STANDARD SPECIFICATIONS FOR NTI DEMOLITION BID PACKAGES

CITY OF PHILADELPHIA

NEIGHBORHOOD TRANSFORMATION INITIATIVE

These Standard Specifications for NTI Demolition Bid Packages are to be read in conjunction with the Project Manual for a specific bid package. This document sets forth the contract requirements, general requirements, and technical specifications for NTI Demolition Bid Packages. The Instruction to Bidders, Bid Form, Bid Bond, Performance Bond, Payment Bond, and Special Contract Requirements are contained in the Project Manual for each specific bid package. This document is incorporated by reference into each Project Manual as though fully copied therein.

TABLE OF CONTENTS

CONTRACT REQUIREMENTS:

00700 Terms and Conditions of Bidding and Contract
00801 NTI - Owner Controlled Insurance Program Bid Insurance Requirements
00802 NTI - Prime Contractor Qualification
00813 MBEC Requirements
00814 Prevailing Wage Rates and Supplement
00816 Substance Abuse Policy
00820 Equal Opportunity for Contracts over $10,000.00
00822 Slavery Era Insurance Disclosure
00830 Standard Environmental Conditions

SPECIFICATIONS:

DIVISION 1 – GENERAL REQUIREMENTS:
01150 Measurements and Payment
01311 Project Coordination
01312 Project Meetings
01321 Construction Photographs
01322 Progress Reports
01323 Construction Scheduling
01324 Contractor Safety Plan
01330 Submittals
01410 Codes, Regulations and Standards
01450 Contractor's Quality Control
01500 Temporary Facilities and Controls
01510 Environmental Controls
01610 Products and Materials
01630 Substitution Procedures
01740 Cleaning
01782 Warranties
01783 Project Record Documents

DIVISION 2 – TECHNICAL SPECIFICATIONS
02050 Demolition
02071 Asbestos Removal
02091 Groundwater Management
02092 Underground Storage Tanks, Aboveground Storage Tanks, and Soil and Fill Management
02120 Offsite Transportation and Disposal
02150 Shoring and Underpinning
02225 Earthwork
02444 Chain Link Fence
02445 Post and Rail Fence

DIVISIONS 3 – 5 NOT USED

DIVISION 6 – TECHNICAL SPECIFICATION
06100 Rough Carpentry

DIVISION 7 – TECHNICAL SPECIFICATIONS
07160 Bituminous Damp-proofing
07511 Repairs to Existing Built-up Roofing
07650 Flexible Flashing
07900 Joint Sealants

DIVISION 8 – NOT USED

DIVISION 9 – TECHNICAL SPECIFICATIONS
09225 Metal Lath and Stucco

DIVISION 10 – 16 – NOT USED

APPENDICES:

APPENDIX 1 DETAIL DRAWINGS:
CS-001 Abbreviations
CS-100 General Notes
SK-01 Elevation Sketch Demolition
SK-02 Side Elevation
SK-03 Section Thru Rake @ Roof
SK-04 Porch Section Detail – Side Wall Stucco
SK-05 Porch Detail
SK-06 Porch Detail – Side Wall T-111
SK-07 Porch Section Detail – Front Condition
SK-08 Elevation Sketch Finish Work
SK-09 Stucco Wall Section – Full Parapet Condition
SK-10 Typical Tunnel Alley Existing Condition Plan
SK-11 Typical Tunnel Alley Existing Front Elevation
SK-12 Typical Tunnel Alley Side & Detail Elevations
SK-13 Section Detail @ Tunnel Alley
SK-14 Section @ Tunnel Alley
SK-15 Section @ Roof – Tunnel Alley Wall
SK-16 Structural Modification at Tunnel Alley - Plan
SK-17 Structural Modification at Tunnel Alley - Detail
SK-18 Structural Modification at Tunnel Alley – Detail
SK-19 NTI Project Sign
SK-20 Wood Fencing Detail

APPENDIX 2
City of Philadelphia Neighborhood Transformation Initiative Prime Contractor Qualification Application for Demolition Projects

APPENDIX 3 – Miscellaneous Form(s)
Application for Street Closure

SECTION 00700
TERMS AND CONDITIONS OF BIDDING AND CONTRACT

A. **DEFINITIONS** – The terms used in these Terms and Conditions of Bidding and Contract shall have the following meanings:

1) "**ADA**" has the meaning set forth in Paragraph 104 below.

2) "**Amendment**" means a written modification or change to any Contract Document signed by both Parties.

3) "**Applicable Law**" means all applicable present and future federal, state or local laws, ordinances, executive orders, rules, regulations and all court orders, injunctions, decrees and other official interpretations thereof of any federal, state or local court, administrative agency or governmental body, including the City, the Commonwealth and the United States of America. Applicable Law includes, without limitation, laws, etc. relating to the environment, the Philadelphia Home Rule Charter, as amended from time to time, The Philadelphia Code, as amended from time to time, and the specific laws set forth herein, each as amended from time to time. Bidders bid, and the parties execute, deliver and perform their respective obligations under the Contract, under and pursuant to the applicable provisions of all Acts of the General Assembly of the Commonwealth and applicable ordinances of the City, as such enactments may hereafter be supplemented or amended.

4) "**Bid**" means a Bidder's signed response, submitted to the Procurement Department pursuant to a public invitation to submit competitive Bids for a specific City contract or City contracts that is or are issued by the Procurement Department in accordance with Sections 8-200(1), 2(a) and 2(b) of the Philadelphia Home Rule Charter.

5) "**Bidder**" means a Person submitting a Bid, signed by the Person, to the Procurement Department pursuant to a Bid Solicitation.

6) "**Change Order**" means an instrument altering the scope of the work under the Contract issued under Paragraph 48 below.

7) "**Check**" means a certified check, bank treasurer's or cashier's check, bank money order or United States Postal Service Money Order.

8) "**City**" or "**The City**" means The City of Philadelphia, a corporation and body politic existing under the laws of the Commonwealth of Pennsylvania, and includes its various executive and administrative departments, agencies, boards and commissions, including the Department, and its legislature, City Council. The City is a City of the First Class under the laws of the Commonwealth of Pennsylvania.

9) "**Contract**" means the agreement of the Parties evidenced by the Contract Documents.

10) "**Contract Documents**" means the Standard Specifications for NTI Demolition Bid Packages and the Project Manual, which includes without limitation the Bid, together with the Notice to Proceed, the Notice of Contract Award, Contractor's Project Specific Safety Program, Contractor's proof of requisite insurance, the executed performance and payment bonds and all addenda, exhibits and schedules, if any, to any of the foregoing documents, and any and all Amendments and Change Orders.

11) "**Contractor**" means the Person that has entered into the Contract with the City.

12) "**Department**" means the Department of Licenses and Inspections of the City.

13) "**Inspector**" means the representative of the Project Manager assigned to inspect work and the delivery of services under the Contract.

14) "**Notice of Contract Award**" means a notice from the City to the Bidder informing the Bidder of the City's determination to award the Contract to the Bidder.

15) "**Notice to Proceed**" means a notice from the City to the Contractor authorizing the Contractor to commence work under the Contract.

16) "**Operating Commissioner**" means the commissioner of the Department or his or her designee.

17) "**Parties**" means the City and the Contractor, and a "Party" means either the City or the Contractor.

18) "**Person**" means any individual, sole proprietorship, association, company, firm, partnership, limited partnership, joint venture, corporation, limited liability company or other form of entity or association recognized at law.

19) "**Procurement Commissioner**" means the head of the City's Procurement Department, or his or her designee.

20) "**Procurement Department**" means the Procurement Department of the City.

21) "**Program Manager**" means the City or its designated agent responsible for oversight and implementation of the City's Neighborhood Transformation Initiative (hereinafter, "NTI") Demolition and Encapsulation Program.

22) "**Project**" means all of the services, including the provision of any materials, which the Contractor has agreed to perform and supply under the Contract including, but not limited to, services, if any, performed by the City upon the Contractor's default hereunder, or performed by Subcontractors or other contractors.

23) "**Project Site**" site means the boundary of the Project as defined in the Special Contract Requirements included in the Project Manual.

24) "**Project Manager**" means the individual specifically designated as "Project Manager" in the Special Contract Requirements contained within the Project Manual, and any other individual who may be designated in writing by the Project Manager as his or her representative.

25) "**Project Manual**" means the Bidding Requirements, Contract Requirements and Specifications and includes any exhibits and addenda thereto. For NTI Demolition Bid Packages, the Project Manual includes this Standard Specifications for NTI Demolition Bid Packages by reference.

26) "**Responsibility**" or "**Responsible**" means the capacity to perform a City contract in accordance with its terms and conditions. Elements of Responsibility include the following, among others: judgment, skill, promptness, faithfulness, skillful workers, honesty of the Contractor, financial standing, reputation, experience, resources, facilities, past history of adherence to plans and specifications, capacity and ability to do the work according to the specifications, availability and efficiency, and such other factors as may be determined by law.

27) **"Standard Specifications for NTI Demolition Bid Packages"** means this book, which contains the Contract Requirements, General Requirements, and Technical Specifications governing the work of the NTI Demolition Bid Packages.

28) "**Subcontract**" means a contract made between the Contractor and a Subcontractor, or between a Subcontractor and a sub-subcontractor at any tier, providing for the completion of one or more portions of the Project which the Contractor has agreed to perform under the Contract, including agreements for the supply of materials and equipment forming part of such Project.

29) "**Subcontractor**" means a Person performing at any tier under a contract with the Contractor or another Subcontractor one or more portions of the Project which the Contractor has agreed to perform under the Contract. Subcontractors shall include, without limitation, vendors, manufacturers, suppliers, or other Persons contracting with a Subcontractor or the Contractor for the manufacture or supply of equipment, systems or components forming part of the services under the Contract.

30) "**Terms and Conditions of Bidding and Contract**" means the Terms and Conditions of Bidding and Contract of the City in connection with the invitation for, and the award, execution, and performance of the Project, except as modified by the Project Manual and any other special requirements for the Contract. These Terms and Conditions of Bidding and Contract form an integral part of the Contract Documents and are incorporated therein.

31) "**Unbalanced Bid**' means an offer by the Contractor which (1) contains extremely low prices on items or types of services which are, as determined by the City in its sole discretion, unimportant or infrequently ordered or performed, and extremely high prices on items or types of services which are frequently ordered or performed, resulting in an effort to qualify as the low Bidder while charging disproportionately high prices for certain items or types of services; or (2) contains prices for phases of the services to be performed early in the course of the Project under this Contract that are, as determined by the City in its sole discretion, disproportionately high relative to prices for later phases of the Project, resulting in payment of a disproportionately high percentage of the total Contract price early in the Contract period.

32) **Interpretation; number, gender.** The words "herein" "hereof" and "hereunder" and other words of similar import refer to the Contract as a whole, including all of the Contract Documents, and not to any particular article, paragraph, subparagraph or clause contained in the Contract Documents. Whenever the context requires, words used in the singular shall be construed to include the plural and vice versa, and pronouns of any gender shall be deemed to include the masculine, feminine and neuter genders.

B. BIDDING REQUIREMENTS

1. Bidder Responsibility.

a. Each Bidder must demonstrate to the satisfaction of The City that it is responsible, capable of performing the work under the Contract, and has successfully completed contracts equivalent in scope and nature, and comparable in magnitude. Bidder must further demonstrate that it has the necessary financial and technical resources, equipment and workforce to perform the work under the Contract in a proper and satisfactory manner, in accordance with the Project Manual, and within the time specified. Unless otherwise specified, after bids are opened, the Procurement Department and other City departments or agencies where appropriate or specified, shall review and may investigate the lowest responsive bidder's responsibility, including, but not limited to, its integrity, qualifications,

references, capacity and ability to perform the Contract in accordance with its terms. All determinations of bidder responsibility shall be vested in the sole discretion of the Procurement Commissioner and other City officials. Any bidder who is deemed not responsible shall be ineligible for award of the Contract. Bidders deemed not responsible will be notified of such determination and the reasons therefore in writing by the Procurement Department, and shall have the right to contest the determination by submitting to the Procurement Department, within forty-eight (48) hours after receipt of its written determination, a written request for reconsideration that includes information relating to the bidder's qualifications and responsibility and demonstrating the insufficiency of the reasons stated in the written determination for finding the bidder not responsible. Any further determination of a contesting bidder's responsibility shall be vested in the sole discretion of the Procurement Commissioner and other City officials.

b. In the event that Bidder has been declared by the City in default under a contract for demolition work and has been directed to remediate a demolition site because of the use of improper and/or unacceptable backfill, Bidder agrees not to bid for any contracts for demolition projects until such time as a full and complete remediation has been completed to the satisfaction of the Department of Licenses and Inspections or until such other time as the Department of Licenses and Inspections and the Procurement Department shall determine. Bidder acknowledges and understands that its agreement not to bid is without waiver of the City's right to otherwise determine its responsibility or to disqualify, suspend, or debar the Bidder. Similarly, Bidder agrees not to use any Subcontractor that has been declared by City in default under a contract for demolition unless and until the Department and the Procurement Department determine that the Subcontractor is Responsible.

2. **Bid Responsiveness.** The Project Manual is mandatory and must be strictly followed by all Bidders in the preparation and submission of their bids. After Bids are opened, the Procurement Department, and other City departments or agencies where appropriate or specified, shall review all Bids for responsiveness. Any Bid which is incomplete, obscure, conditional, unbalanced, which contains additions not called for or which offers counter terms and conditions, or irregularities of any kind, including alterations or erasures, or which fails to conform in any respect to the Project Manual shall be deemed to be non-responsive and shall be rejected. Notwithstanding the foregoing, the Procurement Commissioner reserves the right to waive irregularities and non-responsiveness in his or her sole discretion, when the Procurement Commissioner determines that the irregularity or non-responsiveness is not material or that a waiver of the irregularity or non-responsiveness is otherwise permitted by the Project Manual or by applicable law. The Procurement Department's determination of non-responsiveness shall be final and any bid rejected as non-responsive shall not be eligible for Contract award.

3. **Examination of Contract Documents and Project Site.**

a. Bidder is responsible for and shall thoroughly acquaint itself with the Project Manual, including, without limitation, a careful study and review of the technical specifications (included in the Standard Specifications) prior to submission of its Bid. Bidder shall examine in detail the Project Site and shall acquaint itself with conditions affecting the work, and, when applicable, shall take measurements and examine the condition of walls and foundations of overlying and adjacent structures, the character of the paving, and the soil and subsurface soil. The City reserves the right to coordinate and schedule site inspections so as to minimize interference with residential structures. The Bid shall be prepared with due regard to the provisions of the Project Manual and to the conditions existing or to be anticipated at the Project Site.

b. If Bidder discovers or encounters any ambiguity or discrepancy in the Project Manual and/or the Standard Specifications in the course of preparing its Bid, the Bidder shall promptly notify the Procurement Department of the ambiguity or discrepancy prior to the date and time for receipt and opening of Bids. The City, so advised, may, at its sole discretion determine whether such ambiguity or discrepancy exists and whether any corrective action is necessary.

4. **Bid Submission.**

a. By submitting a Bid, the Bidder certifies that it is familiar with the Project Site, that it has thoroughly reviewed the Project Manual and Standard Specifications, and that all services can be completed for the amount bid and within the time specified in the Project Manual. All Bids must be written in ink or typewritten, must be made on the bid forms issued by the City, and must be signed in ink by an individual with legal authority to bind the Bidder. No Bid may be considered if received after the date and time for opening of Bids established by the Project Manual, nor may any Bid be modified after that date and time. The time of Bid opening shall be the time displayed on the City's official bid clock. In the event of any discrepancy between actual time and the City's official bid clock, the latter shall determine the time of Bid opening.

b. It is the sole responsibility of the Bidder to ensure that it has received any and all addenda and the Procurement Commissioner may, in his or her discretion, reject any Bid for which all addenda have not been executed and

returned in accordance with the instructions provided therein. All information concerning this Bid will be contained in the Project Manual as issued or amended; information provided verbally by any City official, representative, employee or agent of City shall not be binding or relevant.

c. For purposes of determining the basis of a contract award, in the event of a discrepancy between a unit price and an extended price for a work or line item, the unit price shall govern, and the extended price shall be re-computed by the City. Where a unit price is expressed in both words and numerals, and there is a discrepancy between the two, the words shall govern. If the amount set forth as a unit price is ambiguous, unintelligible, or uncertain for any cause, or is omitted entirely, or is the same amount as the extended price for a work or line item, then the amount set forth as the extended price shall govern for purposes of determining the basis of a contract award. In such event, the extended price shall be divided by the estimated quantity for the work or line item to arrive at a re-computed unit price which shall thereafter govern for purposes of payment under paragraph 46.

d. Where a unit or other price (including a unit price extension or the aggregate or total bid price) contained in the Bid contains a mistake or error in computation, or is otherwise ambiguous as to computation, or there is a discrepancy between a unit price and an extended price for a work or line item, and where the mistake, ambiguity, or discrepancy is not discovered prior to contract award and results in the award of a contract to the Bidder, which award is later determined to be mistaken or erroneous, or the Contract Amount is determined to be erroneous, based upon a re-computation of the unit prices and the total bid price, the Contractor shall bear the sole financial risk of such mistake or ambiguity, and such mistake or ambiguity shall be construed solely against the Contractor and in favor of the City. In all such cases of price mistake, ambiguity, or discrepancy, if work under the Contract has not yet commenced, the City shall have the discretion, at its sole option, to formally rescind the Contract, if the Contractor is deemed not to be the low bidder in accordance with the rule set forth in paragraph 5(c) above, or to unilaterally reform the Contract and the prices therein in accordance with the rule set forth in paragraph 5(c), if the Contractor would still be deemed to be the low bidder notwithstanding any mistake, ambiguity, or discrepancy. If work under the Contract has already commenced, the City shall have the discretion, at its sole option, to make payment at the unit price as recomputed in accordance with paragraph 5(c) above or at the mistaken or ambiguous unit price, or to dispute payment at the mistaken or ambiguous price. In the event of a rescission or reformation of the contract under this paragraph, the Contractor agrees and acknowledges that it shall have no claim against the City, including any claim for breach of contract or breach of any other legal duty, or for lost profits, costs, damages, or expenses of any kind, arising out of the rescission or reformation. In the event that the City disputes payment to the Contractor at a mistaken or ambiguous unit price, and the parties cannot mutually agree upon a price to be paid to the Contractor for the item of work in question, the payment to the Contractor for the item of work shall not exceed the payment which would be made pursuant to paragraph 51, and the City's liability to the Contractor for such item of work shall not in any event exceed the Contract Amount as specified in paragraph 45.

5. **Anti-Bid Rigging Act**. All Bidders, by submitting a Bid, certify that they have not committed or engaged in, or attempted to commit or engage in, a prohibited activity under the Anti-Bid Rigging Act, 62 Pa. C.S. § 4501, et seq., in connection with their Bid. In addition, all Bidders by submitting a Bid certify that the Bidder has not been convicted or found liable for any act prohibited by any federal or state law in any jurisdiction involving conspiracy or collusion with respect to bidding on any public contract within the three (3) years prior to the date of the Bid; that the Bidder acknowledges that a conviction or finding of liability for any act prohibited by federal or state law in any jurisdiction involving conspiracy or collusion with respect to Bidding on any public contract within the three (3) years prior to the date of the Bid shall not prohibit the City from accepting a Bid from the Bidder or awarding a Contract to the Bidder, but may nonetheless serve as grounds for Bidder's suspension or debarment at the sole discretion of the Procurement Commissioner, or may serve as grounds for a non-award of a contract to the Bidder on the basis of the Bidder's lack of responsibility.

6. **Multiple Bid Restriction.** No Bidder shall be a party to more than one (1) Bid for the same bid number. A violation of this condition may, in the sole discretion of the Procurement Commissioner, result in rejection of any or all such Bids in which the Bidder is interested.

7. **Bid Security.** Bidder must submit with its Bid, a bid bond, issued by a surety approved by the City on a form prepared by the City's Law Department in the amount of ten percent (10%) of the total amount Bid. Once the lowest responsive and responsible Bidder has been determined, the Procurement Department shall return, only upon request, the other bidders' bid bond(s) except the bid bond of the lowest responsive and responsible Bidder.

8. **Quantities are Approximate.** For requirements contracts only, the articles and quantities of such articles as set forth in the Project Manual are estimates and the Procurement Commissioner, in his/her sole discretion, may make an award for all or some of the articles bid and in such quantities as the Procurement Commissioner shall deem appropriate.

9. **Bid Processing Fee**. In addition to bid security and any other fee or monies required, the Bid shall be accompanied by a non-refundable bid processing fee in the form of a separate check made payable to "The City of Philadelphia," based on the gross amount of the Bid in accordance with the formula below. Cash is not acceptable. The gross amount of the Bid shall be the sum of all items bid upon, including "add" alternates, without reduction for "deduct" alternates.

Gross Bid	Processing Fee	Gross Bid	Processing Fee
$0-$13,000	$0	$1,000,001-$2,000,000	$200
$13,001-$100,000	$10	$2,000,001-$3,000,000	$300
$100,001-$300,000	$30	$3,000,001-$4,000,000	$400
$300,001-$500,000	$50	$4,000,001-$5,000,000	$500
$500,001- $1,000,000	$100	Over $5,000,000	$600

Failure to submit this fee may result in rejection of the Bidder's bid. In addition, if a contract award is made, any such unpaid fees owed by the Bidder to the City must be paid prior to the City's release of any payments to the Contractor under the resulting contract.

10. **Document Preparation Fee**. In accordance with §17-702 of The Philadelphia Code, the successful Bidder shall be required to pay a non-refundable document preparation fee in the form of a separate check made payable to "The City of Philadelphia," based on the amount of the awarded contract in accordance with the formula below. Cash is not acceptable.

Contract Value	Preparation Fee	Contract Value	Preparation Fee
$0-$20,000	$0	$250,001-$500,000	$340
$20,001-$50,000	$120	$500,001-$1,000,000	$520
$50,001-$100,000	$170	Over $1,000,000	$1,000
$100,001-$250,000	$260		

This fee shall be payable at the time of contract award and any such unpaid fee owed by the Contractor to the City must be paid prior to the City's release of any payments under the resulting contract.

11. **Business Tax Requirements.** Any Contractor, or vendor of goods, wares and merchandise, or purveyor of services, who bids on and is awarded a contract by the City or the School District of Philadelphia, is subject to Philadelphia's business tax and applicable ordinances and regulations. Anyone who is awarded a contract by the City or the School District of Philadelphia pursuant to a formal bid solicitation, including a Bid Solicitation, shall be deemed to have entered into a contract within the City, and the subsequent delivery of goods into the City, or performance of services within the City constitutes "doing business" in the City and subjects the successful Bidder to one or more of the following taxes: (a) Business Privilege Tax; (b) Net Profits Tax; and (c) City Wage Tax. The successful Bidder, if not already paying the aforesaid taxes, is required to apply to the Department of Revenue, 1401 John F. Kennedy Blvd., Public Service Concourse, Municipal Services Building, Philadelphia, PA 19102, for a tax identification number and to file appropriate business tax returns as provided by law. Questions should be directed to the Business and Earnings Tax Unit at (215) 686-6600.

12. **Business Privilege License.** A Business Privilege License ("BPL") is required for every person desiring to engage in any business within the City, whether or not such person maintains a place of business in the City. The successful Bidder will be required to furnish a BPL number at the time of Contract award, but no later than before the "Notice to Proceed" is issued. In the event the successful Bidder has applied for, but not been issued, a BPL, a photocopy of the application will be acceptable. The BPL is a one-time license with no expiration date. Only one (1) license is needed for multiple locations or for multiple businesses for the same Person. If the Bidder has never had a BPL assigned, the Bidder may request one by filing a "Miscellaneous License Application". In order to be assigned a BPL, it is necessary to have a "Philadelphia Business Tax Account Number". This is a number assigned by the City's Department of Revenue to identify City tax accounts. If the Bidder has never had a number assigned, the Bidder may request one by filing an "Application for Philadelphia Business Tax Account Number". Any tax account previously opened for the Bidder which is unsettled or delinquent will cause delay and may preclude the issuance of a new license. Applications may be obtained from the Department of Licenses and Inspection, License Issuance Unit.

13. **Formal Specification**. When a formal, numbered, specification is referred to in the Project Manual and/or the Standard Specifications, no deviation therefrom will be permitted and the Bidder will be required to furnish articles and/or services in conformity with that specification. When catalogues, model numbers, trade names, or cuts are listed in the Project Manual and/or Standard Specifications, they are, unless otherwise specified, included for the purposes of furnishing Bidders with information concerning the style, type or kind of article and /or service

desired. Unless otherwise provided in the specifications, all items offered by the Bidder must be new. A "new" item is one which will be used first by the City. This clause shall not be construed to prohibit Bidders from offering goods, supplies, equipment or materials containing recycled materials or printing with recycled content; Bidders intending to provide goods made with recycled materials should notify the Procurement Department.

14. **Price Increases**. Any articles furnished under the Contract must be delivered at the price(s) bid, FOB Destination Point. Bids containing reservations of the right to increase the price(s) bid, including, but not limited to, late payment charges, will not be considered, except where the Procurement Commissioner, in his/her sole discretion, finds it in the City's best interest to do so.

15. **Performance and Payment Bonds**. To ensure faithful performance of the services, compliance with the Contract Documents and the payment of Subcontractors and others furnishing labor and materials in the performance of the Contract, the successful Bidder shall be required at the time of Contract award to provide an individual performance bond and an individual payment bond on the City's forms as provided in the Project Manual, with a surety company approved by the City in a sum equal to 100% of the amount of the awarded Contract.

16. **Insurance**. An Owner Controlled Insurance Program has been designed for the NTI (hereinafter, "NTI OCIP") and will be administered by the City in accordance with the laws of the Commonwealth of Pennsylvania. Special terms, conditions and bidding instructions related to the NTI OCIP are contained in a document entitled, "Neighborhood Transformation Initiative Owner Controlled Insurance Program Bid Insurance Requirements" (hereinafter, "NTI OCIP Insurance Requirements") included in the "Special Contracts Requirements" contained in the Project Manual. For informational purposes only, Bidders are required, in addition to submitting a Bid which excludes the Bidder's costs for providing the insurance specified in Part 1 of the NTI OCIP Bid Requirements, to submit a Bid which includes the Bidder's costs for providing that insurance; only the Bid utilizing the OCIP, i.e., the Bid which excludes the Bidder's cost of providing the insurance, will be considered in evaluating the Bid for award. All Contractors are required to maintain, at their sole cost and expense, insurance in the minimum limits and for the coverages stated in the NTI OCIP Insurance Requirements.

17. **Ethics Requirements**. To preserve the integrity of City employees and maintain public confidence in the competitive bidding system, the City intends to vigorously enforce the various ethics laws as they relate to City employees in the bidding and execution of City contracts. Such laws are in three categories:

a. Gifts. Executive Order No. 16-92 prohibits City employees from soliciting or accepting anything of value from any person or entity seeking to initiate or maintain a business relationship with the City, its departments, boards, commissions and agencies. All City employees presented with gifts or gratuities as indicated in Executive Order 16-92 have been instructed to report these actions to the appropriate authorities. All Bidders, agents or intermediaries who are solicited for gifts or gratuities by City employees are urged to report these incidents to the Inspector General, 1101 Market Street, 4th Floor, Philadelphia, PA 19107.

b. City employee interest in City contracts. In accordance with Section 10-102 of The Philadelphia Home Rule Charter, no bid shall be accepted from, or contract awarded to, any City employee or official, or any firm in which a City employee or official has a direct or indirect financial interest. All Bidders are required to disclose any current City employees or officials who are employees or officials of the Bidder's firm, or who otherwise would have a financial interest in the contract.

c. Conflict of Interest. Both the State Ethics Act and the City Ethics Code prohibit a public employee from using his/her public office or any confidential information gained thereby to obtain financial gain for himself/herself, a member of his/her immediate family, or a business with which he/she or a member of his/her immediate family is associated. "Use of public office" is avoided by the employee or official publicly disclosing the conflict and disqualifying himself/herself from official action in the matter, as provided in The Philadelphia Code §20-608.

18. **MacBride Principles Certification**. Section 17-104(2)(b) of The Philadelphia Code prohibits the City from accepting Bids from companies that do business in Northern Ireland, unless that business has implemented the fair employment principles embodied in the MacBride Principles. In furtherance of this Ordinance, Bidder makes the following certification and representations:

a. In accordance with Section 17-104 of the Philadelphia Code, Bidder by execution of its bid certifies and represents that (i) Bidder (including any parent company, subsidiary, exclusive distributor, or company affiliated with Bidder) does not have, and will not have at any time during the term of any contract resulting from this bid (including any extensions thereof), any investments, licenses, franchises, management agreements or operations in Northern Ireland and (ii) no product to be provided to the City under any resulting contract will originate in Northern Ireland, unless Bidder has implemented the fair employment principles embodied in the MacBride Principles.

b. In the performance of any contract resulting from this Bid, Bidder agrees that it will not utilize any suppliers or subcontractors at any tier (i) who have (or whose parent subsidiary, exclusive distributor of company affiliate have) any investments, licenses, franchises, management agreements or operations in Northern Ireland or (ii) who will provide products originating in Northern Ireland unless said supplier or subcontractor has implemented the fair employment principles embodied in the MacBride Principles. Bidder further agrees to include provisions with this subparagraph (b), with appropriate adjustments for the identity of the parties, in all subcontracts and supply agreements which are entered into in connection with the performance of any resulting contract.

c. Bidder agrees to cooperate with the City's Director of Finance in any manner which the said Director deems reasonable and necessary to carry out the Director's responsibilities under Section 17-104 of The Philadelphia Code. Bidder expressly understands and agrees that any false certification or representation in connection with this subparagraph (c) and/or any failure to comply with the provisions of this subparagraph (c) shall constitute a substantial breach of any contract resulting from this Invitation and Bid entitling the City to all rights and remedies provided in this bid or otherwise available in law (including, but not limited to Section 17-104 of the Philadelphia Code) or at equity. In addition, it is understood that false certification or representation is subject to prosecution under 18 Pa.C.S. Section 4904.

C. GENERAL REQUIREMENTS OF THE CONTRACT

19. **Tax Exemption**. The City is exempt from the payment of any federal excise or transportation taxes and any Pennsylvania Sales Tax. The price bid must be net, exclusive of taxes. However, when under established trade practice any federal excise tax is included in list prices, Bidder may quote the list price and shall show separately the amount of the federal tax, either as a flat sum or as a percentage of the list price, which shall be deducted by the City. In the event the Contractor pays any sales or use tax, the Contractor hereby assigns to City, or City's agent, all of its rights, title and interest in any sales or use tax which may be refunded as a result of the purchase of any articles furnished in connection with the Contract and the Contractor, unless directed by the City, shall not file a claim for any sales or use tax refund subject to this assignment. The Contractor authorizes the City, in City's name or the name of the Contractor, to file a claim for refund of any sales or use tax subject to this assignment.

20. **Tax Indebtedness.** The City does not wish to do business with tax delinquents or other businesses indebted to the City. In furtherance of this policy, the Contractor represents, warrants and covenants, that it and its parent company(ies) and subsidiary(ies) are not currently indebted to the City and will not at any time during the term of this Contract (including any extensions or renewals thereof) be indebted to the City, for or on account of any delinquent taxes (including, but not limited to, taxes collected by the City on behalf of the School District), liens, judgments, fees or other debts for which no written agreement or payment plan satisfactory to the City has been established. In addition to any other rights or remedies available to the City at law or in equity, the Contractor acknowledges that any breach or failure to conform to this certification may, at the option of the City, result in the withholding of payments otherwise due to it and, if such breach or failure is not resolved to the City's satisfaction within a reasonable time frame specified by the City in writing, may result in the offset of any such indebtedness against said payments and/or the termination of this Contract for default (in which case the Contractor shall be liable for all costs, losses and other damages resulting from the termination). The Contractor shall further require all its Subcontractors performing work in connection with this Contract to provide and be bound by the aforesaid certification, and, in addition to any other rights or remedies available at law or in equity, any breach of or failure by any Subcontractor to conform to this certification may, at the option of the City, result in the withholding of payments otherwise due to Subcontractor for services rendered in connection with the contract and, if such breach or failure is not resolved to the City's satisfaction within a reasonable time frame specified by the City in writing, may result in the offset of any such indebtedness against said payments otherwise due to Subcontractor and/or the termination of Subcontractor for default (in which case Subcontractor shall be liable for all costs, losses and other damages resulting from the termination).

21. **Indemnification.** Contractor shall indemnify, defend and hold harmless the City, its officers, employees and agents from and against any and all losses, costs and expenses, including, but not limited to, litigation costs , settlement costs and expenses and counsel fees and expenses, claims, suits, actions, damages, liability and expenses, arising out of or resulting in whole or in part from the performance of the services or the provision or installation of materials under the Contract, including, but not limited to, those in connection with loss of life, bodily injury, personal injury, damage to property, contamination or adverse effects on the environment, the Contractor's default under the Contract, failure to pay Subcontractors and suppliers, any infringement or violation of any proprietary right (including, but not limited to, patent, copyright, trademark, service mark and trade secret) and any other breach of the Contract, regardless of the inherent nature of the services or material supply and regardless of whether or not such loss, cost, claim, suit, action, damage, liability, or expense is caused in whole or in part by the negligent act or omission of the City, its officers, employees and agents. Such obligation shall not

be construed to negate, abridge or reduce other rights or obligations of indemnity which would otherwise exist as to a Party or Person described in this paragraph including without limitation, the City's statutory defenses and/or immunities.

In claims against the City, its officers, employees or agents by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this paragraph 21 shall not be limited by the provisions under any Workers Compensation acts, disability benefit acts or other employee benefit acts. This obligation to indemnify, defend and hold harmless the City, its officers, employees and agents shall survive the termination of this Contract.

22. **Assignment.** Except through a Subcontract, the Contractor shall not assign the Contract, or any part of the Contract, or delegate performance of the Contract (other than to its own work forces), without obtaining the prior written consent of the Procurement Commissioner. The decision whether to consent to an assignment, the timing of consent (if any), and conditions to such consent, if any, shall each be at the City's sole discretion. Any consent to the assignment of any monies to be paid under the Contract shall not relieve the Contractor from the faithful performance of any of its obligations under the Contract or change any of the terms and conditions of the Contract. Any purported assignment in violation of this provision shall be void and of no effect. The City's consent to an assignment shall not release the assignor from any liability accrued or thereafter accruing under the Contract. Any assignment or purported assignment shall be in writing and shall contain an express assumption by the assignee of all liability accrued or thereafter accruing under the Contract. Consent by the City to any assignment shall not be deemed a course of conduct, dealing or performance with respect to any other assignment or proposed assignment. For purposes of this paragraph, an assignment includes the transfer or acquisition of the Bidder or the Contractor, or a controlling interest therein, through a corporate or other merger, and the appointment of a receiver or bankruptcy trustee, and the transfer of the Contract or the Contractor in any bankruptcy or other insolvency proceeding.

23. **Nondiscrimination.**

a. Any Contract awarded hereunder is entered into under the terms of the Philadelphia Home Rule Charter and in its performance; Contractor shall not discriminate nor permit discrimination against any person because of race, color, religion, national origin or sex. Such discrimination shall constitute an event of default under this Contract entitling City to terminate this Contract forthwith. This right of termination shall be in addition to any other rights or remedies provided under this Contract or otherwise available to the City at law or in equity.

b. In accordance with Chapter 17-400 of The Philadelphia Code, Contractor agrees that its payment or reimbursement of membership fees or other expenses associated with participation by its employees in an exclusionary private organization, insofar as such participation confers an employment advantage or constitutes or results in discrimination with regard to hiring, tenure of employment, promotions, terms, privileges or conditions of employment, on the basis of race, color, sex, sexual orientation, religion, national origin or ancestry, shall constitute an event of default under this Contract and shall entitle the City to all rights and remedies as provided herein or otherwise available to the City at law or in equity. Contractor agrees to include the immediately preceding sentence, with appropriate adjustments for the identity of the parties, in all subcontracts which are entered into pursuant to this Contract. Contractor further agrees to cooperate with the Commission on Human Relations of the City in any manner which the said Commission deems reasonable and necessary for the Commission to carry out its responsibilities under Chapter 17-400 of The Philadelphia Code. Failure to so cooperate shall constitute an event of default under this contract entitling the City to all rights and remedies as provided herein or otherwise available to the City at law or in equity.

24. **Cancellation of Bid and Award of Contract.** The Procurement Commissioner, in his/her sole discretion, may cancel any Bid prior to bid opening. After bid opening, the Procurement Commissioner, in his/her sole discretion, may reject all bids, if deemed in the best interest of the City. The City shall make the Contract award to the lowest responsive, responsible Bidder. In the event of an absolute tie, the Procurement Commissioner shall make the Contract award in accordance with the best interests of the City. In all cases where a contract award is made by the Procurement Department, the Bidder is bound by all of the terms and conditions of the Contract Documents upon the submission of its Bid. All Bids are valid for a period of not less than 120 days within the date of Bid opening, or as otherwise specified in the Project Manual; thereafter if the Bid has not been awarded, the Bid shall be valid for subsequent award only upon the express consent of the Bidder, with no change to the submitted Bid.

25. **Binding Contract and Execution of Contract.**

a. All Contract awards shall be made by the Procurement Department upon written notice to the Bidder that is determined by the Procurement Department to be the lowest responsive and responsible Bidder. The award shall not become a Contract binding upon the City until after written Notice of Contract Award is made by the Procurement Department and until after all of the following conditions have been satisfied:

1. Successful Bidder posts a proper performance bond and a proper payment bond, as described in Paragraph 15 above, on the City's current bond forms, within the time set forth in the Notice of Contract Award;
2. Successful Bidder provides proof of the requisite insurance;
3. Successful Bidder submits an approved Contractor's Project Specific Safety Program;
4. The Contract is approved as to form by the City's Law Department;
5. The Director of Finance and the City Controller's Office certify the availability of funds for the Contract;
6. The Procurement Commissioner executes the Contract.

The Procurement Commissioner may, in his or her sole discretion, cancel any Contract award if any of the above conditions are not satisfied, or if the Procurement Commissioner, in his or her sole discretion, determines cancellation of the Contract award to be in the best interests of the City. In the event of such cancellation, the successful Bidder agrees and acknowledges that it shall have no claim against the City, including any claim for breach of contract or breach of any other legal duty, or for lost profits, costs, damages, or expenses of any kind.

b. Any Bidder who is not lawfully released from its Bid and who fails, refuses, or is unable to execute the Contract in accordance with its Bid, or who fails, refuses, or is unable to furnish the required performance and payment bonds, insurance, or Contractor's Project Specific Safety Program shall be liable to the City for the actual loss, cost or damage sustained by the City as a result of the failure of the Bidder to enter into the Contract. This remedy against the Bidder shall be in addition to, and not in lieu of, any remedy or claim which the City may have under the Bid Bond posted by the Bidder.

26. **Unauthorized Acts.** Any act of any City representative, official, agent, or employee, which is not within the scope of his or her authority as set forth in the Contract Documents or pursuant to the Philadelphia Home Rule Charter, shall not be binding on the City and shall not be deemed as a defense to the Contractor for the breach of any of the terms and conditions of the Contract Documents.

27. **Termination for the Convenience of the City.** The City may terminate performance of services and furnishing of materials under this Contract at any time during the term of the Contract, for any reason, including, without limitation, the City's own convenience. Written notice of termination shall be sent to the Contractor by the Procurement Commissioner which notice shall set forth the effective date of the termination. Upon receipt of such notice of termination, the Contractor shall stop all services and furnishing materials under the Contract. Upon termination for convenience, the City shall be liable only for the cost and profit on the services and materials then completed and furnished by the Contractor. The City shall have no additional liability or cost, for termination of the Contract, including but not limited to any penalty, the Contractor's anticipated profits or any loss on the services terminated. Termination of the Contract shall not affect any obligation or liabilities of either Party accruing prior to termination.

28. **Contractor's Obligations.** The services to be performed under the Contract are set forth in detail in the Contract Documents. The Contractor shall furnish all labor, materials, plant, tools and appliances, and shall complete the services to the satisfaction of the City in the manner and within the time required in the Contract Documents at the prices set forth in the Contract Documents. If at any time the Contractor's methods, workforce, or equipment appear to the City to be unsafe, insufficient, or inadequate for the proper performance of the provisions of the Contract, the City may order the Contractor to make such changes as the City may deem necessary, and the Contractor shall comply with such orders, but the failure of the City to make such demands shall not relieve the Contractor of its obligations under the Contract. The Contractor shall maintain an office where orders and instructions may be delivered, and shall give personal attention to the faithful performance of the services of the Contract. The Contractor shall employ a competent representative or superintendent on the job site who shall have full authority to receive and execute orders, and to supply such labor, tools, and materials as may be required for the proper performance of the services.

29. **Performance of Services by the Contractor.** The Contractor shall perform, on the site and with its own organization and work force, at least twenty percent (20%) of the total amount of the services to be performed under the Contract. The Contractor shall submit with its Bid a complete description of the services it will perform with its own organization, the percentage of the total Contract this represents, and the estimated cost thereof.

30. **Materials and Equipment Loaned or Rented by the City.** Any materials, or equipment loaned or rented by the City to the Contractor for use on the particular job must be returned by the Contractor in kind or in cash, or as a credit to the Contract as determined by the City, or the Contractor will be considered in default of the Contract. The use or operation of such material or equipment shall be at the Contractor's own risk. The material or equipment shall be taken in its "AS IS" condition and the Contractor shall maintain the material or equipment in the same condition, or better, as when received. Should damage occur, repair or replacement shall be made by the

Contractor at its own expense, at the election and to the satisfaction of the City, in accordance with specifications approved in writing by the City.

31. Contract Time and Delay.

a. Times set forth in the Special Contract Requirements for the performance of the services or any portions thereof are essential elements of the Contract. The Contractor shall begin services, unless otherwise directed by the Department, within ten (10) calendar days from the date of issuance of the Notice to Proceed from the Procurement Department directing the Contractor to proceed with the services, and shall complete all services covered by the Contract Documents within the time specified in the Contract Documents. The Contract completion date shall be determined by reference to the date of the issuance to the Contractor of the Notice of Contract Award. In submitting a Bid, the Contractor acknowledges and agrees that the Contract time, as specified in the Contract Documents, is a reasonable period for performing the work.

b. Except as may otherwise be required by the Project Manual, the Contractor shall prepare and submit to the City, before the commencement of services, a written and detailed schedule which shall, at a minimum, indicate the milestone dates on which the Contractor intends to start and end each of the principal services under the Contract and which shall indicate generally how the Contractor intends to complete the services under the Contract within the Contract time specified. The Contractor's schedule shall include a schedule or timeline for submission of shop drawings or other submittals to the Department, which shall be coordinated with the overall Project schedule and which allows for a reasonable time for the Department or the Project Manager to review the submittals or such time as the Department or the Project Manager may otherwise require pursuant to any of the Contract Documents. The Contractor's schedule shall in no event exceed the time allotted for completion of the Contract. From time to time, the Contractor shall revise and update its schedule to show changes to the schedule and any agreed revisions to the Contract time. The Contractor acknowledges that its failure to submit a written schedule to the Project Manager, as herein provided, shall preclude the assertion of any claim for delay or interference to Contractor's schedule or prosecution of the work and shall further preclude the assertion of any claim or request for an extension of the Contract time.

c. The Contractor shall be entitled to a reasonable extension of time for unavoidable delays or interference in completion of the Contract caused by:

   1. Any acts or omissions of the City (but not PGW, or its contractors, or any other non-City utilities or authorities) which occur subsequent to the issuance of the Notice to Proceed and which cause delay in the completion of the Contract, by failure to give possession of the site, by changes in the technical specifications, or by requiring for any cause the suspension of services under the Contract, except where such suspension is the result of a default or other act or omission by the Contractor. Any delay or postponement in the issuance of the Notice to Proceed shall not entitle the Contractor to an extension of the Contract time and shall not give rise to any claim for delay, disruption, or interference by the Contractor.

   2. Causes not reasonably foreseeable by the Parties at the time of the execution of the Contract and which are entirely beyond the control and without the fault or negligence of the Contractor, including, but not limited to, acts of God, acts of the public enemy, acts of governmental authorities, quarantine restrictions, general strikes throughout the trade or freight embargoes not caused or participated in by the Contractor, fire, floods, pandemics and weather of unusual severity, such as hurricanes or tornadoes.

d. Delays caused by the Contractor's Subcontractors or materialmen shall not, in themselves, be cause for an extension of time by the City. To warrant an extension of time, such delays must be occasioned by the same causes specified in Paragraphs 31 (c) (1) and (2) above.

e. Time extensions shall be handled as follows:

   1. The Contractor, within five (5) days after the beginning of any delay or interference to its schedule, shall notify the Project Manager in writing of the occurrence of the delay or interference, stating with reasonable particularity the cause or causes of the delay or interference and the Contractor's intention to seek an extension of time.

   2. Any claim by the Contractor for a time extension must be made in writing to the Project Manager within ten (10) days after the conclusion of the delay or interference for which a time extension is requested or the City will not consider such claim. The City shall not in any event grant a time extension for any delay or interference which was incurred more than five (5) days before the Contractor gave written notice as required in subparagraph (1) above.

   3. Before the Project Manager reviews a claim for a time extension, the Contractor shall demonstrate in writing the effect of the delay or interference on the Contractor's schedule, including plotting such effect on the

Contractor's critical path documents, showing graphically therein the effect on the Contract completion date. This depiction of the delay or interference must accompany the written claim for a time extension submitted in accordance with subparagraph (2) above.

4. If the Project Manager determines that an extension of time is in order, the time allowed for any delay will be added to and will correspondingly extend the Contract time for completion and adjust any Contract completion milestones set forth in the Project Manual. The Contractor agrees that a time extension granted by the Project Manager shall be its sole remedy for a delay or interference and shall operate as a full and complete release of any claim by Contractor for any and all costs and expenses related to or arising out of the event giving rise to the delay or interference.

f. NOTWITHSTANDING ANYTHING TO CONTRARY CONTAINED HEREIN, THE CONTRACTOR AGREES AND ACKNOWLEDGES THAT THERE SHALL BE NO PAYMENT OR COMPENSATION OF ANY KIND TO THE CONTRACTOR FOR DAMAGES OR COSTS ARISING FROM ANY DELAY OR INTERFERENCE WHETHER SUCH DELAY BE AVOIDABLE OR UNAVOIDABLE. CONTRACTOR FURTHER AGREES AND ACKNOWLEDGES THAT ITS SOLE REMEDY IN THE CASE OF DELAYS OR INTERFERENCES TO ITS SCHEDULE WHICH ARE ATTRIBUTABLE TO THE CITY, SHALL BE A REASONABLE EXTENSION OF THE CONTRACT TIME.

g. If, for reasons other than those stated above, any portion of the Project remains uncompleted after the Contract date specified for its completion, the Project Manager shall deduct from payments due the Contractor, as liquidated damages, the amounts so specified in the Special Contract Requirements. These delay damages are assessed as agreed liquidated damages because the Parties have considered the difficulty of determining the City's actual damages and agreed that computation of the City's actual damages is impossible. If a delay is due to causes which the Contractor considers extraordinary or beyond its control, the Contractor must give timely notice thereof in writing as specified in Paragraph 31(e) above.

32. **Independent Contractor.** The Contractor is an independent contractor and shall not in any way or for any purpose be deemed or intended to be an employee or agent of the City. Neither the Contractor nor its employees or subcontractors shall in any way represent that they are acting as employees, officials or agents of the City.

33. **Risk of Loss.** The Contractor shall assume all risk and responsibility for casualties of every description in connection with its performance of services. The Contractor shall have charge of the entire Project until completion and acceptance, and shall alone be liable and responsible for any injuries to persons and any loss or damage to property, buildings, or adjacent work that may occur as a consequence of or during the progress of the services under this Contract, whether such damage or accident be due to the Contractor's own negligence or that of its Subcontractor, servants, agents, employees, or whether such damage or accident be due to the inherent nature of the services, or whether such damage or accident be due to other causes.

34. **Default and Remedies.**

a. It shall be a violation of the Contract for the Contractor to abandon the Project; to fail or refuse to prosecute the work with promptness and diligence; to unreasonably delay the services so that it may not be completed within the Contract time; to fail or refuse to proceed with services under a Disputed Change Order; to fail or refuse to furnish suitable materials in place of any which may be rejected by the Project Manager as unsuitable as not being in accordance with the Contract Documents, or to refuse or neglect to furnish and supply a sufficient number of properly skilled workers and necessary equipment or either of them; to execute any of the work improperly, carelessly, or in bad faith; to fail or refuse to remove any of the work which, in the opinion of the Project Manager, is defective and unsuitable and not in accordance with the Contract Documents, and to replace it with work that is in accordance with the Contract Documents; or to otherwise violate any of the terms, conditions, and provisions of the Contract. In the event of a violation of Contract, the Operating Commissioner may notify the Contractor and its surety in writing to require that each remedy the Contractor's violation of the Contract and require the Contractor to comply with the terms, conditions, and provisions of the Contract which it has violated or is violating. The failure of the City to promptly notify the Contractor of a violation of Contract shall not constitute an acceptance by the City of work which is performed or installed in violation of the Contract.

b. If the Contractor shall fail to cure or remedy, or diligently commence to cure or remedy, the violation of the Contract, as described in the notice specified above, within five (5) days after the receipt of said notice, or within twenty four (24) hours after receipt of said notice when, in the opinion of the Operating Commissioner, immediate action is necessary to safeguard life or property, or within some other period of time specified in the notice, the Operating Commissioner shall thereupon notify the Procurement Commissioner, who shall have the right to declare the Contractor in default of the Contract, and to notify the Contractor to discontinue the work or any part

thereof under the Contract, and to call upon the surety to carry out its obligations under the performance bond posted for the Contract.

c. If the surety fails to abide by the terms of the performance bond or if the surety shall deny liability to the City under the performance bond, the Procurement Commissioner shall have the right to declare the surety in default under the performance bond and, at his or her sole option, shall also have the right:

1. To terminate the work under the Contract, to maintain conditions, to obtain Bids (if circumstances will allow) for all or any portion of the work, and to enter into a new contract to complete the work of the original Contract; or
2. In case of an emergency, including but not limited to danger to life or property, or serious interference with traffic, to terminate any and all of the work under the Contract, and to then and there secure in the open market, from any Person, at the then current market prices the materials of the quality and quantity required, the necessary workers and mechanics, and the required equipment to complete the Contract.

d. Upon default by the Contractor as herein set forth, all moneys due and owing to the Contractor upon estimates, retainage, or otherwise, materials delivered, materials built into the work, and the Contractor's plant (including tools, appliances, and equipment on the premises intended for use in the performance of the Contract), shall become the property of the City for use in the completion of the work under the Contract, and the City shall have resort thereto to the extent necessary to maintain and complete the work and reimburse the City for its outlays and expenditures.

e. In case of such default by the Contractor the remedies herein provided shall be in addition to and not in substitution of the rights and remedies which would otherwise be vested in the City by statute, at law or in equity, all of which rights and remedies are specifically reserved to the City. In addition, upon default by the Contractor, the Procurement Commissioner shall have the right to secure from any Person the materials, equipment, and labor necessary and required for the proper completion of the Contract. In such event, the Contractor shall pay the City, upon demand, the difference between the cost paid by the City for such materials, equipment and labor and the price or prices set forth in the Contract, together with all costs and expenses incident to the same and incurred by the City. Upon default by the Contractor, the Procurement Commissioner, in his or her sole discretion, shall also have the right, to terminate the Contract and to secure from any Person the materials, equipment, and labor necessary and required for the proper completion of the work. In such event, the Contractor shall pay the City, upon demand, the difference between the price or prices set forth in the Contract and the price or prices which may be paid upon such termination and completion of the work, together with all costs and expenses incident to such re-advertisement. In the exercise of either of these remedies, the City shall further have the right to a set-off against any monies which may be due or may thereafter become due the Contractor under the Contract or any other contract between the City and the Contractor. If the Procurement Commissioner shall secure materials, equipment, and labor to complete the work under the Contract, or if the Procurement Commissioner shall terminate this Contract, the Procurement Commissioner shall have the right to take possession, for the purpose of completing the work under the Contract, of all materials, tools, appliances, and equipment on the Project site, intended for use in the performance of the Contract. The Contractor hereby assigns to the City (and each Subcontract shall require each Subcontractor to assign) all right, title, and interest of the Contractor in and to such materials, tools, appliances, and equipment. The failure of the City to exercise any of the remedies herein provided shall not preclude the resort by the City to any other remedy available to the City arising out of the Contractor's default.

f. The use of any specific remedy herein provided shall not bar subsequent or concurrent resort to any other remedy available to the City at law or in equity, for the recovery of damages or otherwise, on account of such default, or in the event of any other default by the Contractor.

g. Contractor and its surety shall pay to the City on demand, all loss, expense, cost or damage suffered or incurred by the City by reason of any default.

35. **Subcontracts.** Within fifteen (15) days after execution of the Contract, the Contractor shall submit in writing to the Project Manager the names of all Subcontractors who will perform any services including furnishing and/or installing any materials or providing any equipment under the Contract. All proposed Subcontractors who have not been pre-approved by the Department may be approved by the Project Manager if in his or her opinion such proposed Subcontractor is reliable, responsible and competent to perform the work in compliance with the Contract Documents. The City, acting in its sole discretion, reserves the right to reject any Subcontractor. The Contractor shall be as fully responsible to the City for the acts and omissions of its Subcontractors and Persons either directly or indirectly employed by them, as it is for the acts and omissions of the Contractor and Persons directly or indirectly employed by the Contractor. The City and the Contractor specifically understand and intend,

and acknowledge and agree that no Subcontractor utilized by the Contractor shall have any right or claim against the City to any monies due and owing to the Contractor for the performance of services under the Contract. Each Subcontract for any portion of the services is hereby assigned to the City provided that (a) such assignment is effective only after termination of the Contract by the City and only for a Subcontract which the City, acting in its sole discretion, accepts by issuing notice to such Subcontractor and to the Contractor; and (b) such assignment, if exercised, is subject to the prior rights of the surety, if any, obligated under a bond relating to this Contract. The exercise of the foregoing option for an assignment shall be in the City's sole discretion, the City having no duty or obligation to the Contractor, such Subcontractor or any surety, to exercise or decline to exercise the foregoing option for an assignment. The Contractor shall incorporate the foregoing option for an assignment into each Subcontract for any portion of the services.

36. **Permits and Licenses.** Unless otherwise noted elsewhere, the Contractor shall obtain all permits and licenses required by the City or pursuant to applicable law in connection with the performance of all or any part of the services required under the Contract, unless otherwise specifically directed.

37. **Co-operation and Coordination with other Contractors.** The Contractor shall have the duty to co-operate and coordinate with any other contractors on other work which is being performed concurrently on or adjacent to the Project site, including specifically PGW, or its contractors or any other non-City utilities or authorities, and shall afford reasonable facilities and access to them. The Project Manager will decide any matters in dispute as to the performance of the work, including access to the Project site and priority of performance on either side of any division line between contiguous sections of the Project site where the Contractor and another contractor each work.

38. **Clean-up of Project Site.** The Contractor and its Subcontractors shall remove all rubbish or refuse from the Project site daily and as the work progresses the Contractor shall carefully clean and keep the Project site clean from such rubbish and refuse. The Contractor shall furnish to the Project Manager, upon request, all documentation regarding the proper disposal of all rubbish, soil, refuse, and other debris. Before the City will approve the completion of the work under the Contract, the Project site and any other place or places affected by the work shall be thoroughly cleared of all debris. The Contractor shall resod or plant anew any grass plot or plots disturbed, and replace any shrubbery not specified for removal. The clean-up work shall be governed by the record of existing conditions made and filed with the Department prior to the commencement of work.

39. **Maintenance after Completion and Contractor's Guarantee.**

a. The Contractor shall guarantee the work of the Contract against defects in materials and workmanship for a period of one (1) year from the date of completion and acceptance of the work by the City, unless a longer period is specified, and shall guarantee and warrant that all equipment shall perform in accordance with the specifications of the manufacturer and in accordance with the Technical Specifications. When individual items of the Contract, including equipment, are formally accepted in writing by the Project Manager and used or operated by the City prior to the completion of the total work under the Contract, the period of guarantee for such items shall be calculated from the date of final acceptance of such items, provided, however, that the item of work and equipment is used or operated by the City for a period of ninety (90) consecutive days following the date of acceptance without the occurrence of any defects, breakdowns, or faulty operation. Paving, including curbs and footway, shall be similarly guaranteed for a period of one (1) year from the date of completion and acceptance of the work by the City.

b. If, within such period of guarantee, any of the work shall prove to be defective either in materials or workmanship, or if damage occurs by settlement of the backfill placed under this Contract, or if any part or parts of any equipment furnished shall prove to be inadequate, insufficient, or defective, either in design, materials, or workmanship, the Contractor shall immediately, upon demand of the Project Manager (whose decision as to such inadequacy, insufficiency, or defectiveness shall be binding and conclusive upon the Parties hereto), repair and replace the same in accordance with the plans and technical specifications, and shall repair and replace any damage to other parts or structures at the Contractor's sole cost and expense, without cost or expense to the City, to the approval and satisfaction of the Project Manager.

c. Should the Contractor or its sureties fail to comply with the orders of the Project Manager to replace or repair defective materials, workmanship, or equipment as aforesaid within the time specified in subparagraph (a) above, the Operating Commissioner shall notify the Procurement Commissioner, who shall have the right to declare the Contractor or its surety, or both, in default and to proceed with the correction of the defect in accordance with the methods provided herein.

d. Without limiting the foregoing, prior to final payment being made by the City to Contractor, the Contractor shall furnish a separate Maintenance Bond which warrants all of the work of its Contract against defect of workmanship or material for ONE YEAR from the date of the final acceptance in the amount of TEN PERCENT 10% of the

final contract price. Whenever a longer guarantee period is called for in the Contract Documents, the warranty period shall be extended accordingly.

40. **Access to Accounting Records.** The Contractor shall certify that all materials, equipment, and labor charged to the City are accounted for and shall keep such full and detailed accounts as may be necessary for proper financial management under this Contract. The Contractor shall retain, and shall provide the City and its representatives access to, all records, books of account, correspondence, instructions, Shop Drawings, receipts, vouchers, memoranda, and similar data and documentation pertaining to the Contract for a period of seven (7) years following final payment, or earlier termination of the Contract, or for such longer period as may be required by law or the Contract Documents; however, if any litigation, claim or audit is commenced prior to expiration of said seven (7) year period, then the records shall be retained until all litigation, claims or audit findings have been completely terminated or resolved, without right of further appeal, or if Applicable Law requires a longer period, then the records shall be retained for such longer period. From time to time during the performance of the work under the Contract, and for a period of seven (7) years after the completion of the work under the Contract, the City may audit any and all aspects of the Contractor's performance under the Contract, including but not limited to its billings and invoices. Audits may be conducted by representatives, agents or contractors of the City, including the Department, or other authorized City representatives including, without limitation, the City Controller. If requested by the City, the Contractor shall submit to the City all vouchers or invoices presented for payment pursuant to the Contract, all cancelled checks, work papers, books, records and accounts upon which the vouchers or invoices are based, and any and all documentation and justification in support of expenditures or fees incurred pursuant to the Contract. All books, invoices, vouchers, records, reports, cancelled checks and other materials shall be subject to periodic review or audit by the City. All work, equipment, materials, systems, subassemblies, tools appliances and plant shall be subject to inspection and review by City, federal and state representatives, as may be applicable, or their designees, at the offices of the Contractor in the City, or in another location with the City's consent. The Contractor shall cooperate with all City, State and Federal inspections and reviews conducted in accordance with the provisions of the Contract. Such inspection and review of the Contractor's work hereunder shall be in the sole discretion of the inspecting or reviewing entity. Such inspection or review may include, without limitation, review of staffing ratios and job descriptions, and meetings with any of the Contractor's staff who are either directly or indirectly involved in providing all or any portion of the work hereunder. The Contractor shall make available, within the City at reasonable times during the performance of the work hereunder and for the period set forth below in this paragraph 40, all records pertaining to the Contract for the purpose of inspection, audit or reproduction by any authorized representative (including any agent or contractor and the City Controller) of the City, the Commonwealth Auditor General, and any other federal and state auditors, as may be applicable

D. ADMINISTRATION, MEASUREMENT, AND PAYMENT

41. **Status and Authority of the Project Manager.** The Project Manager shall be responsible for the general direction of the work to be performed under the Contract, the interpretation of the Plans and General Bidding and Contract Requirements, and the Technical Specifications, the ordering of additions to or deductions from the work, and the determination of procedure. The Project Manager shall give all orders and directions contemplated under the Contract. The Project Manager shall in all cases determine the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid for under the Contract, and shall have authority and sole discretion to reject all work and materials which in his or her opinion do not conform to the requirements of the Contract. The Project Manager shall determine all other questions that may arise in relation to the execution of the work and shall have the authority to halt the work whenever such action may be necessary to secure the safe and proper execution of the Contract. The Project Manager shall adjust and decide any differences or conflicts that may arise between the Contractor and other prime contractors for the performance of concurrent work. The provisions of this Paragraph are not intended to supersede or limit the provisions of Paragraph 34.

42. **Plans and Technical Specifications.** The Plans, with all notes thereon, and the Technical Specifications are intended to be consistent with one another and of equal force and effect, and in the event the Contractor should believe that an apparent discrepancy may exist between the Plans and the Technical Specifications, the Contractor shall bring such apparent discrepancy to the attention of the Project Manager, who will interpret their meaning. The Plans give general dimensions and sizes, and such details as are required to cover special features. Figures shall have preference over scale in reading dimensions. The Contractor shall maintain at the site of the work for use of the Project Manager or Inspector one record copy of the Plans and Technical Specifications, and Change Orders and other Contract modifications, and one record copy of all approved Shop Drawings and other submittals, including the construction schedule.

43. **Shop Drawings and Working Drawings.** The Contractor shall prepare and submit to the Department or the Project Manager, as specified in the Technical Specifications or as required by the Project Manager, all Shop

Drawings and Working Drawings, which shall include all details required to carry out the City's Plans and Technical Specifications. By approving and preparing Shop Drawings and other similar submittals, the Contractor represents that it has determined and verified materials, field measurements, and field construction criteria related thereto and has checked and coordinated the information contained within such Shop Drawings and submittals with the requirements of the Contract Documents. The Contractor shall not proceed with any portion of the work until the Shop Drawings or other submittal which governs the work has been approved. The Shop or Working Drawings shall conform to standards specified by the Department. Upon correction, if found necessary, and after approval, the Contractor shall furnish prints of the Shop Drawings or Working Drawings for construction purposes as required by the technical specifications. After the completion of the work, the tracings shall be delivered to and become the property of the City. The approval of Shop Drawings shall not relieve the Contractor of responsibility for the proper fit of the work, nor for its completion pursuant the Contract.

44. **Lines and Grades – City Datum.** Vertical dimensions are given in United States standard feet and fractions thereof. Unless otherwise stated, elevations preceded by a plus (+) or a minus (-) sign refer respectively to distances above or below the established City Datum, which is two and one quarter (2.25) feet above mean high water in the Delaware River at Chestnut Street, Philadelphia. Dimensions locating buildings and structures shall be verified and checked in the field by the Contractor before proceeding with any work affected thereby. Line and grade stakes giving the requisite basic data will be set by the City without expense to the Contractor. The Contractor will be held responsible for the proper and correct extensions of measurements from such data, and the correctness of work based thereon. The Contractor will be held responsible for the preservation of stakes, benchmarks, or survey monuments, until authorized to remove them. Should any stakes be disturbed, the cost of replacing them will be charged against the Contractor at the then current fee as determined by the City's district surveyor and regulator, to be deducted from the Final Estimate. All survey monuments or bench marks moved, covered or uprooted in the course of performance of the work of this Contract will be reset by the City at the expense of the Contractor, at the then current fee per monument or bench mark, as determined by the City's district surveyor and regulator. Said cost shall be deducted from the Final Estimate. The Contractor shall provide reasonable and necessary opportunities and facilities for setting points and taking measurements. The Contractor shall not proceed until it has made timely demand upon the Project Manager for, and has received from him, such points and instructions as may be necessary for the progress of the work. Any work improperly done without lines or levels or instructions shall be removed and replaced by the Contractor at its own expense. Failure to do so may be considered a default under the Contract.

45. **Contract Amount.** The total amount which is to be paid by the City to the Contractor for the work performed and materials supplied under the Contract shall in no event exceed the sum of the Contractor's Bid price, plus a contingency fund of approximately ten percent (10%) of the Contractor's Bid price (to be specified by the Procurement Department upon the award of the Contract), which fund is intended to cover additional compensation which may be due to the Contractor as a result of Change Orders issued pursuant to Paragraphs 47 and 48 below, as such sum may be increased or reduced pursuant to a Change Order or Change Orders, or pursuant to an Amendment. The City shall specify the contract amount in the Notice of Contract Award. The Contractor acknowledges that the City's liability under the Contract shall be limited by the amounts which shall have been or may be from time to time appropriated by City Council. The City reserves the right to authorize the Contractor to commence work prior to appropriation of the total amount of the Contract, in which case the City shall give the Contractor notice thereof, and the City shall not be liable hereunder in any amount greater than that appropriated therefore by City Council. Payment to the Contractor shall be made by checks drawn by the City Treasurer, for the Contract work and materials.

46. **Scope of Payments.** Payment for the cost of all work, labor, materials, and services required to be done or furnished to complete the work of the Contract as shown on the Plans or as otherwise specified (except where payment is otherwise specifically provided), will be made at the prices contained in the Bid. The prices contained in the Bid shall each cover the supply and installation, in a good, sound, substantial and workmanlike manner, of everything required for and incidental to the full completion of the work of that item as called for by the Plans or as otherwise specified, including its proportionate share of the expense of all plant, tools, and equipment required; the cost of all bonds, fees, and permits; of all administration, superintendence, and insurance; and of any loss or damages arising out of the nature of the work, from the action of the elements, from any unforeseen difficulties encountered in the prosecution of the work, and from risks of all kinds connected with the work, except as otherwise specifically provided in the Contract Documents.

47. **Changes.** If changes to any portion of the work or the requirements of the Technical Specifications are deemed necessary by the Project Manager, in order to carry out and complete the work covered by the Contract Documents, the Project Manager may by notice to the Contractor order alterations to or changes in the work

covered by the Contract Documents, and the Contractor shall promptly comply with such orders. No changes or alterations to the work shall be made or performed by the Contractor except upon prior written orders from the Project Manager authorizing the change and a Change Order fixing the additional compensation or deduction therefore, except where the order authorizing the change states that the method of compensation or deduction shall be determined at a later date.

