification period covered.

(4) In performing this contract, the Contractor recognizes that its employees may have access to data, either provided by the Department or first generated during contract performance, of a sensitive nature which should not be released without Department approval. If this situation occurs, the Contractor agrees to obtain confidentiality agreements from all affected employees working on requirements under this contract including subcontractors and consultants. Such agreements shall contain provisions which stipulate that each employee agrees not to disclose, either in whole or in part, to any entity external to the Department, Department of Health or the New York State Department of Law, any information or data provided by the Department or first generated by the Contractor under this contract, any site-specific cost information, or any enforcement strategy without first obtaining the written permission of the Department. If a Contractor, through an employee or otherwise, is subpoenaed to testify or produce documents, which could result in such disclosure, the Contractor must provide immediate advance notification to the Department so that the Department can authorize such disclosure or have the opportunity to take action to prevent such disclosure. Such agreements shall be effective for the life of the contract and for a period of five (5) years after completion of the contract.

(c) **Remedies** - The Department may terminate this contract in whole or in part, if it deems such termination necessary to avoid an organizational or personal conflict of interest, or an unauthorized disclosure of information. If the Contractor fails to make required disclosures or misrepresents relevant information to the Department, the Department may terminate the contract, or pursue such other remedies as may be permitted by the terms of Clause I of this Appendix or other applicable provisions

of this contract regarding termination.

(d) The Contractor will be ineligible to make a proposal or bid on a contract for which the Contractor has developed the statement of work or the solicitation package

(e) The Contractor agrees to insert in each subcontract or consultant agreement placed hereunder (except for subcontracts or consultant agreements for well drilling, fence erecting, plumbing, utility hookups, security guard services, or electrical services) provisions which shall conform substantially to the language of this clause, including this paragraph (e), unless otherwise authorized by the Department.

If this is a contract for work related to action at an inactive hazardous waste site, the following paragraph shall apply to those Contractors whose work requires the application of professional judgment: It does not apply to construction contracts.

(f) Due to the scope and nature of this contract, the Contractor shall observe the following restrictions on future hazardous waste site contracting for the duration of the contract.

(1) The Contractor, during the life of the work assignment and for a period of three (3) years after the completion of the work assignment, agrees not to enter into a contract with or to represent any party with respect to any work relating to remedial activities or work pertaining to a site where the Contractor previously performed work for the Department under this contract without the prior written approval of the Department.

(2) The Contractor agrees in advance that if any bids/proposals are submitted for any work for a third party that would require written approval of the Department prior to entering into a contract because of the restrictions of this clause, then the bids/proposals are submitted at the Contractor's own risk, and no claim shall be made against the Department to recover bid/proposal costs as a direct cost whether the request for authorization to enter into the contract is denied or approved.

IV. Requests for Payment All requests for payment by the Contractor must be submitted on forms supplied and approved by the Department. Each payment request must contain such items of information and supporting documentation as are required by the Department, and shall be all-inclusive for the period of time covered by the payment request.

V. Compliance with Federal requirements To the extent that federal funds are

V. Compliance with Federal

requirements To the extent that federal funds are provided to the Contractor or used in paying the Contractor under this contract, the Contractor agrees that it will comply with all applicable federal laws and regulations, including but not limited to those laws and regulations under which the Federal funds were authorized. The Contractor further agrees to insert in any subcontract hereunder, provisions which shall conform substantially to the language of this clause.

VI. Independent Contractor The Contractor shall have the status of an independent contractor. Accordingly, the Contractor agrees that it will conduct itself in a manner consistent with such status, and that it will neither hold itself out as, nor claim to be, an officer or employee of the Department by reason of this contract. It further agrees that it will not make any claim, demand or application to the Department for any right or privilege applicable to an officer or employee of the Department, including but not limited to worker's compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit.

VII. Article 15-A Requirements The terms contained in this clause shall have the definitions as given in, and shall be construed according to the intent of Article 15-A of the Executive Law, 5 NYCRR Part 140, et. seq., Article 52 of the Environmental Conservation Law and 6 NYCRR Part 615, et. seq., as applicable, and any goals established by this clause are subject to the intent of such laws and regulations.

- (a) If the maximum contract price herein equals or exceeds \$25,000, and this contract is for labor, services, supplies, equipment, or materials; or
- (b) If the maximum contract price herein equals or exceeds \$100,000 and this contract is for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; then
- (c) The affirmative action provisions and equal employment opportunity provisions contained in this paragraph and paragraphs (d) and (e) of this clause shall be applicable within the limitations established by Executive Law §§312 and 313 and the applicable regulations.

(1) The Contractor is required to make good faith efforts to subcontract at least **21.5%** of the dollar value of this contract to Minority Owned Business Enterprises (MBEs) and at least **13.7%** of such value to Women Owned Business Enterprises (WBEs).

(2) The Contractor is required to make good faith efforts to employ or contractually require any Subcontractor with whom it contracts to make good faith efforts to employ minority group members for at least **10%** of, and women for at least **10%** of, the workforce hours required to perform the work under this contract.

(3) The Contractor is required to make good faith efforts to solicit the meaningful participation by enterprises identified in the NYS Directory of Certified Businesses provided by:

Empire State Development Corp.
Div. Minority & Women's Business Development
30 South Pearl Street
Albany, New York 12245
Phone: (518) 292-5250
Fax: (518) 292-5803
and
Empire State Development Corp.
633 Third Avenue
New York, NY 10017
Phone: (212) 803-2414
Fax: (212) 803-3223
internet: www.empire.state.ny.us/esd.htm

(d) The Contractor agrees to include the provisions set forth in paragraphs (a), (b) and (c) above and paragraphs (a), (b), and (c) of clause 12 of Appendix A in every subcontract in such a manner that the provisions will be binding upon each Subcontractor as to work under such subcontract. For the purpose of this paragraph, a "subcontract" shall mean an agreement providing for a total expenditure in excess of \$25,000 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon in which a portion of the Contractor's obligation under a State contract is undertaken or assumed.

(e) The Contractor is required to make good faith efforts to utilize the MBE/WBEs identified in the utilization plan to the extent indicated in such plan, and otherwise to implement it according to its terms. The Contractor is requested to report on such implementation periodically as provided by the contract, or annually, whichever is more frequent.

VIII. Compliance with applicable laws

(a) Prior to the commencement of any work under this contract, the Contractor is required to meet all legal requirements necessary in the performance of the contract. This includes but is not limited to compliance with all applicable federal, state and local laws and

permits, or other authorizations. By signing this contract, the Contractor affirmatively represents that it has complied with said laws, unless it advises the Department otherwise, in writing. The Department signs this contract in reliance upon this representation.

(b) During the term of this contract, and any extensions thereof, the Contractor must remain in compliance with said laws. A failure to notify the Department of noncompliance of which the Contractor was or should have been aware, may be considered a material breach of this contract.

IX. Dispute Resolution The parties agree to the following steps, or as many as are necessary to resolve disputes between the Department and the Contractor.

(a) The Contractor specifically agrees to submit, in the first instance, any dispute relating to this contract to the designated individual, who shall render a written decision and furnish a copy thereof to the Contractor.

(1) The Contractor must request such decision in writing no more than fifteen days after it knew or should have known of the facts which are the basis of the dispute.

(2) The decision of the designated individual shall be the final agency determination, unless the Contractor files a written appeal of that decision with the designated appeal individual (“DAI”) within twenty days of receipt of that decision.

(b) Upon receipt of the written appeal, the DAI, will review the record and decision. Following divisional procedures in effect at that time, the DAI will take one of the following actions, with written notice to the Contractor.

(1) Remand the matter to the program staff for further negotiation or information if it is determined that the matter is not ripe for review; or

(2) Determine that there is no need for further action, and that the determination of the designated individual is confirmed; or

(3) Make a determination on the record as it

exists.

(c) The decision of the DAI shall be the final agency decision unless the Contractor files a written appeal of that decision with the Chair of the Contract Review Committee (“CRC”) within twenty days of receipt of that decision.

The designated individual to hear disputes is:

**Robert Knizek, Director
Remedial Bureau E**

**Division of Environmental Remediation
625 Broadway, 12th Floor, Albany, NY 12233-7017
Tel:(518) 402-9814**

The designated appeal individual to review decisions is:

**Sal Ervolina, Assistant Director
Division of Environmental Remediation, 12th Floor
625 Broadway, Albany, NY 12233-7011
Tel:(518) 402-9706**

The Chair of the Contract Review Committee is:

Department of Environmental Conservation
**Nancy Lussier, Chair
Contract Review Committee
625 Broadway, 10th Floor
Albany, NY 12233-5010
Telephone: (518) 402-9237**

(d) Upon receipt of the written appeal, the Chair of the CRC, in consultation with the members of the CRC and the Office of General Counsel, will take one of the following actions, or a combination thereof, with written notice to the Contractor.

(1) Remand the matter to program staff for additional fact finding, negotiation, or other appropriate action; or

(2) Adopt the decision of the DAI; or

(3) Consider the matter for review by the CRC in accordance with its procedures.

(e) Following a decision to proceed pursuant to (d) 3, above, the Chair of the CRC shall convene a proceeding in accordance with the CRC's established contract dispute resolution guidelines. The proceeding will provide the Contractor with an opportunity to be

heard.

(f) Following a decision pursuant to (d) 2 or (d) 3, the CRC shall make a written recommendation to the Assistant Commissioner for Administration who shall render the final agency determination.

(g) At any time during the dispute resolution process, and upon mutual agreement of the parties, the Office of Hearings and Mediation Services (OHMS) may be requested to provide mediation services or other appropriate means to assist in resolving the dispute. Any findings or recommendations made by the OHMS will not be binding on either party.

(h) Final agency determinations shall be subject to review only pursuant to Article 78 of the Civil Practice Law and Rules.

(i) Pending final determination of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract in accordance with the decision of the designated individual. Nothing in this Contract shall be construed as making final the decision of any administrative officer upon a question of law.

(j) (1) Notwithstanding the foregoing, at the option of the Contractor, the following shall be subject to review by the CRC: Disputes arising under Article 15-A of the Executive Law (Minority and Women Owned Business participation), the Department's determination with respect to the adequacy of the Contractor's Utilization Plan, or the Contractor's showing of good faith efforts to comply therewith. A request for a review before the CRC should be made, in writing, within twenty days of receipt of the Department's determination.

(2) The CRC will promptly convene a review in accordance with Article 15-A of the Executive Law and the regulations promulgated thereunder.

X. Labor Law Provisions

(a) When applicable, the Contractor shall post, in a location designated by the Department, a copy of the New York State Department of Labor schedules of prevailing wages and supplements for this project, a copy of all re-determinations of such schedules for the project, the Workers' Compensation Law Section 51 notice, all other notices required by law to be posted at the site, the Department of Labor notice that this project is a public work project on which each worker is entitled to receive the prevailing wages and supplements for their occupation, and all other notices which the Department directs the Contractor to post. The Contractor shall provide a surface for such notices which is satisfactory to the Department. The Contractor shall maintain such notices in a legible manner and

shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason.

Contractor shall post such notices before commencing any work on the site and shall maintain such notices until all work on the site is complete.

(b) When appropriate, contractor shall distribute to each worker for this Contract a notice, in a form provided by the Department, that this project is a public work project on which each worker is entitled to receive the prevailing wage and supplements for the occupation at which he or she is working. Worker includes employees of Contractor and all Subcontractors and all employees of suppliers entering the site. Such notice shall be distributed to each worker before they start performing any work of this contract. At the time of distribution, Contractor shall have each worker sign a statement, in a form provided by the Department, certifying that the worker has received the notice required by this section, which signed statement shall be maintained with the payroll records required by the following paragraph (c).

(c) Contractor shall maintain on the site the original certified payrolls or certified transcripts thereof which Contractor and all of its Subcontractors are required to maintain pursuant to the New York Labor Law Section 220. Contractor shall maintain with the payrolls or transcripts thereof, the statements signed by each worker pursuant to paragraph (b).

(d) Within thirty days of issuance of the first payroll, and every thirty days thereafter, the Contractor and every subcontractor must submit a transcript of the original payroll to the Department, which transcript must be subscribed and affirmed as true under penalty of perjury.

XI. **Offset** In accordance with State Law, the Department has the authority to administratively offset any monies due it from the Contractor, from payments due to the Contractor under this contract. The Department may also (a) assess interest or late payment charges, and collection fees, if applicable; (b) charge a fee for any dishonored check; (c) refuse to renew certain licenses and permits.

XII. **Tax Exemption** Pursuant to Tax Law Section 1116, the State is exempt from sales and use taxes. A standard state voucher is sufficient evidence thereof. For federal excise taxes, New York's registration Number 14740026K covers tax-free transactions under the Internal Revenue Code.

XIII. **Litigation Support** In the event that the Department becomes involved in litigation related to the subject matter of this contract, the Contractor

agrees to provide background support and other litigation support, including but not limited to depositions, appearances, and testimony. Compensation will be negotiated and based on rates established in the contract, or as may otherwise be provided in the contract.

XIV. Equipment Any equipment purchased with funds provided under this contract, shall remain the property of the Department, unless otherwise provided in the contract. The Contractor shall be liable for all costs for maintaining the property in good, usable condition. It shall be returned to the Department upon completion of the contract, in such condition, unless the Department elects to sell the equipment to the Contractor, upon mutually agreeable terms.

XV. Inventions or Discoveries Any invention or discovery first made in performance of this Contract shall be the property of the Department, unless otherwise provided in the contract. The Contractor agrees to provide the Department with any and all materials related to this property. At the Department's option, the Contractor may be granted a non-exclusive license.

XVI. Patent and Copyright Protection If any patented or copyrighted material is involved in or results from the performance of this Contract, this Article shall apply.

(a) The Contractor shall, at its expense, defend any suit instituted against the Department and indemnify the Department against any award of damages and costs made against the Department by a final judgment of a court of last resort based on the claim that any of the products, services or consumable supplies furnished by the Contractor under this Contract infringes any patent, copyright or other proprietary right; provided the Department gives the Contractor:

- (1) prompt written notice of any action, claim or threat of infringement suit, or other suit, and
- (2) the opportunity to take over, settle or defend such action at the Contractor's sole expense, and
- (3) all available information, assistance and authority necessary to the action, at the Contractor's sole expense.

The Contractor shall control the defense of any such suit, including appeals, and all negotiations to effect settlement, but shall keep the Department fully informed concerning the progress of the litigation.

(b) If the use of any item(s) or parts thereof is held to infringe a patent or copyright and its use is enjoined, or

Contractor believes it will be enjoined, the Contractor shall have the right, at its election and expense to take action in the following order of precedence:

- (1) procure for the Department the right to continue using the same item or parts thereof;
- (2) modify the same so that it becomes non-infringing and of at least the same quality and performance;
- (3) replace the item(s) or parts thereof with noninfringing items of at least the same quality and performance;
- (4) if none of the above remedies are available, discontinue its use and eliminate any future charges or royalties pertaining thereto. The Contractor will buy back the infringing product(s) at the State's book value, or in the event of a lease, the parties shall terminate the lease. If discontinuation or elimination results in the Contractor not being able to perform the Contract, the Contract shall be terminated.

(c) In the event that an action at law or in equity is commenced against the Department arising out of a claim that the Department's use of any item or material pursuant to or resulting from this Contract infringes any patent, copyright or proprietary right, and such action is forwarded by the Department to the Contractor for defense and indemnification pursuant to this Article, the Department shall copy all pleadings and documents forwarded to the Contractor together with the forwarding correspondence and a copy of this Contract to the Office of the Attorney General of the State of New York. If upon receipt of such request for defense, or at any time thereafter, the Contractor is of the opinion that the allegations in such action, in whole or in part, are not covered by the indemnification set forth in this Article, the Contractor shall immediately notify the Department and the Office of the Attorney General of the State of New York in writing and shall specify to what extent the Contractor believes it is and is not obligated to defend and indemnify under the terms and conditions of this Contract. The Contractor shall in such event protect the interests of the Department and State of New York and secure a continuance to permit the State of New York to appear and defend its interests in cooperation with Contractor as is appropriate, including any jurisdictional defenses which the Department and State shall have.

(d) The Contractor shall, however, have no liability to the Department under this Article if any infringement is based upon or arises out of: (1) compliance with designs, plans, or specifications furnished by or on behalf of the Department as to the items; (2) alterations of the items by the Department; (3) failure of the Department to use updated items provided by the

Contractor for avoiding infringement; (4) use of items in combination with apparatus or devices not delivered by the Contractor; (5) use of items in a manner for which the same were neither designed nor contemplated; or (6) a patent or copyright in which the Department or any affiliate or subsidiary of the Department has any direct or indirect interest by license or otherwise.

(e) The foregoing states the Contractor's entire liability for, or resulting from, patent or copyright infringement or claim thereof.

XVII. Force Majeure The term Force Majeure shall include acts of God, work stoppages due to labor disputes or strikes, fires, explosions, epidemics, riots, war rebellion, sabotage or the like. If a failure of or delay in performance by either party results from the occurrence of a Force Majeure event, the delay shall be excused and the time for performance extended by a period equivalent to the time lost because of the Force majeure event, if and to the extent that:

(a) The delay or failure was beyond the control of the party affected and not due to its fault or negligence; and

(b) The delay or failure was not extended because of the affected party's failure to use all reasonable diligence to overcome the obstacle or to resume performance immediately after such obstacle was overcome; and

(c) The affected party provides notice within (5) days of the onset of the event, that it is invoking the protection of this provision.

XVIII. Freedom of Information Requests

The Contractor agrees to provide the Department with any records which must be released in order to comply with a request pursuant to the Freedom of Information Law. The Department will provide the contractor with an opportunity to identify material which may be protected from release and to support its position.

XIX. Precedence In the event of a conflict between the terms of this Appendix B and the terms of the Contract (including any and all attachments thereto and amendments thereof, but not including Appendix A), the terms of this Appendix B shall control. In the event of a conflict between the terms of this Appendix B, and the terms of Appendix A, the terms of Appendix A shall control.

Rider to Appendix B

***Standard Clauses for all NYS Department
of Environmental Conservation Contracts***

The parties to this contract hereby agree that clause II of this Appendix is hereby revised to read as follows:

- II. The Contractor agrees that it will indemnify and save harmless the Department and the State of New York from and against all losses from claims, demands, payments, suits, actions, recoveries and judgements, of every nature and description brought or recovered against it by reason of any acts or omissions of the Contractor, its agents, employees, or Subcontractors in the performance of this contract which are shown to have been the result of negligence, gross negligence or reckless, wanton or intentional misconduct.

Department of Environmental Conservation

Dated: _____

By: _____
Director of Fiscal Management

Dated: _____

By: _____
Contractor

SECTION VIII

General Conditions

ARTICLE 1 - Preliminary Matters

Copies of Documents:

- 1.1 **Department** shall furnish to **Contractor** without charge up to ten copies of the Contract Documents. Additional copies of the Contract Documents will be furnished, upon request, at the cost of reproduction.

Preconstruction Conference:

- 1.2 No later than twenty days after the Effective Date of the Agreement, but before **Contractor** starts the Work, a conference will be held on a date and at a location set by **Department** to:
 - 1.2.1 Review, item by item, the requirements of this Article;
 - 1.2.2 Review the qualifications of **Contractor's** resident superintendent and the qualifications of any Subcontractors and Suppliers of **Contractor**;
 - 1.2.3 Discuss **Contractor's** plans for complying with the requirements of Article 5 of the General Conditions;
 - 1.2.4 Formalize procedures for processing of Administrative Agreements, Payment Applications, Shop Drawings and other submittals, Change Orders and Proposed Change Orders, and **Contractor** requests for clarifications and interpretation of Contract Documents;
 - 1.2.5 Establish a working understanding among the parties as to the Work; and
 - 1.2.6 Discuss any conflicts, errors or discrepancies that **Contractor** has discovered by review of the Contract Documents.

Commencement of Contract Time and Start of Work at Site:

- 1.3 Before starting, **Contractor** shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. **Contractor** shall immediately report in writing to **Engineer** any conflict, error or discrepancy which **Contractor** may discover and shall obtain a written interpretation or clarification from **Engineer** before proceeding with any Work affected thereby.
- 1.4 Before a **Contractor** may commence Work on the site but no later than 10 days after Notice of Award, **Contractor** shall submit to **Engineer** for review and acceptance:
 - 1.4.1 An interim progress schedule indicating **Contractor's** anticipated schedule for the Work for the first three months in detail and for the remainder of the Work in summary form. If **Contractor** doesn't intend to perform Work on the date when Contract Time commences, **Contractor** must notify **Department** as soon as possible in writing when work will commence so inspection services can be scheduled to minimize cost to the **Department**. The

interim progress schedule shall include the information specified in paragraphs 1.4.2 and 1.4.3.

1.4.2 An interim schedule of Shop Drawing, material, soil characteristic, sample collection and analytical test result submissions covering the various stages of Work detailed in the first three months of the interim Progress Schedule; and

1.4.3 An interim schedule of values on the form provided by **Engineer** covering the various stages of Work detailed in the first three months of the interim Progress Schedule. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by **Contractor** at the time of submission.

1.5 **Contractor** shall start to perform the Work on the date specified in the Notice to Proceed in a manner consistent with the Contract Documents. No Work shall be done prior to the date specified in the Notice to Proceed unless written permission to do so is given by the **Department** to the **Contractor**.

Finalizing Interim Schedules:

1.6 **Contractor** shall submit a proposed progress schedule to finalize the interim schedules submitted in accordance with paragraph 1.4 and the requirements of the Progress Schedule Section of the Standard Specification no later than twenty days after starting work at the site. The progress schedule shall be acceptable to **Engineer** and **Department** as providing an orderly progression of the Work to completion within the Contract Time, but such acceptance will not relieve **Contractor** from full responsibility for the progress or scheduling of the Work. The schedule of Shop Drawing, material, soil characteristic, sample collection, and analytical test results submissions shall be acceptable to **Engineer** and **Department** as providing a workable arrangement for processing the submissions. The schedule of values shall be acceptable to **Engineer** and **Department** as to form and substance. The first Application for Payment shall not be processed unless **Contractor** has submitted acceptable schedules.

ARTICLE 2 - Contract Documents: Intent, Amending, Reuse

Intent:

2.1 The Contract Documents comprise the entire agreement between **Department** and **Contractor** concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.

2.2 The Contract Documents describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any work, materials or equipment that may be necessary to satisfactorily complete the contract must be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials or equipment, such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Laws of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or Laws in effect at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids), even though reference may be specifically made to an earlier standard. If there is any conflict or discrepancy between standard specifications, manuals, or codes of any technical society, organization or association, or between Laws, the **Engineer** shall determine which shall apply and shall be binding on **Contractor**. **Contractor** has a duty to comply with the latest standard specification, manual, code, or Laws in effect at the time of opening of bids, without any increase in Contract Price or extension in Contract Time. Clarifications and interpretations of the Contract Documents shall be issued by **Engineer** as provided in paragraph 8.4. However, no provision

of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of **Department, Contractor or Engineer** or any of their consultants, agents or employees from those set forth in the Contract Documents. If there is any conflict or discrepancy between the provisions of the Contract Documents and any such referenced standard specification, manual, or code of any technical society, organization or association, the provisions of the Contract Documents will take precedence.

- 2.3 If during the performance of the Work, **Contractor** finds a conflict, error or discrepancy in the Contract Documents, **Contractor** shall so report to **Engineer** in writing at once and before proceeding with the Work affected thereby, and shall obtain a written interpretation or clarification.

Engineer will promptly investigate the matter and respond to **Contractor**. Until such interpretation or clarification is obtained from **Engineer**, any Work done by **Contractor** after the discovery of such a conflict, error or discrepancy, which is directly or indirectly affected by same, will be at **Contractor's** own risk and **Contractor** shall bear all cost arising therefrom. In resolving such conflicts, errors or discrepancies, the Contract Documents shall be given preference in the following order:

- 2.3.1 First, in accordance with the order of preference stated in the conflicting parts of the Contract Documents as provided by Article 4 of the Agreement;

- 2.3.2 In all cases, figured dimensions shall govern over scaled dimensions, but Work not dimensioned shall be as directed, and Work not particularly shown, identified, sized, or located shall be the same as similar parts that are shown or specified. Detail Drawings shall govern over general Drawings, larger scale Drawings take precedence over smaller scale Drawings, Change Order or Proposed Change Order Drawings govern over Contract Drawings, and approved Shop Drawings govern over Contract Drawings. Specifications shall govern as to products, execution and workmanship, and Drawings shall govern as to locations, dimensions, or quantities to be furnished. Further, in all cases where specifications, notes or details in two or more Specifications, or in two or more Drawings, conflict, the requirement calling for the larger quantities, or higher quality product or workmanship shall prevail and be binding on **Contractor**, unless otherwise directed by **Engineer**.

Amending and Supplementing Contract Documents:

- 2.4 The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways as defined in Section 2, "Terms and Definitions."

- 2.4.1 An Administrative Agreement,

- 2.4.2 A Change Order (pursuant to Article 9), or

- 2.4.3 A Proposed Change Order signed by **Department** (pursuant to Article 9).

Contract Price and Contract Time may only be changed by a Change Order.

- 2.5 In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, not involving an adjustment in Contract Price or Contract Time, in one or more of the following ways:

- 2.5.1 A Field Order (pursuant to Article 8.4),

- 2.5.2 **Engineer's** approval of a Shop Drawing or sample (pursuant to Article 5.23 thru 5.29), or

2.5.3 **Engineer's** written interpretation or clarification (pursuant to Article 8.3).

Reuse of Documents:

2.6 Neither **Contractor** nor any Subcontractor or Supplier or other person or organization shall have or acquire any title to or ownership rights in any of the Drawings, specifications or other documents (or copies of any thereof) prepared by or bearing the seal of **Engineer** or **Design Engineer** ; and they shall not reuse any of them on extensions of the Project or any other project without the written consent of **Engineer** or, and **Department**.

ARTICLE 3 - Availability of Lands; Physical Conditions; Reference Points

Availability of Lands:

3.1 As indicated in the Contract Documents, **Department** shall make available the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands as are designated for the use of **Contractor**. Easements or other authority for permanent structures or permanent changes in existing facilities will be obtained and paid for by **Department**, unless otherwise provided in the Contract Documents. If **Contractor** believes that any delay in **Department's** furnishing of these lands or easements entitles **Contractor** to an extension of the Contract Time, **Contractor** may make a request therefore as provided in Article 10 of the General Conditions. If **Department** and **Contractor** are unable to agree concerning such an extension, a claim may be made as provided in Articles 9, 10 and 11 of the General Conditions.

3.2 Any lands and easements for access not furnished by **Department** which **Contractor** deems necessary for the Work, including but not limited to requirements for temporary construction facilities, access and egress, or for storage of materials, shall be provided by **Contractor** at no increase in Contract Price nor extension in Contract Time. **Contractor** shall obtain all necessary permits and written approvals from the appropriate jurisdictional agencies and property owner(s) for use of premises not furnished by **Department** as described above, and for the use of all off-site areas needed for the Work including but not limited to off-site borrow pits, and waste and disposal areas. If permits and approvals do not specify the required treatment, if any, of said areas during and at the completion of the Work, the Progress Schedule must describe such treatment. Copies of all permits and approvals applicable to said areas shall be filed with the **Engineer** before utilization of any said areas. **Contractor** shall have sole responsibility for any property damage or personal injuries occasioned by an act or omission of **Contractor** in respect to all lands, and easements obtained pursuant to this paragraph.

3.3 Engineering survey horizontal and vertical control reference points for construction which are specified in the Contract Documents or which in **Engineer's** judgment are necessary to enable **Contractor** to proceed with the Work, will be provided by **Department**. **Contractor** shall be responsible for laying out the Work using such reference points, shall protect and preserve the established reference points; and shall make no changes or relocations without the prior written approval of **Engineer**. **Contractor** shall notify **Engineer** in writing whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations; and shall be responsible for the accurate replacement or relocation of such reference points by a professionally qualified surveyor at **Contractor's** expense.

Physical Conditions and Existing Structures:

3.4 **Explorations and Reports:** Reference is made to the Supplementary Bidding Information and Requirements for identification of those reports of explorations and tests of conditions at the site that have been utilized by **Design Engineer** in preparation of the Contract Documents; and for identification

of those drawings of physical conditions in or relating to existing surface structures (except Underground Facilities referred to in paragraphs 3.6 and 3.7) which are at or contiguous to the site that have been utilized by **Design Engineer** in preparation of the Contract Documents. **Contractor** may rely upon the accuracy of the technical data contained in such reports, as to the location where and at the point in time when data was obtained, but not upon non-technical data, interpretations or opinions contained therein or for the completeness thereof for **Contractor's** purposes. Except as indicated in the Bidding Information and Requirements Section and in paragraphs 3.11 and 3.12, **Contractor** shall have full responsibility with respect to subsurface conditions which **Contractor** could reasonably expect or foresee by reason of the technical data and **Contractor's** inspection of the site, and with respect to physical conditions in or relating to such surface structures.

3.5 Intentionally left blank.

Physical Conditions - Underground Facilities Shown or Indicated:

3.6 The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to the **Design Engineer** by the owners of such Underground Facilities or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

3.6.1 **Department** shall not be responsible for the accuracy or completeness of any such information or data; and,

3.6.2 **Contractor** shall have responsibility: a) for reviewing and checking all such information and data; b) for locating all Underground Facilities shown or indicated in the Contract Documents as to depth and alignment in advance of installations, backfilling or other work required by the Contract Documents; c) for coordination of the Work with the owners of such Underground Facilities during construction, d) for the safety and protection thereof, and e) for repairing any damage thereto resulting from the Work. The cost of and the time required to perform the responsibilities outlined in this paragraph will be considered as having been included in the Contract Price and in **Contractor's** schedule for the performance of the Work within the prescribed Contract Time(s) and **Contractor** shall not be entitled to additional payment therefor.

3.6.3 **Contractor** shall excavate and uncover all Underground Facilities to be crossed or paralleled by the proposed Work a sufficient time in advance to permit change in line and grade of the existing Underground Facility or the proposed Work if the location of the existing Underground Facility should interfere with the Work. Further, at a reasonable interval of time, up to thirty days, will be allowed to **Engineer** and **Department** in order to resolve issues relating to Underground Facilities shown or indicated which are determined to interfere with the Work. This interval of time will be considered as having been included in the Contract Price and in **Contractor's** schedule for the performance of the Work within the Contract Time unless otherwise agreed to in writing by **Department**. If more than thirty days is consumed in resolving such issues, no claim will be allowed unless: 1) **Contractor** has given the notice required in paragraph 3.7 of the General Conditions, and 2) within fifteen days thereafter, **Contractor** has submitted to **Department** a written Proposed Change Order claim in accordance with the requirement of Article 9, 10 and 11 of the General Conditions and the Standard Specifications.

3.6.4 Where it is necessary for the Work to be close to or between other underground facilities or structures for short distances, **Contractor** shall shore, block, and protect the other underground facilities or structures to the satisfaction of the utility agency, state agency,

municipality or private owner having ownership or jurisdiction over said underground facilities on structures.

- 3.6.5 Access to various municipal structures shall not be obstructed by **Contractor** to prevent use of hydrants, valves, manholes, fire alarms, etc. **Contractor** is to make no connections to existing water mains, or operate valves on existing mains, or otherwise interfere with the operation of the existing water distribution system, without first giving written notice to the owners of such municipal structures and securing their written approval of the proposed action.

Underground Facilities Not Shown or Indicated:

- 3.7 If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents and which **Contractor** could not reasonably have been expected to be aware of, **Contractor** shall promptly after learning thereof and before performing any Work affected thereby (except in an emergency as permitted by paragraph 5.22), identify the owner of such Underground Facility and give written notice of such uncovering to that owner and to **Engineer** and **Department**. **Engineer** and **Department** will promptly review the situation to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and take prompt action to amend the Contract Documents to the extent necessary. During such time, **Contractor** shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 5.20.
- 3.7.1 **Contractor** shall schedule excavation and uncovering Work to begin a sufficient time in advance to allow **Engineer's** review and the possible amendment to the Contract Documents if unanticipated Underground Facilities are discovered as described in paragraph 3.7. Further, up to thirty days, will be allowed to **Engineer** and **Department** to resolve issues and problems related to a report of newly discovered Underground Facilities, not shown or indicated. This interval of time will be considered as having been included in the Contract Price and in **Contractor's** schedule for the performance of the Work within the Contract Time and **Contractor** shall not be entitled to any additional payment therefor.
- 3.7.2 No claim by **Contractor** under paragraph 3.7 of the General Conditions will be allowed unless more than thirty days has elapsed and 1) **Contractor** has given the notice required in paragraph 3.7 of the General Conditions, and 2) within fifteen days thereafter, **Contractor** has submitted to **Department** a written Proposed Change Order claim in accordance with the requirements of Articles 9, 10 and 11 of the General Conditions, and the Standard Specifications.

Report of Differing Site Conditions:

- 3.8 If **Contractor** believes that any subsurface or physical condition uncovered or revealed at the site renders materially inaccurate any information in the Contract Documents or technical data on which **Contractor** was entitled to rely as provided in paragraph 3.4 or 3.6, **Contractor** shall, immediately after becoming aware thereof and before performing any Work in connection therewith (except in an emergency as permitted by paragraph 5.22), notify **Department** and **Engineer** in writing about the inaccuracy or difference to allow **Department** and **Engineer** to make any necessary changes to minimize the cost of the Work.
- 3.9 **Engineer's and Department's Review:** **Engineer** and **Department** will promptly review the pertinent conditions, determine the necessity of obtaining additional explorations or tests with respect thereto, and notify **Contractor** in writing of findings and conclusions. Immediately thereafter, **Department** shall perform or cause to be performed any necessary or appropriate additional investigations and tests with respect to the newly discovered conditions and furnish copies to **Contractor**.
- 3.10 **Possible Document Change:** If **Engineer** concludes that there is a material error in the Contract Documents or that because of newly discovered conditions a change in the Contract Documents is required, a Proposed Change Order or a Change Order will be issued as provided in Article 9 to reflect and document the consequences of the inaccuracy or difference, provided **Department** has not exercised its right to suspend or terminate under Article 14 of Section 8, "General Conditions", Appendix B, or Article 12 of Section 6 "Agreement."
- 3.11 **Possible Contract Adjustment:** An increase or decrease in the cost of, or the time required to perform any part of the Work, whether or not affected by such differing conditions, and a corresponding adjustment in Contract Price or Contract Time in accordance with Articles 9, 10 and 11 of the General Conditions, or any combination thereof, may be allowable to the extent that they are attributable to any such inaccuracy or difference which **Contractor** could not reasonably have been expected to anticipate or be aware of. If **Department** and **Contractor** are unable to agree as to the adjustment in Contract Price or Contract Time, or if **Engineer** concludes that there is not a material error in the Contract Documents, or that the uncovered or revealed condition could reasonably have been anticipated by **Contractor**, and **Contractor** disagrees, a claim may be made therefor as provided in Articles 9, 10 and 11 of the General Conditions.
- 3.12 No claim by **Contractor** under paragraph 3.11 of the General Conditions will be allowed unless: 1) **Contractor** has given the notice required in paragraph 3.8 of the General Conditions, and 2) within fifteen days thereafter, **Contractor** has submitted to **Department** a written Proposed Change Order substantiating in detail **Contractor's** proposed adjustments in accordance with the requirements of Articles 9, 10 and 11 of the General Conditions, and the Standard Specifications.
- 3.13 **Responsibilities and Allowances:** **Contractor** shall schedule excavation and uncovering of Work to begin a sufficient time in advance to allow **Engineer's** review as described in paragraph 3.9, and **Department's** issuance of a Change Order or a Proposed Change Order as described in paragraph 3.10 in connection with a report of differing conditions. Further, a reasonable interval of time, not less than thirty days will be allowed to **Engineer** and **Department** for those functions required to resolve any report of differing conditions. This interval of time will be considered as having been included in the Contract Price and in **Contractor's** schedule for the performance of the Work within the Contract Time. If more than thirty days is used, no claim will be allowed unless (1) **Contractor** has given the notice required in paragraph 3.8 of the General Conditions, and (2) within fifteen days thereafter, **Contractor** has submitted to **Department** a written Proposed Change Order claim in accordance with the requirements of Articles 9, 10 and 11 of the General Conditions, and the Standard Specifications.

ARTICLE 4 - Bonds and Insurance

Performance and Other Bonds:

- 4.1 **Contractor** shall furnish performance, labor and material payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all **Contractor's** obligations under the Contract Documents. These Bonds shall remain in effect until at least one year after the date when final payment is made, unless otherwise provided by Law or by the Contract Documents. **Contractor** shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall: a) be in the form prescribed by the Contract Documents; and b) be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and As Acceptable Reinsuring Companies" as published by the U.S. Treasury Department. Also the surety shall be licensed to do business in New York State. All Bonds signed by an agent must be accompanied by a certified true copy of the agent's power of attorney. **Contractor's** failure to submit and keep in effect a Bond or form of financial security acceptable to **Department** in the manner required by this paragraph shall be cause for termination. **Contractor** shall give written notice to **Department** and reference the site number and project name, if the surety on any Bond furnished by **Contractor** is declared bankrupt, becomes insolvent, its right to do business is involuntarily terminated by any state or federal agency, it ceases to meet the requirements of paragraph 4.1, **Contractor**, if required by **Department**, shall within fourteen days substitute another Bond or Surety, in an acceptable form of financial security. The top of all bonds shall have "NYSDEC-DER Site No."

If the provision of any bond requires that the surety be notified of any change in the Work, it shall be **Contractor's** responsibility to so notify the surety. **Contractor** shall furnish **Department** any modified bond.

Insurance - All Types:

- 4.2 **Contractor** shall purchase and maintain at its own expense the specific coverages and types of insurance set forth in this Article. 4.2 through 4.4.3 except as noted in 4.3.
- 4.2.1 **Contractor** shall not commence or continue to perform any work unless and until **Contractor** has in full force and effect all required insurance, and until **Contractor** has submitted true copies of all endorsements (i.e., amendments) and a copy of the Certificate of Insurance attached herein to **Department** evidencing the specific insurance coverage required. No payment for work performed shall become due and payable unless current certificates and endorsements have been received.
- 4.2.2 **Contractor** shall not permit any Subcontractor, Supplier or other person or organization to perform Work unless the following insurance requirements at a minimum have been complied with by such Subcontractor, Supplier or other person or organization and proof of the issuance of all policies of insurance has been delivered to **Contractor**.
- 4.2.2.1 Comprehensive general liability insurance providing coverage as herein required of **Contractor** including Contractors' Protective Liability Insurance, Completed Operations Insurance, Products Liability Insurance and Contractual Liability Insurance. Insurance must be project specific or contain an endorsement (i.e., amendment) in writing (including print or stamp) added to and made part of the insurance contract for the purpose of changing the original terms such that the general aggregate limit applies separately to each of **Contractor's** projects away from premises owned by or rented to **Contractor**.

Commercial General liability insurance with a limit of not less than \$1,000,000 each occurrence. Such liability shall be written on the Insurance Service Office's (ISO) liability arising from premises operations, independent contractors' operations, products-completed operations, broad form property damage, personal and advertising injury, cross liability coverage, liability assumed in a contract (including tort liability of another assumed in a contract) and explosion, collapse and underground coverage.

- Products and Completed Operations Coverage shall include a provision that coverage will extend for a period of at least twelve (12) months after the date of final completion and acceptance by the **Department** of all of **Contractor's** work.

4.2.2.2 Comprehensive Business automobile liability insurance with a limit of not less than \$1,000,000 with **Department** and **Engineer** listed as an additional insured.

4.2.2.3 Worker's Compensation, Employers Liability and Disability Benefits as required by State Law covering all employees doing work within New York State. If workers will be working on, or near navigable waters, US Longshore and Harbor Workers Compensation Act endorsement must be included. This contract shall be void and of no effect unless the contractor procures this policy and maintains it in effect until final acceptance of this work.

4.2.2.4 Owner's (**Department's**) and **Contractor's** Protective Liability Insurance issued to and in the name of The People of the State of New York, the **Department**, and the **Engineer** with limits not less than \$1,000,000 per occurrence.

4.2.2.5 **Pollution Liability Insurance:** If the work involves abatement, removal, repair, replacement, enclosure, encapsulation and/or disposal of any hazardous material or substance, the **Contractor** shall maintain in full force and effect throughout the Term, pollution legal liability insurance with limits of not less than \$1,000,000, providing coverage for bodily injury and property damage, including loss of use of damaged property or of property that has not been physically injured. Such policy shall provide coverage for actual, alleged or threatened emission, discharge, dispersal, seepage, release or escape of pollutants or in the investigation, settlement or defense of any claim, suit, or proceedings against the State of New York and/or the **Department** and/or the **Engineer**, arising from **Contractor's** work and list Department as an additional insured. Claims made policies shall have a one (1) year tail beyond the date **Department** determines physical completion.

- If coverage is written on claims-made policy, the **Contractor** warrants that any applicable retroactive date precedes the effective date of this Contract; and that continuous coverage will be maintained, or an extended discovery period exercised, for a period of not less than two years from the time work under this Contract is completed.

- 4.2.2.6 **Errors and Omissions:** If providing professional services, **Contractor** shall maintain, or if subcontracting professional services, shall certify that its subcontractor maintain errors and omissions liability insurance with a limit not less than \$1,000,000 per loss.
- Such insurance shall apply to professional errors, acts or omissions arising out of the scope of services covered by this contract and may not exclude bodily injury, property damage, pollution or asbestos related claims, testing, monitoring, measuring or laboratory analyses.
 - If coverage is written on a claims-made policy, the **Contractor** warrants that any applicable retroactive date precedes the effective date of this contract; and that continuous coverage will be maintained, or an extended discovery period exercised for a period not less than two years from the time the work under this contract is completed.
- 4.2.3 Insurance shall be issued by carriers licensed to do business in New York State. Each insurance carrier must be rated at least “A-” Class “VII” in the most recently published Best’s Insurance Report. If during the term of the policy, a carrier’s rating falls below “A-” Class VII, the insurance must be replaced no later than the renewal date of the policy, with an insurer acceptable to the **Department** and rated at least “A-” Class VII in the referenced report.
- 4.2.4 Acceptance by **Department** of the insurance provided by **Contractor** shall not relieve **Contractor** from liabilities, obligations, responsibilities or decrease the liabilities of **Contractor** hereunder. It is understood that **Department** does not in any way represent that the insurance or the limits of insurance specified in the Article is sufficient or adequate to protect **Contractor’s** interests or liabilities, but are merely minima.
- 4.2.5 All insurance shall be maintained in full force and effect until the Contract has been fully and completely performed, as set forth in the Contract Documents. Completed operations insurance shall remain in effect until one year after the date of final acceptance of work under the contract, or one year after **Contractor** or any Subcontractor performs any work under the Contract, whichever is later. Should any coverage approach expiration during the period in which it must remain in full force and effect, it shall be renewed prior to its expiration , and a certificate again filed with **Department**. Also, any endorsements (i.e., amendments) which change insurance during the length of the contract shall also be submitted to **Department** for acceptance. All insurance policies shall require notice to **Department** 30 days prior to expiration, termination, or suspension of such policy, directed to the attention of **Department**. Expiration of any coverage shall be grounds for termination of contract for cause, at the option of **Department**. If any insurance provided hereunder contains an aggregate limit, the aggregate shall apply separately to this contract and shall not be less than \$2,000,000. **Department** may suspend or terminate this contract unless Contractor maintains in full force and effect, the types and amounts of insurance required by this contract. No later than thirty (30) days prior to the expiration or renewal date of policy the **Contractor** should supply replacement certificates of insurance.
- 4.2.6 **Contractor** shall deliver, if requested by **Department**, duplicate originals of each policy required by Contract Documents, as well as insurance policies of Subcontractors, in such number as **Department** may require, and such alternate or additional proof of coverage as **Department** demands. **Contractor** shall provide prompt, written notice to the Department and its insurer, of any claims made related to work done hereunder, in accordance with the insurance policy provisions.

- 4.2.7 Nothing contained in these insurance requirements shall be construed to limit the liability of **Contractor** or **Contractor's** insurance carriers.
- 4.3 **Additional Pollution Liability Insurance:** In addition, **Contractor** shall provide project specific Pollution Liability Insurance in an additional amount of not less than \$4,000,000, for a total of \$5,000,000, per claim if possible unless otherwise authorized in writing by the **Department**. If **Contractor** cannot obtain this additional level of coverage of \$4,000,000, the following documentation is required: written confirmation by **Contractor** from at least three insurance carriers. The cost of this additional pollution liability insurance will be reimbursed by **Department**. **Department** will determine if it is in **Department's** best interest to have this additional insurance.
- 4.4 If required by the Supplementary Conditions or Law, **Contractor** shall purchase and maintain at its own expense insurance otherwise deemed necessary by **Department** with **Department** listed as an additional insured.
- 4.4.1 Where special or unusual hazards peculiar to this contract are foreseeable, **Contractor** shall take such steps as are necessary to insure itself against such hazards and be responsible for any damage, including water, which results from the occurrence of the hazards in connection with the performance of Work under the Contract.
- 4.4.2 **Contractor** shall purchase and maintain insurance which complies with the requirements of the Flood Disaster Protection Act.
- 4.4.3 **Contractor** shall maintain until the physical completion date builder's risk insurance on the Builder's Risk Completed Values Form with extended coverage, on the value of the work which shall be the contract amount. Whenever applicable, the Contractor's Interest Completed Value Form may be used. The extended coverage endorsement may include a loss deductible clause of \$100.00. **Department** shall be listed as an additional insured. The Builder's Risk policy shall include the following endorsement. "It is made a condition of this insurance that occupancy of the premises shall not require consent of the insurance company nor rate of adjustment."

ARTICLE 5 - Contractor's Responsibilities

Supervision and Superintendence:

- 5.1 **Contractor** shall supervise and direct the Work required by the contract competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. **Contractor** shall be responsible for the means, methods, techniques, sequences and procedures of construction; except that **Contractor** shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is indicated in and required by the Contract Documents. **Contractor** shall be responsible to see that the finished Work conforms with the Contract Documents.
- 5.2 **Contractor** shall keep on the Site of the Work at all times during its progress, a competent and reliable resident superintendent, who shall not be replaced without written approval of **Department**. The superintendent will be **Contractor's** representative at the site and shall have authority to act on behalf of **Contractor**. All communications given to the superintendent shall be as binding as if given to **Contractor**.
- 5.2.1 **Department** may require immediate replacement of the superintendent upon written notice for cause.

- 5.2.2 The superintendent and similar authorized representatives of any Subcontractors as requested by **Department** or **Engineer** shall attend all meetings pertaining to the Work.
- 5.2.3 Whenever the superintendent is not present for performance of a particular part of the Work and **Engineer** is not able to give to **Contractor**, through the superintendent, information relative to an interpretation of the Contract Documents, or relative to disapproval or rejection of materials or the performance of such work, **Engineer** may so inform the worker in charge of such Work. Information so given shall be binding as if given to superintendent.
- 5.2.4 **Contractor** shall issue all communications to **Department** through **Engineer** except as provided by Contract Documents. All written correspondence to **Engineer** shall be copied to **Department**.

Labor, Working Hours, Materials and Equipment:

- 5.3 **Contractor** shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. **Contractor** shall, at all times, employ labor and equipment which shall be sufficient to prosecute the several classes of work to full completion in the manner and time specified. All workers must have sufficient skill, experience and Health and Safety training required to perform properly the work assigned them. All workers engaged on special or skilled work shall have had sufficient experience in such work to perform properly and satisfactorily including operation of any equipment involved. Any person employed by **Contractor** or Subcontractor whom the **Engineer** or **Department** may determine incompetent or unfit to perform the work shall be at once discharged or reassigned and not again be employed on Work in connection with this Contract. The **Contractor** may request review by **Department** regarding the discharge of such employee(s). **Contractor** shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during normal working hours as defined in paragraph 5.3.1 below, and **Contractor** shall not permit overtime Work or the performance of Work during hours other than normal Working hours without: a) prior written notice to **Engineer**; b) **Department's** written consent; and c) written approval from the New York State Department of Labor as required by law.
- 5.3.1 Normal working hours shall be defined as a normal working schedule which a) does not exceed eight hours per working day, occurring between the hours set forth at the pre-construction conference, or if none are set forth, beginning no earlier than 7:00 a.m. and ending at no later than 5:00 p.m.; and b) does not exceed 40 hours per week, excluding overtime Work, Work on Saturdays, Sundays, and legal holidays (New Years, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas). Work during other than normal working hours may be scheduled by **Contractor** by first obtaining written permission from **Department** and as provided in Section 5.3. **Department** shall be entitled to recover extra costs incurred in providing inspection related to Work done during other than normal working hours in accordance with paragraph 5.3.5 below.
- 5.3.2 If **Contractor**, for convenience, voluntarily chooses to schedule Work during hours other than normal working hours at no increase in Contract Price, **Contractor** shall submit details of such proposed schedule with the interim Progress Schedule described in paragraph 1.6 of the General Conditions. Any Progress Schedule calling for Work outside of normal working hours shall be reviewed for acceptance by **Engineer** and **Department** and must be in accordance with the requirements of the New York State Labor Law and Articles 1.6 and 5.3 of the General Conditions.

- 5.3.3 If at any time subsequent to the submission and approval of the Progress Schedule pursuant to the General Conditions and the Standard Specifications, an event or delay not meeting the requirements for extensions in Contract Time set forth in Articles 9, 10 and 11 of the General Conditions occurs, and requires **Contractor** to schedule Work during hours other than normal working hours for **Contractor's** convenience and at no increase in Contract Price, **Contractor** shall submit, at least ten working days in advance of the acceleration period, a proposed revised accelerated schedule for review by **Engineer** and **Department**. If **Department** accepts the revised accelerated Progress Schedule, **Department** will so notify **Contractor** in writing.
- 5.3.4 If the accelerated Progress Schedule pursuant to paragraph 5.3.2 or 5.3.3 is accepted by **Department**, **Contractor** shall reimburse **Department** for all extra costs incurred in providing inspection during hours other than normal working hours in accordance with paragraph 5.3.5 below. Acceptance by **Department** of the accelerated Progress Schedule shall not justify an increase in Contract Price; any increase in **Contractor's** cost to perform the Work, or any part thereof, whether or not affected by **Contractor's** initiated acceleration proposal, shall remain the responsibility of **Contractor**.
- 5.3.5 **Contractor** shall reimburse **Department** for the extra costs incurred in providing inspection during hours other than normal working hours when **Department** considers that the additional hours are due to **Contractor's** inefficiencies or delays. Reimbursement may include but may not be limited to costs for **Engineer**, Resident Project Representatives, administrative expenses and other related costs. Reimbursement for **Engineer's** charges shall be in amounts equal to **Engineer's** charges to **Department** for inspection during hours other than normal working hours under the terms of **Engineer's** agreement with **Department**. In the event **Contractor** fails to pay such costs within 30 days after receipt of an invoice from **Department**, a Change Order or Proposed Change Order may be issued incorporating the unpaid amounts, and **Department** shall be entitled to an appropriate decrease in Contract Price.
- 5.3.6 **Department** may direct **Contractor** to accelerate if the progress of Work indicates **Contractor** may not be able to complete the contract within the contract terms. **Contractor** shall be responsible for all increased costs due to the acceleration.
- 5.4 Unless otherwise specified in the Contract Documents, **Contractor** shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, storage areas, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.
- 5.4.1 All water for testing, flushing and construction shall be furnished by **Contractor**. If water is available from **Department** and **Department** agrees to its use, **Contractor** shall connect to **Department's** water system at a point approved by **Department**. **Department** will charge **Contractor** for water used in performing the above functions in accordance with **Department's** established rate schedule. There shall be installed at each and every connection to any water supply: (a) a meter accepted by **Department** or Owner of water supply, and (b) a backflow preventer device accepted by the New York State Department of Health.
- 5.4.2 In the event that **Contractor** wishes to utilize water from **Department's** facilities as a substitute source of test water, **Contractor** shall submit sufficient information in accordance with paragraph 5.7.2 of the General Conditions to allow **Engineer** to evaluate the substitution.

Such information shall in addition include a description of the necessary equipment and temporary facilities needed to implement the substitute and an estimate of the costs savings anticipated. In the event that the substitution is accepted by **Engineer** pursuant to the requirements of paragraph 5.7.3 of the General Conditions and allowed by **Department**, and the supply of water is inadequate in quantity or quality, **Contractor** shall be responsible for obtaining other sources of test water at no increase in Contract Price or extension in Contract Time.

- 5.4.3 **Contractor** shall light the parts of the Work performed during working hours in the manner required by law and as required by **Engineer** or **Department**.
- 5.5 Except as otherwise provided in the Contract Documents, all materials shall be of good quality, good condition and new, and all equipment shall be new, or should be in good working order and of good quality. As required by **Engineer**, **Contractor** shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents.
- 5.5.1 **Contractor** shall provide to **Department** for **Department's** benefit through **Engineer** all manufacturers' warranties for materials, and products incorporated into the Work, or required by the Contract Documents to be furnished by **Contractor**.
- 5.5.2 **Contractor** shall obtain from manufacturers of all materials and products complete information as to any special condition, or restriction to be applied in the use of these items. Should the manner or method of installation, specified performance or test results as set forth in the Specifications be contrary to the manufacturer's recommendations for installation and use of the product, the **Contractor** shall notify **Engineer** of same for appropriate action. Lack of such notification shall constitute a certification and guarantee by **Contractor** that Specification requirements will be met by such materials and products to be incorporated.
- 5.5.3 **Contractor** shall submit data on all products to be incorporated into the Work required by the Contract Documents, including but not limited to complete maintenance instructions (including preventive maintenance and operating requirement data) and parts lists in sufficient detail to facilitate ordering replacements, in accordance with the procedures set forth in the Special Supplementary Conditions, the Standard Specifications or the Supplementary Specifications.

Adjusting Progress Schedule:

- 5.6 **Contractor** shall report on the status of and revise the Progress Schedule to **Engineer** and **Department** by delivering Progress Schedule status and update submittals to **Engineer** in accordance with the Specifications and Article 1.6 of the General Conditions. If **Contractor** does not adequately update the Schedule, **Department** may reject **Contractor's** requests for payment, provided that **Department** gives **Contractor** 10 days written notice of its intention to do so.

"Or-Equal" or Substitute Items:

- 5.7.1 Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the naming of the item is intended to establish the type, function, quality, performance and design criteria required. Unless the name is followed by words indicating that no "or equal" or substitution is permitted, materials or equipment of other Suppliers may be accepted by **Engineer** if

sufficient information is submitted by **Contractor** to allow **Engineer** to determine that the material or equipment proposed is equivalent or equal to that named. The procedure for review by **Engineer** will include the following as supplemented in the Contract Documents. Requests for review of "or equal" or substitute items of material and equipment will not be accepted by **Engineer** from anyone other than **Contractor**. If **Contractor** wishes to furnish or use an "or equal" or substitute item of material or equipment, **Contractor** shall make written application to **Engineer** for acceptance thereof, certifying that the proposed "or equal" or substitute shall perform the functions and achieve the results called for by the general design, be similar and of equal substance and quality to that specified and be suited to the same use as that specified.

5.7.1.1 The application shall state that the evaluation and acceptance by **Engineer** of the proposed "or equal" or substitute shall not prejudice completion of the Work, or any part thereof, within the Contract Time, or contract times (including **Contractor's** achievement of Substantial Completion on time), whether or not acceptance of the "or equal" or substitute for use in the Work would require a change in the Work, or any part thereof, or would require the **Department** or others having a contract with **Department** for Work on the Project to adapt the Contract Documents to the proposed "or equal" or substitute; and whether or not incorporation or use of the "or equal" or substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed "or equal" or substitute from that specified shall be identified in the application and available maintenance, repair and replacement services shall be indicated. The application shall also contain an itemized estimate of all increases or decreases in the following costs: 1) the cost of, or the time required to perform any part of the Work, and the corresponding adjustments in Contract Price and Contract Time, resulting directly or indirectly from evaluation and acceptance of the proposed substitute, including, but not as a way of limitation, costs and delays associated with redesign, or claims of other contractors affected by the resulting "or equal" or substitute, and 2) increases or decreases in operating, maintenance, repair, replacement or spare part costs, all of which shall be considered by **Engineer** in evaluating the proposed "or equal" or substitute. In rendering a decision, **Department** and **Engineer** shall at a minimum, have access to any available Total Float in the approved Progress Schedule. **Engineer** may require **Contractor** to furnish at **Contractor's** expense additional data about the proposed "or equal" or substitute.

5.7.2 If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, **Contractor** may furnish or utilize a substitute only if first approved by **Engineer**. **Contractor** shall submit in writing sufficient information to allow **Engineer** to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedures for review by **Engineer** established by paragraph 5.7.1, and as may be supplemented in the Contract Documents, will apply to reviews under this paragraph.

5.7.3 **Engineer** shall be allowed a reasonable time as determined by **Department** within which to evaluate each proposed "or equal" or substitute. **Engineer** and **Department** shall be the sole judge of acceptability, and no "or equal" or substitute shall be ordered, installed or utilized without **Engineer's** prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. **Department** may require **Contractor** to furnish at **Contractor's** expense a special performance guarantee or other financial security with respect to any substitute. **Engineer** will keep record of the time required by **Engineer** and **Engineer's** consultants in evaluating "or equals" or substitutions proposed by **Contractor** and

in making changes in the Contract Documents occasioned thereby. Whether or not **Engineer** accepts an "or equal" or proposed substitute, **Department** shall be entitled to an offset against any payment due **Contractor** for the charges of **Engineer** and **Engineer's** consultants for evaluating each proposed "or equal" or substitute after the second submittal on such item. In the event that substitute materials or equipment are accepted and are less costly than the originally specified materials or equipment, then the net difference in cost shall benefit **Department**, and an appropriate Change Order or Proposed Change Order shall be executed to reflect the difference in cost. If **Engineer** or **Department** determine that the deduction proposed by **Contractor** does not reflect the net difference in cost, then this shall be adequate justification to reject the proposed substitute. Additional construction and/or engineering costs identified after **Department's** acceptance of the proposal and resulting from installation of an "or equal" or substitute shall be borne by **Contractor**.

Subcontractors, Suppliers and Others:

- 5.8.1 **Contractor** shall not employ nor award Work to Subcontractors in excess of the amount specified in Article 7 of the Supplementary Bidding Information and Requirements Section. Such percentage may be increased by an Administrative Agreement if, during performance of the Work, **Contractor** requests an increase and **Department** at its sole discretion determines that the increase would be to **Department's** advantage. **Contractor** shall submit to **Department** a statement stating the character and amount of the work to be subcontracted and the party to whom it is proposed to subcontract the work. **Contractor** shall not employ any Subcontractor, Supplier or other person or organization whether initially or as a substitute, unless first approved by **Department**.
- 5.8.2 Wherever Work to be performed by **Contractor** or by a Subcontractor is dependent upon Work of other Subcontractor(s) or the work of separate contractor(s), then **Contractor** shall require such Subcontractor(s) whose Work is so dependent to:
- 5.8.2.1 Provide necessary notices of delay, data or other requirement(s) for performance of dependent Work or work of separate contractor(s),
 - 5.8.2.2 Supply and/or install items to be built into dependent Work or work of separate contractor(s),
 - 5.8.2.3 Make provisions for dependent Work or work of separate contractor(s),
 - 5.8.2.4 Examine previously placed dependent Work or work of separate contractor(s),
 - 5.8.2.5 Check and verify dimensions of previously placed dependent Work or work of separate contractor(s),
 - 5.8.2.6 Notify **Engineer** in writing immediately upon determining previously placed dependent Work or work of separate contractor(s), the dimensions of which are unsatisfactory or will prevent a satisfactory installation of Work,
 - 5.8.2.7 Not proceed with Work until the unsatisfactory dependent conditions which prevent satisfactory installation of Work have been corrected.

Installation of Work by **Contractor** or by a Subcontractor in any given area shall constitute acceptance by **Contractor** or by such Subcontractor of all previously placed dependent Work

or work of separate contractor(s) and after such acceptance **Contractor** shall not make any claims for additional costs based on alleged deficiencies in such Work.

- 5.8.3 Whenever other **Contractors** will perform portion(s) of the work that depend on the **Contractor's** portion of the Work; **Contractor** shall provide all of the notices and information listed in 5.8.2. to such other **Contractors** in a timely manner.
- 5.9 **Contractor** shall be fully responsible to **Department** and **Engineer** for **Contractor's** acts and omissions and all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a contract with any level of Subcontractor or Supplier. Nothing in the Contract Documents shall create any contractual relationship between **Department** or **Engineer** and any such Subcontractor, Supplier or other person or organization. **Department** or **Engineer** may furnish to any Subcontractor or Supplier, to the extent practicable, evidence of the payments made to **Contractor** on account of specific Work done.
- 5.10 The various sections, divisions and subdivisions of the Standard and Supplementary Specifications and the identifications of any Drawings shall not control **Contractor** in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade. The Standard Specifications, Supplementary Specifications, and Drawings are complementary to each other and are to be read as a whole. Anything mentioned or shown in a division of such Specifications, or Drawings or in a specific trade Drawing shall be effective as if shown in all divisions of such Specifications and in all Drawings. In addition to the requirements of paragraphs 5.23 through 5.29 of the General Conditions, shop drawings of a specific trade shall be compared to and coordinated with those from other trades by **Contractor** before submission to **Engineer**.
- 5.11 All Work performed for **Contractor** by a Subcontractor will be pursuant to an appropriate agreement between **Contractor** and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of **Department**.

Patent Fees and Royalties:

- 5.12 **Contractor** shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, device or intellectual processes which is the subject of patent rights or copyrights held by others, both when a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and otherwise. It is the intent of the parties that whenever **Contractor** is required or desires to use any design, device, material or process covered by letters, patent, trademark or copyright, the right for such use shall be provided for by suitable legal agreements with the patentee or owner, and a copy of this agreement shall be filed with **Engineer**. However, whether or not such agreement is made or filed as noted, **Contractor** and **Contractor's** surety in all cases shall indemnify and hold harmless **Department** and **Engineer** and their employees as provided in paragraph 5.12.1 thereof and in Appendix B.
- 5.12.1 **Contractor** shall, at its expense, defend any suit instituted against **Department** and indemnify **Department** against any award of damages and costs made against **Department** by a final judgment of a court of last resort based on the claim that any of inventions, designs, processes, products, devices or intellectual processes furnished by or used in the performance or incorporated in the Work by **Contractor** or any Subcontractor or Supplier, infringes any patent or copyright of the United States; provided **Department** gives **Contractor** immediate notice in writing, permits **Contractor** to defend the suit and gives **Contractor** all available information, assistance and authority to do so. **Contractor** shall control the defense of any such suit, including appeals, and all negotiations to effect settlement. If any of such items in any such suit is held to so infringe and its use is enjoined, **Contractor** shall, at its election and expense: 1) procure for **Department** the right to continue using the same; or 2) replace or modify the same so that it becomes non-infringing; or 3) remove the same and eliminate any obligation to pay future charges or royalties pertaining thereto.
- 5.12.2 In the event that an action at law or in equity is commenced against **Department** or State arising out of a claim that its use of any invention, design, process, product, device or intellectual process as under this Agreement infringes on any patent, copyright or proprietary right, and such action is forwarded to **Contractor** for defense and indemnification pursuant to paragraph 5.12.1 and Appendix B. **Department** shall copy all pleadings and documents forwarded to **Contractor** together with the forwarding correspondence to the Office of the Attorney General of the State of New York together with a copy of the Contract Documents. If upon receipt of such request for defense, or at any time thereafter, **Contractor** is of the opinion that the allegations in such action, in whole or in part, are not covered by the indemnification set forth herein, **Contractor** shall immediately notify **Department** and the Office of the Attorney General of the State of New York in writing and shall specify to what extent **Contractor** believes it is and is not obligated to defend and indemnify under the terms and conditions of this Agreement. **Contractor** shall in such event protect the interests of the State of New York and secure a continuance to permit the State of New York to appear and defend its interests in cooperation with **Contractor** as is appropriate including any jurisdictional defenses which the State shall have.
- 5.12.3 **Contractor** shall, however, have no liability to the **Department** under this Article 5.12 if any infringement is based upon or arises out of: 1) Compliance with designs, plans, or specifications furnished by or on behalf of **Department** as to the items; 2) Alterations of the items by **Department**; 3) Failure of **Department** to use updated items provided by **Contractor** for avoiding infringement; 4) Use of items in combination with apparatus or devices not delivered by **Contractor**; 5) Use of items in a manner for which the same were neither designed nor contemplated; or 6) A patent or copyright in which **Department** or any

affiliate or subsidiary of the **Department** has any direct or indirect interest by license or otherwise.

- 5.12.4 The foregoing states **Contractor's** entire liability for, or resulting from, patent or copyright infringement or claim thereof.

Permits:

- 5.13 Unless otherwise provided in the Contract Documents, **Contractor** shall obtain and pay for any permits or licenses required for performance of Work. **Contractor** shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening of Bids, or if there are no Bids on the Effective Date of the Agreement. **Contractor** shall pay all charges for connections or disconnections required by the Work to Underground Facilities or utilities owned by third parties.

Laws and Regulations:

- 5.14.1 **Contractor** shall comply with all Laws applicable to performance of the Work. Except where otherwise expressly required by applicable Laws or Contract Documents, neither **Department** nor **Engineer** shall be responsible for monitoring **Contractor's** compliance with any Laws.
- 5.14.2 If **Contractor** observes that the Contract Documents are at variance with any applicable Laws, **Contractor** shall immediately give **Engineer** prompt written notice thereof, and any necessary changes will be authorized by one of the methods set forth in paragraph 2.4 and 2.5 of the General Conditions. If **Contractor** performs any Work knowing or having reason to know that it is contrary to such Laws, and without such notice to **Engineer**, **Contractor** shall bear all costs arising therefrom; however, it shall not be **Contractor's** primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws.

Taxes:

- 5.15 **Contractor** shall pay all sales, consumer, use and other similar taxes required to be paid by **Contractor** in accordance with the Laws of the State of New York which are applicable during the performance of the Work. Materials, supplies and equipment incorporated into the Work or sold to New York State are exempt from New York State sales tax.

Use of Premises:

- 5.16 **Contractor** shall confine the use and storage of construction equipment, the storage of materials and equipment and the operations of workers to the Project site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by applicable Laws, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. Unless otherwise provided in the Contract Documents, use of **Department's** facilities at or contiguous to the site by **Contractor** for storage of materials or equipment shall not be permitted. **Contractor** shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the acts or omissions of **Contractor**. Should any claim be made against **Department** or **Engineer** by any such owner or occupant because of the performance of the Work, **Contractor** shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim by arbitration or by Law. **Contractor** shall, to the fullest extent permitted by Laws, indemnify and hold **Department** harmless in accordance with the provisions of Appendix B.

- 5.16.1 Temporary buildings (e.g., storage sheds, trailers, shops, offices) and utilities may be erected by **Contractor** only with the approval of **Engineer** and shall be built without additional expense to **Department**. Such temporary buildings and utilities shall remain the property of **Contractor** and shall be decontaminated as necessary and removed by **Contractor** at his expense upon completion of the Work; the buildings and utilities may be abandoned and remain at the site with the written consent of **Department**.
- 5.16.2 When materials are transported for performance of the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by Federal, State, or local law or regulation. When it is necessary to cross curbs, sidewalks or work which is completed or underway on site, **Contractor** shall protect them from damage, and shall repair any damage caused.
- 5.16.3 Notwithstanding the designation of site boundaries or the indication of temporary fences or barricades, the provisions of the Contract Documents governing certain phases or portions of the Work may require that certain operations be carried out beyond the site boundaries. Trenching, utility Work, site development, landscaping, other Work, if required beyond such designated limits, shall be scheduled in such a manner as to cause or occasion a minimum of inconvenience or disturbance to or interference with the normal operation of **Department**, abutting owners and the public. **Contractor** shall obtain **Department's** prior approval and all necessary approvals from others, including but not limited to public authorities and utility companies for such operations, and shall conduct such operations expeditiously and restore the affected area to its original condition immediately upon completion of such operations, unless otherwise specified in the Contract Documents.
- 5.16.4 All existing walks, roadways, paved or landscaped areas on which temporary driveways or walks are rerouted shall be restored to their original condition, immediately upon completion of the phases or portions of the Work for which such features were disturbed unless otherwise specified in the Contract Documents.
- 5.16.5 Pumping, draining and control of surface and ground water will be carried out so as to avoid endangering the Work or any adjacent facility or property, or interrupting, restricting or otherwise infringing or interfering with the use thereof, or exceeding the limits allowed by Contract Documents, or applicable Law.
- 5.17 During the progress of the Work, **Contractor** shall keep the Site free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work **Contractor** shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the Site clean and ready for **Department**. **Contractor** shall restore all pavement, sidewalks, driveways, fences, shrubs, lawns, trees and any other public or private property damaged as a result of the Work under this Contract. All such replacement shall be done in accordance with the applicable specifications and no separate or extra payment will be made unless specifically provided for in the Payment Items. In all cases, said replacement shall be at least equal to the original conditions.
- 5.18 **Contractor** shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall **Contractor** subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

As-Built Documents:

- 5.19 **Contractor** shall maintain in a safe place at the Site one as-built document which shall consist of all Drawings, Specifications, Addenda, written amendments, Change Orders, Proposed Change Orders, field

test records, construction photographs, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 8.3) in good order and annotated to show all changes made during construction.

Contractor will be required to review with **Engineer** the status of all as-built documents in connection with **Engineer's** evaluation of an Application for Payment. Pursuant to paragraph 13.2.1 of the General Conditions, failure to maintain a current file of such as-built documents up-to-date may be just cause to recommend withholding of payments for Work performed. These as-built documents together with all approved samples and a copy of all approved Shop Drawings shall be available to **Engineer** for reference at the Site. Upon completion of the Work, these as-built documents, samples and Shop Drawings shall be delivered to **Engineer** for **Department**. Failure by **Contractor** to produce acceptable as-built documents of the above listed items shall be cause for reduction of Contract Price in an amount equal to **Department's** cost of generating or producing the as-built documents.

Health, Safety and Protection:

- 5.20 **Contractor** shall be responsible for initiating, maintaining and supervising all health and safety precautions and programs in connection with the Work which include but are not limited by the Contract Documents and **Contractor's** Health and Safety Plan. **Contractor** shall take all necessary precautions for the health and safety of, and shall provide the necessary protection to prevent damage, injury or loss to all employees and other persons and organizations who may be affected thereby. **Contractor** shall comply with all applicable Laws of any public body having jurisdiction for the health and safety of persons or property in order to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such health, safety and protection. **Contractor** shall notify owners of Underground Facilities and utility owners when performance of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. In addition to any requirements imposed by Laws, **Contractor** shall shore up, brace, underpin, and protect as may be necessary, all foundations and other parts of all existing structures adjacent to and adjoining the site which are in any way affected by the excavations or other operations connected with performance of the Work under the Contract. All damage, injury or loss to any property referred to in this paragraph caused, directly or indirectly, in whole or in part, by **Contractor**, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or caused by anyone for whose acts any of them may be liable, shall be remedied by **Contractor**; provided that **Contractor** shall not be responsible for damage or loss attributable to defects in the Drawings or Specifications or to the acts or omissions of **Department** or **Engineer** or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of **Contractor**. **Contractor's** duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and **Engineer** has issued a written notice to **Department** and **Contractor** in accordance with paragraph 13.11 that the Work is acceptable, except as otherwise expressly provided in connection with Substantial Completion. **Department** has the right to suspend Work or terminate this contract for cause for **Contractor's** failure to comply with any health and safety plan required by the Contract Documents or Law.
- 5.21 **Contractor** shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be **Contractor's** superintendent unless otherwise designated in writing by **Contractor** to **Department**.

Emergencies:

- 5.22 In emergencies affecting or threatening to affect the safety or protection of persons or the Work or property at the site or adjacent thereto when prompt action is required and there is no reasonable opportunity for prior consultation with **Engineer** or **Department**, **Contractor**, without special instruction or authorization from **Engineer** or **Department**, is obligated to act to prevent threatened

damage, injury or loss. **Contractor** shall give **Engineer** prompt telephonic notice followed by written notice thereof, including any significant changes in the Work or variations from the Contract Documents which **Contractor** believes have been caused thereby. If **Engineer** determines that a change in the Contract Documents is required because of the action taken in response to an emergency, an Administrative Agreement, Field Order, Proposed Change Order or Change Order shall be issued to document the consequences of the changes or variations. **Contractor** shall give **Engineer** and **Department** name and number of contact for emergencies during non-Work hours.

Shop Drawings and Samples:

- 5.23 After checking and verifying all field measurements and after complying with applicable procedures specified in the Contract Documents, **Contractor** shall submit to **Engineer** for review and approval in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 1.4, hereof) six copies of all Shop Drawings plus additional copies as required by **Contractor**, unless otherwise specified in the Contract Documents. All such Shop Drawings shall bear a stamp or other specific written indication that **Contractor** has satisfied the requirements of the Contract Documents with respect to the review of the submissions including but not limited to subparagraph 5.25 below. All submissions shall be identified as **Engineer** may require. The data shown on the Shop Drawings shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable **Engineer** to review the information as required.
- 5.24 **Contractor** shall also submit to **Engineer** for review and approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents. **Contractor** shall check all samples, shall identify them clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended, and shall submit with them a written certification that **Contractor** has satisfied the requirements of the Contract Documents with respect to the review of such submissions including but not limited to subparagraph 5.25 below.
- 5.25 Before submission of each Shop Drawing or sample, **Contractor** shall certify that all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto have been reviewed or that each Shop Drawing or sample has been coordinated with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.
- 5.26 At the time of each such submission, **Contractor** shall give **Engineer** specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation of each such variation to be made on each Shop Drawing submitted to **Engineer** for review and approval.
- 5.27 **Engineer** will review and approve or disapprove Shop Drawings and samples in 14 days. However, **Engineer's** review and approval of Shop Drawings will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to the accuracy of other matters that may be contained in the submittals, including but not limited to such matters as dimensions, quantities, performance of equipment and systems proposed by **Contractor**, **Contractor's** means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequences, and procedures of construction is indicated in or required by the Contract Documents) or to safety precautions or program incident thereto, the correctness of which shall remain the sole responsibility of **Contractor**. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 5.27.1 When reviewed by **Engineer**, each submittal of Shop Drawings and samples will be returned to **Contractor** as either "Approved", "Approved as Noted", "Resubmit with Revisions", or

"Disapproved." Submittals stamped as "Approved" or "Approved as Noted" will indicate **Engineer's** approval thereof, subject to the provisions of paragraph 5.27.

- 5.27.2 **Contractor** shall revise and correct Shop Drawings and samples and resubmit them to **Engineer** for **Engineer's** second review and return pursuant to paragraph 5.28. **Contractor** shall direct specific attention in writing to revisions other than the corrections called for by **Engineer** on previous submittals.
- 5.27.3 Costs associated with **Engineer's** review and return of a Shop Drawing or sample submission other than ones submitted pursuant to paragraph 5.7 of this Section shall be borne by **Contractor** after the **Engineer's** second review. **Department's** charges to **Contractor** for additional reviews will be equal to **Engineer's** charges to **Department** under the terms of **Engineer's** agreement with **Department**. In the event **Contractor** fails to pay such costs within 30 days after receipt of an invoice from **Department**, funds will be withheld from payment requests and at the completion of the Work, a Change Order or proposed Change Order will be issued incorporating the unpaid amount, and **Department** will be entitled to an appropriate decrease in Contract Price.
- 5.27.4 After the **Engineer's** second review, delays associated with **Contractor's** resubmittal and **Engineer's** review and return of a particular Shop Drawing or sample submission shall be the responsibility of **Contractor**. Such delays shall not justify an increase in Contract Price nor an extension in Contract Time.
- 5.28 **Engineer's** review and approval of Shop Drawings or samples shall not relieve **Contractor** from responsibility for any variation from the requirements of the Contract Documents unless **Contractor** has in writing called **Engineer's** attention to each such variation at the time of submission as required by paragraph 5.26 and **Engineer** has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample approval; nor will any approval by **Engineer** relieve **Contractor** from responsibility for errors or omissions in the Shop Drawings or from responsibility for complying with paragraph 5.25.
- 5.29 Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to **Engineer's** review and approval of the pertinent submission will be the sole expense and responsibility of **Contractor**.

Continuing the Work:

- 5.30 **Contractor** shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with **Department**. No work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Article 14 of the General Conditions or as **Contractor** and **Department** may otherwise agree in writing.

Weather Protection:

- 5.31 **Contractor** shall be responsible for initiating, maintaining and supervising all weather protection precautions and programs in connection with the Work. Additional weather protection provisions, if applicable, are set forth in the Supplementary Conditions, Standard Specifications or Supplementary Specifications.

Cutting and Patching of Work:

- 5.32 **Contractor** shall be responsible for all cutting of masonry and other materials, and all fitting, drilling or patching which may be necessary to complete the Work or to make its several parts fit together properly, whether or not such Work is expressly specified in the Contract Documents.
- 5.33 **Contractor** shall not damage or endanger any portion of the Work or the work performed by **Department** or by any separate contractors by cutting, patching or otherwise altering any work, or by excavation. **Contractor** shall not cut or otherwise alter work performed by **Department** or any separate contractors except with the written consent of **Department** and of such separate contractor. **Contractor** shall not unreasonably withhold from **Department** or any separate contractor consent to cutting or otherwise altering the Work.

Quality Control:

- 5.34 Reference is made to the Supplementary Conditions, Standard Specifications and Supplementary Specifications for the identification of **Contractor's** quality control system requirements under the Contract.

Project Meetings:

- 5.35 **Contractor**, along with appropriate Subcontractors, suppliers and manufacturers, shall attend weekly project meetings at the site or as requested by **Department** or **Engineer**, for the purpose of discussing and resolving matters concerning the various elements of the Work.

Notification of Emergency Services:

- 5.36 **Contractor** shall notify all local Police, Fire Department and Ambulance Services at least twenty-four (24) hours in advance of construction across or adjacent to existing roadways in order that such services might be aware of any disrupted access.

Conflicts Between Contract Documents and Site:

- 5.37 **Contractor** shall notify **Engineer** and **Department** immediately upon discovering any conflicts, ambiguities, error or inconsistencies in the Contract Documents, between the Contract Documents and the actual Site Conditions, or between the Contract Documents and work being done by others. Failure to promptly notify the **Engineer** and **Department** may invalidate **Contractor's** request for an increase in Contract Price and/or Time.

ARTICLE 6 - Other Work

Related Work at Site:

- 6.1 **Department** may perform other work related to the Project at the site by **Department's** own forces, have other work performed by utility owners, or enter into other contracts for such other work.
- 6.2 **Contractor** shall afford each utility owner and other contractor who is a party to a direct contract with **Department** (or **Department**, if **Department** is performing the additional work with **Department's** employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect the Work with theirs. **Contractor** shall do all the Work that may be required to make its several parts come together properly and integrate with other work. **Contractor** shall only alter the work of others with the written consent of **Engineer** and notice to the other contractors whose work will be affected, and shall not endanger any work of others by altering their work. The duties and responsibilities of **Contractor** under this paragraph are for the benefit of such utility owners and other contractors.
- 6.3 If any part of **Contractor's** Work depends for proper execution or results upon the work of any such other contractor, utility owner or **Department**, **Contractor** shall inspect and promptly report to **Engineer** in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. **Contractor's** failure so to report shall constitute an acceptance of the other work as fit and proper for integration with **Contractor's** Work except for latent or non-apparent defects and deficiencies in the other work.

ARTICLE 7 - Department's Responsibilities

- 7.1 **Department** may issue communications to **Contractor** through **Engineer**.
- 7.2 In case of termination of the employment of **Engineer**, **Department** shall appoint an engineer whose status under the Contract Documents shall be that of the former **Engineer**.
- 7.3 **Department** shall furnish the data required of **Department** under the Contract Documents promptly and shall make payments to **Contractor** promptly after they are due as provided in Article 13.
- 7.4 **Department** is represented by the Project Field Representative, the Project Manager and the Designated Representative whose duties and authority are set forth in the Contract Documents. **Department** is also represented by **Engineer**.
- 7.5 **Department** will not be responsible for **Contractor's** means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, unless the Contract Documents specifically impose such a duty on **Department**. **Department** will not be responsible for **Contractor's** failure to perform or furnish the Work in accordance with the Contract Documents.
- 7.6 **Department** will not be responsible for the acts or omissions of **Contractor** or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 8 - Engineer's Status During Construction

Project Representation:

- 8.1 The duties and responsibilities and the limitations of authority of **Engineer** during construction are set forth in the Contract Documents. **Engineer's** Resident Engineer will assist **Engineer** in inspecting the performance of the Work. The duties, and authorities of any Resident Engineer and Resident Project Representatives are set forth in the Contract Documents. Secondarily **Department** is represented as set forth in article 7.4 of the General Conditions.

Visits to Site:

- 8.2 **Engineer** shall make any on-site inspections necessary to check the quality or quantity of the Work and to determine if the Work is proceeding in accordance with the Contract Documents. **Engineer's** duty to visit the site shall in no way be construed to relieve **Contractor** of its duty to perform the Work in conformance with the Contract Documents.

Clarifications and Interpretations:

- 8.3 **Engineer** or **Department** shall issue with reasonable promptness and within 14 days maximum such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as **Engineer** or **Department** may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. If **Contractor** believes that a written clarification or interpretation justifies an increase in Contract Price or an extension in Contract Time, **Contractor** shall be required to deliver a written notice thereof to **Engineer** and **Department** in accordance with the provisions of Article 9 of the General Conditions. If **Department** and **Contractor** are unable to agree as to amount and extent thereof, a claim may be made pursuant to Articles 10, 11 and 15 of the General Conditions.

Authorized Variations in Work:

- 8.4 **Engineer** may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order and will be binding on **Contractor** who shall perform the Work involved promptly. If **Contractor** believes that a Field Order justifies an increase in Contract Price or an extension in Contract Time, **Contractor** shall be required to deliver a written notice thereof to **Engineer** in accordance with the provisions of Article 9 of the General Conditions. If **Department** and **Contractor** are unable to agree as to amount and extent thereof, a claim may be made pursuant to Articles 10 and 11 of the General Conditions.

Rejecting Defective Work:

- 8.5 **Engineer**, based on its inspections, reports of its Resident Engineer, other information available to it and its professional experience and training, or the direction of Department, may disapprove or reject Work at any time during the construction of the Work, which **Engineer** believes to be Defective Work. **Engineer** shall also have authority to require special inspection or testing of the Work as provided in paragraphs 12.4 through 12.10 of the General Conditions, whether or not the Work is fabricated, installed, or completed. When **Contractor** has been notified by **Engineer** of disapproval or rejection of Defective Work, **Contractor** shall take immediate action to correct same at no additional cost.

Shop Drawings, Change Orders and Payments:

- 8.6 **Engineer's** responsibilities regarding Shop Drawings and samples, are set forth in paragraphs 5.23 through 5.29 of the General Conditions. If **Contractor** believes that **Engineer's** approval of a Shop Drawing or sample justifies an increase in Contract Price or an extension in Contract Time, **Contractor** shall be required to deliver a written notice thereof to **Engineer** in accordance with the provisions of Article 9 of the General Conditions. If **Department** and **Contractor** are unable to agree as to amount and extent thereof, a claim may be made pursuant to Articles 10 and 11 of the General Conditions.
- 8.7 **Engineer's** duties regarding Change Orders are set forth in Articles 9, 10 and 11 of the General Conditions.
- 8.8 **Engineer's** duties regarding Applications for Payment, etc., are set forth in Article 13 of the General Conditions.

Determinations for Unit Prices:

- 8.9 **Engineer** will review and make preliminary determinations on the actual quantities and classifications of acceptable Unit Price Work performed by **Contractor**. **Engineer** will review such preliminary determinations with **Contractor**, before rendering a written decision thereon by recommendation of an Application for Payment or otherwise. **Department** shall review and approve **Engineer's** determinations. **Department's** decisions thereon shall be final unless within 15 days after the date of any such decision, **Contractor** delivers to **Department** and to **Engineer** written notice of intention to dispute such a decision.

