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Project Site numbers will be proceeded by the following:

Municipal Brownfields - b
Superfund - hw
Spills - sp
ERP - e
VCP - v
BCP - c

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PROJECT MANUAL

Building Decontamination
and Soil Remediation
318 Urban Street
Buffalo, New York 14211

March 15, 1997

Prepared For:

General Electric Company
One River Road
Schenectady, New York 12345

Prepared By:

ERM-NORTHEAST, INC
Centerpointe Corporate Park
325 Essjay Road, Suite 110
Williamsville, New York 14221

380.215

ERM

ERM-Northeast's Commitment to Quality

Our Quality Policy

We will fully understand and document our clients' requirements for each assignment.

We will conform to those requirements at all times and satisfy the requirements in the most efficient and cost effective manner.

Our quality policy and procedures include an absolute commitment to provide superior service and responsiveness to our clients

Our Quality Goals

To serve you.

To serve you well.

To continually improve that service.

Our Quality Improvement Process

Train each employee.

Establish and implement requirements based on a preventative approach.

Maintain a standing Quality Improvement Team to ensure continuous improvement.

Empower Corrective Action Teams to analyze, correct and eliminate problems.

Continually strive to improve our client relationships.

John A. DeFilippi, P.E.
Chairman

Howard Wiseman, P.E.
President

Project Manual March 15 '97

DEC comments — 6/2/97
(Canceled 6/9/97)

Addendum 1 — 6/9/97

- DEC comments — 9/13/96
  Project Manual and
  (dated 7/26/96)
  Addendum 1 (8/9/96)
- Addendum 3 — 8/[illegible]/96
- Addendum 2 — 8/[illegible]/96
- Addendum 1 — 8/[illegible]/96

Rebidded 8/2/96

GE response to comments 7/[illegible]/96

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DIVISION 3 - CONCRETE

DIVISION 4 - GLASS

LIST OF DRAWINGS

LIST OF APPENDICES:

INSTRUCTIONS TO BIDDERS NO. 97-001

1. *DEFINED TERMS*

Terms used in these Instructions to Bidders which are defined in the Remedial Action Contract have the meanings assigned to them in said Contract.

Certain additional terms used in these Bidding Documents have the meanings indicated below.

The term "Owner's Representative" shall mean a person or entity designated by the Owner to represent Owner's interest on the project.

The term "Bidder" means one who submits a Bid directly to Owner, as distinct from a sub-bidder or subcontractor, who submits a Bid to the Bidder.

The term "Successful Bidder" means Bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award.

The term "Bidding Documents" means the document to be used by Bidders for the purposes of preparing Bids for the "Project" (defined in paragraph 1.2 of the Remedial Action Contract), and consists of: Instructions to Bidders No. 97-001 ; Lump Sum Proposal Form No. 97-001; and the proposed Contract Documents (including the Remediation Contract Form, Specifications, Drawings and all Addenda issued prior to receipt of Bids).

2. *DUE DATE*

Bids must be submitted on the Lump Sum Proposal Form No. 97-001 enclosed herewith and must be submitted in the envelope provided therefor so as to reach the addressee on or before 1:00 PM, Eastern Daylight Savings Time on Tuesday April 15,1997. Bids are to be sent to:

Mr. John Harrsen
Manager Remedial Projects
General Electric Company
Building 2, Room B43
One River Road
Schenectady, NY 12345

Your Bid should be sent by Courier Service (Federal Express, Airborne Express, etc.) to ensure receipt by the addressee on or before the Bid due time. Please do not send your Bid by registered or certified mail.
Telefaxed revisions to Bids which are sent to and received by GE prior to Bid receipt time will be accepted. Telefaxed revisions should be addressed to:

Mr. John Harrsen
General Electric Company
(518) 385-9329

BID MODIFICATIONS BY ANY OTHER MEANS WILL NOT BE ACCEPTED.

3. *PATENT RIGHTS, LICENSES, ROYALTIES*

Bidders are advised that if any proposed equipment or process is or may be subject to patent rights belonging to third parties, the successful Bidder shall have full responsibility for securing any necessary rights or licenses in order to complete the Work. The cost of securing such rights, including, but not limited to, royalties and license fees, must be included in the Bid price. No claims will be entertained which are based on the successful Bidder's failure to secure any such rights or licenses, or for failure to include such costs in the Bid price. Further, the successful Bidder shall be required to fully protect GE from the consequences of any such failure (See, for example, Article 1, Paragraph 1.7; Article 3, Paragraph 3.9; and any other applicable sections of the Remedial Action Contract).

4. *CONTRACT*

By submitting a Bid, Bidder agrees that should it be awarded the Work and fail to promptly enter into a Contract with GE in accordance with the contract form included in the Bidding Documents, Bidder shall be liable to GE for any damages GE may suffer thereby.

5. *BULLETINS; CLARIFICATIONS; ADDENDA*

GE may, during the Bidding period, advise Bidder by Bulletins or Addenda of changes in the Bidding Documents. All such changes shall be included in the Bid as if they were originally a part of the Bidding Documents. Bidders are advised that any Addenda issued during the Bidding period will be forwarded to all Bidders.

6. *AWARD*

GE reserves the right to reject any or all Bids and to award the Contract to other than the low Bidder.

7. *LABOR DISPUTES*

Bidders are advised that consideration of possible work interruptions due to construction labor disputes affecting the project site will be part of the total Bid evaluations.

8. *ACCURACY OF DOCUMENTS*

Documents and/or drawings issued by GE as part of the Bidding Documents are issued for purposes of assisting Bidders in developing a Bid. GE assumes no liability for the accuracy of any documents furnished to Bidders with the Bidding Documents and such documents shall in no way relieve the Bidders from reviewing the scope of the proposals received from the Subcontractors and the organization of said subcontractors and otherwise furnishing a complete and fully coordinated Bid to GE covering the complete scope of the Work.

9. *SUPERVISION OF SUBCONTRACTORS AND MATERIALMEN*

The successful Bidder shall have full responsibility for supervising the work of its subcontractors and materialmen and for obtaining performance of the work schedules and quality of workmanship from them.

10. *CHANGES*

Bidder's attention is directed to Schedule "A", Paragraph 2.0 Changes In The Work in the Contract form. Before any change in the Contract will be approved by GE, a detailed estimate must be furnished by the Bidder to GE. In the case of subcontractors, a detailed breakdown similar to that required from the General Contractor must also be furnished.

11. *MATERIAL, EQUIPMENT AND SUBCONTRACTORS*

Bidder is advised that the Successful Bidder must submit to GE, within 14 days after award of Contract, proposed lists of material, equipment and subcontractors to be used on the Project.

12. *VOLUNTARY ALTERNATE BIDS*

Bidder is requested to offer suggested alternate processes or methods of performing the Work in the interest of improving the quality of the process or method and/or reducing costs to GE. Bidder is advised that GE will evaluate any

such alternative processes or methods submitted in determining the most favorable Bid submitted.

13. *SITE VISIT*

Bidder is advised to visit the Site of work, and to acquaint itself with the unloading, storing and handling facilities and general job conditions. Failure to visit the Site shall not relieve the Bidder of any responsibilities or liabilities it assumes by submitting a Bid. Bidder's failure to visit the Site shall not be the basis for a claim against GE if a site visit would have revealed information which would alter the Bidder's price. A prebid meeting and site visit have been set at the following time and date:

Date: Monday, March 24, 1997
Time: 1 p.m.
Place: 318 Urban Street, Buffalo, New York

Please contact John T. Harrsen at (518) 385-9932 if you have questions concerning the site visit.

14. *COMPLETION SCHEDULE*

Bidder is requested to base its Bid on GE's preferred completion schedule, which provides for completion of all Work on or before August 31, 1997.

15. *CONSTRUCTION SCHEDULE*

Bidder is requested to furnish with its Bid a preliminary Construction Schedule. The Successful Bidder must furnish a detailed Construction Schedule showing time frames and interdependencies, within 14 days after award of Contract as stated in Paragraph 7.1 of the Remedial Action Contract and Section 01100 of the Specifications.

16. *SUBCONTRACTORS' SCHEDULES*

It shall be the responsibility of each Bidder to verify with its Subcontractors that the Subcontractors can complete their portion of the Work in accordance with Bidder's preliminary Construction Schedule.

17. *HEALTH AND SAFETY*

It shall be the responsibility of the Successful Bidder to protect the health and monitor the safety of its personnel, Subcontractors, other persons who may be affected by the Work and the environment. The Successful Bidder must comply with all federal, state, county, and local ordinances and regulations including, but not limited to, 29 CFR 1926 and 1910.120 through the period of the Work. Each Bidder must provide an outline of its proposed Health and Safety Plan of this project together with a narrative describing the scope and content it will incorporate into its final plan if awarded this Work. Not later than 14 days after award of Contract, the Successful Bidder must submit to GE for its review a final Health and Safety Plan, a Contingency Plan and a Certification of Compliance with 29 CFR 1910.120, 40 Hour Training and Medical Monitoring for each employee to be engaged in remedial activities on the Site. The Successful Bidder must assure that its Construction Schedule as proposed allows sufficient time to both itself and GE for accomplishment of this important activity.

18. *BIDDING DOCUMENTS*

Bidder must base its Bid on the Bidding Documents dated March 15, 1997, which include: Drawings; and Specifications (consisting of four divisions: Division 1 - General Requirements, Division 2 - Site Work, Division 3 - Concrete and Division 4 - Glass). Complete sets of Bidding Documents must be used in preparing Bids. Neither GE nor GE's Representative assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

19. *PERFORMANCE OF THE WORK*

It is understood that unless otherwise specified the Successful Bidder must provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, telecommunications, potable water, and all other services and facilities of any nature necessary to execute, complete, and deliver the Work.

20. *CONSTRUCTION WORK PLAN*

Bidder must submit with its Bid a preliminary version of the Construction Work Plan, which is specified in Division 1, Section 01100, Subsection 1.03. The preliminary plan shall address the construction procedures, major equipment, materials and methods to be used for the Work. A final Construction Work Plan

must be submitted by the Successful Bidder within 14 days after award of Contract.

21. *RETURN OF BIDDING DOCUMENTS*

All Bidding Documents, including those reproduced and distributed by the Bidder, must be returned to the Owner with the Bid. All necessary documents will be delivered to the Successful Bidder at the time of Contract award.

22. *OWNER FURNISHED ITEMS*

Bidder is advised that any item indicated in the Specifications or on the Drawings to be furnished by Owner shall be received, unloaded, stored, handled, and installed by the Successful Bidder.

23. *NYSDEC INVOLVEMENT*

The Bidding Documents have been prepared to comply with the Consent Agreement between New York State Department of Environmental Conservation (NYSDEC) and GE. All Work will be conducted in accordance with the Consent Agreement.

LUMP SUM PROPOSAL FORM NO. 97-001

PROJECT IDENTIFICATION: **SOIL REMEDIATION AND BUILDING DECONTAMINATION GENERAL ELECTRIC BUILDING 318 URBAN STREET, BUFFALO, NY 14211**

THIS PROPOSAL IS SUBMITTED TO:

Mr. John T. Harrsen
Manager Remedial Projects
General Electric Company
Building 2, Room B43
One River Road
Schenectady, NY 12345

Date: _____

If this Proposal (Bid) is accepted within forty-five (45) days, we, the undersigned, hereby agree to furnish all services, material, labor, tools, equipment and all other items required to perform the SOIL REMEDIATION AND BUILDING DECONTAMINATION located at 318 Urban Street, Buffalo, New York, 14211.

Bidder accepts all of the Terms and Conditions of the Instructions to Bidders No. 97-001. All Work shall be completed in strict accordance with the Bidding Documents, dated March 15, 1997, all of which we acknowledge receiving, for the Lump Sum amount of _____ DOLLARS ($_____). The attached Bid Breakdown lists itemized prices, the cumulative sum of which equals the Lump Sum amount for the Work. Optional tasks unit prices are also attached in case further cleaning is required.

We acknowledge the following addenda to the Bidding Documents and have included the costs associated therewith in our base bid amount:

_____

_____

_____

As provided for in Paragraph 14 of the Instructions to Bidders, we shall complete all Work on or before _____(Preliminary schedule attached).

In accordance with the terms and conditions of Paragraph 2 of Schedule "A" of the Contract, the following percentages and unit rates shall apply to added or omitted Work:

a) _____ percent (__%) for field overhead, home office overhead and profit for work performed by Contractor's own forces.

b) _____ percent (__%) for field overhead, home office overhead and profit for work performed by Subcontractors.

All Federal, State and Local Sales and use taxes and the cost of all required insurance are included in the foregoing Bid.

In the event we are the successful Bidder, we agree, as a condition of this Bid, to submit evidence satisfactory to GE of our financial ability to perform all work covered by this Bid.

Bidder will sign and deliver three copies of the Remediation Contract with the Bonds, and other documents required by the Instructions to Bidders for Proposal No. 97-001 within fifteen days after the date of Notice of Award.

By submitting this Bid, Bidder certifies that:

A. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance and furnishing of the Work;

B. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, performance and furnishing of the Work.

C. Bidder has given GE's Representative written notice of all conflicts, ambiguities or discrepancies that Bidder has discovered in the Contract Documents and the written resolution thereof by GE's Representative is acceptable to the Bidder, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.

D. The prices in this Bid have been arrived at independently without collusion, consultation, communication or agreement for the purposes of restricting competition as to any matter relating to such prices with any other Bidder or with any other competitor;

E. The Prices quoted in this Bid have not been and will not be knowingly disclosed directly or indirectly by Bidder to any other Bidder or competitor prior to the final date and time for submission of such bid; and

F. No attempt has been made or will be made by Bidder to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition.

The following documents are attached to and made a condition of this Bid:

(a) Outline of Proposed Health and Safety Plan

(b) Preliminary Construction Schedule

(c) Preliminary Construction Work Plan

Name of Bidder _____

By _____

Title _____

Address _____

Telephone No. _____

Telefax No. _____

Legal Status: ____ Individual Proprietorship ____ Partnership

Incorporated under the Laws of the State of _____

BID BREAKDOWN
BUILDING DECONTAMINATION
AND SOIL REMEDIATION
GENERAL ELECTRIC FACILITY, 318 URBAN ST., BUFFALO, NY

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL PRICE
GENERAL WORK ITEMS				
1.	Mobilization/Demobilization And Obtaining All Necessary Permits	Lump Sum	$	$
2.	Preparation of Health and Safety Plan and other Required Plans, Profile Sheets, Land Disposal Restriction Forms, Manifests and Other Paperwork Required for Waste Disposal	Lump Sum		
3.	Preparation for Transportation and Transportation of Waste and Debris Off-Site	Estimated Quantities		
	• TSCA - all soils and construction debris containing PCB concentrations above 25 ppm to Model City, New York	650 cy		
	• RCRA Non Hazardous (Subtitle D) - soils and construction debris containing PCB concentrations below 25 ppm, asbestos containing material, grasses and roots to High Point Landfill	1300 cy		
	• Debris (Nonhazardous) - all non-PCB containing construction debris and cleared vegetation to a GE approved disposal facility	300 cy		
4.	Preparation for, Transportation to and Disposal of Decontamination Water	Lump Sum		
5.	Surveying Limits of Excavations and Final Grades	Lump Sum		
6.	Collection, Transportation and Disposal of Water from Rain or Dewatering	Lump Sum		
		SUBTOTAL		

SITE PREPARATION/RESTORATION

7.	Clearing and Grubbing	Lump Sum	_____	_____
8.	Removal of Asbestos Containing Material	Lump Sum	_____	_____
9.	Demolition of Exterior Loading Docks and Exhaust Unit, including rebricking of Openings	Lump Sum	_____	_____
10.	Demolition of Interior Office Space (East and West Mezzanines)	Lump Sum	_____	_____
11.	Installation of Topsoil and Revegetation	Lump Sum	_____	_____
12.	Installation of Asphalt	Lump Sum	_____	_____
13.	Fence Restoration	Lump Sum	_____	_____
		SUBTOTAL	_____	_____

BUILDING DECONTAMINATION

14.	Decontamination and Movement of Sweeney Steel Equipment	Lump Sum	_____	_____
15.	Decontamination of Exposed Interior Surfaces, including Skylight Windows	Lump sum	_____	_____
16.	Decontamination of Johnson Heater	Lump Sum	_____	_____
	OR	**OR**		
	Removal, Disposal, and Replacement of Johnson Heater	Lump Sum	_____	_____
17.	Removal of Wood Floor Blocks, Underlying Mastic and Metal Tracks	Lump Sum	_____	_____
18.	Decontamination of Surfaces Under Wood Block Floor	Lump Sum	_____	_____
19.	Installation of Concrete Floor	Lump Sum	_____	_____
20.	Painting of Building Interior Walls and Ceiling	Lump Sum	_____	_____
		SUBTOTAL	_____	_____

SOIL REMEDIATION

21.	Excavation and Backfill of Designated Soils	Lump Sum	_____	_____
22.	Removal of Underground Storage Tank; Preparation for Transportation and **Transportation**	Lump Sum	_____	_____
23.	Installation of Geotextile	Lump Sum	_____	_____
		SUBTOTAL		

UNIT RATES

24.	Unit Rate for Water Based Recleaning Surfaces	Square Foot		
		<500	_____	_____
		500-1,000	_____	_____
		>1,000	_____	_____
25.	Unit Rate for Scarification of Concrete Surfaces	Square Foot		
		<500	_____	_____
		500-1,000	_____	_____
		>1,000	_____	_____
26.	Excavation, Preparation for Transportation and Transportation of Subtitle D Waste From Outside Regions Designated on Drawings	Ton	_____	_____
27.	Excavation, Preparation for Transportation and Transportation of Excess PCB-Contaminated Soil Outside Regions Designated on Drawings	Ton	_____	_____
28.	Removal of Exterior Windows (Optional)	Square Foot	_____	_____
29.	Replacement of Exterior Windows with Glass Block and Required Structural Supports (Optional)	Square Foot	_____	_____
30.	Disposal of TSCA Waste (Optional)	Ton	_____	_____
31.	Disposal of RCRA Subtitle D Waste (Optional)	Ton	_____	_____
32.	Disposal of C & D Waste (Optional)	Ton	_____	_____

33. Installation of Grout or Piling for Excavation Closer to Building (Optional) Square Foot

_____ _____

TOTAL BID PRICE $_____ $_____

Written Out

Bid Submitted By: _____ Date _____, Phone No. _____

* Engineers estimate, actual quantities may differ; Contractor will be paid on actual quantities.
NOTE: In case of any discrepancies; words shall govern.

REMEDIAL ACTION CONTRACT

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REMEDIAL ACTION CONTRACT

This Contract is made and entered into as of the __ day of _____19_, by and between GENERAL ELECTRIC COMPANY ("GE"), a New York Corporation, with its principal place of business at _____("Contractor"), a _____(corporation) (partnership) (joint venture) (sole proprietorship) organized and existing under the laws of the State of _____ and whose principal place of business is at _____.

GE and Contractor agree as follows:

ARTICLE 1 CONSTRUCTION UNDERTAKING

1.1 CONTRACTOR'S COMMITMENT

The Contractor shall perform all "Work" and construct the "Project" in strict accordance with the "Contract Documents."

1.2 THE PROJECT

The Project consists of:

I. General Work Items, including:

A. Mobilization/Demobilization

B. Preparation of Plans

C. Temporary Facilities

D. Site Security

E. Preparation of Waste Shipment Documentation

F. Preparation for Transportation and Transportation of

G. Decontamination Water/Liquids

II. Site Preparation/Restoration

III. Building Decontamination

IV. Soil Remediation

The former General Electric Apparatus Service Center is located at 318 Urban Street in Buffalo, New York.

1.3 CONTRACT DOCUMENTS

The Contract Documents consist of the following items, all of which are incorporated in this Contract by reference:

This Contract (Schedule A);

Specifications, dated March 15, 1997 as listed in the Table of Contents of the Project Manual.

Drawings dated March 15, 1997 as listed in the Table of Contents of the Project Manual.

Bid Schedule for Lump Sum Proposal No. 97-001.

Addenda to Drawings and Specifications identified as _____;

Special Conditions identified as _____;

Other, as follows: [if applicable to the Project, a reference will be made here to any order, decree, permit, or other legal instrument or process of any court, agency, or other governmental entity. If such document is referenced the following paragraph will be added immediately following such reference: "The Contractor acknowledges that it was provided with a copy of the {name of document}, and further, the Contractor has read, understands, and agrees to perform the Work in a manner consistent with, the terms of the {name of document}."];

1.4 THE WORK

The Contractor shall furnish all labor, supervision, materials, equipment, tools, services, utilities, facilities and all other items necessary or proper for completion of the Project, all of which is called the "Work."

1.5 COMMENCEMENT AND COMPLETION DATES

The Contractor shall commence the Work not later than _____, 19_, pursue the Work with all due diligence and fully complete the Project by The Contractor further agrees to substantially complete the following activities of the Project by the dates shown:

_____by

_____by _____

_____ by _____

Unless specifically defined elsewhere in the Contract Documents, an area shall be deemed to be substantially complete when the Work has progressed to the extent that the cognizant federal, state or commonwealth, and/or local authority will agree that the terms and conditions of any applicable order, decree, permit, or other legal instrument or process of any court, agency, or other governmental entity, and GE have been satisfied, although minor adjustments and corrections may be required to make it fully complete.

1.6 TIME AND DELAYS

Time is of the essence of all completion dates set forth above, and any dates set forth in any order, decree, permit, or other legal instrument or process of any court, agency, or other governmental entity if applicable to this project. If the Contractor's Work is delayed by the act, neglect, delay or default of GE, or of any other contractor employed by GE, or by additions, deletions, or alterations in the Work ordered in writing by GE, or for other reasons beyond the control of the Contractor, the Contractor shall initiate a recovery plan to minimize its effect on the completion dates. The Contractor recognizes that a delay in any one phase of the Project does not necessarily result in any delay or a delay of equal duration in completion of the entire Project. In the event it is not possible to develop a plan adequate to permit achieving the above completion dates without incurring additional costs which GE is not willing to assume, GE and Contractor shall agree on extending such completion date or dates as may be necessary, but for no greater period than the period of the unavoidable delay. To be granted any such extension of time the Contractor must submit a claim in writing within seven (7) calendar days from the occurrence of the event causing the unavoidable delay. It is

understood that extension of time granted shall be the Contractor's exclusive remedy in event of such delay, no matter how or by whom caused.

1.7 STIPULATED PENALTIES

Contractor shall reimburse GE for GE's payment of any stipulated penalty pursuant to any order, decree, or other legal instrument or process of any court, agency, or other governmental entity to the extent that such penalties are imposed on GE as a result of any failure by Contractor, or any subcontractor at any tier engaged by or through Contractor, to perform in accordance with the provisions of this Contract.

ARTICLE 2 COMPENSATION AND PAYMENT

2.1 Compensation and payment shall be in accordance with the provisions set forth in Schedule "A" attached hereto and by reference made a part hereof.

ARTICLE 3 - LEGAL RESPONSIBILITY; GUARANTEES AND WARRANTIES

3.1 WORKMANSHIP

The Contractor warrants that: a) it shall perform the Work in a good, safe workmanlike manner; b) it shall perform the Work in strict accordance with the Contract Documents; c) any process, method or equipment specified by Contractor as fit to accomplish some purpose on the project, will be fit for the purpose specified by Contractor; d) it has and shall maintain all required permits, licenses and all other authorizations necessary to perform the Work and that its performance shall conform with all applicable permits and licenses; and e) it shall complete the Project in a professional and timely manner. Copies of such permits or licenses shall be provided to GE upon request. Contractor will promptly notify GE in writing in the event any permit or license related to this Contract or to Contractor's authorization or capacity to perform hereunder is revoked or has expired, or in the event any notice of violation is received which could result in a revocation of any permit or license necessary to perform the Services. Contractor warrants that it has the requisite expertise, resources, and facilities to perform the Services in a safe, workmanlike, legal, and efficient manner. Contractor further warrants that it shall be responsible to GE for the acts and omissions of all of its employees and all subcontractors, their agents and employees, and all other persons performing any of the Work under a contract with the Contractor.

3.2 MATERIALS AND EQUIPMENT

During the performance of the Work, and for a period of one year (or such longer period as may be specified by the Contract Documents) from the date of acceptance of the entire Project by GE, regardless of any prior use or occupancy of all or any part thereof, Contractor warrants that all Work shall be free from defects in labor and material, that any equipment utilized in connection with performance hereunder shall be safe and in proper working order, and that any material(s) and/or equipment incorporated in the Work shall be new and of first class quality (unless otherwise expressly consented to in writing by GE). All bonds which may have been required of Contractor by GE shall remain in full force and effect during this one-year period (or such longer period as may be specified by the Contract Documents) from the above-referenced date of acceptance of the entire Project by GE.

3.3 COMPLIANCE WITH APPLICABLE LAWS

Contractor warrants that Contractor, its officers, employees, agents, contractors and subcontractors at every tier shall comply with all applicable federal, state or commonwealth, and local laws, and all executive orders, ordinances, and/or regulations, and codes issued pursuant thereto, including, but not limited to, those concerning health, safety, building construction, equal opportunity employment, use of equipment and the protection of the environment. All rules and regulations of GE which may be in effect at the job site regarding employment, passes, badges,

smoking, fire prevention, drug free work place, and conduct on the property shall be observed by Contractor, its subcontractors and each of their employees.

3.4 REMEDY

During the warranty period, Contractor shall promptly remove, replace and repair as necessary, at its sole cost and expense, all materials, equipment and workmanship which are faulty, defective, damaged, unsound, do not meet the required ratings, capacities or characteristics or in any other way do not conform to the Contract Documents.

3.5 DAMAGED WORK

The Contractor shall be held responsible for damages to the Work and property of GE, other contractors and adjacent property caused by its work or workmen, or the work or workmen of any of its subcontractors or materialmen. The repair or replacement of damaged work shall be performed by the contractor for the appropriate trade at Contractor's cost.

3.6 CONTRACTOR LIABILITY

The Contractor shall remain primarily responsible and liable for performance of the entire Work, regardless of whether GE has given approval or consent to the use of a particular subcontractor, subcontract or any other matter.

3.7 INDEMNITY

To the extent permitted by law, Contractor shall at all times indemnify and hold GE and its officers, directors, employees, invitees, licensees and agents (its "Affiliates") harmless against and from all losses, liability, expenses, fines, penalties, damages and other detriments of every nature and description (including attorneys' fees) to which GE or its Affiliates may be subjected by reason of any act or omission (including, without limitation, any negligence, gross negligence, willful misconduct, violation of law or breach of this Contract), of the Contractor, or any of its Affiliates or contractors (except where such loss is due solely to GE's negligence), including, but not limited to, personal injury (including death) and loss of or damage to property of GE or others.

3.8 LIENS

Contractor shall keep GE's properties, any property on which the project site is located, and all properties adjacent to the project site free and clear of all liens and charges arising out of the Work, including materialmen's, laborers' and mechanics' liens, and Contractor shall defend GE against all claims and suits by reason thereof and indemnify and save GE harmless from all resulting loss and cost and expense, including attorneys' fees. Contractor shall give GE prompt written notice of actual and prospective claims of any such liens or charges known to Contractor, and of the steps it intends to take to protect GE. GE shall have the right to retain so much of the monies due under the Contract as it deems necessary for its protection until

such time as any such claims have been settled or paid and all related suits, liens, and charges properly released. Contractor shall, simultaneously with entering into the Contract, execute and deliver to GE a waiver of lien rights or such similar instrument as may be permitted under the laws of the jurisdiction where the Project is located.

3.9 PATENTS, PATENT RIGHTS AND INDEMNITIES

3.9.1 Without GE's prior written, Contractor warrants that it will not use, designate for use, or allow others under its control to use or designate for use, in connection with the Project, any patented or patent pending article, method or device which involves or requires payment of any license, fee or royalty in addition to the compensation agreed to under this Contract. Contractor agrees, to indemnify and hold GE harmless against any and all liabilities, expenses, losses, damages or any other costs incurred in connection with the payment, or defending against the requirement of payment of any such license, fee or royalty.

3.9.2 Contractor further warrants that the Work to be performed under this Contract does not infringe upon any patents, trademarks, trade secrets, or copyrights of third parties, and Contractor shall take all necessary actions to ensure that no such infringement occurs. Contractor agrees to indemnify and hold GE harmless against any and all liabilities, expenses, losses, damages or any other costs (including, but not limited to, stipulated penalties as set forth in ARTICLE 1, Paragraph 1.7 of this Contract) arising from or relating to any claim or suit for damages or injunctive relief arising

from an alleged infringement of any United States or foreign patent, trademark, trade secret, or copyright of a third party.

3.9.3 In the event any claims are made as set forth in 3.9.1 or 3.9.1 above, Contractor further agrees to tender a defense on behalf of GE, or pay GE's reasonable attorney's fees for defending any such claim, if GE in its sole discretion decides to secure its own counsel. Contractor shall make no settlement of any such claims without prior written approval from GE.

3.9.4 The Covenants set forth in these Paragraphs 3.9.1 through 3.9.3 shall survive the performance of this Contract, or if such performance is not completed, the termination of this Contract.

3.10 MATERIAL GUARANTEES

All guarantees and warranties from material and equipment dealers and manufacturers and from subcontractors shall run in favor of GE and be enforced by Contractor at its sole cost and expense.

3.11 TITLE

Contractor represents and warrants that title to all work, materials and equipment for which payment shall have been made to Contractor shall vest in GE upon said payment, free and clear of all liens, encumbrances and adverse interests of any kind whatever; however, Contractor shall remain liable for damage and loss to said work, materials and equipment, until such time as the Project is fully

completed and accepted by GE, and final payment is made pursuant to the Contract.

3.12 CORRECTION BY GE

In the event that the Contractor shall fail to prosecute the Work in accordance with the Contract Documents, or shall otherwise default thereunder, GE may, without terminating the Contract and without prejudice to any other remedy it might have, cure said default at the expense of the Contractor following the lapse of seven (7) days after written notice thereof has been given to Contractor and Contractor has not then remedied the situation.

3.13 HAZARDOUS OR TOXIC MATERIALS

Contractor agrees that it will inform its officers, employees, agents, contractors, subcontractors at every tier, and any other party which may come into contact with any hazardous or toxic materials as a result of its performance hereunder of the nature of such materials, and any health or environmental risks associated therewith. In that respect, Contractor will exercise its independent judgment as to whether it should consult with a more knowledgeable party to determine the nature and extent of any such risks. The treatment of injury sustained by any parties coming into contact with any hazardous or toxic materials as a result of Contractor's performance or failure to perform hereunder shall be the responsibility of Contractor.

ARTICLE 4 TERMINATION

4.1 CANCELLATION FOR CAUSE

4.1.1 Definition of Cause

Should the Contractor at any time fail to prosecute the Work with reasonable promptness and diligence, or fail to make prompt payment to subcontractors or for material or labor, or fail or refuse to supply a sufficient number of skilled workmen to meet schedule or materials of the proper quality, or become insolvent or be unable to pay its debts as they mature, or make a general assignment for the benefit of creditors, or if a receiver should be appointed for the whole or any substantial part of Contractor's property, or if Contractor should become in any way the subject of a bankruptcy petition, or if Contractor defaults in the performance of any material provision of this Contract, GE may, in addition to all other rights and remedies provided by law, cancel this Contract for "cause" by giving Contractor written notice thereof either delivered by hand or by certified mail, return receipt requested. Such notice shall state the date upon which the cancellation shall become effective, provided, however, that in no event shall the effective date be less than seven (7) days after the written notice is issued. In the event the Contractor shall correct the cause giving rise to the notice prior to the date of cancellation set forth in the written notice, the notice of cancellation shall be deemed void and this Contract shall continue in effect.

4.1.2 Completion and Payment

Should this Contract be canceled for cause, GE may take possession of the premises and all or any part of the materials and equipment delivered or in transit to the job site, and complete the Work by whatever method and means it may deem expedient. In such an event, Contractor shall not be entitled to any further payments until the Work is completed, at which time Contractor shall prepare a statement of cost to date of cancellation, plus all obligations incurred in the interest of the Work but not yet due and all reasonable costs incurred at GE's request after termination. The net amount of such statement shall become due and payable when approved by GE after completion of the remainder of the Work by GE or its agents. Notwithstanding the foregoing, in no event shall the total payments made to the Contractor plus the cost and expense incurred by GE in completing the Work exceed the Guaranteed Maximum or the Contract Price, whichever is applicable, and should the cost, expense and any damages incurred by GE in completing the Work, or because of the events leading to termination, exceed the difference between the total payments made to Contractor and the Guaranteed Maximum or the Contract Price, Contractor shall pay such excess to GE upon demand.

4.2 TERMINATION FOR CONVENIENCE

GE may terminate this Contract for convenience at any time for reasons other than stated above, without prejudice to any claims which GE may have against the Contractor, by issuing written notice thereof to Contractor. Such notice shall state the date upon which the termination shall become effective, provided, however that in no event shall the date of termination be less than seven (7) days prior to the stated termination date. In such an event, GE shall take possession of the premises and all or any part of the equipment and materials delivered or in transit to the job site, and Contractor shall be reimbursed for the value of the Work performed prior to termination. In addition, GE shall pay all reasonable costs incurred at GE's request after termination plus a proportionate agreed-upon amount (as per Exhibit "A") representing Contractor's home office overhead and profit on such costs incurred after termination. In no event shall the total payments made to Contractor exceed the Contract Price, and, prior to final payment, the Contractor shall comply with requirements for releases of claims and other documentation as appropriate and provided for under the provisions for final payment in Paragraph 4.3 of this Contract.

4.3 CONTRACTOR'S DUTY UPON TERMINATION

Should GE exercise any right afforded to it to terminate the Contract, Contractor shall, unless otherwise directed by GE:

4.3.1 Immediately discontinue the Work, and, if requested by GE, make every reasonable effort to procure cancellation of all existing orders and contracts on terms satisfactory to GE;

4.3.2 Proceed with such work (and only such work) as may be necessary to preserve and protect that portion of the Work then in place on the job site, and to protect material and equipment in transit, in storage or on the job site.

4.3.3 Turn over to GE all records of any kind required to be kept by this contract or any applicable law or any order, decree, or other legal instrument or process of any court, agency, or other governmental entity.

ARTICLE 5 - DRAWINGS AND SPECIFICATIONS

5.1 MEANING AND INTENT

The Drawings and Specifications are to be considered as complimentary, and everything which is necessary for the proper and complete orderly execution and finishing of the Work within the limits established by the Drawings and Specifications, whether described in the Specifications and not shown on the Drawings, or shown on the Drawings and not described in the Specifications, or reasonably inferable from either the Drawings or Specifications although omitted from both, shall be considered as a part of the Contract Documents and will be executed in the same manner and with the same character of material as other

portions of the Contract without extra compensation. Work or materials described in words which have a well-known technical or trade meaning shall be interpreted by such customary and recognized standards of meaning. The Contractor shall be responsible for checking the accuracy of the Drawings and Specifications, and in the event it shall discover any conflict, lack of clarity, or inconsistency between the Drawings and Specifications, or any discrepancies, omissions or errors in either, or should the work called for by the Drawings and/or Specifications not conform to the actual site conditions or conflict with laws, rules, regulations or requirements of governmental authorities having jurisdiction or GE's fire insurance carrier, then in any of such events the matter shall be immediately reported in writing to GE for its determination. Failure of Contractor to so notify GE and secure GE's determination shall render all Work thereafter performed to be at Contractor's sole risk and cost and expense. Drawings and details to larger scales shall take precedence over those of smaller scales. Contractor shall in no event "scale" drawings, but will work from figured dimensions shown on the Drawings. In the event of any doubt or question as to the true meaning of the Drawings and Specifications, GE's decision shall be final and conclusive.

5.2 SHOP DRAWINGS

The Contractor shall be responsible for preparation of shop drawings and schedules required for the work of the various trades and shall submit them to GE for approval in sufficient time to prevent delay in performance of the Work and completion of the Project. All Work described therein shall be carefully checked by the Contractor for clearances, field conditions and coordination with other trades, and all Work furnished must be in accordance with approved shop drawings. The

approval of shop drawings by GE shall not relieve the Contractor of the responsibility for proper construction of the Work and the furnishing of materials and labor required by the Drawings and/or Specifications, even though the same may not be indicated on approved shop drawings. The Contractor shall make any and all corrections on the shop drawings as may be required by GE, and shall promptly file corrected copies thereof with GE.

5.3 COPIES AND OWNERSHIP

The Contractor will be furnished free of charge all copies of Drawings and Specifications mutually agreed upon as being reasonably necessary for execution of the Work. The Drawings and Specifications and all shop drawings are GE's property and shall not be copied or used for any other work by the Contractor or any subcontractor.

5.4 AS-BUILTS

The Contractor shall maintain at the Project site a record set of plans marked up to show all necessary and approved changes. These plans shall be delivered to GE at the conclusion of the Work for use in preparing "as-built" drawings.

ARTICLE 6 - MATERIALS AND EQUIPMENT

6.1 PRIOR APPROVAL

Prior to incorporation of any materials or equipment into the Work, the Contractor shall submit to GE for his approval the following:

6.1.1 A listing of all major materials and equipment that the Contractor contemplates incorporating into the Work, such listing to be furnished as promptly as practicable following award of the Contract.

6.1.2 Performance data and other information on materials and equipment to the extent that such reporting is called for in the Specifications. Such reports shall be submitted in a timely manner;

6.1.3 Samples of materials as may be called for in the Specifications or required by GE. Such samples shall be submitted in a timely manner to allow GE ample time to review them without adversely impacting the schedule of Work.

The installation or use of materials or equipment without GE's prior approval shall be at Contractor's risk, and GE shall have the right to reject such materials or equipment. In the event GE exercises its right to reject materials or equipment Contractor shall replace same at its sole cost and expense as may be directed by

GE. GE's approval of any such material or equipment shall in no way relieve Contractor of any liability or responsibility for such materials or equipment under contract or warranty.

6.2 GENERAL ELECTRIC MANUFACTURED MATERIALS AND EQUIPMENT

All materials and equipment, including component parts, required for the Work shall be of General Electric Company manufacture, except for those items which are not manufactured by General Electric Company in the ordinary course of its business. If in any instance General Electric Company manufactured materials or equipment are unobtainable to meet requirements, the Contractor shall procure the written approval of GE before substituting other materials or equipment.

6.3 GE-FURNISHED MATERIALS AND EQUIPMENT

GE may furnish materials and equipment for the Work. The Contractor's responsibilities regarding GE-furnished materials and equipment include:

6.3.1 Receiving them, including unloading and verification that they agree with the Bill of Lading and are undamaged;

6.3.2 Storing them as and if required; and

6.3.3 Installing or erecting them as set forth in the Drawings and Specifications.

6.4 PROTECTION

The Contractor shall receive, pile, store, and handle all materials, equipment and other items incorporated or to be incorporated in the Work, including items furnished by GE, in a careful and prudent manner and shall protect them against loss and damage from every source. The Contractor shall provide security personnel and adopt other security measures as may be necessary and appropriate to meet this requirement. The Contractor shall be obligated to replace or pay for all materials and equipment including items furnished by GE, damaged or stolen prior to completion of the Work.

6.5 ORDERING/EXPEDITING

Except for GE-furnished materials and equipment which shall be ordered and expedited by GE, the Contractor shall be wholly responsible for ordering, in a timely manner, all materials and equipment forming a part of the Work, including those of General Electric Company manufacture, and it shall expedite such orders and take all reasonable measures to ensure that such materials and equipment are delivered to the Project site at such times and in such quantities as necessary for orderly and uninterrupted progress of the Work and completion of the Project on time.

6.6 QUALITY

Unless otherwise specified, all materials and equipment incorporated in the Work shall be new and of the best grade and quality available. Any specifications by manufacturer's name are intended only to establish standards of quality, type and characteristics. Similar products produced by other manufacturers will be acceptable provided the established standards are met. Should any question arise as to the acceptability of a particular product GE will make the determination.

6.7 ADVANCES TO SUPPLIERS

Contractor shall make payments to suppliers and vendors for materials and equipment in fabrication only when necessary and after first obtaining GE's written consent. Should such advances be necessary and should GE consent thereto, Contractor shall (a) obtain security agreements and take all necessary steps to perfect a security lien in the advances and in the subject materials and equipment, in favor of GE, (b) maintain appropriate insurance on said materials and equipment, and (c) obtain such bonding as GE may request in order to adequately protect GE with respect to said advance payments and the subject materials and equipment. Should Contractor fail to comply with the foregoing provisions, GE may withhold monies for said materials and equipment until they are completed and delivered to the job site, and all risk of loss in the event of the supplier's or vendor's failure to perform shall be borne by Contractor.

ARTICLE 7 - EXECUTION OF WORK

7.1 SCHEDULE

The Contractor shall submit his detailed schedule for construction progress ("Construction Schedule") to GE for review and approval within fourteen (14) days after award of the Contract. Contractor will be permitted to submit the Construction Schedule included in the Bid Documents as its own schedule; however, GE makes no representations or warranties whatsoever with respect to matters contained in said Construction Schedule, it being understood and agreed that the inclusion of said Construction Schedule in the Bid Documents is for informational purposes only. In the event Contractor does submit the Construction Schedule included in the Bid Documents, it shall release and save GE harmless from any and all loss, cost, damage, or expense which it may thereafter incur, suffer or be required to pay because of any errors, omissions, or inconsistencies therein, or of a failure on the part of GE to take into account all of the factors affecting the Work and to properly assess or report such factors. Weekly, or at less frequent intervals at GE's discretion, following commencement of the Work, and until its completion, the Contractor shall measure and report to GE the actual progress of the Work against the Construction Schedule, including any extra Work or changes in the Work that GE has approved. If the Contractor falls behind the Construction Schedule, it shall immediately take, and cause his subcontractors to take, such action as may be necessary to remedy the delay, and it shall submit to GE a recovery schedule or progress chart demonstrating the manner in which the delay will be remedied.

7.2 OVERTIME

Except for the possible use of casual overtime for such work as concrete finishing, utility tie-ins, etc., the Work will be completed on schedule without overtime. If, however, the Work fails to progress according to the Construction Schedule, including any modifications thereto that the Contractor and GE may have agreed upon, and GE believes that the Work or any segment thereof cannot be completed on the date or dates stated in the Contract, the Contractor shall work whatever additional time over the regular working hours as may be required to meet the scheduled completion date or dates without any increase in the Guaranteed Maximum or Contract Price. Notwithstanding the foregoing, the Contractor shall work overtime if directed by GE, and provided the Contractor is not in default in any of the applicable provisions of the Contract Documents, the Contract shall be amended to include overtime premium over and above straight time rates paid by the Contractor for such work at rates approved by GE, including applicable taxes, fringe benefits, and insurance. In no event will overtime, except casual overtime, be permitted without GE's prior approval, and in no event shall the Contractor be entitled to an increase in the Guaranteed Maximum or Contract Price or reimbursement in any manner for overhead and fee on overtime premium payments.

7.3 CUTTING, FITTING, AND PATCHING

The Contractor shall be responsible for all cutting, fitting, and patching necessary for proper execution of the Work and completion of the Project. Contractor shall not perform any cutting, fitting, or patching which may endanger the Work, adjacent property, workmen or the public. Any cost of cutting, fitting, and patching caused by defective or ill-timed work shall be borne by the responsible party.

