

THE PORT AUTHORITY OF NY & NJ

PROCUREMENT DEPARTMENT
ATTN: BID/RFP CUSTODIAN
4 WORLD TRADE CENTER,
150 GREENWICH STREET, 21ST FLOOR
NEW YORK, NY 10007

INVITATION FOR BID/PUBLIC BID OPENING

BID INFORMATION

ISSUED DATE: 9/4/2015

**TITLE: CLEANING AND DISPOSAL OF MATERIAL FROM SUMPS, CATCH BASINS,
MANHOLES, SCUPPERS, DRAINAGE PIPES AND RELATED APPURTENANCES
AT THE LINCOLN TUNNEL AND STATEN ISLAND BRIDGES**

Bid No.: 43633

SUBMIT SEALED BIDS BEFORE THE DUE DATE AND TIME TO THE ABOVE
ADDRESS WHERE THEY WILL BE PUBLICLY OPENED AND READ

FACILITY INSPECTION: SEPTEMBER 14, 2015 TIME: 10:00AM & 2:00 P.M.

BID DUE DATE: SEPTEMBER 23, 2015 TIME: 11:00 AM

BUYER NAME: MARGARET D'EMIC
PHONE NO.: (212) 435-4609
FAX NO.: (212) 435-4697
EMAIL: mdemic@panynj.gov

BIDDER INFORMATION (TO BE COMPLETED BY THE BIDDER) (PLEASE PRINT)

(NAME OF BIDDING ENTITY)

(ADDRESS)

(CITY, STATE AND ZIP CODE)

(REPRESENTATIVE TO CONTACT-NAME & TITLE (TELEPHONE)

(FEDERAL TAX I.D. NO.) (FAX NO.)

____ BUSINESS CORPORATION _____ PARTNERSHIP _____ INDIVIDUAL

____ OTHER (SPECIFY): _____

INVITATION FOR BID

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- PART II – CONTRACT SPECIFIC INFORMATION FOR BIDDERS
- PART III – CONTRACT SPECIFIC TERMS AND CONDITIONS
- PART IV – SIGNATURE SHEET, NAME AND RESIDENCE OF PRINCIPALS AND PRICING SHEET(S)
- PART V – SPECIFICATIONS
- STANDARD CONTRACT TERMS AND CONDITIONS

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PART I - STANDARD INFORMATION FOR BIDDERS

1. General Information: The Port Authority of New York and New Jersey

The Port Authority of New York and New Jersey (the “Port Authority” or the “Authority”) is an agency of the States of New York and New Jersey, created and existing by virtue of the Compact of April 30, 1921, made by and between the two States, and thereafter consented to by the Congress of the United States. It is charged with providing transportation, terminals and other facilities of trade and commerce within the Port District. The Port District comprises an area of about 1,500 square miles in both States, centering about New York Harbor. The Port District includes the Cities of New York and Yonkers in New York State, and the cities of Newark, Jersey City, Bayonne, Hoboken and Elizabeth in the State of New Jersey, and over 200 other municipalities, including all or part of seventeen counties, in the two States. The Port Authority manages and/or operates all of the region’s major commercial airports (Newark Liberty International, John F. Kennedy International, Teterboro, LaGuardia, Atlantic City International, and Stewart International Airports), marine terminals in both New Jersey and New York (Port Newark and Elizabeth, Howland Hook and Brooklyn Piers); and its interstate tunnels and bridges (the Lincoln and Holland Tunnels; the George Washington, Bayonne, and Goethals Bridges; and the Outerbridge Crossing), which are vital “Gateways to the Nation.”

In addition, the Port Authority operates the Port Authority Bus Terminal in Manhattan, the largest facility of its kind in the world, and the George Washington Bridge and Journal Square Transportation Center bus stations. A key link in interstate commuter travel, the Port Authority also operates the Port Authority Trans-Hudson Corporation (PATH), a rapid rail transit system linking Newark, and the Jersey City and Hoboken waterfronts, with midtown and downtown Manhattan. A number of other key properties are managed by the agency including but not limited to a large satellite communications facility (the Teleport) in Staten Island, and a resource recovery co-generation plant in Newark. Prior to September 11, 2001, the Port Authority’s headquarters were located in the World Trade Center, and that complex is still owned and being partially redeveloped by the Authority.

2. Form and Submission of Bid

The Bidder shall review carefully every provision of this document, provide all the information required, and sign and return one entire copy to the Port Authority in accordance with the instructions on the Cover Sheet and Part II – Contract Specific Information for Bidders. The Bidder should retain one complete duplicate copy for its own use. The “Signature Sheet” contained herein must be completed and signed by the Bidder. The Pricing Sheet(s) contained herein must also be completed. The Bid shall be sealed in the enclosed self-addressed envelope conspicuously marked with the Bidder’s name, address, and Vendor Number, if available. In addition, the outside of the package must clearly state the Bid Title, the Bid Collective Number and the Bid Due Date. Failure to properly label submissions may cause a delay in identification, misdirection or disqualification of the submissions. In submitting this bid, the Bidder offers to assume the

obligations and liabilities imposed upon it herein and expressly makes the representations and warranties required in this document.

All Bids must be received by the bid custodian on or before the due date and time specified on the cover page, at which time they will be publicly opened and read. Bids are only accepted Monday through Friday, excluding Port Authority holidays, between the hours of 8:00 a.m. and 5:00 p.m., via (1) regular mail, (2) express delivery service (e.g. UPS), or (3) hand delivery.

Express carrier deliveries by commercial vehicles can be made via vendors approved by Silverstein Properties, the 4 World Trade Center (4WTC) Property Manager, through the Vehicle Security Center (VSC). Presently, UPS is the only delivery vendor with approved recurring delivery times.

There is extensive security at the World Trade Center Site. Individuals must present a valid government-issued photo ID to enter 4 WTC. If a Bid is to be hand-delivered or if an individual is planning to attend the formal bid opening, please note that only individuals with valid photo identification will be permitted access to the Port Authority's offices. Individuals without valid identification shall be turned away and their packages not accepted. Individuals without packages or carrying small packages or boxes that can be conveyed by hand or on a hand truck may enter through the lobby. All envelopes, packages and boxes may be subject to additional security screening.

There is no parking available at 4 WTC/150 Greenwich Street, and parking in the surrounding area is extremely limited.

Bids that are not received by the bid custodian by the scheduled bid opening date will be considered late.

3. Vendor Profile

To ensure maximum opportunities, it is vitally important that Bidders keep their vendor profiles up to date with an appropriate e-mail address, as this will enable their firm to receive timely notice of advertisements, reminders, solicitations and addenda. Bidders may update their vendor profile or register as a Port Authority Vendor by accessing the online registration system at <https://panynjprocure.com/VenLogon.asp>.

4. Acknowledgment of Addenda

If any Addenda are posted or sent as part of this Bid, the Bidder shall complete, sign and include with its Bid the addenda form(s). In the event any Bidder fails to conform to these instructions, its Bid will nevertheless be construed as though the Addenda had been acknowledged.

If the Bidder downloaded this solicitation document, it is the responsibility of the Bidder to periodically check the Port Authority website at <http://www.panynj.gov/business-opportunities/bid-proposal-advertisements.html> and download any addenda that might have been issued in connection with this solicitation.

5. Firm Offer

The Bidder offers to provide the Port Authority of New York and New Jersey the services and to perform all Work in connection therewith required under this Contract, all as specified by the terms and conditions of the Contract, based on the Pricing Sheets provided herein.

EXCEPTIONS TAKEN OR CONDITIONS IMPOSED BY A BIDDER TO ANY PORTION OF THE CONTRACT DOCUMENTS WILL RESULT IN REJECTION OF THE BID.

6. Acceptance or Rejection of Bids

The acceptance of a Bid will be by a written notice signed by an authorized representative on behalf of the Authority. No other act of the Port Authority, its Commissioners, officers, agents or employees shall constitute acceptance of a Bid. The Port Authority reserves the unqualified right, in its sole and absolute discretion, to reject any or all Bids or to accept any Bid, which in its judgment will best serve the public interest and to waive defects in any Bid. No rights accrue to any Bidder unless and until its Bid is accepted.

7. Bidder's Questions

Any questions by prospective Bidders concerning the Work to be performed or the terms and conditions of the Contract may be addressed to the Contracts Specialist listed on the Cover Sheet of this document. The Contracts Specialist is only authorized to direct the attention of prospective Bidders to the portions of the Contract. No employee of the Port Authority is authorized to interpret any portion of the Contract or to give information in addition to that contained in the Contract. When Contract interpretation or additional information as to the Contract requirements is deemed necessary by the Port Authority, it will be communicated to all Bidders by written addenda issued under the name of the Assistant Director, Commodities & Services Division, Procurement Department of the Port Authority and may be posted on the Port Authority website. Addenda shall be considered part of the Contract.

8. Additional Information To and From Bidders

Should the Authority require additional information from the Bidder in connection with its bid, such information shall be submitted within the time frame specified by the Port Authority.

If the Bidder is a corporation, a statement of the names and residences of its officers should be submitted on the Name and Residence of Principals Sheet, directly following the Signature Sheet.

9. Union Jurisdiction

All prospective Bidders are advised to ascertain whether any union now represented or not represented at the Facility will claim jurisdiction over any aspect of the operations to

be performed hereunder and their attention is directed to the paragraph entitled “Harmony” in the Standard Contract Terms and Conditions.

10. Assessment of Bid Requirements

The Bidder should carefully examine and study the entire contents of these bid documents and shall make its own determinations as to the services and materials to be supplied and all other things required to be done by the Contractor.

11. Bidder’s Prerequisites

Only Bids from Bidders that can satisfactorily demonstrate meeting the prerequisites specified within Part II hereof at the time of bid submission will be considered. By furnishing this document to the Bidder, the Port Authority has not made a determination that the Bidder has met the prerequisites or has otherwise been deemed qualified to perform the services. A determination that a Bidder has met the prerequisites is no assurance that it will be deemed qualified in connection with other bid requirements included herein.

12. Qualification Information

The Port Authority may give oral or written notice to the Bidder to furnish the Port Authority with information and to meet with designated representatives of the Port Authority relating to the Bidder’s qualifications and ability to fulfill the Contractor’s obligations hereunder. The requested information shall be submitted no later than three (3) days after said notice unless otherwise indicated. Matters upon which the Port Authority may inquire may include, but may not be limited to, the following:

a. The Bidder may be required to demonstrate that it is financially capable of performing this Contract, and the determination of the Bidder’s financial qualifications will be made by the Port Authority in its sole discretion. The Bidder shall submit such financial and other relevant information as may be required by the Port Authority from time to time including, but not limited to, the following:

1. (i) Certified financial statements, including applicable notes, reflecting the Bidder’s assets, liabilities, net worth, revenues, expenses, profit or loss and cash flow for the most recent calendar year or the Bidder’s most recent fiscal year.

(ii) Where the certified financial statements set forth in (i) above are not available, then either reviewed or compiled statements from an independent accountant setting forth the aforementioned information shall be provided.

(iii) Where neither certified financial statements nor financial statements from an independent accountant are available, as set forth in (i) and (ii) above, then financial statements containing such information prepared directly by the Bidder may be submitted; such financial statements, however, must be accompanied by a signed copy of the Bidder’s most recent Federal income tax return and a statement in writing from the Bidder, signed by an executive officer or their authorized designee, that

such statements accurately reflect the present financial condition of the Bidder.

Where the statements submitted pursuant to subparagraphs (i), (ii) or (iii) are dated prior to forty-five (45) days before the bid opening, then the Bidder shall submit a statement in writing, signed by an executive officer of the Bidder or their designee, that the present financial condition of the Bidder is at least as good as that shown on the statements submitted.

2. Bidder's statement of work on hand, including any work on which a bid has been submitted, and containing a description of the work, the annual dollar value, the location by city and state, the current percentage of completion, the expected date for completion, and the name of an individual most familiar with the Bidder's work on these jobs.

3. The name and address of the Bidder's banking institution, chief banking representative handling the Bidder's account, the Bidder's Federal Employer Identification Number (i.e., the number assigned to firms by the Federal Government for tax purposes), the Bidder's Dun and Bradstreet number, if any, the name of any other credit service to which the Bidder has furnished information, and the number, if any, assigned by such service to the Bidder's account.

- b. Information relating to the Bidder's Prerequisites, if any, as set forth in this document.
- c. If the Bidder is a corporation: (1) a copy of its Certificate of Incorporation and, if applicable, all Amendments thereto with a written declaration signed by the Secretary of the Corporation with the corporate seal affixed thereto, stating that the copy furnished is a true copy of the Certificate of Incorporation and any such Amendments as of the date of the opening of the bid and (2) if the Bidder is not incorporated under the laws of the state in which the service is to be performed, a certificate from the Secretary of State of said state evidencing the Bidder's legal qualification to do business in that state.
- d. A statement setting forth the names of those personnel to be in overall charge of the service and those who would be exclusively assigned to supervise the service and their specific roles therein, setting forth as to each the number of years of experience and in which functions and capacities each would serve.
- e. Information to supplement any statement submitted in accordance with the Standard Contract Terms and Conditions entitled "Contractor's Integrity Provisions."
- f. In the event that the Bidder's performance on a current or past Port Authority or Port Authority Trans-Hudson Corporation (PATH) contract or contracts has been rated less than satisfactory, the Manager, Purchasing Services Division, may give oral or written notice to the Bidder to furnish information demonstrating to the satisfaction of such Manager that, notwithstanding such rating, such performance was in fact satisfactory or that the circumstances which gave rise to such unsatisfactory rating have changed or will not apply to performance of this Contract, and that such performance will be satisfactory.
- g. The Bidder recognizes that it may be required to demonstrate to the satisfaction of the Port Authority that it in fact can perform the services as called for in this Contract and

that it may be required to substantiate the warranties and representations set forth herein and the statements and assurances it may be required to give.

Neither the giving of any of the aforesaid notices to a Bidder, the submission of materials by a Bidder, any meeting which the Bidder may have with the Port Authority, nor anything stated by the Port Authority in any such meeting shall be construed or alleged to be construed as an acceptance of said Bidder's Bid. Nothing stated in any such meeting shall be deemed to release any Bidder from its offer as contained in the bid documents.

13. Contractor's Integrity Provisions

By submitting a Bid, Bidders shall be deemed to have made the certifications contained in the clauses entitled "Certification of No Investigation (criminal or civil anti-trust), Indictment, Conviction, Debarment, Suspension, Disqualification and Disclosure of Other Information," and "Non-Collusive Bidding, and Code of Ethics Certification, Certification of No Solicitation Based On Commission, Percentage, Brokerage, Contingent or Other Fees" contained within the Standard Terms and Conditions within these bid documents. If the Bidder is unable to make the certifications contained therein the Bidder shall submit a statement with its Bid explaining why any such certification(s) cannot be made. Such a submission shall be submitted in a separate envelope along with your Bid, clearly marked "CERTIFICATION STATEMENT."

14. Facility Inspection

Details regarding the Facility inspection for all parties interested in submitting a bid are stipulated in Part II hereof. All Bidders must present company identification and photo identification for access to the Facility.

15. Available Documents - General

Certain documents, listed in Part II hereof, will be made available for reference and examination by Bidders either at the Facility Inspection, or during regular business hours. Arrangements to review these documents at a time other than the Facility Inspection may be made by contacting the person listed in Part II as the contact for the Facility Inspection.

These documents were not prepared for the purpose of providing information for Bidders upon this Contract but they were prepared for other purposes, such as for other contracts or for design purposes for this or other contracts, and they do not form a part of this Contract. The Port Authority makes no representation or guarantee as to, and shall not be responsible for, their accuracy, completeness or pertinence, and, in addition, shall not be responsible for the inferences or conclusions to be drawn there from.

16. Pre-award Meeting

The lowest qualified Bidder may be called for a pre-award meeting prior to award of the Contract.

17. Price Preference

A price preference may be available for Minority/Women Business Enterprises (M/WBEs) or Small Business Enterprises (SBEs) as set forth in the Standard Contract Terms and Conditions.

18. M/WBE Subcontracting Provisions

The Port Authority has a long-standing practice of making its business opportunities available to Minority Business Enterprises (MBEs) and Women-Owned Businesses (WBEs) and has taken affirmative steps to encourage such firms to seek business opportunities with the Port Authority. The successful Bidder will use good faith efforts to provide for meaningful participation by the Port Authority certified M/WBEs as defined in this document, in the purchasing and subcontracting opportunities associated with this contract, including purchase of equipment, supplies and labor services.

Minority Business Enterprise (MBE) - means a business entity which is at least fifty one percent (51%) owned and controlled by one or more members of one or more minority groups, or, in the case of a publicly held corporation, at least fifty one percent (51%) of the stock of which is owned by one or more minority groups, and whose management and daily business operations are controlled by one or more such individuals who are citizens or permanent resident aliens.

"Minority Group" means any of the following racial or ethnic groups:

- (a) Black persons having origins in any of the Black African racial groups not of Hispanic origin;
- (b) Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American culture or origin, regardless of race;
- (c) Asian and Pacific Islander persons having origins in any of the original peoples of the Far East, Southeast Asia, The Indian Subcontinent, or the Pacific Islands;
- (d) Native American or Alaskan native persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification.

Women-Owned Business Enterprise (WBE) - means a business enterprise which is at least fifty one percent (51%) owned by one or more women, or, in the case of a publicly held corporation, at least fifty one percent (51%) of the stock of which is owned by one or more women and whose management and daily business operations are controlled by one or more women who are citizens or permanent or resident aliens.

Good faith efforts to include participation by M/WBEs shall include, but not be limited to the following:

- 1) Dividing the services and materials to be procured into small portions where feasible;
- 2) Giving reasonable advance notice of specific subcontracting and purchasing opportunities to such firms as may be appropriate;

- 3) Soliciting services and materials from M/WBEs, which are certified by the Port Authority;
- 4) Ensuring that provision is made for timely progress payments to the M/WBEs and;
- 5) Observance of reasonable commercial standards of fair dealing in the respective trade or business.

Bidders are directed to use form PA3749B as the recording mechanism for the M/WBE participation Plan, which may be downloaded at <http://www.panynj.gov/business-opportunities/become-vendor.html>

The M/WBE Plan submitted by the Contractor to the Port Authority shall contain, at a minimum, the following:

- Identification of M/WBE's: Provide the names and addresses of all M/WBEs included in the Plan. If none are identified, describe the process for selecting participant firms in order to achieve the good faith goals under this Contract.
- Level of Participation: Indicate the percentage of M/WBE participation expected to be achieved with the arrangement described in the Plan.
- Scope of Work: Describe the specific scope of work the M/WBE's will perform.
- Previous M/WBE Participation: Describe any previous or current M/WBE participation, which the Bidder has utilized in the performance of its contracts.

All M/WBE subcontractors listed on the M/WBE Participation Plan must be certified by the Port Authority in order for the Contractor to receive credit toward the M/WBE goals set forth in this Contract. Please go to www.panynj.gov/supplierdiversity to search for M/WBEs by a particular commodity or service. The Port Authority makes no representation as to the financial responsibility of such firms or their ability to perform Work under this Contract.

Bidders shall include their M/WBE Participation Plan with their Bids, to be reviewed and approved by the Authority's Office of Business Diversity and Civil Rights (OBDCR).

If the Contractor wishes to subcontract a portion of the Work through a firm not listed in the Directory, but which the Contractor believes should be eligible because it is (1) an M/WBE, as defined above and (2) competent to perform portions of the Work, the Contractor shall submit an M/WBE Uniform Certification Application to the Port Authority of New York and New Jersey, Office of Business Diversity and Civil Rights (OBDCR), 233 Park Avenue South, 4th Floor, New York, NY 10003. The application is available online at www.panynj.gov/supplierdiversity. In addition, to update your certification file and to advise OBDCR of changes to any information, please email these changes to certhelp@panynj.gov. Credit toward applicable goals will be granted only to Port Authority certified vendors. For more information about M/WBE Programs, call (212) 435-7888.

19. Certification of Recycled Materials

Bidders are requested to submit, with their bid, a written certification entitled "Certified Environmentally Preferable Products / Practices" attached hereto as "Attachment I-A",

attesting that the products or items offered by the Bidder contain the minimum percentage of post-consumer recovered material in accordance with the most recent guidelines issued by the United States Environmental Protection Agency (EPA), or, for commodities not so covered, the minimum percentage of post-consumer recovered materials established by other applicable regulatory agencies. The data submitted by the Bidder in Attachment I-A is being solicited for informational purposes only.

Recycling Definitions:

For purposes of this numbered section, the following definitions shall apply:

- a. "Recovered Material" means any waste material or by-product that has been recovered or diverted from solid waste, excluding those materials and by-products generated from, and commonly reused within, an original manufacturing process.
- b. "Post-consumer Material" means any material or finished product that has served its intended use and has been discarded for disposal or recovery having completed its life as a consumer item. "Post-consumer material" is included in the broader category of "Recovered Material".
- c. "Pre-consumer Material" means any material or by-product generated after the manufacture of a product but before the product reaches the consumer, such as damaged or obsolete products. Pre-consumer Material does not include mill and manufacturing trim, scrap, or broken material that is generated at a manufacturing site and commonly reused on-site in the same or another manufacturing process.
- d. "Recycled Product" means a product that contains the highest amount of post-consumer material practicable, or when post-consumer material is impracticable for a specific type of product, contains substantial amounts of Pre-consumer Material.
- e. "Recyclable Product" means the ability of a product and its packaging to be reused, reconditioned for use, or recycled through existing recycling collection programs.
- f. "Waste Reducing Product" means any product that will result in less waste generated due to its use rather than another product designed to serve the same function with an greater waste generation rate. This shall include, but not be limited to, those products that can be reused, refilled or have a longer life expectancy and contain a lesser amount of toxic constituents.

20. City Payroll Tax

Bidders should be aware of the payroll tax imposed by the:

- a. City of Newark, New Jersey for services performed in Newark, New Jersey;
- b. City of New York, New York for services performed in New York, New York; and
- c. City of Yonkers, New York for services performed in Yonkers, New York.

These taxes, if applicable, are the sole responsibility of the Contractor. Bidders should consult their tax advisors as to the effect, if any, of these taxes. The Port Authority provides this notice for informational purposes only and is not responsible for either the imposition or administration of such taxes. The Port Authority exemption set forth in the Paragraph headed “Sales or Compensating Use Taxes”, in the Standard Contract Terms and Conditions included herein, does not apply to these taxes.

21. Additional Bidder Information

Prospective Bidders are advised that additional vendor information, including but not limited to, forms, documents and other information, including protest procedures, may be found on the Port Authority website at: <http://www.panynj.gov/business-opportunities/become-vendor.html>

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PART II - CONTRACT SPECIFIC INFORMATION FOR BIDDERS

The following information may be referred to in other parts hereof, or further detailed in other parts hereof, if applicable.

1. Service(s) Required

Cleaning and disposal of material from sumps, catch basins, manholes, scuppers, drainage pipes, and related appurtenances.

2. Location(s) Services Required

The Lincoln Tunnel; the Bayonne and Goethals Bridges, and the Outerbridge Crossing, collectively known as the Staten Island Bridges (SIB), and surrounding tunnel and bridge areas in NY and NJ, as more fully described in the definition of "Facility" in Part V, (the "Specifications.")

3. Expected Date of Commencement of Contract

On or about October 18, 2015.

4. Contract Type

Unit Price Service Contract.

5. Duration of Contract

Two years, expiring on or about October 17, 2017.

6. Option Period(s)

There shall be up to two (2), one year Option Periods.

7. Price Adjustment during Option Period(s) (Index Based)

Price adjustment during the Option Period(s) shall be pursuant to the clause entitled "Price Adjustment" in Part III hereof.

8. Extension Period

120-day extension applicable.

9. Facility Inspection

For the Staten Island Bridges (SIB):

Date and Time: September 14, 2014 at 10:00 A.M.

All interested parties shall meet at the Goethals Bridge Administration Building, 2777 Goethals Road North, Staten Island, New York 10303. Please contact Carlos Patoir at 718-390-3057 between the hours of 8 a.m. and 3 p.m. or email him at cpatoir@panynj.gov to confirm attendance and/or receive travel directions.

For the Lincoln Tunnel (LT):

Date and Time: September 14, 2014 at 2:00 P.M.

All interested parties shall meet at the Lincoln Tunnel Administration Building, 500 Boulevard East, Weehawken, NJ 07087.

Please contact Don Higgins at 201-617-8436 or at email dhiggins@panynj.gov or Robert Doeg at 201-617-8133 or at email rdoeg@panynj.gov between the hours of 8 a.m. and 3 p.m. to confirm attendance and receive travel directions. Valid photo identification is required for each individual to attend each Facility Inspection.

10. Specific Bidder's Prerequisites

- a. The Bidder shall have had at least three (3) years of continuous experience immediately prior to the date of submission of its Bid in the management and operation of a commercial sewer cleaning business and during that time shall have actually engaged in providing said or such services to commercial or industrial accounts under contract. The Bidder may fulfill this prerequisite if the Bidder can demonstrate to the satisfaction of the Port Authority that the persons or entities owning and controlling the Bidder have had a cumulative total of at least three (3) years of experience immediately prior to the date of the submission of its Bid in the management and operation of a business actually engaged in providing these services to commercial or industrial accounts under contract during that time, or have owned and controlled other entities which have actually engaged in providing the above described services during that time period.
- b. During the time period stated in (a) above, the Bidder, or persons or entities owning and controlling the Bidder, shall have performed or be performing under at least one contract requiring similar services of similar scope to those required under this Contract.
- c. The Bidder shall have a current and valid Solid Waste Transporter License Approval ("A-901 Approval") and a Certificate of Public Convenience and Necessity from the State of New Jersey Department of Environmental Protection (NJDEP).
- d. The Bidder shall have had in its last fiscal year, or in the last complete calendar year immediately preceding the opening of its Bid, a minimum of \$150,000 annual gross income from the type of service required under this Contract.
- e. In the event a bid is submitted by a joint venture the foregoing prerequisites will be considered with respect to such Bid as follows: The prerequisite in subparagraphs (a) and (b) above will be considered satisfied if the joint venture itself, or any of its participants individually, can meet the requirements. The prerequisite in subparagraph (c) above will be considered satisfied if the joint venture performing the Work under this Contract can meet the requirements. The prerequisite in subparagraph (d) above will be considered satisfied if the gross income of the joint venture itself meets the prerequisite or the gross income of the participants in the joint venture cumulatively meets the prerequisite. If a joint venture which has not been established as a distinct legal entity submits a bid, it

and all participants in the joint venture shall be bound jointly and severally and each such participant in the joint venture shall execute the bid and do each act and thing required by this Invitation for Bid. On the original bid and wherever else the Bidder's name would appear, the name of the joint venture Bidder shall appear if the joint venture is a distinct legal entity. If the Bidder is a common law joint venture, the names of all participants shall be listed followed by the words "acting jointly and severally." All joint venture Bidders must provide documentation of their legal status.

Proof that the above prerequisites are met shall be submitted with the Bid.

11. Available Documents

The following documents will be made available for reference and examination at the facility inspection:

Cleaning and Disposal of Materials from Sumps, Catch Basins, Manholes, Scuppers, Drainage Pipes and Related Appurtenances Located at the Lincoln Tunnel and the Staten Island Bridges Located in New York and New Jersey. Contract No. 4600008851; Purchase Order Nos. 4500062808, 4500062812, and 4500062813.

These documents were not prepared for the purpose of providing information for Bidders upon the present Contract but they were prepared for other purposes, such as for other contracts or for design purposes for this or other contracts, and they do not form a part of this Contract. The Port Authority makes no representation or guarantee as to, and shall not be responsible for their accuracy, completeness or pertinence, and, in addition, shall not be responsible for the conclusions to be drawn therefrom. They are made available to the Bidders merely for the purpose of providing them with such information as is in the possession of the Port Authority, whether or not such information may be accurate, complete or pertinent or of any value to the bidders.

12. Contractor Staff Background Screening

The Contractor awarded this contract may be required to have its staff, and any subcontractor's staff working under this Contract, authorize the Authority or its designee to perform background checks. Such authorization shall be in a form acceptable to the Authority. The Contractor (and any subcontractors) may also be required to use an organization designated by the Authority to perform the background checks. The cost for said background checks for staff that pass and are granted a credential shall be reimbursable to the Contractor (and its subcontractors) as an out-of-pocket expense. Costs for staff that are rejected for a credential for any reason are not reimbursable.

As of January 29, 2007, the Secure Worker Access Consortium (S.W.A.C.) is the only Port Authority approved provider to be used to conduct background screening, except as otherwise required by federal law and/or regulation. Information about S.W.A.C., instructions, corporate enrollment, online applications, and location of processing centers can be found at <http://www.secureworker.com>, or S.W.A.C. may be contacted directly at (877)522-7922.

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PART III – CONTRACT SPECIFIC TERMS AND CONDITIONS

1. General Agreement

Subject to all of the terms and conditions of this Contract, the undersigned (hereinafter called the “Contractor”) hereby offers and agrees to provide all the necessary supervision, personnel, equipment, materials and all other things necessary to perform the Work required by this Contract as specified in Part II, and fully set forth in the Part V, (the “Specifications,”) at the location(s) listed in Part II and as more fully set forth in the Specifications, and to do all other things necessary or proper therefor or incidental thereto, all in strict accordance with the provisions of the this Contract and any future changes therein; and the Contractor further agrees to assume and perform all other duties and obligations imposed upon it by this Contract.

In addition, all things not expressly mentioned in the Specifications but involved in the carrying out of their intent and in the complete and proper execution of the matters referred to in and required by this Contract are required by the Specifications, and the Contractor shall perform the same as though they were specifically delineated, described and mentioned therein.

2. Duration

- a) The initial term of this Contract (hereinafter called the “Base Term”) shall commence on or about the date specified in Part II hereof, on the specific date set forth in the Port Authority’s written notice of bid acceptance (hereinafter called the “Commencement Date”), and unless otherwise terminated, revoked or extended in accordance with the provisions hereof, shall expire as specified in Part II hereof (hereinafter called the “Expiration Date”).
- b) If specified as applicable to this Contract and set forth in Part II hereof, the Port Authority shall have the right to extend this Contract for additional period(s), either through an extension or an option (hereinafter collectively referred to as the “Option Period(s)”) following the Expiration Date, upon the same terms and conditions subject only to adjustments of charges, if applicable to this Contract, as may be hereinafter provided in the paragraph entitled “Price Adjustments”. If the Port Authority shall elect to exercise the Option(s) to extend this Contract, then, no later than thirty (30) days prior to the Expiration Date, the Port Authority shall send a notice that it is extending the Base Term of this Contract, and this Contract shall thereupon be extended for the applicable Option Period. If the Contract provides for more than one Option Period, the same procedure shall apply with regard to extending the term of this Contract for succeeding Option Periods.
- c) Unless specified as not applicable to this Contract in Part II hereof, the Port Authority shall have the absolute right to extend the Base Term for an additional period of up to one hundred and twenty (120) days subsequent to the Expiration Date of the Base Term, or the Expiration Date of the final exercised Option Period (hereinafter called the “Extension Period”), subject to the same terms and conditions as the previous contract period. The prices quoted by the Contractor for the previous contract period shall

remain in effect during this Extension Period without adjustment. If it so elects to extend the term of Contract, the Port Authority will advise the Contractor, in writing, that the term is so extended, and will stipulate the length of the extended term, at least thirty (30) days prior to the expiration date of the previous contract period.

3. Payment

Subject to the provisions of this Contract, the Port Authority agrees to pay to the Contractor and the Contractor agrees to accept from the Port Authority as full and complete consideration for the performance of all its obligations under this Contract and as sole compensation for the Work performed by the Contractor hereunder, a compensation calculated from the actual quantities of services performed and the respective prices inserted by the Contractor in the Pricing Sheet(s), forming a part of this Contract, exclusive of compensation under the clause hereof entitled "Extra Work". The manner of submission of all bills for payment to the Contractor by the Port Authority for Services rendered under this Contract shall be subject to the approval of the Manager in all respects, including, but not limited to, format, breakdown of items presented and verifying records. All computations made by the Contractor and all billing and billing procedures shall be done in conformance with the following procedures:

- a) Payment shall be made in accordance with the prices for the applicable service (during the applicable Contract year) as they appear on the Pricing Sheet(s), as the same may be adjusted from time to time as specified herein, minus any deductions for services not performed and/or any liquidated damages to which the invoice may be subject and/or any adjustments as may be required pursuant to increases and decreases in areas or frequencies, if applicable. All Work must be completed within the time frames specified, or as designated by the Manager.
- b) The Contractor shall submit to the Manager by the fifth day of each month following the month of commencement of this Contract and on or by the fifth day of each month thereafter (including the month following the termination, revocation or expiration of this Contract) a complete and correct invoice for the Work performed during the preceding month accompanied by such information as may be required by the Manager for verification. The invoice must show the Contractor's Federal Tax Identification Number. Payment will be made within thirty (30) days of Port Authority verification of the invoice.
- c) No certificate, payment, acceptance of any Work or any other act or omission of any representative of the Port Authority shall operate to (1) release the Contractor from any obligation under or upon this Contract, or to (2) estop the Port Authority from showing at any time that such certificate, payment, acceptance, act or omission was incorrect or to (3) preclude the Port Authority from recovering any monies (a) paid in excess of those lawfully due or (b) to which the Port Authority may be entitled on account of and any damage sustained by the Port Authority.
- d) In the event an audit of received invoices should indicate that the correct sum due the Contractor for the relevant billing period is less than the amount actually paid by the Port Authority, the Contractor shall pay to the Port Authority the difference promptly upon receipt of the Port Authority's statement thereof. The Port Authority may, however, in

its discretion elect to deduct said sum or sums from any subsequent monthly payments payable to the Contractor hereunder.

“Final Payment”, as the term is used throughout this Contract, means the final payment made for services rendered in the last month of the Base Term or any extended term. However should this Contract be terminated for any reason prior to the last month of the Base Term or any extended term, then Final Payment shall be the payment made for services rendered in the month during which such termination becomes effective. The Contractor’s acceptance of Final Payment shall act as a full and complete release to the Port Authority of all claims of and of all liability to the Contractor for all things done or furnished in connection with this Contract and for every act and neglect of the Port Authority and others relating to or arising out of this Contract, including claims arising out of breach of contract and claims based on claims of third persons. No payment, however, final or otherwise shall operate to release the Contractor from any obligations in connection with this Contract.

4. Price Adjustment

All Contract prices submitted by the Contractor and agreed to by The Port Authority, shall be applicable to the two (2) years of the Base Term. For the Option Period(s) that are applicable to this Contract and are exercised hereunder, (excluding the 120 day Extension Period as described in the paragraph entitled “Duration/Escalation” or “Duration” in Part III, hereof) The Port Authority shall adjust the compensation due to the Contractor utilizing the Consumer Price Index for all Urban Consumers; Series Id: CUURA101SA0L2; Not Seasonally Adjusted; New York-Northern New Jersey-Long Island, NY-NJ-CT-PA area; all items less shelter; 1982-1984=100, published by the Bureau of Labor Statistics of the United States Department of Labor (hereinafter called the “Price Index”).

For the first one-year Option Period of the Contract, the Price Index shall be determined for the months of April 2016 and April 2017. The amounts payable to the Contractor in the final year of the Base Term shall be multiplied by a fraction the numerator of which is the Price Index for April 2017 and the denominator of which is the Price Index for April 2016. The resulting product shall be the amounts payable to the Contractor in the first one-year Option Period.

For the second one-year Option Period of the Contract, the Price Index shall be determined for the months of April 2017 and April 2018 The amounts payable to the Contractor in the first Option Period shall be multiplied by a fraction the numerator of which is the Price Index for April 2018 and the denominator of which is the Price Index for April 2017. The resulting product shall be the amounts payable to the Contractor in the second one-year Option Period.

5. Liquidated Damages

- a) The Contractor’s obligations for the performance and completion of the Work within the time or times provided for in this Contract are of the essence of this Contract. In the event that the Contractor fails to satisfactorily perform all or any part of the Work

required hereunder in accordance with the requirements set forth in the Specifications (as the same may be modified in accordance with provisions set forth elsewhere herein) then, inasmuch as the damage and loss to the Port Authority for such failure to perform includes items of loss whose amount will be incapable or very difficult of accurate estimation, the damages for such failure to perform shall be liquidated as follows:

i. Failure to Perform All or Any of the Work in the Specification

If not specified below and in the event that during any designated time period the Contractor fails to perform all or any part of the services as specified in this Contract as the same may, as hereinafter provided, be revised, satisfactorily or at the times required or at the frequencies set forth herein, the total amount payable by the Port Authority to the Contractor shall be reduced by one hundred dollars (\$100) per hour for each hour, or part thereof, the Contractor fails to satisfactorily perform all or any item of the Work.

ii. Failure to Respond to an Emergency

If the Contractor fails to respond to an emergency within the response time provided in the Specifications, then the amount payable to the Contractor under this Contract shall be reduced by two hundred dollars (\$200) per hour for each hour, or part thereof, past the response time that the Contractor fails to provide the required Service.

iii. Failure to Provide Required or Requested Information

If for any reason, the Contractor fails to maintain or provide or have available when required or requested by the Port Authority or fails to submit any required documentation, reports or records as stipulated in the Specifications, the amount payable by the Port Authority to the Contractor hereunder shall be reduced by an amount equal to twenty-five dollars (\$25) for each day or any part thereof, such information is past due.

iv. Failure to Provide Insurance Certificate

If the Contractor fails to provide the Manager with the approved certificates of insurance no less than fifteen (15) days prior to the expiration of each policy as required hereunder, then the amount payable hereunder shall be reduced by one hundred dollars (\$100) for each day or any part thereof, such certificates are past due.

v. Failure to wear uniform/ID

If the Contractor's employee(s) fail(s) to comply with the uniform and identification (ID) badge requirements as set forth in the Specifications, then the amount payable hereunder shall be reduced by an amount equal to twenty-five dollars (\$25) per violation, for each day or any part thereof, that the Contractor's employees fail to comply with the uniform and/or identification requirements.

vi. Communication Devices/Cellular Telephones

If the Contractor fails to provide a communication device, and/or cellular telephone to its Lead Worker, or if the communication device, and/or cellular telephone is/are not in good working order as stipulated in the Specifications, the amount payable to the Contractor shall be reduced by fifty dollars (\$50) per day or any part thereof, per incident per Lead Worker.

vii. Lead Worker Response Time

If the Lead Worker fails to respond to any notice from the Manager as set forth in the Specifications within five (5) minutes, the amount payable to the Contractor shall be reduced by twenty-five dollars (\$25) per each five minutes or portion thereof that the Lead Worker fails to respond.

- b) The Manager shall determine whether the Contractor has performed in a satisfactory manner and their determination shall be final, binding and conclusive upon the Contractor.
- c) Failure of the Manager or the Port Authority to impose liquidated damages shall not be deemed Port Authority acceptance of unsatisfactory performance or a failure to perform on the part of the Contractor or a waiver of its remedies hereunder.

6. Insurance

The Contractor shall take out, maintain, and pay the premiums on Commercial General Liability Insurance, including but not limited to premises-operations, products-completed operations, and independent contractors coverage, with contractual liability language covering the obligations assumed by the Contractor under this Contract and, if vehicles are to be used to carry out the performance of this Contract, then the Contractor shall also take out, maintain, and pay the premiums on Automobile Liability Insurance covering owned, non-owned, and hired autos in the following minimum limits:

Commercial General Liability Insurance - \$ 2 million combined single limit per occurrence for bodily injury and property damage liability.

Automobile Liability Insurance - \$ 2 million combined single limit per accident for bodily injury and property damage liability.

In addition, the liability policy (ies) shall name “The Port Authority of New York and New Jersey and its related entities, their commissioners, directors, officers, partners, employees and agents as additional insureds”, including but not limited to premise-operations, products-completed operations on the Commercial General Liability Policy. Moreover, the Commercial General Liability Policy shall not contain any provisions for exclusions from liability other than provisions for exclusion from liability forming part of the most up to date ISO form or its equivalent unendorsed Commercial General Liability Policy. The liability policy (ies) and certificate of insurance shall contain separation of insured condition and severability of interests clause for all policies so that coverage will respond as if separate

policies were in force for each insured. An act or omission of one of the insureds shall not reduce or void coverage to the other insureds. Any and all excess and umbrella policies shall 'follow form' by conforming to the underlying policies. Furthermore, the Contractor's insurance shall be primary insurance as respects to the above additional insureds. Any insurance or self-insurance maintained by the above additional insureds shall not contribute to any loss or claim.

These insurance requirements shall be in effect for the duration of the contract to include any maintenance/warranty/guarantee period.

The certificate of insurance and liability policy (ies) must contain the following endorsement for the above liability coverages:

“The insurer(s) shall not, without obtaining the express advance written permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the Tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority, or the provisions of any statutes respecting suits against the Port Authority.”

The Contractor shall also take out, maintain, and pay premiums on Workers' Compensation Insurance in accordance with the requirements of law in the state(s) where work will take place, and Employer's Liability Insurance with limits of not less than \$1 million each accident.

Each policy above shall contain an endorsement that the policy may not be canceled, terminated, or modified without thirty (30) days' prior written notice to the Port Authority of NY and NJ, Att: Facility Contract Administrator, at the location where the work will take place and to the General Manager, Risk Financing.

The Port Authority may at any time during the term of this agreement change or modify the limits and coverages of insurance. Should the modification or change results in an additional premium, The General Manager, Risk Financing for the Port Authority may consider such cost as an out-of-pocket expense.