48. <u>Change Orders by Agreement</u>.

a. If alterations or changes increase the cost of the work to the Contractor, additional compensation will be allowed by the City, based upon unit prices, or by a detailed cost proposal submitted by the Contractor to the Project Manager, negotiated by the Department and agreed to by the Contractor, or by Force Account, in accordance with Paragraph 51 below. The cost proposal shall detail the costs of materials, labor, overhead and profit, as well as any proposed changes to the Contract time. If such alterations or changes reduce the cost of the work to the Contractor, the amount of such reduction may be deducted by the City, and any such reduction may be based upon unit prices contained in the Bid for the performance of the deleted items of work, upon any Subcontract already entered into by the Contractor for the performance of the deleted item of work, or upon a detailed cost proposal submitted by the Contractor to the Project Manger and negotiated by the Department. The Contractor shall submit its cost proposal for the change or alteration within twenty (20) days after the Project Manager gives notification to the Contractor of the intended change or alteration. Thereafter, a formal Change Order will be executed and signed by the Department reflecting the change or alteration and the additional cost or reduction negotiated by both Parties.

b. A Change Order negotiated and agreed to by the Contractor and the City and then executed as a Change Order by the City and the Contractor shall be deemed to cover all of the Contractor's costs associated with the change or alteration to the work, as reflected in the Change Order, including all costs and expenses incurred by the Contractor for time, material, labor, and extended or field office or home office overhead and profit. Any Contract time extension granted by the City for the Change Order shall be the sole time extension granted for the change or alteration and for which Contractor is entitled, and no other time extension shall be granted by the City in connection with the work reflected in such Change Order. No loss of profit on account of any changes or alterations to the work or on account of work not executed or performed by the Contractor will be allowed, except that the Contractor may be entitled to an extension of time on account of changes or alterations to the work, provided that the Contractor satisfies the requirements of Paragraph 31 above.

c. The Contractor agrees and acknowledges that after a Change Order is negotiated and agreed to by the Parties and then executed by the City and the Contractor, the Change Order shall operate as a full and complete waiver and release of any and all claims of the Contractor related to or arising out of such change or alteration, whether such change or alteration is considered individually or cumulatively, including, but not limited to, any claim by the Contractor for extended home office overhead, extended field office overhead, time-impact costs, schedule delay costs, acceleration costs, compression costs, loss of productivity costs, extra work, additional work, and interference costs, or any combination of such costs.

49. <u>Disputed Change Orders</u>. If, after submission of a cost proposal, the Department and the Contractor cannot agree upon a price within a reasonable amount of time, or if the Contractor disputes the applicability of unit prices or contingent prices, the Project Manager may direct the Contractor to perform or complete the extra or additional work notwithstanding that there is no agreement between the Parties as to price, and the Contractor shall proceed to perform the work so as to avoid any delay or interference to the progress of its work. In all such cases, the Contractor shall promptly comply and maintain proper force account time sheets and records, in accordance with Paragraph 51 below. The Project Manager shall also process a Change Order in an amount that he or she determines to be reasonable, necessary and appropriate. If the Contractor does not agree with the amount processed by this Disputed Change Order, the Contractor must notify the Project Manager within ten (10) days of issuance of the Disputed Change Order that it is proceeding under protest and that it reserves the right to a claim for the cost of the disputed work. In all cases of Disputed Change Orders which are protested by the Contractor, the Contractor shall submit to the Project Manager, within five (5) days after completion of the work, a detailed cost proposal which shall detail the costs of materials, labor, overhead and profit, actually expended by the Contractor for the work, as well as any changes to the Contract time.

50. <u>Disputed Extra Work</u>. If the Contractor is of the opinion that any work required or ordered by the Project Manager violates the terms and provisions of the Contract or is not called for under the Contract Documents, the Contractor shall promptly notify the Project Manager, in writing, of its contentions with respect thereto and shall request a final determination thereof. If the Project Manager determines that the work in question is work required under the Contract Documents and is not "extra" work, or that the order complained of is proper, the Project Manager will direct the Contractor to proceed with the work in question. In all such cases, the Contractor shall

promptly comply and maintain proper force account time sheets and records, in accordance with Paragraph 51 below. In order to preserve its right to claim compensation for such extra work or damages resulting from compliance with such an order, the Contractor must notify the Project Manager in writing, within five (5) days of receiving notice from the Project Manager of this final determination, that the work is being performed or that the determination and direction is being complied with under protest. Furthermore, in order to claim an adjustment in the Contract price for work performed under protest, the Contractor must submit in writing to the Project Manager, within five (5) days after completion of the work in question, the nature and precise amount of compensation sought for the work, as well as copies of all force account time sheets and records compiled by the Contractor for the work. Failure of the Contractor to so notify the Project Manager of both its protest and its claim for compensation shall be deemed as a full and final release and waiver of any claim for extra compensation or damages therefore.

51. <u>Force Account</u>

a. Payment under Force Account will be for the reasonable, actual and necessary direct cost of the work in accordance with the orders of the Project Manager, and in addition thereto the percentage of such cost hereafter stated. "Reasonable, actual and necessary direct cost" shall be deemed to include the following:

1. Wages of forepersons, equipment operators and skilled and semi-skilled and common laborers directly assigned to the specific operation at actual payroll rate of wages per hour and actual fringe benefits paid, labor taxes as established by law, and workers compensation and employers liability insurance, for each hour that such employees are actually engaged in the performance of the authorized work and, if directed, overtime, as provided by existing laws and regulations, as well as other insurance premium expenses, including but not limited to premiums for general liability insurance, where the such insurance premium expenses are a direct function of the foregoing wages, but only to the extent such insurance premium expenses derive solely from the foregoing wages.
2. The reasonable actual expenditure for materials (including sales tax paid, if applicable, and except as provided to the contrary in Paragraph 40 above), used up or incorporated in the work.
3. For any equipment, including machinery and trucks, mutually deemed as necessary for the performance of the work, the Project Manager shall allow the Contractor reasonable rental rates, computed as follows: (i) for all equipment rented, the Contractor will be reimbursed the reasonable actual costs based upon the receipts provided, plus an allowance for operating cost as provided in subparagraph 51.(a)(3)(ii) below; (ii) for all equipment owned, including pumps and compressors, a reasonable hourly rate will be determined by using the monthly rental rates taken from the current edition (with updated supplements) of the Rental Rate Blue Book for Construction Equipment and dividing it by one hundred seventy-six (176); an allowance may be made for operating costs for each and every hour the machinery or equipment is actually operated in accordance with the rates listed in the aforesaid rental book; if the machinery or equipment is required to be at the work site, but is not operated, the Contractor may be compensated at the reasonable hourly rental rate, exclusive of operating costs. The Contractor will be allowed to add to the above rates the area adjustment percentage for the state as shown on the area adjustment map contained in the Rental Rate Blue Book for Construction Equipment. In the case of any machinery or equipment not referred to in the Rental Rate Blue Book for Construction Equipment, a monthly rental rate shall be computed on the basis of an amount that is the equivalent of six percent (6%) of the manufacturer's list price for the sale (new) of such equipment; the hourly rate in such cases will be determined by dividing the monthly rate by one hundred sixty (160) when actually operating, and by one hundred seventy-six (176) when at the Project site, but not operating, to which no percentage shall be added. The above rates shall be for the time such equipment is required on the Project site for the performance of force account work exclusively.

b. To the reasonable, actual and necessary direct cost of the work done under Force Account as noted above, twenty percent (20%) will be added to the expenditure for labor and fifteen percent (15%) will be added to the expenditure for materials. No additions will be allowed for equipment costs, whether such equipment is rental or Contractor-owned. These percentages shall be deemed to cover the cost of heat, light, bond or bonds, use and up keep of small hand tools, administration, engineering, field and office superintendence, home office and site overhead, extended general conditions, non-payroll taxes, insurance (including general liability and non-payroll insurance), all loss, damage, risk and expenses incidental to the work and profit. The Contractor shall have no claim in excess of the above, such payments being in full compensation for the performance of such work and the furnishing of such materials and for all expense in connection therewith and incidental thereto.

c. Should the Contractor subcontract any portion of the work, with the prior written approval of the Project Manager, payment for that portion will be computed as the reasonable, actual and necessary costs defined above (exclusive

of any profit to the Subcontractors), plus the percentages allowed, plus eight percent (8%) mark-up of the total paid to the Subcontractor. No additional percentage mark-up by or for any additional tiers of Subcontractors will be allowed.

d. The Contractor shall submit daily a statement in duplicate of work done on a Force Account basis within twenty-four (24) hours of the time the work is done, and representatives of the Project Manager and the Contractor shall make daily comparison of the time and rates of labor, material used, etc., as shown therein. After correction, if necessary, this comparison shall be signed by each and filed with the Project Manager and the Contractor. The Contractor shall submit to the Project Manager monthly, prior to each Current Estimate, four (4) copies of an itemized statement of the amount and value of labor and materials furnished, accompanied by the original invoices for work performed under a Subcontract, and by an affidavit certifying the correctness of such statement. The Project Manager shall have access to any books, vouchers, time sheets, records, and memoranda showing the labor employed and the materials actually used on the specific operation and the actual net cost thereof, for the Contractor and any Subcontractor(s). Daily force account time sheets must include the name and job titles of employees, actual starting and quitting times, and the total number of hours worked each day by each employee.

e. Work done under Force Account shall be subject to all of the requirements of the Contract. It shall be prosecuted in an orderly, reasonable and economical way, and the prices paid for labor and material and the method of prosecuting the work shall be subject to the approval of the Project Manager [in his or her sole discretion]. Neither work nor material will be paid for under Force Account unless it is ordered as such in writing.

52. **Lump Sum Bid Breakdown; Applications for Payment.** In order to assist the Project Manager in estimating approximate quantities and the value of the work performed, the Contractor shall furnish in writing to the Project Manager within thirty (30) days after the issuance of the Notice to Proceed, an apportionment of any lump sum Bid (the "Lump Sum Bid Breakdown") showing in detail its component parts. The Lump Sum Bid Breakdown shall be subject to the approval of the Project Manager. In addition,, the Contractor shall furnish within sixty (60) days of the commencement of the work, and thereafter every thirty (30) days until Substantial Completion of the work, an application for payment (the "Application for Payment") which shall set forth in detail the approximate quantities and value of the work performed as of the date of the Application for Payment in conformity with the approved Lump Sum Bid Breakdown. The Contractor shall certify that the information set forth in the Application for Payment is true, correct and complete, and accurately and fairly represents the work performed to date by the Contractor in accordance with the Contract Documents.

53. **Current Estimates.** The Project Manager, after receipt of an Application for Payment, shall prepare a current estimate (the "Current Estimate") of the approximate quantities and value of the work performed at intervals of about one (1) month during the progress of the work, except that the first Current Estimate may be prepared within sixty (60) days of the commencement of work under the Contract, provided at all times, however, that the Contractor is in compliance with all of the requirements of the Contract and the value of the work done during the time covered by the Current Estimate exceeds the amount of fifteen hundred dollars ($1,500). The City shall make payments to the Contractor on the basis of the Current Estimates, when approved by the Project Manager. Payments on uncompleted items will be for the value of work done and materials furnished, as apportioned by the Project Manager. The Current Estimates are approximate only, and subject to correction in the Final Estimate. The payment of a Current Estimate shall not bind the City to the acceptance of any materials furnished or work performed by the Contractor. The City shall not be precluded from later contesting a Current Estimate and shall enjoy every legal defense, or other claim or counter-claim, in recoupment or otherwise, by reason of the character, quality, and quantity of the work and materials covered by a Current Estimate, notwithstanding payment of a Current Estimate.

54. **Retainage.** Provided that the Contractor is making satisfactory progress and is in compliance with all of the requirements of the Contract and there is no specific legal or other basis for the withholding of greater amounts, retainage under the Contract shall be ten percent (10%) of the amounts due the Contractor until fifty percent (50%) of the work under the Contract is completed (at which time one-half (½) of the amount then retained shall be returned to the Contractor) and thereafter five percent (5%) of the amounts due the Contractor until Substantial Completion of the Contract. "Substantial Completion" as used herein means that the work is sufficiently complete in accordance with Contract Documents and certified by the Project Manager and in no event shall the Contract be certified as Substantially Complete until the Contractor has completed at least ninety percent (90%) of the work under the Contract.

55. **Semi-Final Estimate.**

a. Upon Substantial Completion of the Contract, the Project Manager, based on an Application for Payment submitted by the Contractor, shall prepare an estimate (the "Semi-final Estimate") of the approximate value of all work

performed and completed. The Semi-final Estimate will reduce the withheld retainage to one and one-half (1½) times the amount required to complete any remaining uncompleted items of work, provided that the Contractor has made satisfactory progress towards completion of the Contract and is in compliance with all of the requirements of the Contract and provided there is no legal or other basis for the withholding of a greater amount. The City reserves the right to withhold additional retainage to the extent the same is permitted under applicable law.

b. Upon preparation of the Semi-final Estimate, the Project Manager, with the assistance of the Contractor, shall list in comprehensive fashion the remaining uncompleted items of work in an official punchlist which shall thereafter be issued in writing to the Contractor. If the Contractor disputes any of the items on the official punchlist, the Contractor must notify the Project Manager in writing, detailing the items in dispute and the nature of its dispute with all supporting documentation, within five (5) days after receipt of the official punchlist. The Contractor must commence work on the official punchlist within ten (10) Working Days after receipt of the official written punchlist. The Contractor shall thereafter proceed promptly and expeditiously to complete the official punchlist items, and shall give notice to the Project Manager in writing of the date on which the Contractor completes the official punchlist items. The Contractor shall perform and complete all work on the official punchlist at its sole cost and expense and at no additional cost or expense to the City, subject to payment of the Final Estimate under Paragraph 56 below. The Contractor's work in completion of the official punchlist items shall in all respects be governed by the requirements of the Contract Documents.

56. **Final Inspection and Final Estimate.** The Project Manager shall conduct a final inspection of the work, including the completion of all punchlist items, after completion of all punchlist items to the Project Manager's satisfaction, and within thirty days (30) of receipt of the Contractor's formal written request for final inspection and final Application for Payment (which request the Contractor shall not make until completion of the punchlist items). After final inspection, and provided that all the requirements of the Contract Documents have been complied with to the satisfaction of the Project Manager, including completion of all official punchlist items, the Project Manager will prepare a final estimate (the "Final Estimate") and, based upon the Final Estimate, the City will pay the balance due to the Contractor, after all allowable additions and deductions have been made, by checks drawn by the City Treasurer.

57. **Contractor Claims.**

a. Except as otherwise provided in these Standard Contract Requirements, the Contractor must notify the Project Manager in writing of any and all claims whatsoever relating to or arising out of Contractor's performance of the work under the Contract within ten (10) days of the event or occurrence giving rise to the claim, except where a shorter time is specified by the Contract Documents. The written notice of claim to the Project Manager shall provide a detailed statement of and basis for the claim, with supporting documentation attached. For purposes of this Paragraph 57, a "claim" shall mean a demand or assertion by the Contractor seeking, as a matter of right, an adjustment or interpretation of the Contract, payment of money, extension of time or other specific relief with respect to the terms and conditions of the Contract. The Project Manager will review all claims submitted by the Contractor and shall approve or reject each claim in whole or part, or shall request additional documentation in support of the claim from the Contractor.

b. The City and the Contractor hereby release and waive any and all claims against each other for consequential damages arising out of or related to the Contract and the work performed thereunder. This mutual release and waiver includes damages incurred by the Contractor for principal home office expenses, including home office overhead and the compensation of personnel stationed there, for losses of financing, business, and reputation, and for loss of profit associated with any other work, except anticipated profit arising directly from the Contract and the work thereunder. Nothing hereunder shall preclude, however, the assessment by the City of liquidated damages, when applicable, pursuant to Paragraph 31(g) above.

c. After Substantial Completion of the work under the Contract, but prior to the Contractor's acceptance of the Semi-final Estimate, the Contractor shall notify the Project Manager in writing of any and all unresolved and previously asserted claims relating to or arising out of the Contractor's performance of the work under the Contract, including, but not limited to, claims for Disputed Change Orders or other disputed work, delay, extensions of time, interference by the City or any other prime contractor, acceleration, inefficiency, extra or additional work, loss of productivity or any combination of the foregoing. The Contractor's written notice of claims to the Project Manager shall list the claims by number, assign a dollar value to each claim, and provide a detailed statement of each claim, with supporting documentation attached, including a copy of the notice by which the Contractor first brought the claim to the attention of the Project Manager.

d. Failure of the Contractor to notify the Project Manager of any claims in accordance with subparagraphs (a) and (c) above, and the Contractor's acceptance of and negotiation of payment under the Semi-final Estimate under Paragraph 55 above, shall constitute and operate as a full and final release and a waiver of all such claims by the Contractor.

58. <u>Contractor's Liability for Services and Materials</u>.

a. Notwithstanding the acceptance and approval by the City of any work the Contractor shall continue to be responsible for the professional quality, technical accuracy and the coordination of all work under the Contract. The Contractor shall, without additional compensation, correct any defects, deficiencies or omissions in the work.

b. Except where otherwise provided in the Contract Documents, the City's review, approval, or acceptance of, or payment for, any of the work performed under the Contact shall not constitute any representation, warranty, or guaranty by the City as to the substance or quality of the work reviewed, approved, or accepted, and shall not be construed to operate as a waiver or estoppel of any of the City's rights or privileges under the Contract, nor or of any cause of action arising out of the performance of the Contract. Except where otherwise provided in the Contract Documents, no Person shall rely in any way on such review, approval or acceptance by the City. The Contractor shall be and remain liable in accordance with the Contract and Applicable Law for all damages to the City caused by the Contractor or the work under the Contract. Review, approval or acceptance by the City or the Project Manager under the Contract shall not constitute approval otherwise required by any City department, board, commission, or other regulatory agency in the exercise of such department's, board's, commission's or agency's independent regulatory authority of police powers under applicable law.

59. <u>False Claims</u>. The Contractor covenants and agrees that it shall promptly reimburse the City for (a) all sums paid to the Contractor by the City as a result of any false, fictitious or fraudulent billings, invoices, contract overcharges, and the like, and (b) all other costs which are incurred by the City as a result of the false fictitious or fraudulent billings, invoices, contract overcharges and the like. The Contractor further covenants and agrees that it shall promptly reimburse the City for all expenses and costs, including but not limited to attorneys fees and expenses, incurred by the City in recovering any such sums from the Contractor. This Paragraph shall survive termination of the Contract and completion of the work under the Contract.

E. <u>MATERIALS, WORKMANSHIP, AND INSPECTION</u>

60. <u>Materials and Workmanship</u>. The materials used in the work under the Contract shall conform to the requirements of the Technical Specifications. Where no requirements are specified for materials or for the methods of testing materials or equipment, such materials or methods shall at least equal the latest standard or tentative specifications of nationally recognized standardizing agencies, such as the American Society of Mechanical Engineers, the latest codes of the National Board of Fire Underwriters or, as they apply, any regulations of the City.

61. <u>Inspection</u>. All of the work of the Contract shall be subject to general direction and inspection of the Project Manager or the Project Manager's designated representatives, and the Contractor shall afford every opportunity for the inspection of materials and workmanship. Authorized representatives of the City shall be permitted access at all reasonable times to all portions of the work, and to such portions of the place of manufacture of fabricated materials as may be necessary for complete inspection. Before beginning work the Contractor shall notify the Project Manager of the type and source of supply of the principal materials which the Contractor proposes to furnish, and, as soon as possible thereafter, shall furnish samples of materials, fixtures, and appliances for approval by the Project Manager. Before removal of any excess excavated material, waste, refuse, or rubble, etc., from the site, the Contractor shall furnish to the Project Manager, a list of certified dump site or landfill locations that are to be utilized for disposal of such waste materials and written verification that permission for the disposal of the waste materials has been obtained. Before beginning the fabrication of materials, equipment or systems, and before shipping materials, equipment or systems of a specified type, the Contractor shall notify the Project Manager in ample time to permit inspection at the place of manufacture or shipping, should the Project Manager so desire. Such materials, equipment or systems shall be delivered to the Project site properly marked for identification, and shall be subject to re-inspection and final acceptance or rejection at the Project site. The Contractor shall deliver materials, equipment and systems to be inspected at the Project site in ample time for such inspection and testing. No materials, equipment or systems shall be incorporated into or used in connection with the work until accepted by the Project Manager, and all materials, equipment or systems rejected by the Project Manager as unsuitable or not in conformity with the Plans or Technical Specifications shall be immediately removed from the work. Unless otherwise specifically provided for, the City shall bear the cost of inspection and testing. All work shall be prosecuted in the presence of the Inspector, and conformity with the requirements of the Contract Documents. The Contractor shall provide for inspection and testing to be carried out during regular working hours unless specifically authorized or directed otherwise by the Project Manager. The presence of the Inspector shall not affect in any way the duty of the Contractor to complete the work in accordance with the

Contract Documents, nor be deemed a defense on the part of the Contractor for default or violation of the Contract. The Inspector is not authorized to waive, amend, revoke, alter, enlarge, relax, or release any of the requirements of the Contract Documents.

62. **Investigation of Work.** Should the Project Manager at any time have reason to suspect that the Contractor may have delivered any unsuitable, unfit or otherwise defective work, the Project Manager may order an investigation thereof, and the Contractor shall furnish the necessary labor and equipment for such investigation. If the City finds that any part of the work is defective, the Contractor shall repair, replace or reconstruct such work to the satisfaction of the Project Manager, and the cost thereof and of such investigation shall be the sole responsibility of the Contractor. If the work is found to be in accordance with the Contract Documents, the City will reimburse the Contractor, in accordance with Paragraph 51 above, for the expense of the examination.

63. **Defective Work or Material.** The Contractor shall remove, at its own expense, any work or material rejected by the Project Manager as unsuitable, unfit, or otherwise defective and not in accordance with the Contract Documents, and shall repair, replace or reconstruct the same without additional compensation. Failure to do so shall be deemed a violation of Contract and shall be subject to the provisions of the Contract concerning violations and defaults. Any omission or failure on the part of the Project Manager to disapprove or reject any work or material shall not be construed to be an acceptance of any such defective work or material. For any work or material that is determined to be defective and not in accordance with the Contract Documents, but which in the sole determination of the Project Manager cannot be remedied or does not require total replacement, the Project Manager shall determine an appropriate credit due the City from the Contractor.

F. CONSTRUCTION REQUIREMENTS

64. **Prosecution and Performance of Work.** The Contractor's methods for the performance of the work must be those best adapted for the safe, efficient, and expeditious prosecution of the work, with a minimum of interference to adjoining work sites, to adjoining properties, and to public traffic and convenience. The Contractor shall prosecute the work vigorously, without delay, and with such workforce and equipment as shall be satisfactory to the Project Manager. The Contractor shall furnish and supply all labor and materials, in the quantity and of the quality required for the proper and timely performance of the work under the Contract; all such materials shall be of the best kind and quality and subject to the inspection and approval of the Project Manager. The Contractor shall strictly conform to the orders, instructions and directions given by the Project Manager, it being expressly understood and agreed that the decision of the Project Manager on any questions arising in connection with the performance of the work under Contract shall be binding and conclusive upon the Contractor. The Contractor shall supervise and direct the work, and Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of its work under the Contract. Before commencing the work, the Contractor, when required by the Project Manager, shall submit for approval its proposed methods of prosecution of the work, including the maintenance of both vehicular and pedestrian traffic; underpinning, bulkheading, shoring; sinking foundations; handling spoil; lighting; fencing; street surfaces; drainage; and all other branches of its work operation. Such approval is intended to safeguard the City's interest, but such approval will not be deemed to relieve the Contractor of its obligation or responsibility for the safe and proper conduct of the work. The Contractor shall at all times enforce good discipline and order among its employees, and shall not employ any unfit Person or anyone not skilled in the task assigned. Any contact by the Contractor or its employees with adjacent property owners, passing motorists or pedestrians, and the general public shall at all times be professional, courteous, and respectful.

65. **Maintenance of Traffic and Access to Property.** Traffic of all kinds shall be maintained continuously and access to buildings shall be provided for at all times, except where otherwise specifically permitted by the Contract Documents, or where temporary interference is authorized by the Project Manager, in which case it shall be interrupted only for such time as is necessary to provide temporary substitutes for surfaces disturbed by the construction and to restore street and sidewalk surfaces after the completion of the work. Suitable bridges or other means of access shall be built and maintained to permit owners and occupants to reach their premises. Where necessary, the Contractor shall maintain proper and easy means for passengers to enter or exit public transportation. Where partial occupation of the street is allowed, materials and equipment shall be so placed as to ensure a minimum of interference with traffic; no materials shall be placed on the sidewalk within one foot of the curb line, and a clear sidewalk passage not less than four (4) feet in width shall be maintained at all times. The work shall be so conducted that annoyance to residents and interference with the normal use of the properties will be reduced to a minimum. The flow in gutters and inlets shall be maintained. When access to any adjacent property is temporarily cut off, owing to occupancy of the street by the Contractor, the Contractor shall render every assistance to the owner or occupant in handling materials of every description that must be delivered to or removed from such property, including recyclables, rubbish, and garbage, and such materials shall be taken to or

from the nearest accessible point that, in the opinion of the Project Manager, is convenient for handling. No additional compensation will be allowed for the various items of expense above noted.

66. **Access to Fire Hydrants and Fire Alarm Boxes.** Fire hydrants shall be left at all times clear of obstructions and readily accessible to fire apparatus. No material or other obstructions shall be placed within ten (10) feet of a fire hydrant. Fire alarm boxes shall be supported and protected and maintained so as to be readily accessible and open to view. Excavation shall be decked or bridged, where necessary, to permit the safe passage of fire apparatus and to give access to fire hydrants and to adjacent buildings for the extinguishing of fires. Where necessary, branch pipes shall be extended from the nozzles of the fire hydrants to the mains. Fire hydrants and any branch pipes shall be protected from freezing, and the fire hydrants (particularly the high pressure type) shall, where necessary, be braced or tied to the connecting pipes to prevent movement under water pressure.

67. **Temporary Buildings.** Buildings, fences, trailers, and equipment erected or provided by the Contractor shall be neat in appearance. Except as provided in Paragraph 70 below, no advertising matter, other than Project information and the name and address of the Contractor, shall be displayed on the work or any such buildings, fences, trailer or equipment.

68. **Danger Signals.** The Contractor, at Contractor's own expense, shall erect and maintain all necessary barricades, and danger signs and signals. The Contractor shall keep the lights burning from sunset until sunrise, and shall provide security personnel as necessary for the safety of the public. The Contractor shall observe such rules relative to signals and safeguards as the police regulations, harbor regulations, and other Applicable Laws require.

69. **Street Closings and Detour Signs.** In the event that the work requires the closing of a street or roadway, the Contractor shall first obtain a permit from the City's Department of Streets. When the Department of Streets gives permission to close a street or roadway during Contract operations and to divert the traffic therefrom, the Contractor, at the Contractor's sole expense, shall erect and maintain appropriate traffic and highway barricades, detour signs, and any other necessary traffic signs in order to safely protect vehicular and pedestrian traffic. The Contractor shall notify the Department fourteen (14) days prior to the date of starting work and one (1) day prior to the date of completion. Copies of these notices shall be sent to the Traffic Engineer of the Department of Streets.

70. **Contract Identification Signs.** The Contractor shall, at Contractor's own expense, erect and maintain in a prominent position upon the Project site at a location approved by the Project Manager, a suitable sign, plainly lettered with the name and address of the Contractor, the character of the work and the name of the Department under which the Contract is being carried out. No advertising matter other than the signs above noted shall be displayed on the work.

71. **Safety and Sanitary Provisions.** The Contractor shall provide means and appliances and shall enforce suitable rules for the safe prosecution of the work and for the safety and health of the work force emp loyed on it. The completed portions of the work shall be kept clean and in a sanitary condition. The Contractor shall provide and maintain properly secluded sanitary conveniences, in accordance with existing regulations of the Department of Public Health, for the use of Contractor's work force, and the Contractor shall strictly enforce the exclusive use of them by its work force.

72. **Storage Space.** Buildings, yards, or sidings that may be required for the delivery or storage of materials shall be provided by and at the cost of the Contractor. The Contractor may not use streets for storing materials unless otherwise specifically authorized in writing by a permit issued by the City's Department of Streets. Upon request of the Project Manager, the Contractor shall furnish a copy of any agreement for the use of a property or building for construction purposes, except where owned by the Contractor.

73. **Night Work.** Work during the night shall be carried on with due regard to the comfort of, and so as to minimize any disturbance to, nearby residents, and the methods to carry out such work shall be subject to the approval of the Project Manager, who may, if conditions so require, order that no night work be done in specific localities. The Contractor's work force shall refrain from loud noises, calls, whistles, and the operation of air compressors, rock drills, riveting machinery, and blasting between the hours of 7:00 p.m. and 7:00 a.m. unless specifically permitted by the Project Manager.

74. **Power and Light.** In developed portions of the City, and elsewhere when ordered by the Project Manager, the Contractor shall use either electric, compressed air or internal combustion engine power. When engines are used, the exhaust shall be muffled. None but electric lights shall be used in or under buildings or anywhere on the work below the surface of the street.

75. **Use of Water.** Permission for the use of City water shall be obtained directly from the Philadelphia Water Department. Water may be obtained through a hydrant attachment or as otherwise specified in the Technical Specifications. In all cases, the Contractor shall obtain and use such water in accordance with regulations of the

Water Department. If the Contractor shall, at any time, waste water (as determined by the Project Manager) obtained from the Water Department, the Project Manager shall revoke permission for such use. No charge will be made for the use of water actually used for the construction work, unless specifically set forth elsewhere in the Technical Specifications.

76. Prevention of Dust and Smoke.

a. The Contractor shall keep the surface of the sidewalks and streets affected by its work, including decking and temporary paving, in a clean, neat condition. The Contractor shall sprinkle with water or otherwise treat the surface sufficiently to keep down any dust generated during the progress of work. Piles of dirt or other material shall not be left on the surface. The aforementioned requirements are not intended to take the place of the usual duties of the Department of Streets but to supplement them. No fires of any kind or burning of debris on the site or adjacent to it will be permitted; the debris shall be disposed of off the Project site.

b. The Contractor shall comply strictly with the provisions of the Air Pollution Code (Title 3 of The Philadelphia Code).

77. Explosives. If any blasting is involved in the performance of the Contract, the Contractor must obtain a blasting permit from the Department of Licenses and Inspections. Such permits will be issued only upon approval of the Fire Marshal and posting of bond or Certificate of Insurance covering personal injuries and property damage. Blasting may be done only by blasters duly licensed by the City. Storage of explosives and transportation of explosives to the site also require permits, which are issued by the Department of Licenses and Inspections, subject to prior approval of the Fire Marshal.

78. Work in Freezing Weather. Masonry of all kinds, pointing, grouting, plastering, and other work subject to the action of frost shall not be done when exposed to freezing weather, except under conditions where the Project Manager may specifically direct or permit such work, subject to the heating of materials, the protection of finished work and such other measures as may be deemed necessary. If operations are suspended on account of freezing weather, the entire work shall be properly protected until the resumption of work is permitted. If a suspension of the work on account of freezing weather or from any other cause is necessary, the site shall be cleaned up, left in good order, and continuously maintained by the Contractor during the period of such suspension.

G. SURFACE, SUBSURFACE, AND OVERHEAD STRUCTURES

79. Completeness of Data. The term "structures" used in these Standard Contract Requirements shall apply to all surface, underground, and above-ground structures of whatever character within the Project site or immediately adjacent thereto, including buildings situated in or adjacent to the excavation. Where these structures are shown or indicated on the Plans, the information provided is in accordance with the information in the possession of the Department, but is approximate only. Such data are not warranted or guaranteed by the Department to be either complete or correct, and the Contractor shall and must assume, and adjust its Bid to account for, all risks resulting from conditions in the field that differ from the approximation shown.

80. Support and Protection. All structures, unless specifically designated by the Project Manager to be abandoned or relocated, shall be supported and protected at all times from destruction or injury, including damage from freezing, and maintained continuously in service. Should any injury occur while the work is in progress and the structures are under the protection of the Contractor, the Contractor shall fully restore such structures to as good condition as existed before the injury was done. All such support and protection work, and also such alterations of any structures as the Contractor may carry out for the Contractor's own convenience in executing the work, shall be done without additional compensation, unless otherwise specifically provided for in the Contract Documents. The City makes no covenant, representation or warranty as to the right of the City or the Contractor to carry out any such support or protection work, or any alterations of any structures for the Contractor's own convenience; all such work being in any and all events subject to the consent and approval of the owner or owners of such structures.

81. Structures Interfering with Construction. If, in the course of the work, the Contractor determines that any of the existing structures occupy space required by the structure or its appurtenances to be constructed under the Contract, or that such structures are so situated as to render it impracticable, in the opinion of the Project Manager, to do the work called for under the Contract in the manner specified, the Contractor shall excavate and uncover the portions of such structures in service and shall notify the Project Manager, who will, if reasonably practicable, arrange for the alteration, relocation or removal of the interfering structures or appurtenances within a reasonable time. The Contractor shall not move nor disturb such structures in any way without prior approval by the owners thereof, and the approval of the Project Manager. Any such action by the Contractor shall be at the Contractor's sole cost, risk and expense. Structures belonging to the public utility companies, which are ordered by the Project Manager to be removed or relocated, will be so removed or relocated and permanent supports placed, in general by their owners without cost to the Contractor. The Contractor, however, shall support and protect them up to the time of their removal, shall co-operate with such owners during the process of relocation, and shall maintain and

protect such structures if and when such structures are relocated within the Project site or immediately adjacent thereto. Such work shall be done without additional compensation. Sewers, water pipes, electrical conduits, and other City-owned structures shall be altered, relocated, or reconstructed as shown on the Plans or as may be ordered in the course of the work. Payment for this work is subject to Change Order unless otherwise specifically provided for. If the Project Manager approves a request by the Contractor to effect a temporary or permanent relocation of structures for Contractor's own convenience, and satisfactory arrangements can be made with the owners thereof, the Contractor may carry out such work at its own expense.

82. **Abandonment of Structures.** In the case of structures the service of which is permanently abandoned, the Project Manager will designate which such structures or portions of such structures the Contractor may salvage and which the Contractor may abandon in place on the Project site, including in the trench. The Contractor shall remove and deliver to a designated point of storage materials salvaged, and payment therefore will be made at the appropriate prices of the Contract, unless otherwise specifically provided. The Contractor shall allow owners of privately owned structures reasonable facilities for salvaging their property. Structures designated as abandoned shall become the property of the Contractor, and shall be removed from the work, unless the Project Manager has approved abandonment of such structures in place on the Project site.

83. **Co-operating with Public Utility Companies and City Departments.**

a. The Contractor shall at all times during the performance of the work fully comply with the Underground Utility Line Protection Law (Act 287 of 1974, as amended by Act 187 of 1996), otherwise known as the PA One Call System.

b. The Contractor shall co-operate with other contractors and with the employees, officers, and agents of the City Departments or the various public utility companies which own, operate, or have supervision over the underground or above-ground structures encountered by the Contractor, and shall conform to the requirements of the owners of such structures in regard to their safe maintenance. The Contractor shall give to authorized representatives of the City Departments and public utility companies unrestricted access at all times to the excavation and site to inspect the condition and support of their structures at no additional cost to the City. Suitable arrangements shall be provided to facilitate access to valves and manholes if necessary. Ventilation openings shall be provided where gas is likely to accumulate. Where structures are to be constructed by the Contractor under the facilities of any public utility, the Contractor shall make suitable arrangements with the public utility company for the removal or support and maintenance of such facilities at no additional cost to the City.

84. **Gas Pipes.** PGW will make any necessary alterations to the gas mains or gas service pipes, without expense to the Contractor, unless specifically indicated elsewhere in the Contract Documents. PGW will by-pass the gas service in temporary pipes laid outside such excavation, in advance of the construction work. The mains and services that have been removed may be replaced in their permanent position after the backfilling has been sufficiently compacted.

85. **Traffic Control Apparatus.** The Contractor acknowledges that the underground location of conduit and cables for traffic signals at intersecting streets is not ordinarily shown on the Plans for the work. Where traffic signals are indicated on the Plans, but the location of connecting conduit or cables for the signals is not shown, the Contractor shall nonetheless assume that there are underground conduits and cables that may affect or interfere with the performance of its work and the Contractor shall adjust its Bid accordingly. The Contractor shall support and maintain in their present locations, or in approved temporary locations, any existing traffic control masts, signals, apparatus, and their connecting underground or above-ground conduits and cables, in such condition as to permit the uninterrupted functioning of the signals during the progress of the work, on temporary poles if necessary, and in a manner satisfactory to the Department of Streets. If the existing signal apparatus is supported on poles and these poles are moved to a temporary location during the progress of the work, the Contractor shall either erect temporary signal poles in the approximate locations of the original poles and erect the signals thereon, or shall extend the electrical connection to the poles as relocated as may be ordered by the Project Manager. Upon the restoration of surface conditions, the Contractor shall restore the equipment, including underground or above-ground conduits and cables and electrical connections, to its original position and condition. This work, except new masonry, shall be done without additional compensation to the Contractor. Masonry piers will be paid for at the applicable unit prices.

86. **Street Lighting Units.** Whenever it is necessary to remove, relocate, or adjust street lighting units, or poles, the work shall be reviewed and approved by the City's Department of Streets – Street Lighting Division. All such street lighting work shall be performed at the sole expense of the Contractor and at no additional cost to the City, unless otherwise pre-approved in writing by the Project Manager and the Street Lighting Division.

87. **Governing Law.** The Contract shall be deemed to have been made in Philadelphia, Pennsylvania. The Contract and all disputes arising under the Contract shall be governed, interpreted, construed and determined in accordance

with the laws of the Commonwealth, without giving effect to principles of Commonwealth law concerning conflicts of laws.

88. **Binding Upon Contractor's Successors, etc.** The Contract shall be binding upon the Contractor's heirs, executors, administrators, and successors and assigns and such successors and assigns shall be responsible for the faithful performance and completion of the Contract.

89. **Amendments; Waiver.** The Contract may not be amended, supplemented, altered, modified or waived, in whole or in part, except by a written Amendment signed by the Parties, or as terminated for convenience by the City, or as provided in Paragraph 48 concerning Change Orders. Except to the extent that the parties may have otherwise agreed in writing in an Amendment, no waiver, whether express or implied, by either party of any provision of the Contract shall be deemed: (a) to be a waiver by that party of any other provision in the Contract; or (b) to be a waiver by that party of any breach by the other party of its obligations under the Contract. Any forbearance by a party in seeking a remedy for any noncompliance or breach by the other party shall not be deemed to be a waiver of rights and remedies with respect to such noncompliance or breach.

90. **Interpretation and Order of Precedence.** The Contract Documents govern performance of the Contract. In the event of a conflict or inconsistency between the Standard Specifications for NTI Demolition Bid Packages, which contains the Terms and Conditions of Bidding and Contract, and the terms of the Project Manual, the terms of the Project Manual shall prevail.

91. **Integration.** The Contract Documents, including the Standard Specifications for NTI Demolition Bid Packages, which contains these Terms and Conditions of Bidding and Contract and the exhibits incorporated by reference therein, contain all the terms and conditions agreed upon by the parties, constitute the entire agreement between the parties pertaining to the subject matter of the Contract, and supersede all prior agreements, understandings, negotiations and discussions, whether oral or written, of the parties (except to the extent specifically set forth herein). No other prior or contemporaneous agreements, covenants, representations or warranties, oral or otherwise, regarding the subject matter of the Contract shall be deemed to exist or to bind any party or vary any of the terms contained in the Contract.

92. **No Joint Venture.** The parties do not intend to create, and nothing contained in the Contract shall be construed as creating, a joint venture arrangement or partnership between the City and the Contractor with respect to the services performed by the Contractor under the Contract.

93. **No Third Party Beneficiaries.** Nothing in the Contract, express or implied, is intended or shall be construed to confer upon or give to any person, other than the parties, any rights, remedies, or other benefits, including but not limited to third-party beneficiary rights, under or by reason of the Contract. The Contract shall not provide any third party with any remedy, claim, liability, reimbursement, cause of action or other right other than any such remedy, claim, etc. existing without reference to the term of or the existence of the Contract.

94. **Severability and Partial Invalidity.** The provisions of the Contract shall be severable. If any provision of the Contract or the application thereof for any reason or in any circumstance shall to any extent be held to be invalid or unenforceable, the remaining provisions of the Contract and the application of such provision to persons, or in circumstances, other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each provision of the Contract shall be valid and enforceable to the fullest extent permitted by law.

95. **Survival.** Any and all provisions set forth in the Contract which, by its or their nature, would reasonably be expected to be performed after the termination of the Contract or after full performance of the work under the Contract shall survive and be enforceable after such termination. Any and all liabilities, actual or contingent, which shall have arisen in connection with the Contract shall survive the expiration or earlier termination of the Contract, along with the following: the Contractor's warranty of its work, the Contractor's obligation to indemnify, defend and hold harmless the City, its officers, employees and agents.

96. **Controlling and Pertinent Statutes.** All statutory citations in the Contract shall refer to the pertinent statute as it may be amended hereafter from time to time.

97. **Forum Selection Clause; Consent to Jurisdiction.** The parties irrevocably consent and agree that any lawsuit, action, claim, or legal proceeding involving, directly or indirectly, any matter arising out of or related to the Contract shall be brought exclusively in the United States District Court for the Eastern District of Pennsylvania or the Court of Common Pleas of Philadelphia County. It is the express intent of the parties that jurisdiction over any lawsuit, action, claim, or legal proceeding shall lie exclusively in either of these two (2) forums. The parties further irrevocably consent and agree not to raise any objection to any lawsuit, action, claim, or legal proceeding which is brought in either of these two (2) forums on grounds of venue or *forum non conveniens*, and the parties expressly consent to the jurisdiction and venue of these two (2) forums. The parties further agree that service of

original process in any such lawsuit, action, claim or legal proceeding may be duly affected by mailing a copy thereof, by certified mail, postage prepaid to the addresses specified in the Special Contract Requirements.

98. **Waiver of Jury Trial.** The Contractor hereby waives trial by jury in any legal proceeding in which the City is a party and which involves, directly or indirectly, any matter (whether sounding in tort, Contract or otherwise) in any way arising out of or related to the Contract or the relationship created or evidenced hereby. This provision is a material consideration upon which the City relied in entering into the Contract.

99. **Headings.** The titles, captions or headings of Paragraphs, sections, exhibits or schedules in or to the Contract are inserted for convenience of reference only, and do not in any way define, limit, describe or amplify the provisions of the Contract or the scope or intent of the provisions, and are not a part of the Contract.

100. **Days**. Any references to a number of days in the Contract shall mean calendar days, unless the Contract specifies Working Days or business days.

101. **Notice.** All notices, demands, requests, waivers, consents, approvals or other communications which are required or may be given under the Contract shall be in writing and shall be deemed to have been duly made (a) when received or refused if delivered by hand with receipt given or refused; (b) on the next business day if delivered by a nationally recognized overnight courier service (*e.g.*, Federal Express or United Parcel Service); (c) on the date confirmed for receipt by facsimile if delivered by facsimile; and (d) upon receipt or refusal of delivery if sent by certified or registered United States mail, return receipt requested. In each case notices shall be sent to the addresses set forth in the Special Contract Requirements.

102. **Prevailing Wage: Labor-Management Relationships.** The Contract is subject to Section 17-107 of The Philadelphia Code, "Contractors: Labor-Management Relationships", and all regulations and procedures adopted thereunder.

a. As required by Section 17-107 of The Philadelphia Code, all employees performing work under the Contract shall be paid at least the applicable prevailing wages for the respective occupational classifications designated, as set forth in the minimum wage schedule attached to the Project Manual and incorporated therein, and shall be given at least the applicable presently prevailing working conditions during the entire period of work under the Contract. Such working conditions are those which are given to employees pursuant to a bona fide collective bargaining agreement for the applicable craft, trade or industry in the Philadelphia area on the date the Bid is issued. The occupational classifications for all employees under the Contract shall be only the specific categories of jobs within a given craft, trade or industry for which a separate hourly wage rate for the Philadelphia area is determined by the Secretary of Labor of the United States, in accordance with the provisions of the Davis-Bacon Act, and which are set forth in the applicable wage schedule.

b. The City may withhold from any sums due to the Contractor under the Contract so much as may be necessary to pay the employees the difference between the wages required to be paid under this Paragraph 102 and the wages actually paid to such employees, and the City may make such payments directly to the appropriate employees.

c. Each Contractor shall require all Subcontractors to comply with and be bound by all of the provisions of this paragraph of the Contract and of Section 17-107 of The Philadelphia Code.

d. Every Contractor and Subcontractor shall keep an accurate record showing the name, address, occupational classification, wages and other benefits paid or provided and number of hours worked for each employee assigned to city-work (as "city-work" is defined in Section 17-107(1)(b) of the Philadelphia Code), and such record shall be preserved for five (5) years from the date of payment. The Contractor shall make its employment records available for inspection and shall make its employees available for interviews during working hours on the job by authorized representatives of the City.

e. All Contractors and Subcontractors performing city-work shall, upon request of the City, file with the City's Managing Director's Office ("MDO"), Labor Standards Division, a certified statement setting forth the name, address, occupational classification, wages and other benefits paid or provided and number of hours worked with respect to each employee performing city-work. Such statement shall be made weekly for each preceding weekly period. The certification shall affirm that the statement is correct and complete, that the wages set forth therein are not less than those required by the Contract for city-work and that the occupational classification set forth for each employee conforms with the work performed.

f. Nothing herein shall preclude the payment by the Contractor of wages at rates higher than those specified as the minimum in the applicable schedule attached to the General Bidding and Contract Requirements. However, no increase in any Contract price shall be allowed or authorized on account of the payment of wages in excess of those so specified, or on account of wage increases granted hereafter. No increases above the amounts specified in the applicable schedule attached to the General Bidding and Contract Requirements will be required by any Contract during the term thereof except in the case of an error or omission in such schedule. Such an error or

omission shall be called to the attention of the MDO, Labor Standards Division as promptly as possible; but the remedying thereof by the Department shall not constitute grounds for withdrawal of a Bid or cancellation of a Contract, nor for an increase in the Contract price or other claim or recovery against the City, nor a ground for failure or refusal to pay the applicable proper minimum to all employees.

g. The minimum wages required hereby shall be paid unconditionally without any subsequent deduction or rebate of any kind except in accordance with prevailing payroll deduction practices. Any assignment of wages by an employee for the direct or indirect benefit of the Contractor shall constitute a violation of this paragraph; and any purported release of rights under Section 17-107 of the Philadelphia Code by an employee shall be void and of no effect.

h. The parties shall refer to Section 17-107 of the Philadelphia Code, and to the regulations to be issued from time to time by the MDO, Labor Standards Division, for further information concerning the administration of the foregoing requirements of this Paragraph 102. In addition, it shall be the responsibility of all Bidders and Contractors to inform themselves as to all prevailing working conditions, including, without limitation, length of work day and work week, overtime compensation, and holiday and vacation rights.

103. **Federal Laws.** The Contractor shall comply with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d – 200d7), section 504 of the Federal Rehabilitation Act of 1973 (29 U.S.C. § 794), The Age Discrimination Act of 1975, (42 U.S.C. §§ 6101 – 6107), Title IX of the Education Amendments of 1972 (20 U.S.C. § 1681), and 45 C.F.R. Part 92, as they may be amended from time to time, which together prohibit discrimination on the basis of race, color, national origin, sex, handicap, age and religion.

104. **Americans With Disabilities Act.** Contractor understands and agrees that no individual with a disability shall, on the basis of the disability, be excluded from participation in the Contract or from activities or services provided under the Contract. As a condition of accepting and executing the Contract, Contractor shall comply with all provisions of the Americans With Disabilities Act (the "ADA"), 42 U.S.C. §§ 12101 – 12213, and all regulations promulgated thereunder, as the ADA and regulations may be amended from time to time, which are applicable (a) to Contractor, (b) to the benefits, services, activities, facilities and programs provided in connection with the Contract, (c) to the City, or the Commonwealth, and (d) to the benefits, services, activities, facilities and programs of the City or of the Commonwealth, and, if any funds for payments by the City or otherwise under the Contract are provided by the federal government, which are applicable to the federal government and its benefits, services, activities, facilities and programs. Without limiting the applicability of the preceding sentence, Contractor shall comply with the "General Prohibitions Against Discrimination," 28 C.F.R. Part 35.130, and all other regulations promulgated under Title II of the ADA, as they may be amended from time to time, which are applicable to the benefits, services, programs and activities provided by the City through Contracts with outside contractors.

105. **Steel Products Procurement Act.** The Steel Products Procurement Act, 73 P.S. § 1881, et seq shall govern payments to the Contractor under the Contract. In seeking payment under the Contract, the Contractor represents, warrants and covenants that only steel products made in the United States as defined by the Steel Products Procurement Act have been used or supplied in the performance of the Contract and all Subcontracts thereunder. Where unidentified steel products are supplied or used under the Contract, the City will not authorize, provide for, or make any payments to the Contractor for such steel products, unless and until the Contractor shall first provide to the Project Manager documentation, including, but not limited to, invoices, bills of lading, and mill certification, attesting that the steel was melted and manufactured in the United States. Where a steel product is identifiable from its face, the City will authorize, provide for, and make payments to the Contractor for such steel products, only after the Contractor shall have submitted a certification, in a form satisfactory to the Project Manager, that the Contractor has fully complied with the requirements of the Steel Products Procurement Act. Where the Project Manager has determined, in writing, that a particular steel product is not produced in the United States in sufficient quantities to satisfy the requirements of the Contract, then this Paragraph shall not apply to payments for that steel product. Failure of the Contractor to comply with the Steel Products Procurement Act shall constitute a violation of the Contract which shall entitle the City to exercise all rights and remedies provided to it by the Steel Products Procurement Act and provided to it under the Contract, either at law or in equity.

106. **Executive Order 02-05.** In accordance with Executive Order 02-05, as it may be amended from time to time, the City has established an anti-discrimination policy which relates to the solicitation and utilization of M-DBEs, W-DBEs, and DS-DBEs in City contracts. The purpose of Executive Order 02-05 is to provide an equal opportunity for all businesses and to assure that City funds are not used, directly or indirectly, to promote, reinforce or perpetuate discriminatory practices. Instructions, forms and special contract provisions relating to Executive Order 02-05 are included in Section 00813 of the Project Manual. Compliance with Executive Order 02-05 is a matter of bid responsiveness and failure of the Contractor to comply with Executive Order 02-05 shall constitute a violation of the Contract which shall entitle the City to exercise all rights and remedies provided to it under Executive Order 02-05 and provided to it under the Contract, either at law or in equity.

107. Employment of Low- and Moderate-Income Persons. The Contract is subject to Section 17-1000 of The Philadelphia Code, "Employment of Low- and Moderate-Income Persons by City Contractors", and all regulations and procedures adopted thereunder.

a. As required by Section 17-1000 of The Philadelphia Code, for all construction and demolition contracts entered into by the City with a total value in excess of $150,000 (a "Covered Construction Contract"), the Contractor must certify to the Procurement Department that at least forty percent (40%) of the workers who work on a Covered Construction Contract are low- or moderate-income persons. Apprentices and those working in on-the-job training positions shall be considered workers for the purposes of meeting the requirements of Section 17-1000.

b. A low- or moderate-income person is defined under Section 17-1000 as a person whose income does not exceed more than eighty percent (80%) of the median income for the Philadelphia metropolitan area, as determined or adjusted by the Secretary of Housing and Urban Development pursuant to 42 U.S.C. § 5302 (a)(20). A person who no longer meets the income eligibility criteria set forth in Section 17-1000 because of employment by a party to a Covered Construction Contract, but who met the criteria on his or her date of hire, shall be deemed a low- or moderate-income person for three years from the date of hire.

c. Each Contractor shall require all Subcontractors to comply with and be bound by all of the provisions of this paragraph of the Contract and of Section 17-1000 of The Philadelphia Code, and the Contractor shall insert the requirements of Section 17-1000 in all Subcontracts.

SECTION 00801

NEIGHBORHOOD TRANSFORMATION INITIATIVE (NTI)

OWNER CONTROLLED INSURANCE PROGRAM BID INSURANCE REQUIREMENTS

TABLE OF CONTENTS

SECTION TITLE

Introduction
Program Directory
Definitions
Part1: Insurance Provided by the City under OCIP
Part 2: Insurance to be Provided by Contractors Insured Under OCIP
Part 2: Sample Certificate of Insurance-A
Part 3: Insurance Provided by Contractors Not under OCIP
Part 3: Sample Certificate of Insurance -B
Part 4: OCIP Bid Procedures
Part 5: Contractor Enrollment
Part 6: Subcontractor Enrollment
Part 7: Claim Administration
Part 8: Completion of Work

ENROLLMENT PACKAGE FORMS AND INFORMATION

Form 1: Enrollment Form
Form 2: Enrollment Form (previously enrolled Contractors and Subcontractors)
Form 3: Assignment
Form 4: Notice of Work Completion

INTRODUCTION:

The Commercial General Liability, Workers Compensation & Employers Liability Insurance, Umbrella/Excess Liability and Contractors Pollution Liability Insurance for your jobsite construction operations will be provided under an Owner Controlled Insurance Program (OCIP) administered by the City of Philadelphia (City). The OCIP will be designed and administered in accordance with the laws of the Commonwealth of Pennsylvania.

THE OCIP WILL ONLY PROVIDE COMMERCIAL GENERAL LIABILITY, UMBRELLA/EXCESS LIABILITY, AND WORKERS COMPENSATION & EMPLOYERS LIABILITY INSURANCE UP TO AND INCLUDING 9/30/07.

AS OF 10/1/2007, THESE COVERAGES WILL NEED TO BE PROVIDED BY ALL CONTRACTORS AND SUBCONTRACTORS

Under the OCIP, the Owner, Contractor, and all tiers of Contractors/Subcontractors are required to:

(A) Participate in the OCIP;

(B) Delete the following insurance costs from their contract bid: Commercial General Liability, Workers Compensation and Employers Liability, Excess/Umbrella Liability, and Contractor's Pollution Liability Insurance;

COMMERCIAL GENERAL LIABILITY, UMBRELLA/EXCESS LIABILITY, AND WORKERS COMPENSATION & EMPLOYERS LIABILITY COSTS SHALL ONLY BE DELETED FOR WORK OCCURRING UP TO AND INCLUDING 9/30/2007.

NOTE: (Contractors involved in Asbestos Abatement work should only delete the following insurance coverage costs from their contract bid: Commercial General Liability, Umbrella/Excess Liability, and Contractor's Pollution Liability Insurance costs. **The OCIP will not afford Workers' Compensation and Employers' Liability coverage to Contractors involved in Asbestos Abatement work.** Contractors performing Asbestos Abatement work must purchase and maintain Workers' Compensation and Employers' Liability coverage on their own as per the limits outlined in Part 3.

(C) Actively support and participate in the Neighborhood Transformation Initiative's Project Safety Program;

(D) Include the OCIP Provisions in all Subcontracts;

(E) Submit required insurance forms prior to start of work;

A FAILURE TO SUBMIT THE REQUIRED OCIP INSURANCE FORMS PRIOR TO THE START OF WORK MAY EXCLUDE YOU FROM OCIP INSURANCE COVERAGE. IF EXCLUDED, THE OWNER WILL NOT PAY ANY ADDITIONAL AMOUNTS BEYOND YOUR BID AMOUNT FOR YOUR INSURANCE COSTS.

(F) Keep and maintain payroll records of all employees working at the Jobsite;

(G) Comply with accident reporting and claim procedures and;

(H) Submit required insurance termination form when work is completed.

PROGRAM DIRECTORY:

BROKER and OCIP ADMINISTRATOR: THE GRAHAM COMPANY
ADDRESS: ONE PENN SQUARE WEST, PHILADELPHIA PA 19102 FAX: (215) 567-3203

NAME	TITLE	PHONE	E-MAIL ADDRESS
Harry Johnson	OCIP Administrator	(215) 701-5215	hjohnso@grahamco.com
Franz Wagner	Account Manager	(215) 701-5257	fwagner@grahamco.com
Kelly Krause	Executive Assistant	(215) 701-5423	kkrause@grahamco.com
Mark Troxell	Safety Director	(215) 701-5340	mtroxel@grahamco.com
Durrell Garman	Safety Consultant	(215) 701-5227	dgarman@grahamco.com
Michelle Leighton	Claims Manager	(215) 701-5232	mleight@grahamco.com

OWNER: CITY OF PHILADELPHIA – RISK MANAGEMENT DIVISION
ADDRESS: 1515 ARCH STREET, 14TH FLOOR, PHILADELPHIA, PA 19102 FAX: (215) 683-1705

NAME	TITLE	PHONE/FAX	E-MAIL ADDRESS
Nella Goodwin	Services Manager	(215) 683-1708	Nella.Goodwin@phila.gov
Debora Lawton	Director	(215) 683-1719	Debbie.Lawton@phila.gov

DEFINITIONS:

Approved Contractor	A Contractor/Subcontractor who has successfully completed and submitted all OCIP required documentation and has received confirmation of enrollment for participation in the insurance program.
Broker of Record	The insurance broker authorized to represent, negotiate, and obtain appropriate insurance coverage on behalf of the Owner.
Claim	A written or oral demand for compensation, including a request for benefits, injuries or damages arising out of an insured loss.
Contract	A written agreement between the Owner and a Contractor, or between a Contractor and a Subcontractor, or by and between any tier of Subcontractors. This also includes any written and/or verbal agreement, invoice, purchase order, or work order that includes direct labor on one or more Insured Sites.
Contractor	A specified individual, firm, or corporation under Contract with the Owner or its designee to undertake maintenance, construction or other services at the Insured Site(s).
Insurance Company	The company which provides financial protection against property damage or bodily injury losses to third parties.
Insured	The entity named in a Policy or Certificate of Insurance signed by a duly authorized representative of the Insurer.
Insured Loss	The total amount of cost, charges and expenses, inclusive of deductibles, relating to an incident or occurrence, which is insured under the Owner Controlled Insurance Program (OCIP).
Insured Site	The Project Site as defined in your Contract. Employees performing services, under Contract, are covered under the OCIP while working on-site (see Part 1). Employees are not covered when traveling between home and an Insured Site.
Insurer	The entity issuing a policy.
Job-site	See “Insured Site”.
OCIP	The Owner Controlled Insurance Program under which Commercial General Liability Insurance, Workers' Compensation & Employer's Liability, Contractor’s Pollution Liability and Umbrella/Excess Liability are procured by the Owner for specified Contractors and/or Subcontractors providing direct labor at one or more Insured Sites.
OCIP Administrator	A representative of the Broker of Record designated to administer the OCIP.
OCIP Manager	The Graham Company.
OCIP Team	The professional firm's employees from the Owner, Broker and Insurance Company.
Owner	City of Philadelphia, their commissions, officers, officials, employees and/or agents, associated and/or affiliated organizations, successors or assigns, as now exist or may hereafter be acquired or formed which any of the City of Philadelphia owns, operates or controls, including the interest as successor to any organization acquired, merged, or transformed into any of the foregoing, and any trust, foundations, funds and welfare plans of any kind and other interests as are now or hereafter related to the insured but not specifically named.

Subcontractor A specified individual, firm or corporation providing direct labor to perform subcontracted work on the Insured Sites, with the consent of the Contractor or its designee, excluding vendors, suppliers, material dealers, or others whose function is solely to supply and/or deliver materials, parts, or equipment to and from one or more Insured Sites.

Temporary Site Employees Those contractor and subcontractor employees not assigned to an Insured Sites (i.e., an employee who does not directly bill his or her time to Owner). As general guidance, an employee whose salary and overheads are included in the overhead component of Contractor or Subcontractor's billing rate is not covered under the OCIP even though they may occasionally be on site. Examples include, but are not limited to: home office auditors, sales personnel, payroll clerks, and human relations personnel.

Third Party Any party other than employees of an Approved Contractor or its Subcontractor of any tier.

Work Any direct or indirect physical task to be performed to complete the Project at the Insured Site. For the purpose of the OCIP, Work will commence when the approved Contractors' employees first report or are present at the Insured Site after enrollment in the OCIP and completion any existing required badge procedures. No physical activity will be performed until the Contractor/Subcontractor is enrolled in the OCIP.

Wrap-up: See OCIP.

PART 1 - INSURANCE TO BE PROVIDED BY CITY UNDER THE OCIP:

The City will be securing specific insurance coverage for the benefit of the City, Contractor, and Subcontractors of all tiers performing work at the insured site. **The insurance will not apply to vendors, suppliers, material dealers, and independent operators/haulers. Also, Workers Compensation & Employers Liability will not apply to Asbestos Abatement Contractors or Subcontractors.**

COMMERCIAL GENERAL LIABILITY, UMBRELLA/EXCESS LIABILITY, AND WORKERS COMPENSATION & EMPLOYERS LIABILITY INSURANCE WILL ONLY BE PROVIDED BY THE CITY FOR ENROLLED CONTRACTORS AND SUBCONTRACTORS UP TO AND INCLUDING 9/30/2007.

The coverages afforded under this program will not include all insurance needed by Contractor or Subcontractor(s). For example, Commercial General Liability coverage applies only to the operations of and for each Insured at or emanating directly from the insured site. It will not apply to the operations of any Insured in its regularly established main or branch office, factory, warehouse, or similar place of business. Further, Workers Compensation & Employers Liability Coverage will not be afforded to Contractors or Subcontractors performing asbestos removal or containment operations. **Each Contractor and Subcontractor should review its own insurance program to assure that their permanent insurance is properly coordinated with the OCIP.**

Only the following insurance, set forth in (A), (B), (C) and (D) below, will be provided by the City:

(A) Workers Compensation Insurance in statutory limits for the Commonwealth of Pennsylvania. Employers Liability limits of $1,000,000 Each Accident/$1,000,000 Disease – Each Employee/$1,000,000 Disease – Policy Limit.

INDEPENDENT OPERATORS/HAULERS AND ASBESTOS ABATEMENT CONTRACTORS/SUBCONTRACTORS WILL NOT BE INSURED UNDER THE OWNER'S PROGRAM.

Coverages to be extended under this policy include US Longshoremen's and Harbor Workers' Compensation Act (USL&H), Voluntary Compensation, Alternative Employer Endorsement, and a Waiver of Our Right to Recover from Others Endorsement.

NOTE: **The OCIP will not afford Workers' Compensation and Employers' Liability coverage to Contractors or Subcontractors performing Asbestos Abatement work.** Contractors and Subcontractors performing Asbestos Abatement work must purchase Workers' Compensation and Employers' Liability coverage on their own as per the limits outlined in Part 3.

WORKERS COMPENSATION & EMPLOYERS LIABILITY INSURANCE COVERAGE WILL ONLY BE PROVIDED UP TO AND INCLUDING 9/30/2007. CONTRACTORS AND SUBCONTRACTORS WILL NEED TO SECURE THIS COVERAGE ON THEIR OWN BEHALF AS OF 10/1/2007.

(B) Commercial General Liability Insurance applying to all Insureds jointly with the following limits:

$2,000,000 per occurrence combined single limit for bodily injury (including death) and property damage liability;
$2,000,000 Personal & Advertising Injury;
$4,000,000 General Aggregate
$4,000,000 Products/Completed operations Aggregate

Coverages include: Three (3) year Products/Completed Operations Tail (One Aggregate Limit will apply), 60 day Notice of Cancellation, Insurance Company Waiver Endorsement, Knowledge of Occurrence, Notice of Occurrence, Unintentional Failure to Disclose Hazards, Additional Insureds - Owners, Lessee or Contractors Form B, Limitation of Coverage to Designated Premises, Waiver of Transfer of Rights of Recovery Against Others, and Incidental Medical Malpractice.

Additional exclusions include: Nuclear Energy Liability, Asbestos, Radioactive Material, Employment Related Practices, Total Lead, Architects & Engineers Professional Liability, and Absolute Pollution.

This insurance will not extend coverage for products liability to any insured party, vendor, supplier, material dealer or others for any product manufactured, assembled or otherwise worked upon while away from the insured site.

COMMERCIAL GENERAL LIABILITY INSURANCE WILL ONLY BE PROVIDED UP TO AND INCLUDING

9/30/2007. CONTRACTORS AND SUBCONTRACTORS WILL NEED TO SECURE THIS COVERAGE ON THEIR OWN BEHALF AS OF 10/1/2007.

(C) Umbrella/Excess Liability Insurance, covering all insureds extending the Employers Liability and Commercial General Liability noted in (A) and (B) above by an additional $50,000,000 per occurrence/aggregate combined single limit for bodily injury (including death) and property damage liability.

Coverages include: Notice of Occurrence, Knowledge of Occurrence, Unintentional Errors & Omissions, Three (3) year Extension Endorsement for Products/Completed Operations Tail (One Aggregate for Entire Tail).

Additional exclusions include: Automobile Liability and Architects and Engineers Errors & Omissions.

This insurance will also not extend coverage for products liability to any insured party, vendor, supplier, material dealer or others for any product manufactured, assembled or otherwise worked upon while away from the insured site.

UMBRELLA/EXCESS LIABILITY INSURANCE WILL ONLY BE PROVIDED UP TO AND INCLUDING 9/30/2007. CONTRACTORS AND SUBCONTRACTORS WILL NEED TO SECURE THIS COVERAGE ON THEIR OWN BEHALF AS OF 10/1/2007.

(D) Contractor's Pollution Liability Insurance (Occurrence) applying to all Insureds with the following limits:

$10,000,000 Each Occurrence
$10,000,000 Aggregate

Coverages Include: Loss as a result of Claims for Bodily Injury, Property Damage or Environmental Damage caused by Pollution Conditions resulting from Covered Operations; (5) year Completed Operations Coverage; City is First Named Insured with Contractors & Subcontractors at all tiers as Additional Named Insureds;

Exclusions include: Expected or Intended Injury, Known Conditions, Intentional Non-Compliance, Professional Services (except for the First Named Insured for project management), Hostile Acts, Terrorism and Product Liability.

POLICY NOTES FOR OWNER-PROVIDED COVERAGE

Policy Period - Initial policies under the OCIP are effective on your contract start date and will expire upon completion of your work or as determined by the Owner.

Program Limits - Limits under the primary Commercial General Liability Policy will be reinstated annually.

Evidence of Coverage - Each Enrolled Contractor and Subcontractor will receive a Commercial General Liability Certificate of Insurance evidencing coverage, and, except for Contractors and Subcontractors performing Asbestos Abatement work, a Workers' Compensation policy.

Changes in Coverage - Owner reserves the right to change the coverages and/or limits of insurance provided under the OCIP.

It is recommended that the Contractors and Subcontractors of all tiers have their Insurance Agent review the coverages to be provided by the City. It is the responsibility of all Contractors and Subcontractors to maintain, at their sole option and cost, any additional insurance they deem necessary and/or, in lieu of excluding coverage for this Project from their ongoing Liability and Workers Compensation Program, that they have their Commercial General Liability and Workers Compensation & Employers Liability policies endorsed to the effect that insurance provided under those policies is excess over valid and collectible insurance provided under the OCIP.

THE COVERAGES REFERRED TO ABOVE WILL BE SET FORTH IN FULL IN THE RESPECTIVE POLICY FORMS AND THE FOREGOING DESCRIPTIONS ARE NOT INTENDED TO BE COMPLETE.