Decisions on Disputes:

- 8.10 **Engineer** shall interpret the Contract Documents and determine the acceptability of the Work thereunder subject to **Department's** right to modify or overrule **Engineer's** determination after consultation with **Engineer** and **Contractor**. Disputes or other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work, and disputes under Articles 9, 10, 11 and 15 of the General Conditions in respect to changes in the Contract Price or Contract Time will be referred to **Engineer** in writing with a request for a formal determination in accordance with this paragraph. **Engineer** shall render such determination in writing within a reasonable time. Written notice of each such claim, dispute or other matter shall be delivered by **Contractor** to **Engineer** and **Department** within fifteen days after the occurrence of the event giving rise thereto. Written data supporting such dispute or other matters shall be submitted to **Department** within forty-five days after such occurrence, unless **Department** allows an extension of time to submit additional information.

Limitations on Engineer's Responsibilities:

- 8.11 Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as approved," or terms of like effect or import are used, or the adjectives "unreasonable," "unsuitable," "acceptable," "proper," or "satisfactory," or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of **Engineer** as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents unless there is a specific statement indicating otherwise. The use of any such term or adjective shall not be effective to assign to **Engineer** any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 8.12 or 8.13.
- 8.12 **Engineer** will not be responsible and **Contractor** remains responsible for **Contractor's** means, methods, techniques, sequences and procedures of construction, and the safety precautions and programs

incident thereto, unless Contract Documents specifically impose such a duty on **Engineer**. **Engineer** will not be responsible for **Contractor's** failure to perform or furnish the Work in accordance with the Contract Documents.

- 8.13 **Engineer** will not be responsible for the acts or omissions of **Contractor** or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 9 - Changes in the Work

- 9.1 Without invalidating the Agreement, **Department** may, at any time or from time to time and without notice to any surety, order additions, deletions or revisions in the Work or other requirements, which the performance of, or compliance with, is established in the provisions of the Contract Documents. These changes will be initiated by Proposed Change Orders, in Administrative Orders and authorized by Change Orders. Upon receipt of an Administrative Order, or Proposed Change Order, the Contractor shall proceed with the Work involved. All such Work involved shall be performed in accordance with the applicable conditions of the Contract Documents. If an Administrative Order or Proposed Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made in a duly executed Change Order. The value of any work covered by a Proposed Change Order or a Change Order for an increase or decrease in the Contract Price or the Contract Time, hereafter called the "Work involved", shall be determined by one of the following methods:
- 9.2 **Department** may order minor changes in the Work which do not involve an adjustment in the Contract Price or in the Contract Time and are consistent with the overall intent and purpose of the Contract Documents. Such minor changes will be authorized by a Field Order which shall be binding on **Department** and **Contractor** who shall perform such changes promptly. If **Contractor** believes that a Field Order justifies an increase in the Contract Price or the Contract Time, **Contractor** shall make written notification within 3 days and provide documentation within 15 days in a Proposed Change Order to **Engineer**.
- 9.3 Additional work performed without authorization of a Proposed Change Order will not entitle **Contractor** to an increase in the Contract Price or an extension in the Contract Time, except in the case of emergency work as provided in paragraph 5.22 of the General Conditions and except in the case of uncovering Work as provided in paragraph 12.9 and 12.10 of the General Conditions.
- 9.4 When changes in the Work, involving adjustments to the Contract Price or Contract Time are contemplated by **Department**, pursuant to paragraph 9.1, **Contractor** may be requested to submit a cost proposal prior to being authorized to proceed with the change. If **Department** and **Contractor** are unable to agree and **Department** orders the change, or if **Department** pursuant to **Engineer's** review and decision concludes that the written direction, instruction, interpretation or clarification, approval, decision or determination does not require an increase in Contract Price or extension in Contract Time, **Contractor** will be required to carry on with the Work involved and adhere to the Progress Schedule. **Contractor** proposals substantiating the amount and extent of any proposed adjustment in Contract Price or Contract Time shall become due within three days of receipt (or issuance) of a Proposed Change Order initiated by **Department** (or **Contractor**), and shall be submitted in accordance with Articles 9, 10 and 11 of the General Conditions. Any delays in the submittal of **Contractor** proposals relative to adjustments in Contract Price or Contract Time will not justify a delay or constitute basis for an increase in Contract Price or an extension in Contract Time. Unless **Contractor** gives written notice of intent to appeal **Department's** determination or to file a claim in accordance with Article 15 of the General Conditions, within said thirty days of the issuance of a Proposed Change Order or the rejection of a Proposed Change Order, **Department's** determination shall be final and binding upon **Contractor**.

- 9.5 Upon receipt of a cost proposal from **Contractor**, pursuant to paragraph 9.4 above, and if **Department** agrees with the increase or decrease in the Contract Price or Contract Time, **Department** shall authorize the change in the Work by issuing a Proposed Change Order and shall begin preparation of a Change Order covering the Work involved.
- 9.5.1 A Change Order shall also be any other written order, including direction, instruction, interpretation, determination, or decision embodied in a Field Order, or in a response to a request for clarification or interpretation of the requirements of the Contract Documents, or in an approval of a Shop Drawing or sample, or in a decision relating to a report or differing or unforeseen conditions or the acceptability of Work or Administrative Order which causes any change, provided that **Contractor** gives **Engineer** and **Department** a dated written notice identifying the written order and stating circumstances and other information required in this Article and in Articles 9, 10 and 11 of the General Conditions indicating that **Contractor** considers the written order a Proposed Change Order.
- 9.5.2 **Contractor** quotations substantiating the amount or extent of any proposed adjustment in Contract Price or Contract Time shall cover all known amounts or extents to which **Contractor** is entitled as a result of the proposed change. Pursuant to this requirement of the Contract Documents, **Contractor** acknowledges and agrees to the following waivers when executing Change Orders or Proposed Change Orders authorized in accordance with paragraph 9.4 of the General Conditions:
- 9.5.2.1 **Contractor** acknowledges and agrees that the adjustments in Contract Price and Contract Time stipulated in this Change Order represent full compensation for all increases or decreases in the cost of, or the time required to perform the entire Work under the Contract, arising directly or indirectly from this Change Order, including this and all previous Change Orders. Acceptance of this waiver constitutes an agreement between **Department** and **Contractor** that the Change Order represents an all inclusive, mutually agreed upon adjustment to the Contract for all direct, indirect and consequential costs and delays, and that **Contractor** shall waive all rights to file a claim on this Proposed Change Order after it is properly executed.
- 9.5.2.2 Acceptance by **Contractor** is evidence of mutual accord and satisfaction for those adjustments in Contract Price and Contract Time stipulated in this Proposed Change Order, that **Contractor** shall submit detailed supporting data within fifteen days in accordance with Articles 10 and 11 of the General Conditions to allow negotiation of outstanding issues, and that the changes ordered and documented by this Proposed Change Order will be incorporated into a future Change Order subsequent to agreement on all outstanding issues.
- 9.6 If the provision of any bond requires that the surety be notified of any change in the Work, it shall be **Contractor's** responsibility to so notify the surety and the amount of each applicable bond shall be adjusted accordingly. **Contractor** shall furnish proof to **Department** of such adjustment.
- 9.7 No claim by **Contractor** for an adjustment under this Article of the General Conditions shall be allowed if asserted after the date of final payment under this Contract.

ARTICLE 10 - Change of Contract Price or Time

- 10.1 The Contract Price constitutes the total compensation, subject to authorized adjustments, payable to **Contractor** for performing the Work. All duties, responsibilities and obligations assigned to or

undertaken by **Contractor** shall be at its own expense without any change in the Contract Price or the Contract Time.

- 10.2 The Contract Price and the Contract Time may only be changed by a duly executed Change Order.
- 10.3 The value of the Work involved shall be determined by one of the following methods:
 - 10.3.1 Where the Work involved is covered by unit prices contained in the Contract Documents, those unit prices shall be used to determine the cost of the Work involved.
 - 10.3.2 Where the Work involved is not covered by unit prices contained in the Contract Documents, by application of mutually agreed upon unit prices to the quantities of the items of Work involved.
 - 10.3.3 By mutual acceptance of a lump sum.
 - 10.3.4 On the basis of the cost of the Work involved as provided in paragraph 10.4 of this Article plus a **Contractor's** fee for overhead and profit as provided in paragraph 10.7 of this Article.
 - 10.3.5 Where the **Department** and **Contractor** cannot agree on any of the methods described above, and **Department** directs **Contractor** to proceed with the Work involved as provided in Article 10 of the General Conditions.
- 10.4 The Cost of the Work involved shall include the following items and shall not include any of the costs disallowed under this Article 10 of the General Conditions:
 - 10.4.1 Payroll costs of employees in the direct employ of the **Contractor** in the performance of the Work involved in job classifications agreed upon by **Department** and **Contractor**. Payroll costs shall include, but shall not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers or workmen's compensation, health and retirement benefits, and sick leave applicable thereto. Such employees may include foremen at the site but shall not include employees in the job classifications itemized in paragraphs 10.6.1. The costs of performing the Work involved during other than normal working hours, as defined in paragraph 5.3.1, shall be included in the above to the extent authorized by **Department** and as required by Law.
 - 10.4.2 Cost of all materials and equipment furnished and incorporated into the Work involved, including costs of transportation and storage thereof, and suppliers' field services connected therewith. All cash discounts shall accrue to **Contractor** unless **Department** deposits funds with **Contractor** with which to make payments, in which case, the cash discounts shall accrue to **Department**. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment shall accrue to **Department**, and **Contractor** shall make provisions so that they may be obtained.
 - 10.4.3 Payments made by **Contractor** to subcontractors who perform a part of the Work involved. If required by **Department**, **Contractor** shall obtain competitive bids from prospective subcontractors acceptable to **Contractor** and shall deliver such bids to **Department** who will then determine which bids will be accepted. If a subcontract provides that the subcontractor is to be paid on the basis of cost plus a fee, the subcontractor's cost shall be determined in the same manner as **Contractor's** cost of the Work involved. All subcontracts shall be subject to the provisions of the Contract Documents, insofar as applicable.

- 10.4.4 Costs of special consultants, including but not limited to engineers, architects, testing laboratories, surveyors, attorneys and accountants, employed for services specifically related to the Work involved to the extent authorized in writing by **Department**.
- 10.4.5 Costs of **Contractor** owned equipment - **Contractor** shall be reimbursed for his ownership and operating costs for self owned equipment employed on the Work involved. The rates of reimbursement shall be as listed in most recent published edition of the Rental Rate Blue Book published by Dataquest, Inc. in effect on the date of issuance of the applicable Change Order or Proposed Change Order, or prior to performing the Work in a claim for an increase or decrease in the Contract Price and applied in the following manner.
- 10.4.5.1 Ownership costs - The equipment rates for ownership costs include depreciation on the original purchase, insurance, applicable taxes, interest on investment, storage, repairs, mobilization to and demobilization from the site of the Work involved, and profit reimbursement will be made for the hours on the Work involved. In no event shall the equipment rate billed to **Department** be at rates exceeding those described below.
- 10.4.5.2 Less than 8 hours of actual use or necessary for availability as approved by Engineer: The daily rate or the product of the hours of actual use multiplied by the hourly rate, whichever is less.
- 10.4.5.3 Between 8 hours and 40 hours of actual use: The weekly rate or the product of the hours of actual use used divided by 8 and multiplied by the daily rate, whichever is less.
- 10.4.5.4 Between 40 hours and 176 hours of actual use: The monthly rate or the product of the hours of actual use divided by 40 multiplied by the weekly rate, whichever is less.
- 10.4.5.5 Over 176 hours of actual use: The product of the hours of actual use divided by 176 multiplied by the monthly rate.
- 10.4.5.6 Operating costs including fuel, lubricants, other operating expendables, and preventive and field maintenance. Operating costs do not include the operator's wages. **Contractor** shall be reimbursed the product of the hours of actual use multiplied by the estimated operating cost per hour.
- 10.4.5.7 The geographic area adjustment factor and the Rate adjustment tables for federal aid projects shall be applied to the equipment ownership rates.
- 10.4.5.8 The rates used shall be those in effect at the time the Work involved is to be done as listed in the then current Rental Rate Blue Book.
- 10.4.5.9 In the event that a rate is not established in the Rental Rate Blue Book for a particular piece of equipment, **Department** will establish rates for ownership and operating costs.
- 10.4.5.10 Equipment to be used by **Contractor** shall be specifically described by manufacturer and model number and be of suitable size and capacity to accomplish the Work involved. In the event **Contractor** elects to use equipment of a higher rental rate than equipment suitable for the Work involved, payment

will be made at the rate applicable to the suitable equipment. **Department** and **Engineer** shall determine the suitability of the equipment. If there is a differential in the rate of pay of the operator of oversized or higher rate equipment, the rate paid for the operator will likewise be related to the suitable equipment.

10.4.5.11 Transportation, loading and unloading, installation, dismantling and removal costs shall be included only if such construction equipment and machinery is imported to the site solely to perform the Work involved in the Change Order Proposed Change Order, or Claim. All equipment costs shall cease when the use thereof is no longer necessary to perform the Work involved or the equipment cannot be used to perform the Work involved due to contractor actions or inactions. Payroll costs for employees operating the equipment shall be in accordance with paragraph 10.4.1 of the General Conditions.

10.4.5.12 Actual equipment use time documented by **Engineer** shall be on the basis that the equipment was on and used at the site. In addition to the leasing rate, equipment operational costs shall not exceed the estimated hourly operation rate as set forth in the Blue Book. Daily records listing the equipment units and their respective operators, identification code, and actual usage and certified at the end of each day by **Engineer** shall be the record upon which actual equipment use shall be based. For multiple shift work sequences the allowable equipment rate for second or third shifts shall not exceed 50 percent of the base rate. Idle equipment at the site and necessary to perform the Work involved but not in actual use shall be paid at the rate determined above. Idle time shall include a reasonable time allowance to and from the site, and be as documented by **Engineer**.

10.4.6 Costs of **Contractor** rented equipment.

10.4.6.1 In the event **Contractor** must rent a specific piece of equipment, payment will be the actual rental rate for the piece of equipment for the time that is used on the Work involved or required by **Department** to be present, not to exceed the rental rate in the Rental Rate Blue Book, plus the reasonable cost of moving the equipment onto and away from the site of the Work involved.

10.4.6.2 **Contractor** shall also be reimbursed for the operating cost of the rented equipment if that cost is not included in the rental cost. The operating cost shall be determined in the same manner as specified for **Contractor** owned equipment above. If contractor owned equipment is available on site to complete the work, **Contractor** shall be reimbursed only at the rate for owned equipment and there shall not be any reimbursement for transportation of equipment to or from site.

10.4.6.3 In the event area practice dictates the rental of fully manned or fueled and maintained equipment, payment will be made on the basis of an invoice for the rental of the fully manned, fueled and/or maintained equipment, including all costs incidental to its use, plus costs of moving to and from the site of the Work involved, provided the rate is substantiated by area practice.

10.4.6.4 Transportation, loading and unloading, installation, dismantling and removal costs shall be included only if such construction equipment and machinery is imported to the site solely to perform the Work involved in the Change Order, Proposed Change Order, or Claim. All equipment costs shall cease when the use

thereof is no longer necessary to perform the Work involved or the equipment cannot be used to perform the Work involved due to **Contractor** actions or inactions. Payroll costs for employees operating the equipment shall be in accordance with paragraph 10.4.1 of the General Conditions.

- 10.4.7 The maximum amount of reimbursement for the ownership costs of **Contractor** owned equipment or for the rental costs of rented equipment shall be limited to the original purchase price of the equipment as listed in the Green Guide for Construction Equipment published by the Equipment Guide Book Company. In the specific event where the reimbursement is limited by the original purchase price, **Contractor** shall be reimbursed for the operating cost per hour for each hour of actual use.
- 10.4.8 Supplemental costs due solely in connection with the Work involved to include the following:
 - 10.4.8.1 The necessary transportation, travel and subsistence expenses of **Contractor's** employees who are solely employed in the Work involved.
 - 10.4.8.2 Costs, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site required, but excluding hand tools, protective clothing and other consumables which are used or consumed in connection with the Work involved and are individually valued at less than \$100.00.
 - 10.4.8.3 Sales, consumer use, or similar taxes for which **Contractor** is liable, exclusive of New York State and local sales taxes for materials, supplies and equipment incorporated into the Work.
 - 10.4.8.4 Royalty payments and fees for licenses and permits.
 - 10.4.8.5 Costs of utilities at the site including but not limited to electricity, telephone, fuel, heat, water, property rental and sanitary facilities.
- 10.5 The amount of credit to be allowed by **Contractor** to **Department** for any individual change in the Work which results in a net decrease in cost shall be the amount of the actual net decrease plus a deduction in **Contractor's** fee equal to one half of the fee derived from the application of paragraphs 10.7.2.1, 10.7.2.2 and 10.7.2.3 of this Article.
 - 10.5.1 When more than one individual change is covered by one Proposed Change Order or Change Order, the adjustment in **Contractor's** fee shall be the sum of the individual fees computed on each individual change in accordance with paragraphs 10.7.2.1 through 10.7.2.4.
- 10.6 The cost of the Work involved shall not include any of the following, all of which are to be considered general and overhead costs covered by the **Contractor's** fee:
 - 10.6.1 Payroll costs and other compensation of **Contractor's** executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, superintendents, administrators, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by **Contractor**, at the site or not, for general administration of the Work including any Change Orders, and who are not specifically included in the agreed upon schedule of job classifications referred to in paragraph 10.4.1 of this Article.

- 10.6.2 Expenses of **Contractor's** principal and branch offices other than **Contractor's** office at the site. Costs derived from the computation of an extended or unabsorbed home office overhead rate by application of the Eichleay, Allegheny, Burden Fluctuation, or other similar methods.
- 10.6.3 Any part of **Contractor's** capital expenses, including interest on **Contractor's** capital employed for the Work involved and charges against **Contractor** for delinquent payments.
- 10.6.4 Cost of premiums for all bonds and insurance whether or not **Contractor** is required by the Contract Documents to purchase and maintain the same.
- 10.6.5 Costs incurred in the preparation of Proposed Change Orders or Change Orders or in preparation or filing of claims.
- 10.6.6 Expenses of **Contractor** associated with anticipated lost profits or lost revenues, lost income or earnings, lost interest on earnings or unpaid retainage.
- 10.6.7 Small tools used or consumed in the performance of the Work involved having an individual value of less than \$100.
- 10.6.8 Costs due to negligence of **Contractor** or any subcontractor anyone directly or indirectly employed by them for whose acts any of them may be liable, including, but not limited to correction of defective work, disposal of equipment or material wrongly supplied and repairing any damage to property.
- 10.6.9 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 10.4 of this Article, all of which are to be considered general and overhead costs covered by the **Contractor's** fee.

Contractor's Fee:

- 10.7 The **Contractor's** fee for general and administrative overhead costs (whether at the site or in **Contractor's** principal or branch offices), small tools and profit on the Work involved shall be determined by negotiations in accordance with this paragraph.
 - 10.7.1 **Contractor** shall negotiate with **Department** for reasonable overhead rates and fair and reasonable profit based on assumptions of risk, exposure to weather, size of the change, labor to material ratio, equipment requirements, and time of performance.
 - 10.7.2 In no case shall the **Contractor's** fee exceed the following percentages of the various percentages of the Cost of the Work involved.
 - 10.7.2.1 For costs incurred under paragraph 10.4.1 (Payroll Costs) of this Article, the **Contractor's** fee shall not exceed fifteen percent (15%).
 - 10.7.2.2 For costs incurred under paragraph 10.4.2 (Costs of Materials and Equipment) of this Article, the **Contractor's** fee shall not exceed ten percent (10%).
 - 10.7.2.3 For costs incurred under paragraph 10.4.3 (Cost of Subcontracts) of this Article, the **Contractor's** fee shall not exceed five percent (5%) and the subcontractor's fee shall not exceed ten percent (10%).

- 10.7.2.4 For costs incurred under paragraph 10.4.3 of this Article, for work performed by a subcontractor's subcontractor, the **Contractor's** and the first subcontractor's fees shall not exceed five percent (5%) each and the second subcontractor's fee shall not exceed ten percent (10%).
- 10.7.2.5 No fee shall be paid on the costs itemized under paragraphs 10.4.4 and 10.4.5 nor on subcontractors' fees derived in accordance with paragraphs 10.7.2.3 and 10.7.2.4.
- 10.7.3 No fee shall be paid on premium portion of wages nor on increased wages due to delays.
- 10.8 Changes in the Contract Price due to changes in the Contract Time.
- 10.8.1 An increase in the Contract Price due solely to delays causing extensions in the Contract Time will be allowed only if the delays to the Work, or parts thereof, arise from acts or omissions of **Department** or **Engineer** which are longer than the time period(s) provided for review(s) or decision(s) as provided for in the Contract Documents, and provided further that the delays arise from changes in the Work covered by Proposed Change Orders or Change Orders prepared pursuant to Article 9 of the General Conditions or from suspensions of Work pursuant to paragraph 14.1 of the General Conditions. However no adjustment in the Contract Price shall be made under this paragraph for the following reasons:
- 10.8.1.1 For any extensions granted in the Contract Time to the extent that performance would have been so extended by any other cause including fault or negligence of **Contractor** or subcontractors, suppliers or other persons or organizations.
- 10.8.1.2 For any acceleration alternative in lieu of an extension proposed by **Contractor**, to the extent that the acceleration costs exceed those in connection with the alternative extension in Contract Time.
- 10.8.1.3 For which a Contract Price is provided or excluded under any other provision of the Contract Documents.
- 10.8.1.4 For delays which are covered by or which could be covered by relocating the Total Float or a portion of it.
- 10.8.2 Recovery of damages for delay on account of extensions in **Contractor's** Progress Schedule or in connection with acceleration alternatives thereof will be allowed only when said delays extend the Work, or a part thereof, beyond the applicable Contract Time(s).
- 10.8.3 It is further expressly agreed and understood that **Contractor** will not be entitled to any compensation or damages on account of delays which meet the requirements of paragraph 10.12.3 of the General Conditions for time extensions but which can or could have been avoided by reallocating portions of the Total Float. Under this requirement, it is further understood and agreed that the only remedies for delays which are figured to cause an extension in the Contract Time or form the basis for a proposal for an acceleration alternative thereof solely due to the use of Total Float will consist of an increase in Contract Time only and shall exclude **Contractor's** right to recover any delay damages or compensation from **Department**.
- 10.9 In submitting proposals or asserting claims for changes under this Article, **Contractor** acknowledges and agrees that no adjustment shall be made: 1) for any escalation costs for any part of the Work which

is not delayed beyond the applicable latest possible dates specified in the approved Progress Schedule, or 2) for any acceleration costs incurred without prior authorization from **Department**, or 3) for which an adjustment has been provided for, limited as to extent, or excluded under any other provision of the Contract Documents.

10.10 **Contractor** quotations substantiating the amount or extent of any proposed adjustment in Contract Price or Contract Time shall cover all known amounts or extents (direct, indirect and overhead) to which **Contractor** is entitled as a result of the proposed change. Pursuant to this requirement, **Contractor** acknowledges and agrees to the following waivers when executing Proposed Change Orders and Change Orders authorized in accordance with Article 9:

10.10.1 **Contractor** acknowledges and agrees that the adjustments in Contract Price and Contract Time stipulated in the Change Order represent full compensation for all increases or decreases in the cost of, or the time required to perform, the entire Work under the Contract arising directly or indirectly from the Change Order. Acceptance of this waiver constitutes an agreement between **Contractor** and **Department** that the Change Order represents an all inclusive, mutually agreed upon, adjustment to the Contract for all direct, indirect and consequential costs and delays, and that **Contractor** will waive all rights to file a claim on the Change Order after it is duly executed.

10.10.2 Acceptance by **Contractor** is evidence of mutual accord and satisfaction for those adjustments in the Contract Price and Contract Time stipulated in the Proposed Change Order, that **Contractor** will submit detailed supporting data within fifteen days in accordance with Articles 10 and 11 of the General Conditions to allow negotiation of outstanding issues, and that the changes ordered and documented by the Proposed Change Order will be incorporated into a future Change Order subsequent to agreement on all outstanding issues.

10.11 Additional costs incurred due to acceleration or additional work performed by **Contractor** without an agreed upon Proposed Change Order will not entitle **Contractor** to an increase in Contract Price or Contract Time, except in the case of emergency work as provided in paragraph 5.22 of the General Conditions or in the case of uncovering Work as provided in paragraph 12.9 of the General Conditions.

10.12 The Contract Time may be changed only by a duly executed Change order. Any proposal for an extension or shortening of the Contract Time shall be based on a Proposed Change Order in accordance with the provisions of this Article.

10.12.1 **Contractor** requests substantiating the extent of increase in the Contract Time shall be delivered to **Engineer** within fifteen days of the event causing the proposed need for the extension in the Contract Time unless **Department**, in writing, allows an additional period of time. **Contractor** shall prove that the delays have materialized or will materialize despite reasonable, prudent, and diligent efforts to prevent such delays and meet the criteria set forth in this Article. Any delays by **Contractor** in submittal of proposals will not justify a delay or be basis for an extension of the Contract Time.

10.12.2 Extensions in Contract Time due to delays to parts of the Work will not be granted until all Total Float available for those parts of the Work has been used.

10.12.3 An extension in the Contract Time will not be granted unless **Contractor** can demonstrate, through an analysis of the Progress Schedule approved in accordance with the applicable provisions of the Standard Specifications, that the delay in completing the applicable parts of the Work within the applicable Contract Time(s) arises from unforeseeable causes beyond the control and without the fault or negligence of **Contractor** or its Subcontractors, Suppliers or

other persons or organizations, and which **Contractor** could not have guarded against, and that such causes do or will cause extension of the schedule for that part of the Work beyond the applicable Contract Time. Examples of such causes include 1) acts of God or of the public enemy, 2) fires, floods, epidemics, quarantine restrictions, 3) strikes, freight embargoes, 4) unusually severe weather, 5) delays of Subcontractors or Suppliers at any tier arising from unforeseeable causes beyond the control and without fault or negligence of both **Contractor** and the Subcontractors, Suppliers or other persons organizations.

- 10.12.4 All time limits stated in the Contract Documents are of the essence. They have been developed by taking into account:
- 10.12.4.1 The scope of the Work under the Contract Documents;
 - 10.12.4.2 Reasonable time for performance of the Work, or parts thereof, as a whole; and
 - 10.12.4.3 The perceived sensitivity of the Work, or parts thereof, as a whole, to the potential delaying effect of causes meeting the requirements of paragraph 10.12.3.
 - 10.12.4.4 Therefore, and as long as delays meeting the requirements of paragraph 10.12.3 are not to be considered by **Contractor** in the initial development of the Progress Schedule pursuant to paragraph 1.6 of the General Conditions and the Progress Schedule Section of the Standard Specifications, the initial Progress Schedule developed by **Contractor** could show Total Float with respect to the Contract Time, or contract Times. Pursuant to the Float sharing requirements of the Contract Documents (as set forth in the provisions of Progress Schedule Section of the Standard Specifications) any such Total Float materializing between **Contractor's** completion of the Work, or part thereof, as anticipated by **Contractor's** approved progress Schedule, and the corresponding Contract Time(s) will be available to **Department, Engineer, Contractor** and others to absorb delays that cannot be mitigated by any other means.
- 10.12.5 The provisions of Section 10.11 of this Article shall govern and be applicable to the following:
- 10.12.5.1 Changes in Contract Time initiated by **Department** or **Contractor** due to delays which meet the requirements of paragraph 10.12.4.
 - 10.12.5.2 **Contractor** proposals to accelerate the Progress Schedule, in lieu of the alternate extension of Contract Time, due to delays meeting the requirements of paragraph 10.12.3.
- 10.12.6 The provisions of paragraphs 10.11, 10.12.2, and 10.12.3 shall exclude recovery for damages arising out of an acceleration alternative to an extension in Contract Time on account of delays not meeting the requirements for extensions in Contract Time set forth in this Article.
- 10.12.7 The provisions of this Article 10 shall not exclude recovery for damages (including compensation for additional professional services and court costs) for delay by either party, except as otherwise specifically disallowed in this Article and in other provisions of the Contract Documents.

10.13 Failure, refusal or neglect by **Contractor** to comply with the time requirements for delivery of written Proposed Change Orders or notice of a claim shall be considered to be a waiver by **Contractor** of any request or claiming for extension in Contract Time.

10.13.1 **Contractor** proposals (or claims) substantiating **Contractor's** proposed adjustment in Contract Price shall be delivered within the time period stipulated in paragraph 9.3 (9.4), unless **Department** in writing, allows an additional period of time to ascertain accurate cost data. **Contractor** shall prove that additional costs were necessarily incurred, despite **Contractor's** reasonable, prudent, and diligent efforts to prevent such costs and which meet the criteria set forth in this Article. Any delays in the submittal of **Contractor** proposals relative to adjustments in Contract Price will not justify a delay or constitute basis for an increase in Contract Price or an extension in Contract Time.

10.13.2 **Contractor** proposals (or claims) shall be submitted on forms required by Contract Documents, and shall remain firm for a period of at least 60 days from delivery of the proposal (or claim). Proposals (or claims) shall include itemized estimates of all costs and schedule adjustments that will result directly or indirectly from the changes described. Unless otherwise specified, itemized estimates shall be in accordance with the requirements of this Article of the General Conditions and in sufficient detail to reasonably permit an analysis by **Engineer** and **Department** of all quantities involved, labor and payroll costs, productivity rates, material costs, Subcontractor and Supplier costs, supplemental costs as described in paragraph 10.4.8, special consultant costs as described in paragraph 10.4.4, equipment costs, general and administrative overhead costs, field office overhead costs, and profit and shall cover all aspects of the Work involved in the change, whether such was deleted, added, changed, or impacted. Any amount claimed for Subcontractors, Suppliers or other persons or organizations shall be similarly supported. Itemized schedule adjustments shall be sufficiently detailed to permit an analysis of effects on the Progress Schedule as required in the Standard Specifications.

ARTICLE 11 - Unit Price Work and Cash Allowances

Cash Allowances:

11.1 **Contractor** shall include in the Contract Price all cash allowances named in the Contract Documents and all Work covered by those cash allowances shall be performed for an amount not to exceed those allowances without prior approval in writing by **Engineer**.

11.1.1 The allowances include the cost to **Contractor** (less any applicable trade discounts) of materials labor and equipment required by the allowances to be delivered at the site, and all applicable taxes; and the cost documentation requirements of Articles 9, 10, 11 apply to cash allowances.

11.1.2 Prior to final payment, an appropriate Change Order will be issued as recommended by **Engineer** to reflect actual amounts due **Contractor** on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

Unit Price Work:

11.2 Where the Contract Documents provide that all or part of the Work to be performed on the basis of Unit Prices, the following shall apply:

- 11.2.1 The original Contract Price shall include the sum of the bid unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated on the Contract Bid Form.
- 11.2.2 Unless otherwise provided by the Contract Documents, the estimated quantities of Unit Price Work are not guaranteed and are solely for the purpose of comparing Bids and determining the initial Contract Price.
- 11.2.3 **Engineer** shall determine the actual quantities and classifications of Unit Price Work performed by **Contractor** and will review with **Contractor** preliminary determinations before recommending an Application for Payment for those items.
- 11.2.4 **Contractor** shall have included overhead and profit in the price of each separately stated unit price item bid.
- 11.2.5 The Unit price of an item of Unit Price Work shall be subject to re-evaluation, negotiation, and possible adjustment under the following conditions:
- 11.2.5.1 If the total cost of a particular item of Unit Price Work change by \$30,000 or 5% or more of the total Contract Price, whichever is less, and the variation in the quantity of that particular item of Unit Price Work performed by **Contractor** differs by more than 15% from the estimated quantity of such item indicated in the Agreement; and
- 11.2.5.2 If **Contractor** justifies and adequately documents to the **Department's** satisfaction additional expenses have been incurred as a result thereof, or
- 11.2.5.3 If **Department** believes that the quantity variation entitles **Department** to an adjustment in the Unit Price, either **Department** or **Contractor** may make a request for an adjustment in the Contract Price in accordance with the Contract Documents. If the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed, a claim may be made.
- 11.2.6 The negotiated Unit Price shall be applicable only to the variation in quantities above 115% or below 85% of the quantities estimated or indicated.
- 11.2.7 If **Department** or **Contractor** believes that the quantity variation requires an extension or shortening in Contract Time, either party shall within seven working days of knowledge of the variation in quantities, submit a written Proposed Change Order to the other party and to **Engineer**, and substantiate the request within fifteen days thereafter in accordance with the analysis and documentation provisions of the Standard and Supplementary Specifications.

ARTICLE 12 - Warranty and Guarantee; Tests and Inspections; Correction, Removal or Acceptance of Defective Work

Warranty and Guarantee:

- 12.1 **Contractor** warrants and guarantees to **Department** that all Work shall be in accordance with the Contract Documents and shall not be defective. Immediate notice of all defects shall be given to **Contractor** by **Engineer**. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article.

- 12.1.1 The obligations of **Contractor** under this paragraph 12.1 shall be in addition to and not in limitation of any obligation imposed upon it by special guarantees required by the Contract Documents or by Law.
- 12.1.2 Notwithstanding anything in these Contract Documents to the contrary, when a particular item of equipment or part of the Work reaches Substantial Completion upon successful performance of Pre-operational Testing, and a) is not placed in continuous service until the commencement of the Correction Period, or b) is placed in continuous service upon reaching Substantial Completion (as a segment of a completed Project) but use will be limited until all segments of the Project reach substantial completion thereby commencing the Correction Period, and notwithstanding anything in the Contract Documents to the contrary, **Contractor** shall maintain the particular item of equipment or part of the Work in good order and in proper working condition during the period between the particular Substantial Completion date and the commencement of the Correction Period, and for such maintenance **Contractor** shall receive no adjustment in Contract Price. Also **Contractor** shall maintain the warranties and guarantees required under paragraph 12.1 of the General Conditions in full force and effect during the period between the particular item's Substantial Completion date and the commencement of the Correction Period, and for such warranties and guarantees **Contractor** shall receive no adjustment in Contract Price.
- 12.1.3 The warranties and guarantees provided by **Contractor** under paragraph 12.1 of the General Conditions shall remain in full force and effect from the date of Substantial Completion of the Work, or part thereof, until one year after the date of commencement of the Correction Period or such a longer period as may be prescribed by Law or the terms of any applicable specific warranty or guarantee required by the Contract Documents or by any specific provision of the Contract Documents.

One Year Correction Period:

- 12.2 If within the period from the date of Substantial Completion of a particular item of equipment or a designated part of the Work to one year after the commencement of the Correction Period, or such longer period as may be prescribed by Federal or New York State Law or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, the particular item of equipment or designated part of the Work is found to be defective, **Contractor** shall promptly, without an adjustment in Contract Price and in accordance with **Department's** or **Engineer's** written instructions, either correct such Defective Work, or if it has been rejected by **Department** or **Engineer**, remove it from the site and replace it with Work which conforms to the requirements of the Contract Documents. **Department** or **Engineer** may direct the correction or removal and replacement of Defective or rejected Work. In addition to any other remedies which **Department** may have, **Contractor** shall pay the indirect and consequential costs of such correction or removal and replacement, including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by **Department** due to delays to others performing work under a separate contract with **Department**, and other contractual obligations, if the Defective Work is not corrected or the rejected Work is not removed and replaced within 30 days of the **Department's** or **Engineer's** written rejection or request for rejection of Work unless otherwise provided for in writing. In the event that **Contractor** fails to pay such costs within thirty days after receipt of an invoice from **Department**, a Change Order or Proposed Change Order may be issued incorporating the unpaid amount, and **Department** shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, a claim may be made therefore as provided in Articles 9 and 10 and 15 of the General Conditions.

- 12.2.1 At the date of Substantial Completion of the Work, the parties have agreed on the date for commencement of the Correction Period. However, **Department** may at its sole option advance or delay the date for commencement of the Correction Period, and **Contractor's** obligations to extend warranties and guarantees in accordance with paragraphs 12.1.2 and 12.1.3 or to maintain the Work in accordance with paragraph 12.1.2 and 12.1.3 until then shall remain absolute. Applicable Change Orders or Proposed Change Orders shall be executed by the parties to adjust the Contract Price, as appropriate, on the basis of the unit prices declared in **Contractor's** Bid for extended warranty and extended maintenance requirements.
- 12.2.2 No later than 30 days before the date for commencement of the Correction Period, **Engineer** shall notify **Contractor** in writing of the date upon which the Correction Period is expected to commence, and **Contractor** shall ensure that the parts of the Work which reached Substantial Completion upon successful performance of Pre-operational Testing but were not placed in continuous service, are ready in their entirety by such date for use by **Department** as contemplated in the Contract Documents. In addition to any other damages payable by **Contractor** under these Contract Documents, **Contractor** shall also be liable for any damages suffered by **Department** on account of the parts of the Work which reached Substantial Completion upon successful performance of Pre-operational Testing but were not placed in continuous service at the beginning of the Correction Period because they were not ready for continuous utilization for the purposes for which they are intended.
- 12.2.3 Each month during the period between the date of Substantial Completion of parts of the Work which reached Substantial Completion upon successful performance of Pre-operational Testing and the date of commencement of the Correction Period, **Contractor** shall certify to **Engineer** in writing that the said parts of the Work are being properly maintained and will be ready for use by **Department** upon commencement of the Correction Period.
- 12.2.4 During the period described in Section 12.2.3 until commencement of the Correction Period, **Contractor** shall bear all risks of injury, loss, or damage to any part of the Work arising from the elements or from any other cause. **Contractor** shall rebuild, repair, restore, and make good at no cost to **Department** all injuries, losses, or damage to any portion of the Work occasioned by any cause and shall at no expense to **Department** provide suitable drainage and erect such temporary structures and take all other actions as are necessary for the protection of the Work. Suspension of the Work or the granting of an extension in Contract Time for any cause shall not relieve **Contractor** of its responsibility for the Work as herein specified.
- 12.2.5 **Contractor's** responsibilities under this Paragraph 12.2 are in addition to, not in lieu of, all other obligations imposed by these Contract Documents.

Access to Work:

- 12.3 Representatives of **Department**, **Engineer**, and representatives of testing agencies and governmental agencies with jurisdictional interests will have access to the Work at all times for observation, inspection and testing. **Contractor** shall provide proper and safe conditions for such access. Inspections, tests or observations by **Engineer**, **Department** or third parties may be performed to provide information to **Department** on the progress of the Work, however, this provision is not intended to create any duty or obligation to **Contractor** by **Department** or **Engineer**, nor is the information provided intended to fulfill **Contractor's** obligations under the Contract.

Tests and Inspections:

- 12.4 **Contractor** shall give **Engineer** timely notice of readiness of the Work for all required inspections, tests or approvals.
- 12.5 If a Law specifically requires any Work (or part thereof) to be inspected, tested or approved, **Contractor** shall assume full responsibility therefor, pay all costs in connection therewith and furnish to **Engineer** the required certificates of inspection, testing or approval. Except as provided in Article 5, **Contractor** shall be responsible for and shall pay all costs in connection with any inspection or testing required in connection with **Department's** or **Engineer's** acceptance of materials or equipment proposed or submitted to **Department** and **Engineer** for approval prior or subsequent to **Contractor's** purchase thereof for incorporation in the work. The cost of all inspections, tests and approvals in addition to the above which are required by the contract documents shall be paid by **Contractor**.
- 12.6 All inspections, tests or approvals other than those required by Law to be performed or given by public body having jurisdiction over the Work or any part thereof, shall be performed by organizations acceptable to **Department** and **Engineer**. **Contractor** shall perform sufficient inspection and testing of the Work to support the warranty and guarantee requirements of paragraph 12.1 and 12.2 of the General Conditions. Reference is made to the Supplementary Conditions, Standard Specifications and Supplementary Specifications for provisions applicable to the procurement of an independent testing laboratory.
- 12.7 If any Work, including the work of others, that is to be inspected, tested or approved is covered without written concurrence of **Engineer**, it must, if requested by **Engineer**, be uncovered for inspection. Such uncovering shall be at **Contractor's** expense unless **Contractor** has given **Engineer** timely notice of **Contractor's** intention to cover the same and **Engineer** has not acted with reasonable promptness in response to such notice.
- 12.8 Neither inspections by **Engineer** nor inspections, tests or approvals by others shall relieve **Contractor** from **Contractor's** obligations to perform the Work in accordance with the Contract Documents.

Uncovering Work:

- 12.9 If any work is covered contrary to the written request of **Engineer**, it must, if requested by **Engineer**, be uncovered for **Engineer's** inspection and replaced at **Contractor's** expense.
- 12.10 If **Engineer** considers it necessary or advisable that covered Work be inspected by **Engineer** or inspected or tested by others, **Contractor**, at **Engineer's** request, shall uncover, expose or otherwise make available for observation, inspection or testing as **Engineer** may require, that portion of the Work in question, furnishing all necessary labor, material and equipment.
- 12.10.1 If it is found that such Work is Defective, **Contractor** shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing, and of satisfactory reconstruction, including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by **Department** due to delays to others performing work under a separate contract with **Department**, and other contractual obligations, **Contractor** shall further bear the responsibility for keeping the Work on schedule and shall not be entitled to any extension of Contract Time or recovery of any delay damages due to the uncovering.
- 12.10.2 If, however, such Work is not found to be Defective, **Contractor** shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction pursuant to Articles 9, 10 and 11.
- 12.10.3 When covered Work is uncovered and found to be Defective, all direct, indirect and consequential costs as established in paragraph 12.10.1 shall be paid by **Contractor**. In the event that **Contractor** fails to pay such costs within thirty days after receipt of an invoice from **Department**, a Change Order or Proposed Change Order may be issued incorporating the unpaid amount as an appropriate reduction in the Contract Price, and if the parties are unable to agree as to the amount thereof, the **Contractor** may make a claim therefore as provided in Articles 9 and 10 of the General Conditions.

Department May Stop the Work:

- 12.11 If the Work is defective, or **Contractor** fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, **Department** may order **Contractor** to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of **Department** to stop the Work shall not give rise to any duty on the part of **Department** to exercise this right for the benefit of **Contractor** or any other party.
- 12.11.1 **Contractor** shall bear all direct, indirect and consequential costs of such order to **Contractor** to stop Work including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by **Department** due to delays to others performing work under a separate contract with **Department**, and other contractual obligations, and **Contractor** shall further bear the responsibility for maintaining schedule and shall not be entitled to any extension of contract time or recovery of any delay damages due to the order to stop Work.
- 12.11.2 In the event that **Contractor** fails to pay such costs within thirty days after receipt of an invoice from **Department**, a Change Order or Proposed Change Order may be issued

incorporating the unpaid amount as an appropriate reduction in the Contract Price. If the parties are unable to agree as to the amount thereof, the **Contractor** may make a claim therefore as provided in Articles 9, 10, 11 and 15 of the General Conditions.

Correction or Removal of Defective Work:

- 12.12 If required by **Engineer**, **Contractor** shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by **Engineer**, remove it from the site and replace it with non-defective Work that conforms with the Contract Documents. **Contractor** shall bear all direct, indirect and consequential costs of such correction or removal including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by **Department** due to delays to others performing work under a separate contract with **Department**, and other contractual obligations. **Contractor** shall further bear the responsibility for keeping the Work on schedule and shall not be entitled to any extension in Contract Time or recovery of any delay damages due to the correction or removal. In the event that **Contractor** fails to pay such costs within thirty days after receipt of an invoice from **Department**, a Change Order or Proposed Change Order may be issued incorporating the unpaid amount, as an appropriate reduction in the Contract Price. If the parties are unable to agree as to the amount thereof, the **Contractor** may make a claim therefore as provided in Articles 9, 10, 11 and 15 of the General Conditions.

Acceptance of Defective Work:

- 12.13 If, instead of requiring correction or removal and replacement of defective Work, **Department** prefers to accept it, **Department** may do so. **Contractor** shall bear all direct, indirect and consequential costs attributable to **Department's** evaluation and determination to accept such Defective Work, such costs to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by **Department** due to delays to others performing work under a separate contract with **Department**, and other contractual obligations. **Contractor** shall further bear the responsibility for keeping the Work on schedule and shall not be entitled to any extension in Contract Time or recovery of any delay or acceleration damages due to **Department's** evaluation and determination to accept such Defective Work. If any such acceptance occurs prior to **Engineer's** recommendation of final payment, a Change Order may be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and **Department** shall be entitled to an appropriate reduction in the Contract Price. In the event that **Contractor** fails to pay such costs within thirty days after receipt of an invoice from **Department**, or if the parties are unable to agree as to the amount thereof, **Contractor** may make a claim therefore as provided in Articles 9, 10, 11 and 15 of the General Conditions. If the acceptance occurs after final payment, an appropriate amount will be refunded by **Contractor** to **Department**.

Department May Correct Defective Work:

- 12.14 If **Contractor** fails within a reasonable time after written notice of **Engineer** to proceed to correct and to correct Defective Work or to remove and replace rejected Work as required by **Engineer**, or if **Contractor** fails to perform the Work in accordance with the Contract Documents, or if **Contractor** fails to comply with any other provision of the Contract Documents, **Department** may, after seven days' written notice to **Contractor**, correct and remedy any such deficiency. To the extent necessary to complete corrective and remedial action, **Department** may exclude **Contractor** from all or part of the site, take possession of all or part of the work and suspend or terminate **Contractor's** services related thereto, take possession of **Contractor's** tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which **Department** has paid **Contractor** but which are stored elsewhere. **Contractor** shall allow **Department**, and

Department's representatives, agents and employees such access to the site as may be necessary to enable **Department** to exercise the rights and remedies provided by this paragraph and the Contract Documents. All direct, indirect and consequential costs of **Department** in exercising such rights and remedies will be charged against **Contractor** in an amount approved as to reasonableness by **Engineer**, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and **Department** shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, **Contractor** may make a claim therefore as provided in Article 9, 10, 11 and 15. Such direct, indirect and consequential costs shall include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all costs of delay and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of **Contractor's** Defective Work. **Contractor** shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by **Department** of **Department's** rights and remedies hereunder.

ARTICLE 13 - Payments to Contractor and Completion

Schedule of Values:

- 13.1 The schedule of values established as provided in paragraph 1.4 and 1.6 of the General Conditions shall serve as the basis for progress payments. Progress payments for Unit Price Work shall be based on the number of units completed. **Department** will furnish Application for Payment forms.

Application for Progress Payment:

- 13.2 At least fourteen days before each progress payment is scheduled to be submitted to the Department, **Contractor** shall submit to **Engineer** for review an Application for Payment on forms furnished by **Department** filled out and signed by **Contractor** covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by bills of sale, invoices or other documentation supporting the cost, together with documents warranting that **Department** has received the materials and equipment free and clear of all liens, charges, security interests and encumbrances (each and all of these terms are hereinafter referred to as "Liens"). Each Application for Payment shall contain a certification by **Contractor** that progress payments received from **Department** on account of the Work have been applied by **Contractor** and its Subcontractors to discharge in full all of **Contractor's** and its Subcontractors' obligations stated in the prior Application for Payment, and that **Contractor** has verified the accuracy of the progress reported to have been completed by **Contractor** or its Subcontractors in the Application for Payment. Notwithstanding any other provisions of the Contract Documents to the contrary, neither **Department** nor **Engineer** are under any duty or obligation whatsoever to any Subcontractor or Supplier to insure that payments due and owing by **Contractor** to any of them are or will be made. Such parties shall rely only on **Contractor's** surety bonds for remedy of nonpayment by **Contractor**. The amount of retainage with respect to progress payments will be as provided for by the laws of New York State.

- 13.2.1 An Application for Payment a) will not be approved if the as-built documents, including but not limited to Drawings legibly marked in accordance with Contract Documents to record actual construction, are not kept current, and b) will not be approved until the completed as-built documents, showing all variations between the Work as actually constructed and as originally shown on the Drawings and other Contract Documents, have been inspected by **Engineer**. For the purpose of this paragraph, the as-built documents will be considered

current if they include all of the documents itemized in paragraph 5.19 together with any other information that supplements or changes the original Contract Documents which has been delivered or otherwise made known to **Contractor** prior to the time when Application for Payment is to be reviewed by **Engineer**.

- 13.2.2 An Application for Payment will not be approved until **Contractor** has submitted and **Engineer** has reviewed the Progress Schedule and submittals required in Contract Documents which are due prior to that Application for Payment.

Contractor's Warranty of Title:

- 13.3 **Contractor** warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether or not incorporated in the Project, shall pass to **Department** no later than the time of payment free and clear of all Liens.

Review of Applications for Progress Payment:

- 13.4 **Engineer** shall, within five days after receipt of each Application for Payment, either recommend payment in writing and present the Application to **Department** or return the Application to **Contractor** indicating in writing **Engineer's** reasons for refusing to recommend payment. In the latter case, **Contractor** may make the necessary corrections and resubmit the application. After presentation of the application for payment with **Engineer's** recommendation, the amount recommended shall be paid in accordance with New York State Law upon approval of the **Department**.
- 13.5 **Department** may refuse to make payment of the full amount recommended by **Engineer** for one or more of the following reasons: claims have been made against **Department** on account of **Contractor's** performance, or furnishing of the Work, Liens have been filed in connection with the Work, there are other facts or circumstances entitling **Department** to a set-off against the amount recommended, or **Department** has determined that Work performed by **Contractor** does not conform to Contract Documents including, but not limited to, moneys payable by **Contractor** to **Department** pursuant to the requirements of Articles 5 and 12 of the General Conditions. In the event of such refusal to pay the full recommended amount, **Department** must give **Contractor** prompt written notice (with a copy to **Engineer**) stating the reasons for such action.

Substantial Completion:

- 13.6 When **Contractor** considers all or part of the Work ready for its intended use, **Contractor** shall notify **Department** and **Engineer** in writing that the Work, or specified part thereof, is substantially complete except for items specifically listed by **Contractor** as incomplete, and request that **Engineer** issue a certificate of Substantial Completion for the Work, or such specified part thereof. Within a reasonable time thereafter, not to exceed 30 days, **Department**, **Contractor** and **Engineer** shall make an inspection of the Work, or specified part thereof, to determine the status of completion. If **Engineer** or **Department** does not consider the Work, or specified part thereof, substantially complete, **Engineer** shall notify **Contractor** in writing giving the reasons therefor, after consultation with the **Department**. If **Engineer** considers the Work, or part thereof, substantially complete, **Engineer** shall prepare and deliver to **Department** a tentative certificate of Substantial Completion for the Work, or part thereof which shall fix the date of Substantial Completion. There shall be attached to the certificate a list of items to be completed or corrected before final payment, and **Engineer's** written recommendation as to a division of responsibilities between **Department** and **Contractor** pending final payment including but not limited to security, operation, safety, maintenance, heat, utilities, insurance and warranties. **Department** shall have seven days after receipt of the tentative certificate with attachments during

which to make written objection to **Engineer** as to any provisions of the referenced submittals and to direct a revision of the tentative certificate. Unless **Department** and **Contractor** agree otherwise in writing and so inform **Engineer** or **Department** directs the revision of the certificate of Substantial Completion for the Work, or specified part thereof, **Engineer's** recommendation will be binding on **Contractor** until final payment.

- 13.7 **Department** shall have the right to exclude **Contractor** from the Work, or part thereof, after the date of Substantial Completion for the Work, but **Department** shall allow **Contractor** reasonable access to complete or correct items on the tentative list.

Partial Utilization:

- 13.8 **Department** may use any finished part of the Work which has specifically been identified in the Contract Documents, or which **Department**, **Engineer**, and **Contractor** agree constitutes a separately functioning and usable part of the Work that can be used by **Department** without significant interference with **Contractor's** performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following:

13.8.1 **Department** at any time may direct **Contractor** in writing to permit **Department** to use any such part of the Work which **Department** believes to be ready for its intended use and substantially complete. **Contractor** may certify to **Department** and **Engineer** that said part of the Work is substantially complete and request **Engineer** to issue certificate of Substantial Completion for that part of the Work. Within a reasonable time after such direction, **Department**, **Contractor** and **Engineer** shall make an inspection of that part of the Work to determine its status of completion. If **Engineer** does not determine that part of the Work to be substantially complete, **Engineer** will notify **Department** and **Contractor** in writing giving the reasons therefor. The provisions of paragraphs 13.6 and 13.7 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

13.8.2 **Department** may at any time direct **Contractor** in writing to permit **Department** to take over operation of any such part of the Work although it is not substantially complete. A copy of such request will be sent to **Engineer** and within a reasonable time thereafter **Department**, **Contractor** and **Engineer** shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If **Contractor** does not object in writing to **Department** and **Engineer** that such part of the Work is not ready for separate operation by **Department**, **Engineer** shall submit to **Department** a list of items to be completed or corrected together with a written recommendation as to a division of responsibilities between **Department** and **Contractor**, including but not limited to security, operation, safety, maintenance, utilities, insurance and warranties pending final payment for such Work. **Department** shall have seven days to make written objection to **Engineer's** list and recommended division of responsibilities to direct a revision thereof. Such directed revision or otherwise objected list and recommended division of responsibilities, shall become binding upon **Department** and **Contractor** at the time when **Department** takes over such operation unless they shall have agreed otherwise in writing. During such operation and prior to Substantial Completion of such part of the Work, **Department** shall allow **Contractor** reasonable access to complete or correct items on said list and to complete other related Work.

Final Inspection:

- 13.9 Upon written notice from **Contractor** that the entire Work or an agreed portion thereof is complete, **Engineer** will make a final inspection with **Department** and **Contractor** and will notify **Contractor** in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. **Contractor** shall immediately take such measures as are necessary to remedy such deficiencies.

Final Application for Payment:

- 13.10 After **Contractor** has completed all corrections to the satisfaction of **Engineer** and **Department** and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in paragraph 5.19) and other documents - all as required by the Contract Documents, and after **Engineer** has indicated that the Work is acceptable (subject to the provisions of paragraph 13.12), **Contractor** may make application for final payment following the procedures for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers satisfactory to **Department** of all Liens arising out of or filed in connection with the Work. In lieu thereof and as provided for by the laws of New York State and approved by **Department**, **Contractor** may furnish receipts or releases in full and an affidavit of **Contractor** that such receipts and releases include all labor, services, material and equipment for which a Lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which **Department** or **Department's** property might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment. If any Subcontractor or Supplier fails to furnish a release or receipt in full, **Contractor** may furnish a Bond or other collateral satisfactory to **Department** to indemnify **Department** against any Lien.

Final Payment and Acceptance:

- 13.11 If, on the basis of **Engineer's** inspection of the work during construction and final inspection, and **Engineer's** review of the final application for payment and accompanying documentation, **Engineer** has determined that the work has been completed in substantial conformance with the contract documents and **Contractor's** other obligations under the contract documents have been fulfilled, **Engineer** will, within ten days after receipt of the final application for payment, indicate in writing **Engineer's** recommendation of payment and present the application to **Department** for payment along with a certificate that the work was completed in substantial conformance with the contract documents. Thereupon **Engineer** will give written notice to **Department** and **Contractor** that the work is acceptable subject to the provisions of paragraph 13.13. Otherwise, **Engineer** will return the application to **Contractor**, indicating in writing the reasons for refusing to recommend final payment, in which case **Contractor** shall make the necessary corrections and resubmit the Application. After presentation to **Department** of the application and accompanying documentation, in appropriate form and substance, and with **Engineer's** recommendation and certification of substantial conformance with the Contract Documents, final payment will be paid by **Department** to **Contractor** in accordance with New York State Law. If **Department** believes deficiencies exist, it will so notify **Engineer** and **Contractor** in writing.
- 13.12 If, through no fault of **Contractor**, final completion of the Work is significantly delayed and if **Engineer** so confirms, **Department** shall, upon receipt of **Contractor's** final Application for Payment and recommendation of **Engineer**, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted.

Waiver of Claims:

- 13.13 The making and acceptance of final payment will constitute:

- 13.13.1 A waiver of all claims by **Department** against **Contractor**, except claims arising from unsettled Liens, from Defective Work appearing after final inspection pursuant to paragraph 13.11 or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by **Department** of any claims or rights with respect to **Contractor's** continuing obligations under the Contract Documents; and
- 13.13.2 A waiver of all claims by **Contractor** against **Department** other than those previously made in writing and still unsettled.

ARTICLE 14 - Suspension of Work and Termination

Department May Suspend Work:

- 14.1 **Department** may for its convenience, order **Contractor** in writing at any time to suspend the Work or any portion thereof for such a period of time as **Department** may determine to be appropriate. A suspension of Work order will fix the date on which the Work, or portion thereof, will be resumed. **Contractor** shall resume the Work, or portion thereof, on the date so fixed.
 - 14.1.1 If the performance of the Work or portion thereof is suspended for a period of time which exceeds the Total Float available in the approved Progress Schedule for the portion or portions controlling the Work affected by a suspension of Work order pursuant to paragraph 14.1, or by an act of **Department** or **Engineer** in the administration of the Contract, or by **Department's** or **Engineer's** failure to act within the applicable latest dates substantiated in the approved Progress Schedule, **Contractor** will be allowed an increase in Contract Price or an extension in Contract Time, or both, necessarily caused by such suspension which extends the applicable latest dates in the approved Progress Schedule. However, no adjustment will be made under this paragraph of the General Conditions for any suspension to the extent: 1) that performance would have been so suspended by any other cause, including the fault and negligence of **Contractor**, or 2) for which an adjustment is provided, limited as to extent, or excluded under any other provision of the Contract Documents.
 - 14.1.2 **Contractor** shall deliver to **Engineer** a written Proposed Change Order including at a minimum, justification for the request within seven days or earlier if so required elsewhere in the Contract Documents, of the act or failure to act which **Contractor** believes gives rise to an adjustment in Contract Price or Contract Time pursuant to paragraph 14.1.1. Failure by **Contractor** to comply with the time requirements for delivery of written Proposed Change Orders will be considered to be a waiver by **Contractor** of any request for adjustment or claim for an increase in Contract Price or Contract Time for the period of time during which the Proposed Change Order has not been submitted.
 - 14.1.3 **Contractor's** proposal with all supporting data shall be delivered within 15 days of such notice or within twenty-two days of such occurrence, whichever is later, unless **Department** allows an additional period of time to obtain more accurate data. **Contractor** shall prove that additional costs and delays were necessarily incurred which meet the criteria set forth in Articles 9, 10 and 11 of the General Conditions, despite **Contractor's** reasonable, prudent, and diligent efforts to prevent such costs or delays.
- 14.2 In addition to the provisions of Appendix B, if **Department** stops Work in accordance with Article 12.10 of the General Conditions or suspends **Contractor's** services in accordance with article 12.11, or suspends the work or any portion thereof because of **Contractor's** failure to prosecute the work and to

protect persons and property, **Contractor** shall not be entitled to an extension of Contract Time or an increase in Contract Price.

Department May Terminate:

14.3 **Department** may terminate for cause upon the occurrence of any one or more of the following events:

14.3.1 If **Contractor** commences a voluntary case under any chapter of the Bankruptcy Code, as now or hereafter in effect, or if **Contractor** takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;

14.3.2 If a petition is filed against **Contractor** under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against **Contractor** under any other federal or state law in effect at the time relating to bankruptcy or insolvency;

14.3.3 If **Contractor** makes a general assignment for the benefit of creditors;

14.3.4 If a trustee, receiver, custodian or agent of **Contractor** is appointed under applicable law or under contract, whose appointment or authority to take charge of property of **Contractor** is for the purpose of enforcing a lien against such property or for the purpose of general administration of such property for the benefit of **Contractor's** creditors;

14.3.5 If **Contractor** admits in writing an inability to pay its debts generally as they become due;

14.3.6 If **Contractor** fails to perform the Work in accordance with the Contract Documents, including, but not limited to, failure to supply sufficient skilled workers, or suitable materials or equipment, or failure to adhere to the progress schedule established under paragraph 1.6 as revised from time to time or failure to submit an updated schedule as required by paragraph 5.6;

14.3.7 If **Contractor** disregards Laws or Regulations of any public body having jurisdiction;

14.3.8 If **Contractor** disregards the authority of **Engineer**;

14.3.9 If **Contractor** filed certification in accordance with New York State Finance Law §139-k which was intentionally false or intentionally incomplete; or

14.3.10 If **Contractor** otherwise violates in any substantial way any provision of the Contract Documents;

Department may, after giving **Contractor** and its surety seven days written notice and to the extent permitted by Federal and New York State Law, terminate the services of **Contractor**, exclude **Contractor** from the site and take possession of the Work and of all **Contractor's** tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by **Contractor** without liability to **Contractor** for trespass or conversion, incorporate in the work all materials and equipment stored at the site or for which **Department** has paid **Contractor** but which are stored elsewhere, and finish the Work as **Department** may deem expedient. In such case **Contractor** shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct, indirect and consequential costs of completing the Work including but not

limited to fees and charges of engineers, architects, attorneys and other professionals and court costs, such excess will be paid to **Contractor**. If such costs exceed such unpaid balance, **Contractor** shall pay the difference to **Department**. Such costs incurred by **Department** will be approved as to reasonableness by **Engineer** and incorporated in a Change Order or Proposed Change Order.

- 14.4 Where **Contractor's** services have been so terminated by **Department**, the termination shall not affect any rights or remedies of **Department** against **Contractor** then existing or which may thereafter accrue. Any retention or payment or moneys due **Contractor** by **Department** will not release **Contractor** from liability.
- 14.5 Upon seven days written notice to **Contractor** and **Engineer**, **Department** may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement. In such case, **Contractor** shall be paid for all Work accepted by **Department**.

Contractor May Stop Work or Terminate:

- 14.6 If, through no act or fault of **Contractor**, **Engineer** fails to act on any Application for Payment within thirty days after it is submitted, or **Department** fails for one hundred and twenty days to pay **Contractor** any sum finally determined to be due by **Department**, then **Contractor** may, upon seven days' written notice to **Department** and **Engineer**, terminate the Agreement and recover from **Department** payment for all Work accepted by **Department**. In lieu of terminating the Agreement, if **Engineer** has failed to act on an Application for Payment or **Department** has failed to make any payment as aforesaid, **Contractor** may upon seven days' written notice to **Department** and **Engineer** stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve **Contractor** of the obligations under paragraph 5.30 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with **Department**.

ARTICLE 15 - Disputes

Giving Notice:

- 15.1 All claims, counterclaims, disputes and other matters in question between **Department** and **Contractor**, arising out of or relating to the Contract Documents or the breach thereof (hereafter referred to claims) except for claims which have been waived by the making or acceptance of final payment as provided in paragraph 13.11, shall be resolved under this Article.

- 15.1.1 A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under this Article. Such a submission may be converted to a claim under this Article by complying with the requirements of this Article, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- 15.2 A claim by **Contractor** shall be made in writing and submitted to **Department** for evaluation with a copy to **Engineer**.
- 15.3 A written demand or written assertion by **Contractor** seeking the payment of money exceeding \$10,000 is not a claim under this Article until certified as required below. For claims exceeding \$10,000 **Contractor** shall submit with the claim a certification that:
- 15.3.1 The claim is made in good faith,
- 15.3.2 Supporting Cost and Pricing Data are current, accurate, and complete to the best of the **Contractor's** knowledge and belief, and
- 15.3.3 The amount of the claim accurately reflects the adjustments in Contract Price or Contract Time which **Department** has agreed to or for which **Contractor** believes **Department** is liable.
- 15.4 The **Contractor's** certification shall be executed by **Contractor's** Authorized Representative specified in the Contract Documents.
- 15.5 For claims of \$10,000 or less, **Department** shall render a decision if requested in writing by **Contractor**. For **Contractor** certified claims over \$10,000, **Department** shall decide the claim or notify **Contractor** of the date by which the decision will be made.
- 15.6 **Department's** decision shall be final unless **Contractor** initiates legal action within 120 days of **Department's** final decision.
- 15.7 **Contractor** shall proceed diligently with performance of Work under this Contract, and comply with any decision of **Engineer** or **Department** pending final resolution of any request for relief, claim, appeal, or action arising under the Contract.
- 15.8 **Contractor** agrees that all claims shall be subject to resolution pursuant to **Department** procedures as described in the Disputes article of the Agreement.

ARTICLE 16 - Miscellaneous

Notice and Service:

- 16.1 All notices, demands, requests, instructions, approvals and claims shall be in writing.
- 16.1.1 Any notice to or demand upon **Contractor** shall be deemed sufficient if delivered to **Contractor's** representative at the site or if delivered to the individual proprietor if **Contractor** is an individual, to a partner if **Contractor** is a partnership or to an officer of the corporation if **Contractor** is a corporation, at the office of **Contractor** specified in the Contract Documents, or if deposited in the United States mail in a sealed, postage prepaid envelope, addressed to the principal office of **Contractor** listed in the Agreement, or if delivered with charges prepaid to any telegraph company for transmission, in each case

addressed to the office of **Contractor** specified in the Contract Documents or faxed to the number provided in the Contract Documents and followed by written notice.

- 16.1.2 All notices or other papers required to be delivered by **Contractor** to **Department**, or to any of its representatives shall, unless otherwise specified in writing to **Contractor**, be delivered to **Department** at the office specified in the Contract Documents. Any other notice or demand upon **Department** shall be deemed sufficient if delivered to such office, or if deposited in the United States mail in a sealed, postage prepaid envelope, or if delivered, with the charges prepaid to any telegraph company for transmission, in each case addressed to such office or to such other representative of **Department** or to such other address as **Department** may subsequently specify in writing to **Contractor** for such purpose, or faxed to the number provided in the Contract Documents and followed by written notice.
- 16.1.3 Any written notice or other communication to **Contractor's** Surety or Sureties shall be delivered or mailed to the home office of the Surety or Sureties, or to the agent or agents who executed the Bonds on behalf of the Surety or Sureties.
- 16.1.4 Any such notice or demand shall be deemed to have been given or made as of the time of actual delivery, or, in the case of mailing or of telegrams, at the time of actual receipt thereof.

Computation of Time:

- 16.2 When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last calendar day of such period. If the last calendar day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the State of New York, such day will be omitted from the computation. This does not apply to contract completion time as set forth in Article 6 of the Agreement.

General:

- 16.3 Should **Department** or **Contractor** suffer injury or damage to person or property because of an act or omission to act of the other party, its employees or agents or others for whose acts the other party is legally liable, a Claim may be made therefore, in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.
- 16.4 The duties and obligations imposed by these General Conditions and the rights and remedies available to the parties hereunder, including but not limited to the warranties, guarantees and obligations imposed upon **Contractor** by Contract Documents and all of the rights and remedies available to **Department** thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by New York State Laws, by special warranty or guarantee or by other provisions of the Contract Documents. The provisions of this paragraph shall be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy. All representations, warranties and guarantees made in the Contract Documents shall survive final payment and termination or completion of the Agreement.
- 16.5 The obligation of **Contractor** to maintain the Work, or any part thereof, until the completion of the Correction Period shall survive final payment and termination or completion of the Agreement.

No Waiver of Legal Rights:

- 16.6.1 Inspection by **Engineer** or by any of its duly authorized representatives, any measurement or report by **Engineer**, any order by **Department** for the payment of money, any payment for or acceptance or possession of any Work or any extension in Contract Time or any possession taken by **Department** shall not operate as a waiver of any provision of the Contract Documents, or any power therein preserved to **Department**, or of any right to damages therein provided. Any Waiver of any breach of this Contract shall not be held to be a waiver of any other or subsequent breach.
- 16.6.2 **Department** reserves the right to correct any error that may be discovered in any estimate that may have been paid, and to adjust the same to meet the requirements of the Contract Documents. **Department** further reserves the right, should proof of Defective Work on the part of **Contractor** be discovered after the final payment has been made, to claim, and recover by process of law, such sums as may be sufficient to correct the error, or make good the defects in the Work.
- 16.6.3 Any waiver of any provision of the Contract Documents shall be specific, shall apply only to the particular item or matter concerned and shall not apply to other similar or dissimilar items or matters.

Affidavit and Release of Lien:

- 16.7.1 When the Work has been completed, **Contractor** shall execute a final release of Lien and an Affidavit declaring that all bills have been paid in full, and that the requirements of the New York State Labor Law have been complied with.
- 16.7.2 These documents will be furnished to **Department** on the forms included with the Contract Documents.
- 16.7.3 **Contractor** shall be responsible for obtaining and submitting these forms to **Department** for all subcontractors involved in the Work.

Recovery Rights Subsequent to Final Payment:

- 16.8 **Department** reserves the right, should an error be discovered in an Application for Payment or should proof of Defective Work or materials used by or on the part of **Contractor** be discovered after the final payment has been made, to claim and recover from **Contractor** or his Surety, or both, by process of law, such sums as may be sufficient to correct the error or make good the defects in the Work and materials.

General Guarantee:

- 16.9 Neither the final acceptance, nor final payment by **Department**, nor any provision of the Contract Documents, nor partial or entire use of the Work by **Department**, shall constitute an acceptance of Work not done in accordance with the Contract Documents or relieve **Contractor** of liability in respect to any express warranties or responsibility for faulty materials or workmanship. **Contractor** guarantees the remedy of all Defective Work and payment for all damage to other Work, persons or property resulting therefrom which shall occur within one year from the date of final acceptance unless a longer period is required by Contract Documents, by Law, or by standard practice. **Department** will give notice of observed Defective Work with reasonable promptness. **Contractor** shall ensure that its Surety shall be bound with and for **Contractor** in the faithful observance of this General Guarantee.

Audit; Access to Records:

- 16.10.1 In addition to the rights of access set forth in Appendix A, if **Contractor** has submitted Cost and Pricing Data in connection with the pricing of any Change Order, Proposed Change Order or Claim related to this Contract, **Department** and **Engineer** or any of their duly authorized representatives shall have the right to examine and audit all books, ledgers, records, and documents pertinent to all Cost and Pricing data available and relied upon by **Contractor** including but not limited to that used by **Contractor** in the determination of its Bid for the Work, in order to evaluate the accuracy, completeness, and currency of the Cost or Pricing data.
- 16.10.2 **Contractor** shall make available at **Contractor's** office at all reasonable times the materials described in paragraph 16.10.1 above, for examination, audit, or reproduction, until 6 years after final payment under this Contract.
- 16.10.2.1 If this Contract is completely or partially terminated, the records relating to the Work terminated shall be made available for 6 years after any resulting final termination settlement.
- 16.10.2.2 Records pertaining to appeals under Article 15 of Section 8, "General Conditions," to litigation or the settlement of claims arising under or relating to the performance of this Contract shall be made available until disposition of such appeals, litigation, or claims.
- 16.10.3 A provision stating that all the requirements of this Article of Section 8, "General Conditions" are applicable to Subcontracts under this Contract exceeding \$50,000 in value shall be inserted by **Contractor** in all such subcontracts.

Price Reduction for Defective Cost or Pricing Data:

- 16.11.1 This provision shall become operative only for any Change Order, or Proposed Change Order or claim settlement under this Contract involving aggregate increases and/or decreases in costs, plus applicable profits, of more than \$10,000; except that this provision shall not apply to any amendment to the Contract for which the price of the Work involved in the amendment is:
- 16.11.1.1 Based on adequate price competition;
- 16.11.1.2 Based on established catalog or market prices of commercial items sold in substantial quantities to the general public, or
- 16.11.1.3 Set by New York State law.

- 16.11.2 If any price, including profit, negotiated in connection with any Change Order, Proposed Change Order or claim settlement under this provision, was increased because: 1) **Contractor** or a Subcontractor, Supplier, other person or organization furnished Cost and Pricing Data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data; 2) a designated or prospective Subcontractor, Supplier, other person or organization furnished **Contractor** Cost and Pricing Data that were not complete, accurate, and current as certified in the **Contractor's** Certificate of Current Cost and Pricing Data; or 3) any of these parties furnished data of any description that were not accurate, the price shall be changed accordingly and the Contract shall be adjusted to reflect the change. This right to a change in Contract Price is limited to that resulting from defects in data relating to amendments to the Contract for which this provision becomes operative under paragraph 16.11.1 above.
- 16.11.3 Any decrease in Contract Price under paragraph 16.11.2 above due to defective data from a designated or prospective Subcontractor, Supplier, other person or organization that was not subsequently awarded the Subcontract or purchase order shall be limited to the amount, plus applicable overhead and profit markup, by which 1) the actual Subcontract or purchase order or 2) the actual cost to **Contractor**, if there was no Subcontract or purchase order, was less than the prospective Subcontract or purchase order, cost estimate submitted by **Contractor**; provided, that the actual Subcontract or purchase order price was not itself affected by defective cost or Pricing data.
- 16.11.4 Before awarding any Subcontract or purchase order which exceeds or can be reasonably expected to exceed \$150,000 when entered into, or pricing any Change Order or Proposed Change Order or claim settlement involving a pricing adjustment expected to exceed \$10,000, **Contractor** shall require the Subcontractor, Supplier, other person or organization to submit Cost or Pricing data (actually or by specific identification in writing), unless the price is:
- 16.11.4.1 Based on adequate price competition;
- 16.11.4.2 Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or
- 16.11.4.3 Set by New York State law.
- 16.11.5 **Contractor** shall require such Subcontractor, Supplier, other person or organization to certify in the form prescribed in the Contract Documents, that to best of its knowledge and belief, the data submitted under paragraph 16.11.4 is accurate, complete, and current as of the date of agreement on the negotiated price of the Subcontract, purchase order, Change Order, Proposed Change Order, or claim settlement affecting the Subcontract.
- 16.11.6 **Contractor** shall make the provisions of this Article applicable to all Subcontracts or purchase orders that exceed or can be reasonably expected to exceed \$150,000.

No Waiver:

- 16.12.1 The rights and remedies set forth in the Contract Documents are not exclusive and are in addition to any other rights and remedies provided by law or equity. The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by New York State law.
- 16.12.2 No act or omission by **Department** or **Contractor** shall constitute a waiver of any right or duty afforded any of them under the Contract Documents, nor shall any such act or omission constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

Comparable or Equivalent Terms:

- 16.13.1 **Contractor** warrants, represents and guarantees that all of the prices, terms, warranties and benefits granted to **Department** under the Contract are comparable to or better than the equivalent terms, prices, warranties and benefits offered to any other existing customer for similar Work.
- 16.13.2 In addition to the other remedies available, **Department** may demand repayment for any excess payment, plus interest thereon, for failure of **Contractor** to comply with paragraph 16.13.1.

Unlawful Provisions Deemed Stricken:

- 16.14.1 If the Contract Documents contain any unlawful provisions, such unlawful provisions shall be of no effect. Any provision determined to be unlawful by a court of competent jurisdiction, shall be deemed stricken from the Contract Documents without affecting the validity of the remaining provisions of the Contract Documents.

All legal Provisions Included:

- 16.15.1 All provisions of Law required to be included in the Contract Documents shall be and are inserted herein. If through mistake, neglect, oversight or otherwise, any such provision has not been included or included in improper form, upon the application of either party, the Contract Documents shall be amended in writing at no increase in Contract Price nor extension in Contract Time, so as to comply with the Law.

No Estoppel:

- 16.16 **Department** or any officer, employee, servant or agent thereof, shall not be estopped, bound or precluded by any determination, return, decision, approval, order, letter, payment or certificate made or given by **Engineer** or any other officer, employee, servant or agent of **Department**, at any time, either before or after final completion and acceptance of the Work and payment therefor:
 - 16.16.1 From showing the true and correct amount, classification, quality, and character of the Work completed and materials furnished by **Contractor** or any other person under the Contract, or from showing at any time that any determination, return, decision, approval, order, letter, payment, or certificate is untrue and incorrect, or improperly made in any particular, or that

the Work or the materials or any part thereof, do not in fact conform to the Contract Documents; or,

- 16.16.2 From demanding the recovery of any overpayments made to **Contractor**, or such damages as **Department** may sustain by reason of failure to perform each and every term, provision or condition of the Contract in accordance with its terms.

Prohibited Interests:

- 16.17 No official of **Department** who is authorized in such capacity on behalf of **Department** to negotiate, make, accept or approve or to take part in the negotiating, making or approving any architectural, engineering, inspection, construction or material supply contract or any Subcontractor in connection with the Work or the Project of which the Work is a part, shall be knowingly permitted by **Contractor** to become directly or indirectly interested personally in this Contract or in any part thereof. No officer, employee, architect, attorney, engineer or project representative of or for **Department** who is authorized in such capacity and in behalf of **Department** to exercise any executive, supervisory or other similar function in connection with the Work or the Project of which the Work is a part shall be knowingly permitted by **Contractor** to become directly interested personally in this Contract or in any part thereof.

No Third Party Beneficiary:

- 16.18 Contractor acknowledges and agrees that it is not a third party beneficiary to any other agreement between the **Department** and any third party and/or any work product prepared or work performed for the **Department** by any third party, including but not limited to the contract between and/or work or work product performed by the **Engineer**; that nothing in the bid documents or the contract document shall be construed so as to give the contractor any legal or equitable claim, right or remedy against any other party with whom the **Department** has contracted, including but not limited to the **Engineer**; that nothing in any separate agreement between **Department** and any third party, including but not limited to the **Engineer** shall be construed to give the contractor any legal or equitable claim, right or remedy against such third party; rather such agreements are acknowledged and agreed to be intended to be for the sole exclusive benefit of the parties thereto. Contractor further acknowledges and agrees that its sole rights and remedies in connection with its bidding and performance of the work to be performed by it under the bid documents and contract documents are limited to such rights and remedies as are provided under the bid documents and contract documents. Further, contractor acknowledges and agrees that no claim against any third party, including but not limited to the **Engineer**, which is in separate contractual privity with the **Department**, shall arise out of such contractor's or the **Engineer's** performance of services for the **Department** pursuant to such separate contract.

Nothing herein shall release or waive any direct claim which the **Department** may have against any such separate contractor, including the **Engineer**, pursuant to the terms of the **Department's** contract with such third party.

Should any direct claim be brought by contractor against any third party in separate direct contractual relationship with the **Department**, contractor agrees to reimburse to the **Department** and to such separate contractor, including **Engineer**, their reasonable and necessary costs, including legal fees, incurred in the defense of such claim or claims.

SECTION IX

Supplementary Conditions

Section VIII - General Conditions:

Articles 4.2.2.1 and 4.2.2.2:

The **CONTRACTOR** shall name **Aris Food Transit** and the **ENGINEER** as additional insured and shall provide each of those entities with certificates of insurance indicating the same.

SECTION X

Standard Specifications

00001	Progress Schedule
00002	Concrete
00003	Minimum Requirements for Health and Safety

SECTION X - Standard Specifications

SPEC 00001
Progress Schedule

Table of Contents

	<u>Page</u>
1. TERMS AND DEFINITIONS	00001-1
2. REQUIREMENTS INCLUDED	00001-2
3. BAR CHART DESCRIPTION	00001-2
4. CRITICAL PATH METHOD (CPM) DESCRIPTION	00001-3
5. PROGRESS SCHEDULE SUBMITTALS FOR CPM SCHEDULES	00001-4
6. QUALITY ASSURANCE OF PROGRESS SCHEDULE	00001-4
7. REFERENCES FOR CPM SCHEDULES	00001-6
8. REVIEW OF PROGRESS SCHEDULE SUBMITTALS	00001-7
9. DELAYS AND RECOVERY	00001-8
10. EARLY-COMPLETION PROGRESS SCHEDULES	00001-9
11. CASH ALLOWANCE - SCHEDULING SUBCONTRACTOR	00001-9
12. TIME ALLOWANCE REQUIREMENTS FOR DOCUMENT REVIEW AND OTHER ACTIVITIES	00001-10
13. MEASUREMENT AND PAYMENTS	00001-10
14. COMPLIANCE	00001-10
15. ACCEPTABLE CPM DIAGRAMS	00001-11
16. ACCEPTABLE ACTIVITY SCHEDULE DATA FOR CPM DIAGRAMS	00001-11
17. ACCEPTABLE ACTIVITY VALUE AND SHOP DRAWING DATA	00001-11
18. ACCEPTABLE SCHEDULING SOFTWARE	00001-12
19. ACCEPTABLE PROGRESS SCHEDULE NARRATIVES	00001-13
20. ACCEPTABLE CONTRACTOR'S COST DATA	00001-14

SECTION X

Standard Specifications

SPEC 00001

Progress Schedule

1) *Terms and Definitions*

The terms listed below (or pronouns in place of them) have the following intent and meanings which are applicable to both the singular and plural thereof.

- a) **Activity** - A part of the Work identified in the Progress Schedule, assigned a description, duration, certain codes, and other related Shop Drawing data, and Cost and Pricing data, and evaluated to start and finish in accordance with Early and Late Schedules.
- b) **Activity, Critical** - An Activity is considered to be Critical when it is evaluated to have the minimum value of Total Float Time available in the Progress Schedule.
- c) **Activity, Value** - That portion of the contract Price which represents a fair value for the part of the Work identified by that Activity.
- d) **As-Built Schedule** - Term used to denote record schedule drawings and data substantiating how the Work was performed as to timing, sequencing and rate of progress.
- e) **Bar Chart Diagram** - A graphical representation of how the Work is to be performed as shown by timing each activity between a single choice of anticipated start and finish dates.
- f) **Critical Path** - The sequence of Critical Activities from the Date for Commencement of the Contract Time, or Contract Times, to Substantial Completion of the Work, or part thereof.
- g) **Critical Path Method Diagram** - A graphical representation of how the Work is to be performed as represented by the sequencing and timing of the Activities. A CPM Diagram shall either follow an "arrow" (I-J) format, wherein the start of an Activity is dependent upon the finish of preceding Activities, or a "precedence" format, wherein either the start or finish of an Activity is dependent upon either the start or finish of preceding Activities.
- h) **Dummy restraints** - Activities not identifying a part of the Work, and used to preserve proper logic sequencing, avoid duplicate Activity numbering, to enforce Work Sequences indicated in or required by the Contract Documents, or to achieve other preferential sequencing chosen by **Contractor**.
- I) **Duration (Activity)** - Estimated or required time of performance for the part of the Work

represented by that Activity.

- j) **Free Float** - Working days by which an Activity may be delayed from its Early Schedule, without delaying any other Activities from their Early Schedules.
 - k) **Contract Float** - Working days between the date(s) for Substantial Completion shown for the Work, or part thereof, in **Contractor's** anticipated Early Schedule, and the corresponding Contract Time or Contract Times.
 - l) **Total Float** - Working days between the Early Schedule and the Late Schedule for an Activity by which that Activity may be delayed without necessarily extending the Contract time, or Contract Times.
 - m) **Early Schedule (Late Schedule)** - The proposed Early Dates (Late Dates) of performance for the parts of the Work represented by the Activities. The Early dates are predicated on proceeding with the Work, or part thereof, exactly on the date when the Contract Time, or applicable Contract Time, commences to run; and the Late dates are based on achieving Substantial Completion of the Work, or part thereof, exactly on the Contract Time, or applicable Contract Times.
 - n) **Percent Complete** - That portion of an Activity which when multiplied by the Activity Value will yield a fair proportion of the Contract Price for that part of the Work completed.
 - o) **Preferential Logic - Contractor's** approach to sequencing of the Work over and above those sequences indicated in or required by the Contract Documents. Examples include equipment restraints, crew movements, form reuse, special logic (lead/lag) restraints, etc. factored into the Progress Schedule instead of disclosing the associated Float Times.
- 2) **Requirements Included**
- a) Pursuant to the requirements of the Contract Documents, **Contractor** shall prepare and submit, finalize, and periodically adjust the Progress Schedule as required herein.
 - b) This Section of the Specifications requires **Contractor** to plan, manage, schedule and execute the Work in accordance with a Progress Schedule meeting the requirements of the Contract Documents; that **Contractor's** Progress Schedule stay current with **Contractor's** approach to performing Work remaining; that the Progress Schedule, when approved, be jointly used by **Owner, Engineer and Contractor** to substantiate or mitigate the impact of delays and Change Orders; and that **Contractor** prepare record schedule drawings and data showing how the Work is being performed as to sequencing, timing, and rate of progress.
- 3) **Bar Chart Description**
- a) A Bar Chart Diagram does not show express logic ties, nor does it compute Early or Late Dates as defined above. Although a Bar Chart Diagram may show Contract Float time, it does not disclose Activity Total Float values.

- b) Total Float and Contract Float are not for the exclusive benefit of **Owner, Engineer, Contractor**, or others, but is time available to all parties as needed for the Contract as a whole. Such Float times shall be shared between **Owner, Engineer, Contractor** and others to absorb delays which could not be mitigated by any other reasonable means.
- c) Activity representative quantities, Activity Value, Activity Percent Complete data, Activity Value of Work performed, and the applicable Value of significant subcomponents. The sum of all Activity Values shall equal the corresponding Contract Price for the Work. The sum of all Activity Values for Work performed divided by the Contract Price shall equal the Percent Complete for the Work.