Within five (5) days after the award of this agreement or contract and prior to the start of work, the Contractor must submit an original certificate of insurance, to the Port Authority of NY and NJ, Facility Contract Administrator, at the location where the work will take place. This certificate of insurance MUST show evidence of the above insurance policy (ies), including but not limited to the cancellation notice endorsement and stating the agreement/contract number prior to the start of work. The General Manager, Risk Financing must approve the certificate(s) of insurance before any work can begin. Upon request by the Port Authority, the Contractor shall furnish to the General Manager, Risk Financing, a certified copy of each policy, including the premiums.

If at any time the above liability insurance should be canceled, terminated, or modified so that the insurance is not in effect as above required, then, if the Manager shall so direct, the Contractor shall suspend performance of the contract at the premises. If the contract is so suspended, no extension of time shall be due on account thereof. If the contract is not suspended (whether or not because of omission of the Manager to order suspension), then the Authority may, at its option, obtain insurance affording coverage equal to the above required, the cost of such insurance to be payable by the Contractor to the Port Authority.

Renewal certificates of insurance or policies shall be delivered to the Facility Contractor Administrator, Port Authority at least fifteen (15) days prior to the expiration date of each expiring policy. The General Manager, Risk Financing must approve the renewal certificate(s) of insurance before work can resume on the facility. If at any time any of the certificates or policies shall become unsatisfactory to the Port Authority, the Contractor shall promptly obtain a new and satisfactory certificate and policy.

The requirements for insurance procured by the Contractor shall not in any way be construed as a limitation on the nature or extent of the contractual obligations assumed by the Contractor under this contract. The insurance requirements are not a representation by the Authority as to the adequacy of the insurance to protect the Contractor against the obligations imposed on them by law or by this or any other Contract. **CITS #4789**

7. Increase and Decrease in Areas or Frequencies

The Manager shall have the right, at any time and from time to time in their sole discretion, to increase or decrease the frequencies of all or any part of the services required hereunder and/or to add areas not described herein in the Specifications or to remove areas or parts of areas which are hereunder so described. In the event the Manager decides to change any frequencies or areas such change shall be by written notice given to the Contractor not less than seventy-two (72) hours prior to the effective date of said changes, said changes to be effective upon the date specified in said notice.

In the event of an increase or decrease in areas or frequencies, the Contractor's compensation will be adjusted to reflect such change in areas or frequencies utilizing the applicable Unit Price for such services (for the applicable Contract year) as set forth on the Pricing Sheet(s).

Where no specific Unit Price has been quoted for the type of services to be increased or decreased, the Manager shall have the right to negotiate the compensation to reflect such change, whether an increase or decrease in areas or frequencies, which, in the opinion of the Manager, are necessary to complete the work, by multiplying the increased or decreased amount by the negotiated rate.

In the event of a decrease, the Contractor shall not be entitled to compensation for Work not performed.

No such change in areas or frequency will be implemented which results in a total increase or decrease in compensation that is greater than fifty percent (50%) of the Total Estimated

Contract Price for the Base Term or, if changes are to be implemented during an Option Period, fifty percent (50%) for that Option Period.

Any increases in frequencies or areas shall not constitute Extra Work and, as such, shall not be limited by the Extra Work provisions of this Contract.

8. Extra Work

The Contractor is required to provide separate materials, supplies, equipment and personnel for Extra Work when such is deemed necessary by the Manager. "Extra Work" as used herein shall be defined as work which differs from that expressly or impliedly required by the Specifications in their present form. Total Extra Work performed by the Contractor shall not exceed six percent (6%) of the Total Estimated Contract Price of this Contract for the entire Term of this Contract including extensions thereof, or six percent (6%) of the Total Estimated Contract Price of each Section if this Contract is awarded by separate Sections.

An increase in area or frequency does not constitute Extra Work, but shall be compensable based on the prices in the Pricing Sheet(s) and the paragraph herein titled "Increase or Decrease in Areas or Frequencies".

- a) The rental for equipment, whether owned by the Contractor or Subcontractors or rented from others and notwithstanding the actual price of any rental or actual costs associated with such equipment, shall be as determined and computed by the Manager on the basis of the following:
 1. Hourly rental for those items of equipment listed in the "Rental Rate Blue Book" (published by Dataquest, a company of The Dun and Bradstreet Corporation, 1290 Ridder Park Drive, San Jose, California 95131-2398), (hereinafter called "The Blue Book") shall be 100% of the applicable rates as listed in said book, reduced to an hourly basis (see formula below). The edition of this publication to be used shall be the one in effect on the date of the actual rental of the equipment. The "Estimated Operating Cost per Hour" as set forth for such item of equipment in the Blue Book shall be added to the hourly rental for each hour that such equipment is actually engaged in performing Extra Work. No amount for operating cost will be allowed during periods when such equipment is not actually engaged in performing Extra Work (i.e. standby rental time). None of the provisions of the Blue Book shall be deemed referred to or included in this Contract except as specifically set forth in this Section.
 2. If no listing of rental rate and/or hourly operating cost for the item of equipment is in the Blue Book, the Manager shall determine the reasonable rate of rental and/or hourly operating cost of the particular item of equipment by such other means as he/she finds appropriate.
- b) When utilizing the rental rates appearing in the Blue Book, the Manager shall determine the applicable rate and the hourly rental determined therefrom by applying the following criteria:

1. The rate to be applied for an item of equipment used on a particular Extra Work order shall be the daily, weekly or monthly rates from the foregoing publication based on the total number of work days or portions thereof that a particular item of equipment or substitute item of equipment is at the Site of the Work for use by the Contractor or Subcontractors whether under this Contract or any other contract with the Authority. Included within this period will be (i) work days of idleness of the equipment at the Site of the Work whether such idleness results from acts or omissions of the Contractor, the Authority or third persons, breakdowns in the equipment or any other cause, (ii) work days on which the equipment is removed from the Site of the Work solely to enable the performance of repairs thereon, and (iii) work days intervening between the removal of equipment from the Site of the Work for repairs and the delivery to the Site of the Work of the same or substitute equipment. The number of work days in the period for each rate shall be as indicated below:

Three work days or less - daily rate

More than three work days but not more than fifteen work days - weekly rate

More than fifteen work days - monthly rate

The pro rata portion which one (1) hour bears to the applicable rate shall be determined in accordance with the following formula:

Hourly rate based on daily rental from Blue Book 1/8 of daily rental

Hourly rate based on weekly rental from Blue Book 1/40 of weekly rental

Hourly rate based on monthly rental from Blue Book 1/176 of monthly rental

2. The rental rate shall be multiplied by the applicable regional adjustment factor shown for such item of equipment in the Blue Book. The adjustment factor shall not apply to the hourly operating cost.
3. If the Manager should determine that the nature or size of the equipment used by the Contractor in connection with Extra Work is larger or more elaborate, as the case may be, than the size or nature of the minimum equipment determined by the Manager to be suitable for the Extra Work, the reasonable rental will not be based upon the equipment used by the Contractor but will be based on the smallest or least elaborate equipment determined by the Manager to have been suitable for the performance of the Extra Work.

- c) In addition to amounts determined as provided in subparagraphs a) and b) above, there will be added to the rental as computed above the reasonable cost of transporting such equipment to and from the Site of the Work. Notwithstanding the number of hours during which such equipment is utilized, the minimum rental therefore will be for a period of eight (8) hours.

In computing the compensation insofar as it is based upon Extra Work, and notwithstanding any provision to the contrary appearing in the Blue Book, no consideration shall be given to any items of cost or expense not expressly set forth above, it being expressly agreed that the costs and percentage additions hereinbefore provided cover items of cost and expense to the Contractor of any type whatsoever, including administration, overhead, taxes (other than those enumerated above), cleanup, consumables including gas and oil, drafting (including printing or other reproduction), coordination, field measurements, maintenance, repairs, insurance, profit to the Contractor and small tools.

The Manager shall have authority to agree in writing with the Contractor upon lump sum or other compensation for the Extra Work in lieu of the compensation for which provision has been made above.

Invoices for compensation due for Extra Work shall be submitted to the Manager upon acceptance by the Manager of the Work of each authorized Extra Work item. Within thirty (30) days after the Manager certifies the correctness of such invoices, the Authority will pay to the Contractor by check, the amounts so certified. No certificates or payment shall, at any time, preclude the Authority from showing that such certification or payment was incorrect or from recovering any money paid in excess of that due hereunder.

The Contractor is required to perform Extra Work pursuant to a written order of the Manager expressly recognizing such work as Extra Work. If Lump Sum or Unit Price compensation cannot be agreed upon by the parties in writing prior to the start of Work, the Contractor shall perform such Extra Work and the Contractor's compensation shall be increased by the sum of the following amounts and such amounts only: (1) the actual net cost, in money, of the labor, and material, required for such Extra Work; (2) ten percent (10%) of the amount under (1) above; (3) such rental as the Manager deems reasonable for plant and equipment (other than small tools) required for such Extra Work; (4) if the Extra Work is performed by a subcontractor, an additional five percent (5%) of the sum of the amounts under (1) through (3) above.

As used in this numbered clause (and in this clause only):

“Labor” means laborers, mechanics, and other employees below the rank of supervisor, directly employed at the Site of the Work subject to the Manager or their designee's authority to determine what employees of any category are “required for Extra Work” and as to the portion of their time allotted to Extra Work; and “cost of labor” means the wages actually paid to and received by such employees plus a proper proportion of (a) vacation allowances and union dues and assessments which the employer actually pays pursuant to contractual

obligation upon the basis of such wages, and (b) taxes actually paid by the employer pursuant to law upon the basis of such wages and workers' compensation premiums paid pursuant to law. "Employees" as used above means only the employees of one employer.

"Net Cost" means the Contractor's actual cost after deducting all permitted cash and trade discounts, rebates, allowances, credits, sales taxes, commissions, and refunds (whether or not any or all of the same shall have been taken by the Contractor) of all parts and materials purchased by the Contractor solely for the use in performing its obligation hereunder provided, where such purchase has received the prior written approval of the Manager as required herein. The Contractor shall promptly furnish to the Manager such bills of sale and other instruments as the Manager may require, executed, acknowledged and delivered, assuring to the Manager title to such materials, supplies, equipment, parts, and tools free of encumbrances.

"Materials" means temporarily-installed and consumable materials as well as permanently-installed materials; and "cost of materials" means the price (including taxes actually paid by the Contractor pursuant to law upon the basis of such materials) for which such materials are sold for cash by the manufacturers or producers thereof, or by regular dealers therein, whether or not such materials are purchased directly from the manufacturer, producer or dealer (or if the Contractor is the manufacturer or producer thereof, the reasonable cost to the Contractor of the manufacture and production), plus the reasonable cost of delivering such materials to the Site of the Work in the event that the price paid to the manufacturer, producer or dealer does not include delivery and in case of temporarily-installed materials, less their salvage value, if any.

The Manager shall have the authority to decide all questions in connection with Extra Work. The exercise by the Manager of the powers and authorities vested in him/her by this section shall be binding and final upon the Port Authority and the Contractor.

The Contractor shall submit all reports, records and receipts as are requested by the Manager so as to enable him/her to ascertain the time expended in the performance of the Extra Work, the quantity of labor and materials used therein and the cost of said labor and materials to the Contractor.

The provisions of this Contract relating generally to Work and its performance shall apply without exception to any Extra Work required and to the performance thereof. Moreover, the provisions of the Specifications relating generally to the Work and its performance shall also apply to any Extra Work required and to the performance thereof, except to the extent that a written order in connection with any particular item of Extra Work may expressly provide otherwise.

If the Contractor deems work to be Extra Work, the Contractor shall give written notice to the Manager within twenty-four (24) hours of performing the work that it so considers as Extra Work, and failure of the Contractor to provide said notice shall constitute a waiver of any claim to an increase in compensation for such work and a conclusive and binding determination that it is not Extra Work.

The Contractor shall supply the amount of materials, supplies, equipment and personnel required by the Manager within seventy-two (72) hours following the receipt of written or verbal notice from the Manager, or in the case of an emergency as determined by the Manager, within four (4) hours following the receipt by the Contractor of the Manager's written or oral notification. Where oral notification is provided hereunder, the Manager will thereafter confirm the same in writing.

All Extra Work shall be billed to the Port Authority on a separate invoice on a monthly basis.

PART IV – SIGNATURE SHEET, NAME AND RESIDENCE OF PRINCIPALS SHEET AND PRICING SHEET(S), TABLE OF CONTENTS

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PART IV – SIGNATURE SHEET, NAME AND RESIDENCE OF PRINCIPALS SHEET AND PRICING SHEET(S)

1. SIGNATURE SHEET

OFFER: The undersigned offers and agrees to furnish to the Port Authority of New York and New Jersey the services and/or materials in compliance with all terms, conditions, specifications and addenda of the Contract. Signature also certifies understanding and compliance with the certification requirements of the standard terms and conditions as contained in the Standard Contract Terms and Conditions. This offer shall be irrevocable for one hundred twenty (120) days after the date on which the Port Authority opens this bid.

ONLY THE COMPANY NAMED AS THE BIDDING ENTITY BELOW WILL RECEIVE PAYMENT. THIS MUST BE THE SAME NAMED COMPANY AS INDICATED ON THE COVER SHEET

Bidding Entity _____
Bidder's Address _____
City, State, Zip _____
Telephone No. _____ FAX _____
Email _____ EIN# _____

SIGNATURE _____ Date _____
Print Name and Title _____

ACKNOWLEDGEMENT:

STATE OF: _____
COUNTY OF: _____

On this ___ day of _____, 20____, personally came before me _____, who, duly sworn by me, did depose that (s)he has knowledge of the matters herein stated, that they are in all respects true and that (s)he has been authorized to execute the foregoing offer and statement of irrevocability on behalf of said corporation, partnership or firm.

Notary Public

NOTE: If a joint venture is bidding, duplicate this Signature Sheet and have each party to the joint venture sign separately and affix to the back of this Signature Sheet.

Bidder attention is called to the certification requirements contained in the Standard Contract Terms and Conditions, Part III. Indicate by checking the box below if a signed, explanatory statement in connection with this section is attached hereto.

If certified by the Port Authority as an SBE or MWBE: _____ (indicate which one and date).

2. NAME AND RESIDENCE OF PRINCIPALS SHEET

Names and Residence of Principals of Bidder. If general or limited partner, or individual, so indicate.

NAME	TITLE	ADDRESS OF RESIDENCE (Do not give business address)
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3. PRICING SHEET(S)

Entry of Prices

- a. The prices quoted shall be written in figures, in ink (preferably in black ink), where required in the spaces provided on the Pricing Sheet(s) attached hereto and made a part hereof. Prices must be quoted in United States Dollars. All figures inserted will be interpreted as being quoted in United States Dollars.
- b. All Bidders are asked to ensure that all charges quoted for similar operations in the Contract are consistent.
- c. Prices must be submitted for each Item required on the Pricing Sheet(s). Bidders are advised that the Items on the Pricing Sheet(s) correspond to the required services set forth in the Specifications hereunder.
- d. Bidders must insert all figures as required and verify all computations for accuracy. The Port Authority in its sole judgment reserves the right to: (1) reject Bids without checking them for mathematical errors or omissions, (2) reject Bids that contain or appear to contain errors or omissions, and (3) supply corrections to Bids that contain or appear to contain mathematical errors and omissions, and in this case the Port Authority reserves the right to recompute the Estimated Contract Price based upon the Unit Prices inserted by the Bidder, which amount shall govern in all cases.
- e. In the event that a Bidder quotes an amount in the Estimated column but omits to quote a Unit Price for that amount in the space provided, the Port Authority reserves the right to compute and insert the appropriate Unit Price.
- f. The Total Estimated Contract Price is solely for the purpose of facilitating the comparisons of Bids. Compensation shall be in accordance with the section of this Contract entitled "Payment."
- g. The Total Estimated Contract Price shall be obtained by adding the Estimated Annual Contract Price for each location for the first year of the Contract to the Estimated Annual Contract Price for each location for each subsequent year.
- h. The unit prices inserted by the Bidder shall include the cost of all labor, materials, equipment and all things necessary to complete the work, including the removal and lawful disposal of all debris.

**CONTRACTOR'S PRICING SHEET
EXHIBIT A
LINCOLN TUNNEL CLEANING SERVICES
(FIRST YEAR)**

TUNNEL SUMPS

	(A)	(B)	(C)	(D)
Designation Location	No. of Units	Unit Price	Estimated Frequency Per Year	Estimated Total (A) x (B) x (C) = (D)
NJ Plaza Pump Room	1	\$ _____	1	\$ _____(1)
NJ Vent Building, Center and North Tunnel	1	\$ _____	1	\$ _____(2)
NJ Vent Building South	1	\$ _____	1	\$ _____(3)
North Tunnel Mid-River	1	\$ _____	1	\$ _____(4)
Center Tunnel Mid-River	1	\$ _____	1	\$ _____(5)
South Tunnel Mid-River	1	\$ _____	1	\$ _____(6)
NY Vent Building South	1	\$ _____	1	\$ _____(7)
NY River Building, Center Tunnel	1	\$ _____	1	\$ _____(8)
NY River Building, North Tunnel	1	\$ _____	1	\$ _____(9)
NY Land Building, Center Tunnel	1	\$ _____	1	\$ _____(10)
Galvin Plaza	1	\$ _____	1	\$ _____(11)
Dyer Plaza, Center Tunnel Roadway	1	\$ _____	1	\$ _____(12)
39 th Street, NY Expressway	1	\$ _____	1	\$ _____(13)
36 th Street, NY Expressway	1	\$ _____	1	\$ _____(14)
33 rd Street, NY Expressway	1	\$ _____	1	\$ _____(15)

LINCOLN TUNNEL CATCH BASINS, MANHOLES, SCUPPERS AND DRAINAGE PIPES

	(A)	(B)	(C)	(D)
Designation Location	No. of Units	Unit Price	Estimated Frequency Per Year	Estimated Total (A) x (B) x (C) = (D)
Catch Basins and Manholes	275	\$_____/EA.	1	\$_____(16)
Roadway Scuppers	15	\$_____/EA.	1	\$_____(17)
Drainage Pipes 8 inches or less in diameter	2,000 Linear Feet	\$_____/L.F.	1	\$_____(18)
Drainage Pipes 12 inches to 18 inches in diameter	1,250 Linear Feet	\$_____/L.F.	1	\$_____(19)

EMERGENCY SERVICES

(A)	(B)	(C)
Number of Hours	Unit Price per Hour	Estimated Total (A) x (B) = (C)
24	\$_____	\$_____(20)

TOTAL ESTIMATED ANNUAL CONTRACT PRICE FOR LINCOLN TUNNEL CLEANING AND EMERGENCY SERVICES FOR THE FIRST YEAR (Sum of (1) through (20) above)

\$_____

**CONTRACTOR'S PRICING SHEET
EXHIBIT A
LINCOLN TUNNEL CLEANING SERVICES
(SECOND YEAR)**

TUNNEL SUMPS

	(A)	(B)	(C)	(D)
Designation Location	No. of Units	Unit Price	Estimated Frequency Per Year	Estimated Total (A) x (B) x (C) = (D)
NJ Plaza Pump Room	1	\$ _____	1	\$ _____(1)
NJ Vent Building, Center and North Tunnel	1	\$ _____	1	\$ _____(2)
NJ Vent Building South	1	\$ _____	1	\$ _____(3)
North Tunnel Mid River	1	\$ _____	1	\$ _____(4)
Center Tunnel Mid River	1	\$ _____	1	\$ _____(5)
South Tunnel Mid River	1	\$ _____	1	\$ _____(6)
NY Vent Building South	1	\$ _____	1	\$ _____(7)
NY River Building, Center Tunnel	1	\$ _____	1	\$ _____(8)
NY River Building, North Tunnel	1	\$ _____	1	\$ _____(9)
NY Land Building, Center Tunnel	1	\$ _____	1	\$ _____(10)
Galvin Plaza	1	\$ _____	1	\$ _____(11)
Dyer Plaza, Center Tunnel Roadway	1	\$ _____	1	\$ _____(12)
39 th Street, NY Expressway	1	\$ _____	1	\$ _____(13)
36 th Street, NY Expressway	1	\$ _____	1	\$ _____(14)
33 rd Street, NY Expressway	1	\$ _____	1	\$ _____(15)

LINCOLN TUNNEL CATCH BASINS, MANHOLES, SCUPPERS AND DRAINAGE PIPES

	(A)	(B)	(C)	(D)
Designation Location	No. of Units	Unit Price	Estimated Frequency Per Year	Estimated Total (A) x (B) x (C) = (D)
Catch Basins and Manholes	275	\$_____/EA.	1	\$_____(16)
Roadway Scuppers	15	\$_____/EA.	1	\$_____(17)
Drainage Pipes 8 inches or less in diameter	2,000 Linear Feet	\$_____/L.F.	1	\$_____(18)
Drainage Pipes 12 inches to 18 inches in diameter	1,250 Linear Feet	\$_____/L.F.	1	\$_____(19)

EMERGENCY SERVICES

(A)	(B)	(C)
Number of Hours	Unit Price per Hour	Estimated Total (A) x (B) = (C)
24	\$_____	\$_____(20)

TOTAL ESTIMATED ANNUAL CONTRACT PRICE FOR LINCOLN TUNNEL CLEANING AND EMERGENCY SERVICES FOR THE SECOND YEAR (Sum of (1) through (20) above)

\$_____

**CONTRACTOR'S PRICING SHEET
EXHIBIT B
STATEN ISLAND BRIDGES CLEANING SERVICES
(FIRST YEAR)**

CATCH BASINS AND SCUPPERS

	(A)	(B)	(C)	(D)
Designation Location	No. of Units	Daytime Unit Price*	Estimated Frequency Per Year	Estimated Total (A) x (B) x (C) = (D)
Goethals Bridge & Outerbridge Crossing Catch Basins and Scuppers	80	\$/EA.	1	\$(1)

	(A)	(B)	(C)	(D)
Designation Location	No. of Units	Nighttime Unit Price*	Estimated Frequency Per Year	Estimated Total (A) x (B) x (C) = (D)
Bayonne Bridge Catch Basins and Scuppers	64	\$/EA.	1	\$(2)
Goethals Bridge & Outerbridge Crossing Catch Basins and Scuppers	10	\$/EA.	1	\$(3)

DRAINAGE PIPES

	(A)	(B)	(C)	(D)
Designation Location	No. of Units	Unit Price	Estimated Frequency Per Year	Estimated Total (A) x (B) x (C) = (D)
Drainage Pipes 8 inches or less in diameter	2,000. Linear Feet	\$/L.F.	1	\$(4)
Drainage Pipes 12 inches to 18 inches in diameter	1,250 Linear Feet	\$/L.F.	1	\$(5)

EMERGENCY SERVICES

(A)	(B)	(C)
Number of Hours	Unit Price per Hour	Estimated Total (A) x (B) = (C)
16	\$ _____	\$ _____ (6)

**TOTAL ESTIMATED ANNUAL CONTRACT
PRICE FOR SIB CATCH BASIN CLEANING AND
EMERGENCY SERVICES FOR THE FIRST YEAR
(Sum of (1) through (6) above)**

\$ _____

*See Part V, "Specifications", Section 4, "Hours of Work", for daytime and nighttime hours of work.

**CONTRACTOR'S PRICING SHEET
EXHIBIT B
STATEN ISLAND BRIDGES CLEANING SERVICES
(SECOND YEAR)**

CATCH BASINS AND SCUPPERS

	(A)	(B)	(C)	(D)
Designation Location	# of Units	Daytime Unit Price*	Estimated Frequency Per Year	Estimated Total (A) x (B) x (C) = (D)
Goethals Bridge & Outerbridge Crossing Catch Basins and Scuppers	80	\$ _____/EA.	1	\$ _____(1)

	(A)	(B)	(C)	(D)
Designation Location	No. of Units	Nighttime Unit Price*	Estimated Frequency Per Year	Estimated Total (A) x (B) x (C) = (D)
Bayonne Bridge Catch Basins and Scuppers	64	\$ _____/EA.	1	\$ _____(2)
Goethals Bridge & Outerbridge Crossing Catch Basins and Scuppers	10	\$ _____/EA.	1	\$ _____(3)

DRAINAGE PIPES

	(A)	(B)	(C)	(D)
Designation Location	No. of Units	Unit Price	Estimated Frequency Per Year	Estimated Total (A) x (B) x (C) = (D)
Drainage Pipes 8 inches or less in diameter	2,000 Linear Feet	\$ _____/L.F.	1	\$ _____(4)
Drainage Pipes 12 inches to 18 inches in diameter	1,250 Linear Feet	\$ _____/L.F.	1	\$ _____(5)

EMERGENCY SERVICES

(A)	(B)	(C)
Number of Hours	Unit Price per Hour	Estimated Total (A) x (B) = (C)
16	\$_____	\$_____ (6)

**TOTAL ESTIMATED ANNUAL CONTRACT
PRICE FOR SIB CATCH BASIN CLEANING AND
EMERGENCY SERVICES FOR THE SECOND YEAR
(Sum of (1) through (6) above)**

\$_____

*See Part V, "Specifications", Section 4, Hours of Work", for daytime and nighttime hours of work.

**CONTRACTOR'S PRICING SHEET
EXHIBIT C
PRICING SUMMARY SHEET**

(1) **TOTAL ESTIMATED ANNUAL CONTRACT PRICE FOR THE FIRST YEAR OF LINCOLN TUNNEL CLEANING AND EMERGENCY SERVICES**
(Exhibit A) \$ _____

(2) **TOTAL ESTIMATED ANNUAL CONTRACT PRICE FOR THE SECOND YEAR OF LINCOLN TUNNEL CLEANING AND EMERGENCY SERVICES**
(Exhibit A) \$ _____

(3) **TOTAL ESTIMATED ANNUAL CONTRACT PRICE FOR THE FIRST YEAR OF STATEN ISLAND BRIDGES CLEANING AND EMERGENCY SERVICES**
(Exhibit B) \$ _____

(4) **TOTAL ESTIMATED ANNUAL CONTRACT PRICE FOR THE SECOND YEAR OF STATEN ISLAND BRIDGES CLEANING AND EMERGENCY SERVICES**
(Exhibit B) \$ _____

TOTAL ESTIMATED TWO (2) YEAR CONTRACT PRICE FOR THE LINCOLN TUNNEL AND STATEN ISLAND BRIDGES CLEANING AND EMERGENCY SERVICES
(Sum of (1) through (4) above) \$ _____

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PART V – SPECIFICATIONS

1. Specific Definitions

To avoid undue repetition, the following terms, as used in this Contract, shall be construed as follows:

- a. “Facilities” or “Facility” shall mean (1) the Lincoln Tunnel (LT) including the north, south, and center tubes in New York (NY) and New Jersey (NJ); NJ helixes; and (2) the Bayonne and Goethals Bridges, and the Outerbridge Crossing, collectively known as the Staten Island Bridges (SIB).

The following provides further detail for each Facility:

Lincoln Tunnel:

North, Center, and South Tubes, NJ Helix Inbound Roadway, NJ Helix Outbound Roadway, New York Streets, Dyer Avenue – North of 40th Street, Dyer Avenue – South of Dyer Plaza.

Staten Island Bridges:

The Bayonne and Goethals Bridge and Outerbridge Crossing, including parking lots, ramps, toll plazas, administration building and garage areas, in NY and NJ (Eastbound and Westbound).

- b. The term “Roadway” means any roadway surface and adjoining paved areas, including painted and unpainted shoulder areas, gore areas in front of and behind guardrails, curbs, curb ledges in front of and behind guardrails, and sidewalk/safety-walk surfaces adjacent to or otherwise associated with the roadway.
- c. The term “Gore” or “Gore Area” means any of the roughly triangular paved or graveled areas formed at the vertex of two (2) Roadways/ramps located at the Facilities.
- d. The term "Clean" means to wash a System or Structure to ensure that all refuse, dirt, waste materials, litter and trash has been removed in accordance with “Attachment A, “Cleaning Storm Drainage Systems” and “Attachment B, Handling and Disposal of Solid Waste Material from Cleaning of Storm Drainage Systems” attached hereto, and these Specifications.
- e. “Systems” or “Structures” mean manholes, catch basins, tunnel sumps, drainage pipes, scuppers, and other related appurtenances at the Facilities.
- f. “Contractor” means the bidder who is awarded this Contract and who accepts all the terms and conditions in all the parts herein.
- g. “Contractor’s Personnel” means individuals employed by the Contractor to perform Work under this Contract who have formal training and extensive on-the-job

experience in the type of services required herein, and who have achieved the competence required to operate equipment and/or machinery and vehicles necessary to perform the Work specified herein.

- h. "Emergency Service(s)" means services requested to be provided by the Contractor within four (4) hours of the Manager's notification to the Contractor and which shall be made available by the Contractor twenty-four (24) hours per day, seven (7) days per week, including Holidays.
- i. "Overtime Working Hours" or "Overtime Hours" mean hours other than Regular/Normal Working Hours and that are in excess of eight (8) hours, but not Premium Overtime Working Hours.
- j. "Premium Overtime Working Hours" mean hours in excess of eight (8) hours on Saturday, all day Sunday and Holidays.
- k. "Notice" means a written notice.
- l. Reference to Work or its performance, "directed," "required," "permitted," "ordered," "designated," "prescribed," and words of similar import shall mean directed, required, permitted, ordered, designated, or prescribed by the Manager; and "approved", "acceptable," "satisfactory," and words of similar import shall mean approved by or acceptable or satisfactory to the Manager; and "necessary," "reasonable," "proper," "correct," and words of similar import shall mean necessary, reasonable, proper, or correct in the judgment of the Manager.
- m. "Manager" means the Manager of the Facility, acting personally or through his/her duly authorized representative acting within the scope of the authority vested in him or her.

2. Work Required by the Specifications

- a. These Specifications relate generally to the performance of the cleaning of manholes, catch basins, tunnel sumps, drainage pipes between catch basins and/or manholes, scuppers, and other drainage-system components and the removal and disposal of resulting waste material at the Lincoln Tunnel and at the Staten Island Bridges, including plazas and roadways, as further described herein.
- b. The Contractor shall Clean all Systems at the Lincoln Tunnel and the Staten Island Bridges at least once annually, as determined by the Manager. All Structures shall be Cleaned in such a manner as determined by the Manager.
- c. Work shall be performed in accordance with these Specifications and "Attachment A" through "Attachment I", attached hereto and incorporated as part of this Contract. Prior to commencement of Work, the Contractor shall submit to the Manager all permits/licenses required to perform the Work under this Contract.
- d. The Contractor shall maintain a readily available supply of replacement casting covers and gratings to replace any that are broken or found broken during the course of Work. This supply shall include all types and sizes of covers and gratings in use at

the Site of the Work. Any casting covers or gratings broken as a result of improper/abusive procedures or accidents by the Contractor, as determined by the Manager(s), shall be replaced by the Contractor at no additional cost to the Authority. Any casting covers or gratings found broken or damaged prior to the start of Work, as determined by the Manager(s), will be compensated in accordance with the provisions of the section entitled "Extra Work" on a Unit Price basis. The covers and gratings shall be replaced no later than seven (7) days after notification from the Manager(s).

- e. In all instances, the Contractor shall dispatch a sufficient number of personnel, vehicles and equipment to any and all locations as required to ensure satisfactory completion of all Work at the required frequencies.
- f. All Work, including the removal of all waste materials, shall be performed in accordance with applicable local, state and federal regulations, laws, ordinances, and requirements of this Contract.
- g. The Contractor shall complete the cleaning of all the Facilities' catch basins at least annually, and/or as directed by the Manager. In addition, the Contractor shall complete the cleaning of all the Facilities' catch basins located in New Jersey by the first week of October for each year following the first year of the Contract.
- h. No payment will be made for Work that, in the opinion of the Manager, is necessitated by the Contractor's improper or incomplete performance of the Work that is to be performed hereunder. Work necessitated by the Contractor's improper or incomplete performance shall be performed within twenty-four (24) hours of the Manager's request and/or as determined by the Manager. All Work shall be performed as determined by the Facility Manager(s).

3. Conditions and Precautions

- a. Notwithstanding lane availability specified in Section 4. "Hours of Work" herein, during the time the Contractor is performing the Work, it may at times be necessary, because of emergency or abnormal traffic conditions, to suspend the Contractor's operations or to postpone the time at which a lane or lanes become available for performance of Work. Should the Contractor be specifically directed to suspend operations in a lane specified herein, or should a lane or lanes not be available by the times specified herein and, if solely because of such suspension of operations or late availability of lane or lanes, the Contractor is kept idle at the Site of the Work, the Contractor will be compensated as stipulated in the provisions of the Contract in Part V, Section 18 entitled "Compensation For Emergency Delays."
- b. No vehicles of the Contractor, the Contractor's Personnel, Subcontractor(s), or others over whom the Contractor has control will be permitted to park in or on Authority property, except for vehicles required for Maintenance of Traffic and Work Area Protection, which will be permitted to park in the Site of the Work during the times when the Work is being performed.

- c. The Contractor shall provide sound-suppression devices on gasoline and diesel powered equipment and pneumatic tools as required to maintain noise exposures below the limits as mandated by the United States Department of Labor, Occupational Safety and Health Administration's (OSHA) Construction Standard, codified as 29 CFR 1926. The Contractor shall maintain such sound suppression devices in proper operating condition throughout the time of their use, and shall adjust and repair as required to maintain noise within exposure stipulated in 29 CFR 1926.52, Table D-2.
- d. Lane closures shall be kept to a minimum, as required, for only equipment and personnel to perform Work as directed by the Manager.

4. Hours of Work

The following time and lane restrictions are applicable to the Work to be performed at the Facilities. The Manager will designate to the Contractor the specified work periods during which the Contractor will be permitted to work, based on the availability of the area.

Lincoln Tunnel Regular/Normal Working Hours

North, Center, and South Tubes:

Monday through Friday 12:01 a.m. to 5:00 a.m.

New Jersey Streets:

NJ Helix Inbound Roadway – Work may be performed on one curb at a time during the following hours:

Monday through Friday 12:01 a.m. to 5:00 a.m.

New Jersey Helix Outbound Roadway – Work may be performed on one curb at a time during the following hours:

Monday through Friday 12:01 a.m. to 5:00 a.m.

New York Streets:

Dyer Avenue – North of 40th Street – Work may be performed only on any two adjacent lanes at a time during the following hours:

Monday through Friday 12:01 a.m. to 5:00 a.m.

Dyer Avenue – South of Dyer Plaza – Work may be performed on any two (2) adjacent lanes at a time during the following hours:

Monday through Friday 12:01 a.m. to 5:00 a.m.

Staten Island Bridges Regular/Normal Working Hours

Bayonne Bridge:

Sunday through Thursday 10:30 p.m. to 6:30 a.m. (Nighttime)

Goethals Bridge:

Monday through Friday 6:30 a.m. to 3:00 p.m. (Daytime)

Sunday through Thursday 10:30 p.m. to 6:30 a.m. (Nighttime)

Outerbridge Crossing:

Monday through Friday 6:30 a.m. to 3:00 p.m. (Daytime)

Sunday through Thursday 10:30 p.m. to 6:30 a.m. (Nighttime)

5. Emergency Service

- a. The Contractor shall furnish Emergency Service, within four (4) hours of notice from the Manager, unless otherwise directed by the Manager, and the Contractor shall indicate the specific time of response upon arrival at the Site of the Work.
- b. These four (4) hours begin to toll upon the Manager's good-faith implementation of the response plan provided by the Contractor in accordance with this section, even if direct contact with the Contractor is not actually made. If the Contractor fails to furnish Emergency Service within four (4) hours after the request, Liquidated Damages will be imposed in accordance with Part III of this Contract.
- c. Prior to commencement of Work, the Contractor shall provide the Manager with a response plan listing alternate telephone numbers of key personnel in order of priority, as well as a telephone number at which the Manager can reach the Contractor twenty-four (24) hours a day, seven (7) days a week to call for Emergency Service and for Regular Service to ensure definite contact and response when Emergency Service is needed. The Contractor shall notify the Manager immediately both verbally and in writing of any changes to these telephone numbers.
- d. The Contractor's compensation for Emergency Service shall be at the Unit Prices inserted by the Contractor for such services in the Part IV Pricing Sheets, "Emergency Services."

6. Confined Space Work at Lincoln Tunnel

The Contractor shall perform work within any of the Lincoln Tunnel sump rooms that are classified as Permit-Required Confined Spaces (PRCS) in accordance with "Attachment C, "Operating & Maintenance Standard Nos. 61 & 62: "Work Performed in Confined Spaces & "Testing Confined Space Atmospheres." Prior to commencement of any Confined Space Work, the Contractor shall perform the following.

- a. Develop and submit to the Facility Managers for approval a Confined Space Entry Program that addresses the potential hazards (i.e. lack of oxygen, presence of combustible gas, presence of carbon monoxide, presence of hydrogen sulfide, and depth of waste water and sludge greater than four and a half (4.5) feet anticipated in the sump rooms, whether existing or created during the performance of the Work. The program shall include the following:
 - i. The Contractor's procedures for preparation, issuance, use and cancellation of Confined Space Entry Permit(s) (CSEP) for the Work, including a blank copy

of the CSEP. The Contractor shall have its own CSEP, which shall be utilized along with Port Authority Form 3745C, "Confined Space Entry Permit Form," attached hereto as "Attachment F". The Contractor's CSEP shall at a minimum be in accordance with OSHA 29 CFR 1910.146. The Contractor shall complete Port Authority Form 3745C and submit it along with the Contractor's CSEP to the appropriate Facility Manager twenty-four (24) hours prior to commencing Work in the PRCS. Any licensing costs shall be borne by the Contractor.

- ii. Procedures for notifying the Manager of any hazards that may be encountered or created during the Work, including but not limited to physical, chemical, electrical and biological hazards.
- iii. Entry procedures to be used for staged entry operations and to prevent unauthorized entry. The procedures shall also describe measures used to eliminate or control the hazards identified in the Contractor's CSEP, before entry and during entry of the PRCS, including level of personal protection, mechanical ventilation equipment, lockout/tag-out procedures and the use of explosion-proof equipment and tools.
- iv. Air monitoring to be performed prior to PRCS entry and during Work in the PRCS, including specific equipment to be used, its maintenance and calibration procedures and schedules. At minimum, air monitoring must include oxygen, hydrogen sulfide, carbon monoxide, combustible gas levels and any other hazard identified in the Contractor's CSEP.
- v. Identification of all workers, their respective roles and responsibilities, including entry Lead Worker, attendants and entrants for this PRCS Work. Certification that all such workers have been appropriately trained for confined space entry in accordance with OSHA 29 CFR 1910.146.
- vi. Communication procedures between entrants inside the PRCS and between attendants and entrants, including evacuation signals.
- vii. Emergency and re-entry procedures which shall include, but not be limited to, procedures for evacuation of the PRCS, emergency notification requirements, emergency telephone numbers, procedures, rescue equipment, identification of and route to the nearest medical facility.
- viii. Identification of the specific equipment and materials to be used during performance of the Work. This equipment shall include, but shall not be limited to, air monitoring equipment (i.e. RKI Eagle Series gas detection equipment, RKI calibration equipment and replacement sensors or equivalent), mechanical ventilation equipment (intrinsically safe forced air ventilation equipment), personal protective equipment, rescue equipment (i.e. Miller's 7 foot tripod, work winch, full body harness or equivalent). The

Contractor shall submit catalog cuts of all equipment to be used for PRCS Work to the Manager prior to commencement of such Work.

7. Contractor's Personnel

- a. The Contractor (and any approved Subcontractor) shall furnish competent and adequately trained personnel to perform the Work required under this Contract. The Services under this Contract shall be performed by personnel qualified to work on all Systems in the States of New York and New Jersey.
- b. The Contractor's Personnel shall comply with all directives issued in the interest of public safety when so notified by the Manager. The Contractor's Personnel shall immediately comply with all directives issued by the Authority's Police officers and/or Managers. Failure to comply with authorized directives shall entitle the Authority to require the removal of Contractor's personnel who have failed to comply with the directive.
- c. All of the Contractor's Personnel performing Work under this Contract shall have the ability to communicate in the English language to the extent necessary to comprehend directions given by either the Contractor's supervisory staff or by the Manager's staff. No employee will be permitted to work under this Contract without approval of the Manager and/or the Authority.
- d. If, in the opinion of the Manager, any of the Contractor's Personnel so assigned is performing his/her functions unsatisfactorily, the Contractor shall take all steps necessary to ensure that the Contract is performed in full accordance with the requirements hereof. Further, if in the determination of the Manager, any such employee has taken any action which constitutes a conflict of interest or which is inconsistent with the highest level of honesty, ethical conduct or public trust or which the Manager determines is adverse to the public interest or to the best interest of the Port Authority, the Contractor shall remove any such personnel within twenty-four (24) hours, upon notice from the Port Authority.

8. Lead Worker

- a. The Contractor shall assign a Lead Worker who shall be present at the Site of the Work during Regular Working Hours and at such other times as the Manager may require. The Lead Worker so assigned shall serve as the Contractor's representative at the Site of the Work and shall have day-to-day responsibility for ensuring that all Work required hereunder is performed in the manner and at the times specified. The Contractor's Lead Worker shall also be available to the Manager at such times as the Manager may require to discuss any matters pertaining to this Contract, to review and/or inspect Work being performed hereunder and to receive such instructions, directives or information as the Manager may wish to transmit. In addition to performing the Work, the Lead Worker shall perform inspection and oversight of the Contractor's Personnel performing the Work required hereunder.
- b. Prior to commencement of Work under this Contract, the Contractor shall submit

Lead Worker resume(s) to the Manager. The Manager shall have the right to approve or reject any Lead Worker proposed by the Contractor for assignment hereunder.