7.4 INSPECTION OF OTHER CONTRACTORS' WORK

GE reserves the right to let other contracts in connection with the Work. If any part of the Contractor's Work depends for proper execution or results upon the work of any other contractor, the Contractor shall inspect and promptly report to GE any defect in such other contractors' work that renders it unsuitable. Failure to so inspect and report constitutes acceptance of the other contractors' work, except for defects which might develop later. The Contractor shall furnish to such other contractor all detailed drawings and information which might be desirable or necessary for proper coordination and prosecution of the Contractor's Work and of the work being performed by such other contractors.

7.5 SUPERVISION AND DISCIPLINE

The Contractor shall provide a competent Superintendent who is authorized to act for it and has been approved by GE. Such Superintendent shall be on the Project site at all times when Work is being performed. Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures, and for supervising the work of the subcontractors and materialmen and coordinating all portions of the Work. Contractor shall at all times enforce discipline and good order among all persons employed on the Project by Contractor and its subcontractors and materialmen and Contractor shall not employ on the Project any unfit person or anyone not skilled in the work assigned to them.

7.6 USE OF THE SITE

The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits, and the Contract Documents, and shall not unreasonably encumber the site with any materials or equipment. The Contractor shall keep the job site and adjoining premises clean of rubbish caused by it or its subcontractors, and at the completion of Work shall remove all rubbish, tools, equipment, surplus material and temporary structures and installations, leaving the premises clean and ready for use.

7.7 HEALTH, SAFETY, WELFARE; ENVIRONMENTAL CONSIDERATIONS

7.7.1 The Contractor shall take all necessary precautions for the safety of all persons on the Project, and shall erect and properly maintain at all times, as required by job conditions and progress of the Work, all necessary safeguards for the protection of the workmen and the public; shall post danger signs warning against the hazards created by the remedial activities; shall not load or permit any part of the Work to be loaded so as to endanger its safety; and shall designate a responsible member of its organization on the Work whose duty shall include the prevention of accidents. In any emergency affecting the safety of persons or property, Contractor shall act, at Contractor's discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of such emergency work shall be determined by agreement of the parties.

7.7.2 Contractor acknowledges that its breach of any Contract provisions or obligations related to environmental considerations and/or the health, safety, and welfare of its employees, GE's employees, any other personnel at the work site, or any third parties or members of the general public shall be cause for cancellation of this Contract on the grounds of Contractor's default subject to the provisions of ARTICLE 4, Paragraph 4.1 hereof.

7.8 ADVERTISING SIGNS

Contractor may display no more than two advertising signs on the job site, and the size, design and wording thereof shall first have the approval of GE. Such signs shall be furnished, erected and removed upon completion of the Work, all at Contractor's sole cost, risk and expense.

7.9 SUBCONTRACTED WORK

Except as expressly provided for elsewhere in the Contract Documents, the Contractor may perform such portions of the Work with its own forces as its qualifications and experience shall permit, and shall otherwise subcontract out the Work as it sees fit. Prior to the award of any subcontract, the Contractor agrees to obtain from the proposed subcontractor, and to submit for GE's approval, such subcontractor's percentage adders for field overhead and fee for added or omitted work.

ARTICLE 8 - INSURANCE AND BONDS

8.1 REQUIRED INSURANCE

Prior to commencing the Work, Contractor shall obtain and thereafter maintain in full force and effect until such time as the Work is completed and accepted by GE, the following insurance coverage:

8.1.1 Workers' compensation insurance in accordance with the requirements of the applicable laws of the jurisdiction (State or Commonwealth) in which the Work is to be performed;

8.1.2 Employer's Liability insurance with a limit of not less than One Million Dollars ($1,000,000);

8.1.3 Builders Risk insurance, insuring the entire Work against fire and other risks normally included in standard coverage endorsements, in amounts satisfactory to GE;

8.1.4 Public liability and property damage insurance, including contractual liability coverage with respect to the indemnifications set forth in the Contract Documents, with limits of not less than One Million Dollars ($1,000,000) per person per accident or occurrence for bodily injury (including but not limited to wrongful death), and One

Million Dollars ($1,000,000) per accident or occurrence for property damage;

8.1.5 Contractor's protective public liability insurance covering the operations of subcontractors with the same minimum limits required as for public liability and property damage insurance; and

8.1.6 Vehicle insurance for owned or hired vehicles with a capacity in excess of 3,500 gallons used for transportation of Waste Material under this Agreement, insurance with minimum limits for public liability of not less than $5,000,000 for any one person injured and $5,000,000 for any one accident, and property damage insurance with minimum limits of $5,000,000.

For all other owned or hired vehicles insurance with minimum limits for public liability of not less than $1,000,000 for any one person injured and $1,000,000 for any one accident, and property damage insurance with minimum limit of $1,000,000.

8.1.7 Contractor's pollution coverage insurance covering loss or damage associated with environmental impairment arising out of or in connection with the Work with minimum limits of liability of $1,000,000.

8.1.8 Excess liability insurance with minimum limits of liability of $10,000,000.

8.2 EVIDENCE OF INSURANCE

All insurance required by the Contract Documents shall be with companies or governmental agencies and on forms satisfactory to GE, and no such insurance shall be deemed to be in effect until such time as satisfactory certificates thereof are delivered to GE, containing therein provisions requiring the insurance carrier to notify GE at least thirty (30) days prior to any expiration, termination or modification of any policy of insurance required or approved by this Contract or GE. Certificates shall be delivered to GE prior to commencing work at the site. Such certificate shall indicate that Architect-Engineer is the primary named insured, and in addition, shall list Owner as an additional insured.

8.3 WAIVER OF RECOVERY

8.3.1 Contractor shall require all policies of insurance that are in any way related to the Services and that are secured and maintained by Contractor, subcontractors and/or consultants to include clauses providing that every underwriter shall waive all of its rights of recovery under subrogation or otherwise, against GE, subcontractors and/or consultants.

8.3.2 Contractor waives all rights of recovery against GE, subcontractors and/or consultants which Contractor may have or acquire because of deductible clauses in or inadequacy of limits of any policies of insurance that are in any way related to the services and that are

secured and maintained by Contractor. Contractor shall require all subcontractors and consultants to waive the rights of recovery (as aforesaid waiver by Contractor) against GE, Contractor and other subcontractors or consultants.

8.4 PERFORMANCE AND PAYMENT BONDS

Contractor shall, if required by GE, obtain and maintain sufficient bonds to cover the performance of the Contract and the payment of all obligations arising thereunder. GE shall reimburse Contractor the direct cost thereof.

ARTICLE 9 - DISPOSAL OF WASTE MATERIAL AND TITLE

9.1 After identification of the Waste Material, Contractor and GE shall agree upon the waste transportation and treatment, storage or disposal (TSD) companies which will manage the Waste Material and any site(s) for disposal of the Waste Material. Contractor shall provide GE with a copy of any amended or new manifest(s) to ensure a complete chain of custody record for the Waste Material. GE will be listed as generator of the waste material on the manifest.

9.2 At the time Contractor or any transporter acting on its behalf takes physical possession of Waste Materials, title, risk of loss, and all other incidents of ownership to the Waste Material shall vest in Contractor. Contractor shall complete and maintain full records of the chain of custody and control, including certificates of disposal or destruction, of all Waste Materials loaded, transported and/or disposed of and shall deliver all such records to Sponsor in accordance

with applicable laws and regulations and any instructions from Sponsor in a timely manner and in any event prior to final payment(s) under this Contract.

9.3 In all cases where Waste Material is disposed of or destroyed Contractor shall obtain certificates of disposal or destruction and shall deliver them to Sponsor in a timely manner which shall in any event not exceed forty-five (45) days after delivery of the Waste Material to the TSD company.

ARTICLE 10 - DOCUMENTS/CONFIDENTIALITY

10.1 DOCUMENTS

All drawings, specifications, technical documents, reports, or documents of any nature, prepared in connection with provision of or required as part of the Work and any documents provided to Contractor by GE (collectively, the "Documents") shall be considered to be the property of GE and shall be treated as highly confidential. All Documents, including drafts thereof, shall be automatically delivered to GE upon the earlier of (i) completion of the Services and (ii) termination of this Contract pursuant to ARTICLE 4. GE shall be entitled to demand and receive prompt delivery of all Documents at any time whatsoever and Contractor expressly waives any right it may have under any circumstance, including but not limited to payment disputes with GE, to withhold Documents from GE.

10.2 DISCLOSURE TO THIRD PARTIES

Contractor shall not disclose any Documents or any information contained therein to any third party without the prior written consent of GE. Contractor shall not disclose or advertise that it is performing any Work or service on this Project, or its relationship to GE without GE's prior written agreement.

10.3 INTERNAL DISCLOSURE

Contractor shall disclose Documents and information contained therein to its employees only on a need-to-know basis. Contractor shall make its employees having access to such Documents and information aware of this obligation of confidentiality and bind said employees under similar obligations of confidence. No article, paper, commentary or treatise related to or in any way associated with the Work shall be submitted for publication without GE's prior written consent.

10.4 DISCLOSURE TO SUBCONTRACTORS

GE consents to disclosure of Documents and information contained therein to Contractor's subcontractors, consultants and agents on the following conditions: (i) such disclosure is made only on a need-to-know basis and (ii) Contractor secures the signature of each of its subcontractors, consultants and agents binding them to the confidentiality provisions set forth in this ARTICLE.

ARTICLE 11 - MISCELLANEOUS

11.1 GOVERNING LAW

It is the intent of the parties that the validity, interpretation and construction of this Agreement will be governed by the laws of the State of New York except for its laws governing conflict and choice of laws.

11.2 EQUAL OPPORTUNITY

Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin, and agrees to comply with all laws and ordinances relating thereto, and all orders, rules and regulations issued pursuant thereto including, without limitation, Executive Order 11246 (as amended by Order 11375). Contractor further agrees to comply with Executive Orders 11701 (employment of veterans), 11758 (employment of the handicapped) and 11625 (utilization of minority business enterprises). Should any of the aforementioned laws, ordinances, orders, rules or regulations require any particular provision, representation or agreement to be set forth in this Contract, same is incorporated herein by reference to the same extent as if fully rewritten herein.

11.3 SEPARATE CONTRACTS

GE reserves the right to award other contracts or purchase orders in connection with other portions of the Project. If GE assigns certain contracts and/or purchase orders to the Contractor (as may be required by the provisions of the Contract Documents or as may be otherwise agreed to by GE and Contractor), the Contractor agrees to assume the same responsibility for the Work assigned as it has for all other parts of the Work. Payment in full is due at completion and acceptance of such assigned Work in accordance with provisions of the applicable contract or purchase order. GE will accept billing from the Contractor for such final payments when due. If the dollar value of assigned contracts or purchase orders are defined as allowances, the Contractor shall initiate a Change Order to adjust applicable reimbursement provisions of the Contract when actual cost is determined.

11.4 SET-OFF

Any amount owing at any time from Contractor or its subcontractors to GE or any of its affiliated companies may be set-off against amounts due and payable by GE to the Contractor for Work supplied under this Contract. Contractor agrees to specify in all subcontracts entered into by it in furtherance of the Work contemplated hereby that amounts payable by it thereunder shall be subject to set-off by it on behalf of GE for amounts owing by the subcontractors to GE or any of its affiliated companies.

11.5 ADDITIONAL RIGHTS AND REMEDIES

All rights and remedies of GE specified in the Contract Documents are not exclusive but rather are in addition to the rights and remedies afforded to GE by law, custom or otherwise.

11.6 SURVIVAL OF TERMS

Those provisions of the Contract Documents which by their very nature are incapable of being performed or enforced prior to expiration or termination of the Contract or which suggest at least partial performance or enforcement following such expiration or termination, shall survive any such expiration or termination of the Contract.

11.7 INDEPENDENT CONTRACTOR

Contractor is and shall remain for all purposes an independent contractor, and it shall have no power, nor shall it represent that it has any power, to bind GE or to assume or create any obligation, express or implied, on behalf of GE.

11.8 SUCCESSORS AND ASSIGNS

This Contract and every covenant, condition and provision of the Contract Documents shall work to the benefit of and be binding upon GE and the Contractor, and each of their respective partners, heirs and legal representatives, successors and permitted assigns. The Contractor shall not assign, transfer or sublet its interest or obligations hereunder without the express written consent of GE, and any attempt to assign, transfer or sublet its interest shall be void and unenforceable.

IN WITNESS WHEREOF, GE and the Contractor have made and executed this Contract as of the day and year first written above.

GENERAL ELECTRIC COMPANY(GE)	_____ (Contractor)
By_____	By
Title_____	Title

Section 1

SECTION 01010
SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. Work Covered By Contract Documents

2. Existing Site Conditions

3. Work By Others

4. Work Sequence

5. Contractor's Use Of Premises

1.02 WORK COVERED BY CONTRACT DOCUMENTS

A. All Work described in this Section is described in more detail in the other specification sections and on the Drawings. In general, the Work consists of two major components, Soil Remediation and Building Decontamination at a former General Electric Apparatus Service Center located at 318 Urban Street in Buffalo, NY. The Work consists of Site Preparation, Demolition, Soil Removal with Off-Site Disposal, Building Decontamination, and Site Restoration.

B. The Work includes the following:

1. General work items

a. Mobilization of equipment and personnel including construction of new Site access points as required.

b. Preparation and implementation of Health and Safety Plan (HASP), Contingency Plan, Construction Work Plan and other required documents.

c. Temporary construction facilities and temporary controls, including soil erosion and sediment control, control of pollution from construction operations, and prevention of off-site tracking and spillage of Site soils by equipment and personnel. Pollution controls include but are not limited to the proper collection, storage and disposal of all oil and other fluids discharged during vehicle maintenance operations, and cleanup of all spills.

d. Site security to prevent unauthorized entry of persons during the Work and to prevent vandalism of the property while it is under the control of the remediation contractor.

e. Preparation of profile sheets, landfill disposal restriction forms, manifests and other paperwork required for disposal of TSCA waste containing hazardous constituents and PCBs. Preparation of documentation for disposal of waste at a Subtitle D landfill. Preparation of other documentation as required for disposal of construction debris which has been designated as non-hazardous.

f. Preparation for transportation and transportation of TSCA (PCB) waste, Subtitle D waste, and construction debris off-Site. Waste will include designated soils, wood floor blocks, windows, tank, scrap metal, PPE, decontamination water, and other materials.

g. Preparation for transportation, transportation and treatment /disposal of all decontamination water.

h. Surveying of the excavation depths throughout soil removal and fill activities.

i. Site cleanup and demobilization of equipment and personnel.

2. Soil Preparation/Restoration including general exterior work items.

a. Clearing and grubbing of all areas requiring remediation or required for staging of equipment or construction material or required for access including the removal of all scrap, debris, etc. that will block, hinder or interfere with the efficient conduct of the remediation.

b. Removal of asbestos containing material in Work areas. This removal must follow OSHA and NYS Department of Labor requirements, including proper disposal of the asbestos containing material.

c. Demolition of the external loading dock along the south and west faces of the building and preparation of the materials for transportation off-site. Demolition of the external hoist, the concrete slab and the exhaust unit. Openings which are left after the removal of these items must be repaired with materials similar to the original building construction and two sets of stairs, one at each of the emergency exits, must be installed.

d. Demolition of the office walls and ceilings on the East and West Mezzanine Second Floors and the entire East Mezzanine First Floor. Removal of all associated utilities for the office space is included in this Work.

e. Revegetation of the areas disturbed during soil remediation. Installation of the new trees and bushes along the western fenceline and the south side of the building.

f. Installation of new asphalt in areas disturbed during soil remediation. Recoating of existing asphalt as shown in the Drawings.

g. Restoration of the fence along the western side of the property.

3. Building Decontamination

a. This Work involves the cleaning, movement and replacement of Sweeney Steel equipment and the removal of the wood block floor. The Johnson Heater is to be decontaminated or removed. The interior surfaces of the building are to be decontaminated. A new concrete floor will be installed and the interior of the building will be painted.

4. Soil Remediation

a. Provide access and equipment as necessary to assist GE's Representative in obtaining verification samples. Sampling may require a temporary cessation of Contractor's activities in the area being sampled. No extra payment will be made for standby time during sampling or analyses periods.

b. Backfill of all excavations and grading of the Site with fill material from on-site or a borrow site that has been sampled and analyzed for the TCL and which has been approved for use by GE's Representative.

c. Installation of new asphalt pavement in designated areas, as specified in Drawing C-4. Resurfacing of existing pavement as shown on the Drawing.

d. Grading of the Site as specified in Drawing C-4 and the installation of top soil, grass seed, shrubs and trees per specification.

1.03 EXISTING SITE CONDITIONS

A. The Site is located at 318 Urban Street in Buffalo, Erie County, New York (Refer to Drawings)

B. The Site contains a two story brick building of approximately 20,000 square feet, one stock pile of soil containing less than 5 ppm PCBs and some areas that have become overgrown by brush. The Site is located within a residential neighborhood. A playground is located on the east boundary and there is a school across Urban Street.

C. Sweeney Steel currently uses the facility for storage and a slitting operation.

D. Environmental remediation of PCB containing soil had previously been performed on the playground and at the rear of the residential properties located to the north. The combined storm sanitary sewer was replaced in 1996 and the Buffalo Sewer System was flushed as part of the 1996 sewer remediation.

E. Subsurface Conditions

1. Several soil borings have been drilled around the Site to characterize the areas containing PCBs. Logs of the borings are in a separate document.

2. Borings were installed to check ground water quality. These borings were made to a depth of approximately 25 feet without encountering ground water. Monitoring wells were not installed because a decision was made not to penetrate the clay confining layer.

1.04 WORK BY OTHERS

A. Related work by others under separate contracts with GE consists of:

1. Engineering Oversight

2. On-Site Analysis of Samples Using Immunoassay Test Kits

3. Disposal of TSCA, RCRA Subtitle D and Construction Debris

1.05 WORK SEQUENCE

A. The sequence of all activities shall be the responsibility of the Contractor as long as the requirements of these specifications are met, the Contractor's progress is according to the schedule approved by GE's Representative, and Contract Times stated in the Agreement are complied with.

B. The Contractor is responsible for prevention from recontamination of all areas which are cleaned or newly installed, including the concrete floor.

1.06 CONTRACTOR'S USE OF PREMISES

A. All of the Contractor's operations on -site, including the storage of materials shall be confined to areas approved by GE or GE's Representative.

B. Contractor's personnel shall abide by the requirements concerning site entry and exit as specified in the Health and Safety Plan.

C. Neither GE nor GE's Representative will assume responsibility for damages to the facilities on or off the Site due to negligence or carelessness on the part of the Contractor or the Contractor's failure to protect the Site at any

time during the period between mobilization and demobilization. GE or GE's Representative will not be liable for loss or damage of Contractor's tools, equipment or materials due to theft, vandalism or any other cause whatsoever.

D. The Contractor shall make arrangements for coordinating with the local utilities during decontamination, demolition and reactivation operations.

E. The Contractor shall verify that fire insurance is in effect with the limits satisfactory for full building replacement during the Work.

END OF SECTION

SECTION 01025
MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section includes measurement and payment criteria applicable to the Work.

1.02 UNIT QUANTITIES SPECIFIED

A. Items of construction work as specified will not be measured for payment. The work will be paid for at the Contract lump sum prices for the items identified below as lump sum and the costs summarized on the accompanying Bid Schedule.

B. Certain items are specified below and in the accompanying Bid Schedule as requiring unit costs. These items will be measured for payment by the Contractor and the measurements approved on a daily basis by GE or GE's Representative.

1.03 BASIS OF PAYMENT

A. Payment includes full compensation for: preparation and implementation of Contractor's Health and Safety Plan, Contingency Plan, Construction Work Plan, Permits and all other required documents; all required labor, products, tools, equipment, transportation, services and incidentals; performance of surveys to locate and lay out the Work; erection, application or installation; specified quality control testing; inspections, if any, required by local regulations; delays; and overhead and profit.

1.04 PAY ITEMS

A. GENERAL WORK ITEMS

1. Pay Item 1: Mobilization/Demobilization and Obtaining All Necessary Permits

a. Shall be paid for at the Contract lump sum price. Price shall include all costs of project start-up including cost of insurance, permits, installation and erection of temporary facilities of

every kind, as well as all costs for removing same. Price shall also include relocating/reinstalling utilities, security measures, maintaining site for bond, if required. The Contractor shall be paid 55 percent of the bid item when mobilization is complete and 45 percent when all temporary facilities and equipment have been removed from the Site to the satisfaction of GE's Representative and GE.

2. Pay Item 2: Preparation of Health and Safety Plan and other Required Plans, Land Disposal Restriction Forms, Manifests and Other Paperwork Required for Waste Disposal.

   a. Shall be paid for at the Contract lump sum price. Price shall include all work necessary to complete required forms for disposal.

3. Pay Item 3: Preparation for Transportation and Transportation of Waste and Debris Off-Site.

   a. Shall be paid for at the Contract lump sum price for the estimated quantities specified. Waste is divided into three classifications:

      i. **TSCA** waste includes all soils containing PCB concentrations above 25 ppm. These soils will be transported to the TSCA permitted landfill in Model City, New York.
      ii. **RCRA nonhazardous (Subtitle D)** includes soils containing PCB concentrations below 25 ppm, grasses and roots, and debris from the garage demolition. These materials will be shipped to the Subtitle D permitted landfill in Belle Fontaine, Ohio or High Acres Landfill in Fairport, New York.
      iii. **Debris (Nonhazardous)** includes all wastes which are non-PCB containing. These wastes will be shipped to a GE-approved Construction and Debris (C&D) landfill.

4. Pay Item 4: Preparation for, Transportation to and Disposal of Decontamination Water.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies to store the decontamination wastewaters on-Site in compliance with TSCA secondary containment requirements. The price shall also include all labor, supplies, and equipment to transport and disposal of the water at a GE-approved facility.

5. Pay Item 5: Surveying Limits of Excavations and Final Grades.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, supplies and equipment for a licensed surveyor to establish the horizontal boundaries and the initial elevations of the areas to be excavated. Price shall also include the licensed surveyor establishing the final graded elevations after completion of backfilling and any adjustments of the extent of the excavations. Contractor is responsible for supplying the surveyor with documentation on the invert elevations of the excavations.

6. Pay Item 6: Collection, Transportation and Disposal of Water from Rain or Dewatering

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, supplies and equipment for the proper collection and storage of any rain water which collects within any open excavation or any water generated from dewatering activities. Price also includes the sampling and analyses of the water for proper waste classification. Price shall also include the transportation and disposal of the water at a GE approved facility.

B. SITE PREPARATION/RESTORATION

1. Pay Item 7: Clearing and Grubbing.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, supplies, for clearing of all brush and trees at a level 6 inches above ground surface.

Management of the cleared vegetation shall be as C&D waste as per Item 3. Price shall also include labor, equipment, supplies, for grubbing of all roots and grasses within the upper 6 inches of ground surface. Management of the grubbed vegetation shall be as Subtitle D waste as per Item 3.

2. Pay Item 8: Removal of Asbestos Containing Material.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, and supplies for removal of asbestos containing material including pipe insulation, office structures and roofing material over the covered loading dock area. Price shall also include the preparation for transportation, transportation for disposal and disposal of the removed materials as asbestos containing waste at a GE approved disposal facility.

3. Pay Item 9: Demolition of Exterior Loading Docks and the External Exhaust Unit and Rebricking of the Openings.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, and supplies for demolition of the exterior loading dock along the south and west walls of the main building and the demolition of the hoist and the exterior exhaust unit. Price shall also include the trimming of any exterior fixtures flush with the building exterior walls. Price shall also include the restoration of any exterior surfaces and rebricking of any openings with materials similar to the building's current construction.

4. Pay Item 10: Demolition of Interior Office Space.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, supplies for the removal of the interior walls and wall structural supports and the ceilings and the ceiling supports for the office space on the second floor of the East and West Mezzanine and the entire first floor office space under the East Mezzanine. Price shall also include proper removal and closing of all utilities to the office space in these areas. Price shall also include the removal of several non-supporting walls under the West Mezzanine.

5. Pay Item 11: Installation of Topsoil and Revegetation

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, supplies for the installation of at least 6 inches of topsoil over areas which were disturbed during remediation. Price includes the seeding of these areas and maintenance of the seeded areas for one year. Price shall also include the planting of the trees and shrubs as shown in the Drawings.

6. Pay Item 12: Installation of Asphalt.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, supplies for the installation of the three types of asphalt as required in the Drawings. Price shall also include the removal of several inches of stone and gravel and recompacting of subbase in several areas prior to installation of asphalt.

7. Pay Item 13: Fence Restoration

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, supplies for the restoration of any fencing after the soil remediation is complete. Price shall also include the replacement of the fence along the north western property line in the area where the fence was removed to allow soil remediation.

C. BUILDING DECONTAMINATION

1. Pay Item 14: Decontamination and Movement of Sweeney Steel Equipment.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies for the washing of the Sweeney Steel equipment. Price shall also include the loading of the equipment onto trucks and the movement of the equipment to the Sweeney Steel facility in Tonawanda, New York. Price shall also include the on-Site movement of any pieces of Sweeney Steel equipment which remain on-Site during the building interior remediation. Price shall also include the testing of the Sweeney Steel equipment for

operability prior to and after the decontamination is conducted. Price shall include the repair of any equipment which was damaged as a result of the Contractor decontamination. Price shall also include the movement of Sweeney Steel equipment from the Tonawanda facility back to 318 Urban Street after the decontamination is complete.

2. Pay Item 15: Decontamination of Exposed Interior Surfaces, including Skylight Windows

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, supplies for washing all interior surfaces with a water based cleaning solution until the surfaces are declared by GE's Representative to be "white glove" clean. Price shall also include the flushing of the interior of all windows on the exterior walls. Price shall include the preparation for transportation, transportation and disposal of any and all washwaters generated during the decontamination.

3. Pay Item 16: Decontamination of Johnson Heater OR Removal, Disposal, and Replacement of Johnson Heater.

   a. Shall be paid for at the Contract lump sum price. Price shall include the dismantling of the Johnson Heater Unit and the decontamination of all interior and exterior surfaces with a water based cleaning solution. Price shall also include the reconstruction of the Heater and demonstrated performance similar to the performance prior to the dismantling. Price shall include the preparation for transportation, transportation and disposal of any and all washwaters generated during the decontamination.

   OR

   b. Shall be paid for at the Contract lump sum price. Price shall include the direct replacement of the Johnson Heater Unit with a similarly performing model and the demolition of the old unit, with preparation for disposal as a RCRA non-hazardous waste.

4. Pay Item 17: Removal of Wood Floor Blocks, Underlying Mastic and Metal Tracks.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies for the removal of the wooden floor blocks and any underlying mastic material. Price shall also include the removal of any metal tracks and areas where the concrete is in deteriorated condition.

5. Pay Item 18: Decontamination of Surfaces Under Wood Block Floor.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies for the decontamination of the concrete subsurface under the wood block floor. Price shall include the decontamination of the metal trenches along the floor areas. Price shall also include the testing of any utilities encountered in areas under the wood block floor and within the trenches to determine if the utilities are still active. Price shall include the removal of nonactive utilities and the continued operability of those still in use. Price shall also include the removal of all materials from the former transformer decommissioning pit and the decontamination of the walls of this pit. Price shall include the preparation for transportation, transportation and disposal of any and all washwaters generated during the decontamination.

6. Pay Item 19: Installation of Concrete Floor.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies for the installation of a 7 inch thick concrete floor of designated strength with sufficient rebar throughout the main floor in the building. Price shall also include the cost of sloping the floor toward lower elevations in three areas. Price shall also include the filling in of the former transformer decommissioning pit and the installation of concrete floor over properly compacted subbase in this area. Price shall also include the renovation of collapsed concrete in the areas shown on the Drawings and the installation of new concrete over these areas after repair.

7. Pay Item 20: Painting of Building Interior Walls and Ceiling.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies for the application of one complete coating of paint over the entire interior of the building walls and ceilings.

D. SOIL REMEDIATION

1. Pay Item 21: Excavation of Designated Soils.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor equipment and supplies to excavate the designated soils and backfill the excavations with properly compacted soils.

2. Pay Item 22: Removal of Underground Storage Tank.

   a. Shall be paid for at the Contract lump sum price. Price shall include removal of the underground storage tank formerly used for petroleum product. Price shall include all labor, supplies, and equipment to excavate the tank and clean the interior in accordance with the NYSDEC STARS requirements. Price shall also include the cleaning of the exterior of the tank to remove any PCB containing soils. Price shall also include the preparation for transportation, transportation and disposal of the tank off-Site as a C&D waste.

3. Pay Item 23: Installation of Geotextile.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, supplies and equipment to place the geotextile liner along the south side of the building as designated in the Drawings.

D. UNIT RATES

1. Pay Item 24: Unit Rate for Water Based Recleaning Surfaces.

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment and supplies to perform additional water-based cleaning at surfaces which passed the white glove test. Price shall also include the disposal costs for the additional decontamination water generated.

2. Pay Item 25: Unit Rate for Scarification of Concrete Surfaces.

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment and supplies to additionally decontaminate concrete surfaces which require scarification for PCB removal. The price shall include all measures to contain and collect all dusts. Price shall also include the disposal costs for the disposal of all dusts and particulates collected. This is an optional unit cost..

3. Pay Item 26: Excavation, Preparation for Transportation, and Transportation of Subtitle D Waste from Outside Regions Designated on Drawings.

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, federal and state taxes to excavate, prepare for transportation and transportation of soils outside the regions designated on the Drawings. Price shall include the transportation of the designated waste to a GE approved Subtitle D landfill.

4. Pay Item 27: Excavation, Preparation for Transportation, and Transportation of TSCA Waste from Outside Regions Designated on Drawings.

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, federal and state taxes to excavate, prepare for transportation and transportation of soils outside the regions designated on the Drawings. Price shall include the transportation of the designated waste to a GE approved TSCA landfill.

5. Pay Item 28: Removal of the Exterior Windows. (Optional)

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, and supplies for removal of the exterior windows, caulking and the steel frame work. This is an optional unit cost.

6. Pay Item 29: Installation of Glass Block Windows and Required Structural Supports (Optional)

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, and supplies for installation of glass block windows along the current exterior window areas. Price shall also include all costs associated with installation of structural supports for the glass block systems.

7. Pay Item 30: Disposal of TSCA Waste (Optional)

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, federal and state taxes to dispose of the PCB waste in a GE approved TSCA landfill. This is an optional unit cost.

8. Pay Item 31: Disposal of RCRA Subtitle D Waste (Optional).

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, federal and state taxes to dispose of the RCRA Subtitle D waste in a GE approved Subtitle D landfill. This is an optional unit cost.

9. Pay Item 32: Disposal of C & D Waste (Optional).

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, federal and state taxes to dispose of the RCRA Subtitle D waste in a GE approved Subtitle D landfill. This is an optional unit cost.

10. Pay Item 33: Installation of Grouting or Piling (Optional).

    a. Shall be paid for at the Unit Price. Price shall include all labor, equipment and supplies to install grouting or piling along the south side of the building to allow excavation to proceed

beyond the current limits shown in the Drawings.. This is an optional unit cost..

END OF SECTION

SECTION 01050
CONSTRUCTION SURVEYING

PART 1 GENERAL

1.01 SUMMARY

A. Section includes Contractor's field surveying for control and documentation of the Work.

1.02 QUALITY CONTROL

A. The Contractor shall employ a Land Surveyor licensed and registered in the State of New York and acceptable to GE's Representative.

1.03 SUBMITTALS

A. The Contractor shall submit name, address, and telephone number of Land Surveyor before starting survey work.

B. On request, the Contractor shall submit documentation verifying accuracy of survey work.

C. Submit redline mark-ups of the Contract Drawings showing as-built information.

1.04 EXAMINATION

A. Verify locations and elevations of survey control points prior to starting Work.

B. Verify topographic elevations prior to disturbance of soil.

C. Establish the areal boundaries of excavations prior to Contractor initiating excavation.

D. Resurvey the limits of any excavations which differ from the initially surveyed extents.

E. Verify topographic elevations after placement and compaction of fill.

F. Promptly notify GE's Representative of any discrepancies discovered.

1.05 SURVEY REFERENCE POINTS

A. Locate and protect survey control and reference points.

B. Control datum for survey is that indicated on Drawings.

C. Protect survey control points prior to starting site work; preserve permanent reference points during construction.

D. Promptly report to GE's Representative the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.

E. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to GE's Representative.

1.06 SURVEY REQUIREMENTS

A. Utilize recognized engineering survey practices.

B. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means all Work, including grading limits.

C. Periodically verify layouts by same means.

1.07 DOCUMENTATION OF WORK

A. Maintain a complete and accurate log of control and survey work as it progresses.

B. Survey as-built locations and elevations of structures, pavement, final grades, and other points and levels specified in individual specification sections.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01100
SPECIAL PROJECT PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. Schedule and Sequence of Work
2. Construction Work Plan
3. Contingency Plan
4. Emergency Calls
5. Health and Safety Plan
6. Subsurface Conditions Found Different
7. Decontamination Plan

1.02 SCHEDULE AND SEQUENCE OF WORK

A. Pursuant to the requirements stated in Article 7.1 of the Remedial Action Contract, the Contractor shall submit to GE and GE's Representative a Construction Schedule for this project within 14 days after award of Contract.

B. The Construction Schedule shall be based on the estimated time for completion of the Work.

C. The sequence of the Work shall follow a logical, systematic method of completing tasks in the most cost-effective and time-efficient manner.

D. The Construction Schedule shall be presented on a horizontal bar chart and shall identify milestone begin and end dates for major items of work including the following:

1. Mobilization/Demobilization

2. Site Preparation/Restoration, including, but not limited to:

   a. Clearing and grubbing;

   b. Removal of Asbestos Containing Material (ACM);

   c. Demolition/Removal of the exterior loading docks, hoist and exhaust unit and rebricking openings;

   d. Demolition of interior office space including the entire East Mezzanine and the offices on the West Mezzanine; and

   e. Revegetation/Paving.

3. Building Decontamination, including, but not limited to:

   a. Decontamination and movement of Sweeney Steel equipment;

   b. Decontamination of exposed interior surfaces including thorough washing of the skylight windows and flushing of the windows on the exterior walls;

   c. Decontamination of Johnson Heater or removal, disposal and replacement of the Johnson Heater;

   d. Removal of wood floor blocks and metal tracks;

   e. Decontamination of surfaces under wood block floor, metal tracks, inside transformer decommissioning pit and sump areas and within the pipe trench;

   f. Installation of concrete floor; and

   g. Painting of building interior walls and ceiling;

4. Soil Remediation

   a. Excavation and backfill of designated soils;

   b. Removal of underground storage tank, piping and associated soils; and

c. Installation of geotextile in designated areas.

Optional unit tasks include removal and replacement of the windows and disposal of the waste materials.

The sequence of all activities shall be the responsibility of the Contractor as long as the requirements of these specifications are met, the Contractor's progress is according to the schedule approved by GE's Representative, and the Contract Times stated in the Agreement are approved by GE.

E. The Construction Schedule shall clearly depict and describe the sequence of activities planned by the Contractor, their interdependence, and the times estimated to perform each activity.

F. All time shown shall be "working days". Include with the Construction Schedule estimated calendar dates for each activity, manpower requirements and major equipment to be used for each task.

G. The Construction Schedule shall be approved by GE and GE's Representative prior to initiating work. The Contractor shall submit updates of the Construction Schedule on at least a weekly basis to GE's Representative, unless otherwise directed.

1.03 CONSTRUCTION WORK PLAN

A. The Contractor shall prepare and submit a final Construction Work Plan to GE and GE's Representative within 14 days after award of Contract for approval. This Work Plan must include a Quality Assurance Project Plan which specifies how the Contractor will maintain compliance with the requirements of the Bid Package.

B. The Work Plan shall indicate construction procedures, major equipment, staging of operations, materials and methods to be used for the Work. The Work Plan shall include drawings and a narrative, and shall include the following items, as a minimum:

1. Temporary site controls, including control of site access and routing of traffic. Staging of construction equipment and material is critical because of limited available space both on and adjacent to the Site.

2. Site Preparation/Restoration including general exterior work:

a. Describe how the work will be sequenced so that no earthwork equipment will operate outside the property lines and no contaminated equipment will carry material from dirty areas to clean ones.

b. Describe methods to be used for stabilizing the excavation and for minimizing the volume of soil to be handled during excavation and reuse activities.

c. Describe how excavated soils and materials will be managed, including temporary stockpiling, preparation for transportation, and on-site placement.

3. Cleaning and Grubbing:

a. Describe the management of wood materials from large trees. Describe the equipment which will be used to grub the grasses and roots from the areas to be excavated.

4. Removal of Asbestos Containing Material (ACM):

a. Detail the procedures to be followed for asbestos removal including location of proposed air monitoring stations.

b. Provide information on the collection and management of waters which have come in contact with the ACM or areas where ACM removal is active.

c. Describe the packaging to be used for the removed ACM.

d. Provide information on the steps which will be used to minimize removal of other materials with the ACM.

5. Demolition:

a. Describe the management of the concrete slab prior to transportation for disposal.

b. Describe the removal of the loading docks and hoist without interfering with the remaining building structural integrity and how and when openings will be repaired, including the shearing of any bolts flush with the building surface.

6. Building Decontamination

a. Describe how the Sweeney Steel equipment will be cleaned in a manner that will not affect the associated electrical controls and motors.

b. Describe the testing which will be performed to verify if the electrical line in the trench area are live and the deenergizing of any live lines with later reenergizing.

c. Describe methods for decontamination of the various surfaces within the building including methods for accessing areas.

d. Describe the methods for collection of decontamination water and management of the water after collection.]

e. Detail the methods for removal of the wood block flooring and the proposed method of cleaning the underlying concrete subfloor.

f. Describe the method of pouring the new concrete floor including the estimated schedule for the installation.

7. Soil Remediation including general exterior work:

a. Describe how the soil will be excavated (including placement of geotextile and backfill) below grade and whether it will involve temporary sheeting.

b. Describe control of run-on and run-off during soil excavation.

1.04 CONTINGENCY PLAN

A. The Contractor shall prepare and submit to GE and GE's Representative for review and approval, within 14 days after award of Contract, a Contingency Plan to include, but not be limited to, the following items:

1. The availability, location, and amount of spill control equipment and absorbent materials.

2. Contingency plan for spills within the Exclusion Zones.

3. Contingency plan for spills outside the Exclusion Zones.

4. Names and telephone numbers of local and state officials to be contacted in the event of a spill or release.

5. Use of subcontractors for dealing with off-site spills, including all information required for Contractor's own forces.

6. Fire prevention and fire fighting measures shall include, at a minimum, procedures and equipment to be employed for responses to fires on the Site that may occur in equipment, in refuse, or elsewhere.

7. Services available from the local fire department and coordination with services of the Site fire brigade.

8. Training of personnel in spill control.

9. Organization for a Site fire brigade, and a list of the personnel assigned to this brigade.

1.05 EMERGENCY CALLS

A. The Contractor shall provide GE and GE's Representative with the telephone numbers of at least three responsible persons, who shall be in a position to dispatch personnel and equipment to the project in the event of an emergency.

1.06 HEALTH AND SAFETY PLAN

A. The Contractor's work will involve working on the Site of a former apparatus service center. The Contractor may potentially contact substances harmful to the health and safety of workers on the Site.

B. In addition to compliance with Paragraph 7.8 and 3.3 of the sample Remediation Contract, and without limiting the effect thereof, comply with the requirements in the following paragraphs C through I.

C. All work shall be performed in accordance with applicable safety and health regulations, codes and standards set forth by the proper authorities. All persons performing work at the Site with the possible exception of personnel placing the asphalt pavement, shall meet the training and medical monitoring requirements of 29 CFR 1910.120 (OSHA). If, at the

start of asphalt pavement placement, all site soils have been covered so that there is no potential exposure of paving personnel to site soils, paving personnel need not meet the training and monitoring requirements of 29 CFR 1910.120 (OSHA).

D. Known potential substances of concern which have been identified through environmental assessment of the Site are polychlorinated biphenyls (PCBs). PCBs are in site soils and interior surfaces (floors, walls and ceilings) of the building. Reports of environmental assessments can be obtained by submitting a written request to GE or GE's Representative.

E. The Contractor is advised that he should be familiar with the hazards associated with those chemical compounds listed in the aforementioned document(s) and that he must take appropriate measures as required when working in an environment where these substances are known to exist.

F. The Contractor shall submit to GE, a Health and Safety Plan for review and approval within 14 days after award of Contract.

G. The HASP shall include the following as a minimum: 1) a Hazard Communication Program, specifying requirements for safety procedures and notification regarding hazardous substances brought to the Site by the Contractor; 2) precautions for protecting personnel against electrical hazards; 3) type of equipment to be used to detect flammables, toxic gases and other hazardous materials; 4) type of equipment and methods to be used to work with these materials; and 5) safety precautions to be taken to protect all site personnel, other properties and the public from hazards associated with Work.

H. This HASP must also include a Community Air Monitoring Plan which will outline the action levels and monitoring which will be conducted regarding the surrounding neighborhood. At a minimum, this Plan shall include the same provisions as the "Interim Remedial Measure Work Plan for Off-Site Properties to the 318 Urban Street Site (October 1992)" included as Appendix A to the Project Manual.

I. The Contractor shall utilize the services of an industrial hygienist certified by the American Board of Industrial Hygiene (ABIH) to develop and implement the Contractor's HASP, including an air monitoring program, conduct initial site specific training and provide support for all health and safety activities as needed, including the upgrading or downgrading of the level of personnel protection.

J. In addition, provide a Site Health and Safety Officer (SHSO), assigned to the Site on a full-time basis, to assist and represent the certified industrial hygienist in the continued implementation and enforcement of the Contractor's HASP. The responsibilities of the SHSO shall include monitoring of air quality conditions to determine appropriate levels of personnel protection and construction safety related to site activities.

1.07 SUBSURFACE CONDITIONS FOUND DIFFERENT

A. It is the obligation of the Contractor to become familiar with subsurface conditions prior to bidding, as the Contractor deems necessary to satisfy the Contractor as to the nature, character, quality, and quantity of the subsurface materials.

B. In the event that the Contractor encounters subsurface physical conditions other than those anticipated and which could not have been reasonably foreseen (from the inspection and examination by the Contractor) or from all information available to the Contractor, he shall give immediate notice to GE or GE's Representative regarding such conditions before they are disturbed. GE or GE's Representative will thereupon promptly investigate the conditions. If conditions do differ significantly and substantially from those which should have been reasonably foreseen or anticipated by the Contractor as above, a change in the Contract will be processed. Any increase or decrease of cost resulting from any such change in the Contract necessitated by reason of such latent subsurface conditions shall be adjusted in the manner provided in the Remedial Action Contract for Change Orders.

1.08 DECONTAMINATION PLAN

A. The Contractor shall decontaminate all equipment and materials which may have come in contact with PCB contaminated soil, PCB contaminated building materials or building surfaces, regulated waste or hazardous materials.

B. Decontamination shall be performed on all personnel and nondisposable work materials and equipment each time such personnel, material or equipment exit the Work Zone as defined in Section ~~02084~~. 01561

C. Handling and disposition of decontamination water at a GE-approved facility and by GE-approved transportation shall be at the Contractor's expense.

D. The Contractor shall provide to GE a written decontamination plan, which shall be incorporated into the Health and Safety Plan, describing procedures and techniques of decontamination.