4) ***Critical Path Method (CPM) Description***

- a) The Progress Schedule shall be based on the Critical Path Method (CPM) of planning and scheduling, and prepared, finalized, and revised in accordance with the principles, definitions and terms described hereafter and those standards of the industry for CPM scheduling which are not in conflict with this Specification.
- b) CPM Diagrams shall show in detail the priority, sequencing and interdependence of Activities, and the sequence in which the Work is to be accomplished to: a) to comply with the Contract Time(s), named allowances, and those sequences of Work indicated in or required by the Contract Documents; b) to anticipate foreseeable events that may in any manner affect cost, progress, schedule, performance, and furnishing of the Work; and c) to reflect the means, methods, techniques, sequences, and procedures of construction anticipated by **Contractor**, subject to the limitations on Float sequestering set forth by this Specification.
- c) Total Float and contract Float are not for the exclusive benefit of **Owner, Engineer, Contractor, OR OTHERS**, but is time available to all parties as needed for the Contract as a whole. Such Float Times shall be shared between **Owner, Engineer, Contractor** and others to absorb delays which could not be mitigated by any other reasonable means. Use of Float Time shown in the approved progress Schedule for interim milestones or Contract Times will be available to **Owner**, if required to effect proper interfacing between work performed.
- d) Use of float suppression techniques such as preferential sequencing, special lead/lag logic restraints, extended Activity times, imposed Activity dates, scheduling items of Work required for Final Completion as though they were prerequisites to Substantial Completion, and others, and 2) use of Float time disclosed or implied by the use of alternate Float suppression techniques will be allowed, provided: a) that **Contractor** not engage in Float manipulations which have the net effect of "sequestering" Float, that is to reduce unilaterally otherwise available Float Time by more than 50 percent; and b) that **Contractor** agrees that in order to mitigate the impact of delays to the Work, or parts thereof, adjustment or removal of such Float suppression techniques will be a prerequisite to consideration of any requests for compensation for delay or acceleration or for extensions in Contract Time.
- e) The finalized Schedule of Values will be acceptable to **Engineer** as to form and substance, and will serve as the basis for progress payments.

- f) The finalized Schedule of Shop Drawing submissions will be acceptable to **Engineer** as providing a workable arrangement for processing the submissions.

5) ***Progress Schedule Submittals for CPM Schedules***

- a) All CPM Diagrams, Schedule of Values, Schedule of Shop Drawing submissions, associated computer reports, and narratives submitted by **Contractor** shall be consistent with the requirements of this Specification.
- b) The "Preliminary" submittal set shall consist of:
 - 1) A CPM Diagram and associated Schedule of Values and a supporting narrative.
 - 2) A User Manual for the scheduling software to be used by **Contractor** for the purposes of computation of the Progress Schedule.
- c) The "Interim" submittals shall consist of the interim CPM Diagram and associated Schedule of Values and Schedule of Shop Drawings submissions and a supporting narrative.
- d) The "Detailed" submittal set shall consist of:
 - 1) The Detailed CPM Diagram, and the reports associated with the Schedule of Values, and Schedule of Shop Drawing submissions, and a supporting narrative.
 - 2) The five associated Activity reports described in paragraph 18.A sorted by each of the first four sequencing criteria described in paragraph 18.D.
- e) "Status" submittal sets shall consist of "mark-up" versions of the current Detailed CPM Diagram, Schedule of Values, and Schedule of Shop Drawings, together with a supporting narrative.
- f) "Update" submittal sets shall consist of revised Detailed CPM Diagrams, Schedule of Values and Schedule of Shop Drawings, the six associated computer reports, a detailed **Contractor's** Cost report, and a supporting narrative.
- g) The "Contract Completion" submittal set shall consist of the Detailed Contract Completion Schedule, and associated computer reports.
- h) The "As-Built" submittal set shall consist of the As-Built CPM Diagram, and a "Schedule Reconciliation" report.

6) ***Quality Assurance of Progress Schedule***

- a) **Engineer** will review and if acceptable, approve the Progress Schedule.
- b) In preparing a version of the Progress Schedule, pursuant to paragraph 1.6 of the General Conditions and Supplementary Conditions, it is the responsibility of **Contractor** 1) to inspect the preaward "Preliminary Progress Schedule" submitted in compliance with Article 11 of Section III of the Contract Documents, 2) to verify site conditions that may in any manner affect cost, scheduling, progress, performance and furnishing of the Work, 3) to work with each major Subcontractor, Supplier, or other relevant person or

organization to obtain information on Activities, sequencing, and Activity Durations for incorporation into the Progress Schedule, and 4) to request and obtain written interpretations from **Engineer** as needed.

- c) The Detailed Progress Schedule shall break down the Work into Activities in sufficient detail to identify clearly all individual parts of the Work and those factors which may in any manner affect the cost, schedule, progress, performance, and furnishing of the Work. At a minimum, the break down of the Work in the detailed Progress Schedule submittal for CPM schedules only, shall delineate the following:
- 1) Those Activities designating the date for commencement of the Contract Time, or Contract Times; those Activities leading to Substantial Completion of the Work, or parts thereof; and those Activities identifying parts of the Work to be performed or furnished leading from Substantial Completion to Final Completion.
 - 2) All special Work sequences, schedule milestones, intermediate Contract Times, and named allowances set forth in the Contract Documents.
 - 3) Items pertaining to securing prerequisite permits and approvals from those agencies with jurisdiction over Work to be performed under the Contract.
 - 4) All items of Work involved in the preparation, submittal, review and approval of Shop Drawings and samples required by the Specifications.
 - 5) Appropriate times required for the fabrication, delivery, receipt and inspection, and storage of items of materials and equipment.
 - 6) Work associated with installation, erection and other field construction activities.
 - 7) Items of Work required to work around existing physical conditions and Underground Facilities which are at or contiguous to the site including the time for permanent or temporary relocation of such existing physical conditions and/or underground facilities.
 - 8) Items of interface which relate to the responsibilities of **Owner, Engineer** or other contractors performing work under separate contracts with **Owner**.
 - 9) Work required to implement cut-offs or closures, power shutdowns or temporary or permanent take-down or interruptions to existing facilities or affecting the operations of **Owner**, utilities or similarly involved third-parties. Specific dates when such cut-offs, etc. are to take place shall be shown as milestone dates on the appropriate Activities.
 - 10) All items of Work related to shop and field testing, associated trimout activities and specified manufacturer or supplier training required prior to placing the facilities in service, including but not limited to manufacturer or supplier installation checks; leak, disinfection and pressure tests; removal or erection of temporary components; tie-ins; flushing and chemical/mechanical cleaning operations; specified performance tests; and other necessary non-operating tasks adjustments, cold-alignment checks, corrections, housekeeping and spare parts stocking required of **Contractor** to conform to the Pre-operational testing

requirements of the Contract Documents.

- 11) All items of Work associated with the performance of the Start-Up Testing requirements of the Contract Documents, including, but not limited to, trial operation tests and operator training, performance tests under simulated and design operating conditions, emission testing, final acceptance or guarantee tests.
 - 12) Work related to the tentative list of items to be completed or corrected before and subsequent to Pre-operational, Startup Testing and Final Testing.
- d) The following limitations shall also apply to the selection and scoping of Activities for CPM schedules only:
- 1) Activity Durations shall be in working days and represent **Contractor's** best estimate of the time required for completion based on the Work included and the resources planned for that Activity. The computation of the Activity dates shall be based on a calendar recognizing the applicable holidays and the limitations on Work during hours other than the normal working hours set forth in the General Conditions and the Supplementary Conditions.
 - 2) Unless otherwise provided in the Special Progress Schedule Requirements, all Activities, except those identifying Work related to Shop Drawings and deliveries, shall span twenty working days or less, and their Values shall not exceed \$45,000. Duration requirements for Activities identifying Work related to **Engineer's** review of Shop Drawing or sample submissions are prescribed in the Special progress Schedule Requirements.
 - 3) Installation Activities shall not combine Work located in separate structures, buildings or facilities, nor Work corresponding to different Divisions of the Specifications. Submittal and associated delivery Activities shall identify each submittal required by the Sections of the specifications. Activities identifying Work in connection with Pre-Operational or Start-up Testing shall not combine Work pertaining to the different Division within the specifications.
 - 4) Reference is made to Article 1.11 of this specification for the identification of allowances and their incorporation into the Progress Schedule.
 - 5) Items that qualify as (a) on-site stored materials, fixtures and equipment and (b) undelivered equipment, shall be separately identified on the Progress Schedule.
- 7) ***References for CPM Schedules***
- a) The text "Precedence and Arrow Networking Techniques for Construction," by R.B. Harris (Wiley, 1978), provides principles, definitions and terms common to CPM arrow and precedence diagrams, and schedule computations therefrom.
 - b) The provisions of this Section are binding on **Contractor** in the event of a conflict between the Standard Specifications and this Specification.
- 8) ***Review of Progress Schedule Submittals***
- a) **Engineer's** and **Owner's** review of **Contractor's** Progress Schedule submittals will be

only for conformance with the Contract Time(s), those sequences of Work indicated in or required by the Contract Documents, the Float sharing concepts established in the Contract Documents, and for compliance with the requirements of this Specification and the information given in the Contract Documents. **Engineer's** and **Owner's** review, comments and exceptions taken, if any, shall not extend to, nor constitute directions nor approval of, the means, methods, techniques, sequences, or procedures of construction or safety precautions, the correctness of which shall be the sole responsibility of **Contractor**.

- b) **Engineer's** and **Owner's** review of progress schedule submittals will be predicated on a **Contractor's** stamp of approval signed off by **Contractor**. **Contractor's** stamp of approval on Progress Schedule submittals shall constitute a representation to **Owner** that **Contractor** has either determined or verified all data on the Progress Schedule submittal, or assumes full responsibility for doing so, and that **Contractor** and his Subcontractors, Suppliers or other persons or organizations have reviewed and coordinated the sequences shown in the Progress Schedule with the requirements of the Work under the Contract Documents.
- c) **Engineer's** and **Owner's** review will not be intended to be for the purpose of determining the accuracy of other matters that may be contained in the submittals. When the review of a Progress Schedule results in a number of comments or exceptions taken, **Engineer** and **Owner** does not warrant that these comments are inclusive of all variations, as it shall remain the responsibility of **Contractor** to meet the requirements of the contract documents and to identify expressly any proposed variations.
- d) **Engineer's** and **Owner's** review of progress schedule submittals shall not relieve **contractor** from responsibility for any variations from the requirements of the Contract Documents unless **Contractor** has in writing, by means of a specific notice, called **Engineer's** attention to each variation, and **Engineer** has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the Progress Schedule submittal.
- e) **Engineer's** approval of Progress Schedule submittals will not relieve **Contractor** from responsibility for errors and omissions in the submittals or from responsibility for having complied with the provisions of General Conditions and Supplementary Conditions. Approval of a Progress Schedule with undisclosed variations or errors such as omitted Work or erroneous sequences will not relieve **Contractor** from completing the omitted or impacted Work within the applicable Contract Time(s).
- f) Progress Schedules that include Activities with negative Float Times, or Activities scheduled beyond the applicable Contract Time(s), will not be approved until a specific Change Order or Proposed Change Order authorizing appropriate changes to the impacted Contract Time(s) is agreed upon between **Owner** and **Contractor**.
- g) When reviewed by **Engineer** and **Owner**, each progress schedule submittal will be returned stamped as either "approved," "approved as noted," "resubmit with revisions," or "disapproved." Submittals stamped as "approved" or "approved as noted" will indicate approval thereof, subject to the limitations set forth, and will be considered to represent the approved progress schedule as of the date in the approval stamp until an updated progress schedule is submitted by **Contractor** and approved by **Owner** and **Engineer**.
- h) If **Contractor** believes that **Engineer's** approval of a progress schedule justifies an

increase or decrease in contract price or an extension or shortening in contract time, **Contractor** shall be required to deliver a proposed change order thereof to **Engineer** in accordance with the provisions of article 9 of the general conditions. If **Owner** and **Contractor** are unable to agree as to amount and extent thereof, a claim maybe made pursuant to Articles 10 and 11 of the General Conditions.

- I) Costs associated with **Engineer's** and **Owner's** review and return of a progress schedule submission after the **Engineer's** second time review shall be borne by **Contractor**. **Owner's** charges to **Contractor** for additional reviews will be equal to **Engineer's** charges to **Owner** under the terms of **Engineer's** agreement with **Owner**. In the event **Contractor** fails to pay such costs within 30 days after receipt of an invoice from **Owner**, a change order or proposed change order will be issued incorporating the unpaid amount, and **Owner** will be entitled to an appropriate decrease in Contract Price.
- j) No partial submittals will be reviewed. Submittals not complete will be returned to **Contractor** for resubmittal.

9) ***Delays and Recovery***

- a) Reference is made to the General Conditions and the Supplementary Conditions for Contract requirements related to delays, conditions warranting extensions in Contract Time(s), and conditions applicable to reimbursement for delay costs.
- b) Whenever **Contractor** fails to complete an activity within its late date on the approved progress schedule, **Contractor** shall, within five days or with the next application for payment, whichever comes earlier, submit a written statement to **Engineer** describing the cause for the slippage in the Activity and the actions being considered by **Contractor** to recover the time lost and to prevent or mitigate any derived slippage beyond the applicable Contract Time(s).
- c) A written schedule recovery statement shall include, but not be limited to, such actions as overlapping of dependent Activities, sequencing changes to accommodate increased Activity concurrency, assignment of additional labor or equipment, shift or overtime Work, expediting of submittals or deliveries, or any combination of the foregoing.
- d) If **Contractor** refuses, fails or neglects to submit a required written schedule recovery statement, **Owner** may, at its option, withhold additional retainage pursuant to the Contract Documents and/or initiate default termination proceedings in accordance with Contract Documents or request **Engineer** to identify and to order alternate recovery actions on the basis of the information in the current Progress Schedule. If **Contractor** believes that a written order to recover schedule from **Engineer** justifies an increase in Contract Price or an extension in Contract Time, **Contractor** shall be required to deliver a written request thereof in accordance with the provisions of Article 9 of the General Conditions. If **Owner** and **Contractor** are unable to agree as to responsibility for the slippage in the schedule or the amount and extent thereof, a claim may be made pursuant to Articles 10 and 11 of the General Conditions.

10) ***Early-Completion Progress Schedules***

- a) Progress Schedules anticipating achievement of Substantial Completion ahead of the corresponding Contract Time(s), and disclosing appropriate Contract Float Time(s) for

the Work, or parts thereof, shall be considered equivalent or equal to Progress Schedules anticipating Substantial Completion exactly on the Contract Time(s). In accordance with requirements of the Contract Documents, the contract Float Time in these equivalent or equal Progress Schedules will be available to **Owner, Engineer, Contractor** and others to absorb delays to the Work as a whole which cannot be mitigated by any other means.

- b) Progress Schedules anticipating achievement of Substantial Completion ahead of the corresponding Contract Time(s), but with zero Contract Float as opposed to positive Contract Float, will be returned as either "Approved as Noted," "Resubmit with Revisions," or "Disapproved." Submittals stamped as "Approved as Noted" will indicate **Engineer's** approval thereof, subject to the limitations set forth, including **Engineer's** computation of the appropriate Contract Float implied by the anticipated early completion.
- c) If upon approval (or approval as noted) by **Engineer** of a Progress Schedule with disclosed or implied Contract Float Time, **Contractor** disputes the availability of Contract Float and proposes that compensation for delay shall be measured from the anticipated early completion date(s) as opposed to the corresponding Contract Time(s), **Contractor** agrees and understands that said proposal will represent a request to **Owner** that the approved Progress Schedule be evaluated as a substitute Progress Schedule for the purposes of changing the Contract Time(s) to those supported by the **Contractor's** early-completion Progress Schedule. Evaluation of that substitution will be in accordance with the requirements of paragraphs 5.7.1, 5.7.2 and 5.7.3 of the General conditions, and will require additional supporting data that explains and substantiates the basis of the anticipated Early Schedules. Such supporting data shall consist of: 1) notice of any scheduled Work during hours other than normal work hours, 2) information related to rates of production including pertinent quantities, crew sizes, man-day requirements, major items of equipment, etc., for Critical and other significant Activities, 3) express or implied contingency allowances figured in for Activities for such factors as weather, delays, activities of **Owner AND Engineer** to respond to reports of differing site conditions, and other relevant factors. Acceptance of that substitution will be evidenced by a Change Order shortening the Contract Time, or Contract Times accordingly, but maintaining the Contract Price and the provisions for liquidated and actual damages set forth in the Agreement.

11) ***Cash Allowance - Scheduling Subcontractor***

- a) It is understood that **Contractor** has included in the Contract Price the allowance stipulated in the Bid Form so named in the Contract Documents and shall cause the Work so covered to be done by the Scheduling Subcontractor and for such sums within the allowance as maybe acceptable to **Owner** and **Engineer**.
- b) It is also understood that **Contractor** has included in the Contract Price sufficient funds to cover all costs in excess of the allowance in connection with Work to be done by the Scheduling Subcontractor.

- c) **Contractor's** costs for administering the performance of Work by the Scheduling Subcontractor, for participating in the preparation of the required progress Schedule submittals, for overhead, profit and other expenses contemplated for the allowance have been included in the Contract Price for the Work and not in the allowance for the Scheduling Subcontractor. No demand for additional payment on account of any costs thereof will be valid.

12) ***Time Allowance Requirements for Document Review and Other Activities***

- a) **Contractor** shall make allowances for time required for a) document review and approval of submittals of Shop Drawings and samples specified in this Specification, b) the requirements for anticipated repeat submissions for particular items of materials or equipment, and c) the requirements for anticipated or required time intervals for the performance of specific parts of the Work by **Contractor**.
- b) **Contractor** shall make allowances for time required by a) those other activities indicated in or required by the contract Documents which are the responsibility of **Owner** or **Engineer**, b) the potential time requirements of **Owner** and **Engineer** to investigate instances of potential differing site conditions, and c) those other named time allowances required by the Contract Documents.
- c) It is understood that **Contractor** has included in the Contract Price the effect of accommodating all of these time allowances and requirements in the planning, scheduling and execution of the Work; that **Contractor's** Progress Schedule will incorporate Activities and sequences contemplated by the time allowances based on the information indicated in or required by the Contract Documents; and that **Contractor** shall cause the Work or requirements covered by such time allowances to be done within the limits of the Contract Time(s).

13) ***Measurement and Payments***

- a) All costs in connection with these requirements, including the Work to be performed by the Scheduling Subcontractor, shall be borne by **Contractor**. Payments made to **Contractor** under the allowance for the Scheduling Subcontractor provided for in paragraph 11.A shall be disbursed in their entirety to the Scheduling Subcontractor.
- b) Payments for Work performed under this Section of the Specifications will be made pursuant to Article 9 of the Agreement. Payment for Work performed shall be in accordance with the schedule of payments in the Special Progress Schedule Requirements.

14) ***Compliance***

- a) If **Contractor** refuses, fails or neglects to provide the required Progress Schedules or related schedule, Pricing and cost data, Shop Drawing data, or schedule recovery data, he will be deemed not to have provided sufficient information to **Engineer** upon which progress can be evaluated, and **Engineer** may refuse to recommend the whole or part of any outstanding payment if, in the **Engineer's** opinion, it would be incorrect to make such representations to **Owner**. Further, and pursuant to the Article 14 of the General Conditions, **Owner** may refuse to make payment of those amounts recommended by **Engineer** because of **Contractor's** failure or refusal to provide the required Progress Schedule and related submittal data.

15) ***Acceptable CPM Diagrams***

- a) Interim and Detailed CPM Diagrams shall be based on an arrow or precedence diagram format, and sequenced by the separate structures, facilities, buildings or site areas.
- b) CPM Diagrams shall be allotted on a time-scaled calendar and expressly identify: 1) the Contract Times, 2) the approach taken to comply with the Work Sequence conditions, 3) the Critical Path(s), and 4) all Activities. Activities shall be shown on their Early Schedule, and their total Float Times noted beside them.
- c) CPM Diagrams shall include title blocks identifying the name and location of the Project, Contract designation, names of **Owner, Engineer, Contractor** and Scheduling Subcontractor, Progress Schedule issue number and date, and sheet title. Diagram sheets shall be dimensioned as the full-size Contract Drawings, be neat and legible and submitted on a medium suitable for reproduction. Connections between Activities on different sheets shall be shown on the different sheets of the CPM Diagrams to allow a complete schedule document.

16) ***Acceptable Activity Schedule Data for CPM Diagrams***

- a) Activity schedule information shall, at a minimum, include the following data:
 - 1) Activity identified, i.e., I-J numbers in arrow format, or alphanumeric numbers in precedence format, such that not more than one Activity, dummy, or restraint may have the same identifier.
 - 2) Activity Description for each Activity, dummy or preferential restraint shall fully convey the scope of the Work included.
 - 3) Special Activity codes designating: a) location of the Work, e.g., site areas, elevations, etc., b) Work breakdown, e.g., process, trade, performing organization, c) responsibility, e.g., **Contractor, Owner**, Subcontractors, etc., d) as-awarded from amended (added or deleted by a Change Order or Proposed Change Order) items of Work.
 - 4) Activity labor requirements, based on a proportionate share of the (direct) labor manhours and quantities in the associated items from the Contract Price Breakdown developed pursuant to the requirements of the Supplementary Conditions.
 - 5) The use of start or finish restraint dates must be annotated as to the basis for the chosen restraints.

17) ***Acceptable Activity Value and Shop Drawing Data***

- a) Activity data pertaining to the Schedule of Values shall at a minimum include the following for each Activity:
 - 1) Activity code and description as on the CPM Diagram.

- 2) Activity representative quantities, Activity Value, Activity Percent Complete data, Activity Value of Work performed, and the applicable Value of significant subcomponents. The sum of all Activity Values shall equal the corresponding Contract Price for the Work. The sum of all Activity Values for Work performed divided by the Contract Price shall equal the Percent Complete for the Work.
 - 3) Activity Values shall breakdown Value for anticipated stored materials from Value for Work installed, as applicable.
 - 4) Cost of equipment or materials to be incorporated in the Work shall be assigned to the appropriate fabrication and delivery Activities.
- b) Activity data pertaining to the Schedule of Shop Drawing submissions shall at a minimum include the following for each Activity:
 - 1) Activity code and description as on the CPM Diagram.
 - 2) A list of specific submissions, Specification Section, Contract Drawing sheet numbers, and applicable submission dates.
 - c) The Schedule of Values and the Schedule of Shop Drawing submissions shall be provided on forms acceptable to **Engineer**.

18) ***Acceptable Scheduling Software***

- a) **Contractor's** evaluation of the CPM Diagrams shall be based on scheduling software meeting the data management, computational, and reporting requirements of this Specification. Activity reports provided by the scheduling software selected shall, at a minimum, display the following data for each Activity, dummy, or restraint:
 - 1) Activity identifier, activity description, activity duration, activity man-days, computed or restrained Early Start date, computed Early Finish date, computed Late Start date, computed or restrained Late Finish date, Total Float and Free Float, Activity Value, Percent Complete, Activity Value for Work performed, and associated Activity list items (e.g., Shop Drawing submissions).
 - 2) Dates shall be in calendar form. Contract Times representing Substantial Completion requirements shall be set as restrained Late Finish Dates where applicable; Contract Times representing Commencement of Work conditions shall be shown as restrained Early Start Dates as applicable. Contract Float times shall be computed and shown pursuant to the definition in Attachment A.
- b) If the CPM Diagram is based on the precedence format, an additional computer report tabulating the sequences on the Diagram shall be provided showing: a) each Activity together with a listing of all of its preceding and succeeding Activities, and b) the relationship type, lead/lag types, and lead/lag times between each Activity and each of its preceding and succeeding Activities.
- c) The scheduling software shall have the capability of sorting out computer reports by the special Activity codes designated in 17(a) above.
- d) The scheduling software shall have the capability of sequencing computer reports by:

- 1) Activity identifier, in order of ascending I-J number.
 - 2) Activity identifier, in order of descending J-I number.
 - 3) Total Float, in order of ascending Total Float values, and by ascending Early Start Dates, or by ascending I-J numbers, or by descending J-I numbers, within the same Total Float values.
 - 4) Early Start dates in chronological order of Early Start dates, and by ascending I-J numbers within the same Early Start Dates.
 - 5) Late Finish dates, in chronological order of Late Finish Dates and by descending J-I numbers within the same Late Finish Dates.
 - 6) Change Order or Proposed Change Order No.
- e) In addition to the ability to process the required Activity data, the scheduling software shall offer the following features: a) the capability of accepting and processing schedules with actual start and actual finish dates for the Activities; b) processing of CPM schedules with negative Total Float values; c) printing or plotting of rate of progress data, such as labor utilization and payment curves; d) the ability of drawing CPM Diagrams using plottergraphics.

19) ***Acceptable Progress Schedule Narratives***

- a) A narrative shall include sufficient information to substantiate the basis of the data used to develop that Progress Schedule submittal, and detail:
 - 1) The status of the Progress Schedule in terms of number of days ahead or behind the Contract Time, or Contract Times.
 - 2) The progress status (i.e., progress achieved vs. that forecasted) for a) Activities designating accomplishment of Substantial Completion, b) Critical and other significant Activities, c) Work related to achieving milestones set forth by the Work Sequences indicated in or required by the Contract Documents, d) long-lead delivery items of material or equipment.
 - 3) The assumptions made in incorporating Work related to pending or authorized Change Orders and Proposed change Orders.
 - 4) Actual or potential delays, including causes, the steps taken or anticipated to mitigate their impact, and the anticipated effect on the Progress Schedule as a whole.
 - 5) Schedule recovery statement describing actions under consideration by **Contractor** to recover from a negative float or overrun in Late Finish Date condition.

- 6) Any significant changes in Progress Schedule sequences, and their basis thereof. Significant sequencing changes shall be those affecting Critical Activities, or causing a substantial reduction or increase in the Total Float Times available.
- 7) **Owner** and **Engineer** Activities which become due over the next two months on account of **Contractor's** requirements for performing Work which follows such **Owner** and **Engineer** Activities.
- 8) Rate of progress or "momentum" curves showing: a) the anticipated levels of labor utilization, e.g., man-days per week, and b) the anticipated level of payments for Work to be performed, all in accordance with the Activity time frames supported by the Early and Late Dates in the Progress Schedule.
- 9) Other information relevant to or of concern in the planning, scheduling and execution of Work over the next two months.
- 10) **Contractor's** responses to **Engineer's** comments raised in the review of the previous Progress Schedule submittal.
- 11) Actions taken to address schedule noncompliance issues which have negated **Engineer's** approval of a previous Progress Schedule submittal.

20) ***Acceptable Contractor's Cost Data***

- a) Cost data for inclusion in the **Contractor's** Cost reports required with each Progress Schedule Update submittal shall detail Contract financial and budget data available to and customarily relied upon by **Contractor** to monitor financial and cost performance.
- b) Acceptable financial and cost data for each cost account used by **Contractor** to apportion the contract Price to separable parts of the Work shall include:
 - 1) Account number and description.
 - 2) Account estimate data, identifying labor, material and equipment, and Subcontract costs for that account is included in the **Contractor's** Bid estimate, together with the sum increase or decrease in associated authorized Change Orders or Proposed Change Orders, and those sums anticipated by proposed Change Orders in negotiation or claims pending resolution.
 - 3) Current labor, material and equipment, and Subcontract cost data for the account; percent complete for the Work designated by that account; and **Contractor's** current forecast of the cost to complete Work designated by the account.

*** END OF SECTION ***

SECTION X - Standard Specifications

**SPEC 00002
Concrete**

Table of Contents

- 1. GENERAL 00002-1**
 - 1.1 Scope of Work 00002-1
 - 1.2 Submittals 00002-1
 - 1.3 Quality Assurance 00002-1

- 2. PRODUCTS 00002-2**
 - 2.1 Cast-In-Place Concrete 00002-2
 - 2.2 Precast Concrete Units 00002-3

- 3. EXECUTION 00002-3**
 - 3.1 Concrete Placement 00002-3
 - 3.2 Cold Weather Placing 00002-3
 - 3.3 Monolithic Slab Finish 00002-4
 - 3.4 Concrete Curing and Protection 00002-4
 - 3.5 Concrete Floor Sealer 00002-4

SECTION X - Standard Specifications

SPEC 00002

Concrete

1) ***General***

1.1 **Scope of Work**

- a) The Contractor shall furnish all labor, materials, equipment, and incidentals needed for the cast-in-place and/or precast concrete required by the Contract Documents and as herein specified.

1.2 **Submittals**

- a) Cast-in-place concrete.
 - 1) Name and location of batch plant.
 - 2) Design mix.
 - 3) Shop drawings indicating placement of all reinforcing inserts, location of joints, sealing of joints, etc.
 - 4) Submittal on grating and frame.
- b) Precast concrete
 - 1) Name and location of precaster.
 - 2) Submittals of precast units.
 - 3) Certifications of design for loading.
 - 4) Submittal on manhole frame and cover.

1.3 **Quality Assurance**

- a) Codes and Standards
 - 1) Comply with the provisions of the following codes and standards, except as otherwise shown or specified:
 - a) ACI 301 - "Specifications for Structural Concrete for Buildings."
 - b) ACI 318 - "Building Code Requirements for Reinforced Concrete."
 - c) CRSI - "Manual of Standard Practice."
 - d) ACI 305 - "Recommended Practice for Hot Weather Concreting."

- 2) Where provisions of the above codes and standards are in conflict with the building code in force for the project, the more stringent code shall apply.

2) ***Products***

2.1 **Cast-In-Place Concrete**

- a) Portland Cement - ASTM C 150, Type III.
- b) Aggregates - ASTM C 33
 - 1) Fine aggregates - clean, sharp, natural sand free of dune sand, bank run sand, manufactured sand, loam, clay, etc.
 - 2) Coarse aggregate - clean processed natural limestone free of all foreign matter.
- c) Water - clean, fresh, free of all oils, acids organics, etc.
- d) Admixtures.
 - 1) Air-Entraining - ASTM C 260.
 - 2) Water-Reducing - ASTM C 494.
 - 3) Floor sealer - Sonoglaze is manufactured by Sonneborn Building Products or similar product by Master Builders.
- e) Concrete Qualifiers.
 - 1) Concrete mix shall be DOT Class E.
 - 2) Strength - 4,000 psi at twenty-eight (28) days with maximum water-cement ratio of 0.45.
 - 3) Air content - 6 percent.
 - 4) Slump limits - 3-4 inch.
- f) Reinforcing
 - 1) Bars - ASTM A615, Grade 40.
 - 2) Welded Wire Fabric - ASTM A185.
- g) Frame and Grating - (Reteculine)
 - 1) The frames, gratings, and appurtenances shall be fabricated from steel conforming to ASTM A36.
 - 2) All parts shall be galvanized according to the requirements of the NYSDOT 719-01 type 1.

- 3) Grating shall be provided with lock down bolt anchors.
- h) Waterstops
 - 1) Waterstops to be 6" PVC dumbbell style, made of virgin raw materials.
 - 2) Waterstops shall be #747 as manufactured by Greenstreak, #8046 as manufactured by Vulcan Metal Products, Inc., or equal.

2.2 Precast Concrete Units

- a) Precast concrete units shall be of sizes shown and built in accordance with ASTM standards C913-89. Units to be designated to withstand H-20 loading.
- b) Manhole cover and frame shall conform to NYSDOT Standard 715-05, Class No. 30. Units shall be supplied with lock down device.

3) *Execution*

3.1 Concrete Placement

- a) General - Place concrete in compliance with the practices and recommendations of ACI-304, and herein specified.
- b) Deposit and consolidate concrete slabs in a continuous operation, within the limits of construction joints, until the placing of a panel or section is complete. In the event that the slab is placed in two sections, the sections shall have continuous waterstops.
- c) Consolidate concrete during placing operations using mechanical vibrating equipment, so that concrete is thoroughly worked around reinforcing and other embedded items and into corners.
- d) Bring slab surfaces to the correct level with a straight edge strike off. Use bull floats or darbies to smooth the surface, leaving it free of humps or hollows.

3.2 Cold Weather Placing

- a) Protect all concrete work from physical damage or reduced strength which could be caused by frost, freezing actions, or low temperatures.
- b) When air temperature has fallen to or is expected to fall below 40° F, uniformly heat all water and aggregate before mixing, to obtain a mixture temperature of not less than 50° F and not more than 80° F at point of placement.
- c) Do not use calcium chloride, salt, and other materials containing antifreeze agents or chemical accelerators.

3.3 Monolithic Slab Finish

- a) Begin float finishing when surface water has disappeared or when concrete has stiffened sufficiently to permit the operation of a power-driven float. Check surface plane to a

tolerance not to exceed 1/4 inch in 10 feet, with uniform slopes to drains.

- b) Begin the final troweling when the surface produces a ringing sound as the trowel is moved over the surface.

3.4 **Concrete Curing and Protection**

- a) Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- b) Weather permitting, keep placed concrete continuously moist for not less than 72 hours.

3.5 **Concrete Floor Sealer**

- a) Concrete slab shall be fully cured, cleaned, and etched.
- b) Apply sealer as recommended by manufacturer or as specified in the contract documents.

*** END OF SECTION ***

SECTION X - Standard Specifications

SPEC 00003

Minimum Requirements for Health and Safety

Table of Contents

1.	GENERAL	00003-1
1.01	Description	00003-1
1.02	Basis	00003-1
1.03	Health and Safety Definitions	00003-2
1.04	Responsibilities	00003-3
1.05	Health and Safety Plan	00003-4
1.06	Health and Safety Organization	00003-5
1.07	Site Description and Hazard Assessment	00003-7
1.08	Training	00003-8
1.09	Medical Surveillance	00003-8
1.10	Site Control	00003-10
1.11	Standard Operating Safety Procedures (SOSP), Engineering Controls	00003-12
1.12	Personal Protective Equipment	00003-13
1.13	Personnel Hygiene and Decontamination	00003-24
1.14	Equipment Decontamination	00003-25
1.15	Air Monitoring Program	00003-27
1.16	Emergency Equipment and First Aid Requirements	00003-31
1.17	Emergency Responses/contingency Plan and Procedures	00003-33
1.18	Heat Stress Monitoring	00003-35
1.19	Cold Stress	00003-36
1.20	Logs, Reports and Record Keeping	00003-37
1.21	Posting Regulations	00003-38
1.22	Community Protection Plan	00003-40
1.23	Confined Space Work	00003-42
2.	PRODUCTS	00003-42
3.	EXECUTION	00003-42

MINIMUM REQUIREMENTS FOR HEALTH AND SAFETY

1. GENERAL

1.01 Description

- A. The **CONTRACTOR** is solely responsible and liable for the health and safety of all on-site personnel and any off-site community potentially impacted by the remediation.
- B. This section describes the minimum health and safety requirements for this project including the requirements for the development of a written Health and Safety Plan (HASP). All on-site workers must comply with the requirements of the HASP. The **CONTRACTOR's** HASP must comply with all applicable federal and state regulations protecting human health and the environment from the hazards posed by activities during this site remediation. The HASP is a required deliverable for this project. The HASP will be reviewed by the **ENGINEER**. The **CONTRACTOR** will resubmit the HASP, addressing all review comments from the **ENGINEER**. The **CONTRACTOR** shall not initiate on-site work in contaminated areas until an acceptable HASP addressing all comments has been developed.
- C. Consistent disregard for the provision of these health and safety specifications shall be deemed just and sufficient cause for immediate stoppage of work and/or termination of the Contract or any Subcontract without compromise or prejudice to the rights of the **DEPARTMENT** or the **ENGINEER**.
- D. Any discrepancies between this HASP and the specifications (or OSHA requirements) shall be resolved in favor of the more stringent requirements as determined by the **ENGINEER**.

1.02 Basis

- A. The Occupational Safety and Health Administration (OSHA) Standards and Regulations contained in Title 29, Code of Federal Regulations, Parts 1910 and 1926 (20 CFR 1910 and 1926) and subsequent additions and/or modifications, the New York State Labor Law Section 876 (Right-to-Know Law), the Standard Operating Safety Guidelines by the United States Environmental Protection Agency (EPA), Office of Emergency and Remedial Response and the Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (NIOSH, OSHA, USCG, and EPA) provide the basis for the safety and health program. Additional specifications within this section are in addition to OSHA regulations and reflect the positions of both the EPA and the National Institute for Occupation Safety and Health (NIOSH) regarding procedures required to ensure safe operations at abandoned hazardous waste disposal sites.

- B.** The safety and health of the public and project personnel and the protection of the environment will take precedence over cost and schedule considerations for all project work. Any additional costs will be considered only after the cause for suspension of operations is addressed and work is resumed. The **ENGINEER's** on-site representative and the **CONTRACTOR's** Superintendent will be kept apprised, by the Safety Officer, of conditions which may adversely affect the safety and health of project personnel and the community. The **ENGINEER** may stop work for health and safety reasons. If work is suspended for health and/or safety reasons, it shall not resume until approval is obtained from the **ENGINEER**. The cost of work stoppage due to health and safety is the responsibility of the **CONTRACTOR** under this Contract.

1.03 Health and Safety Definitions

- A.** The following definitions shall apply to the work of this Contract:

1. Project Personnel: Project personnel include the **ENGINEER**, the **ENGINEER's** On-site Representatives, **CONTRACTOR**, Subcontractors, and Federal and State Representatives, working or having official business at the Project Site.
2. Authorized Visitor: Authorized visitors who work for the State of New York shall receive approval to enter the site from the **DEPARTMENT**. The Safety Officer has primary responsibility on determining who is qualified and may enter the site. The Site Safety Officer will only allow authorized visitors with written proof that they have been medically certified and trained in accordance with 29 CFR 1910.120 to enter the contamination reduction zone and/or exclusion area.
3. Health and Safety Coordinator (HSC): The HSC shall be a Certified Industrial Hygienist (CIH) or Certified Safety Professional (CSP) retained by the **CONTRACTOR**. The HSC will be responsible for the development and implementation of the HASP.
4. Safety Officer (SO): The SO will be the **CONTRACTOR's** on-site person who will be responsible for the day-to-day implementation and enforcement of the HASP.
5. Health and Safety Technicians (HST): The HST(s) will be the **CONTRACTOR's** on-site personnel who will assist the SO in the implementations of the HASP, in particular, with air monitoring in active work areas and maintenance of safety equipment.
6. Medical Consultant (MC): The MC is a physician retained by the **CONTRACTOR** who will be responsible for conducting physical exams as specified under the Medical Monitoring Programs in this section.
7. Project Site: The area designated on the Site Sketch, which includes the Contractor Work Area.
8. Contractor Work Area: An area of the project site including the Support Zone, access road, staging area, and Exclusion Zone.

9. Contractor Support Zone: An area of the Contractor Work Area outside the Exclusion Zone, accessible for deliveries and visitors. No persons, vehicles, or equipment may enter these areas from the Exclusion Zone without having gone through specified decontamination procedures in the adjacent Contamination Reduction Zone.
10. Staging Areas: Areas within the Exclusion Zone for the temporary staging of contaminated soil and debris.
11. Exclusion Zone: The innermost area within the Contractor Work Area that encloses the area of contamination. Protective clothing and breathing apparatus as specified in the health and safety requirements and in the **CONTRACTOR's** approved HASP must be worn.
12. Contamination Reduction Zone: An area at the Exit Point of the Exclusion Zone through which all personnel, vehicles, and equipment must enter and exit. All decontamination of vehicles and equipment and removal of personal protective clothing and breathing apparatus must take place at the boundary between the Exclusion Zone and the Contamination Reduction Zone.
13. **ENGINEER's** on-site representative: The **ENGINEER's** representative assigned responsibility and authority by the **ENGINEER** for day-to-day field surveillance duties.
14. Work: Work includes all labor, materials, and other items that are shown, described, or implied in the Contract and includes all extra and additional work and material that may be ordered by the **ENGINEER**.
15. Monitoring: The use of direct reading field instrumentation to provide information regarding the levels of gases and/or vapor, which are present during remedial action. Monitoring shall be conducted to evaluate employee exposures to toxic materials and hazardous conditions.

1.04 Responsibilities

- A.** The **ENGINEER** will be responsible for the following:
 1. Reviewing the HASP for the acceptability for its personnel and the impact on the site and human health.
 2. Reviewing modifications to the HASP.
- B.** The **CONTRACTOR** will be responsible for the following:
- C.** The **CONTRACTOR** will perform all work required by the Contract Documents in a safe and environmentally acceptable manner. The **CONTRACTOR** will provide for the safety of all project personnel and the community for the duration of the Contract.

D. The **CONTRACTOR** shall:

1. Employ an SO who shall be assigned full-time responsibility for all tasks herein described under this HASP. In the event the SO cannot meet his responsibilities, the **CONTRACTOR** shall be responsible for obtaining the services of an "alternate" SO meeting the minimum requirements and qualifications contained herein. No work will proceed on this project in the absence of an approved SO.
2. Ensure that all project personnel have obtained the required physical examination prior to and at the termination of work covered by the contract.
3. Be responsible for the pre-job indoctrination of all project personnel with regard to the HASP and other safety requirements to be observed during work, including but not limited to (a) potential hazards, (b) personal hygiene principles, (c) personal protection equipment, (d) respiratory protection equipment usage and fit testing, and (e) emergency procedures dealing with fire and medical situations.
4. Be responsible for the implementation of this HASP, and the Emergency Contingency and Response Plan.
5. Provide and ensure that all project personnel are properly clothed and equipped and that all equipment is kept clean and properly maintained in accordance with the manufacturer's recommendations or replaced as necessary.
6. Alert appropriate emergency services before starting any hazardous work and provide a copy of the Emergency Contingency Plan to the respective emergency services.
7. Have sole and complete responsibility of safety conditions for the project, including safety of all persons (including employees).
8. Be responsible for protecting the project personnel and the general public from hazards due to the exposure, handling, and transport of contaminated materials. Barricades, lanterns, roped-off areas, and proper signs shall be furnished in sufficient amounts and locations to safeguard the project personnel and public at all times.
9. Ensure all OSHA health and safety requirements are met.
10. Maintain a chronological log of all persons entering the project site. It will include organization, date, and time of entry and exit. Each person must sign in and out.

1.05 Health and Safety Plan

- A.** The HASP is a deliverable product of this project. The **ENGINEER** will review and comment on the **CONTRACTOR's** HASP. Agreed upon responses to all comments will be incorporated into the final copy of the HASP. The HASP shall govern all work performed for this contract. The HASP shall address, at a minimum, the following items in accordance with 29 CFR 1910.120(I)(2):

1. Health and Safety Organization.
2. Site Description and Hazard Assessment.
3. Training.
4. Medical Surveillance.
5. Work Areas.
6. Standard Operating Safety Procedures and Engineering Controls.
7. Personal Protective Equipment (PPE).
8. Personnel Hygiene and Decontamination.
9. Equipment Decontamination.
10. Air Monitoring.
11. Emergency Equipment/First Aid Requirements.
12. Emergency Response and Contingency Plan.
13. Confined-Space Entry Procedures.
14. Spill Containment Plan.
15. Heat & Cold Stress.
16. Record Keeping.
17. Community Protection Plan.

B. The following sections will describe the requirements of each of the above-listed elements of the HASP.

1.06 Health and Safety Organization

A. The **CONTRACTOR** shall list in the HASP a safety organization with specific names and responsibilities. At a minimum, the **CONTRACTOR** shall provide the services of a Health and Safety Coordinator, SO, Health and Safety Technician, and a Medical Consultant.

B. Health and Safety Coordinator: The **CONTRACTOR** must retain the services of a Health and Safety Coordinator (HSC). The HSC must be an American Board of Industrial Hygiene (ABIH) Certified Industrial Hygienist (CIH) or a Certified Safety Professional (CSP). The HSC must have a minimum of two years experience in hazardous waste site remediations or related industries and have a working knowledge of federal and state occupational health and safety regulations. The HSC must be familiar with air monitoring techniques and the development of health and safety programs for personnel working in potentially toxic atmospheres.

In addition to meeting the above requirements the HSC will have the following responsibilities:

1. Responsibility for the overall development and implementation of the HASP.
2. Responsibility for the initial training of on-site workers with respect to the contents of the HASP.
3. Availability during normal business hours for consultation by the Safety Officer.
4. Availability to assist the Safety Officer in follow-up training and if changes in site conditions occur.

C. Safety Officer: The designated SO must have, at a minimum, two years of experience in the remediation of hazardous waste sites or related field experience. The SO must have formal training in health and safety and be conversant with federal and state regulations governing occupational health and safety. The SO must be certified in CPR and first aid and have experience and training in the implementation of personal protection and air monitoring programs. The SO must have "hands-on" experience with the operation and maintenance of real-time air monitoring equipment. The SO must be thoroughly knowledgeable of the operation and maintenance of air-purifying respirators (APR) and supplied-air respirators (SAR) including SCBA and airline respirators.

In addition to meeting the above qualifications, the SO will be responsible for the following minimum requirements:

1. Responsibility for the implementation, enforcement, and monitoring of the health and safety plan.
2. Responsibility for the pre-construction indoctrination and periodic training of all on-site personnel with regard to this safety plan and other safety requirements to be observed during construction, including:
 - a. Potential hazards.
 - b. Personal hygiene principles.
 - c. PPE.
 - d. Respiratory protection equipment usage and fit testing.
 - e. Emergency procedures dealing with fire and medical situations.
 - f. Conduct daily update meetings in regard to health and safety.
3. Responsibility for alerting the **ENGINEER's** on-site representative prior to the **CONTRACTOR** starting any particular hazardous work.
4. Responsibility for informing project personnel of the New York State Labor Law Section 876 (Right-to-Know Law).

5. Responsibility for the maintenance of separation of Exclusion Zone (Dirty) from the Support Zone (Clean) areas as described hereafter.

D. Health and Safety Technicians: The Health and Safety Technician (HST) must have one year of hazardous waste site or related experience and be knowledgeable of applicable occupational health and safety regulations. The HST must be certified in CPR and first aid. The HST will be under direct supervision of the SO during on-site work. The HST must be familiar with the operations, maintenance and calibration of monitoring equipment used in this remediation. An HST will be assigned to each work crew or task in potentially hazardous areas.

E. Medical Consultant: The **CONTRACTOR** is required to retain a Medical Consultant (MC) who is a physician, certified in occupational medicine. The physician shall have experience in the occupational health area and shall be familiar with potential site hazards of remedial action projects. The MC will also be available to provide annual physicals and to provide additional medical evaluations of personnel when necessary.

1.07 Site Description and Hazard Assessment

A. The **CONTRACTOR** shall perform a hazard assessment to provide information to assist in selection of PPE and establish air monitoring guidelines to protect on-site personnel, the environment, and the public. The **CONTRACTOR** shall provide a general description of the site, its location, past history, previous environmental sampling results, and general background on the conditions present at the site.

1. Chemical Hazards: A qualitative evaluation of chemical hazards shall be based on the following:

- Nature of potential contaminants;
- Location of potential contaminants at the project site;
- Potential for exposure during site activities; and
- Effects of potential contaminants on human health.

2. Biological Hazards: A qualitative evaluation of biological hazards consisting of the elements listed for chemical hazards.

3. Physical Hazards: The **CONTRACTOR** shall assess the potential for physical hazards affecting personnel during the performance of on-site work.

B. The **CONTRACTOR** shall develop a hazard assessment for each site task and operation established in the HASP.

1.08 Training

A. OSHA Training

1. The **CONTRACTOR** is responsible to ensure that all project personnel have been trained in accordance with OSHA 1910.120 regulations.
2. The **CONTRACTOR** shall ensure that all employees are informed of the potential hazards of toxic chemicals to the unborn child and of the risks associated with working at the project site.
3. The **CONTRACTOR** shall be responsible for, and guarantee that, personnel not successfully completing the required training are not permitted to enter the project site to perform work.

B. Safety Meetings

1. The SO will conduct daily safety meetings for each working shift that will be mandatory for all project personnel. The meetings will provide refresher courses for existing equipment and protocols, and will examine new site conditions as they are encountered.
2. Additional safety meetings will be held on an as-required basis.

- C.** Should any unforeseen or site-specific safety-related factor, hazard, or condition become evident during the performance of work at this site, the **CONTRACTOR** will bring such to the attention of the SO in writing as quickly as possible for resolution. In the interim, the **CONTRACTOR** will take prudent action to establish and maintain safe working conditions and to safeguard employees, the public, and the environment.

1.09 Medical Surveillance

- A.** The **CONTRACTOR** shall utilize the services of a Physician to provide the minimum medical examinations and surveillance specified herein. The name of the Physician and evidence of examination of all **CONTRACTOR** and Subcontractor on-site personnel shall be kept by the SO.

- B.** **CONTRACTOR** and Subcontractor project personnel involved in this project shall be provided with medical surveillance prior to onset of work. Immediately at the conclusion of this project, and at any time there is suspected excessive exposure to substances that would be medically detectable, all project personnel will be medically monitored. The costs for these medical exams, including state field representatives, (four maximum) are to be borne by the **CONTRACTOR**.

- C.** Physical examinations are required for:

1. Any and all personnel entering hazardous or transition zones or performing work that required respiratory protection.
2. All **CONTRACTOR** personnel on site who are dedicated or may be used for emergency response purposes in the Exclusion Zone.

3. **CONTRACTOR** supervisors entering hazardous or transition zones, or on site for more than 16 hours during the length of the contract.
- D.** Physical examinations are not required for people making periodic deliveries provided they do not enter hazardous or transition zones.
 - E.** In accordance with good medical practice, the examining Physician or other appropriate representative of the Physician shall discuss the results of such medical examination with the individual examined. Such discussion shall include an explanation of any medical condition that the Physician believes required further evaluation or treatment and any medical condition which the Physician believes would be adversely affected by such individual's employment at the project site. A written report of such examination shall be transmitted to the individual's private physician upon written request by the individual.
 - F.** The examining Physician or Physician group shall notify the SO in writing that the individual has received a medical examination and shall advise the SO as to any specific limitations upon such individual's ability to work at the project site that were identified as a result of the examination. Appropriate action shall be taken in light of the advice given pursuant to this subparagraph.
 - G.** The physical examination shall also include but not be limited to the following minimum requirements:
 1. Complete blood profile;
 2. Blood chemistry to include: chloride, CO₂, potassium, sodium, BUN, glucose, globulin, total protein, albumin, calcium, cholesterol, alkaline phosphatase, triglycerides, uric acid, creatinine, total bilirubin, phosphorous, lactic dehydrogenase, SGPT, SGOT;
 3. Urine analysis;
 4. "Hands on" physical examination to include a complete evaluation of all organ systems including any follow-up appointments deemed necessary in the clinical judgement of the examining physician to monitor any chronic conditions or abnormalities;
 5. Electrocardiogram;
 6. Chest X-ray (if recommended by examining physician in accordance with good medical practice);
 7. Pulmonary function;
 8. Audiometry - To be performed by a certified technician, audiologist, or physician. The range of 500 to 8,000 hertz should be assessed.
 9. Vision screening - Use a battery (TITMUS) instrument to screen the individual's ability to see test targets well at 13 to 16 inches and at 20 feet. Tests should include an assessment of muscle balance, eye coordination, depth perception, peripheral vision, color discrimination, and tonometry.

10. Tetanus booster shot (if no inoculation has been received within the last five years); and
11. Complete medical history.

1.10 Site Control

A. Security

1. Security shall be provided and maintained by the **CONTRACTOR**.
2. The **CONTRACTOR** shall contact law enforcement officials, emergency medical care units, local fire departments and utility emergency teams to ascertain the type of response required in any emergency situation and to coordinate the responses of the various units. A standard operating procedure describing security force response to foreseeable contingencies shall be developed. The **CONTRACTOR** shall also prepare and update a list of emergency points of contact, telephone numbers, radio frequencies, and call signs to ensure dependable responses.
3. Security personnel shall record their presence while patrolling the site using a watchman's clock. The Tapes or punch cards shall be delivered to the **ENGINEER** once a week.
4. Security identification, specific to the project site, shall be provided by the **CONTRACTOR** for all project personnel entering the project site. The **CONTRACTOR** shall be responsible for and ensure that such identification shall be worn by each individual, visible at all times, while the individual is on the site. Vehicular access to the site, other than to designated parking areas, shall be restricted to authorized vehicles only.
5. Use of on-site designated parking areas shall be restricted to vehicles of the **ENGINEER**, **ENGINEER's** on-site representative, **CONTRACTOR**, subcontractor, and service personnel assigned to the site and actually on duty but may also be used on short-term basis for authorized visitors.
6. The **CONTRACTOR** shall be responsible for maintaining a log of security incidents and visitor access granted.
7. The **CONTRACTOR** shall require all personnel having access to the project site to sign-in and sign-out, and shall keep a record of all site access.
8. All approved visitors to the site shall be briefed by the SO on safety and security, provided with temporary identification and safety equipment, and escorted throughout their visit.
9. Site visitors shall not be permitted to enter the hazardous work zone unless approved by the **DEPARTMENT** with appropriate site access agreement.
10. Project sites shall be posted, "Warning Hazardous Work Area, Do Not Enter Unless Authorized," and access restricted by the use of a snow fence or equal at a minimum. Warning signs shall be posted at a minimum of every 500 feet.

B. Site Control

1. The **CONTRACTOR** shall provide the following site control procedures as a minimum:
 - A site map;
 - A map showing site work zones;
 - The use of a "buddy system"; and
 - Standard operating procedures or safe work practices.

C. Work Areas

1. The **CONTRACTOR** will clearly lay out and identify work areas in the field and will limit equipment, operations and personnel in the areas as defined below:
 - a. Exclusion Zone (EZ) - This will include all areas where potential environmental monitoring has shown or it is suspected that a potential hazard may exist to workers. The level of PPE required in these areas will be determined by the SO after air monitoring and on-site inspection has been conducted. The area will be clearly delineated from the decontamination area. As work within the hazardous zone proceeds, the delineating boundary will be relocated as necessary to prevent the accidental contamination of nearby people and equipment. The Exclusion Zone will be delineated by fencing (e.g., chain link, snow fencing, or orange plastic fencing).
 - b. Contamination Reduction Zone - This zone will occur at the interface of "Hazardous" and "Clean" areas and will provide for the transfer of equipment and materials from the Support Zone to the Exclusion Zone, the decontamination of personnel and clothing prior to entering the "Clean" area, and for the physical segregation of the "Clean" and "Hazardous" areas. This area will contain all required emergency equipment, etc. This area will be clearly delineated by fencing (e.g., chain link, snow fencing, or orange plastic fencing). It shall also delineate an area that although not contaminated at a particular time may become so at a later date.
 - c. Support Zone - This area is the remainder of the work site and project site. The Support Zone will be clearly delineated and procedures implemented to prevent active or passive contamination from the work site. The function of the Support Zone includes:
 1. An entry area for personnel, material and equipment to the Exclusion Zone of site operations through the Contamination Reduction Zone;
 2. An exit for decontamination personnel, materials and equipment from the "Decontamination" area of site operations;
 3. The housing of site special services; and
 4. A storage area for clean, safety, and work equipment.

1.11 Standard Operating Safety Procedures (SOSP), Engineering Controls

A. General SOSP

1. The **CONTRACTOR** will ensure that all safety equipment and protective clothing is kept clean and well maintained.
2. All prescription eyeglasses in use on this project will be safety glasses and will be compatible with respirators. No contact lenses shall be allowed on site.
3. All disposable or reusable gloves worn on the site will be approved by the SO.
4. During periods of prolonged respirator usage in contaminated areas, respirator filters will be changed upon breakthrough. Respirator filters will always be changed daily.
5. Footwear used on site will be covered by rubber overboots or booties when entering or working in the Exclusion Zone area or Contamination Reduction Zone. Boots or booties will be washed with water and detergents to remove dirt and contaminated sediment before leaving the Exclusion Zone or Contamination Reduction Zone.
6. All PPE used on site will be decontaminated or disposed of at the end of the work day. The SO will be responsible for ensuring decontamination of PPE before reuse.
7. All respirators will be individually assigned and not interchanged between workers without cleaning and sanitizing.
8. **CONTRACTOR**, subcontractor and service personnel unable to pass a fit test as a result of facial hair or facial configuration shall not enter or work in an area that requires respiratory protection.
9. The **CONTRACTOR** will ensure that all project personnel shall have vision or corrected vision to at least 20/40 in one eye.
10. On-site personnel found to be disregarding any provision of this plan will, at the request of the SO, be barred from the project.
11. Used disposable outerwear such as coveralls, gloves, and boots shall not be reused. Used disposable outerwear will be removed upon leaving the hazardous work zone and will be placed inside disposable containers provided for that purpose. These containers will be stored at the site at the designated staging area and the **CONTRACTOR** will be responsible for proper disposal of these materials at the completion of the project. This cost shall be borne by the **CONTRACTOR**.
12. Protective coveralls that become torn or badly soiled will be replaced immediately.
13. Eating, drinking, chewing gum or tobacco, smoking, etc., will be prohibited in the hazardous work zones and neutral zones.
14. All personnel will thoroughly cleanse their hands, face, and forearms and other exposed areas prior to eating, smoking or drinking.
15. Workers who have worked in a hazardous work zone will shower at the completion of the work day.
16. All personnel will wash their hands, face, and forearms before using toilet facilities.

17. No alcohol, firearms or drugs (without prescriptions) will be allowed on site at any time.
18. All personnel who are on medication should report it to the SO who will make a determination whether or not the individual will be allowed to work and in what capacity. The SO may require a letter from the individual's personal physician stating what limitations (if any) the medication may impose on the individual.

B. Engineering Controls - Air Emissions

1. The **CONTRACTOR** shall provide all equipment and personnel necessary to monitor and control air emissions.

1.12 Personal Protective Equipment

A. General

1. The **CONTRACTOR** shall provide all project personnel with the necessary safety equipment and protective clothing, taking into consideration the chemical wastes at the site. The **CONTRACTOR** shall supply the **ENGINEER's** on-site personnel (average two people for the project duration) with PPE as specified. The **ENGINEER** will require specific manufacturers and styles of PPE, which are detailed in the Safety Equipment Specifications portion of this section. At a minimum, the **CONTRACTOR** shall supply all project personnel with the following:
 - a. Two (2) sets of cotton work clothing to include underwear, socks, work shirts, and work pants. Leather steel-toed work boots, and such other clothing and outer garments as required by weather conditions (e.g., insulated coveralls and winter jacket);
 - b. Sufficient disposable coveralls;
 - c. One pair splash goggles;
 - d. Chemical-resistant outer and inner gloves;
 - e. Rubber overshoes (to be washed daily);
 - f. Hard hat;
 - g. One full-face mask with appropriate canisters. The **ENGINEER** and the **DEPARTMENT** will supply their own full-face mask. The **CONTRACTOR** will supply the appropriate canisters to all on-site project personnel including the **ENGINEER** and the **DEPARTMENT**. The **CONTRACTOR** shall supply MSA canisters; and
 - h. For all project personnel involved with Level B protection, a positive-pressure SCBA or in-line air. A 5-minute escape bottle must be included with the in-line air apparatus.

B. Levels of Protection

1. It is planned that Levels C and D PPE will be required in this remediation. Although Levels A and B are not planned, site conditions may be encountered that

require their use. The following sections described the requirements of each level of protection.

a. Level A Protection

1. PPE:
 - a. Supplied-air respirator approved by the Mine Safety and Health Administration (MSHA) and NIOSH. Respirators may be:
 - Positive-pressure SCBA; or
 - Positive-pressure airline respirator (with escape bottle for Immediately Dangerous to Life and Health [IDLH] or potential for IDLH atmosphere).
 - b. Fully encapsulating chemical-resistant suit.
 - c. Coveralls.
 - d. Cotton long underwear.*
 - e. Gloves (inner), chemical-resistant.
 - f. Boots, chemical-resistant, steel toe and shank. (Depending on suit construction, worn over or under suit boot.)
 - g. Hard hat (under suit).*
 - h. Disposal gloves and boot covers (worn over fully encapsulating suit).
 - i. Cooling unit.*
 - j. Two-way radio communications (inherently safe).*

* Optional

2. Criteria for Selection:

Meeting any of these criteria warrants use of Level A protection:

- a. The chemical substance has been identified and requires the highest level of protection for skin, eyes, and the respiratory system based on:
 - Measures (or potential for) high concentration of atmospheric vapors, gases, or particulates, or
 - Site operations and work functions involves high potential for splash, immersion, or exposure to unexpected vapors, gases, or particulates of materials highly toxic to the skin.
- b. Substances with a high degree of hazard to the skin are known or suspected to be present, and skin contact is possible.
- c. Operations must be conducted in confined, poorly ventilated areas until the absence of substances requiring Level A protection is determined.
- d. Direct readings on field Flame Ionization Detectors (FID) or Photoionization Detectors (PID) and similar instruments indicate high levels of unidentified vapors and gases in the air.

3. Guidance on Selection:

- a. Fully encapsulating suits are primarily designed to provide a gas- or vapor-tight barrier between the wearer and atmospheric contaminants. Therefore, Level A is generally worn when high concentrations of airborne substances could severely effect the skin. Since Level A requires the use of SCBA, the eyes and respiratory system are also more protected.

Until air surveillance data become available to assist in the selection of the appropriate level of protection, the use of Level A may have to be based on indirect evidence of the potential for atmospheric contamination or other means of skin contact with severe skin affecting substances.

Conditions that may require Level A protection include:

- Confined spaces: Enclosed, confined, or poorly ventilated areas are conducive to the buildup of toxic vapors, gases, or particulates. (Explosive or oxygen-deficient atmospheres are also more probable in confined spaces). Confined-space entry does not automatically warrant wearing Level A protection, but should serve as a cue to carefully consider and to justify a lower level of protection.
- Suspected/known highly toxic substances: Various substances that are highly toxic, especially skin absorption, for example, fuming corrosives, cyanide compounds, concentrated pesticides, Department of Transportation

Poison "A" materials, suspected carcinogens, and infectious substances may be known or suspected to be involved. Field instruments may not be available to detect or quantify air concentrations of these materials. Until these substances are identified and concentrations measured, maximum protection may be necessary.

- Visible emissions: Visible air emissions from leaking containers or railroad/vehicular tank cars, as well as smoke from chemical fires and others, indicate high potential for concentrations of substances that could be extreme respiratory or skin hazards.
- Job Functions: Initial site entries are generally walk-throughs, in which instruments and visual observations are used to make a preliminary evaluation of the hazards.

In initial site entries, Level A should be worn when:

- There is a probability for exposure to high concentrations of vapors, gases, or particulates; and
- Substances are known or suspected of being extremely toxic directly to the skin or by being absorbed.

Subsequent entries are to conduct the many activities needed to reduce the environmental impact of the incident. Levels of protection for later operations are based not only on data obtained from the initial and subsequent environmental monitoring, but also on the probability of contamination and ease of decontamination.

Examples of situations where Level A has been worn are:

- Excavating of soil to sample buried drums suspected of containing high concentrations of dioxin;
- Entering a cloud of chlorine to repair a valve broken in a railroad accident;
- Handling and moving drums known to contain oleum; and
- Responding to accidents involving cyanide, arsenic, and undiluted pesticides.

- b. The fully encapsulating suit provides the highest degree of protection to skin, eyes, and respiratory system if the suit material resists chemicals during the time the suit is worn. While Level A provides maximum protection, all suit material may be rapidly permeated and degraded by certain chemicals from extremely high air concentrations, splashes, or immersion of boots or gloves in concentrated liquids or sludges. These limitations should be recognized when specifying the type of fully encapsulating suit. Whenever possible, the suit material should be matched with the substance it is used to protect against.

b. Level B Protection

1. PPE:
 - a.. Positive-pressure SCBA (MSHA/NIOSH approved); or
 - b. Positive-pressure air line respirator (with escape bottle for IDLH or potential for IDLH atmosphere) MSHA/NIOSH approved;
 - c. Chemical-resistant clothing (overalls and long-sleeved jacket; coveralls or hooded, one- or two-piece chemical-splash suit; disposable chemical-resistant, one-piece suits);
 - d. Cotton long underwear;*
 - e. Coveralls;
 - f. Gloves (outer), chemical-resistant;
 - g. Gloves (inner), chemical-resistant;
 - h. Boots (inner), leather work shoe with steel toe and shank;
 - I. Boots (outer), chemical-resistant, (disposable);
 - j. Hard hat (face shield*);
 - k. 2-way radio communication;* and
 - l. Taping between suit and gloves, and suit and boots.

*Optional

2. Criteria for Selection:

Any one of the following conditions warrants use of Level B Protection:

- a. The type and atmospheric concentration of toxic substances have been identified and require a high level of respiratory protection, but less skin protection than Level A. These atmospheres would:
 - Have IDLH concentrations; or
 - Exceed limits of protection afforded by an air-purifying mask; or
 - Contain substances for which air-purifying canisters do not exist or have low removal efficiency; or
 - Contain substances requiring air-supplied equipment, but substances and/or concentrations do not represent a serious skin hazard.

- b. The atmosphere contains less than 19.5% oxygen.
- c. Site operations make it highly unlikely that the work being done will generate high concentrations of vapors, gases or particulates, or splashes of material that will affect the skin of personal wearing Level B protection.
- d. Working in confined spaces.
- e. Total atmospheric concentrations, sustained in the breathing zone, of unidentified vapors or gases range from 5 ppm above background to 500 ppm above background as measured by direct reading instruments such as the FID or PID or similar instruments, but vapors and gases are not suspected of containing high levels of chemicals toxic to skin.

3. Guidance on Selection Criteria:

Level B equipment provides a reasonable degree of protection against splashes and to lower air contaminant concentrations, but a somewhat lower level of protection to skin than Level A. The chemical-resistant clothing required in Level B is available in a wide variety of styles, materials, construction detail, permeability, etc. Taping joints between the gloves, boots and suit, and between hood and respirator reduces the possibility for splash and vapor or gas penetration. These factors all affect the degree of protection afforded. Therefore, the SO should select the most effective chemical-resistant clothing based on the known or anticipated hazards and/or job function. (It is anticipated that Level B protection will not be required under this contract.)

Level B does provide a high level of protection to the respiratory tract. Generally, if SCBA is required, Level B clothing rather than a fully encapsulating suit (Level A) is selected based on needing less protection against known or anticipated substances affecting the skin. Level B skin protection is selected by:

- a. Comparing the concentrations of known or identified substances in air with skin toxicity data;
- b. Determining the presence of substances that are destructive to or readily absorbed through the skin by liquid splashes, unexpected high levels of gases, vapor or particulates, or other means of direct contact; and
- c. Assessing the effect of the substance (at its measured air concentrations or splash potential) on the small area of the head and neck left unprotected by chemical-resistant clothing.

For initial site entry at an open site, Level B protection should protect site personnel, providing the conditions described in selecting Level A are known or judged to be absent.

c. Level C Protection

1. PPE
 - a.. Full-face, air-purifying, cartridge- or canister-equipped respirator (MSHA/NIOSH approved) with cartridges appropriate for the respiratory hazards;
 - b. Chemical-resistant clothing (coveralls, hooded, one-piece or two-piece chemical splash suit; chemical-resistant hood and apron; disposable chemical-resistant coveralls);
 - c. Coveralls;
 - d. Cotton long underwear;*
 - e. Gloves (outer), chemical-resistant;
 - f. Gloves (inner), chemical-resistant;
 - g. Boots (inner), leather work shoes with steel toe and shank;
 - h. Boots (outer), chemical-resistant (disposable);*
 - i. Hard hat (face shield);*
 - j. Escape SCBA of at least 5-minute duration;
 - k. 2-way radio communications (inherently safe);* and
 - l. Taping between suit and boots, and suit and gloves.

* Optional

2. Criteria for Selection

Meeting all of these criteria permits use of Level C protection:

- a. Measured air concentrations of identified substances will be reduced by the respirator to, at or below, the substance's Threshold Limit Value (TLV) or appropriate occupational exposure limit and the concentration is within the service limit of the canister.
- b. Atmospheric contaminant concentrations do not exceed IDLH levels.
- c. Atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect the small area of the skin left unprotected by chemical-resistant clothing.
- d. Job functions do not require SCBA.
- e. Total readings register between background and 5 ppm above background as measured by instruments such as the FID or PID.
- f. Oxygen concentrations are not less than 19.5% by volume.

g. Air will be monitored continuously.

3. Guidance on Selection Criteria

Level C protection is distinguished from Level B by the equipment used to protect the respiratory system, assuming the same type of chemical-resistant clothing is used. The main selection criterion for Level C is that conditions permit wearing air-purifying devices. The air-purifying device must be a full-face mask (MSHA/NIOSH approved) equipped with a cartridge suspended from the chin or on a harness. Cartridges must be able to remove the substances encountered.

A full-face, air-purifying mask can be used only if:

- a. Oxygen content of the atmosphere is at least 19.5% by volume;
- b. Substance(s) is identified and its concentrations(s) measured;
- c. Substance(s) has adequate warning properties;
- d. Individual passes a qualitative fit-test for the mask; and
- e. Appropriate cartridge is used, and its service limits concentration is not exceeded.

An air monitoring program is part of all response operations when atmospheric contamination is known or suspected. It is particularly important that the air be monitored thoroughly when personnel are wearing air-purifying respirators (Level C). Continual surveillance using direct-reading instruments and air sampling is needed to detect any changes in air quality necessitating a higher level of respiratory protection. Total unidentified vapor/gas concentrations exceeding 5 ppm above background require Level B.

d. Level D Protection

1. PPE:
 - a. Coveralls, chemical resistant;

- b. Gloves (outer), chemical resistant;
- c. Gloves (inner), chemical resistant;*
- d. Boots (inner), leather work shoes with steel toe and shank;
- e. Boots (outer), chemical resistant (disposable);*
- f. Hard hat;
- g. Face shield;*
- h. Safety glasses with side shields or chemical splash goggles;* and
- i. Taping between suit and boots, and suit and gloves.

* Optional

2. Criteria for Selection:

- a. No atmospheric contaminant is present.
- b. Direct reading instruments do not indicate any readings above background.
- c. Job functions have been determined not to require respirator protection.

3. Guidance on Selection Criteria:

Level D protection is distinguished from Level C protection in the requirement for respiratory protection. Level D is used for non-intrusive activities or intrusive activities with continuous air monitoring. It can be worn only in areas where there is no possibility of contact with contamination.

e. Anticipated Levels of Protection

- 1. It is anticipated that most of the work shall be performed in Level D. A respirator shall be immediately available in the event that air monitoring indicates an upgrade to Level C is required. The determination of the proper level of protection for each task shall be the responsibility of the **CONTRACTOR**. These task specific levels of protection shall be stated in the **CONTRACTOR's** HASP.

C. Safety Equipment Specifications

Note: Prior to purchasing any equipment or supplies required by this HASP, the **CONTRACTOR** shall notify the **ENGINEER** of the type, model and manufacturer/supplier of that particular safety equipment he is proposing to use or purchase for use on this project. The specifications for PPE that the **CONTRACTOR** is to supply to the **ENGINEER** and which differ from the minimum requirements shown below are provided at the end of this section.

D. Self-Contained Breathing Apparatus

1. The **CONTRACTOR** shall provide positive-pressure SCBA for possible upgrades in respiratory protection. The **CONTRACTOR** shall further supply all the SCBA for all field personnel for the duration of normal work activities. The units must be a MSHA/NIOSH-approved pressure-demand type with a 30-minute service life, manufactured/supplied by Scott, MSA, or other appropriate manufacturers. The **CONTRACTOR** shall inspect and maintain respirators in accordance with OSHA regulations (29 CFR 1910.13-4) and as recommended by the manufacturer.

E. Disposable Coveralls

1. The **CONTRACTOR** shall provide, as necessary, protective coveralls for all project personnel each day with extra sets provided for authorized visitors. The coveralls shall be of the disposable type made of Tyvek or equivalent material, and shall be manufactured/supplied by Durafab, Koppler, or other appropriate manufacturers. To protect project personnel from exposure to liquids, splash-resistant suits (Saranex suits, from appropriate manufacturers) shall be provided. Ripped suits will be immediately replaced after all necessary decontamination has been completed to the satisfaction of the SO.

F. Hard Hat

1. The **CONTRACTOR** shall provide and maintain one hard hat per person on site (authorized visitors included). The hard hats shall comply with OSHA Health and Safety Standards (29 CFR 1910.135).

G. Face Shields

1. The **CONTRACTOR** shall provide and maintain one face shield per person on site. The face shields shall be of the full face type meeting OSHA Health and Safety Standards (29 CFR 1910.133) and shall have brackets for mounting on hard hats. Hard hats and face shields shall be from the same manufacturer to ensure proper fit and shall be manufactured/supplied by Bullard, Norton, or other appropriate manufacturers.

H. Work Clothing

1. The **CONTRACTOR** shall provide a minimum of two sets of work clothing per personnel to allow for changing if contaminated. The work clothing shall include a minimum of underwear, socks, work shirts, work pants, and other clothing as weather conditions dictate. All work clothes shall be put on clean, before entering the site and shall not be kept in same lockers as the workers street clothes. All project personnel shall shower and change to street clothing prior to leaving the site. All contaminated work clothing shall be laundered on site with wash water drained to the decontamination water holding tank.

I. Escape-Type Respirator

1. The **CONTRACTOR** shall provide and maintain one self-contained breathing escape-type respirator per person working on site. The small self-contained device shall be capable of providing oxygen to the worker while protecting an escaping worker from toxic gases. The respirator shall be made by Scott, MSA, or other appropriate manufacturer. The **CONTRACTOR** shall inspect and ensure all devices are in working order before issuing to personnel. Employees must be trained to use equipment prior to being allowed to work on site and carry the escape-type respirator with them. An escape-type respirator must be provided if positive-pressure SCBA are not part of the ensemble worn by each person on site.

J. Full Face Organic Vapor Respirator

1. The **CONTRACTOR** shall provide and maintain a dedicated air-purifying organic vapor respirator per person working in hazardous work and neutral work zones. The respirator shall be of the full-face canister type with cartridges appropriate for the respiratory hazards. Respirators and cartridges shall be MSHA/NIOSH approved, manufactured/supplied by MSA, Scott, or other appropriate manufacturers. The **CONTRACTOR** shall inspect and maintain respirators and canisters in accordance with OSHA regulations (29 CFR 1910.134) and in accordance with manufacturer's instructions. The **CONTRACTOR** shall ensure that proper fit testing training and medical surveillance of respirator users is in accordance with OSHA regulations (29 CFR 1910.134).

K. Gloves (outer)

1. The **CONTRACTOR** shall supply a minimum of one pair of gloves per workman in areas where skin contact with hazardous material is possible. Work gloves shall consist of nitrile (NCR) or Neoprene material. Other gloves may be selected if required based on the potential chemical present. Cotton liners will be provided by the **CONTRACTOR** during cold weather.

L. Gloves (inner)

1. The **CONTRACTOR** shall supply Latex or equivalent surgical gloves to be worn inside the outer gloves.

M. Boots (inner)

1. The **CONTRACTOR** shall supply one pair of safety shoes or boots per workman and shall be of the safety-toe type meeting the requirements of 29 CFR 1910.136.

N. Boots (outer)

1. The **CONTRACTOR** shall provide and maintain one pair of overshoes for the on-site person entering a hazardous work area. The overshoes shall be constructed of rubber and shall be 12 inches high minimum.

PERSONAL PROTECTIVE EQUIPMENT SPECIFICATIONS				
Description	Manufacturer	Model Number	Size	Comments
Tyvek coveralls	Kappler/Abanda	1427/1428	xl/lg	NA
Saranex coveralls	Kappler/Abanda	77427/77428/77434	xl/lg	NA
Sijal acid suit	Chemtex Bata	91522-G	xl/lg	NA
Surgical gloves	Best	7005	xl/lg	NA
Neoprene gloves	Edmont	8-354	xl/lg	NA
Nitrile gloves	Granet	1711	10	NA
Butyl gloves	North	B-161	10	NA
Viton gloves	North	F-124	10/11	NA
Long gauntlet neoprene	Edmont	19-938	xl	NA
Cotton work gloves	North	Grip-N/K511M	men's	or equal
Latex booties	Rainfair	1250-Y	xl	NA
PAPR pesticide cartridges	Racal	AP-3	NA	NA
PAPR asbestos cartridges	Racal	SP-3	NA	NA
APR organic cartridges	MSA	GMC-H	NA	NA
APR asbestos cartridges	MSA	Type H	NA	NA
APR pesticide cartridges	MSA	GMP	NA	NA

1.13 Personnel Hygiene and Decontamination

A. On-Site Hygiene Facility

1. The **CONTRACTOR** shall provide a hygiene facility on site. The hygiene facility shall include the following:
 - Adequate lighting and heat;
 - Shower facilities for project personnel;
 - Laundry facilities for washing work clothes and towels;
 - Areas for changing into and out of work clothing. Work clothing should be stored separately from street clothing;
 - Clean and "dirty" locker facilities; and

- Storage area for work clothing, etc.

a. Portable "Boot Wash" Decontamination Equipment

1. The **CONTRACTOR** shall provide a portable decontamination station, commonly referred to as a "Boot Wash" facility for each hazardous work zone requiring decontamination for project personnel. These facilities shall be constructed to contain spent wash water, contain a reservoir of clean wash water, a power supply to operate a pump for the wash water, a separate entrance and exit to the decontamination platform, with the equipment being mobile, allowing easy transport from one hazardous work zone to the next. All such wash water shall be disposed of at the dewatering facility. An appropriate detergent such as trisodium phosphate shall be used.

b. Personnel Decontamination

1. The **CONTRACTOR** shall provide full decontamination facilities at all hazardous zones. Decontamination facilities must be described in detail in the HASP.

c. Disposal of Spent Clothing and Material

1. Contaminated clothing, used respirator cartridges and other disposable items will be put into drums/containers for transport and proper disposal in accordance with TSCA and RCRA requirements.
2. Containers/55-gallon capacity drums shall conform to the requirements of 40 CFR Part 178 for Transportation of Hazardous Materials. The containers/drums containing excavated and other hazardous material shall be transported by the **CONTRACTOR** to the staging area.
3. The **CONTRACTOR** is responsible for the proper container packaging, labeling, transporting, and disposal.

1.14 Equipment Decontamination

A. General

1. All equipment and material used in this project shall be thoroughly washed down in accordance with established federal and state procedures before it is removed from the project. With the exception of the excavated materials, all other contaminated debris, clothing, etc. that cannot be decontaminated shall be disposed at the **CONTRACTOR's** expense by a method permitted by appropriate regulatory agencies. The cost for this element of work shall be incorporated in the lump sum bid for mobilization/demobilization the unit prices bid for disposal of decontamination liquids or as otherwise directed on this project. All vehicles and equipment used in the "Dirty Area" will be decontaminated to the satisfaction of the SO in the decontamination area on site prior to leaving the project. The **CONTRACTOR** will certify, in writing, that each piece of equipment has been decontaminated prior to removal from the site.

2. Decontamination shall take place within the designated equipment and materials decontamination area. The decontamination shall consist of degreasing (if required), followed by high-pressure, hot-water cleaning, supplemented by detergents as appropriate. Wash units shall be portable, high-pressure with a self-contained water storage tank and pressurizing system (as required). Each unit shall be capable of heating wash waters to 180 degrees Fahrenheit and providing a nozzle pressure of 150 psi.
3. Personnel engaged in vehicle decontamination will wear protective clothing and equipment as determined in the HASP. If the **CONTRACTOR** cannot or does not satisfactorily decontaminate his tools or equipment at the completion of the project, the **CONTRACTOR** will dispose of any equipment which cannot be decontaminated satisfactorily and will bear the cost of such tools and equipment and its disposal without any liability to the **ENGINEER**. At the completion of the project the **CONTRACTOR** shall completely decontaminate and clean the decontamination area.

B. Decontamination Station

1. The **CONTRACTOR** shall construct a decontamination station as described. The decontamination station shall be located in the Contamination Reduction Zone and shall be used to clean all vehicles leaving the Exclusion Zone prior to entering the Support Zone or leaving the site.
2. Each decontamination pad will be equipped with a drain system and holding tank on a properly graded area that has no deleterious material. The **CONTRACTOR** shall obtain and analyze one soil sample at the area where the decontamination pad is to be built and one soil sample after the pad has been dismantled, as directed by the Engineer. The cost associated with the samples shall be included in the cost of providing health and safety at the site.
3. Shop drawings of the decontamination pad shall be submitted to the **ENGINEER** for approval.
4. The **CONTRACTOR** shall be responsible for the provision of an adequately equipped decontamination pad which shall meet the following requirements:
 - a. Adequate dimensions to contain wash water and debris from the largest sized vehicles to be utilized in this contract. All vehicles and construction equipment leaving a contaminated zone shall be decontaminated.
 - b. Perimeter to be curbed and provided with splash guards.
 - c. 40 mil impervious HDPE membrane is required to prevent seepage into the ground.
 - d. Sumps, pumping facilities, and temporary storage facilities to be adequate for anticipated use.
 - e. Temporary storage facility may be mobile tankers or suitable fixed tanks. Fixed tanks shall be located within secondary containment areas capable of containing 100% of the tank capacity, or 110% of the largest tank where the secondary containment area holds more than one tank. The secondary containment area shall have a permeability of not more than 1.0×10^{-7} cm/sec.
 - f. The decontamination pad is to be located at the exit of each contaminated zone such that previously non-contaminated areas are not contaminated during

remedial activities. This may require the construction and use of multiple decontamination pads.

- g. The **CONTRACTOR** shall place a minimum of six (6) inches of sand under the decontamination pad.
- h. There shall be side wall panels, six (6) feet high minimum on two sides to prevent over spray.

C. The **CONTRACTOR** shall clean the decontamination pad after daily use. No contamination shall be left behind. The **CONTRACTOR** will be required to dismantle, remove and properly dispose of the pad at their own expense.

1.15 Air Monitoring Program

A. General

1. The **CONTRACTOR** shall develop, as part of the HASP, an air monitoring program (AMP). The purpose of the AMP is to determine that the proper level of personnel protective equipment is used, to document that the level of worker protection is adequate, and to assess the migration of contaminants to off-site receptors as a result of site work.
2. The **CONTRACTOR** shall supply all personnel, equipment, facilities, and supplies to develop and implement the air monitoring program described in this section. Equipment shall include at a minimum real-time aerosol monitors, depending on work activities and environmental conditions.
3. The **CONTRACTOR's** AMP shall include both real-time and documentation air monitoring (personal and area sampling as needed). The purpose of real-time monitoring will be to determine if an upgrade (or downgrade) of PPE is required while performing on-site work and to implement engineering controls, protocols, or emergency procedures if **CONTRACTOR**-established action levels are encountered.
4. The **CONTRACTOR** shall also use documentation monitoring to ensure that adequate PPE is being used and to determine if engineering controls are mitigating the migration of contamination to off-site receptors. Documentation monitoring shall include the collection and analysis of samples for total nuisance dust.
5. To protect the public in the neighboring residential neighborhood, the **CONTRACTOR** must include in the AMP provisions for suspending work and implementing engineering controls based upon detectable odors, as well as upon instrument monitoring results.
6. During the progress of active remedial work, the **CONTRACTOR** will monitor the quality of the air in and around each active hazardous operation with real-time instrumentation prior to personnel entering these areas. Sampling at the hazardous work site will be conducted on a continuous basis. Any departures from general background will be reported to the SO prior to entering the area. The SO will determine when and if operations should be shut down.

7. Air monitoring (both real time and documentation monitoring) shall be conducted by a minimum of one dedicated person with communication to the foreman whenever intrusive activities (such as excavation, tank removal, and soil treatment) are performed in an exclusion zone. After completion of intrusive activities involving contaminated materials and removal of the exclusion zone, air monitoring may be discontinued.
8. Air monitoring equipment will be operated by personnel trained in the use of the specific equipment provided and will be under the control of the SO. A log of the location, time, type and value of each reading and/or sampling will be maintained. Copies of log sheets will be provided on a daily basis to the **ENGINEER's** on-site representative.

B. Action Levels

1. The **CONTRACTOR** is responsible for developing level of protection site action levels for organic vapors and/or inorganic species.
2. The SO, **CONTRACTOR**, and their personnel will be responsible for implementing, maintaining and enforcing the respirator program.
3. In addition to these on-site action levels, the following action levels will be established for work area and perimeter monitoring of particulates. If the following levels are attained at the perimeter of the exclusion zone, then work will cease until engineering controls bring levels down to acceptable limits. These levels are general and shall be used as minimum action levels. The **CONTRACTOR** shall develop site-specific work area and perimeter monitoring action levels based on contaminants found in the work areas.