- c. All Lead Workers assigned hereunder shall have at least two (2) years prior experience in the performance of functions similar to those to which they are being assigned, and the Contractor shall provide the Manager with such proof of prior experience, including references, as the Manager may request. Notwithstanding the above, if any individual demonstrates exceptional ability, the Manager may waive the requirement of two (2) years prior experience with respect to such individual.
- d. The Contractor shall provide primary-residence telephone numbers and alternate phone numbers to the Manager for the Contractor's Lead Worker(s) for use in emergency notifications. The Contractor shall notify the Manager immediately verbally and in writing of any changes to the telephone numbers.
- e. The cost for all Lead Workers shall be borne by the Contractor as an included cost and shall not be separately billable hereunder. If during the course of this Contract a Lead Worker leaves and/or is replaced and his/her position is filled by someone unfamiliar with the operations, then it will be the Contractor's responsibility to acclimate this individual as to his/her duties during his/her tour schedule. The period spent familiarizing this individual with the Facility and duties shall be considered non-compensable hours by the Port Authority.

9. Service Maintenance Form

The Contractor's Lead Worker shall report to the Manager at the start and completion of each service routine, and the Lead Worker shall keep the Manager informed of the Work performed by completing a "Service Maintenance Form," attached hereto as "Attachment E," which shall include, in addition to any pertinent data, the times of arrival and departure, materials replaced, a checklist indicating the specific components which were inspected and/or Cleaned, and the service employees' names. A completed copy of the Contractor's "Service Maintenance Form" shall be attached to and submitted with each of the Contractor's monthly invoices for the associated period. Prior to the institution of its use, any changes made by the Contractor to the "Service Maintenance Form" shall be submitted to the Manager for approval.

10. Personnel Uniforms and Badges

- a. The Contractor shall provide distinctive uniforms and picture identification (ID) badges bearing the employee's name to each employee performing the Work required herein. Uniforms and badges shall be subject to the prior and continuing approval of the Manager, and shall be worn by all employees in a conspicuous and clearly visible position at all times during which such Work is being performed. Employees without proper ID shall not be permitted to work.
- b. Uniforms and ID badges shall be subject to the Manager's approval prior to the start of the Contract, and shall be worn at all times while working at the Facility. There will be

no grace period for any employee to obtain the uniform. The Contractor agrees that its employees will present a neat, clean and orderly appearance at all times, and that he/she will supply his/her employees with sufficient uniforms to comply with said requirements. The Contractor shall also ensure that his/her employees wear safety shoes, reflectorized safety vests, hard hats, goggles, dust masks, gloves and/or rain gear appropriate for the tasks performed. Personal clothing shall not be worn in any manner that will cover any part of the ID badge.

- c. The Manager shall have the right to require removal of any employee who fails to wear the proper uniform, safety gear and/or ID badge and the exercise of this right shall not limit the obligation of the Contractor to perform the Work or to furnish any required number of employees at a specific location at the Site of the Work as specified.

11. Transportation and Vehicles

- a. The Contractor shall provide for the legal (i.e. per the New York State Department of Motor Vehicles and/or the New Jersey Motor Vehicle Commission) transportation of its personnel, materials and equipment to the various Sites of Work at the Facility.
- b. All Contractor's vehicles operated at the Facility in connection with this Contract shall be maintained in good and safe operating condition and permanently labeled on both sides of the vehicle(s) with the Contractor's name, address and telephone number in contrasting lettering having a minimum dimension of 3" high with 0.5" thick lines. Magnetic signs are not acceptable.
- c. The Authority will not: 1) furnish free Facility-use parking passes, or 2) ensure on-site parking for the Contractor in connection with this Contract. Parking will be provided at the Facility at no cost to the Contractor only as available at the time. All vehicles must be properly placarded with vehicle security identification when parked or driven in non-public areas of any Facility.
- d. All of the Contractor vehicles used for all Work performed under this Contract will be required to pay the appropriate tolls for each passage or crossing of Authority Facilities.
- e. The Contractor shall comply with Authority rules, regulations, and such procedures as are now in force and such reasonable future rules, regulations, and procedures as may hereafter be adopted by the Authority for safe operation of motor vehicles at the Facility.

12. Trash Removal / Dumpsters

The Port Authority will provide dumpsters, which shall be situated at locations at the Site of the Work, for disposal of litter and trash removed in connection with clean-up operations only. No solid waste material arising from or associated with the cleaning of the Systems shall be disposed of in the dumpsters provided by the Authority. No garbage, debris or waste material shall be flushed, swept, dumped into any drainage

system or associated waterways or thrown on any area within or surrounding the Site of the Work, nor shall it be burned or buried.

After each day of performing the required service(s), the Contractor shall clean up all refuse, rubbish, scrap materials and debris from the storm drainage system and shall dispose of all resulting waste material in accordance with "Attachment A, "Cleaning Storm Drainage Systems" and "Attachment B, "Handling and Disposal of Solid Waste Material from Cleaning of Storm Drainage Systems" so that the risk of injury or damage therefrom shall be eliminated and so that the Site of the Work shall at all times present a neat and orderly appearance. Before final inspection of the Work by the Manager, the Contractor shall remove all surplus material and debris of every nature resulting from the Work performed.

13. Hazardous Waste

The Contractor shall notify the Manager immediately of hazardous materials and/or medical waste/hypodermic needles discovered during the performance of the Work. Arrangements for the cleanup and handling of hazardous materials and medical waste/hypodermic needles will be handled by the Port Authority.

14. Safety Program and Provisions

- a. Within thirty (30) days after award of this Contract, the Contractor shall submit to the Manager for review and approval the Contractor's Safety Program which shall comply with all applicable federal, state, municipal and local regulations pertaining to employee safety (I.e. Worker And Community Right to Know Act) and which shall include, among other things, the designation by the Contractor of a qualified individual who shall administer such Safety Programs. A twenty-four (24) hour contact number for this individual shall be provided to the Manager. In addition, the Contractor shall, prior to the commencement of Work, submit to the Manager for his/her approval a Health and Safety Plan specific to the Work to be performed
- b. The Contractor shall comply with all Port Authority rules, regulations and procedures, whether currently in effect or promulgated subsequent to the date of this Contract, which pertain in any way to the use, operation or parking of vehicles at the Site of the Work, including, but not limited to, those pertaining to the safety, inspection, identification and licensing of such vehicles.
- c. The Contractor shall obtain and display at the place of Work one copy of the Safety Data Sheet (SDS) conforming to the requirements of Federal Hazard Communication Standards (29 CFR 1910.1200(g)) for each chemical utilized for work on this Contract.
- d. The Contractor shall restrict smoking to areas designated by the Manager for this purpose. It shall be the responsibility of the Contractor to ensure that all employees of the Contractor (and any Subcontractor) shall comply with the provisions of this paragraph.

15. Accidents and First Aid Provisions

The Contractor shall have adequate first aid supplies as necessary to provide first aid service in accordance with the Standard Contract Terms and Conditions, Part II, Section 18, "General Obligations" Sub-Paragraph h., in case of accident to anyone who may be injured during the performance of the Work.

If any claim is made by third persons against the Contractor on account of any accident, the Contractor shall promptly report the facts in writing to the Manager, giving full details of the claim.

16. Materials, Supplies and Equipment

- a. Only equipment, materials and supplies approved in advance by the Manager shall be used by the Contractor in performing the Work required hereunder in accordance with the Standard Contract Terms and Conditions, Part II, Section 29, "Approval of Materials, Supplies and Equipment," and all such equipment, materials and supplies shall be used in accordance with their manufacturer's instructions. The supplies that are currently approved for use are set forth in the "Port Authority Approved Products List-Environmental Protection Supplies" which will be available in the office of the Manager.
- b. Materials and supplies to be provided by the Contractor hereunder shall include plastic bags, personal dust masks and any other items that the Contractor deems necessary or desirable to enable or facilitate the required cleaning.
- c. Equipment provided by the Contractor hereunder shall be maintained in good operating condition by the Contractor. In addition, the Contractor shall supply all traffic-control devices and equipment as necessary to implement the traffic control configurations as specified in Section 19 herein entitled "Maintenance of Traffic and Work Area Protection". The Contractor shall provide and maintain for the duration of the Contract its own cell phone devices for communication amongst its own personnel and for instant communication with Lincoln Tunnel and Staten Island Bridges personnel. The Contractor's on-site personnel shall carry/wear the communication devices at all times while at the Site of the Work.
- d. The Contractor shall furnish and subsequently maintain the necessary quantities as required by the Manager of spare materials and equipment (including but not limited to cones and signs) at the Site of the Work, if space is available, or at another nearby location as approved by the Manager.

17. Scheduling of Work

- a. Working in conjunction with the Manager, the Contractor shall develop routes to cover efficiently all areas requiring Cleaning of the Structures while avoiding traffic-congested areas wherever and whenever possible. The Contractor's performance shall not cause a disruption to traffic or other operations. Facility staff routinely closes major roadway/lane sections at night for other maintenance or construction purposes. The Contractor is permitted to work in such closed Roadway/lane sections if it can be done

without interfering with others performing work in the area. The Manager may determine that Work may be performed during the day during off-peak times.

- b. Roadway/Lane closures change from time-to-time, and are not predictable far in advance, nor is there any assurance by the Port Authority that there will be any particular such closures in the future.
- c. The Manager has the unconditional right to prohibit the cleaning of Structures during a given time of day and/or day of week. Such prohibitions will not limit the Contractor's responsibility to meet the frequencies of cleaning the Structures included herein, to the extent that the Contractor is given earlier or later access to the subject area(s).
- d. Due to operational emergencies such as roadway/lane closures or unusual congestion, the Manager may require the Contractor to postpone work at a particular location as more fully described in Section 3, "Conditions and Precautions". The Manager reserves the right to change or rotate the work schedule on an as-needed basis to reflect changing job situations.
- e. The Contractor shall, during the term of this Contract, create and submit to the Manager a written schedule of Work (generated using a Microsoft software program compatible with that used at the Facilities) which schedules for each approximate three (3)-month period of the Contract the Work to be accomplished during said approximate three (3)-month period. This schedule shall include the dates and times of day when such Work will be done, the number of personnel to be assigned to each shift, and such other information as the Port Authority may require. This schedule shall be subject to the continuing approval of the Manager.

The Contractor shall submit the first such schedule (covering the first three (3) months of this Contract) at least ten (10) days prior to the commencement of this Contract and shall submit schedules for each subsequent three (3)-month period. The Contractor shall also submit promptly to the Manager a written report of any changes in the aforesaid scheduling it contemplates making during the course of any three (3)-month period, but no changes shall be made without the prior approval of the Manager.

The Contractor shall procure and maintain at its own expense a computer and software program for use in creating this schedule of Work.

- f. The Contractor shall, within twenty-four (24) hours, comply with any oral or written request(s) given by the Manager to correct/remedy a condition or situation. The Contractor shall submit to the Manager on the first day of each calendar month during the term of this Contract a written report setting forth the actions taken by the Contractor with respect to any matters which the Manager may have requested the Contractor to correct or remedy during the preceding month.
- g. The Contractor hereby further agrees to furnish to the Port Authority any other written reports as requested in connection with its operations hereunder as the Port Authority may deem necessary or desirable in connection with the Port Authority's responsibility as the operator of the Facilities.

18. Compensation for Emergency Delays

- a. If the Contractor is specifically directed by the Manager to suspend or postpone

his/her operations as stipulated in Section 3, "Conditions and Precautions" herein, the Contractor's compensation shall be adjusted by an amount equal to the salaries and wages in amounts approved by the Manager which the employer is required to pay and actually pays to such employees for the period or periods of such idleness, plus a proper proportion of (a) taxes actually paid by the employer pursuant to law upon the basis of such salaries and wages, and (b) vacation allowances and union dues and assessments which the employer actually pays pursuant to contractual obligations upon the basis of such salaries and wages, and in addition thereto such rental as the Manager deems reasonable for such equipment during the period or periods of such idleness.

- b. In the event that the Contractor deems that any payment should be made pursuant to this numbered clause, he/she shall give prompt written notice to the Manager stating the reasons why he/she believes such payments should be made and shall moreover, furnish to the Manager at the end of the workday, a memorandum showing the name, payroll title, salary rate and employer of each of his employees, and description, owner and claimed rental rate for each item of equipment claimed to have been kept idle. Said notice must be given at the time of occurrence so that the Manager can verify idle labor and equipment on site. Accordingly, notwithstanding any other provisions hereof, the failure of the Contractor to furnish such notice and memorandum shall constitute a conclusive binding determination on his part that he/she is not entitled to compensation as provided herein and shall constitute a waiver by the Contractor of all claims for such compensation. Compensation for emergency delays will be made under "Extra Work."

19. Maintenance of Traffic and Work Area Protection

Elements for work area protection and traffic maintenance shall be put in place by the Contractor sufficiently ahead of commencement of Work and be removed upon completion of the cleaning activities. The Contractor shall conform to the requirements of the Port Authority Operating & Maintenance Standards 20, "Roadway Work Area Protection" and 37, "Tunnel Roadway Work Area Protection" attached hereto as "Attachment D", and to the following.

A. Definitions

As used in this numbered Section, and this Section only, the terms used herein shall have the following meaning:

1. The terms "Traffic Lane", and "Lane", "Active Roadway", "Street", and "Roadway" mean, in addition to the normally traveled pavement areas, other areas including but not limited to ramp terminal gore areas, roadway shoulders, and all other areas that may foreseeably be occupied by moving vehicles.
2. The term "Gore" or "Gore area" means any of the roughly triangular paved or graveled areas formed at the vertex of two (2) Roadways/ramps at the Facilities.

3. “Flashing Arrow Sign Unit” (FASU) means an engine/generator-, solar-, or battery-powered flashing light sign with lights displayed in the shape of an arrow.
4. “Variable Message Sign Unit” (VMSU) means an engine/generator-, solar-, or battery-powered variable text sign using a matrix composed of elements such as fluorescent flip-disc, fiber optic, light-emitting diode (LED), or incandescent bulb element.
5. “Nighttime Hours” means the local time period between one-half hour after sunset to one-half hour before sunrise.
6. “Slow Moving Vehicle” means vehicles or equipment that travel at or under a speed corresponding to 15 miles per hour less than the regulatory speed limit.
7. “Work Area” means the area immediately surrounding the Work in progress, typically where workers are afoot, and/or the space within a Roadway where the Contractor is doing Work on the Roadway.

B. General Requirements

The Contractor shall conform to requirements of this numbered Section and the following. All publications listed in this section are to be obtained at the Contractor’s expense.

1. Applicable portions of the latest editions, including all amendments thereto, of the Federal Highway Administration (FHWA): “Manual on Uniform Traffic Control Devices” (MUTCD) Part VI as hereinafter specified and applicable portions of the companion “Traffic Control Device Handbook” (TCDH); “Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects”; and “Standard Color Tolerance Charts”.
2. American Association of State Highway and Transportation Officials (AASHTO): “Roadside Design Guide”, Chapter 9: “Safety Appurtenances for Work Zones”; and “Standard Specifications for Highway Bridges.”
3. The requirements of the Americans with Disabilities Act (ADA) in all respects as specified in the ADA’s Accessibility Guidelines for Buildings and Facilities (ADAAG).
4. American Traffic Safety Service Association’s (ATSSA) Guidelines for the Use of Portable Changeable Message Signs.
5. Maintenance of Traffic and Work Area Protection equipment included herein are to be furnished by the Contractor.

6. In the event of a technical conflict between a requirement in the publications referenced herein and the Contract documents, the requirements of the Contract documents shall take precedence, unless otherwise directed by the Manager.
7. There may be more than one Work Area within the confines of a closed Roadway or Traffic Lane. Each Work Area shall be individually protected as specified herein.

C. General Work Area Protection

1. The Contractor shall establish a Traffic Maintenance Crew, properly trained, supplied, staffed and equipped to deploy and remove the Maintenance of Traffic and Work Area Protection elements required for each of the Contractor's activities in applicable areas as per Paragraph 3 in this Section. The Contractor shall identify and maintain one individual, per work shift, as the central or key contact for the Traffic Maintenance Crew and their associated activities.
2. The Contractor's Traffic Maintenance training shall be specifically developed from this section. The contents of the Contractor's training programs shall specifically include the Authority's Operating and Maintenance Standards.
3. Prior to commencement of each day's Work, the Contractor shall furnish and install, and shall periodically inspect, maintain, relocate, replace, cover, remove, or reconstruct, the traffic control delineations, guiding devices, signals, signs, and pedestrian protection, barricades and barriers, if any, as required throughout the progress of cleaning operations. The Contractor shall maintain safe control of traffic flow and shall demarcate areas of Work at all times.
4. The Contractor shall not park vehicles other than vehicles required for cleaning operations within the demarcated protected areas of Work.
5. The Contractor shall promptly remove traffic control delineations, guiding devices, signals, signs, pedestrian protection, barricades, and barriers whenever operations under this Contract no longer require Work Area Protection.
6. All existing traffic guides that conflict with markings and traffic guides to be installed shall be concurrently removed prior to placement of new traffic guides.
7. Prior to the end of each work shift, the Contractor's Traffic Maintenance Crew shall remove all elements of the Maintenance of Traffic and Work Area protection installations.
8. Throughout progress of Work, the Contractor shall do the following:
 - a) Maintain visual and physical accessibility to fire hydrants. Provide twenty-four (24) hour advance notice to the Manager in the event of hydrant

obstruction.

- b) Conduct Work Area protection operations so that Traffic Lane ingress and egress to intersecting Roadways, adjacent structures or property, and bus and taxi stops, if any, can be maintained, and obtain the approval of the Manager and provide twenty-four (24) hour advance notice to the Manager in the event that Work Area protection operations obstruct access to such areas.

In the case of an Emergency Service, such advance notice of obstructed access to areas such as hydrants, ingresses/egresses to Roadways, etc. shall be as determined by the Manager.

D. Placement and Removal of Temporary Signs and Traffic Control Devices

1. The Contractor shall locate signs or other traffic delineations and guiding devices in a manner that does not obstruct or interfere with motorists' view of approaching, merging or intersecting traffic, obstruct other permanent signs or route markers, or mislead or misdirect the motorist.
2. The Contractor shall not place traffic control signs under an overpass or elevated building, or within overpass or building shadow areas, unless so directed by the Manager.
3. On Roadways passing below an overpass or elevated building, the Contractor shall not begin or end traffic cones or other delineation and guiding devices less than one hundred (100) feet from such overpass or building. The Contractor shall extend delineation and guiding devices as required to comply with this requirement.
4. Unless otherwise directed by the Manager, the Work of installing and removing temporary signs and traffic control devices shall be protected, as a minimum, in accord with O&M Standards 20 and 37. (See "Attachment D").
5. Slow Moving Vehicles traveling on a Roadway outside of demarcated protected Work Areas shall have the same flashing hazard signal lights and sealed beam rotating yellow warning light as required for back-up trucks or shall be followed (approximately fifty (50) feet behind) by a vehicle displaying the same flashing hazard signal lights and sealed beam rotating yellow warning light as required for back-up trucks.

20. Contractor-Furnished Materials and Equipment

- a. The Contractor shall provide and maintain in good working order all materials, equipment and supplies required for proper Maintenance of Traffic and Work Area Protection, as specified herein. All such items shall be new or undamaged previously used items or materials in serviceable condition conforming to requirements specified herein. All said items and materials shall remain the property of the Contractor.

- b. The Contractor shall provide and maintain in serviceable condition the following as shown on the attached "Attachment D", or as directed by the Manager.
- 1) Portable changeable message signs: Trailer mounted flashing arrow sign unit (FASU) or variable message sign unit (VSMU).
 - 2) Traffic Cones.
 - 3) Traffic Guide Posts.
 - 4) Plastic Delineator Drums.
 - 5) Type III Barricades.
 - 6) Temporary Signs: Conform to requirements of Specifications Section 02850, "Plywood Sign Panels and Wood Sign Posts", attached hereto as "Attachment H", and/or Specification Section 02851 "Aluminum Sign Panels and Aluminum Sign Posts", attached hereto as "Attachment I". Plywood signs shall be Type 1 unless otherwise specified by the Manager.
 - 7) Temporary sign supports: Wood conforming to requirements of Specification Section 02850 ("Attachment H").
 - 8) Portable sign supports: "Windmaster" as manufactured by MDI Worldwide, Farmington Hills, MI or Port Authority-approved equal.
 - 9) Portable Impact Attenuator, Structural Type: "G-R-E-A-T System" as manufactured by Energy Absorption Systems, Inc., Chicago, IL; or Port Authority-approved equal.
 - 10) Warning Lights: the Contractor shall provide the units listed below, which shall conform to the requirements of Part VI of the United States Department of Transportation - Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD). To certify conformance, prior to commencement of Work the Contractor shall provide catalog cuts and/or independent testing laboratory reports to the Manager for approval. This documentation shall also be made available upon request from the Manager.
 - Nighttime: Type A Low Intensity Flashing Warning lights using 12-volt circuit and lamp units with vandal resistant off/on switch and mounting hardware, photocell, and new bulbs and batteries.
 - Daylight and Nighttime: High Type B Intensity High Intensity Flashing lights with vandal resistant off/on switch and mounting hardware, and new bulbs and batteries. Type B Flashing Light battery cases shall be set on the ground/pavement and equipped with a neatly routed electrical cord to the detachable, remote mounted light head.
 - Nighttime: Type C Low Intensity Steady-Burn lights with vandal resistant off/on switch mounting hardware, photocell, and new bulbs and batteries.
 - 11) Truck-mounted Impact Attenuator / Back-up Trucks: Minimum actual weight of 15,000 lbs. with nominal 24,000 lbs. gross vehicle weight registration and rear-most wheels situated close to rear of truck body. Actual vehicle weight may vary

depending on the recommendations of the manufacturer of the vehicle-mounted impact attenuator selected. In addition, truck(s) must be equipped with:

- a. Standard 4 lamp flashing hazard signal lights (parking and tail lights);
- b. Four (4) lamps sealed beam rotating yellow warning light providing 35,000-candle power per lamp with an apparent flash rate of 120 flashes per minute. Truck mount such lights seven (7) to ten (10) feet above the Roadway located so as to be visually unobstructed by any part of truck body or load, or equipment.
- c. Vehicle-mounted impact attenuator: "TMA" units as manufactured by Energy Absorption Systems, Inc., Chicago, IL. or Port Authority-approved equal.

21. Additional Requirements

Notwithstanding provisions herein requiring or permitting the Manager to approve or disapprove any traffic control or delineation and guiding device provided by the Contractor, the Contractor shall be responsible for the suitability and performance of all such traffic-control devices such that inconvenience to the traveling public is held to an absolute minimum.

Coning within the confines of the tunnels will be provided by the Authority. The Contractor will notify the Manager of his requirements for this coning two (2) weeks prior to the scheduled Work.

22. Required Documentation

The Contractor shall submit to the Manager all required documentation at the times indicated herein. Documents to be submitted include, but are not necessarily limited to:

- a. Solid Waste laboratory results as stipulated in "Attachment B", attached hereto;
- b. Service Maintenance Logs for sump cleaning at the Lincoln Tunnel as stipulated in "Attachment B" attached hereto;
- c. Service Maintenance Form, attached hereto as "Attachment E";
- d. Confined Space Entry Permit Form, attached hereto as "Attachment F"; and
- e. Contractor Permit Required Confined Space Notification, attached hereto as "Attachment G".

The Contractor's submission of this required information and documentation shall be a prerequisite to receiving payment.

ATTACHMENT “A”

CLEANING STORM DRAINAGE SYSTEMS

ATTACHMENT “A”
CLEANING STORM DRAINAGE SYSTEMS

PART 1 – GENERAL

1.01 SUMMARY

This Section specifies requirements for the removal and disposal of debris and sediment from catch basins, manholes, and scuppers, and from the connecting pipes of such catch basins, scuppers and manholes.

1.02 REFERENCES

- The following is a listing of the publications referenced in this Section:
- National Fire Protection Association (NFPA)
- NFPA 328, Recommended Practice for the Control of Flammable and Combustible Liquids and Gases in Manholes, Sewers and Similar Underground Structures”

1.02 QUALITY ASSURANCE

- A. When cleaning operations are performed, the Contractor shall remove debris from the work sites following all Federal, State, and Local requirements and transport the debris away from Authority property. Storm Drain System debris and sediment shall not be stored, burned or otherwise disposed on Authority property.
- B. Testing requirements as specified in Section 3.03 below entitled “Waste Analysis and Handling” shall be followed when testing is ordered by the Manager.
- C. The Contractor shall obtain prior approval from the Manager for all equipment and procedures to be employed in the performance of this section.
- D. No one shall enter into a manhole or catch basin.
- E. Water required for the performance of the Work will be supplied to the Contractor at no cost to him/her and from a source within a reasonable distance from the work areas.
- F. When Work in any area is completed, the Contractor shall clean the area, secure all covers and leave the area in a condition satisfactory to the Manager.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

3.01 PREPARATION

Equipment shall include, but not be limited to, a vacuum truck of 13 cubic yards minimum capacity with a 25-foot minimum length vacuum hose. The vacuum truck shall have a self-contained truck unit developing approximately 1000 psi of water pressure through an appropriate nozzle attached to hose at least 200 feet long.

3.02 APPLICATION

- A. Remove debris and sediment from catch basins, scuppers, drainage troughs, manholes, and pipes to clear drainage paths and provide unobstructed water flow. Dispose of removed materials in a lawful manner away from Authority property (see Attachment B).
- B. For drainage troughs, remove all accumulated debris from the drainage troughs, seat angles, adjacent beams and steel, etc., under and in the immediate vicinity of the upper level roadway finger dam expansion joints by hand shoveling and vacuuming. No water shall be used at the upper level roadway finger dam expansion unless otherwise approved by the Manager.
- C. Prior to cleaning the pipes, remove all debris from existing inlets to the drainage pipes. Pipe cleaning shall be performed by using a high-pressure water system or procedure approved by the Manager.
- D. Catch basins and manholes shall be cleaned by use of a vacuum system or procedure approved by the Manager.
- E. At no time will chemical solvents be used for the Work of this Section.
- F. Water generated from cleaning operations under this Section shall be decanted back into the system from which it was removed and/or as determined by the Manager.

3.03 WASTE ANALYSIS AND HANDLING

- A. The contractor shall make arrangements for, and shall conduct sampling of in situ solid waste at the start of contract, as directed by the Manager. The Contractor shall conduct waste sampling of the removed material in accordance with (and as applicable to) the latest New Jersey Department of Environmental Protection (NJDEP) or New York State Department of Environmental Conservation (NYSDEC) sampling guidelines and protocols, from a representative sampling of catch basins, manholes, drainage troughs or other waste-accumulating appurtenances (not bridge scuppers) to

determine the characteristics of the waste stream. The number and locations of composited samples shall be as necessary to satisfy guidelines and protocols from the latest NJDEP and NYSDEC (as applicable), based on the actual distribution and quantity of waste materials in the waste-accumulating appurtenances that are anticipated to need cleaning in the near term. Additional composited samples shall be collected as directed by the Manager or his appointed representative. Composited samples shall be taken from different locations, so that, to the maximum extent possible, the entire compliment of waste-accumulating appurtenances are tested over the course of the contract. Composited sampling shall satisfy the requirements of the Solid Waste Disposal Facility. Any additional sampling performed by the Contractor for his/her purposes and requirements shall not be separately compensated by the Port Authority.

- B. The Contractor shall conduct sampling of the removed solid waste material in accordance with the latest NJDEP or NYSDEC (as applicable) sampling guidelines and protocols. The Contractor shall conduct sampling and provide laboratory results to the Manager within 21 days of initiating waste collection when directed by the Manager.
- C. The Contractor shall employ the services of a certified NY and NJ environmental consulting and/or laboratory entity, as applicable, to analyze the composited samples of the solid waste material. At a minimum, the waste materials are to be analyzed for the parameters that are required by the Solid Waste Facility to be used by the Contractor.
- D. The Contractor shall perform no waste removal activities until test results are in hand and have demonstrated that the waste is non-hazardous. [In case of emergency (i.e., blockage and backup) with no representative test results available, the Contractor shall perform the waste removal, but shall stage and maintain the solid waste material removed from the storm drainage system in truck or water tight roll-off containers that it shall provide until testing can be completed. If analytical data subsequently shows hazardous constituents, disposal will be done by the Port Authority.]
- E. The Contractor shall submit to the Manager two copies of the laboratory results. The Contractor will advise the Manager of the waste classification of the solid waste material tested under this Section based upon the laboratory test results as stipulated above. The Contractor shall await Authority review and concurrence before beginning any waste removal work.
- F. The Contractor shall furnish all required copies of bills of lading and manifests/waste disposal forms to the Manager with invoices.
- G. No co-mingling of waste will be permitted. The Contractor shall not stop enroute either before or after picking up non-hazardous waste materials from Authority property to pick up additional material from any party.

3.04 REQUIRED REGISTRATION FOR TRANSPORTERS OF NON-HAZARDOUS WASTE MATERIALS

- A. All devices used by the Contractor for the transportation of non-hazardous solid waste material shall have current registrations approved by NJDEP and NYSDEC, as applicable.
- B. If disposal requires interstate transportation, comply with all applicable transportation regulations of the state(s) through or within which transportation will be made.

3.05 REQUIRED PERMITS AND APPROVALS FOR SOLID WASTE FACILITIES (SWFs)

- A. SWFs used for the Work herein shall have current registration and permits for operating such facilities or shall be approved by the state (and by the United States Environmental Protection Agency (US EPA) or other local agency, if applicable) in which it operates. Proof of such documentation shall be submitted prior to commencement of Work.
- B. SWFs used for the Work herein shall have current State Pollutant Discharge Elimination System permits.
- C. In addition, the SWF proposed by the Contractor shall meet the following requirements:
 - 1. During the last twelve months, the SWF shall not have incurred more than five (5) Notice of Violations (NOVs) related to accepting unpermitted haulers or accepting waste containing contamination above the facility's permit limits.
 - 2. During the last twelve months, the SWF shall not have incurred more than three (3) NOVs related to poor housekeeping, such as spills of chemicals or petroleum products that could contaminate soil and ground water. The SWF shall not have incurred an Administrative Consent Order (ACO) related to ground water remediation.
- D. The Manager's approval of the proposed SWF will be contingent upon verification of the SWF's environmental compliance.

3.06 CASTING COVER REMOVAL AND REPLACEMENT

The Contractor shall use all care and minimal necessary force in the removal of casting covers or grates to prevent breakage. At the time of removal of casting covers or grates, mark the edge of such cover or grate and edge of frame in such a way so that the cover or grate can be replaced in the same position relative to the frame. The lip of the frame shall be cleaned of debris so that the cover or grate fits securely in the frame.

END OF ATTACHMENT A

ATTACHMENT "B"

**HANDLING AND DISPOSAL OF SOLID WASTE MATERIAL FROM
CLEANING OF STORM DRAINAGE SYSTEMS**

ATTACHMENT "B"

Handling and Disposal of Solid Waste Material from Cleaning of Storm Drainage Systems

Waste Analysis

1. The Contractor shall make arrangements for, and shall conduct sampling of the removed solid waste material as directed by the Manager. At a minimum, the Contractor shall collect one sample each as directed in paragraph 3 below, from the first five (5) truckloads of material to determine the characteristics of the waste stream. Additional samples shall be collected as directed by the Manager.
2. The Contractor shall conduct samplings of the removed solid waste material in accordance with the latest NJDEP or NYSDEC (as applicable) sampling guidelines and protocols. The Contractor shall conduct sampling and provide laboratory results to the Manager within 60 days of initiating waste collection when directed by the Manager.
3. The Contractor shall employ the services of a certified NY or NJ environmental consulting and/or laboratory entity, as applicable, to analyze the samples of the solid waste material. At a minimum, the waste materials are to be analyzed for Full Toxic Characteristic Leaching Procedure (TCLP), including nickel, Total Polychlorinated biphenyls (PCBs), Reactivity, Corrosivity, Ignitability, and any other parameters that are required by the Solid Waste Facility (SWF) to be used by the Contractor.
4. The Contractor shall stage and maintain the solid waste material removed from the storm drainage system in watertight roll-off containers at location(s) designated by the Manager.
5. The Contractor shall submit to the Manager two (2) copies of the laboratory results. The Manager will determine the waste classification of the solid waste material tested under this Section based upon the laboratory test results as stipulated above.
6. The Contractor shall furnish all required bills of lading or non-hazardous waste disposal forms to the Manager.

**SERVICE MAINTENANCE LOG
LINCOLN TUNNEL**

YEAR _____

Designation / Location	Date Cleaned	Initial	Date Cleaned	Initial
NJ Plaza Pump Room				
NJ Vent Building, Center and North Tunnel				
NJ Vent Building South				
North Tunnel Mid River				
Center Tunnel Mid River				
South Tunnel Mid River				
NY Vent Building South				
NY River Building, Center Tunnel				
NY River Building, North Tunnel				
NY Land Building, Center Tunnel				
Galvin Plaza				
Dyer Plaza, Center Tunnel Roadway				
39 th Street, NY Expressway				
36 th Street, NY Expressway				
33 rd Street, NY Expressway				

ATTACHMENT "C"

OPERATING & MAINTENANCE STANDARD NOS. 61 & 62:

“WORK PERFORMED IN CONFINED SPACES”

&

“TESTING CONFINED SPACE ATMOSPHERES”

WORK PERFORMED IN CONFINED SPACES

I. INTRODUCTION

This standard establishes the procedures to be followed in protecting the public, and Port Authority employees and property, during work in manholes, sewers, catch basins, sump pits, electrical vaults, excavations, storage tanks, sanitary vaults, crawl spaces, hoppers, boilers, hollow pier legs, and similar confined areas where combustible mixtures, toxic gases, oxygen deficient/enriched atmospheres, or other physical hazards may be present.

This standard should be used in conjunction with the following Standards, Manuals, and Rules:

1. Standard No. 20 - Roadway Work Area Protection
2. Standard No. 37 - Tunnel Roadway Area Protection
3. Standard No. 45 - Safety Belts (Fall Protection)
4. Standard No. 62 - Testing Confined Space Atmospheres
5. Instruction Manual No. 12 - Timber Shoring for Excavation Work
6. Port Authority Respiratory Protection Program
7. Instruction Pamphlet - High Tension Administrative and Safety Rules
8. Instruction Pamphlet - Confined Space Entry Administrative and Safety Rules
9. Occupational Safety and Health Administration (OSHA) Standards including No. 29 CFR 1910.146 "Permit Required Confined Spaces" and No. 29 CFR 1910.147 "The Control of Hazardous Energy".

II. CONFINED SPACES

- A. A confined space is one that:
1. Is large enough and configured so that an employee can bodily enter and perform assigned work
 2. Has limited or restricted means for entry and exit
 3. Is not designed for continuous employee occupancy.

O&M Standards

- B. A permit-required confined space is a confined space that has one or more of the following characteristics:
1. Contains or has the potential to contain a hazardous atmosphere
 2. Contains a material that has the potential for engulfing an entrant
 3. Has an internal configuration in which an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section, or
 4. Contains any other recognized serious safety or health hazard.
- C. In cases where there is the slightest indication or suspicion that any hazards exist, or may exist, continuous ventilation and monitoring must be provided at all times while personnel are in the confined areas.
- D. Permit Issuance is subject to the following rules:
1. All permits are void after the shift ends or supervision is changed.
 2. All permits are void in the event of an emergency alarm (fire, equipment failure/problems, etc.) at the confined space worksite.
 3. The safe work permit shall be void if entry is not made within 30 minutes of the air tests. Any changes of entry supervisors, or working conditions shall void the permit.
 4. Prior to start of work, a copy of the permit must be sent, delivered, or faxed (with receipt verified) to the local PAPD desk and/or the communication desk, and the local PAPD Tour Commander. Facilities without Port Authority Police must notify local police. A copy of the permit must be maintained by the chief maintenance supervisor or designee with the original sent to the General Manager, Risk Management.

III. GUIDELINES FOR CONFINED SPACE OPERATIONS

- A. GENERAL PRECAUTIONS. Prior to working in permit-required confined spaces, the following general precautionary steps must be taken:
1. All openings in roadways, parking lots, sidewalks, or any other thoroughfares used by vehicles or pedestrians must be properly protected with barricades, traffic cones, lights, etc. in accordance with O&M Standard No. 20.

O&M Standards

2. If any circumstances regarding the type of work to be performed or the hazards encountered change, the permit is void and a new revised permit must be obtained.
3. If excavations are required, the need for timber shoring should be determined. See Instruction Manual No. 12.
4. A confined space must never be entered before initial air-monitoring tests are completed. Before entering a confined space, the atmosphere must be tested for the lack of oxygen, toxic atmosphere, and presence of combustible gas. See O&M Standard No. 62. If such tests indicate the slightest existence of these conditions, the area must be ventilated with a blower to change the air at least twice. The atmosphere must then be retested. The time required for ventilation prior to entry will be based upon the volume of space to be ventilated, and the rated capacity of the blower. Even though the retest may indicate that the atmosphere has been purged, ventilation should be continuously supplied while the area is occupied. The atmosphere must be continuously retested in accordance with the frequencies stipulated in O&M Standard No. 62, paragraph VII. In addition, the atmosphere must be tested continuously with personal monitors.
5. A confined space, which has been opened for the first time during the day or reopened after having been closed for one hour or more, must not be entered until tests have confirmed that the area is safe.
6. Confined areas must always be entered cautiously. If any irritation of the eyes, nose, or throat is experienced, or if any difficulty in breathing is encountered, the area must be vacated immediately. Re-entry must not be attempted until the area has been thoroughly ventilated, retested, and proven safe.
7. Whenever possible, electric blowers shall be used. If a gasoline engine driven blower must be used, or a gasoline driven electrical generator must be used, care must be exercised to ensure that fumes from the engine do not enter the blower intake. If work is being done with a truck, or other gasoline-powered equipment, the vehicle must not be parked within 10 feet of the confined area, and the exhaust must be directed away from the area entrance and the blower intake.
8. When a blower is used, the discharge tube must terminate 6 inches from the bottom of the confined space.
9. Smoking and open flames (torches, flares, etc.) must not be used in the vicinity of the entry operation.

O&M Standards

10. When working in areas where combustible gas or vapor may be encountered, explosion-proof equipment and non-ferrous tools must be used.
 11. When artificial light is required, only safe lighting equipment designed for use in hazardous locations shall be used.
 12. All electric handtools, blowers, etc. should be powered through GFI-protected outlets.
- B. ISOLATION and LOCKOUT/TAGOUT. All energy sources which are potentially hazardous must be secured, relieved, disconnected and/or restrained before permit space work begins. (See Figures 1 and 2 on page 17.)
1. Methods must be used to prevent flammable, toxic, irritating, or oxygen-displacing gases and vapors from entering the permit space.
 2. Pipelines must be drained, cleaned, or flushed of hazardous material as necessary.
 3. Equipment or processes must be locked, tagged, or preferably both.
- C. SPECIAL PRECAUTIONS IN ELECTRICAL AREAS. The following additional precautions must be taken when working in confined spaces containing electrical equipment:
1. After testing, the first employee entering the confined area must be the electrician responsible for locking out and/or de-energizing the sources of electrical energy, and for grounding the circuits or lines requiring maintenance.
 2. All electrical wiring and components, even though de-energized, must be covered with insulating blankets, shields, or covers by an electrician.
 3. When employees other than electricians are working in these areas, they must do so with the assistance of an electrical foreman who shall be the individual responsible for locking out the sources of electrical energy, and for grounding the circuits or lines requiring maintenance.
 4. Where initial tests indicate the presence of explosive gases, meggers used for making insulation resistance measurements must be kept out of the confined area and their conductors must be discharged through the discharge switch even though the area was freed of gas following the initial test. Under no circumstances should sparks be created when working in such questionable atmospheres.

O&M Standards

- D. **EVALUATE HAZARDS.** During the hazard-evaluation process, several items must be considered. One significant item is history. If several years of history indicate that no hazardous situations were encountered in a particular confined space, then it is safe to consider that space as one which does not require an entry permit. Lacking this history, all other confined spaces must be considered permit spaces until further evaluation and testing proves otherwise. It is the responsibility of the facility to evaluate hazards and to identify permit spaces.

Items to consider when evaluating a space are:

1. What is the size and configuration of the space?
2. What is the size and location of the exit?
3. What is or has been stored in the space?
4. Are there nearby elements that could drift, fall, or spill into the space?
5. Does testing reveal any atmospheric hazards?
6. Are there any mechanical or electrical hazards?
7. Has there been, or is there work planned in adjoining spaces that could effect the space staff will be working in?

- E. **ENTRY PROCEDURES.** The following questions must be considered when entry procedures are being planned:

1. What precautions and personal protective equipment are required?
2. What tools are required?
3. Is cleaning required? If so:
 - a. Will the cleaning materials pose a hazard?
 - b. Are material safety data sheets (MSDS) available?

- F. **ATMOSPHERIC TESTING.** Atmospheric testing must be simultaneously performed for the following items:

NOTE

Manholes must be tested prior to cover removal. (Refer to O&M Standard 62, paragraph VI.)