E. The facilities for decontamination activities shall be located where approved by GE or GE's Representative.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01200
PROJECT MEETINGS

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. Preconstruction meeting

2. Progress meetings

1.02 PRECONSTRUCTION MEETING

A. GE or GE's Representative will schedule a pre-construction meeting within ten days after the Notice to Proceed.

B. The location of the pre-construction meeting will be as indicated by GE.

C. Parties responsible for attending the pre-construction meeting are:

1. GE.

2. GE's Representative.

3. Contractor's representatives.

4. Major subcontractors and suppliers.

5. Other parties as appropriate.

6. NYSDEC will be notified of the meeting and invited to attend.

D. Agenda:

1. Reiteration of Contract Contents.

2. Review of Contractor's Work Plan and Schedule.

3. Discussion of construction quality assurance procedures.

4. Designation of personnel representing the parties in Contract, GE's Representative, and other personnel.

5. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and Contract close-out procedures.

6. Use of premises.

7. Construction facilities, controls and construction aids.

8. Site security.

9. Work hours.

10. Other items as required.

1.03 PROGRESS MEETINGS

A. GE's Representative will schedule progress meetings, if deemed necessary. The progress meetings will be held on an as-required basis.

B. Location of the meetings will be at the project site.

C. Attendance: GE's Representative, Contractor, GE, and other parties as appropriate. NYSDEC will be notified of the meetings and invited to attend.

D. Agenda:

1. Field observations, problems, conflicts.

2. Problems which impede schedule.

3. Corrective measures and procedures to regain projected schedule.

4. Revisions to schedule.

5. Progress and schedule for succeeding work period.

6. Maintenance of quality standards.

7. Pending changes and substitutions, and effect on Construction

Schedule.

8. Work hours.

9. Other items, as appropriate.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01400
QUALITY CONTROL

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. Regulatory requirements
2. References
3. Source quality control testing
4. Quality control of installation
5. Manufacturers' field services and reports
6. Inspection and testing services
7. Construction surveying

1.02 REGULATORY REQUIREMENTS

A. Comply with all applicable local state and federal regulations.

1.03 REFERENCES

A. Conform to latest edition of reference standards as of date of Contract Documents or date otherwise specified in specification sections.

B. Should specified reference standards conflict with Contract Documents, request clarification from GE's Representative before proceeding.

C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.04 SOURCE QUALITY CONTROL TESTING

A. Materials and equipment forming the Work under this Contract are subject to inspection and testing at the point of manufacture or fabrication.

Standard specifications for quality and workmanship are indicated in the Contract Documents.

B. The Contractor shall provide statements or certificates from the manufacturers and fabricators that the materials and equipment provided by them are manufactured or fabricated in full accordance with the standard specifications for quality and workmanship indicated in the Contract Documents.

C. All costs of this testing and providing statements and certificates shall be a subsidiary obligation of the Contractor, and no extra charge to GE shall be allowed on account of such testing and certification.

1.05 QUALITY CONTROL OF INSTALLATION

A. The Contractor shall monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.

B. The Contractor shall comply fully with manufacturers' instructions, including each step in sequence.

C. Should manufacturers' instructions conflict with Contract Documents, the Contractor shall request clarification from GE's Representative before proceeding.

D. The Contractor shall comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. The Contractor shall ensure that work is performed by persons qualified to produce workmanship of specified quality.

1.06 MANUFACTURERS' FIELD SERVICES AND REPORTS

A. When specified in individual specification Sections, the Contractor shall require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to initiate instructions when necessary.

B. The suppliers' or manufacturers' personnel shall report to the Contractor, observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

1.07 INSPECTION AND TESTING SERVICES

A. Contractor shall employ and pay for the services of approved independent quality control firms (QC Firms) to perform specified testing services. Qualifications, duties and responsibilities of the QC Firms are specified in Section 01410.

1.08 CONSTRUCTION SURVEYOR

A. Contractor shall retain the services of a Land Surveyor, registered in the State of New York, to control and document construction work as specified in Section 01050.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01410
CONTRACTOR'S QUALITY CONTROL TESTING LABORATORY SERVICES

PART 1 GENERAL

1.01 SUMMARY

A. Section includes

1. Selection and payment

2. Qualifications

3. Contractor submittals

4. Responsibilities of Quality Control Firms

5. Quality Control Firm submittals

6. Limits on authority of Quality Control Firms

7. Contractor's responsibilities

1.02 SELECTION AND PAYMENT

A. Contractor shall employ and pay for the services of approved independent quality control firms (QC Firms) to perform specified inspection and testing services for the Work.

B. Employment of QC Firms shall in no way relieve Contractor of obligation to perform work in accordance with requirements of Contract Documents.

1.03 QUALIFICATIONS

A. Maintain a full time registered Engineer or other specialist on staff to review services.

B. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to either National Bureau of Standards (NBS) Standards or accepted values of natural physical constants as approved by the manufacturer.

C. Obtain approval of the GE and GE's Representative before employing QC Firms.

D. Laboratories shall meet "Recommended Requirements for Independent Laboratory Qualifications," published by American Council of Independent Laboratories, and other applicable qualifications and standards.

E. Comply with all quality control requirements of these Specifications.

1.04 CONTRACTOR SUBMITTALS

A. Prior to start of Work, within the time limit agreed to in the Preconstruction Meeting, submit the following for each QC Firm: name, address, and telephone number, and names of full time registered Engineer or specialist or responsible officer.

B. Submit copy of report of laboratory facilities inspection made by Materials Reference Laboratory of National Bureau of Standards (NBS) during most recent tour of inspection, with memorandum of remedies of any deficiencies reported by the inspection.

C. Submit three copies of all testing reports summarizing results and observations at completion of the Project. Report shall be certified by a Professional Engineer registered in the State of New York. If the New York State P.E. is a member of a firm, the firm must be authorized to offer professional engineering services in the State of New York in accordance with NYS Education Law.

1.05 RESPONSIBILITIES OF QUALITY CONTROL FIRMS

A. Provide qualified personnel at site. Cooperate with GE's Representative and Contractor in performance of services.

B. Perform specified inspection, sampling, and testing in accordance with specifications.

C. Promptly notify GE's Representative and Contractor of observed irregularities or non-conformance of Work or Products.

D. Attend Preconstruction Meeting and progress meetings if required by GE's Representative.

1.06 QUALITY CONTROL FIRM SUBMITTALS

A. Submit two copies of laboratory reports to GE's Representative within three working days after completion of each inspection and test.

B. Reports shall include:

1. Date issued

2. Project title and number

3. Name of inspector

4. Date and time of sampling or inspection

5. Identification of product and specifications section

6. Location in the Project

7. Type of inspection or test

8. Date of test

9. Results of tests

10. Signature of appropriate specialist on laboratory report certifying accuracy of data

C. When requested by GE's Representative, provide interpretation of test results.

1.07 LIMITS ON AUTHORITY OF QUALITY CONTROL (QC) FIRMS

A. The QC Firms shall not release, revoke, alter, or enlarge on requirements of Contract Documents.

B. The QC Firms shall not approve or accept any portion of the Work, and shall not assume any duties of the Contractor.

C. The QC Firms shall have no authority to stop the Work.

1.08 CONTRACTOR'S RESPONSIBILITIES

A. Cooperate with personnel of QC Firms and provide access to Work.

B. Furnish incidental labor and facilities:

1. To provide access to work to be tested.

2. To obtain and handle samples at the Project site or at the source of the product to be tested.

3. To facilitate inspections and tests.

4. For storage and curing of test samples.

C. Notify QC Firms sufficiently in advance of operations to allow for assignment of personnel and scheduling of tests and inspections.

D. Pay costs of services of QC Firms.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01500
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. Mobilization
2. Temporary utilities
3. Protection of existing utilities
4. Site security
5. Construction facilities: structures, site access, parking
6. Temporary controls: noise, water, pollution and dust
7. Traffic control; haul routes

1.02 MOBILIZATION

A. The Contractor shall mobilize to the Site and initiate construction activities within ten days after receiving Notice to Proceed from GE.

B. Mobilization shall not be attempted unless the Contractor has:

1. Obtained all permits, licenses and OSHA training certificates necessary to perform the Work, where required.
2. Received approval from GE for the location of temporary structures, staging and stockpile areas.

Received approval from GE Rep on

3. ~~Submitted~~ a Construction Work Plan (specified in Section 01100).
4. ~~Submitted~~ a Health and Safety Plan and a Contingency Plan (specified in Section 01100).
5. ~~Submitted~~ a Construction Schedule (specified in Section 01100).

6. Submitted a proposed list of material, equipment and subcontractors to be used on the Project.

7. Submitted required certificate(s) of insurance.

1.03 TEMPORARY UTILITIES

The Contractor shall:

A. Provide and pay for required power service, and temporary lighting. Contractor shall coordinate with Sweeney Steel, the current operators of the property, for use of the existing power service during remediation, and shall pay for all electric service provided by Sweeney Steel. Additional electrical utilities, if needed, shall be installed by a licensed electrical contractor at Contractor's cost.

B. Provide and pay for temporary heating, cooling, and ventilation. Contractor shall coordinate with Sweeney Steel, the current operators of the property, to pay for use of the existing heating, cooling and ventilation service during remediation. All additional systems shall meet the accepted safety standards.

C. Provide and pay for all potable and non-potable water required for construction as described in these specifications. Contractor shall coordinate with Sweeney Steel, the current operators of the property, to pay for use of the existing water service during remediation.

D. Provide and pay for Contractor, desk, telephone and fax.

E. Provide GE's Representative and NYSDEC Representative with an office, access to a telephone and fax machine during remediation.

F. All office space provided shall be designated as nonsmoking.

G. Provide adequate fire protection at the Site as required by local fire codes and standards.

1.04 PROTECTION OF EXISTING UTILITIES

The Contractor shall:

A. Contact and cooperate with GE and utility companies to locate all utilities (including pipelines, cables, power poles and other structures) on and adjacent to the construction site prior to beginning the Work. The Contractor must call the Underground Facilities Protective Organization (893-1133), or similar agency, for utility location.

B. Contact the Buffalo Building Permits Department and obtain the required permits for the Work.

C. Protect utilities from damage during construction, unless otherwise indicated to be removed or abandoned.

D. Comply with requirements of the utility owners for clearances and access for all construction within and adjacent to the utility right-of-way.

E. Repair damaged utilities as required by GE or utility company(s) at the Contractor's expense.

F. Promptly take necessary steps to assure that the utility is not damaged if a utility is encountered which is not shown on the Drawings or otherwise made known to the Contractor prior to beginning the Work. The Contractor shall give written notice to GE or GE's Representative and to the owner of the utility. GE or GE's Representative will then review the conditions and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence of the utility.

1.05 SITE SECURITY

The Contractor shall:

A. Provide security and facilities to protect Work and existing facilities from unauthorized entry, vandalism or theft.

1.06 TEMPORARY STRUCTURES

The Contractor shall:

A. Construct any temporary structures or facilities necessary to perform the Work.

B. Maintain all equipment, temporary structures and facilities used during the Work.

C. Upon completion of the Work, remove the temporary structures and restore the area to its original condition.

1.07 SITE ACCESS AND PARKING

The Contractor shall:

A. Obtain and maintain temporary access to construction area if necessary. Coordinate with local jurisdiction for Site access.

B. Provide means of removing Site soil from vehicle wheels before entering public roads. Such means shall include constructing a decontamination pad as shown on the Drawings. The decontamination pad shall be relocated as necessary during excavation and construction so as to remain in service throughout the Work.

C. Provide parking areas on or adjacent to Site where approved by GE to accommodate NYSDEC personnel, GE's Representative, and construction personnel.

1.08 NOISE CONTROL

A. Contractor's vehicles and equipment shall be such as to minimize noise to the greatest degree practicable. Noise levels shall conform to the latest OSHA standards and state, county and local ordinance requirements, and in no case will noise levels be permitted which interfere with the work of others.

1.09 WATER CONTROL

The Contractor shall:

A. Construct structures (fill, grading and ditching) to direct water away from excavations, and other construction areas, and to direct drainage to proper runoff courses so as to prevent any erosion, damage or nuisance. Contractor shall be responsible for damages caused by the Contractor-installed water collection and disposal operations.

B. Provide methods to control surface water and ground water to prevent damage to the Work, the Site, or adjoining properties.

C. Provide, operate and maintain equipment and facilities of adequate size to control water.

D. Provide methods to prevent discharge of any waste water from decontamination activities into the newly installed Site sewer system.

E. Ensure protection of stockpiled material from weather conditions that may cause additional soil contamination.

1.10 SOIL EROSION AND SEDIMENT CONTROL

Specified in Section 01560.

1.11 POLLUTION CONTROL

The Contractor shall:

A. Provide methods to control surface water and ground water to prevent damage to the Work, the Site, or adjoining properties.

B. Collect, store and dispose all oil, fuel, and other fluids discharged or spilled during vehicle maintenance operations or other site operations in compliance with all applicable local, state, and Federal regulations. All spills shall be cleaned up to the satisfaction of GE, including excavation of soil contaminated by spills. Excavated soil contaminated by spills shall be classified as PCB waste, transported and disposed at a GE-approved facility at the Contractor's expense.

C. Take special measures to prevent harmful substances from entering public waters. Prevent disposal of wastes, effluents, chemicals, or other such substances adjacent to streams, or in sanitary or storm sewers.

D. Provide systems for control of atmospheric pollutants. Prevent toxic concentrations of chemicals, and prevent harmful dispersal of pollutants into the atmosphere.

E. Ensure that equipment used during project conforms to all current federal, state and local laws and regulations.

1.12 DUST CONTROL

The Contractor shall:

A. Maintain all excavations, stockpiles, and all other work areas within the project boundaries free from visible airborne dust which would cause a hazard or nuisance to others.

B. The Contractor shall continuously monitor non-visible levels of dust with the use of a portable, light-sensitive dust monitor during all Work. The OSHA Permissible Exposure Limit (PEL) for respirable particulates within a work zone is 5 mg/m^3 Time Weighted Average (TWA). The continuous dust monitor shall be set to alarm if this level is exceeded at any time. If this level is exceeded, work will cease until dust control measures can be implemented.

C. Enforce approved temporary engineering controls for stabilization, consisting of sprinkling with clean water, or similar methods, required to control dust. Sprinkling must be repeated at such intervals as to keep all parts of the disturbed area at least damp at all times.

D. Comply with the provisions of the Community Monitoring Plan as required in Section 01100.

1.13 TRAFFIC CONTROL

The Contractor shall:

A. Coordinate movement of construction equipment and hauling vehicles with GE to prevent interference with public traffic and parking, access by emergency vehicles, and GE's operations.

B. Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.

C. Haul Routes

1. Consult with authority having jurisdiction in establishing public thoroughfares to be used for haul routes and site access.

2. Confine construction traffic to designated haul routes.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01560
TEMPORARY SOIL EROSION, SEDIMENT AND DUST CONTROL

PART 1 GENERAL

1.01 SUMMARY

A. Section includes construction of temporary measures to control soil erosion and sediment control within the construction limits. Designated erosion and sediment control measures will be left in place for Site restoration.

1.02 SUBMITTALS

The Contractor shall:

A. Submit silt fencing product data and specifications for approval by GE or GE's Representative.

1.03 QUALITY ASSURANCE

The Contractor shall:

A. Comply with the requirements of governmental authorities having jurisdiction.

1.04 PROJECT REQUIREMENTS

The Contractor shall:

A. Use temporary control measures which can be coordinated with permanent erosion control features to the extent practical, to assure effective and continuous erosion control.

B. Use temporary control measures to minimize collection of rainwater by covering excavations during period when no work is active in the excavation.

C. Install soil erosion and sediment control measures shown on Drawings C-4 and C-5 as part of the Site restoration activities.

PART 2 PRODUCTS

2.01 MATERIALS

A. Silt Fencing: "Envirofence" by Mirafi, "Propex Silt Stop" by Amoco, or equivalent or ASTM equivalent.

PART 3 EXECUTION

3.01 EROSION AND SEDIMENT CONTROL - GENERAL

A. All Work under this contract shall be performed by the Contractor in such a manner that objectionable sediment shall not be created in water courses through or adjacent to the project area.

B. The Contractor shall notify GE's Representative and GE in the event of conflict between these specification requirements and pollution control laws, rules or regulations of federal, state or local agencies.

C. GE's Representative and GE shall have the authority to limit the surface area of erodable earth material exposed by clearing and grubbing, excavation, borrow and fill operations and to direct the Contractor to provide immediate, permanent or temporary sediment control measures to minimize damage to adjacent property and to minimize effects on storm sewers or watercourses.

3.02 INSTALLATION AND MAINTENANCE OF SILT FENCING

The Contractor shall:

A. Install in accordance with details shown on the Drawings.

B. Remove sediment deposits when deposits reach approximately one-half the height of the barrier. Sediment shall be field tested for PCB content prior to being placed in areas approved by GE's Representative.

C. Replace fabric when it has deteriorated, is torn, loose or no longer performs effectively.

3.03 INSTALLATION OF OTHER EROSION CONTROL MEASURES

The Contractor shall:

A. Install according to manufacturer's recommendations and standard local practice.

B. Replace the Stream Guard Filter Type 11-S or equivalent at the catch basins during the Work if the existing filter becomes clogged. The Contractor shall leave these filters in place, cleaned of sediment and fully operational at the end of Site Work.

C. Maintain installations as required for proper erosion and sediment control until the Work is accepted by GE.

3.04 REMOVAL OF SILT FENCING

The Contractor shall:

A. Remove silt fencing when approved by GE's Representative and GE, after the construction area has been sufficiently stabilized.

B. Remove any sediment deposits remaining after silt fence is removed and the ground shall be dressed to conform with the existing grade.

C. Maintain installations as required for proper erosion and sediment control until the Work is accepted by GE.

3.05 SITE DUST CONTROL

A. The Contractor shall provide the necessary equipment and take the necessary actions as may be required from time to time to prevent construction activities on the Site from raising appreciable or objectionable quantities of dust, as determined by GE's Representative or the NYSDEC. If so required by GE's Representative, the Contractor shall implement the measures necessary to reduce dust to a level acceptable to GE's Representative, at no additional cost to GE.

B. The Contractor shall continuously monitor non-visible levels of dust with the use of a portable, light-sensitive dust monitor during all Work. The OSHA Permissible Exposure Limit (PEL) for respirable particulates within the work zone is 5 mg/m^3 Time Weighted Average (TWA). The continuous dust monitor shall be set to alarm if this level is exceeded at any

time. If this level is exceeded, work will cease until dust control measures can be implemented.

C. The Contractor shall continuously conduct perimeter monitoring of particulates in compliance with the Community Air Monitoring Program, as required in Section 01100. If the particulate levels at Site perimeter exceed 150 micrograms per cubic meter, work will cease until dust control measures can be implemented.

END OF SECTION

SECTION 01561
CONTRACTOR'S DECONTAMINATION REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. Equipment Decontamination Requirements

2. Personnel Decontamination Requirements

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 EQUIPMENT DECONTAMINATION REQUIREMENTS

A. All construction equipment, including automobiles, trucks, support equipment, hand tools, and so forth of any kind that comes onto the Site and enters the contaminated areas shall be presumed to have come into contact with contamination. The Methods of Decontamination are summarized below:

1. Daily: All equipment remaining on the Site at the close of work for any day shall be inspected for any unnecessary build up of dust. If any is found, it shall be removed by brushing, scraping, or washing in such a way as to minimize the formation of airborne dust.

2. Upon Leaving: Prior to leaving the Site, all equipment to which this Section is applicable shall be thoroughly cleaned on all surfaces using solvents if required and a high pressure wash using a detergent/hot water mixture. Decontamination shall not be less than that required to meet 40 CFR 761.79.

B. The Contractor shall provide a decontamination pad of adequate size. The decontamination pad shall be equipped with an impervious liner or container designed to collect all wash water, dust, or mud generated during equipment washing and decontamination. All decontamination and washing of equipment shall take place on the decontamination pad.

C. The Contractor is responsible for the collection, packaging, storage, transport, and disposal of the waste water, dust and sludge resulting from equipment decontamination and washing procedures and shall be responsible for all necessary tests, manifests and permits. Contractor shall supply all required containers, labels, and other supplies needed for waste management.

D. The Contractor shall designate an employee who shall have the responsibility of supervising and checking the decontamination and washing of all equipment. That employee shall cause to be kept a record of all equipment brought onto the Site and a record of all equipment that is properly decontaminated and is released to leave the Site.

E. No equipment or tool to which the Section is applicable shall enter or leave the Site without being recorded in the record required by this Section.

3.02 PERSONNEL DECONTAMINATION REQUIREMENTS

A. The Contractor shall designate one employee who shall be the Health and Safety Officer for this Site. The Health and Safety Officer shall have sole responsibility and complete authority for the determination of the level of protection required at any time by any and all personnel working on or entering the Site, and determination of what articles of clothing and personal equipment shall be classed as contaminated and require disposal accordingly. The Contractor shall, at no expense to GE or GE's Representative, provide such health and safety equipment as may be required by the Contractor's Health and Safety Plan or by the Health and Safety Officer.

B. The Health and Safety Officer shall be responsible for issuing personal protective equipment and for recording the disposition or disposal of all equipment.

C. No personal equipment shall be removed from the Site unless it is possible to decontaminate it to the satisfaction of the Health and Safety Officer and unless it has been so decontaminated and recorded as such by the designated Contractor employee.

END OF SECTION

Section 2

Section 2

SECTION 02050
DEMOLITION

PART 1 GENERAL

1.01 SUMMARY

A. Section includes the demolition, preparation for transportation and transportation for disposal of the following structures:

1. Concrete slab from former location of metal garage

2. Loading docks, external exhaust unit and hoist

3. Interior office space, including the entire East Mezzanine and the office space on the second floor of the West Mezzanine

4. Exterior windows (Optional task)

B. Section also includes the repair of any openings and removal of fixtures which had been used to secure the structures to the building

1.02 QUALITY ASSURANCE

A. Observation of all structural demolition and removal will be made by GE's Representative to verify conformance with these Specifications.

1.03 REGULATORY REQUIREMENTS

A. Conform to applicable codes for demolition of structures, dust control, runoff control and disposal.

B. Obtain required permits from authorities.

C. Notify affected utility companies before starting work and comply with their requirements.

D. Transport building debris to GE-approved facility in accordance with all federal, state and local regulations

1.04 PROJECT CONDITIONS

A. Work will involve the disturbance of hazardous materials, including PCBs.

B. The Contractor shall work with GE or GE's Representative to coordinate schedule for demolition of structures and disposal of debris.

C. Perform work in accordance with OSHA 29 1920.120, 1926 and the Health and Safety Plan.

D. Use means necessary to prevent dust from becoming a nuisance to the public and to other work being performed on or near the Site.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 PERSONNEL PROTECTION

A. Comply with the requirements listed in the Contractor's Health and Safety Plan for protection of workers from hazardous and non-hazardous materials and dust expected to be encountered.

3.02 PREPARATION FOR DEMOLITION

A. By careful study of the Drawings and these Specifications, determine the location and extent of demolition to be performed.

B. Use means necessary to prevent dust from becoming a nuisance to the public and to other work being performed on or near the Site.

C. If not indicated to be removed, shut-off, cap and otherwise protect public utility lines in the area of demolition in accordance with the requirements of GE or public agency having jurisdiction.

3.03 DEMOLITION OF CONCRETE SLAB

A. The Contractor shall remove the floor slab and foundation, using suitable equipment. After removal of loose dirt from the slab, the concrete floor slab and foundation are to be prepared for transportation and transported

to a GE approved landfill based on sampling results and as directed by GE's Representative.

3.04 DEMOLITION OF LOADING DOCKS, EXTERNAL EXHAUST UNIT AND HOIST

A. During demolition, the Contractor shall use all procedures necessary to assure that no portion of the structure becomes a hazard to persons by instability or other condition.

B. The Contractor shall remove the designated portion of the south and west loading docks as shown on the Drawings. All steel reinforcement within the loading dock structure which extends to the building shall be cut flush with the building.

C. After demolition of the loading dock and excavation/backfill of the soil along this are, the Contractor shall install a set of metal stairs for the emergency exit door near the south west corner of the building and a set of metal stairs for the emergency exit door along the west side of the building.

D. Any opening s in the exterior wall so the building which result from demolition of the hoist or removal of the external exhaust unit shall be repaired by the Contractor to match the existing materials of the building.

3.05 DEMOLITION OF THE INTERIOR OFFICE SPACE

A. The contractor shall removal all ceiling tiles and suspension units, dry wall, or other wall support structures and any associated utilities within the second floor office space on the East and West Mezzanine and on the first floor of the East Mezzanine. The removed materials shall be prepared for transportation and transported to a Subtitle D landfill for disposal unless directed otherwise by GE's Representative.

B. The interior office space materials which were tested and found to be asbestos containing building materials are to be remediated prior to general demolition following the procedures detailed in Section 02080.

C. The drain pipes leading from the restroom fixtures on the first floor of the East Mezzanine shall be temporarily covered during demolition to prevent discharge of any materials into the pipes. The drains shall then be secured in a manner to allow future connection of fixtures. The future installation of fixtures in not included in this Work.

3.06 DEMOLITION OF EXTERIOR WALL WINDOWS

A. Follow procedures detailed in Section 04270.

END OF SECTION

SECTION 02080
HAZARDOUS ASBESTOS MATERIAL ABATEMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section includes the removal, preparation for transportation, and transportation of asbestos-containing insulation, wallboard materials from the interior of the subject facility and roofing materials from the southern loading dock of the subject facility.

B. Approval of or acceptance by GE's Representative of various construction activities or methods proposed by Contractor does not constitute an assumption of liability either by GE's Representative or GE for inadequacy or adverse consequences of said activities or methods.

1.02 QUALITY ASSURANCE

A. Qualifications for Performance of Work

1. Contractor (or subcontractor engaged to perform the Work of this Section) shall:

a. Be a certified and licensed asbestos contractor in accordance with New York State regulatory requirements. Submit documentation confirming current accreditation.

b. Comply with current Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) regulations.

B. Reference Standards

1. The Contractor acknowledges, by the execution of the Contract, awareness and familiarity with the contents and requirements of the following regulations, codes, and standards, and assumes responsibility for the performance of the Work in strict compliance therewith and, for every instance of failure, to comply therewith.

2. The current issue of each document shall govern. Where conflict among requirements or with the Contract Documents exists, the more stringent requirements shall apply.

a. United States Environmental Protection Agency (USEPA) Regulations for Asbestos (Code of Federal Regulations Title 40, Part 61, including
   i. Subpart A - General Provisions
   ii. Subpart M - National Emission Standard for Asbestos)

b. United States Occupational and Safety and Health Administration (OSHA) Asbestos Regulations (Code of Federal Regulations Title 29, Part 1926), including
   i. Section 58 - Asbestos Regulations for the Construction Industry
   ii. Section 59 - Hazard Communication for the Construction Industry

c. United States Occupational and Safety and Health Administration (OSHA) additional regulations including
   i. Title 29, Part 1910, Section 120 - HAZWOPER
   ii. Title 29, Part 1910, Section 134 - Respiratory Protection
   iii. Title 29, Part 1910, Section 145 - Accident Prevention Signs
   iv. Title 29, Part 1910, Section 1000 - Air Contaminants
   v. Title 29, Part 1926, Subpart C - General Safety and Health Provisions
   vi. Title 29, Part 1926, Subpart D - Occupational Health and Environmental Controls
   vii. Title 29, Part 1926, Subpart E - Personal Protective and Life Saving Equipment
   viii. Title 29, Part 1926, Subpart L - Ladders and Scaffolding

d. USEPA Office of Pesticide and Toxic Substances Guidance Document "Guidance for Controlling Friable Asbestos Containing Material in Buildings", EPA 56015-85-024, June 1985.

e. United States Department of Transportation, Hazardous Substances: Final Rule (Code of Federal Regulations Title 49 Parts 171 and 172), Federal Register November 21, 1986 and corrected February 17, 1987.

f. New York State Regulations including
   i. Title 12, Part 56 - Asbestos (New York State Department of Labor [NYSDOL])
   ii. Title 6, Part 364 - Waste Transporter Permits (NYSDEC)

iii. Title 6, Part 360 Solid Waste Management Facilities (NYSDEC)

g. New York State Codes including:
i. Uniform Fire Prevention and Building Code

h. New York State Labor Laws

i. Article 30 - Asbestos or Products Containing Asbestos: Licensing

C. All state, county and city codes and ordinances as applicable.

D. Patent/Copyright Compliance: Comply with all patent and copyright laws involved with processes, equipment and materials regarding the Work of the Contract Documents.

E. Test Reports

1. Results of tests of materials suspected of containing asbestos taken from materials within the scope of this project are available for review at the office of GE's Representative. However, the Contractor or subcontractor is cautioned that, should interpretations be made, opinions be formed, and conclusions be drawn as a result of examining the test results, those interpretations, opinions, and conclusions will be those made, formed, and drawn solely by the Contractor.

2. In as much as randomly and/or arbitrarily selected areas were sampled, GE's Representative and GE make no representation, warranty, nor guarantee that the conditions indicated by the test reports either are representative of those conditions existing throughout the area, or that unforeseen developments may not occur, or that materials other than, or in proportions different from, those indicated may not exist.

1.03 SUBMITTALS

A. Notices and Postings

1. EPA

a. At least ten (10) days prior to beginning Work on the ACM portion of this project, the Contractor shall send written

notification to EPA, NESHAP Coordinator, Air Facilities Branch, 26 Federal Plaza, New York, New York 10007.

b. The content of the notification shall be in accordance with 40 CFR 61.146.

2. NYSDOL

a. At least ten (10) days prior to beginning Work on the ACM portion of this project, the contractor shall send written notification to the Commissioner of Labor, State of New York, Department of Labor, State Office Building Campus, Albany, New York 12240

b. At least fifteen (15) days prior to beginning Work on the ACM portion of this project, the Contractor shall submit a copy of the completed and signed DOSH 465 Form entitled "Non-Friable Asbestos or Asbestos Services of New York Department of Labor" in Albany, New York, if applicable.

c. The Contractor shall post applicable variances, the signed DOSH 465 and a valid NYS Asbestos Handling License (DOSH 432). Copies of the Contractor's asbestos handling certificate, "Certified Handlers" for each person working in containment, OSHA-conforming "Danger Asbestos" signs in the predominant language of the abatement workers, and emergency telephone numbers shall be posted at the entrance to the personal decontamination enclosures. The content of the notification shall be in accordance with NYS Labor law, Article 30, Section 904 and Title 12, Part 56-1.6.

d. The Contractor shall display or post a copy of a valid NYSDOL asbestos-handling license proximate to but outside the Work area of the Project.

B. Start-up Submittals

No asbestos abatement work will be allowed to begin until the following have been received by GE's Representative and returned approved.

1. A detailed Asbestos Abatement Plan and schedule for abatement. The Asbestos Abatement Plan must include:
   a. Schedule and work shifts for Abatement Activities.

b. Proposed Work Areas.

c. Methods of isolation and removal.

d. Decontamination system locations.

e. List of workers, "competent persons", and supervisors for each shift.

F. Persons preparing the Asbestos Abatement PLAN must possess a valid project designer cert. which shall be provided to GE's Rep.

2. Documentation of satisfactory employee, "competent person", and supervisor training per 40 CFR 763, (AHERA), 29 CFR 1910.120, and 29 CFR 1926.58 in accordance with this specification. Documentation shall include the dates of training and qualifications of instructors.

3. Documentation of written respiratory protection program and current respirator fit testing and training records for all project workers that meet the requirements of 29 CFR 1910.134 and 29 CFR 1926.58.

4. Satisfactory proof that required permits and arrangements for on-site storage have been made.

5. A certificate signed by a licensed physician shall be submitted certifying that each project worker is physically able to wear the approved respiratory protection and has been examined in accordance with medical monitoring requirements of 29 CFR 1926.1101 within the previous twelve (12) months.

6. An inventory of materials and equipment to be used on the project. Include manufacturer's certifications or approvals as applicable. Include manufacturer's use instructions and recommendations for materials.

C. Submittals Following Completion of the Work

1. Submit to GE's Representative receipts from landfill operator which acknowledge the contractor's delivery(s) of asbestos-containing waste materials. Receipts shall include date, quantity of material delivered, and signature of authorized representative of landfill.

2. Submit to GE's Representative evidence of compliance with the applicable OSHA regulation including, as a minimum, copies of employee air monitoring results.

1.04 PRODUCT HANDLING

A. Deliver all materials as described in Part 2 in the original packages, containers, or bundles bearing the name of the manufacturer or the brand name.

B. Store all materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination.

C. Remove from the premises all damaged or deteriorating materials. Dispose of materials that become contaminated with asbestos in accordance with applicable regulatory standards and these specifications.

1.05 WORKSITE CONDITIONS

Worker and Visitor Procedures: the Contractor is hereby advised that asbestos has been determined by the U.S. Government to be a cancer-causing agent and Contractor shall provide workers and visitors with respirators which as a minimum shall meet the requirements of OSHA 29 CFR, Part 1926, and protective clothing during preparation of system of enclosures, prior to commencing, during actual asbestos removal, and until final clean-up is completed. Adequate site security and posting shall be provided by the Contractor so as to effectively restrict access by unauthorized personnel for the duration of the asbestos removal Work.

NOTE: Contractor is hereby warned that the Site was found to contain PCBs and care should be taken during abatement operations.

1.06 PERSONNEL PROTECTION

A. Prior to commencement of work, all workers shall be instructed by the Contractor and shall be knowledgeable in the appropriate procedures of personnel protection and asbestos removal.

B. Contractor acknowledges and agrees that he is solely responsible for enforcing worker protection requirements at least equal to those required by federal regulations.

C. Contractor shall provide workers with personally issued and marked respiratory equipment approved by NIOSH and OSHA and as minimum suitable for the asbestos exposure level in the work areas according to OSHA Standard 29 CFR Part 1926.

D. Where respirators with disposable filters are used, provide sufficient filters for replacement as necessary by the workers or as required by applicable regulations.

E. Permit no visitors, except for governmental inspectors having jurisdiction, or as authorized by GE's Representative or GE, in the work areas after commencement of asbestos disturbance or removal. Provide authorized visitors with suitable respirators in accordance with 29 CFR, Part 1926.

F. Provide workers with sufficient sets of protective disposable clothing, headgear, eye protection, and footwear of sizes to properly fit individual workers in accordance with 29 CFR, Part 1926.

G. Provide authorized visitors with protective disposable clothing, headgear, eye protection, and footwear of sizes to properly fit visitors whenever they are required to enter the work area, to a maximum of six sets per day.

H. Provided compressed air system shall be in accordance with OSHA 29 CFR 1910.134.

1. Provide compressor of sufficient size to accommodate respirator manufacturer's recommendation of supply capacity.

2. Provide emergency backup air supply for each worker in work are at all times when Type "C" (supplied air) respirators are required. Provide emergency backup equipment with air supply of sufficient duration for all workers to safely exit work area. Locate emergency equipment so that it is readily accessible to each worker in work areas following interruption of normal air supply.

3. Provide compressed air system with compressor failure alarm, with high temperature alarm or shut-off, carbon monoxide monitor, and suitable in-line air purifying sorbing beds and filters to assure Grade D breathing air.

I. Provide respiratory protection at all times which is in compliance with or in excess of OSHA requirements. When not in violation of the above, the

minimum acceptable respiratory protection used for this project are as follows:

1. Pre-cleaning as necessary: No respiratory protection required.

2. Plastic sheeting installation which does not disturb asbestos material: No respiratory protection required.

3. Cleaning and removal of items or plastic sheeting during installation when such operation will disturb asbestos material: half-face dual air purifying respirators, minimum.

4. Asbestos-containing material removal: Initially, Type "C" supplied air respirators, minimum.

5. Gross cleanup of contaminated work areas: Initially, Type "C" supplied air respirators, minimum.

   Installation of encapsulant before plastic sheeting removal: half face dual cartridge air purifying respirators, minimum.

6. Final wet cleaning of walls and immovable equipment and until final air tests show fiber levels in work areas to be equal to or less than 0.01 f/cc: half face dual cartridge air purifying respirators, minimum.

7. Asbestos-containing removal using glovebag techniques: half face dual cartridge air purifying respirators, minimum.

8. Loading bags on truck (outside work area): half face dual cartridge air purifying respirators, minimum.

J. Be solely responsible for scheduling necessary air sampling analysis in a timely manner utilizing phase contrast microscopy by an independent testing laboratory for OSHA compliance monitoring of Contractor's employees' respiratory protection. Pay for all costs associated with such testing and timely analysis of samples.

K. Provide for testing of compressor and supplied air (Type C) respirator equipment by an independent testing laboratory competent in this field to verify that air supplied is Grade D.

PART 2 PRODUCTS

2.01 MATERIALS

A. Impermeable containers - Shall be suitable to receive and retain asbestos-containing or contaminated materials until disposal at an approved site and shall be labeled in accordance with OSHA Regulation 29 CFR, Part 1926 and USDOT 49 CFR, 171 and 172, containers shall be both air and watertight. Use a minimum of two containers: 1) six mil plastic bags sized to fit within the drum or 2) double poly bags.

B. Warning labels and signs - Shall be as required by OSHA regulation 29 CFR Part 1926 (and USDOT 49 CFR 171 and 172 for impermeable containers).

C. Other materials - provide all other materials, such as lumber, nails and hardware, which may be required to construct and dismantle the decontamination area and the barriers that isolate the work area(s).

2.02 TOOLS AND EQUIPMENT

A. Provide suitable tools for asbestos removal.

1. Sprayer - utilize airless or other low pressure sprayer for amended water or primer application.

2. Scaffolding - Shall be as required to accomplish the specified work and shall meet all applicable safety regulations.

3. Transportation - As required for loading, temporary storage, transit, and unloading of contaminated waste without exposure to persons or property.

PART 3 EXECUTION

3.01 PREPARATION AND WORK AREA ENCLOSURE

A. Identify location and amount of all asbestos-containing materials to be removed as part of the Work described in this Project Manual.

B. Maintain emergency and fire exits from the work areas, or establish alternative exits satisfactory to fire officials.

C. Trap and filter water using filters having a pore size of not larger than five microns, and drain shower wastewater into a sanitary sewer. Replace contaminated filters when they become clogged but not less than every third day. Dispose of filters as asbestos waste. Contractor has option of disposal of wastewater as asbestos material rather than filtering and draining into sanitary sewer.

3.02 REMOVAL OF ASBESTOS-CONTAINING MATERIAL

A. Properly remove and dispose of all asbestos-containing materials indicated to be removed as described in the Contract Documents in accordance with the methods and procedures outlined in the US Department of Labor Occupational Safety and Health Administration (OSHA) Asbestos Regulations (Code of Federal Regulations Title 29, Part 1926) or as more stringently specified herein.

1. Prepare Work Areas as previously specified.

2. Properly remove asbestos containing material within the Work Area(s) utilizing appropriate wet methods, hand tools and generally accepted abatement removal activities.

3. Spray areas of asbestos material with a wetting agent, using spray equipment capable of providing a "mist" application to reduce the release of fibers. Wet the material sufficiently to the substrate without excessive dripping. Spray the asbestos material repeatedly during removal to maintain wet condition but do not use excessive amounts of water.

4. Remove the wetted asbestos material in small sections. As it is removed, place the material in sealable plastic bags of six-mil minimum thickness and place in labeled containers for transport.

5. Do not permit removed asbestos-containing material to fall more than 10 feet. If necessary, provide an airtight inclined chute apparatus.

6. After removal of asbestos-containing material, all surfaces shall be wet-cleaned to remove residual material. Continue wet cleaning until surface is free of visible material.

7) Clearence Samples shall be collected in accordance with NYSDOH & NYSDOL Requirements

END OF SECTION

SECTION 02081
UNDERGROUND STORAGE TANK REMOVAL

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. Preparation of Underground Storage Tank (UST) for removal

2. Removal of UST, associated vents and piping, and impacted soils

3. Preparation for transport and transportation to disposal of sludges, UST, and impacted soils

1.02 QUALITY ASSURANCE

A. The UST contents and the UST shall be properly removed and disposed of in accordance with all federal, state, and municipal regulations and as specified herein. The Contractor shall be responsible for determining the proper disposal method, with GE or GE's Representative's approval. Disposal of all tank contents shall be in accordance with the requirements of Section 02221.

1.03 REGULATORY REQUIREMENTS

A. All Work performed in removing the contents and the tank shall be performed in accordance with 6 NYCRR Part 613.9(b), Closure of Tanks Permanently Out-of-Service, and the NYSDEC guidance document "Permanent Closure of Petroleum Storage Tanks" (July 19, 1988).

B. All Work shall be performed in a safe manner, in accordance with the Site Health and Safety Plan, and 29 CFR 1910.146, Confined Space Entry (if confined space entry is needed). Tank entry, if required to remove residual sludges from the storage of heavy fuel oils, and closure of tanks are very dangerous procedures. Tanks that contain gasoline residues are explosive. All sources of ignition must be controlled, and the tank's interior volume must be made inert. The tank shall only be entered by trained and properly equipped personnel, and the tank shall not be entered without positive ventilation and standby personnel. Petroleum vapors are heavier than air and will remain in the tank. The American Petroleum Institute (API) and

National Fire Protection Association (NFPA) references listed at the end of the July 19, 1988 NYSDEC guidance document provide further information on safety precautions.

1.04 PRODUCT HANDLING

A. The Contractor shall be responsible for all sampling and analyses as may be required by disposal facilities for disposal of the UST contents. All sampling shall be conducted with GE's Representative present.

B. The Contractor shall be responsible for ensuring that the waste meets the approved TSDF's acceptance criteria. The Contractor shall be responsible for all costs involved in the handling of any wastes deemed unacceptable by the approved TSDF.

C. Tank size is estimated only. The Contractor is responsible for verifying the tank size.

D. Following the removal of each UST, five samples from the tank excavation pit shall be collected, sampled and analyzed in accordance with the Department's guidance document (August 1992 NYSDEC STARS Memo No. 1). In addition, the soil removed from the excavation shall also be sampled, analyzed and disposed of as necessary in accordance with the STARS Memo and the field analyzed PCB concentrations.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

A. The Contractor shall:

1. Remove all product to its lowest draw-off point.

2. Drain and flush piping into the tank (one or two gallons of water should be sufficient).

3. The liquid below the draw-off point is a "tank bottom" and must also be pumped out using a handpump or a vacuum pump. This liquid may consist of a floating layer of product, water and sediments. Pump out the entire tank bottom including any remaining product layer.

4. Dig down to the top of the tank and expose the upper half of the tank.

5. Remove the fill tube and disconnect the fill, gauge, product and vent lines. Cap or plug open ends of lines which are not to be used further.

6. Temporarily plug all tank openings, complete the excavation, and remove the tank, placing it in a secure location. The tank must be blocked to prevent movement.

B. The tank shall be made safe by using one of the following methods. In all methods, the tank atmosphere must be checked to ensure that vapors have been satisfactorily purged from the tank.

1. Addition of dry ice; 1.5 pounds per 100 gallons of tank capacity. The dry ice shall be crushed and distributed evenly over the greatest possible area of the tank's interior. As the dry ice vaporizes, flammable vapors will flow out of the tank. Therefore, observe all safety precautions regarding flammable vapors.