Parameter	Action Level	Action
Total particulates	2.5 times background and/or greater than 150 µg/m ³	Work ceases until mitigated
Visible Dust	Visible dust as determined by the ENGINEER .	Work ceases until mitigated

The following action levels shall be used as minimum action levels for organic vapors and odors.

Parameter	Action Level	Action
Total Organic Vapors	5 ppm at work zone	Workers use respirators
	25 ppm at work zone	Work ceases until mitigated
Odors	Noticeable odors outside the exclusion zone as determined by the ENGINEER .	Work ceases until mitigated

C. Real-Time Monitoring

1. The **CONTRACTOR** shall submit a written copy of the real time air monitoring results for each Workday, by 10:00 a.m. the following Workday, which shall include an appropriately scaled map of the Work area depicting sample locations, wind direction and other pertinent meteorological data: date; time; analytical results; applicable standards and engineering controls implemented (if necessary).
2. Real-time monitoring shall be conducted using the following equipment:
3. Organic vapor photoionizers shall be Photovac TIP, total organic vapor analyzer as manufactured by Photovac International, 739B Park Avenue, Huntington, New York 11743 or equal. The **CONTRACTOR** shall provide one Photovac TIP for each and every hazardous work zone operation.
4. Particulate monitoring must be performed using real-time particulate monitors (MiniRam Model MIEPDM-3, or equal) and shall monitor particulate matter in the range of 0-10 microns diameter (PM₁₀) with the following minimum performance standards:

Object to be measured: Dust, Mists, Aerosols

Measurement Ranges: 0.001 to 400 mg/m³ (1 to 400,000 µg/m³)

Precision (2-sigma) at constant temperature:

+/- 10 µg/m³ for one second averaging; +/- 1.5 µg/m³ for sixty second averaging

Accuracy:

+/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 µm, g= 2.5, as aerosolized)

Resolution: 0.1% of reading or 1 µg/m³, whichever is larger

Particle Size Range of Maximum Response: 0.1-10 µ

Total Number of Data Points in Memory: 10,000

Logged Data:

Each Data Point: average concentration, time/date, and data point number

Run Summary:

overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number.

Alarm Averaging Time (user selectable):

real-time (1-60 seconds) or STEL (15 minutes)

Operating Time: 48 hours (fully charged NiMH battery); continuously with charger

Operating Temperature: -10 to 50°C (14 to 122°F)

Automatic alarms are suggested.

5. Particulate levels will be monitored and integrated over a period not to exceed 15 minutes. Consequently, instrumentation shall require necessary averaging hardware to accomplish this task. A monitor such as the personal DataRAM, manufactured by Monitoring Instruments for the Environment, Inc., or equivalent, can be used as a real time particulate screening tool. Although the instrument's design does not allow it to make a sharp differentiation of particulates at the PM₁₀ standard, the instrument could be used in the passive mode without a pump to provide readings in the 0.1 to 10µ range in the immediate vicinity of construction activities.
6. Monitor the air, using the same equipment, for 10-15 minutes upwind of the work site to establish background level. The background level shall be established before the start

of each shift every day. In the event that downwind particulates are detected at levels in excess of 150 ug/m³ or 2.5 times the established background level at the work site, re-measure the background concentrations upwind of the work zone using the same equipment. If the measured particulate level at the work zone is 100 ug/m³ above background, monitor the downwind site perimeter and implement additional dust controls in the work zone. Continue to take hourly measurements of the upwind background concentrations and compare such concentrations with the particulate level at the work zone, until the downwind level at the work zone is less than 100 ug/m³ above the upwind level. If at any time the measured particulate level at the work zone is more than 150 ug/m³ over background concentration, the CONTRACTOR shall immediately suspend work at the site, promptly notify the Safety Officer, and implement suitable corrective action or engineering controls before work resumes.

7. Real-time monitoring will be conducted at any excavation of contaminated soil or sediments. Real-time monitoring will also be conducted at perimeter locations including an upwind (background) and three downwind locations. A background reading will be established daily at the beginning of the work shift. If the wind direction changes during the course of the day, a new background reading will be made. Downwind readings at the perimeter will be made when **CONTRACTOR** action levels have been exceeded at the excavation face or at a minimum of twice a day.
8. If action levels are exceeded at the perimeter location for fugitive dust, work must be suspended and engineering controls must be implemented to bring concentrations back down to acceptable levels.
9. Construction activities generate dust which could potentially transport contaminants off site. There may be situations when visible dust is being generated and leaving the site and the monitoring equipment does not measure PM₁₀ at or above the action level. Therefore, if dust is observed leaving the working site, additional dust suppression techniques must be employed by the **CONTRACTOR**.

D. Documentation Monitoring

1. Documentation monitoring will be conducted at the perimeter at a minimum of four locations (one upwind and three downwind) for total dust. Documentation monitoring will be conducted only during excavation, consolidation, staging, removal, or decontamination activities (i.e., intrusive activities).
 - a. Collect total nuisance dust using PVC collection filter and personnel sampling pump and analyze gravimetrically according to NIOSH 89-127 Method 0500.
 - b. Documentation samples will be collected at established perimeter locations. The four locations will be chosen according to site activities and expected wind direction.
 - c. The perimeter locations will be established and marked with high visibility paint or flagging at approximately equidistant points around the site. Samples will be collected at a height of 6 feet above ground surface.

- d. Documentation samples will be collected continuously, during the normal work hours when activities are occurring on site. At the end of the week, one days worth of sampling (i.e. three downwind locations and one upwind location) will be selected by the Engineer for analysis by the Contractor.
- e. The documentation samples will be collected over an eight (8) hour work period.
- f.. In addition to perimeter monitoring, personnel documentation samples will be collected on site once a week. On-site samples will be collected by choosing “high risk” workers to wear appropriate collection media for pesticides, metals, and particulate. “High risk” workers are those who are most likely to encounter contamination on a particular task. At a minimum, two high risk workers will be chosen to wear collection media for a particular day each week and the media will be analyzed with the documentation air monitoring samples.
- g. The **CONTRACTOR** shall submit a written copy of the documentation air monitoring results within 7 days of sampling, which shall include an appropriately scaled map of the Work area depicting sample locations, wind direction and other pertinent meteorological data: date; time; analytical results; applicable standards and engineering controls implemented (if necessary).
- h. The documentation sampling submitted shall also identify the “high risk” workers chosen to wear appropriate collection media for contaminants; date media was worn; task involved; analytical results and applicable standards.
- i. Payment for air monitoring will not be approved until the above submittals have been received and approved by the **ENGINEER**.

E. Community Air Monitoring

- 1. Real-time air monitoring, for particulate levels at the perimeter of the work area is necessary:
 - a. Particulates should be continuously monitored upwind, downwind and within the work area at temporary particulate monitoring stations. If the downwind particulate level is 150 ug/m³ greater than the upwind particulate level, then dust suppression techniques must be employed. All readings must be recorded and be available for **ENGINEER**'s review.
- 2. The **CONTRACTOR** shall install a meteorological station on site that will be capable of recording, at a minimum, wind velocity and direction.

1.16 Emergency Equipment and First Aid Requirements

A. Communications

- 1. The **CONTRACTOR** shall provide telephone communication at the site field office. Emergency numbers, such as police, sheriff, fire, ambulance, hospital, poison control, NYSDEC, EPA, NYSDOH, and utilities, applicable to this site shall be prominently posted near the telephone.
- 2. The **CONTRACTOR** shall establish a signaling system for emergency purposes.

B. Emergency Shower and Emergency Eye Wash

1. The **CONTRACTOR** shall supply and maintain one portable eyewash/body wash facility per active hazardous work zone. The facility shall have a minimum water capacity of 10 gallons and shall conform to OSHA regulations 29 CFR 1910.151. The portable eyewash/body wash facility shall be manufactured/ supplied by Direct Safety Company, Lab Safety Supply Company, or other appropriate suppliers.

C. Fire Extinguishers

1. The **CONTRACTOR** shall supply and maintain at least one fire extinguisher in the **CONTRACTOR's** office and one at each hazardous work zone. The fire extinguisher shall be a 20-pound Class ABC dry fire extinguisher with UL-approval per OSHA Safety and Health Training Standards 29 CFR 1910.157. The fire extinguisher shall be manufactured/supplied by Direct Safety Company, Lab Safety Supply Company, or other appropriate suppliers.

D. First Aid Kit

1. The **CONTRACTOR** shall supply and locate in his project office and at each and every hazardous work zone one 24-unit (minimum size) "industrial" or "Contractor" first aid kit, required by OSHA requirements 29 CFR 1910.151. The first aid kit shall be manufactured/supplied by Norton, Scott, or other appropriate suppliers.

E. Emergency Inventory

1. In addition to those items specified elsewhere, the SO will maintain the following inventory of equipment and protective clothing for use at the site in the event of emergencies.
 - a. Washable coveralls;
 - b. Gloves (outer);
 - c. Gloves (inner);
 - d. SCBA;
 - e. Escape SCBA (authorized visitor use);
 - f. Face shields;
 - g. Safety glasses;
 - h. Respirators and appropriate cartridges;
 - i. Disposable coveralls;
 - j. Chemical-resistant boots and latex boot covers;
 - k. Hard hats;
 - l. Bottled breathing air; and
 - m. Rain suits.

1.17 Emergency Responses/contingency Plan and Procedures

A. Daily Work

1. During the progress of work, the **CONTRACTOR** will monitor the quality of the air in and around each active hazardous operation prior to personnel entering these areas. Sampling shall be conducted on a continuous basis. Based on the air monitoring data, the proper level of protection will be chosen by the SO.

B. Emergency Vehicle Access

1. In the event that emergency services vehicles (police, fire, ambulance) need access to a location which is blocked by the working crew operations, those operations (equipment, materials, etc.) will be immediately moved to allow those vehicles access. Emergency crews will be briefed as to site conditions and hazards by the SO. All vehicles and personnel will be decontaminated prior to leaving the site.
2. The **CONTRACTOR** shall schedule a site briefing with the local Fire Department at the completion of mobilization to familiarize emergency response personnel with his operations and site layout.

C. Personal Injury Response Plan

1. In cases of personal injuries, the injured person or the crew personnel in charge will notify the SO. The SO will assess the seriousness of the injury, give first aid treatment if advisable, consult by telephone with a physician if necessary, and arrange for hospitalization if required. The SO will arrange for an ambulance if required.
2. If soiled clothing cannot be removed, the injured person will be wrapped in blankets for transportation to the hospital.
3. Personnel, including unauthorized personnel, having skin contact with chemically contaminated liquids or soils shall be flushed with water after any wet or soiled clothing has been removed.
4. These personnel should be observed by the SO to ascertain whether there are any symptoms resulting from the exposure. If there is any visible manifestation of exposure such as skin irritation, the project personnel will refer to a consulting physician to determine whether the symptoms were the result of a delayed or acute exposure, a secondary response to exposure such as skin infection, or occupational dermatitis. All episodes of obvious chemical contamination will be reviewed by the SO in order to determine whether changes are needed in work procedures.

D. Route to the Hospital

1. The **CONTRACTOR** shall post in conspicuous places in the Support Zone a map with written directions to the nearest hospital or emergency medical treatment facility.

E. Fire Service

1. The **CONTRACTOR** will make arrangements to take immediate fire fighting and fire protection measures with the local Fire Chief. If there is a fire, the crewmen or their person in charge will immediately call the SO. The SO will immediately call the fire personnel.
2. The air downwind from any fire or explosion will be monitored immediately in order to protect workers and the nearby community. If personal injuries result from any fire or explosion, the procedures outlined in the Personal Injury Response Plan are to be followed.

F. Master Telephone List

1. The attached master telephone list will be completed and prominently posted at the field office. The list will have telephone numbers of all project personnel, emergency services including hospital, fire, police, and utilities. In addition, two copies with telephone numbers are to be given to the **DEPARTMENT** for emergency reference purposes.

<u>Emergency Service</u>	<u>Telephone Number</u>
Fire Department	911
Police Department	911
Ambulance	911
Hospital/Emergency Care Facility	To be determined
Poison Control Center	(800) 336-6997
Chemical Emergency Advice (CHEMTREC)	(800) 424-9300
NYSDEC Albany Office	Work Hours To be determined After Hours To be determined
NYSDEC Regional Office	Work Hours To be determined
County Dept. of Health	To be determined
New York State Dept. of Health - Albany	To be determined
New York State Dept. of Health - Regional	To be determined

1.18 Heat Stress Monitoring

- A. Site personnel who wear protective clothing allow body heat to be accumulated with an elevation of the body temperature. Heat cramps, heat exhaustion, and heat stroke can be experienced, which, if not remedied, can threaten life or health. Therefore, an American Red Cross Standard First Aid book or equivalent will be maintained on site at all times so that the SO and site personnel will be able to recognize symptoms of heat emergencies and be capable of controlling the problem.
- B. When protective clothing is worn, especially Levels A and B, the suggested guidelines for ambient temperature and maximum wearing time per excursion are:

Ambient Temperature (°F)	Maximum Wearing Time Per Excursion (Minutes)
Above 90	15
85 to 90	30
80 to 85	60
70 to 80	90
60 to 70	120
50 to 60	180

- C. One method of measuring the effectiveness of employees' rest-recovery regime is by monitoring the heart rate. The "Brouha guideline" is one such method:
 - During a 3-minute period, count the pulse rate for the last 30 seconds of the first minute, the last 30 seconds of the second minute, and the last 30 seconds of the third minute.
 - Double the count.
- D. If the recovery pulse rate during the last 30 seconds of the first minute is at 110 beats/minute or less and the deceleration between the first, second, and third minutes is at least 10 beats/minute, the work-recovery regime is acceptable. If the employee's rate is above that specified, a longer rest period is required, accompanied by an increased intake of fluids.
- E. In the case of heat cramps or heat exhaustion, "Gatorade" or its equivalent is suggested as part of the treatment regime. The reason for this type of liquid refreshment is that such beverages will return much-needed electrolytes to the system. Without these electrolytes, body systems cannot function properly, thereby increasing the represented health hazard.
- F. This liquid refreshment will be stored in a cooler at the edge of the decontamination zone in plastic squeeze bottles. The plastic bottles will be marked with individual's names. Disposable cups with lids and straws may be used in place of the squeeze bottles. Prior to drinking within the decontamination zone, the project personnel shall follow the following decontamination procedures:

1. Personnel shall wash and rinse their outer gloves and remove them.
2. Personnel shall remove their hard hats and respirators and place on table.
3. Personnel shall remove their inner gloves and place them on table.
4. Personnel shall wash and rinse their face and hands.
5. Personnel shall carefully remove their personal bottle or cup from the cooler to ensure that their outer clothes do not touch any bottles, cups, etc.
6. The used bottle or cups will not be returned to the cooler, but will be placed in a receptacle or container to be cleaned or disposed of.
7. Personnel shall replace their respirators, hard hats, gloves and tape gloves prior to re-entering the hazardous zone.

G. When personnel are working in situations where the ambient temperatures and humidity are high--and especially in situations where protection Levels A, B, and C are required--the SO must:

- Assure that all employees drink plenty of fluids ("Gatorade" or its equivalent);
- Assure that frequent breaks are scheduled so overheating does not occur; and
- Revise work schedules, when necessary, to take advantage of the cooler parts of the day (i.e., 5:00 a.m. to 1:00 p.m., and 6:00 p.m. to nightfall).

1.19 Cold Stress

A. Whole-body protection shall be provided to all site personnel that have prolonged exposure to cold air. The right kind of protective clothing shall be provided to site personnel to prevent cold stress. The following dry clothing shall be provided by the **CONTRACTOR** as deemed necessary by the SO:

- Appropriate underclothing (wool or other);
- Outer coats that repel wind and moisture;
- Face, head, and ear coverings;
- Extra pair of socks;
- Insulated safety boots; and
- Glove liners (wool) or wind- and water-repellant gloves.

B. The SO will use the equivalent chill temperature when determining the combined cooling effect of wind and low temperatures on exposed skin or when determining clothing insulation requirements.

- C. Site personnel working continuously in the cold are required to warm themselves on a regular basis in the on-site hygiene facility. Warm, sweet drinks will also be provided to site personnel to prevent dehydration. The SO shall follow the work practices and recommendations for cold stress threshold limit values as stated by the 1991-1992 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices by the American Conference of Governmental Industrial Hygienists or equivalent cold stress prevention methods.

1.20 Logs, Reports and Record Keeping

A. Security Log

1. A daily log of security incidents and visitors granted access to the site will be maintained, as well as a log of all personnel entering and exiting the site.
2. All approved visitors to the site will be briefed by the SO on safety and security, provided with temporary identification and safety equipment, and escorted throughout their visit. Site visitors will not be permitted to enter a hazardous work zone.
3. Project site shall be posted, "Warning: Hazardous Work Area, Do Not Enter Unless Authorized," and access restricted by the use of a snow fence.

B. Safety Log

1. The **CONTRACTOR's** SO will maintain a bound safety logbook. The log will include all health and safety matters on site and include, but not be limited to, the following information:
 - Date and weather conditions on site;
 - A description of the proposed work for the day;
 - Times when site personnel arrive and depart;
 - Air monitoring data;
 - Heat and/or cold stress monitoring;
 - Decontamination procedures;
 - Type and calibration of air sampling/monitoring equipment used;
 - Safety meeting summaries; and
 - Accidents.

C. Emergency Or Accident Report

1. Any emergency or accident will be reported immediately to the SO. The **ENGINEER** will also be notified. The **CONTRACTOR** will submit a written report immediately, but no later than 24 hours of its concurrence. The report will include, but not be limited to, the nature of the problem, time, location, areas affected, manner and methods used to control the emergency, sampling and/or monitoring data, impact, if any, to the surrounding community, and corrective actions the **CONTRACTOR** will institute to minimize future occurrences. All spills will be treated as emergencies.

D. Daily Work Report

1. The **CONTRACTOR** shall maintain a daily work report that summarizes the following:

- Work performed,
- Level of protection,
- Air monitoring results,
- Safety-related problems, and
- Corrective actions implemented.

1.21 Posting Regulations

- A.** The **CONTRACTOR** will post signs at the perimeter of the Exclusion Zone that state "Warning, Hazardous Work Area, Do Not Enter Unless Authorized." In addition, a notice directing visitors to sign in will be posted at the project site. Also, the **CONTRACTOR** will post a sign stating that any questions about the site should be directed to the New York State Department of Environmental Conservation.
- B.** Safety regulations and safety reminders will be posted at conspicuous locations throughout the project area. The following safety regulations and safety reminders are at a minimum to be posted around the job site:

SAFETY REGULATIONS

(To be Posted for Project Personnel)

The main safety emphasis is on preventing personal **contact** with gases, soils, sludge and water. Towards that end, the following rules have been established.

Regulations

- A. Eating, drinking and smoking on the site is PROHIBITED except in specifically designated areas.
- B. All project personnel on the site must wear clean or new gloves daily.
- C. If you get wet to the skin, you must wash the affected area with soap and water immediately. If clothes in touch with the skin are wet, these must be changed.
- D. You must wash your hands and face before eating, drinking or smoking.
- E. Observe regulations on washing and removing boots before entering the dressing room or a clean area and showering before going home.

Recommendations

- A. Do not smoke on site with dirty hands; better yet, do not smoke.
- B. Check for any personal habit which could get soil or water into your body.

Examples: food off your fingers, wiping your face or nose with a dirty hand or running a dirty hand through your hair.

- C. Check that any regularly worn clothing is clean. Examples include dirty watchbands, neck chains and a dirty liner on your safety helmet. Safety practices with poisonous chemicals can be summed up with a few words:

Don't breathe in chemical odors and don't touch the water, soil, and sludge.

If you do get dirty or wet, clean up as soon as possible.

SAFETY REMINDER FOR TOXIC CHEMICALS

(Post for Project Personnel)

Chemicals can't cause problems unless you breathe them, eat them, or put them on your skin.

Chemicals in Gases, Soils, Sludge, and Water

Don't let them go into your mouth, nose, or stay on your skin.

Use common personal hygiene.

- A. Don't eat or drink on the site.
- B. No smoking in the area of work.
- C. Wear protective clothing.
- D. Glove liners must be **clean**.
- E. Wash your hands whenever practical. Wash before eating, drinking, or smoking.
- F. Don't carry chemicals home to your family. (For example, on clothing, mud in the car, dirty hands.)
- G. Follow strictly the HASP.

1.22 Community Protection Plan

A. General

1. Develop, as part of this HASP, a Community Protection Plan (CPP). The CPP shall outline those steps to be implemented to protect the health and safety of surrounding human population and the environment.

B. Air Monitoring

1. As part of the Air Monitoring Program, use real-time monitoring and documentation sampling as described in the Subpart "Air Monitoring Program" of this section to determine if off-site emission, as a result of site work, poses a threat to the surrounding community.
2. Provide real-time air monitoring for volatile compounds and particulate levels at the perimeter of the work area as necessary. Include the following:
 - a. Volatile organic compounds must be monitored at the downwind perimeter of the work area on a continuous basis. If total organic vapor levels exceed 5 ppm above background, work activities shall be halted and monitoring continued under the provisions of a Vapor Emission Response Plan. All readings shall be recorded and be available for State (DEC & DOH) personnel to review.
 - b. Particulates shall be continuously monitored at the 4 documentation sampling stations for a total of 4 dust monitors. If the downwind particulate level is 150 $\mu\text{g}/\text{m}^3$ greater than the upwind particulate level, dust suppression techniques shall be employed. All readings shall be recorded and be available for State (DEC & DOH) personnel to review.

C. Vapor Emission Response Plan

1. If the ambient air concentration of organic vapors exceed 5 ppm above background at the perimeter of the work area, activities shall be halted and monitoring continued. If the organic vapor level decreases below 5 ppm above background, work activities may resume. If the organic vapor levels are greater than 5 ppm over background but less than 225 ppm over background at the perimeter of the work area, activities may resume provided the organic vapor level 200 feet downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is below 5 ppm over background.
2. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities shall be shutdown. When work shutdown occurs, downwind air monitoring as directed by the SO shall be implemented to ensure that vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section.

D. Major Vapor Emission

1. If any organic levels greater than 5 ppm over background are identified 200 feet downwind from the work area or half the distance to the nearest residential or commercial property, whichever is less, all work activities shall be halted.

2. If, following the cessation of the work activities, or as the result of an emergency, organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest residential or commercial property from the work area, the air quality shall be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone).
3. If efforts to abate the emission source are unsuccessful and if organic vapor levels are approaching 5 ppm above background and persist for more than 30 minutes in the 20 Foot Zone, the Major Vapor Emission Response Plan shall automatically be placed into effect.
4. However, the Major Vapor Emission Response Plan shall be immediately placed into effect if organic vapor levels are greater than 10 ppm above background levels.

E. Major Vapor Emission Response Plan

1. Upon activation, the following shall be undertaken:
 - a. All Emergency Response Contracts as listed in the Subpart titled "Emergency Response and Contingency Plan" paragraph titled "Telephone List."
 - b. The local police authorities shall immediately be contacted by the SO and advised of the situation. Coordinate with local officials to arrange for notification and evacuation of the surrounding community.
 - c. Frequent air monitoring shall be conducted at 30 minutes intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring say be halted or modified by the SO.
2. The Air Monitoring Program shall include real-time air monitoring and shall be conducted at the perimeter of the site. Particulates should be continuously monitored upwind, downwind and within the Exclusion Zone at temporary particulate monitoring stations. If the downwind particulate level is more than 2.5 times greater than the upwind particulate level and greater than 150 ug/m³, then dust suppression techniques shall be employed. This is a general action level. A site-specific action level shall be developed based on available analytical data. All readings shall be recorded and be available for ENGINEER, NYSDEC, and NYSDOH personnel to review.
3. Coordinate with local officials to arrange for notification and evacuation of the surrounding community in the event that off-site emissions pose a threat.

F. Odor

1. Foam active work areas to reduce odors if odor complaints are received from nearby residences during site activities. Odor masking agents or other odor control methods may be used subject to **ENGINEER's** review. Continue odor suppression during each day that odor complaints are received.

G. Off-Site Spill Response

1. Produce as part of the HASP a Spill Response Plan, also coordinated with local officials, in case of an off-site spill of either liquid or solid wastes. The plan shall include transportation routes and times, as well as the minimum requirements set forth in the Subpart titled "On-Site Spill Containment Plan." The driver shall be supplied with Material Safety Data Sheets (MSDSs), a 24-hour emergency phone number, and instructions for reporting emergencies to local agencies and the project site.

1.23 Confined Space Work

- A.** Evaluate the work areas and determine if there are any permit-required confined spaces. If the **CONTRACTOR** determines that personnel will not need to enter a permit-required confined space, appropriate measures to prevent personnel from entering such shall be taken. If the **CONTRACTOR** determines that personnel will need to enter a permit-required confined space, develop and implement a written permit-required confined space program.
- B.** The written program shall comply with 29 CFR 1910.146 and shall include the following:
 1. Implement methods to prevent unauthorized entry;
 2. Identify and evaluate the hazards of permit-required confined spaces before personnel entry;
 3. Develop and implement procedures for safe permit-required confined space entry;
 4. Provide the appropriate equipment to evaluate permit-required confined spaces;
 5. Evaluate permit-required confined spaces when entry operations are conducted;
 6. Provide at least one attendant outside the permit-required confined space which will be entered;
 7. Designate the personnel who will have active roles in entry operations;
 8. Develop and implement procedures for obtaining rescue and emergency services;
 9. Develop and implement a system for the preparation, issuance, use, and collection of entry permits;
 10. Develop and implement procedures to coordinate entry operations when personnel from more than one employer are working;
 11. Develop and implement procedures for concluding the entry;
 12. Review and revise entry operations if measures may not protect personnel; and
 13. Review the permit-required confined space program to ensure personnel are protected from the hazards present.
- C.** Copies of the permit-required confined space program and employee training certificates shall be included with the HASP.

2. PRODUCTS

Not Used.

3. EXECUTION

Not Used.

*** END OF SECTION ***

SECTION XI - SUPPLEMENTARY SPECIFICATIONS

TABLE OF CONTENTS

	<u>Page No.</u>
SECTION 01010 - GENERAL	01010-1
1.1 BACKGROUND AND SITE DESCRIPTION	01010-1
1.2 SUMMARY OF PROPOSED WORK	01010-2
1.3 SUMMARY OF SITE CONTAMINATION	01010-3
1.4 CONTRACTOR USE OF SITE	01010-4
1.5 REGULATORY REQUIREMENTS	01010-4
1.6 SPILL CONTROL	01010-4
1.7 ENVIRONMENTAL PROTECTION	01010-5
1.8 PROTECTION OF WATER RESOURCES AND EROSION CONTROL	01010-6
1.9 CONTRACTOR QUALITY CONTROL	01010-6
1.10 COMMUNITY PROTECTION PLAN	01010-6
1.11 FIRE PREVENTION AND CONTROL	01010-7
1.12 SUBMITTALS	01010-7
1.13 PRE-CONSTRUCTION CONFERENCE	01010-20
1.14 PROGRESS MEETINGS	01010-20
1.15 PROJECT RECORD DOCUMENTS	01010-21
1.16 PERMITS	01010-21
1.17 WARRANTY OF CONSTRUCTION	01010-22
1.18 PROJECT COORDINATION	01010-22
SECTION 01030 - SITE PREPARATION	01030-1
1.1 DESCRIPTION	01030-1
1.2 CLEARING	01030-1
1.3 UTILITIES	01030-1
1.4 DECONTAMINATION PAD	01030-3
1.5 FENCING	01030-4
SECTION 01040 - PROJECT IDENTIFICATION AND SIGNS	01040-1
1.1 REFERENCES	01040-1
1.2 QUALITY ASSURANCE	01040-1
2.1 MATERIALS	01040-1
2.2 FABRICATION	01040-2
3.1 INSTALLATION	01040-2
3.2 MAINTENANCE AND REMOVAL	01040-2
SECTION 01050 - SITE FACILITIES AND SERVICES	01050-1
1.1 DESCRIPTION	01050-1
1.2 SITE SECURITY	01050-1
1.3 FACILITIES	01050-2

TABLE OF CONTENTS

	<u>Page No.</u>
1.4 ENGINEER’S EQUIPMENT	01050-4
1.5 TRAFFIC CONTROL	01050-6
1.6 STAGING AREAS	01050-6
1.7 SNOW AND ICE REMOVAL	01050-7
SECTION 01051 - SURVEY	01051-1
1.1 DESCRIPTION	01051-1
1.2 SUBMITTALS	01051-1
2.1 SURVEY EQUIPMENT	01051-2
3.1 SURVEY AND STAKE-OUT	01051-2
SECTION 01052 - PROJECT RECORD DOCUMENTS	01052-1
1.1 SUMMARY	01052-1
1.2 SUBMITTALS	01052-1
1.3 AS-BUILT DOCUMENTS	01052-1
1.4 SUPPLEMENTAL RECORD DRAWINGS	01052-2
1.5 MAINTENANCE OF DOCUMENTS	01052-2
1.6 PRELIMINARY SUBMITTAL	01052-3
1.7 FINAL PROJECT RECORD DOCUMENT PREPARATION	01052-3
SECTION 01053 - SHOP DRAWING PROCEDURES	01053-1
1.1 GENERAL	01053-1
1.2 PROCEDURE	01053-1
SECTION 01600 - OPERATION AND MAINTENANCE MANUAL	01600-1
1.1 GENERAL	01600-1
1.2 OPERATION AND MAINTENANCE PLAN	01600-1
SECTION 01731 - INSTRUCTION OF OPERATIONS AND MAINTENANCE PERSONNEL	01731-1
1.1 GENERAL	01731-1
1.2 TRAINING SCHEDULE	01731-1
1.3 INSTRUCTION LESSON PLAN	01731-1
1.4 TRAINING AIDS	01731-3
1.5 “HANDS-ON” DEMONSTRATIONS	01731-3
SECTION 02220 - EARTHWORK	02220-1
1.1 GENERAL	02220-1
1.2 SITE GRADING	02220-1
1.3 EXCAVATION AND TRENCHING	02220-1
1.4 BACKFILLING	02220-3
1.5 EROSION CONTROL	02220-3

TABLE OF CONTENTS

	<u>Page No.</u>
SECTION 02221 - BACKFILL	02221-1
1.1 SUMMARY	02221-1
1.2 DESCRIPTION	02221-1
1.3 SUBMITTALS	02221-1
1.4 QUALITY ASSURANCE	02221-1
2.1 CLEAN OFF-SITE MATERIALS	02221-2
3.1 GENERAL BACKFILLING REQUIREMENTS	02221-2
3.2 FIELD QUALITY CONTROL	02221-3
3.3 PROTECTION OF FINISHED WORK	02221-4
 SECTION 02222 - COMPACTION	
1.1 SUMMARY	02222-1
1.2 DESCRIPTION	02222-1
1.3 QUALITY ASSURANCE	02222-1
1.4 SUBMITTALS	02222-1
2.1 PRODUCTS (NOT USED)	02222-1
3.1 PREPARATION	02222-1
3.2 FIELD QUALITY CONTROL	02222-2
3.3 PROTECTION	02222-3
 SECTION 02230 - CONTAMINATED MATERIALS	02230-1
1.1 GENERAL	02230-1
1.2 DEBRIS	02230-2
1.3 SOIL AND SEDIMENTS	02230-2
1.4 DRILL CUTTINGS	02230-2
1.5 PERSONAL PROTECTIVE EQUIPMENT	02230-3
1.6 CONTAMINATED WATER	02230-3
1.7 RESIDUAL WASTE	02230-3
1.8 TRANSPORTATION AND DISPOSAL	02230-3
 SECTION 02500 - SITE RESTORATION	02500-1
1.1 GENERAL	02500-1
1.2 PAVEMENT RESTORATION	02500-1
1.3 CONCRETE RESTORATION	02500-2
 SECTION 02512 - BITUMINOUS PAVING	02512-1
1.1 GENERAL	02512-1
1.2 MATERIALS	02512-2
1.3 BITUMINOUS -AGGREGATE MIXTURES	02512-3
1.4 TRAFFIC AND PARKING MARKING MATERIALS	02512-3

TABLE OF CONTENTS

Page No.

1.5	INSPECTION	02512-4
1.6	PRIME COAT	02512-4
1.7	PAVEMENT INSTALLATION	02512-4
1.8	PAVEMENT QUALITY REQUIREMENTS	02512-4
1.9	PATCHING	02512-5
1.10	CLEANING AND PROTECTION	02512-5
1.11	MARKING PAVEMENT	02512-5
SECTION 02513 - CRUSHED STONE AND GRAVEL		02513-1
1.1	GENERAL	02513-1
1.2	MATERIALS	02513-1
1.3	PLACING	02513-2
SECTION 02733 - SVE WELL DRILLING AND PLACEMENT		02733-1
1.1	GENERAL	02733-1
1.2	WELL CONSTRUCTION	02733-2
1.3	SVE WELL INSTALLATION	02733-2
1.4	VACUUM MONITORING POINT	02733-3
1.5	PRECAST CONCRETE VAULTS	02733-4
SECTION 02734 - DECOMMISSIONING SUBSURFACE STRUCTURES		02734-1
1.1	GENERAL	02734-1
1.2	SCHEDULE FOR DECOMMISSIONING	02734-1
1.3	METHODS	02734-1
SECTION 03400 - PRECAST CONCRETE		03400-1
1.1	SCOPE OF WORK	03400-1
1.2	CONCRETE	03400-1
1.3	DOOR	03400-1
1.4	INSTALLATION	03400-2
SECTION 11301 - SOIL VAPOR EXTRACTION SYSTEM		11301-1
1.1	DESCRIPTION	11301-1
1.2	EQUIPMENT HOUSING AND STRUCTURAL SUPPORTS FOR NEW SYSTEM	13301-1
1.3	PERFORMANCE OBJECTIVES FOR NEW SVE SYSTEM ...	11301-2
1.4	PERFORMANCE STANDARDS FOR BOTH SYSTEMS	11301-2
1.5	NOISE ABATEMENT FOR NEW SVE SYSTEM	11301-2
1.6	MINIMUM REQUIREMENTS OF THE NEW SVE SYSTEM ..	11301-3
1.7	PHASES OF OPERATIONS FOR BOTH SYSTEMS	11301-9
1.8	ROUTINE MAINTENANCE FOR BOTH SYSTEMS	11301-10
1.9	PROGRESS MONITORING	11301-10

TABLE OF CONTENTS

Page No.

1.10	REPORTS	11301-10
1.11	INDOOR AIR SAMPLES	11301-11
SECTION 15050 - PVC PIPE, FITTINGS, VALVES AND OTHER ACCESSORIES		15050-1
1.1	DESCRIPTION	15050-1
1.2	REFERENCE STANDARDS	15050-1
1.3	QUALITY ASSURANCE	15050-1
1.4	PIPES AND FITTINGS	15050-1
1.5	VALVES	15050-2
1.6	INSTALLATION	15050-3
1.7	TESTING AND ACCEPTANCE	15050-4
1.8	CLEANING	15050-4
SECTION 16010 - ELECTRICAL		16010-1
1.1	DESCRIPTION	16010-1
1.2	REFERENCE STANDARDS	16010-1
1.3	QUALITY ASSURANCE	16010-2
1.4	DELIVERY, STORAGE AND HANDLING	16010-2
1.5	IDENTIFICATION OF EQUIPMENT	16060-3
1.6	CONDUITS, BOXES AND CABINETS	16010-3
1.7	WIRES AND CABLES	16010-8
1.8	UTILITY SERVICE REQUIREMENTS	16010-11
1.9	PANELBOARDS AND CONTROLLERS	16010-11
1.10	GROUNDING AND BONDING	16010-15
1.11	LIGHTING	16010-18
1.12	TESTS	16010-21
1.13	CLEANING	16010-22

SECTION 01010 GENERAL

The means, methods, procedures, and techniques to be used by the Contractor are the responsibility of the Contractor, and shall be developed by the Contractor to meet the intent of these Contract Documents.

The Contractor shall furnish all labor, materials, supplies and equipment to construct and fully complete the work as shown, or specified in the Contract Documents or as directed by the Department in the most substantial and workmanlike manner. The Contractor shall be responsible for the procurement and installation of compatible components, and shall perform all modifications necessary for the proper operation and guarantee of the equipment. Any alterations which are necessary to adequately and satisfactorily accommodate the equipment to be installed under this Contract shall be made by the Contractor at his own expense, in accordance with the Contract Documents.

The type and quantity of work are estimates that have been shown solely for the convenience of the Department, Engineer and the Contractor, and may not necessarily include all of the items of work required. Any work that is necessary or required to make the installation satisfactory and operable for its intended purpose, even though it is not included in the specifications or drawings, shall be performed as if it were described or shown.

Payment for the work shall be made at the prices stated in the Contract.

No payment shall be made for work performed by the Contractor to replace defective work, work which is not shown in the Contract Documents, work outside the limits of the contract and additional work necessary due to actions of the Contractor, unless ordered by the Department in writing.

All equipment supplied shall be in good working condition and clean.

All facilities shall be maintained in neat, clean, and good working order. Failure to maintain the facilities in neat, clean, and good working order shall be cause for the Engineer to withhold payment until necessary improvements are made.

All work shall be done in accordance with applicable federal, state and local regulations. The Health and Safety Plan, Sampling Plan, Quality Assurance/Quality Control (QA/QC) Plan, and Operations and Maintenance Plan, and other required plans which are to be prepared by the Contractor, are subject to the Department/Engineer's review. If any regulation, the above referenced plans, and/or contract documents have contradicting requirements, then the most stringent requirement shall apply as determined by the Department/Engineer.

1.1 BACKGROUND AND SITE DESCRIPTION

A. Background

The Kliegman Brothers Site is located at 76-01 77th Avenue in Queens County, New York. The Long Island Railroad borders the site to the north. Residences border the site to the

east, west, and south. The site has an area of approximately 37,000 square feet, of which 26,000 is occupied by a building. A basement exists under the western portion of the building.

The site was formerly owned by Kliegman Bros. Inc. This site was used as a warehouse and distribution center for laundry and dry-cleaning supplies from the 1950s through the 1990s. The site contained two 6,000 gallon above ground storage tanks (ASTs) which were used to store tetrachloroethene (PCE). The tanks have since been removed from the property. Although these tanks are the presumed source of contamination, it is unknown if, and when, product was released, or, whether contamination was due to a single catastrophic release or a chronic leak problem. Kliegman Bros. ceased operation in 1999. The site was purchased in 2000 and is currently being used as a warehouse for an imported food distributor. Known contamination at the site is unrelated to operations since 2000.

In general, the site geology consists of a fill layer of variable thickness (up to two feet) at the surface, containing concrete or asphalt underlain by reworked native materials. Brown loose to dense, fine to coarse silty sand to sandy silt with localized sandy clay seams was observed to depths of approximately 10 feet below ground surface (bgs). This layer is underlain by brown loose to dense, fine to coarse sand with variable amounts of fine to coarse gravel to depths of 148 feet bgs. The regional groundwater table occurs at the site at approximately 70 feet bgs within the upper glacial aquifer. However, perched groundwater was observed in several wells above a clay layer in the eastern portion of the site.

On-site contamination consists of vadose zone (above the water table) soil contamination and groundwater contamination. Within the vadose zone, perched water was detected in the eastern area of the site. The perched water accumulates on a clay layer that is about 12 feet below ground surface in this eastern region of the site. The groundwater table is about 65-70 feet below ground surface at the site.

Groundwater contamination has migrated offsite as shown by the Remedial Investigation. VOCs, particularly PCE, have been detected above groundwater criteria in all directions around the site. VOCs have also migrated offsite in soil gas. The source of the soil gas contamination is mainly contamination in vadose zone soil.

URS completed construction of an SVE system at the Kliegman Brother site as an Interim Remedial Measure (IRM) in 2003. The system, currently in operation, utilizes three extraction wells (SVE-1, SVE-6S and SVE-6D) as shown on the Contract Drawings. Other wells (SVE-2 through SVE-5) originally installed by Envirosience as SVE wells, were not used for the IRM. Components of the existing IRM system will be tied - into and coordinated with the work of this remedial action.

1.2 SUMMARY OF PROPOSED WORK

The following is a list of the main work items required of the Contractor by the Contract Documents.

1. Mobilization of equipment, trailers, and staff to the site.
2. Indoor air sampling

3. Installation of six soil vapor extraction wells.
4. Installation of five vacuum monitoring points.
5. Construction and installation of a soil vapor extraction and treatment system.
6. Construction of secure system housing.
7. Startup of the new SVE system.
8. Performance testing, reporting, operation, and maintenance of the new SVE treatment system for a period of twelve weeks in accordance with Section 11301.
9. Operation and maintenance of the existing SVE system for a period of twelve weeks.
10. Training of personnel, and turnover of an operational system to the Department for long-term operation.
11. Restoration of all disturbed areas of the site as required. Demobilization of all equipment, trailers, and offices.

1.3 SUMMARY OF SITE CONTAMINATION

1.3.1 Soils

Soil analytical results from past investigations have shown elevated concentrations of benzene, toluene, ethylbenzene, xylene, (BTEX), PCE, and 1,2-dichloroethene (DCE). PCE was detected most frequently, and at the highest concentrations. PCE was detected in soils above the clay layer in the eastern portion of the north yard; however, samples were not collected below the clay layer.

Soil samples collected from underneath the building indicate that concentrations of PCE generally exceed the limitations only in shallow (less than one foot below the floor) samples. However, deep samples were only collected at five locations. Soil gas data indicate that contamination is likely widespread and extends throughout the depth of the vadose zone. For example, significant quantities of VOCs have been removed by the existing deep well (SVE-6D) (screened from 30 to 65 feet bgs) during the IRM and high photoionization detector (PID) readings were recorded at depth in some borings.

For the purpose of this remedial action, it is assumed that the entire vadose zone onsite is contaminated by VOCs – mainly PCE. In the eastern areas of the site, where the clay layer and the perched water zone are present, samples have not been collected from below the clay layer. It is also assumed that the clay layer will not be disturbed or penetrated with extraction wells for the purpose of the remedial action.

1.3.2 Groundwater

This remedial action is only for the OU1 portion of the site, which is defined as only the on-site contaminated soil and soil vapor issues. The OU1 portion of the site is being addressed separately from the remaining OU2 portion of the site, which consists of the groundwater both on-site and off-site, as well as the off-site soil vapor impacts.

1.4 CONTRACTOR USE OF SITE

Use or occupation of the site by the Contractor shall be limited to those areas identified as being contaminated and those areas required for support activities as identified on the Contract Drawings. Use of the site shall be restricted to operations essential to the remediation of the site. The Contractor shall not use any of the existing buildings or facilities at the site without the prior approval of the Department and/or Engineer. The limits of the required work areas may be adjusted by the Contractor as the work progresses subject to the approval of the Department and/or Engineer, in accordance with the requirements of the Contract Documents.

Access to the site for the Contractor will be only from 7:00 AM until 6:00 PM on Wednesday, Thursday, Saturday, and Sunday. Limited or no access will be available on Monday, Tuesday and Friday. Truck traffic at the site is heaviest in the mornings. Mondays are also the busiest day of the week. The Contractor may be required to limit or stop work at the site if the work cannot reasonably be accommodated by the existing business located at the site. The Contractor must notify the designated representative of the existing business and the Engineer at least 24 hours in advance of all activities. Trenching and other site work that affects traffic through the site must be staged and performed to allow for no interruption of delivery trucks at the site.

1.5 REGULATORY REQUIREMENTS

Remedial work at the Kliegman Brothers Site OU1 will proceed under the NYSDEC Superfund Program. The substantive requirements for all state regulations shall be met by the Contractor. Specifically, the requirements for air discharge (New York State Department of Environmental Conservation, Division of Air Resources Air Guide I). The Contractor shall be responsible for all local permits, including buildings, utilities, etc.

1.6 SPILL CONTROL

The Contractor shall devise methods, provide the means, and take action to prevent further contamination and spread of contaminants to soil, water, atmosphere, structures, equipment or material resulting from spills generated from operations at the site.

The Contractor shall maintain equipment and trained personnel on-site to perform emergency measures necessary to contain, remove, and clean up all spills generated from operations at the site.

In event of a spill, the Contractor shall take immediate action in accordance with the approved Health and Safety Plan, Contingency Plan, and local, state, and federal regulations. In addition, the Contractor shall notify the Engineer/Department immediately of the spill and keep the Engineer/Department informed of action being taken to comply with these requirements.

All spill material, adsorbents, etc. resulting from a spill shall be removed and disposed of accordingly.

When a spill occurs, the Contractor's Health and Safety Officer shall submit a written report to the Engineer within 48 hours of the incident including, at a minimum, date of the incident, a map showing the location and extent of the incident, details of the cause and resolution of the incident, outside agencies involved, impact on the environment and potential claims by third parties.

1.7 ENVIRONMENTAL PROTECTION

For the purpose of these Specifications, environmental protection is defined as the retention of the environment in its natural state to the greatest extent possible during all project activities and to preserve the natural appearance in its final condition. Environmental protection requires consideration of air, water, and land resources and involves elimination of noise, solid waste management and management of other pollutants. In order to prevent, and to provide for abatement and control of any environmental pollution arising from any activity in performance of this Contract, the Contractor and his subcontractors shall comply with all applicable Federal, State, and local laws and regulations.

Should the Engineer become aware of any apparent non-compliance with Federal, State or local environmental laws or regulations, the Engineer will notify the Contractor immediately of it in writing. The Contractor shall, after receipt of such notice, immediately inform the Engineer of his/her proposed corrective action and shall take such action as may be approved. If the Contractor fails or refuses to comply promptly, the Engineer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be used by the Contractor to apply for and/or justify an extension of time or reimbursement for additional costs or damages.

Disposal in or adjacent to the Project Site of any debris, wastes, effluents, trash, garbage, oil, grease, chemicals, etc. resulting from contract work will not be permitted. If any waste material is dumped in unauthorized areas, the Contractor shall remove the material and restore the area to its original condition. If necessary, ground contaminated from such unauthorized disposal operation shall be excavated, disposed as directed by the Engineer, replaced with suitable fill material, compacted and finished with topsoil or cover as required by the Engineer, all at no additional cost to the Department.

All wastes resulting from construction operations during this contract shall be removed and disposed in an approved location at no additional cost to the Department in accordance with applicable Federal, State, and local laws and the requirements of these Contract Documents. Such materials shall be removed from each Contractor Work Area before requesting final acceptance of the work.

The Contractor shall take all necessary measures in addition to those required by Federal, State, and local laws and regulations and the requirements of the Contract Documents to prevent the migration of dust off-site due to site activities.

The Contractor shall take all necessary measures in addition to those required by Federal, State and local laws and regulation and requirements of the Contract Documents to control odors as approved by the Engineer.

The entire site shall be left in a clean and tidy state prior to Final Payment.

Compliance with the provisions of this section by subcontractors shall be the responsibility of the Contractor.

1.8 PROTECTION OF WATER RESOURCES AND EROSION CONTROL

The Contractor shall not pollute any ponds, lakes, marshes, wetlands, streams, rivers (i.e., waterways) with fuels, oils, bitumens, calcium chloride, acids, insecticides, herbicides or other harmful materials. The Contractor shall investigate and comply with all applicable Federal, State and local laws concerning pollution of waterways.

Trenching, excavation and backfill shall be constructed by selective placement of materials to eliminate silts or clays on the surface which may erode and migrate off-site. The Contractor shall comply with all applicable Federal, State and local laws concerning soil erosion and sediment control.

The Contractor shall take all reasonable measures as approved by Engineer to minimize interference with or disturbance of fish and wildlife.

1.9 CONTRACTOR QUALITY CONTROL

The Contractor shall submit a Construction Quality Assurance Plan (CQAP) as part of the Work Plan for the site, which shall be submitted 5 days after being given a notice of apparent low bid by the Department. The quality of all work shall be the responsibility of the Contractor. The Contractor shall provide and maintain an effective quality control program that complies with the Contract Documents and the approved CQAP.

The Contractor shall furnish qualified personnel, appropriate facilities, instruments, and testing devices necessary for the performance of the quality control system; these shall be adequate to cover all operations, including both on-site and off-site testing.

Sufficient inspections and tests shall be performed on a continuous basis of all items of work, including work performed by subcontractors.

1.10 COMMUNITY PROTECTION PLAN

Section X, Specification 00003, outlines the requirements for the health and safety of all on-site personnel and any off-site community potentially impacted by the remedial work. However, due to the fact that the remedial work is being conducted at an active working facility, and due to the proximity to a residential neighborhood, extra measures may be required to address the concerns of these entities and to ensure that the Contractor's activities are coordinated with the local business, as well as police, and fire departments. The Contractor shall address any concerns raised by the local community through the preparation of a separate Community Protection Plan.

1.11 FIRE PREVENTION AND CONTROL

In the event that a fire breaks out, or one is suspected, which cannot be controlled by available on-site equipment, the Contractor shall immediately inform the local fire department and then the Engineer, the Department, the NYS Department of Health (NYSDOH) and any other appropriate local agencies. All work that would endanger health or safety of on-site or off-site personnel shall be stopped until the fire has been brought under control and the danger has passed, as determined by the Contractor and accepted by the Engineer.

When a fire occurs, the Contractor's Health and Safety Officer shall submit a written report to the Engineer within 48 hours of the incident including, as a minimum, date of the incident, a map showing the location and extent of the incident, details of the cause and resolution of the incident, outside agencies involved, impact on the environment and potential claims by third parties.

1.12 SUBMITTALS

The Contractor shall submit six (6) copies of each required submittal document (Section 01052) for Department/Engineer review or as directed by the Department. Upon acceptance of a submittal, the Contractor shall deliver to the Engineer six (6) copies of the approved document.

1.12.1 Bid Submittals

Bid submittals shall be in accordance with Section III Article 5 and all other applicable sections of these specifications.

The Bid Breakdown required under Article 12 of Section III shall be submitted in accordance with the breakdown of items outlined in Section XII- Measurement and Payment.

1.12.2 Submittals After Notice of Apparent Low Bidder

Submittals required after notice of apparent Low Bidder are outlined in Section III, Article 5. Further specifications on some of the technical submittals are detailed below.

1. HEALTH AND SAFETY PLAN prepared in accordance with the requirements of Section X.
2. SPILL RESPONSE PLAN prepared in accordance with requirements of Section 01010, Subsection 1.6.
3. QUALITY ASSURANCE/QUALITY CONTROL PLAN
 - a. Introduction

The Contractor shall provide a Quality Assurance/Quality Control (QA/QC) Plan for all samples to be collected and analyzed. The Contractor's QA/QC Plan will be reviewed and commented on by the Engineer and Department during the award period. The QA/QC Plan

must be accepted by the Engineer and the Department before the Contract can be awarded.

Samples to be collected and analyzed are described primarily in Section 11301. The requirements presented herein are minimum requirements required by the New York State Department of Environmental Conservation. The TSDF, NYSDOT, USDOT or other states may require additional sample(s), analyses and/or requirements for proper transportation and disposal of the wastes to the TSDF. Final disposal will be subject to RCRA and TSCA regulations, State requirements and specific requirements of the TSDF. The Contractor shall be responsible for compliance with all appropriate and applicable requirements for final disposition of all waste/contaminated materials.

b. Sampling Services

The Contractor shall provide a sample collection plan for soil, water, and air during remedial activities. The Contractor shall provide all labor and equipment required to collect samples, all required sample and shipping containers, collect representative samples under chain-of-custody, ship all samples for analysis to the laboratory (also provided by the Contractor), and provide complete analytical reports with the appropriate quality assurance/quality control deliverable data package.

c. Analysis

General

All soil and water laboratory analyses will be in accordance with the June 2000 or most current edition of the NYSDEC Analytical Services Protocol (ASP). It is the laboratory's responsibility to be familiar with this document and all procedures and deliverables within it pertaining to New York State Superfund work. Site-specific QA/QC samples shall be collected only where indicated in Section 11301. For all other cases, the Contractor shall request analytical batch QC from the laboratory. All analyses must be performed by a laboratory currently certified by the New York State Department of Health-Environmental Laboratory Approval Program (ELAP), for Contract Laboratory Program (CLP) Solid and Hazardous Waste Categories (soil and water samples) or the Air and Emissions Category (air samples).

Soils

Soil analysis is only for disposal of the soil as required by the disposal facility. Minimally, all contaminated soil to be disposed of offsite shall be analyzed for NYSDEC Superfund Target Compound List (TCL) parameters for the following chemical classes, and will require NYSDEC ASP analytical methods and Superfund category deliverable:

USEPA CLP Statement of Work (SOW)
OLM04.2 TCL VOCs

Soil shall also be analyzed for all other parameters as required by the disposal facility.

Waters

Waters collected onsite from SVE condensate and from decontamination operations shall be analyzed for all parameters as required by the disposal facility. NYSDEC ASP Category B (or equivalent) deliverables will be required, unless otherwise directed by the NYSDEC. Minimally the water shall be analyzed for the following parameters:

- Method 624 TCL VOCs
- Method 200.7/245.1 Target Analyte List (TAL) Metals
- Method 150.1 pH
- Method 160.1 Total Dissolved Solids
- Method 160.2 Total Suspended Solids

Air

Air or off-gas samples collected onsite as a result of progress monitoring for the treatment system shall be analyzed for the following parameters, and will be reported as NYSDEC ASP Category B (or equivalent) deliverables.

- TO-15 VOCs (grab samples using Summa canisters)

Indoor air samples collected in accordance with New York State Department of Health *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. October 2006.

- TO-15 VOCs (8-hour samples using Summa canisters)

d. General QA/QC Plan Requirements

Samples shall be collected in accordance with Table 11301-1. Electronic data deliverables shall be submitted with the hard copy reports.

The QA/QC plan must state that prior to any deviations from the agreed program, the Engineer's QA/QC Officer will be notified and the deviation accepted by the Engineer's QA/QC Officer. However, such an acceptance does not limit the full responsibility of the Contractor to meet all requirements of the Contract Documents.

The Contractor project Quality Assurance Officer (QAO) must have a minimum of a bachelor's degree in chemistry or natural sciences with a minimum of 20 hours in chemistry.

The QAO must be proficient in analytical methodology, data quality and interpretation, sampling plan development, quality control procedures and auditing techniques.

The QAO will assist the Contractor's Project Manager in the development of the sampling and analytical portion of the QA/QC Plan, perform field and laboratory audits, interface with the analytical laboratory to make requests and resolve problems, interface with the data validator and develop a project specific data usability report. Because on-site work is expected, verification of completion of the 40 hour OSHA safety training course and 8 hour refresher is required.

The QAO will attend all site specific meetings between the Contractor and the Department and Engineer and sign off on the site specific QA/QC Plan and all revisions. The plan shall include an organizational chart and have a designated, qualified Quality Assurance Officer. Include a copy of the QAOs' resume and signature page. The plan and all revisions shall be signed by the QAO prior to submission to the Department and Engineer. The QAO will be within the same geographical area as the Project Manager and independent of the analytical laboratory.

The plan shall state the data quality objectives for the Project Site and identify data uses.

The plan shall include a chart reflecting the number of samples to be collected, matrices, container and preservation requirements, holding times, analytical protocols to be used and anticipated QA/QC samples to be collected and analyzed.

All sample collection techniques shall be described and must be site specific.

The plan shall indicate what analytical protocols will be followed. The statement, ASP, is insufficient. The contractor shall designate by method number what protocol contained in the NYSDEC ASP shall be used.

The plan shall indicate the specific limits of concern for each of the analyses listed in each of the matrices to be sampled. (Refer to Volume I, New York State ARAR's, 6NYCRR Part 371.)

The plan shall indicate the matrix specific method detection limit that must be obtained for each of the analyses and matrices listed. (This value should be in the range of 1/5 the site specific limit of concern.)

All samples shall be delivered to the laboratory within 24 hours from day of collection.

Acetone is an unacceptable solvent for decontamination of sampling equipment. Pesticide grade methanol is allowed.

4. **SAMPLING PLAN:** The Contractor shall provide a sampling and analysis plan for all materials to be sampled. The sampling and analysis plan shall specifically address the following, at a minimum:
 - a. Subsurface soil/drill cuttings/drummed and staged soil sampling and analysis.
 - b. Air sampling and analysis.
 - c. Indoor air sampling and analysis
 - d. Sampling and analysis of liquids generated from decontamination activities and collected condensate.
 - e. Sampling and Sample Custody Procedures, along with any references used as a source for the procedure.
 - f. Sampling and analysis equipment.
 - g. Sample collection points.
 - h. Sampling team and qualifications.
 - i. Proposed laboratory and certification (NYSDOH ELAP required for all applicable categories).

5. **WORK PLAN:** The Contractor shall prepare a Work Plan with a description of all activities related to the construction, startup, and operation of the treatment system as required in Section 11301. The Work Plan shall also include process piping and instrumentation drawings, collection and treatment system layout drawings, and other information as required to describe the general design and intent of the system for site remediation. The Work Plan must also address the aspects of the project related to working in a residential area (e.g., HASP measures, decon, staging methodology, etc.). The Work Plan shall, at a minimum, include:
 - a. Procedures for adequate and safe excavation of soils and materials including a contingency plan detailing procedures and methods to be employed to prevent, contain, and recover spills during the work.
 - b. Description of equipment to be used on site with appropriate safety devices needed to undertake the remediation of the site.
 - c. Identification of the permitted treatment, storage, and disposal facilities (TSDF) proposed to receive liquid or solid wastes to be transported off-site.
 - d. Identification of permits required to conduct the work.
 - e. Worksite layout showing, at a minimum, equipment and material staging areas, trailers, decontamination station, and staging procedures.

- f. Detailed construction drawing(s) of the proposed decontamination station.
 - g. Procedures for excavating, handling, storing, and placing soils.
 - h. Procedures for handling liquid wastes and groundwater.
 - i. Provisions for control of fugitive air emissions and dust control.
 - j. Other requirements necessary to provide security, staging, sampling, testing, removal, and disposal of wastes.
 - k. Procedures for completing any other major aspect of the work.
6. **CONTINGENCY PLAN:** The Contractor shall prepare a Contingency Plan to properly prepare and deal with any emergency conditions that may arise during construction or operation of the remedial actions at the site. Considerations shall include trench collapses, unacceptable air emissions, equipment failures, storm events, utility interruptions, etc. The plan shall identify emergency procedures, emergency contacts, and all materials and equipment to be maintained at the site in the event of an emergency.
7. **SCHEDULE:** The Contractor shall prepare a schedule of all site activities related to well installation and to the construction, startup, and operation of the SVE system.

1.12.3 Technical Submittals

A. The Contractor shall submit a technical submittal schedule as shown in Table 01010-1 to the Engineer no later than ten (10) days after being given Notice to Proceed by the Department in accordance with Section VIII and Section X of the Contract Documents. The schedule shall be designed so that submittals can be approved prior to commencement of work and so the Contractor can complete his work on schedule. This schedule must be approved by the Engineer before commencement of the review of technical submittals.

All final submittals shall be made at least two weeks prior to field implementation. Draft submittals shall be made sufficiently in advance to allow adequate time for Department/Engineer review and for Contractor to incorporate review comments in the final submittal. All technical submittals have to be approved prior to their implementation.

B. The CONTRACTOR shall submit to the ENGINEER the following:

- 1. Site Preparation:
 - a. Drawing(s) showing the layout and construction of the decontamination area.
 - b. Project sign.

2. Site Facilities and Services:
 - a. A site plan showing the proposed layout of the site including decontamination areas, staging areas, system locations, utility tie-ins, and all other areas of the site proposed for use in construction..
 - b. Traffic control plan.
3. Earthwork/Backfill/Compaction:
 - a. Clean backfill material from off-site source(s), moisture-density curve, grain size distribution.
 - b. Excavation method, proposed equipment, and calculations (if required)
 - c. Dewatering methods (if required)
4. SVE Well/Vacuum Monitoring Point Installation
 - a. Installation - The Contractor shall submit for review by the Engineer a proposed plan for well drilling and installation. The plan shall take into account all the information furnished in the contract Drawings and specifications. All work shall be performed under the direction of an experienced qualified and competent hydrogeologist approved by the Engineer.
 - b. Sieve analysis of filter material
 - c. Sample of filter material, upon request
 - d. Dimensions and material of construction of precast concrete structures.
 - e. Manufacturer's name and product data of the concrete structures and cover to be used.
 - f. Construction Reports - The Contractor shall develop and maintain reports for all well drilling and construction to assure compliance with contract requirements. The Contractor shall submit quality control records including the following:
 - Borehole Logging
 - Installation diagrams of wells
 - Placement of filter pack material
 - Sieve analysis of and gradation curve of filter pack material

5. Contaminated Materials:

- a. A Materials Handling Plan describing manners and/or methods for collection, staging, containerization, handling, treatment, testing transportation and disposal of contaminated soil, liquid, drummed material, and waste or other materials resulting from onsite activities. Whenever possible, excavated material shall be put back into the excavation. The plan shall include the proposed final disposal locations for all materials. The plan shall also consider the limited space available at the site for storage.
- b. Transportation Plan: The Contractor shall submit a Transportation Plan to the Engineer prior to the start of work for review. This shall include:
 - Type and number of vehicles used;
 - Travel routes and times;
 - Decontamination methods for vehicles and containers (see Section X, Subsection 1.14)
 - Emergency response plans (see Section X, Subsection 1.17)
- c. Disposal Facilities: The Contractor shall submit to the Engineer information regarding proposed facilities for disposal of each type of waste. All proposed facilities must be permitted. Information submitted shall include, but not be limited to:
 - Name;
 - Owner;
 - Type of facility/permit;
 - Contact person, phone number;
 - Location; and
 - Hours of operation

The Engineer shall approve all the final disposal facilities for wastes from this site.

6. SVE System:

- a. Process and Instrumentation Diagram (P & ID).
- b. Equipment list including, manufacturer, model number, dimensions, operating capacity, weight, expected range of operations, utility requirements, and material of construction.
- c. Drawing(s) showing proposed location, layout, and anchorage of equipment, instrumentation and appurtenances and relationship of other parts of work including clearances for maintenance and operation.
- d. Performance charts and curves.

- e. Manufacturers' descriptive and technical literature.
- f. Ambient air quality impact screening analysis per NYSDEC Air Guide 1.
- g. A Startup Plan shall be submitted for the approval of the Engineer. The Startup Plan shall be prepared as follows:

- 1. General

- a. The Contractor shall summarize in a Startup Plan the actions necessary so that all steps required for the startup and operation of the SVE System are carried out in a reliable and cost-effective manner and implemented at the appropriate times.
- b. The Contractor shall submit to the Engineer for approval the Startup Plan in accordance with the schedule detailed below.
- c. The Startup Plan shall include an introduction which describes the startup and operation activities.
- d. The Startup Plan shall include the following sections:
 - (i) Records, Reports, and Laboratory Control: This section shall describe the Contractor's methodology and schedule for developing all records and reports needed to effectively and efficiently monitor and control the treatment systems.
 - (ii) Process Control and Startup Activities: This section shall describe the startup schedule and process control strategies developed by the Contractor to coordinate and effectively startup all equipment, processes, systems, and appurtenances.
 - (iii) Health, Safety, and Emergency Response: This section shall describe the Contractor's schedule and tasks necessary to abide by the appropriate requirements.
 - (iv) Operation and Maintenance: This section shall schedule and describe the tasks required by the Contractor to develop and submit O&M procedures and information to the Engineer for inclusion in the O&M Manual.

- (v) Maintenance: This section shall schedule and describe the tasks required by the Contractor to develop and implement a maintenance program for the Treatment Facility.
- (vi) Permits: This section shall schedule and describe the tasks required by the Contractor to obtain all required permits or meet permit equivalencies for the operation of all on-site facilities.
- (vii) Staffing: This section shall describe the schedule and required tasks to enable the Contractor to hire qualified personnel to manage, operate, and maintain the treatment systems.
- (viii) Training: This section shall describe and schedule the training program for Contractor's staff prior to plant startup.

2. Submittal Schedule

- a. The Contractor shall submit the Preliminary Plan of Operation 30 calendar days after the Notice to Proceed.

h. Operation and Maintenance Manual Submittal

- 1. The Contractor shall submit detailed information addressing system operation and maintenance requirements, as described in this Section and other sections of these Specifications, for inclusion in the Operation and Maintenance (O&M) Manual. The O&M Manual shall be prepared as follows:
 - a. General
 - (i) The Contractor shall provide the Engineer with all required information as described in this Section and other Sections of these Specifications for inclusion in the O&M Manual.
 - (ii) The O&M procedures and information shall be submitted for approval to the Engineer in accordance with the schedule detailed below.
 - (iii) The O&M procedures and information provided to the Engineer shall include appropriate

information, logs, schedules, references, catalog cuts, regulatory guidelines, and requirements concerning the design, operation, maintenance and management of all equipment, processes, systems, appurtenances and facilities.

- (iv) The Contractor shall also provide the Engineer with unit process information, reported design criteria and standards, starting and stopping procedures, troubleshooting guidelines, laboratory control and test procedures, health, safety and emergency response, material procurement information and all maintenance-related information for inclusion in the O&M Manual.
- (v) The Contractor shall estimate the bed life for the carbon from the vapor phase carbon beds, and shall develop a change-out schedule from this. The calculations which support this estimate shall be submitted to the Engineer with the change-out schedule.
- (vi) The Contractor shall provide to the Engineer and Department a summary report of the system startup, including all analytical and operations data.
- (vii) The Contractor shall provide the Engineer with updates during the operation and maintenance period which reflect changes in safety procedures, operation and maintenance, and from information gained during actual operation of all equipment, processes, systems and appurtenances for inclusion in the O&M Manual.

b. Submittal Schedule

- (i) The Contractor shall submit the O&M Manual in accordance with Section 01600.
- (ii) The Contractor shall submit updated O&M procedures and information at the end of the Contractor's operating period. The final O&M manual shall be submitted in both hard-copy and electronic (PDF) format.

7. Piping, Valves, Fittings and Other Accessories
 - a. Detailed drawing(s) showing pipe and valve layout for the entire SVE treatment system. Drawings shall show all supports, anchors, guides, expansion joints and all accessories required for a satisfactory piping system.
 - b. Pipe and valve schedules including size, type, style, and materials of construction.
 - c. Manufacturers' technical and descriptive literature.
 - d. Detailed description of proposed leak and pressure testing procedures.
8. Process Instrumentation and Controls
 - a. Instrument specifications sheets including tag number(s), electrical power requirements, connections, dimensions, materials of construction, performance and environmental characteristics, manufacturer and model, enclosure classification, and input/output characteristics.
 - b. Manufacturers' technical and descriptive literature.
 - c. A block diagram(s) showing in schematic form all interconnections between components including but not limited to control panels, PLC(s), local processors, annunciators operation interface(s) and instrumentation.
 - d. Loop diagrams for each monitoring and control loop prepared in accordance with ANSI/ISA-S5.4-1991.
9. Electrical
 - a. The contractor shall submit the following:
 - (1) Product data for conduit and fittings.
 - (2) Product data for junction boxes, hinged cover enclosures, and cabinets.
 - (3) Product data for each type and size of wire and cable.
 - (4) Product data for each type and size of splice connector and terminator on electrical service.
 - (5) Product data on service entrance panelboard. Include enclosure and support point dimensions, voltage, main bus ampacity, integrated short circuit ampere rating, circuit breaker arrangement and sizes.

- (6) Product data on motor starting contactors. Include electrical ratings, components arrangement and enclosure rating and dimensions.
 - (7) Product data on wiring devices. Include electrical and NEMA ratings and dimensions for power and lighting switches, receptacles and control devices.
 - (8) Panel schedule for installation in panelboard. Submit final versions after load balancing.
 - (9) All Equipment Electrical ratings.
 - (10) Submit utility companies' information and service installation.
 - (11) NEMA ratings of all equipment and materials of construction.
- b. Submittals shall include the following information to the extent applicable to the particular item above.
- (1) Manufacturer's name and product designation or catalog number.
 - (2) Electrical ratings.
 - (3) Conformance to applicable standards or specifications of ANSI, ASTM, ICEA, IEEE, ISA, NEC, NEMA, NFPA, OSHA, UL, or other organizations.
 - (4) Dimensioned plan, section, and elevations showing means for mounting, conduit connection, and grounding, vibrational movement, and preventative maintenance.
 - (5) Materials of construction and finish specification, including paints.
 - (6) List of components including manufacturer's names, catalog numbers, and quantities (bill of materials).
 - (7) Internal wiring diagram indicating all connection to components and numbered terminals for external connections.
 - (8) Manufacturer's instructions and recommendations for installation, operation, and maintenance.
 - (9) Manufacturer's recommended lists of spare parts.
 - (10) Utility Company prepared drawings for electric service and written summaries of all communications with the utility companies.

- c. Submit manufacturer's data on lighting fixtures, lamps and ballasts.
 - (1) Include electrical ratings and photometric data with certified results of independent laboratory test.
 - (2) Include data on batteries and chargers (materials of construction, grade, life, recharging requirements) of emergency lighting units.
 - (3) Submit dimensioned drawings of lighting fixtures. Submit fixture drawings in booklet form with separate sheet for each fixture.
 - (4) Provide complete set of operating and maintenance manuals. Include technical data sheets and parts ordering information. Include testing and maintenance requirements and instructions for emergency lighting equipment.
 - (5) Submit a sample of specific individual lighting fixture types for approval. Submit fixture samples when requested by the department.

1.13 PRE-CONSTRUCTION CONFERENCE

A Pre-Construction Conference (as required by Section VIII, Article 1) will be held between the Contractor, Engineer, NYSDEC, and NYSDOH. Attendance by the Contractor's superintendent, quality control personnel, safety department personnel, and any major subcontractor's superintendent will be required.

The Department shall be responsible for making arrangements for an acceptable site for the conference. The Engineer shall take minutes of the conference and distribute copies to all participants. The Department's Engineer for this project will be identified by the time of the pre-construction meeting.

1.14 PROGRESS MEETINGS

Progress meetings and conferences will take place at the project site or some other location satisfactory to both the NYSDEC and the Contractor. All expenses associated with providing a location and facility for the meetings shall be borne by the Contractor. The progress meetings will be conducted in accordance with Section VIII, Article 5.35.

The Department/Engineer will schedule and administer a mandatory progress meeting at least once every week and such additional meetings as deemed necessary to raise significant questions, establish new guidelines, introduce new aspects to the project or other items that will affect the progress of work if requested by either the Engineer or the Contractor. The Contractor and their subcontractors shall attend all progress meetings, providing the staff necessary to address items on the agenda and other issues that could come up.

The Engineer will be responsible for recording the minutes of meetings and shall include all significant proceedings and decisions. The Engineer shall reproduce and submit to the

NYSDEC and Contractor within five working days after each meeting three copies of the minutes of the meeting and shall distribute copies to each participant at the meeting and to agencies parties affected by decisions made at the meeting.

The Department/Engineer will administer the following general requirements for the progress meetings.

1. Prepare agenda for meetings.
2. Make physical arrangements for the Department/Engineer to attend meetings.
3. Preside at meetings.
4. Record the minutes; include significant proceedings and decisions.
5. Distribute previous meeting minutes.

1.15 PROJECT RECORD DOCUMENTS

The Contractor shall maintain in their possession at the site for the NYSDEC one record copy of:

1. Updated construction schedules and progress records.
2. Contract Drawings, and one set of blue prints of Record Drawings marked-up with field changes.
3. Contract Specifications.
4. Addenda and Modifications.
5. Change Orders and other modifications to the contract.
6. NYSDEC and the Engineer's field orders.
7. Manufacturer's certificates.
8. Daily work activity summary reports, including:
 - Records of all site work.
 - Reports on any/all spill incidents.
 - Reports on any emergency response actions.
 - Test Records.
 - Chain-of-custody documents.
 - Laboratory reports.
 - Other items as may be required by the NYSDEC and the Engineer.

The Contractor shall be responsible for preparation and maintenance of as-built drawings in accordance with Section VIII – Article 5.19.

1.16 PERMITS

The Contractor shall obtain and maintain at the site all federal/state/local permits necessary to perform the work required under this contract. The Contractor is not required to get an air permit, but must meet the substantive requirements of “DAR-1 (Air Guide 1) – Guidelines for the Control of Toxic Ambient Air Contaminants” for discharge.

1.17 WARRANTY OF CONSTRUCTION

In addition to any other warranties set out elsewhere in this contract, the Contractor shall provide a warranty that work performed under this contract conforms to the requirements of the Contract Documents and is free of any defect of equipment, material or design furnished, or workmanship by the Contractor or any of his subcontractors or suppliers.

The warranty shall continue for a period of one year from the date of Final Acceptance of the work (Section VIII, Article 12). If the NYSDEC takes possession prior to Final Acceptance, such warranty shall continue for a period of one year from the date the NYSDEC takes possession.

The Contractor shall repair or replace at his own expense any such failure to conform or any such defect. In addition, the Contractor shall remedy at his own expense any damage to Government-owned or controlled real or personal property, when that damage is the result of the Contractor's failure to conform to contract requirements or any such defect of equipment, material, workmanship, or design.

The Contractor shall also restore any work damaged by the Contractor in fulfilling the terms and conditions of this section. The Contractor's warranty with respect to work repaired or replaced hereunder will run for one year from the date of such repair or replacement.

In addition to the other rights and terms provided by this section, all subcontractors', manufacturers', and suppliers' warranties expressed or implied with respect to any work and materials shall, at the direction of the NYSDEC, be enforced by the Contractor for the benefit of the NYSDEC. In such case if the Contractor's warranty under paragraph 12.1 of the General Conditions has expired, any suit directed by the NYSDEC to enforce a subcontractors', manufacturers', or suppliers' warranty will be at the expense of the NYSDEC. The Contractor shall obtain any warranties which the subcontractors, manufacturers, or suppliers would give in normal commercial practice.

1.18 PROJECT COORDINATION

A. The Contractor shall be solely responsible for the coordination of schedules for any and all of his subcontractors. The Engineer shall review all schedules and the Contractor shall coordinate all time schedules to be used for construction.

B. As per Article 10 of Section III, prior to a proposed Subcontractor working on the project in an amount expected to be greater than or equal to \$10,000, the proposed subcontractor must submit to the Department a properly executed New York State Uniform Contracting Questionnaire (Section V, Article 2 (e)) through the Contractor, and have it accepted by the Department.

TABLE 01010-1
CONTRACTOR'S SCHEDULE FOR TECHNICAL SUBMITTALS
REQUIRING DEPARTMENT/ENGINEER REVIEW

Submittal	Submittal Number	When Required	Contractor's Anticipated Submittal Date
<i>01010 GENERAL</i>			
Permitted Disposal Facility		5 days after notice of apparent low bid	
Work Plan		5 days after notice of apparent low bid	
Construction Schedule		5 days after notice of apparent low bid	
Health and Safety Plan		5 days after notice of apparent low bid	
Sampling Plan		5 days after notice of apparent low bid	
QA/QC		5 days after notice of apparent low bid	
Spill Response Plan		Prior to Construction	
Contingency Plan		Prior to Construction	
<i>01030 SITE PREPARATION</i>			
Decontamination Pad		Prior to Construction	
<i>01040 – PROJECT IDENTIFICATION AND SIGNS</i>			
Project Sign		Prior to Construction	
<i>01050 SITE FACILITIES AND SERVICES</i>			
Site Layout		Prior to Construction	
Traffic Control Plan		Prior to Construction	
<i>01051 SURVEY</i>			
Well Survey Data		Following Installation	
Pipe Installation Data		Following Installation	
Survey Notes		Following Installation	
<i>01052 PRODUCT RECORD DOCUMENTS</i>			
As-Built Documents and Record Drawings		Prior to Final Completion	
<i>01600 OPERATION AND MAINTENANCE MANUAL</i>			
Operation and Maintenance Manual		As per Section 01600	
<i>02220 EARTHWORK</i>			
Excavation Method		Prior to Construction	
Excavation Equipment		Prior to Construction	
Dewatering Methods (if required)		Prior to Construction	
<i>02221 BACKFILL</i>			
Backfill Material		Prior to Construction	
<i>02222 COMPACTION</i>			
Proposed Methods		Prior to Construction	
Test Reports		Following Installation	
<i>02230 CONTAMINATED MATERIAL</i>			
Materials Handling Plan		Prior to Construction	
Transportation Plan		Prior to Construction	
<i>02733 WELL DRILLING AND PLACEMENT</i>			
Well Construction Plan		Prior to Construction	
Sieve Analysis for Filter Material		Prior to Construction	
Precast Concrete Vaults		Prior to Construction	
Vault Covers for Wells		Prior to Construction	
Boring Logs and Well Construction Reports		Following Installation	
<i>02734 DECOMMISSIONING SUBSURFACE STRUCTURES</i>			
Well Decommissioning Plan		Prior to Construction	

TABLE 01010-1 (Continued)
CONTRACTOR'S SCHEDULE FOR TECHNICAL SUBMITTALS
REQUIRING DEPARTMENT/ENGINEER REVIEW

03400 PRECAST CONCRETE			
Concrete Structures		Prior to Construction	
Design Calculations		Prior to Construction	
Pipe Seals		Prior to Construction	
11301 SVE SYSTEM			
SVE Design		Prior to Construction	
System Layout		Prior to Construction	
System Housing		Prior to Construction	
Valves		Prior to Construction	
Portable Monitoring Instruments		Prior to Construction	
Moisture Separator		Prior to Construction	
Regenerative Blowers and Appurtenances		Prior to Construction	
Condensate Transfer Pump		Prior to Construction	
Vapor Phase Carbon		Prior to Construction	
Sampling Ports		Prior to Construction	
Heat Trace (if required)		Prior to Construction	
Startup Plan		Prior to Construction	
Weekly Reports		After Startup	
Level Switch		Prior to Construction	
Pressure Indicators		Prior to Construction	
Flow Indicators		Prior to Construction	
Temperature Indicators			
Autodialer (if required)		Prior to Construction	
Lightning/Surge Protection		Prior to Construction	
15050 PVC PIPE, FITTINGS, VALVES, ETC.			
PVC Pipe		Prior to Construction	
Butterfly Valves		Prior to Construction	
Pipe Test Procedures		Prior to Construction	
16010 ELECTRICAL			
Conduit and Fittings		Prior to Construction	
Junction Boxes		Prior to Construction	
Enclosures and Cabinets		Prior to Construction	
Wire and Cable		Prior to Construction	
Panelboards		Prior to Construction	
Motor Starters		Prior to Construction	
Wiring Devices		Prior to Construction	
Lighting and Fixtures		Prior to Construction	
Grounding		Prior to Construction	
Electrical Heat Trace		Prior to Construction	
NEMA Ratings for all equipment		Prior to Construction	

END OF SECTION 01010

NOTE: This list is not meant to be an all encompassing list of the shop drawings required for submittal. The Contractor is not exempt from submitting shop drawings or non-technical submittals as required by other sections not listed above.

SECTION 01030 SITE PREPARATION

1.1 DESCRIPTION

The work for this item and its cost shall include mobilizing everything necessary to complete the work; preparing the site for construction of the SVE system; clearing; installing the decontamination pad; providing utilities; restoration and demobilizing from the site; and satisfactorily completing all work required by Contract Documents and not included in the other payment items.

1.2 CLEARING

The Contractor shall clear as necessary all areas of the site as required for construction of the SVE system and its components, staging areas, trailers, utilities and other construction facilities. All debris and other material cleared from the site shall be disposed off-site by the Contractor in accordance with the applicable regulations.

Clearing shall be defined as the removal of trees, brush, down timber, rotten wood, rubbish, any other vegetation, concrete, pipe and objectionable material from areas within 5 feet of the limits of the completed work, or as directed by the Engineer.

Clearing may also include the temporary relocation of items that the existing business operator currently has stored in the work area. Contractor shall relocate all existing materials and equipment on the site (e.g., dumpsters, pallets, drums, garbage, compactor, etc.) as required for the performance of the work. All materials and equipment shall be replaced to its original location, or as directed by the owner, after the work is complete. No existing onsite materials may be removed or disposed of without the specific consent of the owner.

During clearing as well as during all activities involved with this Project, including excavation of contaminated soil, all existing wells shall be protected. Any damage to the wells shall be repaired or replaced by the Contractor at his cost.

1.3 UTILITIES

The Contractor shall provide all necessary utilities to the site for proper execution and satisfactory completion of this Contract. The Contractor shall be responsible for all utility markouts.

This includes furnishing, operating and maintaining the following utilities, and removal (if required) upon completion of the project:

- a. Electricity (Contractor shall use existing power source as required)
- b. Telephone (service to existing Autodialer)
- c. Mobile Telephone Service
- d. Sanitary Facilities

e. **Wireless Broadband Internet Service**

Accounts for the existing utilities will be turned over to the Contractor prior to the startup of the new O&M system.

1.3.1 Electricity

No use shall be made of existing utilities located on the project site without the prior approval of the Department/Engineer. Power to the existing IRM SVE system at the site is adequate for tie-in of the system to be installed for this action.

Electricity and lighting shall be in accordance with federal, state and local regulations as well as local utility company requirements. All work shall be in accordance with the National Electrical Code (NEC), National Fire Protection Association (NFPA), American National Standards Institute (ANSI), National Electrical Manufacturers Association (NEMA), National Electrical Safety Code (NESC), and the Occupational Safety and Health Administration (OSHA). All materials shall be listed with Underwriters Laboratories (U.L.). The Contractor shall obtain approvals of inspection agencies as required.

Lighting shall be provided for all work areas where natural light is inadequate to perform the work safely. Minimum illumination intensities shall be in accordance with 29 CFR 1910. 120 (m) (1) Table H-102-1 within all work areas and within all structures.

All wiring and connections shall comply with NFPA Article No. 70 - The NEC code which covers requirements for electric equipment and wiring in both hazardous and non-hazardous (un-classified) locations.

1.3.2 Telephone

The Contractor shall use the existing phone service and Autodialer for the new SVE system installation.

The minimum quantity of phone lines to be installed shall be as follows:

- Any phone lines that the Contractor may require in order to facilitate work and for project security.
- One dedicated cellular telephone for use by the Engineer' until system startup is satisfactorily complete.

1.3.3 Sanitary Facilities (Portable)

Sanitary facilities, and disposal of sanitary wastes, shall be in accordance with New York State Department of Health and local requirements.

Adequate portable sanitary facilities for both male and female on-site personnel shall be provided throughout the contractor work area.

Waste from portable sanitary facilities shall be collected by a sanitary vacuum tank truck and disposed of off-site at least twice every week during construction at the expense of the Contractor. Contractor shall obtain the services from a reputable, licensed sanitary waste company prior to construction. The proposed portable sanitary waste facilities shall be supplied/serviced in accordance with local sanitary codes and other applicable NYS Sanitary and Health codes.

1.3.4 Wireless Broadband Internet Service

The Contractor shall make all arrangements and pay all costs for providing wireless broadband internet service or other approved service for use by the Engineer/Department until substantial completion of the contract has been achieved by the Contractor and accepted by the Department.

1.4 DECONTAMINATION PAD

The Contractor shall provide an area within the containment area for decontamination. The decontamination area will be a properly graded area that allows no deleterious material to leave the containment area. This will facilitate the Contractor to be able to pump the decontaminated washwater to a portable truck or tank for future off-site disposal. The location of the decontamination pad shall be coordinated with the Engineer and the business located on the site.

A high-pressure wash system shall be provided in the equipment decontamination pad and shall be suitably sized to provide a minimum pressure of 150 psi and a 0.5 gallons per minute flow and a nominal temperature of 180°F. Wash units for equipment decontamination shall be self-contained, portable high-pressure water and detergent induction units.

Washwater from the equipment decontamination shall drain into the sump. The water shall be pumped from the sump to a temporary holding tank for future hauling to a NYSDEC permitted disposal facility system at the Contractor's expense. No washwater shall be discharged to ground surface.

The Contractor shall be responsible for the provision of an adequately equipped decontamination area that shall meet the following requirements and shall be approved by the Engineer.

- a. Adequate dimensions to contain wash water and debris from the largest sized vehicles to be utilized in this Contract. All vehicles and construction equipment leaving the Exclusion Zone shall be decontaminated.
- b. Perimeter to be curbed and provided with splash guards.
- c. An impermeable membrane required to prevent seepage into the ground.
- d. Sumps, pumps, pumping facilities, and temporary storage facilities to be adequate for anticipated use.