1. Oxygen (deficient or enriched)
2. Combustible gases
3. Toxic gases and vapors

- G. **VENTILATION.** Use forced-air ventilation if atmospheric testing indicates a low or high oxygen level and/or the presence of harmful gases. The use of ventilation fans and air ducts/trunk hoses will increase the oxygen level and displace harmful gases.

O&M Standards

- H. ALTERNATE ENTRY PROCEDURES. Under certain circumstances, simplified procedures may be used to enter confined spaces.
1. A simplified alternate entry procedure may be used provided that all of the following conditions are met:
 - a. It can be demonstrated that the only hazard posed by the permit space is an actual or potential hazardous atmosphere.
 - b. It can be demonstrated that continuous forced air ventilation alone is sufficient to maintain the confined space safe for entry.
 - c. Supporting monitoring and inspection data have been developed.
 - d. Supporting data are documented and made available to each entrant.
 2. Entry into the confined space is performed as follows:
 - a. Any conditions making it unsafe to remove an entrance cover must be eliminated before the cover is removed.
 - b. The entrance opening must be promptly guarded by a temporary barrier that will prevent an accidental fall through the opening.
 - c. Before any employee enters the space, the internal atmosphere must be tested in accordance with O&M Standard No. 62.
 - d. There may be no hazardous atmosphere within the space whenever any employee is inside.
 - e. Continuous forced air ventilation must be used as follows:
 - (1) An employee may not enter the space until the forced air ventilation has eliminated any hazardous atmosphere
 - (2) The forced air ventilation must be so directed as to ventilate the immediate areas where an employee is or will be present, and must continue until all employees have left the space
 - (3) The air supply for the forced air ventilation must be from a clean source and cannot increase the hazards in the space.

- f. The atmosphere within the space must be periodically tested as necessary to ensure that the forced air ventilation is preventing the accumulation of a hazardous atmosphere.
- g. If a hazardous atmosphere is detected during entry:
 - (1) Each employee must leave the space immediately
 - (2) The space must be evaluated to determine how the hazardous atmosphere developed
 - (3) Measures must be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place

IV. HAZARDS

- A. The three classes of hazards to be concerned with while working in confined spaces are Engulfment, Mechanical/Electrical, and Atmospheric.
 - 1. **ENGULFMENT** refers to the situation where the entrant is trapped or enveloped by the material already present in the confined space, or from material accidentally released into the confined space.
 - 2. **MECHANICAL/ELECTRICAL** hazards are difficult to avoid when working in confined spaces because the configuration of the spaces often place the entrant in close proximity to mechanical/electrical processes. In addition, limited space may restrict the entrant's mobility, thereby limiting one's ability to avoid potentially fatal conditions.
 - 3. **ATMOSPHERIC** hazards are classified into three categories: Asphyxiating, Toxic, and Flammable.
 - a. **ASPHYXIATING** atmospheres are those in which there is insufficient oxygen to sustain human respiratory needs. An asphyxiating atmosphere is one that contains less than 19.5 percent oxygen by volume.
 - b. **TOXIC** atmospheres are those containing poisonous gases, vapors, or fumes. The toxic gases most commonly found in confined spaces are carbon monoxide, toluene, carbon disulfide, and hydrogen sulfide. Toxins can be in the form of a liquid, solid, gas, or in any combination.

- c. **FLAMMABLE** or **EXPLOSIVE** atmospheres are those containing gases such as methane or acetylene, vapors such as gasoline or kerosene, and combustible particles such as coal or grain dust. Atmospheres pose a serious fire or explosion hazard if flammable gas or vapor is present at a concentration greater than 10 percent of its lower flammable limit (LFL), or if combustible dust is present at a concentration greater than or equal to its LFL. This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52M) or less.

V. **CONFINED SPACE EQUIPMENT**

Items available for confined-space work can be categorized as either Monitoring, Ventilation, Personal Protective, or Rescue Equipment. All equipment must be intrinsically safe (spark-proof, etc.), and approved for use in hazardous atmospheres.

- A. **MONITORING EQUIPMENT** is available for use in measuring and monitoring for atmospheric hazards. This process is described in O&M Standard 62. Instruments are designed to measure oxygen content as well as to detect specific toxins and combustible gases.
- B. **VENTILATION EQUIPMENT** (fans, air ducts, and trunk hoses) is used to eliminate atmospheric hazards, and to maintain a safe working environment.

NOTE

The control of atmospheric hazards through forced air ventilation does not constitute elimination of the hazard.

- C. **PERSONAL PROTECTIVE EQUIPMENT** provides protection against many different hazards. There are two types of personal protective equipment: respiratory protection, and protective clothing.
 - 1. **RESPIRATORS** provide protection against inhalation of hazardous substances. Two types of respirators are:
 - a. Negative-pressure air purifying respirators which filter or remove airborne contaminants. (See Figure 3 on page 18.)
 - b. Air supplying respirators which supply air to the user. Refer to the PA Respiratory Protection Program for appropriate respirator selection.

O&M Standards

2. PROTECTIVE CLOTHING is available in several forms based upon hazards present and the kind of work to be performed. However, they can be described as belonging to one of two basic types:

a. Physical Hazard Protective Clothing such as hard hats, boots, and hearing protectors, which provide protection against such hazards as heat or cold, sparks or flame, abrasion, impact, or loud noise.

b. Chemical/Toxic Protective Clothing which provide spill and splash protection (gloves, boots, visors, goggles, etc.) or total encapsulation protection. Total encapsulation clothing is essentially a one-piece suit with one piece gloves and boots. A one-piece suit requires a self-contained breathing apparatus.

D. RESCUE EQUIPMENT is available to facilitate the removal of an injured or overcome worker from the confined space. Typical items are:

1. Body Harness
2. Retrieval Line
3. Tripod
4. Lifting Device

VI. ENTRY PERMIT SYSTEM

The key element in establishing and maintaining an effective confined space safety program is the entry permit. This permit is designed to provide the necessary information, equipment, and training to perform confined space work safely and effectively. A sample permit is appended to this standard.

A. To be compliant, the entry permit must identify the:

1. Permit space to be entered
2. Purpose of the entry
3. Date and authorized duration of the permit
4. Names of the authorized entrants
5. Names of the confined-space attendants
6. Name of the entry supervisor
7. Hazards in that particular permit space
8. Measures used to eliminate or control the hazards before entry
9. Acceptable entry conditions
10. Results of the initial and periodic tests performed, and names of the testers and an indication of when tests were performed
11. Rescue and emergency services that can be summoned, and the means for calling those services
12. Communication procedures by which entrants and attendants will maintain contact
13. Equipment required (protective, monitoring, communication, and rescue)

O&M Standards

14. Additional information needed to ensure safety during entry
15. Additional permits that have been issued to authorize work in the confined space (such as for hot work).

B. The implementation of the program must meet the following requirements:

1. Before entry begins, the entry supervisor must sign the permit. Entry begins when any part of the body breaks the plane of an opening into the permit space.
2. The duration of the permit cannot exceed the time required to complete the job described on the permit.
3. The entry supervisor must terminate the entry and the chief maintenance supervisor must cancel the permit when:
 - a. The job covered by the permit has been completed
 - b. An unsafe condition arises
4. The entry supervisor must note on the permit any problems encountered during an entry. Canceled entry permits must be kept for one year.

C. Training must be provided to all employees who are involved in confined space work. Training must be designed to ensure that affected employees have the understanding, knowledge, and skills necessary for safely performing their assigned duties. The training program shall include the following:

1. Operation of the permit system
2. Specific duties of each person involved in permit-required confined space operations:
3. Hazards of confined spaces including information on the mode, signs or symptoms, and consequences of exposure
4. Proper use of equipment required during permit space operations including: testing and monitoring equipment, personal protective equipment, ventilating equipment, rescue equipment used for non-entry rescue, and any other equipment necessary for safe entry into and rescue from permit spaces
5. Methods of communication between entrant and attendant
6. Conditions under which the space should be evacuated
7. Procedures to be used for a non-entry rescue.

O&M Standards

D. Training must be provided:

1. Before the employee is first assigned confined space duties
2. Before there is a change in assigned duties
3. Whenever there is a change in confined space operations that presents a hazard for which an employee has not previously been trained
4. Whenever the entry supervisor has reason to believe that there are deviations from the established procedures, or there are inadequacies in the employee's knowledge or use of these procedures.

Certification of training must contain each employee's name, the signature of the trainers, and the dates of the training. Records of training will be maintained by Risk Management.

VII. CONFINED-SPACE SAFETY

The following steps are those required to protect employees and the general public from the hazards of entry into permit-required confined spaces:

- A. IDENTIFICATION AND MARKING OF CONFINED SPACES. The atmosphere of a confined space must be analyzed to identify and evaluate any hazardous conditions that may exist. In addition, an evaluation must be made regarding the existence of electrical/mechanical hazards. As soon as it is determined that a workplace contains permit spaces, all exposed employees must be informed of the existence, location, and danger by the posting of signs reading "DANGER - PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER".
- B. PLANNING WORK. To ensure a successful entry and facilitate the performance of the assigned tasks, it is imperative that a detailed work plan be formulated. As a minimum, the work plan must define:
 1. The measures used to prevent unauthorized entry
 2. The methods by which hazards will be identified and evaluated
 3. The means, procedures, and practices to be used for safe entry operations
 4. The personal protective equipment to be used
 5. How to determine if acceptable entry conditions are being maintained during the course of entry operations
 6. The persons who are to have active roles in entry operations, and specify their duties

O&M Standards

7. The procedures for summoning rescue services, for rescuing entrants, for preventing unauthorized personnel from attempting a rescue, and for providing necessary emergency services to rescued employees.
 8. The procedures for the preparation, issuance, use, and cancellation of entry permits.
- C. **PROVIDING PROPER EQUIPMENT.** The following equipment, as required, must be provided, maintained, and used:
1. Testing and monitoring equipment
 2. Ventilating equipment
 3. Communications equipment
 4. Personal protective clothing
 5. Lighting equipment
 6. Barriers and shields
 7. Rescue and emergency equipment.
- D. **ADVANCE NOTIFICATION.** Advance notice must be given to the facility and to the Port Authority Police so that they can be prepared to respond to an emergency situation. The advance notification must include the location, dates, and types of hazards and potential hazards which might be encountered.
- E. **POSTING OF PERMIT.** The entry permit must be conspicuously posted outside of the permit space. This posting assures entrants that all required preparations have been made.

VIII. DUTIES OF ENTRY SUPERVISOR

The entry supervisor has the duty and responsibility for coordinating the entire entry operation. The safety of all entrants depends upon this vital person. Each entry supervisor must:

- A. Know the hazards that may be faced during entry, including the symptoms and consequences of exposure
- B. Verify that the permit is filled out correctly, that all tests specified have been conducted, and that all procedures and equipment specified by the permit are in place before allowing entry to begin
- C. Terminate the entry as described in paragraph VI.B.3
- D. Verify that rescue services are available, and that there are workable means for summoning help

O&M Standards

- E. Remove unauthorized individuals who enter, or attempt to enter, the permit space during entry operations
- F. Determine that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained, whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space.

IX. DUTIES OF ATTENDANTS

Attendants monitor the activities of the entrants. They can be assigned no other duties which would interfere with their duties as permit-space attendants. Attendants must:

- A. Know the hazards that may be faced during entry, including information on the signs, symptoms, and consequences of exposure
- B. Be aware of possible behavioral effects of the hazardous exposure on entrants
- C. Continuously maintain accurate count of authorized entrants in the permit space, and ensure that the entry permit accurately defines who is in the permit space.
- D. Remain outside the permit space during entry operations until relieved by another attendant
- E. Communicate with entrants as necessary to monitor entrant status and to alert entrants to the need to evacuate the space
- F. Monitor the activities inside and outside of the permit space to determine if it is safe for the entrants to remain in the space and order the entrants to evacuate the space immediately under any of the following conditions:
 - 1. If the attendant detects a prohibited condition
 - 2. If the attendant detects the behavioral effects of hazard exposure in an entrant
 - 3. If the attendant detects a situation outside the space that could endanger the entrants
 - 4. If the attendant cannot safely perform all required duties
- G. Summon rescue and other emergency services as soon as the attendant determines that the entrants may need assistance to escape from permit-space hazards. Remain in communication with PA Police or person who is responding to the rescue call.

O&M Standards

- H. Take the following actions when unauthorized persons approach or enter a permit space while entry is underway:
 - 1. Warn the unauthorized persons that they must stay away from the permit space
 - 2. Advise the unauthorized persons that they must exit immediately if they have entered the permit space, and inform authorized entrants and the entry supervisor that unauthorized persons have entered the permit space.
- I. Perform non-entry rescues.

X. DUTIES OF AUTHORIZED ENTRANTS

Authorized entrants are the employees who go into the permit space to perform the authorized work. All authorized entrants must:

- A. Know the hazards that may be faced during entry, including the signs or the symptoms and consequences of exposure to these hazards
- B. Use supplied equipment properly
- C. Communicate with the attendant as necessary to enable the attendant to monitor the entrant's status, and to enable the attendant to alert entrants to the need to evacuate the space
- D. Alert the attendant whenever the entrant recognizes any warning sign or symptom of exposure to a dangerous situation, or detects a prohibited condition.
- E. Exit the permit space whenever:
 - 1. An order to evacuate is given by the attendant or the entry supervisor
 - 2. The entrant recognizes any warning sign or symptom of exposure to a dangerous situation
 - 3. The entrant detects a prohibited condition
 - 4. An evacuation alarm is activated.

O&M Standards

XI. DUTIES OF PORT AUTHORITY TO CONTRACTOR

When contractors are to be used to perform work in permit spaces it is the responsibility of the Port Authority chief maintenance supervisor to make the contractor aware of the permit system, and the contractor's duties under the system. As a minimum, the Port Authority chief maintenance supervisor shall:

- A. Inform the contractor that the workplace contains permit spaces, and that permit-space entry is only through compliance with a permit-space program
- B. Verify that the contractor meets OSHA 29 CFR 1910.146, permit required confined spaces; and provides its own permit which is approved by the facility.
- C. Apprise the contractor of the elements and hazards which make the space in question a permit space
- D. Apprise the contractor of any precautions or procedures which have been implemented for the protection of entrants
- E. Coordinate entry operations with the contractor
- F. Debrief the contractor at the conclusion of the entry operation regarding any hazards confronted or created during entry operation.

XII. DUTIES OF CONTRACTOR TO PORT AUTHORITY

In addition to complying with the permit space requirements that apply to all employers, each contractor who is retained to perform permit space entry operations shall:

- A. Obtain any available information regarding permit space hazards and entry operations from the Port Authority
- B. Coordinate entry operations with the Port Authority, when both host employer personnel and contractor personnel will be working in or near permit spaces, and
- C. Provide the required safety equipment
- D. Inform the Port Authority of the permit space program that the contractor will follow, and of any hazards confronted or created in permit spaces, either through a debriefing or during the entry operation.

O&M Standards

XIII. EMERGENCY CONDITIONS

The ability to recognize and react properly to an emergency can result in the avoidance of many of the injuries and deaths associated with confined spaces. In many of these incidents, it is not only the original entrant who dies, but also the rescuer. No one should attempt a confined space rescue unless that person is trained and properly equipped.

- A. **RECOGNITION OF EMERGENCY SITUATIONS.** It is the primary responsibility of the attendant to be aware of emergency situations. While entrants might be able to communicate in an emergency, the attendant must be alert to symptoms which would indicate that a physical problem is developing.

Should one be overcome while working in a permit space, it is likely that the cause would be anoxia (oxygen deprivation). The attendant should watch for the following symptoms, and order persons out of the confined space if such symptoms are observed:

1. Shortness of breath out of proportion to work performed
2. Nausea, headache, and dizziness
3. Drowsiness
4. Poor color and blue lips. This symptom will not appear if the anoxia is caused by inhalation of carbon monoxide
5. Incoherence of speech and movements. Speech is slow and thick. Movement is clumsy along with dropping of tools among other signs indicating poor muscular coordination
6. Apathy, disinterest, and dull judgment.

- B. **RESCUE GUIDELINES.** Should an emergency arise, it is imperative that a rescue operation is initiated which will result in the prompt removal of the affected employee from the confined space by persons trained in, and equipped for, rescue operations. To ensure this, the following guidelines must be followed:

1. Notify the Port Authority Police immediately.
2. Attendants may only perform non-entry rescues.

XIV. HOUSEKEEPING

All confined spaces shall not be used for unnecessary storage of any kind. Spaces must be kept clean and free of grease, grime, stagnant oil or water.

O&M Standards

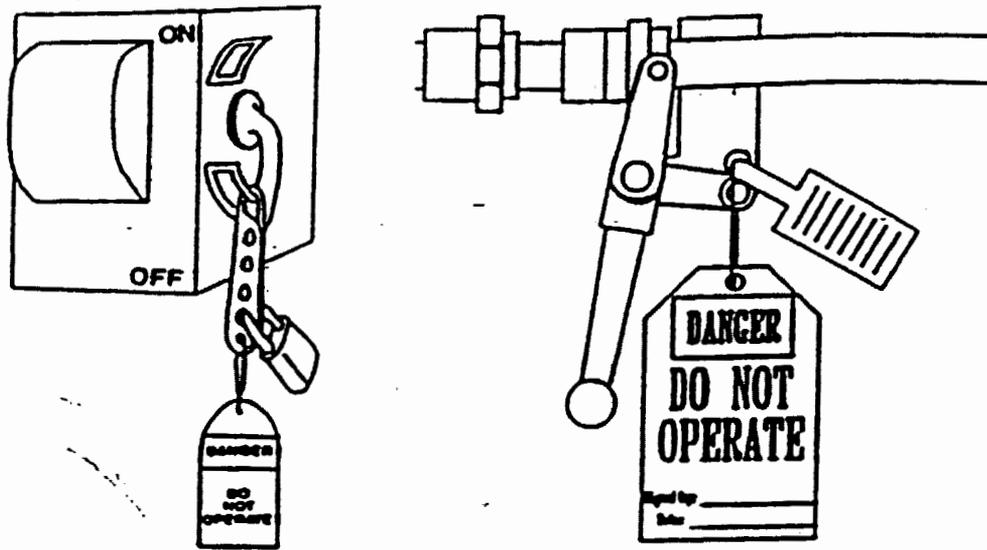


Figure 1. Lockout and Tag-Out

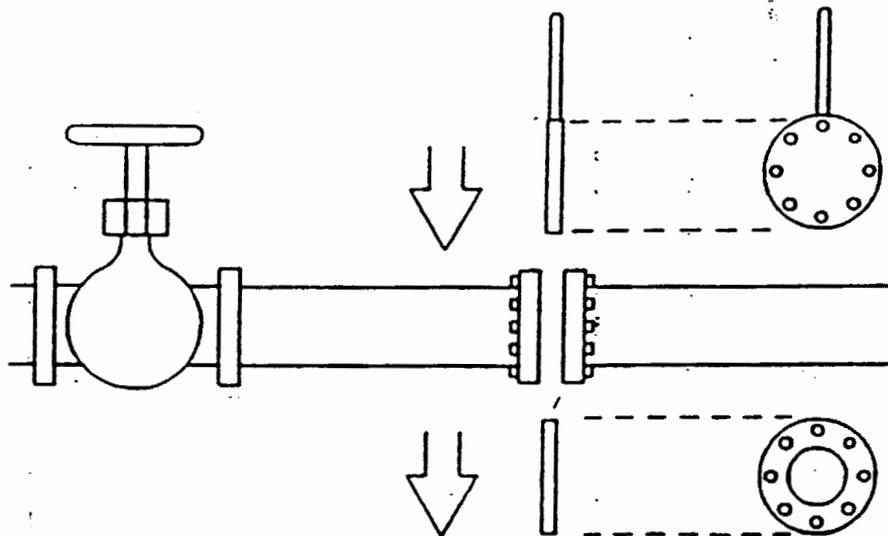


Figure 2. Blanking Hydraulic/Pneumatic Lines

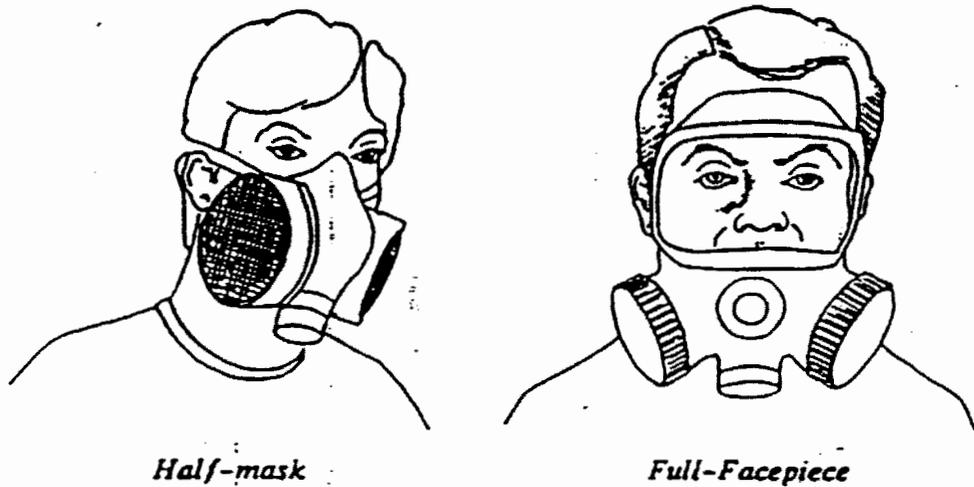


Figure 3. Air Purifying Respirators

APPENDIX

CONFINED SPACE ENTRY PERMIT

O&M Standards

THE PORT AUTHORITY OF NY & NJ CONFINED SPACE ENTRY PERMIT

FACILITY: _____

DURATION OF PERMIT: _____

Hand print in ink. (See reverse side for further instructions.)

1 PERMIT NUMBER: _____	WORK ORDER NUMBER: _____
CONFINED SPACE NUMBER: _____ (IF APPLICABLE)	HIGH TENSION PERMIT NUMBER: _____ (IF APPLICABLE)
2 REQUESTED BY: _____ PRINT NAME SIGNATURE	ISSUED BY: _____ CHIEF MTC. SUPV./DESIGNEE PRINT NAME - INITIALS - DATE
EXACT LOCATION OF CONFINED SPACE: _____	PURPOSE OF ENTRY: _____

3. PRE-ENTRY CHECKLIST - COMPLETED BY SUPERVISOR OF JOB SITE					
	YES	N/A		YES	N/A
ENTRY AND EMERGENCY PROCEDURES REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	ALL HAZARDOUS LINES HAVE BEEN ISOLATED	<input type="checkbox"/>	<input type="checkbox"/>
ALL PERSONNEL TRAINED (CLASSROOM/EXERCISE)	<input type="checkbox"/>	<input type="checkbox"/>	HOT WORK PERMITS (WELDING, CUTTING, ETC.)	<input type="checkbox"/>	<input type="checkbox"/>
ALL PERSONNEL KNOWLEDGEABLE ABOUT POTENTIAL HAZARDS	<input type="checkbox"/>	<input type="checkbox"/>	ALL ENERGY SOURCES HAVE BEEN DE-ENERGIZED AND LOCKED/TAGGED OUT	<input type="checkbox"/>	<input type="checkbox"/>
ATTENDANT STATIONED AT ENTRANCE	<input type="checkbox"/>	<input type="checkbox"/>	SPACE HAS BEEN DRAINED AND FLUSHED	<input type="checkbox"/>	<input type="checkbox"/>
RESCUE EQUIPMENT ON LOCATION AND READILY ACCESSIBLE (TRIPOD, SAFETY LINES, HARNESES)	<input type="checkbox"/>	<input type="checkbox"/>	VENTILATION EQUIPMENT IS BEING UTILIZED	<input type="checkbox"/>	<input type="checkbox"/>
COMMUNICATION DEVICES AT SITE (RADIOS, CELLULAR PHONES, ETC.)	<input type="checkbox"/>	<input type="checkbox"/>	ELECTRICAL EQUIPMENT IS GROUNDED	<input type="checkbox"/>	<input type="checkbox"/>
PERSONAL MONITORS WORN BY ALL ENTRANTS	<input type="checkbox"/>	<input type="checkbox"/>	GROUND FAULT CIRCUIT INTERRUPTERS (GFCI) USED	<input type="checkbox"/>	<input type="checkbox"/>
ENTRY AREA IS FREE OF DEBRIS AND OBJECTS	<input type="checkbox"/>	<input type="checkbox"/>	ELECTRICAL EQUIPMENT RATED FOR EXPLOSIVE ATMOSPHERES	<input type="checkbox"/>	<input type="checkbox"/>
WARNING BARRIERS AND SIGNS ARE IN PLACE	<input type="checkbox"/>	<input type="checkbox"/>	LOW VOLTAGE (< 25 v) LIGHTING USED	<input type="checkbox"/>	<input type="checkbox"/>
ATMOSPHERIC MONITORING CONDUCTED	<input type="checkbox"/>	<input type="checkbox"/>	NO COMPRESSED GAS CYLINDERS STORED IN SPACE	<input type="checkbox"/>	<input type="checkbox"/>

4. GAS DETECTION EQUIPMENT/ATTENDANT(S)/ENTRANT(S)					
INSTRUMENT USED	ATTENDANT (S) - PRINT NAME		INITIAL(S)	INITIAL - FINAL	
SERIAL #	_____	_____	_____	_____	_____
CALIBRATION DATE	ENTRANT(S) - PRINT NAME		INITIAL (IN)	INITIAL (OUT)	
_____	_____	_____	_____	_____	

5. MONITORING RESULTS: (record results every 2 hours) ENTRY SUPERVISOR MUST VERIFY INITIAL READINGS							
REQUIRED TESTING	ACCEPTABLE ENTRY CONDITIONS	(AM/PM)	(AM/PM)	(AM/PM)	(AM/PM)	(AM/PM)	(AM/PM)
% of Oxygen - O ₂	19.5% - 23.5%						
Lower Explosive Limit - LEL	10% OR LESS						
Carbon Monoxide - CO	UNDER 35 ppm						
Hydrogen Sulfide - H ₂ S	UNDER 10 ppm						
Other Tests							

6. APPROVAL TO PERFORM WORK IN CONFINED SPACE - DUTY OF ENTRY SUPERVISOR	
SIGNATURE AT START OF JOB _____	INITIALS AT COMPLETION OF JOB _____

IN THE EVENT OF AN EMERGENCY CONTACT:
(TO BE FILLED IN BY PERSON ISSUING PERMIT)

TELL THE OPERATOR:

1. Your name, Port Authority of NY & NJ.	5. Number of victims; condition of victims if known.
2. Location, including cross streets.	6. Type of entry (manhole, door, etc.)
3. Phone number from which you are calling.	7. Any known conditions in the space (gas readings, flooding)
4. This is a confined space operation. You need a rescue service.	

PERMIT IS VOIDED BY CHIEF MAINTENANCE SUPERVISOR OR DESIGNEE AT END OF SHIFT OR COMPLETION OF JOB.

SIGNATURE - CMS or Designee

DATE

THE PORT AUTHORITY OF NY & NJ

CONFINED SPACE ENTRY ADMINISTRATIVE AND SAFETY RULES

1. No work shall be performed in any designated Permit Required Confined Space (PRCS) without specific approval and/or supervision of the Chief Maintenance Supervisor or his/her designee.
2. When work involving entrance into a PRCS is requested, the Confined Space Entry Permit (Form PA-3745) must be completed as follows:

Section 1 - Permit number, work order number, confined space number (if applicable), and high tension permit number (if applicable).

Section 2 - Name of Supervisor requesting permit, Chief Maintenance Supervisor or designee, location of confined space, and purpose of entry.

Section 3 - Pre-entry checklist.

Section 4 - Record gas detection equipment name, serial number, and calibration date. Record attendant(s) and entrant(s) names. Prior to entering a PRCS, entrant(s) must initial they are entering space and upon completion of work entrant(s) must initial indicating they are exiting space.

Section 5 - Monitoring results. Monitoring results must be recorded every two hours.

Section 6 - Supervisor of job site must give his/her approval for work to begin by providing his/her signature in the space provided on the permit.

Upon completion of work or when shift ends, the Chief Maintenance Supervisor or designee must cancel the permit, file copy, and route original to Risk Management, PATC 43.

3. The Requesting Agency, prior to starting work, shall assure itself that the confined space has been properly identified, monitored, secured and that all safety precautions have been implemented (such as ventilation, lock-out/tag-out, etc.). Other interested agencies, such as the Resident Engineer, Tenant Representatives, FAA, Utility companies, etc., may witness above operations. Responsibility for notification to interested and affected parties is the responsibility of the Chief Maintenance Supervisor or designee.
4. Once initial monitoring has been conducted and prior to any work being performed in a PRCS, the Confined Space Entry Permit shall be prominently posted at the work site for the duration of the job. A copy shall be given or faxed (with verification of receipt) to the Police desk and/or the Communications desk to alert personnel of work being performed in a PRCS by the Chief Maintenance Supervisor. Any additional information regarding the Confined Space Entry Permit shall be included in the file with the original.
5. *Should the scope of the work or the entire work crew change at any time during the performance of the job described on the permit, a new Confined Space Entry Permit must be completed in accordance with all Confined Space Entry Administrative and Safety Rules.*

TESTING CONFINED SPACE ATMOSPHERES

I. INTRODUCTION

This standard establishes the equipment required and procedures to be followed to test the atmosphere and thereby protect the public and Port Authority employees and property, during work in confined spaces. This standard is to be used in conjunction with Operating and Maintenance Standard No. 61.

Several models of atmospheric testers are used at different facilities. Accordingly, this standard has been designed to have general applicability.

II. CONFINED SPACES

A. A confined space is one that:

1. Is large enough and configured so that an employee can bodily enter and perform assigned work
2. Has limited or restricted means for entry and exit
3. Is not designed for continuous employee occupancy.

B. A permit-required confined space is a confined space that has one or more of the following characteristics:

1. Contains or has the potential to contain a hazardous atmosphere
2. Contains a material that has the potential for engulfing an entrant
3. Has an internal configuration in which an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section
4. Contains any other recognized serious safety or health hazard.

C. Examples of confined spaces:

- | | |
|--------------------|---------------------|
| 1. Manholes | 5. Hoppers |
| 2. Storage Tanks | 6. Boilers |
| 3. Sanitary Vaults | 7. Hollow Pier Legs |
| 4. Crawl Spaces | 8. Ditches |

O&M Standards

III. HAZARDS

- A. There are three classes of atmospheric hazards to be concerned with while working in confined spaces: asphyxiating, toxic, and flammable.
1. **ASPHYXIATING** atmospheres are those in which there is insufficient oxygen to sustain human respiratory needs. An asphyxiating atmosphere is one that contains less than 19.5 percent oxygen by volume.
 2. **TOXIC** atmospheres are those containing poisonous gases, vapors, or fumes. The toxic gases most commonly found in confined spaces are carbon monoxide, hydrogen sulfide, toluene, and carbon disulfide. Toxins can be in the form of a liquid, solid, gas, or in any combination.
 3. **FLAMMABLE** or **EXPLOSIVE** atmospheres are those containing gases such as methane or acetylene; vapors such as gasoline or kerosene; and combustible particles such as coal or grain dust. Atmospheres pose a serious fire or explosion hazard if flammable gas or vapor is present at a concentration greater than 10 percent of its lower flammable limit (LFL), or if combustible dust is present at a concentration greater than or equal to its LFL. This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52M) or less.

IV. HAZARD ASSESSMENT

- A. **GENERAL GUIDELINES.** The atmosphere of a confined space must be analyzed in order to identify and evaluate any hazardous conditions that may exist, or are likely to exist. Items to consider when evaluating a confined space are:
1. The size and configuration of the space
 2. The size and location of the exit
 3. Products which are, or have been stored in the space
 4. Nearby elements that could drift, fall, or spill into the space
 5. Results of atmospheric testing.

Before entry into a confined area, its atmosphere must be tested to ensure that there is sufficient oxygen, and that there are no existing toxic or explosive conditions. A direct-reading gas meter must be used. Testing must be performed by a supervisor who has successfully completed gas detector training for the instrument in use.

O&M Standards

Human senses are never to be trusted to determine if the air in a confined space is safe. You cannot see or smell many toxic gases and vapors, nor can you determine the level of oxygen present.

- B. **STRATIFIED ATMOSPHERES.** Some gases and vapors are heavier than air, and will settle to the bottom of a confined space. Also, some gases and vapors are lighter than air, and will be found at the top of the confined space. These conditions can result in a stratified atmosphere. (See Figure 1 on page 7.) Therefore, to ensure your safety, it is necessary to sample the atmosphere at the top, middle, and bottom levels of a confined space.

- C. **OXYGEN-DEFICIENT ATMOSPHERES.** An oxygen-deficient atmosphere contains less than 19.5% by volume available oxygen. Any atmosphere with an oxygen content of less than 19.5% by volume must not be entered. The oxygen scale shown in Figure 2 on page 7 indicates the effect that low oxygen levels has on people. The oxygen content of a confined atmosphere can be decreased by:
 - 1. Work being done such as welding or brazing
 - 2. Chemical reactions such as rusting
 - 3. Bacterial action such as fermentation
 - 4. Being displaced by another gas such as nitrogen.

- D. **FLAMMABLE/EXPLOSIVE ATMOSPHERES.** Two things make an atmosphere flammable:
 - 1. Oxygen enriched air
 - 2. A flammable gas, vapor, or dust in the proper mixture with oxygen.

If a source of ignition is introduced in a space containing a flammable atmosphere, an explosion will result. (See Figure 3 on page 8.)

- E. **TOXIC ATMOSPHERES.** In a confined space, most substances (liquids, vapors, gases, solids, and dusts) must be considered toxic. Toxic substances can come from products stored in the space, work being performed in the space, as well as from areas surrounding the space.
 - 1. Products which are stored in a confined space can be absorbed into the walls, which can emit toxic gases even after the product has been removed. In addition, the process of cleaning out the residue of previously stored material can result in the release of toxic gases.

O&M Standards

2. Work being performed in confined spaces such as welding, scraping, sanding, and degreasing, can cause the release of toxins.
3. Toxins produced by work being performed in surrounding areas can spill into, and contaminate, a confined space.

V. ATMOSPHERIC TESTERS

- A. **GENERAL.** Portable atmospheric testers are supplied which, when used properly, will afford protection against hazardous atmospheric conditions in confined spaces. These testers are available in different gas combinations for the detection of hydrocarbons, oxygen, carbon monoxide, and hydrogen sulfide. Most of the units incorporate microprocessor-controlled operation and calibration procedures. For added safety, audible alarms supplement the visual readouts.

Manufacturer's data for the latest types of sensors stocked by the Port Authority are provided as an appendix to this standard. The specific type(s) of tester(s) required for a particular entry operation will depend upon the space to be entered and the job to be performed. In every case, the required equipment will be specified on the entry permit.

- B. **TRAINING.** All personnel involved in atmospheric testing must be trained in the proper use of atmospheric monitoring instruments. Training must include field calibration of equipment, knowledge of the work being performed, anticipated atmospheric hazards, and any ongoing process which could change the conditions inside of the confined space.

Training effectiveness must be evaluated periodically. This can be accomplished by written tests or by asking personnel to demonstrate their practical knowledge.

Training sessions must be repeated as often as evaluation and performance observation dictate.

VI. TEST PROCEDURES

NOTE

This section contains general information regarding atmospheric testing. Refer to the manufacturer's data sheets appended to this standard for detailed information on specific gas testers.

O&M Standards

- A. **GENERAL.** Atmospheric testing is conducted in order to identify the types of hazards within the confined space (evaluation), and to later ascertain that acceptable conditions exist before entry into the space (verification).
1. **EVALUATION TESTING.** During this phase of testing, the atmosphere of a confined space must be analyzed, using gas detection equipment to identify and evaluate any hazardous atmospheres that may exist, or are likely to develop. Evaluation and interpretation of these data, and development of the entry procedure, should be done by, or reviewed by, a technically qualified professional (as designated by the facility manager) based on evaluation of all serious past and present hazards. Material safety data sheets (MSDS) and OSHA Permissible Exposure Limits (PEL's) are to be consulted during the evaluation process.
 2. **VERIFICATION TESTING.** Prior to entry, the atmosphere of a confined space which may contain a hazardous atmosphere must be tested for residues of all previously-identified contaminants to determine that residual concentrations at the time of entry are within the range of acceptable entry conditions.
- B. **INITIAL TESTS.** Initial tests for oxygen deficiencies and explosive conditions must be made from outside of the confined area. To facilitate this, testers with probes and sampling lines are available, and shall be utilized.
- C. **PROCEDURES FOR TESTING MANHOLES.** The following procedures apply to the testing of atmospheres within each manhole:
1. Test each manhole closed by a single cover which contains ventilating holes by inserting the free end of the sampling hose through one of the holes.
 2. Test each manhole closed by a single cover which does not have ventilating holes by raising one side of the cover sufficiently to insert and lower the free end of the sampling hose. Do not allow weight of the cover to compress the hose.
 3. Test each manhole closed by a cover and inner pan by removing the top cover and locking bar; and raising one side of the inner pan sufficiently to insert and lower the free end of the sampling hose.
 4. Do not submerge the sampling hose into any liquid during testing.

VII. TESTING FREQUENCY

- A. **INITIAL TEST.** Confined areas opened for the first time, or re-opened after having been closed for one hour or more, must be tested. The time of each test must be recorded on a tag or chart at the site.

O&M Standards

- B. **CONTINUOUS TESTING.** Continuous gas monitoring must be performed during all confined space operations.

VIII. TEST RESULTS/ACTIONS TAKEN

- A. **NO GAS DETECTED AND NO OXYGEN DEFICIENCY EXISTS.** If the tests made upon opening or reopening the confined area indicate a safe atmosphere, and the area has been ventilated with a spark-proof blower for ten minutes, the area may be entered.
- B. **GAS DETECTED OR OXYGEN DEFICIENCY EXISTS.** If a combustible gas and/or an oxygen deficiency is detected during the initial test, entry must not be attempted until:
 - 1. The area has been ventilated with a spark-proof blower to change the air at least twice, and
 - 2. Subsequent retesting indicates a safe atmosphere, and
 - 3. Continuous ventilation is provided.

IX. MAINTENANCE OF ATMOSPHERIC TESTERS

- A. **RESPONSIBILITY.** Facility management is responsible for ensuring proper operation and calibration of all testing equipment.
- B. **PERIODIC INSPECTION.** All instruments must be inspected monthly by responsible facility personnel.
- C. **CALIBRATION.** All instruments must be calibrated at least once every six months or as per manufacturer's recommendations.
- D. **RECORDS.** An inspection record must be attached to each instrument, and filed with the organizational unit. All inspections and calibrations, all deficiencies found, and all maintenance performed must be entered, dated, and initialed on this card.
- E. **INSPECTION BEFORE EACH USE.** Before each use, inspect all instruments for tightness of connectors, wear of rubber parts, and battery strength. Ensure that the monitor is operational.