COMMERCIAL GENERAL LIABILITY, UMBRELLA/EXCESS LIABILITY, AND WORKERS COMPENSATION & EMPLOYERS LIABILITY INSURANCE WILL ONLY BE PROVIDED BY THE CITY UP TO AND INCLUDING 9/30/2007.

Termination of Contractor (Subcontractor) Participation in OCIP

In the event Contractor/Subcontractor's participation in the OCIP is terminated or the entire program is canceled, Contractor/Subcontractor must provide the insurance coverage specified in Part 3. These coverages should apply to all Contractor/Subcontractor employees working on the Jobsite as well as those employees working off-site.

Exclusion of a Contractor (Subcontractor) From The OCIP

If a Contractor/Subcontractor does not meet the minimum standard for participation, as determined by Owner, the Contractor (Subcontractor) must provide the insurance coverage specified in Part 3. These coverages should apply to all Contractor's/Subcontractor's employees working on the Jobsite as well as those employees working off-site.

PART 2 - INSURANCE TO BE PROVIDED BY CONTRACTORS AND / OR SUBCONTRACTORS INSURED UNDER THE OCIP:

Contractor and all tiers of Subcontractors shall at all times during the period in which the Contract is in force and effect, (including the maintenance/guarantee period or other applicable warranty period), provide and maintain the following insurance at their own expense. All insurance shall be procured from "A-; Class VII" or better rated insurance carriers by AM Best and authorized to do business in the Commonwealth of Pennsylvania. All insurance required herein shall be written on an "occurrence" basis and not a "claims-made" basis. **In no event shall work be performed by the Contractor until the required evidence of insurance has been furnished.** If Contractor fails to obtain or maintain the required insurance, the City shall have the right to treat such failure as a material breach of contract and to exercise all appropriate rights and remedies. The insurance shall provide for at least thirty (30) days prior written notice to be given to the City in the event coverage is materially changed, canceled or non-renewed:

(A) Automobile Liability Insurance covering all owned, non-owned and hired automobiles. Such insurance shall provide coverage not less than that of the Standard Comprehensive Automobile Liability policy (or Business Auto Policy) with limits not less than $300,000 Per Accident for Bodily Injury and Property Damage.

(B) Commercial General Liability Insurance for Operations **away from the jobsite** including products liability coverage for any product manufactured, assembled or otherwise worked upon while away from the insured site. Coverage is to be provided in a form not less than the ISO 1998 standard Commercial General Liability Insurance policy ("Occurrence Form") including hazards of premises/operations (including explosion, collapse and underground coverage), independent contractors, products and completed operations, contractual liability coverage (for any contracts related to the Work) and personal injury. Coverage is to be provided at the following minimum Limits of Liability:

$500,000 Per Occurrence
$500,000 Completed Operations Aggregate (Annual Limits)
$500,000 Personal Injury and Advertising Injury
$500,000 General Aggregate (Annual Limits)

FOR ALL CONTRACT WORK OCCURRING ON OR AFTER 10/1/2007, CONTRACTORS AND SUBCONTRACTORS SHALL PROVIDE COMMERCIAL GENERAL LIABILITY INSURANCE FOR OPERATIONS BOTH ON AND AWAY FROM THE JOBSITE. COVERAGE IS TO BE PROVIDED IN A FORM NOT LESS THAN THE ISO 1998 STANDARD COMMERCIAL GENERAL LIABILITY INSURANCE POLICY ("OCCURRENCE FORM") INCLUDING HAZARDS OF PREMISES/OPERATIONS (INCLUDING EXPLOSION, COLLAPSE AND UNDERGROUND COVERAGE), INDEPENDENT CONTRACTORS, PRODUCTS AND COMPLETED OPERATIONS, CONTRACTUAL LIABILITY COVERAGE (FOR ANY CONTRACTS RELATED TO THE WORK) AND PERSONAL INJURY. COVERAGE IS TO BE PROVIDED AT THE FOLLOWING MINIMUM LIMITS OF LIABILITY:

$2,000,000 PER OCCURRENCE
$2,000,000 COMPLETED OPERATIONS AGGREGATE
$2,000,000 PERSONAL INJURY AND ADVERTISING INJURY
$2,000,000 GENERAL AGGREGATE (ANNUAL LIMITS)

(C) Workers' Compensation Insurance for all operations **away from the jobsite:** In statutory limits of the Workers' Compensation Law of the Commonwealth of Pennsylvania and having:

Employers Liability Limits:

$500,000 Each Accident;
$500,000 Disease – Policy Limit;
$500,000 Disease Each Employee for all Work.

NOTE: Asbestos Abatement Contractors must provide Workers' Compensation and Employers' Liability coverage for their employees while performing work on the jobsite and also away from the jobsite.

FOR ALL CONTRACT WORK OCCURRING ON OR AFTER 10/1/2007, CONTRACTORS AND SUBCONTRACTORS SHALL PROVIDE WORKERS COMENSATION & EMPLOYERS LIABILITY INSURANCE FOR OPERATIONS BOTH ON AND AWAY FROM THE JOBSITE IN STATUTORY LIMITS OF THE WORKERS' COMPENSATION LAW OF THE COMMONWEALTH OF PENNSYLVANIA AND HAVING:

EMPLOYERS LIABILITY LIMITS:

$500,000 EACH ACCIDENT;
$500,000 DISEASE – POLICY LIMIT;
$500,000 DISEASE EACH EMPLOYEE FOR ALL WORK.

(D) Completed Operations Coverage: The OCIP will include coverage for completed operations for three (3) years after the date of acceptance of the Work by City. FOR COMMERCIAL GENERAL LIABILITY AND UMBRELLA/EXCESS LIABILITY, THIS COMPLETED OPERATIONS PERIOD WILL COMMENCE AFTER THE DATE OF ACCEPTANCE OF THE WORK BY CITY OR 10/1/2007, WHICHEVER IS SOONER. It is the responsibility of the Contractor to arrange for the continuation of completed operations coverage with their insurance agent and insurer after termination of completed operations coverage under the OCIP.

(E) Mobile Equipment: Some mobile equipment may not be insured under the new Commercial General Liability policies (ISO 1998 policy form). Contractors utilizing mobile equipment not scheduled in their auto policy should review this coverage with their agent and/or insurer. The OCIP will provide third party liability coverage only arising out of the use of Mobile Equipment as defined in the OCIP Commercial General Liability Policy.

(F) Owned or Leased Equipment/Tools: Contractor and all Subcontractors shall maintain insurance on their owned or leased equipment, tools, trailers, etc.

(G) Additional Insured Provision: The insurance policies identified in paragraph's (A) and (B) above **shall include an endorsement naming the City of Philadelphia**, **their commissions, officers, officials, employees and/or agents, associated and/or affiliated organizations, successors or assigns as additional insureds including Excess or Umbrella Liability Policies if applicable.**

(H) Waiver of Subrogation Endorsement: The insurance policies identified in paragraph's (A), (B), (C), (E) and (F) above shall include an endorsement waiving rights of subrogation in favor of the Additional Insureds described in (G) above.

(I) Primary Insurance: The insurance policies identified in paragraph (B) above shall include an endorsement stating that the coverage afforded the Additional Insureds described in (G) above will be primary and non-contributory to any other coverage available to them.

(J) Certificate of Insurance: Within five (5) days following receipts of the Notice of Award, Contractor must provide a Certificate of Insurance evidencing coverages and limits as identified in (A), (B), (C), (G), (H) and (I) above, and each shall furnish an Original Certificate(s) of Insurance to:

ELLA JACKSON
City of Philadelphia
Procurement Department
Municipal Services Building – 1st Floor
Philadelphia, PA 19102-1685

With a copy to:

Nella Goodwin, Risk Management Services Manager
City of Philadelphia
Risk Management Division
1515 Arch Street – 14th Floor
Philadelphia, PA 19102

And:

Franz Wagner, NTI OCIP Account Manager
The Graham Company
The Graham Building

One Penn Square West
Philadelphia, PA 19102

Certificates of Insurance are not required for Subcontractors to be submitted to the City of Philadelphia or The Graham Company. However, Contractors are responsible for ensuring compliance of all their Subcontractors with these insurance specifications.

The five (5) day requirement for advance documentation of coverage may be waived in situations where such waiver will benefit the City, but under no circumstances shall the Contractor actually begin work without providing the required evidence of insurance. The City reserves the right to require Contractor to furnish certified copies of the original policies of all insurance required under this contract at any time upon ten (10) days prior written notice to the Contractor.

All Certificates of Insurance shall indicate, in the Special Items Section, that all policies will contain (1) Additional Insured Endorsement (except the Workers' Compensation Policy), (2) a Waiver of Subrogation Endorsement, and (3) Primary and Non-Contributory Insurance Endorsement (except the Business Automobile and Workers' Compensation Policies) as outlined above.

In addition, all policies of insurance that are required by the City shall be endorsed to provide that the insurance company must notify the City at least thirty (30) days prior to the effective date of cancellation or modification that reduces coverage of such policies.

THE CERTIFICATE OF INSURANCE MUST BE PROVIDED AND APPROVED PRIOR TO THE START OF YOUR WORK. (SEE SAMPLE "A" ON NEXT PAGE WHICH APPLIES TO WORK PERFORMED UP TO AND INCLUDING 9/30/2007. THE REQUIREMENTS SPECIFIED IN PART 3 AS REPRESENTED ON SAMPLE "B" SHALL APPLY TO CONTRACT WORK OCCURRING ON OR AFTER 10/1/2007. FOR WORK THAT EXTENDS PAST 9/30/2007, CERTIFICATES EVIDENCING THE REQUIREMENTS OF PART 3 SHOULD BE PROVIDED FOR APPROVAL NO LATER THAN 9/1/2007.)

The above insurance requirements are mandatory.

ACORD # CERTIFICATE OF LIABILITY INSURANCE

DATE: (MM/DD/YY)

Producer

YOUR INSURANCE BROKER OR AGENT

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

COMPANIES AFFORDING COVERAGE

Company A	*YOUR INSURANCE COMPANY*
Company B	
Company C	
Company D	

Insured

XYZ COMPANY
123 MAIN STREET
ANYTOWN, PA 12345

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POL. EFF. DATE (MM/DD/YY)	POL. EXP. DATE (MM/DD/YY)	LIMITS	
A	**GENERAL LIABILITY**	*12345678*	*TBD*	*TBD*	GENERAL AGGREGATE	*$500,000*
	X COMMERCIAL GEN LIABILITY				PRODUCTS-COMP/OP AGG	*$500,000*
	OWNERS & CONTRACTOR'S PROT				EACH OCCURRENCE	*$500,000*
					FIRE DAMAGE (Any one Fire)	
					MED EXP (Any one person)	
A	**AUTOMOBILE LIABILITY**	*12345678*	*TBD*	*TBD*	COMBINED SINGLE LIMIT	*$300,000*
	X ANY					
	AL NED OS				DILY I r Perso	
	SC D AUTOS					
	HIRE				BODIL UI (Per A t)	
	NO OWN TO					
					PR E	
	GARAGE ITY				A NLY-E CIDENT	
	ANY AUTO				OTHER THAN AUTO ONLY:	
					EACH ACCIDENT	
					AGGREGATE	
					EACH OCCURRENCE	
A	UMBRELLA FORM				AGGREGATE	
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** THE PROPRIETOR/PARTNERS/EXECU-TIVE OFFICERS ARE: INCL. EXCL.	*12345678*	*TBD*	*TBD*	STATUTORY LIMITS X	
	THE PROPRIETOR/PARTNERS/ EXECUTIVE OFFICERS ARE: INCL EXCL				EL EACH ACCIDENT	*$100,000*
					EL DISEASE-POLICY LIMIT	*$500,000*
					EL DISEASE-EA EMPLOYEE	*$100,000*

DESCRIPTION : ALL POLICIES SHALL CONTAIN 1) A WAIVER OF SUBROGATION ENDORSEMENT , 2) AN ADDITIONAL INSURED ENDORSEMENT (EXCEPT FOR WORKERS COMPENSATION), AND 3) AN ENDORSEMENT STATING THAT INSURANCE IS PRIMARY AND NON-CONTRIBUTORY (EXCEPT FOR WORKERS COMPENSATION AND BUSINESS AUTOMOBLE) TO ANY OTHER INSURANCE MAINTAINED BY THE ADDITIONAL INSURED IN FAVOR OF THE CITY OF PHILADELHIA, THEIR COMMISSIONS, OFFICERS, EMPLOYEES AND/OR AGENTS, ASSOCIATED AND/OR AFFILIATED ORGANIZATIONS, SUCCESSORS OR ASSIGNS AS RESPECTS TO THEIR WORK PERFORMED FOR THE CITY OF PHILADELPHIA FOR OPERATIONS COVERED UNDER THE OCIP.

CERTIFICATE HOLDER	CANCELLATION
CITY OF PHILADELPHIA *Attn: Ella Jackson* *City of Philadelphia* *Procurement Department* *Municipal Services Building, 1st Floor* *Philadelphia, PA 19102-1685*	SHOULD ANY OF THE ABOVE DESCRIBED POLICES BE CANCELED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.
	AUTHORIZED REPRESENTATIVE

Sample "A"

PART 3 – INSURANCE PROVIDED BY CONTRACTORS AND / OR SUBCONTRACTORS NOT INSURED BY THE OCIP. THESE REQUIREMENTS ALSO APPLY TO ENROLLED CONTRACTORS AND SUBCONTRACTORS FOR CONTRACT WORK OCCURRING ON OR AFTER 10/1/2007.:

Contractor and all tiers of Subcontractors not covered by the OCIP shall at all times during the period in which the Contract is in force and effect, (including the maintenance/guarantee period or other applicable warranty period), provide and maintain the following insurance at their own expense. All insurance shall be procured from "A-; Class VII" or better rated insurance carriers by AM Best and authorized to do business in the Commonwealth of Pennsylvania. All insurance required herein shall be written on an "occurrence" basis and not a "claims-made" basis. **In no event shall work be performed until the required evidence of insurance has been furnished.** If Contractor fails to obtain or maintain the required insurance, the City shall have the right to treat such failure as a material breach of contract and to exercise all appropriate rights and remedies. The insurance shall provide for at least thirty (30) days prior written notice to be given to the City in the event coverage is materially changed, canceled or non-renewed:

(A) Automobile Liability Insurance covering all owned, non-owned and hired automobiles. Such insurance shall provide coverage not less than that of the Standard Comprehensive Automobile Liability policy (or Business Auto Policy) with limits not less than **$1,000,000** Per Accident for Bodily Injury and Property Damage.

(B) Commercial General Liability Insurance for Operations including products liability coverage for any product manufactured, assembled or otherwise worked upon. Coverage is to be provided in a form not less than the ISO 1998 standard Commercial General Liability Insurance Policy ("Occurrence Form") including hazards of premises/operations (including explosion, collapse and underground coverage), independent contractors, products and completed operations, contractual liability coverage (for any contracts related to the Work) and personal injury. Coverage is to be provided at the following minimum Limits of Liability:

$2,000,000 Per Occurrence
$2,000,000 Personal Injury and Advertising Injury
$2,000,000 Completed Operations Aggregate (Annual Limits)
$2,000,000 General Aggregate (Annual Limits)

(C) Workers' Compensation Insurance for all operations: In statutory limits of the Workers' Compensation Law of the Commonwealth of Pennsylvania and having Employers Liability Limits:

$500,000 Each Accident
$500,000 Disease Each Employee for all Work.
$500,000 Disease – Policy Limit

The Limits of Liability in Paragraph (A), (B), and (C) above can be met by combining the Contractor's Individual Policy Limits of Liability with their Umbrella Liability Policy Limits.

(D) Owned or Leased Equipment/Tools: Contractor and all tiers of Subcontractors shall maintain insurance on their owned or leased equipment, tools, trailers, etc.

(E) Additional Insured Provision: The insurance policies identified in paragraph's (A) and (B) above **shall include an endorsement naming the City of Philadelphia, and its officers, employees and agents as additional insureds including Excess or Umbrella Liability Policies if applicable.**

(F) Waiver of Subrogation Endorsement: The insurance policies identified in paragraph's (A), (B), (C) and (D) above shall include an endorsement waiving rights of subrogation in favor of the Additional Insureds described in (E) above.

(G) Primary Insurance: The insurance policy identified in paragraph (B) above shall include an endorsement stating that the coverage afforded the Additional Insureds described in (E) above will be primary and non-contributory to any other coverage available to them.

(H) Certificate of Insurance: Prior to the date on which the Contractor commences its part of the work, each shall furnish to the City copies of Certificates of Insurance at least ten (10) days before work is begun. The ten (10) day requirement for advance documentation of coverage may be waived in situations where such waiver will benefit the City, but <u>under no circumstances shall the Contractor actually begin work without providing the required evidence of insurance</u>. The

City reserves the right to require Contractor to furnish certified copies of the original policies of all insurance required under this contract at any time upon ten (10) days prior written notice to the Contractor.

All Certificates of Insurance shall indicate, in the Special Items Section, that all policies will contain (1) Additional Insured Endorsement (except for the Workers Compensation and Property Policies), (2) a Waiver of Subrogation Endorsement and (3) Primary Insurance Endorsement (except for the Business Automobile, Workers Compensation and Property Policies) as outlined above.

In addition, all policies of insurance that are required by the City shall be endorsed to provide that the insurance company must notify the City at least thirty (30) days prior to the effective date of cancellation or modification that reduces coverage of such policies.

THE CERTIFICATE OF INSURANCE MUST BE PROVIDED AND APPROVED PRIOR TO THE START OF YOUR WORK. (SEE SAMPLE "B" ON NEXT PAGE)

The above insurance requirements are mandatory.

ACORD **CERTIFICATE OF LIABILITY INSURANCE** DATE: (MM/DD/YY)

Producer

YOUR INSURANCE BROKER OR AGENT

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

COMPANIES AFFORDING COVERAGE

Company A	*YOUR INSURANCE COMPANY*
Company B	
Company C	
Company D	

Insured

XYZ COMPANY
123 MAIN STREET
ANYTOWN, PA 12345

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POL. EFF. DATE (MM/DD/YY)	POL. EXP. DATE (MM/DD/YY)	LIMITS	
A	**GENERAL LIABILITY**	*12345678*	*TBD*	*TBD*	GENERAL AGGREGATE	*$2,000,000*
	X COMMERCIAL GEN LIABILITY				PRODUCTS-COMP/OP AGG	*$2,000,000*
	OWNERS & CONTRACTOR'S PROT				EACH OCCURRENCE	*$2,000,000*
					FIRE DAMAGE (Any one Fire)	
					MED EXP (Any one person)	
A	**AUTOMOBILE LIABILITY**	*12345678*	*TBD*	*TBD*	COMBINED SINGLE LIMIT	*$2,000,000*
	X ANY					
	AL NED OS				DI r P	
	SC D AUTOS					
	HIRE				BOD (Per	
	NO OWN TO					
					PR E	
	GARAGE ITY				AU ACCIDENT	
	ANY AUTO				OTHER THAN AUTO ONLY:	
					EACH ACCIDENT	
					AGGREGATE	
A					EACH OCCURRENCE	
	UMBRELLA FORM				AGGREGATE	
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** THE PROPRIETOR/PARTNERS/EXECU-TIVE OFFICERS ARE: INCL. EXCL.	*12345678*	*TBD*	*TBD*	STATUTORY LIMITS X	
	THE PROPRIETOR/PARTNERS/ EXECUTIVE OFFICERS ARE: INCL EXCL				EL EACH ACCIDENT	*$500,000*
					EL DISEASE-POLICY LIMIT	*$500,000*
					EL DISEASE-EA EMPLOYEE	*$500,000*

DESCRIPTION : ALL POLICIES SHALL CONTAIN 1) A WAIVER OF SUBROGATION ENDORSEMENT , 2) AN ADDITIONAL INSURED ENDORSEMENT (EXCEPT FOR WORKERS COMPENSATION) , AND 3) AN ENDORSEMENT STATING THAT INSURANCE IS PRIMARY AND NON-CONTRIBUTORY (EXCEPT FOR WORKERS COMPENSATION AND BUSINESS AUTOMOBILE) TO ANY OTHER INSURANCE MAINTAINED BY THE ADDITIONAL INSURED IN FAVOR OF THE CITY OF PHILADELHIA, THEIR COMMISSIONS, OFFICERS, EMPLOYEES AND/OR AGENTS, ASSOCIATED AND/OR AFFILIATED ORGANIZATIONS, SUCCESSORS OR ASSIGNS AS RESPECTS TO THEIR WORK PERFORMED FOR THE CITY OF PHILADELPHIA FOR OPERATIONS COVERED UNDER THE OCIP.

CERTIFICATE HOLDER

CITY OF PHILADELPHIA
Attn: Ella Jackson
City of Philadelphia
Procurement Department
Municipal Services Building, 1st Floor
Philadelphia, PA 19102-1685

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICES BE CANCELED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

Sample "B"

PART 4 – OCIP BID PROCEDURES:

All Contractors and Subcontractors shall remove the cost of insurance as provided under the OCIP per these specifications from their bid price FOR WORK COMPLETED UP TO AND INCLUDING 9/30/2007. FOR WORK OCCURRING ON OR AFTER 10/01/2007, CONTRACTORS AND SUBCONTRACTORS SHALL NOT REMOVE COMMERCIAL GENERAL LIABILITY, UMBRELLA/EXCESS LIABILITY, OR WORKERS COMPENSATION & EMPLOYERS LIABILITY COSTS OF INSURANCE FROM THEIR BID. Completion of OCIP Enrollment Forms and Insurance Certificates will not be required until after successful award.

NOTE FOR DEDUCTIBLE OR SELF-INSURERS

Regardless of the risk financing technique Contractor/Subcontractor employs for its workers' compensation and general liability exposures, Owner expects Contractor/Subcontractor to remove the cost of risk related to these exposures from its bid FOR WORK TO BE COMPLETED UP TO AND INCLUDING 9/30/2007. In lieu of state workers' compensation rates, Contractor/Subcontractor should apply its company-specific costs to determine the bid deduction. Cost elements should include estimated losses, loss handling expenses, and administrative expenses.

PART 5 – CONTRACTOR ENROLLMENT:

When a contract for Work at the Project has been awarded, the Contractor will coordinate with the OCIP Account Manager to arrange for OCIP coverage. **Contractors and Subcontractors of each tier will not be admitted to the project until completion, return and approval of the enrollment package.**

Enrollment Package: When notified by Owner of a Contract award, The Graham Company will provide enrollment information included within the OCIP Insurance Manual.

You should complete these forms (to follow), and return them to the The Graham Company NTI - OCIP Account Manager within ten (10) business days. We recommend that you contact your risk manager, insurance agent, or broker to assist you in completing the OCIP enrollment forms. Additionally, your insurance agent/broker should adjust your regular insurance program to dovetail with the OCIP coverage. Direct any questions concerning the enrollment process to The Graham Company OCIP Account Manager, Franz Wagner.

Completed Enrollment Package for submission will include:

1. Enrollment Application – "Contractor, Subcontractor, and Sub-subcontractor Enrollment Form" (Exhibit Form 1). Contractors and Subcontractors previously enrolled for another project(s) under this NTI- OCIP should use the simplified Enrollment Form (Exhibit Form 2)
2. A Certificate of Insurance (for Contractor only) evidencing the contractor-required coverages outlined in Part 2.
3. Assignment (Form 3) acknowledging the insurance costs under the OCIP shall be bound by the Owner as well as any return premiums and refunds.

FOR WORK PERFORMED UP TO AND INCLUDING 9/30/07, The OCIP Administrator will provide a Certificate of Insurance (Workers' Compensation insurance policy if applicable to follow) naming the Approved Contractor/Subcontractor as an Insured Contractor/Subcontractor. Workers' Compensation claim reporting kits will be distributed directly to the claim contacts identified in the Subcontractor's enrollment application.

PART 6 - SUBCONTRACTOR ENROLLMENT:

Enrollment Criteria Contractor is responsible for initiating OCIP enrollment for all Subcontractors performing on-site work, regardless of subcontract value. With the exception of furnishing a Certificate of Insurance, each Subcontractor shall follow the requirements outlined and complete the forms identified within the Contractor Enrollment Section - Part 5.

IMPORTANT

CONTRACTOR AND SUBCONTRACTOR ARE CONTRACTUALLY OBLIGATED TO HAVE EACH OF THEIR SUBCONTRACTORS OF EVERY TIER, NOW OR IN THE FUTURE, COMPLETE AND SUBMIT AN OCIP APPLICATION. ADDITIONALLY, CONTRACTOR IS RESPONSIBLE FOR ENSURING SUBCONTRACTOR COMPLIANCE WITH OCIP PROCEDURES. OWNER WILL, AT ITS SOLE DISCRETION, CHOOSE WHICH SUBCONTRACTORS WILL BE COVERED UNDER THE OCIP.

PART 7 – CLAIM ADMINISTRATION:

Claims Administration and Procedures for insurance coverages provided under the OCIP will be outlined in detail in the Insurance Manual provided to the successful bidder.

PART 8 – COMPLETION OF WORK:

Notification Upon completion of work under all of your contracts and subcontracts, complete Form 4 (Notice of Work Completion) and fax to:

The Graham Company
Attn: Franz Wagner
Phone: (215) 701-5257
Fax: (215) 567-3203
fwagner@grahamco.com

Final Audit A designated insurer representative may contact the audit contact identified in your Notice of Work Completion (Form 4) to arrange for a final payroll audit.

Record Retention Retain all payroll records related to the OCIP for **at least seven years.**

FORM 1
Page 1 of 2

ENROLLMENT FORM
City of Philadelphia Neighborhood Transformation Initiative
OWNER CONTROLLED INSURANCE PROGRAM
Request for Insurance
Contractor/Subcontractor/Sub-subcontractor Information Form

COVERAGE IS NOT APPLICABLE UNTIL THIS FORM IS SUBMITTED TO AND APPROVED BY THE GRAHAM COMPANY. PLEASE FAX OR E-MAIL THIS FORM PRIOR TO STARTING WORK TO: THE GRAHAM COMPANY, THE GRAHAM BUILDING, ONE PENN SQUARE WEST, PHILADELPHIA, PA 19102, ATTN: Franz Wagner AT FAX #215-567-3203 or e-mail: fwagner@grahamco.com

1. Company Name:_____

2. Company Address: _____

_____

3. Telephone: Area Code ( ) No:_____

4. Federal Employer ID # _____

5. Dun & Bradstreet #: _____

6. Project: _____

7. Contract No: _____

8.

	Project Site Representative	Insurance/Risk Manager	Claims Contact
Name:	_____	_____	_____
Address:	_____	_____	_____
Telephone:	_____	_____	_____
Fax Number:	_____	_____	_____
E-Mail Address:	_____	_____	_____

9. Brief Description of Work To Be Done:

_____

_____

10. Estimated Start Date of Jobsite Activities: _____

11. Estimated Completion Date of Jobsite Activities:_____

12. Classification	13. Class Code	14. Payroll*	15. Manhours*

**** Include only the estimated Jobsite payrolls (manhours) to be directly performed by your company (and not by your subcontractors) for the period coverage is provided.***

FORM 1
Page 2 of 2

16. PA Workers' Compensation Exp. Modification: _____
Anniversary Rating Date _____
Workers' Compensation Bureau Risk No. _____

17. Location of payroll records: _____

Contact: _____Phone Number:_____

18. Estimated Contract Amount: $_____

19. PRESENT INSURANCE COVERAGE

	Workers' Compensation	Commercial General Liability	Business Automobile	Commercial Umbrella Liability
Insurer:	_____	_____	_____	_____
Policy No.:	_____	_____	_____	_____
Agent/Broker:	_____	_____	_____	_____
Address:	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
Account Executive:	_____	_____	_____	_____
Telephone:	_____	_____	_____	_____

20. Your status on this project:

[ ] Contractor [ ] Subcontractor

21. If your firm anticipates work under your contract will be subcontracted to others, indicate the names and addresses of the firms which will act as your subcontractors (attach additional pages, if necessary):

Subcontractor	Contact Person	Phone Number	Subcontract $

Name:_____
Date:_____
(please type or print)

_____
Signature Title

FORM 2
Page 1 of 2

ENROLLMENT FORM
City of Philadelphia Neighborhood Transformation Initiative
OWNER CONTROLLED INSURANCE PROGRAM
Request for Insurance
Contractor/Subcontractor/Sub-subcontractor Currently Enrolled in the OCIP

COVERAGE IS NOT APPLICABLE UNTIL THIS FORM IS SUBMITTED TO AND APPROVED BY THE GRAHAM COMPANY. PLEASE FAX OR E-MAIL THIS FORM PRIOR TO STARTING WORK TO: THE GRAHAM COMPANY, THE GRAHAM BUILDING, ONE PENN SQUARE WEST, PHILADELPHIA, PA 19102, ATTN: Franz Wagner AT FAX #215-567-3203 or e-mail: fwagner@grahamco.com

1. Company Name:_____

2. Company Address: _____

_____

3. Project: _____

4. Contract No: _____

5.

	Project Site Representative	Insurance/Risk Manager	Claims Contact
Name:	_____	_____	_____
Address:	_____	_____	_____
Telephone:	_____	_____	_____
Fax Number:	_____	_____	_____
E-Mail Address:	_____	_____	_____

6. Brief Description of Work To Be Done:

_____

_____

7. Estimated Start Date of Jobsite Activities: _____

8. Estimated Completion Date of Jobsite Activities:_____

9. Classification 10. Class Code 11. Payroll* 12. Manhours*

_____

_____

**** Include only the estimated Jobsite payrolls (manhours) to be directly performed by your company (and not by your subcontractors) for the period coverage is provided.***

FORM 2
Page 2 of 2

13. Estimated Contract Amount: $_____

14. Your status on this project:

[ ] Contractor [ ] Subcontractor

15. If your firm anticipates work under your contract will be subcontracted to others, indicate the names and addresses of the firms which will act as your subcontractors (attach additional pages, if necessary):

Subcontractor	Contact Person	Phone Number	Subcontract $

Name:_____
Date:_____
(please type or print)

_____ _____
Signature Title

FORM 3

CITY OF PHILADELPHIA NEIGHBORHOOD TRANSFORMATION INITIATIVE
OWNER CONTROLLED INSURANCE PROGRAM
ASSIGNMENT BY CONTRACTOR OR SUBCONTRACTOR

In consideration of the City of Philadelphia's agreement to arrange and provide insurance under an Owner Controlled Insurance Program and for other good and valuable consideration, we hereby assign to the City of Philadelphia all rights of cancellation, return premiums, premium refunds, and any other monies due or to become due in connection with the Owner Controlled Insurance Program.

_____
Name of Contractor or Subcontractor

_____ _____
By Date

_____
Title

FORM 4

CITY OF PHILADELPHIA NEIGHBORHOOD TRANSFORMATION INITIATIVE
OWNER CONTROLLED INSURANCE PROGRAM
NOTICE OF WORK COMPLETION

1. Contractor Name and ID#: _____

2. Project: _____

3. Contract #: _____

4. Work Performed: _____

5. Date work completed: _____

_____
Signature

Fax To: Franz K. Wagner
The Graham Company
215-567-3203

Mail To: Franz K. Wagner
The Graham Company
The Graham Building
One Penn Square West
Philadelphia, PA 19102
E-Mail: fwagner@grahamco.com

END OF SECTION

SECTION 00802

NEIGHBORHOOD TRANSFORMATION INITIATIVE - PRIME CONTRACTOR QUALIFICATION

The following is hereby incorporated into the Project Manual and made a part thereof:

1) Neighborhood Transformation Initiative (NTI) Prime Contractor Qualification Application for Demolition Projects, containing:
    a. Cover Letter
    b. Questionnaire and Financial Statement for Qualifying Prime Bidders for NTI Demolition Projects
    c. Neighborhood Transformation Initiative (NTI) Economic Opportunity Plan – Demolition
    d. The City's Minority Business Enterprise Council Anti-Discrimination Policy Disadvantaged Minority, Women and Disabled Owned Business Enterprises (See Standard Specifications for NTI Bid Packages, Section 00813)
    e. Neighborhood Transformation Initiative Owner Controlled Insurance Program Requirements (See Standard Specifications for NTI Bid Packages, Section 00801)
    f. Contractor Safety Plan Requirements (See Standard Specifications for NTI Bid Packages, Section 01324)

Interested bidders for this package are required to be qualified for the NTI Demolition Program to participate. The qualification package is available from the City's Procurement Department.

Qualification packages **shall be submitted either in advance** to Hill International, Inc., One Penn Square West, 30 South 15th Street, Suite 1300, Philadelphia, PA 19102**, or completed in full and attached to the bid.**

In order to submit a bid, Bidders are required to provide <u>ONE</u> of the following three items attached WITH THEIR BID:

1) A fully completed NTI Prime Contractor Qualification Application for Demolition Projects, **OR**
2) A copy of an NTI Demolition Confirmation of Receipt of Qualification Package Letter, **OR**
3) A copy of an NTI Demolition Qualification Letter

END OF SECTION

SECTION 00813

DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

Bidder's Guidelines Relating to Executive Order 02-05

These guidelines pertain to Executive Order 02-05, the City's antidiscrimination policy relating to the participation of disadvantaged minority (M-DBE), Women (W-DBE), and disabled (DS-DBE) owned business in City contracts. These guidelines, presented in a question and answer format, are designed to assist the bidder in submitting a responsive bid. These are guidelines and do not supersede or serve as a substitute for carefully reading and responding to the bid documents entitled "Antidiscrimination Policy -Disadvantaged Minority, Women, and Disabled Owned Business Enterprises" included in your bid package. Please note that these guidelines do not apply to bid packages issued by the City implementing the federal goals program for DBEs pursuant to 49 C.F.R. Part 23, or concessions.

1. **If I forget to submit the Solicitation and Commitment Form with my bid, will my bid be rejected?**

   Yes. The Solicitation and Commitment Form must be submitted with the bid. If you use additional pages to list solicitations, commitments and/or reasons for your inability to make commitments within the participation ranges, all pages must be submitted with the bid.

2. **Can a M-DBE, W-DBE or DS-DBE which is not certified by the Minority Business Enterprise Council, be listed on the Solicitation and Commitment Form and be credited towards the ranges for participation?**

   No. Only those firms which have been certified by the Minority Business Enterprise Council, prior to bid opening, may be on the Solicitation and Commitment Form and credited towards the participation ranges.

3. **Can M-DBEs'/W-DBEs/DS-DBEs listed as subcontractors subcontract and still be fully credited toward the range(s)?**

   Yes. However, M-DBE/W-DBE/DS-DBE subcontractors to which you have made commitments will be evaluated to ensure that they perform at least 75% of the cost of the subcontract (not including the cost of materials, equipment or supplies incident to the performance of the subcontract) with their own employees.

   If the subcontractor contracts out more than 10% of their work, then they will need the expressed approval of MBEC.

4. **Will materials purchased from M-DBE/W-DBE/DS-DBEs be credited toward the range(s)?**

   M-DBE/W-DBE/DS-DBE subcontractors and manufacturers will be credited toward the range at 100%. Customary industry stocking and non-stocking supplies who as their primary business purchase and sell supplies shall be credited at 100%. Brokers, ad-hoc suppliers and non-stocking suppliers which are not commonly and ordinarily the custom in the industry nor a part of the industry's trade practice will not be credited.

5. **If I am an M-DBE/W-DBE/DS-DBE bidding as a prime contractor, may I count myself toward the range?**

   No. However, an M-DBE/W-DBE/DS-DBE which is a partner in a joint venture bidding as a prime, may have its participation "credited" (provided it satisfies the joint venture criteria set forth in the Antidiscrimination Policy) to the extent of its ownership interest in the joint venture.

6. **Do I have to solicit both M-DBEs and W-DBEs?**

   Yes. If the "Invitation for Bid" includes both a range for M-DBE participation and a range for W-DBE participation, solicitations must be made in each category. 1) Solicitations must be real, i.e. the work solicited must be within the scope of the bid specifications. 2) A reasonable number of firms certified by the MBEC and included in its most recent "Directory of Certified Firms", must be solicited. 3) M-DBE and W-DBE firms solicited must be given adequate information and reasonable time to prepare a quote. (If you intend to perform all of the work related to the project utilizing your own workforce and resources and do not need to subcontract or purchase supplies for the project, see Question 12 below.)

7. **Do I have to list all solicitations on the Solicitation and Commitment Form?**

   Documentation of all solicitations must be submitted with the bid, regardless of whether you have committed with a solicited firm. However, the failure to list all solicitations may be waived where the bidder has met each of the projected ranges and is therefore rebuttably presumed not to have discriminated.

8. **Will my bid automatically be rejected for not meeting the projected range(s) for participation?**

   No. You can be deemed both responsive and responsible if you give sufficient reasons for not meeting the projected range(s) including specific reasons for not making solicitations or contractual commitments with the M-DBEs/W-DBEs/DS-DBEs that you have solicited. In order to be responsive, documentation of all solicitations and commitments, and reasons must be submitted with the bid. The reasons given must be sufficient to demonstrate that the bidder's failure to meet the projected range(s) is not a result of discriminatory practices.

9. Do I have to explain why I did not commit with a solicited firm?

Yes. As stated above, specific reasons must be given on the Solicitation and Commitment Form. For example, if you state that an M-DBE's quote was too high, the MBEC will review whether price is your sole criterion for awarding a subcontract. The MBEC may request that you provide quotes from all subcontractors that you have committed to on this project. The MBEC may also request information on other similar contracts, including your private sector work.

10. For requirements contracts, do I need to commit to both a dollar and percentage amount?

No. If the invitation to bid is for a requirements-type contract, a percentage amount will suffice for each commitment made.

11. May I delay making a commitment to an M-DBE/W-DBE/DS-DBE until after I receive the award?

No. All solicitations and commitments must be made and documented on the Solicitation and Commitment Form prior to bid opening. Stating on the form that the commitments will be made after award or listing an indefinite amount of participation (for example, 0%-5%) is not acceptable.

12. If I intend to perform all of the work myself, do I have to solicit and make commitments with M-DBEs/W-DBEs/DS-DBEs in order to submit a responsive bid?

No. Bidders who, consistent with their standard practices, are planning to perform all of the labor of a contract with their own work force and/or to provide their own supplies (from stock currently on hand or to be manufactured by the bidder), are not required, under the Executive Order, to create subcontracting opportunities for M-DBEs/W- DBEs/DS-DBEs in order to meet the projected range(s). Bidders must, however, submit a bid which is responsive to the Order, the bidder must state on the Solicitation and Commitment Form its intention to perform all of the labor and/or to provide all of the supplies (from stock currently on hand or to be manufactured by the bidder) necessary for the contract. Submitting a blank Solicitation and Commitment Form, with no further explanation, would not be deemed responsive despite the bidder's (unexpressed) intention to perform all of the work.

Note:

Bidders who submit a responsive bid that is not within the stated participation ranges are also reviewed for responsibility, i.e., the MBEC will investigate whether discrimination has occurred. In the case of a responsive bidder who does not intend to subcontract, the MBEC would review the bid and any other relevant information to confirm the veracity of the bidder's intention. The bidder's conduct on this bid must be consistent with its standard practice and not simply a contrivance to avoid the Executive Order.

13. If my bid is deemed nonresponsive can I be awarded the contract and correct the defects?

No. If you are deemed nonresponsive your bid will be rejected and you will not be permitted to amend your bid.

14. On bids that include add or deduct alternates, should the amount(s) I am committing to be applied solely to my base bid or to the base and the alternates?

Commitments listed by bidders on the Solicitation and Commitment Form should be based upon the base bid. If the City elects to award any add or deduct alternates, the apparent lowest responsible bidder may be required to amend its Solicitation and Commitment Form accordingly.

15. How do I locate certified M-DBEs/W-DBEs/DS-DBEs?

The MBEC publishes a Directory of Certified Firms. The Directory is available at the MBEC offices (Municipal Services Building, 1401 JFK Blvd., Room 330, Philadelphia, PA 19102) for a charge of $15.00. The Directory may also be used, without charge, at the MBEC office, The Procurement Department Information Counter, MSB, 1401 JFK Blvd., Room 170, Philadelphia, PA 19102, the phone number is 686-4720. and at all twelve regional Free Libraries. Bidders are expected to ascertain the current status of all M-DBE/W-DBE/DS-DBE firms and commodity codes by using the latest published Directory, (make checks payable to the "City of Philadelphia".)

16. Where do I go if I have questions concerning Executive Order 02-05?

The MBEC is available to answer your questions, and is located at the Municipal Services Building, 1401 JFK Blvd., Room 330, Philadelphia, PA 19102, the office hours are Monday through Friday, 8:30 a.m. to 5:00 p.m. Contact the MBEC Public Works Unit and/or Supplies, Services, & Equipment Unit at 686-6232, our fax number is 686-3878.

And/or

The Procurement Department Information Counter, MSB, 1401 JFK Blvd., Room 170, Philadelphia, PA 19102, the phone number is 686-4755.

ANTI-DISCRIMINATION POLICY-DISADVANTAGED MINORITY, WOMEN AND DISABLED OWNED BUSINESS ENTERPRISES

(FOR BIDS TO BE AWARDED BY THE PROCUREMENT DEPARTMENT)

Under the authority of Executive Order No. 02-05, the City has established an anti-discrimination policy relating to the participation of Disadvantaged Minority (M-DBE), Disadvantaged Women (W-DBE) and Disadvantaged Disabled (DS-DBE) Owned Business Enterprise in City contracts. The purpose of this policy is to provide equal opportunity for all businesses and to assure that City funds are not used, directly or indirectly, to promote, reinforce or perpetuate discriminatory practices. The City is committed to fostering an environment in which all businesses are free to participate in business opportunities, flourish without the impediments of discrimination and participate in all City contracts on an equitable basis. In accordance with the contracting requirements of the City, the City's anti-discrimination policy is applicable to this invitation to bid.

The Minority Business Enterprise Council (MBEC) has established projected ranges of participation for this invitation to bid which serve as a guide in determining each bidder's responsibility. These ranges represent the percentage of M-DBE/W-DBE/DS-DBE participation that should be attained from business opportunities existing in the available market absent discrimination in the solicitation and selection of these businesses. These ranges are based upon an analysis of factors such as the size and scope of the contract and the availability of <u>certified</u> M-DBE/W-DBE/DS-DBEs to perform various elements of the contract. Please review these forms carefully as the submission of a Solicitation and Commitment Form (more fully discussed below) with this bid is an element of responsiveness to the bid and failure to submit a Solicitation and Commitment Form will result in rejection of your bid.

A. <u>PARTICIPATION RANGE</u>

1. Under the authority of Executive Order 02-05, the Minority Business Enterprise Council (MBEC) has the authority to establish the M-DBE, W-DBE and DS-DBE participation ranges for the NTI Demolition Bid Packages. These participation ranges serve exclusively as a guide in determining bidder responsibility.

2. Only firms that are certified by the MBEC prior to bid opening will be credited toward the participation ranges. A list of certified firms is maintained by the MBEC and is available for review at the MBEC, Municipal Services Building, 1401 JFK Blvd. Suite 330, Philadelphia, PA 19102

3. M-DBE/W-DBE/DS-DBE subcontractors and manufacturers will be credited toward the participation range at 100%. Stocking suppliers will be credited at 100% Non-stocking suppliers which are commonly and ordinarily the custom in the industry and which have as its principal business and in its own name, the purchase and sale of these supplies, will be credited at 100%. Brokers, ad-hoc suppliers and non-stocking suppliers which are not commonly and ordinarily the custom in the industry nor a part of the industry's trade practice will not be credited.

4. In order to maximize opportunities for as many businesses as possible, a firm that is certified in two or more categories (e.g. M-DBE and W-DBE and DS-DBE or W-DBE and DS-DBE) will only be credited toward one participation range as either an M-DBE or W-DBE or DS-DBE. The firm will not be credited toward more than one category. Bidders will note with their submission which category, M-DBE or W-DBE or DS-DBE, is submitted for credit.

5. An M-DBE/W-DBE/DS-DBE submitting as the prime bidder will not receive credit toward the participation ranges for its own work or supply effort on this invitation to bid. However, the participation of an M-DBE/W-DBE/DS-DBE partner, as part of a joint venture created for this bid, may be credited to the extent of the partner's ownership interest in the joint venture in accordance with the following criteria:

   - The M-DBE, W-DBE or DS-DBE partner(s) must be certified by the MBEC prior to bid opening;
   - The M-DBE/W-DBE/DS-DBE partner(s) must derive substantial benefit from the arrangement;
   - The M-DBE/W-DBE/DS-DBE partner(s) must be substantially involved in all phases of the contract including bidding, planning, staffing and daily management;

   The business arrangement must be customary (i.e., each partner shares in the risk and profits of the joint venture commensurate with their ownership interest, contributes working capital and other resources, etc).

6. M-DBE/W-DBE/DS-DBE subcontractors must perform at least seventy-five percent (75%) of the cost of the subcontract (not including the cost of materials, equipment or supplies incident to the performance of the subcontract) with their own employees.

7. For the purpose of applying the participation ranges on Public Works projects that include add or deduct alternates, commitments listed by bidders on the Solicitation and Commitment Form should be based upon the base bid. In the event the City elects to award any add or deduct alternates, the City reserves the right to require the apparent lowest responsible bidder to amend its Solicitation and Commitment Form, to ensure the bidder's continuing responsibility.

8. In listing amounts committed to on the Solicitation and Commitment Form, bidders should list both the dollar amount and percentage of total bid for each commitment made. (If the invitation to bid is for a requirements-type contract, a percentage amount will suffice.) In calculating the percentage amount, bidders may apply the standard mathematical rules in rounding off numbers. In the event of an inconsistency between the dollar and percentage amounts listed on the Solicitation and Commitment Form, the amount which results in the greater commitment will be used.

B. RESPONSIVENESS

1. Bidders must submit documentary evidence of M-DBE, W-DBE and DS-DBEs who have been solicited and with whom commitments have been made.

   a) Documentation of all solicitations (regardless of whether commitments resulted therefrom) as well as all commitments made prior to bid opening shall be submitted, concurrently with the bid, on the enclosed document entitled "Solicitation and Commitment Form". If the bidder has entered into a joint venture with an M-DBE, W-DBE and/or DS-DBE partner, the bidder should submit along with the Solicitation and Commitment Form, a document entitled "Joint Venture Eligibility Information Form," available at the Office of the MBEC, for the City's review and approval of the joint venture arrangement. Failure to submit the required information on M-DBE/W-DBE/DS-DBE participation will result in rejection of the bid as nonresponsive. (Bidders should note that only commitments that have been made prior to bid opening and listed on the Solicitation and Commitment Form will be credited toward the participation ranges. Since the City must ensure that all bidders respond on equal terms, a bid which indicates that the bidder will make commitments after bid opening will be rejected as nonresponsive.)

   b) Upon award, the completed forms and accompanying documents regarding solicitation and commitments with M-DBE, W-DBE and DS-DBEs become part of the contract. A bidder should only make actual solicitations of M-DBE/W-DBE/DS-DBEs whose work or materials are within the scope of this invitation to bid. Mass mailing of a general nature to M-DBE/ W-DBE/DS-DBEs will not be deemed solicitation, but rather will be treated as informational notification only. A reasonable period of time should be given to all solicited firms to ensure that they have sufficient time to adequately prepare their quotes.

   c) The bidder's listing of a commitment with an M-DBE/W-DBE/DS-DBE as described on the Solicitation and Commitment Form constitutes a representation that the bidder has, prior to bid opening, made a binding commitment to contract with such firm, upon receipt of a contract award from the City.

2. Bidders failing to submit a bid within any one or more of the participation range(s) established for this invitation to bid shall submit concurrently with the bid submission, sufficient evidence which demonstrates to the City that the bidder has not engaged in discriminatory practices in the solicitation and commitment of contract participants. Such evidence shall be contained on the Solicitation and Commitment Form. Failure to submit such evidence will result in the rejection of the bid as non-responsive.

   a) Evidence submitted on this point should indicate:

      1) Whether M-DBE/W-DBE/DS-DBEs were solicited for the type of work or materials to be contracted for and, if not, the reason(s) why no such solicitation was made;

      2) The reasons for not committing with a M-DBE/W-DBE/ DS-DBE which has submitted a quote; and

      3) Where no quotations are received or commitments made within a particular range, the lack of quotations and/or commitments must be shown and explained on the Solicitation and Commitment Form.

   b) Evidence submitted will be reviewed to ascertain whether discrimination has occurred in the solicitation or selection of contract participants. The review will include consideration of the following:

      1) Whether the bidder's actions were motivated by considerations or race or gender or disability. For example, the MBEC may investigate the bidder's contracting activities and business practices on similar public and private sector contracts;

2) Whether M-DBE/W-DBE/DS-DBEs were treated less favorably than other businesses in the solicitation and commitment process. For example, the MBEC will investigate whether M-DBE/W-DBE/DS-DBEs are given the same information and amount of time to prepare a quote as others who were solicited;

3) Whether the bidder's solicitation and commitment decisions were based upon policies which disparately affect M-DBE/W-DBE/DS-DBEs.

C. RESPONSIBILITY

1. Upon receipt of bids for this contract, the bidder's submittal will be subject to review by the MBEC to determine whether the bidder has discriminated in the solicitation and/or selection of contract participants. If the bidder has submitted a bid within each of the projected range(s) for M-DBE/W-DBE/DS-DBE participation, the bidder will be rebuttably presumed not to have discriminated in its selections. If the bidder has not submitted a bid within the projected range(s), the MBEC will initiate an investigation to determine whether discrimination has occurred. After review of the Solicitation and Commitment Form and other relevant information, the MBEC will make a recommendation to the Procurement Commissioner (the "Commissioner") or his/her designee. If the Commissioner, after review of the recommendation and supporting documentation concurs that discrimination has occurred; the bidder will be deemed not responsible and its bid rejected. Bids rejected for responsibility (due to a determination of discrimination) may result in the suspension of the bidder from bidding on and/or participating in any future City contracts for a period of up to three (3) years.

2. M-DBE/W-DBE/DS-DBE percentage commitments are to be maintained throughout the term of the contract and shall apply to the total contract value (including approved change orders and amendments). Any change in commitment, including but not limited to substitutions for the listed firm(s), changes or reductions in the work and/or listed dollar/percentage amounts, must be pre-approved in writing by the MBEC.

D. ACCESS TO INFORMATION

1. The MBEC shall have the right to make site visits to the bidder's place of business and/or job site and obtain documents and information from any bidder, subcontractor, supplier, manufacturer of contract participant that may be required in order to ascertain bidder responsibility.

2. Failure to cooperate with the MBEC in its review will result in a recommendation to the Commissioner that the bidder be deemed not responsible and its bid rejected.

E. RECORDS AND REPORTS

1. The successful bidder shall maintain all books and records relating to its M-DBE/W-DBE/DS-DBE commitments (e.g. copies of subcontracts, joint venture agreement, correspondence, cancelled checks, invoices, telephone logs) for a period of at least three (3) years following acceptance of final payment. These records shall be made available for inspection by the MBEC and/or other appropriate City officials.

2. The successful bidder agrees to submit reports and other documentation to the MBEC as deemed necessary by the MBEC to ascertain the successful bidder's fulfillment of its M-DBE/W-DBE/DS-DBE commitments.

F. REMEDIES

1. The successful bidder's compliance with the requirements of Executive Order 02-05, including the fulfillment of any M-DBE/W-DBE/DS-DBE commitments, is material to the contract. Any failure to comply with these requirements constitutes a substantial breach of the contract. It is further understood and agreed that in the event the Director of Finance determines that the successful bidder hereunder has failed to comply with these requirements the City may, in addition to any other rights and remedies the City may have under the contract, any bond filed in connection therewith or at law or in equity, exercise one or more of the following remedies which shall be deemed cumulative and concurrent:

   a) Withhold payment(s) or any part thereof until corrective action is taken.

   b) Terminate the contract, in whole or in part.

   c) Suspend the successful bidder from bidding on and/or participating in any future City contracts for a period of up to three (3) years.

   d) Recover as liquidated damages, one percent of the total dollar amount of the contract for each one percent (or fraction thereof) of the commitment shortfall. (NOTE: The "total dollar amount of the contract'' shall include approved change orders, amendments and for requirements contracts shall be based on actual quantities ordered.

SOLICITATION AND COMMITMENT FORM *(BID)*

DISADVANTAGED MINORITY (M-DBE), WOMEN (W-DBE), AND DISABLED (DS-DBE) OWNED BUSINESS ENTERPRISES

DEPARTMENT OF FINANCE
MINORITY BUSINESS ENTERPRISE COUNCIL (MBEC)

BID NUMBER	NAME OF BIDDER	DATE OF BID OPENING

List below ALL M-DBE/W - DBE/DS - DBEs that were solicited regardless of whether a commitment resulted therefrom. - Photocopy this form as necessary.

☐ M-DBE ☐ W-DBE ☐ DS-DBE[1]	TYPE OF WORK MATERIALS	DATE SOLICITED		COMMITMENT MADE		GIVE REASON(S) IF NO COMMENT[2]
		BY PHONE	BY MAIL	YES (IF Yes, give date)	NO	
COMPANY NAME						
ADDRESS		QUOTE RECEIVED		AMOUNT COMMITTED TO		
		YES	NO			
CONTACT PERSON / TELEPHONE NUMBER				DOLLAR AMOUNT $		
MBEC CERTIFICATION NUMBER				PERCENT OF TOTAL BID %		

☐ M-DBE ☐ W-DBE ☐ DS-DBE[1]	TYPE OF WORK MATERIALS	DATE SOLICITED		COMMITMENT MADE		GIVE REASON(S) IF NO COMMENT[2]
		BY PHONE	BY MAIL	YES (IF Yes, give date)	NO	
COMPANY NAME						
ADDRESS		QUOTE RECEIVED		AMOUNT COMMITTED TO		
		YES	NO			
CONTACT PERSON / TELEPHONE NUMBER				DOLLAR AMOUNT $		
MBEC CERTIFICATION NUMBER				PERCENT OF TOTAL BID %		

☐ M-DBE ☐ W-DBE ☐ DS-DBE[1]	TYPE OF WORK MATERIALS	DATE SOLICITED		COMMITMENT MADE		GIVE REASON(S) IF NO COMMENT[2]
		BY PHONE	BY MAIL	YES (IF Yes, give date)	NO	
COMPANY NAME						
ADDRESS		QUOTE RECEIVED		AMOUNT COMMITTED TO		
		YES	NO			
CONTACT PERSON / TELEPHONE NUMBER				DOLLAR AMOUNT $		
MBEC CERTIFICATION NUMBER				PERCENT OF TOTAL BID %		

☐ M-DBE ☐ W-DBE ☐ DS-DBE[1]	TYPE OF WORK MATERIALS	DATE SOLICITED		COMMITMENT MADE		GIVE REASON(S) IF NO COMMENT[2]
		BY PHONE	BY MAIL	YES (IF Yes, give date)	NO	
COMPANY NAME						
ADDRESS		QUOTE RECEIVED		AMOUNT COMMITTED TO		
		YES	NO			
CONTACT PERSON / TELEPHONE NUMBER				DOLLAR AMOUNT $		
MBEC CERTIFICATION NUMBER				PERCENT OF TOTAL BID %		

71-400 (Rev. 6/98)

[1] M-DBE/W-DBE/DS-DBEs listed above must be certified by the City Prior to bid opening.

[2] Failure to give reasons will result in your bid being rejected as nonresponsive and may impact upon your responsibility. Use additional pages if necessary.

SECTION 00814

PREVAILING WAGE RATES

NTI Demolition Bid Packages are subject to the Prevailing Wage Rates for Residential Construction and Demolition as published by the City's Labor Standards Unit. See APPENDIX A of the Project Manual.

NOTE:

1. Contractors are advised to contact the Philadelphia Labor Standards Unit with any questions regarding job classification, prevailing wage rates, and fringe benefits.

2. Prior to employing apprentices on a public works project, the contractor is required to provide written evidence of employee's registration with a statewide training program recognized by the U.S. Bureau of Apprenticeship and Training (BAT). Contractors shall forward proper documentation for each bona fide apprentice to:

Philadelphia Labor Standards Unit
Municipal Services Building
1401 John F. Kennedy Boulevard - 6th Floor, Room 630
Philadelphia, PA 19102-1670
Telephone Number: (215) 686-7088/89
Fax Number: (215)686-2116

SECTION 00816

SUBSTANCE ABUSE POLICY FOR CONSTRUCTION AND DEMOLITION CONTRACTORS OF THE CITY OF PHILADELPHIA

I. **RATIONALE**: The use of alcohol and other mood-altering substances impairs the capacity of workers to safely perform their work. The Federal Government recognized this when it promulgated regulations under the Drug Free Workplace Act of 1988. These "impaired workers" are a hazard to themselves and to those who work around them, and to the public. The use of these mood altering materials also poses grave health risks to workers and has a significant negative effect on worker productivity. Construction and Demolition work sites in particular frequently present a variety of hazards to workers and the public. Therefore, it is the goal of the City that its contractors establish policies to ensure that substance misuse and abuse does not imperil any worker or member of the public on any City-sponsored construction or demolition project. While it is our hope that anyone identified by this program is offered a number of options in terms of treatment, rehabilitation and recovery, because these individuals are not employees of the City, the City cannot mandate benefits due to them.

II. **CONTRACTOR OBLIGATIONS**: Contractors who engage in capital construction or demolition work for the City must enforce on their city work sites, a substance abuse policy which, at a minimum, provides for the elements and features listed below.

A. Requirements for Contractors

1. Develop and implement a substance abuse policy which, at a minimum, meets the criteria listed in Section IV below.
2. Enforce in a responsible manner the policy on substance abuse.
3. Maintain in strict confidentiality and in a secure restricted access file any of the records developed in the course of the substance abuse program.
4. All costs related to this testing program are the full responsibility of the contractor.

III. **CITY OBLIGATIONS**: The City shall assure:

A. All contractors for major construction or demolition projects have in place a substance abuse policy which at a minimum meets the standards outlined in Section IV below.
B. Contractors are engaged in actively enforcing their substance abuse policies.
C. Contractors who fail to comply with their obligations under this policy are not disbursed funds until their programs are deemed acceptable or are removed from the project or work site.
D. All records relating to the testing and suspicion of substance abuse are maintained in a strictly confidential manner and in a restricted access file.

IV. **MODEL SUBSTANCE ABUSE POLICY** : The following policy constitutes the minimum required substance abuse policy which a contractor on a City project may enforce. The terms in this policy refer to: the employee means contractor's employee; employer means contractor; supervisor means an employee of the contractor who supervises other employees.

A. **Policy**

1. The word drug when used in this section shall mean illegal drugs, controlled substances including prescription drugs that are abused or misused, and alcohol.
2. The possession, distribution, sale, and use of drugs by employees on the work site is prohibited. The Philadelphia Police will be called in. Additionally, strong disciplinary action up to and including suspension and/or termination will be enforced.
3. Reporting to work or being at work while under the influence of illegal drugs, unauthorized controlled substances, or alcohol is prohibited and shall result in disciplinary action up to and including suspension and/or termination.
4. The use of legally prescribed or over-the-counter medications is a normal event. Many of these medications bear warnings about possible side effects, which could impair work performance. Where the drug manufacturer warns about potential performance effects, the use of these medications must be reported to the employee's supervisor as soon as practical after treatment with these medications has begun.
5. The statements of supervisors, police officers and others, and the presence of indicators (see Appendix 2) can also be used to substantiate the determination that an employee is under the influence of illegal drugs, unauthorized controlled substances, or alcohol if the employee refuses to submit to testing or is intentionally unavailable when tests are scheduled. Any employee who refuses to submit to testing can be disciplined pursuant to this policy and be assumed to be under the influence, in the same way as if a positive test result had been received.

B. **Types of Drug Tests**: An employee/applicant may be requested to undergo a screening test under any of the below listed circumstances. This test may be requested by any supervisor of his employer. All supervisors should read, review and be thoroughly familiar with the employer's substance abuse policy, circumstances which constitute reasonable suspicion and indicators of substance abuse.

1. Prior to employment;
2. Within 24 hours of the occurrence of a workplace accident or incident resulting in personal injury or property damage or workplace circumstances which could have resulted in personal injury or damage to property;
3. When there is reason to believe (reasonable suspicion) that an individual is under the influence of drugs or alcohol when reporting to work or while at the project property during working hours. This must be based on specific contemporaneous, articulable observations concerning appearance, work performance, behavior, or speech.

C. **Drug Testing Program:** Testing protocols and procedures shall be consistent with the U.S. Health and Human Services protocol for workplace drug testing programs. This type of procedure is outlined in Appendix 1.

D. **Education and Training**

1. All supervisors shall receive information about the grounds for reasonable suspicion of substance abuse and indicators and traits of substance abuse (see Appendix 2).
2. The employer shall establish an orientation program for all employees to explain the company's policies on drug and alcohol abuse, its rationale, and consequences.

APPENDIX 1

Specimen collection procedures. Steps shall be taken to ensure that those undergoing tests are supervised at all times and any other measures necessary to prevent sample tampering are employed.

1. The collection site person shall instruct the employee to provide at least 45 ml. of urine under the split sample method of collection.

a. The donor shall urinate into a collection container or a specimen bottle capable of holding at least 60 ml.
b. If a collection container is used, the collection site person, in the presence of the donor, pours the urine into two specimen bottles. Thirty (30) ml. shall be poured into one bottle, to be used as the primary specimen. At least 15 ml. shall be poured into the other bottle, to be used as the split specimen.
c. Both bottles shall be shipped in a single shipping container, together with copies 1, 2, and the split specimen copy of the chain of custody form to the laboratory.
d. If the test result of the primary specimen is positive, the employee may request that the medical review officer direct that the split specimen be tested in a different DHHS-certified laboratory for presence of the drug(s) for which a positive result was obtained in the test of the primary specimen. The medical review officer shall honor such a request if it is made within 72 hours of the employee having been notified of a verified positive test result.
e. When the medical review officer informs the laboratory in writing that the employee has requested a test of the split specimen, the laboratory shall forward, to a different DHHS-approved laboratory, the split specimen bottle, with seal intact, a copy of the medical review officer request, and the split specimen copy of the chain of custody form with appropriate chain of custody entries.
f. The result of the test of the split specimen is transmitted by the second laboratory to the Medical Review Officer.
g. If the result of the test of the split specimen fails to reconfirm the presence of the drug(s) or drug membolite(s) found in the primary specimen, the Medical Review Officer shall cancel the test and report the cancellation and the reasons for it to the employer and the employee.

2. Upon receiving the specimen from the individual, the collection site person shall determine if it has at least 30 milliliters of urine for the primary or single specimen bottle and an additional 15 ml. of urine for the split specimen bottle. If the individual is unable to provide such a quantity of urine, the collection site person shall instruct the individual to drink not more than 24 ounces of fluids and, after a period of up to two hours, again attempt to provide a complete sample using a fresh collection container. The original insufficient specimen shall be discarded. If the employee is still unable to provide an adequate specimen, the insufficient specimen shall be discarded, testing discontinued, and the employer so notified. The Medical Review Officer shall refer the individual for a medical evaluation to develop pertinent information concerning whether the individual's inability to provide a specimen is genuine or constitutes a refusal to test. (In pre-employment testing, if the employer does not wish to hire the individual, the Medical review officer is not required to make such a referral.)

3. Laboratory Analysis Procedures

a. The laboratory shall log in the split specimen, with the split specimen bottle seal remaining intact. The laboratory shall store this sample securely. If the result of the test of the primary specimen is negative, the laboratory may discard the split specimen. If the result of the test of the primary specimen is positive, the laboratory shall remain, the split

specimen is frozen, stored for 60 days from the date on which the laboratory acquires it (see Paragraph (h) of this section). Following the end of the 60-day period, if not informed by the Medical Review Officer that the employee has requested a test of the split specimen, the laboratory may discard the split specimen.

b. When directed in writing by the Medical Review Officer to forward the split specimen to another DHHS-certified laboratory for analysis, the second laboratory shall analyze the split specimen by GCMS to reconfirm the presence of the drug(s) or drug membolite(s) found in the primary specimen. Such GCMS confirmation shall be conducted without regard to any cutoff levels. The split specimen shall be retained in long-term storage for one year by the laboratory conducting the analysis of the split specimen (or longer if litigation concerning the test is pending).

APPENDIX 2

"Reasonable Suspicion" means -- "an articulable belief based on specific facts and reasonable inferences drawn from those facts that an employee is under the influence of or impaired to any degree, by drug and/or alcohol." Circumstances which constitute a basis for determining "reasonable suspicion" may include, but are not limited to:

1. Direct observation of drug and/or alcohol use.
2. The employee's body shows evidence of drug use.(e.g. "track marks", etc.)
3. The employee is found to be in possession of alcohol and/or drugs while on duty.
4. Spontaneous unusual, abnormal, erratic or unacceptable behavior.
5. A documented pattern of unusual, abnormal, erratic or unacceptable behavior.
6. An unusual or suspicious pattern of sick leave usage.
7. A major or serious on duty injury under suspicious circumstances.
8. Reporting to work unfit for duty.
9. Being under any suspension that may be related to substance abuse.
10. Being under current investigation for a disciplinary infraction that may be related to substance abuse.
11. Information is provided by a reliable and credible source.
12. The presence of physical symptoms of drug and/or alcohol use (i.e. glassy or bloodshot eyes, the odor of alcohol on the breath, slurred speech, poor coordination, and/or reflexes, etc.)

SUBSTANCE ABUSE INDICATORS/TRAITS

The following behaviors are consistent with a chemically dependent employee. In most cases, these traits will be accompanied by clear evidence of the employee's deteriorating job performance.

In the absence of any deterioration of job performance or a specific incident giving rise to "reasonable suspicion", supervisors must be able to document enough indicators/traits to meet the "reasonable suspicion" requirement before any testing will take place. All supervisors must maintain a pro-active role in the early detection of possible substance abuse problems.

1. Physical

a. Loss of weight
b. Increased thirst
c. Chronic hoarseness of voice
d. Chronic persistent running nose
e. Tremors/twitching of mouth and/or nose
f. Habitual grinding of teeth/licking of lips
g. Excessive sweating/rise in body temperature

2. Psychological

a. Short temper
b. Severe mood changes
c. Desire for isolation
d. Habitual irritability
e. Questionable judgment
f. Thinking becomes altered
g. Shortened attention span
h. Paranoid / argumentative / sensitive
i. Difficulty remembering / memory lapses
j. Regular periods of severe depression
k. Over-reaction to real or imagined criticism

3. Behavioral

a. Picking at food
b. Sloppy appearance
c. Persistent lateness
d. Frequent absenteeism
e. Needless risk taking
f. Irrational decisions
g. Frantic/rapid speech
h. Delays in starting work
i. Habitually short on cash
j. Constant financial difficulties
k. Compulsive, repetitive behavior
l. Frequent visits to the bathroom
m. Schedules/appointments not kept
n. Alternate periods of high and low energy levels

END OF SECTION

SECTION 00820

EQUAL EMPLOYMENT OPPORTUNITY

1. EQUAL EMPLOYMENT OPPORTUNITY FOR CONTRACTS OVER $10,000.00

1.1 EMPLOYMENT GOALS

The employment goals for this contract are as follows:

1. **Minority - 75% - 80% of total work hours for the Project.**
2. **Female - 10% - 15% of total work hours for the Project.**
3. **Philadelphia Residents - 80% of total work hours for the Project.**

The bidders attention is directed to the Neighborhood Transformation Initiative (NTI) Economic Opportunity Plan contained within the **NTI PRIME CONTRACTOR QUALIFICATION APPLICATION FOR DEMOLITION PROJECTS**. See Section 00802.