2. Introduce CO_2 gas directly into the tank (via the fill line) to purge flammable vapors. A minimum of one 75 lb cylinder of CO_2 gas per 2,000 gallons of tank volume must be used. Care must be exercised to prevent buildup of any static charge. The nozzle must be bonded or grounded and the gas introduced slowly to reduce static electricity.

3. Introduce nitrogen gas directly into the tank (via the fill line) to purge flammable vapors. Vapors within the storage tank must be displaced with an amount of nitrogen gas equal to or greater than the volume of the tank atmosphere. Bonding or grounding of the nozzle or hose to prevent static buildup is required.

4. The tank atmosphere must be tested to ensure that the tank has been properly purged. The tank interior must be tested with an oxygen meter giving a reading of percent oxygen per volume. For a safe condition, the readings shall be 6 to 7 percent oxygen.

   If the tank is not in a safe condition, then the purging or inerting process must be continued until the tank tests safe.

5. The tank interior shall be cleaned by a high pressure spray rinse. The water collected from this operation should be disposed of in the same manner as the tank bottoms. The tar and sludge remaining in the tank must be removed by manual cleaning methods. Tank entry for cleaning requires protective clothing, auxiliary air and masks for personnel involved.

   The tank shall be cut into several pieces for disposal by recycling.

C. Solid residuals which may be present in the UST shall be disposed of, as appropriate. Because it is not expected that liquids will be present, any liquids shall be disposed of off-Site, at time and material rates to be negotiated by the parties.

D. Disposal

Tank and Associated Piping:

After the tank is decontaminated, the exterior of the tank shall be tested for PCB concentrations. The tank shall be prepared for transportation and transported by the Contractor for disposal at a GE approved recycling facility/scrap yard or other facility in accordance with Section 02221.

Tank Contents:

All tank contents shall be disposed off-Site at GE approved facilities, in accordance with Section 02221.

END OF SECTION

SECTION 02088
CONFIRMATORY SAMPLING AND ANALYSIS

PART 1 GENERAL

1.01 SUMMARY

A. Section includes: The outline of procedures to perform confirmatory sampling and analysis for building decontamination and soil excavations.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 CONFIRMATORY SAMPLING AND ANALYSIS OF BUILDING DECONTAMINATION

A. Upon completion of the pressure washing or hand washing, as appropriate, of all impervious non-porous surfaces to be cleaned, GE's Representative will conduct white glove testing of the surface. The Contractor will, at no extra cost to GE, reach a standard of "white glove clean" in all areas accessible to being wiped or tested by a finger in a white glove. If the white glove testing shows no residual material, a minimum of one wipe sample will be taken from each non-porous wall, superstructure surface, skylight and the interior and exterior of the air handling unit.

B. Where possible, on-site analyses determining the concentrations remaining after each washing will be performed by GE's Representative. Based on the results of analyses, GE's Representative shall determine whether an acceptable concentration has been obtained and whether additional applications of cleaning solution or scarification are required. The acceptable concentration is 10 ug PCBs/100 square centimeter surface area for wipe samples for impervious nonporous surfaces.

C. In the case of non-impervious surfaces such as concrete or brick, a white glove test will be used to evaluate completion of decontamination. The Contractor will, at no extra cost to GE, reach a standard of "white glove clean" in all areas accessible to being wiped or tested by a finger in a white glove. All re-cleaning of non-impervious surfaces will be at the Contractor's expense until the surfaces pass the white glove test. Once the surfaces pass are white glove clean, wipe samples will be collected over a grid for field analysis to screen for compliance with the cleanup criteria. If

these wipe samples indicate compliance, surface scrapings will be collected by GE's Representative from the top centimeter of 20% of the grid locations to confirm that a cleanup level of less than 50 micrograms PCBs per gram of scraping. In the event a given sample indicates higher concentrations than the cleanup level, GE's representative may authorize additional cleaning at the Contractor's unit rate.

D. The Contractor shall coordinate activities with GE's Representative. Sampling may require a temporary cessation of Contractor's activities in area being sampled. No extra payment will be made for standby time during sampling or analyses periods. The Contractor will supply equipment and access for GE's Representative to collect white glove, wipe and surface scraping samples.

3.02 CONFIRMATORY SAMPLING OF SOIL EXCAVATION

A. Upon completion of the excavation to the specified depth, GE's Representative will take a representative sample of the soil. A minimum of one soil sample will be taken from every 500 square feet of the base of the excavation. One soil sample will also be taken from every 50 linear feet of sidewall of the excavation.

B. Where possible, on-site analyses determining the concentrations remaining after excavation will be performed by GE's Representative. Based on the results of analyses, GE's Representative shall determine whether an acceptable concentration (i.e., less than 1 ppm in upper 12 inches, less than 10 ppm at other depths or to a lesser depth as directed by GE's Representative) has been obtained or whether additional excavation is required.

C. The Contractor shall coordinate activities with GE's representative. Sampling may require a temporary cessation of Contractor's activities in area being sampled. No extra payment will be made for standby time during sampling or analyses periods. The Contractor will supply equipment and access for GE's Representative to collect soil samples.

D. The Contractor shall supply equipment and access for GE's Representative to collect soil samples under the building during the excavation of soils on the south side of the building.

3.03 UNDERGROUND STORAGE TANK

A. The excavation remaining after removal of the underground storage tank will be sampled following the NYSDEC STARS protocol. Analyses of these samples will be conducted at an off-site GE approved laboratory to demonstrate compliance with the STARS cleanup levels.

B. The excavation for the underground storage tank will remain open while awaiting the results of the STARS sample analyses, thereby requiring a temporary cessation of Contractor's activities in the underground storage tank area. No extra payment will be made for standby time during sampling or analyses periods. The Contractor will supply equipment and access for GE's Representative to collect soil samples from the underground storage tank excavation.

C. The Contractor will supply equipment and access for GE's Representative to conduct testing of the exterior of the surface of the tank with off-site analysis of the samples collected for disposal characterization.

END OF SECTION

SECTION 02090
BUILDING DECONTAMINATION

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. General decontamination activities
2. General cleaning steps for interior building surfaces
3. Specific surface decontamination details
4. Air exhaust unit
5. Windows
6. Machinery
7. Control of waste cleaning agent

1.02 SUBMITTALS

A. The Contractor shall submit to GE a Work Plan indicating the decontamination methods proposed for this scope of work. The Work Plan shall include, but is not limited to, a brief description of the proposed work, a list of materials and equipment, a description of any proposed cleaning solutions, required number of personnel necessary to accomplish this task and a description of the plan for treatment or disposal of generated waste. The Work Plan shall also include the "Lock-out/Tag-out" procedures for any active equipment requiring decontamination. A schedule for performance of Work shall be included in the Work Plan. Any changes in this Work Plan shall be submitted to GE's Representative as promptly as possible.

PART 2 PRODUCTS

2.01 CLEANING MATERIALS

A. Cleaning materials or chemicals for decontamination shall be specified in the Work Plan and must be approved by GE or GE's Representative prior to being brought on-site. The primary cleaning materials anticipated for this project include potable water and a non-phosphate detergent, to be used in conjunction with a steam cleaning unit, and GE-approved solvents for washing of machinery in accordance with 40 CFR 761.79 (a) and (b).

2.02 PAINT

A. Manufacturer's information on the color and type of paint for the interior of the Building shall be provided to GE's Representative for approval at least two weeks prior to the scheduled application of the paint.

2.03 REPLACEMENT MATERIALS

A. The following floor areas require replacement once the contaminated surfaces are removed and the subfloor structures are decontaminated and repaired:

1. The majority of the main shop floor presently consists of wood blocks with concrete patching. These materials shall be removed and replaced with a 7-inch thick reinforced concrete slab, with a minimum strength of 3,000 pounds per square inch (psi). Additionally, to provide a level surface throughout the main shop area it will be necessary to pour additional reinforced concrete above the floor areas where a concrete slab is already present (see Drawing C-3 for approximate locations; however, Contractor is responsible for determining which concrete areas are competent and only require an additional 3 inch layer of concrete and which areas require complete replacement with a 7 inch layer of concrete with appropriate rebar).

2. The Contractor shall, during the replacement of the floor of the main shop area, repair the caved-in floor areas (see Drawing C-3 for approximate locations). The Contractor ~~is responsible to design~~ shall follow the requirements established by Sweeney Steel appropriate replacement systems and repair these areas to the satisfaction of GE and GE's Representative. The replacement systems must be equivalent to or exceed the structural capacity of the subfloor systems in the undamaged areas of the main shop area

and be capable of supporting the new reinforced concrete floor slab.

3. The Contractor shall create a tapered slope at three locations during the installation of the 7" poured concrete floor: (1) the loading dock area on the east side of the building, (2) the south exit and under the west mezzanine, and (3) the steps leading to the boiler room on the north side of the building. At all three of these locations, the floor should be tapered at following the detail provided on Drawing C-5.

2.04 REPLACEMENT EQUIPMENT

A. Should the replacement of the air handling unit be more economical than decontamination, the existing unit shall be removed and disposed of as ~~TSCA contaminated material~~ RCRA Nonhazardous waste. A new unit shall be installed, meeting or exceeding the parameters of the discarded unit as included in Appendix B of this package. Any replacement unit shall be proposed by the Contractor, subject to the approval of GE and GE's Representative.

PART 3 EXECUTION

3.01 GENERAL DECONTAMINATION ACTIVITIES

A. The following general activities shall be performed by the Contractor during decontamination:

1. The Contractor is responsible for the control and collection of all waste materials generated during decontamination activities.

2. The Contractor shall coordinate activities with GE's Representative to allow sampling by GE's Representative in accordance with Section 02088 to demonstrate completion of decontamination activities.

3.02 GENERAL CLEANING STEPS FOR INTERIOR SURFACES OF THE BUILDING

A. The following general cleaning procedure shall be used for cleaning interior building surfaces:

1. Solids shall be removed from building surfaces by procedures such as chiseling, scraping, or scrubbing to remove solids such as

sediment and encrustation, followed by vacuuming to remove dust and other fine particulates. Vacuum units shall be equipped with HEPA filters.

2. Cleanup with cold or hot water and/or detergent solution, using high pressure application on hard surfaces such as superstructure, walls, stairways, shelving, floors and interior of the roof; and hand application on surfaces such as the skylight windows, which would be damaged by high pressure washing. Additionally, in areas where fiberglass insulation or porous building materials are present which could be damaged by water, only vacuuming followed by wiping shall be utilized.

3. If shown to be necessary by results of wipe tests taken after cleaning, the exposed areas shall be abraded to remove the upper layer where it is contaminated with PCBs. This step shall not be implemented until specifically instructed to do so by GE or GE's Representative. If surfaces must be abraded, Contractor must demonstrate to GE's satisfaction that abrasion method will minimize the generation of airborne dust and particulates.

4. All interior surfaces, including floors, walls, and structural supports, will be pressure washed with a combination of cold or hot water and/or detergent solution. All wash water shall be collected. Every effort shall be made to prevent damage to building features. Repair of damages to building materials shall be the responsibility of the Contractor. Use of detergents should be managed to only where necessary to meet cleanup criteria.

5. Upon completion of decontamination, all interior surfaces of the building including walls and ceiling area will be painted with one coat of white paint as approved by GE's Representative.

6. The Contractor shall be prepared to repeat any cleaning, wiping, decontamination, abrading, or scarifying efforts as directed by GE's Representative. Final approval of clean non-impervious surfaces will be based on a "white glove" test, followed by confirmatory wipe samples, by GE or GE's Representative.

3.03 SPECIFIC SURFACE DECONTAMINATION DETAILS

A. The following specific cleaning procedure shall be used for each applicable surface.

1. Non-impervious surfaces exposed to the building including painted masonry walls, stairways, shelving, the building superstructure and sheet metal surfaces may be cleaned by: 1) wire brushing or scraping excess materials, if necessary, followed by vacuum collection; 2) high-pressure hot or cold water and/or detergent wash; and, 3) hand-wiping the surfaces dry, as necessary. Excess water from the pressure-washing activities shall be collected by the Contractor. Care shall be taken to avoid damaging areas near insulation and windows and to limit cleaning materials from contacting the floor in certain areas. The Contractor shall be responsible for repair of damaged materials or collection of spilled materials at his own expense.

2. Porous surfaces exposed to the building including wood walls, plasterboard walls and fiberboard materials may be cleaned by: 1) wire brushing or scraping excess materials if necessary followed by vacuum collection; 2) wiping or mopping with an approved cleaner; and, 3) hand-wiping the surfaces dry. Care shall be taken to avoid damaging areas near insulation and windows and to avoid cleaner from contacting the floor. The Contractor shall be responsible for repair of damaged materials or collection of spilled materials at his own expense.

3. The wooden blocks on the main shop floor shall be removed along with any concrete patches. The exposed surface shall be initially scraped or wire-brushed to remove solids such as sediment and encrustation, if necessary. The subfloor under the wood block shall then have all mastic, waste materials, or other materials removed. If cleanup verification samples indicate PCB contamination above cleanup standards on the subfloor, the Contractor may be directed to scarify the subfloor to remove the surface. The Contractor shall demonstrate that such scarification can be accomplished with a minimum of dust or particulate generation.

4. Caved-in floor areas shown on Drawing C-3 appear to be comprised of poured concrete. These areas will need to be removed to allow replacement with new concrete. The Contractor shall remove the existing floor in a manner approved by GE or GE's Representative.

5. The floor areas outside the main shop floor have been tested and found to be free of PCBs; however, the floor tile surfaces will be

cleaned with a hot or cold water and/or detergent solution and polished. Office equipment or furniture that is damaged during temporarily moving during cleaning and polishing will be the Contractor's responsibility and will be repaired or replaced at the Contractor's expense.

3.04 DECONTAMINATION OF THE AIR EXHAUST UNIT

A. The Johnson Heater Corporation heating unit shall be cleaned as follows with appropriate lock-out/tag-out procedures:

1. Return air "grilles" will be removed. These are expanded metal frames enclosing structural unit supports. These shall be cleaned, repainted and reinstalled. As an alternative, they may be refabricated as duplicates, from all new materials, painted to match the existing or replacement unit and installed.

2. The supply air plenum distribution system shall be cleaned, painted, reinstalled, or replaced, in accordance with the instructions outlined in Step 1.

3. After removal of the supply and return "grilles", a vacuum collection device shall be placed at the return end of the unit. This device shall consist of a bag filter, a 95% prefilter, and finally a HEPA filter section, all connected to a solid metal plenum completely enclosing the return (bottom) section of the unit. The only perimeter opening allowed in this plenum shall be for the vacuum collector connection.

4. The vacuum collection device shall be activated, and the cleaning crew, with proper PPE, shall brush down internal heat exchange surfaces using properly sized "boiler brushes". Brushes shall be used in such a way as to "push" the accumulated dirt downward towards the collection device connected to the temporary fully enclosed return plenum. The fan scrolls shall be cleaned, being careful not to disturb balance weights. The motor shall be cleaned.

5. On the gas side of the unit, a hose from the vacuum collection device shall be inserted into the fire box through the flange-mounted burner opening. The flue and cap shall be carefully removed in such a way as to minimize dusting and disposed of as contaminated scrap. The interior of the gas-side shall be cleaned through the flue opening, and other access ports as available, or as

directed by the manufacturer. The entire combustion chamber and all heat-exchange surface shall be particulate-free to GE's Representative's satisfaction. The gas "gun" shall be rebuilt and cleaned in accordance with manufacturer's specifications.

6. At the completion of the cleaning process, all collected material shall be disposed of as contaminated waste. The unit filters and drive belts shall be replaced and one spare set of each shall be provided, as maintenance replacement items. The temporary solid return air plenum shall be carefully dismounted to minimize dusting, and disposed of as contaminated waste. The rebuilt and cleaned gas "gun" shall be reinstalled and the new or cleaned supply and return air devices shall be reinstalled. A completely new flue (all new materials, except roof penetration flushing) shall be installed of like material to that removed. Power connections shall be re-established using appropriate lock-out/tag-out procedures. The unit shall be energized and fired. Firing rate, air flow rate, stock conditions, and so forth, shall be adjusted to meet manufacturer's standards and recommendations. The data motor readings for power draw and rpm shall be reviewed by GE's Representative prior to final acceptance of the reconditioned unit. Motor replacement to meet design conditions, if necessary, are part of this specification.

The Contractor has the option of removing the current air heater and replacing the heater with a similar unit with the same performance. A copy of the Johnson Heater Specifications are included in Appendix B of this Package.

3.06 WINDOWS

A. The following cleaning activities shall be conducted for the interior skylight windows within the main building:

1. Only the interior of the skylight windows are to be thoroughly cleaned using the following method.

2. The Contractor shall wipe down the windows with the appropriate cleaning solution and collect all washwaters.

3. A white glove test followed by confirmatory sampling will be conducted.

B. The following cleaning activities shall be conducted for the windows along the exterior walls of the main building:

1. The interior surfaces of the windows along the exterior walls are to be flushed with a detergent/water solution until white glove clean. All decontamination water is to be collected.

2. After cleaning, these windows will be removed as part of the Work described in Section 04270.

3.07 MACHINERY

A. The following decontamination activities shall be conducted for the Sweeney Steel equipment, including but not limited to the list of equipment provided in Appendix C of this Package.

1. All machinery in the main building shall be wiped down and cleaned with appropriate cleaning solution in accordance with 40 CFR 761.79 (a) and (b). The cleaning solution to be used will be approved by GE's Representative. Designated pieces of machinery will be cleaned prior to mobilization to allow them to be moved to an off-site location. This will expose the underlying wood block floor for removal. Other machinery shall be moved temporarily by the Contractor. On site storage of machinery during flooring replacement will be the responsibility of the contractor.

2. A white glove test followed by confirmatory wipe samples collected by GE's on-site representative that demonstrate successful decontamination must be achieved prior to movement of machinery. If the wipe tests indicate the machinery requires further decontamination, the Contractor shall provide additional cleaning efforts until wipe samples indicate appropriate cleanup standards have been achieved.

3.08 CONTROL OF WASTE CLEANING AGENT

A. The following specific cleaning procedure shall be executed as follows:

1. The Contractor shall collect all decontamination materials generated during performance of this contract. This shall include but not be limited to rags, wipes, all washwater, sandblast sand, pressure washwater, dirt, and grit.

2. The Contractor shall maintain, to the extent possible, the floor free of spent cleaning agent resulting from cleaning activities.

3. Under no circumstances shall the Contractor allow cleaning agent to leave the building uncontrolled. Should cleaning agent leave the building and contaminate other media, that media shall be cleaned by the Contractor and all waste disposed at the Contractor's expense, at no additional cost to GE.

4. Under no circumstances shall the Contractor allow cleaning agent to contact previously cleaned and inspected surfaces or newly replaced surfaces. Should cleaning agent come in contact with cleaned and inspected or newly replaced surfaces, and contaminate this media, that media shall be cleaned by the Contractor and all waste disposed at the Contractor's expense, at no additional cost to GE. The Contractor will also cover the cost for GE's Representative to reinspect and retest the surfaces after the cleaning.

END OF SECTION

SECTION 02220
EXCAVATING, BACKFILLING AND GRADING

PART 1 GENERAL

1.01 SUMMARY

A. Section includes: excavation of soil in areas south and west of the building, backfill and compaction for all soil excavations, placement of backfill for the geotextile installation south of the building and grading of backfill.

1.02 REFERENCES

A. State of New York Department of Transportation Standard Specifications, dated January 2, 1995 (NYSDOTSS) and all addenda.

B. American Association of State Highway and Transportation Officials (AASHTO):

1. AASHTO T 2, Sampling Stone, Slag, Gravel, Sand, and Stone Block for Use as Highway Materials.

2. AASHTO T 27, Sieve Analysis of Fine and Coarse Aggregates.

C. American Society for Testing and Materials (ASTM).

1. ASTM D 2487, Standard Test Method for Classification of Soils for Engineering Purposes.

D. United States Environmental Protection Agency (USEPA)

1. Test Methods for Evaluating Solid Waste - Physical/Chemical Methods, SW-846, 3rd Edition.

1.03 SUBMITTALS

The Contractor shall:

A. Submit written reports of all specified tests showing conformance of the materials with the specifications. Submit results of USEPA tests (chemical

analyses) for approval by GE or GE's Representative of borrow source at least three days prior to the planned delivery date of off-Site borrow.

B. Submit to GE's Representative for review, at least seven days prior to installation, certificates, signed by the material producer and the Contractor, stating that the following materials meet or exceed the specified requirements:

1. Backfill for geotextile installation.

1.04 QUALITY ASSURANCE/QUALITY CONTROL

A. Contractor shall retain the services of an approved inspection and testing firm (QC Firm) to determine conformance of the materials and constructed work with the specifications, in accordance with Sections 01400 and 01410.

B. Contractor shall retain the services of a chemical analytical laboratory capable of demonstrating experience and compliance with EPA SW-846 analytical methods, including quality assurance and quality control measures.

1.05 PROJECT CONDITIONS

A. The Contractor is solely responsible for excavation slope stability. Excavation work shall be in compliance with applicable OSHA regulations, and in accordance with the Contractor's Health and Safety Plan, prepared as specified in Section 01100.

B. Work shall be performed in a manner that does not disturb existing structures, utilities, or other facilities not indicated to be removed.

PART 2 PRODUCTS

2.01 SOURCE QUALITY CONTROL

A. Any materials proposed for use by the Contractor shall be approved for use on this project by GE's Representative as specified, prior to use of the material in the construction.

2.02 SOIL EXCAVATION BACKFILL MATERIAL

A. The primary source for backfill material at depths below one foot shall be on-Site soils which have been removed from surface (less than one foot below ground surface) areas or were stockpiled during the 1996 on-Site sewer remediation. These soil shall have been field analyzed by GE's Representative and found to contain less than 10 ppm PCBs.

B. A secondary off-Site source for fill material may be used if there is no available on-Site material. Backfill material from off-Site sources for backfill must be obtained from a GE-approved source.

C. Soils obtained from off-Site borrow sources shall be bank run material with characteristics consistent with GM, SW, SP or SM soils or blends of these materials, as defined by the Unified Soil Classification System.
Backfill material shall not have greater than 20% fines.

D. Testing of Off-Site Borrow

1. Soil Type (ASTM D 2487): Minimum of one test for every 1,000 cubic yards of loose soil, or fraction thereof, and for each material change.

2. One sample of the proposed borrow soil, from the proposed off-site borrow source, shall be analyzed for US EPA priority pollutant compounds as follows:

Analytical Parameter	SW-846 Method
Volatile Organic Compounds	8260
Base/Neutral/Acid Extractable Organic Compounds	8270
Pesticides/Polychlorinated Biphenyls	8080
Metals	6010/7000 Series
Cyanide	9012

E. Soil obtained from off-site borrow sources shall not contain concentrations of the chemical parameters for which analyzed that are above natural background levels.

2.03 GEOTEXTILE BACKFILL MATERIAL

A. Material used for backfill in the on-Site excavations shall be obtained from a GE-approved source.

B. Shall be crushed gravel, having characteristics consistent with GW or GP soils as defined by the Unified Soil Classification System.

C. Shall be substantially free of sharp edges or corners, and debris. Maximum particle size shall be 3/8 inch or less.

D. Testing of Soil

1. Soil type (ASTM D 2487): Minimum of one test for each visible change in material as determined by GE's Representative.

PART 3 EXECUTION

3.01 PREPARATION

The Contractor shall:

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

B. Identify required locations and elevations.

3.02 EXCAVATION OF DESIGNATED SOILS

The Contractor shall:

A. Excavate soils along the south and west areas of the building, as shown on the Drawings. Use temporary sheeting as necessary to maintain the

excavation sides and to avoid removal of soil from beyond the specified limits.

B. For all soil remediation adjacent to the building, soil shall be excavated to a maximum depth of three feet below grade along the foundation wall. Excavation shall then proceed with a maximum slope ratio of 2 horizontal to one vertical until the required depth of remediation has been achieved. Sampling and on-Site analyses will then be conducted by GE's Representative to determine the PCB concentrations in horizontal and vertical direction from the slope line. Contractor shall be prepared to grout or otherwise support the slope line of the excavation to allow excavation of further additional soil. Following excavation, geotextile shall be placed on the sloped surface.

C. Dewatering of excavation shall be avoided. However, if ground water is displaced during construction, it shall be collected in temporary containers provided by the Contractor using equipment and methods approved by GE and GE's Representative. The Contractor will be responsible for analysis and disposal of the water. Removed water containing hazardous constituents, based on laboratory testing, shall be disposed of at a GE-approved disposal facility appropriate to the regulatory status of the material.

D. Removal of materials beyond the indicated subgrade elevations and horizontal limits, without written authorization by GE or GE's Representative, shall be classified as unauthorized excavation and shall be backfilled and compacted at no additional cost to GE.

E. The Contractor shall coordinate activities with GE's Representative to allow sampling of the excavation in accordance with Section 02088 prior to backfilling. Sampling may require a temporary cessation of Contractor's activities in the area being sampled. No extra payment will be made for standby time during sampling or analyses periods. The Contractor will supply equipment and access for GE's Representative to collect samples from the excavation.

3.03 HANDLING OF EXCAVATED SOILS

A. Soil removed from the designated areas shall be tested for PCBs. The soil shall be classified by GE's Representative as reusable or to be disposed off-Site as specified in Section 02221.

B. Keep the stockpiled excavated soil confined and covered to protect it against the elements (wind, rain, and erosion). If requested by GE's Representative, a silt fence shall be installed along the perimeter of the stockpile.

C. All soils which are excavated shall be sampled and field analyzed by GE's Representative for PCB content prior to being managed on-Site, if less than 10 ppm PCBs, or transported off-Site for disposal by the Contractor at a GE-approved disposal facility.

D. Excavated soils which are stockpiled on-Site must be staged and covered as shown on the Detail 1 in Drawing C-5.

3.04 BACKFILLING OF EXCAVATIONS

The Contractor shall:

A. Not backfill the excavations until surveying has demonstrated that the excavation complies with the Project Manual or is shown to meet the remediation standards and approved by GE's Representative.

B. Backfill

1. Soil shall be placed an uniformly spread in lifts not exceeding eight inches thickness, loose measure, and compacted with five passes of the Contractor's compaction equipment. Any settlement which occurs in areas impacted by the Work shall be corrected by the Contractor.

2. For areas located within three feet of the walls of the building, compact the soil fill with manually guided "jumping jack" type compressors.

3.05 GRADING

A. The Contractor shall smooth the finished surface within tolerance of two inches above or below the required elevation, unless otherwise approved by GE's Representative.

3.06 MAINTENANCE

A. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify the surface, reshape, and compact to the required density prior to further construction.

B. Protection of Newly Graded Areas:

1. Protect newly grade areas from traffic and erosion.

2. Repair and reestablish grades in settled, eroded and rutted areas.

END OF SECTION

SECTION 02221
DISPOSAL OF WASTE MATERIALS

PART 1 - GENERAL

1.01 DESCRIPTION:

A. Section includes all labor, equipment, materials and services necessary to properly sample, profile, and manifest for all soil, waste materials and construction debris generated during the building decontamination and soil remediation, at facilities described in Part 2.

B. The Work described in this section also includes the sampling and analyses for waste acceptance and the disposal of all decontamination wastewater generated during the building decontamination and soil remediation work.

C. Optional Work also described in this Specification shall include all labor, equipment, materials and services necessary to properly dispose of the following Waste Materials, at facilities described in Part 2:

1. TSCA PCB/New York State hazardous soil, sediments and debris which have PCB concentrations greater than 25 ppm PCB concentrations.

2. Subtitle D non-hazardous soil, sediments and debris with PCB concentrations less than 25 ppm..

3. Non PCB-containing construction debris.

1.02 GENERAL REQUIREMENTS:

A. The Contractor shall stage TSCA (PCB) and Subtitle D wastes separately.

B. All materials indicated on the Drawings to be contaminated materials requiring excavation must be disposed of, at a minimum, to a Subtitle D landfill and as specified in paragraph 1.02 (D). This requirement includes but is not limited to wastes associated with the Work such as grubbed materials and personal protective equipment.

C. All other wastes and debris generated during the Work may be disposed as construction and demolition (C & D) debris if sampling by Contractor

shows this to be the appropriate disposal alternative, or to a regulated TSDF based on sampling results. C&D disposal requirements are expected to extend, for example, to grubbed material from the Site.

D. Specific waste classification requirements for the Project are as follows, requiring disposal to the type of facility listed.

1. TSCA-Permitted Disposal Facility:

a. Any Waste Materials containing a PCB concentration greater than or equal to 25 mg/kg, based on Contractor's waste profile sampling required in paragraph 1.03 or the on-Site field analysis using an immunoassay field test kit..

2. Subtitle D-Permitted Facility:

a. Waste Materials ~~with detectable concentrations of~~ concentrations equal to or greater than 10PPM PCBs below 25 parts per million to be disposed off-site will be managed as Subtitle D wastes. Sampling and field analysis conducted by GE's Representative shall verify the wastes within this classification. No waste will be sent off-site to a Subtitle D facility until representative samples have been collected by GE's Representative and field analyzed for PCB content. Further waste profiling to meet the requirements of the disposal facility are the responsibility of the Contractor, as described in paragraph 1.03.

Soil containing less than 10PPM will be used as backfill material on site at depths below one foot

3. Construction and Debris (C&D) Landfill :

a. Certain scrap materials and debris to be disposed off-site are expected to have nondetectable concentrations of PCBs and be disposed as C&D waste. Sampling conducted by Contractor shall verify the disposal requirements for these wastes.

E. All Waste Materials shipments shall be properly manifested on required federal and/or state manifest forms. Manifest forms shall be provided by and completed by Contractor, and will be signed by GE or GE's Representative as generator of the waste.

F. Manifests shall be signed by an authorized representative of the disposal facility upon receipt of each Waste Material shipment at the facility. Manifest forms shall be distributed in accordance with federal and state regulations. Non-hazardous Waste Materials shall be manifested on "Non-

Hazardous Waste Manifest Forms" provided by Contractor. Forms shall be approved by GE's Representative prior to shipment of Waste Materials.

G. Contractor shall be responsible for the proper management, transportation to disposal and disposal of all decontamination wastewater.

1.03 WASTE PROFILING AND SAMPLING:

A. Contractor shall be responsible for sampling all Waste Materials and Construction Debris, as required by the TSCA disposal facility, the Subtitle D disposal facility or the C&D disposal facilities selected by Contractor in order to properly profile the Work Materials and obtain disposal approvals.

B. At a minimum, one sample shall be analyzed for every 500 cubic yards of Waste Materials or Construction Debris to be disposed of. Each sample shall be analyzed for the parameters required by the disposal facility(s) to obtain disposal approvals, and for the following:

1. TCLP parameters, except herbicides and pesticides.

2. Ignitability, Corrosivity, and Reactivity.

3. PCBs.

C. All liquids to be disposed of off-Site shall be sampled as necessary to obtain disposal facility approvals. These liquids include but are not limited to: washwaters generated during the building interior decontamination, personnel decontamination and equipment decontamination.

1.04 SUBMITTALS:

In accordance with the General Conditions and Section 01100, Contractor shall submit the following:

A. Copies of all manifest forms required under federal and state regulations, following disposal of wastes. Contractor shall ensure that copies of manifest forms are distributed among regulatory agencies as required. Contractor shall ensure that TSDF-signed copies of the manifest are sent to:

Mr. John Harrsen
Manager Remedial Projects
General Electric Company
Building 2, Room B43
One River Road
Schenectady, NY 12345

B. Copies of all profiles, sample and analytical results, and all other paperwork generated in performing the Work described herein.

C. A list of all TSDFs and disposal facilities proposed for its Work. Requirements of the TSDFs and facilities are listed in paragraphs 2.01 through 2.05.

D. Copies of weight tickets for all shipments of Waste Materials. These weight tickets will serve as the basis of payment for disposal of all Waste Materials.

E. Contractor shall obtain and submit Certificates of Disposal within 30 days of disposal of all Waste Materials. These certificates shall comply with the requirements of 40 CFR 761.218 and/or 40 CFR 261 as applicable, and shall include:

1. The identity of the TSDF, including name, address and EPA identification number;

2. The identity of the Waste Materials for which the certificate of disposal is prepared, including reference to the manifest number for the truck;

3. A statement certifying the fact of disposal of the Waste Materials, including the date(s) of disposal, and identifying the disposal process used; and

The certificate of disposal must be received by GE before payment will be made to the Contractor for disposal of the corresponding Waste Material shipment.

G. Contractor shall obtain and submit said certificates within 30 days of the treatment and disposal of Waste Materials. These certificates shall include:

1. Written documentation that all vehicles are properly permitted to transport the Waste Materials intended for transport.

2. A letter from each TSDF, which complies with 6 NYCRR 372.2, certifying that the TSDF has the capacity to accept the volumes of Waste Materials offered for disposal.

1.05 OFF-SITE DECONTAMINATION:

A. Following disposal of Waste Materials, each truck shall be decontaminated and sampled at the disposal facility in accordance with all applicable federal, state and disposal facility requirements. All decontamination and sampling shall be performed by Contractor at no additional cost to GE.

B. A certificate of decontamination shall be submitted to GE's Representative for each truck which is required to be decontaminated.

PART 2 PRODUCTS AND EXECUTION

2.01 TSCA-PERMITTED TSDFs:

A. Contractor shall use one or more of the TSCA-permitted TSDFs listed below, for the disposal of PCB-contaminated Waste Materials described in paragraph 1.02 above.

1. CWM Chemical Services
Model City, New York

2. Chemical Waste Management
Emelle, Alabama

2.02 SUBTITLE D (NON HAZARDOUS) - PERMITTED LANDFILL:

A. Contractor shall use the Subtitle D TSDF listed below for the disposal of non-regulated (low PCB) wastes listed in paragraph 1.02 above.

1. High Acres Landfill
Fairport, New York

2.03 C & D LANDFILLS:

A. All Construction Debris, as described in Section 01010, generated at the Site during remediation activities, shall be disposed of by Contractor at a Contractor-selected off-Site construction and demolition debris facility which is approved by GE.

2.04 WATER DISPOSAL:

A. Contractor shall dispose of all decontamination waters at an off-Site GE approved TSDF under all provisions of these Contract Documents.

END OF SECTION

SECTION 02222
TOPSOIL

PART 1 GENERAL

1.01 SUMMARY

Section includes:

A. The types of topsoil Work required include the following:

1. Topsoil from off-site sources.

2. Topsoil testing to provide certified acceptability of topsoil for landscape Work.

3. Topsoil amendments, as may be required by test results to provide topsoil acceptable for landscape Work.

4. Spreading topsoil.

5. Maintenance Work.

1.02 REFERENCES

Comply with applicable provisions and recommendations of the following, except where otherwise shown or specified:

1. ASTM C 602, Agricultural Liming Materials.

2. ASTM D 2487, Classifications of Soils for Engineering Purposes.

3. Association of Official Analytical Chemists, Official Methods of Analysis.

4. United States Environmental Protection Agency (US EPA)

A. Test Methods for Evaluating Solid Waste-Physical/Chemical Methods, SW-846, 3rd Edition.

1.03 SUBMITTALS

1. Shop Drawings: The Contractor shall submit the following for GE or GE's Representative approval of topsoil at least three days prior to the planned delivery date of topsoil

   a) A written statement giving the location of the properties from which the topsoil is to be obtained, the names and addresses of the suppliers, the depth to be stripped and the crops grown during the past 2 years.

   b) Manufacturer's specifications and application instructions for all soil amendments required.

2. Test Reports: Before delivery of off-site topsoil submit for approval a soil analysis made by an approved soil testing laboratory stating porosity, the percentages of silt, clay, sand, and organic matter, the pH and the mineral and plant nutrient content of the topsoil.

3. Submit results of US EPA tests (chemical analyses) for GE or GE's Representative approval of borrow source at least three days prior to the planned delivery date of off-site borrow.

4. Certificates: Submit for approval certificates of inspection as may be required by governmental authorities to accompany shipments, and manufacturer's or vendors certified analysis for soil amendments. For standard products submit other data substantiating that materials comply with specified requirements.

1.04 QUALITY ASSURANCE/QUALITY CONTROL

A. Contractor shall retain the services of an approved independent inspection and testing firm (QC Firm) to determine conformance of constructed work with the specifications, in accordance with Sections 01400 and 01410.

B. Contractor shall retain the services of a chemical analytical laboratory capable of demonstrating experience and compliance with EPA SW-846 analytical methods, including quality assurance and quality control measures.

PART 2 PRODUCTS

2.01 MATERIALS

A. Topsoil:

1. Fertile, friable, natural loam, surface soil, capable of sustaining vigorous plant growth, free of any admixture of subsoil, clods of hard earth, plants or roots, sticks or other extraneous material harmful to plant growth. Supply topsoil with the following analysis:

a. 6 inch mesh: 100 percent passing
3/4 inch mesh: 90 percent passing
No. 200 sieve: 10-80 percent passing

b. Clay content of material passing #200 sieve not greater than 60 percent, as determined by hydrometer tests.

c. pH 5.5 to pH 7.6.

d. Organic content may range from 1 to 20 percent, as determined by ignition loss.

B. Soil Amendments:

1. Lime: Natural limestone containing not less than 88 percent of total carbonates, ground so that not less than 90 percent passes a 20-mesh sieve and not less than 60 percent passes a 100-mesh sieve.

PART 3 EXECUTION

3. 01 INSPECTION

A. Contractor and his installer shall examine the subgrade, verify the elevations, observe the conditions under which Work is to be performed, and notify GE's Representative of unsatisfactory conditions. Do not proceed with the Work until unsatisfactory conditions have been corrected in a manner acceptable to GE's Representative.

3.02 INSTALLATION

A. Place and spread topsoil, over the areas shown, to a minimum depth of 6-inches after natural settlement and light rolling, in a manner that the completed work conforms to the lines and grades shown.

B. Do not spread topsoil while in a frozen condition or when moisture content is so great that excessive compaction will occur nor when so dry that dust will form in the air or that clods will not break readily.

C. Do not compact topsoil.

D. After the topsoil is spread, remove all large, stiff clods, rocks, roots or other foreign matter over 2-inches.

E. Apply soil amendments, as required, by machine over all areas receiving topsoil, to bring the soil to a neutral pH. Work lightly into the top 3 inches of topsoil.

F. Manipulate topsoil to attain a properly drained surface.

G. Grade topsoil areas to smooth, even surface with loose, uniform, fine texture.

H. Roll and rake and remove ridges and fill all depressions, ruts, low spots or unsuitable areas which result after settlement so that the area is suitable for seeding and subsequent work.

3.03 MAINTENANCE

A. Maintain topsoiled areas by filling in erosion channels and correcting drainage as required.

B. Maintain the topsoil in a loose, friable condition until the Work under other Sections begins.

3.04 INSPECTION AND ACCEPTANCE

A. During topsoiling work, store materials and equipment where directed. Keep pavements clean and areas in an orderly condition.

B. Protection includes all temporary fences, barriers and signs and other Work incidental to proper protection.

3.05 INSPECTION AND ACCEPTANCE

A. When the topsoiling Work is completed, including maintenance, GE's Representative will make an inspection to determine acceptability.

B. Where inspected topsoil Work does not comply with the requirements, regrade rejected Work and maintain until re-inspected by GE's Representative and found to be acceptable.

3.06 JOB CONDITIONS

A. Environmental Requirements: Do not spread topsoil if condition is unsuitable due to frost, excessive moisture or other conditions. Cease Work until the topsoil is in a suitable condition as determined by GE's Representative.

END OF SECTION

SECTION 02234
CRUSHED STONE AND GRAVEL

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. Construction of a crushed stone and gravel base course for the area to be paved with asphalt

1.02 REFERENCES

A. State of New York Department of Transportation - Standard Specifications, dated January 2, 1995 (NYSDOTSS) and all addenda.

B. American Society for Testing and Materials (ASTM):

1. ASTM D422 - Particle Size Analysis of Soils

2. ASTM D4253 - Maximum Index Density of Soils Using a Vibratory Table

3. ASTM D4254 - Minimum Index Density of Soils

4. ASTM D2216 - Laboratory Determination of Water (Moisture) Content of Soil, Rock and Soil - Aggregate Mixtures

1.03 SUBMITTALS

A. The Contractor shall furnish certificates and test reports signed by the material producer and the Contractor stating that the materials meet or exceed the specified requirements at least three days prior to planned delivery date of the crushed stone and gravel.

1.04 QUALITY CONTROL

A. Contractor shall retain the services of an approved independent inspection and testing firm to determine conformance of material and constructed work with the specifications, in accordance with Section 01400 and 01410.

1.05 PROJECT CONDITIONS

A. Work shall be performed in a manner that does not disturb existing structures, utilities, or other facilities not indicated to be removed.

PART 2 PRODUCTS

2.01 MATERIALS

A. Road Gravel/Crushed Stone Subbase for Pavement

1. All materials furnished shall be well graded from coarse to fine and shall be free from organic or other deleterious material.

2. Material shall conform to NYSDOTSS Subbase Course, Type 2 as specified in NYSDOTSS Section 304-2.02.

3. The contractor shall provide certified copies of test reports three days before.

4. Blast furnace slag shall not be used.

5. No segregation of large and fine particles will be allowed, but the material as spread shall be well graded with no pockets of fine materials.

PART 3 EXECUTION

3.01 FIELD QUALITY CONTROL

A. Tests specified below shall be performed by the independent testing firm during construction of the base course at Contractor's expense.

1. In-Place Density Tests, using AASHTO T 191 or AASHTO T 238: Minimum of one test per lift for every 200 square yards of material placed.

2. Surface Tolerance: Test the finished surface with a 15-foot straight edge whenever GE's Representative suspects an area is deficient or irregular. The surface tolerance shall be as specified in subsection 3.06 below.

B. GE's Representative may direct additional tests to establish in-place density as required by working conditions, at the Contractor's expense.

3.02 PREPARATION

A. Refer to Section 02510 for construction of the subgrade.

B. Verify subgrade gradients and elevations are correct, and that subgrade is ready to receive base course.

C. Do not place base course on soft, muddy subgrade. Correct unsatisfactory subgrade conditions by scarifying and recompacting, replacement, or other methods approved by the GE's Representative.

3.03 TRANSPORTING

A. Base material shall be transported to the project without loss or segregation.

3.04 PLACING AND COMPACTION

A. Crushed stone and gravel shall be spread in layers of uniform thickness not exceeding 6 inches and shall be thoroughly compacted with suitable power driven tampers or other power driven equipment.

B. Pavement and structural subbase shall be a minimum of 6 inches of crushed stone subbase, placed and compacted in accordance with NYSDOTSS Section No. 304-3.01 through 304-3.04, and in other Sections, as specified or shown.

C. Place the crushed stone and gravel in a manner to avoid segregation. Uncontrolled spreading shall not be permitted.

D. Level and contour surfaces to elevations and gradients indicated on the Drawings.

E. Compaction shall follow the spreading operation closely to prevent loss of contained moisture and displacement of material.

F. Each layer shall be compacted to a density of at least 95 percent of the material's maximum dry density as determined by AASHTO T 180, Method D. The moisture content of the material shall be maintained within zero to three percentage points above the material's optimum moisture during compaction.

3.05 MAINTENANCE AND PROTECTION

A. Correct defects (such as mixing of the subgrade with base material and cracking of the compacted base) using methods specified in Section 304-3.02 and 3.03 of the New York State DOT Specifications.