O&M Standards

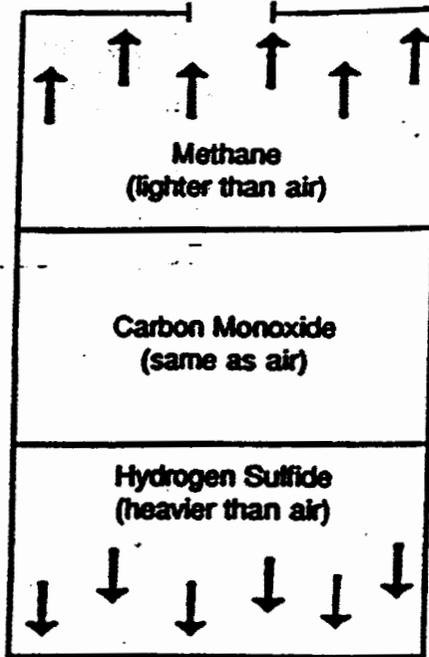


Figure 1. Stratification of Gas within a Confined Space

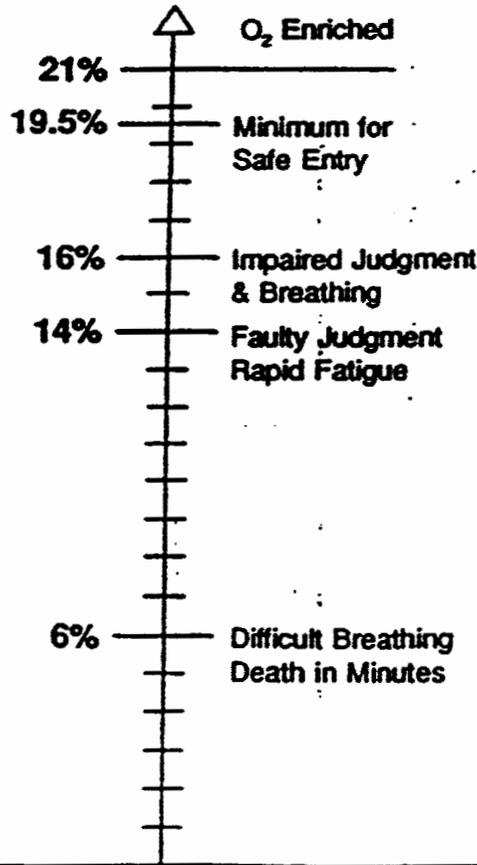


Figure 2. Oxygen Scale and Its Physical Effects

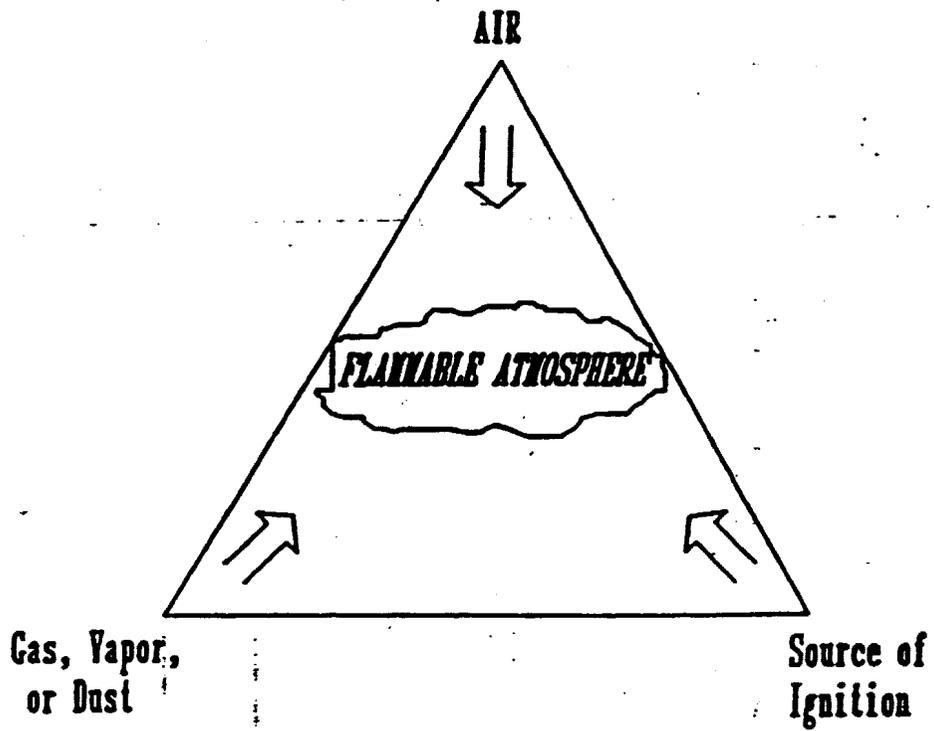


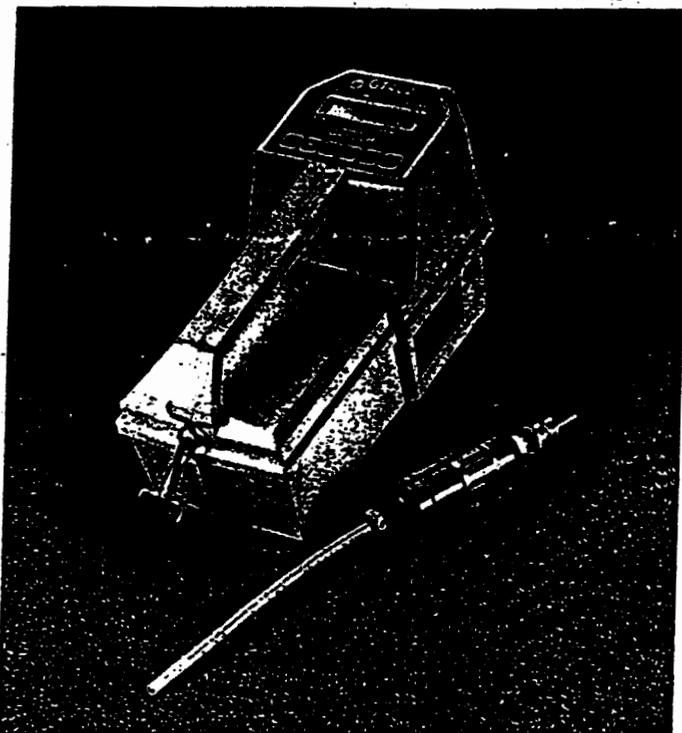
Figure 3. Ignition Triangle

APPENDIX

MANUFACTURER'S DATA SHEETS

GT Series Portable One, Two, Three, or Four Gas Monitors

Detection of hydrocarbons, oxygen, carbon monoxide and hydrogen sulfide



The GT Series of portable gas monitors are designed to protect workers from hazardous gases in confined spaces and other industrial work sites. They are available in eight different gas combinations for the detection of hydrocarbons in the PPM and LEL ranges, oxygen, carbon monoxide, and hydrogen sulfide. Microprocessor electronics and convenient top-mounted switches make operation and calibration simple.

Each GT Series monitor features two levels of alarm with audible and visible indications to warn of unsafe gas levels. Alarms can be programmed to trigger at user-defined levels and can be set to latching or self-resetting modes. Alarms also trigger if a low battery, low flow, or sensor malfunction condition exists. A top-mounted LCD with on-demand backlight shows real-time gas concentrations. TWA, STEL, minimum, and maximum readings can also be called to the display. For regulatory and safety reporting purposes, GT Series monitors feature a built-in datalogger.

At only 6" x 5" x 10" and 5 lbs., GT Series monitors are completely portable and can be comfortably worn over the shoulder for hands-free monitoring. They feature a rugged RFI resistant housing that is water-shedding and can be set down in an inch of water. All GT Series monitors have a built-in pump for pre-entry testing of confined spaces and other remote areas. A dust filter and hydrophobic filter prevent contaminants from being drawn into the pump. A unique "float probe" is available for monitoring underground storage tanks.

Four D alkaline or Ni-Cad batteries power the GT Series monitors for nine hours. The pin-mounted catalytic and electrochemical sensors are warranted for one year. Battery replacement, sensor replacement, and calibration can easily be performed in the field.

GT Series

SPECIFICATIONS

Gas detected	Range
Hydrocarbons	0 - 100% LEL, 0 - 10,000 PPM
Oxygen	0 - 30.0 %VOL
Carbon Monoxide	0 - 300 PPM
Hydrogen Sulfide	0 - 200 PPM
Sensor	
Hydrocarbons	Catalytic compensated
O ₂ , CO, H ₂ S	Electrochemical
Sampling method	Sample-draw, internal pump
Response time	90% in 20 seconds
Accuracy	PPM, CO, H ₂ S: ± 10% full scale LEL: ± 5% full scale O ₂ : ± 0.5 %VOL
Repeatability	PPM, CO, H ₂ S: ± 5% full scale LEL: ± 2% full scale O ₂ : ± 0.2 %VOL
Operating temperature	-20°F to 115°F (-43°C to 61°C)
Alarms	Audible and visual alarms
Display	LCD, backlight on demand
Power source	Four D alkaline or Ni-Cad batteries
Battery life	9 hours
Controls	Five top-mounted switches
Dimensions	10" x 6" x 5" (25.4 cm x 15.2 cm x 12.7 cm)
Weight	Approximately 5 pounds (2.25 g)
Case material	High impact plastic
Intrinsic safety rating	Class I, Div. 1, Groups B, C, D
Warranty	One year material and workmanship

ORDERING INFORMATION

Item	Cat #
GT101 O ₂	72-6101*
GT105 Hydrocarbons LEL/PPM	72-6105
GT201 Hydrocarbons LEL/PPM, O ₂	72-6201
GT202 " " " with float probe	72-6202
GT302 Hydrocarbons LEL/PPM, O ₂ , H ₂ S	72-6302
GT303 Hydrocarbons LEL/PPM, O ₂ , CO	72-6303
GT402 Hydrocarbons LEL/PPM, O ₂ , CO, H ₂ S	72-6402

*Add -01 for alkaline, -02 for Ni-Cad version

Standard Accessories

Shoulder strap	13-0110
5' polyurethane hose	80-0505
10" probe with filter	80-0187
12" float probe assembly (GT202 only)	80-0801E-12

Optional Accessories

Test Kits:

GT-101	81-6101
GT-105	81-6105
GT-201	81-6201
GT-202	81-6202
GT-302	81-6302
GT-303	81-6303
GT-402	81-6402
Carrying case, for instrument only	20-0650
Dilution fitting, 50%	80-0403
Ni-Cad battery charger, internal, 115 VAC	49-2150
Ni-Cad battery charger, internal, 230 VAC	49-2149

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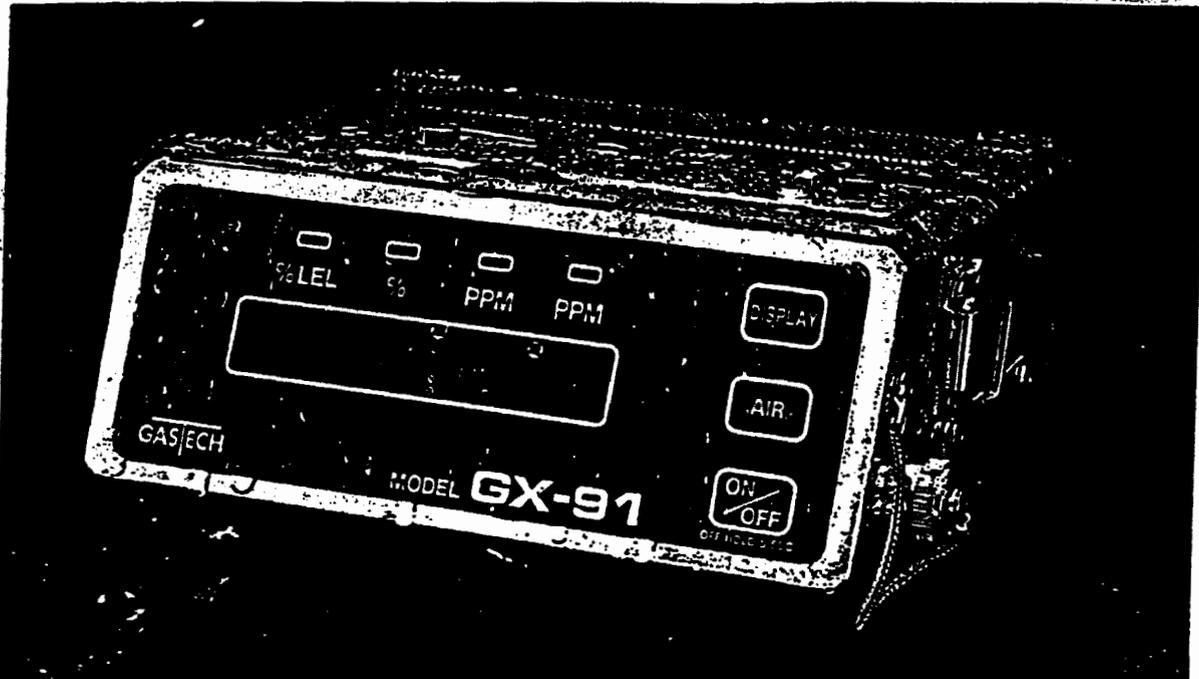
PH (510) 745-8700 FAX (510) 794-6201 TLX 334-462

GASTECH

The Trusted Name In Gas Detection

Model GX-91 Four Gas Portable

Simultaneous monitoring of oxygen, combustible gases, and two toxic gases



The GX-91's stainless steel case and water-shedding design make it ideally suited to use in demanding conditions.

Strong. Reliable. Flexible.

The perfect work companion. The GX-91 is an all-in-one monitor specifically designed for use in rough field conditions. The GX-91 provides immediate warning of hazardous or changing atmospheric conditions.

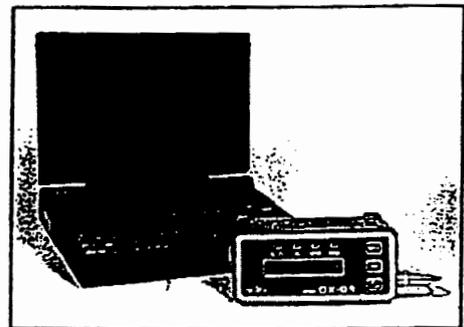
The GX-91 is simple to use. Just three flush-mounted switches operate this advanced monitor. Separate side-mounted switches are easily accessible, and allow the user or industrial hygienist to calibrate and program information into the GX-91.

The GX-91's two line LCD features auto backlighting for worry-free operation in low light areas. Concentrations of all four gases are displayed simultaneously.

The GX-91 can be used as an area monitor, or to test confined spaces prior to entry. The basic model samples air by diffusion. Optional sample draw pumps are available in two styles. A base-mount or pistol style pump draws samples from remote locations into the GX-91 for analysis.

The GX-91 is designed to make data collection and storage simple. An internal data logger captures gas concentrations at user-defined time intervals. Information contained in the GX-91's datalogger can be downloaded to a PC for long term storage and analysis. An optional bar code reader is also available and provides an easy way to identify users and monitoring locations.

The GX-91 is always ready to go to work when you are. Just two standard C size alkaline batteries power the GX-91 for 10 hours of continuous operation. Ni-Cad batteries, which provide up to 8 hours of continuous operation, and a Ni-Cad battery charger are also available for the GX-91.



Readings are easily downloaded to a PC for long term storage and analysis.

SPECIFICATIONS

Model GX-91

Gases detected	Range	Humidity range	0-95%RH
Oxygen	0-40%	Alarms	Audible/Visible: Low and High, TWA, STEL, Ceiling
Combustibles	0-100%	Display	Two line 20 character self-illuminating LCD
of the following:		Power source	Standard: Alkaline (two C) Optional: Ni-Cad (two C)
Hydrogen Sulfide	0-100 PPM	Battery life	Alkaline: 10 hours Ni-Cad: 8 hours
Carbon Monoxide	0-500 PPM	Controls	Display, Air, On/Off
Sulfur Dioxide	0-50 PPM	Dimensions	6 1/2" x 2 3/4" x 6 1/4"
Chlorine	0-15 PPM	Weight	3 pounds, 11 ounces
Sensor	Combustibles:	Catalytic	Case material
	O ₂ , Toxics:	Electrochemical	Stainless steel
Special functions			
Dosimeter:	Time weighted average (TWA), short term exposure limit (STEL)		
Peak hold:	Highest value encountered, lowest O ₂		
Datalogger:	5 to 300 second intervals, 60 hour capacity at 60 second intervals		
and zero:	Zeroes on demand		
Data logger output	RS-232; switchable for printer or computer		
Sampling method	Diffusion, continuous		
Response time	90% full scale in 30 seconds		
Accuracy/repeatability	±5%/±2%		
Operating temperature	-10° - 120°F		
Intrinsic safety rating	Class I, Division 1, Groups A, B, C, and D		

Attachable Sample Draw Pump

Flow Rate	Approx. 1 acfh
Operating temperature	14° F - 140° F
Humidity range	30 - 90% RH
Power source	Alkaline batteries (two C)
Battery life	30 hours
Controls	On/Off
Dimensions	6 1/2" x 2 3/4" x 2 1/4"
Weight	2 pounds, 4 ounces

ORDERING INFORMATION

Item		Cat. #
GX-91	LEL, O ₂ , H ₂ S, CO	72-8811-10
GX-91	LEL, O ₂ , H ₂ S, SO ₂	72-8811-12
GX-91	LEL, O ₂ , Cl ₂ , H ₂ S	72-8811-14
GX-91	LEL, O ₂ , Cl ₂ , CO	72-8811-16
91	LEL, O ₂ , H ₂ S	72-8811-18

Standard accessories

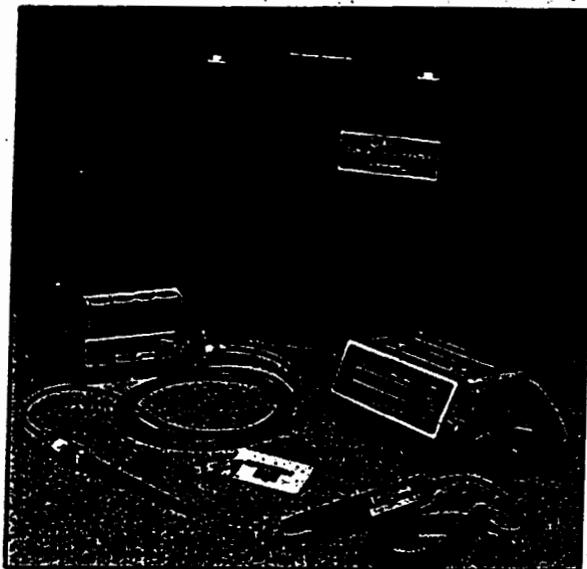
Two C alkaline batteries	49-1211
Quick reference instruction card	29-0962
Operator's manual	71-0004

Optional Accessories

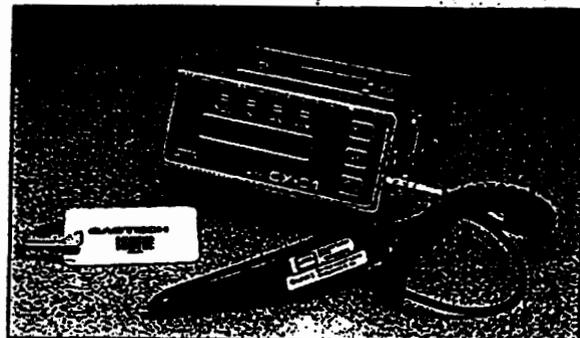
Carrying case with foam	20-0632
Bar code labels, 0 - 500 Codabar	29-0960
Adapter plate (required with pistol pump)	35-1511
Two C Ni-Cad batteries	49-1503
Charger, bench type for two C batteries	49-2006
Remote repeater alarm	52-2026
Straight hose with fittings, 3 meter for attachable pump	80-0011
Coiled hose with fittings for pistol pump	80-0012
Pistol pump, sample draw (requires 35-1511)	81-1164
Attachable pump, sample draw	81-1167
Data connector, CPU adapter, software	82-5005
Bar code reader	82-5030

Test Kits

Test kit (H ₂ S, CO version)	81-0312C
Test kit (H ₂ S, SO ₂ version)	81-0324C
Test kit (CO, SO ₂ version)	81-0325C



Durable carrying case holds the monitor and all accessories.



Identify users or sampling locations with the attachable bar code reader.

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Model GX-82

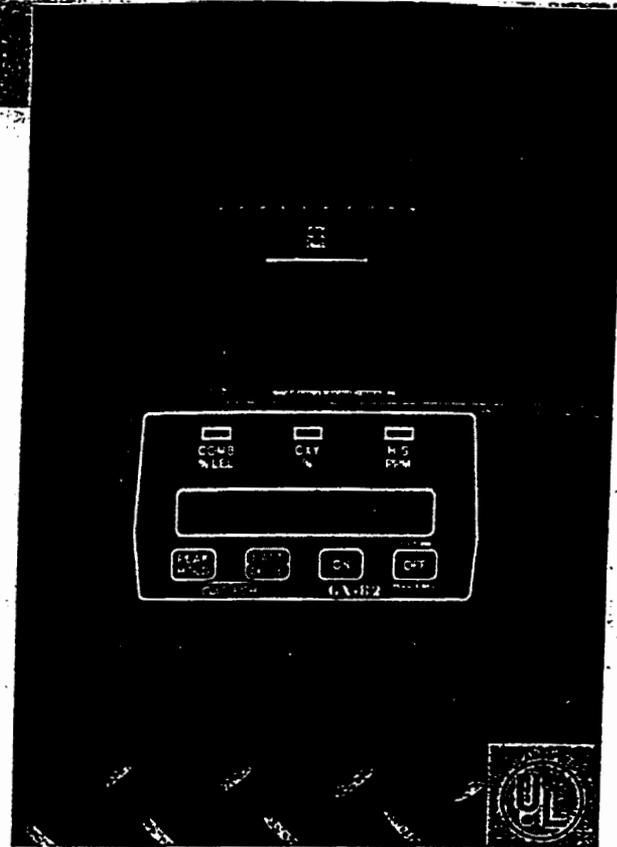
Three Gas Personal Portable Detection for oxygen, combustibles and H₂S, CO or SO₂.

- Microprocessor Control
- Continuous Monitor & Readout
- Self-Illuminating LCD Display
- Rugged Housing
- RF Resistant
- Touch Controls
- Utilizes Standard "C" Batteries
- Peak & Dosimetry Functions

With the recognition of more dangers in the workplace, government regulations have made reliable gas detection an industry necessity. Gas Tech's Model GX-82 has the best combination of features for health and safety protection available in an affordable, personal monitor.

Microprocessor electronics has revolutionized gas detection to simplify operation and add safety features. Following turn-on, the microprocessor scans basic instrument operation before allowing monitoring to proceed. Checks include tests and indications for battery voltage, sensor circuitry, and span settings. Patterned audible alarm tones signal readiness to monitor. An LCD display gives you continuous concentration values in all sensing ranges and self-illuminates to maintain visibility in poorly lit areas.

Light compact design gives you total hands-free operation. Audible alarms and lights warn of dangerous conditions. A Dosimeter function records a time-weighted average exposure to toxic gases (TWA). Press the Peak Hold switch to retain the highest combustibles or toxic readings or lowest oxygen reading registered during a monitoring period. Accidental turn-off is prevented by a five second delay.



Sensors are mounted in a detachable modular assembly which is easily removed to use with an optional extender cable for testing a confined space prior to entry. Optional sample-draw adapters can also be used with the GX-82 to remotely monitor an area prior to entry. Sample-draw adapters are available in hand-aspirated and electrical pump type configurations that clip onto the GX-82.

The Gas Tech sensors have fast, accurate, repeatable responses and are easily replaced in the field. The combustibles sensor operates on the hot-wire catalytic principle. Oxygen and toxic sensors are electrochemical in design; in addition, toxic sensors minimize false readings caused by cross sensitive response to other gases by being highly specific. All sensors have a one year warranty.

Typical applications for the GX-82 include: sulfur plants, mines, waste water treatment, refineries, storage tanks, drilling rigs, hazardous waste sites, tunnels, chemical processing, mills, utilities, and manholes.

GAS TECH

14 of 17
The Trusted Name In Gas Detection

GX-82 SPECIFICATIONS

Gases Detected	Ranges Combustibles 0 to 99% LEL Oxygen 0 to 39.9% VOL <i>One of the following:</i> Hydrogen Sulfide 0 to 99.9 ppm Carbon Monoxide 0 to 499 ppm Sulfur Dioxide 0 to 49 ppm
Sensor	Combustibles: Catalytic O ₂ , H ₂ S, CO, SO ₂ : Electrochemical
Special Functions	Dosimeter: Average ppm/minutes Peak hold: Highest value during monitoring period Demand zero: Resets fresh air calibration Delay turn-off: 5 seconds
Sampling Method	Diffusion, continuous (sample-drawing optional)
Response Time	90% full scale in 30 seconds
Accuracy	± 5% reading
Repeatability	± 2% reading
Operating Temperature	5 to 104°F (-15° to 40°C)
Humidity Range	0 to 95%RH
Alarms	Audible/visible: two stage low & high
Display	LCD self-illuminating
Power Source	Alkaline batteries (2, size C) Ni-Cd batteries optional
Battery Life	Alkaline: 10 to 12 hrs Ni-Cd: 8 to 10 hrs
Controls	Touch operated: On, Off, Peak, Battery (voltage)/Dosimeter (TWA)
Dimensions/Weight	7.3 in. L x 3.2 in. W x 2 in. D (18.4 cm L x 8.1 cm W x 5.1 cm D) 2 pounds, 6 ounces (1.1 kg)
Case Material	Red, high impact plastic
Standard Accessories	RF resistant vinyl leatherette carrying case with strap & batteries
Intrinsic Safety Rating	Class I, Division 1, Group A, B, C, & D
Approvals	Underwriters Laboratories Classified (H ₂ S & CO models)
Warranty	One year material & workmanship
Ordering Information	
Model GX-82	Cat. #
LEL, O ₂ , H ₂ S	72-7511
LEL, O ₂ , CO	72-7512
LEL, O ₂ , SO ₂	72-7513

Confined Space Entry Kits

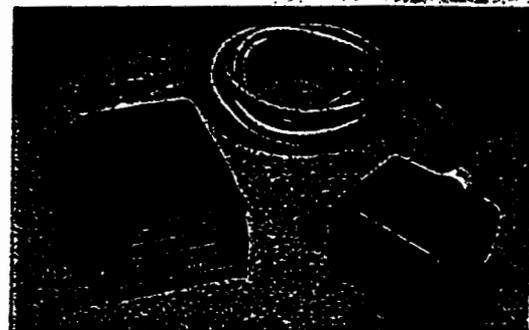
With hand-aspirated pump & 5 meter extender cable:	
LEL, O ₂ , H ₂ S	72-8511
LEL, O ₂ , CO	72-8512
LEL, O ₂ , SO ₂	72-8513
With sample draw pump:	
LEL, O ₂ , H ₂ S	72-8611
LEL, O ₂ , CO	72-8612
LEL, O ₂ , SO ₂	72-8613

Test Kits

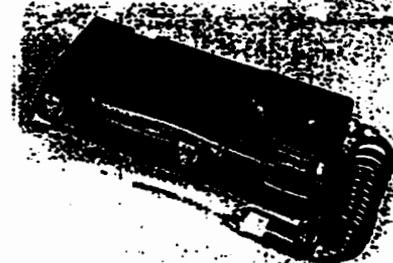
With disposable cylinders of calibration gas & accessories in a convenient carrying case	
LEL, O ₂ , H ₂ S	81-0313C
LEL, O ₂ , CO	81-0311C
LEL, O ₂ , SO ₂	81-0322C

Optional Accessories

Training Video		72-9010
Extender Cable:	16 ft. (5 meter)	47-1641
	33 ft. (10 meter)	47-1645
Ni-Cd Batteries (two required)		49-1503
Ni-Cd Charger for up to Eight Batteries		49-2007
Sample-Drawing Adapter, Pump		81-1148
Sample-Drawing Adapter, Hand-Aspirated		81-1157



Test confined spaces prior to entry with a 5 or 10 meter extender cable.



The sample-draw pump operates up to 10 hours on standard batteries.



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8407 Central Avenue • Newark, CA 94560-3431
 PH (510) 745-8700 • FAX (510) 794-6201 • TLX 334-462

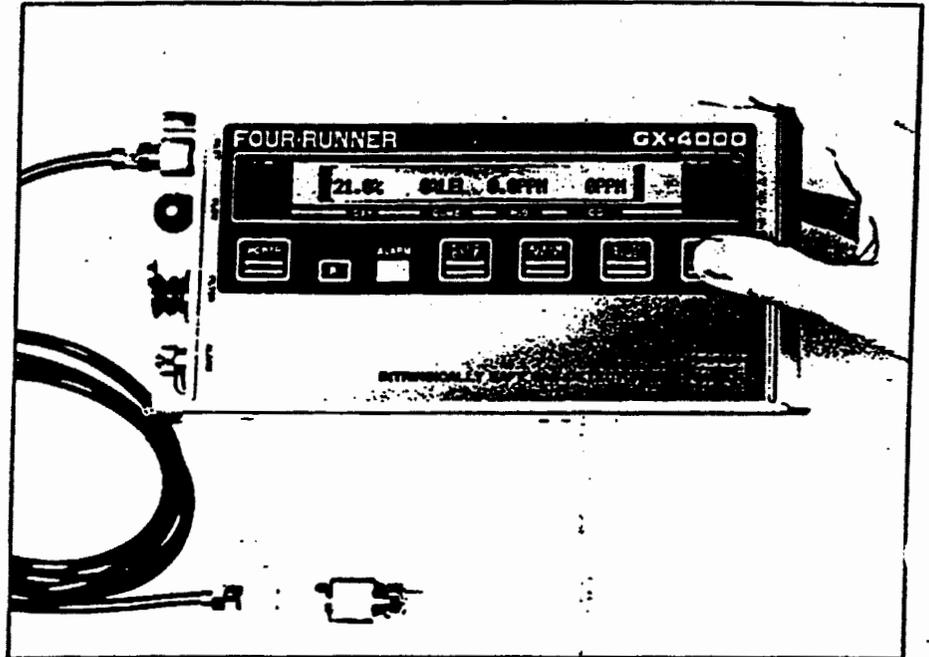
Model GX-4000

Four Gas Portable Gas Detector.

Detection for O₂, LEL Combustibles, H₂S, CO

BENEFITS

- Microprocessor control
- Sample draw pump
- Audible/visible alarms
- Dosimeter function
- Replaceable std. D batteries
- Sample gas temperature
- Low sample flow alarm
- Latching alarms
- Fully portable
- Large LCD display
- Remote alarm
- Training video
- Intrinsically safe
- GasTech's Proven Dependability



PROTECTION

The Model GX-4000 offers simultaneous detection and readout of four gas concentrations. Microprocessor control gives you the best combination of operating simplicity and data. A sample drawing pump brings the test atmosphere to the sensors. This technique is especially useful for testing confined areas before entry. The self-illuminating dot-matrix LCD display gives you a continuous, simultaneous readout of gas concentrations in all four ranges, even in poorly lit environments. Operating instructions and cautionary information also appear on this large easy-to-read display.

The GX-4000's five external controls eliminate the need for extra tools and control adjustments. The

slightly raised switch surface is integrated into the top panel and stays free from dirt and dust contamination.

FEATURES

Audible and visible alarms warn of gas concentrations, sample flow interruption, sensor or circuit failure, and expiring batteries. An 'Alarm Test' function displays all alarm set points. As a safety precaution, triggered alarms continue to sound until the user acknowledges the condition by pressing the 'Alarm Silence' switch (latching alarms).

A dosimeter function displays, in parts per million (ppm), averaged accumulated toxic concentrations,

and time period over which the average is calculated. Temperature of the sample gas can also be displayed.

The sensors of the GX-4000 are electrochemical for oxygen and toxic gases, and catalytic for combustibles. These designs are superior for fast, repeatable response when exposed to gas.

Each GX-4000 is supplied with a soft protective carrying case, and a remote alarm accessory. A training video tape is available that shows operation, calibration, and basic maintenance of the GX-4000. The instrument has a one year material and workmanship warranty.

Model GX-4000

SPECIFICATIONS

Gases detected	Range Oxygen 0-25% Combustible gas 0-100% LEL Hydrogen sulfide 0-125 PPM Carbon monoxide 0-250 PPM
Sensor	Electrochemical: H ₂ S, CO, O ₂ Catalytic: LEL
Special functions	Dosimeter: Readout of cumulative toxic concentrations Temperature: Readout of sample gas temperature
Sampling method	Continuous (sample draw)
Response time	30 sec. to 90% reading
Accuracy/repeatability	±5%/±2%
Operating temperature	-10°C to 50°C
Humidity range	0-95%RH
Alarms	Audible/Visible: Abnormal gas concentration, circuit failure, flow interruption, low battery
Display	Dot matrix self-illuminating LCD Simultaneous all ranges Trouble indications
Power source	Four size D alkaline or NiCad batteries
Battery life	8-10 hours, alkaline 6-8 hours, NiCad
Controls	Tactile: Power, Toxic/Dosimeter, Alarm test, Volt/Temp., Alarm silence
Dimensions	10" L X 4 5/8" W X 7" H
Weight	7 pounds including batteries
Case material	ABS plastic (top panel) Orange enameled aluminum (case)
Intrinsic safety rating	Class I, Division 1 Group C and D
Warranty	One year material and workmanship

TYPICAL APPLICATIONS

Chemical plants
Construction sites
Food storage
Grain storage
Landfills
Municipalities
Oil fields
Paper mills
Refineries
Storage tanks
Underground vaults
Utilities
Waste water treatment

Contact your local distributor or the factory for specific application consultation.

ORDERING INFORMATION

GX-4000 Includes alkaline batteries, remote alarm repeater, sample hose, 10" probe, screwdriver, carrying case, manual	Cat. # 72-0085
GX-4000 NiCad batteries, charger (115V AC), and accessories as above	72-0087
Accessories Training video Hydrophobic filter Continuous operation adapter, 115V AC Continuous operation adapter, 12V DC	71-9011 80-0225 49-2055 49-2057

DISTRIBUTED BY

GAS|TECH

The Trusted Name In Gas Detection

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PH (415) 745-8700 • FAX (415) 794-6201 • TLX 334-462

ATTACHMENT "D"

OPERATING & MAINTENANCE STANDARDS 20 & 37:

“ROADWAY WORK AREA PROTECTION”

&

“TUNNEL ROADWAY AREA PROTECTION”

ROADWAY WORK AREA PROTECTION

I. INTRODUCTION

This standard establishes the typical methods and procedures for Port Authority and Contractor work crews to perform short-term stationary work on Port Authority roadways. (Up to one day's work schedule is considered "short-term stationary" although it may be necessary to re-establish the protection schemes on following days.) **Longer duration work, which may involve the installation of concrete barrier, traffic detours, etc., require special study by the Chief Traffic Engineer's Office, which should be contacted to provide appropriate traffic control plans before the work is started.**

All work should be coordinated with regularly scheduled lane closures, and should be coordinated with Facility Operations and Police to assure adequate protection of the work area and motorists. The Facility Communications Center must be notified of the location and type of work.

II. SHORT-TERM STATIONARY WORK AREA PROTECTION SCHEMES

Four typical roadway work area protection schemes are illustrated. These schemes will guide work crews in the required procedures for establishing the following protected work areas:

- closure of left lane
- closure of right lane
- closure of center lane (one way roadways only)
- closure of two adjacent lanes (one way roadways only)

III. TRAFFIC CONTROL PLANNING

The following should be considered by the Facility Maintenance Supervisor and/or the Resident Engineer's Office in consultation with Facility Operations prior to the beginning of work:

1. The possibility of fully closing the roadway and providing a detour route, to minimize worker exposure to traffic.
2. Other alternatives, such as doing the work during off-peak periods, or closing additional (adjacent) lanes to provide buffer space for workers.
3. Utilizing a rolling roadblock to hold traffic for brief durations, such as during the setup or removal of traffic control devices, to minimize worker exposure.
4. Other measures, such as tighter cone spacing, utilization of variable message signs, and/or police presence may be used, if there are concerns with sight distance limitations, nighttime visibility, excessive traffic speeds, roadway geometry, etc.
5. For moving operations or for brief duration work, setting up a reduced number of warning signs and other devices can minimize worker exposure to traffic. Police assistance and/or additional back-up trucks should be considered in these situations.
6. For work involving excavations adjacent to active traffic lanes, concrete barrier may be warranted. (Contact the Chief Traffic Engineer's Office.)

IV. USE OF TRAFFIC CONTROL DEVICES

A. General

Traffic control devices shall be properly installed prior to the commencement of construction or maintenance operations, and shall be monitored and properly maintained. The devices shall remain in place as long as work is in progress, and shall be immediately removed thereafter. Where operations are performed in stages, only those devices that apply to the current stage shall be in place. Signs not applicable to the current stage of work shall be removed, covered, or turned so as not to be seen by oncoming traffic. Signs or other traffic control devices shall not be located in such a manner that would mislead or misdirect motorists; obstruct or interfere with motorists' views of approaching, merging, or intersecting traffic; or obstruct existing permanent signs. All traffic control devices must possess retro-reflective properties (i.e. with high intensity grade sheeting) or be illuminated.

B. Trailer Mounted Flashing Arrow

This sign consists of lights displayed in the form of an arrow, or in "Caution Mode". The displayed arrow lights flash to indicate the direction of the required traffic movement when a lane closure occurs. (See work area protection schemes for illustration.)

C. Back-up Truck with Impact Attenuator and Flashing Arrow

Back-up trucks shall have a nominal actual weight of 15,000 lbs. with nominal 24,000 lbs. gross vehicle weight registration, and rear-most wheels situated close to the rear of the truck body. Standard "ICC"-type rear bumpers are not an acceptable substitute for the required rear wheel location. In addition, the truck(s) shall be equipped with:

- standard flashing emergency hazard lights (parking and taillights).
- sealed-beam rotating yellow warning light, seven to ten feet above the roadway, and located so as to be visually unobstructed by any part of the truck body, load or equipment.
- truck or trailer mounted impact attenuator "TMA" unit, as manufactured by Energy Absorption Systems, Inc., Chicago, Ill, or approved equal. *Units purchased after January 1, 2010 must meet NCHRP 350 test level 3.*
- Flashing arrow: display "Caution Mode" when the back-up truck is preceded by a trailer-mounted flashing arrow. When not preceded by a trailer-mounted flashing arrow, the truck-mounted flashing arrow must display the appropriate arrow direction.

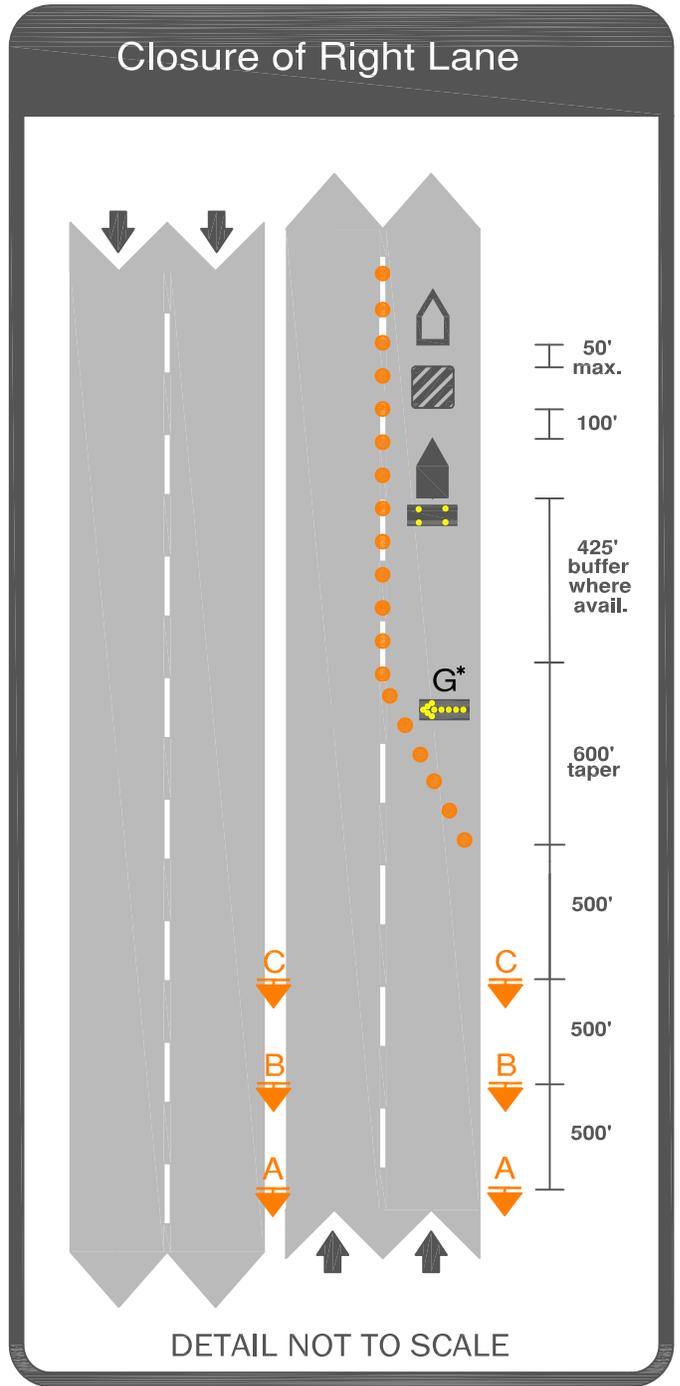
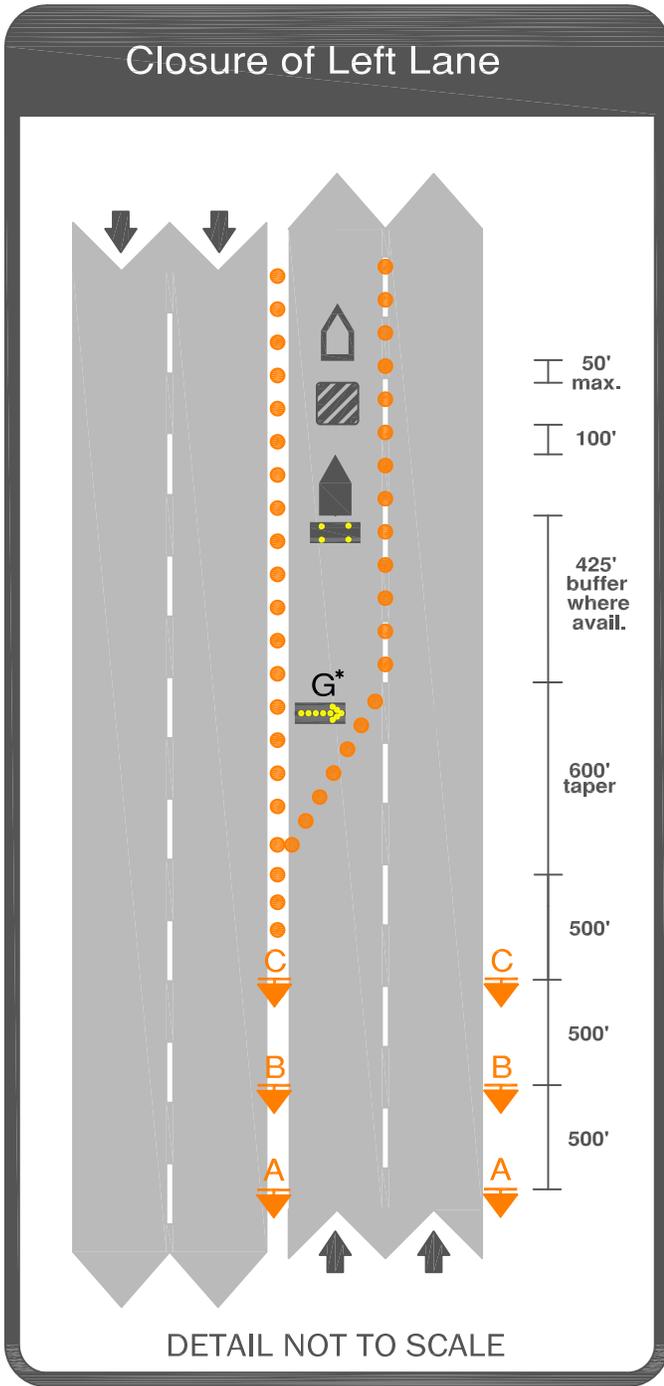
V. RESPONSIBILITIES

1. Facility management staff shall assure that the work crews adhere, as a minimum, to this standard.
2. The Facility may contact the Chief Traffic Engineer's Office to issue a request to the Port Authority Sign Shop to supply the necessary signs when they are not available at the Facility.
3. The Chief Traffic Engineer's Office will design roadway traffic control plans for special conditions and long-term stationary work.
4. If Contractor services are required, the Contractor shall supply and maintain the signs, traffic control devices, barricades, and other equipment as noted in the Contract Documents.