During the performance of the Contract:

1.2 Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment, without regard to race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following:

Employment; upgrading; demotion or transfer; recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the City setting forth the provisions of this nondiscrimination clause.

1.3 Contractor will, in all solicitations or advertisement for employees placed by or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

2. FEDERAL LABOR STANDARDS PROVISIONS

Contractor shall adhere to all Federal Labor Standards Provisions.

3. CONFORMANCE WITH OTHER AGENCY RULES AND REGULATIONS

3.1 Contractor shall comply with National Emission Asbestos Standards relating to Demolition Industry; Federal Register Vol. 38, No. 66, Part II and revised Volume 39, Number 87.

3.2 It shall be the responsibility of Contractor to comply with all Applicable Laws, including, without limitation, the Environmental Protection Agency regulations outlined in section 7.1, above, as well as those of the Pennsylvania Department of Environmental Protection, the Pennsylvania Department of Transportation, and the Occupational Safety and Health Administration (O.S.H.A.).

3.3 Copies of standards referenced above, shall be secured from the United States Environmental Protection Agency, Federal Building, Second Floor, 6th and Walnut Streets, Philadelphia PA 19106 and the O.S.H.A. Regional Office, Gateway Building, Suite 2100, 3535 Market Street, Philadelphia, PA 19104.

END OF SECTION

SECTION 00822
SLAVERY ERA INSURANCE DISCLOSURE

City of Philadelphia – Business, Corporate and Slavery Era Insurance Disclosure

In accordance with Section 17-104 of The Philadelphia Code, the Bidder, after execution of this Contract, will complete an affidavit certifying and representing that the Bidder (including any parent company, subsidiary, exclusive distributor or company affiliated with Bidder) has searched any and all records of the Bidder or any predecessor business entity regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era. The names of any slaves or slaveholders described in those records must be disclosed in the affidavit.

The Bidder expressly understands and agrees that any false certification or representation in connection with this Paragraph and/or any failure to comply with the provisions of this Paragraph shall constitute a substantial breach of this Contract entitling the City to all rights and remedies provided in this Contract or otherwise available in law (including, but not limited to, Section 17-104 of The Philadelphia Code) or equity and the contract will be deemed voidable. In addition, it is understood that false certification or representation is subject to prosecution under Title 18 Pa.C.S.A. Section 4904.

See next page for copy of required affidavit.

CITY OF PHILADELPHIA – BUSINESS, CORPORATE AND SLAVERY ERA INSURANCE ORDINANCE

A Business Entity entering into a Contract with the City must complete an Affidavit disclosing any and all records of Participation or Investment in, or Profits derived from Slavery, including Slaveholder Insurance Policies, during the Slavery Era. The Business Entity must complete and submit the Affidavit and any attachments to the Procurement Department. This is required only of the Business Entity actually selected for award of a Contract. It must be done after the Contract or Contract amendment has been executed. Questions regarding the Affidavit may be directed to the Procurement Department Public Information Unit at (215) 686-4720 or (215) 686-4721.

Procurement Department Contract Number: _____ Department Contact Person: _____

AFFIDAVIT DISCLOSING SLAVERY ERA PARTICIPATION, INVESTMENTS, OR PROFITS

1. I, _____ , am authorized to bind contractually the Business Entity identified below.

2. Information about the Business Entity entering into a Contract with the City is as follows:

Business Entity Name: _____ Phone: _____ Fax: _____

Street Address: _____ City: _____ State: _____ Zip: _____

3. Has the Business Entity submitted the Slavery Affidavit previously? ___NO ___YES. Date of prior submission: _____ If "NO," complete Section 4, 5, and 6. If "YES," list the date of prior submission and skip to Section 6 and execute the form unless the Business Entity has discovered new information not disclosed in prior submissions. In that instance, continue with Section 4.

4. The Business Entity came into existence in _____ (year).

5. The Business Entity has searched its records and those of any Predecessor Companies for information relating to Participation or Investments in, or Profits derived from Slavery or Slaveholder Insurance Policies. Based on that research, the Business Entity represents that:

   ____The Business Entity found no records that the Business Entity or any of its Predecessor Business Entities had any Participation or Investments in, or derived Profits from, Slavery or Slaveholder Insurance Policies during the Slavery Era.

   ____The Business Entity found records that the Business Entity or its Predecessor Companies Participated or Invested in, or derived Profits from Slavery during the Slavery Era. The nature of that Participation, Investment, or Profit is described on the attachment to this Affidavit and incorporated herein.

   ____The Business Entity found records that the Business Entity or its Predecessor Companies bought, sold, or derived Profits from Slaveholder Insurance Policies during the Slavery Era. The names of any Enslaved Persons or Slaveholders under the Policies are listed on the attachment to this Affidavit and incorporated herein.

6. I declare under penalty of perjury under the laws of the Commonwealth of Pennsylvania that the representations made herein are true and correct to the best of my knowledge.

Executed on _____ at _____ , _____
(Date) (City) (State)

Signature: _____ Title: _____

Notary: _____

DEFINITIONS

Business Entity means any individual, domestic corporation, foreign corporation, association, syndicate, joint stock company, partnership, joint venture, or unincorporated association, including any parent company, subsidiary, exclusive distributor or company affiliated therewith, engaged in a business or commercial enterprise.

City means the City of Philadelphia.

Contract means any agreement, franchise, lease or concession including an agreement for any occasional professional or technical personal services, the performance of any work or service, the provision of any materials or supplies or rendering of any service to the City of Philadelphia or the public, which is let, awarded or entered into with or on behalf of the City of City of Philadelphia or any Department or Agency of the City.

Enslaved Person means any person who was wholly subject to the will of another and whose person and services were wholly under the control of another and who was in a state of enforced compulsory service to another during the Slavery Era.

Investment means to make use of an Enslaved Person for future benefits or advantages.

Participation means having been a Slaveholder during the Slavery Era.

Predecessor Business Entity means an entity whose ownership, title and interest, including all rights, benefits, duties and liabilities were acquired in an uninterrupted chain of succession by the Business Entity.

Profit means any economic advantage or financial benefit derived from the use of Enslaved Persons.

Slaveholder means holders of Enslaved Persons, owners of business enterprises using Enslaved Persons, owners of vessels carrying Enslaved Persons or other means of transporting Enslaved Persons, merchants or financiers dealing in the purchase, sale or financing of the business of Enslaved Persons.

Slaveholder Insurance Policies means policies issued to or for the benefit of Slaveholders to insure them against the death of, or injury to, Enslaved Persons.

Slavery means the practice of owning Enslaved Persons.

Slavery Era means that period of time prior to June 19, 1865.

SECTION 00830

STANDARD ENVIRONMENTAL CONDITIONS

The Contractor and Subcontractors are bound to the conditions as stated in all parts of this Specification, and the conditions as outlined in this Section. If discrepancies occur, the most stringent shall apply.

1.0 DEFINITIONS

Regulated Materials – For the purpose of this section, includes Lead and lead-containing materials, Polychlorinated Biphenyls (PCBs) ballasts and fluorescent bulbs, and Asbestos-Containing Materials (ACM). Regulated materials also include construction debris contaminated with these materials.

2.0 BID SUBMITTALS

2.1 HAZARD ABATEMENT PLAN BID SUBMITTAL

In order to properly evaluate bids and Contractor's interpretation of the Federal, State and Local regulations, a Hazard Abatement Plan shall be submitted with the bid, that includes the following for each category of regulated material that requires abatement, removal, transportation, and disposal. The plan shall be comprehensive, and organized in a manner such that each material has its own section and set of procedures, regardless of repetition.

2.1.1 Contractor shall specify how site control and regulatory compliance will be maintained for the duration of the project.

2.1.2 Specify the type of engineering and work practice controls that will be used during demolition project.

2.1.3 Specify what type of material and methods that will be used to control access to the work site by unauthorized persons at all times. Access shall be controlled during and after all shifts.

2.1.4 Specify how access to all abatement areas will be managed during the hazard abatement project for areas where construction/separation barriers will not be constructed (i.e. critical barriers, mini-enclosures, etc.).

2.1.5 Specify where you intend to post regulatory signage within the work area (and outside, if applicable).

2.1.6 Specify type of signage including size, colors and specific language.

2.1.7 Areas where access to unauthorized persons (community members, children, etc.) that cannot be managed during non-abatement hours will require phasing that provides for abatement of areas that can be completed within a shift with all evidences of asbestos abatement removed from abatement area at the conclusion of each shift.

2.1.8 Specify coordination with other components of the demolition project.

2.2 Submit a detailed plan of the safety precautions and work procedures to be used in the removal, demolition and disposal of regulated materials. These plans shall include, but not be limited to: personal protective equipment to be used, the location of control areas including clean and dirty areas, buffer zone, showers, storage areas (interior and exterior), change rooms, removal method, interface of trades involved in the construction, sequencing of regulated material related work, disposal plan, type of wetting agent and sealer to be used, planned Occupational Safety and Health Administration (OSHA) air monitoring, and detailed description of the method to be employed in order to control pollution. These plans shall be submitted as part of the bid submittal documentation. Any proposed modifications to these plans after contractor selection shall be submitted for approval at least 5 business days prior to filing regulatory notification and/or the commencement of work, whichever is earlier. Failure to comply with approved Hazard Abatement Plan shall be considered a Breach of Contract.

2.3 PAST PERFORMANCE, EXPERIENCE AND REGULATORY COMPLIANCE HISTORY

Provide a list of all regulatory citations, fines, penalties, damages issued against abatement Contractor and Subcontractors directly or issued to the owner/client for projects that the abatement Contractor and Subcontractors were performing abatement in all states (federal, state and local) over the past five (5) years. Provide similar documentation for each of the hazard categories included in this scope (Asbestos, Lead and PCBs). Specify if any regulatory citations, penalties, damages or fines are currently pending for Contractor and subcontractors.

3.0 CONTRACTOR'S RESPONSIBILITIES

3.1 SUPERVISION

3.1.1 Contractor shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the specification and all regulations. Contractor shall be solely responsible for the means, methods, techniques, sequences and procedures of construction and compliance with all regulations. Contractor shall be responsible for ensuring that the finished Work complies accurately with the Contract Documents and all regulations.

3.2 Contractor shall provide a full-time State licensed certified Contractor supervisor who functions as competent person and general superintendent who is experienced in administration and supervision of abatement projects in the State, County and City where work will be performed, including work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Contractor's representative responsible for compliance with all applicable federal, state, county and local regulations, particularly those relating to asbestos, lead and PCB abatement and shall have authority to act on behalf of Contractor. The Contractor supervisor will be on the Work Site at all times during hazard abatement progress, and shall direct, manage and supervise all work performed on site unless otherwise specified in the specifications or Contract.

This person shall also be familiar with all contract requirements and appropriate procedures for performing work in occupied areas that shall ensure that the public has no access to abatement areas during abatement and non-abatement hours. Appropriate procedures shall be utilized for construction of containment and regulated material removal that will not impact the functions and/or integrity of surrounding building structures and residents. The Contractor supervisor shall not be replaced without written notice to the Project Manager except under extraordinary circumstances. All communication given to the competent person shall be as binding as if given to the Contractor.

3.3 PERMITS

Contractor shall obtain and pay for all permits and licenses needed to perform removal of regulated materials. Contractor shall pay government charges and inspection fees for the execution of the Work, which are applicable at the time of opening of Bids.

3.4 LAWS AND REGULATIONS

CONTRACTOR shall give notices and comply with all Laws and Regulations, including, but not limited to, the Federal, State and Local regulations, that are applicable to furnishing and performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, the City shall not be responsible for monitoring Contractor's compliance with any Laws and Regulations.

3.4.1 The Contractor shall employ only methods of construction or erection, hoists, rigging forms, scaffolding, cribbing, tools, structures, etc., at the site of the work which conforms to the requirements of the American National Standards Institute (ANSI), "Safety Code for Building Construction, Safety Codes for Hoists, Scaffolding and Demolition", the National Safety Council, and of Local, State and Federal Safety Laws and Building Codes.

3.4.2 Regulatory compliance shall be maintained by the Contractor for subcontractor activities, including but not limited to, employee activities of the Contractor and subcontractor. In the event of a regulatory interpretation difference between Contractor, subcontractor and other parties, the interpretation of the Design Professional shall be the interpretation utilized, at no additional cost to the City

If Contractor observes that the Specifications or Plans are at variances with any Laws or Regulations, Contractor shall give City prompt written notice. If Contractor performs any Work knowing or having reason to know that it is contrary to such Laws or Regulations, and without such notice to City, Contractor shall bear all costs arising there from; however, it shall be Contractor's primary responsibility to make certain that all work performed by the Contractor and his subcontractors is in compliance with all Federal, State and Local regulations.

3.4.3 Any fine or penalty assessed by a regulatory agency is the responsibility of the Contractor. The Contractor is responsible for any delays related to regulatory agency actions related to regulated materials abatement activities.

3.4.4 Waste shipment manifest and all related project documentation, including personnel air monitoring results, shall be provided periodically as follows:

- Waste shipment manifests shall be provided within 20 calendar days after removal of materials from specific site. Interim storage of abated materials is prohibited for this project in its entirety.
- A copy of all OSHA/personnel monitoring results shall be forwarded to the project designer on a weekly basis. Contractor shall immediately modify work practices and engineering procedures, and re-evaluate personal protective equipment in the event of elevated OSHA monitoring results. Samples identified by the laboratory as "too dirty to read," or "overloaded," are considered to have exceeded the OSHA Permissible Exposure Limit (PEL). Contractor shall immediately submit a revised work plan to the Project Designer that represents work practices and engineering controls that will prevent future "overloaded" sample results on said project.

3.4.5 Contractor shall designate a competent person at the site whose duty shall be the prevention of accidents and ensure regulatory compliance.

3.5 FIRE PROTECTION

The Contractor shall conduct the Work with strict consideration to fire protection, and shall notify and comply with the requirements of the local fire department. Portable fire extinguishers shall be provided as required by OSHA regulations and the Fire Department. Storage of flammable materials shall be in areas designated by the City, and shall comply with all NFPA (National Fire Protection Association) requirements applicable regulations.

Smoking at the project site is prohibited.

3.6 SAMPLES

Contractor shall provide chain-of-custody documentation for any samples collected at the project site and shall have written authorization from the City prior to collecting any samples.

4.0 LICENSING

The Contractor and all subcontractors performing abatement of regulated materials must have all proper licensing. This includes, but is not limited to appropriate Supervisor and Worker licenses for each discipline. If a Contractor's company license, supervisor, worker, and any other licensing is required for work with a regulated material, at least one copy of licenses must be on-file with the City, with copies available for inspection at all times on-site.

5.0 REGULATORY COMPLIANCE

It shall be the responsibility of the Contractor to comply with all applicable regulations governing the removal, transportation, and disposal of regulated materials including but not limited to lead, PCBs and asbestos-containing materials.

6.0 CITY'S OR INSPECTOR'S STATUS DURING CONSTRUCTION

6.1 ACCESS TO WORK

The City, inspectors, testing agencies and government agencies with jurisdictional interest will have access to the Work at reasonable times for their observation, inspecting and testing. Contractor shall provide proper and safe conditions for such access.

Contractor will have available any protective clothing and/or equipment required for entrance into work areas for use by authorized visitors.

7.0 TESTS AND INSPECTIONS

7.1 Contractor shall give City timely notice of readiness of the Work for all required inspections, tests or approvals.

7.2 If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved, Contractor shall assume full responsibility thereof, pay all costs in connection therewith and furnish City or other specified party the required certificates of inspection, testing or approval except for third party air monitoring.

7.3 All inspections, tests or approvals other than those required by Law or Regulation of any public body having jurisdiction shall be performed by organizations- acceptable to City.

7.4 If any Work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of City, it must, if requested by City, be uncovered for observation. Such uncovering shall be at Contractor's expense unless Contractor has given City timely notice of Contractor's intention to cover the same and City has not acted with reasonable promptness in response to such notice.

7.5 Neither observation by City nor inspections, tests or approvals by others shall relieve Contractor from Contractor's obligation to perform the Work accordance with the Contract Document and federal, state and local regulations and Codes.

8.0 EXAMINATION OF SITE, QUANTITY OF WORK AND TIME OF COMPLETION

8.1 The Contractor shall examine the site of the Work, the quantity of Work, and the time of completion, and satisfy himself that the Work can be completed as set forth in these Specifications and Contract Documents and in compliance with all applicable regulations including allowance of appropriate time for monitoring, visual inspections and air sampling clearance based on off-site analytical analysis.

All trips for the purpose of site inspections shall be made by appointment through the City.

NO UNSCHEDULED INSPECTIONS WILL BE ALLOWED.

9.0 NOTICE OF COMPLETION

9.1 The Contractor will certify that a licensed supervisor has completed visual inspection in each work area and that all Regulated materials have been removed and the area is safe for re-occupancy by the City. This certification will be submitted to the Project Manager prior to re-occupancy of the area by un-licensed individuals.

END OF SECTION

SECTION 01150

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 BID FORM ITEMS

A. General Statement Concerning Bid Form Items: The prices bid in the Bid Form shall constitute complete payment for the Work of the Contract, which Work is as specified in the Project Manual and as indicated on the Drawings.

1. Work and services of an administrative nature and such other similar work as specified in various Specifications Sections, and not referenced hereinafter in the commentary paragraphs under the Item Description article, is also considered incidental to the Work of the Contract, for which no separate or additional payment will be paid.

1.02 MEASUREMENT

A. Measurement For Bid Form Items: Measurement for payment of the Bid Form items will be made on the basis of completion of the Work in accordance with the Contract Documents and as stated hereinafter in the Article entitled Item Descriptions.

1. Unit Price Bid Form Items listed under Estimated Quantities as Each or Lump Sum items shall be measured as stated, except where specified otherwise hereinafter.

2. In the case of Unit Prices, the prices shall be applied to the measurements of the actual units of work performed.

1.03 PAYMENT

A. Current Payments: Payments will be made as stated in the Agreement and at the Unit Prices and Lump Sum Price or Prices bid in the Bid Form, and in accordance with Section 00700 – Terms and Conditions of Bidding and Contract – Article 46 – Scope Of Payments.

B Partial Payments- Unit Price Items: Partial payments for Unit Price Bid Form Items may be granted only as exceptions and only made if approved by the Project Manager in accordance with the actual amount completed and accepted, measured as stated herein.

C. General Statement Concerning Item Descriptions: The Item Descriptions in the Bid Form are written in an abbreviated format and do not constitute an accurate description of the Work. The Work of the Bid Form Items includes the work of the Specifications Sections referenced hereinafter in the commentary paragraphs concerning the Bid Form Item Description. Such Work also includes the incidental construction as may be included by secondary references to other Specifications Sections in the referenced Sections.

1. Work of Specifications Sections not referenced in the Unit Price Item Description paragraphs is considered incidental to the entire work of the Contract, for which no separate or additional payment will be paid.

D. Each and Lump Sum Items: Unit Price Bid Form Items with Each or Lump Sum entered under Estimated Quantities shall be measured as stated, except where specified otherwise.

E. Mobilization. Upon receipt of the Notice to Proceed, the contractor may submit a payment application (in accordance with the provisions of this contract and the City's payment application procedures) for Mobilization. This payment application is intended to provide an early payment to the contractor for the cost of bonds, insurance, and mobilization to the site for the contractor and its subcontractors. The amount of the Mobilization payment application shall not exceed 5% of the sum of the prices for the demolitions and party wall treatments listed in Section 1 of the bid form.

F. Demolition of Existing Structures, Complete: Section 02050, for various types and sizes as indicated in the Bid Form.

1. Demolition: Measurement by unit, Lump Sum Price each.
2. The right is reserved to withhold payment for Demolition in the event the Contractor has failed to complete specified cleanup.
3. 50% Payment for Demolition will be made once the house is completely demolished, all debris has been removed from the lot, and the lot completely backfilled.
4. 100% Payment for Demolition will be made once the specified wall restoration system has been installed for the adjacent structures to remain, and all topsoil placement and seeding is complete.
5. No separate payment for porch restoration, debris removal, backfilling, site preparation, soil removal, grading, topsoil placement, seeding, and hauling and disposal of material.
6. The contractor must include the cost of the removal of Non-Friable Asbestos Containing Materials in the LS Price bid. This includes any Asbestos Containing Material indicated on the Asbestos Investigation Reports as bid "Non-Friable" or as "No removal Necessary."

G. Asbestos Abatement, Complete: Section 02071, for various types and sizes at the specific locations indicated in the Bid Form.

1. Measurement by unit price.
2. No separate payment for hauling or disposal of material.
3. This Line item shall govern the cost for removal of asbestos containing materials that are identified as Friable.

H. Exterior Wall Finishing, Complete: Section 07241 or 09225.

1. Measurement by unit, Lump Sum Price each.
2. No separate payment made for patching existing wall, or remaining roof parapet opening repairs.
3. No separate payment for repairing existing porch system or connecting new wall system to existing roof.

I. Topsoil and Seeding of Existing Vacant Lots, Complete: Section 02225

1. General Statements:
   a. City to remove debris, vegetation and 6-inches of existing soil in preparation of the topsoil and seeding placement on existing vacant lots only.
   b. No separate or additional payment will be made for performing any additional excavation or any other work required to prepare the sub-grade to receive the specified topsoil and seeding
   c. No separate or additional payment made for dust control.
2. Measurement:
   a. Square Foot: In figuring quantities for payment under the applicable items, the payment will be determined by the actual quantity installed, as measured in the field.

J. Fencing, Complete: Section 02444 and Section 02445; for various types and sizes indicated in the Bid Form.

1. Measurement:
   a. Linear Foot: In figuring quantities for payment under the applicable items, the payment will be determined by the actual quantity installed, as measured in the field.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01311

PROJECT COORDINATION

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section describes the Prime Contractor's responsibilities to coordinate the work and related administrative procedures.

1.02 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

1.03 SUBMITTALS

A. Submit the following prior to or coincidental with the initial application for payment.

1. List of Contractor's staff assigned to the project and responsibilities including personnel on and off-site. Include mailing address, delivery address, phone, fax, mobile phone, etc. For at least three (3) staff, list phones where personnel can be reached during non-work hours for emergencies.
2. List of Contractor's consultants and sub-Contractors with similar requirements as above.
3. List of principal suppliers and fabricators with similar requirements as above. No emergency phone number required.
4. List of Utilities and/or their designated Contractors authorized to perform utility work related to service disconnects and temporary utility services for Prime's site office.

1.04 OBSERVATION OF WORK BY OTHERS

A. Observation of the Work by the City, Project Manager, Inspection and Testing Agencies or any other party shall not be interpreted as relieving the Contractor from responsibility for coordination of all Work, superintendence of the Work, and scheduling and direction of the Work or any other requirement of the Contract.

1.05 CONTRACTOR'S RESPONSIBILITIES

A. Coordinate the Work and Schedules of each separate Sub-Contractor.

B. Coordinate construction activities included under each Sub-Contractor to assure efficient and orderly installation of each part of the Work. .

1.06 LACK OF COOPERATION BETWEEN CONTRACTORS

A. Delays attributable to lack of cooperation between the separate sub-contractors shall not be recognized as a claim for delay. The City shall not pay claims by a Contractor for costs due to such delays.

B. Delays, including delays caused by lack of cooperation, shall result in penalties by the City as stipulated under paragraph 33 of Section 00700, Terms and Conditions of Bidding and Contract.

1.07 SUBCONTRACTOR'S RESPONSIBILITIES

A. Comply with the direction of Contractor in coordination efforts listed above.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01312

PROJECT MEETINGS

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section specifies each Contractor's administrative and procedural requirements for project meetings. Requirements contained herein in no way limit each Contractor's responsibility to effectively communicate with parties involved in order to meet the requirements of the Contract.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.
B. Project Coordination: Division 1.
C. Construction Scheduling: Division 1.

1.03 ADMINISTRATION

A. The Project Manager for this contract is, as indicated in Section 00100 – Instructions to Bidders. The Project Manager will schedule and administer the pre-construction meetings, periodic project meetings, pre-installation, coordination and other specially called meetings throughout the progress of the work. She/he will also:
   1. Prepare agenda for meetings.
   2. Distribute written notice of each meeting four (4) days in advance of meeting date.
   3. Make physical arrangements for meetings.
   4. Preside at meetings.

B. During the course of the pre-construction meetings, periodic project meetings, pre-installation, coordination and other specially called meetings throughout the progress of the work, the Project Manager or his/her Designee will:
   1. Record the minutes, including all significant proceedings and decisions.
   2. Reproduce and distribute copies of minutes within three (3) days after each meeting to: all participants in the meeting; and all parties affected by decisions made at the meeting.

C. Representatives of Contractors, subcontractors and suppliers attending the meetings shall be qualified and authorized to act on behalf of the entity each represents.

1.04 PRE-CONSTRUCTION MEETING

A. Attendance
   1. Project Manager.
   2. Contractor's Representatives.
   3. Major subcontractors.

B. Suggested Agenda
   1. Discussion of coordination of Contract.
   2. Discussion on major subcontracts and suppliers and projected construction schedules.
   3. Critical work sequencing.
   4. Major equipment deliveries and priorities.
   5. Project Coordination and designation of responsible personnel.
   6. Procedures and processing of field decisions, proposal requests, submittals, change orders and applications for payment.
   7. Procedures for maintaining Record Documents.
   8. Use of premises, office, work and storage areas, and City's requirements.
   9. Construction facilities.
   10. Temporary utilities.
   11. Housekeeping procedures.
   12. Dispute resolution.
   13. Discussion of Philadelphia Water Department Issues.
   14. Street Closure Permit & Pedestrian and Vehicular Maintenance for Traffic Concerns.
   15. Utility notification for service shutdowns, PA One Call update, impact to roadways and footways within the project limits.

1.05 PROGRESS, PRE-INSTALLATION AND COORDINATION MEETINGS

A. Schedule regular and special meetings, as required by progress of the Work.

B. Location of the Meetings - The Project field office of the Contractor [or as otherwise directed].

C. Attendance

1. Project Manager.
2. Contractor's Representatives.
3. Subcontractors as appropriate to the agenda.
4. Suppliers as appropriate to the agenda.
5. Others as appropriate.

D. Suggested Agenda

1. Review and approval of minutes of previous meeting.
2. Review of work progress since previous meeting.
3. Field observations, problems, conflicts.
4. Problems which impede Construction Schedule.
5. Coordination issues between the Contractors.
6. Review of off-site fabrication, delivery schedules.
7. Corrective measures and procedures to regain projected schedule.
8. Revisions to Construction Schedule.
9. Plan progress, schedule, during succeeding work period.
10. Coordination of schedules.
11. Review submittal schedules; expedite as required.
12. Maintenance of quality standards.
13. Review proposed changes for:
    a. Effect on Construction Schedule and on completion date.
    b. Effect on other contracts of the Project.
14. Review record drawings.
15. Update of Utility Coordination for service shutdowns.
16. Final punch list items to include review of ditch restorations made for utility shutdowns in the right of way. Coordinate with Streets Department.
17. Other business.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01321

CONSTRUCTION PHOTOGRAPHS

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section describes pre-demolition record photographic services provided by the Contractor required to record the existing conditions of all properties to be demolished and all adjacent properties to remain, as well as the condition of the public right-of-way adjacent to the project site.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

1.03 SUBMITTALS

A. Digital images – Three (3) hard copies of each view. Forward one (1) print each to City and Project Manager and retain one (1) for Contractor's files. Submit catalog of all views on compact disc.

B. Videos - Three (3) copies. Forward two to Project Manager and retain one (1) for Contractor's files.

C. Submit hard copy images and videotape prior to commencing demolition operations on the specific properties.

PART 2 PRODUCTS

2.01 DIGITAL IMAGES (HARDCOPY)

A. Color

B. Minimum image size shall be 3 inches by 5 inches.

C. Identify each image listing:

1 Address (addresses) of property (properties).
2. Orientation of view.
3. Date and time recorded.

2.02 VIDEO CASSETTES

A. Standard size and standard length VHS cassette with storage box.

B. Identify each cassette, listing:

1. Name of project and address (addresses) shown.
2 Date of exposure.
3 Name and address of photographer.

PART 3 EXECUTION

3.01 DIGITAL IMAGES (HARDCOPY) AND VIDEOS

A. Take a sufficient number of initial photographs to document clearly the existing conditions of adjacent structures in order to determine potential damage caused by the demolition operations. Photographs shall be taken prior to start of demolition. Post-demolition photographs shall be taken prior to the restoration of party walls in order to sufficiently document condition of party wall prior to restoration. Images shall include but not be limited to the front, back and roof of the property.

B. Video tape record existing site conditions emphasizing recording of condition of structures to remain, which are adjacent to the demolition activities. Progress recordings at sufficient intervals to document progress shall be provided to give an overview of progress and emphasize recording of utilities and services that shall be concealed by future work. Include a surveyor rod or other similar large readable measuring device in recording to indicate actual size.

C. Retain electronic files on compact disc and original video for three (3) years and make additional copies as may be requested by City or Project Manager at cost of reproduction.

END OF SECTION

SECTION 01322

PROGRESS REPORTS

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section specifies administrative and procedural requirements for progress reports prepared by the Contractor.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections

1.03 DAILY REPORT

A. Contractor shall prepare a Daily Report including:

1. Name of project.
2. City Project number.
3. Date of report.
4. Weather conditions.
5. Manpower status on each type of work being performed.
6. Overtime worked, and planned.
7. Work progress.
8. Environmental problems and corrections.
9. Other information, such as special events or occurrences, accidents, recommendations, suggestions, visitors, major equipment or materials received, tests, inspections, equipment start-up and check out, occupancy.
10. Utility work related to demos, within project site and in adjacent right of way (footway and roadway).

B. Submit copies of reports weekly to Project Manager.

1.04 MONTHLY REPORT

A. Each Contractor shall prepare a synopsis of the previous month's activities, including:

1. Name of project.
2. City Project number.
3. Date of report.
4. Weather conditions for the month compared to normal.
5. Work progress from previous month.
6. Copies of all previous month’s schedules.
7. Updated schedules with explanations of deviation from previous.
8. Milestone schedule events for the upcoming month.
9. Corrective measures and procedures to regain projected construction schedule.
10. Review of status of submittals.
11. Review of status of Change Orders and/or requested Change Orders.
12. Other information of importance from previous month or forecasted for upcoming month.
13. Update of utility coordination for service shut-offs and street and/or footway restorations.

B. Submit copies of reports monthly to Project Manager.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01323

CONSTRUCTION SCHEDULING

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section specifies administrative and procedural requirements for schedules prepared by the Contractor.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

1.03 DEMOLITION / CONSTRUCTION SCHEDULE

A. Each Contractor shall prepare a fully developed computerized, horizontal bar-chart type demolition / construction schedule as follows:

1. Bar Chart Schedule:

   Initial Construction Schedule: Within 7 calendar days after Notice to Proceed the Contractor shall submit an initial demolition / construction schedule for City review. After the City's review and comments the Contractor shall submit a final schedule within 7 calendar days.

   The schedule shall be in CPM format and show one continuous critical path (0 days float) throughout the duration of the project and shall indicate a project completion date on or before the contractual completion date shown on the contract documents.

   Provide a minimum of one activity bar per each lump sum bid item shown on the bid forms. (example: one activity per house, one activity per asbestos abatement per house and one activity per individual wall treatments per house.)

   Each activity shown on the bar chart shall be in proper sequence and include the following data as follows:

   - Activity name
   - Activity duration
   - Percent complete
   - Predecessor activity
   - Successor activity

   Prepare the schedule on a sheet or series of sheets of sufficient width to show data for the entire demolition / construction period.

   Include item in schedule for Utility work and Street/Footway Restoration

2. Schedule Updating:

   The project schedule shall be updated and submitted monthly with the progress payment for that period. The schedule shall be updated by revising each activities percent complete, actual start and finish dates to reflect the actual percent complete during that period.

3. Staffing Plan:

   Provide the number of crews and number of personnel per crew that will be utilized to achieve the planned schedule.

1.04 FORMAT

A. Initial Construction Schedule - Horizontal bar chart form divided vertically by weeks.

1.05 SCHEDULE OF SUBMITTALS

A. Submit a preliminary Schedule of Submittals within 10 days after the Notice to Proceed. Submit the final schedule with the final Contractor's Construction Schedule.

B. Coordinate submittal schedule with the list of subcontracts, schedule of values, submittal register and the Contractor's construction schedule.

C. Coordinate scheduling of interrelated submissions to allow for review of required data and to avoid delays in reviewing submittals caused by lack of coordinated submission.

D. Contractor shall estimate number of re-submissions required for each submittal based on complexity. However, the submittal schedule in no way binds the City to approve a submittal to meet the submittal schedule or construction schedule. It is the Contractor's sole responsibility to prepare acceptable submissions in a timely fashion in order to maintain schedule.

E. Allow for Project Managers review of each submission and resubmission.

F. Prepare the schedule in chronological order. Provide the following information:

1. Related Section number.
2. Submittal category.
3. Name of subcontractor.
4. Description of the part of the Work covered.
5. Scheduled date for the first submittal.
6. Scheduled date for re-submittal.
7. Scheduled date the City's final release or approval.

G. Distribution - Following response to initial submittal, print and distribute copies to the City, subcontractors, and other parties required to comply with submittal dates indicated. Post copies in the Project meeting room and field office.

H. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.

1.06 COORDINATION

A. The Contractor shall prepare an overall schedule including all trades, sub-contracts and utilities.

1.07 UPDATING

A. Updating of the final Construction Schedule and Schedule of Submittals shall be required on a monthly basis.

B. Show all changes occurring since previous submission of updated schedules.

C. Indicate progress of each activity, show completion dates.

D. Include major changes in scope, activities modified since previous updating, revised projections due to changes and other identifiable changes.

1.08 DISTRIBUTION

A. Distribute copies of revised schedules to:

1. Project Manager.

2. Subcontractors.

3. Other Concerned Parties (surety, insurance, etc.).

4. Instruct recipients to report any inability to comply, and provide detailed explanation, with suggested remedies.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01324
CONTRACTOR SAFETY PLAN

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section specifies administrative and procedural requirements for a Safety Plan prepared by the Contractor for this Project.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

1.03 CONTRACTOR'S SAFETY REPRESENTATIVE

A. The contractor shall assign a qualified Safety Representative to the contract on a full-time basis. The Contractor's Safety Representative shall have no duties other than to administer the contractor's safety plan. The minimum qualifications of the Contractor's Safety Representative are:

- Successful completion of the OSHA 510 Course: Occupational Safety and Health Standards in the construction Industry, for which graduates receive an OSHA Construction Safety and Health 30-hour completion card.
- Specific training in safety and loss control practices pertinent to the scope of work of this contract.
- Certified in First Aid and CPR

1.04 SAFETY PLAN

A. The City's Neighborhood Transformation Initiative Project Safety Manual is incorporated by reference and is to be considered part of the contract documents. The requirements set forth in this section and in the NTI Project Safety Manual are considered the minimum safety requirements for this project. The Contractor's Safety Plan shall address these requirements and any other requirements of OSHA 29CFR1910 and 29CFR1926 that are applicable to the contractor's scope of work.

B. The contractor shall submit a site-specific Safety Plan to the Project Manager for review. The Project Manager will secure the necessary City concurrences for approval. On site work shall not proceed until the safety plan is approved by the City.

C. The site-specific Safety Plan shall conform to all applicable Federal, State and City safety regulations and requirements. The plan must, at a minimum, meet the following requirements:

1. Contain the contractor's name, address, submission date, and reference to the specific contract for which the site-specific Safety Plan applies.
2. Contain a complete list of contractor and jobsite contact personnel, including emergency contacts and office, home and cell phone numbers.
3. Include the name, qualifications, background and duties of the contractors' Safety Representative.
4. Define the safety responsibilities of the project superintendent, foremen and employees.
5. Comply with safety requirements contained herein and elsewhere in the Project Manual.
6. Comply with all applicable OSHA Regulations, which at a minimum include the following:

a. <u>OSHA Subpart T</u>

1926.850	Preparatory operations	1926.855	Manual removal of floors
1926.852	Chutes	1926.856	Walls, floors and material with equipment
1926.853	Removal of material through floor openings	1926.857	Storage
1926.854	Removal of walls, masonry sections and chimneys	1926.858	Removal of steel construction
		1926.859	Mechanical demolition

b. <u>OSHA Subparts C,E,F,G,H,I,J,K,L,M,N,O,P,X (as applicable)</u>

1926 Subpart C	Housekeeping	1926 Subpart O	Vehicle Safety
1926 Subpart E	Personal protective equipment	1926 Subpart P	Trenching and excavations
1926 Subpart F	Fire Protection and Prevention	1926 Subpart X	Ladders/Stairways
1926 Subpart G	Barricades	1926.52	Occupational noise
1926 Subpart H	Material Handling	1926.62	Lead/Asbestos
1926 Subpart I	Hand/Power Tools	1926.101	Hearing protection
1926 Subpart J	Welding and cutting	1926.103	Respiratory protection
1926 Subpart K	Electrical Safety	1926.109	Recordkeeping
1926 Subpart L	Scaffolds	1910.146	Confined spaces
1926 Subpart M	Fall Protection		

Note: This prior list of regulations represents the major areas of concern and is in no way meant to imply that compliance with other sections of 29CFR1910 and 29CFR1926 are not required.

7. Provide employee-screening procedures including policy for drug testing.
8. Provide the content of the safety orientation and hazard awareness training to be given by the contractor to all new workers at the project site. Define records to be kept to substantiate each worker's satisfactory completion of the training and a procedure to identify these personnel on the job (e.g., sticker on hard hat).
9. Commit to a risk management program to review and evaluate tasks for potential hazards; a plan to mitigate these hazards and timely coordination and training of work crews in applicable safety procedures.
10. Provide a list of hazardous materials to be used on site and corresponding Material Safety Data Sheets.
11. Provide lockout-tag out precautions to deal with potential live power and utility lines.
12. Include a description of personal protective dress and equipment mandatory for use at the construction site as well as for special tasks.
13. Describe the respiratory protection program. This should include selection of equipment, fit testing, training in equipment use and familiarization with symptomatic warnings.
14. Provide a program for safety record maintenance. Submit sample copies of report and record forms to the project manager. These should include training logs, accident and injury reports, first aid logs, daily/weekly safety inspection checklists, safety coordination meeting minutes, and corrective and disciplinary actions. (Note: A "Wrap-Up" insurance program has been purchased by the City to cover Workmen's Compensation, General Liability, and Pollution Liability. Records and reports must be adequate to cover potential claims.)
15. Define essentials of the fall protection program at the job site.
16. Detail safety procedures for confined space permitting, monitoring, entry and emergency extrication.
17. Describe procedures for job site security, barricades, fencing warning signs, etc. to restrict site access and provide for public safety.
18. Prescribe procedures for hot-work/fire protection including permitting, shielding, fire watch, fire extinguisher placement.
19. Include an emergency communication and response plan for security, fire and rescue. Outside emergency response resources and medical service providers shall be listed. Emergency response drills should also be prescribed.
20. Include a plan to ensure adequate ventilation, dust control, sanitation and safe drinking water.
21. Prescribe site storage requirements for hazardous and flammable materials.
22. Include housekeeping and debris removal procedures.
23. Contain a copy of the contractor's substance abuse policy in accordance with Specification Section 00816
24. Contain a copy of the contractor's Tool Box Talk program.
25. Contain a copy of the contractor's NTI Jobsite Orientation Program for its employees.
26. Contain copies of all safety training documentation for the Contractor's Safety Representative and other employees assigned to the work, such as OSHA 10 hour, OSHA 510 (30 hour), OSHA 500, CPR/First Aid, etc.

1.05 COORDINATION

A. The Contractor shall coordinate its Safety Plan to include all trades, sub-contracts and utilities. The Contractor shall ensure that all subcontractors are familiar with and abide by the Safety Plan.

1.06 UPDATING

A. Updating of the final Safety Plan shall be required periodically as the work of this Contract progresses. Include major changes in Plan, and activities modified since previous updating.

1.07 DISTRIBUTION

A. Distribute copies of the Safety Plan to:
   1. Project Manager.
   2. Subcontractors.
   3. Other Concerned Parties (surety, insurance, etc.).
   4. Instruct recipients to report any inability to comply, and provide detailed explanation, with suggested remedies.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01330

SUBMITTALS

PART 1 GENERAL

1.1 DESCRIPTION OF WORK

A. This Section describes the Contractor's administrative and procedural requirements for submission of shop drawings, product data, samples and other required information.

1.2 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

B. Submittal Schedule specified in Construction Scheduling, Section 01323.

1.3 WORK WITHOUT APPROVED SUBMITTALS

A. City may withhold payment for the value of Work installed without first obtaining approved submittals, when submittal is required by individual specification sections.

1.4 SHOP DRAWINGS

A. Shop drawings are Contractor's or subcontractor's Drawings made specifically for this Project, for use in fabrication and installation.

B. Shop drawings must show sufficient data including layout, fabrication and erection details to establish evidence of conformance with design concept and compliance with the Contract Documents. Shop drawings must show relationships with adjacent construction.

C. Do not use reproductions of Contract Drawings as Shop Drawings unless specifically permitted in the Contract Documents.

D. Identify details by reference to sheet and detail numbers shown on Contract Drawings and by reference to paragraphs and specification section.

E. Orient Shop Drawings in same manner as drawings.

F. Manufacturer's Standard Schematic Drawings

1. Modify drawings to delete information that is not applicable to Project. Drawings showing information which is not applicable or unaltered standard drawings shall be returned without review.
2. Add supplemental information applicable to Project.

1.5 PRODUCT DATA

A. Manufacturer's Catalog Sheets, Brochures, Diagrams, Schedules, Performance Charts, Illustrations and Other Standard Descriptive Data.

B. Clearly mark each copy to identify materials, products or models applicable to this Project. Submittals not marked shall be returned without review.

C. Show colors when required for evaluation, record or other purpose. Where product data is printed in color, submit all copies in original colors as published.

D. Show dimensions and clearances required.

E. Show performance, characteristics and capacities.

F. Show wiring and piping diagrams, and controls.

G. Show by reference to paragraphs and specification section.

1.6 SAMPLES

A. Samples: Actual samples of products proposed for use. Samples must be of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of product or material, with integrally related parts and attachment devices.
2. Full range of color, texture and patterns.

1.7 COORDINATION

A. Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

B. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.

C. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.

D. The City reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

1.8 SUBMISSION REQUIREMENTS

A. Comply with Schedule of Submittals.

B. Accompany each submission with a transmittal indicating project name, location, City's project number, referenced specification number, submission number, date, item submitted, Contractor's name, Sub-contractor, supplier or manufacturer.
   1. Transmittal shall include Contractors certification that information complies with Contract Documents.
   2. Indicate on transmittal or on submittal deviations from Contract Documents requirements.

C. Copies
   1. Submit five (5) of each shop drawing and Product Data.
   2. For sample selections, submit one (1) set. For sample approval, submit three (3) sets. The Project Manager will retain one (1) set.

D. Where product data is printed in color and requires color for evaluation, record, or other purpose, all copies submitted shall be in original colors as published.

E. In addition to information required on the transmittal, submittals shall include:
   1. Relation to adjacent structure or materials.
   2. Field dimensions, clearly identified as such.
   3. Finishes.
   4. Shipping and operating weights
   5. Gauges, fastenings, reinforcements, welding details.
   6. Applicable standards, such as ASTM or Federal Specification numbers.
   7. A blank space, 3 inches by l0 inches for action stamp.

F. Contractor's Review:
   1. Contractor shall review each submittal and indicate approval with a stamp, dated, initialed and/or signed. Review shall include but not be limited to; verification of field measurements, coordination with all trades involved and compliance with Contract Documents. The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the City's or Project Manager's action on submittals unless the Contractor has given specific notice of deviation at the time of submission and written approval of the specific deviation is given. The Contractor shall not be relieved from responsibility for errors or omissions in submittals by the City or Project Manager's approval thereof.

   2. If Contractor does not review submittals and provide the signed approval stamp before sending them to the Project Manager, they will be returned unchecked.

1.9 SUBMISSION ROUTING

A. Forward submittal direct to Project Manager.

B. Project Manager will forward Submittals back to Contractor.

1.10 CITY'S RESPONSIBILITY

A. Review submittals within 10 working days of receipt.

B. Review for conformance to design concept of Project and for compliance with information given in Contract Documents. Review of separate item does not constitute review of an assembly in which item functions.

C. Affix stamp and initials or signature certifying to review of submittal.

D. Project Manager's action on submittals will result in the making of one of the following notations with related meanings:

1. APPROVED: The work involved may proceed, and no further submission is required.
2. APPROVED AS NOTED: The work involved may proceed incorporating comments. Annotations do not authorize changes to Contract Sum.
3. REVISE AND RESUBMIT: The work involved may not proceed. Submittal must be corrected and resubmitted.

E. REJECTED: The submittal is not in accordance with the Contract Documents, and a completely new submittal is required.

F. In the event any comment made to the Submittal results in a claim for a change in the Contract, the Project Manager shall be notified immediately and fabrication may not be undertaken until contract modification procedures are completed.

1.12 RESUBMISSION REQUIREMENTS

A. Identification of Changes - Clearly identify changes made from the initial submittal other than those requested by the Project Manager. The Project Manager will review only those changes requested and those identified by the Contractor.

1.13 DISTRIBUTION OF APPROVED SUBMITTALS

A. Contractor shall reproduce and distribute copies of submittals having the City's stamp ("Approved" or "Approved as Noted") as required to coordinate and complete the Work and to records documents file.

1.14 SUBSTITUTIONS

A. Substitutions submitted as a shop drawing, product data or sample will be returned without action.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01410

CODES, REGULATIONS AND STANDARDS

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section describes each Contractor's responsibilities regarding codes, regulations and standards included in the Contract Documents by reference.

1.02 RELATED REQUIREMENTS

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections

B. All technical sections.

1.03 APPLICABLE CODES AND REGULATIONS

A. Contractor must comply with all applicable federal, state and local codes and regulations. The following local codes and regulations are applicable to the project. The list does not represent all codes, regulations, and standards:

1. The Philadelphia Building Construction and Occupancy Code
   a. The Philadelphia Administrative Code
   b. The Philadelphia Building Code
   c. The Philadelphia Electrical Code
   d. The Philadelphia Fire Prevention Code
   e. The Philadelphia Mechanical Code
   f. The Philadelphia Plumbing Code
   g. The Philadelphia Property Management Code

2. NFPA 241, Standard for Safe Guarding Construction, Alterations, and Demolition Operations.

3. Philadelphia Water Department Regulations
   a. Section 402: Hydrant Permits
   b. Section 403: Backflow Prevention
   c. Section 501.3(a)(2)(B): Sanitary Sewer Regulations
   d. Section 501.3(a)(2)(S)(I): Street Inlets and Sewer Manholes
   e. Section 402 Hydrant Permits
   f. Code 13-603 Stormwater Sewers

B. It is not the intent of the Contract Documents to conflict with any Code, or Regulation. Report any conflicts to Project Manager for clarification.

1.04 REFERENCED STANDARDS

A. For products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes or intended use.

B. The referenced standards shall have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

C. Should specified reference standards conflict with Contract Documents, request clarification from Project Manager before proceeding but generally the more stringent requirement shall apply.

D. In the absence of specific instructions in the specifications, materials, products, equipment, and their installation shall conform to the applicable codes, regulations and standards specified herein.

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

F. Dates of codes, regulations and standards specified shall be the latest date prior to the date of issue of this Project Manual, except where, prior to the date of issue of this Project Manual, modified or otherwise directed by the applicable codes and their supplements and amendments adopted by the code authorities having jurisdiction.

G. Each entity engaged in construction of the Project shall be familiar with industry standards applicable to its construction activity. If unfamiliar, obtain copies and review with all workers. Obtain copies of standards when required by individual specification sections. Maintain copy at job site until Substantial Completion.

1.05 ASSOCIATIONS, INSTITUTIONS AND SOCIETIES

A. Associations, Institutions, and Societies and their abbreviations if any, appearing in the Project Manual or elsewhere in the Contract Documents, shall be as generally recognized in the industry. Refer to the "Encyclopedia of Associations" published by Gale Research Company for abbreviations, addresses and phone numbers.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01450

CONTRACTOR'S QUALITY CONTROL

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This section describes each Contractor's requirements for quality assurance including:
   1. Control of installation
   2. Tolerances
   3. Mockups
   4. Inspection and Testing services
   5. Manufacturer's field services

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections

B. Each technical section required for materials and products in mockup

C. Each technical section requiring independent inspection and testing.

1.03 QUALITY ASSURANCE – CONTROL OF INSTALLATION

A. Contractor is responsible to deliver Work of quality specified regardless of Contractor's sub-contracting or purchasing arrangements.

B. Monitor quality control over suppliers, manufacturer's products, services, site conditions and workmanship to produce Work of specified quality.

C. Comply with manufacturers written instructions, including preparation and each step in sequence.
   1. Should manufacturer instructions differ from Contract Documents, request clarification but assume the more stringent will apply.

D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.

E. Perform work by persons qualified to produce workmanship of specified quality.

1.04 TOLERANCES

A. Monitor tolerance control of installed products to produce acceptable Work. Do not allow tolerances to accumulate.

B. Comply with manufacturers written tolerances.
   1. Should manufacturer tolerances differ from Contract Documents, request clarification but assume the more stringent will apply.

C. Adjust products to appropriate dimensions; position before securing products in place.

1.05 INSPECTION AND TESTING SERVICES

A. Contractor shall retain independent inspection and testing services when required by individual specification sections or by building code authority.

B. The independent agency shall perform inspection and testing services on and off site as required by individual specification sections and as required to comply with requirements of the building code authority.

C. Independent agency shall submit reports to Contractor and direct to City indicating compliance or non-compliance. Notify City the same day of non-compliance.

D. Cooperate with independent agency; furnish samples, mix designs, equipment, tools, storage, safe access, and assistance by incidental labor.

E. Inspection and testing does not relieve Contractor to perform Work to contract requirements.

F. Re-testing required because of non-conformance to specified requirements shall be performed by the original agency at no additional cost to City.

1.06 MANUFACTURERS FIELD SERVICES

A. When specified in individual specification sections, require manufacturer to provide qualified technical staff personnel to observe site conditions, quality of workmanship, start-up or training of City personnel as specified.

B. Technical staff shall not be the local sales staff or independent manufacturers' sales representatives.

C. Manufacturers technical representative shall submit written reports of findings to Contractor and direct to City. Notify City the same day of non-compliance

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01500

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section describes the Contractor's construction facilities and services required for performance of the Work but not a permanent part of the finished construction. Included are temporary utilities, temporary construction and support facilities and security and protection services.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

B. Environmental Controls: Division 1.

1.03 SUBMITTALS

A. Submit reports of tests, inspection, meter readings and similar procedures performed on temporary utilities.

1.04 INSPECTION

A. Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certificates and permits.

PART 2 PRODUCTS

2.01 TEMPORARY MATERIALS

A. Materials may be new or used, but must be adequate in capacity for the required usage and must not violate requirements of applicable codes and standards. Generally, temporary materials shall comply with related specification sections for materials to be incorporated into final work.

PART 3 EXECUTION

3.01 TEMPORARY FIELD OFFICE

A. If required in the Project Manual, the Contractor shall provide a field office meeting the following requirements for the exclusive use of the Program Manager and L&I Inspector:

1. Provide a temporary field office trailer, weather tight, lockable, of a minimum size of 8' by 10', either as a stand alone trailer or as an office within a larger field office trailer to be used by the Contractor. If the office is part of the Contractor's trailer, the portion designated for the use of the Program Manager and L&I Inspector shall have a lockable inside door to secure it from the rest of the trailer. The office shall be provided within the Contractor's fenced-in site yard. Keys to the trailer and the fenced-in yard shall be provided to the Program Manager and the L&I Inspector.

2. Provide operable windows with insect screens and security grilles on all windows.

3. Furnish the field office with a desk and 4 chairs, a 4-drawer file cabinet, a 6-shelf bookcase, and wastebasket.

4. Provide space heating and air-conditioning capable of maintaining indoor temperatures of 68 degrees F and 72 degrees F, respectively.

5. Provide electric power for lighting and duplex receptacles. Provide switch controlled fluorescent light fixtures capable of maintaining average illumination of 20 foot-candles at desk height, and 110-120 volt 20 Amp, duplex outlets at a minimum of one per wall.

6. Provide telephone service consisting of two lines, one telephone handset/combination fax machine/copier (Brother IntelliFAX-1270e or equal) and one digital subscriber line (DSL). Telephone service bills are to be paid by the Contractor. Contractor shall furnish supplies and a service agreement for the fax machine/copier.

7. Provide a drinking water cooler with a regular supply of bottled water.

8. The field office shall be cleaned not less than weekly by the Contractor.

9. The Contractor shall provide a fully usable field office within 14 days of Notice to Proceed, and shall continuously maintain it for the use of the Program Manager and L&I Inspector until 14 days after substantial completion of the contract work.

3.02 TEMPORARY UTILITIES

A. Provide temporary utilities including water, drainage, electrical power, communications, lighting, and steam where applicable.

B. Contractor shall pay all costs associated with temporary utilities.

3.03 TEMPORARY ELECTRICITY

A. Provide electrical service adequate for work of all trades, and terminate in fused safety switch and circuit breaker distribution panels.

B. For welding at site or electrical requirements beyond the capacity of temporary system, supply generator, fuel, maintenance, and other incidentals required.

3.04 TEMPORARY LIGHTING

A. Provide temporary lighting required for construction operations

3.05 HEATING AND VENTILATING

A. Provide temporary heat as required for construction operations. Temporary sources of heat shall be direct vented and thermostatically controlled. Open flame devices or solid fuels are not allowed.

3.06 TEMPORARY WATER SUPPLY

A. Provide temporary water service of adequate size as required for fire protection and construction operations.

B. Provide drinking water, paper cups, and waste receptacles for personnel.

3.07 SANITARY FACILITIES

A. Provide sanitary facilities according to law at locations approved by the City. Provide privacy enclosures, toilet paper, waste receptacles, and daily janitorial services.

B. Enforce use of sanitary facilities. Evidence to the contrary shall require removal, disinfecting, and reconstruction of defaced work.

3.08 FIRE PROTECTION

A. Provide temporary fire protection and portable fire extinguishers according to law.

3.09 CONSTRUCTION AIDS

A. Provide construction aids required for execution of the work, including scaffolds, staging, ladders, stairs, ramps, runways, platforms, railings, hoists, cranes, chutes, and other facilities and equipment.

B. Provide and operate drainage and pumping equipment; maintain excavations and site free of standing water except designated ponds.

3.10 BARRIERS

A. Provide barriers to prevent unauthorized entry to demolition areas and to protect existing facilities and adjacent properties from damage from demolition operations and demolition.

3.11 FENCING

A. Temporary chain link fence shall be erected and maintained by Contractor around all operations and all openings in the ground in accordance with Applicable Law.

3.12 SITE SECURITY

A. The City assumes no responsibility for loss, theft, or damage to the work, tools, equipment, and construction. In the instance of any such loss, theft, or damage, the Contractor shall be responsible to renew, restore, or remedy the work, tools, equipment, and construction in accordance with requirements of the Contract Documents without additional cost to the City.

B. The Contractor, at his own cost, may provide watchman services, and other means of site security.

C. Site parked equipment, operable machinery, and hazardous parts of the new construction subject to mischief and accidental operation, shall be inaccessible, locked, or otherwise made inoperable when left unattended.

D. Liability - The City is not responsible for damage, liability, theft, casualty, or other hazard to the automobiles or other vehicles, nor to injury including death to occupants of automobiles or other vehicles on the City's property. Provide signs to this effect in the designated parking area.

3.13 PROJECT SIGNS

A. Provide project identification signs, temporary information, and directional signs as required and approved. Project Identification Signs shall conform to the indicated design, detail #020610, NTI, SK-1.

B. No other signs shall be permitted except that each Prime Contractor and/or Subcontractor may have one (1) sign on its field office or on the temporary fence at each active demolition site. This sign (these signs) shall not exceed twelve (12) inches by eighteen (18) inches in size.

C. Project Identification Sign shall be eighteen (18) inches wide by twenty-four (24) inches tall. Sign faces shall be ½ inch exterior marine grade medium density overlay plywood, aluminum, or PVC sheet. Painting, vinyl application, or computer generated graphics shall be waterproof and applied by a professional sign manufacturer. The sign shall be attached, through a hole in each corner, to the temporary fence. The sign shall be mounted so that the vertical center is placed 5'-0" above grade.

D. At least one sign shall be erected at each active demolition site (where work will be in process and at each property being demolished or at least at the center of the temporary fence where there are multiple adjacent properties being demolished). For multiple adjacent properties there shall be at least one sign every sixty (60) feet.

3.14 TERMINATION AND REMOVAL

A. Remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility, but no later than Substantial Completion. Complete or restore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.

B. Materials and facilities that constitute temporary facilities are property of the Contractor.

C. Where the area is intended for landscape development, remove soil and aggregate fill that does not comply with requirements for fill or subsoil in the area. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances which might impair growth of plant materials or lawns.

D. Repair or replace street paving, curbs and sidewalks at the temporary entrances, as required by the governing authority, at no increase in contract price. Contractor must be a registered curb setter, hold a current license from L&I and apply for the permit at the local Highway District Office. A list of the district offices can be obtained from the Streets Department.

END OF SECTION

SECTION 01510

ENVIRONMENTAL CONTROLS

PART 1 GENERAL

1.1.1 DESCRIPTION OF WORK

A. This Section describes the Contractors requirement for protection of the atmosphere, waterways, groundwater, plants, animal habitats, soils, etc., both on and off site.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

B. Earthwork and Grading in Division 2.

1.03 REGULATORY AGENCIES AND CODES

A. Comply with the following in accordance with Division 1:
   1. United States Department of Agriculture (USDA)
   2. Urban Hydrology for Small Watersheds, Technical Release No. 55, Engineering Division, Soil Conservation Service.
   3. National Engineering Handbooks, Section 4 (Hydrology); Section 5 (Hydraulics); Section 16 (Drainage), Soil Conservation Service.
   4. City of Philadelphia
   5. Federal and State Environmental Protection Laws (CERCLA, RCRA, Clean Air Act, Clean Water Act, TSA)
   6. PA Codes for Waste Management regulated by PA-DEP

1.04 DEFINITIONS

A. Sediment - Soil that has been eroded and transported by runoff water.

B. Degradable Debris - Debris which can undergo biodegradation or combustion, or which can be dissolved in or suspended by water.

C. Non-degradable Debris - Inorganic debris which will not disintegrate nor dissolve when exposed to moisture or water.

D. Chemicals - Petroleum or cementitious products, bituminous materials, salts, acids, alkalis, herbicides and pesticides.

E. Waste - Sewage, including domestic sanitary sewage, garbage, and trash.

PART 2 PRODUCTS

2.01. MATERIALS

A. Hay Bales: As recommended by the environmental protection agency having jurisdiction.

B. Silt Fences: Three (3) foot wide fabric designed to filter sediment, as manufactured by Mirafi, Inc. Amoco, or Exxon.

C. Earth Stabilizer: Rye grass seed, hay, straw mulch, chemical stabilizer, or other devices approved by the environmental protection agency having jurisdiction and by the Project Manager.

D. Rip Rap: Sizes as shown on drawings.

E. Water: Comply with all environmental regulation including but not limited to Water Department Regulations 402 (Hydrant Use) and 403 (Back-flow Prevention).

PART 3 EXECUTION

3.01 GENERAL

A. Establish and enforce ecological preservation measures which will avoid pollution of the atmosphere, waterways, groundwater, plants, soils, animal habitats, landfills, wetlands, the site, adjacent sites, roadways, etc.

B. Prevent spilling of chemicals or waste. Provide emergency plans and methods for abatement of accidental spills of toxic substances.

3.02 SEDIMENT CONTROL

A. Until permanent work establishes sediment control, provide temporary control, using vegetative cover with seeding, mulch, and binder within ten (10) days after completion of grading of any given area.

B. As a temporary measure, provide silt fences, arranged along the toe of surface drainage ways and inlets, in such a manner that water will pass through the silt fences and filter the sediment. Embed silt fence in ground 6 inches deep and anchor to the ground with posts, as shown on the drawings. Replace silt fences when they become clogged and ineffective.

1. Filter fabrics must be used to protect the stormwater inlets from silt, sediment or debris throughout the site preparation, demolition and clean-up process.
2. Contractor must not wash silt, sediment or debris down the stormwater inlets.

C. During pipe laying work, prevent silt from entering the piping systems by use of hay bales, silt fence, temporary closures of pipe ends, or other means as best suited to the conditions.

3.03 CONTROLS DURING EARTH MOVING

A. Perform earth moving in phases to minimize the area and extent of exposed land.

B. Control the rate of water runoff by diversion ditches, benches, berms, and other earth-formed shaping so that the rate of flow is retarded and silting shall be minimized. Reshape and restore conditions showing evidence of earth erosion.

3.04 DUST CONTROL

A. Keep dust down at all times, including non-working days, weekends, and holidays. Wet down or treat disturbed soil with dust suppressers as required and approved.

B. Do not leave areas of disturbed earth unworked for long periods of time. Provide temporary or permanent earth stabilization promptly.

C. In sandblasting operations, confine the dust.

D. Use wet-cutting methods for cutting concrete, asphalt, and masonry.

E. Do not shake out bags containing dust-causing substances.

3.05 RODENT CONTROL

A. Rodent control measures shall be in accordance with the "Philadelphia Rat Control Project Guidelines for Eradication and Control in Demolitions and Excavations". A copy of these guidelines can be obtained by calling 215-685-9700.

B. A minimum of one pound of water resistant bait and rodenticides approved by the EPA for use in sewers shall be hung by a galvanized tie wire at the springline of the sewer or on the shelf of the manholes within and around the demolition site. Demolition contractor shall install bait and rodenticide on all manholes on the block which shall have demolition work performed on it. This shall include all manholes in the closest intersections to the demolition work. All rodent control measures shall be in place 14 days prior to demolition except in emergency situations, whereas the measure shall be in place within 24 hours of demolition.

C. The bait or rodenticide is a one-pound block CONTRAC Super-Size BLOX. This rodenticide bait is produced by Bell Laboratories, Inc. Following is a list of three local distributors:

Van Walter & Rodgers 8335 Enterprise Avenue Philadelphia, PA 19112 215-365-7200	York Distributors 611 Delsea Drive P.O. Box 25 Westville, NJ 08093 609-848-6818 or 800-257-7814	Residex Corporation 1001 Lower Landing Road Suite 106 Lockwood, NJ 08019 609-232-0880

D. There are various products on the market that serve the same purpose, however very few are made for sewer application, and many are multi-feeder which are not as effective as a single feeder. Therefore, any substitutions shall be submitted to the Inspector for approval.

E. The Contractor shall inspect the rodent control measures once every week or after each rain event, whichever is shorter. All rodent control measures in manholes both within and around the limits of demolition shall be maintained throughout the duration of the project. Payment for this work shall be included in the price bid for demolition.

3.06 NOISE CONTROL

A. Provide mufflers on internal combustion engine equipment. Maximum noise level shall be 90 dbA at 50 feet.

B. Where blasting is permitted, special permit and other requirements of the governing authorities regarding blasting shall govern.

B. Limit hours of operation of noisy construction to limits set by City ordinance.

3.07 DISPOSAL OF DEBRIS, CHEMICALS AND WASTE

A. Legally dispose of debris, chemicals, and waste off the site

B. Collect and contain materials before disposal in orderly fashion and by means which prevent contamination of air, water and soil.

C. Store chemicals in watertight containers.

D. Do not burn materials on the site.

3.08 TRUCKS

A. Dump trucks shall be tarpaulin-covered so that spillage does not occur.

B. Provide a gravel surfaced truck wheel washing area at entrances. Clean all truck wheels of mud and debris before the trucks leave the site

3.09 MAINTENANCE AND TERMINATION

A. Maintain in working order environmental protection measures until they are no longer required.

B. Terminate environmental control measures when there is no longer a threat of pollution. Remove temporary control measures. Complete or, if necessary, restore permanent construction that may have been delayed or damaged because of interference with environmental controls.

END OF SECTION

SECTION 01610

PRODUCTS AND MATERIALS

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section describes administrative procedures regarding the Contractor's selection of products, materials, and equipment required for the completion of the Work. Requirements for handling, storing and installing products are also included.

1.02 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

1.03 DEFINITIONS

A. Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties", "structure", "finishes", "accessories", and similar terms. Such terms are self-explanatory and have well recognized meanings in the construction industry.

B. "Products" are items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock. The term "product" includes the terms "material", "equipment", "system", and terms of similar intent.

C. "Named Products" are items identified by manufacturer's product name, including make or model designation, indicated in the manufacturer's published product literature.

D. "Materials" are products that are substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.

E. "Equipment" is a product with operational parts, whether motorized or manually operated, that require service connections such as wiring or piping.

F. "System" is an integrated assembly of materials and/or equipment which when combined form an integral whole to serve a function.

1.04 QUALITY ASSURANCE

A. Source Limitations - To the fullest extent possible, provide products of the same kind, from a single source.

B. Compatibility of Options - When the Contractor is given the option of selecting between two or more products for use on the Project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store and handle products in accordance with the manufacturer's recommendations, using means and methods that will prevent damage, deterioration and loss, including theft.

B. Schedule delivery in accordance with the Construction Schedule and to minimize long-term storage at the site and to prevent overcrowding of construction spaces.

C. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damages, or sensitive to deterioration, theft and other losses.

D. Deliver products to the site in the manufacturer's original sealed container or other packaging system, complete with legible labels and instructions for handling, storing, unpacking, protecting and installing.

E. Inspect products upon delivery to ensure compliance with the Contract Documents, and to ensure that products are undamaged and properly protected.

F. Store products at the site in a manner that will facilitate inspection and measurement of quantity of counting of units.

G. Store heavy materials away from the Project structure in a manner that will not endanger the supporting construction.

H. Store product subject to damage by the elements above ground, under cover in a weathertight enclosure, with ventilation adequate to prevent condensation. Maintain temperature and humidity within range required by manufacturer's instructions.

PART 2 PRODUCTS

2.01 GENERAL PRODUCT REQUIREMENTS

A. Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, unused at the time of installation. All products shall be certified asbestos-free.

B. Provide products complete with all accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect.

C. Where the work requires testing for assurance of performance, that portion of the work shall not proceed until such testing has been completed and written test report has been approved.