- e. Temporary storage facility may be mobile tankers or suitable fixed tanks. Fixed tanks shall be located within a secondary containment areas capable of containing 100% of the tank capacity, or 110% of the largest tank where the secondary containment area holds more than one tank. The secondary containment area shall have a permeability of not more than 1.0×10^{-7} cm/sec.
- f. All facilities to be at minimum 5 feet clear of the Contamination Reduction Zone boundary.
- g. The decontamination area shall be located at the exit of the exclusion zone or other location as approved by the Department/Engineer.
- h. There shall be side wall panels, six feet high minimum, on two sides to prevent overspray.

The Contractor shall clean the decontamination area after daily use. No contamination shall be left behind. The Contractor will be required to dismantle, remove and properly dispose of the pad and all appurtenances at his own expense at Department acceptance of substantial completion of the contract.

1.5 FENCING

A. The Contractor shall install and maintain a secure 5 foot high plastic construction fence (Tenax Alpi or equal) as necessary around open work areas to meet the requirements of the Health and Safety Plan. The Contractor shall erect and maintain fence for the work area only as necessary to facilitate operations and site security, as approved by the Engineer.

All temporary fencing shall be removed at the completion of the work and disposed off-site by the Contractor.

END OF SECTION 01030

SECTION 01040 PROJECT IDENTIFICATION AND SIGNS

1. GENERAL

The sign shall be 4' high by 8' wide, and constructed of 3/4- to 1-inch medium density overlay plywood, with a resin coating on both sides. The edges shall be framed with a snap trim edge cap consisting of an aluminum channel with a polyvinyl coating. An aluminum sign of equal size may also be used. The sign's background will be painted with white exterior oil base sign enamel. The second, third, fourth, and eighth lines will have green letters. The first, fifth, sixth, and seventh lines will have blue letters. The DEPARTMENT logo will be painted as noted. All adhesives are solvent resistant.

1.1 REFERENCES

Lumber Standard: American Softwood Lumber Standard; U.S. Department of Commerce Product Standard PS20.

Softwood Plywood Standard: Construction and Industrial; U.S. Department of Commercial Product Standard PS1.

1.2 QUALITY ASSURANCE

Painter's Qualifications: All paint shall be applied by a professional sign painter.

2. PRODUCTS

2.1 MATERIALS

Posts: Standard Grade Douglas Fir, White Pine or Southern Pine; preservative treated; 4 inch x 4 inch x 12 feet long.

Plywood: Overlaid Plywood; MDO B-B EXT-APA; 3/4 to 1 inch.

Framing: Snap trim edge cap of polyvinyl coated aluminum channel.

Paint:

Background Enamel: Exterior, alkyd, glass enamel with primer as recommended by finish coat manufacturer.

Lettering and Striping Enamel: Exterior, long oil, alkyd; high gloss enamel manufactured for lettering signs.

Colors:

DEC logo: Pantone® Matching System Color Chart (PMS) 301 Blue
PMS 355 Green

Text: PMS 301 Blue
PMS 355 Green

Type:

All type is Caslon 540. Center each line with small caps and initial caps. See Figure 01580-1 (Project Sign)

2.2 FABRICATION

Painting:

Paint both sides and all edges of signs with two coats of primer and one coat of background enamel.

Paint lettering and striping with two coats of lettering enamel.

Do not apply succeeding coat until previous coat has completely dried.

Apply even coats of uniform thickness without brush marks, runs or lap marks.

Lettering and striping shall be uniform with sharp, neat profiles.

3. EXECUTION

3.1 INSTALLATION

Install signs within two weeks of Notice to Proceed.

Install signs where directed by Engineer.

Set posts plumb, 4 feet into the ground. Compact backfill around posts.

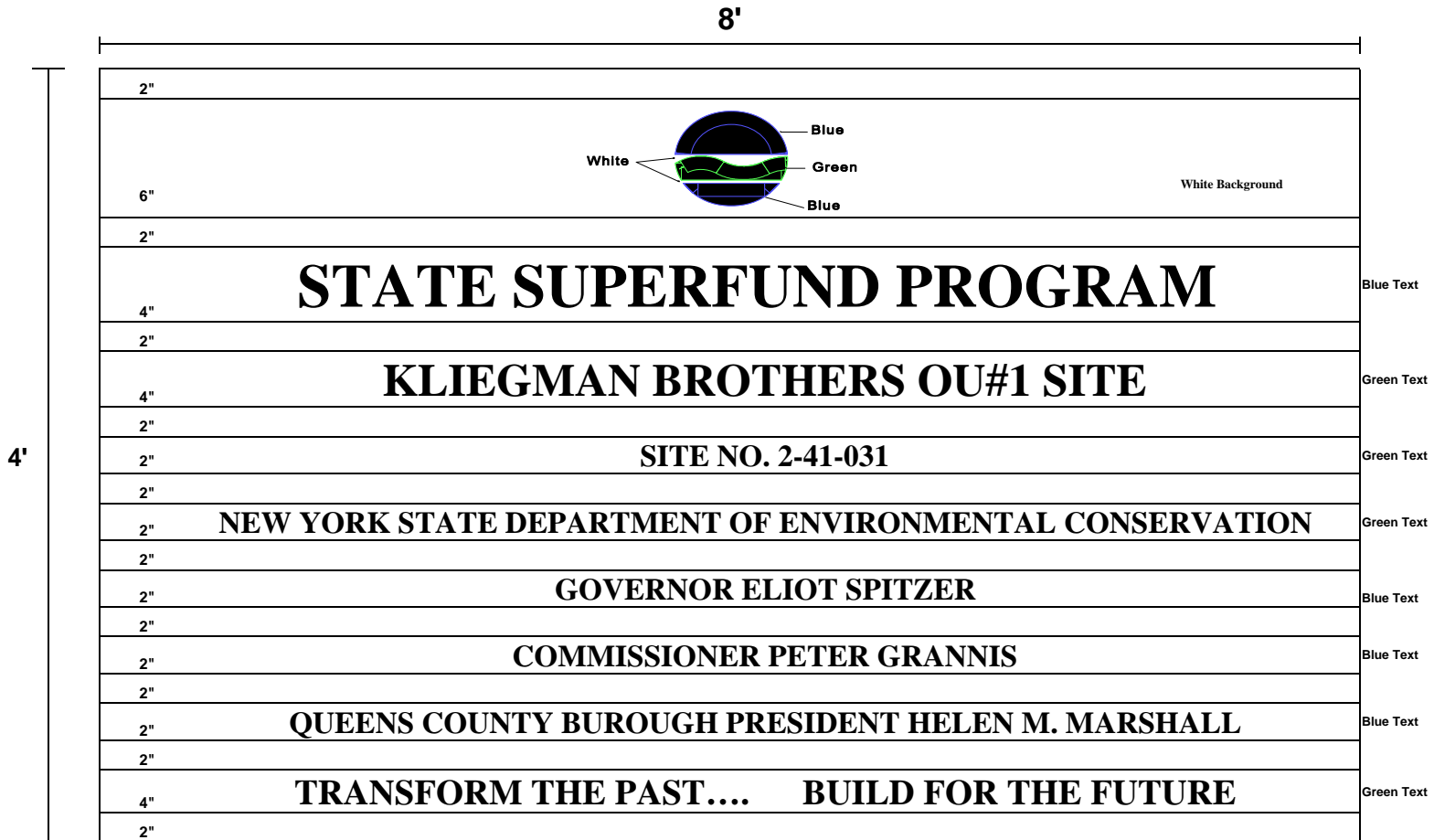
Fasten sign, in a level position, securely to posts. The center of the sign should be located approximately 6 to 7 feet from ground level.

3.2 MAINTENANCE AND REMOVAL

Maintain the signs plumb and level for the duration of the work.

When directed, at the completion of the project, remove the signs.

END OF SECTION 01040



**FIGURE 01040-1
PROJECT SIGN**

SECTION 01050 SITE FACILITIES AND SERVICES

1.1 DESCRIPTION

A. The work for this item and its cost shall include the maintenance of the remedial work site, and providing site security and snow/ice removal during the length of the Contract. This includes operating and maintaining all the items described in this section, including supervision and administration staff. This remedial project will consist of three phases: construction, operation and maintenance, and demobilization from the site.

1.2 SITE SECURITY

A. The Contractor shall be responsible for site security within the Project Site, 24 hours per day, seven days per week, for the duration of the Contract. The repair or replacement of any vandalism to the Contractor's work, equipment, or materials at the site shall be at the Contractor's expense. The security requirements specified in these Contract Documents are only minimum requirements. The Contractor has the option to provide additional security as desired, at his cost.

B. The Contractor shall not rely on any existing security personnel or monitoring that may be utilized by the existing business located at the site. The Contractor shall provide separate security, but must also work in conjunction with any existing security at the site.

C. The Contractor shall ensure that site security is maintained and that unauthorized personnel are not allowed on site. Any security problems shall be reported immediately to the Contractor's authorized representative. The Contractor shall be responsible for the expeditious correction of all problems observed. The Contractor shall report all problems and corrective actions taken to the Engineer.

D. The Contractor shall provide any security personnel with accommodations separate from the Department and Engineer.

E. The Contractor shall be responsible for the control of all persons and vehicles entering and leaving the Contractor's active work area. No vehicles except as required for construction shall be allowed beyond the designated area. All construction vehicles leaving the site must pass through the decontamination area. The Contractor shall:

1. Require all personnel and visitors associated with the Remedial Action to sign in upon entering the Project Site, print their full name and employer, and to sign out when leaving.
2. Maintain a log of all construction-related vehicles and equipment entering and leaving the Project Site.
3. Persons not associated with the project will require the Contractor's acceptance to be admitted on site.
4. Maintain a log of visitors.

5. Require that no person without OSHA 40-hour Health and Safety Training be allowed in any active work areas. Proof of training must be shown.

A log of all security incidents shall be maintained and furnished to the Engineer upon request.

F. The Contractor shall ensure that security fences and gates are maintained and completely closed and locked when there are no work activities at the site. Any breaks or gaps shall be repaired by the Contractor, at his expense, immediately. The Engineer shall be informed immediately of any vandalism to the fences, gates, or other secured areas.

G. The Engineer will have the right of approval and rejection of the Contractor's security personnel.

H. The Contractor shall contact law enforcement officials, emergency medical care units, local fire departments and utility emergency teams to ascertain the type of response required in any emergency situation and to coordinate the responses of the various units. A standard operating procedure describing response to foreseeable contingencies will be developed. The Contractor shall also prepare and update a list of emergency points of contact, telephone numbers, radio frequencies, and call signs to ensure dependable responses.

1.3 FACILITIES

This Section includes furnishing, operating and maintaining the following temporary facilities, and the removal of temporary facilities on completion of the project. The Contractor shall maintain personnel decontamination, equipment storage and emergency medical facilities in accordance with OSHA and the Contractor's approved HASP.

All facilities specified shall be located on site within the designated Contractor's Work Area as shown on the Contract Documents or as approved by the Department/Engineer and the current business operator at the site. There will not be space available on the site (within the fenced area) for placing office trailers for either the Contractor or the Department/Engineer. If the Contractor desires such facilities, a suitable location outside the fenced area must be determined.

No use shall be made of existing facilities located on the Project Site without the prior approval of the Department/Engineer.

All materials shall be suitable for their intended use and shall conform to applicable codes and standards. Manufacturers' requirements shall be strictly adhered to.

A. Engineer/Department Office

Due to the lack of available space, it will not be possible for the Contractor to place an office trailer for the Engineer/Department on-site (within the fenced area). The Contractor shall make arrangements for alternative office space as approved by the Engineer/Department. One proposed location of the office trailer is shown on the Contract Drawings, pending approval of the property owner and/or obtaining a permit for the location from the appropriate authorities. Other potential locations include the sidewalk around the building, as approved by the Department and

the Engineer, and pending approval of a permit for the location. The Contractor shall be responsible for obtaining all permits and approvals as required for the temporary location of the trailer. If the Contractor desires office space, one common trailer to house both the Contractor's and the Engineer/Department's offices, with a common meeting room in the middle, may be provided. The two office sections of the trailer shall be separately lockable; otherwise, no Contractor use of the Engineer/Department trailer shall be allowed. Field office arrangements will extend from the start of work at the site until the end of the first two weeks of system operation. All office equipment will remain the Contractor's property, unless specified otherwise.

At a minimum, the office facilities shall be provided with the following:

1. The office facility shall consist of a trailer which has self-contained, built-in electric heating and air conditioning. The trailer shall be placed on concrete blocks and leveled, with adequate wooden steps and handrails provided at each exterior door. The interiors shall consist of wood paneling and fluorescent ceiling lights.
2. The office shall contain at least two operable windows which are equipped with functioning blinds and security guard screens.
3. Facilities shall be lockable, with a minimum floor space of 200 square feet.
4. Lighting; electric, non-glare type producing a minimum illumination level of 50 foot-candles measured at desk height or approximately 2'-6" above finished floor.
5. Heating and cooling; capable of maintaining ambient temperatures within the structure of 70 degrees Fahrenheit, plus or minus three degrees.
6. Potable bottled water
7. Fire extinguisher; non-toxic dry chemical type, UL-approved for Class A, B and C fires
8. Emergency facilities (e.g. eyewash) as required by OSHA.
9. Facilities shall be structurally sound and weather tight, with floors raised above ground.
10. Janitorial services shall be provided not less than weekly.
11. Office supplies also shall include:
 - a. One waste basket.
 - b. One paper towel dispenser with towels. The supply of towels to be replenished by the Contractor as required by the Engineer.
 - c. One bulletin board measuring four feet by six feet.
 - d. One standard office desk.

- e. One office table with laminated top, three feet by eight feet.
 - f. Six straight-backed chairs.
 - g. One operational water cooler with refrigerator. Supply of water to be replenished by the Contractor as required by the Engineer.
 - h. One paper cup dispenser with cups. The supply of cups to be replenished by the Contractor as required by the Engineer.
 - i. One first aid kit – to be replenished as needed.
12. A sign shall be furnished on the outside of the field office. The sign shall be three feet by four feet by 3/4-inch thick marine plywood with background and black lettering. The sign shall read:

FIELD OFFICE
NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
TELEPHONE (include number when available)

13. The trailer shall be installed in such a location as to provide free access to any individual wishing to communicate with the Engineer and/or the Department's representative. The public access to this trailer shall be provided directly from the public road and the entrance for the public shall be clearly posted.

B. Emergency Medical Facilities

The Contractor shall provide for a separate area for providing an active Zone for emergency medical facilities.

C. Personnel Decontamination

The Contractor shall provide for a separate area for personnel decontamination.

All equipment and fixtures shall be maintained in clean condition. No storage of any equipment will be allowed in the decontamination section of the Contractor's facility.

1.4 ENGINEER'S EQUIPMENT

The Contractor shall supply a portable laptop computer, digital camera, and cellular telephone for use by the Engineer during the oversight of the construction. All equipment shall be provided to the Engineer prior to any work being conducted at the site. The equipment shall remain in the Engineer's possession until the Contractor achieves Substantial Completion of the work, at which time the equipment will be returned to the Contractor. The Contractor shall be responsible for the maintenance and repair of the equipment for the duration of the Contract. The Contractor shall supply replacement equipment to the Engineer should any of the equipment become unusable for any period of time. The equipment must meet the minimum requirements specified below.

A. Laptop Computer

1. Minimum computer technical specifications to include:

- a. Base Unit: 1.7 GHz, Intel® Core 2 Duo
 - b. Memory: 2 GB, 667 MHz DDR2 SDRAM
 - c. Ports: 3 USB 2.0
1 Firewire
1 Media card slot
 - d. Hard Drive: 160 GB
 - e. Operating System: Windows® Vista Home Premium
 - f. CD/DVD Drive: Including CD/DVD burner
 - g. Internal wireless Card to Access Internet, 802.11 a/b/g
2. Software to include Antivirus protection, Internet Explorer, Word, Word Perfect, Excel, Adobe Acrobat Standard – including PDF writer. All software shall be the latest version.
 3. Combination Printer/Scanner/Fax unit, including paper and imaging supplies.
 4. Owner's Manual and any other instructions for all equipment
 5. Protective Carrying Case
 6. All battery charging equipment
 7. Verizon Broadband Internet Account, with unlimited service

B. Digital Camera

1. Minimum camera technical specifications to include:
 - a. Resolution: 7.1 megapixel
 - b. 5X digital/optical zoom
 - c. 32 MB internal memory, 1 GB removable memory card
 - d. Built-in Flash
 - e. 2.4-inch LCD display
2. Owner's Manual and any other instructions.
3. All peripheral equipment required for downloading files to the laptop computer.
4. Battery supplies and/or battery charging equipment

5. Software as required to download and view the photograph files
- C. Cellular Telephone
1. Unlimited service for both local and long-distance calling
 2. Owner's Manual and any other instructions.
 3. Battery charging equipment

1.5 TRAFFIC CONTROL

A. The Contractor shall comply with all rules and regulations of the City, County and State regarding closing or restricting the use of public streets or highways and shall obtain all necessary permits. The Work shall be conducted as to assure the least possible obstruction to traffic and normal commercial pursuits. All obstructions within public roadways shall be protected by installing approved signs, barricades, and lights where necessary for the safety of the public. The convenience of the general public and residents and the protection of persons and property shall be provided for in an adequate and satisfactory manner.

B. When flagmen and guards are required by regulation, or when deemed necessary by the Engineer or Contractor for safety, they shall be furnished with approved orange wearing apparel and other regulation traffic control devices required by the appropriate Department of Transportation (DOT) or local agency.

C. Parking areas shall be designated and regulated to insure free entry and egress to and from the site. The Contractor shall control vehicular traffic on the site and insure safe and efficient operations. Proposed parking areas are subject to prior approval by the Engineer and Site Owner.

1.6 STAGING AREAS

A. The Contractor shall maintain a soil staging area until all soil staging activities have been completed. The staging area will be used to store contaminated soil as outlined in Section 02230. The staging areas shall be located and maintained so as to provide safe access for site personnel and vehicles. The staging area shall be located in an area inaccessible to the general public and site owner activities.

B. The Contractor shall ensure that all contaminated materials within the staging areas are properly drummed or contained to prevent the escape of contaminant vapors. No contaminated material shall be placed directly on the ground surface. Precautions shall be taken to prevent the migration of contaminants from the staging area by wind or by precipitation. Precipitation and surface runoff shall be properly collected or diverted from the staging area as soon as practicable. The staging area shall be protected from flooding by the use of swales and ditches.

C. Only limited space will be available at the site for the stockpile and storage of excavated soil, backfill, and other materials. Only areas approved by the Engineer and the site owner can be used for the storage of soil. Offsite storage of contaminated soil will not be allowed. Contractor

shall use all means necessary to work with the storage space available, including storing soil in rolloff boxes, limiting excavation rates, and conducting excavation work over the weekends when the business is not in operation.

1.7 SNOW AND ICE REMOVAL

A. The Contractor shall be responsible for management of snow and ice to maintain safe access for site personnel and vehicles for the duration of the Contract. The site is an active facility where snow and ice removal may be part of routine maintenance for the facility. However, the Contractor shall be responsible for all snow and ice removal necessary to perform his work and not interfere with the site owner's operations.

END OF SECTION 01050

SECTION 01051 SURVEY

1.1 DESCRIPTION

- A. The Contractor shall provide all necessary survey information and control required to construct all elements and phases of the project as shown on the plans and as specified herein, and to document the completed construction.

- B. The work shall include, but shall not necessarily be limited to, surveys for the preparation of record drawings, and surveys of all well and vacuum monitoring points. The locations and elevations of SVE extraction pipes also shall be surveyed. Locations and elevations, consistent with current, generally-accepted construction surveying practice.

- C. All available survey information has been provided on the Contract Drawings. The Contractor shall establish any additional control points that he may require or that are deemed by the Engineer to be necessary.

- D. The stake-out survey shall proceed immediately following the Contractor's mobilization and shall expeditiously progress to completion in a satisfactory manner.

- E. Record Drawings: All survey and related notes shall be performed in observance of and to facilitate the preparation of project record drawings as described in Section 01052.

- F. Surveyor: Surveyor shall be licensed in the State of New York. All survey submittals shall be signed by the New York State licensed professional surveyor.

1.2 SUBMITTALS

The Contractor shall submit the following information:

- A. Upon Engineer's request, certificates for inspection and calibration on survey instruments indicating certification that instruments are working to manufacturer's specifications.

- B. Description and recovery sketches of all permanent control survey monuments if different from or additional to those shown on the drawings.

- C. Data for all newly installed or modified wells or other subsurface structures, including: northing, easting, well depth, top of casing elevation, top of riser elevation, and ground elevation.

- D. Alignment, location and elevation of all below-grade permanent structures and utilities installed by the Contractor, such as pipe lines, wells, and cables, to prepare record drawings.

- E. All original surveyor field notes, records, and calculations used by the Contractor's surveyor shall be submitted no later than the date of acceptance of Work. The submittal shall include field notebooks. All data necessary to perform the work shall be submitted in a bound book, or other acceptable manner, organized chronologically and fully indexed. All computations performed to facilitate the surveying activities shall be provided in a 3-ring notebook, indexed chronologically.

2.1 SURVEY EQUIPMENT

A. All instruments, equipment, stakes and any other material necessary to perform the work satisfactorily shall be provided by the Contractor and shall be of types approved by the Engineer. Surveying instruments shall have been inspected and, if necessary, calibrated by the manufacturers' authorized service representative within six (6) months of Notice of Award. Certification letters stating that the equipment has been inspected and is working within manufacturers specifications, shall be provided to the Engineer upon request prior to the commencement of survey activities.

3.1 SURVEY AND STAKE-OUT

A. General: The Contractor shall, after approval of all required submittals, trim trees, brush and other interfering objects from survey lines in advance of all survey work to permit accurate and unimpeded work by the stake-out survey crew. The exact position of all work shall be established from control points or other approved points of similar nature shown on the drawings or designated by the Engineer. Any error, apparent discrepancy, or absence of control shown or required for accurately accomplishing the stake-out survey, shall be referred to the Engineer for interpretation.

B. Owner-Furnished Information: Permanent horizontal and vertical control points as provided by the Department, if available, shall be used by the Contractor.

C. Alterations and Preservation of Work: The Contractor shall be responsible for the accuracy of his surveyor's work and shall maintain all reference points and stakes throughout the life of the contract. Damaged or destroyed points, bench marks, stakes, or any reference points made inaccessible by the progress of the construction shall be replaced or transferred to the satisfaction of the Engineer, by the Contractor at no additional cost to the Owner. Any of the previously described points which may be subject to damage or destruction shall be transferred by the Contractor before they are damaged or destroyed. All new (transferred) horizontal points shall be tied to existing control by a closed traverse having a minimum closure at 1:20000. New vertical control points shall be set via a closed loop level run having a closure of not greater than $0.05 \times (\text{times}) m$, where m is the square root of the length of the level run in miles. All new control points shall be referenced by four (4) swing ties to acceptable objects and recorded. Any alterations or revisions in the reference points shall be so noted and the information submitted to the Engineer immediately. All computations necessary to establish the exact position of the work from control points, shall be made and preserved by the Contractor. All survey notes and other records necessary to accomplish the work shall be neatly made on a new bound hardcover field notebook acceptable to the Engineer.

D. Engineer's Inspection: The Engineer may at any time inspect all or any portion of the stake-out survey work or notes made by the Contractor. Any necessary corrections to the work shall be made immediately by the Contractor at no additional cost to the Department. Such checking by the Engineer shall not relieve the Contractor of any responsibility for the accuracy or completeness of his work.

END OF SECTION 01051

SECTION 01052 PROJECT RECORD DOCUMENTS

1.1 SUMMARY

This section includes:

Supplemental requirements to those stated in Section VIII, Article 5.19 for recording of field modifications made during construction, to be marked on a clean set of Contract documents by the Contractor (As-Built Documents) and for preparing Supplemental Record Drawings by the Surveyor (if required) to be submitted to the Department and Engineer. The As-Built Documents and Supplemental Record Drawings shall constitute the Project Record Documents.

1.2 SUBMITTALS

- A. As-Built Documents: Make available for review prior to submission of each monthly pay estimate.
- B. Project Record Documents: Submit preliminary and final as specified in Part 3 of this section.

1.3 AS-BUILT DOCUMENTS

- A. The Contractor shall clearly and neatly mark up in red ink one set of Contract Documents to show the record conditions.
- B. These record marked documents (As-Built Documents) shall be kept current and available on the job site at all times.
- C. All changes from the contract which are made in the work, or additional information which might be uncovered in the course of construction shall be accurately and neatly recorded as they occur by means of details and notes.
- D. The As-Built Documents shall be jointly inspected for accuracy and completeness by the Engineer and a responsible representative of the Contractor prior to submission of each monthly pay estimate.
- E. The documents shall include but not be limited to the following:
 - 1. Installations of any kind or description known to exist within the construction area. The locations shall include dimensions to permanent features.
 - 2. The location and dimensions of any changes within the design features of any kind or description known to exist within the construction area. The locations shall include dimensions to permanent features.
 - 3. Correct grade or alignment of roads, structures, utilities, or project components.
 - 4. Correct elevations.

5. Changes in details or dimensions.
6. The topography and grades of all drainage structures installed or affected as part of the project construction.
7. Additional information obtained from working drawings.
8. Where contract drawings or specifications allow options, only the option selected for construction shall be shown on the As-Built Documents.
9. Additional work ordered by the Engineer or Department.
10. Depths of various elements of foundation in relation to datum.
11. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvement.
12. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.

1.4 SUPPLEMENTAL RECORD DRAWINGS

- A. The Surveyor retained by the Contractor shall prepare Supplemental Record Drawings (if required).
- B. The Supplemental Record Drawings shall include but not be limited to the locations and elevations of all soil vapor extraction wells, vacuum monitoring points, piping, and underground utilities.

1.5 MAINTENANCE OF DOCUMENTS

- A. Maintain in Contractor's possession at the site (or otherwise immediately available), a clean, dry, legible and complete set of the following:
 1. Drawings
 2. Specifications
 3. Addenda
 4. Approved Shop Drawings
 5. Samples, Photographs
 6. Change Orders
 7. Other modifications to Contract Documents
 8. Test Records
 9. Survey Data
 10. Field Orders
 11. Other documents pertinent to Contractor's work

- B. Provide files and racks for proper storage and easy access.
- C. File in accordance with filing format of Construction Specification Institute (CSI), unless otherwise approved by the Engineer.
- D. Make documents available at all times for inspection by Engineer and Department.
- E. Record documents shall not be used for any other purpose and shall not be removed from Contractor's office without the Engineer's approval.

1.6 PRELIMINARY SUBMITTAL

- A. The Contractor shall prepare two (2) copies of As-Built Documents and the Surveyor shall prepare two (2) copies of Supplemental Record Drawings (if required). These documents (Project Record Documents) shall be submitted to the Engineer following substantial completion of the work (within 7 calendar days) for review and approval.
- B. These documents shall be neat, legible and accurate.
- C. If upon review, the documents are found to contain errors and/or omissions, they shall be returned to the Contractor and or Surveyor for corrections.
- D. The Contractor and/or Surveyor shall complete the corrections and return the drawings to the Engineer within 10 calendar days for subsequent review.

1.7 FINAL PROJECT RECORD DOCUMENT PREPARATION

- A. Upon approval of the As-Built Documents and Supplemental Record Drawings submitted, these Project Record Documents shall be modified by the Engineer, as necessary, to add any additional information which is pertinent to the project.
- B. Contractor shall supply one original and six (6) copies of the approved As-Built Documents and the Surveyor shall provide six copies of the Supplemental Record Drawings.
- C. These documents shall be part of the permanent records of this project.
- D. Each document to be submitted by the Contractor shall be lettered or stamped with the words "RECORD DOCUMENT" in 1-inch high printed letters followed by the name of the Contractor and Engineer.
- E. If required, the Supplemental Record Drawings to be submitted by the Surveyor shall:
 - Be stamped and signed by the Surveyor retained by the Contractor.
 - Be prepared on a 24" by 36" reproducible sheet with the same ledger and title block used for the contract drawings.
 - Locate all work referenced to the limits of the project area.

Have all locations referenced to the site horizontal coordinate system.

The grid coordinate system shall be shown on all record drawings.

Elevations shall be referenced to the established vertical control.

F. The Contractor shall provide all site surveys and drawings on CD-ROM in Adobe Acrobat (pdf) and AutoCad format, compatible with version 2007.

END OF SECTION 01052

SECTION 01053 SHOP DRAWING PROCEDURES

1.1 GENERAL

A. Shop Drawing procedures shall conform to requirements of Articles 5.23 – 5.29 of Section VIII, General Conditions and as described in this Section.

1.2 PROCEDURE

A. Submit Shop Drawings to Engineer. Submit additional copies to the Department at address(es) provided by Engineer.

B. A letter of transmittal shall accompany each submittal. If data for more than one Section of the Specifications is submitted, a separate transmittal letter shall accompany the data submitted for each Section.

C. At the beginning of each letter of transmittal, provide a reference heading indicating the following:

- 1. Owner's Name _____
- 2. Project Name _____
- 3. Contract No. _____
- 4. Transmittal No. _____
- 5. Section No. _____

D. If a Shop Drawing deviates from the requirements of the Contract Documents, Contractor shall specifically note each variation as required in article 5.26 of the General Conditions.

E. All Shop Drawings submitted for approval shall have a title block with complete identifying information satisfactory to Engineer.

F. All Shop Drawings submitted shall bear the stamp of approval and signature of Contractor as evidence that they have been reviewed by Contractor. All Shop Drawings submitted shall bear the certification required in article 5.23 of the General Conditions. Submittals without this stamp of approval will not be reviewed by Engineer and will be returned to Contractor. Contractor's stamp shall contain the following minimum information:

Project Name: _____

Contractor's Name: _____

Date: _____

-----Reference-----

Item: _____

Specifications: _____

Section: _____

Page No.: _____

Para. No.: _____

Drawing No.: _____ of _____

Location: _____

Submittal No.: _____

Approved By: _____

G. A number shall be assigned to each submittal by Contractor starting with No. 1 and thence numbered consecutively. Resubmittals shall be identified by the original submittal number followed by the suffix "A" for the first resubmittal, the suffix "B" for the second resubmittal, etc.

H. Contractor shall initially submit to Engineer a minimum of 6 copies of all submittals that are on 8-1/2-inch by 11-inch or smaller sheets, and one unfolded copy for all submittals on sheets larger than 8-1/2-inch by 11-inch. The Department shall receive two copies of each submittal.

I. After Engineer completes his review, Shop Drawings will be marked with one of the following notations:

1. Approved.
2. Approved as Noted.
3. Resubmit with Revisions.
4. Disapproved.

J. If a submittal is acceptable, it will be marked "Approved" or "Approved as Noted". Two prints or copies of the submittal will be returned to Contractor, two prints or copies will be forwarded to the Department and two prints or copies will be retained by the Engineer (one in the field office).

K. Upon return of a submittal marked "Approved" or "Approved as Noted," Contractor may order, ship or fabricate the materials included on the submittal, provided it is in accordance with the corrections indicated.

L. If a Shop Drawing marked "Approved as Noted" has extensive corrections or corrections affecting other Drawings or Work, Engineer may require that Contractor make the corrections indicated thereon and resubmit the Shop Drawings for record purposes. Such drawings will have the notation, "Approved as Noted - Resubmit."

M. If a submittal is unacceptable, 2 copies will be returned to Contractor with one of the following notations:

1. "Resubmit with Revisions"
2. "Disapproved"

N. Upon return of a submittal marked "Resubmit with Revisions", Contractor shall make the corrections indicated and repeat the initial approval procedure. The "Disapproved" notation is used to indicate material or equipment that is not acceptable. Upon return of a submittal so marked, Contractor shall repeat the initial approval procedure utilizing acceptable material or equipment.

O. Any related Work performed or equipment installed without an "Approved" or "Approved as Noted" Shop Drawing will be at the sole responsibility of the Contractor.

P. Shop Drawings shall be submitted well in advance of the need for the material or equipment for construction and with ample allowance for the time required to make delivery of material or equipment after data covering such is approved. Contractor shall assume the risk for all materials or equipment which are fabricated or delivered prior to the approval of Shop Drawings. Materials or equipment will not be included in periodic progress payments until approval thereof has been obtained in the specified manner.

Q. Engineer will review and approve or disapprove Shop Drawings and samples within 14 days of receipt from Contractor. The Engineer will process all submittals promptly, but a reasonable time should be allowed for this, for the Shop Drawings being revised and resubmitted, and for time required to return the approved Shop Drawings to Contractor.

R. It is Contractor's responsibility to review submittals made by his suppliers and Subcontractors before transmitting them to Engineer to assure proper coordination of the Work and to determine that each submittal is in accordance with his desires and that there is sufficient information about materials and equipment for Engineer to determine compliance with the Contract Documents. Incomplete or inadequate submittals will be returned for revision without review.

S. Contractor shall furnish required submittals with complete information and accuracy in order to achieve required approval of an item within two submittals, in accordance with Article 5.27.3 of Section VIII, General Conditions. All costs to Engineer involved with subsequent submittals of Shop Drawings, Samples or other items requiring approval, will be backcharged to Contractor, at the rate equal to the Engineer's charges to the Department under the terms of the Engineer's agreement with the Department. In the event Contractor fails to pay such costs within 30 days after receipt of an invoice from Department, funds will be withheld from payment requests and at the completion of Work, a Change Order or proposed Change Order will be issued incorporating the unpaid amount, and Department will be entitled to an appropriate decrease in Contract price. In the event that Contractor

requests a substitution for a previously approved item, all of Engineer's costs in the reviewing and approval of the substitution will be backcharged to Contractor unless the need for such substitution is beyond the control of Contractor.

END OF SECTION 01053

SECTION 01600 OPERATION AND MAINTENANCE MANUAL

1.1 GENERAL

The Contractor shall develop and implement an Operation and Maintenance Manual to ensure proper operation of the SVE remedial systems, and to assist in continued system operation following remedial system operation turn-over to the Department.

This section describes the minimum requirements for preparation of the Operation and Maintenance Manual, provides minimum Contractor performance requirements, system progress monitoring requirements, and water and air analytical sampling requirements.

The Department and the Engineer will review the Operation and Maintenance Manual for acceptability for the remedial system safe and efficient operation.

1.2 OPERATION AND MAINTENANCE MANUAL

The Operation and Maintenance (O&M) Manual is a deliverable product of this project.

A. The Contractor shall prepare one O&M manual that covers the new SVE system installed as part of this contract, as well as the existing SVE system already located at the site. The new O&M manual prepared by the Contractor shall be one cohesive document, incorporating the existing information with the information for the new system. The current O&M manual for the existing SVE system will be provided to the Contractor. All requirements outlined below refer to the combined manual for both systems (existing and new).

B. Submit three copies bound in 8-1/2 x 11 inch (216 x 279 mm) text pages, three D side ring capacity expansion binders with durable plastic covers. Also submit one electronic copy (pdf) of the final approved O&M Manual.

C. Prepare binder covers with printed title "OPERATION AND MAINTENANCE", title of project, and subject matter of binder when multiple binders are required.

D. Contents: Prepare a Table of Contents for each volume, with each Product or system description identified, print on 24 pound white paper.

E. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.

F. Part 1:

Directory, listing names, addresses, and telephone number of Engineer, Contractor, Subcontractors, and major equipment suppliers. Also include in Part 1 the following:

1. Purpose of the Treatment System.
2. Operation and Managerial Responsibility.

3. Discharge Permits and Operating Standards.
4. Overall System Description
5. Description of Individual Treatment Processes.
6. Safety Inspections and Personal Protective Equipment.
7. On-Site Safety Facilities.
8. Confined Space Safety.

G. Part 2:

Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:

1. Significant design criteria.
2. List of equipment.
3. Parts list for each component.
4. Standard Operating Procedures.
5. Manufacturer's Operation and Maintenance Manuals.
6. System Trouble Shooting.
7. Scheduled Preventative Maintenance.
8. Unscheduled Maintenance and Repairs.
9. Maintenance Record Keeping.
10. Spare Parts Records.
11. Recommended Lubricants and Spare Parts.
12. Required Tools.
13. Maintenance instructions for finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.

H. Part 3:

Project documents and certificates, including the following:

1. Shop drawings and product data.
2. Air and water balance reports.
3. Certificates, i.e. material and equipment.
4. Photocopies of guarantees, warranties and bonds.
5. Record Drawings

2.01 Schedule

A. The Contractor shall submit the O&M Manual in stages based on the following:

1. An O&M manual outline shall be submitted to the Engineer and Department with the SVE system design submittals.
2. A draft O&M manual shall be submitted to the Engineer and Department prior to startup of the SVE system.
3. A draft final O&M manual shall be submitted to the Engineer and Department within one week following the start-up period.
4. The final O&M manual shall be submitted to the Engineer and Department prior to turnover of the system to the Department and as a requirement of Substantial Completion.

B. The Engineer and the Department will review and comment on each Contractor submittal. Agreed upon responses to all comments will be incorporated into the next version of the O&M manual.

END OF SECTION 01600

SECTION 01731 INSTRUCTION OF OPERATIONS AND MAINTENANCE PERSONNEL

1.1 GENERAL

- A. Contractor shall provide the services of a trained maintenance and support representative from the SVE system vendor to instruct Department's designated operations and maintenance personnel in the recommended operation and the preventive maintenance procedures for equipment specified in the equipment Sections.
- B. The qualifications of specialists shall be subject to approval by Engineer.
- C. Contractor shall coordinate these services at times acceptable to Department, with start-up and initial operations in a manner acceptable to Department and with the requirements of the specific equipment Sections.
- D. Manufacturer shall provide field training. All training shall be conducted at the site unless otherwise stated in the equipment Sections.
- E. Manufacturer shall allow any and all training sessions to be videotaped by Department.
- F. Instruction of Department's personnel shall commence only after the equipment has been started and acceptance tests made.

1.2 TRAINING SCHEDULE

- A. The Contractor shall provide a minimum of two days of training. Travel time and expenses are responsibility of the Contractor.

1.3 INSTRUCTION LESSON PLAN

- A. Manufacturer's proposed Lesson Plan shall detail specific instruction topics. Training aids to be utilized in the instruction shall be referenced and attached where applicable to the proposed Lesson Plan. "Hands-On" demonstrations planned for the instruction shall be described in the Lesson Plan. Indicate the estimated duration of each segment of the Lesson Plan.
- B. Instruction Lesson Plan shall include the following as a minimum:
 - 1. Equipment Operation:
 - a. Describe equipment's operating (process) function.
 - b. Describe equipment's fundamental operating principals and dynamics.
 - c. Identify equipment's mechanical, electrical and electronic components and features.

- d. Identify all support equipment associated with the operation of subject equipment (e.g., air intake filters, valve actuators, motors).
- e. Recommend standard operating procedures to cover start-up, routine monitoring and shut-down of the equipment.

2. Detailed Component Description:

- a. Identify and describe in detail each component's function.
- b. Where applicable, group related components into subsystems. Describe subsystem functions and their interaction with other subsystems.
- c. Identify and describe in detail equipment safeties and control interlocks.

3. Equipment Preventive Maintenance (PM):

- a. Describe PM inspection procedures required to:
 - 1) Perform an inspection of the equipment in operation.
 - 2) Spot potential trouble symptoms and anticipate breakdowns.
 - 3) Forecast maintenance requirements (predictive maintenance).
- b. Define the recommended PM intervals for each component.
- c. Provide lubricant and replacement part recommendations and limitations.
- d. Describe appropriate cleaning practices and recommend intervals.
- e. Identify and describe the use of special tools required for maintenance of the equipment.
- f. Describe component removal/installation and disassembly/ assembly procedures.
- g. Perform at least two "hand-on" demonstrations of preventive maintenance procedures.
- h. Describe recommended measuring instruments and procedures, and provide instruction on interpreting alignment measurements, as appropriate.
- i. Define recommended torquing, mounting, calibration and/or alignment procedures and settings, as appropriate.
- j. Describe recommended procedures to check/test equipment following a corrective repair.

4. Equipment Troubleshooting:

- a. Define recommended systematic troubleshooting procedures.
- b. Provide component specific troubleshooting checklists.
- c. Describe applicable equipment testing and diagnostic procedures to facilitate troubleshooting.

1.4 TRAINING AIDS

A. The manufacturer's instructor shall incorporate training aids as appropriate to assist in the instruction. As a minimum, the training aids shall include text and figure handouts. Other appropriate training aids are:

1. Audio-Visual Aids (e.g., Power Point® films, slides, videotapes, overhead transparencies, posters, blueprints, diagrams, catalogue sheets).
2. Equipment cutaways and samples (e.g., spare parts and damaged equipment).
3. Tools (e.g., repair tools, customized tools, measuring and calibrating instruments).

B. The manufacturer's instructor shall utilize descriptive class handouts during the instruction. Photocopied class handouts shall be good quality reproductions. Class handouts should accompany the instruction with frequent reference made to them. Customized handouts developed especially for the instruction are encouraged. Handouts planned for the instruction shall be attached with the manufacturer's proposed Lesson Plan.

1.5 "HANDS-ON" DEMONSTRATIONS

A. The manufacturer's instructor shall present "hands-on" demonstrations of operations and maintenance of the equipment for each scheduled group. The proposed "hands-on" demonstrations should be described in the manufacturer's proposed Lesson Plan.

END OF SECTION 01731

SECTION 02220 EARTHWORK

1.1 GENERAL

A. This item shall include all earthwork associated with the site, including excavation, trenching, and backfilling. The Contractor shall provide the labor, equipment, and materials necessary to perform all of the work as outlined in this specification section. The Contractor is responsible for any and all permits necessary for the completion of this work.

B. The Contractor shall be responsible to determine the construction and existing condition of any basements or foundations of adjacent buildings or other structures that may be impacted by the work at the site by visual inspection, including but not limited to excavation and well installation activities. Any pre-existing conditions with the structures shall be noted by the Contractor to the Engineer prior to the beginning of any excavation work at the site. The Contractor shall make all arrangements determined to be necessary to protect the existing structures at the site and on adjacent properties.

C. The Contractor is responsible for the repair of any damage to offsite properties caused by actions of the Contractor or any subcontractors. This shall include, but not be limited to, landscaping, repairing, and reseeding damaged areas and replacing of pavement.

D. The Contractor shall relocate all existing materials and equipment on the site (e.g., dumpsters, pallets, drums, garbage, compactor, etc.) as required for the performance of the work. All materials and equipment shall be replaced to its original location, or as directed by the owner, after the work is complete.

1.2 SITE GRADING

A. The Contractor shall backfill, grade, and restore all disturbed areas of the site to pre-excavation elevations and conditions unless otherwise directed by the Engineer.

1.3 EXCAVATION AND TRENCHING

A. Damage to the buildings, structures or roads from the Work shall be repaired at Contractor's expense.

B. All excavation and trenching activities shall be coordinated on a daily basis with the Engineer and the site occupant. A minimum 24-hour notice shall be given for all proposed work.

C. The Contractor shall not allow soil to be tracked out of the Work Areas off site at any time during the Project. Visible soil tracks on streets will not be allowed and the Contractor will be responsible for clean up at the direction of the Engineer at the Contractor's expense. The Contractor shall take sufficient precautions to prevent loose soils from adhering to tire treads, wheel wells, etc.

D. Only limited space will be available at the site for the stockpile and storage of excavated soil, backfill, and other materials. Only areas approved by the Engineer and the site owner can be used for the storage of soil. Offsite storage of contaminated soil will not be allowed. Contractor shall use all means necessary to work with the storage space available, including storing soil in rolloff boxes, limiting excavation rates, and conducting excavation work over the weekends when the business is not in operation.

E. The Contractor shall completely cover the staged soil and debris with polyethylene at the conclusion of the excavation or at the end of the day, whichever is sooner, to protect the excavated area from the weather. Polyethylene is to be anchored or weighted down as necessary to prevent loosening by wind. The Contractor shall be responsible for keeping excavations free of standing water. The Contractor shall maintain the integrity of the cover at all times and is responsible for immediate repair as necessary. The Contractor shall not move soil and debris when it is raining. The soil and debris shall remain covered during rain to minimize water accumulating in the soil. All soil staging areas must be approved by the Department and the Engineer prior to their placement.

F. The Contractor shall furnish and utilize steel plates, temporary fencing, and other methods as required to cover holes and trenches and to allow operations at the site to continue unimpeded. The Contractor shall ensure that all such measures are adequate to support the loading from traffic at the site, as well as to ensure the safety of all persons at the site.

G. The Contractor shall furnish a description of the earth moving and excavation equipment that is proposed for use in performing the work, and the proposed methods of excavation.

H. The Contractor shall submit the proposed method of dewatering if required for excavation. All water shall be handled in accordance with Section 02230.

I. The Contractor shall identify all underground and overhead utilities and structures to be maintained. Location of the utilities and structures shall be verified by the agencies of concern prior to breaking ground. The locations of onsite utilities are not known. The Contractor shall exercise due diligence and care in performing all work.

J. If the Contractor elects to use braced or sheeted excavation, the Contractor shall specify the proposed sheet pile material, thickness, and method of supporting the excavation. The drawings shall indicate all dimensions of walling and bracing, and tiebacks or anchors. Calculations prepared by an Engineer licensed in the State of New York shall be submitted. Any sheet piling used in the excavations shall be removed upon completion of the work.

K. Special care shall be taken to avoid damage wherever excavation is being done. The width of such excavation shall not exceed the width actually necessary for the proper prosecution of the work. All excavations shall be of such width for the proper and expeditious progress of the work and to permit the laying and readjusting of all sewers, mains, utilities, and other subsurface structures encountered along the route and contiguous to the project.

L. Excavated slopes which are unstable or subject to slides shall be flattened, cutback or supported. The Contractor is solely responsible for compliance with all OSHA requirements. Contractor shall meet all applicable regulations as set forth in Title 29 Code of Federal Regulations, Part 1926, Safety and Health Regulations for Construction (OSHA). All Municipal, County, State and/or National Ordinances, regulations or laws shall be observed in connection with sheeting, shoring and bracing work. The requirements and minimum standards for sheeting are set forth in the Industrial Code - Rule No. 23 promulgated by the State of New York, Department of Labor and OSHA. Blasting will not be permitted as an excavation method.

M. The Contractor shall control vapors, odor and dust originating during excavation, stockpiling, staging activities, loading and other operations under this Contract. Methods may include plastic

sheeting or foam suppression and must receive prior approval by the Engineer. All excavated material shall be handled in accordance with Section 02230.

1.4 BACKFILLING

A. The Engineer must approve all areas for backfill. The Contractor shall utilize excavated soil and drill cuttings as backfill to the extent practical and as directed by the Engineer. Railroad ties, rails, and other waste (non-soil) materials can not be used as backfill and shall be taken off-site for disposal. Offsite disposal of contaminated material will be limited to only excess soil and soil containing material unacceptable for compaction. If additional backfill is needed, certified clean backfill material obtained from offsite sources can be used. Requirements for backfill are included in Section 02221. Requirements for compaction are outlined in Section 02222.

B. Fill material may be stockpiled on site in an uncontaminated area or other means as approved by the Engineer and the site occupant. Only limited storage space will be made available. The fill shall be adequately covered to prevent runoff, in a manner satisfactory to the Engineer.

1.5 EROSION CONTROL

A. The Contractor shall be responsible for the control of erosion and sedimentation at the remedial project site. The Contractor shall take the measures necessary to ensure that all runoff from the project site is sufficiently sediment free according to all applicable New York State and local guidelines. Measures shall also be taken to prevent ponding of rainwater in all areas of the project site.

END OF SECTION 02220

SECTION 02221 BACKFILL

1.1 SUMMARY

The work specified in this section consists of the labor, equipment, tools, materials, and services needed to perform all backfilling as described herein or shown on the Contract Drawings.

1.2 DESCRIPTION

A. Work included in this Section:

1. Backfilling after excavation of contaminated soil.
2. Backfilling trenches.

1.3 SUBMITTALS

For each material proposed, notify the Engineer of the source of material and furnish for approval a certified gradation analysis.

1.4 QUALITY ASSURANCE

A. Referenced standards: Comply with the applicable provisions and recommendations of the following, except as otherwise shown or specified.

1. ASTM D2487 - Classification of Soil.
2. ASTM 06898 - Standard Proctor Compaction.
3. ASTM D854, D2216 - Physical Property of Soils
4. ASTM D4318 - Atterburg Limits.
5. ASTM D136 - Method for Sieve Analysis of Fine and Coarse Aggregates.

B. The DEPARTMENT and the ENGINEER reserve the right to inspect proposed sources of off-site granular material and to order such tests of the materials deemed necessary to ascertain its quality and gradation of particle size. The CONTRACTOR shall, at his own expense, engage an approved testing laboratory to perform such tests, and submit certified test results to the ENGINEER. If similar tests of the material from a particular source were performed previously, submit results of these tests to the ENGINEER for consideration.

C. No materials shall be used on this project for fill, backfill, subbase, or other purpose until approval is obtained from the ENGINEER. Only material from approved sources shall be used.

D. Off-site material shall be sampled for full TCL analysis, and the results provided to the ENGINEER prior to delivery. Sampling frequency shall be one sampler per 1,000 cubic yards of material. Material shall comply with 6NYCRR Part 375-6.8 (a). Material not in compliance with 6NYCRR Part 375-6.8 (a) shall not be approved by the Engineer.

2.1 CLEAN OFF-SITE MATERIALS

A. The intent of the excavation and backfill activities is to reuse as much excavated soil as possible for backfill. The Engineer will determine acceptability of the excavated material for backfill. Only if there is insufficient soil from on-site excavation will the Contractor be required to bring in material from off-site sources.

B. Additional off-site material required for fill or backfill of excavations shall be natural material, from off-site sources, free from trash, debris, deleterious materials, snow, or ice.

C. Structural backfill (crushed aggregate) soil shall conform to NYSDOT for Type 4 granular fill materials. Materials furnished for Type 4 shall consist of stone, or sand and gravel or blends of these materials. Materials furnished shall be well graded from fine to coarse and shall be free of mud, debris, organic matter or other deleterious materials.

Gradation for Type 4 structural fill/crushed aggregate shall conform to:

Sieve Size	Percent Passing
Designation	By Weight
2 inch	100
No. 40	20 - 65
No. 200	0-10

D. Unsatisfactory Materials: Unsatisfactory materials shall be materials that do not comply with the requirements of satisfactory materials. Unsatisfactory materials include but are not limited to those materials containing roots and other organic matter, trash, debris, frozen materials, stones larger than 2 inches, and materials classified in ASTM 02487 as PT, OH, and OL. Unsatisfactory materials also include man-made fills, or refuse.

3.1 GENERAL BACKFILLING REQUIREMENTS

A. Verify that fill materials to be used are acceptable to that specified. Any crushed stone stockpiles which have undergone excessive particle segregation shall be removed prior to backfilling.

B. Verify that all subsurface installations for the project have been inspected and are ready for backfilling.

- C. Generally, compact subgrade to density requirements for subsequent backfill materials. Cut out soft areas of subgrade not capable of in-situ compaction. Backfill with a material as specified in Part 2.1 (above) and compact to density equal to or greater than requirements for subsequent backfill material.
- D. Backfill spaces shall be inspected prior to backfilling operations and all unsuitable materials, including sheeting, bracing forms and debris, shall be removed. Remove all water, snow, and ice and debris from surfaces to accept backfill material. No backfill shall be placed against foundation walls of structural members unless they are properly shored and braced or of sufficient strength to withstand lateral soil pressures.
- E. Backfill material shall be inspected prior to placement and all roots, vegetation, organic matter, or other foreign debris shall be removed. Stones larger than 2 inches in any dimension shall be removed or broken. Stones shall not be allowed to form clusters with voids.
- F. Backfilling shall be started as soon as practicable as approved by the Engineer. Backfilling shall be carried on expeditiously thereafter. Backfill shall be started at the lowest section of the area to be backfilled. Natural drainage shall not be obstructed at any time.
- G. No backfill material shall be placed on frozen ground nor shall the material itself be frozen or contain frozen soil fragments when placed unless approved by the Engineer. No calcium chloride or other chemicals shall be added to prevent freezing. Material incorporated in the backfilling operation which is not in satisfactory condition shall be subject to rejection and removal at the Contractor's expense.
- H. Backfill material shall not be placed when moisture content is more than two percent above optimum or is otherwise too high to allow proper compaction. When material is too dry for adequate compaction, water shall be added to the extent necessary. Maintain within two percent of optimum moisture content of backfill materials to attain required compaction density.
- I. All areas shall be backfilled to required contours, grades, and elevations.
- J. Hydraulic compaction by ponding or jetting will not be permitted.
- K. Compaction using heavy equipment will not be permitted.
- L. Place and compact fill materials in continuous layers to meet appropriate requirements of Section 02222, Compaction.
- M. Employ a placement and compaction method consistent with Section 02222 that does not disturb or damage adjacent walls, utilities, or underground conduits.
- N. Remove surplus backfill materials from site.

3.2 FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed under provisions of Section 01010.

- B. Tests and analysis of fill material will be performed in accordance with this section.
- C. Compaction testing will be performed in accordance with Section 02222.
- D. If tests indicate the Work does not meet the specified requirements, the Contractor shall remove, replace and retest the work at his own expense.

3.3 PROTECTION OF FINISHED WORK

- A. Regrade and recompact fills subjected to vehicular traffic.

END OF SECTION 02221

SECTION 02222 COMPACTION

1.1 SUMMARY

The work specified in this Section consists of the labor, equipment, tools, materials, and services needed to perform all compaction as described herein or shown on the Contract Drawings.

1.2 DESCRIPTION

A. Work included in this section:

1. Compact all filled and backfilled material as specified.

1.3 QUALITY ASSURANCE

A. The CONTRACTOR shall provide in place moisture-density testing for compaction of material to verify the quality of the work.

B. The CONTRACTOR shall adopt compaction methods which will produce the degree of compaction specified herein, prevent subsequent settlement, and provide adequate support for the structures and piping to be placed thereon, or therein, without damage to the new or existing facilities.

1.4 SUBMITTALS

A. Submit in writing a description of the equipment and methods proposed to be used for compaction.

B. Submit samples of materials to be compacted on the project to the testing laboratory for analysis prior to beginning compaction.

C. Submit copies of all compaction test reports. The test reports shall include the test methods used, results, a narrative of tests conducted, locations, elevations, material tested, equipment used, the name of the technician conducting the tests, and a signed certification from the laboratory.

2.1 PRODUCTS (NOT USED)

3.1 PREPARATION

A. Brace walls and slabs of structures to support surcharge loads and construction loads imposed by compaction operations.

B. Each layer of fill or backfill shall be compacted to the specified density the same day it is placed.

1. The moisture content of backfill or fill material shall be adjusted, if necessary, to achieve the required degree of compaction.

C. Compact each lift in accordance with Table 02222-1 (attached at end of this section).

D. Match compaction equipment and methods to the material and location being compacted in order to obtain the specified compaction, with consideration of the following guidelines:

1. Vibratory compaction is preferred for dry, granular materials.
2. Hand compaction equipment such as impact rammers, plate or small drum vibrators, or pneumatic buttonhead compactors should be used in confined areas.
3. Hydraulic compaction by pounding or jetting will not be permitted except in unusual conditions, and then only upon written approval by the Engineer and after a demonstration of effectiveness.
4. Backhoe mounted hydraulic or vibratory tampers are preferred for compaction of backfill in trenches over 4 feet in depth. The upper 4 feet shall be compacted as detailed above or with hand-guided or self propelled vibratory compactors or static rollers.
5. For plastic pipelines (PVC, PE or PB) do not compact directly over the center of the pipe until the backfill has reached 2 feet above the top of the pipe.
6. Heavy equipment shall not be used for compaction.

3.2 FIELD QUALITY CONTROL

A. Material Testing

1. Testing will be done by a qualified, independent testing laboratory. The CONTRACTOR shall pay for all compaction testing performed by the testing laboratory.
2. The CONTRACTOR shall aid the ENGINEER in obtaining representative material samples to be used in testing.
3. For each material which does not meet specifications, the CONTRACTOR shall reimburse the Department for the cost of the test and shall supply an equal quantity of acceptable material, at no additional compensation.
4. The CONTRACTOR shall anticipate these tests and incorporate the time and effort into his procedures.

B. Compaction Testing

1. Testing (ASTM D698 Standard Proctor Test) shall be in accordance with Table 02222-1.
2. The CONTRACTOR shall dig test holes and provide access to all backfill areas at no additional compensation when requested by the ENGINEER if an area has been covered without approval or is suspected of not meeting the specifications.

3. For each test which does not meet the specifications, the CONTRACTOR shall pay for the cost of the test and shall replace all material included in that lift or sector with acceptable material and compact to specification, at no additional compensation.
4. The CONTRACTOR shall anticipate these tests and incorporate the time and effort into his procedures.
5. Nuclear moisture density testing by "probe" methods will be acceptable for compacted layers not exceeding 8 inches of thickness.
6. Only certified personnel will conduct nuclear testing.

C. Alternate Methods of Compaction - The CONTRACTOR may employ alternate methods of compaction if the desired degree of compaction can be successfully demonstrated to the ENGINEER'S satisfaction.

3.3 PROTECTION

A. Prior to terminating work for the day, the final layer of compacted fill shall be rolled with a smooth-drum roller if necessary to eliminate ridges of soil and depressions left by tractors or equipment used for compaction or installing the material.

B. As backfill progresses, the surface shall be graded so as to drain during incidence of rain such that no ponding of water shall occur on the surface of the fill.

C. The CONTRACTOR shall not place a layer of fill on snow, ice or frozen soil. Unsatisfactory materials shall be removed prior to fill placement.

TABLE 02222-1

MINIMUM COMPACTION REQUIREMENTS

Construction Element	Maximum Compaction Layer Thickness (inches)	Minimum Compaction	Frequency of Testing
Backfill excavation of contaminated soil	12	95%	Every 200 cubic yards
Trench bedding	6	95%	Every 100 linear feet of trench
Trench backfill	12	95%	Every 100 linear feet of trench
Fill under slabs-on-grade, around structures and footings	8	100%	Every 100 cubic yards

END OF SECTION 02222

SECTION 02230 CONTAMINATED MATERIALS

1.1 GENERAL

A. The Contractor shall provide the labor, equipment, and materials necessary for handling, storage, treatment, and disposal as required for debris, soil, drill cuttings, personal protective equipment and other disposables, liquids, decontamination water, and other solid or residual waste generated by the work. The Contractor is responsible for any and all permits necessary for the completion of this work, including any requirements of the City of New York or Queens County. For off-site transportation, the Contractor shall comply with the regulations of those states through which the Contractor plans to transport the materials.

B. All equipment supplied shall be in good repair and good working condition. Equipment and machinery delivered to the site, including drill rigs and haul trucks, that have visible oil or hydraulic fluid leaks will not be allowed on site until satisfactorily repaired. The Contractor is responsible for the cleanup of any oil or hydraulic fluid spills at the Contractor's expense.

 If off-site disposal is deemed necessary, the Contractor shall meet the requirements of Subsection 1.8 for transportation and disposal. Vehicles used to haul waste materials both on and off-site shall be designed, equipped, operated and maintained to prevent leakage, spillage or airborne emissions during transport. All vehicles leaving the Exclusion Zone shall be decontaminated in the Contamination Reduction Zone prior to leaving the site, and a decontamination certificate, signed by the Contractor's Health and Safety Officer or his designated representative, shall be provided to the Engineer stating that:

1. No soil or other material is adhering to the vehicle body, tires or undercarriage.
2. The vehicle is not leaking or dripping liquids.
3. The contents of the vehicle are covered or completely enclosed so as not to permit potentially fugitive particulate matter to become airborne.

C. The Contractor shall complete all required manifest forms and Bill of Lading forms for the Department for proper transportation and disposal of materials off site. Since there is no responsible party to act as the generator at this inactive hazardous waste site, the generator identification number NYR 000145284 shall be used, and the Engineer shall sign all manifests for proper shipping. However, the Contractor shall be responsible and will be held accountable for assuring that all sampling, analysis, transportation, and disposal requirements of the Treatment, Storage and Disposal Facility (TSDF) or Solid Waste Management Facility (SWMF), federal government and state governments are complied with and properly documented. All work shall be performed in compliance with applicable provisions of the OSHA, US Department of Transportation, the State of NY, and municipal and regulatory agencies regarding the handling, transport, and disposal of such waste.

D. Prior to shipment of hazardous wastes off the site, if applicable, the Contractor shall confirm by written communication from the designated TSDF or SWMF that it is authorized, has the capacity, and will provide or assure that the ultimate disposal method is followed for the particular waste on the manifest. Additionally, the Contractor shall confirm by written communication from the designated transporter(s) that they are authorized to deliver the manifested waste to the designated TSDF or SWMF.

E. The Contractor shall be responsible for all sampling and analyses as may be required by disposal facilities for disposal of debris and other material (including soil) under this Contract. All sampling will be conducted with the Engineer present.

F. In addition to the sampling required by the disposal facility, the Engineer may direct the Contractor to collect and analyze additional samples for disposal characterization. Additional samples will be required if, in the opinion of the Engineer, the existing samples are not representative of the material being considered for disposal. This determination will be based on visual observations, PID readings, odor, and source of the material. The Contractor shall be responsible for all costs associated with the collection, handling, shipping, and analysis of these additional samples.

1.2 DEBRIS

A. Handling and relocation of debris may be required to implement remedial measures at the site. The Contractor shall handle and relocate debris as required for performance of the work.

B. All railroad ties, rails, and other large debris uncovered during the excavation activities shall be removed from the site and disposed at an appropriate facility. All such materials shall be handled as if contaminated, including transportation, handling, and disposal. Payment for disposal of these materials shall be under Pay Item UC-9.

1.3 SOIL AND SEDIMENTS

A. This item includes all excavation, stockpiling, staging, sampling, analyses, transportation, treatment, and disposal costs for soil, sediments, asphalt, and other solid materials. All soil shall be properly staged in accordance with Section 02220 - Earthwork and the Contractor's approved Materials Handling Plan.

B. Ultimate disposal for hazardous soil will be to a permitted Treatment, Storage, and Disposal Facility. Final disposal will be subject to Resource Conservation and Recovery Act (RCRA), Toxic Substances Control Act (TSCA) and Federal/State regulations and specific requirements of the Treatment, Storage and Disposal Facility (TSDF). The Contractor shall be responsible to obtain the specific requirements which the TSDF will require for proper disposal into one of their Solid Waste Management Units and the cost shall be included in this item.

Sediments generated by decontamination activities or other construction activities shall be included in this item. These sediments shall be managed in accordance with the provisions of this section.

1.4 DRILL CUTTINGS

A. Drill cuttings generated by remedial activities that are not used as backfill as outlined in Section 02220 shall be disposed of as outlined under Subsection 1.3 of this section.

B. The Contractor will be responsible for sampling, analyzing, handling, treating, and disposing of all drill cuttings. All drums shall be disposed of in accordance with the Contractor's approved Materials Handling Plan.

1.5 PERSONAL PROTECTIVE EQUIPMENT

A. Reference Section X – Standard Specifications

1.6 CONTAMINATED WATER

A. Contaminated water shall include but not be limited to: SVE condensate, surface water or groundwater in excavations, and decontamination water. Costs involving the containment, analysis, transportation, and disposal of water that collects within the excavation are the responsibility of the Contractor.

B. All contaminated water shall be temporarily stored and staged on site, in the designated Contractor's area. All water shall be taken off site for disposal at a Department permitted facility. No onsite treatment and discharge of the water will be allowed.

1.7 RESIDUAL WASTE

A. The Contractor shall be responsible for handling, storage, sampling, analysis, transportation and disposal of all residual waste generated by the construction or operation of the remediation system. Residual wastes will include exhausted vapor phase activated carbon as well as condensate. Solids shall be disposed of in accordance with Subsection 1.3 and liquids in accordance with Subsection 1.6.

1.8 TRANSPORTATION AND DISPOSAL

1.8.1 Description

A. The Contractor shall properly transport and dispose of all items, including solid and liquid hazardous and nonhazardous wastes removed from the site, to appropriate disposal facilities. This includes existing wastes as well as the wastes generated by the Contractor. The Contractor shall be responsible and will be held accountable for assuring that all sampling, analysis, transportation, and disposal requirements of the TSDF, SWMF, POTW, reclamation or salvage facilities, federal, state, and local governments are complied with and properly documented.

1.8.2 Permits And Regulations

A. The Contractor shall comply with all federal, state, and local regulations regarding transportation and disposal of hazardous and nonhazardous material. These include, but are not limited to:

- Trucks used for transportation of material for disposal off-site shall be permitted pursuant to 6 NYCRR Part 364;
- Vehicle operator possession of a commercial driver's license with hazardous materials endorsement (if applicable);
- Registration of vehicle as a hazardous waste carrier (if applicable);
- Utilization of shipping papers and/or hazardous waste manifest (40 CFR 262.20);
- Proper marking and placarding of vehicles;

- Placement of emergency response procedures and emergency telephone numbers in vehicle, and operator familiarity with emergency response procedures (see Minimum Health and Safety Requirements, attached); and
- Compliance with load height and weight regulations.

1.8.3 Materials And Equipment

A. All equipment supplied shall be in good repair and good working condition. Equipment and machinery delivery to the site, including haul trucks, that have visible oil or hydraulic fluid leaks, will not be allowed on site until satisfactorily repaired. The Contractor is responsible for the cleanup of any oil or hydraulic fluid spills at the Contractor's expense.

B. The Contractor shall not allow soil to be tracked off site at any time during the Project. Visible soil tracks on streets will not be allowed. The Contractor shall take sufficient precautions to prevent loose soils from adhering to tire treads, wheel wells, etc.

C. Trucks used for transportation of material for off-site disposal shall be water tight and permitted pursuant to 6 NYCRR Part 364. All trucks shall be covered prior to leaving the site.

1.8.4 Execution

A. **DECONTAMINATION:** Transport vehicles shall be decontaminated at the Decontamination Station (see Section 01040) upon leaving the Exclusion Zone at the site and again at the disposal facility as required.

B. **MEASUREMENT:** The transport vehicle shall be weighed at the disposal facility on a certified scale to determine the amount of material being removed from the site. A printed ticket verified by the disposal facility with the time, date, and net weight of material being disposed shall be given directly to the Engineer.

C. **TRANSPORTATION:** Materials shall be transported only at the times and by the routes indicated in the approved Transportation Plan, unless permission is received by the Engineer to do otherwise. The Contractor shall observe the legal load limits.

Prior to shipment of hazardous wastes off the site, the Contractor shall confirm by written communication from the designated TSDF that it is authorized, has the capacity, and will provide or assure that the ultimate disposal method is followed for the particular hazardous waste on the manifest. Additionally, the Contractor shall confirm by written communication from the designated transporter(s) that they are authorized to deliver the manifested waste to the designated TSDF or SWMF.

D. **SAMPLING:** The Contractor shall be responsible for all sampling of wastes to be disposed of as may be required by the disposal facility as well as additional samples as may be required by the Engineer.

END OF SECTION 02230

SECTION 02500 SITE RESTORATION

1.1 GENERAL

- A. The Contractor shall provide all required labor, equipment, materials, and supplies for site restoration.
- B. Any disturbance by the Contractor's operations to existing structures, pavement, utilities or other site features shall be repaired as specified herein or as approved by the Engineer.
- C. All waste pavement and concrete shall be disposed off-site by the Contractor at his expense.
- D. Related Sections:
 - 1. Section 02220 - Earthwork
 - 2. Section 02512 - Bituminous Paving
 - 3. Section 02513 - Crushed Stone and Gravel
- E. In restoring disturbed concrete and asphalt at the site, the Contractor shall ensure that the restored areas do not direct surface water towards the existing wells/vaults, and do not allow drainage into the structures. Final paving elevations shall all be flush with the top elevation of the well road boxes and vaults. The final construction shall not present any trip hazards, and also shall be protected against damage from traffic, snowplows, and other activities at the site.

1.2 PAVEMENT RESTORATION

- A. Pavement removed, disturbed or damaged-by or as a result of performance of the Contract shall be repaired and replaced by the Contractor by a new and identical pavement.
- B. The pavement shall be cut with a Carborundum saw to give a uniform straight edge.
- C. The cut edges shall be seal coated prior to restoration.
- D. Restoration shall include a subbase course, coarse graded binder course, top course, and tack coat. Materials shall be New York State Department of Transportation (NYSDOT) standard specification construction materials suitable for heavy truck and bus traffic, or as approved by the Engineer.
- E. The minimum thickness of each course shall be 8 inch for the subbase, 4 inch binder, and 2 inch top. If the existing pavement is thicker than 14 inches, then the total thickness of the courses shall be identical to the existing pavement at the site.
- F. Courses shall be laid in one (1") lifts and compacted with a minimum two (2) ton roller or other means as approved by the Engineer.

- G. The Contractor shall apply a minimum of one (1) coat of sealer over the top lift.
- H. Pavement restoration required during cold months, after the shutdown of asphalt plants, shall be temporarily repaired using cold patch asphalt. The Contractor shall remove the cold patch and complete restoration of the pavement in the spring, at no additional cost to the Department.

1.3 CONCRETE RESTORATION

- A. Concrete removed, disturbed or damaged by or as a result of performance of the Contract shall be repaired and replaced by the Contractor be repaired and replaced by the Contractor by new and identical concrete.
- B. Restoration of existing concrete shall be performed by workmen experienced in this type of work. Application techniques shall be in strict accordance with the manufacturer's instructions. Restoration and resurfacing materials shall not be applied at temperatures below 45 degrees F, nor when the temperature is expected to fall below 45 degrees F within 48 hours.
- C. The Contractor shall define the areas of concrete removal prior to any work. The engineer shall approve the proposed cuts and concrete removal/restoration.
- D. The pavement shall be saw cut to give a uniform straight edge.
- E. Repair the concrete slabs in the following manner:
 - 1. Drill 1-inch diameter holes in the center of the slab, nine inches deep, and 15 degrees from the horizontal, on 12-inch centers.
 - 2. Clean drilled hole and slab edges of debris.
 - 3. Epoxy grout 18-inch long #6 reinforcing steel bar into the holes.
 - 4. Apply epoxy bonding agent to edges of slab.
 - 5. Pour 4,000 psi strength concrete or as equal to the existing concrete slab.
 - 6. Finish/coat the surface of the concrete consistent with the existing concrete.

END OF SECTION 02500

SECTION 02512 BITUMINOUS PAVING

1.1 GENERAL

A. Contractor shall provide all labor, materials, equipment and incidentals as shown, specified or required to furnish and install hot mix-hot laid bituminous paving. The Work includes the following:

1. Coarse graded binder course.
2. Fine graded top course.
3. Pavement marking.
4. Testing as specified.

B. Related Sections:

1. Section 02220 - Earthwork
2. Section 02500 - Site Restoration
3. Section 02513 - Crushed Stone and Gravel.

C. Tests:

1. The services of a qualified testing laboratory shall be engaged by Contractor to make tests and determine acceptability of the pavement materials. The laboratory shall be acceptable to Engineer.
2. Required Tests:
 - a. Refer to New York State Department of Transportation (NYSDOT) requirements.

D. Reference Standards: Comply with the applicable provisions and recommendations of the following, unless otherwise shown or specified.

1. Standard Specifications for Road Work of the State of New York.
2. Federal Specification (FS) TT-P-115, Paint, Traffic, Highway, White and Yellow.

E. Shop Drawings: Submit for approval the following:

1. Job mix formula proposed, giving complete data on materials, including source, location, percentages, temperatures, and all other pertinent data.

F. Material Certificates:

1. In lieu of laboratory reports required in the NYSDOT Standards, Contractor may submit certificates of compliance for the following:
 - a. Coarse and fine aggregates from each material source and each required grading.
 - b. Asphalt or tar cement for each penetration grade.
 - c. Job-mix design mixtures for each material or grade.
 - d. Density of uncompacted bituminous concrete.
 - e. Density of compacted bituminous concrete.
 - f. Density and voids analysis for each series of bituminous concrete mixture test specimens.
 - g. Bituminous concrete plant inspection.
2. Certificates that materials, mixtures and plant comply with Specification requirements.
3. Certificates signed by Contractor.

G. Weather Limitations: Use weather limitations in the NYSDOT Standards for the following:

1. Application of bituminous prime coats.
2. Construction of base and surface courses.

H. Grade Control: Establish and maintain the required lines and grades, including crown and cross-slope for each course during construction operations.

1.2 MATERIALS

- A. Aggregate, mineral filler, bitumen, and prime coat shall be in accordance with the State Standards.
- B. Aggregate includes stone, gravel, slag and sand.
- C. Mineral filler includes limestone dust, portland cement or other inert material.
- D. Bitumen includes asphalt and tar cement.
- E. Prime coat includes asphalt cutback, tar or asphalt emulsion.

1.3 BITUMINOUS-AGGREGATE MIXTURES

A. Job-Mix Criteria for driveways, parking lots, and roadways:

1. Provide job mix formulas as follows:

a. Top Course: NYSDOT Section 403-1 Type 7 Top

<u>Sieve Designation (Square Opening)</u>	<u>Percent Passing</u>
½ inch	100
1/4 inch	90-100
1/8 inch	45-70
No. 20	15-40
No. 40	8-27
No. 80	4-16
No. 200	2-6
Bitumen (percent)	6.0-8.0

b. Binder Course: NYSDOT Section 403-1 Type 3 Binder

<u>Sieve Designation (Square Opening)</u>	<u>Percent Passing</u>
1-1/2 inch	100
1 inch	95-100
½ inch	70-90
1/4 inch	48-74
1/8 inch	32-62
No. 20	15-39
No. 40	8-27
No. 80	4-16
No. 200	2-8
Bitumen (percent)	4.5-6.5

1.4 TRAFFIC AND PARKING MARKING MATERIALS

A. Traffic lane marking paint with chlorinated rubber base.

B. Factory mixed, quick drying and non bleeding, FS TT-P-115, Type III.

C. Color: To match existing.

1.5 INSPECTION

A. Examine the subgrade on which bituminous concrete will be installed. Notify Engineer in writing of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected in a manner acceptable to Engineer.

1.6 PRIME COAT

A. Apply prime coat to subgrade in accordance with the requirements of the NYSDOT standards.

1.7 PAVEMENT INSTALLATION

A. Preparing the mixtures, paving equipment, placing the mixes, and compacting the mixes shall be in accordance with the NYSDOT Standards.

B. Preparing the mixtures includes the plant equipment, stockpiling, heating, aggregate processing, mixing of aggregate and bituminous material, and transporting to job site.

C. Paving equipment includes bituminous pavers, rolling equipment and hand tools.

D. Placing the mixes includes paver placing, hand placing, spreading, tamping and jointing.

E. Compacting the mixes includes breakdown rolling, second rolling and finish rolling.

F. Pavement shall not be placed on any wet surface or where the surface temperature is below 40 degrees F for the binder course or 60 degrees F for the surface course.

1.8 PAVEMENT QUALITY REQUIREMENTS

A. General: In addition to other specified conditions, comply with the following minimum requirements:

1. Provide final surfaces of uniform texture, conforming to required grades and cross sections.

B. Density:

1. If directed by Engineer, compare density of in-place material against laboratory specimen or certificates on same bituminous concrete mixture. Use nuclear devices.

2. Minimum acceptable density of in-place course material will be 90 percent of the recorded laboratory specimen or certificate density. Maximum acceptable density will be 98 percent.

C. Thickness: In-place compacted thicknesses shall average not less than the thicknesses specified.

D. Surface Smoothness:

1. Test finished surface of each bituminous concrete course for smoothness, using a 10-foot straightedge applied parallel to and at right angles to centerline of paved areas.
2. Check surfaced areas at intervals directed by Engineer.
3. Surfaces will not be acceptable if exceeding the following:
 - a. Binder Course: 3/8 inch in 10 feet.
 - b. Surface Course: 1/4 inch in 10 feet.

1.9 PATCHING

- A. As directed by Engineer, remove and replace all defective areas. Cut- out such areas and fill with fresh bituminous concrete. Compact to the required density.

1.10 CLEANING AND PROTECTION

- A. Cleaning: After completion of paving operations, clean surfaces of excess or spilled bituminous materials and all foreign matter.
- B. Protect newly finished pavement until it has become properly hardened by cooling.
- C. Cover openings of drainage structures in the area of paving until permanent coverings are placed.

1.11 MARKING PAVEMENT

- A. Cleaning:
1. Sweep surface with power broom supplemented by hand brooms to remove loose material and dirt.
 2. Do not begin marking bituminous concrete pavement until approved by Engineer.
- B. Application:
1. Using mechanical equipment, provide uniform straight edges in two separate coats. Apply in accordance with paint manufacturer's recommended rates.

END OF SECTION 02512

SECTION 02513 CRUSHED STONE AND GRAVEL

1.1 - GENERAL

A. CONTRACTOR shall furnish and place crushed stone and gravel of the types specified at locations shown and as ordered by the ENGINEER.

B. Related Work Specified Elsewhere:

1. Section 02220, Earthwork
2. Section 02500, Site Restoration
3. Section 02512, Bituminous Paving.

C. Required Tests:

1. Select fill, sand, gravel samples gradation, ASTM D421, D422.
2. Select fill, sand, gravel samples moisture density relations ASTM D698, ASTM D1557.

1.2 MATERIALS

A. Pipe Bedding (if required):

1. CONTRACTOR shall furnish and place crushed stone or crushed or screened gravel fill or sand under pipe as shown on or specified, or directed by the Engineer.
2. The material for piping shall be well-graded and clean, obtained from an approved source and conform to NYSDOTSS, Item 304-2.02, Type 1 subbase with the following gradation requirements:

<u>Sieve Size</u>	<u>Percent Passing by Weight</u>
3 inch	100%
2 inch	90-100%
¼-inch	30-65%
No. 40	5-40%
No. 200	0-10%

B. Subbase Course for Pavement:

1. CONTRACTOR shall furnish and place sand and gravel or stone subbase for pavement as shown or specified.

2. The material shall be well graded from coarse to fine and free from organic or other deleterious material.
3. Roadway, access road, and pavement subbase material shall be obtained from an approved source and conform to NYSDOTSS, Item 304-2.02, Type 2 crushed stone with the following gradation requirements:

<u>Sieve Size</u>	<u>Percent Passing by Weight</u>
2-inch	100%
¼-inch	25-60%
No. 40	5-40%
No. 200	0-10%

1.3 PLACING

- A. Gravel shall be spread in layers of uniform thickness not exceeding 8 inches and shall be thoroughly compacted with suitable power driven tampers or other power driven equipment.

END OF SECTION 02513

SECTION 02733 SVE WELL DRILLING AND PLACEMENT

1.1 GENERAL

A. Summary - The Contractor shall provide the labor, equipment, materials, tools, and supplies required to install the soil vapor extraction (SVE) wells and vacuum monitoring points (VMPs). Wells shall be constructed to the dimensions, details, and depths shown on the Contract Drawings, or as determined by the Contractor and approved by the Department and the Engineer, to be necessary for effective operation of the SVE system. The Contractor shall comply with all applicable federal, state and local statutes regarding the installation of the various wells.

B. Applicable Publications - The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by basic designations only.

American Society for Testing and Materials (ASTM) publications:

C136-83	Sieve Analysis of Fine or Coarse Aggregates
D2478-69	Classification of Soils for Engineering Purposes
D2488-69	Description of Soils (Visual-Manual Procedures)
C-478	Specifications for Precast Reinforced Concrete Vault Sections
D-698	Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort

C. Disposal of Cuttings - The Contractor shall be responsible for the collection, handling, sampling, staging and disposal of all drill cuttings and soil excavated for concrete vaults generated during the installation of the wells. All cuttings shall be disposed in accordance with Section 02230.

D. The Contractor shall be responsible for properly handling, storing, treating, sampling, and discharging of any liquid wastes generated as a result of well installation and development activities in accordance with the Section 02230 of the Contract.

E. The Contractor shall also be responsible for all costs associated with the repair or replacement of existing monitoring or SVE wells that are damaged resulting from the Contractor's activities.

F. The Contractor shall provide a qualified geologist, as approved by the Engineer, to oversee all drilling work including, but not limited to, installation, filter material sizing, logging, and determination of final depths and construction details.

G. The Contractor shall place permanent metal labels on all existing and new wells using the well designations indicated on the Contract Drawings.

H. All SVE and VMP locations shall be surveyed in accordance with the requirements of Section 01051.

1.2 WELL CONSTRUCTION

A. SVE Wells and Vacuum Monitoring Points - The SVE wells and VMPs shall be as shown on the Contract Drawings. The bottom section of the well pipe shall consist of a PVC slotted well screen. The wells shall be installed at the locations shown on the Contract Drawings or as approved by the Engineer and the Department.

B. Filter Material - Material for the sand filter pack around the screen shall be rounded to subrounded, washed sand composed of hard, tough, and durable particles free from adherent coatings. It shall contain no organic matter nor soft, friable, thin, or elongated particles in quantities determined deleterious. No more than five (5) percent by weight of calcareous material shall be permitted. The sand filter material shall conform with the well screen such that not more than 10% of the filter material will pass through the screen opening size. Well filter material will be approved by the Engineer.

C. Cement/Bentonite Grout - The cement/bentonite grout shall consist of a mixture of 2 to 5 pounds of pure bentonite powder per 94 pound base of Portland Cement Type I or II with 7 to 8 gallons of water.

D. Bentonite Seal: Material for the seal filter pack shall consist of pure grade bentonite pellets.

1.3 SVE WELL INSTALLATION

A. Drilling and Sampling - Wells will be installed in 8.25-inch boreholes drilled with hollow stem augers or other temporary casing method approved by the Engineer. For extraction wells 8S, 9S, and 10S, standard penetration test split-spoon samples shall be collected continuously after the first five-foot drilling interval. If a clay layer is detected before the required depths are reached, these wells shall only be installed to the depth of the clay layer, as approved by the Engineer. For all other wells, standard penetration split-spoon samples shall only be collected at every five-foot interval.

B. Well Construction - Wells shall be constructed at the locations shown on the drawings. If it is necessary to relocate any proposed well, the Contractor shall notify the Engineer for approval of proposed relocation.

C. During drilling and well construction, the record construction details shall be documented including the depth of each construction material such as bentonite pellet seal, sand pack, and final depth of hole using weighted tape method.

D. Temporary Casing - Any temporary casing used to install the wells shall have an inside diameter large enough to provide a 3-inch minimum filter thickness entirely around the screen and shall have sufficient thickness to retain its shape and maintain a true section throughout its depth. The temporary casing shall be such as to permit its removal without damaging or interfering with the filter or permanent casing.

E. Permanent Casing - Permanent casings used in the construction of the SVE wells shall be as shown on the Contract Drawings. All casings will be grouted in place and allowed to cure for

a 24 hours prior to completing the borehole. Borehole diameter must be minimum 6 inches greater than the immediate casing it surrounds.

F. Plumbness - Casings shall be set plumb and shall not deviate from the vertical by more than one (1) percent of its full depth of casing.

G. Placement of Filter Pack Material - The annular space between the casing and the wells shall be filled with the filler material as shown on the drawings. The temporary casing shall then be removed incrementally while gradually filling the annular space with the sand pack in increments not to exceed 12 inches vertically. The removal of temporary casing and installation of the sand pack shall proceed in such a manner not to endanger the well. The sand pack will be sounded after well development to ensure that significant settling has not occurred. If required, additional sand will be added so that the filter pack construction is consistent with the drawings.

H. Bentonite Pellet Seal - A bentonite seal shall be installed above the sand pack as shown in the drawings. Bentonite pellets shall be introduced slowly and allowed to settle. Soundings shall be made with a weighted tape to conform that the pellets and filter pack have not bridged. After the bentonite seal has hydrated, a cement grout shall be placed from the top of the bentonite seal to the depth of the bottom of the manhole using tremie method of placement in a continuous manner. A precast concrete manhole shall be installed as shown on the drawings.

I. Potable water must be used for grouting materials and drilling fluids.

J. Accurate Measurement of material prior to mixing must be made as air entrainment during physical mixing of the slurry tends to decrease the density of the mixture. Bentonite Products and additives shall be mixed in accordance with manufacturer's specification.