B. Traffic on the completed base shall be held to the minimum amount necessary to complete the work.

C. Areas subjected to traffic shall be rechecked for grade and cross-section and necessary corrections made. Damaged areas shall be repaired using methods approved by the GE's Representative before succeeding courses are constructed.

3.06 SURFACE TOLERANCE

A. The finished surface of the base course shall be smooth and uniform. Irregularities shall not be greater than 1/2 inch when measured with a 15-foot straightedge.

B. Deviations shall be corrected using methods approved by GE's Representative.

END OF SECTION

SECTION 02278
GEOTEXTILES

PART 1 GENERAL

1.01 SUMMARY

A. Section includes supplying and installing geotextile for the containment of PCB contaminated soil left in place adjacent to and under the building's south wall.

1.02 REFERENCES

A. State of New York Department of Transportation - Standard Specifications, dated January 2, 1995 (NYSDOTSS) and all addenda.

B. American Society for Testing and Materials:

1. ASTM D 751, Method of Testing Coated Fabrics.

2. ASTM D 1117, Methods of Testing Non-woven Fabrics.

3. ASTM D 1682, Test Methods for Breaking Load and Elongation of Textile Fabrics.

1.03 SUBMITTALS

A. Submit the following to GE's Representative, for review and approval, no later than three calendar days prior to scheduled shipment of geotextile:

1. Documentation of manufacturer's qualifications as specified in subsection 1.04.A of this Section.

2. List of material properties and samples of the material.

3. Manufacturer's certification that the geotextile to be furnished for this project complies with the product specifications in this Section. The certification shall be signed by a responsible party employed by

the manufacturer, such as the QA/QC Manager, Production Manager, or Technical Services Manager. Certification shall include lot and roll numbers, and corresponding shipping information.

B. No geotextile shall be shipped until the certification is submitted to GE's Representative.

1.04 QUALITY ASSURANCE/QUALITY CONTROL

A. Manufacturer's Qualifications: The manufacturers shall be specialists in the manufacture of geotextile. Geotextile manufacturer shall have at least five years experience in the manufacture of such material or as approved by GE's Representative.

B. Installer's Qualifications: The Installer shall be the manufacturer or an approved contractor trained and licensed (if applicable) to install the manufacturer's product or as approved by GE's Representative.

1.05 DELIVERY, STORAGE AND HANDLING

A. Store material off of ground, rolled and covered to protect from ultraviolet light exposure, precipitation or other inundation, mud, dirt, dust, puncture, cutting or any other damaging or deleterious conditions.

B. Rolls shall be marked or tagged with the following information:

1. Manufacturer's name
2. Product identification
3. Lot number
4. Roll number
5. Roll dimensions

C. Replace defective or torn material at no cost to GE.

PART 2 PRODUCTS

2.01 SOURCE QUALITY CONTROL

A. The following test methods and frequencies shall be used, at a minimum, by the manufacturer for the quality assurance and control of the geotextile prior to shipment of the product.

B. Geotextile Manufacturing Quality Control:

1. ASTM D 1117, Trapezoid Tear Strength; ASTM D 1682, Grab Tensile Strength; ASTM D 751, Puncture Resistance; and Apparent Opening Size and Water Permeability (see table in 2.02 B of this Section). Frequency: One test per roll.

C. For manufacturer's quality control testing of geotextiles, the sample average test results (weaker principle direction for mechanical tests) for a particular property for any individual roll tested within a lot designated as first quality shall meet or exceed the Minimum Average Roll Value indicated in the manufacturer's certification.

2.02 GEOTEXTILE

A. The geotextile shall conform to Section 985 of the New York DOT Specifications. The fabric shall be resistant to deterioration due to ultraviolet light, heat exposure, commonly encountered chemicals, biological degradation, hydrocarbons, acids, alkalies and mildew.

B. Geotextile shall conform to the following minimum requirements:

Fabric Property	Unit	Test Method	Min. Avg. Roll Value*
Grab Tensile Strength	lbs	ASTM D 1682	90
Trapezoid Tear Strength	lbs	ASTM D 1117	50
Puncture Resistance	lbs	ASTM D 751	60

Fabric Property	Unit	Test Method	Min. Avg. Roll Value*
Burst Strength	psi	ASTM D 751	200
Apparent Opening Size (AOS)	Sieve Size	CW-02215 (1)	50-100

Notes: (1) U.S. Army Corps of Engineers Specifications.

D. Minimum roll width shall be 12.5 feet. The roll length shall be maximized in order to minimize seams.

PART 3 EXECUTION

3.01 PREPARATION

A. Surfaces to receive geotextile shall be smooth and free of litter, sharp protrusions, and large stones.

3.02 GEOTEXTILE INSTALLATION

A. Place the geotextile on the bottom and sides of the excavation.

B. Place geotextile in such a manner that placement of overlying material will not stretch or tear the fabric.

C. Overlaps of adjacent rolls of geotextile and at the top of the stone backfill shall be approximately two feet.

3.03 GEOTEXTILE REPAIR

A. Holes or tears in the fabric shall be repaired as follows:

1. A fabric patch shall be spot-seamed in place with a minimum of 36 inches of overlap beyond the perimeter of the tear or damage in all directions.

END OF SECTION

SECTION 02510
ASPHALT PAVING

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. Construction of bituminous pavement in areas disturbed by activities detailed in this contract

2. Resurfacing of existing bituminous designated areas

1.02 REFERENCES

A. State of New York Department of Transportation - Standard Specifications, dated January 2, 1995 (NYSDOTSS).

1.03 SUBMITTALS

A. Submit under provisions of Section 01100.

B. Submit to GE's Representative, at least seven days prior to installation, the following items for review:

1. Material list for items proposed to be provided under this Section.

2. Job-mix formulas for asphaltic concrete pavement.

3. Certificates, signed by the material producer and the Contractor, stating that the materials meet or exceed the specified requirements.

C. Progress Submittals

1. Submit, no later than the day after placement of each course, Contractor's quality control aggregate gradation and asphalt cement content test results.

2. Submit, within seven days after the date of placement, laboratory test reports.

1.04 QUALITY ASSURANCE/QUALITY CONTROL

A. Contractor shall retain the services of approved independent inspection and testing firm(s) to determine conformance of the materials and constructed work with the specifications.

B. Contractor shall use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.

C. Contractor shall use equipment adequate in size, capacity, and numbers to accomplish the work in a timely manner.

1.05 JOB CONDITIONS

A. Weather Limitations: Use weather limitations in the NYSDOTSS Sections 302-3.01 and 401.1-3.01 for the construction of base and surface courses.

B. Grade Control: Establish and maintain the required lines and grades, including but not limited to crown and cross-slope for each course during construction operations.

PART 2 PRODUCTS

2.01 SOURCE QUALITY CONTROL

A. Proposed materials shall be approved for use on this project by GE's Representative as specified, prior to the use of the material in construction.

2.02 MATERIALS

A. Aggregate, mineral filler, bitumen, and prime coat shall be in accordance with NYSDOTSS as detailed in Section 2.03.

B. Subbase shall be as specified in Part 2.01 A of Section 02234, Crushed Stone and Gravel.

C. Aggregate includes stone, gravel and sand.

D. Mineral filler includes limestone dust, Portland cement or other inert material.

E. Bitumen includes asphalt and tar cement.

F. Prime coat includes asphaltic cutback, tar or asphalt emulsion.

2.03 ASPHALTIC PAVING MIXTURES

A. Job Mix Criteria:

1. Provide job mix formulas as follows:

a) Bituminous Base Course: NYSDOTSS Item No. 403.13, Asphalt, Concrete, Type 3 Binder Base Course.

b) Surface Course: NYSDOTSS Item 403.16, Asphalt, Concrete, Type 6 Top Course.

2.04 PAVEMENT THICKNESS

A. Construction of Type 1: Replacement Pavement Area

1. Six (6) inches of gravel/stone subbase shall be provided as detailed in Section 02234.

2. The Contractor shall provide a binder course of two (2) inches.

3. Contractor shall provide two (2) inches of premixed surface course over the binder course for a total depth of four (4) inches.

B. Construction of Type 2: Pavement Area to be Refinished

1. Contractor shall provide one (1) inch of premixed surface course over the existing pavement.

C. Construction of Type 2: New Pavement

1. Contractor shall remove four (4) inches of existing stone and gravel and recompact the subbase to meet the requirements of Section 02234.

2. The Contractor shall provide a binder course of two (2) inches.

3. Contractor shall provide two (2) inches of premixed surface course over the binder course for a total depth of four (4) inches.

PART 3 EXECUTION

3.01 FIELD QUALITY CONTROL

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. In-Place Density Tests: Acceptance of each day's placement of asphaltic concrete shall be determined by using a nuclear densitometer in accordance with AASHTO T238.

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. Surface Smoothness:

1. Contractor shall test finished surface of each bituminous concrete course for smoothness, using a 10-foot straightedge parallel to and at right angles to centerline of paved areas.

2. Check surfaced areas at intervals directed by GE's Representative.

3. Surfaces will not be acceptable if exceeding the following:

a) Base Course: 3/8 inch in 10 feet.
b) Surface Course: 1/4 inch in 10 feet.
c) Crowned Surfaces:
   (1) Test crowned surfaces with a crown template, centered and at right angles to the crown.
   (2) Surfaces will not be acceptable if varying more than 1/4 inch from the template.

D. Tests for Depth

1. The depth of pavement courses shall be carefully controlled, with periodic measurement of the loose and compacted depths.

2. If GE's Representative requires, obtain at least one six-inch diameter core of the pavement for each 1,000 square yards of pavement constructed, or fraction thereof, for thickness measurements by the independent testing firm. Obtain at locations designated by GE's Representative.

3. GE's Representative may require the Contractor to obtain additional cores of the asphaltic concrete as necessary for acceptance testing at the Contractor's expense.

4. Obtain cores under the observation of GE's Representative and submit immediately to the independent testing firm with appropriate identification.

5. Fill core holes with asphaltic concrete the same day cored. Prior to filling, dry the holes so that no standing water remains. Thoroughly compact asphalt mixture and leave flush with the pavement.

6. Asphaltic concrete pavement cores shall be measured for thickness to the nearest 0.1 inch. If pavement is more than 1/4 inch deficient in depth, corrections shall be made as approved by GE's Representative.

3.02 INSPECTION

A. Examine the subgrade on which bituminous concrete shall be installed. Notify GE's Representative 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 GE's Representative.

3.03 SUBBASE

A. Subbase shall be a minimum of 6 inches thick as specified or shown and installed as specified in Section 02234, Crushed Stone and Gravel.

3.04 FRAME ADJUSTMENT

A. Set frames of drainage structures to final grade in an approved manner. Include existing frames and frames furnished under other Sections of these Specifications.

3.05 PAVEMENT INSTALLATION

A. Preparing the mixtures, paving equipment, placing the mixes, and compacting the mixes shall be in accordance with the NYSDOTSS.

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.

3.06 COMPACTION

A. Compaction shall comply with Sections 401-3.05 and 3.06 of the NYSDOTSS and as specified below.

B. Develop rolling with consecutive passes to achieve an even and smooth finish, without roller marks.

C. Use lightweight rollers or vibratory compactors within three feet of the building walls and in areas inaccessible to rolling equipment.

3.07 EXAMINATION

A. Verify compacted base course is ready to support paving and imposed loads.

B. Verify base course gradients and elevations are correct.

3.08 PATCHING

A. As directed by GE's Representative, remove and replace all defective areas. Cut-out such areas and fill with fresh bituminous concrete. Compact to the required density.

3.09 CLEANING AND PROTECTION

A. 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.

END OF SECTION

SECTION 02831
CHAIN LINK FENCE

PART 1 GENERAL

1.01 SUMMARY

A. Section includes installation of new chain link fencing along the north portion of the western property boundary as indicated on the Drawings.

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM A 90, Test Method for Weight of Coating on Zinc-Coated (Galvanized) Iron or Steel Articles.

2. ASTM A 123, Specification for Zinc (Hot-Galvanized) Coatings on Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates, Bars, and Strip.

3. ASTM A 392, Specification for Zinc-Coated Steel Chain-Link Fence Fabric.

4. ASTM A 428, Test Method for Weight of Coating on Aluminum-Coated Iron or Steel Articles.

5. ASTM A 491, Specification for Aluminum-Coated Steel Chain-Link Fence Fabric.

6. ASTM A 570, Specification for Hot-Rolled Carbon Steel Sheet and Strip, Structural Quality.

7. ASTM A 572, Specification for High-Strength Low-Alloy Columbium-Vanadium Steels of Structural Quality.

8. ASTM A 585, Specification for Aluminum-Coated Steel Barbed Wire.

9. ASTM B 6, Specification for Zinc.

10. ASTM F 1083, Specification for Pipe, Steel, Hot-Dipped Zinc Coated (Galvanized) Welded, for Fence Structures.

1.03 SUBMITTALS

A. Submit product data for fences

PART 2 PRODUCTS

2.01 FABRIC

A. Height of fabric shall match existing fence.

B. Number 9 gage coated steel wires for installation along the railroad tracks and Number 6 gage coated steel wires for replacement of any damaged or removed fence along French or Urban Streets. Fence must be 2 inch mesh, with top and bottom selvages twisted and barbed.

C. Fabric finish: Galvanized, conforming to ASTM A 392, Class 2, 2.0 ounces per square foot of surface area when tested in accordance with ASTM A 90.

D. The use of aluminized fabric is allowed as an alternate to the galvanized fabric. The following specifications for the fabric shall apply:

1. Aluminized fabric shall be manufactured in accordance with ASTM A 491, and coated by the hot-dip process before weaving, with a minimum of 0.40 ounces of aluminum per square foot of surface area when tested in accordance with ASTM A 428.

2. Fabric shall be 0.128 inch (10 1/2 gauge) minimum coated wire diameter with minimum wire tensile strength of approximately 100,000 pounds per square inch, or 9 gauge with minimum wire tensile strength of approximately 75,000 pounds per square inch, woven in a 2 inch diamond mesh. Top and bottom selvages shall be twisted and barbed.

2.02 POST, RAILS AND BRACES

A. All steel and iron parts (including posts, braces, rails and gate materials) shall be zinc coated by the hot-dipped method, using zinc Grade E in compliance with ASTM B 6. The weight of zinc coating shall be not less than 2.0 ounces per square foot.

B. Line Posts shall comply with one of the following specifications:

1. Round hot-dipped galvanized steel pipe, standard weight (Schedule 40), conforming with ASTM F 1083. For fence fabric heights six feet or less, posts shall be not less than 2 inches nominal outside diameter (O.D.). For fence fabric heights over six feet, posts shall be not less than 2-3/8 inches nominal O.D..

2. Formed steel "C" Section, rolled from steel shapes, produced from ASTM A 570, Grade 45 steel, and ASTM A 572, Grade 45 steel, fabricated with zinc coating in conformance with ASTM A 123. For fence fabric heights six feet or less, "C" Sections shall be not less than 1-7/8 by 1-5/8 inches nominal outside dimension. For fence fabric heights over six feet, "C" Sections shall be not less than 2-1/4 by 1-3/4 inches nominal outside dimension.

C. End, Corner, and Pull Posts shall be round or square hot-dipped galvanized steel pipe, standard weight (Schedule 40), conforming with ASTM F 1083.

1. For fence fabric heights six feet or less: round posts shall be 2-3/8 inches nominal O.D.; square posts shall be not less than 2 inches nominal outside dimension.

2. For fence fabric heights over six feet: round posts shall be 2-7/8 inches nominal O.D.; square posts shall be not less than 2-1/2 inches nominal outside dimension.

D. Top and Bottom Rails: Shall be hot-dipped galvanized steel pipe, standard weight (Schedule 40), conforming with ASTM F 1083, 1-5/8 inch nominal O.D. Furnish in manufacturer's longest lengths, with expansion type couplings, approximately six inches long, for each joint. Provide means for attaching the top rail securely to each gate, corner, pull, and end post.

E. Post Brace Assembly: Furnish bracing assemblies at end and gate posts and at both sides of corner and pull posts, with the horizontal brace located at mid-height of the fabric. Use 1-5/8 inch O.D. Schedule 40 hot-dipped galvanized steel pipe for horizontal brace and 3/8 inch O.D. adjustable length diagonal truss rod.

F. Post Tops: Weather-tight closure cap. Provide one cap for each post unless equal protection is afforded by combination post top cap and barbed wire supporting arm, where barbed wire is required. Furnish caps with openings to permit through passage of the top rail.

G. Stretcher Bars: Shall be one-piece lengths equal to full height of fabric, with a minimum cross-section of 1/4-inch by 3/4-inch. Furnish one stretcher bar for each gate and end post, and two for each corner and pull post, except where fabric is integrally woven into the post.

H. Stretcher Bar Bands: Galvanized steel, spaced not over 15 inches on center to secure stretcher bars to end, corner, pull and gate posts. Bands may also be used with special fittings for securing rails to end, corner, pull and gate posts.

2.03 MISCELLANEOUS MATERIALS AND ACCESSORIES

A. Wire Ties: Manufacturer's standard, spaced at 24-inch maximum centers.

B. Concrete: Specified in Section 03300.

2.04 BARBED WIRE SUPPORTING ARMS

A. Pressed steel arms, complete with provision for anchorage to posts and attaching three rows of barbed wire.

B. Supporting arms may be either attached to posts or integral with post top weather cap.

C. Provide the following type: Single 45-degree arm, one for each post where indicated.

2.05 BARBED WIRE

A. Aluminum-coated double strand 12-1/2-gauge twisted wire with 14 gauge, four-point round aluminum barbs spaced on approximately five-inch centers. Shall conform to ASTM A 585.

PART 3 EXECUTION

3.01 PREPARATION

A. Do not begin fence installation and erection before grading is completed at the fence location, unless otherwise permitted by the GE's Representative.

3.02 FENCE INSTALLATION

A. Construct fencing in accordance with manufacturer's recommendations and acceptable industry practice.

B. Install new fencing as shown on the Drawings or where directed by the GE's Representative. Install posts at spacings not greater than ten feet.

C. Posts shall be inserted into formed holes, leveled, plumbed, and aligned. The annular space shall be filled solid with a quick-setting hydraulic cement.

END OF SECTION

SECTION 02850
TRANSPORTATION OF WASTE MATERIALS

PART 1 - GENERAL

1.01 DESCRIPTION:

A. Section includes: all labor, equipment, materials and services necessary to transport the Waste Materials generated on Site to GE- approved RCRA Subtitle D permitted TSDFs, or TSCA permitted TSDFs, based on classification of these Waste Materials.

B. Section also includes the transportation of Construction Debris to a construction and demolition debris landfill as described also in Section 02221.

C. Section includes obtaining and providing appropriate liners and covers as specified herein, as well as transport vehicles.

D. The Contractor shall be responsible for all scheduling and coordination of all transportation subcontractors and the disposal facilities.

E. All costs incurred by Contractor due to delays, downtime, and charges by other subcontractors resulting from the failure to perform the Work or due to the performance of the Work described herein, shall be the responsibility of the Contractor.

1.02 TRANSPORTATION REQUIREMENTS:

A. Waste Materials shall not be repackaged or handled between the Site and the TSDF facility(s).

B. Contractor shall be responsible for obtaining and providing all transport vehicles required to perform the Work.

C. All vehicles used to transport Waste Materials off of the Site shall be designed, equipped, operated and maintained to prevent leakage, spillage, or airborne emissions during transport. Vehicles which do not, in the opinion of GE's Representative, meet this requirement will be rejected by GE's Representative.

D. Prior to loading, any precipitation present in vehicles shall be drained in a manner acceptable to GE's Representative.

E. Contractor shall be responsible for all measures necessary to correct leaking transport vehicles, from the time of loading to the time of tipping at the TSDFs, at no additional cost to GE.

F. All transport vehicles shall be permitted pursuant to TSCA requirements as applicable, and all other requirements of the states through which the vehicles will pass.

1.03 MEASUREMENT:

A. Contractor shall be responsible to obtain tare and loaded weight tickets for all vehicles transported off of the Site.

B. Weight tickets will be the only basis for payment. Payment will not be made for transportation of vehicles for which Contractor has not obtained weight tickets.

1.04 SUBMITTALS:

In accordance with the Contract Terms and Conditions, the Contractor shall submit the following to GE's Representative:

A. Tare and loaded weight tickets for all transport vehicles.

B. Copies of all manifest forms immediately following transport of Containers from the Site, and after final receipt at TSDF.

C. List of transportation subcontractors to be used for all Waste Materials transport. Refer to the General Conditions for additional requirements regarding subcontractors.

D. Shop drawings and samples of all types of vehicle liners to be used during the Work.

E. Documentation that transporter is licensed by New York State, and all other states through which Waste Materials will be transported, to transport TSCA waste as applicable.

F. A letter from each transporter, which complies with 6 NYCRR 372.2, certifying that transporter has the capacity to transport the offered volume of Waste Materials.

G. Shop drawings/certifications from all vehicle providers, stating that vehicles meet the requirements of Paragraph 1.02(c).

1.05 LICENSING AND PERMIT REQUIREMENTS:

A. Vehicles used for transportation of Waste Materials shall be permitted pursuant to all USDOT and USEPA requirements, and the requirements of all states and localities through which the Waste Materials will be transported, and shall possess all required licenses and registration numbers.

B. Contractor shall comply with all federal requirements and the requirements of states and localities through which the Waste Materials will be transported.

C. Contractor, or its transportation subcontractors if used, shall be permitted and licensed to transport Waste Materials in the State of New York and all localities and states through which they will transport the Waste Materials. Transporters shall be permitted in accordance with RCRA, USDOT, state and local requirements.

1.06 MANIFESTING AND PLACARDING:

A. The Contractor shall provide and complete manifests for all Waste Material shipments, which comply with federal, commonwealth, state and local regulations and requirements.

B. The Contractor shall be responsible to provide and affix to each vehicle placards required under USDOT regulations.

C. All manifesting and placarding shall comply with USDOT HM-181 regulations.

D. Any Waste Materials transported over public roads in the immediate vicinity of the Site shall be accompanied by the proper paperwork required under federal and/or state law.

E. All manifests shall contain instructions for the TSDF signed manifest to be mailed to :

Mr. John Harrsen
Manager, Remedial Projects
General Electric Company
Building 2, Room B43
One River Road
Schenectady, NY 12345

1.07 COORDINATION:

A. Contractor shall be responsible for all its scheduling and coordination with subcontractors to ensure that a quantity of vehicles sufficient to perform the Site Work at all times has been delivered to the Site.

B. Contractor shall be responsible for the coordination of its Work to avoid down time due to delays in obtaining vehicles for Waste Materials, or due to transportation or disposal delays.

1.08 GENERAL REQUIREMENTS:

A. Contractor shall take title to Waste Materials at point of loading, immediately upon placement of the materials in the vehicles.

B. Contractor shall retain title to all Waste Materials, until receipt by GE's Representative of Certificates of Disposal and/or Destruction required in Section 01100.

1.09 ON-SITE DECONTAMINATION:

A. Contractor shall verify that the exterior of all vehicles is visibly clean, prior to transport off of the Site. If vehicles are not clean, Contractor shall decontaminate the vehicles in accordance with Section 01561.

PART 2 - PRODUCTS

2.01 VEHICLE LINERS:

A. Liners for vehicles shall be minimum 10-mil liners custom sized for the particular size and type vehicle being used. Refer to Paragraph 3.01(B).

B. Liners shall be selected by Contractor to be chemically compatible with the respective Waste Material stream being transported.

C. Liners shall be provided with extra height so that the liner can be draped or tied over the materials in the vehicles, and so there will be a liner between the Waste Materials and the outermost cover.

D. Liners shall not be relied on to meet the leakproof requirements of Paragraph 1.02(C)

PART 3 - EXECUTION

3.01 LINING AND PROTECTION:

A. All transport vehicles shall be protected by placing, at a minimum, one (1) 10-mil liner in each vehicle.

B. All vehicles shall be securely covered with a canvas tarp, unless the vehicle is equipped with a cover determined by GE's Representative to be more secure than the tarp. The canvas tarp or other cover must be the outermost cover and must be waterproof.

3.02 TRANSPORTATION OF WASTE MATERIALS:

A. All Waste Materials shall be described for transportation purposes in accordance with USDOT HM-181 regulations.

END OF SECTION

SECTION 02900
SEEDING

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

1. Contractor shall provide all labor, materials, equipment and incidentals as shown, specified and required to furnish and install seeding Work.

2. The extent of the seeding Work is shown on the Drawings.

3. The types of turf Work required include the following:

   a. Seeding all areas within the final fence line except where pavement is to be installed

   b. Adding soil amendments

   c. Mulching

   d. Replanting unsatisfactory or damaged turf

   e. Maintenance for one year from the date of acceptance

B. Coordination:

1. Review installation procedures under other Sections and coordinate the installations of items that must be installed with the turf.

1.02 REFERENCES

Reference Standards: Comply with applicable provisions and recommendations of the following, except where otherwise shown or specified:

1. American Joint Committee on Horticultural Nomenclature, Standardize Plant Names.

2. ASTM C 602, Agricultural Liming Materials.

3. FSO-F-241D, Fertilizer, Mixed, Commercial.

4. Official Seed Analysts of North America, Standards of Quality.

1.03 SUBMITTALS

A. Shop Drawings: Submit for approval the following:

1. Planting schedule for turf installation showing scheduled planting dates for each type of turf.

2. Manufacturer's specifications and installation instructions for all materials required.

B. Certificates: Submit for approval the following:

1. Certificates of inspection as may be required by governmental authorities to accompany shipments, and manufacturer's or vendors certified analysis for soil amendments and fertilizer materials. For standard products submit other data substantiating that materials comply with specified requirements.

2. Certificates from seed vendors for each seed mixture required, stating botanical and common name, percentage by weight and percentages of purity, germination, and weed seed for each species.

C. Operation and Maintenance Data: Submit for approval typewritten instructions recommending procedures to be established by GE for the maintenance of turf following the Contractor maintenance period. Submit prior to expiration of required maintenance period.

PART 2 PRODUCTS

2.01 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Delivery of Materials:

1. Do not deliver seed until site conditions are ready for planting.

2. Deliver packaged materials in containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery.

3. Furnish seed in sealed, standard containers.

B. Storage of Materials:

1. Store and cover materials to prevent deterioration. Remove packaged materials which have become wet or show deterioration or water marks from the project site.

2. Seed that is wet or moldy or that has been otherwise damaged in transit or storage is not acceptable. Replace at no further cost to GE.

2.02 MATERIALS

A. Grass Materials:

1. Grass Seed Mixture: Provide fresh, clean, new-crop seed complying with the tolerance for purity and germination established by the Official Seed Analysts of North America. Provide seed of the grass species, proportions and minimum percentages of purity, germination, and maximum percentage of weed seed, as specified.

2. The "Schedule of Grass Seed Requirements" is as follows:

Name	Variety	Weight of Pure Live Seed
Red Fescue (Festuca rubra)	Commercial	65 lbs/acre
Perennial Ryegrass (Lolium perenne)	Commercial	25 lbs/acre
White Clover (Trifolium repens)	Commercial (Max. 25% hard seed)	10 lbs/acre
	Total	100 lbs/acre

B. Fertilizer:

1. Standard quality, commercial grade containing 10% total nitrogen, 6% available phosphoric acid and 4% soluble potash.

C. Mulch:

1. Provide clean seed, free of hay or threshed straw of wheat, rye, oats or barley, free of noxious seeds. Low grade hay mulch unfit for farm use, such as "U.S. Sample Grade" will be acceptable.

PART 3 EXECUTION

3.01 SOURCE QUALITY CONTROL

A. General: Ship turf materials with certificates of inspection as required by governmental authorities. Comply with governing regulations applicable to turf materials.

B. Analysis and Standards: Package standard products with manufacturer's certified analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Analytical Chemists, wherever applicable or as further specified.

3.02 INSPECTION

A. Contractor shall examine the topsoil, verify elevations and depths of topsoil, observe the conditions under which Work is to be performed and notify GE's Representative of unsatisfactory conditions. Do not proceed with the Work until the unsatisfactory conditions have been corrected in a manner acceptable to GE's Representative.

3.03 INSTALLATION

A. Fertilizer shall be applied at a rate of 800 pounds per acre and shall be uniformly distributed using measured equipment approved by GE's Representative.

B. Areas to be seeded shall be scarified sufficiently to break up the surface crust immediately before seeding. Seed mixture specified shall be applied at a rate of ~~60~~ 100 pounds per acre. Any method of distribution such as dry

spreader or hydroseeder will be acceptable provided seeds are not damaged during application. The method of application shall be approved by GE's Representative.

C. Mulch shall be spread uniformly in a continuous blanket of sufficient thickness to completely hide the soil from view. The minimum rate of application is 70 to 90 pounds per 1000 square foot and may be applied by hand or with mechanical means. Mulch shall be applied no more than 3 days after seeding, unless otherwise approved. Anchorage of the mulch, if necessary, shall be employed the Contractor using a method approved by GE's Representative.

D. Seeding may be performed at any time during the Spring, Summer or early Fall. The Contractor shall notify the GE's Representative at least 48 hours before sowing seed and shall not begin without the approval of GE's Representative. When conditions of high winds, excessive moisture or drought are such that satisfactory results are jeopardized, GE's Representative shall stop the Work. Completion of the Work shall be at GE's Representative's approval, when satisfactory conditions exist.

E. When ordered by GE's Representative, measured plots shall be established to determined if the specified quantities of seed, fertilizer and mulch are being applied.

3.04 MAINTENANCE

A. The Contractor shall begin maintenance of the seeded areas, including but not limited to appropriate watering and mowing, immediately after planting and shall continue for one year after planting.

B. The Contractor shall repair areas damaged by erosion, wind, drought or other causes. Such areas shall be reseeded and remulched as specified under this Work.

3.05 ACCEPTANCE

A. Seeded areas will be accepted provided all requirements, including maintenance, have been satisfied, and a healthy, uniform, close stand of the specified grass has been established, free of weeds, bare spots and surface irregularities.

END OF SECTION

Section 3

Section 3

SECTION 03300
CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 SUMMARY

A. Section includes cast-in-place concrete construction of the main building floor, fence post footings and miscellaneous concrete work.

1.02 REFERENCES

A. American Concrete Institute (ACI)

1. ACI 301, Structural Concrete for Buildings.
2. ACI 304, Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete.
3. ACI 305R, Hot Weather Concreting.
4. ACI 308, Standard Practice for Curing Concrete.
5. ACI 309, Practice for Consolidation of Concrete.
6. ACI 318, Building Code Requirements for Reinforced Concrete.

B. American Society for Testing and Materials (ASTM)

1. ASTM C 31, Methods of Making and Curing Concrete Test Specimens in the Field.
2. ASTM C 33, Concrete Aggregates.
3. ASTM C 39, Test Method for Compressive Strength of Cylindrical Concrete Specimens.
4. ASTM C 94, Ready-Mixed Concrete.
5. ASTM C 143, Test Method for Slump of Portland Cement Concrete.
6. ASTM C 150, Portland Cement.

7. ASTM C 172, Method of Sampling Freshly Mixed Concrete.

8. ASTM C 260, Air Entraining Admixtures for Concrete.

9. ASTM C 330, Light Weight Aggregates for Structural.

10. ASTM C 494, Chemicals Admixtures for Concrete.

11. ASTM D 1751, Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types).

12. ASTM D 1752, Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.

1.03 SUBMITTALS

A. Manufacturer's certification that concrete materials meet specification requirements.

B. Manufacturer's product data, specifications, and installation instructions for joint devices, admixtures, joint fillers, and sealers.

1.04 QUALITY ASSURANCE/QUALITY CONTROL

A. Contractor shall retain the services of an approved independent testing building to determine conformance of the materials and the constructed work with the specifications.

1.05 COORDINATION

A. Coordinate the placement of joint devices with erection of concrete formwork and placement of form accessories.

PART 2 PRODUCTS

2.01 CONCRETE MATERIALS

A. Cement: Comply with ASTM C 150, Portland Cement, Type I or II.

B. Fine and Coarse Aggregates: Comply with ASTM C 33. Maximum coarse aggregate size shall be one inch.

C. Water: Clean and not detrimental to concrete.

2.02 ADMIXTURES

A. Air Entrainment: Comply with ASTM C 260. Add air entraining agent to normal weight concrete mix for work exposed to exterior.

B. Chemical: The written approval of GE's Representative shall be obtained prior to using any chemical admixture.

C. Use set retarding admixtures during hot weather only when approved by Building's Representative.

D. Fly Ash shall not be used.

2.03 JOINT DEVICES AND FILLER MATERIALS

A. Waterstops:

1. Waterstop at construction joints shall be Synko-Flex preformed plastic adhesive waterstop, manufactured by Synko-Flex Products, Houston, TX, or approved equal.

B. Joint Filler: Shall comply with ASTM D 1752.

2.04 JOINT SEALANT

A. Sealant shall be Sonolastic two-part elastomeric gun-grade polysulfide sealant, manufactured by Sonneborn Building Products, ChemRex, Inc. Sonolastic Primer # 759, and Sonofoam backer rods shall be used in conjunction with the sealant for a complete installation.

B. Equivalent sealant, primer and backer rods may be used if approved by GE's Representative or GE.

2.05 CONCRETE MIX

A. Mix and deliver concrete in accordance with ASTM C 94.

B. Mix Design

1. Concrete mixes shall be proportioned such that 28 day compressive strength of moist cured laboratory samples achieve not less than the following:

   a. Concrete for the following structures shall achieve 4,000 pounds per square inch (psi) compressive strength: Main Building Floor.

   b. Concrete for sidewalks and fence post footings: 3,000 psi.

2. Slump Range: Not more than four inches.

3. Entrained Air Content: Six percent, plus or minus one percent.

4. Maximum Water/Cement Ratio: 0.50 (0.45 for 4000 psi concrete).

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify site conditions.

B. Verify requirements for concrete cover over reinforcement.

C. Verify that anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not cause hardship in placing concrete.

3.02 PREPARATION

A. For the Main Building Floor: Decontaminate the underlying concrete slab as specified in Section 02090.

B. For the three tapered areas shown on Drawing C3, remove the required existing concrete floor to allow installation of a uniform thickness of new concrete.

C. Fence Posts: Excavate and prepare subgrade as specified in Section 02220.

3.03 FIELD QUALITY CONTROL

A. Sampling and testing during the placement of concrete shall include the following:

1. Sampling Fresh Concrete: Comply with ASTM C 172, except modified for slump to comply with ASTM C 94.

2. Slump: Comply with ASTM C 143; one test for each concrete load at point of discharge; and one for each set of compressive strength test specimens.

3. Concrete Temperature: Tested hourly when air temperature is 40 degrees F. and below, and when 80 degrees F. and above; and each time a set of compression test specimens is made.

4. Compression Test Specimens: ASTM C 31. One set of four standard cylinders for each compressive strength test.

5. Compressive Strength Test: ASTM C 39. One set for every 50 cubic yards or less of each class of concrete placed. One specimen of each set tested at seven days, two specimens tested at 28 days, and one specimen retained in reserve for later testing if required.

3.04 CONCRETE PLACEMENT

A. General: Place concrete in compliance with the practice and recommendations of ACI 304, ACI 318, and as herein specified.

B. Place 7 inches of concrete along the main building floor wood block area. Wood block will have been removed in accordance with Section 02050.

C. Place 3 inches of concrete over areas of the main building floor which do not currently contain wood blocks.

D. Install tapered concrete floor in three locations shown in Drawing C3.

E. Install the new concrete so that the concrete over the former wood block floor area and concrete over the non-wood block floor areas is at the same elevation.

F. Conform to ACI 305R when concreting during hot weather.

G. Do not use concrete which becomes non-plastic and unworkable, or does not meet the required quality control limits, or which has been contaminated by foreign materials.

H. Consolidate concrete using equipment and procedures in accordance with the recommended practices of ACI 309, to suit the type of concrete and project conditions.

I. Maintain reinforcing steel in the proper position continuously during concrete placement operations.

3.05 CONCRETE FINISHING

A. Provide as-cast finish to formed concrete surfaces not exposed to view. Repair and patch defective areas with all fins or other projections completely removed and smoothed.

B. Related Unformed Surfaces: At unformed surfaces occurring adjacent to formed surfaces, strike off smooth and finish with texture matching the adjacent exposed formed surfaces.

C. Provide smooth rubbed finish to formed concrete exposed to view not later than one day after form removal.

D. Provide a broomed finish to all concrete surfaces which will receive foot traffic.

3.06 CURING AND PROTECTION

A. Conform to ACI 308 for curing of concrete. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

B. Protect freshly placed concrete from premature drying, excessive cold or hot temperatures and mechanical injury.

3.07 JOINT SEALING

A. As soon as possible after completion of the curing period, all joints required to be sealed shall be filled with joint sealing materials.

B. Thoroughly clean the joint of foreign material as recommended by the sealant manufacturer.

C. Install sealant in accordance with the manufacturer's recommendations.

3.08 PROTECTION OF WORK

A. Protect finished concrete surfaces from damage by subsequent construction operations.

3.09 DEFECTIVE WORK

A. Concrete work which does not conform to the specified requirements, including strength, tolerances and finishes, shall be corrected at the Contractor's expense, as determined by GE's Representative.

END OF SECTION

Section 4

Section 4

SECTION 04270
GLASS UNIT MASONRY

PART 1 GENERAL

1.01 SUMMARY

A. Work includes:

1. Removal of existing plate glass windows, including putty and frames;

2. Installation of glass block units, hollow or solid with application of mortar;

3. Placement of integral joint reinforcements

1.02 RELATED WORK

A. Steel Channels

B. Sills, lintels, jambs

C. Sealant, (caulk)

D. Packing Material

1.03 REFERENCES

A. ASTM A153 - Class B-2, Spec. Zinc Coating (Hot Dip) on Iron and Steel Hardware

B. ASTM C144, Spec. for Aggregate for Masonry

C. ASTM C150, Spec. for Portland Cement

D. ASTM E163, Fire Test of Window Assemblies (equivalent to UL® 9)

E. ASTM C207, Spec. for Hydrated Lime for Masonry Purposes

F. ASTM C270, Spec. for Mortar for Unit Masonry

1.04 PRODUCT DATA

A. Fire Tests
Submit documents verifying glass block units are classified for a 3/4, 1, or 1 1/2 - hour fire exposure according to ASTM E163 or UL® 9 "Fire Tests of Window Assemblies". All such glass block unit cartons shall carry appropriate UL® labels.

B. Insulating Value
Submit two (2) copies of manufacturer's literature and two (2) copies of manufacturer's installation instructions.

C. Edge Coating
Glass block shall have a polyvinyl butyral edge coating to provide for better bonding and to provide for an expansion/contraction mechanism for each block.

1.05 SAMPLES

A. Submit two (2) glass block units of each type specified showing size, color, design and pattern of faces.

B. Submit representative samples of (panel reinforcing), (panel anchors), (expansion strips), and (sealant).

1.06 STORAGE

A. Store unopened cartons of glass block in a clean, cool, dry area.

B. Protect opened cartons of glass block against windblown rain or water run-off with tarpaulins or plastic covering.

1.07 PROJECT CONDITIONS

A. Do not install glass block units when temperature is 40°F (4°C) and falling.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. The drawings and specifications are based on catalog data, specifications and products of Pittsburgh Corning Corporation and designate the type and quality of work intended under this selection.

B. Substitutions

1. Products of other manufacturers proposed as equivalent quality must be submitted through the bidding contractors for written approval of the architect ten days prior to the bid date.

2. Supporting technical data, samples, published specifications and the like must be submitted for comparison.

3. Contractor shall warrant that proposed substitutions, if accepted, will provide performance equivalent to the materials specified herein.

2.02 GLASS BLOCK UNITS

A. Glass block units, normally 12 inches x 12 inches x 3.875 inches thick shall be partially evacuated hollow units made of clear colorless glass.

2.03 ACCESSORIES

A. Panel Reinforcing: two parallel 9-gauge wires either 1 5/8 inch or 2 inch on center with electrically butt-welded cross-wires spaced at regular intervals, galvanized after welding.

B. Expansion Strips: made of fibrous glass or polyethylene foam with a thickness of 3/8 inch.

C. Panel Anchors: 20 gauge perforated steel strips 24 inches long by 1 3/4 inches wide, galvanized after perforation.

D. Asphalt Emulsion: a water-based asphalt emulsion, by Karnak Chemical Corp. (Karnak 100, 1-800-526-4236), or equal.

E. Sealant (caulk): non-staining, waterproof mastic, silicone or urethane type.

F. Packing (Backer Rods): polyethylene foam, neoprene, oakum or equal as approved by sealant manufacturer.

2.04 MORTAR MATERIALS

A. Mortar: Type S in accordance with ASTM C270. Mortar shall be 1 part Portland Cement, 1/2 part lime, and sand equal to 2 1/4 to 3 times the

amount of cementitious material (cement plus lime), all measures by volume. An integral type waterproofer should be added to the mortar mix.

1. Portland Cement: Type 1 in accordance with ASTM C150. If a waterproof Portland Cement is used, the integral type waterproofer shall be omitted. (Masonry Cement is not recommended.)

2. Lime: Type S, in accordance with ASTM C207. Shall be a high-calcium lime, or a pressure-hydrated dolomitic lime, provided that not less than 92% of all the active ingredients are completely hydrated.

3. Sand: A clean, white quartzite or silica type, essentially free of iron compounds, for thin joints, in accordance with ASTM C144, not less than 100% passing a No. 8 sieve.

4. Integral Type Waterproofer: Stearate type by Sonneborn Building Products (Hydrocide Powder, 612-835-3434), or equal.

PART 3 EXECUTION

3.01 REMOVAL OF EXISTING WINDOWS

A. No removal shall be conducted until decontamination of the windows on the exterior walls of the building has been performed in accordance with Section 02090. The flushing of the windows shall be conducted to remove all PCBs from the window surfaces. This allows the removal of the windows and the replacement with glass block to be conducted by personnel who are not trained for hazardous material management (29 CFR 1910), as long as no other tasks with hazardous materials are being performed within the same Work area.

B. All glass and putty materials shall be removed from the interior and exterior walls of the building and placed into a container for transportation off-site and disposal as non-PCB containing C&D waste.

C. Removal of the steel frame work around the windows must be conducted in a manner that will not affect the structural integrity of the building or the window opening. These frames will also be placed into containers for off-Site transportation and disposal as non-PCB containing C&D waste.

D. Contractor shall be responsible for the preparation for transportation and the transportation of all wastes generated from removal of the windows, putty and frames to a GE approved off-site C&D disposal facility.

3.02 PREPARATION FOR INSTALLATION

A. Verify that channels or panel anchors have been provided at the head and jambs for the purpose of providing panel support within the opening.

B. Mix all mortar components to a consistency that is drier than mortar for ordinary masonry. Retempering the mortar after it has taken its initial set shall not be permitted. **Do not use antifreeze compounds or accelerators.**

3.03 INSTALLATION

A. Cover sill area with a heavy coat of asphalt emulsion. Allow emulsion to dry at least 2 hours before placing mortar.

B. Adhere expansion strips to jambs and head. Make certain expansion strip extends to sill.

C. Set a full mortar bed joint, applied to sill.

D. Set lower course of block. Maintain a uniform joint width of 1/4 to 3/8 inch plus or minus 1/8 inch. All mortar joints must be full and not furrowed. Steel tools must not be used to tap block into position. (Place a rubber crutch tip on end of trowel to tap block into position.) Do not realign, tap, or otherwise move block after initial placement. For solid glass block it may be necessary to use wedges in the mortar joints of the lower courses to prevent the mortar from being "squeezed" out.