D. Do not use material or equipment for any purpose other than for which it is designed or specified.

E. Certification of Compatibility: If indicated, the material and equipment manufacturers shall certify in writing that:

1. Other manufacturer's materials or equipment coming into contact with their product are compatible with their product in every way and that the intended performance of the system in which their product is incorporated will not be affected as a result of such contact. Also, physical breakdown of their product by chemical reaction or otherwise will not occur as a result of such contact.
2. The combination of products by one (1) manufacturer to make up the manufacturer's specified system, will contribute to the performance of the system as intended, and will remain operational, reliable and durable. The manufacturer will be the source of routine maintenance and replacement parts.

F. Reuse of Existing Material.

1. Except where indicated or otherwise approved in writing, materials and equipment removed from an existing structure shall not be used in the work.

2.02 PRODUCT SELECTION PROCEDURES

A. Product selection is governed by the Contract Documents and governing regulations, not by previous Project experience. Procedures governing product selection include the following:

B. Where products or manufacturers are specified by name, description, or performance accompanied by the term "or equivalent substitution", "or approved substitution", "or approved equal" or similar terms comply with the Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.

C. Proprietary Specification Requirements – Where products or manufacturers are named, provide the product indicated or submit a substitution request.

D. Descriptive Specification Requirements - Where Specifications describe a product or assembly, listing exact characteristics required, without use of a brand or trade name, provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements. If descriptive specification also includes manufacturers or products, provide product indicated of submit a substitution request.

E. Performance Specification Requirements - Where Specifications require compliance with performance requirements, provide products that comply with these requirements, and are recommended by the manufacturer for the application indicated. Compliance shall be certified by independent testing agencies furnished by manufacturer. General overall performance of a product is implied where the product is specified for a specific application.

F. Manufacturer's recommendations may be contained in published product literature, or by the manufacturer's certification of performance.

G. Compliance with Standards, Codes and Regulations - Where the Specifications require compliance with an imposed code, standard or regulation, select a product that complies with the standards, codes or regulations specified. Compliance shall be certified by independent testing agencies furnished by manufacturer.

H. Visual Matching - Where Specifications require matching an established sample or existing construction, the Project Manager's decision will be final on whether a proposed product matches satisfactorily.

I. Visual Selection - Where specified product requirements include the phrase "...as selected from manufacturer's standard colors, patterns, textures..." or a similar phrase, select a product and manufacturer that complies with other specified requirements. The Project Manager will select the color, pattern and texture from the product line selected.

PART 3 EXECUTION

3.01 ACCEPTABLE INSTALLERS

A. Installers shall be familiar with products and experienced in their installation. Comply with more stringent requirements of individual sections for installer qualifications.

3.02 EXAMINATION OF SUBSTRATE

A. Each installer shall examine substrate onto which the product will be installed. Inspect for any condition which would in any way reduce the quality, performance or durability of the product including but not limited to; dimensional or location tolerances, dampness, dryness, installation not meeting specified criteria for substrate, poor workmanship, etc. Do not proceed with installation over unacceptable substrates. Notify Contractor to have substrate repaired. Work installed over unacceptable substrates shall be redone after substrate is repaired at no cost to the City.

3.03 PREPARATION

A. Protect adjacent work from possible damage which installation could cause including but not limited to staining, overspray, denting, gouging, displacement, etc.

B. Clean and prepare substrates to receive products with primers, bonding agents, barrier coats, etc. as per manufacturer's instructions.

3.04 INSTALLATION

A. Comply with manufacturer's instructions and recommendations and requirements of individual specification sections in the applications indicated. If manufacturer's instructions and specifications indicate differing installation techniques, request clarification from Project Manager but generally comply with more stringent requirement.

B. Anchor each product securely in place accurately located and aligned with other Work.

C. Coordinate installation with surrounding Work to allow for optimum end product.

3.05 FIELD QUALITY CONTROL

A. Have manufacturer's technical representative on-site to observe crucial installation steps as required by individual specification sections or as required to meet manufacturer's warranty or to meet other indicated criteria.

3.06 ADJUSTING

A. Adjust installed products for proper operation and fit.

END OF SECTION

SECTION 01630

SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section specifies the Contractor's administrative and procedural requirements for handling requests for substitutions made after award of the Contract. Procedural requirements governing the Contractor's selection of products and product options are included under Section "Materials and Equipment".

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

1.03 DEFINITIONS

A. Definitions used in this Article are not intended to change or modify the meaning of other terms used in the Contract Documents.

B. Substitutions - Requests for changes in products, materials, equipment, and construction required by Contract Documents proposed by the Contractor after award of the Contract are considered requests for "substitutions". The following shall not be considered substitutions:

1. Substitutions requested by Bidders during the bidding period, and accepted in Addenda prior to award of Contract.
2. Revisions to Contract Documents requested by the City.
3. Specified options of products and construction methods included in Contract Documents.
4. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.

C. "Or equal", "or equivalent", "approved equal", "approved equivalent", "equivalent substitution" and all other similar terms shall be interpreted as "substitution" as defined above.

1.04 SUBMITTALS

A. Submit three (3) copies of each request for substitution. Submit requests with the form attached at the end of this Section and in accordance with procedures required for Change Order proposals. Attach all other data and certification.

B. Identify the product, or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:

C. Product Data, including Drawings and descriptions of products, fabrication and installation procedures.

D. Samples, where applicable or requested.

E. A detailed comparison of salient features and qualities of the proposed substitution with those of the Work specified. Salient features and qualities may include elements such as size, weight, durability, performance and visual effect as determined by the Project Manager. Submit documentation of salient features and qualities from independent testing agencies performing industry recognized tests. The manufacturer's claims of performance may or may not be used in evaluation of substitutions at the discretion of the Project Manager.

F. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the City and separate Contractors that will become necessary to accommodate the proposed substitution.

G. A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.

H. Cost information, including a proposal of the net change, if any in the Contract Sum. The Contractor shall certify that the cost data presented is complete and includes all related costs under this Contract, but excludes the Project Manager's redesign costs.

I. Certification by the Contractor that the substitution proposed is equal-to or better in every significant respect to that required by the Contract Documents, and that it will perform adequately in the application indicated. Include the Contractor's waiver of rights to additional payment or time, that may subsequently become necessary because of the failure of the substitution to perform adequately.

J. Certification that the Contractor will reimburse the City for all costs for review and design changes resulting from the substitution.

K. Project Manager's Action - The Project Manager will notify the Contractor of acceptance or rejection of the proposed substitution. The Project Manager will be the sole judge of the acceptability of the proposed substitution. Acceptance will be in the form of a Change Order. The Change Order will include a deduction from the Contract Sum for additional costs incurred by the City because of the substitution.

PART 2 PRODUCTS

2.01 SUBSTITUTIONS

A. Conditions - The Contractor's substitution request will be received and considered by the Project Manager when one or more of the following conditions are satisfied, as determined by the Project Manager; otherwise requests will be returned without action except to record noncompliance with these requirements.
   1. Extensive revisions to Contract Documents are not required.
   2. Proposed changes are in keeping with the general intent of Contract Documents.
   3. The request is timely, fully documented and properly submitted.
   4. The request is directly related to an "or approved substitution" clause or similar language in the Contract Documents.
   5. The specified product or method of construction cannot be provided within the Contract Time. The request will not be considered if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.
   6. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
   7. A substantial advantage is offered the City, in terms of cost, time, energy conservation or other considerations of merit, after deducting offsetting responsibilities the City may be required to bear. Additional responsibilities for the City may include additional increased cost of other construction by the City or separate Contractors, and similar considerations.

B. The specified product or construction cannot be provided in a manner that is compatible with other materials, and where the Contractor certifies that the substitution will overcome the incompatibility.

C. The specified product or construction cannot be coordinated with other materials, and where the Contractor certifies that the proposed substitution can be coordinated.

D. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provide the required warranty.

E. Where a proposed substitution involves more than one Contractor, each Contractor shall cooperate with the other Contractors involved to coordinate the Work, provide uniformity and consistency, and to assure compatibility of products.

F. The Contractor's submittal and Project Manager acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the Contract Documents does not constitute an acceptable or valid request for substitution, nor does it constitute approval.

PART 3 EXECUTION

Not Used

Attachment - Substitution Request Form (2 pages)

CITY OF PHILADELPHIA SUBSTITUTION REQUEST FORM

INSTRUCTIONS:

A. This request must be submitted and signed by the Contractor.
B. A request for each substitution must be exactly in this form, including all items. (One (1) item of substitution per form).
C. Attach complete information on changes to Drawings and Specifications that proposed substitution will require for its proper installation.
D. Submit with request, all necessary samples and substantiating data to prove quality and performance is equal to that which is specified. Clearly mark manufacturer's literature to indicate equality in performance

CONTRACT AWARD DATE: _____ DATE OF REQUEST: _____

CONTRACTOR: _____

PROJECT: _____

We hereby submit for your consideration the following substitution in lieu of the specified item for the above project:

SPEC. SECTION NO.: _____ PARAGRAPH: _____ SPECIFIED ITEM: _____

PROPOSED SUBSTITUTION: _____

REASON FOR REQUEST: _____

_____

ITEMIZED COMPARISON OF SPECIFIED ITEM WITH THE PROPOSED SUBSTITUTION:

PERFORMANCE: _____

_____

APPEARANCE: _____

_____

REFERENCED STANDARDS: _____

DEDUCT CHANGE ORDER OFFERED FOR PROPOSED SUBSTITUTION: _____

MANUFACTURER'S WARRANTIES OF THE PROPOSED AND SPECIFIED ITEMS:

LENGTH OF WARRANTY: AS SPECIFIED [ ]. PROPOSED[ ]

MATERIALS COVERED: AS SPECIFIED [ ]. PROPOSED[ ]

LABOR COVERED: AS SPECIFIED [ ]. PROPOSED[ ]

OTHER TERMS: AS SPECIFIED: _____

PROPOSED SUBSTITUTION: _____

DESIGNATION OF MAINTENANCE SERVICES AND SOURCES: _____

_____

DOES SUBSTITUTION AFFECT DIMENSIONS OR CLEARANCES SHOWN ON THE DRAWINGS?
YES [ ] NO [ ].

IF YES, CLEARLY INDICATE CHANGES: _____

_____

WILL THE UNDERSIGNED PAY FOR CHANGES TO THE BUILDING DESIGN, INCLUDING ENGINEERING AND DETAILING COSTS CAUSED BY THE REQUESTED SUBSTITUTION? YES [ ] NO [ ].

IF NO, FULLY EXPLAIN: _____

_____

WHAT EFFECT DOES SUBSTITUTION HAVE ON OTHER CONTRACTS OR TRADES? _____

_____

WHAT EFFECT DOES SUBSTITUTION HAVE ON CONSTRUCTION SCHEDULE? _____

_____

CONTRACTORS CERTIFICATION OF EQUAL PERFORMANCE

The undersigned certifies that:

He/she has investigated the proposed substitution and has determined that it is equal to or better than the product specified.

He/she will guarantee the substitution in the same manner as the product specified.

He/she will coordinate and make other changes as required in the Work as a result of the substitution.

He/she waives all claims for additional costs as a result of the substitution, with the exception of those identified above under "cost data".

He/she will reimburse the City for all costs for design change resulting from the substitution.

Submitted by:

Signature: _____

Name: _____ Title: _____

Firm: _____ Date: _____

Street: _____

City: _____ State: _____ Zip Code: _____

Telephone: _____

Signature shall be by person having authority to legally bind his firm to the above terms. Failure to provide legally binding signature will result in rejection without further review by Project Manager.

Project Manager's Action

Accepted	[ ]	
Accepted as noted	[ ]	Signature:
Not accepted	[ ]	
Received too late	[ ]	_____

END OF SECTION

SECTION 01740

CLEANING

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section specifies the Contractor's cleaning and debris removal of the Work prior to commencing demolition activities, during demolition, and before completion of restoration work.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

PART 2 PRODUCTS

2.01 MATERIALS

A. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 EXECUTION

3.01 INITIAL AND PERIODIC CLEANING

A. Collect and remove waste materials, debris, and rubbish from site and interior of structure targeted for demolition, and dispose of legally off-site.

B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to commencing the demolition work.

C. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

D. Broom clean paved surfaces. Rake clean other surfaces of grounds. Remove snow and ice as necessary to safely execute the work of this contract..

E. Open free-fall chutes not permitted. Terminate closed chutes into appropriate containers with lids.

F. Maintain cleaning until Project or portion thereof is accepted by Certificate of Substantial Completion. If minor work is required after Substantial Completion, clean affected areas afterwards.

END OF SECTION

SECTION 01782

WARRANTIES

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section describes the Contractor's procedural requirements for executing, assembling and submitting warranties.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

B. Individual Specification sections requiring warranties or service/maintenance contracts.

1.03 SUBMITTAL REQUIREMENTS

A. Submit two (2) sets of original signed copies of warranties, bonds, service and maintenance contracts, executed by the respective manufacturers, suppliers, and subcontractors.

B. Contents - Neatly type, in orderly sequence, the following information for each item.
   1. Product or work item.
   2. Subcontractor supplier and manufacturers names, addresses, and telephone numbers.
   3. Date of beginning and duration time of warranty, bond, or service and maintenance contract.
   4. Proper procedure in case of failure.
   5. Instances which might affect the validity of warranty or bond.

C. Bind each set in 8 1/2 inch by 11 inch commercial quality, three-ring binders with plastic covers. Identify each binder with typed or printed title "Warranties" with title of project and location.

1.04 TIME OF SUBMITTALS

A. For equipment or component parts of equipment placed into service during progress of construction, submit documents within ten (10) days after inspection and acceptance.

B. Make other submittals within ten (10) days after Date of Substantial Completion, prior to final request for payment.

C. For items of work, where acceptance is delayed materially beyond the Date of Substantial Completion, provide updated submittal within ten (10) days after acceptance, listing the date of acceptance as the start of the warranty period.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01783

PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. This Section describes the Contractor's administrative and procedural requirements for recording final product and material selections, changes to the Contract, and recording Work concealed by subsequent construction.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

1.03 MAINTENANCE OF DOCUMENTS

A. Maintain at job site, one (1) copy of record documents including Drawings, Specifications, Addenda, Change Orders and other modifications, Shop Drawings, product data and samples.

B In addition, maintain one (1) copy of field orders or written instructions, field test records, testing and inspection reports, progress reports, meeting minutes and construction photographs.

C. Maintain documents in a clean, dry, legible condition and in good order.

D. Make documents available at all times for inspection.

E. Review documents at progress meetings.

1.04 RECORDING

A. Neatly label each document and binder with "Project Record" and project name and location.

B. Record information concurrently with construction progress.

C. Do not conceal any work until required information is recorded.

D. Record Construction Drawings and Shop Drawings: Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.

1. Note horizontal and vertical locations of concealed elements, referenced to permanent, visible features.
2. Note field changes of dimension and detail.
3. Note details not on original Contract Drawings.

E. Record Project Manual: Mark to show substantial variations in actual Work performed in comparison with the text of the original. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data.

1.05 SUBMITTALS

A. Preceding or coincidental with the final pay application, submit the following:

B. Record Shop Drawings: One (1) copy of any shop drawings.

C. Record Project Manual: One (1) copy bound in 3 ring binders.

D. Record Product Data: One (1) copy organized by CSI format bound in 3 ring binders.

E. If review of Record Documents reveals noncompliance with Contract Documents, Contractor shall correct deficiencies and resubmit.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 02050

DEMOLITION

PART 1 GENERAL

1.01 SUMMARY

A. Related Sections:
   1. Section 02225: Earthwork

1.02 PROJECT CONDITIONS

A. Dust Control: To prevent unnecessary spread of dust during performance of exterior demolition work, thoroughly moisten surfaces and debris as required to prevent dust being a nuisance to the public, neighbors and concurrent performance of other work on the site. Contractor shall be responsible for securing a supply of water in accordance with applicable regulations.

   1. If contractors wish to utilize fire hydrants, they must obtain hydrant use permits from L&I. The permits cost $35.00 per week, and $105.00 for a 6-month permit. These costs supersede the price structure stated in the Water Department Regulations.
   2. In order to control the use of hydrants, the accompanying hydrant wrench needs to be registered to a specific individual within the company or as a last resort, with a specific vehicle of the company. Therefore the demolition contractor will require a hydrant permit for each crew.
   3. The contractor will be responsible for backflow prevention, and must provide and use an approved backflow preventer.
   4. The contractor will not be required to meter water usage, however the contractor will be required to maintain a record of all hydrant usage with approximate quantities. The Water Department will provide a template form to be completed by the Contractor to document hydrant use. On a regular basis this form will be forwarded to the Philadelphia Water Department, Attention: **Greg Dudzek, (215-685-4933) 1101 Market Street, 4th Floor, Philadelphia, PA 19107.**
   5. Unauthorized use of fire hydrants will not be permitted.
   6. In removing the existing structures, the debris shall be sprinkled with water, as directed by the City Inspector, to satisfactorily control or prevent any dust and dirt that may result from the use of chutes or any other demolition operation.
      a. Sprinkling for dust shall not be required during demolition by hand methods.

PART 2 PRODUCTS

2.01 MATERIALS

A. Materials needed or required for temporary protection in the form of barricades, fences, enclosures, etc., may be "used" construction materials of sound condition and reasonably clean. However, the condition of same materials shall meet or exceed the requirements of governing agencies or approving bodies as may be involved with the work.

B. Equipment, machinery and apparatus, motorized or otherwise, used to perform the demolition work may be used as chosen at the Contractor's discretion, but which will perform the work within the limits of the Contract requirements.

PART 3 EXECUTION

3.01 EXAMINATION

A. Prior to performance of the actual work, carefully inspect the entire site and structures and locate, and verify with the Project Manager, those structures and objects designated to be demolished and removed and those structures and objects to be preserved.

B. Locate existing exposed and buried active utilities and determine the requirement for their protection, or their disposition with respect to the demolition work.

3.02 PERFORMANCE

A. Conduct demolition to minimize interference with adjacent structures.

B. Cease operations immediately if adjacent structures appear to be in danger. Notify Project Manager and authority having jurisdiction; do not resume operations until directed.

C. Conduct operations with minimum interference to public or private accesses. Maintain protected egress and access at all times.

D. Obtain written permission from adjacent property owners when demolition equipment will traverse, infringe upon or limit access to their property.

E. Sprinkle demolition areas with water to minimize dust. Provide hoses and water connections for this purpose.

3.03. SUBSTRUCTURE (Basement Slab)

A. REMOVAL OF ASBESTOS CONTAINING FLOORING MATERIAL: any VAT flooring shall be removed and disposed of according to all rules and regulations prior to breaking up the slab.

B. PENETRATIONS: To prevent future accumulation of water in below grade cavities after backfilling operations, the bottoms of such cavities and the concrete slab shall be broken through to a maximum dimension of one foot to the extent that water drainage readily occurs.

3.04 DEBRIS REMOVAL

A. Dispose of demolition debris off Site in a lawfully approved landfill area.

3.05 ABANDONED EQUIPMENT AND MACHINERY

A. Existing equipment and machinery in or on the structures shall become the property of the Contractor and may not be disposed of on the Site but shall be removed and disposed of in a lawful manner off Site.

3.06 CONCRETE AND MASONRY REMOVAL

A. When removing concrete slabs, the slab must be saw-cut at the limits of removal to assure a smooth, uniform joint with new concrete installation.

B. Removal of all masonry and concrete material must be done, keeping the debris dampened during removal and until outside building.

3.07 BACKFILLING

A. Perform backfilling in the area of demolished structures in accordance with Section 02225.

3.08 DEMOLITION REQUIREMENTS

A. Contractor shall furnish all labor, material, and equipment necessary to remove the entire designated building(s) from within the property lines of this site designated. The means and methods of performing demolition operations are the sole responsibility of the Contractor; however, equipment used, and methods of demolition shall be subject to the approval of the Inspector in addition to the directions below.

B. Demolition by hand and demolition by machine: In general when a building is attached to another that is not being demolished, it shall be demolished by hand. Buildings that are completely detached from others not being demolished may be demolished by machine.

Under hand methods, the contractor shall be restricted to horizontal operations. Unless approval to the contrary has been obtained in writing from the Department of License and Inspections, the demolition shall proceed from top to bottom, one floor at a time. Demolition materials shall not be permitted on sidewalks or curbs overnight. Masonry walls shall be demolished in small sections. Walls above the elevation of the first floor shall not be "thrown," but shall be barred loose and demolished piecemeal. No windows or door frames shall be removed until the demolition work has progressed to their elevation in the walls. No swinging balls, blasting or cables shall be permitted. Only those methods of demolition which ensure all phases of the work will be strictly confined within the limits of the designated area shall be approved.

Under machine methods, the City shall permit the use of power operated (no swinging balls) wrecking equipment. Where a group of buildings is scheduled for demolition and is attached to a structure not scheduled for demolition, power methods shall be permitted for the group except for the building immediately adjoining the structure to remain. This building shall be demolished in accordance with the hand methods above. In addition, the front and rear walls of said building shall be saw-cut free of the building to remain prior to demolition activity.

C. Building(s) and attached appurtenances shall be torn down to a level of one foot below the adjacent grades. All steps shall be removed, except single pour steps may remain where, in the Department's opinion, an unsafe condition would exist, or damage to the adjacent steps would occur if the steps were removed.

1. All on-grade slabs shall remain unbroken.
2. Unless otherwise directed in writing by the City Inspector or the Project Manager, all trees and shrubs on the property shall be removed. Street trees located within the public right-of-way shall remain unless indicated by the Department. When a tree is removed, the remaining stump shall not be more than one foot above the finished grade.
3. Chimneys above the roof level shall be removed to the level of the roof and capped unless it is a double chimney used in common with the adjacent structure. In this situation, it shall be left standing and capped. A chimney which is part of and built with the party wall shall remain; however, it shall be brought down to roof level and capped.
4. Where the party wall is not used in common and said wall acts as an enclosure for an adjacent property, the Department, at its discretion, may permit the enclosing wall to remain to a maximum of six (6) feet in height provided that the wall has been determined to be structurally sound.
5. Contractor shall remove from the site all materials and clean all rubbish from the cellars. Sidewalk curbing, footway pavement, alley pavement, roadway pavement and turfed areas shall not be disturbed, and if damaged or disturbed by Contractor, shall be restored by Contractor, at Contractor's expense.
6. Footway pavement shall be replaced in full blocks with a minimum of four (4) inches of 3000 PSI concrete, finished in a workmanlike manner.

D. Contractor must notify the various utility companies when the work is to begin so that gas and electric services may be discontinued and all wires and equipment may be disconnected in accordance with the rules and regulations of the utility companies. Contractor shall contact the PA One Call System (1-800-242-1776) specifying plumbing excavation as well as demolition, and obtain an authorization number.

IN NO CASE SHALL CONTRACTOR UNDERTAKE EXCAVATION WITHOUT UNDERGROUND UTILITY PROPERTY BEING MARKED BY THE VARIOUS UTILITY COMPANIES. DEMOLITION CANNOT BEGIN ON A PROPERTY UNTIL THE CONTRACTOR HAS OBTAINED A COPY OF A SIGNED RELEASE FROM THE WATER DEPARTMENT, THE STREETS DEPARTMENT, PGW, AND PECO VERIFYING THAT THEIR RESPECTIVE UTILITIES HAVE BEEN DISCONNECTED FROM THE PROPERTY

1. **Sewer trap(s) will be removed and capped by others and is not part of this contract.**

E. Contractor shall maintain the integrity of the party walls and the front and rear walls of the adjacent property, and shall provide any and all shoring and bracing required for their support. All shoring and bracing shall be done by mechanics experienced in this type of work, and shall be installed in accordance with the rules and regulations of the Department.

1. Contractor shall close all breaches in the party walls with like materials. Breaches shall include but are not limited to door openings, passageways, open gables, etc.
2. A masonry saw cut is required at the intersection of any adjacent building (including front and rear). When walls are saw cut, the cut is to be smooth and uniform, done in a workmanlike manner without disturbance of the remaining adjacent wall. If there is a viable reason why the walls should not be saw cut, Contractor is to submit his reasons, in writing, to the Contractual Services Unit of the Department.

F. Demolition site areas shall be leveled off to the adjacent grade away from any surviving party wall, walkway or street at a slope of no less than one (1) inch vertical to one (1) foot horizontal. All grading shall be limited to the perimeter of the demolished building. The demolition site shall be covered with clean earth covering, free of stone, branches, twigs and all foreign material in accordance with Section 02225 – EARTHWORK.

G. Pedestrian and vehicle traffic shall be continuously maintained. If Contractor finds it necessary to close the walkway and/or street, a permit must be obtained from the Streets Department and submitted to the Project Manager 14 days prior to the start of demolition. Barring a footway and/or street closing permit, the demolition area (sidewalks and street), must be clear of all demolition debris at the end of each day.

3.10 SHORING: Sufficient shoring shall be provided as follows:

A. Porches: Where the structure being demolished has a porch and is immediately adjacent to a property with a common porch roof and no support exists at the party line, Contractor, prior to cutting the porch roof, shall provide adequate support for the adjacent roof.

Minimum adequate support shall be one of the following:

1. Pressure treated 6 X 6 wood member
2. 4 inch standard weight steel pipe
3. Adequately sized wrought iron column

A strong effort will be made to match the existing column of occupied properties with a like material.

Columns shall be protected against decay or corrosion except when installing preservative-treated wood bearing the mark of an approved agency. Columns shall be adequately anchored to prevent lateral displacement, and any material used to anchor the column shall be protected against decay and corrosion.

B. Tunnel Alleys: Tunnel alley walls shall only be disturbed where, in the opinion of the Inspector, the remaining walls will support the load thereon. Where work is performed, the covering over the tunnel alley shall be as shown in Appendix 1 – Tunnel Alley Detail Drawings.

C. Porch Roofs: When demolition of a structure exposes or creates an exposure between the porch roof and ceiling, the Contractor shall close the void with ½" T-111 siding, painted to match existing finish. Studs shall be required where butting occurs and as needed for general reinforcing of the siding.

D. Support Columns: Where demolition of a structure results in cutting a beam supporting sections of an adjacent structure, permanent adequate support shall be installed at Contractor's expense. The support shall include adequate footing(s) and vertical support as described in Paragraph "A" above. It will be Contractor's responsibility to determine the necessary column size. Installation to be done according to accepted industry standards.

3.11 PERMITS AND LICENSES: Contractor shall obtain and pay for all licenses, fees and other charges required by the city, county or state, and/or utility companies' regulations.

A. Proof of all required licenses shall be submitted to the Contractual Services Unit of the Department.

B. The Contractor will NOT be required to obtain and pay for an L & I building demolition permit.

3.12 EXTERIOR BASEMENT WALL TREATMENT: Contractor shall treat adjacent party walls as follows:

A. After removal of all loose and foreign materials, all voids shall be filled and the wall dashed to a minimum of 1/2 inch thickness, with a standard mix of one part lime, one part cement and two parts sand.

B. Subsequent to dashing, the wall shall be coated with two (2) separate coats of undiluted bituminous sealant to render the wall substantially impervious to water.

3.13 REMAINING PORCH RESTORATION

A. The extent of repair shall be limited to porches directly attached to structures being demolished.

1. If there is no existing porch on the attached property to remain, the contractor shall not be obligated to make repairs to porches further away.

B. Where the property being demolished does not have an existing porch, the Contractor shall not be obligated to make any repairs to adjacent porches.

3.14 PROTECTION

A. Exercise care during demolition work to confine demolition operations to the Site. The physical means and methods used for protection are at the Contractor's option. However, the Contractor will be completely responsible for replacement and restitution work of whatever nature at no expense to the City.

1. Additionally, if public safety is endangered during the progress of the demolition work, provide adequate protective measures to protect public pedestrian and vehicular traffic on streets and walkways.
2. Signs, signals and barricades used shall conform to requirements of Federal, State and local laws, rules, regulations, precautions, orders and decrees.

3.15 EXPLOSIVES AND BLASTING: Not permitted in performance of demolition work.

END OF SECTION

SECTION 02071

ASBESTOS REMOVAL

PART 1 GENERAL

1.01 SCOPE

This specification covers the removal, transportation, and disposal of asbestos-containing materials (ACM) that may be present in the properties included in this scope of work.

All materials removed will be disposed of in accordance with Federal, State, and Local regulations.

Regulatory compliance is recognized, as minimum standards and the Contractor, subcontractor and all parties involved in any asbestos related activities, shall follow all requirements included in this specification that may exceed minimum regulatory standards. The Project Manager's decision shall be final in the event of any difference of interpretation regarding regulations, contract or these specifications by any parties involved in the performance of this project including, but not limited to, the Contractors, subcontractors, transporters, landfills and laboratories

1.02 DESCRIPTION OF WORK

A. The Work specified herein shall be the removal of asbestos-containing material by persons knowledgeable, qualified, and trained in the removal, treatment, handling, and disposal of asbestos-containing material, and the subsequent cleaning of the affected environment, and who comply with Federal, State, and Local regulations, mandate work practices, and who can perform the Work of this Contract.

B. The Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals that are necessary or required to perform the Work in accordance with the applicable governmental regulations and these Specifications and Contract Documents.

C. The Contractor is hereby notified that both Friable and Non-Friable Asbestos Containing Materials may be present**.** Non-friable asbestos containing material shall be removed in a way that does not render it friable. There shall be no grinding, chipping or pulverizing as defined by NESHAPS. All materials determined to be Friable by the On-Site Inspector or identified as such in the Asbestos Investigation Report (AIR) shall be removed in accordance with all laws and regulations, prior to the demolition of the property. The unit price payable for these items shall be as indicated on the bid sheet(s). All materials indicated as either Category 1 or Category 2, Non-Friable shall be removed as non-friable in accordance with all laws and regulations, during the demolition of the property. No additional payment shall be made for non-friable items deemed to be in acceptable condition by the Certified Asbestos Investigator on the site other than the unit price for the demolition of that property. If the Certified Asbestos Investigator declares that the non-friable material is in poor condition, the material shall be removed in accordance with all laws and regulations prior to the demolition of the property. The unit price payable for these items shall be as indicated on the bid sheet(s).

1.03 TERMINOLOGY

The following terms used in these Specifications are defined as listed below:

A. Abatement - Procedures to control fiber release from asbestos-containing materials; includes securing the Work area, removing the material, cleaning the area, and disposal of the material.

B. Access Doorway - A device to allow ingress and egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing two or three overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway; or by using rigid gasketed doors and HEPA filter.

C. Air Filtration Equipment - A portable local filtration system equipped with HEPA filtration and capable of maintaining a constant, low velocity flow to filter and trap contamination out of the air within the work area and then circulate or exhaust the filtered air to uncontaminated areas. This equipment is also used to establish a reduced pressure within the work area.

D. Air Monitoring - The process of measuring the fiber content of a specific volume of air in a stated period of time.

E. Air Lock - A system for permitting ingress and egress with minimum air movement between a contaminated area and a uncontaminated area, consisting of two curtained doorways separated by a dead air space of four feet.

F. Amended Water - Water containing a wetting agent or surfactant with a surface tension of twenty-nine (29) dynes per square centimeter when tested in accordance with ASTM D1331.

G. Area Sampling - Sampling of asbestos fibers concentration within the asbestos control area and outside the asbestos control area which approximates the concentrations of asbestos in the theoretical zone but is not actually collected in the breathing zone of an employee.

H. Asbestos - The term asbestos includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, actinolite, and any of these materials that have been chemically treated or altered. Materials are considered to contain asbestos if the asbestos content is greater than 1% by weight.

I Asbestos Control Area - An area where asbestos removal operations are performed which is isolated by physical boundaries, which assist in the prevention of the uncontrolled release of asbestos dust, fibers, or debris. Two examples of an asbestos control area are: a full containment and a "glovebag".

J. Asbestos Fibers - This expression refers to asbestos fibers having an aspect ratio of at least 3:1 and longer than 5 micrometers as determined by the National Institute for Occupational Safety and Health (NIOSH) Method 7400. This will be the method utilized for this project for monitoring purposes.

K. Authorized Person or Visitor - The City, or his authorized representative, or any representative of a regulatory agency having jurisdiction over the Project.

L. Background - Normal airborne asbestos concentration in an area prior to any asbestos abatement activity.

M. Clean Room - An uncontaminated area or room that is part of the Work decontamination unit with provisions for storage of worker's street clothes and protective equipment.

N. Curtained Doorway - A device to allow ingress and egress from one room to another while permitting minimal movement between the rooms, typically constructed by placing two overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway.

O. Decontamination Enclosure System - A series of connected rooms, with curtained doorways between any two adjacent rooms, for the decontamination of workers and of materials and equipment. A decontamination enclosure system always contains at least one air lock.

P. Equipment Decontamination Enclosure - That portion of a decontamination unit designed for controlled transfer of materials and equipment, typically consisting of a washroom and a holding area.

Q. Equipment Room - A contaminated area or room that is part of the worker decontamination unit with provisions for storage of contaminated clothing and equipment.

R. Fixed Object - A unit of equipment or furniture in the Work area that cannot be removed from the Work area.

S. Friable Asbestos Material - Any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, can be crumbled, pulverized, or reduced to powder either by hand pressure or mechanical forces reasonably expected to act on the material. If the asbestos content is less that ten percent (10%) as determined by a method other than point counting by PLM, verify the asbestos content by point counting using PLM.

T. Glovebag - A sealed compartment with attached inner gloves used for the handling of asbestos-containing materials. Properly installed and used, glove bags provide a small work area enclosure typically used for small-scale asbestos stripping operations. Information on glove-bag installation equipment used and supplied, and work practices is contained in the Occupation Safely and Health Administration's (OSHA) final rule on occupational exposure to asbestos (Appendix G to 29 CFR 1926.1101).

U. Glovebag Technique - A method with limited applications for removing small amounts of friable asbestos-containing material from HVAC ducts, short piping runs, valves, joints, elbows, and other non-planer surfaces in a non-contained work area. The glovebag assembly is a manufactured or fabricated device consisting of a

glovebag (typically constructed of 6 mil transparent plastic), two inward projecting long sleeve rubber gloves, one inward projecting water wand sleeve, an internal tool pouch, and an attached, labeled receptacle for asbestos waste. The glovebag is constructed and installed in such a manner that it surrounds the object or area to be decontaminated and contains all asbestos fibers released during the removal process. All workers who are permitted to use the glovebag technique must be highly trained, experienced, and skilled in this method.

V. HEPA Filter - A high efficiency particulate air (HEPA) filter capable of trapping and retaining 99.97 percent of particles (asbestos fibers) greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.

W. HEPA Vacuum Equipment - Vacuuming equipment with a HEPA filter system.

X. Holding Area - A chamber in the equipment decontamination area located between the washroom and an uncontaminated area. The holding area comprises an air lock.

Y. Log Book - A notebook or other book containing essential project data, daily project information, and a daily project diary. This book is kept on the project site at all times.

Z. Mini-Enclosure - A method with limited applications for removing small amounts of friable asbestos-containing material.

AA. Movable Object - A unit of equipment or furniture in the Work area that can be removed from the Work area.

BB. Negative Pressure Enclosure (NPE) System - An enclosure system required as per OSHA Asbestos Regulations constructed in areas where the configuration of the work area does not make the erection of the enclosure feasible. At least four air changes per hour are maintained and a minimum of -0.02 column inches of water pressure differential, relative to outside pressure, shall be maintained in the NPE as evidenced by manometric measurements and daily print outs. Print out shall be kept in Contractor logbook with a copy provided for on-site air monitor. The NPE is kept under negative pressure throughout the period of use.

CC. Operation of Building – Building shall remain operational during abatement project. Normal building services including but not limited to plumbing, HVAC systems (heat and air), security systems, escalator, elevators, emergency exits, cash box area, computer rooms, sprinkler systems, shall remain operational during business hours. Contractor shall ensure that work is performed in compliance with all regulations while maintaining normal business operational systems. The Contractor shall provide in writing a detailed list of all systems that may require interruption during business hours and obtain prior approval from City. Letter shall be submitted with bid with approval obtained prior to contract award. Includes anything that will negatively impact the functions of the store.

DD. Personal Sampling - Air sampling to determined asbestos fiber concentrations within the breathing zone for a specific employee, performed in accordance with 29 CFR 1926.58.

EE. Removal - All herein specified procedures necessary to remove asbestos-containing materials from the designated areas and to dispose of these materials at an acceptable site.

FF. Shower Room - A room between the clean room and the equipment room in the worker decontamination unit with hot and cold or warm running water and suitably arranged for complete showering during decontamination. The shower room comprises an air lock between contaminated and clean areas.

GG. Surfactant - A chemical wetting agent added to water to improve penetration.

HH. Time Weighted Average (TWA) - The TWA is an 8-hour time weighted average airborne concentration of asbestos fibers. At least three full shift samples per person are required to establish that person's TWA exposure.

II. Washroom - A room between the Work area and the holding area in the equipment decontamination area. The washroom comprises an air lock.

JJ. Wet Cleaning - The process of eliminating asbestos-contamination from building surfaces and objects by using cloths, mops or other cleaning tools that have been dampened with water, and by afterwards disposing of these cleaning tools as asbestos-contaminated waste.

KK. Wetting Agent - That specific agent used to physically entrap asbestos fibers in material to be removed therefore eliminating airborne asbestos resultant from the removal operations. Agent must have a surface tension of at least twenty-nine (29) dynes per square centimeter as tested in accordance with ASTM D 1331.

LL. Work Area - Designated rooms, spaces, or areas of the Project in which asbestos abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. A contained work area is a work area, which has been sealed, plasticized, and equipped with a decontamination enclosure system. A non-contained work area is an isolated or controlled-access work area which has not been plasticized nor equipped with a decontamination enclosure system.

MM. Worker Decontamination Facility - That portion of a decontamination unit designed for controlled passage of workers, other personnel, and authorized visitors, typically consisting of a clean room, a shower room, and an equipment room.

1.04 APPLICABLE DOCUMENTS

The current issue of each document shall govern. Where conflict among requirements, regulations, Codes, or these Specifications exists, the more stringent requirements shall apply.

A. Regulations: Comply with applicable Federal, State, and Local regulations and ordinances.

B. Title 29, Code of Federal Regulations, Section 1910.1001 and 1910.134 and 1926.1101, Occupational Safety and Health Administration (OSHA), U. S. Department of Labor.

C. Title 40, Code of Federal Regulations, Part 61, Subparts A and M, National Emission Standards for Hazardous Air Pollutants, U.S. Environmental Protection Agency (EPA).

D. All State, County, and City Codes and Ordinances as applicable.

1.05 PERSONAL PROTECTION AND SAFETY

A. The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his containment, decon, equipment, supplies, methods, etc. And for any damages which may result from his operations, improper construction practices or maintenance. He shall erect and properly maintain at all times as required by the conditions and progress of the Work, proper safeguards for the protection of workers and the public. **"DO NOT ENTER" signs will be placed immediately outside the environmental construction area. OSHA required warning signs will be posted within the construction area, attached to the asbestos containment.**

B. During the removal operations the Contractor may be placing his workers in a potentially hazardous electrical environment. Care and special consideration must be exercised by the Contractor to avoid electrical shock to his employees. The requirements as set forth in the latest edition of the National Electrical Code, shall be adhered to at all times. Particular emphasis shall be placed on the requirements listed in Article 210 – BRANCH CIRCUITS, Article 225 – OUTSIDE BRANCH CIRCUITS AND FEEDERS, Article 250 – GROUNDING, Article 300 – WIRING METHODS, and Article 305 – TEMPORARY WIRING, whenever and wherever power utilized. Contractor shall comply with all federal, state and local regulatory requirements.

C. The Contractor shall be responsible for mandatory personnel monitoring of workers in accordance with 29 CFR 1926.58. Results shall be posted on abatement site daily with a copy of results provided to the industrial hygienist of the on-site City Representative within twenty-four (24) hours after completion of sample collection.

D. The Contractor shall be responsible to confirm that the Contractor's written hazard communication program complies with all applicable regulations, including 29 CFR 1910.1200(e).

E. Respiratory Protection Requirements:

1. All respiratory protection programs shall be established in accordance with the respiratory protection requirements of 29 CFR 1910.134, 29 CFR 1910.1001 and 29 CFR 1926.1101. Contractor is responsible for all compliance with all regulations.
2. All respirators used shall be selected from those approved by the

Mined Safety and Health Administration (MSHA), Department of Labor, Department of Health and Human Services and/or the National instituted of Occupational Safety and Health (NIOSH) for use in atmospheres containing asbestos fibers.

3. Work activities associated with the actual removal of asbestos-containing materials as well as post-removal activities prior to acceptable final clearance shall be conducted while wearing an appropriate respirator. The classes and type of respiratory protective equipment acceptable for this project shall be determined by historical air monitoring data provided by Contractor for previous similar projects and regulatory requirements that apply to the specific job site. The class and type of respiratory protection may require upgrading during project based on personnel and area sampling results at no additional cost to City and no project delays.
4. Air-purifying respirators shall be fit-tested utilizing irritant smoke or isoamyl acetate at the beginning of each project or a minimum of every year.
5. Provide authorized visitors with suitable respirators whenever they are required to enter the Work area.

F. Provide workers and authorized visitors with sufficient sets of fire retardant full body impervious protective clothing. Such clothing shall consist of full body coveralls and headgear. Provide eye protection and hard hats as required by applicable safety regulations. Disposable gloves shall be used to protect hands. Reusable type protective clothing and footwear shall be left in the Contaminated Equipment Room until the end of the asbestos abatement work, at which time such items shall be disposed of as asbestos waste, or shall be thoroughly cleaned of all asbestos or asbestos-containing material. Disposable type protective clothing, headgear, and footwear may be provided. The requirements provide in this contract and regulations are minimum standards. The Contractor is responsible for protection of individuals working on the asbestos abatement project and ensuring their safety.

G. Provide and post, in the Equipment Room and the Clean Room, the decontamination and work procedures to be followed by workers and authorized visitors as described in these Specification.

H. Worker Protection Procedures:

1. Each worker and authorized visitor shall, upon entering the job site: Remove street clothes in the Clean Change Room and put on a respirator and clean protective clothing before entering the equipment Room or the Work area. A locker will be provided for each worker and supervisor and the industrial hygienist to store street clothes in a clean/dry environment.
2. All workers and authorized visitors shall, each time they leave the Work area; remove gross contamination from clothing before leaving the Work area; proceed to the Equipment Room and remove all clothing except respirators; still wearing the respirator proceed to the showers; clean the outside of the respirator with soap and water while showering; remove the respirator; thoroughly shampoo and wash.
3. Following showering and drying off, each worker and authorized visitor shall proceed directly to the Clean Change Room and dress in clean clothes at the end of each day's work, or before eating, smoking, or drinking. Before reentering the Work area from the Clean Change Room, each worker and authorized visitor shall put on a clean respirator and shall dress in clean protective clothing.
4. Contaminated work footwear shall be stored in the Equipment Room when not in use in the Work area. Upon completion of asbestos abatement, dispose of footwear as contaminated waste.
5. Workers removing waste containers from the Equipment Decontamination Enclosure shall enter the holding area from outside wearing a respirator and dressed in clean disposable coveralls. No workers shall use this system as a means to leave or enter the washroom or the Work area.
6. Workers shall not eat, drink, smoke, or chew gum or tobacco while in the Work area.
7. Workers shall be fully protected with respirators and protective clothing from the time of first disturbance of asbestos-containing or contaminated materials prior to commending actual asbestos abatement and until final cleanup is completed and final air clearance achieved.

I. Equipment Removal Procedures: Clean surfaces of contaminated containers and equipment thoroughly by wet sponging or wiping before moving such items into the equipment decontamination enclosure system washroom for final cleaning and removal to uncontaminated areas. Ensure that personnel do not leave work areas through the equipment decontamination enclosure.

J. During summer work activities the Work area environment may be very hot and humid. The Contractor shall take precautions to protect his workers from the harsh environment as well as the asbestos fibers. First-aid items such as stretchers, water and cold packs should be kept adjacent to the Work area exits, thus allowing any personnel requiring emergency treatment egress from the Work area with minimum contamination to the

clean environment. No worker shall be allowed to reach through the plastic or air lock door to get water or first-aid supplies during break periods inside the Work area. Breaks, lunch or worker rest periods should be held outside the Work area. All decontamination procedures shall be followed prior to exiting the Work area except in extreme emergencies. During cold weather periods the worker shall be provided with adequate protection from the environment to not cause harm to the workers.

If evacuation of the Work area is required for contaminated personnel due to an emergency, all work efforts shall stop, and all forces shall be directed at minimizing the area contamination, cleanup operations and first-aid procedures. These activities shall be noted in the daily logbook.

K. Post safety-warning signs that follow the "Sample Format Warning Sign" shown below:
Sample Format Warning Sign: Minimum Size – 24" x 36"; Material – Aluminum or Fiberglass

Script:

DANGER

ASBESTOS

CANCER AND LUNG DISEASE HAZARD

AUTHORIZED PERSONNEL ONLY

RESPIRATORS AND PROTECTIVE CLOTHING
ARE REQUIRED IN THIS AREA

L. During work activities requiring decontamination procedures, the Contractor shall provide a means of communication for the workers inside the Work area without requiring personnel to enter or leave the Work area.

M. Adequate shower facilities shall be provided by the Contractor. The shower facilities shall be supplied with hot and cold water, which will be adjustable in the shower. An employee leaving the Work area shall follow all necessary decontamination procedures or as described herein.

N. Personnel of other trades not engaged in the removal and demolition of asbestos shall not be exposed at any time to airborne concentrations of asbestos. The Contractor shall maintain control of access to the regulated area at ALL TIMES. No non-asbestos trades shall enter the regulated area.

O. If an asbestos spill occurs outside of the asbestos control area, stop work immediately, correct the condition to the satisfaction of the City Representative including clearance sampling, prior to resumption of work.

P. The Contractor shall post a list of telephone numbers for local hospitals and/or emergency squad, local fire department, the institutions security office, a representative of the City who may be reached 24 hours a day, the Contractor's headquarters, and any other professional consultants directly involved with the project in the facility.

1.06 ASBESTOS ABATEMENT SUPERVISOR (ABS):

The Contractor shall have a certified abatement supervisor present at all times while asbestos abatement work is in progress. The supervisor shall be thoroughly familiar and experienced with asbestos removal and related work and shall be familiar with and shall enforce the use of all safety procedures and equipment. He shall be knowledgeable of all EPA, OSHA, NIOSH, State and Local requirement and guidelines. He shall be trained in the proper use of all personal protection and safety equipment including, but not limited to, air purification and respiratory systems. The Asbestos Abatement Supervisor and 'Competent Person" shall be onsite at all time and shall have AHERA/EPA approved Contractor/Supervisor training. All workers shall have AHERA/EPA and State approved worker training. All workers and supervisors onsite shall be appropriately licensed.

In addition to the Superintendent, the Contractor shall furnish one or more Asbestos Abatement Supervisors who are familiar and experienced with asbestos removal and its related work, safety procedures and equipment.

A. It shall be a requirement of this Specification that the Superintendent and/or one or more of the Contractor's Asbestos Abatement Supervisor is inside the Work area at all times while work is in progress.

B. It is the intent of these Specifications that all phases of the Work shall be executed by skilled craftsmen experienced, or receiving training by experienced personnel, in each respective environmental discipline.

PART 2 MATERIALS AND EQUIPMENT

2.01 MATERIALS:

A. Deliver all materials in the original package, container, or bundle bearing the name of the manufacturer and the brand name. Store all materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination. Damaged or deterioration materials shall not be used and shall be removed from the premises. Material that becomes contaminated with asbestos shall be disposed of in accordance with the applicable regulations.

B. Polyethylene sheet: provide flame resistant polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for flame-resistant textiles and films. Provide largest size possible to minimize seams, 6.0 mil thick, frosted or black as indicated.

C. Tape capable of sealing joints of adjacent sheets of polyethylene and for attachment of polyethylene sheets to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions, including sue of amended water. Use tape with tough backing that does not leave residue on the adhering surface.

D. Surfactant: Shall consist of 50 percent polyoxyethylene ether and 50 percent of polyoxyethylene ester, or equivalent, and shall be mixed with water to provide a concentration of one ounce surfactant to 5 gallons of water.

E. Impermeable Containers: Suitable to receive and retain any asbestos-containing or contaminated materials until disposal at an approved site, labeled in accordance with OSHA Regulation 29 CFR 1910.1001. Containers must be both air and watertight and must be resistant to damage and rupture. Plastic bags shall be a minimum of 6 mil thick.

F. Warning labels and signs: As required by OSHA Regulation 29 CFR 1910.1001.

G. Other Material: 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.

2.02 TOOLS AND EQUIPMENT:

A. Provide suitable tools for asbestos removal.

B. Air filtration equipment: High efficiency particulate air (HEPA) filtration systems shall be equipped with filtration equipment in compliance with ANSI Z9.2-79, local exhaust ventilation or equal. No air movement system or air filtering equipment shall discharge unfiltered air outside the Work area. A reduced pressure shall be held in the Work area continuously (24 hours a day) from the start of work in the area until the area has been decontaminated and certified as such by the required testing. A volume of air shall be filtered equal to one air exchange in the work area every fifteen minutes. Air filtration shall meet the requirements of 29 CFR 1926.110.

PART 3 SUBMITTALS

3.01 PRE-ABATEMENT

Before the Start of Work: Submit three (3) copies of the following to the City for review. ***Facsimile copies of submittals will not be accepted***. In scheduling, allow at least (10) ten working days for review by the City following City's receipt of the Submittals. Work shall not begin until a letter is returned to Contractor indicating that the submittals are approved for unrestricted use or final-but-restricted use. **No Worker or Supervisor is permitted on the project site unless submittals for each individual has been received and approved. No faxed submittals will be accepted and no field/site review will be provided.

A. Permits- Submit a copy of all required permits per the City's Asbestos Control Regulations and other governing agencies and regulations.

B. Work Plan – Imminently Dangerous Buildings:

When ACM is identified, all ACM and all contaminated debris must be thoroughly wetted and disposed of as ACM. This work must be performed by a licensed abatement contractor. Contractors who plan to perform

this work must have an approved plan on file with the City's Air Management Services (AMS). The plan should provide a detailed description of the work practices that will be followed should ACM be found during demolition and include containment and disposal techniques. An individual certified as an Asbestos Projector Inspector, must be on site to perform the required air monitoring and provide oversight (involving projects greater than 40 linear or 80 square feet). The notification must be amended and all permit and work practice requirements will apply.

C. Work Plan – Buildings Not Imminently Dangerous:

Submit for approval, to the Project Manager, a written Work Plan. The Work Plan shall address at a minimum:

1. Methods proposed for the, removing, loading, and hauling of contaminated materials and construction wastes. All Alternative Removal Methods shall be included in this submission.
2. Storage and security provisions for contaminated materials and construction wastes.
3. Waste identification methods (e.g., labeling, marking containers).
4. Provisions for ensuring separation of incompatible materials.
5. Location of waste staging and temporary storage areas.
6. Provisions for minimizing off-site contamination associated with temporary storage of contaminated materials on-site.
7. Names and addresses of all waste disposal and/or recycling facilities for each particular waste stream.
8. Copies of licenses and permits required by local, state and federal regulations for all transporters and disposal facilities.
9. Special safety precautions required.
10. A description of the exhaust method that will be utilized when performing asbestos abatement of properties adjacent to occupied properties or where persons that are not asbestos trained and equipped with personal protective equipment may be exposed to the asbestos abatement exhaust from the regulated area.

D. Ten (10) day (or most stringent) Federal, State, County, and Local notifications.

E. State and County, if applicable, certificate to engage in asbestos project as per regulatory requirements.

F. Documentation of approval of removal methods and variances issued by regulatory agencies. Documentation must show approval of removal methods as approved by Project Designer as part of the Work Plan submission (Part 3, 3.1, C., 1.).

G. Permits, State licensure, and Notification.

H. Medical examination and fit-testing documentation.

I. Current Company and worker/supervisor training certificates and licensure for Commonwealth of Pennsylvania and City of Philadelphia. Contractor shall be found in breach of contract if invalid, expired, suspended, or revoked licenses are used during contract performance by company, worker and/or supervisor. The company may not use another company's license, or contract will be invalid.

J. Respiratory and medical monitoring program.

K. Confirmation that written hazard communication program complies with all applicable Regulations. Name, address, and telephone number of laboratory performing OSHA sampling and analysis (including laboratory certification information).

M. Inventory of any chemicals or other materials that will be used on site, and Material Safety Data Sheets for any chemicals or other materials that will be used on site.

N. Description of removal methods used for each type of material in the facility (i.e. carpet, floor tile, mastic, spray-on/troweled-on surfacing materials, thermal system insulation).

O. Negative exposure assessment data documentation and report representing similar project size, scope, and type of material in occupied building for work practices and engineering controls intended for use on this project that was performed within the last twelve (12) months.

P. Work plan and detailed project schedule.

Q. Decontamination unit information (i.e. personnel decontamination unit shop drawing, equipment decontamination unit shop drawing, shower plan shop drawing, shower walls product data, shower head and controls product data,

filters product data, filters shop drawing, hose bib product data, elastomeric membrane product data, lumber product data on fire resistance treatment, signs-samples, and fire-proof poly product data).

R. Manufacturer data must be submitted for the following:
   1. Local exhaust and vacuum equipment.
   2. Pressure differential monitor.
   3. Respirators.
   4. Amended water.
   5. Chemicals.

S. Show compliance with ANSI Z 9.2 for vacuums, ventilation equipment, and other equipment required to contain airborne asbestos fibers by providing manufacturer's certification.

T. The Contractor shall provide maintenance records, the actual filtration capacity, manufactured data and manometer readings for the negative air machines to be used on-site. Provide replacement records for primary, secondary and HEPA filters utilized on projects for the past 12 months.

3.02 PROJECT DURATION SUBMITTALS

OSHA MONITORING

A. The Contractor shall be responsible for all personal air monitoring and maintain OSHA Monitoring results at site within twenty-four (24) hours after collection of samples, and shall provide the results of the air monitoring on a weekly basis to the City and City's Representative. These results shall be for each job title.

B. Provide log of all filter changes, and manometer readings for negative air exhaust machines.

C. WASTE SHIPMENT MANIFEST – Waste shipment manifests shall be provided **monthly, or upon request**, for all waste that has been removed offsite for disposal at an approved landfill. Unless otherwise specified. Temporary storage of asbestos waste collected in the performance of this Scope of Work (including all materials removed from containment area) is prohibited.

D. Contractor shall submit project updates/progress reports showing 25%, 50%, 75% and 100% asbestos abatement completion for project phase to City. Indicate completed addresses and addresses listed for completion. Include update project schedule indicating when comp letion for remaining addresses will take place.

3.03 PROJECT CLOSE-OUT SUBMITTALS

Post abatement documentation shall include:

A. Notification of Demolition/Renovation (Including all amended notices for Federal, State and Local agencies) – Contractor shall provide notifications and ensure that work adheres to all Federal, State and Local Regulations.

B. Abatement Contractor License – Contractor shall provide a copy of the current contractor license for the State (and local regulatory agency) for specific job site.

C. Supervisor/Worker License – Contractor shall provide a copy of the current supervisor/workers licenses for the State (and local regulatory agency) for specific job site.

D. Job Sign In/Sign Out Forms – Contractor shall document all personnel and visitors to the site.

E. OSHA Monitoring Results – Contractors shall provide all personal monitoring results for the specific project within 24 hours of sample collection and post results at the site. In addition, contractor shall provide the name, address, telephone number and laboratory certificate for the laboratory that performs the sample analysis.

F. Waste Shipment Manifest – Fully executed original manifests shall be provided to the CITY within 20 calendar days after waste has left the site. Interim storage is prohibited.

G. Material Safety Data Sheets (MSDS) – Contractors shall provide MSDS for all chemicals used at the site during the abatement work.

PART 4 EXECUTION

4.01 PREPARATION - All Work Area preparation shall be performed in compliance with 29 CFR 1926.1101 and Title 6, Health Code, of the Philadelphia Code, Chapter 6-600, Asbestos Projects, adopted June 26, 1986, revised, March 4, 1993 including, but not limited to the following:

4.02 Work Area Preparation Major Project

MAJOR PROJECTS: Workplace preparation and abatement procedures described in Section VI of the City's Asbestos Control Regulations (ACR), including the hiring of an independent API must be followed for major asbestos projects (80 sq. ft. or 40 linear ft. or more).

Pretest project and clearance sampling is required. The final clearance laboratory report, the results of the final visual inspection and documentation of final project cost must be submitted to AMS within 10 calendar days of the project completion.

MAJOR ASBESTOS PROJECT WORKPLACE STANDARDS

A City Major Asbestos Project is any project involving, within one (1) year, the removal, enclosure, or encapsulation of or any renovation, repair, or demolition work which disturbs or damages either: (a) eighty (80) square feet or more of friable asbestos material from ceilings, walls, structural members, mechanical component, or other surfaces of a building; or (b) forty (40) linear feet or more of asbestos pipe covering within a single building or at one location.

1. The provision of this Section shall apply to all major asbestos projects, except where the asbestos abatement is performed solely by containment-bag techniques in which case the work area preparation shall comply with the provisions of Section VI.C.3.c. of the Asbestos Control Regulations.
2. The building owner or designated representative shall provide at least ten (10) calendars days advance notification of intended asbestos abatement activity to all occupants within the work area and areas adjacent to the asbestos project. The notification shall include: the name of the contractor, the project location and scope, amount and type of asbestos, abatement procedure, dates of expected occurrences, and the telephone number for Air Management Services. Postings of this notification shall be in English (and other languages appropriate to the population of occupants within the work area and adjacent areas), at eye level, in a conspicuous, well-lit place, at the entrances to the work area and immediate adjacent areas. The notice shall have the heading, NOTICE OF ASBESTOS ABATEMENT, in a minimum of one-inch Sans Serif gothic or block style lettering. All other lettering shall be in a minimum of one-quarter inch Sans Serif gothic or block style. The notice shall be posted until the Department certifies that the re-occupancy standard has been met. A lessee initiating an asbestos project shall give ten (10) calendar days notice to the owner of the subject building prior to the start of the asbestos project.
3. Caution signs meeting the specifications of OSHA 29 CFR 1926.58 k(l)(ii) shall be posted at all entrances to a location where airborne concentrations of asbestos may exceed ambient background levels. Caution signs shall be posted in English and other appropriate languages.
4. When an isolation barrier is required it shall be constructed as follows:
   a. partitions shall be constructed of, at a minimum, conventional 2x3 wood, polyvinyl chloride piping, or metal stud framing or equivalent, on a sixteen-inch maximum center-to-center (16”CC) to support barriers in all openings larger than thirty-two (32) square feet, except where any one dimension is one (1) foot or less;
   b. a solid construction material (e.g., plywood) of at least three-eighths-inch (3/8”) thickness shall be applied to the work side of the framing where the barrier could be subject to damage from activity adjacent to the work area; and
   c. the partition shall be plasticized in accordance with paragraph 14 below.
5. Prior to erection of partitions, asbestos materials that will be disturbed during this activity shall be:
   a. treated first with amended water or a removal encapsulant; and
   b. removed, using a tent procedure (see Section VI.C.4. of the City’s Asbestos Control Regulations (ACR); or removed by an equivalent procedure approved by the Department of Health.
      i. removal by these procedures shall be limited to a maximum of a one (1)-foot-wide strip running length and/or height of the partition and is allowed only to facilitated erection of the partitions.
6. Prior to plasticizing as required under paragraph 14 below:
   a. if moveable objects are found in the work area, and slated to be disposed of as asbestos waste material in accordance with Section VI.C.7 of the Asbestos Control Regulations, cleaning is unnecessary. If carpeting is left in place, it shall be covered with plastic sheeting and one-half (1/2)-inch rigid flooring prior to plasticizing as required under paragraph 14 below.
   b. fixed objects which will remain within the proposed work areas shall be pre-cleaned using HEPA-filtered vacuum equipment and, where feasible, wet cleaning methods and enclosed with one (1) layer of plastic sheeting sealed with tape; and
   c. all other surfaces in the proposed work areas shall be pre-cleaned using HEPA-filtering vacuuming equipment.
7. Except to allow for the entry of air necessary to maintain negative pressure, the work area shall be isolated by completely enclosing the work area and sealing off all doors, windows, ducts, grills, diffusers, and any other penetrations of the work areas with two (2) layers of plastic sheeting and tape. All seams of system components that pass through the work area shall also be sealed.
8. After the isolation barriers required in paragraph 4. above have been erected, ceiling-mounted objects not previously sealed, that will interfere with the asbestos abatement project, shall be removed and cleaned or removed and disposed of as asbestos waste. Amended water spraying or HEPA-filtering vacuuming shall

be used during the process of removing any ceiling-mounted objects to reduce the dispersal of asbestos fibers.

9. Suspended ceiling tiles and T-grid component contaminated by friable asbestos materials shall remain in place until:
    a. the work area has been fully prepared as outlined in Section VI.B of the Asbestos Control Regulations; and
    b. electrical and HVAC systems have been shutdown:
        i. if any suspended ceiling tiles and T-grid components are to be retained for reuse, they shall be removed and vacuumed with HEPA-filtered equipment and wet-cleaned; otherwise, they shall be removed and disposed of as asbestos waste in accordance with Section VI.C.7. of the Asbestos Control Regulations.
10. Emergency exits from the work areas shall be maintained, or alternative exits shall be maintained, or alternative exits shall be maintained in accordance with Title 5 of the Philadelphia Code and any other applicable provisions. Emergency exits shall be checked daily against exterior blockage or impediments to exiting.
11. Entrances to the work area that will not be used for worker entry or emergency exits shall be locked to prevent unauthorized entry.
12. Floor drains shall be sealed individually with two layers of plastic sheeting and tape, and then covered in accordance with paragraph 14 below. Pits, sumps, etc., shall be covered with adequate plywood sheeting and secured to floor slabs in a manner which prevents a tripping hazard, prior to plasticizing as required in paragraph 14.below.
13. A worker decontamination enclosure system shall be installed or constructed prior to plasticizing the work area and before disturbing asbestos material. The area in which these systems are located, shall require plasticizing of electrical outlets and equipment.
14. All floor and wall surfaces shall be covered and sealed with plastic sheeting, using a minimum of two (2) layers. The plastic layers on the floor shall extend twelve (12) inches up the walls. Walls shall be covered with plastic sheeting down to the floor level, thus overlapping the floor covering by a minimum of twelve (12) inches. There shall be a distance of at least twelve (12) inches between the seams of adjacent layers.
15. Worker decontamination enclosure systems shall be provided outside the work area and shall be attached to all locations where workers will enter or exit the work area:
    a. the worker decontamination enclosure system shall consists of a clean room, a shower room, and an equipment room, in series, separated from each other from the work area by airlocks and from non-work area by a lockable, shuttered door. (Either existing rooms or newly-constructed rooms may be used.);
    b. each room of the worker decontamination enclosure system shall be lined with, at a minimum, two (2) layers of plastic sheeting, or the equivalent;
    c. when the worker decontamination system is constructed outdoors or in areas with public access, it shall be fully framed and sheathed with plywood or its equivalent to prevent unauthorized entry. When located outdoors the system shall be waterproof and windproof;
    d. prefabricated or trailer decontamination systems shall:
        i. at a minimum, be as functional and secure as a constructed worker decontamination enclosure system; and
        ii. be completely decontaminated prior to removal from the work site;
    e. the clean room shall:
        i. be sized adequately to accommodate the entire work crew; and
        ii. contain secure crew lockers or shelves, where space permits, and clean sealable plastic bags for storage of street clothes; and
        iii. contain a sufficient quantity of benches; and
        iv. contain shelves and appropriate facilities for storage of respirators; and
        v. contain clean disposable clothing, replacement filters for respirators, towels and other necessary personal protective equipment; and
        vi. not be used for storage of tools, equipment, or materials, other than personal protective equipment, nor used as office space; and
        vii. be equipped with a lockable, shuttered door which opens on make-up air inflow and seals on air flow cessation for interior and exterior exits. The door shall permit entrance to the clean room

and secure the work place during off-shift hours. Equipment alternatives to this standard design may be utilized with the approval of the City's Department of Health.

f. the shower room shall:
   i. contain a minimum of one (1) shower per eight (8) workers calculated on the basis of the largest shift; and
   ii. be supplied with hot and cold water adjustable at the tap; and
   iii. be constructed to ensure against water leakage; and
   iv. contain liquid bath soap, shampoo, and clean, dry towels in sufficient quantity for each showering:
      a. shower water that is not used for the purpose of rewetting asbestos waste materials shall be drained, collected and filtered through a system with at least five (5.0) micron particle size collection capability. A system containing a series of several filters with progressively smaller pore sizes shall be used to avoid rapid clogging of the filtration systems by large particles:
         i. filtered wastewater shall be discharged either to a sewer or drummed and then properly disposed; and
         ii. used filters shall be disposed of as asbestos waste material in accordance with Section VI.C.7 of the Asbestos Control Regulations.

g. the equipment room shall:
   i. be used for storage of equipment and tools used on the job that have been decontaminated previously in the work area;
   ii. contain a supply of replacement filters (in sealed containers until used) for HEPA vacuums and negative pressure ventilation equipment, extra tools, containers of surfactant and other materials and equipment that may be required during the abatement activity;
   iii. contain labeled six (6)-mil polyethylene bags for collection of disposable clothing;
   iv. be used to store contaminated footwear (e.g. rubber boots and other reusable footwear) and contaminated clothing for reuse for the duration of the abatement activity or until disposed;

h. adequate toilet facilities shall be provided in the vicinity of the clean room, external to the work area. Where such facilities do not exist, portable service shall be provided.