This Standard shows the recommended traffic control devices required, but it is not a substitute for good judgment.

Short Term Stationary

Typical Roadway Work Area Protection



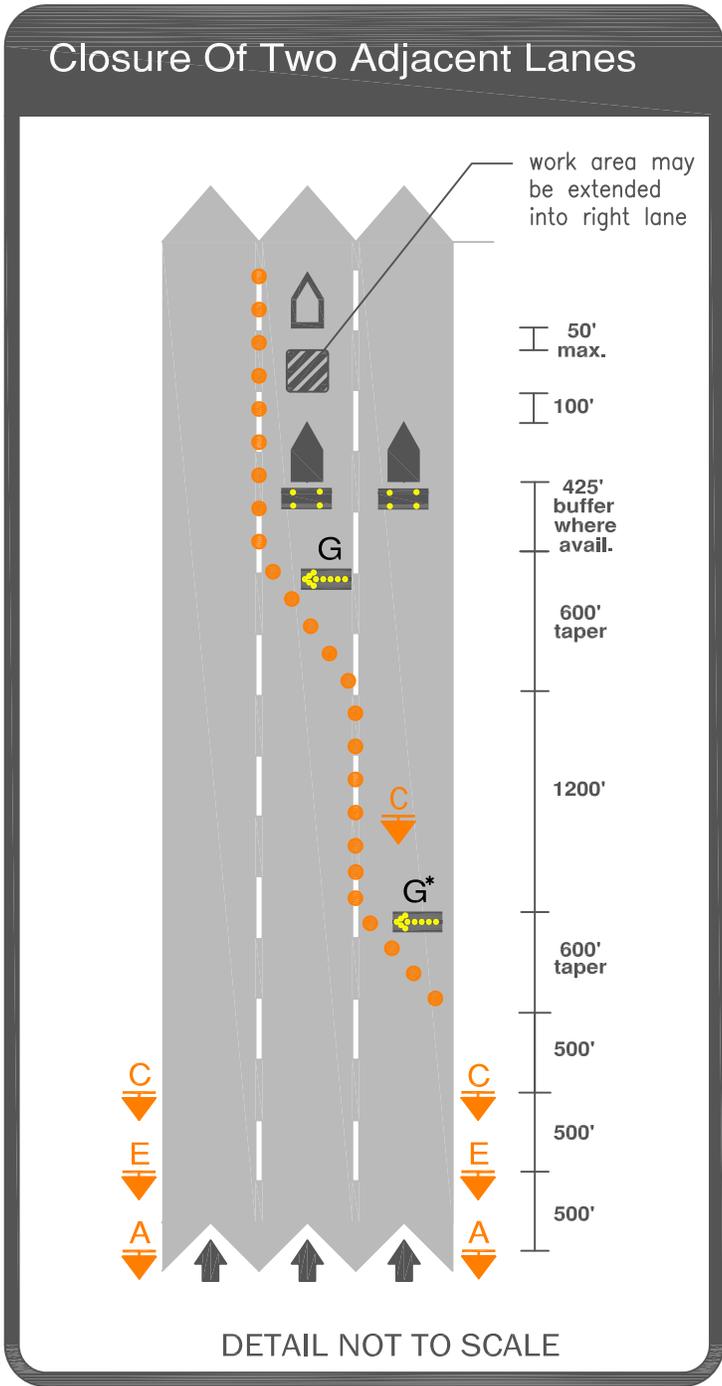
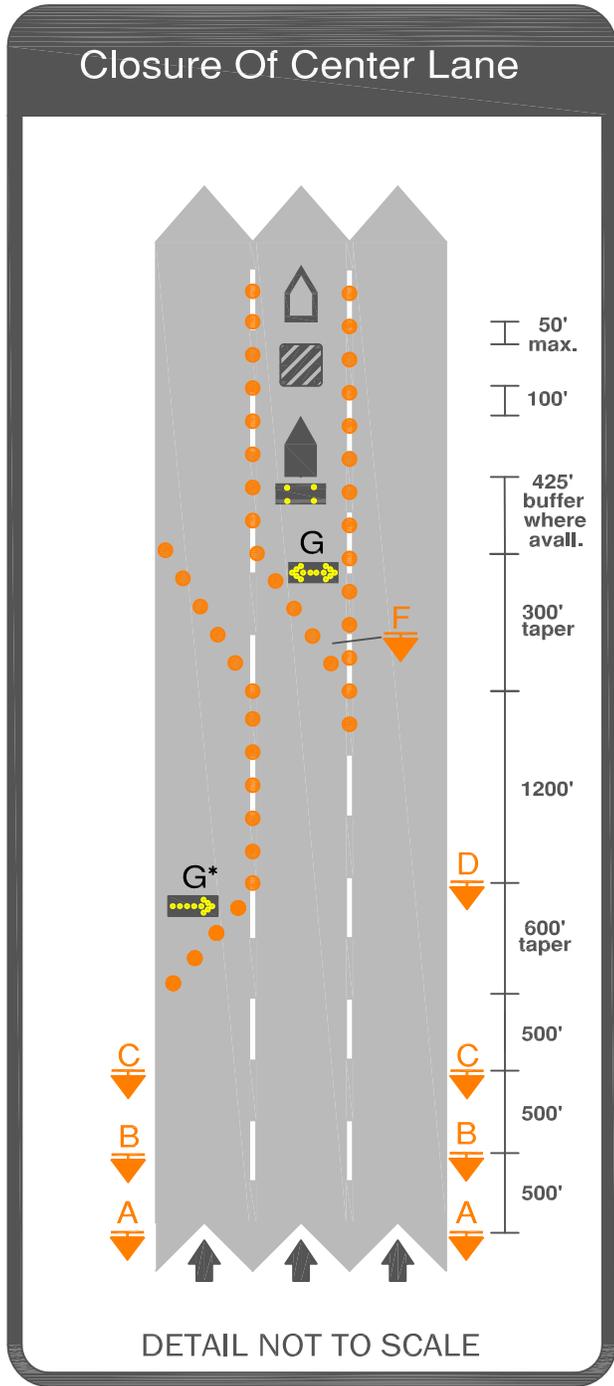
Legend

see other side for notes

A 48" x 48" sign W20-1	D 48" x 48" sign W9-3a	28" high orange traffic cones at 25' intervals	back-up truck with impact attenuator and flashing warning lights in caution mode
B LEFT or RIGHT 48" x 48" sign W20-5	E 2 RIGHT LANES CLOSED 48" x 48" sign W20-5a	G flashing arrow 8' X 4' sign (set on low intensity at night) Arrow points to open lane	* If an 8' wide min. shoulder is present, place the flashing arrow in the shoulder at the beginning of the 600 ft. taper, preceded by a 200 ft. tapered cone line (to close the shoulder)
C LEFT or RIGHT 48" x 48" sign W4-2	F 48" x 48" sign W12-1	work area	
		work vehicle with flashing warning lights (impact attenuator not required on this vehicle)	



Short Term Stationary Typical Roadway Work Area Protection



- ## Notes
- see other side for legend
1. Notify the Communications Center of the location and type of work.
 2. During staged construction, remove or otherwise cover any traffic control devices that do not apply to the current stage.
 3. All fixed-message signs shall be black on reflective fluorescent orange.
 4. Place Signs A, B, C, and E on both sides of roadway where possible.
 5. Where travel speeds are 30MPH or less, 500' spacing may be reduced to 200', 600' taper reduced to 200', 1200' cone line reduced to 600', and 425' buffer reduced to 200'.
 6. Median cone line not required on roadways physically separated by raised barrier or medians over 12' wide.
 7. For longer duration work or special conditions, contact the Chief Traffic Engineer's Office for special traffic control plans.



TUNNEL ROADWAY WORK AREA PROTECTION

I. INTRODUCTION

This standard establishes the typical methods and procedures for Port Authority and Contractor work crews to perform short-term stationary work and non-stop moving operations on Port Authority Tunnel roadways. (Up to one day's work schedule for stationary or catwalk work is considered "short-term stationary" although it may be necessary to re-establish the protection schemes on following days.) **Longer duration work, which may involve the installation of concrete barrier, traffic detours, etc., require special study by the Chief Traffic Engineer's Office, which should be contacted to provide appropriate traffic control plans before the work is started.**

All work should be coordinated with regularly scheduled lane closures, and should be coordinated with Facility Operations and Police to assure adequate protection of the work area and motorists. The Facility Communications Center must be notified of the location and type of work.

II. SHORT-TERM STATIONARY WORK AREA PROTECTION SCHEMES

Three typical work area protection schemes are illustrated. These schemes will guide work crews in the required procedures for establishing protected work areas for the following scheduled work:

1. Stationary Roadway Operations, including:
 - gutter dragging for either lane
 - repairs to far-lane niche doors
 - pavement and pothole repairs

- tunnel booth work requiring persons to be on the roadway side of the handrail
 - tile and handrail repair
 - electrical repairs to traffic signals and wall lighting
 - re-lamping of wall lights and traffic signals
 - inspections
 - standpipe repairs
 - tunnel pump room work
 - flushing standpipe
2. Stationary Catwalk Operations When Work Vehicle is Parked in Tunnel, including:
- near-lane niche door repair
 - work in telephone or traffic control niches
 - mid-river Pump Room work and inspections
 - tunnel booth cleaning and repairs
 - patron alarm repair
3. Non-stop Moving Operations through Tunnel, including:
- sweeping roadways
 - tunnel washing
 - visual inspections of traffic signals and lighting

Note: Does not include tunnel posting of personnel.

III. SPECIFIC TUNNEL REQUIREMENTS

1. Maintain appropriate portal and tunnel over-lane signals (red over closed lane, yellow over open lane).
2. At the Lincoln Tunnel, work in closed tube whenever possible.

IV. TRAFFIC CONTROL PLANNING

The following should be considered by the Facility Maintenance Supervisor and/or the Resident Engineer's Office in consultation with Facility Operations prior to the beginning of work:

1. The possibility of fully closing the roadway and providing a detour route, to minimize worker exposure to traffic.
2. Performing the work during off-peak periods.
3. Utilizing a rolling roadblock to hold traffic for brief durations, such as during the setup or removal of traffic control devices, to minimize worker exposure.
4. Other measures, such as tighter cone spacing, utilization of variable message signs, and/or police presence may be used, if there are concerns with sight distance limitations, nighttime visibility, excessive traffic speeds, roadway geometry, etc.
5. For moving operations or for brief duration work, setting up a reduced number of warning signs and other devices can minimize worker exposure to traffic. Police assistance and/or additional back-up trucks should be considered in these situations.
6. For work involving excavations adjacent to active traffic lanes, concrete barrier may be warranted. (Contact the Chief Traffic Engineer's Office.)

V. USE OF TRAFFIC CONTROL DEVICES

A. General

Traffic control devices shall be properly installed prior to the commencement of construction or maintenance operations, and shall be monitored and properly maintained. The devices shall remain in place as long as work is in progress, and shall be immediately removed thereafter. Where operations are performed in stages, only those devices that apply to the current stage shall be in place. Signs not applicable to the current stage of work shall be removed, covered, or turned so as not to be seen by oncoming traffic. Signs or other traffic control devices shall not be located in such a manner that would mislead or misdirect motorists; obstruct or interfere with motorists' views of approaching, merging, or intersecting traffic; or obstruct existing permanent signs. All traffic control devices must possess retro-reflective properties (i.e. with high intensity grade sheeting) or be illuminated.

B. Trailer Mounted Flashing Arrow

This sign consists of lights displayed in the form of an arrow, or in "Caution Mode". The displayed arrow lights flash to indicate the direction of the required traffic movement when a lane drop occurs. (See work area protection schemes for illustration.)

C. Back-up Truck with Impact Attenuator and Flashing Arrow

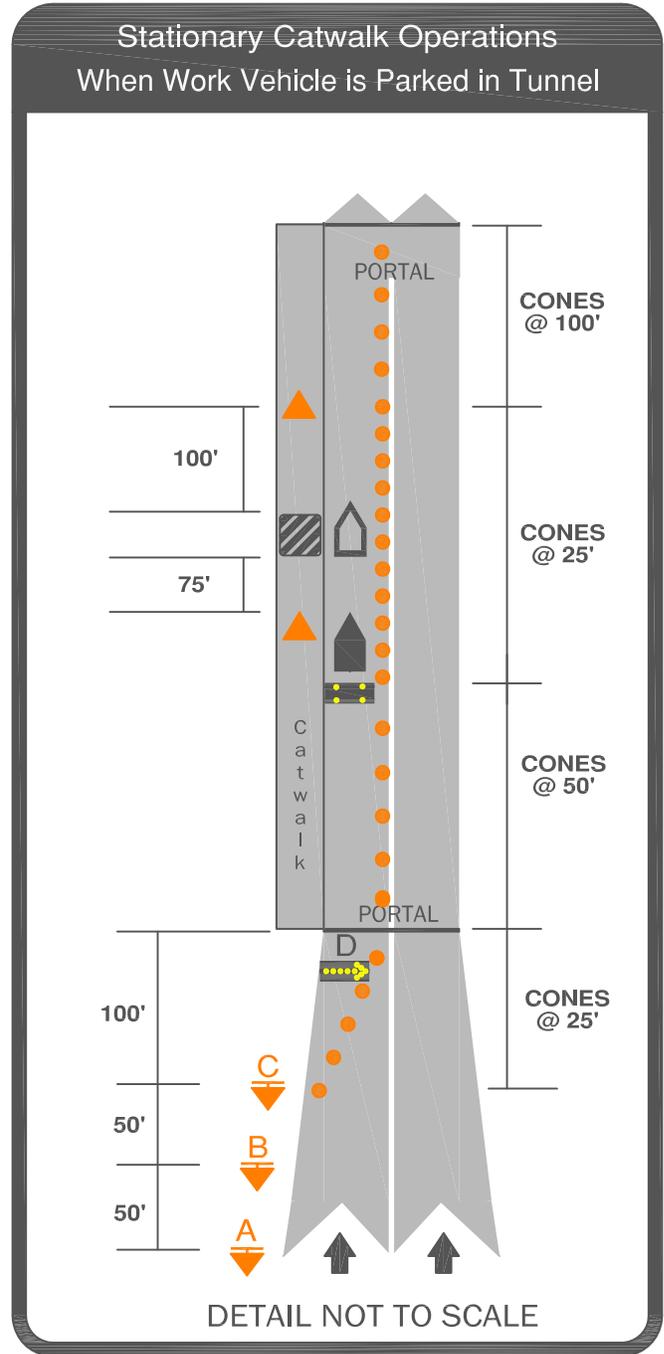
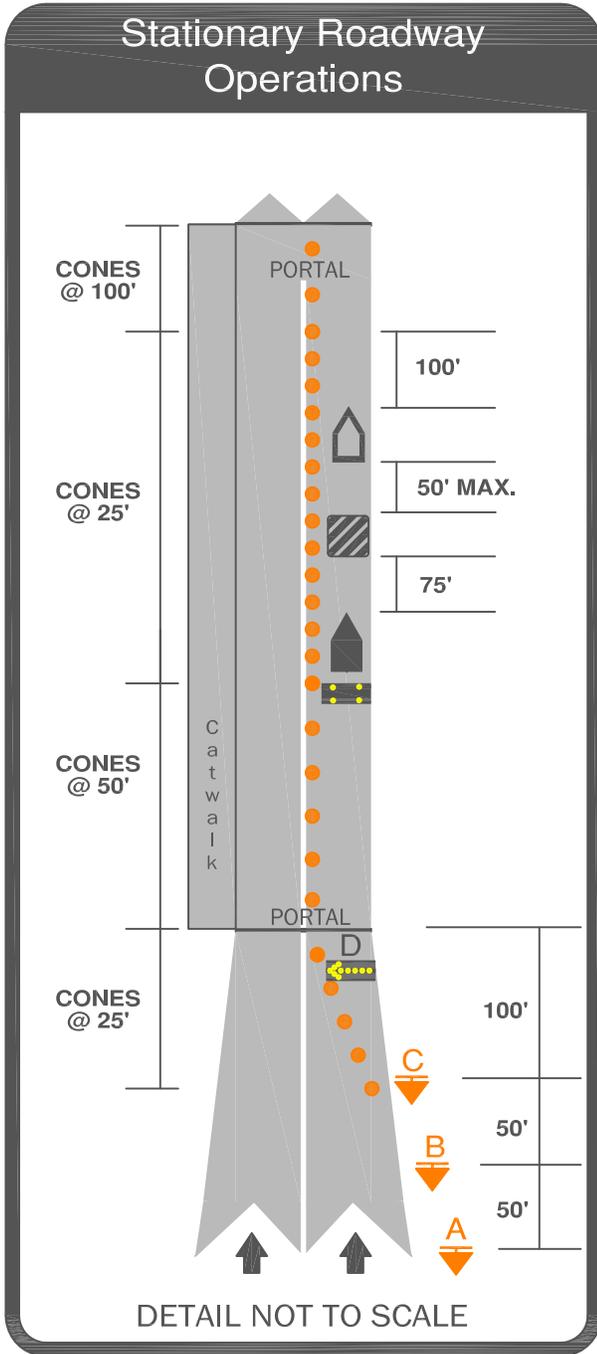
Back-up trucks shall have a nominal actual weight of 15,000 lbs. with nominal 24,000 lbs. gross vehicle weight registration, and rear-most wheels situated close to the rear of the truck body. Standard "ICC"-type rear bumpers are not an acceptable substitute for the required rear wheel location. In addition, the truck(s) shall be equipped with:

- standard flashing emergency hazard lights (parking and tail lights).
- sealed-beam rotating yellow warning light, seven to ten feet above the roadway, and located so as to be visually unobstructed by any part of the truck body, load or equipment.
- truck or trailer-mounted impact attenuator "TMA" unit, as manufactured by Energy Absorption Systems, Inc., Chicago, Ill, or approved equal. *Units purchased after January 1, 2010 must meet NCHRP 350 test level 3.*
- Flashing arrow: shall flash in "Caution Mode" when the back-up truck is preceded by a trailer-mounted flashing arrow. When not preceded by trailer-mounted flashing arrow, the truck-mounted flashing arrow shall display the appropriate arrow direction.

VI. RESPONSIBILITIES

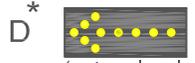
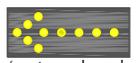
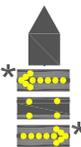
1. Facility management shall assure that the work crews adhere, as a minimum, to this standard.
2. The Facility may contact the Chief Traffic Engineer's Office to issue a request to the Port Authority Sign Shop to supply the necessary signs when they are not available at the Facility.
3. The Chief Traffic Engineer's Office will design roadway traffic control plans for special conditions and long-term stationary work.
4. If Contractor services are required, the Contractor shall supply and maintain the signs, traffic control devices, barricades, and other equipment as noted in the Contract Documents.

This Standard shows the recommended traffic control devices required, but it is not a substitute for good judgment.

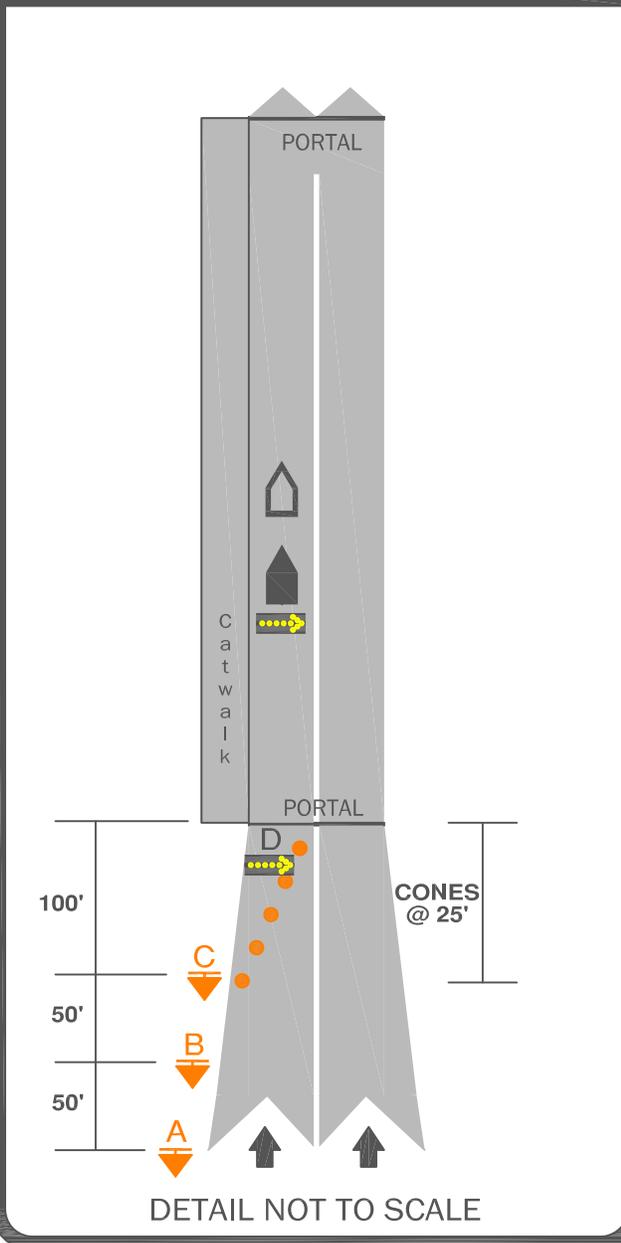


Legend

see other side for notes

-  **A**  48" x 48" sign W20-1
-  **B**  LEFT or RIGHT 48" x 48" sign W20-5
-  **C***  LEFT or RIGHT 4' x 2' sign W1-6
-  catwalk assembly (chock, traffic cone, flashing light)
-  28" high orange traffic cones
-  **D***  flashing arrow 8' x 4' sign (set on low intensity at night or inside tunnel)
-  work area
-  work vehicle with flashing warning lights (impact attenuator not required on this vehicle)
-  back-up truck with impact attenuator and flashing arrow / caution mode indications
-  * Arrow points to open lane.



Short Term Stationary Typical Tunnel Work Area Protection**Non-Stop Moving Operations
Through Tunnel****Work Area
Protection Schemes**

1. STATIONARY ROADWAY OPERATIONS
 - a. Gutter dragging for either lane
 - b. Repairs to far-lane niche doors
 - c. Pavement and pothole repairs
 - d. Tunnel booth work requiring persons to be on the roadway side of the handrail
 - e. Tile and handrail repair
 - f. Electrical repairs to traffic signals and wall lighting
 - g. Relamping of wall lights and traffic signals
 - h. Inspections
 - i. Standpipe repairs
 - j. Tunnel pump room work
 - k. Flushing standpipe
2. STATIONARY CATWALK OPERATIONS WHEN WORK VEHICLE IS PARKED IN TUNNEL
 - a. Near-lane niche door repair
 - b. Work in telephone or traffic control niches
 - c. Mid-river Pump Room work and inspections
 - d. Tunnel booth cleaning and repairs
 - e. Patron alarm repair
3. NON-STOP MOVING OPERATIONS THROUGH TUNNEL
 - a. Sweeping roadways
 - b. Tunnel washing
 - c. Visual inspections of traffic signals and lighting

Tunnel posting of personnel is excluded

Notes

see other side for legend

1. Notify the Communications Center of the location and type of work.
2. During stage construction, remove or otherwise cover any traffic control devices that do not apply to the current stage.
3. All fixed signs are black on reflective fluorescent orange.
4. Work vehicles should travel in same direction as adjacent traffic.
5. A lane closure is not required for walking along the catwalk to access the pump room and niches, except for the Mid-river Pump Room.
6. Maintain appropriate portal and over-lane signals (red over closed lane, yellow over open lane).
7. At the Lincoln Tunnel, work in closed tube whenever possible.
8. For longer duration work or special conditions, contact the Chief Traffic Engineer's Office for special traffic control plans.



ATTACHMENT "E"
SERVICE MAINTENANCE FORM

ATTACHMENT "E"
SERVICE MAINTENANCE FORM

Date: _____ Regular Working Hours: _____

Arrival Time: _____

Departure Time: _____ Other Hours: _____

Facility: Lincoln Tunnel (Other than Regular Working Hours)
 Bayonne Bridge Goethals Bridge Outerbridge Crossing

Name(s) _____

Type of Service: Cleaning Services Emergency Service

Location	Items Serviced	Number of Items

Reason for Service if Not Routine Cleaning:

Trouble found:

Materials Replaced:

Total Hours of Servicing: _____

Lead Worker's Name (print): _____

Lead Worker's Signature: _____ Date: _____

Note: A copy of this form must accompany request for payment.

ATTACHMENT "F"

CONFINED SPACE ENTRY PERMIT FORM

THE PORT AUTHORITY OF NY & NJ
CONFINED SPACE ENTRY ADMINISTRATIVE AND SAFETY RULES

1. No work shall be performed in any designated Permit Required Confined Space (PRCS) without acknowledgement by the Chief Maintenance Supervisor or his/her designee.
2. When work involving entrance into a PRCS is requested, the Confined Space Entry Permit (Form PA 3745) must be completed as follows:

Section 1 – Permit number, work order number, confined space number (if applicable), and high-tension permit number (if applicable).

Section 2 - Name of Supervisor requesting permit, Chief Maintenance Supervisor or designee, location of confined space, and purpose of entry.

Section 3 - Pre-entry checklist.

Section 4 - Record gas detection equipment name, serial number, and calibration date. Record attendant(s) and entrant(s) name(s). Prior to entering a PRCS, entrant(s) must initial that they are entering the space and upon completion of work entrant(s) must initial indicating they are exiting the space.

Section 5 - Monitoring results. Monitoring results must be recorded every two hours.

Section 6 - After verifying initial readings entry supervisor must provide his/her signature in the space provided on the permit. Upon completion of work entry supervisor must provide his/her initials.

Upon completion of work or when shift ends, the Chief Maintenance Supervisor or designee must cancel the permit, file copy, and route original to Risk Management, PATC 43.

3. The Requesting Unit, prior to starting work, shall assure itself that the confined space has been properly identified, monitored, secured and that all safety precautions have been implemented (such as ventilation, lock-out/tag-out, etc. Other interested personnel, such as the Resident Engineer, Tenant Representative, FAA, Utility companies, etc., may witness above operations. Responsibility for notification to interested and affected parties is the responsibility of the Chief Maintenance Supervisor or designee.
4. Once initial monitoring has been conducted in the PRCS the Confined Space Entry Permit shall be prominently posted at the work site for the duration of the job. A copy shall be given or faxed (with verification of receipt) to the Police desk and/or Communications desk, and the local PAPD Tour Commander to alert personnel of work being performed in a PRCS by the Chief Maintenance Supervisor. Any additional information regarding the Confined Space Entry Permit shall be included in the file with the original.
5. ***Should the scope of work or the entire work crew change at any time*** during the performance of the job described on the permit, a ***new*** Confined Space Entry Permit ***must be completed*** in accordance with all Confined Space Entry Administrative and Safety Rules.

ATTACHMENT "G"

**CONTRACTOR PERMIT REQUIRED
CONFINED SPACE NOTIFICATION**

CONTRACTOR PERMIT REQUIRED CONFINED SPACE NOTIFICATION

PA 3745C / 08-10

Hand print in ink. (See instructions)

FACILITY:

Requested By: _____	Company Name/Telephone Number: _____
Print Name	Signature

Exact Location of Confined Space: _____	Contract Number: _____
---	------------------------

Purpose of Entry: _____

Prepared By: Chief Maintenance Supervisor/Designee (CMS/D) _____	Date: _____
Print Name	Signature

In accordance with 29 CFR 1910.146 (c) (8) (i) the issuance of this form explicitly states that the ensuing work involves entry into a Permit-Required Confined Space. Entry into this space is allowed only through compliance with the OSHA standard Permit-Required Confined Spaces, 29 CFR 1910.146.

A copy of this form shall be given or faxed (with verification of receipt) to the Police desk and/or Communications desk, and the local PAPD Tour Commander to alert personnel of work being performed in a PRCS.

PRE-ENTRY CHECKLIST					
	YES	N/A		YES	N/A
Contractor informed of the elements, including the hazards identified that make the space permit required	<input type="checkbox"/>	<input type="checkbox"/>	Contractor personnel and Port Authority personnel will be working in or near permit spaces requiring joint entry operations	<input type="checkbox"/>	<input type="checkbox"/>
Contractor informed of precautions or procedures implemented for the protection of employees.	<input type="checkbox"/>	<input type="checkbox"/>	Contractor has obtained available information regarding permit space hazards and entry operations	<input type="checkbox"/>	<input type="checkbox"/>

IN THE EVENT OF AN EMERGENCY CONTACT: _____

(COMPLETED BY CHIEF MAINTENANCE SUPERVISOR/DESIGNEE)

<ol style="list-style-type: none"> 1. Your name and company name. 2. Location, including cross streets. 3. Phone number from which you are calling. 4. This is a confined space operations. You need a rescue service. 	<ol style="list-style-type: none"> 5. Number of victims; conditions of victims if known. 6. Type of entry (manhole, door, etc.). 7. Any known conditions in the space (gas readings, flooding)
--	---

I UNDERSTAND THE ABOVE INFORMATION AND WILL ADHERE TO ALL RULES AND REGULATIONS MANDATED BY THE OSHA STANDARD FOR PERMIT REQUIRED CONFINED SPACES.

Print Full Name/Title Contractor Representative	Signature/Contract Number	Date
--	---------------------------	------

THE CONTRACTOR IS OBLIGED TO INFORM THE PORT AUTHORITY OF ANY HAZARD CONFRONTED OR CREATED IN THE PERMIT SPACE BY USING THE SPACE BELOW.

Distribution: Copy 1. Completed PA 3745C and completed Contractor's Permit to Risk Management, PATC 43.
Copy 2. Retained by Facility CSM/D.

THE PORT AUTHORITY OF NY & NJ

PERMIT REQUIRED CONFINED SPACE RULES

1. No work shall be performed in any designated Permit Required Confined Space (PRCS) without acknowledgement by the Chief Maintenance Supervisor or his/her designee.
2. Contractors must complete the reverse side of this notification document and ensure that all contract personnel or subcontractor personnel are equipped and trained in accordance with OSHA 29 CFR 1910.146
3. Contractors will ensure monitoring is performed prior to entry into a PRCS. A copy of the contractors confined space entry permit shall be prominently posted outside or above the work site for the duration of the job.
4. Contractors are reminded that should the nature of the work being performed in the permit required confined space change or if all the employees working change during the performance of the task described on the contractor's permit, a new revised notification document and contractor's permit is necessary.

CONTRACTORS SAFETY PRECAUTIONS AND REQUIREMENTS

1. The contractor must provide a copy of its Confined Space Entry Program that meets or exceeds OSHA confined space entry requirements to the Facility Manager or the Chief Maintenance Supervisor and/or the Resident Engineer Office Construction Inspectors prior to the commencement of work. The contractor is responsible for furnishing all necessary equipment including monitoring devices, and the required Confined Space Entry Permit required under 29 CFR 1910.146. The contractor's Permit Required Confined Space Entry Permit is to be posted in a conspicuous manner prior to entering the Port Authority Permit Required Confined Space (PRCS).
2. The contractor must assure that all safety precautions and requirements are implemented prior to the commencement of work inside the PRCS. Examples of these safety precautions and requirements are appropriate site protection, air monitoring prior to and while inside the permit space, appropriate ventilation equipment is utilized, electrical and mechanical systems have been de-energized and locked/tagged out and all other appropriate personal protective equipment (PPE) is furnished and utilized by contract personnel.
3. The contractor is responsible for making notifications to the Port Authority High Tension System Operator to coordinate activities if necessary.
4. Neither this notification document nor any act or omission of the Port Authority shall be construed to impair the obligations of any person under or in connection with any agreement or contract with the Port Authority or in connection with the work done.
5. The contractor shall not do or permit to be done any act or thing which will invalidate or conflict with any insurance policy covering any area which the Contractor enters upon, and the Contractor shall promptly observe, comply with and execute the provisions of any and all present and future rules, regulations, orders, and directions of the New York Board of Fire Underwriters, New York Fire Insurance Exchange, or if the work area is located in New Jersey, the National Board of Fire Underwriters, the Fire Insurance Rating Organization of New Jersey, or of any other board or organization exercising or which may exercise, similar functions which may pertain or apply to the operations of the Contractor hereunder.
6. The contractor fully understands that certain areas owned or leased to the Port Authority are in turn leased or licensed to third parties. In the event that the contractor's work requires access to any of these areas arrangements must be made with the Port Authority property representative at the facility.
7. The contractor shall observe and obey (and compel its officers, members, employees, agents subcontractors, and other persons doing business with it to observe and obey the present and future "Rules and Regulations" of the Port Authority, and all Federal, State, County and Municipal rules, regulations and guidelines and laws.
8. Work being performed in PRCS is subject to immediate suspension by the Port Authority upon oral or written notice if, in the opinion of the Port Authority Resident Engineer's Office staff or Safety Inspectors/Engineers, such action is deemed justifiable to protect life or property.
9. Upon completion of work or when shift ends, the contractor shall return their cancelled entry permit to a Port Authority Representative.

ATTACHMENT "H"

**SPECIFICATIONS SECTION 2850:
"PLYWOOD SIGN PANELS AND WOOD SIGN POSTS" (N 5-1-01)**

DIVISION 2

SECTION 02850

PLYWOOD SIGN PANELS AND WOOD SIGN POSTS

PART 1. GENERAL

1.01 SUMMARY

This Section specifies requirements for the following:

- A. Plywood sign panels for use in the construction of temporary (TYPE 1) and permanent (TYPE 2) guide, warning and regulatory roadway signs. Sign type usage, TYPE 1 or TYPE 2, shall be identified on the Contract Drawings for each required sign.
- B. Wood sign posts and footings for both TYPE 1 and TYPE 2 sign panel side-of-road installations.

1.02 REFERENCES

The following is a listing of organizations and publications referenced in this Section:

American Association of State Highway and Transportation Officials (AASHTO)

Standard Specifications for Structural Supports for Highway Signs, Luminaries, and Traffic Signals (LTS-2).

Manual for Signing and Pavement Markings of the National System for Interstate and Defense Highways (MUTCD)

AASHTO M 168 Wood Products

American Society for Testing and Materials (ASTM)

- ASTM A 153 Zinc Coating (Hot Dip) on Iron and Steel Hardware
- ASTM B 209 Aluminum and Aluminum-Alloy Sheet and Plate
- ASTM B 211 Aluminum-Alloy Bar, Rod and Wire
- ASTM B 221 Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes and Tubes
- ASTM D 245 Methods for Establishing Structural Grades and Related Allowable Properties for Visually Graded Lumber
- ASTM A 307 Carbon Steel Externally Threaded Standard Fasteners
- ASTM A 325 Quenched and Tempered-Steel Bolts and Studs with suitable Nuts and Plain Washers
- ASTM D 2555 Methods for Establishing Clear Wood Strength Values

American Wood Preservers Association (AWPA)

- AWPA C 1 Timber Products - Preservative Treatment by Pressure Processes
- AWPA C 14 Wood for Highway Construction, Pressure Treatment

Douglas Fir Plywood Association

Federal Highway Administration (FHWA)

Manual on Uniform Traffic Control Devices for Streets and Highway (MUTCD)

Standard Alphabets for Highway Signs

Standard Lower-case Alphabets for Highways

United States Department of Commerce (USDC)

Product Standard PS-1 Soft Plywood, Construction and Industrial

1.03 DESIGN AND PERFORMANCE REQUIREMENTS

- A. Design of signs and sign structure shall provide sufficient strength to withstand a wind loading of 80 miles per hour as per AASHTO LTS-2.
- B. Sign supports and framing shall be designed to meet the required wind loading. Posts shall be designed for direct embedment in the soil by excavation and back fill, or by driving with hand or mechanical equipment.

1.04 QUALITY ASSURANCE

Each plywood sheet shall be grade marked and certified in accordance with the standards adopted by the Douglas Fir Plywood Association.

1.05 DELIVERY, STORAGE AND HANDLING

All sign components and materials shall be transported and handled in a manner that shall cause no permanent deformation, injury or damage. Sign components and materials to be stored shall be stored above ground.

1.06 SUBMITTALS

Refer to Appendix "A" for submittal requirements.

PART 2. PRODUCTS

2.01 MATERIALS

- A. Plywood Sign Panels
 - 1. Plywood sign panels shall conform to the requirements set forth in USDC Product Standard PS-1 for Douglas Fir Plywood.
 - 2. The plywood panels for TYPE 1 signs shall be exterior-type plywood, 5-ply and A-C grade or better.
 - 3. The plywood panels for TYPE 2 signs shall be high-density overlay, exterior marine-type plywood, 5 ply and B-B grade or better. Inner plies for TYPE 2 panels shall be B grade veneers or better.
 - 4. The thickness of plywood sign panels and plywood battens shall be not less than 1/2 inch for TYPE 1 panels and not less than 3/4 inch for TYPE 2 signs.

5. The overlay surface for TYPE 2 plywood sign panels shall consist of a cellulose-fibre or sheet, in which not less than 40 percent by weight of the laminate shall be a thermo-setting resin of the phenol or melamine type. The resin-impregnated material shall be not less than 0.009 inches thick and shall weigh at least 60 lbs per 1000 square feet of single face, including both resin and fiber. The resin impregnation shall be sufficient to attach the surfacing material to the plywood. The bond shall be equal in performance to the glue lines between the sheets of veneer that make up the plywood.
 6. The face of the cellulose-fibre overlay surface for TYPE 2 panels shall be hard, smooth, and of such quality that further finishing by paint or varnish is not required to fabricate the sign as specified in 2.03 of this Section.
- B. Panel Sheeting and Screen Printing
1. Reflectorized Sheeting

Shall be Scotchlite Brand Engineer Grade Series 2200 (heat activated adhesive) or Series 3200 (pressure sensitive adhesive) as manufactured by the Traffic Control Materials Division of the 3M Co., 223-3N 3M Center, St. Paul, Minnesota 55144, or approved equal.
 2. Non-Reflectorized Sheeting

Shall be Scotchcal Brand film Series 650 (heat activated adhesive) or Series 3600 (pressure sensitive adhesive) as manufactured by the Traffic Control Materials Division of the 3M Co., or approved equal.
 3. Screen Printing Inks, Thinners and Toners
 - a. Scotchlite Brand Process Colors Series 700 for use on Reflectorized Sheeting.
 - b. Scotchcal Brand Process Colors Series 3900 and 4100 for use on Non-Reflectorized Sheeting.
 - c. Approved equals for use on approved reflective and non-reflective sheetings.
 4. Panel sheeting (reflective or non-reflective) and screen printing usage shall be shown on the Contract Drawing.
- C. Wood Sign Posts
1. Wood sign posts shall be dry, No. 1 grade, S4S, Douglas Fir, Southern or Ponderosa Pine, Hemlock, Spruce or Western Larch conforming to the applicable requirements of AASHTO M 168. The posts shall be straight and true, free of splits, knots and warps or, of steel or aluminum components.
 2. All the posts shall be pressure-treated with CCA in accordance with the applicable requirements of AWPA C1 and AWPA C 14.
 3. Posts shall be surfaced four sides, have a uniform cross-section, and shall be sized not less than 4 inches by 4 inches. The post shall be graded for the following stress grades in accordance with the grading rules developed from ASTM D 245 for the selected stress grades. Using the clean wood properties of ASTM D 2555, the bending stress of the post in a TYPE 1 panel installation shall be not less than 1200 psi, and not less than 4000 psi for a TYPE 2 panel installation.

D. Stiffeners, Brackets and Miscellaneous Hardware

1. Horizontal and vertical sign panel stiffeners (Z bars) and panel brackets shall be fabricated of aluminum alloy 6061-T6 conforming to ASTM B 221.
2. Other miscellaneous aluminum hardware including bolts, nuts, washers, screws, rivets, pull-type lockbolts and serrated or knob stem blind rivets shall be fabricated to meet the requirements of ASTM B 209 and ASTM B 211 for Alloy 2024-T4. Component designated as Alloy 2024-T4 shall be given a chromated sealed anodic coating.
3. High strength steel bolts, nuts and washers shall conform to ASTM A 325. High-strength bolts, nuts and washers shall be galvanized in accordance with ASTM A 153.