E. Install panel reinforcing every 16" to 24" in the horizontal mortar joint, and in joints immediately above and below all openings within panels. Where panel anchors are used at jambs and heads in lieu of channel or chase surrounds, install panel anchors in the same joints as the panel reinforcing, EXCEPT THAT, at panel corners, anchors shall be placed in each mortar joint, both at the jamb and head, 24" on each side of the corner. Run reinforcing continuously from end to end of panels. Lap reinforcing not less than 6 inches whenever it is necessary to use more than one length. Do not bridge expansion joints with reinforcing. Install reinforcing as follows:

- Place lower half of mortar in bed joint. Do not furrow.

- Press panel reinforcing into place.

- Cover panel reinforcing with upper half of mortar bed and trowel smooth. Do not furrow.

F. Place full mortar bed for joints not requiring panel reinforcing - do not furrow. Maintain uniform joint width.

G. Set succeeding courses of block. Space at head of panel and jambs must remain free of mortar.

H. Strike joints smooth while mortar is still plastic and before final set. At this time rake out all spaces requiring sealant to a depth equal to the width of the spaces. Remove surplus mortar from faces of glass blocks and wipe dry. (See Section 3.03.) Tool joints smooth and concave, before mortar takes final set. Remove wedges from lower courses of solid blocks and point the voids with mortar.

I. After final mortar set (approx. 24 hours), install packing tightly between glass block panel and jamb and head construction. Leave space for sealing.

J. Apply sealant evenly to the full depth of recesses as indicated on the drawings and in accordance with the manufacturer's application manual and instructions.

3.04 CLEANING

A. Remove surplus mortar from the faces of the glass block at the time joints are struck or tooled. **Mortar should be removed while it is still plastic** using a clean, wet sponge or an ordinary household scrub brush having stiff bristles.

B. Do not use harsh cleaners, acids, abrasives or alkaline materials while cleaning glass block. Never use steel wool or wire brush to remove mortar from glass block surfaces.

C. Final mortar removal is accomplished with a clean, wet sponge or cloth. Rinse sponge or cloth frequently in clean water to remove abrasive particles. Allow any remaining film on the block to dry to a powder.

D. After all organic sealants, caulking, etc., have been applied, remove excess caulking materials with commercial solvents such as xylene, toluene, mineral spirits or naptha and follow with normal wash and rinse. Be

careful not to damage caulking by over-generous application of strong solvents. Comply with solvent manufacturer's directions on label for toxicity and flammability warnings.

E. Final cleaning of glass block panels is accomplished after they are completely installed. Wait until panels are not exposed to direct sunlight. Start at the top of the panel and wash with generous amounts of clean water. Use a clean, dry, soft cloth to remove all water form the glass block surface. Change cloth frequently to eliminate dried mortar particles or aggregate that could scratch the glass surface or reflective finish.

END OF SECTION

Appendices

A decontamination pad will be available for transport vehicles or dump trailers that may come in contact with excavated soils. All earth moving equipment will be decontaminated at the conclusion of excavation activities. Figure 3-2 indicates a potential location for this decontamination pad.

3.4 Community Health and Safety

The primary concern at this site is the presence of PCBs on soil particles that have the potential for becoming airborne dust. The primary routes of exposure for PCBs is by inhalation and ingestion. Therefore, engineering controls will be used to avoid the generation of dust. Periodic surface wetting and placing dust screens on perimeter fences are two options that may be applicable to reduce fugitive dust at this site. Excavations that have not been backfilled and are left open after normal working hours will be thoroughly wetted and covered, if necessary, to prevent dust generation. Every effort will be made to backfill the excavation on a daily basis.

The non-visible levels of dust will be continuously monitored with the use of Metal Oxide Semiconductor (MOS) monitor during site activities. This monitor is a hand held device that gives a continuous readout and will be operated during excavation activities. Monitoring will be conducted in the breathing space of those working on the excavation equipment and at the upwind and downwind property lines. The measured dust concentrations will be used as action level criteria for upgrading or downgrading protective equipment. Specific criteria for action levels are as follows:

The OSHA Permissible Exposure Limit (PEL) for occupational exposure for respirable particulates is 5 mg/m^3 Time Weighted Average (TWA). The continuous dust monitor, MOS monitor, will be set to alarm if this level is exceeded at any time. If this level is exceeded, work will cease until dust control measures can be implemented. The OSHA PEL for chlorinated biphenyl (54% chlorine) is 0.5 mg/m^3 TWA. The PCB concentrations

in the soils to be excavated do not exceed 70 ppm. If the PEL for particulates is exceeded, the diluted concentration of the PCBs in the soil will make it highly unlikely that the PEL for PCBs will also be exceeded. By employing the PEL for particulates as the action level, a considerable safety margin to minimize the potential for PCB migration via dust transport has been established.

3.4.1 On-site Contingency Plan

The on-site contingency plan outlines the procedures to be followed to minimize potential accidental exposures to residents due to airborne dust during soil excavation activities. The following actions will be taken to reduce the likelihood of an accidental exposure:

- Air monitoring will be performed prior to the start of excavation activities. The NIOSH 5503 method will be used with a 13 mm polypropylene cassette equipped with a glass filter. The filter media will be Type AE and binder free. The sampling will be continuously run for 8 hours to determine background levels of dust and PCB content. The sample will be analyzed by GC-ECD for total dust;

- Residents will be informed when excavation activities will take place so windows and doors are closed and air conditioners are off during those activities;

- Dust monitor readings above action limits set by the previously cited OSHA standard will require immediate cessation of excavation activities and the employment of additional fugitive dust suppression techniques. Only one area at a time will be excavated to minimize releases to the air and to allow for suppression actions to protect the residents, if warranted;

- Sufficient precautions will be taken to prevent loose soils from adhering to tire treads, wheel wells, etc. of on-site vehicles to minimize decontamination requirements, and to ultimately prevent the migration of soil to off-site areas and streets;

- If an excavation is to remain open after working hours, a polyethylene cover will be used to cover the excavation. The excavation will be wetted, if necessary, to prevent dust generation;

- To the greatest extent possible, all soil removed from the excavation will be placed directly into dump trucks or dumpsters, covered and hauled from the site. The staging of soil in piles will be minimized;

- The construction area will have temporary fencing erected outside the edge of the excavation to restrict access of unauthorized individuals or unleashed pets;

- During excavation activities a monitoring device will be placed at the back door of the house nearest to the excavation to monitor for the generation of dust during excavation. This air monitoring will be performed in the same manner as the pre-excavation sampling. If necessary, field personnel will follow behind the excavators to wet the ground surface with a garden hose, thereby further reducing the potential for fugitive dust generation. If exceptionally high levels of emissions are noticed or measured, additional personnel will be utilized for dust suppression activities, as appropriate;

- Inform residents to keep children out of the excavation areas;

- A security guard will be stationed on-site after working hours to ensure that no unauthorized personnel access the site.

A Health and Safety Officer will be on-site at all times during excavation activities. The officer will utilize a dust monitor which provides a continuous readout for the duration of the work day. His duties will include the calibration of the samplers to ambient conditions each morning, monitoring the operation of the samplers, and evaluating site conditions. Whenever visible emissions are produced or the sampler alarm indicates that conditions have exceeded established standards the officer will be responsible for recommending the implementation of additional fugitive dust suppression techniques, if required.

3.4.2 Transportation Contingency Plan

The proposed route for hauling the excavated soil was chosen to minimize the potential for a spill to occur in a residential area and to direct the waste haulers to the interstate system as directly as possible. The proposed route is as follows: Drivers are to exit the site from Urban Street and head directly south onto Barthel Street. Drivers should continue on Barthel Street until it intersects with Walden Avenue and then head east on Walden. Drivers should then continue east on Walden Avenue until it intersects with Interstate Route 90 at Interchange 52. Drivers then should proceed on the interstate highway system to their final destination.

The following is the proposed contingency route: Drivers are to exit the site from Urban Street and head directly south onto Barthel Street. Drivers should continue on Barthel Street until it intersects with Walden Avenue and then head west on Walden. Drivers should then continue west on Walden Avenue until it intersects with the Kensington Expressway (Route 33). Drivers should proceed onto the expressway and head east to Interstate Route 90 at Interchange 51. Drivers then should proceed on the interstate highway system to their final destination.

The levels of PCB contamination in the soil samples obtained from the residential area are relatively low (from 62 ppm to below detection limits). Any soil spill that occurs while the soil is in transit will be managed according to the 1990 Emergency Response Guidebook, publication DOT P 5800.5 Guidebook for First Response to Hazardous Materials Incidents. The guidance provided by this DOT Guidebook are designed for response to spills of high concentrations of hazardous substances. The levels of PCBs in these soils are expected to be well below DOT levels of concern. The application of these guidances for this project represent a conservative approach. This publication states that emergency action for a PCB spill is as follows:

- Keep unnecessary people away; isolate the hazard area and deny entry;
- Call Chemtrec at 1-800-424-9300 for emergency assistance;
- If water pollution occurs, notify the proper authorities. The New York State Spill Hotline (800) 457-7362 would be notified if the spill occurs in New York State. The National Response Center (800) 424-8802 will be notified for all spills;
- For small dry spills: with a clean shovel place material into a clean, dry container and cover, minimize dust generation;
- For large dry spills: Cover soil with a plastic sheet or tarp to minimize dust and spreading, clean with heavy equipment and moisten material to prevent dust generation.

3.4.3 Cleanup/Demobilization

Cleanup and demobilization will begin after soil remediation work is completed. All equipment will be thoroughly decontaminated before leaving the site. Contaminated disposable materials will be containerized and disposed of in the same manner as the contaminated soil. Non-contaminated used disposable equipment will be collected and disposed of as normal refuse.

3.4.4 Site Restoration

All lawns damaged or destroyed during excavation will be reseeded or replaced with sod. Trees that were removed will be replaced with new growth trees of the same or similar species. Fencing and other structures removed or damaged during the excavation activities will be repaired or replaced.

3.5 Work Schedule

ERM has developed a project schedule which allows for expedient completion of all IRM tasks described herein. Adherence to the project schedule is contingent upon the cooperation of all parties involved in the IRM including: ERM, GE, the property owners, NYSDEC, and other regulatory agencies.

The project schedule, following collection of additional soil samples to delineate the extent of contamination on these properties, agreement with affected property owners to permit access to their properties, and approval of the IRM work tasks by DEC, will be as follows:

B

Johnson Heater Corp.
970 Executive Parkway
St. Louis, MO 63141-6302
314-542-9494
800-325-1303 in US
314-542-9445 FAX

Proposal

Date: July 11, 1994

Fax #: 518-452-4295
Fax Date: August 26, 1994

Proposal to: ERM North East
501 New Karner Road
Albany, NY 12205

Attention of: Mr. Frank Parker
518-452-4291

Proposal for: GE Building at 318 Urban Street
Buffalo, NY

Proposal from: John Burr
Vice President

GENERAL INFORMATION

Building Usage	-	**Unknown.**
Dimensional Data	-	**180 x 120 x 32 feet**
	-	21,600 square feet
	-	691,200 cubic feet
Installation Elevation	-	**Less than 2,000 feet.**

BUILDING CONSTRUCTION

Wall Construction	-	**Sawtooth has single pane glass. Walls are 12" brick and single pane glass.**
Roof Construction	-	**Flat portion of roof is concrete with no insulation.**
Other Construction	-	**No smoke curtains, skylights or smoke vents.**
Number of Doors	-	**1 at 8 x 8 feet with seals**
	-	2 at 14 x 14 feet
	-	1 at 24 x 14 feet

HEATING AND VENTILATION SYSTEM INFORMATION

Temperatures	-	**+65°F at 0°F outside**
Summer Ventilation	-	**Equipment assumed to be sealed during the heating season.**
Heat Source	-	**Natural gas. When equipment is ordered, a specific gas supply pressure MUST be specified. The equipment covered by this proposal can be equipped to operate at a specific supply pressure in the range of 10" w.c. to 5 psig. The components and gas trains will vary with the specific pressure available at the contractor connection to the equipment gas train. If the supply pressure is outside the range of 10" w.c. to 5 psig additional costs will be incurred.**
Electric Power Supply	-	**480/3/60 - please confirm.**
Make-Up Air	-	**None required.**
Fire Insurance	-	**Please specify applicable requirement, for example: Factory Mutual, Industrial Risk Insurers, etc.**
Unit Location	-	**Indoor location agreed to by all parties involved and subject to final approval by Johnson Heater Corp. Equipment is free standing.**

BASED ON THE ABOVE, WE OFFER One (1) custom designed AIR-ROTATION® air handling and heating unit per data incorporated and enclosed.

OPTIONAL EQUIPMENT INCLUDED	Main gas regulator, pilot gas regulator, main gas cock, and pilot cock appropriate to the specified gas pressure at the contractor connection to the equipment gas train. 24-hour 7-day clock for automatic temperature setback during unoccupied periods.
PRICE	$25,936.00 (Twenty Five Thousand Nine Hundred Thirty Six Dollars)
ALTERNATE	For unit with higher capacity to heat building with uninsulated windows, price will be: $28,596.00 (Twenty Eight Thousand Five Hundred Ninety Six Dollars) Our price does not include any applicable taxes, fees, or permits.
FREIGHT	F.O.B. Chelsea, Massachusetts via common or contract carrier (truck) with full freight allowed to the jobsite and paid by Johnson Heater Corp.
PRICE SUPPLEMENT	Unless specifically noted, proposals are offered for acceptance within 60 days and delivery within three (3) months from date of order. Under normal circumstances, time extensions will be granted. See "Terms of Payment" for possible discounts.
ORDER ACCEPTANCE	All orders are subject to final acceptance at corporate headquarters in St. Louis, Missouri.
EQUIPMENT APPROVAL	All gas, oil, and combination gas-oil models are Underwriters Laboratories listed and labeled (including return air filters when supplied with original equipment design). Johnson Heater Corp. is not responsible for acceptance by local code authorities or the owner's fire insurance carrier regarding the application of an AIR-ROTATION system for this building and building occupancy. When advised, we can normally manufacture equipment for specific insurance carrier's requirements.
FACTORY TESTING	AIR-ROTATION units are inspected, assembled, operated, and adjusted at the factory prior to shipment. Each unit is individually approved for release and shipment.
START-UP SUPERVISION	Incidental to the sale of this equipment, the services of a Field Engineer are provided at no added cost to supervise placing the system in operation and good adjustment. The Field Engineer will instruct the owner's personnel and/or representatives in the proper operation and maintenance of the equipment. A maximum of one (1) trip to the jobsite and two (2) regular eight hour working days are allowed portal-to-portal from the city of origin. Added trips or time resulting from conditions beyond our control such as temporary heat start-ups, etc., will be invoiced at current labor rates plus expenses.
PURCHASER SERVICE RESPONSIBILITY	The purchaser is responsible to provide a qualified commercial-industrial combustion service technician or service organization to work under the direction of our Field Engineer during start-up. The goal is for this service technician or service organization to be available for future routine maintenance and emergency service.
NOT INCLUDED	The following items are not included. Our Installation Scope contains more detailed information concerning these items and includes the referenced drawings. Labor and equipment for unloading, rigging, and assembly. We do not recommend the use of a fork lift in the erection work.

(Not Included)

A single source of 3-phase power. The factory mounted power panel incorporates a flange mounted disconnect switch meeting NEC requirements.

Electrical reconnection of several wires run between the main power panel and the heater module.

Gas supply piping and venting. See our drawing EDF-167.

Supply and installation of the flue gas vent. See our drawing EDF-183-R3.

TERMS OF PAYMENT

PAYMENT IN ADVANCE OF SHIPMENT

Payment may be made by Sight Draft/Bill of Lading* or Certified Check. Advance payments are discounted 3%.

*A "Sight Draft/Bill of Lading" consists of a Draft at Sight and an Order Bill of Lading. In this form of payment, a Draft at Sight is drawn on a bank designated by the purchaser or selected by Johnson Heater Corp. The Order Bill of Lading represents the title to the shipment. The endorsed Order Bill of Lading is sent to the bank on the day of shipment. Upon acceptance and payment of the Draft at Sight, the purchaser receives the Order Bill of Lading. The purchaser obtains possession of the shipment by presenting the endorsed Order Bill of Lading to the carrier.

NOTE

OPEN ACCOUNT may be established by purchaser's request, subject to a Dun & Bradstreet credit appraisal of 1 or 2 and approval of our Credit Department. Open Account Terms are:

3% DISCOUNT allowed for payment in full prior to shipment.
2% DISCOUNT allowed for payment in full prior to 30 days from date of invoice.
1% DISCOUNT allowed for payment in full prior to 60 days from date of invoice.

UNPAID BALANCES Unpaid balances 61 days from date of invoice are subject to a 2% service charge, and 1% per month interest due and payable as invoices are rendered, until paid in full.

PARTIAL SHIPMENTS If the order is shipped in parts for any reason, payment will be due on that portion shipped as set forth above.

PARTIAL PAYMENTS Partial payments for any reason (retained percentages, unearned discounts, etc.) negate all discount privileges.

COLLECTION COSTS In the event that collection costs (legal fees, etc.) are incurred by the Johnson Heater Corp., such costs will be in addition to any balance due.

John Burr
Vice President

GWL:mat

INSTALLATION SCOPE FOR THE JOHNSON AIR-ROTATION® SYSTEM
GE BUILDING, 318 URBAN STREET, BUFFALO, NY

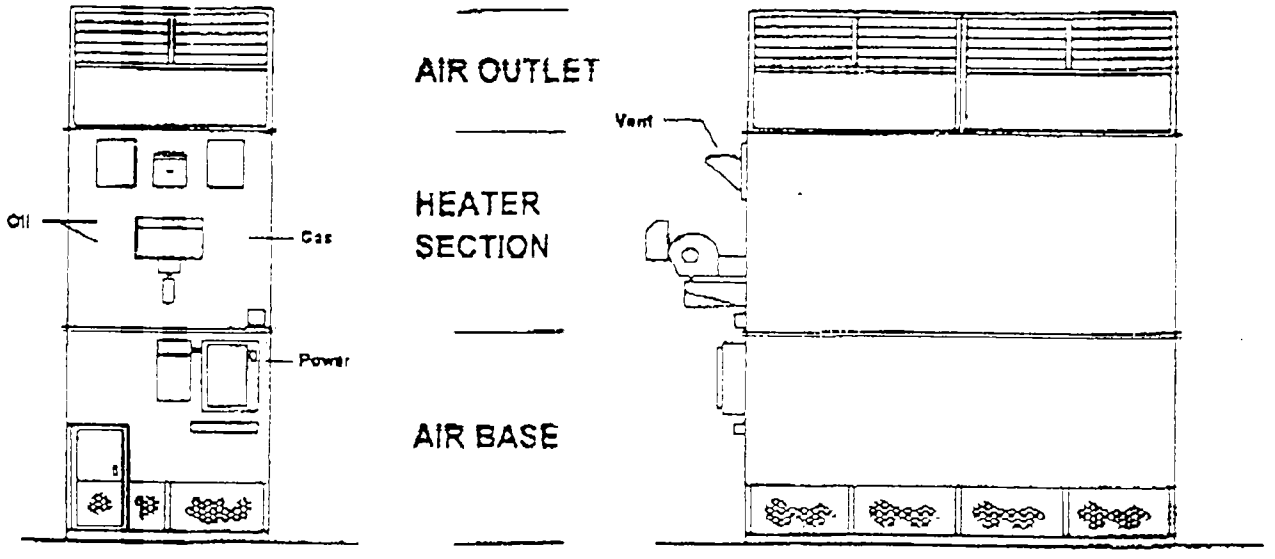
The Johnson AIR-ROTATION® system for this facility will consist of one (1) floor mounted air handling and heating unit.

SHIPPING, LIFTING EYES AND SKIDS

Each AIR-ROTATION® unit is shipped to the jobsite on a rag top truck. Under normal circumstances, there is one unit per truck. Each section has LIFTING EYES provided. All erection should be done with some type of overhead lifting device using chain and spreader bar. The sections should not be erected with a fork lift. Depending upon door size, modules may be shipped on SKIDS to be dragged off the trailers through shipping doors and then carried or moved on pipe rollers to final location. Skids are an option and must be specially ordered.

ERECTION TIME AND HARDWARE

Under normal circumstances, UNLOADING AND ERECTION should require the use of three men and an overhead lifting device and should take approximately four hours. Time required for unloading and erection will vary with job conditions and the rigging skill of the people doing the work. In the past, the work outlined above has been accomplished in as little as two hours to as long as one day. BOLTS AND NUTS are provided for attaching the matched outward flanged angle iron framing on each of the modules.



CONTROL END

RIGHT SIDE

DESCRIPTION OF UNIT

Length of Unit	12'-8"
Length Including Service Clearance	16'-11"
Width	6'-0"
Total Height	17'-8"
Tallest Section	7'-1"
Heaviest Piece	2850#
Flue Connection Height	13'-1"
Flue Diameter	10"
Minimum Circuit Ampacity at 480	15 amps
Maximum Circuit Protective Device at 480	20 amps
Natural Gas Input at 1000 Btu/cu. ft.	2400 cfh

POWER SOURCE A single source of 3-phase power must be supplied to the unit and connected to the main power panel. The power panel furnished with each AIR-ROTATION unit incorporates a flange mounted disconnect switch meeting NEC requirements.

RECONNECTION OF WIRING Reconnection of approximately 15 wires run in flexible conduit from main power panel on the air moving module to a 6" x 6" junction box on the heater module. Wires are match-numbered and wire nuts are provided.

GAS REGULATOR Johnson Heater Corp. will provide the appropriate regulator for the gas pressure specified. In the event that the specified gas distribution pressure is in excess of 5 psig, a service type pounds to pounds regulator, supplied by others, should be included in the gas train ahead of the regulator supplied by Johnson Heater Corp.

GAS TRAIN Our drawing EDF-167 shows components supplied by Johnson Heater Corp., factory piping, and field piping for the unit and reflects FM Insurance requirements. We do not recommend deviations from this schematic.

FLUE GAS VENT The flue gas vent is supplied and installed by others. The flue will meet and be installed in accordance with all applicable codes. The flue will be independently supported, gas tight, and terminate in a rain cap with inverted cone. See our drawing EDF-163-R3 for recommended detail. Each unit is designed to allow for the equivalent of two 45 degree elbows and 30 feet of horizontal pipe run. Should installation conditions require more resistance than this, it may be necessary to increase the flue pipe one size. Consult Johnson Heater Corp. prior to installation. A type "B" vent is not acceptable.

FLUES AND MAKE UP AIR Care must be given to flue height and location for any building with roof mounted or wall mounted supply air fans. The flue discharge and any supply fan intake will be appropriately separated to ensure that flue gas is not returned into the building.

EMERGENCY SHUTDOWN Special Note: There are terminal connections provided in our control panel to be used for emergency unit shutdown in the event of fire. The relay must be remotely powered and controlled by the building's fire protection or smoke detection system.

DO NOT USE FOR CONSTRUCTION All information contained in this scope of work is subject to change and revision. Final shop drawings will be provided after a firm order has been placed.

GWL:mat

July 11, 1994

Johnson AIR•ROTATION® System

SATISFACTION GUARANTEE

The Johnson Heater Corp. guarantees the AIR-ROTATION® system to perform in the manner presented. Satisfactory performance is subject to the sole judgement of the person or persons making the original purchase decision following a thorough indoctrination in system operation and performance through prior experience or visits to other installations.

In the event that the person or persons making the original purchase decision are dissatisfied with the performance provided by the AIR-ROTATION system during their first season of use, they shall notify Johnson Heater Corp. in writing at the corporate office. Johnson Heater Corp. will promptly evaluate the complaint under operating conditions. Providing that no exceptions apply, Johnson Heater Corp. will provide additional air handling and/or heating equipment as deemed necessary at no cost. As with the original equipment, shipment will be made F.O.B. Shipping Point with full freight allowed to the jobsite. Unloading and installation shall be at the expense of others. Any instance requiring the installation of added equipment will extend this guarantee through the next heating season.

Should the AIR-ROTATION system fail to perform in the manner presented and should all remedial efforts fail, Johnson Heater Corp. will remove the AIR-ROTATION equipment from the customer's facility. Assuming that the equipment has only been subjected to normal use and handling, an amount equal to but not exceeding Johnson Heater Corp's original invoice will be promptly rebated.

This guarantee is subject to the following exceptions:

(1) when outside air is introduced into the heated space due to lack of door discipline, poorly sealed summer ventilation equipment, or other means;
(2) inaccurate information supplied during original design;
(3) installation, alteration, or use of the equipment other than as recommended by Johnson Heater Corp;
(4) any performance exceptions specified in writing prior to order acceptance.

THE FOLLOWING ITEMS ARE SHIPPED LOOSE FOR FIELD MOUNTING AND PIPING BY OTHERS. LOCATE THESE COMPONENTS AS CLOSE AS POSSIBLE TO THE FACTORY PIPED GAS VALVE USING A MINIMUM OF PIPE AND FITTINGS.

1. Main shut-off cock with handle.
2. Main pressure regulator.
8. Pilot shut-off cock and tee with test plug .
12. Pilot supply tubing 5 feet long.

THE FOLLOWING ITEMS ARE TO BE VENTED TO THE OUTSIDE:

The vent ports on these components are to be piped to the outdoors and terminated in a weather/insect proof cap. If code allows, vent lines may be manifolded into a single pipe equal to or greater than the sum of the cross sectional areas of all entering vent lines (3/4" minimum).

DO NOT TERMINATE VENT LINES IN COMBUSTION CHAMBER OR FLUE.

2. Main pressure regulator.
3. Low pressure switch, manual reset type.
8. High pressure switch, manual reset type.
10. Pilot pressure regulator.

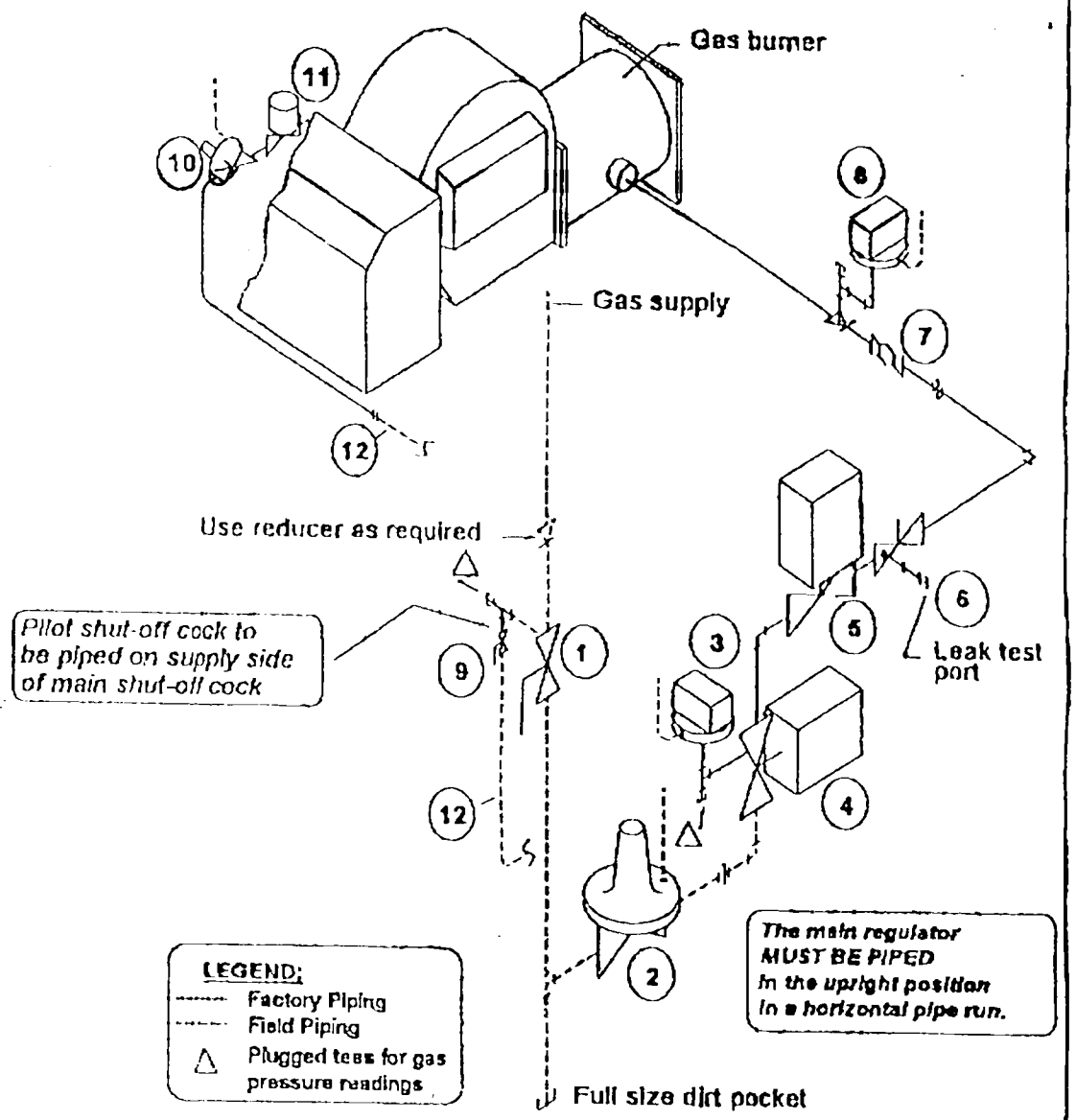
OTHER COMPONENTS:

4. Safety shut-off valve, motorized type. (Proof of closure switch furnished when input is over 5,000 MBH).
5. Safety shut-off valve, motorized type.
6. Leak test cock with test port, lubricated plug type.
7. Modulating gas flow control valve, butterfly type.
11. Pilot valve, solenoid type.

OTHER NOTES:

If gas supply pressure is over 5 PSIG, a service regulator is required in the gas line ahead of the Main Shut-off Cock. This service regulator should be installed at least 10 pipe diameters ahead of the unit regulator and in strict accordance with that manufacturer's recommendations.

All field piping shall conform to applicable local, state, utility, and insurance codes. Minimum compliance shall be to N.F.P.A. #54.



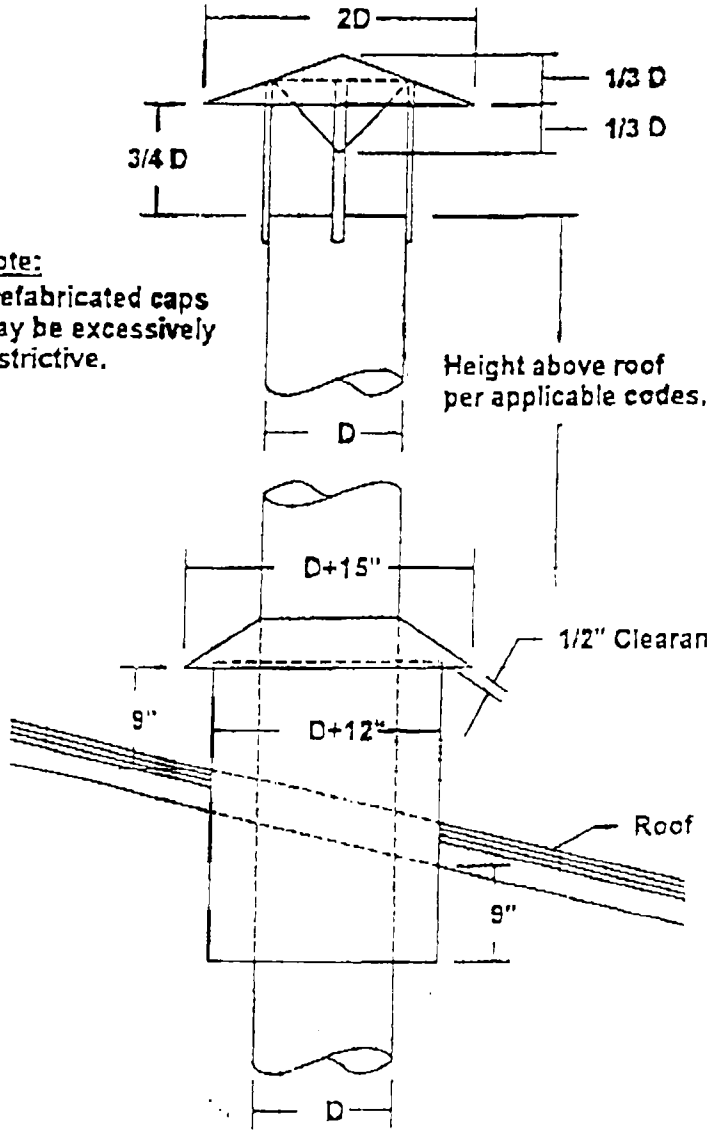
No	Revision	Date

Johnson Heater Corp.
ST. LOUIS, MO

Gas Train Arrangement & Components for Underwriters Laboratories (UL) & Factory Mutual (FM) Insurance Acceptance Modulating Fuel Burner

BY:	APP:	DATE:	NO:
JG	HG	6/15/94	EDF-167

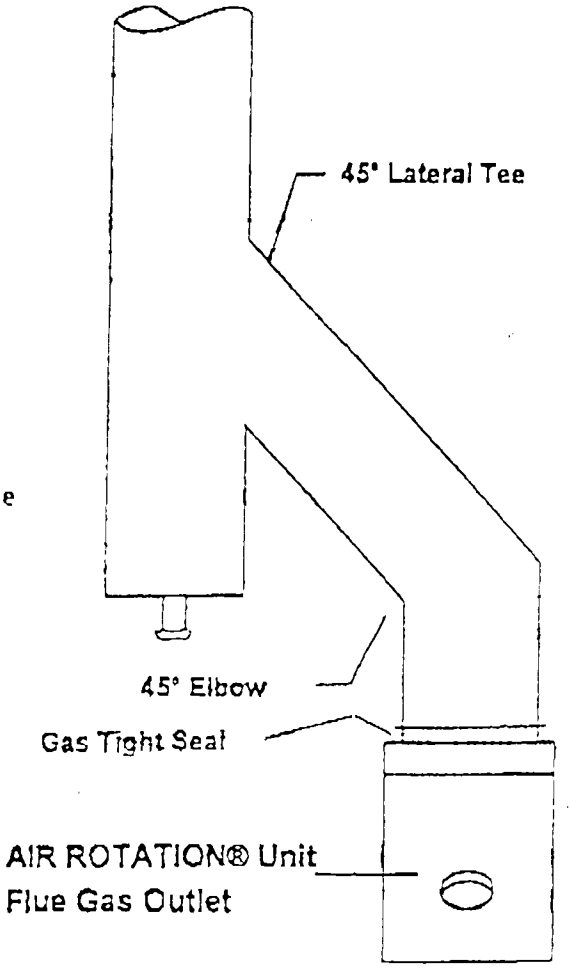
SUGGESTED RAIN CAP AND ROOF SLEEVE DETAIL
(This illustration per NFPA for combustible roofing.
Consult local codes for compliance.)



Note:
Prefabricated caps may be excessively restrictive.

Height above roof per applicable codes.

Suggested Drip-Leg Detail



Notes:

1. Vent stack to be in compliance with applicable codes.
2. By N.F.P.A definition, an AIR ROTATION® unit is a "low heat appliance".
3. The vent stack should be gas tight.
4. Single wall stainless steel construction. is recommended, subject to compliance with applicable codes.
5. The vent stack must be supported independent of the flue gas outlet adaptor on the AIR-ROTATION unit.
6. Ensure that the distance between outside air intakes and the vent stack outlet is according to applicable codes.
7. If the total length of the vent stack INSIDE the building is greater than 30 feet, a double wall or insulated vent stack is strongly recommended.

The installation of a drip leg is recommended on all vent stack.
offset should be made using one 45° lateral tee and one 45° elbow; DO NOT use two 90° elbows.

			DATE

Suggested Flue Gas Vent
Fuel Fired AIR ROTATION® Unit

BY:	APP:	DATE:	NO:
JG	HC	6/27/94	EDF-163

C

NOTE: WEIGHT ESTIMATES PROVIDED BY SWEENEY

EQUIPMENT TO REMAIN ON WEST MEZZANINE

Size (in)	Name	Approximate weight (lb)	Amount
18x36	PEERLESS SAW	400	1
48x60	SIP JIG BORE	1500	1
54x60	LAGUN MILL	2500	1
60x66	MILWAUKEE MILL	3000	1
40x120	HENDEY LATHE	1800	1
60x90	BROWN SHARP GRANDER	1200	1
60x72	GARDNER GRINDER	1000	1
72x228	LANDIS GRINDER	4000	1
60x60	CINCINNATI GRINDER	1200	1
60x60	EXACTO MILL	1600	1
84x84	CINCINNATI EDM	2400	1
70x250	BERTRAM LATHE	4000	1
36x72	SURFACE PLATE & TABLE	150	1
30x36	CARBOLOY GRINDER	200	1
24x36	PORTER CHOP SAW	450	1
	TOTAL WEIGHT=	**25400**	
	TOTAL PIECES OF EQUIPMENT		**15**

EQUIPMENT TO REMAIN ON MAIN SHOP FLOOR

	Size (in)	Name	Approximate weight (lb)	Amount
3	108x120	WESTINGHOUSE HEATER	1000	5
40	*240X72X72*	*SUNBEAM HEAT TREATMENT FURNACE*	**?**	*2*
		TOTAL WEIGHT=	**?**	
		TOTAL PIECES OF EQUIPMENT =		**7**

	ACTIVE EQUIPMENT TO BE DECONTAMINATED			
	LOCATED IN THE MAIN SHOP AREA			
umbe	Size (in)	Name	Approximate weight (lb)	Amount
1	60x95	LITTLE SHEAR	2000	1
2	72x108	GARY FLATTER	1500	1
4	72x120	HALLEN SHEAR	2500	1
5	84x102	HALLEN PAY-OFF	2500	1
6	60x132	WATERBURY PAY-OFF	2500	1
7	24x48	KALAMAZOO SAW	100	1
8	36x94	SHELDON LATHE	1600	1
9	36x60	(4 foot) BREAK	800	1
11	11'x26'	ASC PAY-OFF	4000	1
12	72x32	HALLEN SHEAR	4000	1
13	48x96	STONE SURFACE PLATE	1000	1
14	6'x13'	CONVECTOR	1200	1
15	54x72	SCRAP WINDER	800	1
16	72x120	DOWN ENDER	1000	1
20	7'x50'	12 STRAND RECOILER (50 foot)	10000	1
26	72x32	FLATTERER	200	1
27	9'x4'x5'	PAXBON PAY-OFF	2500	1
28	9'X2'	FLATTENER	1500	1
29	2'X2'	TENSILE STRENGTH TESTER	1000	1
30	5'x3'	CRANE TROLLEY	2000	2
33	3'x2'x3'	SPEED REDUCER	1000	1
37	3'x3'x4'	C HOOK & STAND	800	2
		TOTAL WEIGHT=	44500	
		TOTAL PIECES OF EQUIPMENT		23
	ADDITIONAL EQUIPMENT TO BE DECONTAMINATED			
	LOCATED IN THE MAIN SHOP AREA			
17	48x60	NIAGARA PRESS	2500	1
18	60x72	E.W. BLISS PRESS	3000	1
19	72x84	BROWN & SHARP GRINDER	300	1
21	20x26	7 STRAP RECOILER	750	1
23	24x48	2 HEAD PAY-OFFS	800	7
25	36x120	STEEL TABLE	200	1
31	5'x5'x5'	FLATTENER	1500	1
32	3'x5'	PAY-OFF REEL	2000	1
34	7'x3'x5'	MACH RECOILER	2500	1
35	4'x4'x10"	DIE BOXES	1100	44
36	4'x4'x3'	BOXES OF DIES & ROLLERS	4000	8
38	22'x6'x6'	STACKER	2500	1
39	22'x8'x1'	BASE WESTINGHOUSE GENERATOR	2000	1
		TOTAL WEIGHT=	23150	
		TOTAL PIECES OF EQUIPMENT		69

		EQUIPMENT TO BE DECONTAMINATED		
		LOCATED ON THE THE WEST MEZZANINE		
A	36X72	DESKS	100	2
B	72X72	C&A SLITTER	1800	1
C	24X1002	WORK BENCH	50	2
D	26"x36"	STEEL CABINETS	50	2
10	20x24	STRAPPING ROLLS	250	1
22	18x48	CABLE DRUMS	350	14
24	36x90	RACKS	200	14
		TOTAL WEIGHT=	2800	
		TOTAL PIECES OF EQUIPMENT		34
		EQUIPMENT TO BE DECONTAMINATED		
		LOCATED ON THE EAST MEZZANINE		
01	4'x4'x4'	BASKETS OF MISCELLANEOUS SCRAP		4
02	1'x1.5'	MOTOR		4
03	20'x2'x1'	CONDUIT		8
04	10'x3'x.5'	WOOD BOX FILLED W/ HEAT COILS		8
05	2'x2'	ELECTRICAL COILS		1
06	2'x1'	CONTROL BOXES		3
07	1'x1'x3'	PIPE		1
08	35'	ELECTRICAL CONDUIT		1
09	10"x6"x8'	BOXES FILLED W/ SPINDLES		10
10	6'x6'x5'	THREE HEAD BANDER		1

ADDENDUM NO. 1
TO THE
BUILDING DECONTAMINATION AND SOIL REMEDIATION]
318 URBAN STREET
PROJECT MANUAL

ISSUED APRIL 4, 1997

This Addendum No. 1 consists of the following:

1. Minutes of the Site Walk, conducted on March 24, 1997.

2. Clarifications in response to Bidder's questions raised since March 24, 1997.

3. Actual revisions to the language of the Bidding Documents resulting from the pre-bid conference and clarifications.

This Addendum No. 1, dated April 4, 1997, supersedes the Bid Schedule, Section 01025 and Section 03300 and supplements all other sections of the Contract Specifications, as detailed in the Project Manual for Building Decontamination and Soil Remediation, dated March 15, 1997 and the accompanying Drawings, dated March 15, 1997.

MINUTES OF THE PRE-BID SITE WALK
CONDUCTED ON MARCH 24, 1997
FOR THE
318 URBAN STREET SITE

All prospective Bidders attended the Site Walk and signed in as required.

Bidders were advised that the minutes from the pre-bid walk through will be issued as a subsequent addendum.

Bidders were instructed to contact General Electric (GE)'s Representative, ERM (Peg Lawrence or Gary Garippo) at (716) 633-5920 to arrange additional Site visits for subcontractors.

Bids are due April 15, 1997 to GE at the Schenectady, New York address listed in the Instructions to Bidders.

The Bidders were toured through the entire building at 318 Urban Street including both the East and West Mezzanine areas. The Bidders were also walked around the exterior of the building and around all areas where soil excavation will be conducted.

The Bidders were notified of the Addition of an Optional Item to the Scope of the Work. This item consists of (1) Locating a buried manhole (Manhole No. 2) along the railroad track sewer line, (2) the clearing of a root mass from the railroad track sewer line between Winslow and Ferry Street and (3) the flushing and videotaping of the railroad track sewer line between these two streets. Drawing C-6 was added to the Project Manual to outline the Work to be performed. Attachment A to this Addendum provides the videotape logs for the videotaping of this length of sewer in November 1996.