16. A negative pressure ventilation system shall be established to maintain negative air pressure in the work area at all times in order to prevent airborne asbestos fibers form escaping the work area:
   a. the negative pressure ventilation equipment shall operate continuously, twenty-four (24) hours a day, from the time of the erection of isolation barriers through successful clearance air monitoring in accordance with Section VI.D.4.c. of the Asbestos Control Regulations. An operational failure of the negative pressure ventilation equipment shall require areas adjacent to the work area to be monitored for asbestos fibers;
   b. a static negative air pressure two-hundredth (0.02) inches (minimum) water column shall be maintained at all times in the work area during the abatement activity to ensure that contaminated air in the work area does not filter into uncontaminated areas;
   c. if more than one ventilation unit is installed, each unit shall be turned on, one at a time, while monitoring the integrity of all critical and/or isolation barriers for secure attachment and the need for additional reinforcement;
   d. a dedicated power supply for the negative pressure ventilating units shall be utilized;
   e. upon the loss of negative air pressure, the abatement activity shall stop immediately and shall not resume until negative pressure is restored. When loss of negative pressure lasts or is expected to last longer than one hour:
      i. the make-up air inlets shall be sealed airtight;
      ii. the worker decontamination enclosure system(s) shall be sealed airtight after the evacuation of personnel from the work area; and
      iii. all areas adjacent to the work area shall be monitored for asbestos fiber concentration throughout the duration of the loss of negative air pressure;
   f. negative pressure ventilation equipment shall be installed and operated to provide at least one air change in the work area every fifteen (15) minutes;
   g. additional make-up air may be delivered to the work area through horizontal shutters which open on make-up air inflow and seal on air flow cessation, or through a HEPA-filtered ventilation system;
   h. openings made in the isolation barrier to accommodate negative pressure ventilation equipment shall be made airtight; equipment shall be located in a secure area.

i. negative air pressure equipment shall be in compliance with ANSI (American National Standards Institute) Z9.2 (1979), Local Exhaust Ventilation;

j. negative air pressure systems shall be operated in accordance with, "Guidance for Controlling Asbestos-Containing Materials in Buildings", Appendix J, Specifications and Operating Procedures for the Use of Negative Pressure System for Asbestos Abatement, EPA Report Number 560/5-85-024 (1985);

k. negative pressure ventilation equipment shall be exhausted to the outside of the building away from occupied areas except as provided in subdivision i. below:

i. at no time shall the negative pressure ventilation unit exhaust within entrances of the building or adjacent to buildings;

ii. heavy-duty ducting, equivalent to, or larger than, the shape and dimension of the negative pressure ventilation exhaust port shall be used to exhaust to the outside of the structure; and

iii. all ducting shall be sealed and braced or supported to maintain airtight joints;

l. where ducting to the outside is not possible, careful installation, smoke testing, air monitoring and daily inspection of ducting shall be performed to insure that the ducting does no release asbestos fibers into uncontaminated building areas.

17. The City Department of Health (Department) may approve alternative equivalent methods for work area preparation proposed in the permit application if the methods required by this Section are not technically feasible or would cause unsafe or unhealthy conditions. A request to the Department for approval of alternative equivalent methods shall include the reasons for not using the methods required by this Section and a description of the proposed alternative methods.

B. Asbestos Project Procedures

1. General Procedures

a. No removal, encapsulation, or enclosure of asbestos materials may begin until the Department has performed a pre-inspection of the work area to ensure that the work area has been properly prepared in accordance with this Section and that all necessary equipment is in place to protect the general public;

b. No person shall enter the work area during an asbestos project without proper equipment and clothing and training;

c. The contractor or supervisor of an asbestos project shall provide all authorized persons who enter the work area with the required protective clothing and equipment, in accordance with applicable federal regulations, including disposal protective clothing (including full-body coveralls, head and foot covers, gloves) and appropriate respirators;

d. The contractor or supervisor of an asbestos project shall ensure that:

i. all individuals refrain from eating, drinking, and smoking in the work area and other contaminated areas;

ii. all workers and authorized visitors enter the work area through the worker decontamination system;

iii. all individuals who enter the work area sign an entry log, located in the clean room, upon each entry and exit. The pages of the log shall be permanently bound together and shall identify fully the facility, owner, agents, contractor(s), the project, each work area, worker respiratory protection employed, and date and time of entry and exit. The entry log headings shall indicate, and the signatures shall be used to acknowledge, that the regulations and procedures have been reviewed and understood by all persons prior to entering the work are. The postings and log headings shall be in English and other appropriate languages. The asbestos project supervisor shall be responsible for the maintenance of the log during the abatement activity. The log shall be available for examination during general business hours by the Department, the owner and the project workers;

iv. all individuals, before entering the work area, are familiar with all posted regulations, personal protection requirements and emergency procedures;

v. all individuals proceed first to the clean room, remove all street clothing, store these items in clean, sealable plastic bags or a locker, and don respirator protection, disposable coveralls, head covering, foot covering and gloves. Clean respirators, filters, if appropriate, and protective clothing shall be provided and utilized by each person on each occasion when he/she enters the work area;

vi. individuals wearing the designated personal protective clothing and equipment proceed from the clean room, through the shower room, to the equipment room where necessary tools are collected

and any additional clothing (deck shoes, hard hats, goggles and/or overalls) are donned before entry into the work area;

vii. before leaving the work area, each individual removes the gross contamination from outside of the respirators and protective clothing by wet cleaning and/or HEPA-filtered vacuuming;

viii. in the equipment room, all personal protective equipment, except respirators, are removed; disposable clothing shall be deposited into the appropriate containers for disposal in accordance with Section VI.C.7 of the Asbestos Control Regulations. Reusable contamination clothing, footwear, and/or head gear shall be stored in the equipment room when not in use;

ix. each individual, while still wearing a respirator, proceeds to the shower room, cleans the outside of the respirator and his/her exposed face area under running water prior to removing the respirator, and then fully and vigorously showers and shampoos to remove residual asbestos contamination. Respirators shall be washed thoroughly with soap and water. Various types of respirators may require slight modification of these procedures; and

x. individuals, after showering and drying, proceed to the clean room and don clean disposable clothing if returning to the work area or, if not, street clothing; and

e. Air monitoring to determine worker exposure to asbestos fibers shall be conducted for all asbestos workers not covered by the OSHA asbestos standards, in accordance with the applicable EPA and OSHA standards.

2. General Removal Procedures

a. The asbestos material shall be sprayed with amended water. The amended water shall be tested on a small area before use to ensure effectiveness. A fine Low-pressure spray of amended water shall be applied to prevent disturbance of asbestos fibers prior to removal. The amended water shall be sprayed on as many times as often as necessary to ensure that the asbestos nearest the substrate of the asbestos material is thoroughly wetted to prevent dust emission. Removal of dry asbestos material shall be permitted only when removal of wet asbestos material is demonstrated as not feasible to the Asbestos Inspector or Project Designer and only with the prior approval of the Department;

b. Asbestos material located more than fifteen (15) feet above the floor shall be removed and lowered into inclined chutes, lowered onto scaffolding, or containerized at that height for later disposal. Asbestos materials shall not be dropped or thrown to the floor from fifteen (15) feet or greater. For materials at heights greater then forty (40) feet above the floor, a dust-tight, enclosed chute shall be constructed to transport removed asbestos material directly to containers located on the floor;

c. The asbestos material shall be disposed of in accordance with Section VI.C.7. of the Asbestos Control Regulations;

d. After all of the asbestos material has been removed from the structure, all surfaces from which asbestos has been removed shall be scrubbed using nylon or bristle brushes and wet-sponged, or cleaned by an equivalent method approved by the Department, to removal all visible asbestos material. During cleaning the surfaces shall be kept wet using amended water;

e. All accessory equipment shall be moved to the equipment room in sealed six (6)-mil plastic bags and decontaminated for removal;

f. All free water (in contaminated areas) shall be retrieved and added to asbestos waste for disposal and/or placed in plastic-lined leak-tight drums for disposal in accordance with Section VI.C.7. of the Asbestos Control Regulations; and

g. Containment-bag techniques shall be used to the maximum extent feasible for removal of asbestos pip insulation or other appropriate asbestos material as outlined in paragraph 3 below.

3. Containment-Bag Technique

a. The removal of asbestos by use of the containment-bag technique shall be limited to asbestos insulation from pipe fittings, elbows, and pipe. Containment bags are for single use and shall not be repositioned;

b. A minimum of two persons are required to perform asbestos material removal by the containment-bag technique. A third person may be required to conduct air monitoring and assist with supplies;

c. Work areas where removal of asbestos materials is performed solely by the containment-bag technique shall be prepared as follows:

i. notification of asbestos abatement and caution signs shall e posted in accordance with Section VI.B.3 of the Asbestos Control Regulations;

ii. all necessary material and supplies shall be brought into the work area before any removal begins;

iii. the work area shall be separated from the rest of the work site by isolation barriers consisting of solid physical barriers such as ceiling, floors, and walls, or solid partitions as described in Section

VI.B.5. of the Asbestos Control Regulations, with all openings such as doors, windows, and air vents covered with a single layer of plastic sheeting;

iv. at least one layer of plastic sheeting shall be taped to the floor beneath the pipes subject to the abatement extending at least five (5) feet from the area of removal in all directions; and

v. the provisions of Section VI.B.7. and 15. of the Asbestos Control Regulations shall be followed;

d. The following is a list of required equipment and tools for the removal of asbestos by the containment-bag technique:

i. the seamless-bottom containment bag which consists of a six (6)-mil bag fitted with long sleeve gloves, a tool pouch and a two-inch opening used for water application, that is not more than 60 x 60 inches;

ii. a pump-up sprayer (garden type) with a two or three gallon capacity;

iii. amended water;

iv. six (6)-mil polyethylene disposal bags with the proper markings for asbestos waste;

v. a HEPA-filter vacuum with a capillary tube for insertion into the containment bag;

vi. tools such as: a small scrub brush, a utility knife for cutting the insulation, a stapler, wire cutters, smoke tubes with aspirator bulb, a bone saw, tin snips, duct tape, and wettable cloths;

vii. a roll of six (6)-mil polyethylene; and

viii. an encapsulant (tinted).

e. Removal procedures shall be conducted as follows:

i. a visual inspection of pipe where the work will be performed shall be made to determine if any damaged pipe covering (broken lagging, hanging, etc.) exists. If so, the pipe shall be wrapped in polyethylene and fully secured with duct tape. Debris on the floor and other surfaces which have accumulated and contains asbestos must be properly disposed. If the pipe is undamaged, one layer of duct tape shall be place around the pipe at each end of where the containment bag will be attached. The pipe insulation diameter worked shall not exceed one-half the bag working length above the attached gloves;

ii. slit the top of the containment bag open (if necessary) and cut down the side to accommodate the size of the pipe (about two inches longer than the pipe diameter);

iii. place the necessary tools into the pouch located inside the containment bag. This will usually include the bone saw, utility knife, rag, scrub brush, wire cutters, tin snips and pre-cut wettable cloth. Cut out two (2) doughnut shapes in the cloth with the inner diameter one-half inch smaller than the diameter if the pipe beneath the insulation. Finally, cut a slit in each of the two doughnuts so they can be slipped around the pipe;

iv. one strip of duct tape shall be placed along the edge of the open top slit of the containment bag for reinforcement;

v. place the containment bag around the section of the pipe to be worked on and staple the top together through the reinforcing duct tape, at intervals of approximately one inch. Next, fold the stapled top flap back and tape it down with a strip of duct tape. Next, duct tape the ends of the containment bag to the pipe itself, previously covered with plastic or duct tape (see Subdivision i. above);

vi. using the smoke tube and aspirator bulb, place the tube into the water sleeve (two-inch opening to containment bag). By squeezing the bulb, fill the bag with visible smoke. Remove the smoke tube and twist the water sleeve closed. While holding the water sleeve tightly, gently squeeze the containment bag and look for smoke leaking out, especially at the top and ends of the containment bag. If leaks are found, they shall be taped closed using duct tape and the bag shall be re-tested;

vii. insert the wand from the water sprayer through the water sleeve. Using duct tape, tape the water sleeve tightly around the wand to prevent leakage;

viii. one person place their hands into the long-sleeved gloves while the second directs the water spray at the work;

ix. if the section of pipe is covered with an aluminum jacket, this is removed first using wire cutters to cut any bands and tin snips to remove the aluminum. It is important to fold the sharp edges in to prevent cutting the bag when it is placed in the bottom. A box may be put in the bottom of the bag with the tools placed in it, and the metal placed in the box to further protect the bag from being cut;

x. with the insulation exposed, using a bone saw, cut the insulation at each end of the section to be removed. A bone saw is a serrated heavy-gauge wire with ring-type handles at each end. Throughout this process, water is sprayed on the cutting area to keep dust to a minimum;
xi. once the ends are cut, the section of insulation should be slit from end to end using a utility knife. The cut should be made along the bottom of the pipe and water continuously supplied. Again, care should be taken when using the knife not to puncture the bag. Some insulation may have wire to be clipped as well. Again, a box may be used here as in subdivision (ix) above to protect the bag from puncture;
xii. rinse all tools with water inside the bag and place back into the pouch;
xiii. the insulation can now be lifted of the pipe and gently placed in the bottom of the bag, while the side of the insulation adjacent to the pipe is being thoroughly wetted;
xiv. using a scrub brush, rags, and water, scrub and wipe down the exposed pipe;
xv. wet the doughnut–shaped pieces of wettable cloth over the exposed ends of insulation remaining on the pipe;
xvi. remove the water wand from the water sleeve and attach small nozzle from the HEPA-filtered vacuum. Turn on the vacuum only briefly to collapse the bag;
xvii. remove the vacuum nozzle and twist the water sleeve closed and seal with duct tape;
xviii. from outside the bag, pull the tool pouch away from the back. Place duct tape over the twisted portion and then cut the tool bag from the containment bag, cutting through the twisted/taped section. In this manner, the contaminated tools may be placed directly into the next containment bag without cleaning. Alternatively, the tool pouch with the tools can be placed in a bucket of water, opened underwater, and the tools cleaned and dried without releasing asbestos into the air. Rags and the scrub brush cannot be cleaned in this manner and should be discarded with the asbestos waste;
xix. with removed insulation in the bottom of the bag, twist the bag several times and tape it to keep the material in the bottom during removal of the containment bag from the pipe;
xx. slip a six (6)-mil disposal bag over the containment bag (still attached to the pipe). Remove the tape and open the top of the containment bag and fold it down into the disposal bag;
xxi. all surfaces in the work area shall be cleaned in accordance with Section VI.C.8. of the Asbestos Control Regulations.
xxii. place any containment articles, debris, etc. into the bag with the waste;
xxiii. twist the top of the bag closed, fold this over, and seal with duct tape. Place this bag into a second six (6)-mil disposable bag, and seal as in the above manner. Label the bag with a warning label;
xiv. asbestos material shall be disposed of in accordance with Section VI.C.7. of the Asbestos Control Regulations; and
xv. containment bags shall not be used on vertical sections of pipe.

4. Tent Procedures
   a. Tent procedures shall be used only for the purpose of fulfilling the conditions of Section VI.B.6. of the Asbestos Control Regulations and are limited to the removal of less than one hundred sixty (160) square feet of asbestos materials;
   b. Tent procedures shall be accomplished in a constructed or commercially available plastic tent, plasticizing and sealing all surfaces not being abated within the tent periphery forming an enclosure. The tent shall be of six (6)-mil polyvinyl chloride at a minimum, with seams heat-sealed or double folded, stapled and taped air-tight and then taped flush with the adjacent tent wall. This is a single use barrier that shall not be reused once dismantled or collapsed;
   c. Asbestos workers involved in the tent procedures shall wear two (2) disposable suits, including gloves, hood and footwear, and appropriate respiratory equipment if a decontamination unit is not contiguous to the tent;
   d. The tent shall be attached to the substrate to produce and a airtight seal except for a section large enough to allow for make-up air into the tent;
   e. A HEPA vacuum or equivalent shall be used to continuously exhaust the enclosed area as specified under Section VI.B.20. of the Asbestos Control Regulations, except that the negative air pressure in the subdivision b. of that section shall be tested by smoke testing. The duct shall be attached securely and airtight through the tent wall at the most remote location possible from the asbestos material to be disturbed. A minimum of two (2) volume changes per hour is required;
   f. Removal of asbestos material shall be by wet methods in accordance with Section VI.C.2. of the Asbestos Control Regulations;

g. The removed asbestos material shall be carefully placed in plastic disposable bags and the bags handled in accordance with Section VI.C.7. c. of the Asbestos Control Regulations;
h. Upon completion of abatement, and prior to tent collapse, the enclosed substrates shall:
   i. be wet cleaned using clean rags, mops and sponges
   ii. be permitted sufficient time to dry, prior to HEPA -vacuuming all substrates; and
   iii. be encapsulated to lockdown residual asbestos;
i. In the event of loss of negative pressure or barrier disturbance, the tent and the enclosed substrates shall be treated according to subdivision h. above;
j. The outer disposable suit shall be removed and remain in the tent upon exiting. Following tent disposal and work site cleanup the workers shall immediately proceed to a shower at the work site. The inner disposable suit and respirator shall be removed in the shower after appropriate wetting. The disposable clothing shall be disposed of as asbestos waste material. The workers shall then fully and vigorously shower with supplied liquid bath soap, shampoo, and clean, dry towels;
k. The HEPA vacuum shall be used to filter a minimum of six (6) volume changes through the tent prior to collapse of the tent/barrier; and
l. The tent shall be collapsed inward, enclosing the contaminated clothing. This contaminated material shall be disposed of in a plastic disposal bag. The vacuum shall be decontaminated and sealed.

5. Waste Disposal Procedures
   a. As asbestos materials are removed, they shall be thoroughly wetted and placed into (6)-mil plastic disposal bags;
   b. Asbestos-contaminated materials such as plastic sheeting, clothing, and other items shall be placed into six (6)-mil plastic disposal bags;
   c. Plastic disposal bags containing asbestos and asbestos-contaminated materials shall be sealed, cleaned, and while being removed from the work area, placed into approved six (6)-mil plastic bags, which shall be sealed, labeled, and transported directly to an approved waste disposal, storage, or transfer facility in accordance with the applicable Pennsylvania Department of Environmental Resources, and EPA regulations;
   d. Any asbestos-contaminated materials which may penetrate the asbestos disposal bags shall be placed into fiber drums, which shall be sealed and labeled in accordance with applicable EPA regulations;
   e. There shall be no visible emission of asbestos dust during the transport of asbestos or asbestos contaminated waste; and
   f. Large structural or mechanical components may be removed with the attached asbestos material for disposal provided:
      i. the component has been completely wrapped with two (2) layers of six (6)-mil polyethylene plastic and securely sealed with duct tape for transport to an approved disposal facility; and
      ii. the components have been cut away at places free of asbestos material. If there is no asbestos-free area to make the cut, the asbestos material shall be removed using the glove bag technique or equivalent, and the cut shall be made at the asbestos-cleared place.
6. Work Area Clean-Up Procedures
   a. After all asbestos abatement work has been completed, but before the plasticizing is removed, wet wipe all surfaces in the work area to eliminate gross debris and then remove the top layer of plastic sheeting;
   b. All surfaces within the work area from which asbestos material has been removed, and the bottom layer of plastic sheeting shall be HEPA-vacuumed and where feasible, wet cleaned with amended water;
   c. Following thorough cleaning, and after the Certified Asbestos Project Inspector has confirmed that no visible residue remains, all surfaces in the work area from which asbestos has been removed and the bottom layer of plastic sheeting shall be sprayed where feasible with an encapsulant;
   d. Clearance sampling shall be conducted in accordance with Section VI.D.4.c. after the bottom layer of plastic sheeting on walls, floors and objects in the work area has dried and has been removed;
   e. The sequence of wet and dry cleanup shall be repeated in twenty-four (24) hour intervals until the Certified Asbestos Project Inspector has determined that no residue is visible and, based on aggressive air monitoring conducted after all surfaces have dried, the airborne asbestos levels do not exceed the demolition clearance standard.
   f. Critical barriers shall remain in place until the requirements of paragraph (e.) above has been satisfied.

C. Clearance Samples

The purpose of clearance samples is to determine if the asbestos abatement project was conducted in a proper manner so as to safely allow that use necessary immediately prior to demolition. Clearance samples shall not be required for outdoor projects.

1. for projects prior to demolition (i.e. no re-occupancy):
   a. all clearance samples shall be collected and analyzed either by phase contrast microscopy (PCM) or transmission electron microscopy (TEM);
   b. clearance samples shall be collected after the asbestos abatement contractor has completed all asbestos abatement and clean-up activities and an independent certified asbestos project inspector has certified that the work area has passed the visual inspection set forth in Section VI.C.8. of the Asbestos Control Regulations.

D. Project Completion

In order to be considered a complete demolition project (i.e. no re-occupancy) each work area must pass a final inspection by meeting the conditions outlined below:

1. An asbestos project work area shall not be permitted to be open for use until the Department has certified, in writing, that the following conditions have been met:
   a. the asbestos project inspector has certified that, based on a visual inspection, the area contains no visible dust or debris;
   b. the asbestos project inspector certifies that, based on the results of the aggressive air monitoring procedures listed in Section VI.D.4.c.(.1)(.e) of the Asbestos Control Regulations, the airborne asbestos level in the work area does not exceed the limited use standard set forth in Section VI.D.4.c.(.1)(.f) of the Asbestos Control Regulations;
   c. The Department, based on a visual inspection, has determined that the area contains no visible dust or debris;
   d. The Department has determined that the air monitoring required to establish that the limited use standard has been met has been performed in accordance with applicable regulations and procedures;
   e. The asbestos contractor or supervisor has submitted an amended permit application for any project changes and evidence of the final, total cost of the asbestos abatement portion of the project, and has paid any incremental permit fee due.
2. For outdoor projects:
   a. The asbestos project inspector has certified that, based on a visual inspection, the area contains no visible dust or debris;
   b. The asbestos project inspector has certified that project samples taken on the final day of the project do not exceed the limits set forth in Section VI.D.4.b.(.1)(.d). If these limits are exceeded the project inspector shall make an evaluation of the cause, recommend remedial action and direct a re-test. This process shall continue until these limits have been met;
   c. The Department, based upon a visual inspection, has determined that the area contains no visible dust or debris;
   d. The Department has determined that the air monitoring required to establish that the final day's project samples meet appropriate limits has been performed in accordance with applicable regulations and procedures; and
   e. The asbestos contractor or supervisor has submitted an amended permit application for any project changes and evidence of the final, total cost of the asbestos abatement portion of the project, and has paid any incremental permit fee due.

E. Inspections

The asbestos contractor or supervisor shall make a request to the Department at least seventy-two (72) hours prior to the time when pre-inspections and final inspections are required.

4.03 Work Area Preparation Minor Project

A City Minor Asbestos Project is any project involving, within one (1) year, the removal, enclosure, or encapsulation of or any renovation, repair, or demolition work which disturbs or damages either: (a) less than eighty (80) square feet of friable asbestos material or more than twelve (12); or (b) less than forty (40) linear feet of asbestos pipe covering within a single building or at one location; or (c) any asbestos project in a private residence, regardless of the amount of asbestos removed, enclosed, encapsulated, disturbed, or damaged.

A. MINOR PROJECT WORKPLACE STANDARDS

The building owner or designated representative shall provide at least ten (10) calendar days advance notification of intended asbestos abatement activity to all occupants in areas adjacent to the asbestos project. The notification shall include: the name of the contractor, the project location and scope, amount and type of asbestos, abatement procedure, dates of expected occurrence, and the telephone number for the Air Management Services. Postings of this notification shall be in English (and other languages appropriate to the population of occupants in adjacent areas), at eye level, in a conspicuous, well-lit place, at the entrances to the work area and immediate adjacent areas. The notice shall have the heading, NOTICE OF ASBESTOS ABATEMENT, in a minimum of one-inch Sans Serif gothic or block style lettering. All other lettering shall be in a minimum of one-quarter inch Sans Serif gothic or block style. The notice shall be posted until the demolition is complete for the structure.

1. Caution signs meeting the specifications of OSHA 29 CFR 1926.58 K(1) (ii), shall be posted at all entrances to a location where airborne concentrations of asbestos may exceed ambient background levels. Caution signs shall be posted in English and other appropriate languages.
2. Building occupants shall be removed from any floor where an asbestos project is in progress, unless the work area is completely separated from the occupied area by an airtight physical barrier, with the work area under negative pressure.
3. Prior to plasticizing as required under paragraph 10. below.
   a. Movable objects within the proposed work area shall be pre-cleaned using HEPA-filtered vacuum equipment and, where feasible, wet cleaning methods, and such objects shall be removed from the work area. Upholstered furniture, carpeting and drapes, shall be HEPA-vacuumed before removal from the work area. If disposed of as asbestos waste material in accordance with Section VI.C.7. of these Regulations, cleaning is unnecessary. If carpeting is left in place, it shall be covered with plastic sheeting and one-half (1/2)-inch rigid flooring prior to plasticizing as required under paragraph 10 below;
   b. fixed objects, which will remain within the proposed work areas, shall be pre-cleaned using HEPA-filtered vacuuming equipment, and where feasible, wet cleaning methods and enclosed with one (1) layer of plastic sheeting sealed with duct tape; and
   c. all other surfaces in the proposed work areas shall be pre-cleaned using HEPA-filtered vacuuming equipment.
4. Except to allow for the entry of air necessary to maintain negative pressure, the work area shall be isolated by completely enclosing the work area and sealing off all doors, windows, ducts, grills, diffusers, and any other penetrations of the work areas with two (2) layers of plastic sheeting and tape. All seams of system components that pass through the work area shall also be sealed.
5. An airlock shall be constructed at the entrance to the work area.
6. Suspended ceiling tiles and T-grid components contaminated by friable asbestos materials shall remain in place until, (a) the work area has been fully prepared as outlined in Section VII.A. of the Asbestos Control Regulations, and (b) electrical and HVAC systems has been shut down. If any suspended ceiling tiles and T-grid components are to be retained for reuse, they shall be removed and vacuumed with HEPA-filtered equipment and wet-cleaned; otherwise, they shall be removed and disposed of as asbestos waste in accordance with Section VI.C.7 of the Asbestos Control Regulations.
7. Emergency exits from the work areas shall be maintained, or alternative exits shall be established in accordance with Title 5 of the Philadelphia Code and any other applicable provisions. Emergency exits shall be checked daily against exterior blockage or impediments to exiting.
8. Entrances to the work area that will not be used for worker entry or emergency exits shall be locked to prevent unauthorized entry.
9. Floor drains shall be sealed individually with two layers of plastic sheeting and tape, and then covered in accordance with paragraph 10 below. Pits, sumps, etc., shall be covered with adequate plywood sheeting and secured to floor slabs in a manner which prevents a tripping hazard, prior to plasticizing as required in paragraph 10 below.
10. All floor and wall surfaces shall be covered and sealed with plastic sheeting, using a minimum of two (2) layers. The plastic layers on the floor shall extend twelve (12) inches up the walls. Walls shall be covered with plastic sheeting down to the floor level, thus overlapping the floor covering by a minimum of twelve (12) inches. There shall be a distance of at least twelve (12) inches between the seams of adjacent layers.
11. Asbestos workers must have access to shower facilities after performing asbestos-related work activities, and a clean room for changing clothes.
12. A HEPA vacuum or equivalent shall be used to continuously exhaust the enclosed work area as specified in Section VI.B.20 of the Asbestos Control Regulations except that (1) the negative air pressure in

subdivision b. shall be demonstrated by smoke testing and (2) the minimum number of air changes referred to in subdivision f. shall be two (2) per hour.

13. Where there is no worker decontamination enclosure system contiguous with the work area, the workers shall wear protective equipment consistent with Section VI.C.4.c. of the Asbestos Control Regulations and remove the equipment consistent with Section VI.C.4.j of the Asbestos Control Regulations.

B. Asbestos Project Procedures
   1. General Procedures
      a. No person shall enter the work area without proper equipment, clothing, and training;
      b. The asbestos contractor or supervisor shall provide all authorized persons who enter the work area with the same protective clothing and equipment as is required for major asbestos projects and shall ensure that it is properly used;
      c. The asbestos contractor or supervisor shall ensure that all workers remove asbestos debris from clothing and equipment before leaving the work area; and
      d. The asbestos contractor or supervisor shall ensure that appropriate air monitoring to determine worker exposure shall be conducted for asbestos workers not covered by the OSHA Asbestos Standard.
   2. Removal Procedures
      The asbestos contractor or supervisor shall ensure that all removal, enclosure, encapsulant, waste disposal, work area clean-up, procedures required for major asbestos projects as provided in Section VI.C.2. through Section VI.C.9., inclusive, of the Asbestos Control Regulations are followed.

C. Air Monitoring
   1. The asbestos contractor shall have appropriate, functional power sources available for use by the party contracted for air monitoring and clearance sampling.
   2. The asbestos contractor or supervisor shall immediately halt asbestos work and implement appropriate remedial measures if air testing results show any increase in airborne asbestos levels outside the work area which exceeds the standard set forth for major asbestos projects in Section VI.D.4.b.(.6) of the Asbestos Control Regulations.
   3. NO REOCCUPANCY: For projects such as a demolition where there will be no preoccupancy, final PCM clearance of less than .05 f/cc is required. If necessary, comparison with the ambient level will be in accordance with Section VI.D.5.b. of the Asbestos Control Regulations. After clean-up, the asbestos project work area, including any part of the building evacuated during an asbestos project, shall not be unsealed or re-occupied accept for the performance of demolition activities.

D. Project Completion
   1. The asbestos project work area, including any part of the building evacuated during an asbestos project, shall not be unsealed or re-occupied until the contractor or supervisor certifies that:
      a. based on visual inspection, the area contains no visible dust or debris; and
      b. based on the results of the aggressive air monitoring procedures listed in Section VI.D.4.c.(.4) (.d) of the Asbestos Control Regulations the airborne asbestos level in the area does not exceed the standards established by the Department.

4.04 Alternative Removal Methods

The City's Asbestos Control Regulations (ACR) regulate friable asbestos abatement projects. All floor tile and mastic projects are considered friable asbestos abatement projects unless the abatement contractor submits an alternative abatement plan. Air Management Services (AMS) approval of the alternative method is required prior to the start of the project.

Typical floor tile removal methods such as mechanical chipping (hand or machine) result in the floor tile being broken up into numerous small fragments. Mastic removal by mechanical (shot blast) methods has similar results. These removal methods render the floor tile or mastic materials friable and will be subject to ALL of the requirements of the Asbestos Control Regulations and the U.S. EPA NESHAP, including permits and an independent asbestos project inspector for major projects, air monitoring, work area preparation standards, and disposal requirements.

Contractors may apply for alternative removal methods and submit with the notification a non-friable removal work plan prior to project start up. Work plan methods must include the use of ***heat from infrared machines,*** or ***building a dyke and flood with water,*** or the use of ***dry ice or liquid nitrogen*** for floor tile removal or ***chemical applications*** for mastic removal. AMS must review and approve each abatement plan and alternative method

request for each project prior to the contractor starting the project. If the undertaking is approved by AMS as a non-friable project the notification and worker certification requirements apply. The contractor must ensure that the material remains non-friable during removal and disposal.

The Contractor shall submit the proposed work plan to the Project Manager for approval prior to submission to the City.

4.05 Asbestos Abatement Exhaust into Ambient Air

The properties requiring demolition are located in residential areas and require additional protective measures to be utilized by the contractor to ensure that air exhausted as a result of asbestos abatement and demolition activities where asbestos is located is not exhausted in a manner that may expose adjacent residents, children or others in the area who are not asbestos trained and equipped with personal protective equipment. The contractor shall implement work practices and engineering controls that are specific to properly manage exhausted air from an asbestos regulated site that is adjacent to occupied properties or where persons who are not asbestos trained or equipped with personal protective equipment may be exposed to the asbestos exhaust from the regulated area.

The contractor shall control exhausted asbestos abatement air by applying one of the following methods:

1. The contractor shall exhaust asbestos contaminated air into a drum that contains water instead of directly exhausting to the exterior of the property into the ambient air, or
2. The contractor shall "piggy back" multiple negative air machines that are properly equipped with HEPA-filtration system prior to exhausting air resulting from asbestos remediation into the ambient air.

The contractor shall specify in the work plan which asbestos abatement air exhaust method will be utilized for properties that will require demolition that are located adjacent to occupied properties and properties that are not located adjacent to occupied properties but where non-asbestos trained personal protection equipped persons may come in contact with asbestos abatement exhaust release.

4.06 Disposal of Asbestos-Containing Materials and Asbestos-Contaminated Waste

A. Asbestos Materials

As the Work progresses, and to prevent exceeding available storage capacity on site, remove sealed and labeled containers of asbestos waste and dispose of such containers at an authorized disposal site in accordance with the requirements of disposal authority and all applicable regulations. Scheduled pick-up of asbestos-containing waste is required. No asbestos containing material waste may be left in the building at the end of a shift.

1. Bags of asbestos materials from the Work area via the equipment decontamination enclosure shall be placed in a mechanically fastened drum or a second clean bag, which is then transported in an enclosed vehicle or dumpster. Appropriate labels shall be affixed to the outside of the container.
2. Federal, State and Local permits shall be obtained for the transportation of asbestos materials, and all procedures shall be followed as they pertain to transportation of asbestos materials.
3. The transport vehicle shall be lined with 6 mil plastic prior to loading asbestos waste. The vehicle shall be used for the sole purpose of transporting asbestos waste. No other contract materials or supplies shall be stored or transported in the vehicle unless it has been decontaminated.
4. Activities involving removal of waste, loading onto vehicle, and disposal at the landfill, shall be documented in daily reports. A second document, landfill manifest, shall be completed when material is disposed at landfill. Both documents shall indicate d ate and volume of material handled. A bill of lading shall be submitted as per DOT regulations.

B. Asbestos Waste

1. All wastewater shall be filtered through a five-micron filter system prior to final disposal in a sanitary sewer or the most stringent regulatory requirements, or disposed of as asbestos waste at a landfill. In the absence of a sanitary sewer system, the wastewater shall be drummed and transported to a landfill per the previous requirements of disposal. Used wastewater filters shall be considered to be asbestos waste.
2. Asbestos waste other than contaminated water shall be drummed or bagged and transported as previously described.

END OF SECTION

SECTION 02091

GROUNDWATER MANAGEMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: The work specified in this Section consists of the removal of subsurface water from excavations related to string and scattered sites. These subsurface waters may include: 1) municipal water from a leaking source or 2) Sewer water from a leaking source or 3) local groundwater 4) contaminated water. All associated laboratory analytical work must be performed by a Pennsylvania-certified laboratory. All work performed under this contract is to be in full compliance with Federal, State and Local regulations which mandate work practices and licensing of personnel.

B. Alternative Procedures: It is intended that the procedures described in this Specification Section shall be utilized for the project. If the specified procedures cannot be utilized, request shall be made in writing to the City providing details of the problems encountered and recommended alternative procedures.
   1. Alternative procedure(s) shall be approved in writing by the City prior to implementation.

1.02 REFERENCES

A. Pennsylvania Department of Environmental Protection (PADEP):
   1. Pennsylvania Code Title 25 Environmental Protection, Chapter 250.
   2. Pennsylvania Department of Environmental Protection (PADEP) Land Recycling Program.

B. Occupational Safety and Health Administration (OSHA):
   1. Title 29 Code of Federal Regulations Section 1910.120 Hazardous Wastes Site Worker Operations.

C. United States Geological Survey (USGS):
   1. USGS Water Supply Paper #2346. "Geohydrology and Ground-Water Resources of Philadelphia, PA", 1991, by Gary Paulachok in cooperation with the City's Water Department.

1.03 DEFINITIONS

A. Aquifer: A geologic formation, group of formations or a part of a formation capable of yielding sufficient groundwater for monitoring purposes.

B. Carbon Treatment: The procedure of pumping water through an activated carbon filtering system, which is sometimes contained in an onsite 55-gallon or similar sized drum container. This system removes various contaminant compounds from the influent water. The result is that the effluent water has been treated and is suitable for discharge.

C. Contaminant: A compound, mixture, solution or substance that enters the environment as a result of human action. Common contaminants and their allowable concentrations are listed in the Tables given in Pennsylvania Code Title 25 Chapter 250. See Regulated Substance.

D. Contractor: The individual or business with which the City arranges to perform the specified work.

E. Decontamination: The procedure of washing equipment with a laboratory grade detergent and rinsing with potable or distilled water. This term also applies to the improved environmental quality of water that has undergone remedial treatment.

F. Environmental Consultant: Those professionals that manage the environmental actions at string and scattered sites.

G. EPA: The U.S. Environmental Protection Agency.

H. Free product: a regulated substance that is present as a nonaqueous phase liquid; that is, not dissolved in water.

I. Groundwater: water beneath the subsurface that exists in a zone of saturation.

J. Health and Safety Plan: A printed document that outlines general procedures to prevent personal injury and courses of action in the event of an injury.

K. Owner: The City, or authorized representative.

L. PADEP: Pennsylvania Department of Environmental Protection

M. Regulated Substance: An element, compound, mixture, solution, substance that when released to the environment, may present substantial danger to the public health welfare and environment. Regulated substances as related to water and soil media are listed in the Tables given in Pennsylvania Code Title 25 Chapter 250.

N. Remediation, i.e. environmental remediation: This is the process of removing for proper disposal, contaminants from water and/or soil. The process may include soil removal for proper disposal.

O. Water: This Section of the Technical Specifications addresses subsurface waters:

1. Contaminated Water: If the water exhibits petroleum product it is assumed to be contaminated. If the water exhibits exceedences the water quality standards of the Statewide Health Standards given in Pa. Code Title 25 Chapter 250 through laboratory analysis, then the water is assumed to be contaminated.
2. Groundwater: This is naturally occurring, subsurface water. If the noted subsurface water does not exhibit concentrations of fecal coliform, nitrates, chlorine, or fluorine through laboratory analysis, then the water is assumed to be groundwater. Such waters may be at shallow depths in various parts of the County of Philadelphia.
3. Municipal Water: Water leaking from a city water utility should not have an odor but will exhibit concentrations of chlorine and fluorine upon laboratory analysis of a collected sample.
4. Sewer Water: Water leaking from a sanitary sewer line will, in general, have an odor and exhibit concentrations of fecal coliform and nitrates upon laboratory analysis of a collected sample.

P. Work Area: A designated room or space, or area in which water pumping or remedial treatment actions are to be undertaken or which may become wet as a result of such activity.

1.04 SUBMITTALS

A. Not later than ten days prior to commencing groundwater remedial work, notify in writing the Pennsylvania Department of Environmental Protection (PADEP) and the local authority with responsibility for occupational health and safety of the proposed work.

B. Submit proof satisfactory to the City that the required permits, site location, and arrangements for transport and disposal of contaminated materials, supplies, and the like have been obtained.

C. In the event of Groundwater treatment or remediation, the Contractor shall submit the required reports to the PADEP and the City. Should remediation occur over an extended period, Discharge Monitoring Reports (DMRs) may be required by the PADEP.

1.05 QUALITY ASSURANCE

A. Regulatory Requirements: Perform the work of this Section in accordance with applicable federal, state and local regulations, standards and codes governing environmental sampling procedures, chain of sample custody and remediation.

1. The most recent edition of relevant regulations, standards, documents or codes shall be in effect. Where conflict among the requirements of this Section exists, the most stringent requirements shall be utilized.
2. Make copies of the referenced standards, regulations, codes and other applicable documents available at the worksite.

B. Confirmatory sampling of soil or groundwater shall be performed with decontaminated equipment and laboratory-provided bottleware. Sampling personnel shall wear sterile gloves during sampling activities. Latex or nitrile gloves would be appropriate choices for the above.

C. Local Ordinances: Local ordinances, regulations or rules pertaining to water treatment and disposal, shall also apply to the work of this Specification Section.

1.06 DELIVERY, STORAGE AND HANDLING

A. Upon collection, during transport and through laboratory delivery, all environmental samples shall be kept refrigerated at four degrees Celsius.

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

1.07 SITE CONDITIONS

A. Worker Safety: The standards for worker exposure controls are minimum standards only and the City, along with the Environmental Consultant, assume no responsibility or liability for worker safety or the adequacy of such standards.

1. Prior to commencement of work, the workers shall be instructed, and shall be knowledgeable, in the areas described previously.

2. Authorized Visitor Safety: Provide authorized visitors with suitable protective clothing, headgear, eye protection and footwear, as appropriate.

PART 2 PRODUCTS

2.01 EQUIPMENT AND MATERIALS

A. Equipment, machinery and apparatus, motorized or otherwise, used to perform the work of this Section may be as chosen at the Contractor's discretion, but which will perform the work within the limits of the appropriate requirements.

B. Other Materials: Provide other materials, such as lumber, nails and hardware, which may be required to construct and dismantle the decontamination area and barriers that isolate the work area.

PART 3 EXECUTION

3.01 PREPARATION

A. Verify the following with the City prior to beginning water pumping work:
   1. Contractor and supporting vendor vehicle access and parking.
   2. Determination of logistical factors to minimize interference with operations and facilitate Contractor activities.
   3. Security and fire safety measures.

B. Very that all onsite workers are familiar with and have access to a copy of the Health and Safety Plan for this part of the project.

C. Do not begin pumping uncontaminated water until:
   1. Arrangements have been made for the proper disposing of the water.
   2. Tools and equipment are on hand.
   3. Preparatory steps have been taken and applicable notices posted and permits obtained.

D. Do not begin pumping contaminated water until:
   1. Arrangements have been made for the proper, documented, transport and disposal of the contaminated water.
   2. Tools and equipment are on hand.
   3. Preparatory steps have been taken and applicable notices posted and permits obtained.

3.02 WATER REMOVAL

A. The pumping of water from the excavation(s) shall be performed with a submersible or suction pump or by way of a vacuum truck.

B. The Contractor shall not allow water to damage floors, walls, and other structure surfaces. The Contractor shall not allow the pumped water create an ice hazard.

3.03 CLEAN-UP

A. Once the pumping or remedial activity is complete, the pumping/remedial equipment will be properly stored away. At the end of the workday, site enclosures of the Work Area such as gates, fencing and doors, will be restored to their original position and locked where appropriate.

3.04 DISPOSAL PROCEDURES

A. Onsite disposal of contaminated waters shall only occur following carbon drum filtration and effluent water confirmatory sampling. Carbon drums will be replaced as need. Other PADEP-accepted onsite treatment methods may also be used for such water.

B. Offsite transport and disposal of contaminated waters shall occur only at an appropriately certified transport and disposal facility(s).

C. Disposal of sewer-impacted waters originating from utilities that were aged, damaged or decayed prior to the onsite work shall be performed by the local government authority in charge of such waters during the time of the project. Note that: sewer-impacted water will, in general, have an odor and exhibit concentrations of fecal coliform and nitrates upon laboratory analysis of a collected sample.

END OF SECTION

SECTION 02092

UNDERGROUND STORAGE TANKS, ABOVEGROUND STORAGE TANKS AND SOIL AND FILL MANAGEMENT

PART 1 GENERAL

1.01 SUMMARY

A. This Section Includes: the removal of underground storage tanks, aboveground storage tanks and the handling of excavated soils related to string and scattered sites. All associated laboratory analytical work must be performed by a Pennsylvania-certified laboratory. All work performed under this contract is to be in full compliance with Federal, State and Local regulations which mandate work practices and licensing of personnel.

B. Alternative Procedures: It is intended that the procedures described in this Specification Section shall be utilized for the project. If the specified procedures cannot be utilized, request shall be made in writing to the City providing details of the problems encountered and recommended alternative procedures.

1. Alternative procedure(s) shall be approved in writing by the City prior to implementation.

1.02 REFERENCES

A. City Fire Department:

1. Philadelphia Fire Prevention Code, Subsection F-3208.11 Abandonment of Storage Tank Systems.

B. Pennsylvania Department of Environmental Protection (PADEP):

1. Pennsylvania Code Title 25 Environmental Protection, Chapter 245. Administration of the Storage Tank and Spill Prevention Program.
2. Pennsylvania Code Title 25 Environmental Protection, Chapter 250. Pennsylvania Department of Environmental Protection (PADEP) Land Recycling Program (PADEP Act 2).
3. Pennsylvania Department of Environmental Protection (PADEP) Storage Tank Program Technical Document: "Closure Requirements for Underground Storage Tank Systems".

C. Occupational Safety and Health Administration (OSHA):

1. Title 29 Code of Federal Regulations Section 1910 Hazardous Waste Site Worker Operations.
2. Title 29 Code of Federal Regulations Section 1926 Excavations.

1.03 DEFINITIONS

A. Aboveground Storage Tank (UST): One or a combination of stationary vessels with a capacity in excess of 250 gallons, including underground pipes and dispensing systems connected thereto within the emergency containment area, which is or was used to contain an accumulation of regulated substances, and the volume of which, including the volume of piping within the storage tank facility is greater than 90% above the surface of the ground. The term includes tanks, which can be visually inspected, from their exterior in an underground area.

B. Carbon Treatment: The procedure of pumping water through an activated carbon filtering system, which is sometimes contained in an onsite 55-gallon or similar sized drum container. This system removes various contaminant compounds from the influent water. The result is that the effluent water has been treated and is suitable for discharge.

C. Closure of Tanks: This is the process by which a tank is taken permanently out of service. Aboveground storage tanks are closed through removal. Underground storage tanks (USTs) can be closed through removal or through In-place Closure. In-place UST closure in Philadelphia involves the filling of the tank with a concrete or cement slurry, subsequent to the purging of its residuals. Abandonment of a tank without the subject filling is not Closure.

D. Contaminant: A compound, mixture, solution or substance that enters the environment as a result of human action. Common contaminants and their Statewide Health Standard concentrations are listed in the Tables given in Pennsylvania Code Title 25 Chapter 250. See Regulated Substance.

E. Contractor: The individual or business with which the City arranges to perform the specified work.

F. Corrective Action: The term includes:

1. Containing, assessing or investigating a substance release
2. Removing a release or material affected by a release
3. Taking measures to prevent, mitigate, abate, or remedy releases, pollution and potential and potential for pollution, nuisances and damages to the public health, safety and welfare, including, but not limited to, the following: areas listed in Title 25 Chapter 245 section 245.1.

G. Decontamination: The procedure of washing equipment with a laboratory grade detergent and rinsing with potable or distilled water. This term also applies to the improved environmental quality of water that has undergone remedial treatment.
H. Environmental Consultant: Those professionals that manage the environmental actions at string and scattered sites. These actions are related to underground storage tanks, aboveground storage tanks, contaminated media, soil, fill, groundwater, hazardous substances, sample collection for environmental quality analysis and other environmental issues.
I. EPA: The U.S. Environmental Protection Agency
J. Evidence of tanks: includes but is not limited to; vent pipes, fill pipes, fill caps, tank-related manhole covers/manways, fuel pump islands and/or dispensers.
K. Free product: a regulated substance that is present as a nonaqueous phase liquid; that is, not dissolved in water. Free product also includes the released contaminant or product material.
L. Fuel: petroleum-related products that have flammable characteristics.
M. Health and Safety Plan: A printed document that outlines general procedures to prevent personal injury at a site and courses of action in the event of an injury.
N. In-Place Tank Closure: The in-place closure of an underground storage tank in Philadelphia involves the filling of the tank with concrete or cement slurry, subsequent to the purging of its residuals pursuant to Philadelphia Fire Prevention Code, Subsection F-3208.11. Abandonment of a tank without the subject filling is not Closure.
O. PADEP: Pennsylvania Department of Environmental Protection
P. Product: a regulated substance. This material is often fuel-related.
Q. Owner: The City, or his/her authorized representative.
R. Regulated Substance: An element, compound, mixture, solution, substance that when released to the environment, may present substantial danger to the public health, welfare and environment. Regulated substances as related to water and soil media are listed in the Tables given in Pennsylvania Code Title 25 Chapter 250.
S. Regulated Underground Fuel Storage Tanks: These vessels include but are not limited to those that: have caused contamination or experienced a release or last held product for retail or last held product not for onsite consumptive heating use.
T. Remediation, i.e. environmental remediation: This is the process of removing for proper disposal, contaminants from water and/or soil.
U. Water: This Section of the Technical Specifications addresses subsurface waters:
   1. Contaminated Water: If the water exhibits petroleum product, it is assumed to be contaminated. If the water exhibits exceedences the water quality of the PADEP Statewide Health Standards given in Pa. Code Title 25 Chapter 250 through laboratory analysis, then the water is assumed to be contaminated.
   2. Groundwater: This is naturally occurring subsurface water. If the noted subsurface water does not exhibit concentrations of fecal coliform, nitrates, chlorine, or fluorine through laboratory analysis, then the water is assumed to be groundwater. Such waters may be at shallow depths in various parts of the County of Philadelphia.
   3. Municipal Water: Water leaking from a city water utility should not have an odor but will exhibit concentrations of chlorine and fluorine upon laboratory analysis of a collected sample.
   4. Sewer Water: Water leaking from a sanitary sewer line will, in general, have an odor and exhibit concentrations of fecal coliform and nitrates upon laboratory analysis of a collected sample.
V. Underground Storage Tank (UST): One or a combination of stationary vessels (including underground pipes connected thereto) which are used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10% or more beneath the surface of the ground.
W. Underground Storage Tank System: An underground storage tank, connected piping and ancillary equipment and containment system.
X. Work Area: A designated room or space at which a tank system is being attended to and the associated soils and/or excavation(s). This term also applies to areas of water pumping or remedial treatment actions or areas that may become wet as a result of such activity.

1.04 SUBMITTALS

A. Not later than three days prior to the commencement of UST removal or subsurface boring work, the Contractor shall notify the Pennsylvania Utility One-Call System (1-800-242-1776) for a surface mark-out of utilities at the subject property.

B. Not later than ten days prior to the commencement of the UST removal work, the Contractor shall notify in writing the local authority with responsibility for occupational health and safety of the proposed work.
C. If required by the "Closure Requirements for Underground Storage Tank Systems" (i.e. for regulated tanks), The Contractor shall submit proper notifications to the PADEP. For the proper closure of a regulated underground storage tank (UST) the submittal of a "Report of Underground Storage Tank Closure" including but not limited to, a description of activities, confirmatory sample analytical data from the site and disposal documents, is required by the PADEP. The same will be submitted to the City.
D. For the proper closure of a non-regulated underground storage tank (UST) a Tank Closure document set, which includes but is not limited to, a description of activities, confirmatory sample analytical data from the site and disposal documents, is to be submitted to the City.
E. In the event that disposal of contaminated soils from string or scattered sites is required, submittals to the PADEP and City regarding this action shall consequently be required. Submittals shall include remediation reports with sample analytical data that document the environmental quality of the concerned areas.
F. Submit proof satisfactory to the City that the required permits, site location, and arrangements for transport and disposal of contaminated materials, supplies, and the like have been obtained.

1.05 QUALITY ASSURANCE

A. Regulatory Requirements: Perform the work of this Section in accordance with applicable federal, state and local regulations, standards and codes governing environmental sampling procedures, chain of sample custody and remediation.
   1. The most recent edition of relevant regulations, standards, documents or codes shall be in effect. Where conflict among the requirements of this Section exists, the most stringent requirements shall be utilized.
   2. Make copies of the referenced standards, regulations, codes and other applicable documents available at the worksite.
B. Confirmatory sampling of soil or groundwater shall be performed with decontaminated equipment and laboratory-provided bottleware. Sampling personnel shall wear sterile gloves during sampling activities. Latex or nitrile gloves would be appropriate choices for the above.
C. Local Ordinances: Local ordinances, regulations or rules pertaining to water treatment and disposal, shall also apply to the work of this Specification Section.

1.06 DELIVERY, STORAGE AND HANDLING

A. Upon collection, during transport and through laboratory delivery, all environmental samples (including soil and groundwater) shall be kept refrigerated at 4 degrees Celsius or cooler.
B. Store materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination.

1.07 SITE CONDITIONS

A. Worker Safety: The standards for worker exposure controls are minimum standards only and the City along with the Environmental Consultant assume no responsibility or liability for worker safety or the adequacy of such standards.
   1. Prior to commencement of work, the workers shall be instructed, and shall be knowledgeable, in the areas described previously.
   2. Authorized Visitor Safety: Provide authorized visitors with suitable protective clothing, headgear, eye protection and footwear, as appropriate.

PART 2 PRODUCTS

2.01 EQUIPMENT AND MATERIALS

A. Equipment, machinery and apparatus, motorized or otherwise, used to perform the work of this Section may be as chosen at the Contractor's discretion, but which shall perform the work within the limits of the appropriate requirements.
B. Other Materials: Provide other materials, such as lumber, nails and hardware, which may be required to construct and dismantle the decontamination area and barriers that isolate the work area.

PART 3 EXECUTION

3.01 PREPARATION

A. Not later than three days prior to the commencement of UST removal work, notify the Pennsylvania Utility One-Call System (1-800-242-1776) for a surface mark-out of utilities in the intended work area.

B. Verify the following with the City prior to beginning tank work:

1. Contractor and supporting vendor vehicle access and parking.
2. Determination of logistical factors to minimize interference with operations and facilitate Contractor activities.
3. Security and fire safety measures.

C. Verify that all onsite workers are familiar with and have access to a copy of the Health and Safety Plan for this part of the project. All onsite workers have been 40-hour trained pursuant to OSHA 1910.120.

D. Do not begin tank removal work until:
1. Arrangements have been made for the proper disposing of the tank, residual product and/or sludge.
2. Tools and equipment are on hand.
3. Preparatory steps have been taken and applicable notices posted and permits obtained.

3.02 ABOVEGROUND STORAGE TANK (AST) REMOVAL

A. The Contractor shall open the tank, which shall be sufficiently ventilated to reduce product fumes.
B. The Contractor shall monitor the tank interior air with an explosimeter.
C. The Contractor shall purge the interior of the tank of residual product, sludge and liquid.
D. The removal of the tank shall be performed with appropriate lifting or excavation equipment.
E. The Contractor shall execute the proper, documented, transport and disposal of the tank and its residuals at an appropriately licensed disposal facility. The Contractor shall maintain disposal documents/certificates for the tank, residuals and contaminated soils (if any).

3.03 UNDERGROUND STORAGE TANK (UST) REMOVAL

A. The Contractor shall uncover and open the tank. Once opened, the tank will be sufficiently ventilated to reduce product fumes.
B. The Contractor shall monitor the tank interior air with an explosimeter.
C. The Contractor shall purge the interior of the tank of residual product, sludge and liquid. A vacuum truck may accomplish this.
C. If physically possible, the Contractor shall enter the tank and swab the interior surfaces dry.
D. The removal of the tank shall be performed with appropriate excavation equipment. A backhoe or track-mounted excavator is usually used for this type of work.
E. The Contractor shall execute the proper, documented, transport and disposal of the tank, piping, residuals and any excavated contaminated soils at an appropriately licensed disposal facility(s). The Contractor shall maintain disposal documents/certificates for the tank, piping, residuals and contaminated soils (if any).

3.04 UNDERGROUND STORAGE TANK IN-PLACE CLOSURE

A. The Contractor shall uncover and open the tank. Once opened, the tank will be sufficiently ventilated to reduce product fumes.
B. The Contractor shall monitor the tank interior air with an explosimeter.
C. The Contractor shall purge the interior of the tank of residual product, sludges and liquids. This action may be accomplished by a vacuum truck.
D. If physically possible, the Contractor shall enter the tank and swab the interior surfaces dry.
E. The Contractor shall accomplish an in-closure of a tank by filling the vessel with concrete or cement slurry, per the City's Fire Department regulations pursuant to Philadelphia Fire Prevention Code, Subsection F-3208.11.

3.05 MANAGEMENT OF EXCAVATED SOIL AND FILL MATERIAL

A. The Contractor shall categorize excavated soil and urban fill materials at the proposed string and scattered sites. The fill shall be categorized as either Clean Fill, Urban Fill, or Contaminated Soil. The collection and analyses of soil samples from the proposed excavation area(s) is required to determine which option can be applied.
B. Clean Fill: The removal and handling of soil and fill material that exhibit characteristics that allow the material to be classified as "Clean Fill", in accordance with the Pennsylvania Department of Environmental Protection's 1996 Clean Fill Policy (25 Pa. Code Section 271), is unrestricted. The Contractor can transport and use this as fill material at any location. No permits are required for excavation, transportation and placement of the material. This material may warrant compaction.
C. Urban Fill: Excavated soil and fill materials that do not meet the PADEP Clean Fill analytical parameters, but whose soil analytical results are below the Pennsylvania Statewide Health Standards of Title 25 Pennsylvania Code Chapter 250 can be defined as Urban Fill. The Contractor can transport and use this as fill material at any location onsite. The excavation of urban fill does not require special procedures. However, methods for disposal of Urban Fill are restricted.

1. Where needed, the Contractor shall arrange the proper documented offsite disposal of this material.

D. "Safe Fill": as regulated by the PADEP .

3.06 CONTAMINATED SOIL

A. In the event that contaminated soil is discovered on string or scattered sites, the Contractor shall document this discovery through the collection and submittal of soil or water samples for laboratory analysis. This is a sampling for analysis program.

1. Further sampling for analysis shall be required to distinguish uncontaminated from contaminated soils.
2. In order for a site to obtain a No Further Remedial Action (with release of future environmental liability) determination from the PADEP for contaminated soils, the site shall be submitted to the PADEP Act 2 Program. The Act 2 process takes 6 months to 1 year to complete and requires considerable soil or groundwater sample analytical data prior to completion.

B. Excavation of contaminated soils (if found on site) can proceed in accordance with the following definitions and restrictions. Trained and experienced subcontractors shall be required for the excavation and transportation and disposal work tasks. Further sampling for analysis shall be required to distinguish uncontaminated from contaminated soils. Also there are two kinds of contaminated soil:

1. Non-hazardous contaminated soil is defined as material that does not meet Clean Fill criteria or cannot be defined as Urban Fill (i.e. analytical parameter(s) exceed Statewide Health Standards per 25 Pa. Code Chapter 250) and does not meet the requirements for definition as hazardous material. This material must be transported to an appropriately permitted disposal facility (i.e. permitted landfill or incineration unit). The Contractor will accomplish this task.
2. Hazardous contaminated soil is defined as a material that does not meet the PA Clean Fill criteria or cannot be defined as Urban Fill (i.e. analytical parameters exceed Statewide Health Standards per 25 Pa. Code Chapter 250) and exceeds the analytical criteria for definition as non-hazardous material. This material must be transported to a permitted hazardous waste facility for disposal. Alternatively, the material can be treated on-site to reduce the concentrations of contaminants to non-hazardous levels and then be disposed of as a non-hazardous material. The Contractor will accomplish this task.

3.07 ENVIRONMENTAL CONFIRMATORY SAMPLING

A. Following the removal of a non-regulated tank, the Contractor shall collect an appropriate number of soil samples from the bottom of the tank excavation. At a minimum, three samples shall be collected from the base of the tank excavation (one from each end and one from the center). These samples shall be submitted to a Pennsylvania-licensed analytical laboratory for PADEP analyses related to the product contained in the tank.

1. In the event that the bottom of the excavation is below the groundwater level, the Contractor shall collect a total of four confirmatory soil samples (one from each sidewall) at the soil-groundwater interface.
2. In the event that contaminated soil is discovered, the tank then becomes a regulated tank.

B. Following the removal of a regulated tank, the Contractor shall collect an appropriate number of soil samples from the bottom of the tank excavation pursuant to PADEP sampling protocol as given in "Closure Requirements for Underground Storage Tank Systems". These samples will be submitted to a Pennsylvania-licensed analytical laboratory for PADEP analyses related to the product contained in the tank.

1. In the event that the bottom of the excavation is below the groundwater level, the Contractor shall collect for laboratory analysis confirmatory soil and/or groundwater samples pursuant to PADEP sampling protocol as given in "Closure Requirements for Underground Storage Tank Systems".
2. In the event that contaminated soil removal is required, further soil or groundwater sampling for analysis may be required to demonstrate that contaminants have been removed from the former tank location.
3. For the proper closure of a regulated underground storage tank (UST), the submittal of a Report of Underground Storage Tank Closure, including confirmatory sample analytical data from the site, is required by the PADEP.

C. Prior to in-place closure of a regulated tank, the Contractor shall collect an appropriate number of subsurface samples around the tank location pursuant to PADEP sampling protocol as given in "Closure Requirements for Underground Storage Tank Systems". At a minimum, three subsurface samples shall be collected from the sides of the vessel (one from each end and one from near each side). These samples shall be submitted to a Pennsylvania-licensed analytical laboratory for PADEP analyses related to the product contained in the tank.

1. In the event that the bottom of the tank is below the groundwater level, the Contractor should collect for laboratory analysis, confirmatory subsurface soil and/or groundwater samples pursuant to PADEP sampling protocol as given in "Closure Requirements for Underground Storage Tank Systems".
2. In the event that contaminated soil is detected, further soil and/or groundwater sampling for analysis may be required to demonstrate to the PADEP that contaminants are or are not limited to the tank location.
3. For the proper in-place closure of a regulated underground storage tank (UST), the submittal of a Report of Underground Storage Tank Closure, including confirmatory sample analytical data from the site, is required by the PADEP.

D. Prior to in-place closure of a non-regulated tank, the Contractor shall collect an appropriate number of subsurface samples around the tank location. At a minimum, three subsurface samples shall be collected from the sides of the vessel (one from near each end and one from near a side). These samples shall be submitted to a Pennsylvania-licensed analytical laboratory for PADEP analyses related to the product contained in the tank.

1. In the event that the bottom of the tank is below the groundwater level, the Contractor shall collect for laboratory analysis, a confirmatory groundwater sample.
2. In the event that contaminated soil or groundwater is discovered, the tank then becomes a regulated tank.

3.08 CLEAN-UP

A. Once a UST removal and sampling activity is complete, the former tank location shall be filled with crushed stone or uncontaminated soils from the site.

B. Once the tank activity is complete, the closure equipment shall be properly stored away. At the end of the workday, site enclosures of the Work Area such as gates, fencing and doors, shall be restored to their original position and locked where appropriate.

3.09 DISPOSAL PROCEDURES

A. The Contractor shall execute the proper, documented, transport and disposal of the tank and associated piping, its residuals and any excavated contaminated soils at an appropriately licensed disposal facility(s). The Contractor shall maintain disposal documents/certificates for the tank, residuals and contaminated soils (if any).

END OF SECTION

SECTION 02120

OFF-SITE TRANSPORTATION AND DISPOSAL

PART 1 - GENERAL

1.01 SUMMARY

A. The Contractor shall furnish all labor, materials, equipment, and related items required for the proper transportation and disposition of waste materials.

B. The Contractor is to determine the proper waste characterization and recycling or disposal methods to ensure that waste materials are recycled or disposed according to procedures that are consistent with applicable regulations.

C. All waste materials are to be transported directly to a properly permitted facility for permit issued by the state in which the facility is located is prohibited. All waste is to be transported to the applicable facility in an expeditious manner.

D. It is the intent of these specifications to allow for the proper and legal disposition of waste materials. Primacy shall be given to salvage, recycling and reuse of materials to the extent allowed by applicable laws.

E. Related Sections:

1. Section 02092: Underground Storage Tanks, Aboveground Storage Tanks and Soil and Fill Management
2. Section 02071: Asbestos Removal

1.02 REGULATORY REQUIREMENTS

A. The Contractor shall comply with all Federal, State, and local regulations applicable to waste management, including PADEP, PADOT, OSHA, RCRA, and TSCA regulations.

1. All waste materials shall be recycled, processed, disposed at a property permitted facility in accordance with 25 PA Code 217 et seq if recycled, processed or disposed in Pennsylvania, or applicable state regulations for recycling, processing or disposal in the applicable state where recycling, processing or disposal takes place.
2. All vehicles and containers transporting waste must be in compliance with 25 PA Code 285. If transportation of waste is to occur outside of Pennsylvania, the vehicles transporting contractor shall comply with applicable state regulations for transporting waste materials.
3. All storage of waste prior to removal from the project area shall comply with the requirements of 25 PA Code 285.111 et seq. Storage of waste outside of the project area is prohibited.

B. The Contractor is advised that PADEP has proposed revisions to regulations regarding certain materials that may be disposed of during the contract. Comply with the more stringent requirements of the proposed regulations or regulations promulgated prior to the effective date of this agreement.

1.03 QUALIFICATIONS

A. The Contractor and subcontractors must have demonstrated experience with transportation of waste materials and have sufficient vehicles and containers to perform the work.

B. All receiving facilities must have valid permits to accept the types and quantities of waste materials from the Pennsylvania Department of Environmental Protection's Bureau of Waste Management, of if the facility(ies) is (are) in another state(s), the applicable state permit.

C. The compliance history of the hauler and receiving facility(ies) shall not have any outstanding fines or penalties or have action against the hauler or receiving facility which resulted in a criminal felony conviction within the preceding five years.

D. Transporter shall have at least five (5) years experience in the waste hauling (long haul) experience and sufficient drivers, tractors and trailers to perform the works. The transporter shall have no outstanding fines or penalties with applicable state transportation or law enforcement agencies. Continued violations (more than one per month over two or more consecutive months) of applicable transportation and waste handling laws and regulations (including but not limited to vehicle safety and litter blowing) may result in termination of the transporter and a substitute transporter will be utilized.

1.04 SUBMITTALS

A. Submit to the Project Manager a written Waste Disposal and Waste Handling Plan for disposal and waste handling operations, describing classes of materials to be handled, with storage, disposition and receiving facilities for each material classification. Describe testing program for each material classification. Identify all waste handling contractors, including suppliers of containers, transporters, and receiving facilities. Provide statement(s) of qualifications of all transporters and receiving facilities documenting compliance with Article 1.03.

B. Provide to the Project Manager a copy of valid state issued permit from all proposed receiving facilities.

C. Provide to the Project Manger a written guarantee of capacity for wastes materials form the receiving facility for quantities of material to be delivered to the receiving facility. The written guarantee shall include both maximum daily and maximum total amounts of waste to be received by the facility, and restriction, if any, regarding the types of waste to be received, the hours of acceptance of the wastes.

D. Provide to the Project Manger a written testing program required by the receiving facility(ies) and applicable state laws and regulations, including frequency and types of tests for each applicable waste type.

E. Provide to the Project Manager copies of all laboratory test data, including, quality control and quality assurance information, required by the receiving facility(ies) or applicable state laws and regulations within one week of receipt of the contractor or within two weeks of completion of the analytical report, whichever is earlier.

F. Submit to the Project Manager copies of manifests or other records of sale or bills of lading indicating truck number, weight of waste, whether the waste contains any asbestos containing material, time and date of scale transaction at receiving facility prepared or signed by weighmaster of receiving facility for all wastes. Submit weekly. Information to be submitted prior to the end of the following week. Accompany the manifests with summary tables. Tables shall include daily totals of waste quantities for each waste type at each receiving facility, and should identify samples of waste taken for laboratory analyses to waste load.

G. Submit to the Project Manager copies of each daily operations record kept by each transporting vehicle pursuant to the requirements of 25 PA Code 285.217. Submit weekly. Information to be submitted within three days of end of preceding week.

1.05 PROJECT RECORD DOCUMENTATION

A. Waste Log shall be maintained by the Contractor. The waste log shall record origin (address and date) of waste for each vehicle load, origin of samples taken for analyses, receiving facility for each vehicle load and weight of load as received by the receiving facility.

1. Maintain log in good, legible order and keep available for inspection by Project Manager at all times. Upon completion of project, provide to Project Manager.

B. Each collection vehicle to maintain daily operational record for each day waste is transported in accordance with 25 PA Code 285.217.

C. A separate log shall be maintained for salvaged materials similar to the waste log described in paragraph A. recording the origin (address and date) of waste for each vehicle load, origin of samples taken for analyses, receiving facility for each vehicle load and weight of load as received by the receiving facility.

1. Maintain log in good, legible order and keep available for inspection by City at all times. Upon completion of project, provide to City.

PART 2 - PRODUCTS

2.01 EQUIPMENT

A. The Contractor shall provide equipment, personnel and facilities necessary to load materials for transport and complete transportation to the appropriate disposal facility.

B. All containers used to store materials on site shall comply with the provisions of 25 PA Code 285.211, including, but not limited to the following provisions:

1. Container shall be watertight, leak proof, insect proof and rodent proof.
2. Container shall be equipped with a watertight fitting lid or cover or otherwise sealed.
3. Containers shall be clearly labeled as containing “municipal waste” or the specific type of municipal or other waste being contained.