E. Footings

1. Soil bearing plates shall be attached at the bottom of the post as required in 1.03 of this Section, or as shown on the Contract Drawings.
2. Breakaway post, if required, shall be as shown on the Contract Drawings. Breakaway post and footings shall be designed in accordance with the requirements of 1.03 of this Section.
3. Concrete footings, if required by 1.03 of this Section, shall be Class "B" concrete conforming to the Section entitled "Concrete."
4. Portable sign supports shall be as described in "Maintenance of Traffic and Work Area Protection" of Division 1 - GENERAL PROVISIONS.

2.02 CONSTRUCTION FEATURES

- A. Sign face text, symbol, and border layouts shall be in accordance with "Maintenance of Traffic and Work Area Protection", of Division 1 - GENERAL PROVISIONS, or the Contract Drawings conforming to the requirements of:
1. The AASHTO Manual for Signing and Pavement Marking of the National System of Interstate and Defense Highways.
 2. The FHWA MUTCD.
 3. The FHWA Standard Alphabets for Highway Signs.
 4. The FHWA Standard Lower-case Alphabets for Highways.
- B. Sign characters shall be as shown on the Contract Drawings and shall include letters, numerals, symbols and borders.
- C. Sign corner and border radii shall be approximately one-eighth of the height of the sign but shall not exceed 12 inches. Sign borders shall be of the same type character as the legend and shall be approximately the same width as the stroke width of the major lettering or the sign.

2.03 FABRICATION

- A. Holes shall be drilled; cut edges shall be smooth and true, and free from burrs or ragged breaks. All fabrication except for cutting the lower ends of embedded posts shall be done in the shop. The plywood panels shall be clean, dry, and free from oils, dust, grit, or any other contaminants that would adversely affect the adhesion of the Reflectorized and Non-Reflectorized sheeting.
- B. In preparing TYPE 1 panels for Reflectorized and Non-Reflectorized Sheeting, the entire Grade A surface to be covered shall be wiped down with a tack cloth to remove all saw dust and sanding residue.
- C. In preparing TYPE 2 panels for Reflectorized and Non-Reflectorized Sheeting, the entire portion of the overlay surface to be covered, shall first be given a light, firm abrasion with steel wool (medium to fine grade) saturated with xydol, V.M.&P. Naphtha or similar commercial solvent. The surface shall then be wiped clean and dry. An alternate method of panel pre-treatment that consists of a solvent wipe, immediately followed by vapor degreasing (tri-chloroethylene) for a minimum period of 6 minutes may be used.
- D. All panel and batten surfaces to be glued shall be slightly roughened and then glued with waterproof adhesive prior to assembly.
- E. After panel preparation, the edges and back or rear surface of all TYPE 2 panels and battens shall be painted with two coats of approved white exterior paint.

PART 3. EXECUTION

3.01 INSTALLATION

- A. The Contractor shall erect and remove signs as shown on the Contract Drawings, or as ordered by the Engineer, and in such a manner that the traveling public is informed and protected at all times.
- B. Side-of-road ground mounted signs shall normally be erected so that the sign face is truly vertical to the profile line and the intersection angle measured between the sign face and the centerline of the travel lane, which the sign serves shall be 93 degrees. Where lanes divide or on curves, sign faces shall be oriented so as to be most effective both day and night, and to avoid the possibility of specular reflection.
- C. The wood sign posts for side-of-road mounting shall be embedded in the soil to the depth required by the design specified in 1.03 of this Section. The hole for the embedment shall be excavated using a manual post-hole digger or appropriate size power driven auger. After the hole has been excavated, the post shall be aligned to the sign face direction, held vertical in the hole and suitable excavated material shall be tamped in the annular space. Holes resulting from sign post removals shall be filled by the Contractor to restore the area to its original state as directed by the Engineer.
- D. All signs shall be securely fastened to their supports with bolts, nuts and washers of aluminum (2024-T4 alloy) or hot-dip galvanized steel conforming to 2.01 D of this Section, as required by the design specified in 1.03 of this Section.

- E. Plywood battens and aluminum panel stiffeners shall be utilized as required by 1.03 of this Section and shall conforming to the applicable requirement of 2.01 of this Section.
- F. Horizontal and vertical sign clearances shall be as shown on the Contract Drawings.
- G. Other non-wood post mounting of plywood signs, such as overhead sign installations shall be as shown in the Contract Drawings.
- H. Concrete footings, if required by 1.03 of this Section, shall be placed in accordance with the requirements of the Section of these Specifications entitled "Concrete," and shall not extend more than 4 inches above grade.

3.02 FIELD INSPECTION

- A. Immediately prior to erection, all material shall be inspected by the Engineer for damage.
- B. The Engineer will inspect each completely erected sign for proper location, line and grade of signs, vertical post alignment, condition, appearance, reflectorization and visibility.
- C. As the Work progresses, the location, position and condition of all signs shall be monitored by the Contractor in accordance with "Maintenance of Traffic and Work Area Protection" of Division 1 - GENERAL PROVISIONS.

END OF SECTION

SECTION 02850

PLYWOOD SIGN PANELS AND WOOD SIGN POSTS

APPENDIX "A"

SUBMITTALS

- A. Submit the following in accordance with the requirements of "Shop Drawings, Catalog Cuts and Samples" of Division 1 – GENERAL PROVISIONS:
1. Detailed sign face layout for all TYPE 2 sign panels showing letter height, width, brush stroke, spacing between letters, words, symbols and lines, border width, symbols details, and overall dimensions of the sign panels. Detailed sign face layouts are not required for TYPE 1 sign panels.
 2. Shop drawings of sign panel and posts showing the sizes of the members and their connection details. The shop drawings shall also show the total length of the posts for each sign and give an elevation view of each of the completely erected signs with vertical clearance below the lowest sign panel to adjacent roadway, and other relevant dimensions.
 3. Catalog cuts of all the materials to be used for sign faces.
- B. Prior to fabrication, submit computations for the design of the sign panels and supports, as required in 1.03 of this Section, signed by a Professional Engineer licensed to practice in the State where the Work is to be performed.

END OF APPENDIX "A"

ATTACHMENT "I"

**SPECIFICATIONS SECTION 2851:
"ALUMINUM SIGN PANELS" (N 5-1-01)**

DIVISION 2**SECTION 02851****ALUMINUM SIGN PANELS****PART 1. GENERAL**

1.01 SUMMARY

This Section specifies requirements for the following:

- A. Aluminum sign panels for use in the construction of directional, guide, warning and regulatory roadway signs.

1.02 REFERENCES

The following is a listing of the publications referenced in this Section:

American Association of State Highway and Transportation Officials (AASHTO)

Standard Specifications for Structural Supports for Highway Signs, Luminaries, and Traffic Signals (LTS-2)

Manual for Signing and Pavement Markings of the National System for Interstate and Defense Highways

American Society for Testing and Materials (ASTM)

ASTM A 153 Zinc Coating (Hot-Dip) on Iron and Steel Hardware

ASTM A 193 Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service

ASTM A 194 Carbon and Alloy Steel Nuts for Bolts for High-Pressure and High-Temperature Service

ASTM A 325 High-Strength Bolts for Structural Steel Joints

ASTM A 325 High-Strength Bolts for Structural Steel Joints

ASTM B 209 Aluminum and Aluminum-Alloy Sheet and Plate

ASTM B 211 Aluminum-Alloy Bar, Rod and Wire

ASTM B 221 Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes and Tubes

American Welding Society (AWS)

AWS D 1.2 Structural Welding Code - Aluminum

Federal Highway Administration (FHWA)

Manual on Uniform Traffic Control Devices for Streets and Highway (MUTCD)

Standard Alphabets for Highway Signs

Standard Lower-case Alphabets for Highways

Standard Traffic Signs

1.03 DESIGN AND PERFORMANCE REQUIREMENTS

- A. Design of signs, supports and framing shall provide sufficient strength to withstand a wind loading of 80 miles per hour as per AASHTO LTS-2.

1.04 DELIVERY, STORAGE, AND HANDLING

All sign components and materials shall be transported and handled in a manner that shall cause no permanent deformation, injury or damage. Sign components and materials to be stored shall be stored above ground.

1.05 SUBMITTALS

Refer to Appendix "A" for submittal requirements.

PART 2. PRODUCTS

2.01 MATERIALS

A. Aluminum Sign Panels

1. Aluminum sheets and plates shall conform to ASTM B 209, alloy 6061-T6.
2. Fabricate panels from standard sheet widths. The thickness for panel sizes of 30 inches by 30 inches or smaller shall be 0.080 inch and the thickness of larger panels shall be 0.125 inch unless otherwise shown on the Contract Drawings.
3. The panel blanks shall be free from laminations, blisters, open seams, pits, holes, or defects that may affect their strength, appearance or use. The thickness shall be uniform and the blanks shall be commercially flat.

B. Panel Sheeting and Screen Printing

1. Reflectorized Sheeting

Scotchlite Brand High Intensity Grade Series 2800 (heat activated adhesive) or Series 3800 (pressure sensitive adhesive) as manufactured by the Traffic Control Materials Division of the 3M Co., 223-3N 3M Center, St. Paul, Minnesota 55144, or approved equal, and shall meet or exceed the reflecting requirements associated with High Intensity Grade, sheetings.

2. Non-Reflectorized Sheeting

Scotchcal Brand film Series 650 (heat activated adhesive) or Series 3600 (pressure sensitive adhesive) as manufactured by the Traffic Control Materials Division of the 3M Co., or approved equal.

3. Screen Printing Inks, Thinners and Toners

- a. Scotchlite Brand Process Colors Series 700 for use on Reflectorized Sheeting, or approved equal
- b. Scotchcal Brand Process Colors Series 3900 and 4100 for use on Non-Reflectorized Sheeting, or approved equal.

4. Panel sheeting (reflective or non-reflective) and screen printing usage shall be as shown on the Contract Drawings.
- C. Stiffeners, Brackets and Miscellaneous Hardware
1. Horizontal and vertical sign panel stiffeners (Z bars) and panel brackets shall be fabricated of aluminum alloy 6061-T6 conforming to ASTM B 221.
 2. Other miscellaneous aluminum hardware including bolts, nuts, washers, screws, rivets, pull-type lockbolts and serrated or knob stem blind rivets shall be fabricated to meet the requirements of ASTM B 209 and B 211 for Alloy 2024-T4. Component designated as Alloy 2024-T4 shall be given a chromated sealed anodic coating.
 3. High strength steel bolts, nuts and washers shall conform to ASTM A 325. High-strength bolts, nuts and washers shall be galvanized in accordance with ASTM A 153.
 4. Stainless steel nuts shall conform to ASTM A 194, Grade 8F, except that the nuts shall be lock nuts with semifinished hex nuts equivalent to American Standard Heavy Series. Stainless steel bolts, washers, and screws shall conform to ASTM A 193, austenitic steel.

2.02 CONSTRUCTION FEATURES

- A. Sign face text, symbol, and border layouts shall be in accordance with the Contract Drawings and conform to the following requirements of:
1. The AASHTO Manual for Signing and Pavement Marking of the National System for Interstate and Defense Highways.
 2. The FHWA Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD).
 3. The FHWA Standard Alphabets for Highway Signs.
 4. The FHWA Standard Lower-case Alphabets for Highways.
- B. Sign characters shall be as shown on the Contract Drawings.
- C. Sign corner and border radii shall be approximately one-eighth (1/8) of the height of the sign but shall not exceed 12 inches; or as shown in the FHWA Standard Traffic Sign. Sign borders shall be of the same type character as the legend and shall be approximately the same width as the stroke width of the major lettering or the sign, or as shown in the FHWA Standard Traffic Sign.

2.03 FABRICATION

- A. All shearing, cutting and punching shall be performed prior to preparing the blanks for application of reflective material. All edges and corners shall be filed or ground smooth, leaving the entire sign blank free from sharp edges and burrs.

- B. The blanks shall be cleaned, degreased, and chromated or otherwise properly prepared in accordance with the sheeting manufacturer's recommendations. After treatment, clean cotton gloves shall be used in handling the sign blank until the reflective sheeting is applied. All fabrication except for cutting the lower ends of embedded posts shall be done in the shop. The aluminum panels shall be clean, dry, and free from oils, dust, grit, or any other contaminants that would adversely affect the adhesion of the Reflectorized and Non-Reflectorized sheeting.
- C. Welding of aluminum shall consist of inert gas shielded metal arc welding with consumable electrodes. All welding of aluminum shall be performed in the shop. No field welding or aluminum shall be permitted. All welders shall be qualified in accordance with the qualification procedures of AWS D 1.2.
- D. Necessary drilling of holes required for shop and field assembly after sheeting is applied shall be done such that the drill bit does not snag, rip, or damage the sheeting outside of the drill hole. Holes shall be deburred prior to assembly.
- E. Exposed bolt heads on the face of the assembly sign shall be touched up with enamel paint of the same color as the sheeting surrounding the bolts.

PART 3. EXECUTION

3.01 INSTALLATION

- A. Erect, cover, and remove signs as shown on the Contract Drawings.
- B. Side-of-road ground mounted signs shall be erected so that the sign face is truly vertical to the profile line and the intersection angle measured between the sign face and the centerline of the travel lane, which the sign serves shall be 93 degrees. Where lanes divide or curve, sign faces shall be oriented so as to be most effective both day and night, and to avoid the possibility of specular reflection.
- C. All sign panels shall be securely fastened to their supports with bolts, nuts and washers of aluminum (2024-T4 alloy), hot-dip galvanized steel, or stainless steel conforming to 2.01 D, and 1.03 of this Section.
- D. Horizontal and vertical sign clearances shall be as shown on the Contract Drawings.

3.02 FIELD INSPECTION

- A. Immediately prior to erection, all material will be inspected by the Engineer for damage that is attributable to improper transportation, handling or storage procedures.
- B. An inspection of each completely erected sign shall be made in the daylight for proper location, line and grade of signs, vertical post alignment, condition, appearance and visibility. The completely erected signs may also be inspected at night by the Engineer.
- C. As the Work progresses, the location, position and condition of all signs shall be monitored by the Contractor in accordance with the requirements of "Maintenance of Traffic and Work Area Protection" of Division 1 - GENERAL PROVISIONS.
- D. Any deviation from the above-indicated procedure shall be approved by the Engineer.

END OF SECTION

SECTION 02851

ALUMINUM SIGN PANELS

APPENDIX "A"

SUBMITTALS

- A. Submit the following in accordance with the requirements of "Shop Drawings, Catalog Cuts and Samples" of Division 1 – GENERAL PROVISIONS:
 - 1. Detailed sign face layout for all sign panels showing letter height, width, brush stroke, spacing between letters, words, symbols and lines, border width, symbols details, and overall dimensions of the sign panels.
 - 2. Shop drawings of sign panels showing the sizes of the members and their connection details including joining and anchorage, stiffening, and bracing.
 - 3. Catalog cuts of all the materials to be used for sign faces.
- B. Prior to fabrication, submit computations for the design of the sign panels and supports, as required in 1.03 of this Section, signed by a Professional Engineer licensed to practice in the State where the Work is to be performed.

END OF APPENDIX "A"

SECTION 02850

PLYWOOD SIGN PANELS AND WOOD SIGN POSTS

INSTRUCTIONS TO SPECIFIER

USERS OF THIS SECTION ARE ADVISED THAT DETAILED INSTRUCTIONS ARE NOT AVAILABLE AT THIS TIME.

IN ORDER TO ENSURE PROPER COORDINATION WITH THE CONTRACT DRAWINGS, AND A BIDDABLE CONTRACT, THE TEXT MUST BE CAREFULLY READ AND THE ITEMS OR CHOICES INDICATED AS "AS SHOWN ON THE CONTRACT DRAWINGS" (OR SIMILAR LANGUAGE) MUST BE SHOWN ON THE CONTRACT DRAWINGS.

END OF INSTRUCTIONS

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PART II GENERAL PROVISIONS..... 4

- 1. Facility Rules and Regulations of The Port Authority 4
- 2. Contractor Not An Agent..... 4
- 3. Contractor's Warranties 5
- 4. Personal Non-Liability..... 6
- 5. Non-Discrimination Requirements 6
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- 7. Rights and Remedies of the Contractor 7
- 8. Submission To Jurisdiction..... 7
- 9. Harmony 7
- 10. Claims of Third Persons 8
- 11. No Third Party Rights..... 8
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STANDARD CONTRACT TERMS AND CONDITIONS

PART I GENERAL DEFINITIONS

To avoid undue repetition, the following terms, as used in this Agreement, shall be construed as follows:

Authority or Port Authority - shall mean the Port Authority of New York and New Jersey.

Contract, Document or Agreement - shall mean the writings setting forth the scope, terms, conditions and Specifications for the procurement of Goods and/or Services, as defined hereunder and shall include, but not be limited to: Invitation for Bid (IFB), Request for Quotation (RFQ), Request for Proposal (RFP), Purchase Order (PO), Cover Sheet, executed Signature Sheet, AND PRICING SHEETS with Contract prices inserted," "STANDARD CONTRACT TERMS AND CONDITIONS," and, if included, attachments, endorsements, schedules, exhibits, or drawings, the Authority's acceptance and any written addenda issued over the name of the Assistant Director, Commodities and Services Division, Procurement Department..

Days or Calendar Days - shall mean consecutive calendar days, Saturdays, Sundays, and holidays, included.

Week - unless otherwise specified, shall mean seven (7) consecutive calendar days, Saturdays, Sundays, and holidays.

Month - unless otherwise specified, shall mean a calendar month.

Director - shall mean the Director of the Department which operates the facility of the Port Authority at which the services hereunder are to be performed, for the time being, or his/her successor in duties for the purpose of this Contract, or one of his/her authorized representatives for the purpose of this Contract.

Manager - shall mean the Manager of the Facility for the time being, or his successor in duties for the purpose of this Contract, or his duly authorized representative for the purpose of this Contract.

No person shall be deemed a representative of the Director or Manager except to the extent specifically authorized in an express written notice to the Contractor signed by the Director or Manager, as the case may be. Further, no person shall be deemed a successor in duties of the Director unless the Contractor is so notified in writing signed by the Assistant Director, Commodities & Services Division, Procurement Department. No person shall be deemed a successor in duties of the Manager unless the Contractor is so notified in a writing signed by the Director.

Minority Business Enterprise (MBE) - shall mean a business entity which is at least 51% owned and controlled by one or more members of one or more minority groups, or, in the case of a publicly held corporation, at least 51% of the stock of which is owned by one or more minority groups, and whose management and daily business operations are controlled by one or more such individuals who are citizens or permanent resident aliens.

"Minority Group" means any of the following racial or ethnic groups:

- (a) Black persons having origins in any of the Black African racial groups not of Hispanic origin;
- (b) Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American culture or origin, regardless of race;
- (c) Asian and Pacific Islander persons having origins in any of the original peoples of the Far East, Southeast Asia, The Indian Subcontinent, or the Pacific Islands;

- (d) Native American or Alaskan native persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification.

Site of the Work - or words of similar import shall mean the Facility and all buildings and properties associated therewith as described in this Contract.

Small Business Enterprise (SBE) - The criteria for a Small Business Enterprise are:

- o The principal place of business must be located in New York or New Jersey;
- o The firm must have been in business for at least three years with activity;
- o Average gross income limitations by industry as established by the Port Authority.

Subcontractor - shall mean anyone who performs work (other than or in addition to the furnishing of materials, plant or equipment) in connection with the services to be provided hereunder, directly or indirectly for or on behalf of the Contractor (and whether or not in privity of contract with the Contractor), but shall not include any person who furnished merely his own personal labor or his own personal services. "Subcontractor", however, shall exclude the Contractor or any subsidiary or parent of the Contractor or any person, firm or corporation which has a substantial interest in the Contractor or in which the Contractor or the parent or the subsidiary of the Contractor, or an officer or principal of the Contractor or of the parent of the subsidiary of the Contractor has a substantial interest, provided, however, that for the purpose of the clause hereof entitled "Assignments and Subcontracts" the exclusion in this paragraph shall not apply to anyone but the Contractor itself.

Women-Owned Business Enterprise (WBE) - shall mean a business enterprise which is at least 51% owned by one or more women, or, in the case of a publicly held corporation, at least 51% of the stock of which is owned by one or more women and whose management and daily business operations are controlled by one or more women who are citizens or permanent or resident aliens.

Work - shall mean all services, equipment and materials (including materials and equipment, if any, furnished by the Authority) and other facilities and all other things necessary or proper for, or incidental to the services to be performed or goods to be furnished in connection with the service to be provided hereunder.

PART II GENERAL PROVISIONS

1. Facility Rules and Regulations of The Port Authority

- a. The Contractor shall observe and obey (and compel its officers, employees, guests, invitees, and those doing business with it, to observe and obey) the facility Rules and Regulations of the Port Authority now in effect, and such further reasonable Rules and Regulations which may from time to time during the term of this Agreement be promulgated by the Port Authority for reasons of safety, health, preservation of property or maintenance of a good and orderly appearance and efficient operation of the Facility. The Port Authority agrees that, except in case of emergency, it shall give notice to the Contractor of every Rule and Regulation hereafter adopted by it at least five days before the Contractor shall be required to comply therewith.
- b. A copy of the facility Rules and Regulations of the Port Authority shall be available for review by the Contractor at the Office of the Secretary of the Port Authority.

2. Contractor Not An Agent

This Agreement does not constitute the Contractor the agent or representative of the Port Authority for any purpose whatsoever except as may be specifically provided in this Agreement. It is hereby specifically acknowledged and understood that the Contractor, in performing its services hereunder, is and shall be at all

times an independent Contractor and the officers, agents and employees of the Contractor shall not be or be deemed to be agents, servants or employees of the Port Authority.

3. Contractor's Warranties

The Contractor represents and warrants:

- a. That it is financially solvent, that it is experienced in and competent to perform the requirements of this Contract, that the facts stated or shown in any papers submitted or referred to in connection with the solicitation are true, and, if the Contractor be a corporation, that it is authorized to perform this Contract;
- b. That it has carefully examined and analyzed the provisions and requirements of this Contract, and that from its own investigations it has satisfied itself as to the nature of all things needed for the performance of this Contract, the general and local conditions and all other matters which in any way affect this Contract or its performance, and that the time available to it for such examination, analysis, inspection and investigation was adequate;
- c. That the Contract is feasible of performance in accordance with all its provisions and requirements and that it can and will perform it in strict accordance with such provisions and requirements;
- d. That no Commissioner, officer, agent or employee of the Port Authority is personally interested directly or indirectly in this Contract or the compensation to be paid hereunder;
- e. That, except only for those representations, statements or promises expressly contained in this Contract, no representation, statement or promise, oral or in writing, of any kind whatsoever by the Port Authority, its Commissioners, officers, agents, employees or consultants has induced the Contractor to enter into this Contract or has been relied upon by the Contractor, including any with reference to: (1) the meaning, correctness, suitability, or completeness of any provisions or requirements of this Contract; (2) the nature, quantity, quality or size of the materials, equipment, labor and other facilities needed for the performance of this Contract; (3) the general or local conditions which may in any way affect this Contract or its performance; (4) the price of the Contract; or (5) any other matters, whether similar to or different from those referred to in (1) through (4) immediately above, affecting or having any connection with this Contract, the bidding thereon, any discussions thereof, the performance thereof or those employed therein or connected or concerned therewith.

Moreover, the Contractor accepts the conditions at the Site of the Work as they may eventually be found to exist and warrants and represents that it can and will perform the Contract under such conditions and that all materials, equipment, labor and other facilities required because of any unforeseen conditions (physical or otherwise) shall be wholly at its own cost and expense, anything in this Contract to the contrary notwithstanding.

Nothing in the Specifications or any other part of the Contract is intended as or shall constitute a representation by the Port Authority as to the feasibility of performance of this Contract or any part thereof.

The Contractor further represents and warrants that it was given ample opportunity and time and by means of this paragraph was requested by the Port Authority to review thoroughly all documents forming this Contract prior to opening of Bids on this Contract in order that it might request inclusion in this Contract of any statement, representation, promise or provision which it desired or on which it wished to place reliance; that it did so review said documents, that either every such statement, representation, promise or provision has been included in this Contract or else, if omitted, that it expressly relinquishes the benefit of any such omitted statement, representation, promise or provision and is willing to perform this Contract without claiming reliance thereon or making any other claim on account of such omission.

The Contractor further recognizes that the provisions of this numbered clause (though not only such provisions) are essential to the Port Authority's consent to enter into this Contract and that without such provisions, the Authority would not have entered into this Contract.

4. Personal Non-Liability

Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Contractor with any liability, or held personally liable to the Contractor under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach, thereof.

5. Non-Discrimination Requirements

The Contractor shall take all necessary and reasonable steps to ensure non-discrimination in the performance and administration of all aspects of this Contract.

- A. Contractor hereby agrees that no person on the ground of race, color, national origin, creed/religion, sex, age or handicap/disability shall be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the furnishing of goods or services or in the selection and retention of subcontractors and/or vendors under this Contract. Contractor shall also ascertain and comply with all applicable federal, state and local laws, ordinances, rules, regulations, and orders that pertain to equal employment opportunity, affirmative action, and non-discrimination in employment.
- B. Contractor agrees that these “Non-Discrimination Requirements” are a binding part of this Contract. Without limiting the generality of any other term or provision of this Contract, in the event the Authority, or a state or federal agency finds that the Contractor or any of its subcontractors or vendors has not complied with these “Non-Discrimination Requirements”, the Authority may cancel, terminate or suspend this Contract in accordance with Section 14 of these Standard Terms and Conditions entitled “Default, Revocation, or Suspension of Contract.”
- C. Contractor agrees to cooperate fully with the Authority’s investigation of allegations of discrimination. Cooperation includes, but is not limited to, allowing the Authority to question employees during the investigation of allegations of discrimination, and complying with directives that the Authority or the State or Federal government deem essential to ensure compliance with these “Non-Discrimination Requirements.”

6. Rights and Remedies of the Port Authority

The Port Authority shall have the following rights in the event the Contractor is deemed guilty of a breach of any term whatsoever of this Contract:

- a. The right to take over and complete the Work or any part thereof as agent for and at the expense of the Contractor, either directly or through others.
- b. The right to cancel this Contract as to any or all of the Work yet to be performed.
- c. The right to specific performance, an injunction or any appropriate equitable remedy.
- d. The right to money damages.

For the purpose of this Contract, breach shall include but not be limited to the following, whether or not the time has yet arrived for performance of an obligation under this Contract: a statement by the Contractor to any representative of the Port Authority indicating that the Contractor cannot or will not perform any one or more of its obligations under this Contract; any act or omission of the Contractor or any other occurrence which makes it improbable at the time that it will be able to perform any one or more of its obligations under this Contract; any suspension of or failure to proceed with any part of the Work by the Contractor which makes it improbable at the time that it will be able to perform any one or more of its obligations under this Contract.

The enumeration in this numbered clause or elsewhere in this Contract of specific rights and remedies of the Port Authority shall not be deemed to limit any other rights or remedies which the Authority would have in the absence of such enumeration; and no exercise by the Authority of any right or remedy shall operate as a waiver of any other of its rights or remedies not inconsistent therewith or to estop it from exercising such other rights or remedies.

7. Rights and Remedies of the Contractor

Inasmuch as the Contractor can be adequately compensated by money damages for any breach of this Contract which may be committed by the Port Authority, the Contractor expressly agrees that no default, act or omission of the Port Authority shall constitute a material breach of this Contract, entitling the Contractor to cancel or rescind this Contract or to suspend or abandon performance.

8. Submission To Jurisdiction

The Contractor hereby irrevocably submits itself to the jurisdiction of the Courts of the State of New York and New Jersey, in regard to any controversy arising out of, connected with, or in any way concerning this Contract.

The Contractor agrees that the service of process on the Contractor in relation to such jurisdiction may be made, at the option of the Port Authority, either by registered or certified mail addressed to it at the address of the Contractor indicated on the signature sheet, or by actual personal delivery to the Contractor, if the Contractor is an individual, to any partner if the Contractor be a partnership or to any officer, director or managing or general agent if the Contractor be a corporation.

Such service shall be deemed to be sufficient when jurisdiction would not lie because of the lack of basis to serve process in the manner otherwise provided by law. In any case, however, process may be served as stated above whether or not it might otherwise have been served in a different manner.

9. Harmony

- a. The Contractor shall not employ any persons or use any labor, or use or have any equipment, or permit any condition to exist which shall or may cause or be conducive to any labor complaints, troubles, disputes or controversies at the Facility which interfere or are likely to interfere with the operation of the Port Authority or with the operations of lessees, licensees or other users of the Facility or with the operations of the Contractor under this Contract.

The Contractor shall immediately give notice to the Port Authority (to be followed by written notices and reports) of any and all impending or existing labor complaints, troubles, disputes or controversies and the progress thereof. The Contractor shall use its best efforts to resolve any such complaint, trouble, dispute or controversy. If any type of strike, boycott, picketing, work stoppage, slowdown or other labor activity is directed against the Contractor at the Facility or against any operations of the Contractor under this Contract, whether or not caused by the employees of the Contractor, and if any of the foregoing, in the opinion of the Port Authority, results or is likely to result in any curtailment or diminution of the services to be performed hereunder or to interfere with or affect the operations of the Port Authority, or to interfere with or affect the operations of lessees, licensees, or other users of the Facility or in the event of any other cessation or stoppage of operations by the Contractor hereunder for any reason whatsoever, the Port Authority shall have the right at any time during the continuance thereof to suspend the operations of the Contractor under this Contract, and during the period of the suspension the Contractor shall not perform its services hereunder and the Port Authority shall have the right during said period to itself or by any third person or persons selected by it to perform said services of the Contractor using the equipment which is used by the Contractor in its operations hereunder as the Port Authority deems necessary and without cost to the Port Authority. During such time of suspension, the Contractor shall not be entitled to any compensation. Any flat fees, including management fees, shall be prorated. Prior to the exercise of such right by the Port Authority, it shall give the Contractor notice thereof, which notice may be oral. No exercise by the Port Authority of the rights granted to it in the above subparagraph shall be or be deemed to be a waiver of any rights of termination or revocation contained in this Contract or a waiver of any rights or remedies which may be available to the Port Authority under this Contract or otherwise.

- b. During the time that the Contractor is performing the Contract, other persons may be engaged in other operations on or about the worksite including Facility operations, pedestrian, bus and vehicular traffic and other Contractors performing at the worksite, all of which shall remain uninterrupted.

The Contractor shall so plan and conduct its operations as to work in harmony with others engaged at the site and not to delay, endanger or interfere with the operation of others (whether or not specifically mentioned above), all to the best interests of the Port Authority and the public as may be directed by the Port Authority.

10. Claims of Third Persons

The Contractor undertakes to pay all claims lawfully made against it by subcontractors, suppliers and workers, and all claims lawfully made against it by other third persons arising out of or in connection with or because of the performance of this Contract and to cause all subcontractors to pay all such claims lawfully made against them.

11. No Third Party Rights

Nothing contained in this Contract is intended for the benefit of third persons, except to the extent that the Contract specifically provides otherwise by use of the words "benefit" or "direct right of action."

12. Provisions of Law Deemed Inserted

Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included therein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the Contract shall forthwith be physically amended to make such insertion.

13. Costs Assumed By The Contractor

It is expressly understood and agreed that all costs of the Contractor of whatever kind or nature and whether imposed directly upon the Contractor under the terms and provisions hereof or in any other manner whatsoever because of the requirements of the operation of the service or otherwise under this Agreement shall be borne by the Contractor or without compensation or reimbursement from the Port Authority, except as specifically set forth in this Agreement. The entire and complete cost and expense of the Contractor's services and operations hereunder shall be borne solely by the Contractor and under no circumstances shall the Port Authority be liable to any third party (including the Contractor's employees) for any such costs and expenses incurred by the Contractor and under no circumstances shall the Port Authority be liable to the Contractor for the same, except as specifically set forth in this Section.

14. Default, Revocation or Suspension of Contract

a. If one or more of the following events shall occur:

1. If fire or other cause shall destroy all or a substantial part of the Facility.
2. If any governmental agency shall condemn or take a temporary or permanent interest in all or a substantial part of the Facility, or all of a part of the Port Authority's interest herein;

then upon the occurrence of such event or at any time thereafter during the continuance thereof, the Port Authority shall have the right on twenty-four (24) hours written notice to the Contractor to revoke this Contract, such revocation to be effective upon the date and time specified in such notice.

In such event this Contract shall cease and expire on the effective date of revocation as if said date were the date of the expiration of this Contract. Such revocation shall not, however, relieve the Contractor of any liabilities or obligations hereunder which shall have accrued on or prior to the effective date of

revocation.

b. If one or more of the following events shall occur:

1. The Contractor shall become insolvent, or shall take the benefit of any present or future insolvency statute, or shall make a general assignment for the benefit of creditors, or file a voluntary petition in bankruptcy or a petition or answer seeking an arrangement or its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any other law or statute of the United States or of any State thereof, or consent to the appointment of a receiver, trustee, or liquidator of all or substantially all its property; or
2. By order or decree of a court the Contractor shall be adjudged bankrupt or an order shall be made approving a petition filed by any of the creditors, or, if the Contractor is a corporation, by any of the stockholders of the Contractor, seeking its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any law or statute of the United States or of any State thereof; or
3. A petition under any part of the federal bankruptcy laws or an action under any present or future insolvency law or statute shall be filed against the Contractor and shall not be dismissed within thirty (30) days after the filing thereof; or
4. The interest of the Contractor under this Contract shall be transferred to, passed to or devolve upon, by operation of law or otherwise, any other person, firm or corporation, or
5. The Contractor, if a corporation, shall, without the prior written approval of the Port Authority, become a surviving or merged corporation in a merger, a constituent corporation in a consolidation, or a corporation in dissolution; or
6. If the Contractor is a partnership, and the said partnership shall be dissolved as the result of any act or omission of its copartners or any of them, or by operation of law or the order or decree of any court having jurisdiction, or for any other reason whatsoever; or
7. By or pursuant to, or under authority of any legislative act, resolution or rule, or any order or decree of any court or governmental board, agency or officer having jurisdiction, a receiver, trustee, or liquidator shall take possession or control of all or substantially all of the property of the Contractor and such possession or control of all or substantially all of the property of the Contractor and shall continue in effect for a period of fifteen (15) days;

then upon the occurrence of any such event or at any time thereafter during the continuance thereof, the Port Authority shall have the right upon five (5) days notice to the Contractor to terminate this Contract and the rights of the Contractor hereunder; termination to be effective upon the date and time specified in such notice as if said date were the date of the expiration of this Contract. Termination shall not relieve the Contractor of any liabilities or obligations hereunder which have accrued on or prior to the effective date of termination.

c. If any of the following shall occur:

1. The Contractor shall cease, abandon any part of the service, desert, stop or discontinue its services in the premises for any reason whatsoever and regardless of the fault of the Contractor; or
2. The Contractor shall fail to keep, perform and observe each and every other promise, covenant and agreement set forth in this Contract on its part to be kept, performed or observed, within five (5) days after receipt of notice of default thereunder from the Port Authority (except where fulfillment of its obligations requires activity over a greater period of time, and the Contractor shall have commenced to perform whatever may be required for fulfillment within five (5) days after receipt of notice and continues such performance without interruption except for causes beyond its control);

then upon the occurrence of any such event or during the continuance thereof, the Port Authority shall have the right on twenty four (24) hours notice to the Contractor to terminate this Contract and the rights of the Contractor hereunder, termination to be effective upon the date and time specified in such notice. Termination shall not relieve the Contractor of any liabilities which shall have accrued on or prior to the effective date of termination.

- d. If any of the events enumerated in this Section shall occur prior to commencement date of this Contract the Port Authority upon the occurrence of any such event or any time thereafter during the continuance thereof by twenty-four (24) hours notice may terminate or suspend this Contract and the rights of the Contractor hereunder, such termination or suspension to be effective upon the date specified in such notice.
- e. No payment by the Port Authority of any monies to the Contractor for any period or periods after default of any of the terms, covenants or conditions hereof to be performed, kept and observed by the Contractor and no act or thing done or omitted to be done by the Port Authority shall be deemed to be a waiver of the right of the Port Authority to terminate this Contract or of any other right or remedies to which the Port Authority may be entitled because of any breach thereof. No waiver by the Port Authority of any default on the part of the Contractor in the performance of any of the terms, covenants and conditions hereof to be performed, kept or observed by the Contractor shall be or be construed to be a waiver by the Port Authority of any other subsequent default in the performance of any of the said terms, covenants and conditions.
- f. In addition to all other rights of revocation or termination hereunder and notwithstanding any other provision of this Contract the Port Authority may terminate this Contract and the rights of the Contractor hereunder without cause at any time upon five (5) days written notice to the Contractor and in such event this Contract shall cease and expire on the date set forth in the notice of termination as fully and completely as though such dates were the original expiration date hereof and if such effective date of termination is other than the last day of the month, the amount of the compensation due to the Contractor from the Port Authority shall be prorated when applicable on a daily basis. Such cancellation shall be without prejudice to the rights and obligations of the parties arising out of portions already performed but no allowance shall be made for anticipated profits.
- g. Any right of termination contained in this paragraph, shall be in addition to and not in lieu of any and all rights and remedies that the Port Authority shall have at law or in equity consequent upon the Contractor's breach of this Contract and shall be without prejudice to any and all such other rights and remedies. It is hereby specifically agreed and understood that the exercise by the Port Authority of any right of termination set forth in this paragraph shall not be or be deemed to be an exercise by the Port Authority of an election of remedies so as to preclude the Port Authority from any right to money damages it may have for the period prior to the effective date of termination to the original expiration date of the Contract, and this provision shall be deemed to survive the termination of this Contract as aforesaid.
- h. If (1) the Contractor fails to perform any of its obligations under this Contract or any other agreement between the Port Authority and the Contractor (including its obligation to the Port Authority to pay any claim lawfully made against it by any supplier, subcontractor or worker or other person which arises out of or in connection with the performance of this Contract or any other agreement with the Port Authority) or (2) any claim (just or unjust) which arises out of or in connection with this Contract or any other agreement between the Port Authority and the Contractor is made against the Port Authority or (3) any subcontractor under this Contract or any other agreement between the Port Authority and the Contractor fails to pay any claims lawfully made against it by any supplier, subcontractor, worker or other third person which arises out of or in connection with this Contract or any other agreement between the Port Authority and the Contractor or if in the opinion of the Port Authority any of the aforesaid contingencies is likely to arise, then

the Port Authority shall have the right, in its discretion, to withhold out of any payment (final or otherwise) such sums as the Port Authority may deem ample to protect it against delay or loss or to assure the payment of just claims of third persons, and to apply such sums in such manner as the Port Authority may deem proper to secure such protection or satisfy such claims. All sums so applied shall be deducted from the Contractor's compensation. Omission by the Port Authority to withhold out of any payment, final or otherwise, a sum for any of the above contingencies, even though such contingency has occurred at the time of such payment, shall not be deemed to indicate that the Port Authority does not intend to exercise its right with respect to such contingency. Neither the above provisions for rights of the Port Authority to withhold and apply monies nor any exercise or attempted exercise of, or omission to exercise, such rights by the Port Authority shall create any obligation of any kind to such supplier, subcontractors, worker or other third persons. If, however, the payment of any amount due the Contractor shall be improperly delayed, the Port Authority shall pay the Contractor interest thereon at the rate of 6% per annum for the period of the delay, it being agreed that such interest shall be in lieu of and in liquidation of any damages to the Contractor because of such delay.

- i. If the Port Authority has paid any sum or has incurred any obligation or expense which the Contractor has agreed to pay or reimburse the Port Authority, or if the Port Authority is required or elects to pay any sum or sums or incurs any obligations or expense by reason of the failure, neglect or refusal of the Contractor to perform or fulfill any one or more of the conditions, covenants, or agreements contained in this Contract, or as a result of an act of omission of the Contractor contrary to the said conditions, covenants and agreements, the Contractor shall pay to the Port Authority the sum or sums so paid or expense so incurred, including all interests, costs and damages, promptly upon the receipt of the Port Authority's statement therefore. The Port Authority may, however, in its discretion, elect to deduct said sum or sums from any payment payable by it to the Contractor.
- j. If the Port Authority pays any installment to the Contractor without reducing said installment as provided in this Contract, it may reduce any succeeding installment by the proper amount, or it may bill the Contractor for the amount by which the installment paid should have been reduced and the Contractor shall pay to the Port Authority any such amount promptly upon receipt of the Port Authority's statement therefore.
- k. The Port Authority shall also have the rights set forth above in the event the Contractor shall become insolvent or bankrupt or if his affairs are placed in the hands of a receiver, trustee or assignee for the benefit of creditors.

15. Sales or Compensating Use Taxes

Purchases of services and tangible personal property by the Port Authority in the States of New York and New Jersey are generally exempt from state and local sales and compensating use taxes, and from most federal excises (Taxes). Therefore, the Port Authority's purchase of the Contractor's services under this Contract is exempt from Taxes. Accordingly, the Contractor must not include Taxes in the price charged to the Port Authority for the Contractor's services under this Contract. The Contractor certifies that there are no such taxes included in the prices for this Contract. The Contractor shall retain a copy of this Contract to substantiate the exempt sale.

The compensation set forth in this Agreement is the complete compensation to the Contractor, and the Port Authority will not separately reimburse the Contractor for any taxes unless specifically set forth in this Agreement.

16. No Estoppel or Waiver

The Port Authority shall not be precluded or estopped by any payment, final or otherwise, issued or made under this Contract, from showing at any time the true amount and character of the services performed, or

from showing that any such payment is incorrect or was improperly issued or made; and the Port Authority shall not be precluded or estopped, notwithstanding any such payment, from recovering from the Contractor any damages which it may sustain by reason of any failure on its part to comply strictly with this Contract, and any moneys which may be paid to it or for its account in excess of those to which it is lawfully entitled.