1.4 VACUUM MONITORING POINT INSTALLATION

A. Drilling and Sampling – Vacuum monitoring points (VMPs) shall be installed in 2-inch boreholes drilled with hollow stem augers or other temporary casing method approved by the Engineer. For VMP-4, standard penetration test split-spoon samples shall be collected continuously after the first five-foot drilling interval. If a clay layer is detected before the required depths is reached, this VMP shall only be installed to the depth of the clay layer, as approved by the Engineer. For all other VMPs, standard penetration split-spoon samples shall only be collected at every five-foot interval.

B. VMP Construction - VMPs shall be constructed at the locations shown on the drawings. If it is necessary to relocate any proposed VMP, the Contractor shall notify the Engineer for approval of proposed relocation.

C. Drilling and construction shall be documented, including the depth of each construction material such as bentonite pellet seal, sand pack, and final depth of hole using weighted tape method.

D. Permanent Casing - Permanent casings used in the construction of the VMP wells shall be as shown on the Contract Drawings. All casings will be grouted in place and allowed to cure

for a 24 hours prior to completing the borehole. Borehole diameter must be minimum 6 inches greater than the immediate casing it surrounds.

E. Placement of Filter Pack Material - The annular space between the casing and the VMPs shall be filled with the filler material as shown on the drawings. The temporary casing shall then be removed incrementally while gradually filling the annular space with the sand pack in increments not to exceed 12 inches vertically. The removal of temporary casing and installation of the sand pack shall proceed in such a manner not to endanger the VMP.

F. Bentonite Pellet Seal - A bentonite seal shall be installed above the sand pack as shown in the drawings. Bentonite pellets shall be introduced slowly and allowed to settle. Soundings shall be made with a weighted tape to conform that the pellets and filter pack have not bridged. After the bentonite seal has hydrated, a cement grout shall be placed from the top of the bentonite seal to the depth of the bottom of the concrete road box using tremie method of placement in a continuous manner. A precast concrete road box shall be installed as shown on the drawings.

G. Potable water must be used for grouting materials and drilling fluids.

1.5 PRECAST CONCRETE VAULTS

A. Description - The Contractor shall furnish all labor, materials, equipment, tools and accessories, required to complete the work of construction and installing precast reinforced concrete vaults with all accessories as shown, specified or required on the contract drawings for the SVE wells and VMPs. The vaults shall be designed and sized to allow for the ease of periodically making adjustments to the valve, for reading the pressure gauge, and for taking air samples. The vaults shall be designed without any need for personnel to enter vault structures. The vaults shall be constructed and installed in accordance with Specification Section 03400.

B. All vaults and VMP well boxes shall be permanently labeled with the correct well/point designation. Well labels shall be etched or engraved into the well access doors. Paint will not be accepted as permanent labels.

END OF SECTION 02733

SECTION 02734 DECOMMISSIONING SUBSURFACE STRUCTURES

1.1 GENERAL

The Contractor shall provide all required labor, equipment, materials, supplies for decommissioning existing SVE wells from previous investigations at the site.

1.2 SCHEDULE FOR DECOMMISSIONING

A. The Contractor shall decommission existing structures SVE-2, SVE-3, SVE-4 and SVE-5. Locations SVE-2, SVE-3, and SVE-4 each have a separate shallow, intermediate, and deep well casing. Location SVE-5 is only shallow. All wells are 1-inch in diameter.

B. Decommissioning of all wells shall be completed prior to the start-up and operation of the new SVE system.

1.3 METHODS

A. Decommissioning procedures shall be included in the Contractor's Work Plan, approved by the Department/Engineer. The purpose of the decommissioning is to eliminate the existing wells as a source of short-circuiting during SVE system operation. The Contractor's procedure shall be based on the specific construction of the wells.

B. Drill rigs and tools shall be decontaminated in accordance with Section 01030.

C. Contractor shall dispose of all well materials at an offsite location as outlined in Section 02230.

D. The top 1-foot of the well depth shall be restored to the existing condition and elevation of the area surrounding the well (i.e., concrete or asphalt). Any areas of damaged pavement shall be repaired in accordance with Section 02500.

END OF SECTION 02734

SECTION 03400 PRECAST CONCRETE

1.1 SCOPE OF WORK:

A. Supply all labor, materials, equipment and incidentals to install all precast concrete including design, fabrication, shop drawings, structural openings, and erection as shown on the drawings and specified herein. It is the Contractor's responsibility to furnish and install the equipment completely tested and ready for operation.

B. The precast concrete shall be designed according to ACI 318-latest edition and ASTM C478, whichever is most stringent. The design as a minimum shall consider the following:

- Submerged weight of soil = 62.5 lbs/cu. ft.
Saturated weight of soil = 125 lbs/cu. ft.
- Watertable - at ground surface
- Factor of Safety against Flootation = 1.2
- Ground Snow load = 35 psf
- H-20 loading is within 3 feet from the face of the wall or uniform load of 300 lbs. per square foot as a surcharge load.
- Cement ASTM C 150 - TYPE-II shall be used and the concrete shall be air entrained.
- All construction joints shall have waterstops.

Cast-in-place concrete may be substituted for precast concrete if approved by the Engineer provided, at a minimum, the above design requirements are met.

1.2 CONCRETE

1. Standard weight concrete consisting of specified Portland Cement, aggregates, admixtures, and water to produce the following properties. Compressive strength: 5,000 psi minimum at 28 days for precast concrete.
2. Total Air Content: not less than 4 percent nor more than 6 percent.
3. Water absorption: Not to exceed 5 percent by weight.
4. Reinforcing: Reinforcing Bar ASTM A 615, Grade 60, deformed.

1.3 DOOR

A. Install a well vault cover as shown on the drawings. The cover shall be designed for a maximum loading as specified on the Contract Drawings.

- B. The door cover shall be aluminum. All hardware shall be stainless steel
- C. The cover shall include provisions for drainage of precipitation
- D. Hinges shall be stainless steel and shall be recessed below the elevation of the cover.
- E. An automatic hold-open arm and other safety features shall be included
- F. The cover shall be pneumatic or spring-assisted as required to allow for easy opening by one person.
- G. The cover shall be lockable.
- H. The cover shall have well identifications engraved or otherwise permanently shown.

1.4 INSTALLATION

- A. Skilled workers shall install all embedded concrete items in strict conformity with shop drawings and details and manufacturer's recommendations.
- B. The Contractor shall furnish and install covers as indicated on drawings.
- C. Concrete Sealer: All interior exposed concrete surfaces except as otherwise shown on the drawings shall be treated with a concrete sealer. Sealer shall be Nu-Klad 105 as supplied by Ameron Corrosion Control Division, or approved equivalent. Sealer application shall be in accordance with the manufacturer's recommendation and as approved by Engineer.
- D. Damp Proofing: All external concrete surfaces against which fill is to be placed shall be dampproofed to within 12 inches of final fill grade as per manufacturers recommendation, or as follows, whichever is more stringent.
 - 1. Primer - One Coat of Hydrocide 700B as manufactured by Sonneborn Building Products, or approved equal, shall be applied at the rate of one (1) gallon per 35 square feet.
 - 2. Protective coating - One coat of Hydrocide 700B, or approved equal, shall be applied at the rate of one (1) gallon per 35 square feet.
- E. The Contractor shall install the vaults at the locations shown on the Contract Drawing and in accordance with the manufacturer's recommendation and with the approval of the Department.
- F. The Contractor shall limit the extent of excavation. Non-contaminated soil generated from installing vault shall be temporarily stockpiled adjacent to the excavation and then used as backfill upon installation of vault. Where excess non-contaminated excavation materials are available, the Contractor shall use as borrow, where necessary.
- G. The vault shall be covered during the night with ½ inch thick carbon steel plates, the same dimensions as the vault or greater until the frame and lid are placed.

- H. Pipe/conduits and other connections to the vault shall be watertight and as shown on the Drawings.
- I. A leveling course of stone shall be placed across the entire width of the bottom of the excavation, to a thickness of six inches. The leveling course shall be compacted with a minimum of 2 passes using plate or small drum vibrators, as approved by the Department. Compaction shall be carried out in accordance with NYSDOT Standard Specifications, Section 203-3.12, in layers not exceeding 6 inches in thickness.
- J. Native backfill shall be placed in layers not exceeding 8 inches thickness and compacted in accordance with NYSDOT Standard Specifications, Section 203-3.15, to 95 percent of Standard Proctor Maximum Density, as determined from results of tests performed in accordance with methods given in ASTM D-698.
- K. Random fill too wet to be compacted shall be dried or replaced with suitable material.
- L. Joints between segmented vault sections shall be sealed with gaskets and joint sealant in accordance with the manufacturer's directions.
- M. Vaults shall be constructed and installed to prevent damage due to freezing of the subsurface soil.
- N. Where piping or conduits penetrates the vaults, a water proof link type, mechanical annular seal shall be installed.
- O. Stone material conforming to NYSDOT Standard Specifications Size Designation 3A, shall be used and compacted as a leveling course beneath the vault.

END OF SECTION 03400

SECTION 11301 SOIL VAPOR EXTRACTION SYSTEM

1.1 DESCRIPTION

A. This section covers the work necessary to construct, start-up, test, operate and maintain a new Soil Vapor Extraction (SVE) system as described herein. This new system will operate at the site in conjunction with an existing system that was previously installed and is currently operating at the site. The two systems are referred to in this section as the “new” and the “existing” system. The Contractor shall integrate the new SVE system with the existing SVE system as shown on the Contract Drawings and indicated herein. This includes the operation and maintenance of both the existing and new SVE systems for the period of time specified herein.

B. The new SVE system consists of several components. The Contractor shall be responsible for selecting and integrating all components to meet the requirements of the Contract Documents. Each component of the system has its own operating and construction requirements. It shall be the Contractor’s responsibility to ensure that all of the system components are constructed and will operate in a manner compatible with each other, while each meeting their individual objectives.

C. All equipment and housing provided under this section shall be new and unused.

1.2 EQUIPMENT HOUSING AND STRUCTURAL SUPPORTS FOR NEW SYSTEM

A. The Contractor shall provide housing and supports for all equipment of the SVE system and its components. All components as shown on the Contract Drawings shall be housed to provide protection of all equipment from weather, vandalism, and other factors. The housing for the SVE system shall be a secure and lockable structure as manufactured by Hot Box® or approved equal.

B. Housing for the SVE system shall be large enough to house all of the system components and allow sufficient access for all operation and maintenance requirements. However, due to the limited space available at the site, the footprint of the system housing also shall be minimized to the extent that it is practical so as to not take up more space than is necessary for housing the system components. This includes the actual size of the components, as well as additional area required for maintenance, minimum clearances, and work/maintenance areas for personnel.

C. The system housing structures shall be equipped with heating and/or ventilation as required to maintain temperatures in the range of 50-100°F. Housing shall be equipped with lighting adequate for system O&M. The layout of the structures shall provide adequate space for movement and easy access to all equipment and control devices as required both for operation and maintenance. The housing must meet all State, Federal, and local regulations regarding safety of operation and proper environmental protection.

D. The system housing and supports must be designed to withstand all external loads and forces including snowload, wind, and frost, etc. All supports and anchors shall have an adequate factor of safety against overturning and sliding due to wind.

E. All doors and windows shall be equipped with locking devices and weatherproofed.

F. The new system housing shall be installed at the general location shown in the Contract Drawings, subject to the approval of the Department/Engineer and the existing business located at the site. Adequate space must be provided for the carbon adsorption units that will be located just outside the treatment system. The layout of the adsorption units and treatment system must allow for ease in the changeout of the adsorption units, and also must not interfere with the operations of the existing SVE system at the site.

G. Underground piping shall be used to connect the system to the extraction wells located throughout the parking area.

1.3 PERFORMANCE OBJECTIVES FOR NEW SVE SYSTEM

A. The SVE system shall extract and treat soil gas containing VOC vapors

B. The SVE system shall process and maintain a minimum 520 SCFM of soil gas.

C. The SVE system shall produce and maintain a minimum vacuum of 10 inches water column at each extraction well head when all wells are connected to the system.

D. Upon approval by Department/Engineer, the Contractor shall modify the construction and/or operation of the SVE system as necessary to meet the performance objectives.

1.4 PERFORMANCE STANDARDS FOR BOTH SYSTEMS

A. Soil gas emitted from both SVE systems shall comply with the substantive NYSDEC air discharge requirements as identified in Section 01010, 1.16 of these Contract Documents before being discharged to the atmosphere. To ensure that the systems meet these requirements, the Contractor shall monitor the discharge from both vapor phase carbon systems in accordance with Section 1.8 of this specification.

B. Water (condensate) generated by both SVE systems shall be disposed of by the Contractor in accordance with Section 02230. Costs for disposal shall be included in the unit cost for operation of the SVE system.

C. The Contractor shall modify the construction and/or operation of both SVE systems as necessary to meet the performance standards.

1.5 NOISE ABATEMENT FOR NEW SVE SYSTEM

A. Blowers shall be equipped with intake and discharge silencers.

B. Sound from each blower shall not exceed 70 dBA at a distance of 3' - 0" from the blower housing, or any more stringent noise requirement applicable to the system.

C. The walls and ceiling of the SVE system housing shall be completely lined with sound-deadening foam.

D. SVE system operation shall comply with all local noise ordinances, including the provisions of Section 24-216(b) of the Administrative Code of New York City. Devices and activities shall be operated, conducted, constructed, or manufactured without causing a violation of the Administrative Code.

E. Sound levels shall be attenuated to levels that permit work without special hearing protection.

F. Vibration dampening supports shall be installed between the blowers and the supporting structures.

1.6 MINIMUM REQUIREMENTS OF THE NEW SVE SYSTEM

A. General

1.1 It shall be the responsibility of the Contractor to select, furnish, install and test all components necessary to provide a complete, workable, and efficient SVE system that is capable of achieving the requirements specified herein. All components must meet the approval of the Engineer.

1.2 The minimum requirements for each of these components are described separately below. However, it shall be the Contractor's responsibility to select, operate, and control the components of the SVE system as one complete and compatible unit. The Contractor shall include items and appurtenances not specified below, but required for a complete and operable system.

1.3 Unless specified below, the Contractor shall ensure that all components of the system are constructed of materials that are acceptable and chemically inert to the contaminants expected to be present in the soil gas at the concentrations detected as detailed in the Limited Site Data document.

1.4 The Contractor shall be responsible to integrate specific components of the new SVE system with the existing SVE system.

1.5 Shop Testing: Assuming that the majority of the SVE system will be constructed at an offsite location, the Engineer and the Department may request to observe a "shop test" of the SVE system. Once the construction of the SVE system is approximately 95% complete, the Contractor shall arrange a time for the Engineer/Department to visit the fabrication facility to observe a shop test of all system components. The purpose of the shop test is to verify that the major system components have been correctly and acceptably installed, and that the system is generally in an operable condition and ready for delivery to the site.

B. Monitoring

- 1.1 Ports shall be located at each SVE extraction wellhead, as shown on the Drawings and as required by the Engineer and shall be suitably constructed to easily and accurately perform the following functions:
 - Collect vapor samples
 - Take a PID reading
 - Read the pressure gauge
 - Connect a portable flow gauge
 - Connect a portable temperature gauge
2. Portable monitoring instruments or gauges to indicate pressure, flow, and temperature as described in 1.6B1 shall have a range adequate to indicate the expected range of pressures, flows, and temperatures at the monitoring location.

C. Pipe and Valves

- 2.1 Valves shall be located at each individual well head to allow the soil gas flow rate to be regulated or shut off at each extraction point. The valves must be installed in a manner that allows for the full and unimpeded operation of the valve by a person located on the ground outside of the well box. The valve handle, whether in the open or closed position, or anywhere in between, shall not interfere with the wellhead, piping, or any other system components located in the well box, and vice versa.
- 2.2 All lines installed shall be constantly sloped to freely drain back to the extraction wells. All line slopes shall be verified by survey. All pipe inverts shall be submitted to the Engineer as part of the As-Built drawings. There shall be no low points or locations in the network where condensate could stand and collect. All SVE system pipe after the blower discharge shall meet any temperature requirements specified by the blower manufacturer. The Contractor shall ensure that the installed pipes are large enough to transmit the soil vapor without any significant pressure drop or restrictions to the system, while still meeting system performance objectives.
- 2.3 Installation of the underground pipe and SVE extraction wells will require the Contractor to excavate and work in the parking/driveway area of the site. All such activities shall be coordinated with the existing site occupant. The Contractor shall be responsible to provide adequate dust control and use proper methods and equipment to complete a neat and clean installation with minimal impact to the site occupants.

D. Equipment

1. A moisture separator incorporating cyclonic separation for the removal of entrained water from the soil vapor stream. The separator shall be equipped with liquid level control switches, a liquid level site gauge, automatic vacuum relief, piping, and valves. The separator shall be constructed of epoxy lined steel, and have a minimum liquid holding capacity of 40 gallons.

2. Two regenerative blowers installed in parallel, each sized for a minimum of 260 cfm and 35 inches of water vacuum. The blower shall be engineered for continuous long-life operation in an SVE application. The blower and motor shall be suitable for the design conditions. The blower shall be equipped with inlet filters, check valves, silencers, relief valves and other components as recommended by the manufacturer.
3. A total of two positive displacement pumps for pumping condensate from the moisture separator into drums for disposal. One pump shall be installed in the new SVE system, and one at the existing SVE system. Both pumps shall be identical. The pumps shall be designed for a flow rate in the range of 1 – 4 gpm. The pumps shall be equipped with flexible discharge hose, nozzles, on/off control switches, and other appurtenances as necessary to facilitate the safe and easy pump out and offsite disposal of condensate from the SVE systems. The contractor also shall provide all drums as necessary to accomplish disposal of the condensate during the operating period of this contract. The Contractor also shall provide all ramps, drum dollies, and other equipment as necessary to safely handle full drums of condensate. All equipment, with the exception of storage drums, are considered to be part of the SVE system and are to remain at the site, stored within the SVE system housing.
4. Provide all instrumentation required to monitor and to operate the equipment including indicators, transmitters, controls, alarms, and recorders as necessary.

E. Vapor Treatment

A vapor phase carbon adsorption system shall be utilized to meet the requirements for off gas discharge. The system shall be as follows:

1. Suitable for outdoor installation.
2. Designed to treat a minimum total vapor flow rate of 520 scfm.
3. The vapor phase system shall consist of a minimum of two units, installed for series operation.
4. Each unit shall contain a minimum of 1,000 pounds of activated carbon formulated specifically for removing volatile organic contaminants, primarily PCE, from the vapor phase.
5. The carbon units shall be steel construction, designed to accommodate the heat generated by the blower system.
6. The units shall include a condensate drain fitting.

7. The interconnecting pipe between the carbon adsorption units and the soil vapor extraction system shall be flexible hose to allow for the easy replacement of carbon units, as they become exhausted. The flexible hose system shall allow reallocation of a second-in-series (lag) unit to a first-in-series (lead) unit without needing to physically move the units.
8. Sampling ports suitable for the collection of VOC samples from the air streams prior to, between, and immediately following the vapor phase carbon adsorption units.
9. A discharge stack, adequately supported to withstand wind and snow loads, with rain protection, as well as bird screen. The stack shall be mounted on the existing fence located adjacent to the treatment system, and shall extend 3 feet above the top of the fence. The contractor also has the option to tie the discharge from the new system into the discharge stack from the existing SVE system.
10. Piping and valves shall be installed to interconnect the new vapor phase carbon units to the existing units. The valves and piping shall be configured to allow:
 - The soil gas from the existing carbon to flow through the existing carbon, and the soil gas from the new system to flow through only the new carbon
 - All flow from both the new and existing SVE systems to be directed to only the new carbon or only the existing carbon systems. This condition would only be employed when both system were operating at a reduced capacity, below the rating of the carbon system.

F. Instrumentation

5.1 Level Switch

- a. Service: Level control in moisture separator
- b. Description: Float type
- c. Materials: Stainless steel body and copper float.
- d. Control Requirements: Shutdown blowers, activate local alarm, and activate existing autodialer to notify offsite operator(s) of alarm condition.

1.2 Portable Flow/Temperature Indicators

- a. Service: Gas flow rate and temperature measurement at extraction wells.
- b. Description: Portable digital thermo-anemometer with telescoping probe.

- c. Range: Four field selectable ranges. Total range 0 - 15,000 feet per minute.
- d. Manufacturer: Dwyer Model 471-2 or approved equivalent.
- e. Quantity: A total of two units (one plus spare) shall be provided.

3. Pressure Indicators (Gauges)

- a. Service: Vacuum/pressure measurement at extraction wells and before and after blowers in SVE system.
- b. Description: Liquid-filled gauges.
- c. Dial Size: 2 ½-inch minimum.
- d. Range: Compatible with system location and function.
- e. Temperature: Gauges at extraction wells shall be suitable for outside temperature as low as -10°F.
- f. All gauges shall be installed with isolation valves between the gauge and the process piping.
- g. Manufacturer: Ametek series 500 gauges or approved equivalent.

4. Flow Meter

- a. Service: Indicate gas flow rate in the extraction headers and the blower exits.
- b. Description: Venturi-type flow meters based on differential pressure. Meters shall be direct reading in scfm with no moving parts. Meter size shall be equivalent to the pipe size at the installed location.
- c. Range: Five at 90 - 450 scfm, one at 120 - 600 scfm.
- d. Manufacturer: Ametek or approved equivalent.
- e. Quantity: A total of six units plus two spares (90 - 450 scfm) shall be provided.
- f. Installation: Meters shall be installed as directed by the manufacturer, including the appropriate lengths of straight-run pipe before and after the flow meter unit.

5. Autodialer

- a. The Contractor shall use the autodialer from the existing SVE system to accept the alarm signal from the new SVE system. Contractor shall connect the alarms from the new SVE system to the existing autodialer, making all adjustments and modifications as necessary. Contractor shall reprogram the existing unit as required.

- b. Service: Notify operator(s) of high level alarm for moisture separator.

G. Power and Controls:

The minimum requirements for the power and control components of the SVE system are outlined below. Additional requirements are located in other sections of these contract documents. It shall be the Contractor's responsibility to select, operate, and control the components of the system as one complete and compatible unit.

1. The Contractor shall be responsible for furnishing and installing all electric service to the system. The new system shall tie into the power supply for the existing SVE system at the site.
2. The Contractor shall be responsible for furnishing and installing all conduit and wiring for all system equipment. This includes all power, control and instrumentation interconnections required for a fully operable system.
3. The Contractor shall be responsible for installing all motor starters, equipment, unit heaters, ventilating fans, skid mounted equipment, disconnects, power feeder wiring, lighting fixtures, instrumentation, controls, etc., associated with the system.
4. The system control panel shall contain all operator interface and local control devices, motor starters, circuit breakers, control power transformers, system disconnect switches, and alarm system components.
5. The control system shall include all additional alarms, controls, and interlocks as indicated on the Contract Drawings and as required for proper operation and monitoring.
6. Functional Requirements: The control system shall provide all functions required for complete automatic and manual operation of the system and provide the following functions:
 - a) System shutdown and alarm on high level in moisture separator.
 - b) Manual start/stop for blowers
 - c) Automatic callout and notification in the event of an alarm.
 - d) Manual start/stop for condensate pump.
7. All work outdoors and in wet locations shall be weatherproof. All material, equipment, and incidentals in hazardous locations shall meet NEC/NFPA/UL/NEMA/OSHA requirements for hazardous locations.

1.7 PHASES OF OPERATIONS FOR BOTH SYSTEMS

A. Construction: The Contractor shall be responsible for selection, installation, and integration of the new SVE system components.

B. Turnover of Existing SVE System: Upon startup of the new SVE system, responsibility for the operation and maintenance of the existing SVE system will be turned over to the Contractor. All utility costs, including electricity and telephone also will be turned over to the Contractor at this time. Both the existing and the new systems shall be operated and maintained by the Contractor as specified herein. Upon completion of this contract, operation for both systems shall be turned over to the Department.

C. Startup and Routine Operation Phase: The Contractor shall operate both the new and the existing SVE systems at the required system parameters as determined by the Engineer. The systems shall operate continuously 7 days per week, 24 hours per day. The Contractor shall conduct monitoring and analyses listed in Progress Monitoring (Section 11301, Subsection 1.9). The Contractor shall be responsible for operation and maintenance of both SVE systems as specified by the Engineer for a period of up to twelve weeks following completion of system start-up. The Contractor shall adhere to the operation and maintenance procedures described in the O&M Manual developed for both the new and existing SVE systems as outlined in Section 01600.

D. Testing for Radius of Influence for new SVE system: After one week of operation of the new system, a test of the radius of influence for the system shall be conducted. The time and date of this test shall be coordinated with the Engineer. The test shall consist of the following:

1. With both systems up and operating normally, collect a round of readings from the vacuum monitoring points (VMPs).
2. Close all extraction wells except pair 7S/7D, applying the maximum safe vacuum to this well pair alone. Collect another round of readings from the VMPs, as well as the flowrate and vacuum being extracted from the well pair, and other system data. Conduct similar tests for the remaining well pairs.
3. At all times during the test(s), the site should be observed for any signs or evidence of short circuiting through subsurface structures (e.g., monitoring wells, utility trenches, pavement cracks, etc.).
4. During all tests, the blower temperatures should be monitored, and the amount of bypass air adjusted, to ensure that sufficient airflow is maintained through the blowers at all times so as to prevent overheating of the units.
5. Within two days, summarize all data into a letter report to be submitted to the Engineer and Department.

1.8 ROUTINE MAINTENANCE FOR BOTH SYSTEMS

- A. Routine maintenance of the SVE systems shall be performed as required by the Operation and Maintenance Plan.
- B. Routine maintenance shall include checking: belt tensions, amperage loadings, valves, level controls, interlocks, and all monitoring equipment.
- C. Contractor shall operate and maintain the system components in a safe and efficient manner in accordance with manufacturer's recommendations and all applicable standards of the appropriate trades or professions throughout the duration of operation.
- D. All equipment installed shall be provided with the manufacturer's recommended maintenance and service by the Contractor and shall be maintained and operated by the Contractor throughout the duration of operation.
- E. The Contractor shall be responsible to monitor and individually adjust the flow rates if necessary from all extraction wells at least on a weekly basis or as directed by the Department/Engineer. Both systems shall be continuously adjusted and balanced to maintain required flows and vacuum.
- F. The Contractor shall be responsible to drain condensate from the moisture separators as required to ensure the continuous operation of both systems. The Contractor shall also remove condensate and other buildup from the extraction piping as required to ensure the effective operation of the systems. The Contractor shall dispose of all condensate off site in accordance with Section 02230 of these Contract Documents. All costs for sampling and disposal shall be included in the unit costs for SVE operation.
- G. The Contractor shall be responsible for the monitoring, replacement, sampling and disposal of carbon from the vapor phase carbon units. Based on both the analyses of air samples as well as the monitoring with the photoionization detector, the Contractor shall determine when the lead bed of carbon has been exhausted. The lead bed of carbon shall be assumed to be exhausted whenever a PID reading of more than 1 ppm over the background ambient air concentration is detected in the exhaust of the lead unit. At that time, upon approval of the Engineer, a changeout of the carbon in the lead unit should be scheduled for as soon as possible. After the changeout of the carbon in the lead unit, the hoses and piping to the carbon system shall be reconnected to make the unit with the fresh carbon the lag unit of the system.
- H. The Contractor shall maintain adequate reserves of carbon to ensure that the exhausted carbon can be replaced within one day's notice. However, no on-site storage of either fresh or exhausted carbon shall be allowed without the prior approval of the Engineer and the current business operator. Only virgin carbon specifically designed for the removal of volatile organic contaminants, specifically PCE, shall be replaced in the units.

1.9 PROGRESS MONITORING

A. Parameters to be monitored by the Contractor during the remediation process shall be as indicated in Table 11301-1 Progress Monitoring.

1.10 REPORTS

A. The Contractor shall furnish reports satisfactory to the Engineer covering operation of the SVE systems during the duration of operation. Reports will clearly indicate operating conditions of the system and shall include the following parameters tabulated to show historical trends:

Flowrate (cfm) from each extraction well.

Total flow from all extraction wells (cfm).

Vacuum (inches wc) at each well

Vacuum (inches wc) at each vacuum monitoring point (VMP)

VOC concentrations at each point sampled.

Estimated mass of VOCs removed (lbs) from each extraction well

Log of downtime and description of maintenance task or other corrective action taken.

Quantity of condensate collected from each system.

All other data collected during the period.

B. Reports shall indicate project name, job number, Contractor's name, report number and data. Each report shall be signed by the Contractor's superintendent.

C. The Contractor shall furnish weekly reports to the Engineer.

D. One copy of the reports shall be submitted to the Department, and two copies shall be submitted to the Engineer.

E. All reports shall be submitted within three weeks from the end of the reporting period (one week following the receipt of analytical data). A pro-rated amount shall be deducted from the Contractor's payment for each calendar day that a complete report is submitted late.

1.11 INDOOR AIR SAMPLES

The Contractor shall be responsible for the collection of up to ten indoor air samples from the existing structures at the site. The quantity and the location of the samples will be directed by the Department and the Engineer. The Contractor shall be responsible for the sample collection, including the provision of all sample containers, regulators and other appurtenances, handling,

shipping/transportation, analysis and reporting. All sampling shall be conducted in accordance with the New York State Department of Health *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, October 2006. Samples will be collected only from the indoor air. No sub slab samples will be collected.

END OF SECTION 11301

**TABLE 11301-1
PROGRESS MONITORING FOR BOTH SVE SYSTEMS**

Location	Matrix	Number of Samples/ Locations per event	Parameters	Frequency During First Two weeks Following Startup	Frequency During Subsequent 10 weeks	Laboratory Turnaround Time For All Samples
Extraction Wells	Air	9	VOCs	4/week: (M, T, W, Th)	Once every 2 weeks	2 weeks
	Air	9	Flow rate	Daily	Weekly	Field Measure
	Air	9	Pressure	Daily	Weekly	Field Measure
	Air	9	Temperature	Daily	Weekly	Field Measure
	Air	9	Total VOCs (PID)	Daily	Weekly	Field Measure
Filter Inlet	Air	3	Pressure	Daily	Weekly	Field Measure
Blower Inlet	Air	3	Pressure	Daily	Weekly	Field Measure
Blower Outlet	Air	3	Flow rate	Daily	Weekly	Field Measure
	Air	3	Pressure	Daily	Weekly	Field Measure
	Air	3	Temperature	Daily	Weekly	Field Measure
Vapor Phase Carbon Inlet	Air	2	VOCs	4/week:(M, T, W, Th)	Once every 2 weeks	2 weeks
	Air	2	Flow rate	Daily	Weekly	Field Measure
	Air	2	Pressure	Daily	Weekly	Field Measure
	Air	2	Temperature	Daily	Weekly	Field Measure
	Air	2	Total VOCs (PID)	Daily	Weekly	Field Measure
Vapor Phase Carbon Outlet (First Unit)	Air	2	VOCs	Weekly	Weekly	2 weeks
	Air	2	Total VOCs (PID)	Daily	Weekly	Field Measure
	Air	2	Temperature	Daily	Weekly	Field Measure

- VOCs shall be analyzed by method TO- 15 and shall be in accordance with the latest edition and the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, 1/99.
- Frequencies are subject to change during operation. The Contractor shall be paid for additional authorized analyses and shall give credit for analyses not performed as directed by the Department.
- All samples shall be shipped on the day of collection for overnight delivery to the laboratory.
- The Contractor shall be responsible for supplying, canisters, packaging, handling as required.
- Turnaround time is defined as the time for receipt of electronic or fax results of the analyses, from the date of sample receipt by the laboratory.
- “Daily” is defined as Monday through Friday.
- Electronic data deliverables shall be provided for all sample analyses.

SECTION 15050 PVC PIPE, FITTINGS, VALVES AND OTHER ACCESSORIES

1.1 DESCRIPTION

A. The Contractor shall furnish all labor, materials, equipment, tools and appurtenances required to complete the work including furnishing, installing, connecting, backfilling, testing and placing all piping, complete with all fittings, valves, appurtenances and accessories, as shown, specified or required, in satisfactory operation of the SVE system.

The system piping shall consist of Polyvinyl Chloride (PVC) pipe and fittings unless otherwise shown on the Contract Drawings or specified.

1.2 REFERENCE STANDARDS

The Contractor shall complete all work, including materials of construction, procedures and testing required in this Contract Document for piping, fittings, valves, and other accessories in accordance with all applicable sections of the following reference standards:

American Society for Testing and Materials (ASTM) for PVC Pipes
American National Standards Institute (ANSI) for Piping

1.3 QUALITY ASSURANCE

A. Source Quality Control: Regardless of tolerance permitted by reference standards, the Engineer may reject pipe which is dirty, chipped, cracked, blistered in coating and lining, rough interior or exterior surfaces, evidence of structural weakness, porosity, joint defects, significant variations from theoretical shape, and imperfections which might contribute, in the opinion of the Department, to an accelerated deterioration, reduced functional capability, or reduced structural strength.

B. All products shall be from well established firms who are fully experienced, reputable and qualified in the manufacture of the particular equipment to be furnished. The equipment shall be designed and constructed in accordance with the best practices and methods and shall comply with these Specifications as are applicable.

1.4 PIPES AND FITTINGS

A. PVC Pipe and Fittings

1. Polyvinyl Chloride (PVC) Pipe shall be Schedule 80, Type 1, Grade 1, Class designation 12454-B as per ASTM D1784, unless otherwise indicated on the Contract Drawings.
2. The PVC material from which the pipe and fittings shall be extruded or molded shall not contain any reclaimed, reground or reworked material whatsoever, but shall be compounded from virgin PVC resins, plasticizers, stabilizers, and such materials that when compounded, it shall meet the requirements of ASTM D1784 for Rigid Poly (Vinyl Chloride) Compounds and Chlorinated Poly (Vinyl Chloride) Compounds,

Class 12454-B. The physical dimensions and tolerances of the PVC pipe and fittings shall meet the requirements of ASTM D2665.

3. The patterns, dimensions and laying lengths of fittings including adapters shall meet the requirements of ASTM D2466.
4. The solvent cement shall be a solution of the base PVC resin used to make the Class 12454-B Poly(Vinyl Chloride) molding or extrusion compound as defined in ASTM D1784. The solvent cement shall meet the requirements of ASTM D2564 for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Pipe and Fittings.
5. The size designations of various PVC pipes to be used for the system shall at a minimum be as indicated on the Contract Drawings, or as required to ensure the efficient operation of the facility.

B. All pipe shall be handled and assembled in accordance with the manufacturer's instructions, except as modified on the Drawings or in writing by the Department. Storage and installation procedures for PVC pipes shall be in accordance with ASTM methods.

C. Delivery and Storage:

Inspect materials delivered to site for damage. Store materials on-site in enclosures or under protective coverings. Store PVC piping, rubber gaskets and fittings under cover, out of direct sunlight. Do not store materials directly on the ground. Keep inside of pipes and fittings free of dirt and debris.

D. Handling: Handle pipe, fittings, and other accessories in such a manner as to ensure delivery to the work place in sound, undamaged condition. Carry pipe to work place; dragging of pipe will not be permitted.

E. Steel Pipe and Fittings

1. Steel pipe shall be carbon steel, Schedule 40, ASTM A53, seamless, beveled ends.
2. Connections shall be butt-welded or flanged connections.
3. Pipe shall be insulated as required to maintain a safe temperature on all surfaces to which employees may be exposed.

1.5 VALVES

A. All valves shall have the name of the manufacturer, flow directional arrows, and the working pressure identified on the valve.

B. All valves shall open counter-clockwise unless otherwise specified.

C. All valves that are not located within secured areas shall be lockable to prevent tampering with the valve position. The valve shall be able to be locked in any position between fully open and closed.

D. Plastic Valves

1. Ball valves shall be PVC, true union type as manufactured by Plast-O-Matic Valves, or approved equivalent.
2. Check valves shall be PVC union ball check valve as manufactured by Plast-O-Matic valves, Inc., or approved equivalent.
3. Butterfly valves shall be PVC with flanged connections and lever operator as manufactured by ASAHI/America or approved equivalent.

1.6 INSTALLATION

1.6.1 Pipes

- A. Pipe shall be installed at locations shown on the Drawings and in accordance with manufacturer's instructions.
- B. Joints, tees, elbows, etc. shall be installed as required and shall be in accordance with the manufacturer's instructions.
- C. All pipes shall be solvent welded (PVC) unless otherwise required for installation of valves and connections to equipment. PVC unions shall be installed at reasonable intervals along the run of the pipe, to permit disassembly.
- D. Provisions shall be made for expansion in all pipes. An expansion coupling shall be installed at the entrance to each structure. Expansion couplings shall be submitted by the Contractor to the Engineer for approval.
- E. Where flanged connections are used, flanges shall be designed to conform to ANSI B16.1 Flange bolt pattern. Full face, elastomeric gaskets, with a durometer rating of 55 to 80, are required. All flanged connections shall be made with stainless steel bolts. Flange shall be installed in accordance with manufacturer's recommendations.
- F. Unless otherwise shown or specified, the Contractor shall furnish and install suitable pipe sleeves at all points where pipes pass through walls of floors of structures. The space between the pipe and the sleeve shall be caulked with suitable elastomeric caulking compound or a mechanical sealing ("Link-Seal") system. Sleeve material shall be the same or similar to that of the pipe line. All pipe layout and building penetration locations must be approved by the Department and/or Engineer prior to Construction.
- G. Piping shall be installed with approved hangers and supports to prevent sagging, warping, or vibration of piping system.
- H. All vapor extraction piping shall be installed at a minimum constant 1% slope to freely drain all sections of the pipe back into the SVE wells. The entire length of the pipe runs, from the extraction well, through the manifolds, and into the moisture separator shall be installed with no low elevations, flat elevations, or with any structure or section that could allow condensate to collect within the pipe.

1.6.2 Valves

A. All valves shall be installed in the locations shown on the Drawings, true to alignment and rigidly supported. Any damage to the valves shall be repaired before they are installed. For the valves installed at the wellheads, the valves must be installed in a manner that allows for the full and unimpeded operation of the valve by a person located on the ground outside of the well box. The valve handle, whether in the open or closed position, or anywhere in between, shall not interfere with the wellhead, piping, or any other system components located in the well box.

1.7 TESTING AND ACCEPTANCE

1.7.1 Pipes and Fittings

A. Upon completion of pipe installation, the Contractor shall verify that the pipe is unobstructed. The method of verification shall be submitted to the Engineer for review and approval.

B. Testing of pressurized pipe shall be performed in accordance with the manufacturer's recommendations. Testing procedures shall be submitted and approved by the Engineer prior to testing. All testing of underground pipe shall be conducted by the Contractor prior to the backfill of the pipe excavation. All testing shall be conducted using air.

C. If there are any leaks or obstructions, the Contractor shall make the necessary repairs and retest the pipe as specified, at no additional cost to the Department.

1.7.2 Valves

A. All valves shall be carefully inspected for defect in workmanship and materials; all debris and foreign material shall be cleaned out of valve openings; all operating mechanisms shall be operated to check their proper functioning; and all nuts and bolts shall be checked for tightness. Valves and other equipment which do not operate easily, or are otherwise ineffective, shall be repaired or replaced at no additional cost to the Department.

B. The pressure mains in which the valves are to be installed are specified to be field tested. During these tests any defective valve shall be adjusted, removed and replaced, or otherwise made acceptable to the Department.

1.8 CLEANING

A. During construction, the Contractor shall thoroughly clean all piping before placement and keep the lines free from every kind of foreign matter of whatever origin. All pipe lines shall be left thoroughly clean to the satisfaction of the Department.

END OF SECTION 15050

SECTION 16010 ELECTRICAL

1.1 DESCRIPTION

A. The Contractor shall furnish all labor, materials, equipment, tools and appurtenances required to complete the work of furnishing, installing, connecting, testing and operating all electrical requirements as specified and required for complete and fully functional systems. This shall include, but not be limited to:

1. Conduits, fittings, boxes, enclosures, and cabinets for electrical equipment and conductors.
2. Power, control, and communication (e.g. telephone) conductors, cables and associated splices, connectors, and terminations for electrical systems rated 600 volts and less
3. Instrumentation, programmable logic controllers (PLC), controls and relays.
4. Grounding and bonding.
5. Arrangement with Utility Companies for permanent electric and telephone services including payment of Utility Companies' charges for service.
6. Overhead electric and telephone service entrances.
7. Main and distribution panelboards, motor controllers, contractors, and associated wiring devices rated 600 V or less.
8. A complete electrical heat trace system for exterior piping.

B. All electrical work at the site shall be under the design and direction of a qualified Professional Engineer licensed in the State of New York.

C. It is the intent of this Section that all equipment and devices, furnished and installed under this and other Sections, be properly connected and interconnected electrically with other equipment so as to render the installations complete for successful operation, regardless of whether all the connections and interconnections are specifically mentioned in the Specifications or shown on the Contract Drawings.

D. The electric supply for the new SVE system shall be tied into the supply for the existing SVE system at the site. The two systems will not be separately metered

1.2 REFERENCE STANDARDS

A. Electrical material and related equipment shall conform in all respects to the latest approved standards of the following:

1. National Electrical Manufacturers Association (NEMA).
2. The American National Standards Institute (ANSI).

3. The Institute of Electrical and Electronic Engineers (IEEE).
4. Insulated Power Cable Engineers Association (IPCEA).
5. National Electrical Code (NEC).
6. National Electrical Safety Code (NESC).
7. National Fire Protection Association (NFPA)
8. Joint Industrial Council (JIC)
9. Instrument Society of America (ISA)
10. Underwriters Laboratories (UL)
11. Occupational Safety and Health Association (OSHA)

1.3 QUALITY ASSURANCE

A. Requirements of Regulatory Agencies

1. Permits:
 - a. Obtain all permits required to commence Work and, upon completion of the Work, obtain and deliver to the DEPARTMENT a Certificate of Inspection and Approval from the State Board of Fire Underwriters or other authority having jurisdiction.
2. Codes:
 - a. Material and equipment shall be installed in accordance with the current standards and recommendations of the UL, NEC, NESC, NFPA, OSHA , NEMA, ANSI and with local codes which apply.
 - b. Where discrepancies arise between codes, the most restrictive regulation shall apply.
3. Tests by Independent Regulatory Agencies:
 - a. Electrical material and equipment shall be new and shall bear the label of the Underwriters' Laboratories, Inc., or other nationally-recognized, independent testing laboratory, wherever standards have been established and label service regularly applies.

B. Install service entrance in accordance with the rules and regulations of the local utility company.

1.4 DELIVERY, STORAGE AND HANDLING

A. Coordinate material and equipment delivery with the project schedule.

B. Notify the Owner's Representative immediately, in writing, if material or equipment delivery will adversely affect the project schedule, include documentation from equipment suppliers indicating the revised delivery dates and the reason for the delay.

C. Exercise care during loading, transporting, unloading and handling of materials to prevent damage.

D. Check for defective or damaged materials and for incomplete equipment shipments after equipment delivery to the project site.

E. Store materials and equipment on the construction site in enclosures or under protective covering to keep it clean, dry and undamaged.

F. Replace or repair, to the satisfaction of the Owner's Representative all defective or damaged materials and equipment at no additional cost to the Owner.

1.5 IDENTIFICATION OF EQUIPMENT

A. All electrical items shall be identified. Identification shall be in addition to the manufacturer's nameplates and shall serve to identify the item's function and the equipment or system, which it serves or controls.

B. Listing and Labeling: Provide products specified in this Section that are listed and labeled.

1. The Terms unlisted and Labeled: As defined in the "National Electrical Code," Article 100.

2. Listing and Labeling Agency Qualifications: A "Nationally Recognized Testing Laboratory (NRTL) as defined in OSHA Regulation 1910.7.

C. All new equipment shall be identified by means of laminated phenolic nameplates incised to show one-inch high, black letters on a white background. Labels shall be fastened by means of 3/16-inch diameter, round-head, stainless steel, self-tapping screws. Equipment whose designation has been changed shall be relabeled accordingly.

D. Wires and cables shall be color coded and identified by means of heat shrink PVC wire markers. 208Y/120V wiring shall be color coded black, red, blue with a white neutral. Ground wire insulation shall be green in color and control wire insulation shall be red in color. Control wires shall be numbered and labeled in accordance with JIC standards.

E. Pull and junction boxes, distribution panels, control panels, electrical manholes, disconnect switches, lighting panels and termination panels shall be identified with laminated phenolic nameplates showing the names of the feeders or system wires and cables passing through them.

1.6 CONDUITS, BOXES AND CABINETS

A. Conduits include the following:

1. Rigid galvanized steel conduit.
2. Intermediate metal conduit (IMC), either galvanized steel or aluminum are NOT allowed.
3. Liquid tight flexible metal conduit.

B. Boxes, enclosures, and cabinets shall include the following:

1. Device boxes.

2. Outlet boxes.
3. Pull and junction boxes.
4. Cabinets and hinged cover enclosures and panels.

C. Available Manufacturers: Subject to compliance with requirements, manufacturers offering Products that may be incorporated in the Work include, but are not limited to, the following:

1. Rigid metal conduit:
 - a. Monogram Co., AFC.
 - b. Allied Tube and Conduit, Grinnell Co.
 - c. Rob-Roy Industries, Inc.
 - d. V.A.W. of America, Inc.
2. Conduit Bodies and Fittings:
 - a. Emerson Electric Co., Appleton Electric Co.
 - b. General Signal, O-Z/Gedney Unft.
 - c. Crouse-Hinds Electrical Construction Materials.
3. Boxes, Enclosures, and Cabinets:
 - a. Hoffman
 - b. General Signal,
 - c. O-Z/Gedney.
 - d. Raco, Inc.
 - e. Hubbell Inc.
 - f. Thomas & Betts Corp.
 - g. American Electric
 - h. Appleton
 - i. Keystone

D. Rigid Metal Conduit

1. Galvanized Rigid Steel Conduit, hot-dipped galvanized or electro-galvanized steel: ANSI C80.1.
2. Fittings: NEMA FB 1, compatible with conduit materials.

E. Liquid Tight Flexible Metal Conduit

1. Interlocked steel construction with PVC jacket.
2. Fittings: NEMA FB1, compatible with conduit materials.
3. Used in less than 4'-0" per conduit end of run for vibrational, movement purposes as defined by NFPA Article 70(NEC Code).

F. Outlet and Device Boxes

1. Sheet Metal Boxes: NEMA OS 1.

2. Cast Metal Boxes: NEMA FB 1, type FC, cast ferrous alloy box with gasketed cover.
3. Minimum box size shall be as indicated in Article 370 of the National Electrical Code for the conductors and devices installed and shall be approved for the environmental condition of the location where they will be installed.

G. Pull and Junction Boxes

1. Small Sheet Metal Boxes: NEMA OS 1.
2. Cast Metal Boxes: NEMA FB 1, cast aluminum with gasketed cover.
3. Minimum box size shall be as indicated in Article 370 of the National Electrical code for the conductors installed and shall be approved for the environmental condition of the location where they will be installed.

H. Cabinets and Enclosures

1. Hinged Cover Enclosures: NEMA 250, Type 4 or Type 4X-stainless steel enclosure with continuous hinge cover and flush latch. Finish (carbon steel only) inside and out with manufacturer's standard enamel.
2. Cabinets: NEMA 250, Type 4 - galvanized steel box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel. Hinged door in front cover with flush latch and concealed hinge. Include metal barriers to separate wiring of different systems and voltage, and include accessory feet where required for freestanding equipment.

I. Examination: Examine surfaces to receive conduits, boxes, enclosures, and cabinets for compliance with installation tolerances and other conditions affecting performance of the conduit system. Do not proceed with installation until unsatisfactory conditions have been corrected.

J. Wiring Methods

1. Outdoors: Use the following wiring methods:
 - a. Exposed: Rigid metal conduit
 - b. Buried: Rigid metallic conduit
 - c. Boxes and Enclosures: NEMA Type 4-Steel or Type 4-stainless steel.
2. Indoors: Use the following wiring methods:
 - a. Exposed: Rigid metal conduit.
 - b. Boxes and Enclosures: NEMA 4-Steel or Type 4-stainless steel.

K. Installation

1. Install conduits, boxes, enclosures, and cabinets as indicated, according to manufacturer's written instructions and the contract drawings and specifications.

2. Raceways shall be sized per the National Electrical Code in accordance with the quantity, size, type and insulation of conductors to be installed; however, raceways shall be minimum one-half inch (1/2") trade size for the branch circuit wiring and minimum three-quarter (3/4") trade size for all telephone, intercommunication, instrumentation systems and for all branch circuit "Home Runs" to panelboards.
3. Install conduits level and square and at proper elevations. Provide adequate headroom and ability for operator access, breakdown of preventative maintenance.
4. Contractor shall coordinate layout and installation of conduit and boxes with other construction elements to ensure adequate headroom, working clearance, and access.
5. Complete conduit installation before starting conductor installation.
6. Provide with a #14 AWG. fish wire in all telephone, instrumentation, etc., "spare" or "Empty" conduit runs to facilitate future installation of conductors.
7. Support conduit as specified in NFPA Article 70 (NEC), NEMA and Requirements of the "Unistrut" Corporation. The more stringent shall govern in all cases.
8. Use temporary closures to prevent foreign matter from entering conduit.
9. Protect stub-ups from damage where conduits rise through concrete pad with oversized Sch. 40 PVC pipe and floor slabs. Arrange so curved radius portion of bends is not visible above the finished slab.
10. Make bends and offsets per NEC/NEMA codes/requirements so the inside diameter is not reduced. Unless otherwise indicated, keep the legs of a bend in the same plane and the straight legs of offsets parallel.
11. Use conduit fittings compatible with conduit and suitable for use and location (NEMA Rating).
12. Conduits embedded in asphalt/concrete paving. Install in middle third of the slab thickness where practical, and leave at least 1 inch (25 mm) asphalt/concrete cover.
 - a. Secure conduits to reinforcing rods to prevent sagging or shifting during asphalt/concrete placement.
 - b. Space conduits laterally to prevent voids in the concrete.
 - c. Run conduit larger than 1-inch trade size parallel to or at right angles to main reinforcement. When at right angles to reinforcement, place conduit close to slab support.
13. Install exposed conduits parallel to or at right angles to nearby surfaces or structural members, and follow the surface contours as much as practical.
 - a. Run parallel or banked conduits together, on common supports where practical.

- b. Make bends in parallel or banked runs from same center line to make bends parallel. Use same type factory elbows only where they can be installed parallel; otherwise, provide field bends for parallel conduits.
- 14. Join conduits with fittings designed and approved for the purpose and make joints tight.
 - a. Make raceway terminations tight. Use bonding bushings or wedges at connections subject to vibration. Use bonding jumpers throughout.
 - b. Use insulating bushings to protect conduits.
- 15. Terminations: Where conduits are terminated with locknuts and bushings, align the conduit to enter squarely, and install the locknuts with dished part against the box. Where terminations cannot be made secure with one locknut, use two locknuts, one inside and one outside the box.
- 16. Where terminating in threaded hubs, screw the conduit or fitting tight into the hub so the end bears against the wire protection shoulder. Where chase nipples are used, align the conduit so the coupling is square to the box, and tighten the chase nipple so no threads are exposed.
- 17. Stub-Up Connections: Extend conduits through concrete floor for connection to free standing equipment with an adjustable top of coupling threaded inside for plugs, and set flush with the finished floor. Extend conductors to equipment with rigid steel conduit. Couple rigid steel conduit, properly supported of vibrating, expanding, adjustable equipment using LIQUID TIGHT flexible metal conduit.
- 18. Install hinged cover enclosures and cabinets plumb. Support at each corner.
- 19. Provide grounding connections for conduits, boxes, and components as specified in this Contract Document and the manufacturer. Tighten connectors and terminals, including screws and bolts, according to equipment manufacturer's published torque tightening values for equipment connectors. Where manufacturer's torquing requirements are not indicated, tighten connectors and terminals according to tightening torques specified in UL Standard 486 A then megger (resistant measurement in ohm) connections. Any connection that exhibits 25 ohms or more shall be modified/repared or replaced until 25 ohms or less is achieved and the Contractor bear all cost with no additional cost incurred to the DEPARTMENT.
- 20. Underground Raceway
 - a. Continuous warning tape for underground utilities is required to be installed no less than 6" above all underground pipe.
 - b. Encase all GRS underground raceways in sand envelope. Form sand envelope around raceways, 3 inch minimum thickness sand at top, bottom and sides of raceways, 2-1/2 inch minimum thickness sand between raceways. Top of sand envelope shall be finished red and shall be not less than 24 inches below finished grade, except where under building slabs.

- c. Conduits in the same trench must be spaced 7-1/2 inches on center. Tie raceways in place to prevent floating. Pour sand/concrete as soon as possible after placing and securing of raceways.
- d. Pull iron-shod mandrel, not more than 1/4 inch smaller than bore of raceway to remove any obstructions. Clean raceway by drawing through properly sized cylindrical brushes as many times as necessary to remove dirt.
- e. Where raceways rise above grade and terminate in building, provide conduit sealing brushing on each raceway.
- f. Provide trenching, backfill and restoration where required. Trenches shall be excavated to depths required to provide the minimum necessary cable cover. Bottoms of trenches shall be smooth and free of stones and sharp objects. Where bottoms of trenches comprise materials other than sand or stone-free earth, 3-inch layers of sand or stone-free earth shall be laid first and compacted to approximate densities of surrounding firm soil.

1.7 WIRES AND CABLES

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work includes but are not limited to, the following:

- 1. Wires and Cables:
 - a. American Insulated Wire Corporation, Leviton Manufacturing Co.
 - b. Carol Cable Company, Inc.
 - c. Senator Wire & Cable Co.
 - d. Belden
- 2. Connectors for Wires and Cables:
 - a. AFC, Monogram Co.
 - b. AMP, Inc.
 - c. Electrical Products Division, 3M Co.
 - d. O-Z/Gedney Unit, General Signal.

B. Power Wires and Cables

- 1. Description: Single conductor insulated wire.
- 2. Conductor: Copper, stranded and solid.
- 3. Insulation voltage rating: 600 volts.
- 4. Solid conductor for #14 AWG and smaller; stranded conductor for larger than #14 AWG.
- 5. Insulation: ANSI/NFPA 70; Type XHHW insulation for feeders and branch circuits larger than #8 AWG; Type THHN/THWN insulation for feeders and branch circuits #8 AWG and smaller.

C. Control and Communication Wires and Cables

1. Single conductor type SIS switchboard wire, stranded copper conductor.
2. Multiconductor cable: PVC-Nylon insulated, #14 AWG stranded copper conductors, color coded.
3. Multi-pair individually shielded cable: Stranded #14 AWG copper conductors, color coded, 100% foil shield with drain wire, 600 volt insulation.
4. Telephone cable: Multiconductor, PVC insulated, #22 AWG solid copper conductors, color coded, 300 volt insulation.

D. Connectors and Splices

1. UL-listed factory-fabricated wiring connectors of size, ampacity rating, material, and type and class for application and for service indicated.

E. Installation

1. Install wires and cables, according to manufacturers written instructions and these specifications.
2. Pull conductors into conduit simultaneously where more than one is being installed in same conduit. Use pulling compound or lubricant where necessary; compound used must not deteriorate conductor, insulation or conduit. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips that will not damage cables, cable/conductors, insulation or conduit.
3. Conductors shall not be installed until raceways system, including all outlets, cabinets, bushings and fittings, is completed. Verify that all work of other trades which may cause conductor damage is completed. Use cable lubricants when necessary. Do not use mechanical means to pull conductors No. 8 or smaller.
4. In general, conductors shall be the same size from the last protective device to the load.
5. All feeder connections shall be made to bus and other equipment using solderless, pressure type terminal lugs.
6. Conductor Splices: Keep to minimum and as approved by the ENGINEER. Install splices and tapes that possess equivalent or better mechanical strength and insulation ratings than conductors being spliced. Use splice and tap connectors that are compatible with conductor material.
7. For splices and taps, No. 10 AWG and smaller, use solderless "Twist on" connectors having spiral steel spring and insulated with a vinyl cap and skirt.

8. For splices and taps, No. 8 and larger, use solderless "Split Bolt" type connectors.
9. Use cast connectors for ground conductors.
10. Make all splices and connections in accessible boxes and cabinets only.
11. Cover uninsulated splices, joints and free ends of conductor with rubber and friction tape or PVC electrical tape. Plastic insulating caps may serve as insulation.
12. Feeder conductors shall be continuous from point of origin to load termination without splice. If this is not practical, contact the Owner's Representative and receive written approval for splicing prior to installation of feeder(s). Where feeder conductors pass through junction and pull boxes, bind and lace conductors of each feeder together. For parallel sets of conductors, match lengths of conductors as near equal as possible.
13. Branch circuit conductors installed in panelboards and control conductors installed in control cabinets and panels shall be neatly bound together using "Ty-Raps" or equivalent.
14. Provide conduit seals and explosion proof devices as dictated by the National Electrical Code for all hazardous locations.
15. Motor Terminals and Similar Bolted Connections for Wire and Cable #12 AWG and Above.
 - a. Use proper size pressure type eyelets on stranded conductors. Form a circular loop in bare solid conductors.
 - b. Bolt lugs together back to back using the proper size bolt with a flat washer placed under the bolt head and a lock washer placed under the nut. The bolt shall be cut off short as possible and cleaned of any sharp edges.
 - c. First, insulate with a friction tape starting at end of conductor insulation without covering conductor insulation to eliminate sharp edges and voids.
 - d. Second, start vinyl plastic tape between conductors, pull tightly into crotch, wind around one conductor and back into crotch, then around second conductor and into crotch again, pulling tape as tightly as possible on each turn. Repeat this procedure until six layers of tape are pulled into crotch. Press conductors together firmly. Tape over all with vinyl plastic tape until it extends a short distance beyond the end, turn tape over end and wind back to starting point. Pull tape as tightly as possible on each turn and continue taping as above to a thickness equal to one-and-one-half times the thickness of the original conductor covering.
16. Wiring at Outlets: Install with at least 12 inches (300 mm) of slack conductor at each outlet.

17. Connect outlets and components to wiring and to ground as indicated and instructed by the Contract Drawings and specifications, and the manufacturer. Tighten connectors and terminals, including screws and bolts, according to equipment manufacturers published torque-tightening values for equipment connectors. Where manufacturers torquing requirements are not indicated, tighten connectors and terminals according to tightening torques specified in UL Standard 486A. Where manufacturer's torquing requirements are not indicated, tighten connectors and terminals according to tightening torques specified in UL Standard 486 A then megger (resistant measurement in ohms) connections. Any connection that exhibits 25 ohms or more shall be modified/repaired or replaced until achieved with the Contractor bearing all cost with no increase incurred to the DEPARTMENT.

1.8 UTILITY SERVICE REQUIREMENTS

A. Electrical service from existing treatment facility shall provide power to the new treatment facility as required. Provide new 100Amp three phase breaker in the main distribution panel of the existing treatment facility. Verify route of the new feeder with site engineer.

B. Telephone System Description

1. Telephone Service Requirements: one line, voice grade, tone dial for
 - a) Treatment System auto dialer (only if the autodialer from the IRM system cannot be used).

C. Installation

1. The Electric and telephone services shall be installed in strict accordance with the utility company requirements and standards.
2. The Contractor shall verify the electric service requirements by calculating the total connected load of the approved equipment to be installed and increase the electrical service size and equipment if required.

1.9 PANELBOARDS AND CONTROLLERS

A. Panelboards and controllers shall comply with the following:

1. ANSI/NEMA ICS 6 - Enclosures for Industrial Controls and Systems.
2. FS W-C-375 - Circuit Breakers, Molded Case; Branch Circuit and Service.
3. FS W-P-115 - Power Distribution Panels.
4. NEMA ICS 2 - Industrial Control Devices, Controllers, and Assemblies.
5. NEMA Standard: Comply with NEMA PBI, "Panelboards"; NEMA ICS 2 and NEMA ICS 6, "Industrial Controls and Enclosures."

6. UL Standards: Comply with UL 61, "Panelboards," and UL 50, "Cabinets and Boxes."

B. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:

1. ABB Power Distribution, Inc.
2. Asco Electrical Products Co., Inc.
3. Eaton Corp.
4. General Electric Co.
5. Siemens Energy & Automation, Inc.
6. Square D Co.
7. Westinghouse Electric Corp.

C. Panelboards

1. Branch circuit panelboard rated for use as service entrance equipment. NEMA PB1; circuit breaker type. Federal Specification W-P-115a; Type 1, Class 1.
2. Enclosure: Surface mounted NEMA 4-Steel, with manufacturer's standard grey (ANSI 61) enamel.
3. Panels shall have full size neutral bussing and shall have a ground bus sized per the National Electric code.
4. Panels shall be surface mounted and shall have a single door with cylinder lock and catch assembly. A directory frame with clear plastic protection for the directory shall be included and mounted to the inside of the door. The directory shall be typewritten.
5. Panels shall be supplied with molded-case, bolt-in type, thermal magnetic trip circuit breakers.
6. Molded Case Circuit Breakers: NEMA AB1; Federal Specification W-C-375; bolt-on type thermal magnetic trip circuit breakers, ratings as required.
7. Circuit breakers shall be toggle, quick-make, quick break type with a positive indication of tripped action.
8. Where required, circuit breakers shall have inherent ground fault protection which shall be set to instantaneously trip at 5 ma.
9. Where required, panels shall have main circuit breakers.
10. Minimum Integrated Short Circuit Rating: Coordinate required amperes rms symmetrical rating, with utility company and provided as required.

D. Motor Controllers

1. Magnetic Motor Starter: NEMA ICS 2; AC general-purpose Class A magnetic controller for induction motor rated in horsepower.
2. Full Voltage Starting: Non-reversing type.
3. Coil Operating Voltage: 120 volts, 60 hertz.
4. Size: NEMA ICS 2; size as required, with a minimum Size 1 NEMA CLASS Motor Starter .
5. Overload Relay: NEMA ICS 2; bimetal.
6. Enclosure: NEMA ICS 6; Type 4.
7. Auxiliary Contacts: NEMA ICS2; two normally open, and two normally closed field convertible contacts in addition to seal-in contact.
8. Pushbuttons: NEMA ICS 2; START/STOP in front cover as required for the equipment for the groundwater treatment system.
9. Selector Switch: NEMA ICS 2; HAND/OFF/AUTO in front cover as required for the equipment for the groundwater treatment system.
10. Motors rated ½ horsepower and smaller: Motor starters shall be fractional horsepower manual type with hand-off-auto selector switch in NEMA type with hand-off-auto selector switch enclosure that satisfies the location environment.
11. For motors rated 3/4 horsepower and above: Motor starters shall be combination starter/disconnect type, employing magnetic starter, rated to match the equipment served, with thermal overload protection for each phase and with a thermal magnetic circuit breaker type disconnect sized per the circuit breaker manufacturer's recommendations for coordination with the thermal overload protection. Combination starters shall be provided with a control power transformer, with primary and secondary fusing, as required and hand-off-auto selection switch. Padlock arrangements shall be provided to lock the disconnect device in the "off" position. Starters shall be minimum NEMA Size 1, shall have a NEMA type enclosure that satisfies the location environment and shall be rated for the voltage to which they will be connected.
12. Disconnect switches shall be heavy-duty type three-pole, with operating handle mechanically interlocked with the cover, horsepower and voltage rated to match equipment served. Switches shall be provided with provision for dual-element, time delay, rejection type fuses. Switches shall be installed in NEMA type enclosure that satisfies the location environment.

E. Installation

1. General: Install panelboards and accessory items in accordance with NEMA PB 1.1, "General Instructions for Proper Installation, Operation and Maintenance of Panelboards Rated 600 Volts or Less" and manufacturers' written installation instructions.
2. Panelboard Mounting Heights: Top of enclosure 6 ft. above finished floor or grade, except as indicated on the contract drawings or explained in the specifications.
3. Panelboard Mounting: Plumb and rigid without distortion of box.
4. Circuit Directory: Typed and reflective of final circuit changes required to balance panel loads. Obtain the Departments or Engineers approval before installing.
5. Install filler plates in unused spaces.
6. Wiring in Panel Gutters: Train conductors neatly in groups, bundle, and wrap with wire ties after completion of load balancing.
7. Panels shall be labeled with black letters engraved on white plastic tag securely fastened to the panel.
8. Provide and mount under plastic in each panelboard directory frame, a neatly typewritten directory identifying the branch circuit devices and the circuits, devices and areas which they serve.
9. Install motor control equipment in accordance with manufacturer's instructions and contract specifications.
10. Motor Controller mounting height: 54 inches above finished floor or grade.
11. Motor Controller Mounting: Plumb and Rigid without distortion of enclosure. A disconnect switch shall be mounted at each motor location per NEC requirements.
12. Motor Controllers shall be labeled with black letters engraved on white plastic tag the equipment that is served.

F. Field Quality Control

Visual and Mechanical Inspection: Include the following inspections and related work:

1. Inspect for defects and physical damage, labeling, and nameplate compliance with requirements of up-to-date drawings and panelboard schedules.
2. Exercise and perform of operational tests of all mechanical components and other operable devices in accordance with manufacturer's instruction manual.

3. Check panelboard and motor controller mounting, area clearances, and alignment and fit of components.
4. Check tightness of bolted electrical connections with calibrated torque wrench. Refer to manufacturer's instructions for proper torque values.

1.10 GROUNDING AND BONDING

A. Acceptable Manufacturers

1. Burndy Corp.
2. Cadweld
3. Erico Products Inc.
4. Oz/Gedney Co.
5. Thermoweld
6. Thomas & Betts

B. Provide grounding electrodes, conductors, connections, hardware and bonding as required for proper and complete electrical system and equipment grounding.

C. All grounding system components and hardware shall be UL labeled and listed.

D. The grounding system components and hardware furnished under this specification shall be the standard product of a manufacturer with established reputation and experience and who shall have produced the specified components and hardware for a minimum of three years.

E. The grounding system and bonding shall meet or exceed the requirements of Article 250 of the latest edition of the National Electric Code (NFPA 70). In the event of a conflict or discrepancy with NEC Article 250, the more stringent requirement shall apply.

F. The grounding system resistance to ground shall be 25 ohms or less.

G. Ground Rods

1. Ground rods shall be copper clad steel at least 5/8" in diameter and 10 feet long. The rods shall have a hard, clean, smooth, continuous surface throughout the length of the rod. Each ground rod shall be die-stamped near the top with the name or trademark of the manufacturer and the length of the rod in feet.

H. Conductors

1. Grounding and bonding conductors, cables and braided straps shall be bare, stranded, electrical grade, copper sized as indicated in the contract documents or as required by NEC Article 250, whichever requirement is more stringent. Bonding jumpers shall have a cross-sectional area at least equal to the associated grounding conductor.
2. Provide grounding and bonding conductors and cables with insulation type and color as specified and indicated; conductors and cables shall be same make as for 600 volt conductors.

I. Clamps, Connectors, Lugs, Terminals and Hardware

1. Provide solderless ground clamps, connectors and hardware made of corrosion resistant silicon-bronze as required; clamps, connectors and hardware shall be suitable for direct burial.
2. Provide solderless lugs and terminals constructed of copper as required; lugs and terminals shall be two hole type for conductor sizes #1/0 and larger.

J. Installation

1. General

- a. Install all grounding system components and hardware in accordance with manufacturer's instructions and NEC Article 250.
- b. Install all grounding system cables and conductors with enough slack to prevent undue stress and/or breaking.
- c. Grounding conductors or cables subject to abrasion or mechanical damage shall be installed in rigid metal conduit.
- d. All grounding conductors shall be installed in one continuous length without splice or joint.
- e. All bonding or grounding conductors shall be terminated in a listed lug which shall be bolted or screwed to a fixed metallic portion of the building structure or equipment enclosure.
- f. All surfaces at points of grounding connection shall be thoroughly cleaned and buffed just prior to making the connection.
- g. Grounding conductors that pass through floor slabs, walls, etc., unprotected shall be installed in Schedule 40 PVC conduit sleeves.

2. Building Structure Grounding

- a. Do not install ground rods and ground ring conductors in cinder fill or backfill with soil containing corrosive materials.
- b. Install ground rods around perimeter of building in locations indicated; install additional ground rods as required to achieve resistance to ground specified. Ground rods shall be driven to a depth such that the top of the ground rod is 24" below finished grade.
- c. Install a bare copper ground ring conductor, size as required, around the perimeter of the building 30" below finished grade. The ground conductor shall be connected to each ground rod by a "cadwelded" connection.

- d. Install a bare copper bonding conductor, size as required, from the ground ring conductor to each steel building column. The bonding conductor shall be "cadwelded" to the column and connected to the ground ring conductor by a "cadwelded" connection or listed connector.

3. Electrical System Grounding

- a. The electrical service shall be effectively grounded by bonding together Main Distribution Panel and the made grounding electrode. The grounding electrode and bonding conductors shall be sized as indicated or as required by NEC Articles 230 and 250, whichever is more stringent.
- b. Separately derived alternating current systems shall be bonded and grounded ahead of any disconnecting or overcurrent device. The grounding electrode and conductor shall be the nearest effectively grounded metal structure or water pipe or other approved made grounding electrodes.
- c. Do not install ground rods and grounding electrode conductors in cinder fill or backfill with soil containing corrosive materials.
- d. Provide a made grounding electrode and install additional ground rods as required to achieve the resistance to ground specified. Ground rods shall be driven to a depth such that the top of the ground rod is 24" below finished grade.

4. Equipment and Device Grounding

- a. Each feeder and branch circuit shall be provided with a green, or bare, grounding conductor, sized as indicated, and installed in the associated raceway or conduit. Each grounding conductor shall be terminated on a suitable and approved lug, bus, or bushing.
- b. All feeder raceways shall be bonded to all associated panelboards. Where multiple feeder raceways enter a common enclosure or box, all the feeder raceways shall be bonded together as well, as to the box.
- c. Terminations of all metallic raceways at panelboard, disconnect switches, equipment enclosures, junction boxes, cabinets, etc., shall be provided with grounding type bushings; except insulated type bushings shall be provided where required by the NEC.
- d. All raceway systems, panelboards, disconnect switches, starters, junction boxes, metal enclosures, motor frames, steel supports, etc., shall be effectively grounded.
- e. Conduits which run to enclosures having concentric or eccentric knockouts which partially perforate the metal around the conduit and impair the electrical connection to ground shall be provided with approved bonding jumpers.

- f. Bonding jumpers shall consist of a stranded or braided copper wire sized in accordance with NEC Article 250. The bonding jumper shall be connected from the grounding bushing on the conduit to a ground bus stud or corrosion resistant alloy bolt in the enclosure.
- g. Raceway, conduit, bus expansion joints and telescoping sections not thoroughly bonded shall be provided with approved bonding jumpers not less than #8 awg stranded bare copper.
- h. All flexible metal conduit, liquid tight conduit and Type MC cable shall be provided with a continuous, stranded, copper grounding conductor in addition to the metallic sheath. The grounding conductor shall be sized as indicated or required by NEC Article 250, but shall not be less than #12 awg.

I. Tests

- 1. Measure, record, and submit value of building structure ground resistance and the made electrode ground resistance to earth prior to any connections to equipment, building steel, or water service.
- 2. Measure, record, and submit value of building structure ground resistance and the made electrode ground resistance after all connections have been made.

1.11 LIGHTING

A. Description

- 1. Exterior lighting fixtures, and fixture support devices as required and described herein.
- 2. Types: Types of lighting fixtures in this Section include the following:
 - a. Fluorescent.

B. Quality Assurance

- 1. Manufacturers: Provide products of firms regularly engaged in the manufacture of interior lighting fixtures of types and ratings required, whose products have been in satisfactory use in similar service for not less than 2 years.
- 2. Certified Ballast Manufacturers Association (CBM) Labels: Provide fluorescent-lamp ballasts which comply with CBM standards and carry the CBM label.
- 3. National Fire Protection Association (NFPA): Comply with NFPA 70, "National Electrical Code," as applicable to construction and installation of interior building lighting fixtures and emergency lighting.

4. Underwriters Laboratories, Inc. (UL): Comply with UL standards pertaining to lighting fixtures for damp or wet locations.
 - a. 57 Electric Lighting Fixtures
 - b. 542 Lampholders, Starters and Starter Holders for Fluorescent Lamps
 - c. 1570 Fluorescent Lighting Fixtures
 - d. 1572 High Intensity Discharge Lighting Fixtures
5. UL: Provide lighting fixtures and emergency lighting units which have been UL listed and labeled.

C. General Requirements

1. Lighting Fixture Requirements: Provide fixtures which meet the requirements of these specifications.
2. General Requirements: Provide lighting fixtures of sizes, types, and ratings required; complete with, but not necessarily limited to, housings, lamps, lamp holders, reflectors, ballasts, starters, wiring and batteries and battery charging devices.
 - a. Form fixture sheet metal housings to prevent warping and sagging. Return or clean all edges free of all burrs or sharp spots. Provide fixtures free from light leaks after installation.
 - b. Hinged door closure frames shall operate smoothly without binding. Fabricate frames to allow lamp installation/removal without tools. Hinge mechanism shall be designed to preclude accidental falling of hinged door closure frames during relamping operations and while secured in operating position.
 - c. Interior light reflecting surfaces shall have reflectance of not less than 85 percent for white surfaces, 83 percent for specular surfaces, and 75 percent for specular diffusing surfaces.
 - d. Provide manufacturer's standard finish applied over corrosion-resistant primer, free of streaks, runs, holiday, stains, blisters, or similar defects. Remove any fixtures showing evidence of rust at time of final inspection.
 - e. Light transmitting components shall be fabricated of 100 percent virgin acrylic plastic or water white, annealed, crystal glass. Minimum average thickness of lenses for fluorescent fixtures shall be 0.125-inch. Fabricate frames to allow for expansion of lens without distortion or cracking. For plastic lenses, diffuses, and covers, provide high resistance to yellowing due to UV radiation.
 - f. Provide each fixture with lamps as indicated. Where lamps are not indicated, provide lamps as recommended by manufacturer.

- g. For locations with severe environmental conditions such as damp or wet locations, high temperature, or flammable vapors provide fixtures specifically labeled and listed for the particular conditions to be encountered.

D. Fluorescent Lighting Fixtures

1. General: Conform to UL 1570, except for damp and wet locations conform to UL 57.
2. Fluorescent Lamps: Provide the number, type, and wattage required. Provide lamps conforming to American National Standards Institute (ANSI) C78.
3. Fluorescent Ballasts: Provide fluorescent ballasts conforming to UL935, "Fluorescent-Lamp Ballasts," ANSI C82.1, "Ballasts for Fluorescent Lamps - Specifications." Provide fixtures labeled by CBM and certified by Electrical Testing Laboratories (ETL). Ballasts shall be high power factor type, unless indicated otherwise, designed to operate on the voltage system to which they are connected. Ballasts shall be Class P with sound rating "A" unless otherwise noted. Fixtures and ballasts shall be designed and constructed to limit the ballast case temperature to 90 degrees C. when installed in an ambient temperature of 40 degrees C.
 - a. Low Temperature Ballasts: Provide fluorescent ballasts having a minimum starting temperature of minus 20 degrees C. in fixtures located where ambient temperature may fall below 50 degrees F.
 - b. Energy-Saving Ballasts: Provide electronic high frequency energy-saving fluorescent ballasts of the CBM certified full light output type, compatible for use with energy-saving lamps tested in accordance with ANSI C82.2, "Fluorescent Lamp Ballasts - Methods of Measurement," methods.
4. Electromagnetic Interference Filters: Provide electromagnetic interference filters in fluorescent fixtures. Filters shall be integral to the fixture assembly, one filter per ballast and shall suppress electromagnetic interference as required by MIL-STD-461, "Electromagnetic Emission and Susceptibility Requirements for the Control of Electromagnetic Interference."
5. Lamp Sockets: Comply with UL 542 and ANSI C81.20, "Electric Lamp Bases and Holders - Fluorescent Types, Specifications for."
6. Lamp Sockets: Conform to UL 496, "Edison Base Lampholders."

E. Installation

1. Provide interior light fixtures as required to achieve a minimum lighting level of 30fc. at 32" above finished floor.
2. Mount fixtures in true vertical and horizontal alignment.
3. Offset fixtures as required to avoid obstructions.

4. Provide all necessary hangers and supports for proper fixture installation. Such supports shall be anchored to channels in the ceiling construction, to the structural slab or to structural members above the suspended ceiling. Fixture supports shall be capable of supporting a minimum of two and one-half times the load normally carried at point of support.
5. Provide all necessary accessories for "end-to-end" mounting where continuous rows of fluorescent fixtures are required.

1.12 TESTS

A. Tests and procedures prior to start-up:

1. All equipment and materials shall be clean, dry and free of foreign materials. All screw and bolt connections shall be checked for tightness.
2. Conductor connections and terminations, and all bus bar connections shall be checked for proper tightness and continuity.
3. Provide 1000volt "Megger" insulation testing on all 600volt feeder conductors and motor power conductors.
4. Test the grounding system to assure continuity and to assure that resistance to ground does not exceed specified limits.

B. Branch circuits shall be tested during installation for continuity and identification and shall pass operational tests to determine that all circuits perform properly.

C. Demonstration of Complete Electrical Systems

1. The Owner will assume no liability or responsibility for any portions of the installation under this contract until they are demonstrated and accepted in writing. Final demonstrations shall be made only after the Owner's Representative is satisfied that the work has been completed in accordance with the intent of the Contract Documents.
2. After the electrical system is completed, and when directed by the Owner's Representative, demonstrate the total system operation and make final adjustments to the system. If any system or piece of equipment within a system fails to function properly, rectify such defects or inadequacies and make a final demonstration as directed by the Owner's Representative.
3. Provide the services of authorized manufacturers' representatives to instruct the Owner's Representative in the proper operation of each partial or complete system installed under this Contract.

4. Pay all charges or fees, including the cost of any special test equipment, factory engineers, etc. necessary for the proper performance of the specified tests, demonstrations and instructions.
 5. All demonstrations and instructions referred to shall be scheduled at the convenience of the Owner's Representative and the Owner and in no case shall be scheduled without at least seventy-two (72) hours written notice.
- D. Provide additional testing as indicated in related sections in the Contract Documents.
- E. For all feeder wiring rated 600 volts or less, provide 1,000 volt "Megger" insulation test prior to energizing feeders. Use a 1000 volt motor driven megger for all tests. Test voltage shall be applied until readings reach a constant value, and until three (3) equal readings, each one (1) minute apart, are obtained. Minimum megger reading shall be 45 megohms for feeder conductors. Document test results and submit for approval prior to energizing conductors.

1.13 CLEANING

- A. Refuse and surplus materials shall not accumulate on the project site during the course of the work. Clean up shall be daily and removal shall be scheduled at least once a month.
- B. Upon completion of the work, remove all refuse and surplus materials and leave the premises neat and clean.
- C. Clean all equipment surfaces and touch up all damaged surfaces to the satisfaction of the Owner's Representative.
- D. Clean all lighting fixture reflector assemblies, lenses, louvers, and lamps upon completion of the installation.

END OF SECTION 16010

SECTION XII
MEASUREMENT AND PAYMENT

BID BREAKDOWN

- A. The bid breakdown, submitted in accordance with Section III, Article 12 of these Contract Documents, may be used as a basis for determining progress payments on lump sum pay items. The bid breakdown shall be cost loaded construction activities equal, in total, to the lump sum bid and shall be in such form and sufficient detail to correctly represent a reasonable apportionment of the lump sum. Prior to submitting an invoice for payment, the CONTRACTOR shall have submitted a detailed bid breakdown and obtained approval from the ENGINEER.
- B. Each lump sum bid item on the schedule of Work and Prices, as set forth in the Bid must be broken down separately. The breakdown of each lump sum bid item must cover the cost of construction required by the Contract Drawings and Contract Documents for that item. The sum of the values for the construction activities, within a bid item, must equal the total bid amount for that item. The breakdown shall include subcontract amounts which shall not deviate from the amounts submitted in the Bid Proposal. The CONTRACTOR shall provide certification from the Subcontractors certifying the subcontract amounts.
- C. The bid breakdown will include all information required in the Measurement for Payment Section for each bid item.
- D. A bid breakdown for unit price items will be submitted to the Engineer as requested or required by these Contract documents.
- E. The bid breakdown will include labor, equipment and material costs (regardless if subcontracted or not) with markups as appropriate.

UNIT PRICE ITEMS

UC-1 SHALLOW SVE WELL

A. Measurement

The provision of all work and requirements for the installation of soil vapor extraction wells SVE-9S and SVE-10S as described in Section 02733 - WELL DRILLING AND PLACEMENT, Section 02230 – CONTAMINATED MATERIALS, Section 03400 – PRECAST CONCRETE, and Section 11301 –SOIL VAPOR EXTRACTION SYSTEM, acceptably performed, shall be on a unit price per well basis.

The unit price per well shall include: the complete drilling and installation of the well, pavement saw cutting, excavation and backfill, all well materials and components, the concrete well box and door, all pipe, fittings, and appurtenances to connect the well to the lateral piping, and all instrumentation and sampling ports located within the wellbox. This item also includes mobilization, equipment decontamination, and demobilization per the requirements of these Contract Documents. Only piping within the well box itself is included under this item. All lateral piping is included in Item LS-4.

Disposal of drill cuttings, excavated soil, and other material not reused onsite shall be paid under item UC-9.

The unit price for the well shall take into account the fact that the installed depths of the wells, and the depth of the well components, may vary from that depicted in the Contract Drawings. The unit price for the wells shall take into account the variation in depth and construction for the wells across the site.

B. Payment

The Contractor shall be paid for the quantity of shallow SVE wells installed at the unit price in the Contractor's bid. The unit price shall include all labor, equipment, and materials for installation and construction of the wells.

UC-2 INTERMEDIATE SVE WELL

A. Measurement

The provision of all work and requirements for the installation of soil vapor extraction wells SVE-7S and SVE-8S as described in Section 02733 - WELL DRILLING AND PLACEMENT, Section 02230 – CONTAMINATED MATERIALS, Section 03400 – PRECAST CONCRETE, and Section 11301 – SOIL VAPOR EXTRACTION SYSTEM, acceptably performed, shall be on a unit price per well basis.

The unit price per well shall include: the complete drilling and installation of the well, pavement saw cutting, excavation and backfill, all well materials and components, the concrete well box and door, all pipe, fittings, and appurtenances to connect the well to the lateral piping, and all instrumentation and sampling ports located within the wellbox. This item also includes mobilization, equipment decontamination, and demobilization per the requirements of these Contract Documents. Only piping within the well box itself is included under this item. All lateral piping is included in Item LS-4. Disposal of drill cuttings, excavated soil, and other material not reused onsite shall be paid under item UC-9.

The unit price for the well shall take into account the fact that the installed depths of the wells, and the depth of the well components, may vary from that depicted in the Contract Drawings. The unit price for the wells shall take into account the variation in depth and construction for the wells across the site.

B. Payment

The Contractor shall be paid for the quantity of intermediate SVE wells installed at the unit price in the Contractor's bid. The unit price shall include all labor, equipment, and materials for installation and construction of the wells.

UC-3 DEEP SVE WELL

A. Measurement

The provision of all work and requirements for the installation of deep soil vapor extraction wells SVE-7D and SVE-8D as described in Section 02733 - WELL DRILLING AND PLACEMENT, Section 02230 – CONTAMINATED MATERIALS, Section 03400 – PRECAST CONCRETE, and Section 11301 –SOIL VAPOR EXTRACTION SYSTEM, acceptably performed, shall be on a unit price per well basis.

The unit price per well shall include: the complete drilling and installation of the well, pavement saw cutting, excavation and backfill, all well materials and components, the concrete well box and door, all pipe, fittings, and appurtenances to connect the well to the lateral piping, and all instrumentation and sampling ports located within the wellbox. This item also includes mobilization, equipment decontamination, and demobilization per the requirements of these Contract Documents. Only piping within the well box itself is included under this item. All lateral piping is included in Item LS-4. Disposal of drill cuttings, excavated soil, and other material not reused onsite shall be paid under item UC-9.

The unit price for the well shall take into account the fact that the installed depths of the wells, and the depth of the well components, may vary from that depicted in the Contract Drawings. The unit price for the wells shall take into account the variation in depth and construction for the wells across the site.

B. Payment

The Contractor shall be paid for the quantity of deep SVE wells installed at the unit price in the Contractor's bid. The unit price shall include all labor, equipment, and materials for installation and construction of the wells.

UC-4 SVE SYSTEM OPERATION – FIRST TWO WEEKS

A. Measurement

The provision of all work and requirements for operation of both SVE systems as described in Section 11301-SOIL VAPOR EXTRACTION SYSTEM, acceptably performed, shall be on a unit price basis.