ADDITIONAL CLARIFICATIONS

1. All Work to be performed by others is described in Section 01010, paragraph 1.04A of the bid documents. All other Work described in the bid documents shall be performed by the contractor. The use of the term "will" throughout the Project Manual has the same meaning as "shall". The Contractor is responsible for performing that scope of work.

2. Attachment B to this addendum provides the Product Data Sheet for the Bruning Paint, Interior-Exterior Alkyd Gloss Enamel. This Product Data Sheet shall be followed by the Contractor in its entirety, including all requirements for prime coats and surface preparation. Painting of the interior walls and ceiling of the building shall be performed after decontamination has been confirmed, as specified in Section 02090, 3.02 A.5. Products of other manufacturer proposed as equivalent quality must be submitted to GE's Representative for approval at least two weeks prior to the scheduled application. Contractor shall warrant that proposed substitutions, if accepted, will provide performance equivalent to the materials specified in Attachment B. Contractor shall provide all required ventilation during and after painting in accordance with manufacturer's recommendations and OSHA requirements.

3. All personnel within the exclusion zones during soil remediation and building decontamination must receive 40-hour HAZWOPER training. If concrete floor installation is conducted after building decontamination has been completed, personnel conducting the concrete installation do not need to receive 40-hour HAZWOPER training.

4. The licensed surveyor will be responsible for surveying the existing topography of the Site prior to any Work being performed and establishing the horizontal limits of the areas to be excavated at specified depths. There are control points previously established for the Site. The Contractor is responsible for staking the horizontal and documenting the vertical extent of the excavations and providing this information to GE's Representative. After excavations and backfill have been completed, the licensed surveyor must resurvey the horizontal extent of those areas if additional excavation was conducted beyond the initial horizontal limits.

5. Item 8.4 of the Remedial Action Contract stated that the requirement for obtaining and maintaining performance and payment bonds is at GE's discretion. GE will reimburse the Contractor for the direct cost of the bonds, if they are required.

6. Contractor shall supply a temporary scale, at least 20 feet in length by 10 feet wide with a minimum of 35 ton weighing capacity. The scale shall have a digital indicator and printer. The scale shall be calibrated in accordance with New York State Weights and Measures Standards

7. Specification Section 01025, Pay Item 7, requires cleared vegetation to be transported off-site as C&D waste. Instead of disposing of this waste off-site, Bidders may base their bid on chipping the cleared wood and use as mulch in reseeded areas.

8. RCRA nonhazardous waste shall be transported to the Waste Management Incorporated High Acres landfill in Fairport, New York, located east of Rochester, New York.

9. Specification Section 01025, Pay Item No. 8, requires that the Contractor shall prepare for transportation, transport and dispose of the Asbestos Containing Material at a GE approved facility. The High Acres landfill in Fairport, New York is approved by GE and accepts asbestos containing materials.

10. Specification Section 01025, Pay Item No. 9; The "Exhaust Unit" is the same as the Exhaust "Stack" shown on the Drawings. The interior air filter an metal housing for the Exhaust Unit shall also be removed by the Contractor and prepared for transportation off-site. The air filter material contains concentrations of lead which require management of the material as a hazardous waste.

11. Specification Section 01025, Pay Item No. 10; All of the building interior walls to be removed during the demolition work are non-load bearing walls.

12. Specification Section 01025, Pay Item 13 and shown on Drawing C-4; the Contractor is responsible for removal and replacement of 145 feet of fence along the northern portion of the west property line. The Contractor may remove additional lengths of fence to facilitate equipment movement around an area to be excavated. The price for the removal and replacement of the additional fence shall also be included in this Pay item.

13. Specification Section 01025, Pay Item 14; Sweeney Steel will supply a Representative for the determination of operability of Sweeney Steel equipment prior to decontamination of the equipment. Sweeney Steel will supply a Representative for the determination of the operability of the Sweeney Steel equipment prior to loading, transportation and unloading of the equipment at the Sweeney Steel Sawyer Avenue facility. As described in

Section 01025, the Contractor is responsible for the cost of repairs to equipment damaged during decontamination or transport. New equipment does not have to be fully decontaminated. Wipe samples can be collected by the Contractor and analyzed by the Contractor at a certified laboratory. If determined to not contain PCB concentrations, the base of this equipment which has been in contact with the floor only has to be decontaminated.

14. The 318 Urban Street building has 7, 850 square feet of windows on the exterior walls. These windows shall be replaced with glass block. The removal of the windows and the installation of the glass block will not be performed under this contract. This work will be performed under a separate contract between Contractor and Sweeney Steel. Therefore, bid pricing for glass block replacement and window removal shall be bid as a stand-alone item. This bid item is optional.

15. Section 01010, 1.04, A Work By Others: Sampling and On-Site Analysis of post-excavation and TSCA waste classification samples will consist mainly of field analysis and be provided by ERM. Off-site laboratory confirmation will be performed on selected samples to confirm the field sample results.

16. Waste Disposal : The Contractor shall be responsible for the cost of disposal for the asbestos containing material, the Johnson Heater Unit and wastewater generated during decontamination.. The Contractor may also submit unit costs for disposal of all other wastes. The waste disposal work may, at GE's discretion, be assigned to the Contractor or GE will use existing agreements with the disposal facilities and will be billed directly by the disposal facilities..

17. General Electric is providing a sample of Section 2.0 of Schedule A to the Remedial Action Contract, as referred to in LSP 92001-2 and ITB 97001-3. The Schedule A is included as Appendix D to Addendum No. 1.

18. Specification 02050 3.04C. Metal stairs must be "OSHA" approved construction. Submittals must be made to GE's Representative prior to the purchase of the steps.

19. Specification 02081, Bid Breakdown and Section 01025 After decontamination of the tank, the Contractor shall prepare the underground storage tank for transportation to and transport the tank to a C&D landfill.

20. Specification Section 02080 2.04A and Section 01025 The Johnson Heater shall be disposed of as a RCRA nonhazardous waste. The disposal cost is included under the Pay Item 16 to allow comparisons of the two options by GE.

21. Specification Section 02220- 3.04 B.1 Contractor shall use mechanical compaction equipment, such as tamping devices or rollers. Compaction equipment shall be approved by GE's Representative.

REVISIONS TO THE BIDDING DOCUMENTS

Remedial Action Contract, Item 1.7 - Stipulated Penalties

Contractor shall be charged a stipulated penalty of $300 per day for each day of site work which extends beyond August 31, 1997 plus the charge to supply GE's Representative to oversee this work. Any time resulting from a change in scope as approved by GE will be added to the August 31,1997 deadline.

1. Delete the Bid Schedule in its entirety and replace with the revised Bid Schedule attached to this Addendum.

2. Delete Specification Section 01025 and replace with the revised Section 01025 attached to this Addendum.

3. Section 03300, Paragraph 1.03 Submittals, insert as Item C: "Shop drawings for all concrete."

4. Section 03300, delete Parts 2 and 3 in their entirety and replace with the scope of work described in Attachment C to this Addendum.

   Insert: The Contractor shall pitch the new concrete floor to match the existing door elevations. The floor shall be pitched in these areas at a maximum slope of 1" vertical for every 12" horizontal. In these areas Contractor shall remove any existing floor as necessary to maintain the required new concrete floor thickness. New concrete floor must allow for doors to open freely."

5. Specification Section 01100, 1.08 B Delete "02084" and replace with "01561".

6. Specification Section 01410, 1.03; Insert Item F. "Laboratory must be New York State certified."

7. Specification Section 01561 3.01; Insert to Item D "Contractor shall provide all decontamination records to GE's representative within 48 hours of the decontamination of a surface."

8. Specification Section 01561 3.01; 3.02B Insert "Site" before "Health and Safety Officer (SHSO)"

9. Specification Section 01200 1.03 C. Insert sentence at end of item. "Contractor's Project Manager, Site Superintendent, and Site Health and Safety Officer must attend all meetings".

10. Specification Section 01500 1.02 B.1 Delete "Submitted" and replace with "Received approval from GE's Representative on".

11. Specification Section 01500 1.02 B.2 Delete "Submitted" and replace with "Received approval from GE's Representative on".

12. Specification Section 01500 1.02 B.3 Delete "Submitted" and replace with "Received approval from GE's Representative on".

13. Specification Section 02080 3.02 Item 7. Insert "Clearance samples shall be collected in accordance with NYSDOH and NYSDOL requirements."

14. Specification Section 02090 2.04 A. Delete "TSCA contaminated material" and replace with "RCRA nonhazardous waste."

15. Specification Section 02220 2.02 (C) Insert "Backfill material shall not have greater than 20 % fines."

16. Section 02090 (2.03) (A) (2) delete "the contractor is responsible to design" on line 3 and replace with "the Contractor shall follow the requirements established by Sweeney Steel."

17. Specification Section 02221 1.02, D, 2 Delete "with detectable concentrations of " and replace with "concentrations equal to or greater than 10 ppm." Insert as the second sentence "Soil containing less than 10 ppm will be used as backfill material on-site at depths below one foot.".

18. Specification Section 02850 2.01 Insert Item "D. Liners shall not be relied on to meet the leakproof requirements of Paragraph 1.02 (C)."

19. Specification Section 02900 3.03 B Delete "60" and replace with "100".

20. Specification Section (3.03) (C) Insert "1,000" between "pounds per" and "square foot".

21. Specification Section 02080 1.03 (B) 1 Insert Item f. "Persons preparing the Asbestos Abatement Plan must posses a valid project designer certificate which shall be provided to GE's Representative."

Drawings

Drawing C-5

Delete detail # 8 in its entirety.

BID BREAKDOWN

BUILDING DECONTAMINATION AND SOIL REMEDIATION

GENERAL ELECTRIC FACILITY, 318 URBAN ST., BUFFALO, NY

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL PRICE
	GENERAL WORK ITEMS			
1.	Mobilization/Demobilization And Obtaining All Necessary Permits	Lump Sum	$ _____	$ _____
2.	Preparation of Health and Safety Plan and other Required Plans, Profile Sheets, Land Disposal Restriction Forms, Manifests and Other Paperwork Required for Waste Disposal	Lump Sum	_____	_____
3.	Preparation for Transportation and Transportation of Waste and Debris Off-Site	Estimated Quantities [1] (ton)		
	• TSCA - all soils and construction debris containing PCB concentrations above 25 ppm to Model City, New York	_____	_____	_____
	• RCRA Non Hazardous (Subtitle D) - soils and construction debris containing PCB concentrations below 25 ppm, asbestos containing material, grasses and roots to High Acres Landfill	_____	_____	_____
	• Debris (Nonhazardous) - all non-PCB containing construction debris and cleared vegetation to a GE approved disposal facility	_____	_____	_____
4.	Preparation for, Transportation to and Disposal of Decontamination Water	Lump Sum	_____	_____
5.	Surveying Limits of Excavations and Final Grades	Lump Sum	_____	_____
6.	Collection, Preparation for Transportation and Transportation of Water from Rain or Dewatering	Lump Sum	_____	_____
		SUBTOTAL	_____	_____

[1] Contractor to supply as the basis for the lump sum price.

SITE PREPARATION/RESTORATION

7.	Clearing and Grubbing	Lump Sum	_____	_____
8.	Removal of Asbestos Containing Material	Lump Sum	_____	_____
9.	Demolition of Exterior Loading Docks and Exhaust Unit, including rebricking of Openings	Lump Sum	_____	_____
10.	Demolition of Interior Office Space (East and West Mezzanines)	Lump Sum	_____	_____
11.	Installation of Topsoil and Revegetation	Lump Sum	_____	_____
12.	Installation of Asphalt	Lump Sum	_____	_____
13.	Fence Removal and Replacement	Lump Sum	_____	_____
		SUBTOTAL	_____	_____

BUILDING DECONTAMINATION

14.	Decontamination and Movement of Sweeney Steel Equipment	Lump Sum	_____	_____
15.	Decontamination of Exposed Interior Surfaces, including Skylight Windows	Lump sum	_____	_____
16.	Decontamination of Johnson Heater	Lump Sum	_____	_____
	OR	**OR**		
	Removal, Disposal, and Replacement of Johnson Heater	Lump Sum	_____	_____
17.	Removal of Wood Floor Blocks, Underlying Mastic and Metal Tracks	Lump Sum	_____	_____
18.	Decontamination of Surfaces Under Wood Block Floor	Lump Sum	_____	_____
19.	Installation of Concrete Floor	Lump Sum	_____	_____
20.	Painting of Building Interior Walls and Ceiling	Lump Sum	_____	_____
		SUBTOTAL	_____	_____

SOIL REMEDIATION

21.	Excavation and Backfill of Designated Soils	Lump Sum	_____	_____
22.	Removal of Underground Storage Tank; Preparation for Transportation and Transportation	Lump Sum	_____	_____
23.	Installation of Geotextile	Lump Sum	_____	_____
		SUBTOTAL		

UNIT RATES

24.	Unit Rate for Water Based Recleaning Surfaces	Square Foot		
		<500	_____	_____
		500-1,000	_____	_____
		>1,000	_____	_____
25.	Unit Rate for Scarification of Concrete Surfaces (one half inch thickness)	Square Foot		
		<500	_____	_____
		500-1,000	_____	_____
		>1,000	_____	_____
26.	Excavation, Preparation for Transportation and Transportation of Subtitle D Waste From Outside Regions Designated on Drawings	Ton	_____	_____
27.	Excavation, Preparation for Transportation and Transportation of Excess PCB-Contaminated Soil Outside Regions Designated on Drawings	Ton	_____	_____
28.	Removal of Exterior Windows, Staging of Roll-offs for Transportation of Windows and Tranportaion of Windows for Disposal (Optional - Under Separate Contract)	Square Foot	_____	_____
29.	Replacement of Exterior Windows with Glass Block and Required Structural Supports (Optional - Under Separate Contract)	Square Foot	_____	_____
30.	Disposal of TSCA Waste (Optional)	Ton	_____	_____
31.	Disposal of RCRA Subtitle D Waste (Optional)	Ton	_____	_____
32.	Disposal of C & D Waste (Optional)	Ton	_____	_____

33.	*Do Not Use*			
34.	Removal of 18" Wide Trench adjacent to the Loading Dock (Optional)	Linear Foot	_____	_____
35.	Determination of Location of Manhole No. 2, Removal of Root Ball, Flushing , Collection of Washwaters,and Videotaping of Railroad Track Sewer Line **(Optional)**	Square Foot	_____	_____

TOTAL BID PRICE $**_____ **$_____

Written Out

Bid Submitted By: _____ Date _____, Phone No. _____

* Engineers estimate, actual quantities may differ; Contractor will be paid on actual quantities.
NOTE: In case of any discrepancies; words shall govern.

SECTION 01025
MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section includes measurement and payment criteria applicable to the Work. Work includes all items below as well as all other Work as shown on the Drawings or in the Project Manual. Disposal locations for materials are approximate, field sampling and analysis of the waste materials may result in handling of the waste under a different classification.

1.02 UNIT QUANTITIES SPECIFIED

A. Items of construction work as specified will not be measured for payment. The work will be paid for at the Contract lump sum prices for the items identified below as lump sum and the costs summarized on the accompanying Bid Schedule.

B. Certain items are specified below and in the accompanying Bid Schedule as requiring unit costs. These items will be measured for payment by the Contractor and the measurements approved on a daily basis by GE or GE's Representative.

1.03 BASIS OF PAYMENT

A. Payment includes full compensation for: preparation and implementation of Contractor's Health and Safety Plan, Contingency Plan, Construction Work Plan, Permits and all other required documents; all required labor, products, tools, equipment, transportation, services and incidentals; performance of surveys to locate and lay out the Work; erection, application or installation; specified quality control testing; inspections, if any, required by local regulations; delays; and overhead and profit.

1.04 PAY ITEMS

1. GENERAL WORK ITEMS

1. Pay Item 1: Mobilization/Demobilization and Obtaining All Necessary Permits

a. Shall be paid for at the Contract lump sum price. Price shall include all costs of project start-up including cost of insurance, permits, installation and erection of temporary facilities of every kind, as well as all costs for removing same. Price shall also include relocating/reinstalling utilities, security measures, maintaining site for bond, if required. The Contractor shall be paid 55 percent of the bid item when mobilization is complete and 45 percent when all temporary facilities and equipment have been removed from the Site to the satisfaction of GE's Representative and GE.

2. Pay Item 2: Preparation of Health and Safety Plan and other Required Plans, Land Disposal Restriction Forms, Manifests and Other Paperwork Required for Waste Disposal.

a. Shall be paid for at the Contract lump sum price. Price shall include all work necessary to complete required forms for disposal.

3. Pay Item 3: Preparation for Transportation and Transportation of Waste and Debris Off-Site.

a. Shall be paid for at the Contract lump sum price for the estimated quantities as determined by the Bidder and noted on the Bid Breakdown. Waste is divided into three classifications:

a) TSCA waste includes all soils containing PCB concentrations above 25 ppm. These soils will be transported to the TSCA permitted landfill in Model City, New York.

b) RCRA nonhazardous (Subtitle D) includes soils containing PCB concentrations below 25 ppm, grasses and roots, and debris from the garage demolition.

These materials will be shipped to the Subtitle D permitted landfill in High Acres Landfill in Fairport, New York.

c) **Debris (Nonhazardous)** includes all wastes which are non-PCB containing. These wastes will be shipped to a GE-approved Construction and Debris (C&D) landfill.

4. Pay Item 4: Preparation for, Transportation to and Disposal of Decontamination Water.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies to store the decontamination wastewaters on-Site in compliance with TSCA secondary containment requirements. The price shall also include all labor, supplies, and equipment to transport and dispose of the water at a GE-approved facility.

5. Pay Item 5: Surveying Limits of Excavations and Final Grades.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, supplies and equipment for a licensed surveyor to establish the horizontal boundaries and the initial elevations of the areas to be excavated. Price shall also include the licensed surveyor establishing the final graded elevations after completion of backfilling and any adjustments of the horizontal extent of the excavations. Contractor is responsible for supplying GE's Representative with documentation on the invert elevations of the excavations.

6. Pay Item 6: Collection and Transportation of Water from Rain or Dewatering

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, supplies and equipment for the proper collection and storage of any rain water which collects within any open excavation or any water generated from dewatering activities. Price also includes the sampling and analyses of the water for proper waste classification. Price shall also include the transportation of the water to a GE approved facility.

2. SITE PREPARATION/RESTORATION

1. Pay Item 7: Clearing and Grubbing.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, and supplies for clearing of all brush and trees at a level 6 inches above ground surface. The price for preparation for transportation and transportation of the cleared vegetation as C&D waste is included in Item 3c or the mulch can be applied to the base of the trees and shrubs. Price shall also include labor, equipment, supplies, for grubbing of all roots and grasses within the upper 6 inches of ground surface. The price for preparation for transportation and transportation of the grubbed vegetation as Subtitle D waste is included in Item 3b.

2. Pay Item 8: Removal of Asbestos Containing Material.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, and supplies for removal of asbestos containing material including pipe insulation, office structures and roofing material over the covered loading dock area. Price shall also include the preparation for transportation, transportation for disposal and disposal of the removed materials as asbestos containing waste at a GE approved disposal facility.

3. Pay Item 9: Demolition of Exterior Loading Docks and the External Exhaust Stack and Rebricking of the Openings.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, and supplies for demolition of the exterior loading dock along the south and west walls of the main building and the demolition of the hoist and the exterior exhaust stack . Price shall also include the removal of the interior air handling unit including the filter media. Price shall also include the trimming of any exterior fixtures flush with the building exterior walls. Price shall also include the restoration of any exterior surfaces and rebricking of any openings with materials similar to the building's current construction. The price for preparation for transportation and

transportation of the demolished materials shall be included under Pay Item 3b.

4. Pay Item 10: Demolition of Interior Office Space.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, supplies for the removal of the non-load bearing interior walls and wall structural supports and the ceilings and the ceiling supports for the office space on the second floor of the East and West Mezzanine and the entire first floor office space under the East Mezzanine. Price shall also include proper removal and closing of all utilities to the office space in these areas. Price shall also include the removal of several non-supporting walls under the West Mezzanine. The price for preparation for transportation and transportation of the demolished materials shall be included under Pay Item 3b.

5. Pay Item 11: Installation of Topsoil and Revegetation

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, supplies for the installation of at least 6 inches of topsoil over areas which were disturbed during remediation. Price includes the seeding of these areas and maintenance of the seeded areas for one year. Price shall also include the planting of the trees and shrubs as shown in the Drawings.

6. Pay Item 12: Installation of Asphalt.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, supplies for the installation of the three types of asphalt as required in the Drawings. Price shall also include the removal of several inches of stone and gravel and recompacting of subbase in several areas prior to installation of asphalt.

7. Pay Item 13: Fence Removal and Replacement

   a. Shall be paid for at the Contract lump sum price. Price shall also include the removal and replacement of the fence along the north portion of the western property line in the area where the fence was removed to allow excavation of the

underlying soils. Price shall include all labor, equipment, and supplies for the removal and replacement of any other fencing at the Site which the Contractor removes during soil remediation.

3. BUILDING DECONTAMINATION

1. Pay Item 14: Decontamination and Movement of Sweeney Steel Equipment.

a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies for the washing of the Sweeney Steel equipment. Price shall also include the construction of new wooden crates for those materials currently stored in crates. The preparation for transportation and transportation of the existing crates for disposal is included under Item 3b. Price shall also include the loading of the equipment onto trucks and the movement of the equipment to the Sweeney Steel facility in Tonawanda, New York. Price shall also include the on-Site movement of any pieces of Sweeney Steel equipment which remain on-Site during the building interior remediation. Price shall also include the testing of the Sweeney Steel equipment for operability prior to and after the decontamination is conducted. Price shall include the repair of any equipment which was damaged as a result of the Contractor decontamination. Price shall also include the movement of Sweeney Steel equipment from the Tonawanda facility back to 318 Urban Street after the decontamination is complete.

2. Pay Item 15: Decontamination of Exposed Interior Surfaces, including Skylight Windows

a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment, supplies for washing all interior surfaces with a water based cleaning solution until the surfaces are declared by GE's Representative to be "white glove" clean. Price shall also include the flushing of the interior of all windows on the exterior walls. The price for the preparation for transportation, transportation and disposal of any and all washwaters generated during the decontamination shall be included under Pay Item 4.

3. Pay Item 16: Decontamination of Johnson Heater OR Removal, Disposal, and Replacement of Johnson Heater.

   a. Shall be paid for at the Contract lump sum price. Price shall include the dismantling of the Johnson Heater Unit and the decontamination of all interior and exterior surfaces with a water based cleaning solution. Price shall also include the reconstruction of the Heater and demonstrated performance similar to the performance prior to the dismantling. Price shall include the preparation for transportation, transportation and disposal of any and all washwaters generated during the decontamination.

   OR

   b. Shall be paid for at the Contract lump sum price. Price shall include the direct replacement of the Johnson Heater Unit with a similarly performing model and the demolition of the old unit. Price shall include the preparation for transportation, transportation and disposal of the Johnson Heater Unit at a GE approved disposal facility as a RCRA non-hazardous waste.

4. Pay Item 17: Removal of Wood Floor Blocks, Underlying Mastic and Metal Tracks.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies for the removal of the wooden floor blocks and sandblasting for complete removal of the underlying mastic material. Price shall also include the removal of any metal tracks and areas where the concrete is in deteriorated condition. The price for preparation for transportation and transportation of the floor materials shall be included under Pay Item 3c. The price for preparation for transportation and transportation of the sand blasting waste shall be included under Pay Item 3b.

5. Pay Item 18: Decontamination of Surfaces Under Wood Block Floor.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies for the decontamination of the concrete subsurface under the wood

block floor. Price shall include the decontamination of the metal trenches along the floor areas. Price shall also include the testing of any utilities encountered in areas under the wood block floor and within the trenches to determine if the utilities are still active. Price shall include the removal of nonactive utilities and the continued operability of those still in use. Price shall also include the removal of all materials from the former transformer decommissioning pit and the decontamination of the walls of this pit. The price for the preparation for transportation, transportation and disposal of any and all washwaters generated during the decontamination is included under Pay Item No. 4.

6. Pay Item 19: Installation of Concrete Floor.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies for the installation of a 7 inch thick concrete floor as designated by Sweeney Steel throughout the main floor in the building. Price shall also include the cost of sloping the floor toward lower elevations in three areas. Price shall also include the filling in of the former transformer decommissioning pit and the installation of concrete floor over properly compacted subbase in this area. Price shall also include the removal of collapsed concrete in the areas shown on the Drawings and the installation of new concrete over these areas after repair.

7. Pay Item 20: Painting of Building Interior Walls and Ceiling.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, equipment and supplies for the application of one complete coating of paint over the interior of the building walls and ceilings. Price shall include all surface preparation for the painting.

4. SOIL REMEDIATION

1. Pay Item 21: Excavation and Staging of Designated Soils.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor equipment and supplies to excavate the designated soils and backfill the excavations with properly compacted soils. Price shall also include the proper staging of

the excavated soils to allow GE's Representative to conduct waste characterization sampling.

2. Pay Item 22: Removal of Underground Storage Tank.

   a. Shall be paid for at the Contract lump sum price. Price shall include removal of the underground storage tank formerly used for petroleum product. Price shall include all labor, supplies, and equipment to excavate the tank and clean the interior in accordance with the NYSDEC STARS requirements. Price shall also include the cleaning of the exterior of the tank to remove any PCB containing soils. The preparation for transportation, and transportation of the tank off-Site as a C&D waste shall be included under Item 3b.

3. Pay Item 23: Installation of Geotextile.

   a. Shall be paid for at the Contract lump sum price. Price shall include all labor, supplies and equipment to place the geotextile liner along the south side of the building as designated in the Drawings.

D. UNIT RATES

1. Pay Item 24: Unit Rate for Water Based Recleaning Surfaces.

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment and supplies to perform additional water-based cleaning at surfaces which passed the white glove test. Price shall also include the disposal costs for the additional decontamination water generated.

2. Pay Item 25: Unit Rate for Scarification of Concrete Surfaces.

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment and supplies to remove the upper half inch of concrete surfaces which require additional PCB removal. The price shall include all measures to contain and collect all dusts. This is an optional unit cost..

3. Pay Item 26: Excavation, Preparation for Transportation, and Transportation of Subtitle D Waste from Outside Regions Designated on Drawings.

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, federal and state taxes to excavate, prepare for transportation and transportation of soils classified as Subtitle D waste outside the regions designated on the Drawings. Price shall also include the backfilling of the excavation.

4. Pay Item 27: Excavation, Preparation for Transportation, and Transportation of TSCA Waste from Outside Regions Designated on Drawings.

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, federal and state taxes to excavate, prepare for transportation and transportation of soils classified as TSCA waste outside the regions designated on the Drawings. Price shall also include the backfilling of the excavation..

5. Pay Item 28: Removal of the Exterior Windows. (Optional)

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, and supplies for removal of the exterior windows, caulking and the steel frame work. This is an optional unit cost. This Work will be performed under a separate contract between Contractor and Sweeney Steel.

6. Pay Item 29: Installation of Glass Block Windows and Required Structural Supports (Optional)

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, and supplies for installation of glass block windows along the current exterior window areas. Price shall also include all costs associated with installation of structural supports for the glass block systems. This Work will be performed under a separate contract between Contractor and Sweeney Steel.

7. Pay Item 30: Disposal of TSCA Waste (Optional)

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, federal and state taxes to dispose of the PCB waste in a GE approved TSCA landfill. This is an optional unit cost.

8. Pay Item 31: Disposal of RCRA Subtitle D Waste (Optional).

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, federal and state taxes to dispose of the RCRA Subtitle D waste in a GE approved Subtitle D landfill. This is an optional unit cost.

9. Pay Item 32: Disposal of C & D Waste (Optional).

   a. Shall be paid for at the Unit Price. Price shall include all labor, equipment, federal and state taxes to dispose of the RCRA Subtitle D waste in a GE approved Subtitle D landfill. This is an optional unit cost.

10. Pay Item 33: Do Not Use

11. Pay Item 34: Removal of Root Ball and Flushing and Videotaping of Railroad Track Sewer (Optional)

    a. Shall be paid for at the Unit Price. Price shall include all labor and equipment to remove the root ball found in the 27" sewer line along the Railroad tracks. Price shall also include the location of the manhole between Winslow and Ferry Streets. Price shall also include the reflushing of the railroad track sewer from the Urban Street manhole to Ferry Street and the videotaping of the sewer upon completion of Flushing. Price shall also include collection of water samples from the Ferry Street. This is an optional unit cost.

12. Pay Item 35: Removal of 18" Wide Trench (Optional).

    a. Shall be paid for at the Unit Price. Price shall include all labor and equipment to remove the 18" trench system adjacent to the loading dock area. Price shall include the testing of the electrical lines before removal to determine which electrical

lines need to be replaced. Price shall also include the cost for rerouting and reconnection of the electrical lines. This is an optional unit cost.

END OF SECTION

APPENDIX A

J. A. BRUNDAGE/DRAIN DOCTOR

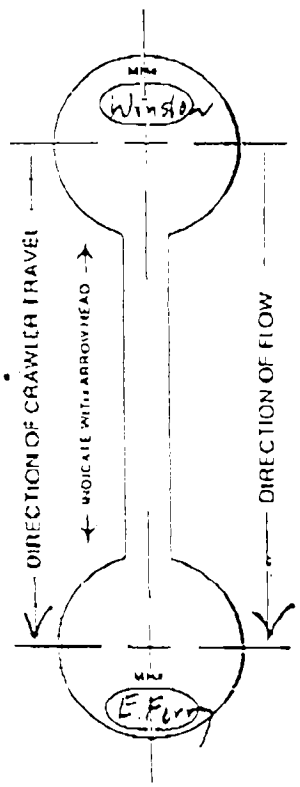
835-1156 434-1280 694-1776
285-1206 285-6383 773-4801

T.V. INSPECTION LOG

PROJECT G.E. # 380.215 DATE 12/3/96
ENGINEER ERM Northeast INSPECTOR G. Guiggio
LOCATION Railroad right of Way VIDEO TAPE NO. 2.17
FROM Manhole at Winston PIPE SIZE 36"
TO E. Ferry PIPE MATERIAL VCT
DIRECTION OF CAMERA: WITH FLOW ~~UPSTREAM~~ OPERATOR S. [illegible]

CLOCK

SPECIAL CONDITIONS
Notes: - Flow To 1/4 pipe
- Some sediment & debris remain
- Infiltration & Mineral Deposit at some joints



FEET/ METERS	REFERENCES	OBSERVATION	REMARKS
255-275			Roots at joints
296	4:00		Large Root Mass
301-311	3 & 9		Unable To pass

ABBREVIATIONS

L	LEAK
O	OBSTRUCTION
R	ROOTS
SR	SEVERE ROOTS
RC	ROOTS IN CONNECTION
BJ	BAD JOINT
JL	JOINT LEAK
OJ	OFFSET JOINT
BP	BROKEN PIPE
CP	CRACKED PIPE
SP	SAG IN LINE
CP	CRUSHED PIPE
Y	WYE
T	TAP
PT	PROTRUDING TAP
IA	INACTIVE CONNECTION
MD	MINERAL DEPOSIT
ED	EXCESSIVE DEBRIS

SHEET 1 OF 1

TECHNICIAN SIGNATURE [signature]

J.A. BRUNDAGE/DRAIN DOCTOR
1401 College Ave
Niagara Falls, NY 14305

J. A. BRUNDAGE/DRAIN DOCTOR

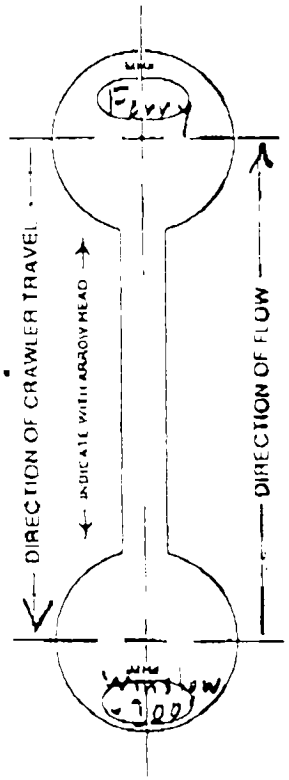
835-1156 434-1280 694-1776
285-1206 285-6383 773-4801

T.V. INSPECTION LOG

PROJECT G.E. # 380.215 DATE 12/3/96
ENGINEER ERM Northeast INSPECTOR G. Gurisko
LOCATION Railroad Right of Way VIDEO TAPE NO. 2.18
FROM E. Ferry PIPE SIZE 36"
TO Winslow Manhole Mins 322' PIPE MATERIAL VCT
DIRECTION OF CAMERA: ~~WITH FLOW~~ UPSTREAM OPERATOR D. Hoin

CLOCK

SPECIAL CONDITIONS
Note: Mineral Deposit at joints & Infiltration



FEET/ METERS	CLOCK REFERENCES	OBSERVATION	REMARKS
2981			Missing manhole
350	4:00		Root Mass
360	4:00		Root Mass
363	4:00		Root Mass
369	4:00		Root Mass
			Inspection Complete

ABBREVIATIONS

L	LEAK
O	OBSTRUCTION
R	ROOTS
SR	SEVERE ROOTS
RC	ROOTS IN CONNECTION
BJ	BAD JOINT
JL	JOINT LEAK
OJ	OFFSET JOINT
BP	BROKEN PIPE
CP	CRACKED PIPE
SP	SAG IN LINE
CP	CRUSHED PIPE
Y	WYE
T	TAP
PT	PROTRUDING TAP
IA	INACTIVE CONNECTION
MD	MINERAL DEPOSIT
ED	EXCESSIVE DEBRIS

SHEET 1 OF 1

TECHNICIAN SIGNATURE

J.A. BRUNDAGE/DRAIN DOCTOR
1401 College Ave
Niagara Falls, NY 14305

APPENDIX B

Mike Sweeney

BRUNING PAINTS

PRODUCT DATA

PACON SUPREME
INT.- EXT. ALKYD GLOSS ENAMEL

378-00 Series

22.88 per gallon

378-00

Pompano Beach FL Ph: 305 781-1441

PRODUCT DESCRIPTION:
Formulated with alkyd resin to provide a durable, high hiding, and fast drying interior or exterior finish on almost any type of properly prepared wood, masonry or metal surface. **(Note: This product may become slippery when wet. When used on a surface subject to pedestrian traffic, we recommend adding grit to reduce possible slipping and falling).**

PRODUCT FEATURES:
- Tough, with good gloss and tint retention
- Excellent flow and leveling
- Low odor
- Withstands frequent scrubbing

RECOMMENDED USES:
- Doors, trim and floors
- Kitchen and bathroom walls
- Toys, lawn and porch furniture
- Porches, railings, fences and fire escapes
- Machinery and manufacturing equipment

COLORS:
White, several ready mixed colors and a wide variety of attractive shades produced by tinting custom color bases.

SURFACE PREPARATION:
In all instances, mildew must be removed before painting by scrubbing an affected area with a medium soft brush and the suggested detergent/bleach solution noted on the back side of this sheet.

Step 1. Generally, all surfaces must be clean, dry and free of dirt, grease and excessive chalk. Remove peeling or flaking paint by sanding, scraping, wire brushing or water blasting.

Step 2. Thoroughly wash chalky surfaces and areas protected from direct weathering such as upper walls, under eaves, overhangs and porch ceilings with a detergent solution. Slick and glossy areas should be dulled with sandpaper or steel wool. Rinse with clean water and allow to dry before priming or painting.

NEW WOOD / PREVIOUSLY PAINTED WOOD: Refer to steps 1 and 2 above. Putty cracks, nail holes and open joints, seal knots and sand flush with the surface. Wipe clean and prime with **BRUNING Pacon Supreme Alkyd Gloss Enamel Undercoat 136-43).**

MASONRY: Allow new masonry to cure 60 days before painting. Smooth, unpainted cement floors must be etched with muriatic acid prior to painting in order to improve adhesion. Prepare the acid solution by mixing ½ gallon of 32% muriatic acid with 1 gallon of water. Follow the manufacturer's instructions.

(continued back page)

TECHNICAL DATA:

PRODUCT CODE: 378-00

GENERIC TYPE: Soya Alkyd Resin

GLOSS: 70-80 @ 60°

DRYING TIME: @ 77°F.- 50% R.H.
Touch (hrs): 4-6
Recoat(hrs): Overnight

WT/GAL: 9.8 LBS

VISCOSITY: 70-75 KU

FLASH POINT: 104°F (TCC)

PERCENT SOLIDS BY WT: 65.6%

PERCENT SOLIDS BY VOL: 48.5%

PERCENT VEHICLE (SOLIDS) BY WT: 32.6%

PERCENT PIGMENT BY WT: 32.9%

WET FILM THICKNESS: 3.6 mils

DRY FILM THICKNESS: 1.7 mils

THINNING/CLEAN-UP: Mineral Spirits

VOC: Max. 3.5 lbs/gal., 420 gms/L

As of 11/91, this product complies with current VOC regulations in all states/areas except NJ., New York City, CA.," and Maricopa, AZ.

RIGHT TO KNOW INFORMATION:

CAS No.	Ingredient
Proprietary	Soya Alkyd Resin
08032-32-4	Mineral Spirits
13463-67-7	Titanium Dioxide
01317-65-3	Calcium Carbonate
64742-95-6	Hi-Flash Naphtha

Protect eyes and skin with goggles, rubber gloves, apron and boots. Apply solution with a long handled broom insuring surface is thoroughly covered. Allow to stand for 1 to 2 hours and then flush with clean water. Allow the floor to dry completely before painting.

METAL SURFACES: Ferrous metal should have rust removed by sanding or wire brushing and then primed with **BRUNING Rust Proof Metal Primer (520-00). Galvanized or non-ferrous metal should be primed with BRUNING Block-Out II Acrylic Primer Sealer Stain Killer (235-00).**

APPLICATION:
BRUNING Pacon Supreme Int./ Ext. Alkyd Gloss Enamel (378-00) may be applied directly from its container by brush, roller or airless/conventional spray. Apply a full generous coat spreading evenly to a uniform film thickness. Brush application is recommended for the first coat to work this product well into the surface pores. On wood, rough sanding between coats is not necessary. Avoid painting in direct sunlight or when air, product or surface temperature is below 40°F. Avoid painting in the evening when condensation is likely to form or when rain threatens.

(continued next column)

AIRLESS SPRAY DATA:
Spray equipment must be operated with care in strict accordance with manufacturer's instructions. When spray applying, wear approved respiratory and eye protection and protective clothing.
Atomization pressure will vary depending upon the specific equipment used, the viscosity of the coating and the air temperature at time of application. Equipment that will maintain an atomizing pressure of 1750-1960 PSI is recommended. A spray tip size of .012" to .018" is suggested.

RECOMMENDED SPREADING RATE / THINNING:
Up to 450 sq. ft. per gallon depending upon the type of surface, method of application and climatic conditions. On very porous surfaces such as concrete and cinder block, expect about 300 sq. ft. per gallon.
For most methods of application, thinning is not required. If necessary, thin sparingly with mineral spirits not to exceed 1/2 pint per gallon.
(In Texas, to comply with VOC regulations, do not thin).

DRYING TIME / CLEAN-UP:
At 77°F and 50% relative humidity, this product dries hard in 18 hours. Recoat after overnight drying depending on temperature and weather conditions.
Clean brushes, rollers, spray and other equipment immediately after use with mineral spirits.

WARNING COMBUSTIBLE LIQUID AND VAPOR...CONTAINS PETROLEUM DISTILLATES

VAPOR HARMFUL. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION. NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Keep away from heat and flame. USE ONLY WITH ADEQUATE VENTILATION. To prevent build-up of vapors and to avoid breathing vapors or spray mist, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches or dizziness, increase fresh air or wear respiratory protection (NIOSH/MSHA TC 23C or equivalent) or leave the area. Close container after each use. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
FIRST AID: If breathing difficulties occur, leave the area to obtain fresh air. If difficulty continues, get immediate medical attention. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention. For skin contact, wash thoroughly with soap and water. If swallowed, do not induce vomiting. Call physician immediately.

KEEP OUT OF THE REACH OF CHILDREN

MILDEW REMOVAL.... *(Double bleach amount if mildew is severe)*

CAUTION: A DETERGENT / BLEACH SOLUTION IS IRRITATING TO EYES AND SKIN AND SHOULD BE KEPT OUT OF THE REACH OF CHILDREN. Wear goggles, rubber gloves and protective clothing during preparation and application. Read detergent and bleach container labels before mixing. If there are ammonia or ammonium containing compounds in the detergent, do not add to the bleach as harmful vapors may be formed. **IN CASE OF CONTACT, FLUSH IMMEDIATELY WITH PLENTY OF WATER AND CONSULT A PHYSICIAN.**

To 3 quarts warm water, add 1 quart liquid bleach containing 5% sodium hypochlorite (Example: CHLOROX). Add ½ cup non-phosphate type detergent (Example: 409, Mr. Clean, etc.), rinse the treated area with fresh water and allow to dry before repainting. Repaint within one month of bleaching to prevent possible spore regeneration.

LIMITATION OF LIABILITY

To the best of our knowledge, the technical data contained herein are true and accurate at the date of issuance but are subject to change without prior notice. We guarantee our product to conform to BRUNING'S specifications. WE MAKE NO OTHER WARRANTY OR GUARANTEE OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. Liability, if any, is limited to replacement of the product or refund of the purchase price. LABOR OR COST OF LABOR AND OTHER CONSEQUENTIAL DAMAGES ARE HEREBY EXCLUDED.

2/92

APPENDIX C

Hilton Head, SC
Feb. 27, 1996

Memo to: Michael W. Sweeney

Subject : Urban Street Floor Designs

From : Arthur J. Bossert PE

In order to handle the floor loads of the steel storage that we discussed for your projected future use of the facility, the minimum floor capability should be for loadings of 1500 psf, though a more desirable capacity to handle possible pigeon hole storage units, would be for 2500 psf.

The difference between these two ratings is not very great in concrete and steel. The heavier floor capacity increases the concrete by one inch and the steel by one size. The number of steel mats remains the same.

For a 2500 psf floor the design would be approximately as follows.

Concrete thickness - 8 inches
Reinforcing - 2 mats - each with #5 bars on 12" o.c. both ways
The mats should be supported on saddles 2" above the bottom, and 2" below the top of the slab. The floor should be laid out in panels of around 20' square max to fit the building shape, with slab edge dowels to hold the panels together in alignment.

For a 1500 psf floor the design would change to a thickness of 7" of concrete and the steel reinforcing to #4 bars. Otherwise the details would remain the same.

APPENDIX D

SCHEDULE "A"

COMPENSATION AND PAYMENT

GUARANTEED MAXIMUM PROVISIONS

1.0 GUARANTEED MAXIMUM

GE agrees to pay and the Contractor agrees to accept as full payment for performance of the Work and completion of the Project, an amount equal to the sum of (a) the "Cost of Work," as defined in Paragraph 2.0; and (b) the "Contractor's Fee," as defined in Paragraph 3.0, except that in no event shall the total amount payable to the Contractor exceed

_____

DOLLARS ($), plus or minus such adjustments as may be expressly provided for in Paragraph 5.0 below, and such total amount payable, including any adjustments, shall be known as the "Guaranteed Maximum."