C. Transportation vehicles shall be clearly identified as carrying the applicable type of waste materials and vehicles shall be in compliance with applicable state department of transportation regulations.

1. Open top trailers shall be covered with secured tarpaulins or other suitable covers to prevent litter or waste from escaping the trailers.

PART 3 - EXECUTION

3.01 SELECTION OF WASTE DISPOSITION METHOD(S)

A. The Waste Disposal and Waste Handling Plan shall be prepared by the Contractor and include material disposition by type. All disposition and sampling arrangements shall be performed and coordinated by the Contractor and in accordance with the plan as approved by the Project Manager. This will include waste characterization and approval as well as any permits required. Contractors shall be responsible for testing and analyzing material, debris, and/or soil to determine the proper disposal method. Provide the City with documentation of the results.

B. The Contractor may dispose non-hazardous and non-recyclable solid waste at a properly permitted municipal or construction/demolition waste transfer station, processing facility or landfill (municipal waste or construction/demolition waste) with a valid permit and sufficient capacity to receive waste. Preference shall be given to facilities that salvage materials, process or beneficially use waste materials as allowed by law. Facility shall provide dedicated capacity for incoming wastes. The solid waste must comply with the facility operator's permit and applicable regulatory requirements. Hazardous waste, as identified by 40 CFR 261 must be disposed as required by local, State, or Federal regulations. The method of disposal must be approved by the Project Manager.

1. Waste materials that may be beneficially used must have applicable beneficial use approvals from the applicable state and the Contractor shall provide copy of the applicable permit or approval. Include any regulatory quality control and quality assurance testing programs and corresponding acceptance/rejection criteria, if any, in the waste plan.
2. For waste materials that may be disposed, reused or processed pursuant to permit by rule, general permits, or permit exemptions, provide documentation from the applicable regulating agency to the satisfaction of the Project Manager that the proposed disposal method, reuse or process is in accordance with applicable state laws and regulations. Include any regulatory quality control and quality assurance testing programs and corresponding acceptance/rejection criteria, if any, in the waste plan.

3.02 LOADING AND HAULING

A. The Contractor shall inspect haul vehicles for soil adhesion to wheels and under carriage. These soils shall be removed and properly handled by the Contractor before leaving Site.

B. No transport vehicles shall be allowed to leave the Site that are leaking or spilling materials.

C. The Contractor shall ensure tarpaulin covers are provided for transport vehicles, which shall cover excavated materials during transport. Do not overfill vehicles.

D. All transport vehicles shall be in strict conformance with all the applicable Federal, State and local laws.

E. The Contractor is responsible for any and all actions and costs necessary to remedy waste spilled in loading or transit.

F. All transport vehicles shall be clean before filling with waste material.

3.03 ASBESTOS MATERIALS

A. Sealed and labeled disposal bags/drums shall be used to transport asbestos-contaminated waste to the landfill. Procedures for hauling and disposal shall comply with 40 CFR, Part 61, 49 CFR, Part 171 and 172, and other applicable State, regional, and local government regulations.

B. Trucks hauling asbestos waste shall be totally enclosed to prevent loss or damage to waste containers in route to approved landfill. The interior of the vehicles shall be lined with two layers of minimum 6-mil plastic.

C. Mark vehicles used to transport the waste material with a visible warning sign during the loading and unloading of RACM. Danger sign legend, text size, style and arrangement shall conform to the requirements of EPA Standard 40 CFR Part 61.149 (d)(1).

END OF SECTION

SECTION 02150

SHORING AND UNDERPINNING

PART 1 GENERAL

1.01 QUALITY ASSURANCE

A. Regulatory Requirements:

1. Shoring materials and installation work shall conform to Federal, State and local laws, rules, regulations, requirements, precautions, orders and decrees.

2. Provide material for sheet piling, sheeting bracing and shoring and drive or set in place in accordance with Federal, State and local laws for excavations and construction; and as may be required to protect the workers and the public, or to maintain the trench widths specified in Section 02225: Earthwork, regardless of whether the same is or is not considered necessary by the Contractor.

1.02 PROJECT CONDITIONS

A. Responsibility for Condition of Excavation:

1. The failure or refusal of the City to suggest the use of bracing or sheeting, or a better quality, grade, or section, or larger sizes of steel or timber, or to suggest sheeting, bracing, struts, or shoring to be left in place, shall not in any way or to any extent relieve the Contractor of any responsibility concerning the condition of excavation or of any of his obligations under the Contract, nor impose any liability on the City; nor shall any delay, whether caused by any action or want of action on the part of the Contractor, or by any act of the City, or their agents, or employees, resulting in the keeping of any excavation open longer than would otherwise have been necessary, relieve the Contractor from the necessity of properly and adequately protecting the excavation from caving or slipping, nor from any of his obligations under the Contract relating to injury to persons or property, nor entitle him to any claims for extra compensation.

PART 2 PRODUCTS

2.01 MATERIALS

A. Wood Materials: Use wood sheeting, sheet piling, bracing and shoring which is in good serviceable condition and timbers of sound condition, free from large or loose knots and of proper dimensions.

B. Steel Materials: Steel sheet piling and bracing of equal strength may be substituted for wood.

PART 3 EXECUTION

3.01 INSTALLATION

A. Using skilled labor, drive or set sheeting, sheet piling, braces or shores in place and arranged such that they may be withdrawn as the excavations are backfilled, without injury to piping and structures, and without injury to or settlement of adjacent structures and pavements.

B. When tight plank or steel sheeting is required, drive such sheeting in advance of the excavation. Make joints of tongue and groove or interlocking type and as watertight as possible.

C. Cut off sheeting or sheet piling left in place whenever and at such points as the City shall require and remove from the work the portion cut off. No additional compensation will be allowed for such cutting and removal.

END OF SECTION

SECTION 02225

EARTHWORK

PART 1 GENERAL

1.01 SUMMARY

A. Related Sections
   1. Section 02150: Shoring and Underpinning
   2. Section 01510: Environmental Controls
   3. Section 02050: Demolition

1.02 REFERENCES

A. American Association of State Highway and Transportation Officials, AASHTO M 140, Emulsified Asphalt.
B. American Society for Testing and Materials, ASTM C 602, Specification for Agricultural Liming Materials.

1.03 SITE CONDITIONS

A. Classification of Excavated Materials: No consideration shall be given to the nature of materials encountered in excavating operations. Therefore, as unclassified excavation, no additional payment will be made for difficulties occurring in excavating and handling of materials.
B. Removal of Obstructions:
   1. DO NOT OBSTRUCT FIRE HYDRANTS.
   2. Remove, realign or change the direction of above or below ground utilities and their appurtenant supports, if such is required in the opinion of the Project Manager. Perform such work as extra work unless such work is done by the Owner of the obstruction without cost to the Contractor. However, uncover and sustain the obstruction at Contractor's expense prior to the final disposition of obstruction. The Contractor is not entitled to claims for damage or extra compensation due to the presence of such obstruction or delay in the removal or rearrangement of same. Additional precautions concerning obstructions as follows:
      a. Do not interfere with persons, firms, corporations or utilities employing protective measures, removing, changing or replacing their property or structures, but allow said persons, firms, corporations or utilities to take such measures as they may consider necessary or advisable under the circumstances; which shall not relieve the responsibilities of the Contract.
      b. If contractor encounters any unanticipated sewer or water line they must stop work and notify Project Manager immediately. The Project Manager will notify the Water Department immediately.
C. Concrete Curbing: Replace all sidewalk curbing removed or damaged during construction in accordance with The City's requirements with no additional compensation.
D. Environmental Requirements:
   1. Do not perform earthwork when weather conditions or the condition of materials are such, in the opinion of the Inspector, that work cannot be performed satisfactorily.
   2. Do not use frozen materials as backfill or wet materials containing moisture in excess of the amount necessary for satisfactory compaction.
   3. Prior to use, moisten dry backfill material lacking sufficient moisture to obtain satisfactory placement or compaction.
   4. Plan work so as to provide adequate protection during storms with provisions available for preventing flood damage.
   5. Accommodation of Drainage: Keep gutters, sewers, drains and ditches open for surface drainage. No damming or ponding of water in gutters or other waterways will be permitted, except where stream crossings are necessary and then only to an extent which the Inspector shall consider necessary. Do not direct water flows across or over pavements except through approved pipes or properly constructed troughs of proper sizes and lengths. Perform grading in the vicinity of excavations so that the ground surface is properly pitched to prevent water running into excavations.
   6. Dewatering: Keep excavations free from water during the performance of the work. Provide and operate pumps of sufficient capacity for dewatering the excavations. Provide for the disposal of the water removed from excavations in such manner as not to cause injury to the public health, to public or private property, to the work of others, to the portion of the work completed or in progress, nor to cause an impediment to the use of streets, roads and highways.
   7. When it is necessary to haul soft or wet soil material over roadways, use suitably tight vehicles to prevent spillage. Clear away spillage of materials on roadways caused by hauling.

8. Provide effective dust control by sprinkling water, use of calcium chloride or other method approved by Inspector. Employ dust control when, where and in a manner required by Inspector.

E. Protection: Assume the risks attending the presence or proximity of overhead or underground public utility and private lines, pipes, conduits and support work for same, existing structures and property of whatever nature. Damages and expenses, arising out of the Work, for direct or indirect injury to such structures or to any person or property by reason of them, or by reason of injury to them, whether such structures are or are not shown on the Drawings, rests solely with the Contractor.

1. Take necessary precautions to protect trees, shrubs, lawns and such other landscaping from damage. Restitution work for damages rests solely with the Contractor.
2. Pipe Supports: Adequately support underground pipes or conduits exposed as a result of excavations. Provide adequate support along the entire exposed length by timber or planking. Install supports in such manner that backfilling may be performed without dislodging such pipes or conduits. Place and carefully compact Clean Earth Backfill or Aggregate Backfill, around the supports, and leave such supports in place as a guard against breakage due to backfill settlement. No additional payment shall be due the Contractor for support material left in place or for the labor of installing and maintaining supports.
3. Temporary Protective Construction:
   a. Temporary Fence Barricade: Erect and maintain substantial temporary fences surrounding excavation to prevent unauthorized persons entering such areas.
   b. Temporary Fence: Where necessary, to keep one side of streets or roadway free from obstruction or to keep material piled along side of the trench from falling on private property outside the right-of-way, erect and maintain a safe and substantial fence.
   c. Barricades: Furnish and erect substantial barricades, along excavations, to protect the public.
   d. Excavation Covers: Cover open excavation when work therein is suspended or left unattended, such as at the end of a work day. For such covers, use materials of sufficient strength and weight to prevent their removal by unauthorized persons.
   e. Remove temporary protective construction at the completion of work on the Project.

F. Structure Supports: Where excavations are in the vicinity of buildings or structures, which by their construction or position might exert detrimental pressure on the excavation, the Inspector reserves the right to require that such buildings or structures be underpinned or supported and protected, or special sheeting be driven, or that short lengths of trench be opened at one time.

G. Excavation Condition: The Contractor is solely responsible for the conditions and results of his excavation work. Remove slides and cave-ins at whatever time and under whatever circumstance they occur.

H. Excess Materials: No right of property in materials is granted the Contractor of excavated materials prior to backfilling. This provision does not relieve the Contractor of his responsibility to remove and dispose of surplus excavated materials, or excavated materials not suitable for use in backfiring.

I. Borrow Material: When the required quantity of backfill material exceeds the quantity of suitable on site material, provide borrow material at no increase in Contract Price. If borrow material is needed, notify the Inspector sufficiently in advance to permit the Inspector to verify such need and to view the proposed borrow pit to determine the material suitability. Borrow excavation shall be subject to the Inspector's approval whose written consent shall be obtained prior to its use.

J. Existing conditions: Following performance of related construction and prior to finish grading do such debris removal and site leveling as necessary in preparation for finish grading. Dispose of such debris in a lawful manner off site.

1.04 Submittals

A. Submit soil test analysis reports for all soils, sands, organic materials and planting mixes from an approved soil testing laboratory.

1. Provide a particle size and analysis including the following gradations of mineral content according to the United States Department of Agricultural particle size classification system.

U.S.D.A. Designation	Size in mm	U.S.D.A. Designation	Size in mm
Gravels	plus 2.0	Fine Sand	0.05- 0.10
Very Course Sand	1.0-2.0	Silt	0.002-0.05
Coarse Sand	0.5-1.0	Clay	minus 0.002
Medium Sand	0.10-0.25		

2. Provide a chemical analysis including the following using NCR-221 or NRP-493 procedures (except where noted):

a. pH
b. Lime Requirement (when needed)
c. Nutrient levels including nitrogen, phosphorous, potassium, calcium and magnesium
d. Cation exchange capacity
e. Soluble salts expressed in mmohs
f. Percent Organic Matter by weight (ASTM D 5269-92)

3. All testing will be at the expense of the contractor
4. If the particle size analysis fails to meet the mix criteria, the ratio shall be adjusted and mix retested.

B. Submit one-pound samples of all topsoil, sand, organic material and planting mixes. Samples shall be labeled to include the location of source material. Samples of all planting mixes shall be labeled with mix ratios.

C. Submit the manufacturer's particle size analysis for all sands and other aggregates.

PART 2 PRODUCTS

2.01 MATERIALS

A. Backfill: On site excavated soil or soil-rock mixed materials. Hard objects other than natural stone shall be less than twelve (12) inches in the greatest dimension or less than one (1) cubic foot in volume. Natural stone(s) shall be less than one and a half (1-1/2) cubic feet in volume. Rock to soil ratio shall not exceed one part rock to three parts soil. Fill must comply with applicable laws. All backfill shall be free of combustible and fibrous material, including metal, reinforcing steel, wood plastic, plaster, ceramic, roofing materials, lumber, trash, household garbage, vegetation, top soil, and other debris or refuse.

B. Topsoil: Use fertile, friable, natural, productive surface soil such as is available on site.

C. Borrow Topsoil: Topsoil shall be natural, fertile, friable loam or sand loam. The material shall be free of sub-soil, large stones over 2", earth clods, sticks, stumps, clay lumps, roots, or other objectionable material. Organic content should be between 3% and 8%. The soil shall have a pH between 6.0 and 7.5.The material shall be free of noxious weeds (including Quack-grass rhizomes, *Agropyron repens*, and the nut-like tubers of Nutgrass, *Cyperus esculentus)*.

2.02 COMPOSTED ORGANICS

A. The organic amendment shall be manure/stable humus-like material derived from aerobic decomposition of biosolids, leaves, yard waste (tree trimmings, grass, leaves, etc.,) animal manures or other readily compostable organic materials. The compost shall be dark brown to black in color and capable of supporting plant growth. It shall be free of objectionable odors. Compost moisture content shall be such that no visible free water or excessive dust is produced during handling.

1. The material shall have particle size of 100% passing a ¾" screen.
2. The material shall have 1% or less by weight inert material retained on a U.S.Std No.5 (4mm) sieve
3. The material shall have an organic matter content (ASTM D 2974) of 25- 85%
4. The saturated extract pH shall be 5.8 to 8.0
5. The saturated extract electrical conductivity shall be 1.0 to 8.0 mmohs/cm
6. The material shall have a carbon to nitrogen ration not exceeding 35:1

2.03 LAWN

A. Appropriate seed varieties

1. Perennial Ryegrass - use for full sun sites that require quick establishment (within one year) and will be vacant for only a few years. Perennial ryegrass tolerates heavy foot traffic. Apply 4 to 5 lbs. of seed per 1,000 sq. ft. When incorporated in a mix, the amount of perennial ryegrass should be less than 15% of the total amount of seed mix, since it is aggressive and will compete with other grass types.
2. Fine Fescue - use for full sun to shady sites that will be vacant for more than two years. Fine fescue mixes well with perennial ryegrass and Kentucky bluegrass. Seed at a rate of 4 to 6 lbs. per 1,000 sq. ft.
3. Kentucky Bluegrass - use as part of a mix with a fine fescue and perennial ryegrass to help fill in bare spots. When incorporated in a mix, the amount of Kentucky bluegrass should be less than 15% of the seed mix.

B. Recommended planting dates

1. The best time to seed a lawn is from September 1 to October 15 in the fall and prior to April 1 in the spring.

C. Seeding Method

1. Drop or Cyclone Seeder - use for larger spaces (a three house lot or larger). Use a hand operated drop or cyclone seeder that scatters the seed out evenly over the soil. For best coverage, divide the recommended amount of seed in half and apply in perpendicular directions. Once the seed is down, rake it lightly to cover with 1/4 inch of soil and apply mulch.

2. Hydroseeding - use when seeding larger areas. In this method the seed is blown onto the soil along with fiber mulch. For best results, have the mulch applied as a second application after the seed rather than mixing the two together in one application.

D. Mulching
1. Straw or Salt Hay - apply at a rate of 50 to 90 lbs. (2 bales) per 1,000 square feet, until the soil is barely covered. A disadvantage to straw or salt hay is that both will blow away in windy locations, therefore apply a liquid binder (see handout).
2. Fiber Mulch - apply this wood cellulose fiber using a hydroseeder at a rate of 1 ton per acre.
3. Penn Mulch - apply this recycled newspaper pellet mulch combined with a starter fertilizer. When moistened with water, the pellets expand to cover the soil surface. Apply by hand or with a spreader.

E. Appropriate type and amount of starter fertilizer
1. Incorporate starter fertilizer into the top 1 inch of soil to help grass establish more rapidly. Rake the seed and starter fertilizer into the soil.
2. Apply 40 lbs. of a 10-5-5 or 10-6-4 fertilizer per 1,000 sq. ft. **OR** 25 lbs. of a 16-8-8 fertilizer per 1,000 sq. ft. The fertilizer should be 'turf-grade' and contain 35% or more of the total nitrogen as water insoluble or controlled-release nitrogen.

PART 3 EXECUTION

3.01 PREPARATION

A. Preparation of Surfaces:
1. Do not remove trees in rights-of-way unless authorized by the Inspector. No additional compensation shall be paid for hand excavation or tunneling in the vicinity of trees that are not being removed. A written variance signed by the Department or its authorized representative shall be required when a tree is to be left in place.
2. Perform authorized tree removal, including debris, by methods meeting Project Manager's approval with no increase in Contract Price.
3. Perform authorized shrubbery removal with no increase in Contract Price.
4. Dispose of tree removal debris in a lawful manner.

B. Salvaged Topsoil: Within the areas indicated for grading, strip turf and topsoil to the depth of suitable topsoil material and stock pile for subsequent topsoiling operations
1. Stockpiling: Place topsoil storage piles within the limits of the project, on well drained land and at locations not interfering with the prosecution of Work.

C. Perform shoring in accordance with Section 02150: Shoring and Underpinning.

D. Perform soil erosion control work in accordance with Section 01510: Environmental Controls.

E. Overlot Grading: Perform rough grading over the site within the areas to be graded.

3.02 EXCAVATING

A. General Requirements: Perform excavation and backfilling using machinery except that hand excavation and backfilling may be required where necessary to protect existing structures, utilities or private or public properties; and except that backfilling by hand shall be done by hand to the extent specified herein. No additional compensation will be paid for hand excavation and backfilling, instead of machine excavation and backfilling, as may be necessary from whatever cause.

B. Excavated Material Storage: Perform excavated material storage as specified herein, at no increase in Contract Price.
1. In streets, roads and highways or in any other locations where working space is limited, remove the excavated materials, store and return same for backfilling when required. In no case will the Contractor be allowed to cast excavated material beyond the curb or right-of-way lines or on sidewalks or lawns.
2. Where more material is excavated than can be backfilled or stored on the street or within rights-of-way limits, leaving space for traffic and drainage, remove and store such excess material. Return this material for backfilling when required.
3. Where excavated material is unsuitable for backfill, excavated material shall be removed.

3.03 BACKFILLING

A. Backfilling: Perform backfilling using machinery, except that hand backfilling may be required where necessary to prevent displacing walls, foundations or buried utilities or damage to such. No additional compensation will be paid where backfilling by hand is required.

1. Prior to backfilling, clean excavation free of trash and debris.
2. Do not place Backfill material on wet or frozen areas.
3. Perform compaction using power driven tampers or compactors suitable for material being placed.

B. Restrictions:

1. Do not use materials such as house ashes, putrescible refuse and such other materials considered unsatisfactory by the Inspector. Do not permit excavations to be used as dumping areas for refuse.
2. Do not use frozen backfill materials or place backfill materials on frozen subgrade or trench surfaces.
3. Should there be a deficiency of proper backfill material, provide acceptable borrow material with no additional compensation paid.

C. Test Digs: Prior to the application of top dirt on any demolition site, the City may require Contractor to dig test digs on each demolition site, at the sole option of the City and at locations to be determined by the City at its discretion. Contractor must notify the Department prior to the application of top dirt so that the Department can exercise this option. A representative from the Department will be responsible for scheduling the test digs and determining the locations of the same and will be present at the same.

D. Compacting: During the course of backfilling and compacting work, the Inspector reserves the right to make tests at various locations or depths of trenches, to determine whether the Contractor's compaction operations are meeting specified requirements. Compact trench backfill as follows:

1. Solidly tamp each layer of Backfill with proper tamping tools made specifically for this purpose.
2. Thoroughly compact Backfill with a vibratory compactor of a type and size satisfactory to the Inspector. Compacting of Backfill by puddling or jetting will not be permitted.

E. Cleanup:

1. Remove surplus excavated material, rubbish and other construction debris and keep such removed to a point not more than two hundred feet from the head of the open trench, unless otherwise authorized by the Inspector.
2. After excavations are refilled and the work completed, remove surplus excavated materials, rubbish or such other materials from the work in such manner as the Contractor may elect or provide, subject to the Inspector's approval. Dispose of such materials off the site in a lawful manner.
3. Evenly spread and leave in neat, smooth condition the surplus excavated material that is disposed of lawfully on public property.
4. Furnish and place topsoil, fertilize and seed grassed areas, as affected by construction. Reseed and refertilize areas that fail to show a uniform stand of grass. Water, mow, rake, weed and otherwise maintain grass until final acceptance of Contract.
5. Restore the area covered to as near the original conditions as is practical. Bring area up to original grade, place topsoil, seed, replant or replace damaged or removed shrubbery, repair or replace walks, driveways, fences and other improvements.
6. Do topsoiling, liming, fertilizing and seeding in a manner consistent with acceptable trade practices for the area involved.
7. When the excavation has been completed, sweep paved surfaces having been affected by the work using hand or power sweepers, and if required by the Inspector, flush with water to remove dust and small particles.
8. In case the Contractor shall fail or neglect to do so, or to make satisfactory progress in doing so, within twenty-four hours after the receipt of a written notice from the Inspector, the City may remove such surplus material and clear the roadways, sidewalks and other places, and the expense for such work charged to the Contractor or deducted from any moneys due or to become due him under the Contract.

F. Maintenance: The Contractor is solely responsible for injury or damage resulting from lack of trench maintenance during the guarantee period. If excavation surfaces are not satisfactorily maintained, or repairs are not begun within three days after written notice from the Inspector, such repairs may be made by the City and the expense for such work charged to the Contractor, or deducted from any moneys due or to become due under the Contract.

3.04 FINISH GRADING AND SEEDING

A. Preparation:

1. Remove surface rock or other foreign objects exceeding three inches in greater dimension. Dispose of such rock and debris in a lawful manner off site.

B. Placement: Place topsoil over areas indicated for new grading contours. However, before topsoil placement, construction work in topsoiled areas shall have been completed. Observe precautions as follows:

1. Do not place topsoil over areas indicated to receive paving or walkways.
2. Do not work topsoil while frozen or wet. Do not work topsoil in a dusting condition but moisten same to prevent a dust nuisance.
3. Scarify subsoil to a depth of two inches for bonding topsoil with subsoil.
4. Place topsoil as needed for dressing-up minor depressions due to settling and erosion and to eliminate other minor irregularities.
5. On sloped areas, work topsoil into subsoil to blend so as to eliminate slip-planing between the two soils; but leave a sufficient cover of topsoil to insure seed germination. Perform such blending of soils by ridging or serrating the subsoil on the slopes.

C. Finished Elevations And Lines: Grade topsoiled areas of the site to within a tolerance of plus or minus one-tenth of a foot of the elevations of surrounding grade accordance with the following:

1. Do not finish grade topsoil to a depth less than six inches nor greater than twelve (12) inches.
2. Leave finish grade surfaces free of objectionable material larger than one (1) inch in greatest dimension. Dispose of such objectionable material in a legal disposal area off site.
3. Grade a uniform longitudinal fall in swales and other surface drainage areas to provide a drainage flow line that can easily be maintained and traversed with normal lawn maintenance equipment.
4. Establish finish grade of topsoil l/2 to 3/4 inch below top of abutting walks or paving to provide positive drainage of same.

D. Compaction: Compact finish grades as the final operation using a light roller weighing not over 120 pounds per foot-width of roller.

E. Tillage: Till finish graded soil over areas indicated for lawn regardless of type of lawn work performed. Use equipment and methods common to such work, and till soil to a two inch depth minimum.

F. Soil Supplement Addition: The soil supplements for lawn areas, as required according to the Inspector approved laboratory test reports, may be incorporated into the soil during tillage operations.

G. Seeding: Sow Grass Seed Mixture at a rate of five pounds per 1000 sq. ft. of area when air current is low and not more than five days after soil supplements have been applied. Sow seeds in two applications using either mechanical power seeders or mechanical hand seeders. Sow one-half of the seed mixture in one direction over designated areas and the remainder at right angles to the first sowing.

H. Seed Cover: Imbed seed mixtures into topsoil 1/4 inch using a light drag or rake and moving in directions parallel to the contour lines. Immediately after dragging or raking, compact seeded areas using a cultipacker or similar design lawn roller, weighing 60 to 90 pounds per linear foot of roller, and roll at right angles to existing slopes.

I. Lawn Mulching: Evenly apply mulch over seeded areas not more than 48 hours after seeding. Start mulching at windward side of relatively flat areas, or at the upper part of slopes. Spread mulch in a total coverage at a depth not less than 1-1/2 inches nor more than three inches.

J. Maintenance Operations shall begin immediately after seeding and shall continue throughout the construction time and guarantee period.

1. Seeded Areas: Keep seed moist continually for proper germination and water thereafter as necessary to prevent drying out or burning. Reseed areas not showing a prompt catch of grass, correct depressions and irregularities and reseed; repeat until a complete coverage is obtained. Cut seeded areas at required intervals to maintain grass at a maximum height of 2-1/2 inches.

K. At conclusion of maintenance period, the Inspector shall make an inspection of the lawn work and determine condition of acceptance. Make such additional repairs as required by the Inspector. Perform such work at no expense to the City.

END OF SECTION

SECTION 02444

CHAIN LINK FENCE

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: The work specified consists of constructing a chain link fence system.

1.02 REFERENCES

A. American Society For Testing and Materials:
   1. ASTM A 121; Specification for Zinc-Coated (Galvanized) Steel Barbed Wire.
   2. ASTM A 123; Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
   3. ASTM A 392; Specification for Zinc-Coated Steel Chain-Link Fence Fabric.
   4. ASTM A 824; Specification for Metallic-Coated Steel Marcelled Tension Wire for Use with Chain Link.
   5. ASTM F 567; Installation of Chain-Link Fence, Practice For.

B. Federal Specifications:
   1. Fed. Spec. RR-F-191 J/Gen; General Specifications.
   2. Fed. Spec. RR-F-191 3/C; Chain-Link Fence Posts, Top Rails, and Braces.
   3. Fed. Spec. RR-F-191 4/C; Chain-Link Fence Accessories.

1.03 SUBMITTALS

A. Product Data: Submit catalog cuts and such other data as required providing complete descriptive information for Frame Materials, Fabric, and Wire.

B. Certificates: Include in Submittals photo copies of certified mill certificates indicating material conformity to the yield strengths for the specified.

1.04 QUALITY ASSURANCE

A. Fabricator Qualifications: Continuing member of the Chain Link Fence Manufacturer Institute (CLFMI).

B. Erector Qualifications: Provide at least one supervisory person who is skilled and experienced in erecting chain link fence, who readily understands the proposed layout and is completely familiar with current erection practices of the CLFMI. The supervisory person must be present during progress of the fence installation.

C. Design Criteria: Chain link type with top rail and bottom tension wire. Fabric height to six feet.

D. Product Compatibility: Provide chain link fence components of one manufacturer.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Acceptable Manufacturers: (or equal)
   1. Anchor Fence, Inc.
   2. United States Steel; Cyclone Fence.
   3. Allied Fence Products.

2.02 FRAME MATERIALS

A. Galvanizing: Ferrous metal elements of the fence frame and accessories shall receive zinc (Grade E) coating by the hot dip process after fabrication. Metal coated to l.8 oz. of zinc coating per square foot of surface, in a smooth finish, free from dross, uncoated spots and foreign materials, ASTM A l23.

B. Framing Members: In general, conforming to Fed. Spec. RR-F-191 3/C and roll-formed shapes or tubular members with zinc hot-galvanized coating according to ASTM A 123, and comprised of the following components:
   1. Intermediate (Line) Posts: Nominal two inch roll formed shapes or tubular members fabricated from 50,000 psi min. yield strength steel, weighing 3.12 lbs. per ft., or 2-1/2 inch schedule 40 at 3.65 per ft.
   2. End, Pull and Corner Posts: Nominal three inch roll formed shapes or tubular members fabricated from 50,000 psi min. yield strength steel, weighing 5.10-lbs. per ft., or 3-inch schedule 40 at 5.79 lbs. per. ft.
   3. Gate Posts: Nominal four inch steel pipe or tubular members fabricated from 30,000 psi min. yield strength steel, weighing 9.l0 lbs. per ft.
   4. Post Braces: Nominal l-l/4 inch steel pipe weighing 2.27 lbs. per ft. minimum, with 3/8 inch diameter truss rod and adjustable take-up device. Provide two brace assemblies at each corner post and one brace assembly at each end and gate post.
   5. Top Rail: Nominal 1-1/4 inch steel pipe weighing 2.27 lbs. per ft. minimum.

C. Framing Accessories: In general, conforming to Fed. Spec. RR-F-191 4/C, stretcher bars, stretcher bar bands, post tops, with zinc hot-galvanized coating according to ASTM A 123, shall be composed of the following:

1. Post Tops: Where barbed wire supporting arms are not required cover post ends with pressed steel or malleable iron, weather tight caps designed to permit passage of top rail, as required.
2. Stretcher Bars: One piece 3/l6 x 3/4 inch bar of length equal to full height of fabric. Provide one bar for each gate and end post and two for each corner and pull post. Provide l/2 inch wide stretcher bar bands spaced not over l5 inches O.C. to secure stretcher bars to posts.
3. Bar Bands: Fabricated from steel plate and strip.

D. Concrete for Post Footings: 3,000 psi compressive strength.

2.03 FABRIC AND WIRE

A. Galvanized Fabric: No. 9 gauge galvanized steel wire having a hot-dipped zinc (Class 1) coating of 1.2 ounce per square foot of wire surface. Fabric shall conform to ASTM A 392.
   1. Fabric interwoven in a two inch mesh with top and bottom selvage edges both twisted and barbed.

B. Galvanized Barbed Wire: Three lines of steel wire with a Class 3 galvanized coating per ASTM A 121. Barbed wire consists of two No. 12 1/2 gauge stranded line wires, with No. 14 gauge round wire barbs in a four point pattern on three inch centers.

C. Tension Wire and Tie Wires:
   1. Galvanized Tension Wire: No. 7 gauge marcelled wire conforming to ASTM A 824 and galvanized according to ASTM A 824 Type II zinc-coating (Class 2) at 1.20 ounces per sq. ft.
   2. Galvanized Tie Wires: Tie wire for fabric to line posts, rails, and braces; minimum 9 gauge and of the same wire and coating as tension wire.
   3. Ties: Fabric to tension wire; 9 gauge hog rings of same material as tension wire.

PART 3 EXECUTION

3.01 PREPARATION

A. Field Verification: Verify that the grading operations have been completed before beginning fence installation operations.

B. Post Footing Excavations: Drill or dig holes for post footings in firm, undisturbed or compacted soil. Holes shall have a diameter equal to four times the diameter of the post. Excavate hole depths approximately three inches deeper than post bottom, with bottom of posts set not less than 36 inches below the surface of planned finish grade.
   1. Dispose of the excess soil not used in finish grading the area around the finished concrete footings, on site in areas as determined by the Inspector.

3.02 INSTALLATION

A. General Requirements: Installation shall conform to ASTM F 567 and Fed. Spec. RR-F-191 J/Gen. with respect to the type of fence specified, and the following additional requirements:
   1. Post Spacing and Setting: Space line posts a maximum of ten feet on center. Set terminal, gate and line posts plumb and in concrete footings. Top of footings shall extend two inches above grade.
   2. Bracing Installation: Install braces so posts are plumb when diagonal rods are under proper tension. Brace gate and terminal posts back to adjacent line posts with horizontal brace rails and diagonal truss rods.
   3. Top Rail Installation: Install through line post loop caps connecting sections with sleeves to form a continuous rail between terminal posts.
   4. Fabric Installation: Install bottom tension wires before stretching fabric and tie to each post with ties or clips. Install fabric on security side of fence, and anchor to framework so that fabric remains in tensions after pulling force is released.
      a. Pull fabric taut with bottom selvage two inches above grade. Fasten fabric to terminal posts with tension bars threaded through the mesh and secured with tension bands at maximum 15-inch intervals. Tie fabric to line posts and top rails with tie wires spaced at maximum 12-inches on posts and 24-inches on rails. Attach to bottom tension wire with top rings at maximum 24-inch intervals.
      b. Thread stretcher bars through fabric, and secure to posts with metal bands spaced not over l5 inches O.C.

B. Concrete Footing Work: Place concrete around posts in a continuous pour. Tamp concrete for consolidation. Check each post for vertical and top alignment. Crown top of post footings to shed water.

END OF SECTION

SECTION 02445

POST AND RAIL FENCE

PART 1 GENERAL

1.01 SUMMARY

The work specified in this Section consists of constructing a post and rail wood fence system.

1.02 SUBMITTALS

A. Product Data: Submit catalog cuts and such other data as required to provide complete descriptive information for the following:
   1. Footing Materials
   2. Wooden Rail
   3. Posts

B. Certificates: Include in Submittals photo copies of certified mill certificates indicating material conformity to the yield strengths for the specified.

1.03 QUALITY ASSURANCE

A. Erector Qualifications: Provide at least one person in a supervisory capacity who is skilled and experienced in erecting post and rail wood fencing and who readily understands the proposed layout and is familiar with the current erection practice. The supervisory person must be present during progress of the fence installation.

B. Design Criteria: Post and rail wooden fence with 2” x 6” railing and 4”x 4” posts. Fabricate to a height of three (3) feet.

PART 2 PRODUCTS

2.01 FRAMING POSTS

A. 4” x 4” Arsenic-free Pressure treated lumber five (5) feet in length, in accordance with AWPA C2 – Lumber, Timber, Bridge Ties and Mine Ties – Preservative Treatment by Pressure Processes; American Wood-Preservers’ Association.

B. 2” x 6” Post Caps.

C. 2-1/2” Deck Screws.

D. Aggregate for Post Footing: Crushed Stone, Gravel, Shale, Limestone, etc. The aggregate size should be 3/4 inch to 3/8 inch in size. Clay, dirt and/or organic compounds, should not exceed 3% of the total volume of aggregate.

E. Concrete for Post Footings: 3,000 psi compressive strength at 28 days.

2.02 RAIL

A. 2”x6” Arsenic-free Pressure treated lumber eight (8) feet in length, in accordance with AWPA C2 – Lumber, Timber, Bridge Ties and Mine Ties – Preservative Treatment by Pressure Processes; American Wood-Preservers’ Association.

B. 2-3/8” Carriage Bolts with Locknuts.

PART 3 EXECUTION

3.01 PREPARATION

A. Field Verification: Verify that the grading operations have been completed before beginning fence installation operations.

B. Verify the exact location and elevation of all underground utilities and other structures before starting work. Call PA One Call System: 1-800-242-1776.

C. Use extreme care to protect all existing elements from damage or displacement. Remove any debris or trash unearthed during excavation and dispose of legally.

3.02 INSTALLATION

A. General Requirements for Fence Post:

1. Post Spacing and Layout: Determine where the fence will be placed. Establish the location of each post and the number of posts that will be used. The maximum spacing between each post is eight (8) feet.
2. Post Footing Excavations: Excavate hole in firm, undisturbed or compacted soil. Drill or dig holes for the wooden posts to a depth of thirty (30) inches, with a diameter of at least one (1) foot.
3. Aggregate Footing Work: Place four (4) inches of aggregate base in the excavate hole to provide a firm footing. The aggregate should be made firm and compact. Position the pressure-treated wood post on the four (4) inch tamped aggregate base in the hole and place another two (2) inches of aggregate around the post for drainage. Tamp the added two (2) inches of aggregate.
4. Concrete Footing Work: Situate the wooden post true and plum with the ground, while filling the hole with concrete. Place concrete around posts in a continuous pour. The concrete should not engulf the bottom of the post. Tamp the concrete for consolidation. Take care to slope the top of the concrete away from the wood post for drainage purposes. Top of posts shall be thirty four (34) inches above the grade. (see detail)
5. Grading of Footing: After the concrete has hardened. Used the soil excavated from the hole to grade the area around the finished concrete footing. Dispose of the excess soil not used in grading, on site in areas determined by the Inspector.
6. Repeat step 2-5 for each fence post.

B. General Requirements for Fence Railing:
1. Attaching Railing: After the posts are put in place, attach the 2”x 6” pressure treated lumber. Two (2) 2”x 6” will cross between the posts. The 2” x 6” are attached flat against the post with the six (6) inch side in contact with the post. The lower 2” x 6” base should be eleven (11) inches above the ground. The top of the upper 2” x 6” should be placed two (2) inch below the pinnacle of the post. Center the wooden 2” x 6”s on the post and attach the 2” x 6” using two 2-3/8” Carriage Bolts on each side of the 2” x 6”s. (see detail)
2. Repeat Step 1 until all of the posts have two (2) 2” x 6”s spanning them.

C. General Requirement for Post Caps:
1. Preparing Posts: Cut the top of the 4” x 4” pressure-treated wood posts at a thirty (30) degree angle. (see detail)
2. Attach the 2” x 6” caps to the top of the post using 2-1/2 inch deck screws.

END OF SECTION

SECTION 06100

ROUGH CARPENTRY

PART 1 GENERAL

1.01 SUMMARY (NON-INCLUSIVE)

A. Section Includes: Wood framing, furring and blocking, including fasteners and accessories which will generally be concealed in the finished Work.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Division 1 Sections applying to or affecting the Work of this Section.

B. Section 07511: Repairs to Existing Built-Up Roofing

C. Section 07650: Flexible Flashing

1.03 SUBMITTALS

A. Submit per the requirements of Division 1.

B. Product Data: Submit Product Data for preservative and fire-retardant treated material.

1.04 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with the following per Division 1.

1. Conform to applicable building code for fire-retardant treatment of wood surfaces for flame spread and smoke developed ratings.

2. Fire-retardant treatment to conform to requirements of Underwriters Laboratories Inc. (UL).

B. Referenced Standards: Comply with the following as per Division 1.

1. Lumber: Identify with grade stamp of an agency certified by NFPA and WWPA.

2. American Plywood Association (APA) Product Guide: Performance-Rated Panels.

PART 2 PRODUCTS

2.01 MATERIALS

A. Lumber: Material concealed from view in the finished Work. Lumber and sizes shall comply with PS-20. Use dry lumber (S-DRY), surfaced four sides (S4S). Moisture content shall not exceed 19 percent except that moisture content of all 2-inch lumber shall not exceed 15 percent or less at time of surfacing. Stamp lumber "S-DRY" and "MC-15" respectively. Lumber shall conform to WWPA Grading Rules as follows (all sizes nominal):

B. Plywood: As recommended by "Guide to Plywood Grades under Product Standard PS-1 for Softwood Plywood/Construction and Industrial" published by the American Plywood Association, except as otherwise indicated.

2.02 PRESERVATIVE WOOD TREATMENT

A. General: Comply with AWPA Standard C2. Mark each piece with AWPA or SPIB Quality Mark Requirements.

1. Provide treatment materials for field cut surfaces.

B. Above-Ground Wood Treatment: Pressure treat to a minimum retention of 0.25 pcf.

1. Kiln-dry lumber to maximum 19 percent moisture content.
2. Kiln-dry plywood to a maximum 15 percent moisture content.
3. Treat wood where indicated and as follows:
   a. In contact with concrete or masonry.

2.03 FIRE-RETARDANT PRESSURE TREATMENT

A. Lumber: Comply with AWPA C 20.

B. Plywood: Comply with AWPA C 27.

C. Treatment: Type A for interior work, and protected exterior work. Exterior type for exterior locations exposed to the elements.

D. Provide UL-listed identification on fire-retardant-treated materials.

E. Fire-retardant treat all lumber and plywood on the interior [and exterior] of the building unless otherwise indicated.

2.04 ROUGH HARDWARE

A. Provide hardware of the size, type, and quantity required to permanently secure the Work. Hardware shall include nails, spikes, screws, anchor bolts, lag bolts, toggle bolts, or other approved fasteners. Hardware exposed to weather shall be hot-dipped galvanized per ASTM A 153, or shall be stainless steel.

1. Nails shall be barbed or ring-shank type and penetrate minimum 1-1/4 inch into substrate.
2. Fasteners into concrete or masonry shall be one of the following as suitable to condition:
   a. Hardened Concrete: minimum No. 10 screws, in pre-drilled holes.
   b. Explosive set anchors, minimum 1 inch penetration.
   c. Epoxy anchors in pre-drilled holes.
   d. No hand driven nails allowed.
   e. No lead, fiber or plastic shields or plugs allowed.

PART 3 EXECUTION

3.01 INSTALLATION

A. Comply with American Forest and Paper Association (AFPA) "National Design Specification for Wood Construction" and Wood Frame Data No. 1".

B. Construct members of continuous pieces of longest possible lengths.

C. Install the work plumb, level, and true of shape and configuration shown.

D. Coat cut surfaces of preservative treated wood to comply with AWPA M 4.

E. Anchors:

1. Nailing: As scheduled in applicable building code if not otherwise indicated.
2. Provide all bolts with plate washers.
3. Recess the heads of screws and bolts below the surface of the member where indicated or required for future Work.

F. Blocking, nailers, edge strips and cants at roofing:

1. Install members in longest lengths possible. Offset joints between members by minimum 4 feet.
2. Anchor members to structure as follows:
   a. Ends of Members: Provide anchor within 6 inches of ends.
   b. Members Over 6 Inches Wide: Stagger anchors in offset rows and double at ends.
   c. Concrete Masonry Units: 1/2 inch diameter anchor bolts with 2 inch 90 degree leg at 4 feet on center maximum. Minimum 12 inch embedment into grouted core.
   d. Concrete and Bond Beams: 1/2 inch diameter expansion bolts at 3 feet on center or double staggered row of masonry screws, each 12 inches on center.
   e. Corner Zones: For a distance of minimum 8 feet from each corner, double the number of fasteners by decreasing the spacing to half of the spacing listed above.
3. Anchor members to each other: Use nails which penetrate minimum 1-1/4 inch into the wood layers below in two staggered rows, each 24 inches on center or 3/8 inch lag bolts in two staggered rows, each 4 feet on center.

END OF SECTION

SECTION 07160

BITUMINOUS DAMPPROOFING

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Division 1 Sections applying to or affecting the Work of this Section
B. Section 06100 Rough Carpentry
C. Section 07511 Repairs to Existing Built-Up Roofing
D. Section 07650 Flexible Flashing

1.02 SUMMARY

A. This Section includes the following:
   1. Hot-applied asphalt dampproofing.
   2. Cold-applied, cut-back asphalt dampproofing.
   3. Cold-applied, asphalt emulsion dampproofing.

1.03 SUBMITTALS

A. General: Submit each item in this Article according to the Division 1 Specification Sections.
B. Product data for each type of product specified, including data substantiating that materials comply with requirements for each dampproofing material specified. Include recommended method of application, recommended primer, number of coats, coverage, or thickness, and recommended protection course.
   1. Certification by dampproofing manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).

1.04 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced Installer who has completed bituminous dampproofing similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
   1. Single-Source Responsibility: Obtain primary dampproofing materials and primers from one source and by a single manufacturer. Provide secondary materials only as recommended by manufacturer of primary materials.

1.05 PROJECT CONDITIONS

A. Substrate: Proceed with dampproofing only after substrate construction and penetrating work have been completed.
B. Weather Limitations: Proceed with dampproofing only when existing and forecasted weather conditions will permit work to be performed according to manufacturer's recommendations and warranty requirements.
C. Ventilation: Provide adequate ventilation during application of dampproofing in enclosed spaces. Maintain ventilation until dampproofing has thoroughly cured.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Hot-Applied Asphalt Dampproofing:
      a. Meadows: W.R. Meadows, Inc.
      b. Owens-Corning Fiberglas Corp.; Trumbull Division.
   2. Cold-Applied, Cut-Back Asphalt Dampproofing:
      a. ChemRex, Inc.; Sonneborn Building Products Div.
      b. Karnak Chemical Corporation.
      c. Meadows: W.R. Meadows, Inc.
   3. Cold-Applied, Asphalt Emulsion Dampproofing:
      a. ChemRex, Inc.; Sonneborn Building Products Div.
      b. Euclid Chemical Co.
      c. Karnak Chemical Corporation.
      d. Koppers Industries, Inc.

e. Meadows: W.R. Meadows, Inc.

2.02 BITUMINOUS DAMPPROOFING

A. General: Provide products recommended by manufacturer for designated application.
   1. Odor Elimination: For interior and concealed-in-wall uses, provide type of bituminous dampproofing material warranted by manufacturer to be substantially odor free after drying for 24 hours under normal conditions.
B. Hot-Applied Asphalt Dampproofing: Dampproofing asphalt, complying with ASTM D 449, Type I.
C. Cold-Applied, Cut-Back Asphalt Dampproofing: Asphalt and solvent compound mixed to a smooth, uniform consistency to provide a firm, moisture-resistant, vapor-resistant, elastic coating recommended by the manufacturer for dampproofing use when applied according to the manufacturer's instructions.
   1. Trowel Grade: Asphalt roof cement, consisting of an asphalt base with petroleum solvents and mineral stabilizers, complying with ASTM D 4586, Type I.

D. Cold-Applied, Asphalt Emulsion Dampproofing: Asphalt-based emulsions recommended by the manufacturer for dampproofing use when applied according to the manufacturer's instructions.
   1. Trowel Grade: Emulsified asphalt mastic, prepared with mineral- colloid emulsifying agents suitable for application in a relatively thick film, complying with ASTM D 1187, Type I.

2.03 MISCELLANEOUS MATERIALS

A. Primer: Asphalt primer complying with ASTM D 41, for asphalt-based dampproofing.
B. Glass Fabric: Woven glass fabric, treated with asphalt, complying with ASTM D 1668, Type I.
C. Protection Course, Board Type: Premolded, 1/8-inch- (3-mm-) thick, multi-ply, semirigid board, consisting of a mineral-stabilized asphalt core sandwiched between layers of asphalt-saturated felt, and faced on one side with polyethylene film.
   1. Available Products: Subject to compliance with requirements, products that may be incorporated in the Work include, but are not limited to, the following:
      a. Protection Course II; ChemRex, Inc.; Sonneborn Building Products Div.
      b. Bituthene Asphaltic Hardboard; Grace: W.R. Grace & Co.
      c. PC-2 Protection Course; Meadows: W.R. Meadows, Inc.

D. Protection Course, Roll Roofing Type: Smooth-surfaced roll roofing, complying with ASTM D 224, Type II.

PART 3 - EXECUTION

3.01 PREPARATION

A. Clean substrate of projections and substances detrimental to work; comply with recommendations of prime materials manufacturer.
B. Install cant strips and similar accessories as shown and as recommended by prime materials manufacturer even though not shown.
C. Fill voids, seal joints, and apply bond breakers, if any, as recommended by prime materials manufacturer, with particular attention at construction joints.
D. Install separate flashings and corner protection stripping, as recommended by prime materials manufacturer, where indicated to precede application of dampproofing. Comply with details shown and with manufacturer's recommendations. Pay particular attention to requirements at building expansion joints, if any.
E. Prime substrate as recommended by prime materials manufacturer.
   1. Protection of Other Work: Do not allow liquid and mastic compounds to enter and clog drains and conductors. Prevent spillage and migration onto other surfaces of work by masking or otherwise protecting adjoining work.

3.02 INSTALLATION, GENERAL

A. Comply with manufacturer's recommendations except where more stringent requirements are indicated and where Project conditions require extra precautions to ensure satisfactory performance of work.
B. Application: Apply dampproofing to the following surfaces
   1. Exterior, below-grade surfaces of exterior concrete or masonry walls in contact with earth or other backfill and where space is enclosed on opposite side.
   2. Back side of concrete or masonry retaining walls and stone facing to prevent percolating of water through the wall or facing.
   3. Where indicated on the Drawings.

C. Hot-Applied Asphalt Dampproofing: Apply on exterior surfaces only.

D. Cold-Applied Asphalt Dampproofing: For exterior surfaces, provide either emulsified or cut-back, asphalt dampproofing materials, at Contractor's option.

E. Reinforcement: At changes in plane or where otherwise shown as "reinforced," install lapped course of glass fabric in first coat of dampproofing compound before it thickens.

F. Bituminous Cant Strips: Install 2-by-2-inch (50-by-50-mm) cant strip of bituminous grout at base of vertical dampproofing where it meets horizontal surface.

G. Apply vertical dampproofing down walls from finished-grade line to top of footing; extend over top of footing, and down a minimum of 6 inches (150 mm) over outside face of footing. Extend 12 inches (300 mm) onto intersecting walls and footings, but do not extend onto surfaces exposed to view when the Project is completed.

3.03 HOT-APPLIED ASPHALT DAMPPROOFING

A. Do not apply hot asphalt when substrate condition causes foaming.
   1. Apply a coat of hot asphalt by mopping or spraying at a rate of 20 lb or 2.5 gal./100 sq. ft. (98 kg or 1 L/sq. m), to produce a uniform film thickness of not less than 30 mils (0.8 mm).

B. Apply a second coat, as specified above, after allowing 24 hours for first coat to cure. Apply double thickness of second coat where first application has failed to produce a smooth, shiny, impervious coat.

3.04 COLD-APPLIED, CUT-BACK ASPHALT DAMPPROOFING

A. Spray Grade: Brush or spray apply a coat of dampproofing at a rate of 1.25 to 2 gal./100 sq. ft. (0.5 to 0.8 L/sq. m), depending on substrate texture, to produce a uniform, dry-film thickness of not less than 12 mils (0.3 mm).

B. Apply a second coat, as specified above, after allowing 24 hours for first coat to dry. Apply second coat at a rate of 0.8 to 1.25 gal./100 sq. ft. (0.3 to 0.5 L/sq. m). Apply double thickness of second coat where first application has failed to produce a smooth, shiny, impervious coat.

C. Semimastic Grade: Brush or spray apply a coat of dampproofing at a rate of 5 gal./100 sq. ft. (2 L/sq. m), to produce a uniform, dry-film thickness of not less than 30 mils (0.8 mm).

D. Trowel Grade: Trowel apply a coat of mastic asphalt dampproofing onto substrate at a minimum rate of 7 gal./100 sq. ft. (2.8 L/sq. m), to produce an average, dry-film thickness of 70 mils (1.8 mm) but not less than 30 mils (0.8 mm) at any point.

3.05 COLD-APPLIED, ASPHALT EMULSION DAMPPROOFING

A. Spray Grade: Brush or spray apply a coat of asphalt emulsion dampproofing at a rate of 1.5 to 2.5 gal./100 sq. ft. (0.6 to 1 L/sq. m), depending on substrate texture, to produce a uniform, dry-film thickness of not less than 15 mils (0.4 mm). Apply in 2 coats, if necessary, to obtain required thickness, allowing time for complete drying between coats.

B. Semimastic Grade: Brush or spray apply a coat of asphalt emulsion dampproofing at a rate of 5 gal./100 sq. ft. (2 L/sq. m), to produce a uniform, dry-film thickness of not less than 30 mils (0.8 mm).

C. Trowel Grade: Trowel apply a coat of mastic asphalt emulsion dampproofing onto substrate at a minimum rate of 7 gal./100 sq. ft. (2.8 L/sq. m), to produce an average, dry-film thickness of 60 mils (1.5 mm) but not less than 30 mils (0.8 mm) at any point.

3.06 PROTECTION AND CLEANING

A. Protect exterior, below-grade dampproofing membrane from damage until backfill is completed. Remove overspray and spilled materials from surfaces not intended to receive dampproofing.

3.07 INSTALLATION OF PROTECTION COURSE

A. General: Where indicated, install protection course of type indicated over completed-and-cured dampproofing treatment. Comply with dampproofing materials manufacturer's recommendations for method of support or attaching of protection materials. Support with spot application of trowel-grade mastic where not otherwise indicated.

END OF SECTION

SECTION 07511

REPAIRS TO EXISTING BUILT-UP ROOFING

PART 1 GENERAL

1.01 SUMMARY (NON-INCLUSIVE)

A. Section Includes: Patching and repairing of existing built-up roof membrane on adjacent properties as appropriate to accommodate the new Work.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Division 1 Section applying to or affecting the Work of this Section.
B. Section 07650: Flexible Flashing

1.03 SUBMITTALS

A. Submit per the requirements of Division 1.
B. Manufacturer's Representative Field Inspection Reports.

1.04 QUALITY ASSURANCE

A. Installer's Qualification: Roofer with minimum five (5) years experience.
B. Standards: Conform to materials practices and standards recommended in NRCA Roofing and Waterproofing Manual.

1.05 DELIVERY, HANDLING AND STORAGE

A. Comply with manufacturer's instructions and NCRA recommendations.

1.06 PROJECT SITE CONDITIONS

A. Environmental Requirements: Do not perform roofing operation during any form of precipitation when surfaces are wet, frozen or frosted or when temperature drops lower than 40 degrees F and as recommended by roofing manufacturer.

PART 2 PRODUCTS

2.01 PRODUCT/MATERIALS

A. Furnish materials matching or compatible with existing roofing materials. Quality, number of plies, weights, type and finishes of products furnished. All materials shall match or exceed the quality of the existing materials.

B. Metal Flashing and Counter-Flashing as required and detailed: Refer to Flashing and Sheet Metal: Division 6.

C. Wood Blocking as required or detailed: Refer to Rough Carpentry: Division 6.

PART 3 EXECUTION

3.01 EXAMINATION

A. After removing existing roofing membrane at new patches or repairs the Contractor shall evaluate the condition of insulation and the substrate. If conditions are unacceptable to roofing manufacturer, immediately notify the Project Manager for requirements to repair or replace. Maintain water tightness of building during review period.

B. Commencing installation constitutes acceptance of substrate by the Contractor as acceptable for new Work. Future Work which may be required because of inadequate substrates will be performed at no cost to the City.

3.02 PREPARATION

A. Provide temporary means and methods to maintain building watertight during roof repair and patching.

B. Remove or turn up sheet metal flashing and counterflashing where required for new Work.

3.03 INSTALLATION

A. General: Perform repairs to the existing roof made necessary as a result of alterations and as indicated or may be required. Include repairing damages caused by workman traffic and the movement of tools, equipment and products across the existing roof surface.

1. Installation to be per manufacturer's written instructions.

B. Vapor Barrier: Cut and reseal vapor barrier to new penetrations. Patch vapor barrier at roof areas to be patched.

C. Blocking: Replace existing damaged blocking with new pressure-treated wood blocking using recessed anchors.

D. Cants and Edge Strips: Install new cants minimum 3 inch by 3 inch at all horizontal to vertical intersections. Install tapered edge strips to match existing and as indicated.

E. Patch membrane using same number of plies as used in original assembly. Provide folded felt envelope at each penetration lapping into base sheet of existing membrane. Existing bottom ply shall be lapped 8 inches by new ply with each succeeding ply over lapping the previous ply by 8 inches (200 mm) until all new splices match in number the original plies. Method shall be as recommended by NRCA and assembly manufacturer.

F. When roof is watertight flood coat and apply surfacing to match existing.

G. Reinstall or turn down existing sheet metal counterflashing.

I. Install new sheet metal flashing per Flashing and Sheet Metal: Division 7.

3.04 FIELD QUALITY CONTROL

A. Manufacturer's Field Services: A qualified technical representative of the manufacturer shall be present for the first day of roof patching and periodically thereafter for each unique situation. Submit written inspection reports.

END OF SECTION

SECTION 07650

FLEXIBLE FLASHING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Laminated metal flashings and counterflashings.
B. Self-adhering rubberized asphalt flashings.
C. Mastic for setting and sealing joints.

1.02 RELATED SECTIONS

A. Section 06100: Rough Carpentry

1.03 REFERENCES

A. SMACNA (ASMM) - Architectural Sheet Metal Manual; Sheet Metal and Air Conditioning Contractors' National Association.

1.03 SUBMITTALS

A. Submit under provisions of Section 01300.
B. Product Data: Manufacturer's data sheets showing product characteristics and including installation instructions.
C. Samples: Actual pieces of flashings specified, not less than 6 inches (150 mm) square.

1.04 QUALITY ASSURANCE

A. Installation Standard: Comply with recommendations of SMACNA Architectural Sheet Metal Manual (ASMM).
B. Installer Qualifications: Company with at least five years of successful experience in weathertight installation of flashing.
C. Coordination: Interface flashing work with adjacent and adjoining work to ensure best possible weather resistance and durability of completed flashing.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to project site in manufacturer's sealed containers and packaging, bearing manufacturer's name and product identification.

B. Stack flashing materials to avoid twisting, bending, and abrasion. Protect materials from weather before installation.
C. Store mastic materials in sealed containers under cover.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide products manufactured by Sandell Manufacturing Company, Inc., 310 Wayto Rd., Schenectady, NY 12303. ASD. Tel: (518) 357-9757. Fax: (518) 357-9636.
B. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.02 MATERIALS

A. Sheet Aluminum: ASTM B 209, alloy 3003, temper H14, AA-C22A41 mill finish; [0.032 – inch thick] {**0.8mm**} except as otherwise indicated.
B. Sando-Seal Self-Adhering Flashing: 40 mil (1.02 mm) thick membrane comprised of 32 mils (0.8 mm) of highly adhesive rubberized asphalt integrally bonded to an 8 mil (0.22 mm) high density, cross laminated polyethylene film.

2.03 ACCESSORIES

A. Asphalt Trowel Mastic: Cut-back asphalt containing long fibered material, in trowel grade consistency.
B. Primer: Manufacturer's special primer formulated to prepare surfaces for self-adhering flashing.
C. Reglets: Types and profiles as indicated on the drawings and as recommended by flashing manufacturer.

2.04 FABRICATION

A. Forming: Fabricate flashings true to shape and accurate in dimension. Form pieces in longest possible lengths to minimize joints. Fold flashing at corners and at ends of pans instead of cutting.

B. Joints: Provide not less than 4 inches (100 mm) of overlap at flashing joints.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces to receive flashing are thoroughly dry, free from loose materials, and reasonably smooth, with no sharp edges or projections.

B. Verify that locations to receive flashing are sloped so water that enters will drain to building exterior.

3.02 PREPARATION

A. Self-Adhering Flashing: Prime all surfaces to receive self-adhering flashing, and allow to dry for not less than 20 minutes prior to flashing application.

3.03 INSTALLATION

A. General: Comply with recommendations of SMACNA ASMM.

1. Lap joints minimum of 4 inches (100 mm) and seal watertight with mastic.

2. Carry flashing vertically as detailed, but not less than 6 inches (150 mm) above horizontal plane.

3. Extend head and sill flashings not less than 6 inches (150 mm) beyond edges of openings and turn up to form watertight pan; seal with mastic.

B. Flashing in Frame Construction: Install over solid backing, both vertically and horizontally. Secure in place with mastic; avoid puncturing installed flashing with nails or other fasteners.

3.04 ADJUSTING

A. Remove mortar or other obstructions from weep holes at flashing locations.

END OF SECTION

SECTION 07900

JOINT SEALANTS

PART 1 GENERAL

1.01 SUMMARY (NON-INCLUSIVE)

A. Section Includes: Joint sealing at the following locations:
   1. Joints exposed to weather in the finished work.
   2. Joints not exposed to the weather, but visible in the finished work, except tight joints between smooth materials.
   3. Expansion joints and control joints, except where shown or specified to be covered or made tight elsewhere.
   4. Where required to make joints weathertight.
   5. Where indicated, whether or not meeting other criteria in this paragraph.

B. Joint sealant work specified as Work of other Sections, but required to comply with the provisions of this Section, includes:
   1. Sealant work internal to flashing and sheet Metal Work and Metal Siding, specified in other Division 7 Sections.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Division 1 Sections applying to or affecting the Work of this Section.
B. Section 07511 - Repairs to Existing Built-Up Roofing
C. Section 07650 - Flexible Flashing

1.03 DEFINITIONS

A. Joint Sealants: “Caulk,” “caulking,” and “sealant” are synonymous, and mean “Joint Sealants” as specified herein.
B. “Joints" include interfaces between general construction materials, and exposed interfaces between mechanical and electrical materials and other materials where mechanical and electrical work penetrates walls and floors, except where such penetrations are shown or specified to be covered and made tight by flanges, gaskets, escutcheons or similar devices.
C. Exposed: Joints exposed to view in the finished Work.
D. Concealed: Joints concealed from view in the finished Work.
E. Exterior: Joints at exterior surfaces of the building, whether or not directly exposed to the weather.
F. Interior: Joints at interior surfaces of the building and not exposed to the weather in any manner.
G. Masonry: Joints in unit masonry and concrete pre-cast concrete, rough stone, cut stone, ceramic and quarry tile.

1.04 SUBMITTALS

A. Submit per the requirements of Section 01330.
B. Product Data: Submit Manufacturer’s Product Specifications, handling, installation and curing instructions, for each product specified.
C. Samples: Submit Samples for the following purposes:
   1. Initial Selection: Submit manufacturer’s standard bead samples consisting of strips of actual products showing full range of colors available, for each product exposed to view.
   2. Verification: Submit Samples of each type and color of joint sealant required. Furnish joint sealant samples formed with [½ inch] {13 mm} wide joints between two (2) [6 inch] {150 mm} long strips of material matching the appearance of exposed surfaces adjacent to joint sealant in the Work.
D. Test Reports:
   1. Submit manufacturer’s certified compatibility, non-staining, and adhesion test reports for elastomeric sealants indicating that materials forming each joint substrate and joint backing have been tested for compatibility, non-standing and adhesion with proposed joint sealant.
   2. Include manufacturer’s interpretation of test results relative to product performance and recommendations for primers and substrate preparation needed to obtain adhesion.

E. Certificates: Submit manufacturer's certification for each joint system indicating the following: Describe each joint system including each combination of substrates, sealants, backers, accessories, and joint profiles.
   1. Each product to be furnished complies with Contract Documents.
   2. Each product and system is recommended and approved by Manufacturer for intended application indicated, and lists requirements for primers, backers and accessories.
   3. Each product and system is compatible with other materials in joint system and substrate.

F. Special Warranty: As specified herein.

1.05 Quality Assurance

A. Installer shall have successfully completed within the last three (3) years at least three (3) applications similar in type and size to this project and shall assign mechanics from the referenced applications, of whom one shall serve lead mechanic.

B. Obtain materials only from manufacturers who will, if requested, send a qualified technical representative to project site to advise Installer of proper procedures and precautions for the use of the materials.

C. Single Source Requirements: Supply each type of sealant required for the Work from one (1) manufacturer. Accessory products including backers, bond breakers, primers, etc. may be from other than the primary manufacturer if approved by the primary manufacturer.

D. Reference Standards: Comply with the following in accordance with Division 1:
   1. American Society for Testing and Materials (ASTM)
      C 790 Standard Guide for Use of Latex Sealants
      C 804 Practices for Use of Solvent-Release Type Sealants
      C 919 Practices for Use of Sealants in Acoustical Applications
      C 1193 Guide for Use of Joint Sealants
   2. Sealants: The Professional's Guide by the Sealant, Waterproofing & Restoration Institute.

E. Per-Installation Conference:
   1. A pre-installation conference will be held at the job site to review requirements and procedures for the installation of the sealants, the coordination and sequence of events, and any special job conditions.
   2. Meeting shall be attended by the Project Manager, Construction Manager, General Contractor, Sealant Subcontractor, Representatives of the sealant manufacturers and other subcontractors whose work requires or may affect or be affected by joint sealants.

1.06 DELIVERY, HANDLING AND STORAGE

A. Packing, Shipping: Ship in labeled containers indicating compliance with specified criteria, storage and environmental conditions and installation instructions.

B. Handling and Storage: Comply with manufacturers recommendations.

1.07 PROJECT SITE CONDITIONS

A. Environmental Requirements: Perform the Work under climatic conditions recommended by the material manufacturer.

1.08 SPECIAL WARRANTY

A. Warrant the Work to be Waterproof, windproof, and dustproof for a period of five (5) years following date of Substantial Completion. Repairs or replacements required during this period shall be at no additional cost.

PART 2 PRODUCTS

2.01 Sealants

A. Colors: For each of the sealant types listed, provide colors as indicated. Manufacturer's full line of colors shall be published in promotional literature without regard to cost.
   1. General Use Weatherproofing Sealants: one (1) color selected from manufacturers full line.
   2. Special Use Sealants: one (1) colors selected from manufacturers full line.

B. General Use Weatherproofing Sealants: Type 1: Silicone, one-part, non-sag, low-modulus, neutral cure, ASTM C 920, Grade NS, Class 25 (FS TT-S-001543B, Class A).
   1. Joint Movement Range: 20 to 50 percent.
   2. Service Life: Minimum 20 years.
   3. Ultimate Tensile Strength: 250 to 450 psi.
   4. Shore A Hardness: 15 to 50 at 75 degrees F and 50 percent relative humidity.
   5. Acceptable Products:
   a. Bostik Construction Products Division: "Chem-Calk 100".
   b. Dow Corning Corporation;"790"
   c. Dow Corning Corporation; "795"

d. General Electric Company; Silpruf 2000".
e. Pecora Corporation; "864".
f. Tremco; "Spectrem 1".
g. Tremco; "Spectrem 2".

2.02 PRIMERS
A. Non-staining, compatible with sealer and substrate, and made or recommended by the sealant manufacturer.

2.03 JOINT BACKING (BACKER ROD)
A. Performed compressible, resilient, non-waxing, non-extruding, non-staining strips, polyethylene foam, closed cell sponge neoprene, urethane foam, or neoprene, butyl or EPDM tubing, ASTM D 1056, as recommended by the sealant manufacturer. Backing shall be of sizes and shapes to control sealant depth and otherwise contribute to optimum sealant performance, sized to suit the various conditions, and shall be compatible with sealant, primers, and substrates.