The unit price per week for the operation and maintenance of the both SVE systems (including wells, piping, and all system components) for the first two weeks after successful installation and startup shall include the furnishing of all labor, equipment and materials necessary for the SVE systems to be fully operational and to meet all system performance requirements. The unit price per week shall also include all sampling and oversight necessary to monitor the performance and progress of the systems, reporting, all utility costs for operation of the systems, all Health and Safety provisions in accordance with the Contractor's approved Health and Safety Plan, all disposal costs, and costs for all other O&M requirements specified. The unit price per week shall also include all costs for providing and maintaining the required site facilities and services in accordance with Section 01050-SITE FACILITIES AND SERVICES.

All costs for vapor phase carbon replacement and disposal, as well as costs for air sample collection and analysis are the only items not included in this pay item. These costs shall be included in Items UC-8 and UC-9.

B. Payment

The Contractor shall be paid the unit price per week for acceptable operation of both SVE systems. A prorated reduction will be made if maintenance or operations are considered by the Engineer to be unsatisfactory, unnecessary or unavailable during the period. Such a prorated reduction will be computed based on prices in the bid breakdown submitted by the Contractor, operating records, and as determined by the Engineer. The unit price for continuous system operation will be paid on a weekly basis, provided that all required reports for the period for which payment is requested have been submitted and approved by the Engineer, and the system performance objectives are being met.

UC-5 SVE SYSTEM OPERATION – SUBSEQUENT TEN WEEKS

A. Measurement

Measurement for this pay item shall be as defined for Pay Item UC-4. However, the frequency of sampling, analysis, and monitoring shall be as described in Section 11301-SOIL VAPOR EXTRACTION SYSTEM.

B. Payment

Payment for this item shall be as defined under Pay Item UC-4.

UC-6 HEALTH AND SAFETY

A. Measurement

1. Measurement for health and safety provisions described in Section X and other applicable sections will include the preparation of a Health and Safety Plan (HASP) and Community Protection Plan (CPP), provision of a Health and Safety Coordinator (HSC), a Safety Officer (SO) at the Project Site, the implementation of the HASP on-site including provision and disposal of personal protective equipment and other related disposable materials and decontamination of personnel and equipment. All daily maintenance costs for health and safety are part of this Bid Item including everything required in the HASP. This item also includes all costs for the collection, handling, sampling, analysis and disposal of all decontamination water generated over the course of the project.
2. Measurement for payment of this Bid Item shall begin when the exclusion zone is established, shall be considered completed when there is no longer an exclusion zone. This bid item shall only be for those days when intrusive work occurs within the exclusion zone, and only for those employees working in the zone as determined by the Engineer. When intrusive work occurs only for a portion of a day, it will be recorded as such by the Engineer. A reduction in the payment for this Item will occur for each day the Contractor fails to adhere (in the opinion of the Engineer) to

the requirements of the HASP. No measurement of Health and Safety provisions will be performed during O&M.

3. At the conclusion of each working day for which the Contractor has incurred costs under this pay item, the Contractor and the Engineer shall come to written agreement as to the quantity of units performed.

B. Payment

Contractor shall be paid in the Unit Price amount for each day that specified health and safety provisions have been provided, as outlined above.

UC-7 VAPOR PHASE CARBON

A. Measurement

All work for the provision of vapor phase carbon as described in Section 11301 – SOIL VAPOR EXTRACTION SYSTEM, shall be on a unit price basis. The unit price shall include the cost for loading new carbon into the units, removal and disposal of the spent carbon, sampling, analysis, transportation, and all additional fees and costs. No carbon shall be replaced without the prior written approval by the Engineer.

B. Payment

The Contractor shall be paid for the actual pounds of carbon replaced in the carbon vessels as determined by the Engineer. The unit price shall include all labor, equipment, and materials for replacement and disposal of the carbon.

UC-8 SVE AIR SAMPLES

A. Measurement

The Contractor shall be paid on a unit price basis to provide sample containers, collect, ship, and analyze air samples from the SVE extraction wells and treatment system in accordance with Section 11301 – SOIL VAPOR EXTRACTION SYSTEM. This item includes all labor, equipment, sample containers, mobilization, demobilization, health and safety provisions and submittal of a complete report.

B. Payment

The Contractor shall be paid for the actual quantity of air samples collected, transported/shipped to the laboratory and analyzed at the unit price in the Contractor's bid.

UC-9 SOIL AND DEBRIS DISPOSAL

A. Measurement

The provision of all work for the excavation, handling, sampling and analysis, and offsite disposal of contaminated soil and other debris, as described in Sections 02220-EARTHWORK and 02230-CONTAMINATED MATERIALS, shall be on a unit price basis. Measurement shall be only for soil and other materials generated via drilling and excavation at the site, and shall not include the disposal of any personnel protective equipment (PPE), exhausted carbon, sanitary trash, well decommissioning materials, or other materials.

Soil disposal shall be measured as the actual tons of soil and debris transported to and disposed of at an approved disposal facility. No payment will be made for this item until the Contractor submits weigh slips from the disposal facility to substantiate the quantity of soil disposed.

B. Payment

Payment for this item shall be on a unit price basis for the actual tons of soil and debris transported to and disposed of at an offsite facility. The unit price shall also include purchase and/or rental of the storage container, staging, handling, sampling, analysis, treatment as necessary, transportation, disposal, and all applicable disposal fees.

UC-10 VACUUM MONITORING POINT

A. Measurement

The provision of all work and requirements for the installation of a vacuum monitoring point as described in Section 02221 – WELL DRILLING AND PLACEMENT, Section 02230 – CONTAMINATED MATERIALS, and Section 11201 – SOIL VAPOR EXTRACTION SYSTEM, acceptably performed, shall be on a unit price basis. Measurement shall include the actual quantity of VMPs installed.

The unit price for each VMP shall include: the complete installation, excavation, disposal of contaminated materials, all components, the concrete well box and cover, and all hose, pipe, and fittings. This item also includes mobilization and demobilization per the requirements of these Contract Documents.

B. Payment

The Contractor shall be paid for the quantity of VMPs installed at the unit price in the Contractor's bid. The unit price shall include all labor, equipment, and materials for installation and construction of the VMPs.

UC-11 INDOOR AIR SAMPLES

A. Measurement

The Contractor shall be paid on a unit price basis to provide sample containers, collect, ship, and analyze indoor air samples from the existing building at the site in accordance with Section 01010-GENERAL and Section 11301 – SOIL VAPOR EXTRACTION SYSTEM. This item includes all labor, equipment, sample containers, regulators, mobilization, demobilization, health and safety provisions and submittal of a complete report.

B. Payment

The Contractor shall be paid for the actual quantity of air samples collected, transported/shipped to the laboratory and analyzed at the unit price in the Contractor's bid.

LUMP SUM ITEMS

LS-1 SITE PREPARATION

A. Measurement

The item includes the provision of all work and requirements as described in the following Sections:

01010 GENERAL
01030 SITE PREPARATION
01040 PROJECT IDENTIFICATION AND SIGNS
02500 SITE RESTORATION

This items also includes all other miscellaneous items not specified elsewhere, but necessary for a complete and proper remediation of this site. All work under the above items, acceptably performed, will be measured as a complete unit (lump sum).

The Contractor shall submit a bid breakdown for this bid item that shows the separate cost of each of the four Sections (01010, 01030, 01040, and 02500), as well as the costs for the items identified in the Subsections of both Sections 01010 and 01030.

B. Payment

Seventy percent (70%) of the lump sum price for Bid Item LS-1 will be paid by the Department upon completion of mobilization at, and preparation of, the project site as determined by the Engineer. The remaining thirty percent (30%) of the lump sum price for Bid Item LS-1 will be paid upon demobilization, site restoration, and completion of the project closeout activities. The total bid price for all work and requirements in Pay Item LS-1 will be limited to a maximum of five percent (5%) of the total bid amount for the entire project.

LS-2 SITE SERVICES

A. Measurement

The item includes the provision of all work and requirements as described in the following Sections:

01050 SITE FACILITIES AND SERVICES

All work under the above items, acceptably performed, will be measured as a complete unit (lump sum).

The Contractor shall submit a bid breakdown for this bid item that shows the separate cost of each item identified in the Subsections of this Section.

B. Payment

Seventy percent (70%) of the lump sum price for Bid Item LS-2 will be paid by the Department upon completion of mobilization, and preparation of the project site for the site services, as determined by the Engineer. The remaining thirty percent (30%) of the lump sum price for Bid Item LS-2 will be paid upon demobilization and completion of the project closeout activities. The total bid price for all work and requirements in Pay Item LS-2 will be limited to a maximum of five percent (5%) of the total bid amount for the entire project.

LS-3 NEW SVE TREATMENT SYSTEM

A. Measurement

The provision, mobilization, and installation of a completely operable soil vapor extraction (SVE) system acceptably performed in accordance with the Contract Documents shall be measured as a complete unit (lump sum). The SVE system is defined as the portion of construction from where all extraction pipe manifolds extend aboveground, through to the end of the system including the vapor phase carbon canisters and discharge stack. All treatment system housing and building improvements, including heating and ventilation are included in this pay item. Connections and incorporation with the existing SVE system, installation of bollards, and other site construction not specifically included as part of any other pay item are also included under this pay item. This pay item includes all work under the following Sections:

01052 PROJECT RECORD DOCUMENTS
01053 SHOP DRAWING PROCEDURES
01600 OPERATION AND MAINTENANCE MANUAL
01731 INSTRUCTION OF OPERATIONS AND MAINTENANCE PERSONNEL
11301 SOIL VAPOR EXTRACTION SYSTEM
15050 PIPING, VALVES, FITTINGS AND OTHER ACCESSORIES
16010 ELECTRICAL

The Contractor shall submit a bid breakdown for this bid item that shows the individual cost of material and installation for each system component identified in Section 11301 Subsection 1.6, as well as any other major system components (e.g., system housing, heating and ventilation, etc.).

Installation shall include the design, furnishing, construction and connecting of all equipment, piping, instrumentation, controls, and all other appurtenances necessary for a fully operational system, capable of meeting the performance requirements.

This item also includes the provision of all electrical work and requirements described in Section 16010 ELECTRICAL and necessary for the SVE system and all appurtenances to be fully operational. Work by the Contractor and/or his subcontractors shall be included under this item. All costs to the Contractor for work that must be performed by the electric and other utility companies also shall be included under this item. The Contractor shall not be reimbursed for any security deposits that are paid to the utilities. This item shall not include any monthly utility bills (to be paid under Items UC-4 and UC-5).

B. Payment

The Contractor shall be paid lump sum to furnish and install a complete and acceptable SVE system per the following schedule.

- 90% of the lump sum upon mobilization and complete installation of an operable SVE system
- 10% of the lump sum upon completion of submittal of acceptable project record documents, final approved O&M manuals, and training on the system operation.

LS-4 SVE UNDERGROUND PIPE

A. Measurement

The provision of all work and requirements for the installation of the underground SVE pipe as described in the following Sections, acceptably performed, shall be on a lump sum basis:

02220 EARTHWORK
02221 BACKFILL
02222 COMPACTION
02230 CONTAMINATED MATERIALS
02500 SITE RESTORATION
02512 BITUMINOUS PAVING
02513 CRUSHED STONE AND GRAVEL
15050 PVC PIPE, FITTINGS, VALVES AND OTHER ACCESSORIES

This item includes all pipe and appurtenances that connect the SVE well pumps to the SVE system housing.

The lump sum price for this item includes the complete installation of all pipe and appurtenances to connect the individual SVE wells to the main pipe headers and then to the treatment system, including: excavation, all pipe, backfill, fittings, appurtenances, sawcutting, and repavement. This item also includes mobilization, equipment decontamination, and demobilization per the requirements of these Contract Documents. Disposal of excavated soil that cannot be placed back into the excavation shall be paid under item UC-10.

The Contractor shall submit a bid breakdown for this item separately identifying the cost of materials, installation, excavation, and materials handling.

B. Payment

The Contractor shall be paid the lump sum cost for this item upon completion. The price shall include all labor, equipment, and materials for installation and construction of the pipe.

LS-5 SURVEY

A. Measurement

The item includes the provision of all work and requirements as described in Sections:

- 01051 SURVEY
- 01052 PROJECT RECORD DOCUMENTS (as applicable)

All work under the above items, acceptably performed, will be measured as a complete unit (lump sum). The work will not be considered complete until all well survey data, pipe installation data, and survey notes have been submitted and accepted by the Engineer.

B. Payment

The Contractor shall be paid the lump sum cost for this item upon completion. The price shall include all labor, equipment, and materials, including mobilization and demobilization for all survey work required at the site.

LS-6 WELL DECOMMISSIONING

A. Measurement

The item includes the provision of all work and requirements as described in Section:

- 02734 DECOMMISSIONING SUBSURFACE STRUCTURES

All work under the above item, acceptably performed, will be measured as a complete unit (lump sum). The work will not be considered complete until the wells have been acceptably decommissioned, all materials removed from the site, and the previous well locations restored. This cost item shall include all costs associated with the well decommissioning including sampling, analysis, transportation, and disposal of wells materials.

B. Payment

The Contractor shall be paid the lump sum cost for this item upon completion. The price shall include all labor, equipment, materials, sampling, analysis, mobilization and demobilization for all work required at the site.

SECTION XIII

Wage Rates and Associated Contract Requirements



Eliot Spitzer, Governor

M. Patricia Smith, Commissioner

NYS Dept. Environ Conservation
David Chiusano, Environmental Engineer 1
625 Broadway
12th Floor
Albany NY 12233-7017

Schedule Year 2006 through 2007
Date Requested 03/12/2007
PRC# 2007001498

Location Glendale, Queens County
Project ID#
Project Type Remediation of Inactive Hazrdous Waste Site utilizing Soil Vapor Extraction Technology

PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

Attached is the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for the project referenced above. A unique Prevailing Wage Case Number (PRC#) has been assigned to the schedule(s) for your project.

The schedule is effective from July 2006 through June 2007. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website www.labor.state.ny.us. Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

It is the responsibility of the contracting agency or its agent to annex and make part, the attached schedule, to the specifications for this project, when it is advertised for bids and /or to forward said schedules to the successful bidder(s), immediately upon receipt, in order to insure the proper payment of wages.

Please refer to the "General Provisions of Laws Covering Workers on Public Work Contracts" provided with this schedule, for the specific details relating to other responsibilities of the Department of Jurisdiction.

Upon completion or cancellation of this project, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

NOTICE OF COMPLETION / CANCELLATION OF PROJECT

Date Completed: _____ Date Cancelled: _____

Name & Title of Representative: _____

Phone: (518) 457-5589 Fax: (518) 485-1870
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

General Provisions of Laws Covering Workers on Article 8 Public Work Contracts

Introduction

The Labor Law requires public work contractors and subcontractors to pay laborers, workers, or mechanics employed in the performance of a public work contract not less than the prevailing rate of wage and supplements (fringe benefits) in the locality where the work is performed.

Responsibilities of the Department of Jurisdiction

A Department of Jurisdiction (Contracting Agency) includes a state department, agency, board or commission; a county, city, town or village; a school district, board of education or board of cooperative educational services; a sewer, water, fire, improvement and other district corporation; a public benefit corporation; and a public authority awarding a public work contract.

The Department of Jurisdiction (Contracting Agency) awarding a public work contract MUST obtain a Prevailing Rate Schedule listing the hourly rates of wages and supplements due the workers to be employed on a public work project. This schedule may be obtained by completing and forwarding a "Request for wage and Supplement Information" form (PW 39) to the Bureau of Public Work. The Prevailing Rate Schedule MUST be included in the specifications for the contract to be awarded and is deemed part of the public work contract.

Upon the awarding of the contract, the law requires that the Department of Jurisdiction (Contracting Agency) furnish the following information to the Bureau: the name and address of the contractor, the date the contract was let and the approximate dollar value of the contract. To facilitate compliance with this provision of the Labor Law, a copy of the Department's "Notice of Contract Award" form (PW 16) is provided with the original Prevailing Rate Schedule.

The Department of Jurisdiction (Contracting Agency) is required to notify the Bureau of the completion or cancellation of any public work project. The Department's PW 200 form is provided for that purpose.

Hours

No laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency. The contractor and the Department of Jurisdiction (Contracting Agency) may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project.

Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12240; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website www.labor.state.ny.us.

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is REQUIRED to provide complete copies to all prime contractors who in turn MUST, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website www.labor.state.ny.us.

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website www.labor.state.ny.us.

Payrolls and Payroll Records

Every contractor and subcontractor MUST keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. Payrolls must be maintained for at least three (3) years from the project's date of completion. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid or provide, and Daily and weekly number of hours worked in each classification.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall receive and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, but are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed \$100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds \$25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8 . Section 220-a).

Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYSDOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational ONLY and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

Withholding of Payments

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer MUST then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

Summary of Notice Posting Requirements

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

Every employer providing workers. compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers. Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

Apprentices

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeyworkers in any craft classification can be no greater than the statewide building trade ratios promulgated by the Department of Labor and included with the Prevailing Rate Schedule. An employee listed on a payroll as an apprentice who is not registered as above or is performing work outside the classification of work for which the apprentice is indentured, must be paid the prevailing journeyworker's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12240 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

Interest and Penalties

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

Debarment

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

Criminal Sanctions

Willful violations of the Prevailing Wage Law (Article 8 and Article 9 of the Labor Law) constitute a misdemeanor punishable by fine or imprisonment, or both.

Discrimination

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220-e(b)).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of \$50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c)).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d)).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

Workers' Compensation

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

Unemployment Insurance

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.



Eliot Spitzer, Governor

M. Patricia Smith, Commissioner

NYS Dept. Environ Conservation
David Chiusano, Environmental Engineer 1
625 Broadway
12th Floor
Albany NY 12233-7017

Schedule Year 2006 through 2007
Date Requested 03/12/2007
PRC# 2007001498

Location Glendale, Queens County
Project ID#
Project Type Remediation of Inactive Hazrdous Waste Site utilizing Soil Vapor Extraction Technology

Notice of Contract Award

New York State Labor Law, Article 8, Section 220.3a requires that certain information regarding the awarding of public work contracts, be furnished to the Commissioner of Labor. One "Notice of Contract Award" (PW 16, which may be photocopied), **MUST** be completed for **EACH** prime contractor on the above referenced project.

Upon notifying the successful bidder(s) of this contract, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

Contractor Information

All information must be supplied

Federal Employer Identification Number: _____		
Name: _____		
Address: _____ _____		
City: _____	State: _____	Zip: _____
Amount of Contract: \$ _____	Contract Type:	
Approximate Starting Date: ____/____/____	<input type="checkbox"/> (01) General Construction	
Approximate Completion Date: ____/____/____	<input type="checkbox"/> (02) Heating/Ventilation	
	<input type="checkbox"/> (03) Electrical	
	<input type="checkbox"/> (04) Plumbing	
	<input type="checkbox"/> (05) Other : _____	

Phone: (518) 457-5589 Fax: (518) 485-1870
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

**To all State Departments, Agency Heads and Public Benefit Corporations
IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND**

Budget Policy & Reporting Manual

B-610

Public Work Enforcement Fund

effective date December 7, 2005

1. Purpose and Scope:

This Item describes the Public Work Enforcement Fund (the Fund, PWEF) and its relevance to State agencies and public benefit corporations engaged in construction or reconstruction contracts, and announces the recently-enacted increase to the percentage of the dollar value of such contracts that must be deposited into the Fund. This item also describes the roles of the following entities with respect to the Fund:

- New York State Department of Labor (DOL),
- The Office of the State of Comptroller (OSC), and
- State agencies and public benefit corporations.

2. Background and Statutory References:

DOL uses the Fund to enforce the State's Labor Law as it relates to contracts for construction or reconstruction as defined in subdivision two of Section 220 of the Labor Law. State agencies and public benefit corporations participating in such contracts are required to make payments to the Fund.

Chapter 511 of the Laws of 1995 (as amended by Chapter 513 of the Laws of 1997, Chapter 655 of the Laws of 1999, Chapter 376 of the Laws of 2003 and Chapter 407 of the Laws of 2005) established the Fund.

3. Procedures and Agency Responsibilities:

The Fund is supported by transfers and deposits based on the value of contracts for construction and reconstruction, as defined in subdivision two of Section 220 of the Labor Law, into which all State agencies and public benefit corporations enter.

Chapter 407 of the Laws of 2005 increased the amount required to be provided to this fund to .10 of one-percent of the total cost of each such contract, to be calculated at the time agencies or public benefit corporations enter into a new contract or if a contract is amended. The provisions of this bill became effective August 2, 2005.

**To all State Departments, Agency Heads and Public Benefit Corporations
IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND**

OSC will report to DOL on all construction-related ("D") contracts approved during the month, including contract amendments, and then DOL will bill agencies the appropriate assessment monthly. An agency may then make a determination if any of the billed contracts are exempt and so note on the bill submitted back to DOL. For any instance where an agency is unsure if a contract is or is not exempt, they can call the Bureau of Public Work at the number noted below for a determination. Payment by check or journal voucher is due to DOL within thirty days from the date of the billing. DOL will verify the amounts and forward them to OSC for processing.

For those contracts which are not approved or administered by the Comptroller, monthly reports and payments for deposit into the Public Work Enforcement Fund must be provided to the Administrative Finance Bureau at the DOL within 30 days of the end of each month or on a payment schedule mutually agreed upon with DOL.

Reports should contain the following information:

- Name and billing address of State agency or public benefit corporation;
- State agency or public benefit corporation contact and phone number;
- Name and address of contractor receiving the award;
- Contract number and effective dates;
- Contract amount and PWEF assessment charge (if contract amount has been amended, reflect increase or decrease to original contract and the adjustment in the PWEF charge); and
- Brief description of the work to be performed under each contract.

Checks and Journal Vouchers, payable to the "New York State Department of Labor" should be sent to:

Department of Labor
Administrative Finance Bureau-PWEF Unit
Building 12, Room 464
State Office Campus
Albany, NY 12240

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.

Introduction to the Prevailing Rate Schedule

Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Paid Holidays

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

Overtime

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Supplemental Benefits

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is for each hour worked, some classifications require the payment or provision of supplements for each hour paid (including paid holidays on which no work is performed) and/or may require supplements to be paid or provided at a premium rate for premium hours worked.

Effective Dates

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. The rate listed is valid until the next effective rate change or until the new annual determination which takes effect on July 1 of each year. All contractors and subcontractors are required to pay the current prevailing rates of wages and supplements. If you have any questions please contact the Bureau of Public Work or visit the New York State Department of Labor website (www.labor.state.ny.us) for current wage rate information.

Apprentice Training Ratios

The following are the allowable ratios of registered Apprentices to Journey-workers.

For example, the ratio 1:1,1:3 indicates the allowable initial ratio is one Apprentice to one Journeyworker. The Journeyworker must be in place on the project before an Apprentice is allowed. Then three additional Journeyworkers are needed before a second Apprentice is allowed. The last ratio repeats indefinitely. Therefore, three more Journeyworkers must be present before a third Apprentice can be hired, and so on.

Please call Apprentice Training Central Office at (518) 457-6820 if you have any questions.

Title (Trade)	Ratio
boilermaker	1:1,1:4
Mason	1:1,1:4
Carpenter	1:1,1:4
Electrical (Outside) Lineman	1:1,1:2
Electrician (Inside)	1:1,1:3
Elevator/Escalator Construction & Modernizer	1:1,1:2
Glazier	1:1,1:3
Insulation & Asbestos Worker	1:1,1:4
Iron Worker	1:1,1:6
Laborer	1:1,1:3
Op Engineer	1:1,1:5
Painter	1:1,1:3
Plumber & Steamfitter	1:1,1:3

Roofer	1:1,1:2
Sheet Metal Worker	1:1,1:3
Sprinkler Fitter	1:1,1:2

If you have any questions concerning the attached schedule or would like additional information, please contact the nearest BUREAU of PUBLIC WORK District Office or write to:

New York State Department of Labor
Bureau of Public Work
State Office Campus, Bldg. 12
Albany, NY 12240

District Office Locations:	Telephone #	FAX #
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - New York City	212-352-6088	212-352-6580
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

Queens County General Construction

Asbestos Worker **03/01/2007**

JOB DESCRIPTION Asbestos Worker **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES
 Per hour: 07/01/2006 12/01/06

Abestos Worker Removal&Abatement Only*	\$ 26.45	\$27.45
---	----------	---------

*NOTE - On mechanical systems that are NOT to be SCRAPPED.

SUPPLEMENTAL BENEFITS
 Journeyman
 Removal&Abatement Only \$ 8.25

OVERTIME PAY
 See (B) on OVERTIME PAGE

HOLIDAY
 Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6) on HOLIDAY PAGE
 NOTE: Easter Paid at Time and One-half IF worked

REGISTERED APPRENTICES
 Apprentice Removal&Abatement Only:
 1000 hour terms at the following percentage of Journeyman's rates.

1st	2nd	3rd	4th
78%	80%	83%	89%

Supplemental Benefits :
 (per Hour worked)
 Apprentice
 Removal&Abatement Only Same % as
for Wage of
\$ 8.25

9-12a - Removal Only

Boilermaker **03/01/2007**

JOB DESCRIPTION Boilermaker **DISTRICT 4**

ENTIRE COUNTIES
 Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES
 Per Hour: 07/01/2006

Boilermaker	\$ 41.85
-------------	----------

SUPPLEMENTAL BENEFITS
 Per Hour: 07/01/2006

Journeymen	\$ 8.27 + 48% of the Hourly Wage
------------	--

OVERTIME PAY
 See (D, O) on OVERTIME PAGE

HOLIDAY
 Paid: See (8, 16, 23, 24) on HOLIDAY PAGE
 Overtime: See (4, 6, 11, 12, 15, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES
 (1/2) Year Terms at the following percentage of Journeyman's Wage

1st	2nd	3rd	4th	5th	6th	7th	8th
65%	65%	70%	75%	80%	85%	90%	95%

Supplemental Benefits Per Hour:

07/01/2006

Apprentices \$ 8.27 +
 48% of the
 Hourly Wage

4-5

Carpenter **03/01/2007**

JOB DESCRIPTION Carpenter

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Westchester

PARTIAL COUNTIES

Orange: South of but including the following, Waterloo Mills, SlateHill, New Hampton, Goshen, Blooming Grove, Mountainville, east to the Hudson River.

Putnam: South of but including the following, Cold Spring, TompkinsCorner, Mahopac, Croton Falls, east to Connecticut border.

Suffolk: West of Port Jefferson and Patchoque Road to Route 112 to the Atlantic Ocean.

WAGES

Per hour: 07/01/2006

Core Drilling:

Driller	\$ 29.56
Assistant Driller	24.59

Note: Hazardous Waste Pay Differential:

For Level C, an additional 10% above wage rate per hour

For Level B, an additional 10% above wage rate per hour

For Level A, an additional 10% above wage rate per hour

Note: When required to work on water: an additional \$ 0.50 per hour.

SUPPLEMENTAL BENEFITS

Per hour paid:

Driller	\$ 10.36
Assistant	10.36

OVERTIME PAY

OVERTIME: See (B,E,K*,P,R**) on OVERTIME PAGE.

HOLIDAY

HOLIDAY:

Paid: See (5,6) on HOLIDAY PAGE.

Overtime: * See (5,6) on HOLIDAY PAGE.

** See (8,10,11,13) on HOLIDAY PAGE.

Assistant: One (1) year increments at the following percentage of Assistant wages. This is not an apprenticeship for Driller.

1st Year	2nd Year	3rd Year	4th Year	
70%	80%	90%	100%	9-1536-CoreDriller

Carpenter **03/01/2007**

JOB DESCRIPTION Carpenter

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per Hour: 07/01/2006

Timberman \$ 42.09

SUPPLEMENTAL BENEFITS

Per hour paid:

Journeyman \$ 25.01

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18,19) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,16,18,19,25)

Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour:

(1) year terms:

1st.	2nd.	3rd.	4th.
\$ 17.37	\$ 21.04	\$ 26.54	\$ 32.04

Supplemental benefits per hour:

Apprentices \$ 18.05

9-1536

Carpenter

03/01/2007

JOB DESCRIPTION Carpenter

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per hour: 07/01/2006

Building

Millwright \$ 46.25

SUPPLEMENTAL BENEFITS

Per hour paid:

Journeyman \$ 27.34

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18,19) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,16,18,19,25)

Overtime See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour:

(1) year terms:

1st.	2nd.	3rd.	4th.
\$ 25.06	\$ 29.55	\$ 34.23	\$ 43.02

Supplemental benefits per hour:

(1) year terms:

1st.	2nd.	3rd.	4th.
\$ 18.78	\$ 20.48	\$ 22.86	\$ 25.56

Carpenter**03/01/2007**

JOB DESCRIPTION Carpenter**DISTRICT 9****ENTIRE COUNTIES**

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per hour: 07/01/2006

Marine Construction:

Marine Diver \$ 51.41
M.D.Tender 37.36**SUPPLEMENTAL BENEFITS**

Per hour paid:

Journeyman \$ 32.22

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18,19) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,10,11,13,16,18,19)

Overtime: See (5,6,10,11,13,16,18,19) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wager per hour:

(1) year terms:

	1st	2nd	3rd	4th
	\$ 16.55	\$ 20.69	\$ 26.90	\$ 33.11

Supplemental benefits per hour:

Apprentices \$ 21.43

9-1456MC

Carpenter**03/01/2007**

JOB DESCRIPTION Carpenter**DISTRICT 9****ENTIRE COUNTIES**

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per hour: 07/01/2006

Carpet/Resilient
Floor Coverer \$ 45.66**SUPPLEMENTAL BENEFITS**

Per hour paid:

Journeyman \$ 25.01

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18, 19)on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,16,18,19,25)
Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wage per hour:

(1) year terms:

1st.	2nd.	3rd.	4th.
\$ 18.80	\$22.82	\$28.86	\$34.90

Supplemental benefits per hour:

Apprentices \$ 18.05

9-2287

Carpenter

03/01/2007

JOB DESCRIPTION Carpenter

DISTRICT 9

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per hour: 07/01/2006

Piledriver \$ 45.68
Dockbuilder 45.68

SUPPLEMENTAL BENEFITS

Per hour paid:

Journeyman \$ 25.01

OVERTIME PAY

See (B, E2, O) on OVERTIME PAGE

HOLIDAY

Paid: See (18,19)on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,16,18,19,25)

Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour:

(1)year terms:

1st.	2nd.	3rd.	4th.
\$ 18.80	\$ 22.83	\$ 28.87	\$ 34.92

Supplemental benefits per hour:

Apprentices \$ 18.05

9-1456

Carpenter

03/01/2007

JOB DESCRIPTION Carpenter

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Putnam, Queens, Richmond

PARTIAL COUNTIES

Nassau: That portion of the county that lies west of Seaford Creek and south of the Southern State Parkway.

WAGES

Per hour: 07/01/2006

Additional
Exhibit Shows \$ 45.66

SUPPLEMENTAL BENEFITS

Per hour paid:
Journeyman \$ 25.01

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18,19) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.
Apprentices See (5,6,11,13,16,18,19,25)

Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour:

(1) year terms:

	1st.	2nd.	3rd.	4th.
	\$ 18.80	\$ 22.82	\$ 28.86	\$34.90

Supplemental benefits per hour:
Apprentices \$ 18.05

9-EXHIB

Carpenter - Building / Heavy&Highway

03/01/2007

JOB DESCRIPTION Carpenter - Building / Heavy&Highway

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour: 07/01/2006

Building:
Carpenter \$ 45.66

Heavy&Highway:
Carpenter \$ 45.68

SUPPLEMENTAL BENEFITS

Per hour paid:
Journeyman \$ 25.01

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18,19) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.
Apprentices See (5,6,11,13,16,18,19,25)

Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wage per hour:

(1) year terms:

	1st.	2nd.	3rd.	4th.
Building	\$ 18.80	\$ 22.82	\$ 28.86	\$ 34.90
Heavy&Highway	18.80	22.83	28.87	34.92

Supplemental benefits per hour:

Building	\$ 18.05
Heavy&Highway	18.05

9-NYC

Electrician

03/01/2007

JOB DESCRIPTION Electrician

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour:	07/01/06	10/01/06
Tree Trimmer	\$22.22	\$22.99
Ground Person	14.68	15.19

Applies to line clearance, tree work, and right-of-way preparation on all new or existing overhead, electrical, telephone, and CATV lines.

SUPPLEMENTAL BENEFITS

Per hour paid:

30.5% of wages plus * paid
 vacation & 4 days sick leave.
 Vacation based on continuous
 service as follows:
 * 40 hours after 1 year
 * 80 hours after 2 years

* 120 hours after 5 years
 * 160 hours after 15 years

OVERTIME PAY

See (B, *H, Q) on OVERTIME PAGE

*Worked performed on Sundays & Holidys outside of 7.00am - 4.00pm shall be paid at double time, in addition to the holiday pay if applicable.

HOLIDAY

HOLIDAY:

Paid: See (5,6,10,11,15,16,26) on HOLIDAY PAGE.

(An additional floating holiday after four years' service)

Overtime: See (5,6,10,11,15,16,26) on HOLIDAY PAGE.

9-3T

Electrician

03/01/2007

JOB DESCRIPTION Electrician

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour:	07/01/2006	05/01/2007
Electrician	\$ 25.30	\$ 25.80

H - Telephone 25.30 25.80

Maintenance and Jobbing-Electrical work of limited duration and scope, consisting of repairs and/or replacement of electrical and teledata equipment.

- Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

SUPPLEMENTAL BENEFITS

Journeyman \$14.121 \$15.37

OVERTIME PAY

See (B, H) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 10, 11, 12, 16) on HOLIDAY PAGE

Overtime: See (5, 6, 10, 11, 12, 16) on HOLIDAY PAGE

9-3m

Electrician 03/01/2007

JOB DESCRIPTION Electrician **DISTRICT 9**

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond, Westchester

WAGES

Per hour Paid: 07/01/2006 05/01/2007

Service Technician \$ 26.34 \$ 27.00

Service and Maintenance on Alarm and Security Systems.

Maintenance, repair and /or replacement of defective (or damaged) equipment on, but not limited to, Burglar - Fire - Security - CCTV - Card Access - Life Safety Systems and associated devices. (Whether by service contract of T&M by customer request.)

SUPPLEMENTAL BENEFITS

Per hour:
 Journeyman: \$ 36.56% of wage
 + \$12.00 per day

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

A night shift may be provided with a minimum of five (5) days work on the night shift, Monday through Friday. The shift is based upon a 10% differential between the hours of 4:00 P.M. to 12:30 A.M. and a 15% differential for the hours of 12:00 A.M to 8:30 A.M

HOLIDAY

Paid: See (5, 6, 11, 12, 16, 25, 26) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 12, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

9-3H

Electrician 03/01/2007

JOB DESCRIPTION Electrician **DISTRICT 9**

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per Hour: 07/01/06 05/12/07
 Electrician \$44.00 \$45.00
 Audio/Sound/Tele/Data 44.00 45.00

SUPPLEMENTAL BENEFITS

Journeyman.. 34.41 36.96

OVERTIME PAY

See (A, H) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 12, 16) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages Per Hour:

One year terms at the following rate

1st term...	13.75	14.25
2nd term...	16.55	17.05
3rd term...	18.65	19.15
4th term...	20.60	21.10
MIJ	25.30	25.80

Supplemental Benefits per hour paid:

1st term...	\$10.73	\$11.82
2nd term...	12.44	13.60
3rd term...	13.73	14.93
4th term...	14.93	16.17
MIJ	14.12	15.37

9-3

Elevator Constructor

03/01/2007

JOB DESCRIPTION Elevator Constructor

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

PARTIAL COUNTIES

Rockland: Entire County except for the Township of Stony Point

Westchester: Entire County except for the Townships of Bedford, Lewisboro, Cortland, Mt. Kisco, North Salem, Pound Ridge, Somers and Yorktown.

WAGES

Per hour:	07/01/06	03/17/07
Elevator Constructor	\$43.90	\$45.98
Elevator Constructor Modern. & Service	\$35.33	\$36.80

SUPPLEMENTAL BENEFITS

Per hour:		
Elevator Constructor	\$19.97	\$21.85
Modern./Service	\$19.47	\$21.33

OVERTIME PAY

Constructor. See (C, O) on OVERTIME PAGE.

Modern./Serv. See (B, H) on OVERTIME PAGE.

When a service contract requires two 8-hour shifts, Mon-Sat, worker assigned to each of the double shifts shall work 8 hours per day, 6 days per week for a total of 48 hours. Worker shall be paid for 52 hours at single rate. Any worker who works less than 48 hours shall have his premium prorated.

HOLIDAY

Paid: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: Per Hour	07/01/06	03/17/07
One (1) year terms at the following rate		
Elevator Constructor		
1st Term	\$19.83	\$20.70

2nd Term	\$24.19	\$25.29
3rd Term	\$28.59	\$29.89
4th Term	\$32.99	\$34.99
Modern./Service		
1st Term	\$19.83	\$20.70
2nd Term	\$19.43	\$20.24
3rd Term	\$22.97	\$23.92
4th Term	\$26.50	\$27.60
Supplemental Benefits per hour paid: One (1) year term at the following dollar amount Elevator Constructor:		
1st Term	\$15.93	\$17.40
2nd Term	\$16.41	\$17.92
3rd Term	\$17.20	\$18.80
4th Term	\$18.00	\$19.66
Modern/ & Service:		
1st Term	\$15.85	\$16.49
2nd Term	\$16.14	\$16.82
3rd Term	\$16.88	\$17.50
4th Term	\$17.62	\$18.18

Glazier **03/01/2007**

JOB DESCRIPTION Glazier

DISTRICT 9

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES

Per hour:	07/01/2006- 04/30/2007	05/01/2007
Glazier	\$ 41.45	Additional \$ 2.15 per hour worked
Scaffolding	\$ 42.45	

Repair & Maintenance:

Glazier	\$ 24.60	\$ 25.35
---------	----------	----------

Repair & Maintenance- All repair & maintenance work on a particular building, whenever performed, where the total cumulative contract value is under \$100,000.00.

SUPPLEMENTAL BENEFITS

Per hour paid: Overtime rate shown in parenthesis

Journeyman....	\$ 19.90	
Glazier Repair & Maintenance:	\$ 11.79	\$ 11.89

OVERTIME PAY

OVERTIME: See (C*,D*O) on OVERTIME PAGE.

* Denotes if an optional 8th hour is required same will be at the regular rate of pay. If 9th hour is worked then both hours or more (8th and 9th or more) will be at the double time rate of pay.

** For Repair & Maintenance see (B,F, P) on overtime page.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

The Following are paid holidays for the Repair&Maintenance Class: New Years day,

Presidents day, Memorial day, Independents day, Labor day, Thanksgiving day, day after Thanksgiving, and Christmas day.

REGISTERED APPRENTICES

Wage per hour:

(1) year terms at the following wage rates.

1st term...	\$ 14.21
2nd term...	\$ 20.75
3rd term...	\$ 24.89
4th term...	\$ 33.17

Supplemental Benefits:
 (Per hour worked)

1st term....	\$ 9.13
2nd term....	\$ 13.62
3rd term....	\$ 14.87
4th term....	\$ 17.39

9-1281 (DC9 NYC)

Heat & Frost Insulator

03/01/2007

JOB DESCRIPTION Heat & Frost Insulator

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per hour:	07/01/2006- 12/31/2006	01/01/2007
Insulating Only	\$ 43.61	\$ 45.11

SUPPLEMENTAL BENEFITS

Per Hour:

Journeyman Insulating Only	\$ 25.62	\$ 25.62
-------------------------------	----------	----------

OVERTIME PAY

See (A, D, O, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:

Apprentice Insulating Only:

1 year terms at the following percentage of Journeyman's rates.

1st	2nd	3rd	4th
40%	60%	70%	80%

Supplemental Benefits per hour:

Apprentice Insulating Only	Same % as for Wage of \$ 25.62	Same % as for Wage of \$ 25.62
-------------------------------	--------------------------------------	--------------------------------------

Ironworker

03/01/2007

JOB DESCRIPTION Ironworker

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Wages: (per Hour)

	07/01/2006
Structural..	\$ 37.65
Riggers.....	37.65
Machinery Movers...	37.65
Machinery Erectors.	37.65

SUPPLEMENTAL BENEFITS

Per Hour:

Journeyman..	\$44.88
--------------	---------

OVERTIME PAY

OVERTIME: See (B*,E**,Q,V) on OVERTIME PAGE.

* Time and one-half shall be paid for all work in excess of (8) eight hours at the end of a work day to a maximum of two hours on any regular work day (the ninth (9th) and tenth (10th) hours of work) and double time shall be paid for all work thereafter.

** Time and one-half shall be paid for all work on Saturday up to eight (8) hours and double time shall be paid for all work thereafter.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 18, 19) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

Six month term at the following wage rate.

1st	2nd	3rd	4th	5th	6th
\$19.90	20.50	20.50	21.10	21.10	21.10

Supplemental Benefits:
(per hour paid).

\$32.58*

* Applies to all apprentices.

9-40/361-Str

Ironworker

03/01/2007

JOB DESCRIPTION Ironworker

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

PARTIAL COUNTIES

Rockland: Southern Section

WAGES

Per hour: 07/01/06

Reinforcing & Metal Lathing...	\$ 34.80
-----------------------------------	----------

SUPPLEMENTAL BENEFITS

Per hour paid:

Journeyman	\$ 36.58
------------	----------

OVERTIME PAY

OVERTIME: See (A*,E*,Q,V) on OVERTIME PAGE.

* All overtime in excess of ten (10)hours shall be paid at double wage.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 10, 11, 13, 18, 19) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

(1) year terms at the following wage rates.

1st	2nd	3rd	4th
\$ 24.00	\$ 27.50	\$ 31.50	\$ 35.50

Supplemental Benefits per hour paid:

1st	2nd	3rd	4th
18.23	19.73	20.73	21.73

9-46Reinf

Ironworker

03/01/2007

JOB DESCRIPTION Ironworker

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour:	07/01/2006	01/01/2007
Ornamental	\$ 39.30	\$ 38.60
Chain Link Fence	39.30	38.60
Guide Rail Installation	39.30	38.60

SUPPLEMENTAL BENEFITS

Per hour paid:

Journeyman:	\$ 34.64	\$ 36.35
-------------	----------	----------

OVERTIME PAY

OVERTIME: See (A*,D1,E**,Q,V) on OVERTIME PAGE.

*Time and one-half shall be paid for all work in excess of seven (7) hours at the end of a work day to a maximum of two hours on any regular work day (the eighth (8th) and ninth (9th) hours of work) and double time shall be paid for all work thereafter.

**Time and one-half shall be paid for all work on Saturday up to seven (7) hours and double time shall be paid for all work thereafter.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1/2) year terms at the following percentage of Journeyman's wage.

APPRENTICES:

1st	2nd	3rd	4th	5th	6th
60%	65%	70%	80%	85%	95%

Supplemental Benefits per hour paid:

1st Term	\$ 28.15	\$ 28.15
2nd Term	28.96	28.96
3rd Term	29.78	29.78
4th Term	31.41	31.41
5th Term	32.23	32.23
6th Term	33.86	33.86

9-580-Or

Ironworker **03/01/2007**

JOB DESCRIPTION Ironworker **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES
 Per hour: 01/01/06 07/01/06

Derrickman/Rigger \$46.40 + additional \$.96

SUPPLEMENTAL BENEFITS
 Journeyman.. \$25.09 \$25.09

OVERTIME PAY
 OVERTIME See (A*,D1,E**,Q,V) on OVERTIME PAGE.

*Time and one-half shall be paid for all work in excess of seven (7) hours at the end of a work day to a maximum of two hours on any regular work day (the eighth (8th) and ninth (9) hours of work) and double time shall be paid for all work thereafter.

**Time and one-half shall be paid for all work on Saturday up to seven (7) hours and double time shall be paid for all work thereafter.

HOLIDAY
 Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 10) on HOLIDAY PAGE
 HOLIDAY:
 Paid:.....See (1) on HOLIDAY PAGE.
 Overtime:....See (5*, 6*, 8**, 24***, 25**) on HOLIDAY PAGE.

*No work shall be performed on this day, except in cases of emergency. Such work shall be done at double time rate of pay.

**Double time rate of pay.

***Work stops at schedule lunch break with full day's pay.

REGISTERED APPRENTICES

Wage per hour:

(1/2) year terms at the following percentage of journeyman's wage.

1st	2nd	3rd	4th	5th	6th
50%	50%	70%	80%	90%	90%

Supplemental benefits per hour paid:

Registered Apprentice
 1st year 50% of journeyman's rate
 All others 75% of journeyman's rate

9-197D/R

Laborer **03/01/2007**

JOB DESCRIPTION Laborer **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, New York, Queens, Richmond

WAGES
 Wages: (per Hour) 07/01/06 07/01/07
 Laborer/Asphalt:
 Screenman, Micro Paver... \$38.54 \$39.63
 Rakers..... \$38.13 \$39.20
 A/C Paintman, Liquid Tar. \$36.41 \$37.39
 Gen. Laborer.. \$36.31 \$37.26
 Slurry/Sealcoater/Play Equip.
 Installer \$35.76 \$36.69

SUPPLEMENTAL BENEFITS

Per hour paid:

Journeyman \$ 22.45 \$24.20

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 11, 12, 15, 16) on HOLIDAY PAGE

Overtime: See (21, 22, 25) on HOLIDAY PAGE

HOLIDAY:

Paid: See (5,11,12,15,20)* on HOLIDAY PAGE.

Overtime: See (21, 22, 25)** on HOLIDAY PAGE.

*If an employee does not work on said holiday, he will receive single time pay rate for the said day, provided that the said employee has worked one (1) day in the calendar week in which the said holiday occurs. If an employee works on said holiday, he will be paid only for the single time rate, plus one (1) day's pay for the holiday.

**If an employee does not work on any of these holidays, they will receive no pay. If an employee works on said holiday, he will be paid the single-time rate, plus one day's pay for the holiday.

REGISTERED APPRENTICES

Wage per hour:

One (1) year terms at the following percentage of Journeyman's wage.

	1st	2nd	3rd
	40%	50%	60%

Supplemental Benefits per hour paid:

	07/01/06	07/01/07
1st year	\$25.20	\$26.10
2nd year	\$28.56	\$29.36
3rd year	\$31.82	\$32.62

9-1018a

Laborer

03/01/2007

JOB DESCRIPTION Laborer

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per hour:

GROUP A: Blasters.

GROUP B: Tunnel workers *

* (including Miners, Drill Runners, Iron Men, Maintenance Men, Conveyor Men, Safety Miners, Riggers, Block Layers, Cement Finishers, Rod Men, Caulkers, Powder Carriers, Miners' Helpers, Chuck Tenders, Track Men, Nippers, Brake Men, Derail Men, Form Men, Bottom Bell, Top Bell or Signal men, Form Workers, Movers, Concrete Workers, Shaft Men, Tunnel Laborers and Caulkers' Helpers).

GROUP C: Powder Watchmen, Top Laborers and Changehouse Attendants.

Wages: (per hour) 7/01/06

Laborer (Tunnel)-FREE AIR:

Group A	\$36.89
Group B	35.34
Group C	32.73

Small Bore Micro Tunnel Machines

80% of rates above

For Repairs on Existing Water Tunnels	90% of rates above
For Repairs of Sewer & Drainage Tunnels	85% of rates above
For Repair & Maintenance of all Subway & Vehicular Tunnels	80% of rates above

SUPPLEMENTAL BENEFITS

Per hour paid:

GROUP A \$ 32.78 per hour paid +
0.28 per hour worked +
3.00 per day +
0.16 per overtime hour.

GROUP B \$ 31.34 per hour paid +
0.28 per hour worked +
3.00 per day +
0.16 per overtime hour.

GROUP C \$ 28.92 per hour paid +
0.28 per hour worked +
3.00 per day +
0.16 per overtime hour.

Small Bore Micro Tunnel Machines	80% of rates above
For Repairs on Existing Water Tunnels	90% of rates above
For Repairs of Sewer & Drainage Tunnels	85% of rates above
For Repair & Maintenance of all Subway & Vehicular Tunnels	80% of rates above

OVERTIME PAY

OVERTIME: For Laborer (Free Air) See (D, M, R*) on OVERTIME PAGE.
For Repair Categories See (B, F, R*) on OVERTIME PAGE.
& Micro Tunneling
* Straight time first 8 hours, double time after 8 hours.

HOLIDAY

Paid: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE
Overtime: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE

9-147Tnl/Free

Laborer

03/01/2007

JOB DESCRIPTION Laborer

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour: 07/01/06

Laborer/Excavation:

Basic...	\$34.09
Flagman...	\$34.09
Pipelayer...	\$34.09
*Tree Work, *Landscape...	\$34.09

Note: *Includes trimming, cutting, planting and/or removal of trees.

SUPPLEMENTAL BENEFITS

Per hour paid:

Journeyman \$20.90

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (2, 20) on HOLIDAY PAGE
Overtime: See (5, 6, 11, 13) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

1000 hour terms at the following percentage of journeyman's wage.

1st	2nd	3rd	4th
50%	60%	75%	90%

Supplemental Benefits per hour paid:

All Apprentices \$20.90

9-731Ex

Laborer **03/01/2007**

JOB DESCRIPTION Laborer **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, New York, Queens, Richmond

WAGES
 Per hour: 7/01/2006

Laborer:
 Laborer-Concrete(including
 flag person) \$32.20

SUPPLEMENTAL BENEFITS
 (per hour Worked) \$21.39

OVERTIME PAY
 OVERTIME: See (A,E,Q) on OVERTIME PAGE attached.*
 *(B,E,Q,) when working below street level to top of
 foundation. For Work done on Sat & Sun add
 an additional \$2.50 & \$5.00 per hour
 respectively to Supp.Benefits.

HOLIDAY
 Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 11, 13, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES
 Wages per hour:
 1000 hours term at the following percentage of Journeyman's wage.

	1st	2nd	3rd	4th
07/01/2006	50%	65%	75%	85%

Supplementa Benefits:
 (per hour Worked)

	1st	2nd	3rd	4th
07/01/2006	\$12.91*	\$19.61*	\$20.11*	\$20.61

* For work on Sat & Sun/Holidays, add an additional Suppl. benefits per hour as follows:

1st	2nd	3rd	4th	Sat Sun& Holidays
\$1.25	\$1.63	\$1.88	\$2.13	9-6A/18A/20-C
\$2.50	\$3.25	\$3.75	\$4.50	

Laborer - Building **03/01/2007**

JOB DESCRIPTION Laborer - Building **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, New York, Queens, Richmond

WAGES
 Per hour: 01/01/2006 07/01/2206

Building:		Additional
Plasterer Tender..	\$28.75	\$.80*
Spray Fireproofing.	\$28.75	\$.80*

* May be distributed between wages and benefits.

SUPPLEMENTAL BENEFITS

Per hour paid:
 Journeyman \$17.59

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

1000 hours terms at the following wage.

	1st	2nd	3rd	4th
01/01/2006	\$17.00	\$18.00	\$19.50	\$22.00
07/01/2006	Additional \$.80*			

Supplemental Benefits per hour paid:

Apprentices \$10.75**

** Apply to all Apprentices.

9-30 (79)

Laborer - Building **03/01/2007**

JOB DESCRIPTION Laborer - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour:	07/01/2006		
Laborer (Bldg):			
Basic Laborer	\$ 29.25		
Mason Tender	29.25		
	01/01/2006	07/01/2006	01/01/2007
Laborer (interior demolition)	\$ 28.55	Additional	Additional
\$.60		\$.60 per hour	\$.60 per hour
	07/01/2006	12/01/2006	
Laborer(Asbestos Abatement)	\$26.25	Additional	
		\$1.50	

SUPPLEMENTAL BENEFITS

Per hour paid:

Journeyman:

Basic & Mason Tender	\$ 17.49
Interior	15.99
Asbestos A/ment	9.20

OVERTIME:

See (B,H) on OVERTIME PAGE.(Time & One-half after 8 hours or after

forty per week)

HOLIDAY:

Paid: See (1) on HOLIDAY PAGE.
 Overtime See (5,6,*) on HOLIDAY PAGE.
 * Easter is paid at time and one-half if worked.

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

1000 hours terms at the following wage rate.

Basic & mason tender.

07/01/2006	1st	2nd	3rd	4th
	\$17.00	\$18.00	\$19.50	\$22.00

Interior Demo.

01/01/2006	\$17.00	\$18.00	\$19.50	\$22.00
07/01/2006	Additional \$.60 per hour**			

Asbestos Ab/ment.

07/01/2006	\$20.48	\$21.00	\$21.79	\$23.37
12/01/2006	Additional \$ 1.50 per hour**			

Supplemental Benefits:

1000 hours at the following dollar amounts:
 (per hour Paid)

Basic & Mason tender

07/01/2006	\$10.75
------------	---------

Interior Demo.

07/01/2006	\$10.45
------------	---------

Asbestos Ab/ment.

07/01/2006	\$9.20
------------	--------

** may distributed between wages and benefits.

9-NYDC(78)

Laborer - Building

03/01/2007

JOB DESCRIPTION Laborer - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour: 07/01/2006

Building Laborer-Demolition: \$ 28.85

* / Total Demolition Only: Demolition shall be the complete demolition (wrecking) or dismantling of entire buildings or structures. Also may include the removal of all or any portion of a roof in which structural change is to occur. Structural change is defined as the removal of structural slabs, steel members, concrete members and penetration through the structural slab.

SUPPLEMENTAL BENEFITS

Per hour paid:
 Journeyman: \$ 16.39

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 13, 15, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

(1) year terms at the following wage.

1st	2nd	3rd	4th
\$17.25	\$18.25	\$19.75	\$22.25

Supplemental Benefits per hour paid:

Apprentices: \$ 10.80

9-79/95

Laborer - Heavy&Highway **03/01/2007**

JOB DESCRIPTION Laborer - Heavy&Highway

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour:	07/01/06	07/01/07
Highway Laborer - Concrete Formsetter.....	\$36.77	\$37.74
General Laborer (including Traffic Safety).....	\$33.41	\$34.23
Small Equipment Operator.....	\$33.31	\$34.12
Landscape Planting & Maint....	\$33.30	\$34.11
Small Power Tool Operator/ Maintenance Safety Surface....	\$33.28	\$34.09

SUPPLEMENTAL BENEFITS

Per hour paid:
 Journeyman: \$22.45 \$24.20

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

On night work, the first eight (8) hours of work will be paid for at fifteen (15%) over the single time rate. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.

HOLIDAY

HOLIDAY:
 Paid: See (5,11,12,20)* on HOLIDAY PAGE.
 Overtime: See (21,22)** on HOLIDAY PAGE.

*If an employee does not work on said holiday, he will receive single time pay rate for the said day, provided that the said employee has worked one (1) day in the calendar week in which the said holiday occurs. If an employee works on said holiday, he will paid only for the single time rate, plus one (1) days pay for the holiday.

**If an employee does not work on these holidays he shall receive no pay.
 If an employee works on any of these holidays he will receive the single rate plus 15% of same.

REGISTERED APPRENTICES

Wage Per Hour: 07/01/06 07/01/07

One (1) year terms at the following:

1st Term	\$25.30	\$26.10
2nd Term	\$28.56	\$29.36
3rd Term	\$31.82	\$32.62

Supplemental Benefits per hour paid:

Registered Apprentices	\$11.10	\$12.10
------------------------	---------	---------

9-1010HH-FS

Laborer - Trac Drill

03/01/2007

JOB DESCRIPTION Laborer - Trac Drill

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour: 07/01/06

Hydraulic Trac Drill:

Hydraulic Runner... \$30.75

Hydraulic Tender... 25.98

Wagon, Air Trac, Quarry

Bar Drill Runner... 30.20

Drill Runners Assistant

Nipper... 25.49

Blaster... 33.90

w/ Hyd. Trac. Drill... 34.45

Power Tool... 29.51

Powder Carrier... 26.87

Magazine Keeper... 16.12

SUPPLEMENTAL BENEFITS

Per hour paid:

\$23.60*

*\$ 10.50 of total to be paid at premium rate for overtime hours.

OVERTIME PAY

OVERTIME Magazine Keeper See (B,H) on OVERTIME PAGE.

OVERTIME: ALL OTHERS SEE (D,E,Q) on OVERTIME PAGE.

HOLIDAY

HOLIDAY:

Paid: For Blaster See (5,6,11,13) on HOLIDAY PAGE.

FOR ALL OTHERS SEE (1) ON HOLIDAY PAGE.

Overtime: See (5,6,11,13) on HOLIDAY PAGE.

9-29

Laborer - Tunnel

03/01/2007

JOB DESCRIPTION Laborer - Tunnel

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

GROUP 2: Tunnel Workers* * (including Miners, Drill Runners,Iron Men, Maintenance Men, Inside Muck Lock Tender, Pumpmen, Electricians, Cement Finishers, Rod Men, Caulkers, Carpenters, Hydraulic Men, Shield Drivers, Monorail Operators, Motor Men, Conveyor Men, Safety Miners, Powder Carriers, Pan Men, Riggers, Miner's Helpers, Chuck Tenders, Track Men, Nippers, Brake Men, Form Workers, Concrete Workers, Tunnel Laborers, Caulker's Helpers), Hose Men, Grout Men, Gravel Men, Derail Men and Cable Men.

GROUP 3: Top Nipper

GROUP 4: Outside Man Lock Tender, Outside Muck Lock Tender, Shaft Men,Gauge Tender and Signal Men.

GROUP 5: Powder Watchmen, Top Laborers and Changehouse Attendants.

WAGES: (per hour)

7/01/2006

Laborer(Compressed Air):

GROUP 1	\$38.59
GROUP 2	37.26
GROUP 3	36.59
GROUP 4	35.95
GROUP 5	31.09

SUPPLEMENTAL BENEFITS

SUPPLEMENTAL BENEFITS :

GROUP 1	\$34.34	per hour paid +
	0.28	per hour worked +
	3.00	per day +
	0.16	per overtime hour
GROUP 2	\$33.20	per hour paid +
	0.28	per hour worked +
	3.00	per day +
	0.16	per overtime hour
GROUP 3	\$32.57	per hour paid +
	0.28	per hour worked +
	3.00	per day +
	0.16	per overtime hour
GROUP 4	\$31.98	per hour paid +
	0.28	per hour worked +
	3.00	per day +
	0.16	per overtime hour
GROUP 5	\$30.54	per hour paid +
	0.28	per hour worked +
	3.00	per day +
	0.16	per overtime hour

OVERTIME PAY

See (D, M, *R) on OVERTIME PAGE

NOTE: Time and one-half to be paid for all overtime repair-maintenance work on existing equipment and facilities.

* Straight time first 8 hours, double time after 8 hours.

HOLIDAY

Paid: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE

9-147Tnl/Comp Air

Mason

03/01/2007

JOB DESCRIPTION Mason

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour 07/01/2006

Bricklayer \$ 41.25

SUPPLEMENTAL BENEFITS

Per Hour 07/01/2006

Journeyman \$ 21.76

OVERTIME PAY

See (A, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

wges:
 (per hour paid):

(750 Hours) Term at the following Percentage of Journeyman's Wage*
 (500 hours) term at the following percentage of journeyman's wage**

1st*	2nd*	3rd*	4th*	5th**	6th**
50%	60%	70%	80%	90%	95%

Supplemental Benefits:

(per hour)

Apprentices:

All apprentices \$ 10.40

9-1Brk

Mason - Building

03/01/2007

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

07/01/2006

Building:

Tile Finisher \$ 34.00

SUPPLEMENTAL BENEFITS

Journeyman.. \$ 16.85

OVERTIME PAY

See (A, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 10, 11, 15, 16) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:

(per hour paid)

(750 hour) terms at the following percentages of journeyman's wage.

1st	2nd	3rd	4th	5th	6th	7th	8th
50%	55%	65%	70%	75%	85%	90%	95%

Supplemental Benefits:

(per hour paid)

(750) hour terms at the following dollar amount:

Apprentices. 7.50+
 term wage % of \$ 9.35

9-7/88-tf

Mason - Building

03/01/2007

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Westchester

PARTIAL COUNTIES

Bronx: Entire 5 Boroughs EXCEPT for projects that fall within a fifty-mile radius of Columbus Circle in New York City.

Kings: Entire 5 Boroughs EXCEPT for projects that fall within a fifty-mile radius of Columbus Circle in New York City.

New York: Entire 5 Boroughs EXCEPT for projects that fall within a fifty-mile radius of Columbus Circle in New York City.

Queens: Entire 5 Boroughs EXCEPT for projects that fall within a fifty-mile radius of Columbus Circle in New York City.

Richmond: Entire 5 Boroughs EXCEPT for projects that fall within a fifty-mile radius of Columbus Circle in New York City.

WAGES

Wages:

07/01/06

Building:

Marble Cutters & Setters \$ 47.30

SUPPLEMENTAL BENEFITS

Journeyman: \$ 18.20

OVERTIME PAY

See (B, O, V) on OVERTIME PAGE

HOLIDAY

Paid: See (*5, 6, 8, 11, 15) on HOLIDAY PAGE
Overtime: See (5, 6, 8, 11, 15) on HOLIDAY PAGE

* Journeymen receive 1/2 days pay for Labor Day. Apprentices 1st three terms See (5, 6, 8, 11, 15) on HOLIDAY PAGE, plus any day following a Thursday or Sunday Holiday. All others See (1) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wage Per Hour:

(1/2) year terms at the following percentage of journeyman's wage.

1st	2nd	3rd	4th	5th	6th
50%	55%	65%	70%	80%	95%

Supplemental Benefits per hour paid:

(1/2) year terms at the following dollar amount:

Apprentice: \$ 7.95 + term wage % of
\$ 9.85

9-7/4

Mason - Building

03/01/2007

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

7/01/2006

Building	
Marble/ Sawyer, Rubber & Polisher	\$ 36.58
Marble Restoration Finishers	18.66

SUPPLEMENTAL BENEFITS

Journeyman:

Polisher	\$14.63
Finisher	5.95

OVERTIME PAY

See (A, E, Q, V) on OVERTIME PAGE

HOLIDAY

Paid: See (*5, 6, 11, 15) on HOLIDAY PAGE
Overtime: See (5, 6, 11, 15) on HOLIDAY PAGE

* Journeymen receive 1/2 days pay for Labor Day. Cleaner, Maintenance and 1ST three terms of Apprentices see (5, 6, 11, 15) on HOLIDAY PAGE. All others See (1) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages:

(per hour worked).

(1/2) year terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th	5th	6th	7th	8th
50%	55%	60%	65%	70%	80%	90%	95%

Supplemental Benefits:

(per hour worked)

(750) hours term at the following dollar amount:

Apprentices : term wage % of \$ 8.20 + \$ 6.78

9-7/24

Mason - Building

03/01/2007

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

07/01/2006

Building:
 Tile Setters \$ 42.27

SUPPLEMENTAL BENEFITS

Journeyman: \$19.28

OVERTIME PAY

See (A, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 10, 11, 15, 16) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:
 (750 hr) terms at the following percentage of journeyman's wage.

1st	2nd	3rd	4th	5th	6th
50%	55%	65%	75%	85%	95%

Supplemental Benefits per hour paid:
 Apprentice: \$ 9.93+ term wage % of 9.35

9-7/52

Mason - Building **03/01/2007**

JOB DESCRIPTION Mason - Building **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Building: 07/01/06

Mosaic & Terrazzo Worker \$41.68
 Mosaic & Terrazzo Finisher \$40.37

SUPPLEMENTAL BENEFITS

Journeyman: \$18.55

OVERTIME PAY

See (A, E, Q, *V) on OVERTIME PAGE
 * ADD \$8.05 per hour to supplements on time & one-half overtime hours. ADD \$10.05 per hour to supplements on double-time overtime hours.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:
 (750 Hour) terms at the following percentage of the journeymans wage.

1st	2nd	3rd	4th	5th	6th
50%	55%	65%	70%	80%	95%

Supplemental benefits per hour paid:
 (750 hour) terms at the following percentage of Journeyman's benefit.

1st	2nd	3rd	4th	5th	6th
50%	55%	65%	70%	80%	95%

9-7/3

Mason - Building / Heavy&Highway **03/01/2007**

JOB DESCRIPTION Mason - Building / Heavy&Highway **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

07/01/2006

Stone Setter \$ 42.58

SUPPLEMENTAL BENEFITS

(per hour paid) 07/01/2006

Stone Setter \$25.43
 Stone Tender 10.95
 1st year apprentice 15.06

OVERTIME PAY

See (*C, **E, Q) on OVERTIME PAGE

* On weekdays the eighth (8th) and ninth (9th) hours are time and one-half all work thereafter is paid at double the hourly rate.

** The first seven (7) hours on Saturday is paid at time and one-half all work thereafter is paid at double the hourly rate.

HOLIDAY

Paid: See (8, 25) on HOLIDAY PAGE
 Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:
 (per hour paid):

(750 hour) terms at the following percentage of journeyman's wage.

Apprentices:	1st	2nd	3rd	4th	5th	6th	
07/01/2006	50%	60%	70%	80%	90%	100%	9-1Stn

Mason - Building / Heavy&Highway 03/01/2007

JOB DESCRIPTION Mason - Building / Heavy&Highway **DISTRICT 9**

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Shall include but not limited to: fired clay brick pavers, pre-cast con-crete slabs (london walks), pressed concrete pavers, cobble stone, all types of flagging, asphalt concrete pavers- asphaltic cement sand and stone aggregate, unit safety surface.

WAGES: (per hour)
 07/01/2006
 Journeyman \$24.12

SUPPLEMENTAL BENEFITS

Journeyman \$10.76

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages: 07/01/2006
 (per hour paid)
 One year(1) Apprenticeship \$ 20.27

Supplemental Benefits:
 Apprentice: \$ 6.08

9-1 Paver

Mason - Building / Heavy&Highway 03/01/2007

JOB DESCRIPTION Mason - Building / Heavy&Highway **DISTRICT 9**

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Wages: 07/01/2006

Marble-Riggers,
 Crane & Derrickman \$39.23

SUPPLEMENTAL BENEFITS

Journeyman... \$18.82

OVERTIME PAY

See (C, O, V) on OVERTIME PAGE

HOLIDAY

Paid: See (*2) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE

* 1/2 Day for Labor Day.

REGISTERED APPRENTICES

Wages:
 (per hour paid):

(1/2) year terms at the following percentage of Journeyman's wage.

	1st	2nd	3rd	4th	5th	6th
07/01/2006	50%	55%	65%	75%	85%	95%

Supplemental Benefits:

(per hour paid)
 07/01/2206 \$ 8.65 + term wage % of \$ 10.17

9-7/20-MR

Mason - Heavy&Highway

03/01/2007

JOB DESCRIPTION Mason - Heavy&Highway

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2006

Pointer, Cleaner,&
 Caulker (Mason) \$ 34.73

SUPPLEMENTAL BENEFITS

Journeyman \$ 17.94

OVERTIME PAY

See (B, E2, H) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:
 (per hour paid):

(1) year terms at the following wage rates.

	1st	2nd	3rd	4th
07/01/2006	\$16.80	19.69	25.75	31.30

Supplemental Benefits:

(per hour paid)
 Apprentices:
 07/01/2006 1st \$2.50 2nd \$6.60 3rd \$8.60 4th \$8.60

9-1PCC

Mason - Heavy&Highway

03/01/2007

JOB DESCRIPTION Mason - Heavy&Highway

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

07/01/06

Cement Mason \$41.25

SUPPLEMENTAL BENEFITS

Journeyman: \$23.15

OVERTIME PAY

See (C, O, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 13, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year terms at the following wage rates.

1st Term \$20.62
2nd Term 24.75
3rd Term 28.87

Supplement Benefits per hour paid:

Apprentices:

1st term \$14.94
2nd term 16.59
3rd term 18.25

9-780

Operating Engineer - Building

03/01/2007

JOB DESCRIPTION Operating Engineer - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Survey Rates-Building: 07/01/2006

Party Chief \$44.74
Instrument Man 33.63
Rodman 29.67

SUPPLEMENTAL BENEFITS

(per hour paid):

Journeyman: \$20.30

OVERTIME PAY

See (A, *E, Q, V) on OVERTIME PAGE

* Doubletime paid on the 8th hour on Saturday.

HOLIDAY

Paid: See (5, 6, 8, 11, 12, 15, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 12, 25) on HOLIDAY PAGE

9-15Db

Operating Engineer - Building

03/01/2007

JOB DESCRIPTION Operating Engineer - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Building: 07/01/2006
Maintenance Engineer... \$42.42
Maintenance Engineer On Pumps,
Generators, Mixers & Heaters... 33.61
Oilers... 40.47
Oilers On Backhoes, Crawler Cranes
& Compressors... 30.79

SUPPLEMENTAL BENEFITS

(per hour paid)

Journeyman... \$20.30 (+.85 sup dues)

OVERTIME PAY

See (D, O, V) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:
 (per hour paid):

(1) year terms at the following wage rates:

Apprentices:	1st	2nd	3rd	4th
07/01/2006	\$16.66	\$20.82	\$22.90	\$24.98

Supplemental Benefits:
 (per hour paid):

Apprentices: \$ 11.55 (+ \$.85 sup dues).

9-15Ab

Operating Engineer - Building

03/01/2007

JOB DESCRIPTION Operating Engineer - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

	07/01/2006			
Building:				
Double Drum...	\$48.72			
Cranes, Stone Derrick, Boom Trucks..	51.60			
Fork Lifts, Hoists Concrete Pump, Plaster Buckets & Platforms...	47.56			
All Engine Driven Equipment, Compressors...	32.04			
CRANES: Crawler Or Truck				
100' to 149' Boom	\$1.75/hr Addit. To Above Crane Rates.			
150' to 249' "	2.00/hr	"	"	"
250' to 349' "	2.25/hr	"	"	"
350' to 450' "	2.75/hr	"	"	"
Tower Crane	2.00/hr	"	"	"

SUPPLEMENTAL BENEFITS

(per hour paid)

Journeyman \$17.70 + \$ 3.95/hr*

Note: * \$3.95 Not subject to condition V, paid at straight time for all hours

OVERTIME PAY

See (C, O, *V) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:
 (per hour paid):

(1) year terms at the following percentages of Journeyman wage:

Apprentices:	1st	2nd	3rd
07/01/2006	40%	50%	60%

Supplemental Benefits:
 (per hour paid)
 Apprentices: \$ 8.95 + \$ 3.95/hr**

Note:** \$ 3.95, Not subject to condition V, paid at straight time for all hours.

9-14/14B

Operating Engineer - Building / Heavy&Highway **03/01/2007**

JOB DESCRIPTION Operating Engineer - Building / Heavy&Highway **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, New York, Queens, Richmond

WAGES

EQUIPMENT COVERED: Jet-Rodder/Vacuum Truck, Flusher, Sewer Rodder, Stetco Hoist and similar, Sewer Winch/Tugger Hoist and similar, Vacall/Vactor, Closed Circuit Television Inspection Equipment, Chemical Grouting Equipment and similar, John Beame, Meyers and similar.

WAGES: (per hour) 07/01/2006

Maintenance Engineer \$ 43.59
 Asst. Maint. Engineer 29.44

SUPPLEMENTAL BENEFITS

(per hour paid):
 Journeyman: \$ 20.30

OVERTIME PAY

See (D, O, V) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE
 Overtime: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:
 (per hour paid):

(1) year terms at the following wage rates.

Apprentices:	1st	2nd	3rd	4th
07/01/2006	\$16.66	20.82	22.90	24.98

Supplemental Benefits:

Apprentices: \$11.55

9-15Sewer

Operating Engineer - Heavy&Highway **03/01/2007**

JOB DESCRIPTION Operating Engineer - Heavy&Highway **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Dutchess, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

WAGES

07/01/2006
 Survey Rates-Heavy/Highway:
 Party Chief \$46.14
 Instrument Man 33.61
 Rodman 29.06

SUPPLEMENTAL BENEFITS

(per hour paid)
 Journeyman \$19.45 (+ \$.85 sup dues)

OVERTIME PAY

See (B, *E, Q, V) on OVERTIME PAGE

* Doubletime paid on the 9th hour on Saturday.

HOLIDAY

Paid: See (5, 6, 7, 11, 12) on HOLIDAY PAGE
 Overtime: See (5, 6, 7, 11, 12) on HOLIDAY PAGE

9-15Dh

Operating Engineer - Heavy&Highway

03/01/2007

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

07/01/2006

Heavy and Highway:

Backhoes	\$43.78
Barrier Movers	43.78
Boom Truck	43.78
Bulldozers	43.78
Cherry Pickers	43.78
Concrete Breaker	43.78
Curb Pavers	43.78
Groover	43.78
Loaders	43.78
P-811 Track Removal Machine or Similar	43.78
Dual Purpose Trucks	41.64
Finishing Machines	41.64
Fireman	41.64
Forklifts	41.64
Post Hole Diggers	41.64
Rollers (5 tons and under)	41.64
Tractors	41.64
Tugger Hoists	41.64
Generators	29.44
Water Pump	30.13
Tower Crane Maint. Engineer	56.64
Cherry Picker (20 Ton)	45.07
Oiler	39.48

SUPPLEMENTAL BENEFITS

(per hour paid):

Journeyman... \$20.30

OVERTIME PAY

See (D, O, V) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 7, 11, 12) on HOLIDAY PAGE
 Overtime: See (5, 6, 7, 11, 12) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:

(per hour paid):

(1) year terms at the following wage rates:

Apprentices:	1st	2nd	3rd	4th
07/01/2006	\$ 16.66	\$ 20.82	\$ 22.90	\$ 24.98

Supplemental Benefits:

(per hour paid):

Apprentices: \$ 11.55

9-15-15A/H/H

Operating Engineer - Marine Construction

03/01/2007

JOB DESCRIPTION Operating Engineer - Marine Construction

DISTRICT 4

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per Hour:

DIPPER, CLAMSHELL DREDGES 07/01/2006

CLASS A
Operator \$ 29.62

CLASS B
Operator II \$ 24.59
Engineer 26.02
Boat Master 24.79

CLASS C
Maintenance Engineer \$ 25.15
Mate 23.54
Drag Barge Operator 23.54
Welder 24.77
Boat Captain 23.70
Chief of Party 23.54

CLASS D
Oiler \$ 20.34
Scowman 19.43
Rodman 19.43
Deckhand 19.48

HYDRAULIC DREDGES 07/01/2006

CLASS A
Leverman \$ 29.62

CLASS B
Leverman II \$ 24.59
Engineer 25.47
Derrick Operator 25.72
Chief Mate 25.37
Chief Welder 26.03
Electrician 24.98
Fill Placer 25.37
Boat Master 24.78

CLASS C
Maintenance Engineer \$ 25.14
Mate 23.54
Drag Barge Operator 23.54
Welder (Dredge) 24.76
Spider Barge Operator 24.56
Boat Captain 23.70
Chief of Party 23.54

CLASS D
Oiler \$ 19.94
Shoreman 19.45
Rodman 19.45
Deckhand 19.88

SUPPLEMENTAL BENEFITS

Per Hour:

THE FOLLOWING SUPPLEMENTAL BENEFITS APPLY TO ALL CATEGORIES

07/01/2006

All Classes A & B	\$ 7.90 plus
(overtime hours add)	7% of Wage \$ 1.25
All Class C	\$ 7.30 plus
(overtime hours add)	7% of Wage \$ 0.95
All Class D	\$ 6.70 plus
(overtime hours add)	7% of Wage \$ 0.65

OVERTIME PAY

See (B, F, R) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 8, 15, 26) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 15, 26) on HOLIDAY PAGE

4-25a-MarConst

Operating Engineer - Trenchless Pipe Rehab

03/01/2007

JOB DESCRIPTION Operating Engineer - Trenchless Pipe Rehab

DISTRICT 4

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuylar, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per Hour:

07/01/2006

DSET/DSSET Operator	\$ 30.00
Robotic Unit Operator	30.00
DDCC Injection Operator	30.00
Technician/Equipment Operator	25.50
AM Liner/Hydra Seal Installer	25.50
Hobas Pipe, Polyethylene Pipe or Pull and Inflate Liner Inst.	25.50

SUPPLEMENTAL BENEFITS

Per Hour Worked

All Classifications \$ 11.34

OVERTIME PAY

See (B, H) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 8, 9, 15, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

At One Year Terms
 (Per Hour)

First Year	\$ 16.00
Second Year	16.75
Third Year	17.25
Fourth Year	18.00

Supplemental Benifit
 (Per Hour Worked)
 All Terms \$ 11.34

4-138TrchPREh

Painter **03/01/2007**

JOB DESCRIPTION Painter **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

WAGES
 (Per hour)

	07/01/2006- 04/30/2007	05/01/2007
Brush	\$ 33.50	\$ 34.50
Spray & Scaffold	36.50	37.50
Fire Escape	36.50	37.50
Decorator	36.50	37.50
Paperhanger/Wall Coverer	35..33	36.33

SUPPLEMENTAL BENEFITS
 (per hour worked)

	07/01/2005	05/01/2006
Paperhanger	\$ 23.15	\$ 23.15
All others	18.85	20.94

OVERTIME PAY
 See (A, H) on OVERTIME PAGE

HOLIDAY
 Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES
 Indentured after 5/31/93 (1) year terms at the following wage rate.
 (per hour)

Appr 1st term...	\$ 12.70	\$ 12.70
Appr 2nd term...	16.75	17.25
Appr 3rd term...	20.10	20.70
Appr 4th term...	26.80	27.60
Spplmental benifits: (per Hour worked)		
Appr 1st term...	8.63	9.64
Appr 2nd term...	10.74	11.89
Appr 3rd term...	13.21	14.47
Appr 4th term...	17.68	19.71

9-NYDC9-B/S

Painter **03/01/2007**

JOB DESCRIPTION Painter **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, New York, Queens, Richmond

WAGES

	07/01/06
Drywall Taper	\$35.32

SUPPLEMENTAL BENEFITS
 Journeyman: \$17.77

OVERTIME PAY
 See (A, H) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 10, 11, 18, 19) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:
 One (1) year terms at the following wage rate

1st term	\$13.73
2nd term	\$20.90
3rd term	\$28.26

Supplemental Benefits per hour paid:
 One (1) year term at the following dollar amount

1st term	\$ 8.00
2nd term	\$12.94
3rd term	\$15.62

9-1974-DWT

Painter - Building / Heavy&Highway

03/01/2007

JOB DESCRIPTION Painter - Building / Heavy&Highway

DISTRICT 9

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

07/01/2006

Metal Polisher \$ 21.98

All workers shall be paid a premium in an amount equal to twenty (20%) percent of their basic straight time rate of pay for all time worked on hanging scaffolds and on standing scaffolds while working more than 28 feet off the ground, such premium to be paid on top of their straight time or overtime, whichever is applicable.

SUPPLEMENTAL BENEFITS

(% of Total Wages)

Journeyman & Apprentice - 55% of Wages

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE
 Overtime: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

55% of Basic Polisher Rate (*)

9-8A/28A-MP

Painter - Heavy&Highway

03/01/2007

JOB DESCRIPTION Painter - Heavy&Highway

DISTRICT 9

ENTIRE COUNTIES

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Ulster, Warren, Washington, Westchester

WAGES

(per hour worked) 07/01/2006 10/01/2006

STEEL:

" Bridge Painting \$ 42.50 \$ 43.00

" ** Power Tool/Spray \$ 48.50 49.00

NB: For Bridge Painting Contracts, ALL WORKERS on and off the bridge (including Flagmen) are to be paid Painter's Rate; the contract must be ONLY for Bridge Painting.

SUPPLEMENTAL BENEFITS

(per hour paid)

Journeyman: \$ 26.23 \$ 26.47

OVERTIME PAY

See (*A, **F, ***R) on OVERTIME PAGE

Note: When calculating overtime pay for the Power Tool/ Spray classification, add Six dollars to the hourly overtime rate calculated for the " bridge painting" classification.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (*4, **6) on HOLIDAY PAGE

REGISTERED APPRENTICES

(wage per hour Worked):

(1) year terms at the following percentage of Journeyman's wage.

07/01/2006	1st	2nd	3rd
	40%	60%	80%

Supplemental Benefits:

(1) term at the following dollar amount:

Apprentices:	1st	2nd	3rd
07/01/2006	\$21.23	\$ 26.23	\$ 26.23
10/01/2006	21.47	26.47	26.47

9-DC-9/806-BrSS

Painter - Heavy&Highway

03/01/2007

JOB DESCRIPTION Painter - Heavy&Highway

DISTRICT 9

ENTIRE COUNTIES

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, Nassau, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

WAGES

Painter (Striping-Highway):	07/01/2006
Striping-Machine Operator	\$ 23.64
Linerman Thermoplastic	28.49

SUPPLEMENTAL BENEFITS

(per hour paid)	07/01/2006
Journeyman..	\$ 7.14 + 7% of wage

OVERTIME PAY

See (B, E, P, S) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 8, 11, 12, 15, 16, 17, 20) on HOLIDAY PAGE
 Overtime: See (5, 8, 11, 12, 15, 16, 17, 20, 21, 22) on HOLIDAY PAGE

9-8a/28a (230)-HWSt

Plasterer

03/01/2007

JOB DESCRIPTION Plasterer

DISTRICT 9

ENTIRE COUNTIES

Kings, Nassau, Queens, Suffolk

PARTIAL COUNTIES

New York: Includes work in all Islands in New York City, except Manhattan.

WAGES

(per hour)

	02/01/2006	07/01/2006	02/01/2007
Building: Plasterer/Traditional	\$ 34.03	Additional \$ 1.50*	Additional \$1 .50*

* Note: May be distributed between wages and benefits.

SUPPLEMENTAL BENEFITS

(per hour worked)
 Journeyman \$ 20.30

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 11, 13, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:
 (per hour)

(1) year terms at the following % journeyman's wage rate.

First year:	1st 6 months 40%	2nd 6 months 45%
Second year:	1st 6 months 55%	2nd 6 months 60%
Third year:	1st 6 months 70%	2nd 6 months 75%

Supplemental Benefits:

(per hour paid):

(1) year term broken down into six month periods:

1st year:

1st six months	\$8.37
2nd six months	9.35
3rd six months	11.35
4th six months	12.33
5th six months	14.33
6th six months	15.33

9-530-Z1

Plumber

03/01/2007

JOB DESCRIPTION Plumber

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour worked	01/01/2006	7/01/2006	
Plumber	\$ 44.69	Additional \$ 1.40	
	01/01/2006	07/01/2006	04/01/2007
Repair & Alteration	\$ 27.95	Additional \$ 0.75	Additional \$ 0.75

Repair & alteration work is any repair and/or replacement of present plumbing system that does not change existing roughing or water supply lines.

THERE ARE NO HELPERS UNDER THIS CLASSIFICATION; WHEN USING APPRENTICES, MUST FOLLOW RATIO FOR PLUMBERS.

On tower work, bridges, elevated highway, or buildings, where pipe is being installed, fifty (50) or more feet vertically in a free drop from its base,
 an additional \$1.00 per hour.

SHIFT WORK:

When shift work is directly specified in Transit Authority and/or Dept. of Transportation contract documents, and must continue for a period of not less than ten (10) consecutive work days. A shift shall consist of seven(7) hours with one-half (1/2) hour for lunch after the first four (4) hours of each shift.

A premium of thirty percent (30%) for wages and supplemental benefits on shift work performed Monday through Friday on the 4 P.M.and midnight shifts.

For shift work performed on weekends the shift premium shall be fifty percent (50%) of wages and supplemental benefits.

For shift work performed on holidays designated below, double time wages and supplemental benefits shall be paid. Also noted that the normal workday Monday through Friday 8:00 A.M. to 3:00 P.M. is not considered shift work, and therefore not subject to shift premium.

SUPPLEMENTAL BENEFITS

Plumber:
 Journeyman \$29.99

Plumber-Jobbing &
 Alterations \$11.79

OVERTIME PAY

OVERTIME:

Plumber:..... See (C, O, V) on OVERTIME PAGE.

Plumber-Jobbing &
 Alterations..See (B, H) on OVERTIME PAGE.

HOLIDAY

HOLIDAY:

Plumber:..... Paid: See (1) on HOLIDAY PAGE.

Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE.

Plumber-Jobbing &

Alterations..Paid: See (1) on HOLIDAY PAGE.