2.0 COST OF WORK

"Cost of Work" shall mean the actual costs necessary and reasonably incurred by the Contractor for proper performance of the Work and completion of the Project, further limited to those "Items of Cost" listed in 2.1 below and reduced by appropriate "Credits to Cost of Work" listed in 2.2 below:

2.1 Items of Cost included in Cost of Work shall consist of the following:

2.1.1 Salaries and wages paid to the Contractor's employees at the project site for time spent in performance of the Work;

2.1.2 Employee benefits paid applicable to the salaries and wages included in Cost of Work, as required by law, union agreement, or established Contractor personnel practices, including social security, State and Federal unemployment insurance taxes, contributions to pension and welfare funds, vacation and holiday pay, and sickness and accident insurance premiums;

2.1.3 Materials, equipment, machinery, supplies, fuels and utilities delivered to the site and/or incorporated or consumed in performing the Work, including related transportation;

2.1.4 Rental charges for equipment, exclusive of "small tools" as defined in Paragraph 2.3, used in carrying out the Work for the time it is in use on the Work, with the further understanding that:

2.1.4.1 no rental is to be paid if equipment is not working because it is inoperable or under repair;

2.1.4.2 rental rates shall include general maintenance, repairs, spare parts, and appropriate insurance;

2.1.4.3 rental rates shall be exclusive of fuel and lubricating oil costs, such costs to be included in Cost of Work as fuels and supplies;

2.1.4.4 each rental rate for Contractor owned or furnished equipment must be approved in advance by GE and shall be no higher than the lesser of (1) standard rates paid locally for similar equipment, or (2) 85% of the latest rates published by Associated Equipment Distributors or other equipment sources; and

2.1.4.5 a maximum aggregate billing amount shall be established for each item of equipment in the case of rental equipment owned directly or indirectly by the Contractor, and such amount shall not exceed 75% of the average resale value of the item as established in the latest Green Guide for construction equipment published by the Equipment Guide-Book Company;

2.1.5 Work performed by subcontractors, less applicable back charges;

2.1.6 Travel and living expenses of Contractor employees as may be directly related to the Work and which have the prior written approval of GE; .

2.1.7 Sales and use taxes and similar taxes, excluding those taxes levied or measured on net income, fees and permits necessary to the Work and for which the Contractor is liable;

2.1.8 Premiums for all bonds and insurance policies which the Contract Documents require the Contractor to maintain or which are otherwise approved in writing in advance by GE;

2.1.9 Temporary office and storage facilities including their rental, construction and removal, equipment, furnishings and maintenance;

2.1.10 Debris removal;

2.1.11 Other disbursements made or obligations incurred in performance of the Work not enumerated above, providing they are specifically approved by GE in advance and in writing.

2.2 Credits to Cost of Work shall include the following:

2.2.1 Proceeds of sale (or fair market value in the case of items retained by GE) of all surplus materials, equipment, machinery, supplies, fuels, temporary facilities, and other items which are GE's property by virtue of having been included in the Cost of Work, and the sale prices of such items shall be approved in advance by GE;

2.2.2 Discounts for which the Contractor is eligible through advance or prompt payments, or trade practice; the Contractor agrees to:

2.2.2.1 Obtain all possible time and trade discounts for materials and services furnished and to pay bills within the highest discount periods;

2.2.2.2 Purchase in the most economical ordering quantities for GE considering Project requirements.

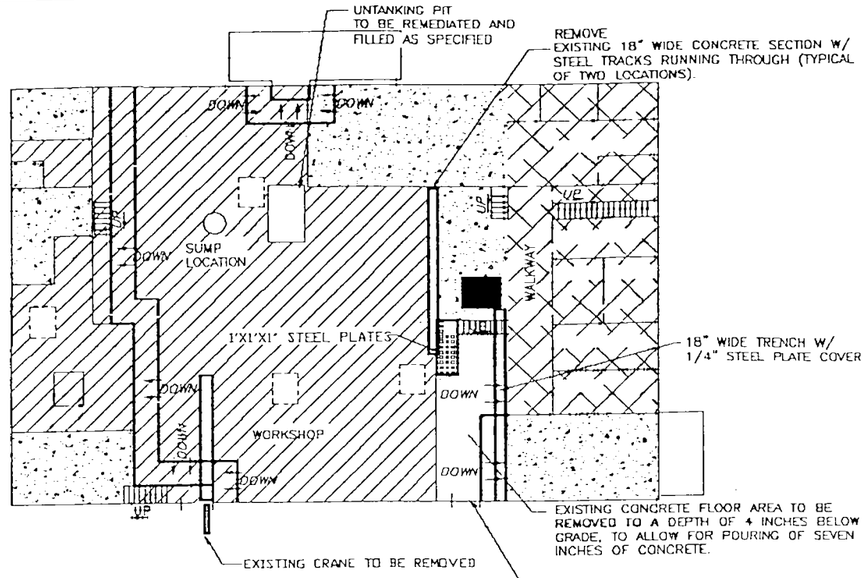
2.2.3 Refunds of deposits made and charged to Cost of Work;

2.2.4 Rebates or commissions allowed to, or collected by, the Contractor from suppliers of materials together with all other refunds, returns, or credits received for return of materials or on bond premiums, insurance, State or Local taxes or otherwise, and it is understood that any insurance dividends or other credits to be received after final payment shall be assigned and paid over to GE;

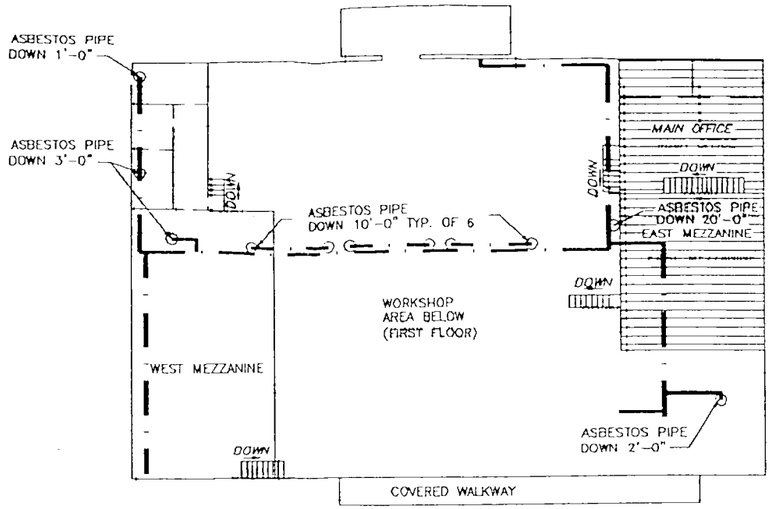
2.2.5 Contractor's portion of any savings realized under Guaranteed Maximum subcontracts.

3.0 CONTRACTOR'S FEE

The "Contractor's Fee" shall be the amount of _____



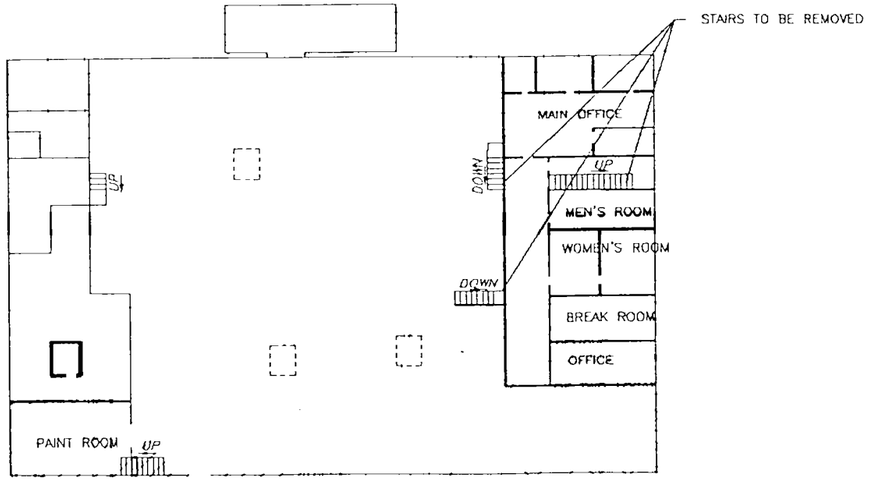
FIRST FLOOR (FLOORING PLAN)



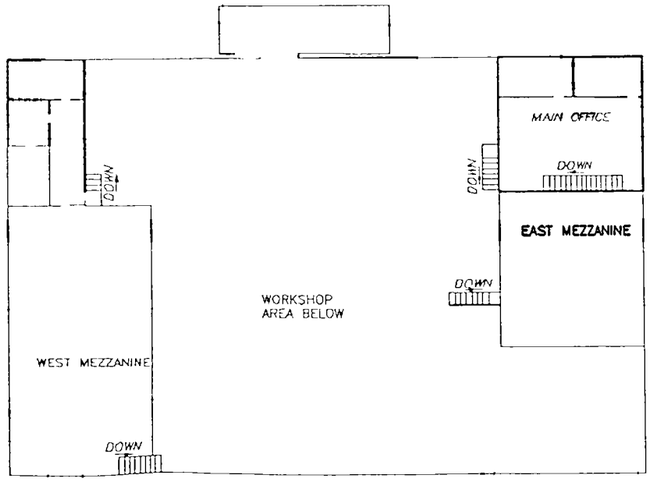
SECOND FLOOR (FLOORING PLAN)

NOTES:

1. ALL SURFACES, INCLUDING WALLS, DOORS, WINDOWS, SUPERSTRUCTURE, STAIRWAYS, OFFICE AREAS AND EXHAUSTS DUCTS SHALL BE DECONTAMINATED AS DESCRIBED IN SECTION 02090. PLAN VIEWS ABOVE ARE SHOWN TO DESCRIBE THE SCOPE OF FLOOR DECONTAMINATION AND REMOVAL.
2. WOODEN BLOCKS ON THE FLOOR OF THE MAIN SHOP AREA SHALL BE REMOVED AND DISPOSED OF OFF-SITE. ALL FLOOR COVERINGS WITHIN THE MAIN SHOP AREA SHALL BE REMOVED AND DISPOSED OFF-SITE. AND DISPOSED OF OFF-SITE AS TSCA WASTE. THE EXPOSED SUB-FLOOR SURFACE SHALL BE DECONTAMINATED AS DESCRIBED IN 02090 OF THE TECHNICAL SPECIFICATIONS THE REMAINING SURFACES SHALL BE DECONTAMINATED AS DESCRIBED IN SECTION 02090.
3. AIR HANDLING UNIT SHALL BE EITHER DISMANTLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AND DECONTAMINATED AS DESCRIBED IN SECTION 02090 OF THE SPECIFICATIONS, OR REPLACED WITH AN EQUIVALENT SYSTEM.
4. LOCATIONS OF SITE FEATURES ARE APPROXIMATE.
5. ALL DEBRIS GENERATED FROM DECONTAMINATION OR DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE
6. RESTORATION OF ALL FLOOR AREA IS DESCRIBED IN THE CONTRACT DOCUMENTS.
7. ALL INTERIOR WALLS ON THE EAST AND WEST MEZZANINE SHALL BE REMOVED AS DESCRIBED IN SECTION 02050 AND DISPOSED OF AS C&D WASTE.
8. EXISTING WORKSHOP FLOOR SEE DETAIL 5, DWG. C-5.
9. EXISTING EAST MEZZANINE FLOOR SEE DETAIL 6, DWG. C-5.
10. FLOORING ON THE EAST MEZZANINE SHALL BE REMOVED AS SPECIFIED IN SECTION 02050.
11. THE ROOF OF THE COVERED WALKWAY IS AN ASBESTOS CONTAINING BUILDING MATERIAL.
12. THE CONTRACTOR SHALL HANDLE ALL 9"X9" FLOOR TILE AS A ASBESTOS CONTAINING MATERIAL.
13. NEW CONCRETE FLOOR IS TO BE POURED AT A 1: 12 SLOPE. ALL STAIR LANDING AREAS TO HAVE A MINIMUM 50" LONG AND 44" WIDE BASE LANDING AS SPECIFIED IN NEW YORK STATE CODE RULES AND REGULATIONS SECTION 765, TABLE 4.765.
14. THE CONTRACTOR SHALL BE RESPONSIBLE TO QUANTIFY ALL FLOORING MATERIAL PRIOR TO REMOVAL.



FIRST FLOOR (WALL REMOVAL PLAN)



SECOND FLOOR (WALL REMOVAL PLAN)

LEGEND

- CONCRETE FLOOR TO DECONTAMINATED
- WOOD BLOCK FLOOR TO BE REMOVED
- AIR HANDLING UNIT TO BE DECONTAMINATED (SEE NOTE 3)
- CAVED-IN FLOOR AREA THAT ARE FILLED WITH CONCRETE (SIZE TO BE DETERMINED BY THE CONTRACTOR)
- WALLS TO BE REMOVED
- LINE OF SLOPED FLOOR AREA
- ASBESTOS CONTAINING PIPE INSULATION
- T&G WOOD FLOOR TO BE REMOVED
- ASBESTOS CONTAINED FLOOR TILE TO BE REMOVED

NO.	DATE	APPR.	REVISION

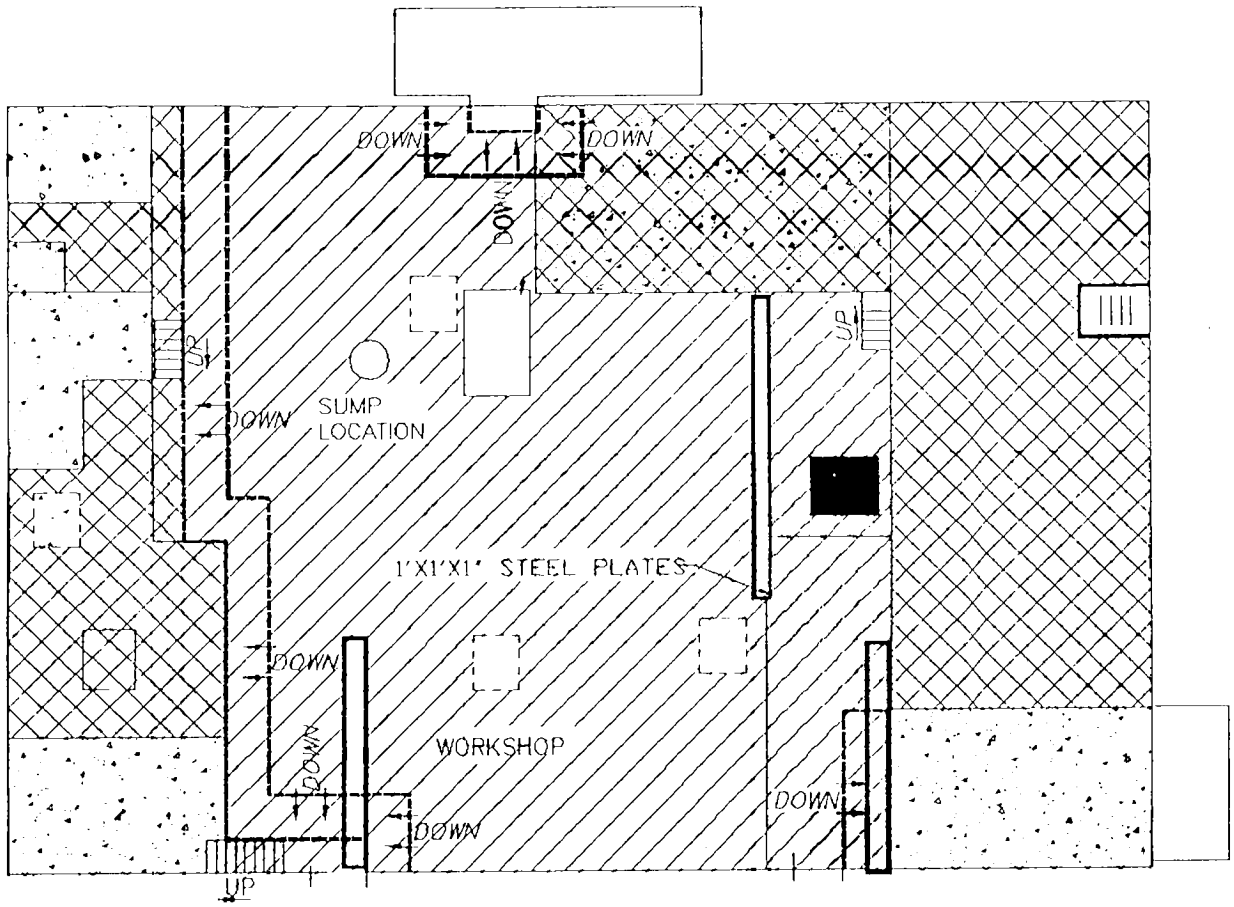
GENERAL ELECTRIC
318 URBAN STREET, BUFFALO, NEW YORK
ERM-Northeast
Environmental Resources Management

		DATE
CHECKED	RR/JEB	
DESIGN ENGINEER	GPG	3/15/97
PROJECT ENGINEER	GPG	3/15/97
PROJECT MANAGER	MAL	3/28/97
APPROVED	JEB	3/28/97
APPROVED	MAL	3/15/97

BUILDING DECONTAMINATION PLAN

DRAWN	GPG	DATE	3/15/97
SCALE	1=20	JOB NO.	380215
REVISION DATE	3/28/97		
FILE NAME	D3380215		

DRAWING NO. C-3
REV. NO. 1a
SHEET 3 OF 6



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LEGEND

- CONCRETE FLOOR TO DECONTAMINATED
- FOUR INCHES OF CONCRETE FLOOR TO BE PLACED
- SEVEN INCHES OF CONCRETE FLOOR TO BE PLACED
- AIR HANDLING UNIT TO BE DECONTAMINATED
- CAVED-IN FLOOR AREA THAT ARE FILLED WITH CONCRETE (SIZE TO BE DETERMINED BY THE CONTRACTOR)
- LINE OF SLOPED FLOOR AREA

NOTE:
THE CONTRACTOR SHALL QUANTIFY ALL FLOOR AREAS AFTER ALL EQUIPMENT IS REMOVED FROM THE FACILITY.

FLOOR AREAS MAY REQUIRE MORE THAN ONE TYPE OF HATCH DESCRIPTION.

FIRST FLOOR

TITLE: FLOOR RESTORATION PLAN

PREPARED FOR: GENERAL ELECTRIC

ERM — Northeast
Environmental Resources Management

SCALE	FIGURE
1-30	4

DRAWN	JOB NO.	TITLE NAME	DATE
gpg	380.215		4/8/97

ADDENDUM NO. 2
TO THE
BUILDING DECONTAMINATION AND SOIL REMEDIATION]
318 URBAN STREET
PROJECT MANUAL

ISSUED APRIL 10, 1997

This Addendum No. 2 consists of the following:

1. Clarifications to the Project Manual, dated March 15, 1997
2. Revisions to the Project Manual, dated March 15, 1997

Clarifications

The exact size of the underground tank is not known. For the purposes of the cost estimate, the tank should be assumed to be 5,000 gallons.

All loading and unloading of Sweeney Steel equipment shall be performed by the Contractor at the Sweeney Steel Tonawanda facility and the 318 Urban Street facility.

Pieces of Sweeney Steel equipment can be disassembled for shipment and reassembled. Lift eyes can be installed for shipment as long as the lift eyes are removed after shipment and the installation/removal do not affect future operation of the equipment.

Revisions

Actual revisions to the language of the Bidding Documents.

1. Instructions to Bidders Section 2. Due Date. The Due Date for the Bids has been changed from Tuesday April 15, 1997 at 1 p.m. to Friday April 18, 1997 at 10:30 a.m.

2. Bid Breakdown Replace Item 14 in whole with

"14a. Total Number of Manhours _____ Unit Rate Per Manhours _____
14b. Fixed Material Cost _____
Total Lump Sum Cost _____

3. Section 01025 Measurement and Payment Section 1.04, A.3. Item 1

   Replace Item 14 with "Pay Item 14: Shall be paid using a time and fixed materials unit cost, with an estimate of the number of hours (shown as Bid Item 14a) and the separate fixed materials cost (shown as Bid Item 14b) provided by the Contractor in the Bid Breakdown. The Work performed at the Unit Cost shall be the entire scope of work described in the Project Manual, dated march 15, 1997, for Pay Item 14. The maximum total cost for this Bid Item shall not exceed the Lump Sum Price provided for Item 14. If the Contractor performs the Work in fewer hours and less fixed materials than the maximum total cost for the Bid Item, GE will split the difference between the Lump Sum price for Bid Item 14 and the actual billed cost, billed at a unit rate."

4. Section 01025 Measurement and Payment Section 1.04, C. Item 6

   Insert at the end of the paragraph "Price shall also include the extension of the existing utilities above the new floor with proper end fittings."

Drawings

Drawing C-4 - Clarification of Type 2 Pavement on Legend

Drawing C-5 - Notes for Glass Block have been revised.

Insert Drawing C-6

FRENCH STREET

CONRAIL TRACKS

SEEDED AREA

SEEDED AREA

SEEDED AREA

INSTALL NEW ASPHALT CURB (SEE DETAIL 7 SHEET C-5)

FIRE ESCAPE TO REMAIN

EXISTING BRICK BUILDING

M.H. SEW-6 RIM 649.97

M.H. SEW-1 RIM 649.70

D.I. SEW-2 RIM 648.93

649.45 D.I. SEW-3 RIM 649.33

M.H. SEW-4 RIM 649.73

M.H. SEW-5 RIM 649.70

GATE

N

NOTE:

ALL PAVEMENT IS TO BE SLOPED AT 1/8" PER FOOT TO PROVIDE ADEQUATE SITE RUN-OFF (INTO CATCH BASINS\DRAINAGE STRUCTURES).

THE CONTRACTOR SHALL SET ALL MANHOLE RIM ELEVATIONS TO MATCH THE GRADE OF THE NEW PAVEMENT. RIM ELEVATIONS ARE SHOWN ON DRAWING C-1.

BACKFILL AND COMPACT DISTURBED AREAS IN ACCORDANCE WITH SECTION 02220 OF THE CONTRACT DOCUMENTS.

GRASS AND PAVED AREAS SHALL BE RESTORED AS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

THE AREAS SHOWN DEFINING THE THREE PAVEMENT TYPES HAVE NOT BEEN SURVEYED AND ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND PROVIDE THE PROPER PAVEMENT AS SPECIFIED IN THE CONTRACT DOCUMENTS.

LEGEND

- DIRECTION OF RUN-OFF FLOW ON NEW PAVED SURFACES
- TYPE 1: REPLACEMENT PAVEMENT AREA
- TYPE 2: NEW PAVEMENT AREA
- TYPE 3: PAVEMENT AREA TO BE RESURFACED
- UTILITY POLE LOCATION
- PROPERTY LINE
- FENCE LINE
- FINAL CONTOUR LINE
- CONTOUR LINE TO MATCH EXISTING
- NEW CURB LOCATION
- NEW TREES
- NEW SHRUBS

URBAN STREET

NO.	DATE	APPR.	REVISION

NO.	DATE	APPR.	REVISION

GENERAL ELECTRIC

318 URBAN STREET, BUFFALO, NEW YORK

ERM-Northeast
Environmental Resources Management

		DATE
CHECKED	RR/JEB	
DESIGN ENGINEER	GPG	3/13/97
PROJECT ENGINEER	GPG	3/13/97
PROJECT MANAGER	MAL	3/13/97
APPROVED	JEB	4/1/97
APPROVED	MAL	4/1/97

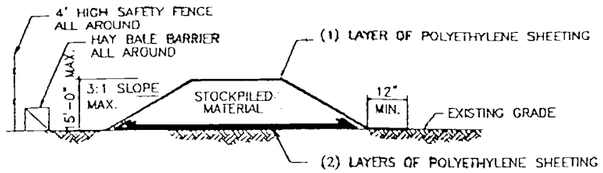
SITE RESTORATION PLAN

DRAWN	GPG	DATE	3/13/97
SCALE	1"=NTS	JOB NO.	380.215
REVISION DATE	3/28/97	FILE NAME	D4380215

DRAWING NO. C-4

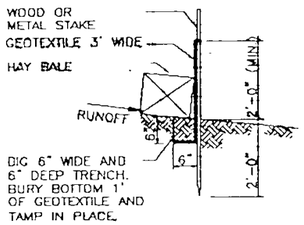
REV. NO. 1

SHEET 4 OF 6

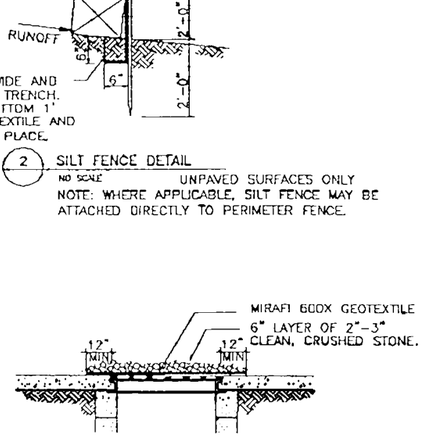


1 STOCKPILE DETAIL
NO SCALE

NOTES:
1. POLYETHYLENE SHEETING SHALL BE MINIMUM 40 MIL THICKNESS, REINFORCED CONSTRUCTION GRADE SHEETING.
2. ANCHOR TOP LAYER(S) OF SHEETING WITH SAND BAGS OR EQUIVALENT WEIGHTS AT 5 TO 10 FOOT CENTERS.

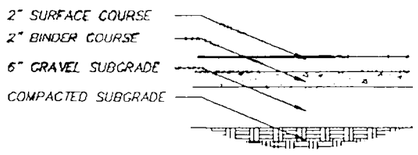


2 SILT FENCE DETAIL
NO SCALE UNPAVED SURFACES ONLY
NOTE: WHERE APPLICABLE, SILT FENCE MAY BE ATTACHED DIRECTLY TO PERIMETER FENCE.

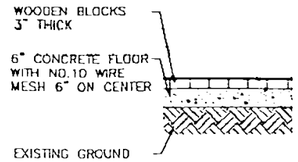


3 INLET SEDIMENT FILTER DETAIL
NO SCALE PAVED SURFACES ONLY

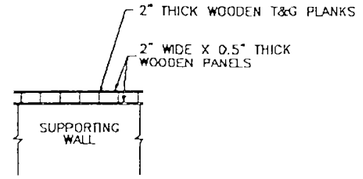
NOTES.
CLEAN AND/OR REPLACE STONE IF SAME BECOMES CLOGGED W/ SEDIMENT TO THE EXTENT THAT IT NO LONGER DRAINS.
REPLACE GEOTEXTILE IF IT BECOMES PUNCTURED.



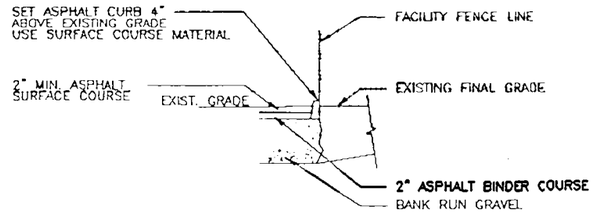
4 TYP. NEW PAVEMENT DETAIL
NO SCALE



5 DETAIL OF EXISTING MAIN SHOP FLOOR
NO SCALE



6 DETAIL OF EXISTING T&G EAST MEZZANINE FLOOR
NO SCALE



7 TYP. CURB PAVEMENT DETAIL
NO SCALE

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THERE SHALL BE NO CHANGE IN GRADING ELEVATIONS OF THE LAND AREAS TO BE DISTURBED BY THIS CONTRACT.
2. THERE IS NO RESIDENTIAL DEVELOPMENT OR DWELLING CONSTRUCTION PROPOSED UNDER THIS CONTRACT.
3. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED IN PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
4. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY SEEDING, THE DISTURBED AREAS SHALL BE MULCHED WITH HAY OR EQUIVALENT AND BOUND (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER.)
5. STABILIZATION MEASURES: SEE "NON-STRUCTURAL SOIL STABILIZATION MEASURES" SPECIFICATIONS ON THIS SHEET.
6. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUN-OFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
7. ALL SEDIMENTATION STRUCTURES SHALL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS.
8. STOCKPILES ARE NOT TO BE LOCATED WITHIN 50' OF A FLOOD PLAIN, SLOPE, ROADWAY, OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHALL BE PROTECTED BY A HAY BALE BARRIER AND SAFETY FENCE.
9. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT EXCEED 3:1 UNLESS OTHERWISE APPROVED BY THE OWNER.
10. PUBLIC AND PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
11. ALL CATCH BASIN INLETS ADJACENT TO THE WORK SHALL BE PROTECTED WITH A CRUSHED STONE FILTER, AS SHOWN IN DETAILS 3 ON THIS DRAWING.

GLASS BLOCK

1 THE CONTRACTOR SHALL PROVIDE A LUMP SUM PRICE FOR INSTALLING GLASS BLOCK WINDOWS AS SPECIFIED IN SECTION 04270 OF THE CONTRACT DOCUMENTS.

2 GLASS BLOCK WORK WILL BE COMPLETED UNDER A SEPARATE CONTRACT BETWEEN THE CONTRACTOR AND SWEENEY STEEL.

NON-STRUCTURAL SOIL STABILIZATION METHODS

1. PERMANENT VEGETATIVE COVER

A. EXISTING NATURAL VEGETATION SHALL BE MAINTAINED, IN ACCORDANCE WITH STATE STANDARDS, WHERE POSSIBLE FOR EROSION PROTECTION UNTIL PERMANENT PROTECTION IS ESTABLISHED.

B. SITE PREPARATION:

GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.

INSTALL NEEDED EROSION CONTROL PRACTICES AND FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS AND WATERWAYS.

C. SEEDBED PREPARATION:

APPLY FERTILIZER AT A RATE OF 800 POUNDS PER ACRE USING 10-6-4 OR EQUIVALENT.

APPLY LIMESTONE (CALCIUM CARBONATE) AT A RATE OF 2 TONS PER ACRE.

WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 3 INCHES WITH A DISC, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL DISCING OR HARROWING OPERATION SHALL BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY SOILS, SILTY SOILS, OR COARSE SANDS SHALL BE ROLLED TO FIRM THE SEEDBED WHERE FEASIBLE.

REMOVE ALL DEBRIS, UNSUITABLE MATERIAL, AND STONES LARGER THAN 2" FROM THE SURFACE.

D. SEEDING:

SEED AS SPECIFIED IN SECTION 02900

APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER-TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). HYDROSEEDINGS WHICH ARE MULCHED MAY BE LEFT ON THE SOIL SURFACE.

WHERE FEASIBLE, EXCEPT WHEN A CULTIPACKER-TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER OR LIGHT DRAG. SEEDING OPERATIONS SHOULD BE ON THE CONTOUR.

E. MULCHING:

IN AREAS SUBJECT TO EROSION, OR WHERE CONDITIONS MAY NOT BE SUITABLE FOR GROWING ON EROSION RESISTANT COVER, MULCH IN ACCORDANCE WITH THE FOLLOWING:

MULCHING SHALL BE REQUIRED ONLY IN AREAS DIFFICULT TO VEGETATE SUCH AS STEEP SLOPES OR AREAS SUBJECT TO EXCESSIVE OR REPETITIVE EROSION.

MULCH MATERIALS SHALL BE UNROTTED HAY OR SMALL GRAIN STRAW APPLIED AT THE RATE OF 70 TO 90 LBS./1,000 SF. IN ACCORDANCE WITH NEW YORK STATE STANDARDS. MULCH SHALL BE SECURED AS SPECIFIED IN SECTION 2900.

MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT 75% TO 95% OF THE SURFACE IS COVERED.

NO.	DATE	APPR.	REVISED	NO.	DATE	APPR.	REVISION

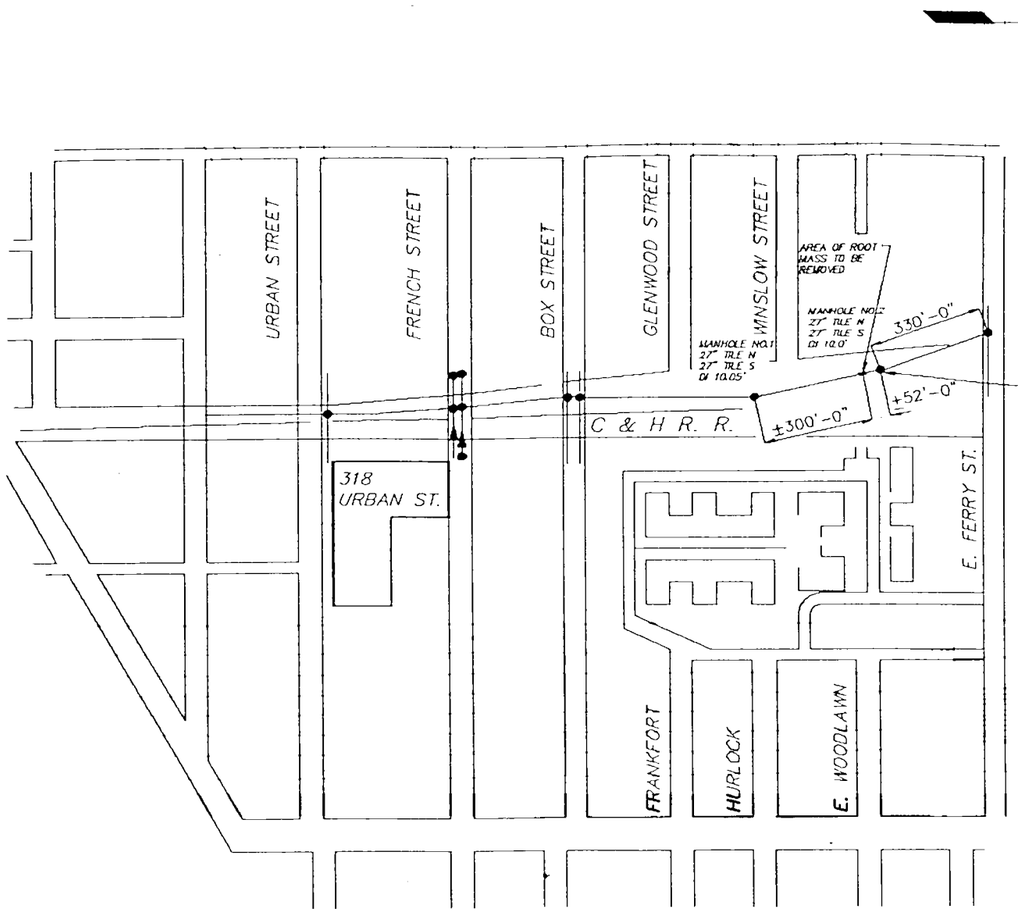
GENERAL ELECTRIC
318 URBAN STREET, BUFFALO, NEW YORK
ERM-Northeast
Environmental Resources Management
ERM

		DATE
CHECKED	RR/JEB	
DESIGN ENGINEER	GPG	3/15/97
PROJECT ENGINEER	GPG	3/15/97
PROJECT MANAGER	NAL	3/15/97
APPROVED	JEB	3/15/97
APPROVED	NAL	3/15/97

MISCELIANEOUS CIVIL DETAILS

DRAWN	GPG	DATE	3/15/97
SCALE	1"=60 NTS	JOB NO.	380215
REVISION DATE	3/28/97	FILE NAME	053802I5

DRAWING NO. C-5
REV. NO. 1
SHEET 5 OF 6



NOTE MANHOLE NO.2 LOCATED BETWEEN WINSLOW AND E. FERRY ST. HAS NOT BEEN ACCESSED FROM THE SURFACE. MANHOLE NO.1 AT THE END OF WINSLOW WAS FOUND. MANHOLE NO.1 RIM ELEVATION IS APPROXIMATELY THREE AND A HALF FEET BELOW GRADE.

NOTES:

THE CONTRACTOR SHALL NOTIFY GE's REPRESENTATIVE 48 HOURS PRIOR TO MOBILIZING OFF-SITE SEWER EFFORTS.

THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE LOCATION OF THE SEWER LINE BLOCKAGE PRIOR TO IMPLEMENTING CLEARING EFFORTS

THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE NOTIFICATION OF START OF WORK TO ALL RESPONSIBLE AGENCIES ONE WEEK HOURS PRIOR TO THE SCHEDULED WORK DATE.

THE CONTRACTOR SHALL PROVIDE A TASK-SPECIFIC HEALTH AND SAFETY PLAN TO BE APPROVED BY THE BUFFALO SEWER AUTHORITY AND GE's REPRESENTATIVE PRIOR TO INITIATING OFF-SITE SEWER WORK.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR AND EQUIPMENT REQUIRED TO CONDUCT CONFINED SPACE ENTRY FOR PURPOSES OF REMOVING THE EXISTING SEWER OBSTRUCTION AND ANY SAMPLING OR WORK EFFORTS THAT MAY BE REQUIRED.

THIS DRAWING IS ADAPTED FROM SEWER MAPS AND PROFILES PROVIDED BY THE BUFFALO SEWER AUTHORITY TITLED NEW YORK CENTRAL R.R. - BELT LINE SEWER (BUILT BY GRADE CROSSING COMMISSION - 1910) DRAWING NUMEER S4075.

THE LOCATIONS OF SEWER STRUCTURES HAVE NOT BEEN SURVEYED AND ARE THEREFORE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SEWER LINE LOCATIONS, LENGTHS, AND DIAMETERS PRIOR TO COMMENCING WORK EFFORTS ON THE BUFFALO SEWER SYSTEM. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY GE's REPRESENTATIVE OF ANY INCONSISTENCIES FOUND PRIOR TO INITIATING WORK EFFORTS.

THE LOCATION OF THE SEWER LINE OBSTRUCTION WAS DOCUMENTED BY J.A. BRUNDAGE / DRAIN DOCTOR, DURING SEWER VIDEO TAPING PERFORMED ON DECEMBER 12,1997. **THE VIDEO LOGS ARE ENCLOSED IN ADDENDUM NO.1 TO THE** PROJECT MANUAL.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING GE's REPRESENTATIVE OF ANY DAMAGED OR BROKEN PIPE ENCOUNTERED DURING THE SEWER ROOT MASS REMOVAL, SEWER FLUSHING, AND AND VIDEO TAPING.

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THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS BOTH ABOVE AND BELOW GROUND.

NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION

GENERAL ELECTRIC

ERM-Northeast
Environmental Resources Management

DRAWN	NAL	3/29/97
DESIGN ENGINEER		
PROJECT ENGINEER	GPG	3/29/97
PROJECT MANAGER	NAL	3/29/97
APPROVED	JB	3/30/97
APPROVED		

RAIL ROAD SEWER PLAN

DRAWING NO. C-6

REV. NO. 1

DRAWN GPG	DATE 3/20/97	REVISION DATE 3/29/97
SCALE NTS	JOB NO. 380.215	FILE NAME 06380215

SHEET 6 OF 6

ADDENDUM NO. 3
TO THE
BUILDING DECONTAMINATION AND SOIL REMEDIATION}
318 URBAN STREET
PROJECT MANUAL

ISSUED APRIL 11, 1997

This Addendum No. 3 consists of the following:

1. Revisions to the Project Manual, dated March 15, 1997 and Addendum 2, dated April 10, 1997

Revisions

Actual revisions to the language of the Bidding Documents.

1. **Instructions to Bidders** Two sets of Bid Packages shall be overnighted to John Harrsen for morning delivery on April 18, 1997. The first package shall be sent to the address provided in the original Instructions to Bidders. The second, duplicate package shall be sent to Mr. Harrsen at: Apt. 204 1525 Lincoln Way, McClean, VA 22102 (phone number 703-761-3151)

ADDENDUM NO. 4
TO THE
BUILDING DECONTAMINATION AND SOIL REMEDIATION
-318 URBAN STREET
PROJECT MANUAL

ISSUED APRIL 15, 1997

This Addendum No. 4 consists of information provided to ERM by Sweeney Steel on April 14 and 15, 1997. The following information is for bid purposes only, all bidders shall assume the scope of the floor replacement shall incorporate the following:

1. Clarifications in response to Bidder's questions raised since April 10, 1997.

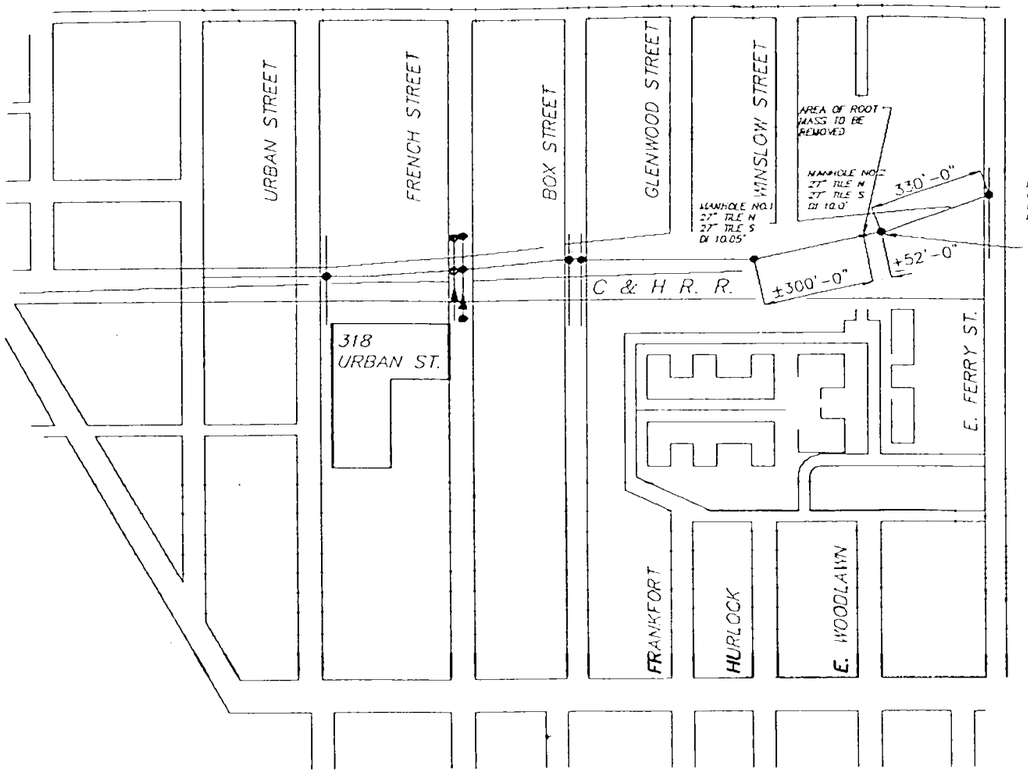
2. Actual revisions to Attachment C, of Addendum No. 1.

Reinforcement in the areas having 4-inches of concrete is to be number 4 gauge, 4-inch by 4-inch on center wire mesh.

Concrete shall be a design mix with a minimum of 3,500 psi strength at 28 days.

Concrete panels of 20 feet maximum shall not be required. The Contractor shall provide adequate saw cut spacing to minimize any anticipated cracking of the new floor slab.

Note:
Final requirements to the concrete floor will be provided at a later date from Sweeney Steel. The Contractor shall not construct the concrete floor until the final issues are provided by Sweeney Steel.



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RAIL ROAD SEWER PLAN

DRAWN	GPG	3/29/97
SCALE	NTS	JOB NO. 388.215
REVISION DATE	3/29/97	FILE NAME 96388215

DRAWING NO. C-6

REV. NO. 1

SHEET 6 OF 6

318 URBAN STREET
BUFFALO, NY 14211

NYSDEC SITE NO. 9-15-151

SOIL REMEDIATION
AND
BUILDING DECONTAMINATION

ERM-NORTHEAST

March 1997