2.04 BOND BREAKER
A. Polyethylene or other plastic types as recommended by sealant manufacturer for preventing bond between sealant and materials at back (3rd) surface of joint.

2.05 MISCELLANEOUS MATERIALS
A. Provide masking type and cleaning agent as recommended by sealant manufacturer.

2.06 PREFORMED FOAM SEALANTS
A. General: High-density urethane foam impregnated with non-drying, water repellent agent; factory-produced in pre-compressed sizes in roll or stick form to fit joint widths and develop a watertight and airtight seal. Products shall be permanently elastic, mildew-resistant, non-migratory, non-migratory, non-staining, and compatible with adjacent materials.
1. Acceptable Products:
a. Emseal Corporation; "Emseal".
b. Emseal Corporation; "Emseal Grayflex".
c. Illbrick, Inc.; "Will-Seal Tape Type 15-".
d. Illbrick, Inc.; "Will-Seal Tape Type 250".
e. Sandell manufacturing Co.; "Polytite R".
f. Sandell manufacturing Co., Inc.; "Polytite Standard".

PART 3 EXECUTION

3.01 GENERAL
A. Each joint sealant system shall include cleaning of joints, priming where required, backing as specified, masking along both sides of joints where required, bond-breaker where conditions of the joints require, and finish sealing with the type of material specified.
B. Comply with approved submittals and manufacturer's requirements.

3.02 SCHEDULE OF SYSTEMS
A. Exterior joints, as otherwise indicated: Type 1 or 2.
B. Exterior joints, with wood on one or both sides of joint: Type 3.
C. Preformed Foam Sealants; Where Indicated

3.03 EXAMINATION
A. Site Verification of Conditions:
1. Substrates: Examine for conformance to requirements indicated for that substrate.
2. Existing Substrates: Examine for conditions which will adversely affect the execution of the Work and which are not including in indicating repair and patching.
B. Conditions: Report to the Project Manager, Construction Manager, Contracting Officer, City prior to commencing Work.
C. Corrections: Make corrections to substrates prior to commencing Work at no cost to City. Perform corrections as directed by City.
D. Acceptance: provide Work required because of deficient or defective substrates at no expense to the City.

3.04 PREPARATION
A. Cleaning: Clean joints of loose particles, dust, and other materials detrimental to adhesion.
B. Masking: Mask edges of joints to prevent misplacement of the primer or sealant onto adjacent surfaces.

C. Priming: Apply primer as recommended by sealant manufacturer, to dry surfaces prior to application of joint backing, bond-breaker or sealants.

D. Surface Preparation: At substrates with pinholes, pock marks, honeycombing or other similar surface irregularity, including but not limited to cast-in-place concrete, cast stone, or pre-fill with a skim coat tooled to fill the irregularities.

E. Joint Backing:
   1. Install where shown and in joints where the depth of the joint exceeds the required depth of the sealant.
   2. Install to provide backing and uniform depth of sealant.
   3. Install with approximately 30 percent compression.
   4. Do not stretch, twist, puncture or tear joint backing.
   5. Butt joint backing at intersections.

F. Bond-Breaker: Install bond-breaker smoothly at back of joint to eliminate three- sided adhesion where joint backing cannot be installed.

3.05 INSTALLATION

A. Sealant Application: Apply sealant in accordance with manufacturer's instructions and referenced standards, using hand guns or pressure equipment with proper nozzle size. Force sealant into and against sides of joint. Avoid pulling of the sealant from the sides. Fill joint completely with sealant.

B. Tooling:
   1. Typical Joints: Tool exposed surfaces to compress sealant to concave joint configuration in accordance with ASTM C 1193, Figure 6A.
   2. Horizontal joint: Tool to provide a slight wash.
   3. Recessed joint: Tool to configuration in accordance with ASTM C 1193, Figure 6C.
   4. Joints shall be straight, uniform, smooth and neatly finished.
   5. Tooling agents shall only be used if recommended by the sealant manufacturer.

C. Double Line of Sealant:
   1. Where double lines of sealant are indicated, install inner line and allow to cure before installing outer line of sealant.
   2. Maintain a minimum ½ inch cavity between inner and outer lines of sealant and backers.
   3. Where cavity between lines of sealant is interrupted, continue inner line to seal the bottom of the cavity and weep to exterior.

D. Against rough surfaces or in joints of uneven widths, locate sealant back into joint to avoid appearance of excess sealant.

E. Installation of Performed Foam Sealants: Comply with manufacturer's directions. Install each length immediately after removing protective wrapping. Do not pull or stretch material. Ensure seal continuity at ends, turns, and intersections of joints. At low ambient temperatures, apply heat where expansion of sealant requires acceleration to produce seal.

F. Gun- Applied Epoxy Grout: Since product produces a vapor barrier, do not apply to surfaces where transmitted vapor can condense and freeze under coating.

3.06 CLEANING

A. Strip off protective masking tape immediately after compound has been applied. Strip toward the joint. Do not reuse masking material. Discard tape carefully to prevent defacing adjacent surfaces.

B. Clean off excess compound or smears with cleaning material recommended by the manufacturer of the compound.

END OF SECTION

SECTION 09225

METAL LATH AND STUCCO

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Metal furring and lath.
B. Stucco indicated on the bid sheets as "Exterior Wall Finish."

1.02 RELATED SECTIONS

A. Section 06100: Rough Carpentry.
B. Section 07900: Joint Sealant.

1.03 REFERENCES

A.	ASTM A641-92	Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.
B.	ASTM A653/A-96	Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process.
C.	ASTM A924/A-96a	Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
D.	ASTM C150-96	Standard Specification for Portland Cement
E.	ASTM C847-04	Standard Specification for Metal Lath
F.	ASTM C897-96	Standard Specification for Aggregate for Job-Mixed Portland Cement-Based Plasters.
G.	ASTM C926-06	Standard Specification for Application of Portland Cement-Based Plaster
H.	ASTM C932-80(90)	Standard Specification for Surface-Applied Bonding Agents for Exterior Plastering.
I.	ASTM C1063-03	Standard Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster
J.	ASTM E119-95a	Test Methods for Fire Tests of Building Construction and Materials.
K.	IBC 2003, Section 2512	Current Philadelphia Code Standard for Exterior Plaster Application.
L.	PCA Manual 5th Ed.	Portland Cement Association, Portland Cement Plaster / Stucco Manual, 5th Edition, 2004.

1.04 SUBMITTALS

A. Submit under provisions of Section 01300, Administrative Requirements.
B. Product Data: Submit product information sheets on all products used on the project.
C. Test Reports: Independent agency reports showing compliance with specified performance criteria.
D. Samples: Samples of adequate size to represent each color and texture to be utilized on the project.
   1. Produce using the same tools and techniques as required for the actual application.
E. Installer Qualifications, including copy of certificate of training.
F. Manufacturer's Maintenance Instructions.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: A firm knowledgeable in the proper application procedures of the system specified and possessing certificate of training issued by manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver all materials to the construction site in their original, unopened packaging with labels intact.
B. Inspect the materials upon delivery to assure that specified products have been received. Report defects or discrepancies to the City Inspector or the Project Manager.
C. Store materials in a cool, dry place, protected from direct sunlight, weather, and other damage. Do not store materials in contact with the ground.

1.07 PROJECT CONDITIONS

A. Environmental Requirements: Before, during, and following application, the ambient and surface temperatures must remain above 40 degrees F (4 degrees C) and below 120 degrees F (49 degrees C) for a minimum period of 24 hours.
B. Temporary Facilities: General Contractor is to provide access to electrical outlets, clean, potable water, and suitable work area at the construction site throughout application period.

1.08 WARRANTY

A. Provide manufacturer's standard limited materials warranty.

B. Provide written certification by installer that workmanship, materials, details, and installation procedures are in accordance with the contract documents and the manufacturer's instructions.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Metal Supports:
1. Dale / Incor.
2. Dietrich.
3. Gold Bond Building Products Division.
4. Unimast Inc. (USG Co.)

B. Expanded Metal Lath:
1. Dale / Incor.
2. Gold Bond Building Products Div.
3. South Lath Inc.
4. Unimast Inc. (USG Co.)

C. Accessories:
1. Dietrich.
2. Fry Reglet Corp.
3. Gold Bond Building Products Div.
4. South Lath Inc.
5. United States Gypsum Co.

D. Portland Cement Stucco
1. Florida Super Stucco by Lafarge Florida.
2. Lonestar Products.
3. Rinker Materials Corp.
4. Southdown, Inc.
5. United States Gypsum Co.

E. Requests for substitutions will be considered in accordance with provisions of Section 01630.

2.02 MATERIALS

A. Lath: Expanded metal lath, woven wire mesh, or welded wire lath.
1. On masonry substrate, use minimum 1-1/2 inch (35 mm) by 17 gauge (1.35 mm) thick lath. Metal shall be corrosion-resistant or shall be treated with a rust-inhibitive coating. It shall have openings of sufficient size to permit the scratch coat to be forced through the openings and completely embed the reinforcement.
2. Corner Reinforcing: 3.4 lb/sq yd (1.8 kg/sq m) expanded metal mesh, galvanized, 6 inches (150 mm) by 18 inches (450 mm) long.
3. Wire for Attaching Lath: ASTM 641 galvanized.

B. Mechanical Fasteners: Provide corrosion resistant fasteners to attach lath to substrate. Furring nails shall be of such design as will rigidly hold the reinforcement not less than ¼ inch away from the support.

C. Accessories: Provide galvanized steel preformed components to form corners, edges, control joints, weeps, and for decorative effects; depth to suit base and finish coat thickness; provide the longest possible lengths, minimum 5/8 inch depth.
1. Corner Beads: 26 gage (0.45 mm), 2 inch (50 mm) wide expanded flanges.
2. Vent Screeds: 24 gage (0.6 mm) thick double "V" profile with perforations between "V"'s.
3. Casing Beads: 24 gage (0.6 mm) thick, expanded metal flanges, square edges.
4. Drip Screeds: 26 gage (0.45 mm) thick, 3-1/2 inch (83 mm) high flange.
5. Control and Expansion Joints: Unijoint II.

D. General Requirements for stucco: Provide base and finish coats manufactured or approved by manufacturer and distributed by the same or its authorized dealers.

E. Base Coat:
1. Apply base coat over metal lath surface to a nominal thickness of ½ inch.

F. Finish Coat:
1. Apply finish coat over base coat surface to a nominal thickness of 1/8 inch.
2. Semi-Smooth texture.. Use steel trowel to create rough cast appearance.
3. Colors: To be selected by Inspector or Project Manager, from manufacturer's standard list of colors.

G. Miscellaneous Materials:
   1. Water for mixing and finishing stucco: potable, free of substances capable of affecting stucco set or of damaging stucco, lath, or accessories.
   2. Bonding Agent – Portland cement: ASTM C932.

2.03 Mixes

A. General: Portland Cement Stucco Mixes and Compositions
   1. Comply with ASTM C926 for Portland cement plaster base and finish coat mixes as applicable bases, materials, and other requirements indicated.
   2. Proportion materials for respective base coats in parts by volume for cementitious materials and in parts by volume per sum of cementitious materials for aggregates to comply with the following requirements for each method of application and plaster base indicated.
   3. Adjust mix proportions below within limits specified to attain workability.
   4. Fiber Content:
      a. Add fiber to mixes to comply with fiber manufacturer's directions, maximum 2 lbs. per cubic foot of cementitious material.
      b. Reduce aggregate quantities accordingly to maintain workability.
   5. Mixing: mechanically mix cementitious and aggregate materials for stucco to comply with applicable referenced application standard and with recommendations of stucco manufacturer.

B. Base Coats for Three-Coat Work Over Metal Lath:
   1. Contractor's Option 1:
      a. Scratch Coat: 1 part Portland cement, 2-1/2 to 4 parts sand.
      b. Brown Coat: 1 part Portland cement, 3 to 5 parts sand.
   2. Contractor's Option 2:
      a. Scratch Coat: 1 part Portland cement, 1 to 2 parts masonry cement, 2-1/2 to 4 parts sand.
      b. Brown Coat: 1 part Portland cement, 1 to 2 parts masonry cement, 3 to 5 parts sand.
   3. Contractor's Option 3:
      a. Scratch Coat: 1 part masonry cement, 2-1/2 to 4 parts sand.
      b. Brown Coat: 1 part Portland cement, 1 part masonry cement, 3 to 5 parts sand.

C. Base Coats for Two-Coat Work Over Concrete Unit Masonry:
   1. Contractor's Option 1:
      a. Base Coat: 1 part Portland cement, 3 to 4 parts sand.
   2. Contractor's Option 2:
      a. Base Coat: 1 part masonry cement, 3 to 4 parts sand.

D. Finish Coats – Job Mixed:
   1. Contractor's Option 1:
      a. 1 part Portland cement, 1 part masonry cement, 2-1/4 to 3 parts sand.
   2. Contractor's Option 2:
      a. 1 part Portland cement, 2-1/4 to 3 parts sand.
   3. Contractor's Option 3:
      a. 1 part masonry cement, 1-1/2 parts sand.

E. Finish Coats – Factory Prepared:
   1. Add water only.
   2. Comply with finish coat manufacturer's directions.

PART 3 EXECUTION

3.01 EXAMINATION

A. Before application, ensure that substrate:
   1. Is of one of the acceptable types specified.
   2. Is true, flush, and free of irregularities within 1/4 inch in 4 foot (6 mm in 1.22 m) radius.
   3. Is sound, dry, properly abutted, and has no surface voids, projections, or other discrepancies that may interfere with application of the system.
   4. Grout infill holes and remove protrusions to achieve tolerances.

B. Notify the Project Manager of any discrepancies found.

C. Ensure that flashings, hangers, fasteners, trim, fixed supports and other waterproofing materials have been properly installed.

3.02 PREPARATION

A. Clean substrate to which the system is to be applied to ensure that no foreign materials are present; foreign materials include, but are not limited to, oil, dirt, dust, form release agents, efflorescence, paint, wax, water repellents, moisture, frost, and protruding nails.

3.03 INSTALLATION

A. Install in accordance with this specification and stucco manufacturer's instructions.
B. Coordinate installation with all other installers.
C. Protect all surrounding areas and surfaces from damage, soiling, and overspray due to installation.
D. Provide sufficient manpower to ensure continuous operation, free of cold joints, scaffolding lines, variations in texture, and other defects.
E. Install lath and (when required) furring materials indicated for Portland cement stucco to comply with ASTM C926.
   1. Provide appropriate type, configuration, and weight of metal lath selected from materials indicated which comply with the referenced lath installation standards.
F. Accessories:
   1. Comply with referenced lath and furring installation standards for provision and location of stucco accessories.
   2. Miter or cope accessories at corners and install with tight joints and in alignment.
   3. Attach accessories securely to hold in place and in alignment during stucco application.
   4. Corner Reinforcement: install at external corners.
   5. Corner Beads: install at external corners.
   6. Casing Beads: install at termination of plaster work
G. Provide and install expansion / control joints at least as follows:
   1. Where an expansion or control joint occurs in the surface of construction directly behind the stucco membrane.
   2. Where distance between control joints in plastered surface exceeds 10 feet in the vertical direction.
   3. Where area within a panel exceeds 200 square feet.
   4. Where panel sizes or dimensions change.
   5. Maintain minimum gap of 1/2 inch (13 mm) at all penetrations and expansion joints.
H. Stucco Application:
   1. Portland Cement Plaster Application Standard: Apply Portland cement plaster materials, compositions, and mixes to comply with ASTM C926.
   2. Number of Coats: Apply Portland cement plaster in either 2 or 3 coats to comply with ASTM C926
   3. Base Coat: (1 or 2 coats per ASTM A926) Apply according to manufacturer's instructions, to flatness of 1/8 inch in 10 feet (3 mm in 3 m); moist cure for minimum of 24 hours prior to application of Finish Coat.
   4. Finish Coat: Tint, mix, and apply according to manufacturer's instructions.
   5. Curing: moist cure Portland cement plaster base and finish coats to comply with ASTM C926, including recommendations for time between coats and curing in ASTM C926 Annex A2 – Design Considerations.

3.04 ADJUSTING, CLEANING AND PROTECTION

A. Cutting and Patching:
   1. Repair or replace work to eliminate blisters, buckles, excessive crazing and check cracking, dry-outs, efflorescence, sweat-out and similar defect, and where bond to substrate has failed.
   2. Sand and/or smooth areas of noticeable trowel marks and arises.
B. Cleaning:
   1. Promptly remove plaster from surfaces that are not to be plastered.
   2. Repair any surfaces that are damaged, stained or otherwise marred during stucco work.
   3. When stucco work is complete, remove unused materials, containers, and equipment,
   4. Clean all areas of plaster debris.
C. Protection:
   1. Ensure that protection is maintained in manner suitable to protect stucco work from damage or deterioration until work is accepted by the Inspector or Project Manager.
   2. Remove temporary protection and enclosures.

END OF SECTION

APPENDIX 1

DETAIL DRAWINGS

APPENDIX 2

CITY OF PHILADELPHIA

NEIGHBORHOOD TRANSFORMATION INITIATIVE

PRIME CONTRACTOR QUALIFICATION APPLICATION FOR DEMOLITION PROJECTS

City of Philadelphia

Neighborhood Transformation Initiative (NTI)
Prime Contractor Qualification Application for Demolition Projects

Dear Sir/Madam:

I would like to take this opportunity to thank you for your interest in the City of Philadelphia's Neighborhood Transformation Initiative (NTI). The NTI, launched by Mayor John F. Street in May 2000, among many programs, solicits bids from prime contractors for targeted demolitions of dangerous residential buildings.

In order to participate in this program, you must be qualified to perform demolition work. In order to be qualified, you must complete and submit this qualification application. Once your application has been received and reviewed and you have been determined to be qualified, your qualification status will remain in effect for the duration of the current fiscal year. The fiscal year for the City of Philadelphia begins on July 1st and ends on June 30th. If you are qualified prior to the time a bid is due, your final qualification will be based on your current bonding capacity and outstanding projects workload.

This package contains a Questionnaire and Financial Statement for Prime Contractors for NTI Demolition Projects (pp. 2-6) to be completed and submitted. For informational purposes the following documents are also included:

1. Neighborhood Transformation Initiative Economic Opportunity Plan ..... pp. 7-10
2. Minority Business Enterprise Council (MBEC) – Anti-discrimination Policy – Disadvantaged Minority, Women and Disabled Owned Business Enterprise ..... pp. 11-14
3. Description of the Wrap-up Insurance Program ..... p. 15
4. Contractor Safety Plan (Specification Section 01324) ..... pp. 16-17

The above documents will also be provided in the bid package in substantially the same form as they appear herein.

I encourage your participation in this significant program and look forward to receiving your submission.

Very Truly Yours,

Janet Hagan

Janet Hagan
Acting Procurement Commissioner

It is <u>mandatory</u> that <u>all</u> items be completed and submitted in order for your application to be processed. Your application will not be reviewed until all questions have been fully answered (please type or print in ink) and all required items have been submitted to the Hill International, Inc., One Penn Square West, 30 South 15th Street, Suite 1300, Philadelphia, PA 19102. For questions please call (215) 557-3240.

If Bidder is a Joint Venture or Bidder intends to submit a bid as a Joint Venture, each partner must submit the required information for qualification.

Please check box indicating required information is attached.

- ☐ This cover sheet with all check boxes filled in.
- ☐ Completed Questionnaire and Financial Statement for Qualifying Prime Bidders for NTI Demolition Projects.
- ☐ Evidence of insurability for demolition activities by providing a Certificate of Insurance indicating current coverages for General Liability, Automobile Liability, Excess Liability, Worker's Compensation and Employer's Liability.
- ☐ Letter from your surety indicating your total bonding capacity and currently available bonding capacity.
- ☐ Sample Safety Plan in accordance with item four (4) above.

City of Philadelphia

QUESTIONNAIRE AND FINANCIAL STATEMENT
FOR QUALIFYING PRIME BIDDERS FOR NTI DEMOLITION PROJECTS

* All information provided by a Contractor in this questionnaire shall be used by the City in determining and assessing a Contractor's qualifications and responsibility.
* The City reserves the right to investigate any statement made herein, by means of information included in, but not limited to, that contained in this questionnaire. Any misrepresentation of fact, as determined by the City, may result in the disqualification of a Contractor.
* Any material change in the financial, corporate or business status of a Contractor that occurs subsequent to the time of the Contractor's submission of this application must be forwarded to the Procurement Commissioner immediately. Failure to do so, without limiting other remedies available to the City, may result in the disqualification of the Contractor from award(s) on the NTI Demolition Program.

DATE SUBMITTED	FEDERAL EIN NUMBER	CITY BUSINESS TAX IDENTIFICATION #

SUBMITTED BY (PLEASE CIRCLE) INDIVIDUAL CORPORATION PARTNERSHIP JOINT VENTURE

PRINCIPAL OFFICE ADDRESS	M-DBE: ☐ W-DBE: ☐ DS-DBE: ☐
	MBEC CERTIFICATION NUMBER

PRINCIPAL OFFICE TELEPHONE NUMBER	PRINCIPAL OFFICE FAX NUMBER	E-MAIL ADDRESS

CORPORATION			PARTNERSHIP/JOINT VENTURE*	
DATE OF INCORPORATION	STATE	CAPITALIZATION	DATE OF ORGANIZATION	TYPE GENERAL LIMITED

OFFICERS	PARTNERS
PRESIDENT	NAME
	ADDRESS
VICE PRESIDENT	NAME
	ADDRESS
SECRETARY	NAME
	ADDRESS
TREASURER	NAME
	ADDRESS
	NAME
	ADDRESS

***If a joint venture, attach a copy of the joint venture agreement or letter of intent**

EXPERIENCE AND EQUIPMENT

1. How many years has your organization been in business as a contractor under its present business name? **YEARS**
   On a separate sheet of paper, list all other business names under which your organization has been in business as a demolition contractor.

2. How many years experience has your organization had as a prime contractor in the type of demolition work for which you seek qualification? **YEARS**

3. How many years experience has your organization had as a sub-contractor in the type of demolition work for which you seek qualification? **YEARS**

4. State the largest dollar amount of work your organization has done in any single year during the last five years as (1) a prime contractor $_____(2) a subcontractor **$**_____

5. On a separate sheet of paper, describe the demolition experience of the principal officers and managers (including superintendents) of your organization. Include: name of the individual and position/office, years of demolition experience, type of work in which the individual has experience (including size of project worked on), names of organizations worked for and positions/responsibilities held.

6. Has your organization within the last five years performed work for the City that was not finally accepted by the City? **PLEASE CIRCLE YES NO**

   If "YES", state the City contract number and project name and attach an explanation of the circumstances surrounding the non-acceptance.

   Has any officer, partner, or other person active in the management of your organization, within the last five years, been an officer, partner, manager, or sole proprietor of another organization which performed work for the City that was not finally accepted by the City? **PLEASE CIRCLE YES NO**

   If "YES", state the name of the individual, the name and address of the organization, the City contract number and project name for the contract under which work was not finally accepted, and attach a detailed explanation of the circumstances surrounding the non-acceptance.

7. Has the City, within the last five years, declared your organization in default of a City contract or otherwise terminated the contract? **PLEASE CIRCLE YES NO**

   If 'YES", state the City contract number and project name and attach an explanation of the circumstances surrounding the declaration of default or termination.

   Has a commercial surety for your organization, within the last five years, been called upon to complete any work on a contract with the City? **PLEASE CIRCLE YES NO**

   If 'YES", state the City contract number and project name and a detailed explanation of the circumstances.

   Has any officer, partner, or other person active in the management of your organization, within the last five years, been an officer, partner manager, or sole proprietor of another organization whose commercial surety was called upon to complete any work on a contract with the City? **PLEASE CIRCLE YES NO**

   If "YES", state the name of the individual, the name and address of the organization, the City contract number and project name for the contract the surety was called upon to complete, and attach an explanation of the circumstances.

8. Has any officer, partner, or other person active in the management of your organization, within the last five years, been an officer, partner, manager, or sole proprietor of another organization that was declared in default of a City contract or otherwise terminated, or that failed to complete a City Contract? **PLEASE CIRCLE YES NO**

   If 'YES", state the name of the individual, the name and address of the organization, the City contract number and project name for the contract defaulted or terminated and attach an explanation of the circumstances surrounding the declaration of default or termination.

9. Has your organization ever failed to complete any work under, or been declared in default of, a contract awarded to it by a public or private owner other than the City? **PLEASE CIRCLE YES NO**

   If 'YES", attach a detailed explanation identifying the owner and bid/contract numbers (if applicable) for the project, stating whether the owner declared your organization in default of its contract, and describing the project, the type of work, the dates the work was started and stopped and the reasons the work was not completed.

10. Has any officer, partner, or other person active in the management of your organization ever been an officer, partner, manager, or sole proprietor of another organization that failed to complete or was declared In default of a contract for a public or private owner other than the City? **PLEASE CIRCLE YES NO**

    If "YES", state the name of the individual and attach a detailed explanation identifying the owner and bid/contract number (if applicable) stating whether the owner declared the organization in default of its contract, and describing the project, the type of work, the dates the work was started and stopped, the individual's role in the project, and the reasons the work was not completed.

11. Has your organization or any officer, partner, or other person active in the management of your organization within the last five years been disqualified, suspended, or debarred (under its present name or any other name) from bidding on public contracts, or removed from a bidding list, by any state or federal agency, or by the City? **PLEASE CIRCLE YES NO**

If "YES", state the agency that took such action, the date (s) of the action, the type of work to which the contract(s) applied, and the reasons stated by the agency for the action.

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12. Has any commercial surety ever refused to furnish a bid, performance or payment bond for your organization? **PLEASE CIRCLE YES NO**

If "YES', state the name and address of the surety, describe the contract for which the bond was refused (including the owner, date of contract, and type of work), and state the reasons for the refusal.

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13. Has your organization or any officer, partner, or other person active in the management of your organization, or any shareholder holding an equity interest of more than five percent,

a) ever been convicted of or pleaded guilty or nolo contendere to federal or state misdemeanor or felony charges including but not limited to, charges related to public bidding law, the making of false statements, or violations of the Solid Waste Management Act? **PLEASE CIRCLE YES NO**

b) ever been refused coverage under any fidelity bond? **PLEASE CIRCLE YES NO**

Is your organization or any officer, partner, or other person active in the management of your organization, or any shareholder holding an equity interest of more than five percent,

a) currently under indictment on federal or state misdemeanor or felony charges? **PLEASE CIRCLE YES NO**

b) currently the subject of a state or federal grand jury investigation or under notification by local, state or federal law enforcement authorities that they are the subject of any criminal investigation? **PLEASE CIRCLE YES NO**

If your answer to any of the foregoing questions is YES, attach a detailed description that includes the following:

- the nature of the conviction, plea, indictment, bond refusal, and/or grand jury or criminal investigation;
- the name of each individual who was the subject of such action;
- their position in your organization;
- the jurisdiction or entity taking the action; the date(s) the action was taken; the nature of the charges that were the subject of the action: and all other circumstances relevant to the action.

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14. Has any officer, partner, director, shareholder, or other person active in the management of your organization been employed by the City, or been appointed to a political or other office of the City? **PLEASE CIRCLE YES NO**

If "YES" attach the following information: the name of the individual; position held with the City; the dates the employment or appointment began and terminated.

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15. Identify, by name and business address, all organizations that are affiliates or subsidiaries of your organization, and state their relationship to your organization. Attach separate sheet of paper as needed.

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16. Identify, by name and business address, any other organization and any individual (other than officers, partners and managers of your organization) that control or influence bidding by your organization.

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17. Identify all individuals and organizations, by name and business addresses, that hold a financial interest in your organization of ten percent or more.

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18. Is your organization or any of its parent or subsidiary organizations currently indebted to the City for any delinquent City taxes, taxes collected by the City on behalf of the School District of Philadelphia, liens, judgments, fees or other debts? **PLEASE CIRCLE YES NO**

If YES, attach an explanation describing the nature and amount of the debt, lien, judgment, or fee; the dates of any notices from the City; and any written agreement or payment plan with the City for its disposition.

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19. Have any liquidated damages or other penalties been imposed by the City on your organization? **PLEASE CIRCLE YES NO**

Have any liens, claims or stop notices been filed against your organization? **PLEASE CIRCLE YES NO**

If you answered YES to either of the above questions, please attach an explanation of details identifying the claimant and stating the grounds asserted by the claimant and stating the disposition.

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20. Do you have any pending, contemplated or ongoing administrative or judicial proceedings material to your organization's business or finances including, but not limited to, any litigation, consent orders or agreements with any state or federal regulatory agency issued to your organization? **PLEASE CIRCLE YES NO**

If you answered yes, please attach an explanation.

If your organization has had demolition contracts with the City, provide the following information
List all COMPLETED City demolition contracts within the last five years (attach additional paper as needed):

CONTRACT NUMBER	BID NUMBER	PROJECT DESCRIPTION	AMOUNT OF CONTRACT

List all INCOMPLETE contracts held by your organization at present. (Please attach additional sheets as needed.)
List any City Demolition projects first

CONTRACTING ENTITY	CONTRACT NO.	LOCATION	% COMPLETE	AMOUNT OF CONTRACT

List the largest projects that your organization has completed.

DOLLAR AMOUNT	DATE	CONTRACTING ENTITY	REFERENCES
			Name
			Phone Number
			Name
			Phone Number
			Name
			Phone Number
			Name
			Phone Number
			Name
			Phone Number
			Name
			Phone Number

List any equipment that is owned by your organization that is available for the proposed work.
(Please attach additional sheets as needed.)

FINANCIAL POSITION AS OF: **(Not over 6 months old)**

ASSETS		LIABILITIES & EQUITY	
CURRENT ASSETS		CURRENT LIABILITIES	
Cash and cash equivalents		Lines of credit	
Short-term investments		Notes Payable – current portion	
Accounts receivable		Accounts Payable	
Allowance for doubtful accounts	( )	Accrued and withheld payroll taxes	
Notes receivable		Accrued expenses	
Inventories			
Prepaid expenses			
Total Current Assets		Total Current Liabilities	
PROPERTY AND EQUIPMENT		LONG-TERM LIABILITIES	
Land		Notes payable	
Buildings			
Machinery and equipment			
Trucks and automobiles			
Office furniture and equipment			
Assets under capital lease		Total Long-Term Liabilities	
		Total Liabilities	
		EQUITY	
Total Property and Equipment		Common stock	
Less accumulated depreciation		Additional paid-in capital	
and amortization	( )	Less treasury stock	( )
Net Property and Equipment		Retained Earnings	
OTHER ASSETS		Partner's capital	
Cash surrender value of officer's life insurance		Owner's equity	
Loans against policies			
Notes Receivable			
Organization costs (net)			
Total Other Assets		Total Equity	
TOTAL ASSETS		TOTAL LIABILITIES & EQUITY	

Please provide the total dollar amount of all available lines of credit at your organization's disposal.	$
Please provide the total dollar amount of the balance of all available lines of credit at your organization's disposal	$

The City reserves the right to request any additional or clarifying information from Contractor at any time and Contractor is hereby notified that the City may contact any reference, financial institution or other agency identified by Contractor herein for further information. By submission of this application, Contractor hereby acknowledges the City's right to revoke the qualification of Contractor at any time for reasons including, but not limited to, Contractor exceeding its capacity to perform work under the NTI Demolition program. Contractor hereby verifies that all information and documentation submitted herein is true and correct and Contractor acknowledges that the submission of false information by it is subject to the penalties of 18 Pa. C.S. Section 4904 relating to unsworn falsification to authorities.

NOTE: A partnership must give firm name and signatures of all partners. A corporation must give full corporate name, signatures of two (2) officials (either president or vice-president and secretary or treasurer) and affix corporate seal.

FIRM OR CORPORATE NAME

SIGNATURE TITLE

SIGNATURE TITLE

Date of Signing

SIGNATURE TITLE

SIGNATURE TITLE

CITY OF PHILADELPHIA

NEIGHBORHOOD TRANSFORMATION INITIATIVE (NTI)
ECONOMIC OPPORTUNITY PLAN - DEMOLITION

THE PROJECT

This Economic Opportunity Plan is being provided in connection with the vision of Mayor John F. Street to begin the process of transforming neighborhoods of Philadelphia from areas of blight to communities teeming with opportunity -- restored and revitalized and the centers of activity. The Neighborhood Transformation Initiative (NTI) is citywide in scope, thus impacting the City's diverse population replete with its diverse housing needs and distinct community concerns. Few neighborhoods in Philadelphia have escaped the ravages of abandoned cars, short dumping, vacant or abandoned housing and aging or deteriorating housing stock. Several sections of the city stand out, having suffered the greatest impact of blight. Transformation will not occur with the simple demolition of deteriorating structures and the clearing of vacant lots nor can transformation of the fifth largest American city occur with just the NTI bond financing. Transformation is a long-term proposal which goes beyond the tenure of any one Mayor and any one administration; it will require the on-going commitment to revitalization by public and elected officials, the leveraging of available public funds against private sector resources, and the long-term partnership between government, the private sector, and the residents of this city.

While the primary focus is on the transformation of Philadelphia's neighborhoods, the City recognizes equally the tremendous business and employment opportunities for local small businesses and its residents through the myriad business/contracts that are generated through NTI. This plan seeks to identify the immediate and potential business opportunities for small businesses historically underrepresented in contracting, in particular minority, women and disabled disadvantaged businesses, and immediate and potential employment opportunities for minority, female and the disabled citizens as the result of this massive undertaking.

All consultants and contractors participating on this project shall comply with local and federal policies that are applicable to contracting and employment opportunities including Executive Order 02-05 of the City and federal Executive Order 11246. The majority of work associated with this initiative will be awarded through competitive and negotiated processes of the City and its agencies and authorities, and provides substantial partnering and subcontracting opportunities between businesses. The City recognizes the vast potential for employment and training by residents of the affected areas and is committed to working in conjunction with training providers, contractors and the building trades unions to maximize trainee, apprentice and journeyman employment opportunities for minorities, females and disabled residents.

Many of the contract and employment opportunities associated with the early phases of this initiative have been identified and are fully funded (i.e., demolition, vacant lot clearing, tree removal, etc.). Several additional contract and employment opportunities associated with later phases of this initiative have been identified, but have yet to be funded (i.e., on-going lot maintenance, development agreements, etc.).

The City recognizes that this plan is voluntary and requires the best nondiscriminatory efforts of all parties for its successful implementation. The City, including its agents and representatives, is committed and determined to provide meaningful, substantial participation opportunities in NTI for socially and economically disadvantaged individuals and businesses, with a focused emphasis on individuals and businesses located in the various project areas. The City is committed to preventing any forms of discrimination on the basis of race, religion, color, sex, age, mental or physical disabilities, national origin or ancestry, sexual orientation, and marital or parental status. Therefore, contractors bidding on NTI projects shall make a good faith effort to perform their work in accordance with the guidelines set forth in this document.

PART I. OUTREACH EFFORTS AND TRAINING OPPORTUNITIES WITH LOCAL ENTITIES.

The City, working with its departments, agencies, authorities and the GPUAC, shall undertake a number of local outreach efforts to maximize participation of local businesses and minority, woman and disabled-owned businesses, and to achieve the employment goals set forth herein. The City shall place MBEC-certified disadvantaged minority, woman and disabled owned businesses on its solicitation lists used in conjunction with this initiative, and shall the same of all its agencies and authorities, using the services of the GPUAC and the MBEC.

The City, working with its departments, agencies, authorities and GPUAC, shall work with each contractor and where appropriate, subcontractors, union representatives, and training providers to maximize recruitment and hiring of residents of the City. The outreach effort will utilize organizations such as the Pennsylvania Job Centers, Philadelphia Workforce Development Corporation, Philadelphia Housing Authority, Opportunities Industrial Centers, Universal Community Homes, TOP/Win, Congreso De Latinos Unidos, Youth Build, and other community based organizations and training programs. The community outreach plan will, among other things, identify the organizations to be utilized, provide information as to dates and locations where individuals may apply and where screening and interviews will be conducted, provide information about the interview process, and implement procedures for monitoring and oversight of the process.

If there is a deficiency in the good faith and nondiscriminatory efforts to achieve these goals, the City, its representatives, departments, agencies and authorities shall seek to implement agreeable corrective actions to prevent a continuation of the deficiency and to prevent a recurrence.

PART II. DEMOLITION

A. Employment Opportunities

NTI, under the direction of the Mayor's Office, will begin this initiative through a city-wide program for the demolition or encapsulation of dangerous residential and commercial properties. Demolition began in April 2002 and is continuing aggressively through 2007, after which yearly demolitions will be maintained as needed. The City, through representatives of its departments and agencies, shall work with the contractors involved in the demolition phase, so that all contractors make a good faith effort to employ a workforce equal to goals of 75% minority and 10% female of all work hours for each skilled and semi-skilled trade. These goals represent the total hours worked by trade during the demolition phase. Further, the City has set as a goal the utilization of City residents on the workforce equal to 80% of all workers.

The City, through its agents and representatives, will ensure that these goals are included in all demolition and demolition related prime contracts and require the prime contractors to reference these goals for all subconsultants and subcontractors.

The Prime Contractors agree to work with local area Community Development Corporations, the monitoring consultant and representatives of the skilled and semi-skilled trade unions to create pre-apprenticeship training programs for residents of the local areas.

For the purpose of this plan, the term "minority" means Black (all persons having origins in any of the black African racial groups); Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or Other Spanish culture or origin); Asian and Pacific Island (all persons having origin in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and American Indian (all persons having origins in any of the original peoples of North American and maintaining identifiable tribal affiliations through membership and participation or community identification).

B. <u>Contract Opportunities</u>

Each prime consultant and contractor shall use its good faith and nondiscriminatory efforts to provide joint venture partnerships and subconsulting and subcontract opportunities for disadvantaged minority, woman and disabled owned business enterprises (collectively, "M/W/DS-DBE's") certified by the City's Minority Business Enterprise Council ("MBEC"). For the overall NTI program, each consultant's and contractor's good faith and nondiscriminatory efforts shall be presumed if, during each phase of the project, the following levels of participation are achieved: 35% participation for M-DBE's, 12% participation for W-DBE's and 2% participation for DS-DBE's. These percentages for participation relate to the dollar value of subcontracts including add-ons, change orders and scope adjustments. Recognizing that each contract has its differences, MBEC shall review the specific scope of work and assign an appropriate range of participation. The assigned range shall be attached to each bid package prior to any advertisement for bid.

1. **Program Manager.** Not applicable to this demolition contract.
2. **Relocations.** Not applicable to this demolition contract.
3. **Demolition.**

The City initially budgeted $160,000,000 for the demolition of vacant structures over five years to eliminate the City's inventory of dangerous buildings while providing opportunities to develop tracts of land for subsequent redevelopment.

Of the original budget, it is expected that $140,000,000 will be used to demolish residential structures and $20,000,000 to demolish commercial structures. The City anticipates packaging the demolition bids as large and small packages and to award by geographic areas of the City. The various package sizes will allow for bidding by both large and small contractors.

Types of demolition anticipated are:

(a) **String**: removing multiple adjoining structures to create tracts of land for redevelopment.
(b) **Hand**: demolitions performed structure-by-structure generally to preserve adjacent properties.
(c) **Partial**: Not applicable to this demolition contract.

Additionally, the following ancillary contracting opportunities will be available during demolition:

(a) **Asbestos Inspections** – Not applicable to this demolition contract.
(b) **Air Monitoring** – Not applicable to this demolition contract.
(c) **Asbestos Removal** – Typically this function is included in the competitively bid demolition package and is considered a subcontractable item. The number of structures requiring asbestos removal will be determined upon completion of the asbestos inspection.

(d) **Cement-Stucco Finish** – Walls will require restoration where the structure is adjacent to a demolished property.

(e) **Sealing of Abandoned Laterals** – Not applicable to this demolition contract.

The following areas have been identified as potential subcontracting/business opportunities that will be needed by the prime contractors:

(a) Top Soil and Fill (material supply)
(b) Cement/Stucco (material supply)
(c) Equipment Rental (i.e., cranes, backhoes, trucks, etc.)
(d) Hauling – requires the trucking of debris from the demolition site to designated and authorized waste sites
(e) Grinding & Compacting Equipment – needed to recycle bricks and other material that may be used as backfill

Employment opportunities identified during these aforementioned phases include but are not limited to:

(a) Operating Engineers
(b) Laborers
(c) Plumbers – not applicable to this demolition contract.

4. **Encapsulation and Stabilization.** Not applicable to this demolition contract.
5. **Lot Clean-Up/Vacant Lot Management.** Not applicable to this demolition contract.
6. **Street Tree Removal.** Not applicable to this demolition contract.
7. **MIS Technology.** Not applicable to this demolition contract.

PART III. POST DEMOLITION.

A. Employment Opportunities. Not applicable to this demolition contract.

B. Contract Opportunities

1. **Land Acquisition.** Not applicable to this demolition contract.
2. **Interim Land Use Strategies.**

This phase of NTI represents the stage when either the City or the effected surrounding community anticipates a provisional use of vacant lots. Such uses may include parking, gardens, greening programs, etc. The business and employment opportunities associated with this phase will be identified with a determination of the interim use, but may include at a minimum:

(a) Fencing
(b) Materials (i.e., topsoil, mulch, etc.)
(c) Landscaping
(d) Paving – not applicable to this demolition contract.

3. **Development.** Not applicable to this demolition contract.

PART IV. REPORTING AND PROJECT PERFORMANCE.

Over the initial five-year period of the NTI, the City, through its departments and agencies, will prepare monthly reports and updates of employment and contracting activities for NTI which summarize the following:

1. **Utilization of M/W/DS-DBEs and commitments made with such businesses;**
2. **The hiring and employment of minorities and females.**
3. **The training programs utilized and the placement rates.**

Additionally, the City acknowledges the value of project monitoring and therefore will develop and work with an Oversight Committee to monitor overall compliance and achievement of the project objectives as defined in this Economic Opportunity Plan.

The City agrees to keep, and require all prime contractors and consultants to keep such records and to file such reports relating to the provisions of this Economic Opportunity Plan as may be reasonably necessary to document compliance with the Plan. The City, through the Mayor's Office of NTI, has contracted and is actively working with the Greater Philadelphia Urban Affairs Coalition to assist in the monitoring and reporting of its performance with respect to this Plan.

The GPUAC shall work with the City, its departments and agencies, contractors, consultants, and training providers to ensure maximum opportunities not necessarily identified in this Plan. The City, through its departments and agencies, agree to work with all contractors to submit to the GPUAC manpower utilization projections for all work associated with this initiative.

CITY OF PHILADELPHIA
MINORITY BUSINESS ENTERPRISE COUNCIL
ANTI-DISCRIMINATION POLICY
DISADVANTAGED MINORITY, WOMEN AND DISABLED OWNED BUSINESS ENTERPRISES

(FOR BIDS TO BE AWARDED BY THE PROCUREMENT DEPARTMENT)

Under the authority of Executive Order No. 02-05, the City has established an anti-discrimination policy relating to the participation of Disadvantaged Minority (M-DBE), Disadvantaged Women (W-DBE) and Disadvantaged Disabled (DS-DBE) Owned Business Enterprise in City contracts. The purpose of this policy is to provide equal opportunity for all businesses and to assure that City funds are not used, directly or indirectly, to promote, reinforce or perpetuate discriminatory practices. The City is committed to fostering an environment in which all businesses are free to participate in business opportunities, flourish without the impediments of discrimination and participate in all City contracts on an equitable basis. In accordance with the contracting requirements of the City, the City's anti-discrimination policy is applicable to this invitation to bid.

The Minority Business Enterprise Council (MBEC) has established projected ranges of participation for this invitation to bid which serve as a guide in determining each bidder's responsibility. These ranges represent the percentage of M-DBE/W-DBE/DS-DBE participation that should be attained from business opportunities existing in the available market absent discrimination in the solicitation and selection of these businesses. These ranges are based upon an analysis of factors such as the size and scope of the contract and the availability of certified M-DBE/W-DBE/DS-DBEs to perform various elements of the contract. Please review these forms carefully as the submission of a Solicitation and Commitment Form (more fully discussed below) with this bid is an element of responsiveness to the bid and failure to submit a Solicitation and Commitment Form will result in rejection of your bid.

A. PARTICIPATION RANGE

1. Under the authority of Executive Order 02-05, the Minority Business Enterprise Council (MBEC) has established M-DBE, W-DBE and DS-DBE participation ranges for this invitation to bid. These participation ranges serve exclusively as a guide in determining bidder responsibility.
See the Project Manual for Participation Ranges, Section 00813, Paragraph A.1.

2. Only firms that are certified by the MBEC prior to bid opening will be credited toward the participation ranges. A list of certified firms is maintained by the MBEC and is available for review at the MBEC, Municipal Services Building, 1401 JFK Blvd. Suite 330, Philadelphia, PA 19102-1666

3. M-DBE/W-DBE/DS-DBE subcontractors and manufacturers will be credited toward the participation range at 100%. Stocking suppliers will be credited at 100% Non-stocking suppliers that are commonly and ordinarily the custom in the industry and which have as its principal business and in its own name, the purchase and sale of these supplies, will be credited at 100%. Brokers, ad-hoc suppliers and non-stocking suppliers that are not commonly and ordinarily the custom in the industry nor a part of the industry's trade practice will not be credited.

4. In order to maximize opportunities for as many businesses as possible, a firm that is certified in two or more categories (e.g. M-DBE and W-DBE and DS-DBE or W-DBE and DS-DB E) will only be credited toward one participation range as either an M-DBE or W-DBE or DS- DBE. The firm will not be credited toward more than one category. Bidders will note with their submission which category, M-DBE or W-DBE or DS-DBE, is submitted for credit.

5. An M-DBE/W-DBE/DS/DBE submitting as the prime bidder, will not receive credit toward the participation ranges for its own work or supply effort on this invitation to bid. However, the participation of an M-DBE/W-DBE/DS-DBE partner, as part of a joint venture created for this bid, may be credited to the extent of the partner's ownership interest in the joint venture in accordance with the following criteria:

   a) The M-DBE/W-DBE/DS-DBE partner(s) must be certified by the MBEC prior to bid opening.
   b) The M-DBE/W-DBE/DS-DBE partner(s) must derive substantial benefit from the arrangement.
   c) The M-DBE/W-DBE/DS-DBE partner(s) must be substantially involved in all phases of the contract including bidding, planning, staffing and daily management.

   The business arrangement must be customary (each partner shares the risk and profits of the joint venture commensurate with their ownership interest, contributes working capital and other resources, etc).

6. M-DBE/W-DBE/DS-DBE subcontractors must perform at least seventy-five percent (75%) of the cost of the subcontract (not including the cost of materials, equipment or supplies incident to the performance of the subcontract) with their own employees.

7. For the purpose of applying the participation ranges on Public Works projects that Include add or deduct alternates, commitments listed by bidders on the Solicitation and Commitment Form should be based upon the base bid. In the event the City elects to award any add or deduct alternates, the City reserves the right to require the apparent lowest responsible bidder to amend its Solicitation and Commitment Form, to ensure the bidder's continuing responsibility.

8. In listing amounts committed to on the Solicitation and Commitment Form, bidders should list both the dollar amount and percentage of total bid for each commitment made. (If the invitation to bid is for a requirements-type contract, a percentage amount will suffice.) In calculating the percentage amount, bidders may apply the standard mathematical rules in rounding off numbers. In the event of an inconsistency between the dollar and percentage amounts listed on the Solicitation and Commitment Form, the amount which results in the greater commitment will be used.

B. RESPONSIVENESS

1. Bidders must submit documentary evidence of M-DBE, W-DBE and DS-DBEs who have been solicited and with whom commitments have been made.

   a. Documentation of all solicitations (regardless of whether commitments resulted therefrom) as well as all commitments made prior to bid opening shall be submitted, concurrently with the bid, on the enclosed document entitled "Solicitation and Commitment Form". If the bidder has entered into a joint venture with an M-DBE, W-DBE and/or DS-DBE partner, the bidder should submit along with the Solicitation and Commitment Form, a document entitled "Joint Venture Eligibility Information Form," available at the Office of the MBEC, for the City's review and approval of the joint venture arrangement. Failure to submit the required information on M-DBE/W-DBE/DS-DBE participation will result in rejection of the bid as nonresponsive. (Bidders should note that only commitments that have been made prior to bid opening and listed on the Solicitation and Commitment Form will be credited toward the participation ranges. Since the City must ensure that all bidders respond on equal terms, a bid which indicates that the bidder will make commitments after bid opening will be rejected as nonresponsive.)

   b. Upon award, the completed forms and accompanying documents regarding solicitation and commitments with M-DBE/W-DBE/DS-DBEs become part of the contract. A bidder should only make actual solicitations of M-DBE/W-DBE/DS-DBEs whose work or materials are within the scope of this invitation to bid. Mass mailing of a general nature to M- DBE/W-DBE/DS-DBEs will not be deemed solicitation, but rather will be treated as informational notification only. A reasonable period of time should be given to all solicited firms to ensure that they have sufficient time to adequately prepare their quotes.

   c. The bidder's listing of a commitment with an M-DBE/W-DBE/DS-DBE as described on the Solicitation and Commitment Form constitutes a representation that the bidder has, prior to bid opening, made a binding commitment to contract with such firm, upon receipt of a contract award from the City.

2. Bidders failing to submit a bid within the participation range(s) established for this invitation to bid shall submit concurrently with the bid submission, sufficient evidence which demonstrates to the City that the bidder has not engaged in discriminatory practices in the solicitation and commitment of contract participants. Such evidence shall be contained on the Solicitation and Commitment Form. Failure to submit such evidence will result in the rejection of the bid as nonresponsive.

   a. Evidence submitted on this point should indicate:

      (1) Whether M-DBE/W-DBE/DS-DBEs were solicited for the type of work or materials to be contracted for and, if not, the reason(s) why no such solicitation was made.

      (2) Reasons for not committing to an M-DBE/W-DBE/DS-DBE which submitted a quote.

      (3) Where no quotations are received or commitments made within a particular range, the lack of quotations and/or commitments must be shown and explained on the Solicitation and Commitment Form.

   b. Evidence submitted will be reviewed to ascertain whether discrimination occurred in the solicitation or selection of contract participants. The review will include consideration of:

      (1) Whether the bidder's actions were motivated by considerations or race or gender or disability. For example, the MBEC may investigate the bidder's contracting activities and business practices on similar public and private sector contracts;

(2) Whether M-DBE/W-DBE/DS-DBEs were treated less favorably than other businesses in the solicitation and commitment process. For example, the MBEC will investigate whether M-DBE/W-DBE/DS-DBEs are given the same information and amount of time to prepare a quote as others who were solicited;

(3) Whether the bidder's solicitation and commitment decisions were based upon policies which disparately affect M-DBE/W-DBE/DS-DBEs.

C. RESPONSIBILITY

1. Upon receipt of bids for this contract, the bidder's submittal will be subject to review by the MBEC to determine whether the bidder has discriminated in the solicitation and/or selection of contract participants. If the bidder has submitted a bid within each of the projected range(s) for M-DBE/W-DBE/DS-DBE participation, the bidder will be rebuttably presumed not to have discriminated in its selections. If the bidder has not submitted a bid within the projected range(s), the MBEC will initiate an investigation to determine whether discrimination has occurred. After review of the Solicitation and Commitment Form and other relevant information. The MBEC will make a recommendation to the Procurement Commissioner or his/her designee (the "Commissioner"). If the Commissioner, after review of the recommendation and supporting documentation concurs that discrimination has occurred; the bidder will be deemed not responsible and its bid rejected. Bids rejected for responsibility (due to a determination of discrimination) may result in the suspension of the bidder from bidding on and/or participating in any future City contracts for a period of up to three (3) years.

2. M-DBE/W-DBE/DS-DBE commitments are to be maintained throughout the term of the contract and apply to the total contract value, including approved change orders and amendments. Any change in commitment, including but not limited to substitutions for the listed firm(s), changes or reductions in the work and/or listed dollar/percentage amounts, must be pre-approved in writing by MBEC.

D. ACCESS TO INFORMATION

1. The MBEC shall have the right to make site visits to the bidder's place of business and/or job site and obtain documents and information from any bidder, subcontractor, supplier, manufacturer of contract participant that may be required in order to ascertain bidder responsibility.

2. Failure to cooperate with the MBEC in its review will result in a recommendation to the Commissioner that the bidder be deemed not responsible and its bid rejected.

E. RECORDS AND REPORTS

1. The successful bidder shall maintain all books and records relating to its M-DBE/ W-DBE/DS-DBE commitments (e.g. copies of subcontracts, joint venture agreement, correspondence, cancelled checks, invoices, telephone logs) for a period of at least three (3) years following acceptance of final payment. These records shall be made available for inspection by the MBEC and/or other appropriate City officials.

2. The successful bidder agrees to submit reports and documentation as deemed necessary by the MBEC to ascertain the successful bidder's fulfillment of its M-DBE/W-DBE/DS-DBE commitments.

F. REMEDIES

1. The successful bidder's compliance with the requirements of Executive Order 02-05, including the fulfillment of any M-DBE/W-DBE/DS-DBE commitments, is material to the contract. Any failure to comply with these requirements constitutes a substantial breach of the contract. It is further understood and agreed that in the event the Director of Finance determines that the successful bidder hereunder has failed to comply with these requirements the City may, in addition to any other rights and remedies the City may have under the contract, any bond filed in connection therewith or at law or in equity, exercise one or more of the following remedies which shall be deemed cumulative and concurrent:

   a. Withhold payment(s) or any part thereof until corrective action is taken.
   b. Terminate the contract, in whole or in part.
   c. Suspend the successful bidder from bidding on and/or participating in any future City contracts for a period of up to three (3) years.
   d. Recover as liquidated damages, one percent of the total dollar amount of the contract for each one percent (or fraction thereof) of the commitment shortfall. (NOTE: The "total dollar amount of the contract" shall include approved change orders, amendments and for requirements contracts shall be based on actual quantities ordered by the City.)

NEIGHBORHOOD TRANSFORMATION INITIATIVE
OWNER CONTROLLED INSURANCE PROGRAM

NOTE: OCIP PROGRAM EXPIRES ON 9/30/07, SEE SECTION 00801 FOR DETAILS

THE OCIP WILL ONLY PROVIDE COMMERCIAL GENERAL LIABILITY AND WORKERS COMPENSATION & EMPLOYERS LIABILITY INSURANCE UP TO AND INCLUDING 9/30/07. AS OF 10/1/2007, THESE COVERAGES WILL NEED TO BE PROVIDED BY ALL CONTRACTORS AND SUBCONTRACTORS.

The City of Philadelphia is providing an Owner Controlled Insurance Program (OCIP) or a Wrap-Up Insurance Program for NTI's Demolition Project. The OCIP provides insurance to cover the Project Owner and all contractors in a consolidated program that is controlled by the Project Owner (City). For this project, all contractors of every tier are required to participate under the OCIP. The insurance coverages provided by the OCIP include:

Workers Compensation/Employers Liability ($1,000,000)

General Liability ($2,000,000)

Excess Liability (up to $50,000,000)

Contractor Pollution Liability Insurance ($10,000,000)

A description of the program and coverages is included in the bid specifications.

Also included in the bid specifications are the insurance coverages required of all contractors working on a demolition site, whether they are qualified to participate in the OCIP or not, that evidence of your operational coverages. These insurance requirements include:

Automobile Liability ($300,000)

Workers Compensation/Employers Liability:

($100,000 Each Accident)

($500,000 Disease – Policy Limit)

($100,000 Disease – Each Employee)

General Liability ($500,000), naming the City of Philadelphia as an additional insured.

PLEASE NOTE THAT ALL BIDDERS ARE REQUIRED TO SUBMIT THE FOLLOWING TWO ITEMS WITH THEIR BIDS:

(1) THE TOTAL BASE BID EXCLUDING THE COST OF PROVIDING THE INSURANCE AND

(2) A LINE ITEM INDICATING WHAT THE ADDITIONAL COST OF PROVIDING THE INSURANCE WOULD BE IF NOT PROVIDED BY THE OCIP.

SECTION 01324
CONTRACTOR SAFETY PLAN

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

B. This Section specifies administrative and procedural requirements for a Safety Plan prepared by the Contractor for this Project.

1.02 RELATED WORK SPECIFIED ELSEWHERE

B. Applicable provisions of Bidding Requirements, Contract Requirements and other Division 1 sections.

1.03 CONTRACTOR'S SAFETY REPRESENTATIVE

A. The contractor shall assign a qualified Safety Representative to the contract on a full-time basis. The Contractor's Safety Representative shall have no duties other than to administer the contractor's safety plan. The minimum qualifications of the Contractor's Safety Representative are:

- Successful completion of the OSHA 510 Course: Occupational Safety and Health Standards in the construction Industry, for which graduates receive an OSHA Construction Safety and Health 30-hour completion card.
- Specific training in safety and loss control practices pertinent to the scope of work of this contract.
- Certified in First Aid and CPR

1.04 SAFETY PLAN

A. The City's Neighborhood Transformation Initiative Project Safety Manual is incorporated by reference and is to be considered part of the contract documents. The requirements set forth in this section and in the NTI Project Safety Manual are considered the minimum safety requirements for this project. The Contractor's Safety Plan shall address these requirements and any other requirements of OSHA 29CFR1910 and 29CFR1926 that are applicable to the contractor's scope of work.

B. The contractor shall submit a site-specific Safety Plan to the Project Manager for review. The Project Manager will secure the necessary City concurrences for approval. On site work shall not proceed until the safety plan is approved by the City.

C. The site-specific Safety Plan shall conform to all applicable Federal, State and City safety regulations and requirements. The plan must, at a minimum, meet the following requirements:

1. Contain the contractor's name, address, submission date, and reference to the specific contract for which the site-specific Safety Plan applies.
2. Contain a complete list of contractor and jobsite contact personnel, including emergency contacts and office, home and cell phone numbers.
3. Include the name, qualifications, background and duties of the contractors' Safety Representative.
4. Define the safety responsibilities of the project superintendent, foremen and employees.
5. Comply with safety requirements contained herein and elsewhere in the Project Manual.
6. Comply with all applicable OSHA Regulations, which at a minimum include the following:

a. <u>OSHA Subpart T</u>

1926.850	Preparatory operations	1926.855	Manual removal of floors
1926.852	Chutes	1926.856	Walls, floors and material with equipment
1926.853	Removal of material through floor openings	1926.857	Storage
1926.854	Removal of walls, masonry sections and chimneys	1926.858	Removal of steel construction
		1926.859	Mechanical demolition

b. <u>OSHA Subparts C,E,F,G,H,I,J,K,L,M,N,O,P,X (as applicable)</u>

1926 Subpart C	Housekeeping	1926 Subpart O	Vehicle Safety
1926 Subpart E	Personal protective equipment	1926 Subpart P	Trenching and excavations
1926 Subpart F	Fire Protection and Prevention	1926 Subpart X	Ladders/Stairways
1926 Subpart G	Barricades	1926.52	Occupational noise
1926 Subpart H	Material Handling	1926.62	Lead/Asbestos
1926 Subpart I	Hand/Power Tools	1926.101	Hearing protection
1926 Subpart J	Welding and cutting	1926.103	Respiratory protection
1926 Subpart K	Electrical Safety	1926.109	Recordkeeping
1926 Subpart L	Scaffolds	1910.146	Confined spaces
1926 Subpart M	Fall Protection		

Note: This prior list of regulations represents the major areas of concern and is in no way meant to imply that compliance with other sections of 29CFR1910 and 29CFR1926 are not required.

7. Provide employee-screening procedures including policy for drug testing.
8. Provide the content of the safety orientation and hazard awareness training to be given by the contractor to all new workers at the project site. Define records to be kept to substantiate each worker's satisfactory completion of the training and a procedure to identify these personnel on the job (e.g., sticker on hard hat).
9. Commit to a risk management program to review and evaluate tasks for potential hazards; a plan to mitigate these hazards and timely coordination and training of work crews in applicable safety procedures.
10. Provide a list of hazardous materials to be used on site and corresponding Material Safety Data Sheets.
11. Provide lockout-tag out precautions to deal with potential live power and utility lines.
12. Include a description of personal protective dress and equipment mandatory for use at the construction site as well as for special tasks.
13. Describe the respiratory protection program. This should include selection of equipment, fit testing, training in equipment use and familiarization with symptomatic warnings.
14. Provide a program for safety record maintenance. Submit sample copies of report and record forms to the project manager. These should include training logs, accident and injury reports, first aid logs, daily/weekly safety inspection checklists, safety coordination meeting minutes, and corrective and disciplinary actions. (Note: A "Wrap-Up" insurance program has been purchased by the City to cover Workmen's Compensation, General Liability, and Pollution Liability. Records and reports must be adequate to cover potential claims.)
15. Define essentials of the fall protection program at the job site.
16. Detail safety procedures for confined space permitting, monitoring, entry and emergency extrication.
17. Describe procedures for job site security, barricades, fencing warning signs, etc. to restrict site access and provide for public safety.
18. Prescribe procedures for hot-work/fire protection including permitting, shielding, fire watch, fire extinguisher placement.
19. Include an emergency communication and response plan for security, fire and rescue. Outside emergency response resources and medical service providers shall be listed. Emergency response drills should also be prescribed.
20. Include a plan to ensure adequate ventilation, dust control, sanitation and safe drinking water.
21. Prescribe site storage requirements for hazardous and flammable materials.
22. Include housekeeping and debris removal procedures.
23. Contain a copy of the contractor's substance abuse policy in accordance with Specification Section 00816
24. Contain a copy of the contractor's Tool Box Talk program.
25. Contain a copy of the contractor's NTI Jobsite Orientation Program for its employees.
26. Contain copies of all safety training documentation for the Contractor's Safety Representative and other employees assigned to the work, such as OSHA 10 hour, OSHA 510 (30 hour), OSHA 500, CPR/First Aid, etc.

1.05 COORDINATION

A. The Contractor shall coordinate its Safety Plan to include all trades, sub-contracts and utilities. The Contractor shall ensure that all subcontractors are familiar with and abide by the Safety Plan.

1.06 UPDATING

A. Updating of the final Safety Plan shall be required periodically as the work of this Contract progresses. Include major changes in Plan, and activities modified since previous updating.

1.07 DISTRIBUTION

A. Distribute copies of the Safety Plan to:
   1. Project Manager.
   2. Subcontractors.
   3. Other Concerned Parties (surety, insurance, etc.).
   4. Instruct recipients to report any inability to comply, and provide detailed explanation, with suggested remedies.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

APPENDIX 3

MISCELLANEOUS FORM(S)

EQUIPMENT PLACEMENT

APPLICATION FOR STREET CLOSURE

☐ NEW PERMIT ☐ EXTENSION/AMENDMENT PERMIT # _____

CITY OF PHILADELPHIA
STREETS DEPARTMENT
HIGHWAYS RIGHT OF WAY UNIT
840 MUNICIPAL SERVICES BUILDING
1401 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PA 19102-1676
(215) 686-5501 PHONE (215) 686-5062 FAX

OFFICIAL USE ONLY

M.D.O	☐ APPROVED ☐ DENIED	INITIALS	DATE
POLICE	☐ APPROVED ☐ DENIED	INITIALS	DATE
ROW INSP.	☐ APPROVED ☐ DENIED	INITIALS	DATE

APPLICANT INFORMATION

COMPANY	CONTACT (PERSON)	ADDRESS	CITY	STATE	ZIPCODE

EMAIL ADDRESS	PHONE	FAX	ALTERNATE		
	( )	( )	( )	☐ PAGER ☐ CELLULAR	PIN # _____

APPLICATIONS MUST BE FAXED TO THE RIGHT OF WAY UNIT AT 215-686-5062 AT LEAST 10 BUSINESS DAYS BEFORE START DATE

START DATE	END DATE
/ /	/ /

STREET ADDRESS	NEAR STREET	TO STREET	START TIME	END TIME
			: AM PM	: AM PM

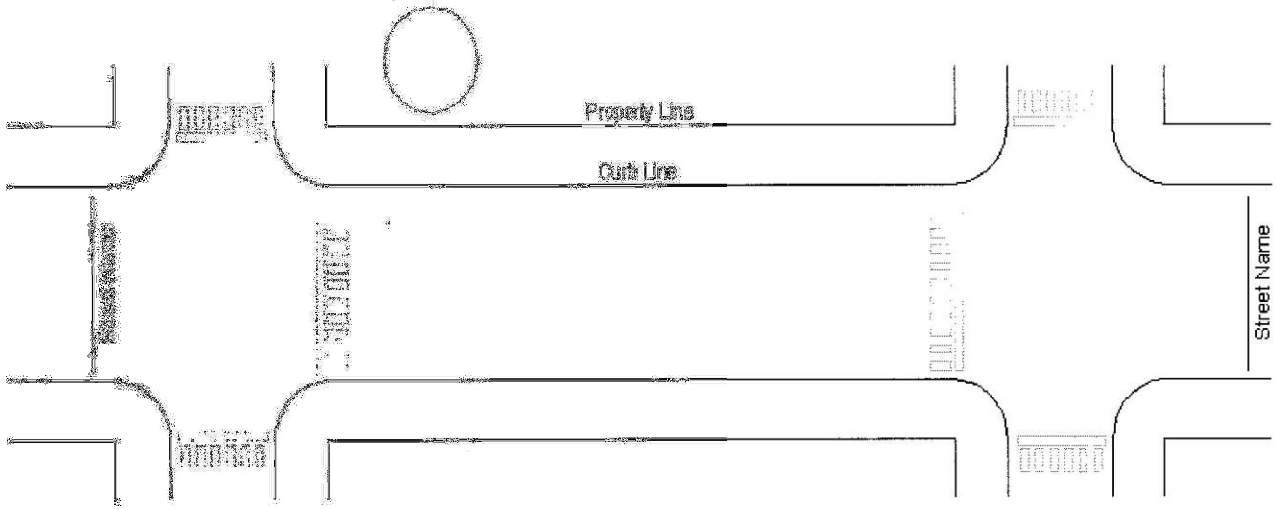
DETAILED LOCATION INFORMATION

CONFIGURATION ☐ PARTIAL SIDEWALK CLOSURE ☐ PARTIAL STREET CLOSURE NUMBER OF LANES IMPACTED _____
☐ FULL SIDEWALK CLOSURE ☐ FULL STREET CLOSURE PARKING METER NUMBERS _____

PURPOSE OF CLOSURE

- ☐ BOOM OR LIFT (AIR TRUCK)
- ☐ SCAFFOLDING FRAME
- ☐ CONSTRUCTION TRAILER
- ☐ DEMOLITION*
- ☐ EQUIPMENT DELIVERY
- ☐ PAVEMENT DEMOLITION*
- ☐ ROOFING RESTORATION*
- ☐ PROMOTIONAL DISPLAY
- ☐ FULL SIDEWALK WIDTH
- ☐ MASTIC LINE
- ☐ SKELETAL PLATFORM*
- ☐ TEMPORARY LOADING ZONE
- ☐ OTHER _____

_____

*☐ CONTACT THE WORKER PROTECTION UNIT AT 215-686-5560

Indicate North Arrow