Overtime: See (5, 6, 25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages:

(Per Hour)

(1/2) year terms at the following wage:

Apprentices:	1st&2nd	3rd&4th	5th&6th	7th&8th	9th	10th
01/01/06	\$11.06	\$14.32	\$16.42	\$19.27	\$20.67	\$32.74

07/01/06 Add an additional \$0.70** cents

Supplemental Benefits per hour paid:

(1/2) year term at the following dollar amount:

01/01/06	1st	2nd	3rd-10th
	\$.38	\$2.63	\$12.76

** May be distributed between Wages and Benefits.

NB: The Jobbing-Alteration category has no Apprentices.

Roofer **03/01/2007**

JOB DESCRIPTION Roofer

DISTRICT 9

ENTIRE COUNTIES

Bronx, Dutchess, Kings, New York, Orange, Putnam, Queens, Richmond, Rockland, Sullivan, Ulster, Westchester

WAGES

Per Hour: 07/01/06

Roofer/Waterproofer... \$36.33

SUPPLEMENTAL BENEFITS

Journeyman \$21.57

OVERTIME PAY

See (B, H) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 13, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th
35%	50%	60%	75%

Supplemental benefits per hour paid:

Appr..... Wage %
 of same

9-8R

Sheetmetal Worker

03/01/2007

JOB DESCRIPTION Sheetmetal Worker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2006

Sheetmetal Worker \$ 40.99

For Temporary Operation or
 Maintenance of Fans is 80% of Above Wage Rate

SUPPLEMENTAL BENEFITS

Per Hour:

Journeyman \$ 33.01

OVERTIME PAY

See (A, O) on OVERTIME PAGE
 For Fan Maintenance See Codes B & O

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages Per Hour:

(1/2) Year Terms at the following Percent of Journeyman(s) Wage

1st	2nd	3rd	4th	5th	6th	7th	8th
30%	35%	40%	45%	50%	55%	60%	70%

Supplemental Benefits per hour:

1st Term	\$ 12.70
2nd Term	14.33
3rd Term	15.82
4th Term	17.38
5th Term	18.92
6th Term	20.33
7th Term	22.20
8th Term	25.85

4-28

Sheetmetal Worker

03/01/2007

JOB DESCRIPTION Sheetmetal Worker

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per Hour:

07/01/06

Sign Erector*

\$ 36.20

*NOTE: Overhead Highway Signs and Structurally Supported Signs
 (See IRON WORKER CLASS)

SUPPLEMENTAL BENEFITS

Per Hour:

07/01/06

Journeyman

\$ 25.48

OVERTIME PAY

See (A, F, S) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 11, 12, 16, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 10, 11, 12, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

07/01/2006

Half (1/2) year terms at the following rate(s):

1st	2nd	3rd	4th	5th
\$12.67	\$14.48	\$16.29	\$18.10	\$19.91
6th	7th	8th	9th	10th
\$21.72	\$23.53	\$25.34	\$27.15	\$28.96

Supplemental Benefits per hour paid:

Half (1/2) year terms at the following dollar amount

1st	2nd	3rd	4th	5th
\$8.28	\$9.21	\$10.16	\$11.09	\$12.18
6th	7th	8th	9th	10th
\$12.97	\$14.07	\$14.86	\$15.95	\$16.74

9-137-SE

Sprinkler Fitter - Refrigeration

03/01/2007

JOB DESCRIPTION Sprinkler Fitter - Refrigeration

DISTRICT 9

ENTIRE COUNTIES

Bronx, Nassau, New York, Queens, Suffolk

WAGES

Per hour:

07/01/2006

Steamfitter

\$ 29.30

Refrigeration, A/C, Oil Burner and Stoker Service and Installations, limited on Refrigeration to combined compressors up to five (5) horsepower, and on A/C Heating and Air Cooling to combined compressors up to ten (10) horsepower.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman

\$ 7.71

OVERTIME PAY

See (B, E, *Q, **S) on OVERTIME PAGE

* Overtime Code Q applies to Holiday Codes 2, 6, 9, 15, and 17.

** Overtime Code S applies to Holiday codes 10, 11, 26, and Memorial Day.

HOLIDAY

Paid: See (2, 6, 9, 10, 11, 15, 17, 26) on HOLIDAY PAGE

Overtime: See (2, 6, 9, 10, 11, 15, 17, 26) on HOLIDAY PAGE

Memorial Day a Paid Holiday with Overtime as per Overtime Code S

9-638B

Steamfitter **03/01/2007**

JOB DESCRIPTION Steamfitter

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

07/01/2006-
12/26/2006

Steam Fitter* \$ 43.67
 Sprinkler Fitter* 43.67

For Work on Temporary Heat**
 & Air Conditioning 33.18*

SUPPLEMENTAL BENEFITS

(per hour paid)

Journeyman \$ 34.60

Journeyman:
 (For Work on Temporary Heat & Air conditioning). \$ 27.40

OVERTIME PAY

See (*C, **D, O, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour worked:

(1) year terms at the following percentage of Journeyman's wage.

Apprentices:	1st	2nd	3rd	4th	5th
	40%	50%	65%	80%	85%

Supplemental Benefits:

(1) year term at the following dollar amounts:

Apprentices:	1st	2nd	3rd	4th	5th
07/01/2006	\$ 14.00	\$ 17.35	\$22.37	\$ 27.37	\$ 29.06

9-638A-StmSpFtr

Steamfitter **03/01/2007**

JOB DESCRIPTION Steamfitter

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

07/01/2006-
12/31/2006

Steamfitter..... \$ 30.45

Refrigeration, A/C, Oil Burner and Stoker Service and Installations,
 limited on Refrigeration to combined compressors up to five (5) horsepower,

and on A/C Heating and Air Cooling to combined compressors up to ten (10) horsepower.

SUPPLEMENTAL BENEFITS

Journeyman..... \$ 7.71

OVERTIME PAY

OVERTIME:.....See (B, E, Q*, S**) on OVERTIME PAGE.

HOLIDAY

HOLIDAY:

Paid:.....See (2, 6, 9, 10, 11, 15, 17, 26,Memorial Day) on HOLIDAY PAGE.

Overtime:.... * (2, 6, 9, 15, 17)

** (10, 11, 26, Memorial Day)

9-638B-StmFtrRef

Survey Crew Consulting

03/01/2007

JOB DESCRIPTION Survey Crew Consulting

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

PARTIAL COUNTIES

Dutchess: Only the portion south of the north city line in Poughkeepsie.

WAGES

Feasibility and preliminary design surveying, line and grade surveying for inspection or supervision of construction when performed under a Consulting Engineer agreement.

WAGES: (per hour)

07/01/2006

Survey Rates:

Party Chief..... \$29.82
Instrument Man.. 25.01
Rodman..... 21.95

SUPPLEMENTAL BENEFITS

(per hour paid)

Journeyman..... \$11.70

OVERTIME PAY

OVERTIME:..... See (B, E*, Q, V) ON OVERTIME PAGE.

*Doubletime paid on the 9th hour on Saturday.

HOLIDAY

Paid: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

Overtime: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

9-15dconsult

Teamster - Building / Heavy&Highway

03/01/2007

JOB DESCRIPTION Teamster - Building / Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per Hour: 07/01/2006

Group#1

Excavation \$ 31.235

Group#2

Euclid & Turnpull type \$ 31.800

ADDITIONS Per Day:

Three(3) Axle Tractors
and Trailers: \$ 8.00

Heavy Equipment and
Tag-Alongs Trailers: 12.00

Drivers of Boom Trucks: 10.00

SUPPLEMENTAL BENEFITS

Per Hour:

All Groups/
Classifications \$ 25.00

OVERTIME PAY

See (B, E, Q, R, T) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 11, 12, 15, 25) on HOLIDAY PAGE
Overtime: See (11, 12, 15, 25) on HOLIDAY PAGE

Employee must work Two(2) Days in Holiday Week
5,6,13 Paid at Triple Time if Worked.

4-282ny

Teamster - Building / Heavy&Highway

03/01/2007

JOB DESCRIPTION Teamster - Building / Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2006

Truck Driver, Chauffeur

Trailers \$ 25.28

Straight Jobs 24.98

SUPPLEMENTAL BENEFITS

Per Hour:

All Classifications \$ 18.80

OVERTIME PAY

See (B, L, S, S1) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 7, 8, 11, 12, 26) on HOLIDAY PAGE
Employee must work Two(2) Days in Holiday Week

4-282.Demo

Welder

03/01/2007

JOB DESCRIPTION Welder

DISTRICT 1

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour

Welder (To be paid the same rate of the mechanic performing the work)

OVERTIME PAY

HOLIDAY

1-As Per Trade

Overtime Codes

Following is an explanation of the code(s) listed in the OVERTIME section of each classification contained in the attached schedule. Additional requirements may also be listed in the HOLIDAY section.

- (A) Time and one half of the hourly rate after 7 hours per day
- (AA) Time and one half of the hourly rate after 7 and one half hours per day
- (B) Time and one half of the hourly rate after 8 hours per day
- (B1) Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday. Double the hourly rate for all additional hours
- (B2) Time and one half of the hourly rate after 40 hours per week
- (C) Double the hourly rate after 7 hours per day
- (C1) Double the hourly rate after 7 and one half hours per day
- (D) Double the hourly rate after 8 hours per day
- (D1) Double the hourly rate after 9 hours per day
- (E) Time and one half of the hourly rate on Saturday
- (E1) Time and one half 1st 4 hours on Saturday Double the hourly rate all additional Saturday hours
- (E3) Between November 1st and March 3rd Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, provided a given employee has worked between 16 and 32 hours that week
- (E2) Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- (E4) Saturday and Sunday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- (F) Time and one half of the hourly rate on Saturday and Sunday
- (G) Time and one half of the hourly rate on Saturday and Holidays
- (H) Time and one half of the hourly rate on Saturday, Sunday, and Holidays
- (I) Time and one half of the hourly rate on Sunday
- (J) Time and one half of the hourly rate on Sunday and Holidays
- (K) Time and one half of the hourly rate on Holidays
- (L) Double the hourly rate on Saturday
- (M) Double the hourly rate on Saturday and Sunday
- (N) Double the hourly rate on Saturday and Holidays
- (O) Double the hourly rate on Saturday, Sunday, and Holidays
- (P) Double the hourly rate on Sunday
- (Q) Double the hourly rate on Sunday and Holidays
- (R) Double the hourly rate on Holidays
- (S) Two and one half times the hourly rate for Holidays, if worked
- (S1) Two and one half times the hourly rate the first 8 hours on Sunday or Holidays One and one half times the hourly rate all additional hours.
- (T) Triple the hourly rate for Holidays, if worked

- (U) Four times the hourly rate for Holidays, if worked
- (V) Including benefits at SAME PREMIUM as shown for overtime
- (W) Time and one half for benefits on all overtime hours.

NOTE: BENEFITS are PER HOUR WORKED, for each hour worked, unless otherwise noted

Holiday Codes

PAID Holidays:

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

OVERTIME Holiday Pay:

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays. The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Following is an explanation of the code(s) listed in the HOLIDAY section of each classification contained in the attached schedule. The Holidays as listed below are to be paid at the wage rates at which the employee is normally classified.

- (1) None
- (2) Labor Day
- (3) Memorial Day and Labor Day
- (4) Memorial Day and July 4th
- (5) Memorial Day, July 4th, and Labor Day
- (6) New Year's, Thanksgiving, and Christmas
- (7) Lincoln's Birthday, Washington's Birthday, and Veterans Day
- (8) Good Friday
- (9) Lincoln's Birthday
- (10) Washington's Birthday
- (11) Columbus Day
- (12) Election Day
- (13) Presidential Election Day
- (14) 1/2 Day on Presidential Election Day
- (15) Veterans Day
- (16) Day after Thanksgiving
- (17) July 4th
- (18) 1/2 Day before Christmas
- (19) 1/2 Day before New Years
- (20) Thanksgiving
- (21) New Year's Day
- (22) Christmas
- (23) Day before Christmas
- (24) Day before New Year's
- (25) Presidents' Day
- (26) Martin Luther King, Jr. Day

**REQUEST FOR WAGE AND SUPPLEMENT INFORMATION
 AS REQUIRED BY ARTICLES 8 AND 9 OF THE LABOR LAW**

Fax (518) 485-1870 or mail this form for new schedules or for determination for additional occupations.

Please type all information requested below

SUBMITTED BY: CONTRACTING AGENCY PUBLIC WORK DISTRICT OFFICE
 (CHECK ONE) ARCHITECT OR ENGINEERING FIRM

DATE :

A. PUBLIC WORK CONTRACT TO BE LET BY: (Enter Data Pertaining to Contracting Agency)

1. Name and complete address (<input type="checkbox"/> check if new or change) : Telephone: () Fax: () E-Mail:	2. NY State Units (see Item 5) <table style="width: 100%;"> <tr> <td><input type="checkbox"/> 01 DOT</td> <td><input type="checkbox"/> 07 City</td> </tr> <tr> <td><input type="checkbox"/> 02 OGS</td> <td><input type="checkbox"/> 08 Local School District</td> </tr> <tr> <td><input type="checkbox"/> 03 Dormitory Authority</td> <td><input type="checkbox"/> 09 Special Local District, i.e., Fire, Sewer, Water District</td> </tr> <tr> <td><input type="checkbox"/> 04 State University Construction Fund</td> <td><input type="checkbox"/> 10 Village</td> </tr> <tr> <td><input type="checkbox"/> 05 Mental Hygiene Facilities Corp.</td> <td><input type="checkbox"/> 11 Town</td> </tr> <tr> <td><input type="checkbox"/> 06 OTHER N.Y. STATE UNIT</td> <td><input type="checkbox"/> 12 County</td> </tr> <tr> <td></td> <td><input type="checkbox"/> 13 Other Non-N.Y. State (Describe)</td> </tr> </table>	<input type="checkbox"/> 01 DOT	<input type="checkbox"/> 07 City	<input type="checkbox"/> 02 OGS	<input type="checkbox"/> 08 Local School District	<input type="checkbox"/> 03 Dormitory Authority	<input type="checkbox"/> 09 Special Local District, i.e., Fire, Sewer, Water District	<input type="checkbox"/> 04 State University Construction Fund	<input type="checkbox"/> 10 Village	<input type="checkbox"/> 05 Mental Hygiene Facilities Corp.	<input type="checkbox"/> 11 Town	<input type="checkbox"/> 06 OTHER N.Y. STATE UNIT	<input type="checkbox"/> 12 County		<input type="checkbox"/> 13 Other Non-N.Y. State (Describe)
	<input type="checkbox"/> 01 DOT	<input type="checkbox"/> 07 City													
<input type="checkbox"/> 02 OGS	<input type="checkbox"/> 08 Local School District														
<input type="checkbox"/> 03 Dormitory Authority	<input type="checkbox"/> 09 Special Local District, i.e., Fire, Sewer, Water District														
<input type="checkbox"/> 04 State University Construction Fund	<input type="checkbox"/> 10 Village														
<input type="checkbox"/> 05 Mental Hygiene Facilities Corp.	<input type="checkbox"/> 11 Town														
<input type="checkbox"/> 06 OTHER N.Y. STATE UNIT	<input type="checkbox"/> 12 County														
	<input type="checkbox"/> 13 Other Non-N.Y. State (Describe)														
3. SEND REPLY TO (<input type="checkbox"/> check if new or change) Name and complete address: Telephone: () Fax:() E-Mail:	4. SERVICE REQUIRED. Check appropriate box and provide project information. <input type="checkbox"/> New Schedule of Wages and Supplements. <table border="1" style="margin-left: 40px;"> <tr> <td>APPROXIMATE BID DATE :</td> </tr> </table> <input type="checkbox"/> Additional Occupation and/or Redetermination <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">PRC NUMBER ISSUED PREVIOUSLY FOR THIS PROJECT :</td> <td style="width: 50%;">OFFICE USE ONLY</td> </tr> </table>	APPROXIMATE BID DATE :	PRC NUMBER ISSUED PREVIOUSLY FOR THIS PROJECT :	OFFICE USE ONLY											
APPROXIMATE BID DATE :															
PRC NUMBER ISSUED PREVIOUSLY FOR THIS PROJECT :	OFFICE USE ONLY														

B. PROJECT PARTICULARS

5. <u>Project Title</u> _____ <u>Description of Work</u> _____ <u>Contract Identification Number</u> _____ <u>Note: For NYS units, the OSC Contract No.</u> _____	6. Location of Project: Location on Site _____ Route No/Street Address _____ Village or City _____ Town _____ County _____												
7. Nature of Project - Check One: <input type="checkbox"/> 1. New Building <input type="checkbox"/> 2. Addition to Existing Structure <input type="checkbox"/> 3. Heavy and Highway Construction (New and Repair) <input type="checkbox"/> 4. New Sewer or Waterline <input type="checkbox"/> 5. Other New Construction (Explain) <input type="checkbox"/> 6. Other Reconstruction, Maintenance, Repair or Alteration <input type="checkbox"/> 7. Demolition <input type="checkbox"/> 8. Building Service Contract	8. OCCUPATION FOR PROJECT : <table style="width: 100%;"> <tr> <td><input type="checkbox"/> Construction (Building, Heavy Highway/Sewer/Water)</td> <td><input type="checkbox"/> Guards, Watchmen</td> </tr> <tr> <td><input type="checkbox"/> Tunnel</td> <td><input type="checkbox"/> Janitors, Porters, Cleaners</td> </tr> <tr> <td><input type="checkbox"/> Residential</td> <td><input type="checkbox"/> Moving furniture and equipment</td> </tr> <tr> <td><input type="checkbox"/> Landscape Maintenance</td> <td><input type="checkbox"/> Trash and refuse removal</td> </tr> <tr> <td><input type="checkbox"/> Elevator maintenance</td> <td><input type="checkbox"/> Window cleaners</td> </tr> <tr> <td><input type="checkbox"/> Exterminators, Fumigators</td> <td><input type="checkbox"/> Other (Describe)</td> </tr> </table>	<input type="checkbox"/> Construction (Building, Heavy Highway/Sewer/Water)	<input type="checkbox"/> Guards, Watchmen	<input type="checkbox"/> Tunnel	<input type="checkbox"/> Janitors, Porters, Cleaners	<input type="checkbox"/> Residential	<input type="checkbox"/> Moving furniture and equipment	<input type="checkbox"/> Landscape Maintenance	<input type="checkbox"/> Trash and refuse removal	<input type="checkbox"/> Elevator maintenance	<input type="checkbox"/> Window cleaners	<input type="checkbox"/> Exterminators, Fumigators	<input type="checkbox"/> Other (Describe)
<input type="checkbox"/> Construction (Building, Heavy Highway/Sewer/Water)	<input type="checkbox"/> Guards, Watchmen												
<input type="checkbox"/> Tunnel	<input type="checkbox"/> Janitors, Porters, Cleaners												
<input type="checkbox"/> Residential	<input type="checkbox"/> Moving furniture and equipment												
<input type="checkbox"/> Landscape Maintenance	<input type="checkbox"/> Trash and refuse removal												
<input type="checkbox"/> Elevator maintenance	<input type="checkbox"/> Window cleaners												
<input type="checkbox"/> Exterminators, Fumigators	<input type="checkbox"/> Other (Describe)												

9. Name and Title of Requester _____

Signature _____

OFFICE USE ONLY

Locality Designations :

DEPARTMENT OF LABOR - BUREAU OF PUBLIC WORK

Under Article 8 of the NYS Labor Law, when two final determinations have been rendered against a contractor, sub-contractor and/or its successor within any consecutive six-year period determining that such contractor, sub-contractor and/or its successor has WILLFULLY failed to pay the prevailing wage and/or supplements, or when one final determination involves falsification of payroll records or the kickback of wages and/or supplements, said contractor, sub-contractor and/or its successor shall be debarred and ineligible to submit a bid on or be awarded any public work contract/sub-contract with the state, any municipal corporation or public body for a period of five years from the date of debarment.

NOTE: Where the Fiscal Officer is denoted "NYC", the information has been provided by the New York City Comptroller's Office, the agency issuing the determination.

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
385 Services LLC	2657 State Highway 28	Portlandville	NY	13834
FEIN: 16-1466399	Barred Until 01/08/2009	Fiscal Officer Notes: DOL Multiple willful violations		

Company Name	Address	City	State	Zip Code
4-A General Construction Corp	131 47th Street	Brooklyn	NY	11232
FEIN: 11-3161355	Barred Until 01/25/2012	Fiscal Officer Notes: AG Plea Agreement with A.G.'s Office and Spiridon Anthoulis, Anastasia Anthoulis aka Stacey Gouzos as individuals		

Company Name	Address	City	State	Zip Code
A & D Contracting Corp	15 Pine Aire Drive	Bay Shore	NY	11706
FEIN: 11-3203983	Barred Until 08/01/2010	Fiscal Officer Notes: DOL Falsification of payroll records. Also Tommaso Allocca as an individual		

Company Name	Address	City	State	Zip Code
A A General Contractors Inc	1765 Mt Read Boulevard	Rochester	NY	14606
FEIN: 16-1319254	Barred Until 10/18/2009	Fiscal Officer Notes: DOL And W.J. Grinder Roofing as a substantially affiliated employer and Dominic Antonucci as an individual. Multiple willful violations		

Company Name	Address	City	State	Zip Code
A Castricone Concrete Inc	P O Box 203	Athol Springs	NY	14010
FEIN: 16-1582253	Barred Until 03/03/2008	Fiscal Officer Notes: DOL and Crazy Horse Tonawanda Inc		

Company Name	Address	City	State	Zip Code
A&T General Construction Inc	3 Alan B Shepard Place	Yonkers	NY	10705
FEIN: 13-3927478	Barred Until 12/11/2011	Fiscal Officer Notes: DOL and Nick Nitis as an individual - falsification of payroll records		

Company Name	Address	City	State	Zip Code
ACC Construction Corp	6 East 32nd St - 7th Fl	New York	NY	10016
FEIN: 11-2688758	Barred Until 05/25/2011	Fiscal Officer Notes: NYC Falsified records		

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Company Name Aegean General Contracting Inc FEIN: 11-3451267 Barred Until 03/11/2008	Address 57-16 157th Street	City Flushing	State NY	Zip Code 11355
Fiscal Officer Notes: Settlement agreement with A.G.'s Office - falsified payrolls - Also Aegean Marble Co., Aegean Marble Contracting Co., and George Begakis individually				
Company Name Aegean Marble Co. FEIN: 11-3451267 Barred Until 03/11/2008	Address	City	State	Zip Code
Fiscal Officer Notes: See Aegean General Contracting Inc				
Company Name Aegean Marble Contracting Co. FEIN: 11-3451267 Barred Until 03/11/2008	Address	City	State	Zip Code
Fiscal Officer Notes: See Aegean General Contracting Inc				
Company Name Albany Pipe Insulators Inc FEIN: 14-1617890 Barred Until 02/18/2008	Address P O Box 332 - Foundry Rd	City Voorheesville	State NY	Zip Code 12186
Fiscal Officer Notes: DOL				
Company Name American Weathertite Inc FEIN: 65-0465918 Barred Until 03/28/2010	Address P O Box 208	City Clifton	State NJ	Zip Code 07110
Fiscal Officer Notes: DOL				
Company Name Amodio Russo FEIN:	Address 14 Brayron Road	City Carmel	State NY	Zip Code 10512
Barred Until 06/01/2010	Fiscal Officer Notes: As in individual and P&T Iron Works. Falsification of payroll records. Settlement Agreement with A.G.'s office			
Company Name Anastasia Anthoulis FEIN:	Address 131 47th Street	City Brooklyn	State NY	Zip Code 11232
Barred Until 01/25/2012	Fiscal Officer Notes: AG aka Stacey Gouzos - as an individual - See 4-A General Construction Corp			
Company Name Andres Alvarez FEIN:	Address 372 North Main Street	City Lodi	State NJ	Zip Code 07644
Barred Until 12/24/2009	Fiscal Officer Notes: See Corinthian Construction Co Inc			
Company Name Angelo Zaffuto FEIN:	Address 162 Atlantic Avenue	City Lynbrook	State NY	Zip Code 11563
Barred Until 09/29/2008	Fiscal Officer Notes: AG As an individual. See Zaffuto Construction Company Inc			
Company Name ANS Welding Corp FEIN: 11-1867262 Barred Until 06/09/2009	Address 111 Dale Street	City West Babylon	State NY	Zip Code 11704
Fiscal Officer Notes: DOL Debarment period extended after additional willful violations				
Company Name Anthos Contracting Corp FEIN: 11-2967327 Barred Until 01/25/2012	Address 131 47th Street	City Brooklyn	State NY	Zip Code 11232
Fiscal Officer Notes: AG Plea Agreement with A.G.'s Office				

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Asbestos Systems Inc	1771 Foote Avenue	Jamestown	NY	14701
FEIN: 25-1742587	Barred Until 05/20/2007	Fiscal Officer Notes: DOL Gregory McCoy T/A GM Enterprises dba Asbestos Systems Inc		

Company Name	Address	City	State	Zip Code
Azam Ali Chaudhry				
FEIN:	Barred Until 12/10/2007	Fiscal Officer Notes: See Republic Reconstruction & Management Inc		

Company Name	Address	City	State	Zip Code
B & Z Development Inc	19 West Street	Spring Valley	NY	10977
FEIN: 13-3713559	Barred Until 02/22/2010	Fiscal Officer Notes: DOL dba Ben-Zvy Enterprises Inc and Erez Ben-Zvy as an individual.		

Company Name	Address	City	State	Zip Code
Bat-Jac Construction Inc	62 Neulist Avenue	Port Washington	NY	11050
FEIN: 11-3391498	Barred Until 07/17/2009	Fiscal Officer Notes: DOL aka Bat-Jac Contracting Inc. a/k/a Bat-Jac Inc. and Kenneth Merz, president and one of its five largest shareholders and Steve Menzer, vice president and one of its five largest shareholders, as individuals. Falsified payrolls.		

Company Name	Address	City	State	Zip Code
Bat-Jac Contracting Inc				
FEIN: 11-3133524	Barred Until 07/17/2009	Fiscal Officer Notes: See Bat-Jac Construction Inc		

Company Name	Address	City	State	Zip Code
Bat-Jac Inc				
FEIN:	Barred Until 07/17/2009	Fiscal Officer Notes: See Bat-Jac Construction aka Bat-Jac Contracting		

Company Name	Address	City	State	Zip Code
Ben-Zvy Enterprises Inc	19 West Street	Spring Valley	NY	10977
FEIN: 13-3713559	Barred Until 02/22/2010	Fiscal Officer Notes: See B & Z Development Inc.		

Company Name	Address	City	State	Zip Code
Best of Friends of Schenectady Constr Co	425 Hamilton Street	Schenectady	NY	12305
FEIN: 20-2105455	Barred Until 01/24/2011	Fiscal Officer Notes: DOL		

Company Name	Address	City	State	Zip Code
Boguslaw Bozek				
FEIN:	Barred Until 05/14/2008	Fiscal Officer Notes: As an individual - see Goldhand Construction LLC		

Company Name	Address	City	State	Zip Code
C B E Contracting Corp	310 McGuinness Blvd	Greenpoint	NY	11222
FEIN: 11-2968809	Barred Until 10/21/2007	Fiscal Officer Notes: DOL And Muhammad A Beig as an individual. Falsified payrolls		

Company Name	Address	City	State	Zip Code
C J H Inc				
FEIN: 14-1830289	Barred Until 06/10/2010	Fiscal Officer Notes: See N F K Excavating and Construction Inc		

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Cappry Contracting Management Corp	1081 Coney Island Avenue	Brooklyn	NY	11230
FEIN: 06-1174437	Barred Until 02/09/2011	Fiscal Officer Notes: NYC Falsified payroll records		

Company Name	Address	City	State	Zip Code
Carl Babb				
FEIN:	Barred Until 07/21/2008	Fiscal Officer Notes: As an individual - See Olympic Window Installers Inc		

Company Name	Address	City	State	Zip Code
Catenary Construction Corp	112 Hudson Avenue	Rochester	NY	14605
FEIN: 54-2129721	Barred Until 02/14/2011	Fiscal Officer Notes: DOL Subsidiary of Lancet Arch Inc.		

Company Name	Address	City	State	Zip Code
Causeway Construction Corp	110-30 15th Avenue	College Point	NY	11356
FEIN: 13-3065561	Barred Until 09/27/2007	Fiscal Officer Notes: NYC Multiple willful violations		

Company Name	Address	City	State	Zip Code
Cavalier Constr Corp c/o Clayman & Rosenbe	305 Madison Avenue	New York	NY	10165
FEIN:	Barred Until 02/19/2008	Fiscal Officer Notes: NYC Falsified records - plea agreement. Also Kingston Trucking & Rigging Corp., Manbru Construction Corp., Port Ewen Trucking Corp. and Super Structure Builders, Inc. as substantially owned-affiliated entities and/or successors of Cavalier.		

Company Name	Address	City	State	Zip Code
Charles J Pardee	261 Ball Road	Hastings	NY	13076
FEIN:	Barred Until 03/16/2009	Fiscal Officer Notes: DOL As an individual. See Dalton Steel Inc.		

Company Name	Address	City	State	Zip Code
Charles Marangoudakis	25 Woodhill Lane	Manhasset	NY	11030
FEIN:	Barred Until 08/16/2010	Fiscal Officer Notes: DOL Individually and Marangos Construction Corp and Tropic Construction Corp. Multiple willful violations		

Company Name	Address	City	State	Zip Code
Christina J Hoek				
FEIN:	Barred Until 06/10/2010	Fiscal Officer Notes: See N F K Excavating and Construction Inc		

Company Name	Address	City	State	Zip Code
Christopher Nicholson	91 Newman Place	Buffalo	NY	14210
FEIN:	Barred Until 10/19/2011	Fiscal Officer Notes: See Commercial System Construction		

Company Name	Address	City	State	Zip Code
Columbus General Construction Inc	914 Newkirk Avenue	Brooklyn	NY	11230
FEIN: 11-3357344	Barred Until 12/16/2009	Fiscal Officer Notes: AG And Mohammed A Rashid as an individual. Falsified business records. Plea agreement.		

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Commercial Painting Co FEIN: 16-1513909 Barred Until: 05/01/2008	4872 West Seneca Turnpike	Syracuse	NY	13215
Fiscal Officer Notes: DOL James Stanton dba Commercial Painting Co - falsified payroll records				
Commercial Steel Inc FEIN: 16-1557064 Barred Until: 03/16/2009	65 Corporate Park Drive	Central Square	NY	13036
Fiscal Officer Notes: DOL As a successor and/or substantially-owned affiliated entity with Dalton Steel Inc dba Pardee Construction - multiple willful violations				
Commercial System Construction FEIN: 90-0066866 Barred Until: 10/19/2011	91 Newman Place	Buffalo	NY	14210
Fiscal Officer Notes: DOL And Christopher Nicholson as an individual - falsification of payroll records				
Commtech Communications Inc FEIN: 16-1335983 Barred Until: 11/22/2007	649 Warwick Road	North Tonawanda	NY	14120
Fiscal Officer Notes: DOL See also Commtech Electrical Construction Corp and Michael R Palmer - multiple violations				
Commtech Electrical Construction FEIN: 16-1407836 Barred Until: 11/22/2007	649 Warwick Road	North Tonawanda	NY	14120
Fiscal Officer Notes: DOL See also Commtech Communications and Michael R Palmer- multiple violations				
Corinthian Construction Co Inc FEIN: 13-3750033 Barred Until: 12/24/2009	372 North Main Street	Lodi	NJ	07644
Fiscal Officer Notes: AG And Andres Alvarez as an individual. Plea agreement with A.G.'s Office				
Crazy Horse Tonawanda Inc FEIN: 16-1528124 Barred Until: 03/03/2008	P O Box 203	Athol Springs	NY	14010
Fiscal Officer Notes: DOL and A Castricone Concrete Inc				
Dalton Steel Inc FEIN: 16-1557064 Barred Until: 03/12/2009	197 U S Route 11	Central Square	NY	13036
Fiscal Officer Notes: DOL dba Pardee Construction and Shirley Pardee as an individual - multiple willful violations. Also Charles J Pardee as an individual.				
Darby General Contracting Inc FEIN: 11-3420817 Barred Until: 08/04/2008	565 Oak Street	Copiague	NY	11726
Fiscal Officer Notes: DOL dba Darby Glass Co - multiple willful violations				
Darby Glass Co FEIN: 11-3081390 Barred Until: 08/04/2008				
Fiscal Officer Notes: See Darby General Contracting Inc				

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Dellapenna Associates Inc FEIN: 16-1465989 Barred Until: 02/18/2008	86 Olive Street Fiscal Officer Notes: DOL	Johnson City	NY	13790
Substantially owned-affiliated entity and/or successor of Dellapenna Brothers Inc - debarment period extended after additional violations				
Dellapenna Brothers Inc FEIN: 16-0964223 Barred Until: 08/04/2008	86 Olive Street Fiscal Officer Notes: DOL	Johnson City	NY	13790
multiple willfuls - debarment period extended after additional violations				
Dennis Lounsbury Builders Inc FEIN: 14-1538702 Barred Until: 05/27/2009	P O Box 220 Fiscal Officer Notes: DOL	Bulville	NY	10915
aka Lounsbury Erectors Inc.				
DePoalo and Son Building Contractors Inc FEIN: 14-1507523 Barred Until: 07/12/2009	296 Morris Road Fiscal Officer Notes: DOL	Schenectady	NY	12303
Multiple willful violations				
DG Pipeline Inc FEIN: 74-2917157 Barred Until: 09/06/2011	312 Halseyville Road Fiscal Officer Notes: DOL	Ithaca	NY	14850
and Douglas S Griffen, President and one of the five largest shareholders - falsified payrolls				
Diamond "D" Construction Corp FEIN: 16-1103218 Barred Until: 12/14/2010	5270 Transit Road Fiscal Officer Notes: DOL	Depew	NY	14043
and Joseph DiPizio individually and as its president. Falsification of payroll records				
Diracon Commercial Contractors FEIN: 08-1681415 Barred Until: 05/18/2009	310 Maple Avenue Fiscal Officer Notes: DOL	New Hampton	NY	10958
and Rebecca Gatto-Wood as an individual. Falsified payarolls.				
DJH Mechanical Associates Ltd FEIN: 13-3373364 Barred Until: 02/01/2011	155 Kingsbridge Road East Fiscal Officer Notes: DOL	Mount Vernon	NY	10552
False records - plea agreement				
Dominic Antonucci FEIN: Barred Until: 10/18/2009	1939 Town Line Road Fiscal Officer Notes: DOL	Hilton	NY	14468
As an individual. See A A General Contractors Inc and W J Grinder Roofing Company.				
Don Adams Roofing Inc FEIN: 13-3455881 Barred Until: 12/07/2010	472 Commerce Street Fiscal Officer Notes: DOL	Hawthorne	NY	10532
Plead guilty to a felony				
Douglas S Griffen FEIN: Barred Until: 09/06/2011	312 Halseyville Road Fiscal Officer Notes: See DG Pipeline Inc	Ithaca	NY	14850

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Drywall Systems Unlimited Inc FEIN: 06-1405921 Barred Until: 10/02/2007	182 West Main Street Fiscal Officer Notes: DOL	Middletown	NY	10940
E Green Restoration & Roofing Inc FEIN: 16-1561693 Barred Until: 06/21/2009	117 Hawley Street Fiscal Officer Notes: DOL	Binghamton	NY	13901
Eliyhu Benyamin FEIN: Barred Until: 03/05/2010	303 Ten Eyck Street Fiscal Officer Notes: As an individual. See W & B Mechanical Corp.	Brooklyn	NY	11206
Elizabeth A. Carr FEIN: Barred Until: 10/14/2008	P O Box 82 Fiscal Officer Notes: dba Everlasting Slate - as an individual	Valatie	NY	12184
Emeis & Emeis General Contracting Corp FEIN: 13-4103233 Barred Until: 01/25/2012	131 47th Street Fiscal Officer Notes: AG Plea Agreement with A.G.'s Office	Brooklyn	NY	11232
Emes Heating & Plumbing Contr FEIN: 13-2590780 Barred Until:	5 Emes Lane Fiscal Officer Notes: DOL and Julius and Gita Behrend, as individuals. Parties entered into a voluntary agreement to be permanently debarred	Monsey	NY	10952
Empire State Renovation Corp FEIN: 11-3170331 Barred Until: 05/22/2007	15 Division Place Fiscal Officer Notes: NYC Falsified payrolls - plea agreement	Brooklyn	NY	11222
Enjem's Incorporated FEIN: 16-1038008 Barred Until: 03/04/2009	111 South Main Street Fiscal Officer Notes: DOL and Francis Enjem as an individual. Falsification of records.	Herkimer	NY	13350
Enviroclean Services LLC FEIN: 26-0045677 Barred Until: 09/07/2009	4245 Union Rd- Suite 210 Fiscal Officer Notes: DOL	Buffalo	NY	14225
Erez Ben-Zvy FEIN: Barred Until: 02/22/2010	19 West Street Fiscal Officer Notes: As an individual. See B & Z Development Inc	Spring Valley	NY	10977
Euro Craft Restoration, Inc. FEIN: 13-3769924 Barred Until: 10/14/2008	41-12 Ditmars Blvd Fiscal Officer Notes: DOL and Savvas A. Savva (as an individual) Falsification of records and kickback of wages. Plea agreement with A.G.'s Office	Long Island City	NY	11105

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Everlasting Slate FEIN: 22-3397381	P O Box 82	Valatie	NY	12184
Barred Until: 10/14/2008	Fiscal Officer Notes: DOL And Elizabeth A. Carr and Sean Campion as individuals. Falsification of records			
Florence XVI Century Marble Inc FEIN: 11-3262505	120 Glen Head Road	Glen Head	NY	11545
Barred Until: 08/03/2010	Fiscal Officer Notes: Falsification of payroll records - plea agreement			
Flower City Asbestos Inc FEIN: 16-1292474	850 St Paul Street	Rochester	NY	14605
Barred Until: 08/18/2009	Fiscal Officer Notes: DOL Multiple willful violations			
Flower City Insulation Sales & Contractors FEIN: 16-1157832	137 Yorkton Street	Webster	NY	14580
Barred Until: 08/03/2009	Fiscal Officer Notes: DOL Multiple willful violations			
Ford Construction Inc FEIN: 11-3167975	18-18 26th Street	Astoria	NY	11102
Barred Until: 07/18/2010	Fiscal Officer Notes: DOL and Mohammed Ali Alvi and Mohammed Ali Alvi T/A Ford Masonry - falsification of records			
Ford Masonry FEIN:	18-18 26th Street	Astoria	NY	11102
Barred Until: 07/18/2010	Fiscal Officer Notes: DOL and Mohammed Ali Alvi individually and Ford Construction Inc. Falsification of payroll records			
Foundation Construction Consultants Inc FEIN: 11-2761496	294 20th Street	Brooklyn	NY	11215
Barred Until: 05/20/2008	Fiscal Officer Notes: NYC Multiple willfuls and falsification of payroll records			
Francis Enjem FEIN:	111 South Main Street	Herkimer	NY	13350
Barred Until: 03/04/2009	Fiscal Officer Notes: As an individual. See Enjem's Incorporated.			
Franco Paints Inc FEIN:	159 92nd Street	Brooklyn	NY	11209
Barred Until: 08/07/2008	Fiscal Officer Notes: NYC and Mida Painting Ltd, Nicholas Kallergis and Stamatia Kallergis, as individuals. Assurance of Discontinuance/Settlement Agreement			
Frank J Tucek & Son Inc FEIN: 13-3300128	92 North Route 9W	Congers	NY	10920
Barred Until: 01/29/2012	Fiscal Officer Notes: DOL			

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Frank Lobene Jr FEIN:	13 Cheviot Lane	Rochester	NY	14624
Barred Until	Fiscal Officer Notes:			
10/18/2010	As an individual - See Lobene Painting Inc.			
Gem Building & Equipment Inc FEIN:	2332 Route 9W	Saugerties	NY	12477
14-1793970	Fiscal Officer Notes:			
06/28/2007	DOL			
George Begakis FEIN:				
10/04/2011	Fiscal Officer Notes:			
	As an individual - see Aegean General Contracting Inc - Debarment period has been extended for George Begakis as per A.G.'s Plea Agreement			
George Bush FEIN:	19 Hoffman Drive	Latham	NY	12118
01/14/2009	Fiscal Officer Notes:			
	DOL Falsification of payroll records			
George J Leva Sr. FEIN:				
02/06/2008	Fiscal Officer Notes:			
	As an individual dba Ontario Flooring Company. Debarment period extended after additional violation			
George Lucey,Manual Tobio(see note) FEIN:	150 Kings Street	Brooklyn	NY	11231
	Fiscal Officer Notes:			
	NYC Manuel P Tobio and Lake Constr and Development Corp (individually and as a whole) grand larceny, falsified records, debarred permanently			
Gerasimo Andrianis FEIN:	22-15 47th Street	Astoria	NY	11105
08/03/2011	Fiscal Officer Notes:			
	AG As an individual. See Rainbow Renovations Inc			
GM Enterprises FEIN:				
16-1509833	Fiscal Officer Notes:			
05/20/2007	See Asbestos Systems Inc			
Goldhand Construction LLC FEIN:	116 East Saddle River Rd	Saddle River	NJ	07458
22-3765123	Fiscal Officer Notes:			
05/14/2008	DOL Falsified payroll records			
Gregory McCoy FEIN:				
05/20/2007	Fiscal Officer Notes:			
	As an individual. See GM Enterprises dba Asbestos Systems Inc			

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Gregory Kloepfer FEIN:	248 Lein Road	West Seneca	NY	14224
Barred Until	Fiscal Officer	Notes:		
10/06/2009	DOL	As an individual. See Kloepfer's Floor Covering		
Company Name	Address	City	State	Zip Code
Haleem Zihenni FEIN:	3 Alan B Shepard Place	Yonkers	NY	10705
Barred Until	Fiscal Officer	Notes:		
12/11/2011	DOL	As an individual see Omni Contracting Company Inc		
Company Name	Address	City	State	Zip Code
Hamax Construction Corporation FEIN:	540 Commerce St - Ste 6	Thornwood	NY	10594
06-1482076	Fiscal Officer	Notes:		
09/11/2008	DOL	Also Thomas Hanlon and William Valentine as individuals. Multiple willfuls and falsification of records. Debarment period extended after other willful violations		
Company Name	Address	City	State	Zip Code
Harrison Jarvis FEIN:	132 W 129th St-Ste 4W	New York	NY	10027
Barred Until	Fiscal Officer	Notes:		
08/12/2009	AG	As an individual and Two By Four Carpentry and Construction Inc. Plea agreement with A.G.'s Office.		
Company Name	Address	City	State	Zip Code
HDA Construction FEIN:	942 Havemeyer Avenue	Bronx	NY	10473
06-1613022	Fiscal Officer	Notes:		
12/10/2007	DOL	Falsified records		
Company Name	Address	City	State	Zip Code
Hi Tech Insulation FEIN:	P O Box 12861	Rochester	NY	14612
16-1487213	Fiscal Officer	Notes:		
12/09/2007	DOL	Kevin C. Marlowe dba Hi Tech Insulation - multiple violations		
Company Name	Address	City	State	Zip Code
Howard K Enterprise Inc FEIN:	219-02 Northern Boulevard	Flushing	NY	11361
22-3791841	Fiscal Officer	Notes:		
04/14/2010	AG	and Howard Kim a/k/a un Hak Kim as an individual - Plea agreement. Additional addresses: 703 Atlantic Avenue, Rochester, NY 14609 and 121 Hemingway Drive, Rochester, NY 14620		
Company Name	Address	City	State	Zip Code
Howard Kim FEIN:	75 West Edsall Boulevard	Palisades Park	NJ	
Barred Until	Fiscal Officer	Notes:		
04/14/2010	AG	a/k/a un Hak Kim, as an individual. See Howard K Enterprise Inc		
Company Name	Address	City	State	Zip Code
I C Construction Company Inc FEIN:	120 South Broadway	Red Hook	NY	12571
14-1789216	Fiscal Officer	Notes:		
08/21/2007	DOL	Multiple willfuls - Debarment period extended after additional violations		
Company Name	Address	City	State	Zip Code
IES Environmental Inc FEIN:	1655 Elmwood Avenue	Cranston	RI	02910
Barred Until	Fiscal Officer	Notes:		
10/05/2009	DOL	And International Environmental Services Inc and James J Ney Jr as an individual. Falsification of payroll records		

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Integrity Construction & Consulting Servs FEIN: 11-3147728 Barred Until: 02/15/2012 Fiscal Officer Notes: NYC Falsification of payroll records	7615 Myrtle Avenue	Glendale	NY	11385
Interior Decorating Floor Covering Co Inc FEIN: 16-1337838 Barred Until: 07/29/2007 Fiscal Officer Notes: DOL Falsification of records	2229 Clifford Avenue	Rochester	NY	14609
International Environmental Resources FEIN: 05-0448266 Barred Until: 08/09/2007 Fiscal Officer Notes: See International Environmental Services Inc				
International Environmental Services Inc FEIN: 05-0448266 Barred Until: 10/05/2009 Fiscal Officer Notes: DOL dba International Environmental Resources - Falsified payrolls - Debarment period extended after additional violation. Also IES Environmental Inc and James J Ney Jr as an individual	2 Stafford Court	Cranston	RI	02920
Ismael Cisneros FEIN: Barred Until: 04/14/2008 Fiscal Officer Notes: As an individual - See Izi Plumbing & Heating Ltd				
Izi Plumbing & Heating Ltd FEIN: 11-3157717 Barred Until: 04/14/2008 Fiscal Officer Notes: DOL and Ismael Cisneros, Individually - falsified payrolls	291 Metropolitan Avenue	Brooklyn	NY	11211
J B C Contracting Co Inc FEIN: 11-3550663 Barred Until: 03/23/2010 Fiscal Officer Notes: AG And/or 509 McDonald Avenue, Brooklyn NY 11218. And Mohammed H Kabir as an individual and J B C Contracting Company. Settlement agreement with A.G.'s Office	346 Prospect Ave - 1st Fl	Brooklyn	NY	11215
J B C Contracting Company FEIN: 11-3330280 Barred Until: 03/23/2010 Fiscal Officer Notes: AG And/or 509 McDonald Avenue, Brooklyn NY 11218. And Mohammed H Kabir as an individual and JBC Contracting Co Inc. Settlement Agreement with A.G.'s Office	346 Prospect Ave - 1st Fl	Brooklyn	NY	11215
J Barr Construction Corp FEIN: 11-3344003 Barred Until: 12/14/2009 Fiscal Officer Notes: DOL and Steve J Nictas as an individual. Multiple willful violations	119-51 Metropolitan Ave	Jamaica	NY	11415
J C McCashion Construction Inc FEIN: 14-1767357 Barred Until: 04/13/2011 Fiscal Officer Notes: DOL Multiple willful violations	84 Fredericks Avenue	Albany	NY	12205

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
J T Painting Corp	P O Box 337	Burlingham	NY	12722

FEIN: 06-1260246	Barred Until 02/26/2009	Fiscal Officer Notes: DOL Falsification of records
----------------------------	-----------------------------------	--

Company Name	Address	City	State	Zip Code
James Avallone				

FEIN:	Barred Until 08/07/2008	Fiscal Officer Notes: As an individual - see James Avallone Tile & Marble - debarment period extended
--------------	-----------------------------------	---

Company Name	Address	City	State	Zip Code
James Avallone Tile & Marble	217 Christie Street	Ridgefield Park	NJ	07660

FEIN: 07-5336752	Barred Until 08/07/2008	Fiscal Officer Notes: DOL Multiple willful violations - debarment period extended
----------------------------	-----------------------------------	---

Company Name	Address	City	State	Zip Code
James J Ney Jr	1655 Elmwood Avenue	Cranston	RI	02910

FEIN:	Barred Until 10/05/2009	Fiscal Officer Notes: DOL As an individual. See International Environmental Services Inc and IES Environmental Inc
--------------	-----------------------------------	--

Company Name	Address	City	State	Zip Code
Jans General Construction Corp	131 47th Street	Brooklyn	NY	11232

FEIN: 13-4201562	Barred Until 01/25/2012	Fiscal Officer Notes: AG Plea Agreement with A.G.'s Office
----------------------------	-----------------------------------	--

Company Name	Address	City	State	Zip Code
Jay Meyer	239 Marsh Drive	DeWitt	NY	13214

FEIN:	Barred Until 02/20/2012	Fiscal Officer Notes: As an individual - see Sky Communications, Inc
--------------	-----------------------------------	--

Company Name	Address	City	State	Zip Code
JBC Industries of Parish Inc	P O Box 728 - CR 44	Mexico	NY	13114

FEIN: 16-1470149	Barred Until 07/24/2007	Fiscal Officer Notes: DOL Multiple willful violations
----------------------------	-----------------------------------	---

Company Name	Address	City	State	Zip Code
John Bradford	6614 Furnace Road	Ontario	NY	14519

FEIN:	Barred Until 12/22/2009	Fiscal Officer Notes: As an individual. See Rusmar Environmental Services Corp.
--------------	-----------------------------------	---

Company Name	Address	City	State	Zip Code
Joseph DiPizio	5270 Transit Road	Depew	NY	14043

FEIN:	Barred Until 12/14/2010	Fiscal Officer Notes: As an individual. See Diamond "D" Construction Corp
--------------	-----------------------------------	---

Company Name	Address	City	State	Zip Code
Joseph Zaffuto	162 Atlantic Avenue	Lynbrook	NY	11563

FEIN:	Barred Until 09/29/2008	Fiscal Officer Notes: AG As an individual. See Zaffuto Construction Company Inc
--------------	-----------------------------------	---

Company Name	Address	City	State	Zip Code
JRC Aris Electric Contractors				

FEIN:	Barred Until 09/13/2009	Fiscal Officer Notes: See JRC Electric Control Service Inc
--------------	-----------------------------------	--

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
JRC Electric Control Service Inc FEIN: 11-3199418 Barred Until: 09/13/2009	516 East 51st Street Fiscal Officer Notes: NYC a/k/a JRC Aris Electric Contractors - multiple willful violations	Brooklyn	NY	11236
Julius and Gita Behrend FEIN: Barred Until:	5 Emes Lane Fiscal Officer Notes: See Emes Heating & Plumbing Contractor, Inc	Monsey	NY	10952
K M R Enterprises Inc FEIN: 14-1749993 Barred Until: 05/03/2010	10 Stuffle Street Fiscal Officer Notes: DOL Multiple willful violations.	Croseyville	NY	12052
Kefcal Construction Inc FEIN: Barred Until: 01/25/2012	131 47th Street Fiscal Officer Notes: AG Plea Agreement with A.G.'s Office	Brooklyn	NY	11232
Kenneth Merz FEIN: Barred Until: 07/17/2009	62 Neulist Avenue Fiscal Officer Notes: As an individual. See Bat-Jac Construction	Port Washington	NY	11050
Kenneth W Griffin FEIN: Barred Until: 05/01/2011	101 Lill Street Fiscal Officer Notes: As an individual - see Lightning Fast Labor Force Services Inc	Rochester	NY	14621
Kevin C Marlowe FEIN: Barred Until: 12/09/2007	Fiscal Officer Notes: See Hi Tech Insulation			
Keystone Construction Corp FEIN: 16-1402500 Barred Until: 08/20/2008	9945 Fort Hamilton Pkwy Fiscal Officer Notes: DOL And Nicholas Margaritis as an individual	Brooklyn	NY	11209
King Machine FEIN: 16-1293494 Barred Until: 04/04/2010	11365 Center Road Fiscal Officer Notes: DOL See Robert Metzgar	Sheridan	NY	14135
Kingston Trucking & Rigging Corp FEIN: 11-3540715 Barred Until: 02/19/2008	99 St Nicholas Avenue Fiscal Officer Notes: DOL As a substantially owned-affiliated entity and/or successor of Cavalier Construction Corp. Falsification of records	Brooklyn	NY	11237
Kloepfer's Floor Covering FEIN: 16-1234359 Barred Until: 10/06/2009	248 Lein Road Fiscal Officer Notes: DOL And Gregory Kloepfer as an individual. Multiple willful violations	West Seneca	NY	14224

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Kosmar Contracting Corp FEIN: 13-4103318 Barred Until: 01/25/2012	131 47th Street Fiscal Officer Notes: AG	Brooklyn	NY	11232
K-Star Construction Corp FEIN: 01-0778648 Barred Until: 12/11/2011	42 48 161st Street Fiscal Officer Notes: DOL	Flushing	NY	11358
L & T Plumbing Corp FEIN: 11-3223496 Barred Until: 01/11/2010	367 Veterans Memorial Hwy Fiscal Officer Notes: DOL	Commack	NY	11725
Labar Enterprises of Rochester Inc FEIN: 16-1605462 Barred Until: 04/18/2010	2121 Empire Boulevard Fiscal Officer Notes: DOL	Webster	NY	14580
Labar Excavating Inc FEIN: Barred Until: 04/18/2010	Fiscal Officer Notes: See Labar Enterprises of Rochester Inc.			
Lake Construction and Development Corp FEIN: 11-2678816	Fiscal Officer Notes: See George Lucey -debarred permanently			
Lancet Arch Inc FEIN: 16-1259628 Barred Until: 02/14/2011	112 Hudson Avenue Fiscal Officer Notes: DOL	Rochester	NY	14605
Liberty Painting Company Inc FEIN: 16-1480256 Barred Until: 12/08/2010	183 Lorfield Drive Fiscal Officer Notes: DOL	Snyder	NY	14226
Lightning Fast Labor Force Services Inc FEIN: 20-0386651 Barred Until: 05/01/2011	150 North Chestnut Street Fiscal Officer Notes: DOL	Rochester	NY	14604
Linda Williams c/o MJAB Construction Inc FEIN: Barred Until: 04/22/2009	183 Washington Avenue Fiscal Officer Notes: DOL	New Rochelle	NY	10801
Lobene Painting Inc FEIN: 16-1514981 Barred Until: 10/18/2010	13 Cheviot Lane Fiscal Officer Notes: DOL	Rochester	NY	14624

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Look Under the Carpet Services Inc	P O Box 686	Buffalo	NY	14290
FEIN: 01-0664654	Barred Until 12/15/2010	Fiscal Officer A.G	Notes: Plea Agreement with A.G.'s Office - principal place of business: 1557 Jefferson Avenue, Buffalo, NY 14208	

Company Name	Address	City	State	Zip Code
Lorenzo DeVardo	1850 Steinway Street	Long Island City	NY	11105
FEIN:	Barred Until 01/08/2009	Fiscal Officer DOL	Notes: As an individual. See Vardo Construction Corp	

Company Name	Address	City	State	Zip Code
Lounsbury Erectors Inc				
FEIN:	Barred Until 05/27/2009	Fiscal Officer	Notes: See Dennis Lounsbury Builders Inc	

Company Name	Address	City	State	Zip Code
LTS Construction	24 Miller Street	Rochester	NY	
FEIN: 16-1463105	Barred Until 06/30/2009	Fiscal Officer	Notes: See Thomas L. Smalls	

Company Name	Address	City	State	Zip Code
M & S Pipeline Excavation Company Inc	784 Conklin Road	Binghamton	NY	13903
FEIN: 16-0926714	Barred Until 05/06/2009	Fiscal Officer DOL	Notes: Multiple willful violations	

Company Name	Address	City	State	Zip Code
Manbru Construction Corp	1439 Wood Road	Bronx	NY	10462
FEIN:	Barred Until 02/19/2008	Fiscal Officer DOL	Notes: Also at 201-203 E 22nd Street, New York 10010. As a substantially owned-affiliated entity and/or successor of Cavalier Construction Corp. Falsification of records.	

Company Name	Address	City	State	Zip Code
Manns Contracting Corp	131 47th Street	Brooklyn	NY	11232
FEIN:	Barred Until 01/25/2012	Fiscal Officer AG	Notes: Plea Agreement with A.G.'s Office	

Company Name	Address	City	State	Zip Code
Manuel P. Tobio				
FEIN:	Barred Until	Fiscal Officer	Notes: See George Lucey - debarred permanently	

Company Name	Address	City	State	Zip Code
Manuel Tobio				
FEIN:	Barred Until	Fiscal Officer	Notes: See George Lucey - debarred permanently	

Company Name	Address	City	State	Zip Code
Marangos Construction Corp	59-45 56th Avenue	Maspath	NY	11378
FEIN: 11-2554543	Barred Until 08/16/2010	Fiscal Officer DOL	Notes: And Charles Marangoudakis individually and Tropic Construction Corp. Multiple willful violations.	

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Mary Newsom FEIN:	1537 Union Street Barred Until	Schenectady Fiscal Officer Notes:	NY	12309
	05/24/2009	DOL As an individual. See Pachyderm Enterprises, Inc		
Mas-Ann Mechanical Inc FEIN:	35 Regency Oaks Blvd Barred Until	Rochester Fiscal Officer Notes:	NY	14624
	01/04/2010	DOL Debarment period extended after additional willful violations		
Masciarelli Construction Co FEIN:	784 Conklin Road Barred Until	Binghamton Fiscal Officer Notes:	NY	13903
	05/06/2009	DOL Multiple willful violations		
Matthew Lobene FEIN:	13 Cheviot Lane Barred Until	Rochester Fiscal Officer Notes:	NY	14624
	10/18/2010	As an individual - See Lobene Painting Inc		
MCS Painting Contractors Inc FEIN:	Lime Kiln Court Barred Until	Stony Point Fiscal Officer Notes:	NY	10980
	01/25/2011	DOL False records - also Michael Salerno as its President		
Merchants I & S Corp Inc FEIN:	7732 Victor Mendon Road Barred Until	Victor Fiscal Officer Notes:	NY	14564
	11/22/2007	DOL Debarment extended after additional violation		
Merit Fence Co Inc FEIN:	130 Old Route 6 Barred Until	Carmel Fiscal Officer Notes:	NY	10512
	02/02/2012	DOL Multiple willful violations - debarment period extended after other willful violations		
MGC Restoration Services Inc FEIN:	64-58 218th Street Barred Until	Bayside Fiscal Officer Notes:	NY	11364
	01/01/2010	AG And Michael Capous individually. Plea agreement		
Michael Capous FEIN:	64-58 218th Street Barred Until	Bayside Fiscal Officer Notes:	NY	11364
	01/01/2010	AG As an individual. Se MGC Restoration Services Inc.		
Michael R Palmer FEIN:	Barred Until	Fiscal Officer Notes:	State	Zip Code
	11/22/2007	As an individual - See Commtech Communications Inc and Commtech Electrical Construction Corp		
Michael Salerno FEIN:	Lime Kiln Court Barred Until	Stony Point Fiscal Officer Notes:	NY	10980
	01/25/2009	DOL Individually as president of MCS Painting Contractors - false records		

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Michael Taylor	66 Rybka Road	Stuyvesant Falls	NY	12174
FEIN:	Barred Until	Fiscal Officer Notes:		
	03/02/2012	DOL As an individual - see Supreme Sports Surfaces Inc., R & T Supreme Sports Flooring, LLC, and Northeastern Supreme Floor Co., Inc.		

Company Name	Address	City	State	Zip Code
Mida Painting Ltd	159 92nd Street	Brooklyn	NY	11209
FEIN:	Barred Until	Fiscal Officer Notes:		
	08/07/2008	NYC and Franco Paints, Inc. and Nicholas Kallergis and Stamatia Kallergis, as individuals. Assurance of Discontinuance/Settlement Agreement		

Company Name	Address	City	State	Zip Code
MJAB Construction Inc	183 Washington Avenue	New Rochelle	NY	10801
FEIN:	Barred Until	Fiscal Officer Notes:		
58-2620937	04/22/2009	DOL and Linda Williams as an individual. Falsification of payroll records		

Company Name	Address	City	State	Zip Code
Modern Tech Design & Services Inc	9151 Southwestern Blvd	Angola	NY	14006
FEIN:	Barred Until	Fiscal Officer Notes:		
16-1464435	01/19/2011	DOL Multiple willful violations		

Company Name	Address	City	State	Zip Code
Mohammed A Rashid	914 Newkirk Avenue	Brooklyn	NY	11230
FEIN:	Barred Until	Fiscal Officer Notes:		
	12/16/2009	As an individual. See Columbus General Construction Inc		

Company Name	Address	City	State	Zip Code
Mohammed Ali Alvi	22-41 26th Street - Apt 2	Astoria	NY	11102
FEIN:	Barred Until	Fiscal Officer Notes:		
	07/18/2010	DOL Individually and Mohammed Ali Alvi T/A Ford Masonry and Ford Construction Inc. Falsification of payroll records		

Company Name	Address	City	State	Zip Code
Mohammed H Kabir	200 East 77th Street	Brooklyn	NY	11218
FEIN:	Barred Until	Fiscal Officer Notes:		
	03/23/2010	AG As an individual. See J B C Contracting Co Inc and J B C Contracting Company - Settlement Agreement with A.G.'s Office		

Company Name	Address	City	State	Zip Code
Muhammad A Beig	142 East Market Street	Long Beach	NY	11561
FEIN:	Barred Until	Fiscal Officer Notes:		
	10/21/2007	DOL As an individual - See C B E Contracting Corporation. falsified payrolls		

Company Name	Address	City	State	Zip Code
Muir Contractors Associates Inc	75 Argyle Ave - Suite 2B	Uniondale	NY	11553
FEIN:	Barred Until	Fiscal Officer Notes:		
11-3586616	08/18/2010	DOL Falsification of payroll records		

Company Name	Address	City	State	Zip Code
Musa Pacuku				
FEIN:	Barred Until	Fiscal Officer Notes:		
	04/14/2008	As an individual - See Victory Roofing & Contracting Co Inc		

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
--------------	---------	------	-------	----------

N F K Enterprises				
FEIN:	Barred Until	Fiscal Officer Notes:		
	06/10/2010	See N F K Excavating and Construction Inc		

Company Name	Address	City	State	Zip Code
--------------	---------	------	-------	----------

N F K Excavating and Construction Inc	22 Black Hawk Road	Pine Bush	NY	12566
FEIN:	Barred Until	Fiscal Officer Notes:		
14-1803310	06/10/2010	DOL and N F K Landscaping Supply Corp and N F K Enterprises Inc and CJH Inc and Roger A Hoek Jr and Christina J Hoek as individuals. Falsification of payroll records		

Company Name	Address	City	State	Zip Code
--------------	---------	------	-------	----------

N F K Landscaping Supply Corp				
FEIN:	Barred Until	Fiscal Officer Notes:		
14-1817371	06/10/2010	See N F K Excavating and Construction Inc		

Company Name	Address	City	State	Zip Code
--------------	---------	------	-------	----------

Neuss Construction Inc	1191 Route 9W - Suite #C6	Marlboro	NY	12542
FEIN:	Barred Until	Fiscal Officer Notes:		
14-1782213	09/06/2011	DOL And Rudolph Neuss as an individual, as chief executive and one of the five largest shareholders of Neuss Construction Inc- falsification of payroll records		

Company Name	Address	City	State	Zip Code
--------------	---------	------	-------	----------

Nicholas Kallergis	159 92nd Street	Brooklyn	NY	11209
FEIN:	Barred Until	Fiscal Officer Notes:		
	08/07/2008	As an individual. See Franco Paints, Inc.and Mida Painting Ltd		

Company Name	Address	City	State	Zip Code
--------------	---------	------	-------	----------

Nicholas Margaritis				
FEIN:	Barred Until	Fiscal Officer Notes:		
	08/20/2008	See Keystone Construction Corp.		

Company Name	Address	City	State	Zip Code
--------------	---------	------	-------	----------

Nick Nitis	3 Alan B Shepard Place	Yonkers	NY	10705
FEIN:	Barred Until	Fiscal Officer Notes:		
	12/11/2011	DOL As an individual - see A&T Construction		

Company Name	Address	City	State	Zip Code
--------------	---------	------	-------	----------

Northeastern Supreme Floor Co Inc	66 Benedict Street	Castleton	NY	12033
FEIN:	Barred Until	Fiscal Officer Notes:		
14-1781833	03/02/2012	DOL And Michael Taylor individually, Supreme Sport Surfaces Inc and R & T Supreme Sports Flooring LLC - multiple willful violations and falsification of payroll records		

Company Name	Address	City	State	Zip Code
--------------	---------	------	-------	----------

Nu-Look Painting & Wallpapering Inc	151-60 7th Avenue	Whitestone	NY	11357
FEIN:	Barred Until	Fiscal Officer Notes:		
11-3389457	08/04/2009	AG and TF Painting Corp. and Tarcisio Ferreira, individually. Plea agreement with the A.G.'s Office.		

Company Name	Address	City	State	Zip Code
--------------	---------	------	-------	----------

Olympia Mechanical Piping & Heating Inc	3624 12th Avenue	Brooklyn	NY	11218
FEIN:	Barred Until	Fiscal Officer Notes:		
11-3161641	08/18/2010	AG And Steven Tischler and Solomon Werzberger as individuals. Plea Agreement with District Attorney		

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Olympic Window Installers Inc FEIN: 22-3034903 Barred Until: 07/21/2008	174 Lincoln Avenue Fiscal Officer Notes: DOL and Carl and Russell Babb as individuals	Hawthorne	NJ	07506
Omni Contracting Company Inc FEIN: 22-3431803 Barred Until: 12/11/2011	3 Alan B Shepard Place Fiscal Officer Notes: DOL And Haleem Zihenni as an individual - falsification of payroll records	Yonkers	NY	10705
Ontario Flooring Company FEIN: 16-1554554 Barred Until: 02/06/2008	296 Rogers Parkway Fiscal Officer Notes: DOL See George J Leva Sr. Debarment period extended after additional violation	Rochester	NY	14617
Oswego Trucking & Leasing FEIN: 16-1371814 Barred Until: 07/21/2008	258 Washington Blvd Fiscal Officer Notes: DOL Falsified records	Oswego	NY	13126
P & H Supply Company Inc FEIN: 13-3868727 Barred Until: 05/25/2009	241-A Harrison Avenue Fiscal Officer Notes: DOL Multiple willful violations - debarment period extended after additional willful violations	Harrison	NY	10528
P&T Iron Works FEIN: 13-3895133 Barred Until: 06/01/2010	59 Plain Avenue Fiscal Officer Notes: and Amodio Russo individually. Falsification of payroll records. Settlement Agreement with A.G.'s office	New Rochelle	NY	10801
Pachyderm Enterprises Inc FEIN: 00-1386527 Barred Until: 05/24/2009	1537 Union Street Fiscal Officer Notes: DOL And Willie Jones and Mary Newsom as individuals - Multiple willful violations	Schenectady	NY	12309
Paragon Plate Glass Inc FEIN: 16-1113039 Barred Until: 11/07/2011	210 Factory Street Fiscal Officer Notes: DOL And Thomas E Mooney individually as President of Paragon Plate Glass Inc - falsified payrolls	Watertown	NY	13601
Pardee Construction FEIN: 16-1557064 Barred Until: 03/12/2009	Fiscal Officer Notes: See Dalton Steel Inc.			
Paul M Maintenance Inc FEIN: 11-3287638 Barred Until: 07/02/2007	7 Gatewood Drive Fiscal Officer Notes: DOL Falsified payrolls	Hauppague	NY	11788
Perry Jacobs FEIN: Barred Until: 12/04/2010	736 Sherman Dr-Box 8015 Fiscal Officer Notes: As an individual. See Precision Site Work Inc. - debarment period extended	Utica	NY	13505

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Pettit & Pettit Inc FEIN: 16-1576164	7 Schuyler Street	Belmont	NY	14813
Barred Until	Fiscal Officer	Notes:		
03/21/2010	DOL	Multiple willful violations		
Pipejacks Inc FEIN: 11-2209596	15 East Bartlett Road	Middle Island	NY	11953
Barred Until	Fiscal Officer	Notes:		
06/26/2007	DOL			
Port Ewen Trucking Corp FEIN: 11-3484639	2013 Flatbush Avenue	Brooklyn	NY	11234
Barred Until	Fiscal Officer	Notes:		
02/19/2008	DOL	Also at 99 St. Nicholas Avenue, Brooklyn, NY 11237. As a substantially owned-affiliated entity and/or successor of Cavalier Construction Corp. Falsification of records		
Precision Site Work Inc FEIN: 16-1609167	736 Sherman Dr - Box 8015	Utica	NY	13505
Barred Until	Fiscal Officer	Notes:		
12/04/2010	DOL	And its president, Perry Jacobs, as an individual. Falsification of payroll records - debarment period extended		
R & T Supreme Sports Flooring LLC FEIN: 16-1511596	66 Rybka Road	Stuyvesant Falls	NY	12174
Barred Until	Fiscal Officer	Notes:		
03/02/2012	DOL	And Michael Taylor individually, Supreme Sport Surfaces and Northeastern Supreme Floor Co. Inc - multiple willful violations and falsified payroll records		
Rainbow Renovations Inc FEIN: 11-3542626	35-44 Crescent Street	Long Island City	NY	11106
Barred Until	Fiscal Officer	Notes:		
08/03/2011	AG	Additional addresses: 22-15 47th Street, Astoria, NY 11105 and 35-34 31st Street, Long Island City, NY 11106. Gerasimo Andrianis debarred as an individual.		
Rapid Demolition Co Inc FEIN: 11-2869485	2550 West 13th Street	Brooklyn	NY	11223
Barred Until	Fiscal Officer	Notes:		
11/18/2007	NYC	And successors		
Rebecca Gatto-Wood FEIN:				
Barred Until	Fiscal Officer	Notes:		
05/18/2009		As an individual. See Diracon Commercial Contractors.		
Republic Construction & Management Inc FEIN: 11-3178177	8111 7th Avenue	Brooklyn	NY	11228
Barred Until	Fiscal Officer	Notes:		
12/10/2007	NYC	and Azam Ali Chaudhry - falsified payrolls - plea agreement		
Robbye Bissesar FEIN:	89-51 Springfield Blvd	Queens Village	NY	11427
Barred Until	Fiscal Officer	Notes:		
		As an individual. See Star International Inc -permanently debarred		

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Robert Amendola FEIN:	1084 Sunrise Highway	Amityville	NY	11701
Barred Until	Fiscal Officer Notes:			
03/19/2008	As an individual. See Westwood Fence Corp.			
Robert DeMonte FEIN:	367 Veterans Memorial Hwy	Commack	NY	11725
Barred Until	Fiscal Officer Notes:			
01/10/2010	As an individual. See L & T Plumbing Corp.			
Robert W Metzgar FEIN:	11365 Center Road	Sheridan	NY	14135
Barred Until	Fiscal Officer Notes:			
04/04/2010	DOL dba King Machine - Also as an individual.			
Roger A Hoek Jr FEIN:				
Barred Until	Fiscal Officer Notes:			
06/10/2010	See N F K Excavating and Construction Inc			
Rudolph Neuss FEIN:	8 Far Horizons Drive	Newburgh	NY	12550
Barred Until	Fiscal Officer Notes:			
09/06/2011	DOL As an individual - see Neuss Construction Inc			
Rusmar Environmental Services Corp FEIN:	703 Atlantic Avenue	Rochester	NY	14609
Barred Until	Fiscal Officer Notes:			
12/22/2009	AG And John Bradford as an individual. Falsified payrolls. Plea agreement.			
Russell Babb FEIN:				
Barred Until	Fiscal Officer Notes:			
07/21/2008	As an individual - See Olympic Window Installers Inc			
Savvas A. Savva FEIN:				
Barred Until	Fiscal Officer Notes:			
10/14/2008	See Euro Craft Restoration Inc			
Sean Campion FEIN:	P O Box 82	Valatie	NY	12184
Barred Until	Fiscal Officer Notes:			
10/14/2008	dba Everlasting Slate - as an individual			
Shirley J Pardee FEIN:	197 U S Route 11	Central Square	NY	13036
Barred Until	Fiscal Officer Notes:			
03/12/2009	As an individual. See Dalton Steel Inc dba Pardee Construction.			
Signal Construction LLC FEIN:	199 Grider Street	Buffalo	NY	14215
Barred Until	Fiscal Officer Notes:			
11/14/2011	DOL Multiple willful violations			

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Sky Communications Inc FEIN: 16-1599397 Barred Until: 02/20/2012	P O Box 278 Fiscal Officer Notes: DOL	DeWitt	NY	13214
Additional address: 6305 Court Street Road, East Syracuse, NY 13057, and Jay Meyer, individually - multiple willful violations				
SN Contracting Corp FEIN: Barred Until: 01/25/2012	131 47th Street Fiscal Officer Notes: AG	Brooklyn	NY	11232
Plea Agreement with A.G.'s Office				
SNA Contracting Corp FEIN: 11-3502738 Barred Until: 01/25/2012	131 47th Street Fiscal Officer Notes: AG	Brooklyn	NY	11232
Plea Agreement with A.G.'s Office - additional SS# 11-3617489				
Solomon Werzberger FEIN: Barred Until: 08/18/2010	56 Lyncrest Drive Fiscal Officer Notes:	Monsey	NY	10952
As an individual. See Olympia Mechanical Piping & Heating Incorporated				
Southwestern General Contracting Inc FEIN: 16-1569822 Barred Until: 10/08/2009	1586 Gowans Road Fiscal Officer Notes: DOL	Angola	NY	14006
Falsification of records				
Spiridon Anthoulis FEIN: Barred Until: 01/25/2012	131 47th Street Fiscal Officer Notes: AG	Brooklyn	NY	11232
As an individual - See 4-A General Construction Corp				
Stacey Gouzos FEIN: Barred Until: 01/25/2012	Fiscal Officer Notes:			
See Anastasia Anthoulis				
Stamatia Kallergis FEIN: Barred Until: 08/07/2008	159 92nd Street Fiscal Officer Notes:	Brooklyn	NY	11209
As an individual. See Franco Paints, Inc. and Mida Painting Ltd				
Star International Inc FEIN: 00-1613496 Barred Until:	89-51 Springfield Blvd Fiscal Officer Notes: DOL	Queens Village	NY	11427
Also Robbye Bissesar. Falsified payroll - permanently debarred				
State Environmental Services Inc FEIN: 11-3164259 Barred Until: 02/25/2008	1801 Stillwell Avenue Fiscal Officer Notes: NYC	Brooklyn	NY	11223
Plea agreement				
Steve J Nictas c/o J Barr Constr FEIN: Barred Until: 12/14/2009	119-51 Metropolitan Ave Fiscal Officer Notes: DOL	Jamaica	NY	11415
As an individual - See J Barr Construction Corp.				

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Steve Menzer	62 Neulist Avenue	Port Washington	NY	11050

FEIN:	Barred Until 07/17/2009	Fiscal Officer	Notes: As an individual. See Bat-Jac Construction
--------------	-----------------------------------	-----------------------	---

Company Name	Address	City	State	Zip Code
Steven Tischler	1465 46th Street	Brooklyn	NY	11212

FEIN:	Barred Until 08/18/2010	Fiscal Officer	Notes: As an individual. See Olympia Mechanical Piping & Heating Incorporated
--------------	-----------------------------------	-----------------------	---

Company Name	Address	City	State	Zip Code
Super Structure Builders Inc	99 St Nicholas Avenue	Brooklyn	NY	11237

FEIN: 11-3487355	Barred Until 02/19/2008	Fiscal Officer DOL	Notes: Also at 2013 Flatbush Avenue, Brooklyn, NY 11234. As a substantially owned-affiliated entity and/or successor of Cavalier Construction Corp. Falsification of records
----------------------------	-----------------------------------	------------------------------	--

Company Name	Address	City	State	Zip Code
Superior Jamestown Corporation	55 Jones-Gifford Avenue	Jamestown	NY	14701

FEIN: 16-1381131	Barred Until 03/17/2008	Fiscal Officer NYC	Notes: Falsified payroll records
----------------------------	-----------------------------------	------------------------------	--

Company Name	Address	City	State	Zip Code
Supreme Sport Surfaces Inc	66 Benedict Street	Castleton	NY	12033

FEIN: 16-1515966	Barred Until 03/02/2012	Fiscal Officer DOL	Notes: And Michael Taylor individually, R & T Supreme Sports Flooring LLC, and Northeastern Supreme Floor Co., Inc. -multiple willful violations and falsified payroll records
----------------------------	-----------------------------------	------------------------------	--

Company Name	Address	City	State	Zip Code
Tao General Contractors Inc	131 47th Street	Brooklyn	NY	11232

FEIN:	Barred Until 01/25/2012	Fiscal Officer AG	Notes: Plea Agreement with A.G.'s Office
--------------	-----------------------------------	-----------------------------	--

Company Name	Address	City	State	Zip Code
Tarcisio Ferreira	151-60 7th Avenue	Whitestone	NY	11357

FEIN:	Barred Until 08/04/2009	Fiscal Officer AG	Notes: and Nu-Look Painting & Wallpapering Inc and TF Painting Corp. Plea agreement with A.G.'s Office.
--------------	-----------------------------------	-----------------------------	---

Company Name	Address	City	State	Zip Code
TF Painting Corp	151-60 7th Avenue	Whitestone	NY	11357

FEIN:	Barred Until 08/04/2009	Fiscal Officer AG	Notes: and Nu-Look Painting & Wallpapering Inc. and Tarcisio Ferreira, individually. Plea agreement with A.G.'s Office.
--------------	-----------------------------------	-----------------------------	---

Company Name	Address	City	State	Zip Code
Thomas E Mooney	164 Winslow Street	Watertown	NY	13601

FEIN:	Barred Until 11/07/2011	Fiscal Officer	Notes: As an individual. Additional address: 150 Clinton Street, Apt 6, Watertown, NY 13601. See Paragon Plate Glass Inc
--------------	-----------------------------------	-----------------------	--

Company Name	Address	City	State	Zip Code
Thomas Hanlon				

FEIN:	Barred Until 09/11/2008	Fiscal Officer	Notes: As an individual. See Hamax Construction Corp
--------------	-----------------------------------	-----------------------	--

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Thomas L Smalls FEIN:	24 Miller Street Barred Until	Rochester Fiscal Officer Notes:	NY	14605
	06/30/2009	DOL dba LTS Construction - also as an individual. Falsified payrolls.		
Thomas Masonry & Concrete Inc FEIN:	803 West Avenue, Ste 207 Barred Until	Rochester Fiscal Officer Notes:	NY	14611
	16-1535306 08/18/2009	DOL Multiple willful violations		
Thomas Masonry Enterprise Inc FEIN:	955 Buffalo Road Barred Until	Rochester Fiscal Officer Notes:	NY	14624
	73-3103284 08/18/2009	DOL Multiple willful violations		
Tommaso Allocca FEIN:	15 Pine Aire Drive Barred Until	Bay Shore Fiscal Officer Notes:	NY	11706
	08/01/2010	DOL As an individual. T/A A & D Contracting Corp. Falsification of payroll records		
Topo-Metrics Inc FEIN:	432 Park Avenue South Barred Until	New York Fiscal Officer Notes:	NY	10016
	11-2465550 04/22/2009	DOL Falsification of payroll records		
Topor Contracting Inc FEIN:	153 Fillmore Avenue Barred Until	Buffalo Fiscal Officer Notes:	NY	14210
	16-1590680 04/27/2009	DOL Falsified payrolls		
Tower Building Maintenance and Mgmt FEIN:	347 Kingsland Avenue Barred Until	Brooklyn Fiscal Officer Notes:	NY	11222
	11-3042307 11/24/2008	DOL Additional willful violations - debarment period extended		
Tri-State Building Contractors Inc FEIN:	108 Sparrow Ridge Road Barred Until	Carmel Fiscal Officer Notes:	NY	10512
	14-1765905 05/24/2009	DOL Falsified payroll records		
Tropic Construction Corp FEIN:	59-45 56th Avenue Barred Until	Maspeth Fiscal Officer Notes:	NY	11378
	11-2659640 08/16/2010	DOL and Marangos Construction and Charles Marangoudakis individually. Multiple willful violations		
Two By Four Carpentry and Constr Inc FEIN:	132 W 129th St-Ste 4W Barred Until	New York Fiscal Officer Notes:	NY	10027
	08/12/2009	AG dba of Harrison Jarvis. Plea agreement with A.G.'s Office.		
un Hak Kim FEIN:	Barred Until	City	State	Zip Code
	04/14/2010	AG		
		As an individual. See Howard K Enterprise Inc and Howard Kim		

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
Vardo Construction Corporation	1850 Steinway Street	Long Island City	NY	11105

FEIN: 11-2694892	Barred Until 01/08/2009	Fiscal Officer Notes: DOL And Lorenzo DeVardo as an individual. Falsified payrolls
----------------------------	-----------------------------------	--

Company Name	Address	City	State	Zip Code
Vasilios Tsimitras				

FEIN:	Barred Until 11/27/2011	Fiscal Officer Notes: See William Tsimitras
--------------	-----------------------------------	---

Company Name	Address	City	State	Zip Code
Victory Roofing & Contracting Co Inc	265 Victory Boulevard	Staten Island	NY	10301

FEIN: 38-0100331	Barred Until 04/14/2008	Fiscal Officer Notes: DOL and Musa Pacuku as in individual. Falsification of records
----------------------------	-----------------------------------	--

Company Name	Address	City	State	Zip Code
Viva Victoria Enterprises Ltd	10317 90th Street	Ozone Park	NY	11417

FEIN: 11-3355466	Barred Until 06/12/2011	Fiscal Officer Notes: NYC Falsification of records
----------------------------	-----------------------------------	--

Company Name	Address	City	State	Zip Code
W & B Mechanical Corp	303 Ten Eyck Street	Brooklyn	NY	11206

FEIN: 11-1340725	Barred Until 03/05/2010	Fiscal Officer Notes: DOL aka White and Blue Sheet Metal Inc and Eliyhu Benyamin as an individual. Falsification of records.
----------------------------	-----------------------------------	--

Company Name	Address	City	State	Zip Code
W J Grinder Roofing Company	1765 Mt Read Boulevard	Rochester	NY	14606

FEIN: 16-0846854	Barred Until 10/18/2009	Fiscal Officer Notes: DOL As a substantially affiliated employer. See A A General Contractors, Inc. Multiple violations
----------------------------	-----------------------------------	---

Company Name	Address	City	State	Zip Code
Westwood Fence Corp	1084 Sunrise Highway	Amityville	NY	11701

FEIN: 11-3084236	Barred Until 03/19/2008	Fiscal Officer Notes: And Robert Amendola as an individual. Falsified payrolls. Plea agreement entered into with Suffolk County D.A.'s Office.
----------------------------	-----------------------------------	--

Company Name	Address	City	State	Zip Code
White and Blue Sheet Metal Inc	303 Ten Eyck Street	Brooklyn	NY	11206

FEIN:	Barred Until 03/05/2010	Fiscal Officer Notes: See W & B Mechanical Inc.
--------------	-----------------------------------	---

Company Name	Address	City	State	Zip Code
Wiley Development Co Inc	235 Northampton Street	Buffalo	NY	14208

FEIN: 16-1363561	Barred Until 08/11/2009	Fiscal Officer Notes: DOL Falsified payroll records
----------------------------	-----------------------------------	---

Company Name	Address	City	State	Zip Code
William Tsimitras	235 91st Street	Brooklyn	NY	11209

FEIN:	Barred Until 11/27/2011	Fiscal Officer Notes: DA aka Vasilios, individually - Plea agreement with Albany County DA
--------------	-----------------------------------	--

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Company Name	Address	City	State	Zip Code
William Valentine FEIN:	Barred Until 09/11/2008	Fiscal Officer Notes: As an individual. See Hamax Construction Corp		
Willie Jones FEIN:	Barred Until 05/24/2009	Fiscal Officer Notes: DOL As an individual. See Pachyderm Enterprises Inc	NY	12309
Winston J Goins Sr FEIN:	Barred Until 05/01/2011	Fiscal Officer Notes: As an individual - see Lightning Fast Labor Force Services Inc	NY	14621
Wintech Contracting Inc FEIN:	Barred Until 07/22/2009	Fiscal Officer Notes: DOL Falsified payroll records	NY	10547
Yang General Contracting Ltd FEIN:	Barred Until 01/25/2012	Fiscal Officer Notes: AG Plea agreement with A.G.'s Office	NY	11232
Yin Construction Ltd FEIN:	Barred Until 01/25/2012	Fiscal Officer Notes: AG Plea Agreement with A.G.'s Office	NY	11232
Zaffuto Construction Company Inc FEIN:	Barred Until 09/29/2008	Fiscal Officer Notes: AG And Angelo Zaffuto (President of ZCCI) and Joseph Zaffuto (Key Person to ZCCI), as individuals -Settlement Agreement	NY	11563
Zarben General Construction Inc FEIN:	Barred Until 01/25/2012	Fiscal Officer Notes: AG Plea Agreement with A.G.'s Office	NY	11232