No cancellation, rescission or annulment hereof, in whole or as to any part of the services to be provided hereunder, or because of any breach hereof, shall be deemed a waiver of any money damages to which the Port Authority may be entitled because of such breach. Moreover, no waiver by the Authority of any breach of this Contract shall be deemed to be a waiver of any other or any subsequent breach.

17. Records and Reports

The Contractor shall set up, keep and maintain (and shall cause its subcontractors to set up, keep and maintain) in accordance with generally accepted accounting practice during the term of this Agreement and any extensions thereof and for three years after the expiration, termination or revocation thereof, records, payroll records and books of account (including, but not limited to, records of original entry and daily forms, payroll runs, cancelled checks, time records, union agreements, contracts with health, pension and other third party benefit providers) recording all transactions of the Contractor (and its subcontractors), at, through or in any way connected with or related to the operations of the Contractor (and its subcontractors) hereunder, including but not limited to all matters relating to the charges payable to the Contractor hereunder, all wages and supplemental benefits paid or provided to or for its employees (and its subcontractors' employees) and such additional information as the Port Authority may from time to time and at any time require, and also including, if appropriate, recording the actual number of hours of service provided under the Contract, and keeping separate records thereof which records and books of account shall be kept at all times within the Port District. The Contractor shall permit (and cause its subcontractors to permit) in ordinary business hours during the term of this Agreement including any extensions thereof and for three years thereafter the examination and audit by the officers, employees and representatives of the Port Authority of such records and books of account and also any records and books of account of any company which is owned or controlled by the Contractor, or which owns or controls the Contractor if said company performs services similar to those performed by the Contractor anywhere in the Port District. However, if within the aforesaid three year period the Port Authority has notified the Contractor in writing of a pending claim by the Port Authority under or in connection with this Contract to which any of the aforesaid records and documents of the Contractor or of its subcontractors relate either directly or indirectly, then the period of such right of access shall be extended to the expiration of six years from the date of final payment with respect to the records and documents involved.

Upon request of the Port Authority, the Contractor shall furnish or provide access to the federal Form I-9 (Employment Eligibility Verification) for each individual performing work under this Contract. This includes citizens and noncitizens.

The Contractor (and its subcontractors) shall, at its own expense, install, maintain and use such equipment and devices for recording the labor hours of the service as shall be appropriate to its business and necessary or desirable to keep accurate records of the same and as the general manager or the Facility Manager may from time to time require, and the Contractor (and its subcontractors) shall at all reasonable times allow inspection by the agents and employees of the Port Authority of all such equipment or devices.

- a. The Contractor hereby further agrees to furnish to the Port Authority from time to time such written reports in connection with its operations hereunder as the Port Authority may deem necessary or desirable. The format of all forms, schedules and reports furnished by the Contractor to the Port Authority shall be subject to the continuing approval of the Port Authority.
- b. No provision in this Contract giving the Port Authority a right of access to records and documents is intended to impair or affect any right of access to records and documents which they would have in the absence of such provision. Additional record keeping may be required under other sections of this Contract.

18. General Obligations

- a. Except where expressly required or permitted herein to be oral, all notices, requests, consents and approvals required to be given to or by either party shall be in writing and all such notices, requests, consents and approvals shall be personally delivered to the other party during regular business hours or forwarded to such party by United States certified mail, return receipt requested, addressed to the other party at its address hereinbefore or hereafter provided. Until further notice the Contractor hereby designates the address shown on the bottom of the Contractors Signature Sheet as their address to which such notices, requests, consents, or approvals may be forwarded. All notices, requests, consents, or approvals of the Contractor shall be forwarded to the Manager at the Facility.
- b. The Contractor shall comply with the provisions of all present and future federal, state and municipal laws, rules, regulations, requirements, ordinances, orders and directions which pertain to its operations under this Contract and which affect the Contract or the performance thereof and those engaged therein as if the said Contract were being performed for a private corporation, except where stricter requirements are contained in the Contract in which case the Contract shall control. The Contractor shall procure for itself all licenses, certificates, permits or other authorization from all governmental authorities, if any, having jurisdiction over the Contractor's operations hereunder which may be necessary for the Contractor's operations. The Contractor's obligation to comply with governmental requirements are not to be construed as a submission by the Port Authority to the application to itself of such requirements.
- c. The Contractor shall pay all taxes, license, certification, permit and examination fees and excises which may be assessed on its property or operations hereunder or income therefrom, and shall make all applications, reports and returns required in connection therewith.
- d. The Contractor shall, in conducting its operations hereunder, take all necessary precautions to protect the general environment and to prevent environmental pollution, contamination, damage to property and personal injury. In the event the Contractor encounters material reasonably believed to be asbestos, polychlorinated biphenyl (PCB) or any other hazardous material, in conducting its operations hereunder, the Contractor shall immediately stop Work in the area affected and report the condition in writing to the Manager. Work in the affected area shall not thereafter be resumed by the Contractor except upon the issuance of a written order to that effect from the Manager.
- e. The Contractor shall promptly observe, comply with and execute the provisions of any and all present and future rules and regulations, requirements, standard orders and directions of the American Insurance Association, the Insurance Services Office, National Fire Protection Association, and any other body or organization exercising similar functions which may pertain or apply to the Contractor's operations hereunder.

The Contractor shall not do or permit to be done any act which:

1. will invalidate or be in conflict with any fire insurance policies covering the Facility or any part thereof or upon the contents of any building thereon; or
 2. will increase the rate of any fire insurance, extended coverage or rental insurance on the Facility or any part thereof or upon the contents of any building thereon; or
 3. in the opinion of the Port Authority will constitute a hazardous condition, so as to increase the risk normally attendant upon the operations contemplated by this Contract; or
 4. may cause or produce in the premises, or upon the Facility any unusual, noxious or objectionable smoke, gases, vapors, odors; or
 5. may interfere with the effectiveness or accessibility of the drainage and sewerage system, fire protection system, sprinkler system, alarm system, fire hydrants and hoses, if any, installed or located or to be installed or located in or on the Facility; or
 6. shall constitute a nuisance in or on the Facility or which may result in the creation, commission or maintenance of a nuisance in or on the Facility.
- f. If by reason of the Contractor's failure to comply with the provisions of this Section and provided the

Port Authority has given the Contractor five (5) days written notice of its failure and the Contractor shall not have cured said failure within said five (5) days, any fire insurance, extended coverage or rental insurance rate on the Facility or any part thereof or upon the contents of any building thereon shall at any time be higher than it otherwise would be, then the Contractor shall on demand pay the Port Authority that part of all fire insurance, extended coverage or rental insurance premiums paid or payable by the Port Authority which shall have been charged because of such violations by the Contractor.

- g. The Contractor shall conduct its operations hereunder so as not to endanger, unreasonably interfere with, or delay the operations or activities of any tenants or occupants on the premises or the Facility and, moreover, shall use the same degree of care in performance on the premises as would be required by law of the Port Authority and shall conduct operations hereunder in a courteous, efficient and safe manner.
- h. The Contractor shall provide such equipment and medical facilities as may be necessary to supply first aid service in case of accidents to its personnel who may be injured in the furnishing of service hereunder. The Contractor shall maintain standing arrangements for the removal and hospital treatment of any of its personnel who may be injured.

19. Assignments and Subcontracting

- a. The Contractor shall not sell, transfer, mortgage, pledge, subcontract or assign this Contract or any part thereof or any of the rights granted hereunder or any moneys due or to become due to it hereunder or enter into any contract requiring or permitting the doing of anything hereunder by an independent Contractor, without the prior written approval of the Port Authority, and any such sale, transfer, mortgage, pledge, subcontract, assignment or contract without such prior written approval shall be void as to the Port Authority.
- b. All subcontractors who provide permanent personnel to the Contractor for work under this Contract shall be given written notice to comply with all requirements of the Contract. The Contractor shall be responsible and liable for the performance and acts of each subcontractor.
- c. All persons to whom the Contractor sublets services shall be deemed to be its agents and no subletting or approval thereof shall be deemed to release this Contractor from its obligations under this Contract or to impose any obligations on the Port Authority to such subcontractor or to give the subcontractor any rights against the Port Authority.

20. Indemnification and Risks Assumed By The Contractor

To the extent permitted by law, the Contractor shall indemnify and hold harmless the Port Authority, its Commissioners, officers, representatives and employees from and against all claims and demands, just or unjust, of third persons (including Contractor's employees, employees, officers, and agents of the Port Authority) arising out of or in any way connected or alleged to arise out of or alleged to be in any way connected with the Contract and all other services and activities of the Contractor under this Contract and for all expenses incurred by it and by them in the defense, settlement or satisfaction thereof, including without limitation thereto, claims and demands for death, for personal injury or for property damage, direct or consequential, whether they arise from the acts or omissions of the Contractor, the Port Authority, third persons (including Contractor's employees, employees, officers, and agents of the Port Authority), or from the acts of God or the public enemy, or otherwise, including claims and demands of any local jurisdiction against the Port Authority in connection with this Contract.

The Contractor assumes the following risks, whether such risks arise from acts or omissions (negligent or not) of the Contractor, the Port Authority or third persons (including Contractor's employees, employees, officers, and agents of the Port Authority) or from any other cause, excepting only risks occasioned solely by affirmative willful acts of the Port Authority done subsequent to the opening of proposals on this Contract, and shall to the extent permitted by law indemnify the Port Authority for all loss or damage incurred in connection with such risks:

- a. The risk of any and all loss or damage to Port Authority property, equipment (including but not limited to automotive and/or mobile equipment), materials and possessions, on or off the premises, the loss or

damage of which shall arise out of the Contractor's operations hereunder. The Contractor shall if so directed by the Port Authority, repair, replace or rebuild to the satisfaction of the Port Authority, any and all parts of the premises or the Facility which may be damaged or destroyed by the acts or omissions of the Contractor, its officers, agents, or employees and if the Contractor shall fail so to repair, replace, or rebuild with due diligence the Port Authority may, at its option, perform any of the foregoing work and the Contractor shall pay to the Port Authority the cost thereof.

- b. The risk of any and all loss or damage of the Contractor's property, equipment (including but not limited to automotive and/or mobile equipment) materials and possessions on the Facility.
- c. The risk of claim, whether made against the Contractor or the Port Authority, for any and all loss or damages occurring to any property, equipment (including but not limited to automotive and/or mobile equipment), materials and possessions of the Contractor's agents, employees, materialmen and others performing work hereunder.
- d. The risk of claims for injuries, damage or loss of any kind just or unjust of third persons arising or alleged to arise out of the performance of work hereunder, whether such claims are made against the Contractor or the Port Authority.

If so directed, the Contractor shall at its own expense defend any suit based upon any such claim or demand, even if such suit, claim or demand is groundless, false or fraudulent, and in handling such shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provision of any statutes respecting suits against the Port Authority.

Neither the requirements of the Port Authority under this Contract, nor of the Port Authority of the methods of performance hereunder nor the failure of the Port Authority to call attention to improper or inadequate methods or to require a change in the method of performance hereunder nor the failure of the Port Authority to direct the Contractor to take any particular precaution or other action or to refrain from doing any particular thing shall relieve the Contractor of its liability for injuries to persons or damage to property or environmental impairment arising out of its operations.

21. Approval of Methods

Neither the approval of the Port Authority of the methods of furnishing services hereunder nor the failure of the Port Authority to call attention to improper or inadequate methods or to require a change in the method of furnishing services hereunder, nor the failure of the Port Authority to direct the Contractor to take any particular precautions or to refrain from doing any particular thing shall relieve the Contractor of its liability for injuries to persons or damage to property or environmental impairment arising out of its operations.

22. Safety and Cleanliness

- a. The Contractor shall, in the furnishing of services hereunder, exercise every precaution to prevent injury to person or damage to property or environmental impairment and avoid inconvenience to the occupants of or any visitors to the Facility. The Contractor shall, without limiting the generality hereof, place such personnel, erect such barricades and railings, give such warnings, display such lights, signals or signs, place such cones and exercise precautions as may be necessary, proper or desirable.
- b. The Contractor shall in case of unsafe floor conditions due to construction, wetness, spillage, sickness and all other types of hazardous conditions proceed to rope off the unsafe area and place appropriate warnings signs to prevent accidents from occurring. The Contractor shall clean said area to the satisfaction of the Manager.

- c. The Contractor shall at all times maintain in a clean and orderly condition and appearance any and all facilities provided by the Port Authority for the Contractor's operations, and all fixtures, sink closets, equipment, and other personal property of the Port Authority which are located in said facilities.

23. Accident Reports

The Contractor shall promptly report in writing to the Manager of the Facility and to the Deputy Chief, Litigation Management of the Port Authority all accidents whatsoever arising out of or in connection with its operations hereunder and which result in death or injury to persons or damage to property, setting forth such details thereof as the Port Authority may desire. In addition, if death or serious injury or serious damage is caused, such accidents shall be immediately reported by telephone to the aforesaid representatives of the Port Authority.

24. Trash Removal

The Contractor shall remove daily from the Facility by means provided by the Contractor all garbage, debris and other waste material (solid or liquid) arising out of or in connection with its operations hereunder, and any such garbage, debris and other waste material not immediately removed shall be temporarily stored in a clear and sanitary condition, approved by the Facility Manager and shall be kept covered except when filling or emptying them. The Contractor shall exercise care in removing such garbage, debris and other waste materials from the Facility. The manner of such storage and removal shall always be subject in all respects to the continual approval of the Port Authority. No equipment or facilities of the Port Authority shall be used in such removal unless with its prior consent in writing. No such garbage, debris or other waste materials shall be or be permitted to be thrown, discharged or disposed into or upon the waters at or bounding the Facility.

25. Lost and Found Property

The Contractor shall instruct its personnel that all items of personal property found by the Contractor's employees at the Site must be turned in to the Port Authority and a receipt will be issued therefor.

26. Property of the Contractor

- a. All property of the Contractor at the Site by virtue of this Contract shall be removed on or before the expiration or sooner termination or revocation of this Contract.
- b. If the Contractor shall fail to remove its property upon the expiration, termination or revocation of this Contract the Port Authority may, at its option, dispose of such property as waste or as agent for the Contractor and at the risk and expense of the Contractor, remove such property to a public warehouse, or may retain the same in its own possession, and in either event after the expiration of thirty (30) days may sell the same in accordance with any method deemed appropriate; the proceeds of any such sale shall be applied first, to the expenses of sale and second, to any sums owed by the Contractor to the Port Authority; any balance remaining shall be paid to the Contractor. Any excess of the total cost of removal, storage and sale and other costs incurred by the Port Authority as a result of such failure of performance by the Contractor over the proceeds of sale shall be paid by the Contractor to the Port Authority upon demand.

27. Modification of Contract

This Contract may not be changed except in writing signed by the Port Authority and the Contractor. The Contractor agrees that no representation or warranties shall be binding upon the Port Authority unless expressed in writing in this Contract.

28. Invalid Clauses

If any provision of this Contract shall be such as to destroy its mutuality or to render it invalid or illegal, then, if it shall not appear to have been so material that without it the Contract would not have been made by

the parties, it shall not be deemed to form part thereof but the balance of the Contract shall remain in full force and effect.

29. Approval of Materials, Supplies and Equipment

Only Port Authority approved materials, supplies, and equipment are to be used by the Contractor in performing the Work hereunder. Inclusion of chemical containing materials or supplies on the Port Authority Approved Products List – Environmental Protection Supplies constitutes approval. The list may be revised from time to time and at any time by the Port Authority and it shall be incumbent upon the Contractor to obtain the most current list from the Manager of the Facility.

At anytime during the Solicitation, pre-performance or performance periods, the Contractor may propose the use of an alternate product or products to those on the Approved Products List – Environmental Protection Supplies, which product(s) shall be subject to review and approval by the Port Authority. Any alternate product so approved by the Port Authority may be used by the Contractor in performing the Services hereunder. Until such approval is given, only products on the Approved Products List – Environmental Protection Supplies may be used.

30. Intellectual Property

The right to use all patented materials, appliances, processes of manufacture or types of construction, trade and service marks, copyrights and trade secrets, collectively hereinafter referred to as “Intellectual Property Rights”, in the performance of the work, shall be obtained by the Contractor without separate or additional compensation. Where the services under this Agreement require the Contractor to provide materials, equipment or software for the use of the Port Authority or its employees or agents, the Port Authority shall be provided with the Intellectual Property Rights required for such use without further compensation than is provided for under this Agreement.

The Contractor shall indemnify the Port Authority against and save it harmless from all loss and expense incurred as a result of any claims in the nature of Intellectual Property Rights infringement arising out of the Contractor’s or Port Authority’s use, in accordance with the above immediately preceding paragraph, of any Intellectual Property. The Contractor, if requested, shall conduct all negotiations with respect to and defend such claims. If the Contractor or the Port Authority, its employees or agents be enjoined either temporarily or permanently from the use of any subject matter as to which the Contractor is to indemnify the Port Authority against infringement, then the Port Authority may, without limiting any other rights it may have, require the Contractor to supply temporary or permanent replacement facilities approved by the Manager, and if the Contractor fails to do so the Contractor shall, at its expense, remove all such enjoined facilities and refund the cost thereof to the Port Authority or take such steps as may be necessary to insure compliance by the Contractor and the Port Authority with said injunction, to the satisfaction of the Port Authority.

In addition, the Contractor shall promptly and fully inform the Director in writing of any intellectual property rights disputes, whether existing or potential, of which it has knowledge, relating to any idea, design, method, material, equipment or any other matter related to the subject matter of this Agreement or coming to its attention in connection with this Agreement.

31. Contract Records and Documents – Passwords and Codes

When the performance of the contract services requires the Contractor to produce, compile or maintain records, data, drawings, or documents of any kind, regardless of the media utilized, then all such records, drawings, data and documents which are produced, prepared or compiled in connection with this contract, shall become the property of the Port Authority, and the Port Authority shall have the right to use or permit

the use of them and any ideas or methods represented by them for any purpose and at any time without other compensation than that specifically provided herein.

When in the performance of the contract services the Contractor utilizes passwords or codes for any purpose, at any time during or after the performance of such services, upon written request by the Authority, the Contractor shall make available to the designated Authority representative all such passwords and codes.

32. Designated Secure Areas

Services under the Contract may be required in designated secure areas, as the same may be designated by the Manager from time to time (“Secure Areas”). The Port Authority shall require the observance of certain security procedures with respect to Secure Areas, which may include the escort to, at, and/or from said high security areas by security personnel designated by the Contractor or any subcontractor's personnel required to work therein. All personnel that require access to designated secure areas who are not under positive escort by an authorized individual will be required to undergo background screening and personal identity verification.

Forty-eight (48) hours prior to the proposed performance of any work in a Secure Area, the Contractor shall notify the Manager. The Contractor shall conform to the procedures as may be established by the Manager from time to time and at any time for access to Secure Areas and the escorting of personnel hereunder. Prior to the start of work, the Contractor shall request a description from the Manager of the Secure Areas which will be in effect on the commencement date. The description of Secure Areas may be changed from time to time and at any time by the Manager during the term of the Contract.

33. Notification of Security Requirements

The Authority has the responsibility of ensuring safe, reliable and secure transportation facilities, systems, and projects to maintain the well-being and economic competitiveness of the region. Therefore, the Authority reserves the right to deny access to certain documents, sensitive security construction sites and facilities (including rental spaces) to any person that declines to abide by Port Authority security procedures and protocols, any person with a criminal record with respect to certain crimes or who may otherwise poses a threat to the construction site or facility security. The Authority reserves the right to impose multiple layers of security requirements on the Contractor, its staff and subcontractors and their staffs depending upon the level of security required, or may make any amendments with respect to such requirements as determined by the Authority.

These security requirements may include but are not limited to the following:

- Execution of Port Authority Approved Non-disclosure Agreements

At the direction of the Port Authority, the Contractor shall be required to have its principals, staff and/or subcontractor(s) and their staff, execute Port Authority approved non-disclosure agreements.

- Contractor/ Subcontractor identity checks and background screening

The Port Authority's designated background screening provider may require inspection of not less than two forms of valid/current government issued identification (at least one having an official photograph) to verify staff's name and residence; screening federal, state, and/or local criminal justice agency information databases and files; screening of any terrorist identification files; access identification to include some form of biometric security methodology such as fingerprint, facial or iris scanning, or the like.

The Contractor may be required to have its staff, and any subcontractor's staff, material-men, visitors or others over whom the Contractor/subcontractor has control, authorize the Authority or its designee to perform background checks, and a personal identity verification check. Such authorization shall be in a form acceptable to the Authority. The Contractor and subcontractors may also be required to use an organization designated by the Authority to perform the background checks.

As of January 29, 2007, the Secure Worker Access Consortium (S.W.A.C.) is the only Port Authority

approved provider to be used to conduct background screening and personal identity verification, except as otherwise required by federal law and/or regulation (such as the Transportation Worker Identification Credential for personnel performing in secure areas at Maritime facilities). Information about S.W.A.C., instructions, corporate enrollment, online applications, and location of processing centers can be found at <http://www.secureworker.com>, or S.W.A.C. may be contacted directly at (877) 522-7922 for more information and the latest pricing. The cost for said background checks for staff that pass and are granted a credential shall be reimbursable to the Contractor (and its subcontractors) as an out-of-pocket expense as provided herein. Staff that are rejected for a credential for any reason are not reimbursable.

- Issuance of Photo Identification Credential

No person will be permitted on or about the Authority construction site or facility (including rental spaces) without a facility-specific photo identification credential approved by the Authority. If the authority requires facility-specific identification credential for the Contractor's and the subcontractor's staff, the Authority will supply such identification at no cost to the Contractor or its subcontractors. Such facility-specific identification credential shall remain the property of the Authority and shall be returned to the Authority at the completion or upon request prior to completion of the individual's assignment at the specific facility. It is the responsibility of the appropriate Contractor or subcontractor to immediately report to the Authority the loss of any staff member's individual facility-specific identification credential. The Contractor or subcontractor shall be billed for the cost of the replacement identification credential. Contractor's and subcontractor's staff shall display Identification badges in a conspicuous and clearly visible manner, when entering, working or leaving an Authority construction site or facility.

Employees may be required to produce not less than two forms of valid/current government issued identification having an official photograph and an original, unlaminated social security card for identify and SSN verification. Where applicable, for sensitive security construction sites or facilities, successful completion of the application, screening and identify verification for all employees of the Contractor and subcontractors shall be completed prior to being provided a S.W.A.C. ID Photo Identification credential.

- Access control, inspection, and monitoring by security guards

The Authority may provide for Authority construction site or facility (including rental spaces) access control, inspection and monitoring by Port Authority Police or Authority retained contractor security guards. However, this provision shall not relieve the Contractor of its responsibility to secure its equipment and work and that of its subconsultant/subcontractor's and service suppliers at the Authority construction site or facility (including rental spaces). In addition, the Contractor, subcontractor or service provider is not permitted to take photographs, digital images, electronic copying and/or electronic transmission or video recordings or make sketches on any other medium at the Authority construction sites or facilities (including rental spaces), except when necessary to perform the Work under this Contract, without prior written permission from the Authority. Upon request, any photograph, digital images, video recording or sketches made of the Authority construction site or facility shall be submitted to the Authority to determine compliance with this paragraph, which submission shall be conclusive and binding on the submitting entity.

- Compliance with the Port Authority Information Security Handbook

The Contract may require access to Port Authority information considered Protected Information ("PI") as defined in the Port Authority Information Security Handbook ("Handbook"), dated October, 2008, corrected as of November 14, 2013, and as may be further amended. The Handbook and its requirements are hereby incorporated into this agreement and will govern the possession, distribution and use of PI if at any point during the lifecycle of the project or solicitation it becomes necessary for the Contractor to have access to PI. Protecting sensitive information requires the application of uniform safeguarding measures to prevent unauthorized disclosure and to control any authorized disclosure of this information within the Port Authority or when released by the Port Authority to outside entities. The following is an outline of some of the procedures, obligations and directives contained in the Handbook:

- (1) require that the Contractor and subcontractors, when appropriate, sign Non-Disclosure Agreements (NDAs), or an Acknowledgment of an existing NDA, provided by the Authority as a condition of being granted access to Protected Information categorized and protected as per the Handbook;
- (2) require that individuals needing access to PI be required to undergo a background check, pursuant to the process and requirements noted in § 3.2 of the Information Security Handbook.
- (3) require Contractors and commercial enterprises to attend training to ensure security awareness regarding Port Authority information;
- (4) specific guidelines and requirements for the handling of PI to ensure that the storage and protection of PI;
- (5) restrictions on the transfer, shipping, and mailing of PI;
- (6) prohibitions on the publication, posting, modifying, copying, reproducing, republishing, uploading, transmitting, or distributing PI on websites or web pages. This may also include restricting persons, who either have not passed a pre-screening background check, or who have not been granted access to PI, from viewing such information;
- (7) require that PI be destroyed using certain methods, measures or technology pursuant to the requirements set forth in the Handbook;
- (8) require the Contractor to mandate that each of its subcontractors maintain the same levels of security required of the Contractor under any Port Authority awarded contract.
- (9) prohibit the publication, exchange or dissemination of PI developed from the project or contained in reports, except between Contractors and subcontractors, without prior approval of the Port Authority;
- (10) require that PI only be reproduced or copied pursuant to the requirements set forth in the Handbook.

- Audits for Compliance with Security Requirements

The Port Authority may conduct random or scheduled examinations of business practices under this section entitled “NOTIFICATION OF SECURITY REQUIREMENTS” and the Handbook in order to assess the extent of compliance with security requirements, Protected Information procedures, protocols and practices, which may include, but not be limited to, verification of background check status, confirmation of completion of specified training, and/or a site visit to view material storage locations and protocols.

34. Construction In Progress

The Contractor recognizes that construction may be in progress at the Facility and may continue throughout the term of this Contract. Notwithstanding, the Contractor shall at all times during the term hereof maintain the same standards of performance and cleanliness as prevails in non-affected areas as required by the standards hereunder.

35. Permit-Required Confined Space Work

Prior to commencement of any work, the Contractor shall request and obtain from the Port Authority a description of all spaces at the facility which are permit-required confined spaces requiring issuance of an OSHA permit.

Prior to the commencement of any work in a permit-required confined space at a Port Authority facility requiring issuance of an OSHA permit, the Contractor shall contact the Manager to obtain an Authority Contractor Permit-Required Confined Space Notification form. The notification form must be filled out and submitted prior to commencing permit-required confined space work. All confined space work shall be performed in accordance with all applicable OSHA requirements. The Contractor shall provide its employees with a copy of its own company permit and shall furnish the Port Authority with a copy of the permit upon completion of the work. The Contractor must supply all equipment required for working in a confined space.

36. Signs

Except with the prior written approval of the Port Authority, the Contractor shall not erect, maintain or display any signs or posters or any advertising on or about the Facility.

37. Vending Machines, Food Preparation

The Contractor shall not install, maintain or operate on the Facility, or on any other Port Authority property, any vending machines without the prior written approval of the Port Authority. No foods or beverages shall be prepared or consumed at the Facility by any of the Contractor's employees except in areas as may be specifically designated by the Port Authority for such purpose.

38. Confidential Information/Non-Publication

a. As used herein, confidential information shall mean all information disclosed to the Contractor or the personnel provided by the Contractor hereunder which relates to the Authority's and/or PATH's past, present, and future research, development and business activities including, but not limited to, software and documentation licensed to the Authority or proprietary to the Authority and/or PATH and all associated software, source code procedures and documentation. Confidential information shall also mean any other tangible or intangible information or materials including but not limited to computer identification numbers, access codes, passwords, and reports obtained and/or used during the performance of the Contractor's Services under this Contract.

b. Confidential information shall also mean and include collectively, as per *The Port Authority of New York & New Jersey Information Security Handbook (October 15, 2008, corrected as of November 14, 2013)*, Protected Information, Confidential Proprietary Information, Confidential Privileged Information and information that is labeled, marked or otherwise identified by or on behalf of the Authority so as to reasonably connote that such information is confidential, privileged, sensitive or proprietary in nature. Confidential Information shall also include all work product that contains or is derived from any of the foregoing, whether in whole or in part, regardless of whether prepared by the Authority or a third-party or when the Authority receives such information from others and agrees to treat such information as Confidential.

c. The Contractor shall hold all such confidential information in trust and confidence for the Authority, and agrees that the Contractor and the personnel provided by the Contractor hereunder shall not, during or after the termination or expiration of this Contract, disclose to any person, firm or corporation, nor use for its own business or benefit, any information obtained by it under or in connection with the supplying of services contemplated by this Contract. The Contractor and the personnel provided by the Contractor hereunder shall not violate in any manner any patent, copyright, trade secret or other proprietary right of the Authority or third persons in connection with their services hereunder, either before or after termination or expiration of this Contract. The Contractor and the personnel provided by the Contractor hereunder shall not willfully or otherwise perform any dishonest or fraudulent acts, breach any security procedures, or damage or destroy any hardware, software or documentation, proprietary or otherwise, in connection with their services hereunder. The Contractor shall promptly and fully inform the Director in writing of any patent, copyright, trade secret or other intellectual property rights or disputes, whether existing or potential, of which the Contractor has knowledge, relating to any idea, design, method, material, equipment or other matter related to this Contract or coming to the Contractor's attention in connection with this Contract.

d. The Contractor shall not issue nor permit to be issued any press release, advertisement, or literature of any kind, which refers to the Port Authority or to the fact that goods have been, are being or will be provided to it and/or that services have been, are being or will be performed for it in connection with this Agreement, unless the vendor first obtains the written approval of the Port Authority. Such approval may be

withheld if for any reason the Port Authority believes that the publication of such information would be harmful to the public interest or is in any way undesirable.

39. Time is of the Essence

Time is of the essence in the Contractor’s performance of this Contract inasmuch as the Work to be performed will affect the operation of public facilities.

40. Holidays

The following holidays will be observed at the Site:

- | | |
|----------------------------|------------------------|
| New Year's Day | Labor Day |
| Martin Luther King Jr. Day | Columbus Day |
| Presidents Day | Veterans Day |
| Memorial Day | Thanksgiving Day |
| Independence Day | Day After Thanksgiving |
| Christmas Day | |

This list is subject to periodic revision and the Contractor shall be responsible for obtaining all updated lists from the office of the Manager. If any such holiday falls on a Sunday then the next day shall be considered the holiday and/or if any such holiday falls on a Saturday then the preceding day shall be considered the holiday.

41. Personnel Standards

In addition to any specific personnel requirements that may be required under the clause entitled “Personnel Requirements” in the Specifications, the Contractor (and any Subcontractor) shall furnish competent and adequately trained personnel to perform the Work hereunder. If, in the opinion of the Manager, any employee so assigned is performing their functions unsatisfactorily, they shall be replaced by the Contractor within twenty-four (24) hours following the Contractor’s receipt of the Manager’s request for such replacement.

All Contractor's employees performing Work hereunder shall have the ability to communicate in the English language to the extent necessary to comprehend directions given by either the Contractor's supervisory staff or by the Manager's staff. Any employee operating a motor vehicle must have a valid driver's license.

The Contractor shall verify that employees working under this Contract in the United States are legally present in the United States and authorized to work by means of the federally required I-9 program

42. General Uniform Requirements for Contractor’s Personnel

In addition to any specific uniform requirements that may be required by the Specifications, uniforms must be worn at all times during which the Services are being performed hereunder. The Contractor agrees that his/her employees will present a neat, clean and orderly appearance at all times. Uniforms shall include the Contractor’s identification badge with picture ID bearing the employee’s name. All uniforms, colors, types and styles shall be subject to the prior approval of the Manager. The Contractor will also be responsible for ensuring that its employees are wearing shoes appropriate for the tasks performed. The Manager shall have the right to require removal of any employee who shall fail to wear the proper uniform and shoes, and the exercise of this right shall not limit the obligation of the Contractor to perform the Services or to furnish any required number of employees at a specific location at the Site as specified.

43. Labor, Equipment and Materials Supplied by the Contractor

The Contractor shall, at all times during the performance of this Contract, furnish all necessary labor, supervision, equipment and materials necessary for the prompt and efficient performance of the Work, whether such materials and equipment are actually employed in the furnishing of the Work or whether incidental thereto.

All materials used by the Contractor in furnishing Work hereunder shall be of such quality as to accomplish the purposes of this Contract and the Services to be furnished hereunder in such manner so as not to damage any part of the Site.

The Port Authority by its officers, employees and representatives shall have the right at all times to examine the supplies, materials and equipment used by the Contractor, to observe the operations of the Contractor, its agents, servants and employees and to do any act or thing which the Port Authority may be obligated or have the right to do under this Contract or otherwise.

All equipment, materials and supplies used in the performance of this Contract required hereunder shall be used in accordance with their manufacturer's instructions.

Materials and supplies to be provided by the Contractor hereunder shall comply with OSHA and all applicable regulations.

44. Contractor's Vehicles – Parking - Licenses

At the discretion of the Manager, the Port Authority may permit the Contractor during the effective period of this Contract to park vehicle(s) used by it in its operations hereunder in such location as may from time to time or at any time be designated by the Manager. The Contractor shall comply with such existing rules, regulations and procedures as are now in force and such reasonable future rules, regulations and procedures as may hereafter be adopted by the Port Authority for the safety and convenience of persons who park automotive vehicles in any parking area at the Site or for the safety and proper persons who park automotive vehicles in any parking area at the Site or for the safety and proper identification of such vehicles, and the Contractor shall also comply with any and all directions pertaining to such parking which may be given from time to time and at any time by the Manager. Any vehicle used by the Contractor hereunder shall be marked or placarded, identifying it as the Contractor's vehicle.

45. Manager's Authority

In the performance of the Work hereunder, the Contractor shall conform to all orders, directions and requirements of the Manager and shall perform the Work hereunder to the satisfaction of the Manager at such times and places, by such methods and in such manner and sequence as he/she may require, and the Contract shall at all stages be subject to his/her inspection. The Manager shall determine the amount, quality, acceptability and fitness of all parts of the Work and shall interpret the Specifications and any orders for Extra Work. The Contractor shall employ no equipment, materials, methods or staff or personnel to which the Manager objects. Upon request, the Manager shall confirm in writing any oral order, direction, requirement or determination.

The Manager shall have the authority to decide all questions in connection with the Services to be performed hereunder. The exercise by the Manager of the powers and authorities vested in him/her by this section shall be binding and final upon the Port Authority and the Contractor.

46. Price Preference

If this solicitation has not been set aside for the purposes of making an award based on bids solicited from Port Authority certified Minority Business, Women Business or Small Business Enterprises as indicated by the bidder pre-requisites in Part II hereof, for awards of contracts, not exceeding \$1,000,000, for:

- (a) Services, a price preference of 5% is available for New York or New Jersey Small Business Enterprises (SBE); or

(b) Services (excluding Janitorial/Cleaning Services), a price preference of 10% is available for New York or New Jersey Minority or Women Business Enterprises (M/WBE),

certified by the Port Authority by the day before the bid opening.

If the Bidder is a Port Authority certified MBE, WBE or SBE, enter the applicable date(s) certification was obtained in the space provided on the Signature Sheet attached hereto.

47. M/WBE Good Faith Participation

If specified as applicable to this Contract, the Contractor shall use every good-faith effort to provide for participation by certified Minority Business Enterprises (MBEs) and certified Women-owned Business Enterprises (WBEs) as herein defined, in all purchasing and subcontracting opportunities associated with this Contract, including purchase of equipment, supplies and labor services.

Good Faith efforts to include participation by MBEs/WBEs shall include the following:

- a. Dividing the services and materials to be procured into small portions, where feasible.
- b. Giving reasonable advance notice of specific contracting, subcontracting and purchasing opportunities to such MBEs/WBEs as may be appropriate.
- c. Soliciting services and materials from a Port Authority certified MBE/WBE or seeking MBEs/WBEs from other sources. To access the Port Authority's Directory of MBE/WBE Certified Firms go to www.panynj.gov/supplierdiversty
- d. Ensuring that provision is made to provide progress payments to MBEs/WBEs on a timely basis.
- e. Observance of reasonable commercial standards of fair dealing in the respective trade or business.

Subsequent to Contract award, all changes to the M/WBE Participation Plan must be submitted via a modified M/WBE Participation Plan to the Manager for review and approval by the Authority's Office of Business Diversity and Civil Rights. For submittal of modifications to the M/WBE Plan, Contractors are directed to use form PA3749C, which may be downloaded at <http://www.panynj.gov/business-opportunities/become-vendor.html>. The Contractor shall not make changes to its approved M/WBE Participation Plan or substitute M/WBE subcontractors or suppliers for those named in their approved plan without the Manager's prior written approval. Unauthorized changes or substitutions, including performing the work designated for a subcontractor with the Contractor's own forces, shall be a violation of this section. Progress toward attainment of M/WBE participation goals set forth herein will be monitored throughout the duration of this Contract.

The Contractor shall also submit to the Manager, along with invoices, the Statement of Subcontractor Payments as the M/WBE Participation Report, which may be downloaded at <http://www.panynj.gov/business-opportunities/become-vendor.html>. The Statement must include the name and business address of each M/WBE subcontractor and supplier actually involved in the Contract, a description of the work performed and/or product or service supplied by each such subcontractor or supplier, the date and amount of each expenditure, and such other information that may assist the Manager in determining the Contractor's compliance with the foregoing provisions.

If, during the performance of this Contract, the Contractor fails to demonstrate good faith efforts in carrying out its M/WBE Participation Plan and the Contractor has not requested and been granted a full or partial waiver of the M/WBE participation goals set forth in this Contract, the Authority will take into consideration the Contractor's failure to carry out its M/WBE Participation Plan in its evaluation for award of future Authority contracts.

PART III CONTRACTOR'S INTEGRITY PROVISIONS

1. Certification of No Investigation (criminal or civil anti-trust), Indictment, Conviction, Debarment, Suspension, Disqualification and Disclosure of Other Information

By bidding on this Contract, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that the Bidder and each parent and/or affiliate of the Bidder has not

- a. been indicted or convicted in any jurisdiction;
- b. been suspended, debarred, found not responsible or otherwise disqualified from entering into any contract with any governmental agency or been denied a government contract for failure to meet standards related to the integrity of the Bidder;
- c. had a contract terminated by any governmental agency for breach of contract or for any cause based in whole or in part on an indictment or conviction;
- d. ever used a name, trade name or abbreviated name, or an Employer Identification Number different from those inserted in the Bid;
- e. had any business or professional license suspended or revoked or, within the five years prior to bid opening, had any sanction imposed in excess of fifty thousand dollars (\$50,000) as a result of any judicial or administrative proceeding with respect to any license held or with respect to any violation of a federal, state or local environmental law, rule or regulation;
- f. had any sanction imposed as a result of a judicial or administrative proceeding related to fraud, extortion, bribery, bid rigging, embezzlement, misrepresentation or anti-trust regardless of the dollar amount of the sanctions or the date of their imposition; and
- g. been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency, including an inspector general of a governmental agency or public authority.

2. Non-Collusive Bidding, and Code of Ethics Certification, Certification of No Solicitation Based On Commission, Percentage, Brokerage, Contingent or Other Fees

By bidding on this Contract, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, that

- a. the prices in its bid have been arrived at independently without collusion, consultation, communication or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
- b. the prices quoted in its bid have not been and will not be knowingly disclosed directly or indirectly by the Bidder prior to the official opening of such bid to any other bidder or to any competitor;
- c. no attempt has been made and none will be made by the Bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition;
- d. this organization has not made any offers or agreements or taken any other action with respect to any Authority employee or former employee or immediate family member of either which would constitute a breach of ethical standards under the Code of Ethics dated March 11, 2014, or as may be revised, (a copy of which is available upon request) nor does this organization have any knowledge of any act on the part of an Authority employee or former Authority employee relating either directly or indirectly to this organization which constitutes a breach of the ethical standards set forth in said Code;
- e. no person or selling agency other than a bona fide employee or bona fide established commercial or selling agency maintained by the Bidder for the purpose of securing business, has been employed or retained by the Bidder to solicit or secure this Contract on the understanding that a commission, percentage, brokerage, contingent, or other fee would be paid

- to such person or selling agency; and
- f. the Bidder has not offered, promised or given, demanded or accepted, any undue advantage, directly or indirectly, to or from a public official or employee, political candidate, party or party official, or any private sector employee (including a person who directs or works for a private sector enterprise in any capacity), in order to obtain, retain, or direct business or to secure any other improper advantage in connection with this Contract.
 - g. no person or organization has been retained, employed or designated on behalf of the Bidder to impact any Port Authority determination with respect to (i) the solicitation, evaluation or award of this Contract, or (ii) the preparation of specifications or request for submissions in connection with this Contract.

The foregoing certifications in this Part III, Sections 1 and 2, shall be deemed to have been made by the Bidder as follows:

- * if the Bidder is a corporation, such certification shall be deemed to have been made not only with respect to the Bidder itself, but also with respect to each parent, affiliate, director, and officer of the Bidder, as well as, to the best of the certifier's knowledge and belief, each stockholder of the Bidder with an ownership interest in excess of 10%;
- * if the Bidder is a partnership, such certification shall be deemed to have been made not only with respect to the Bidder itself, but also with respect to each partner.

Moreover, the foregoing certifications, if made by a corporate Bidder, shall be deemed to have been authorized by the Board of Directors of the Bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of such certification as the act and deed of the corporation.

In any case where the Bidder cannot make the foregoing certifications, the Bidder shall so state and shall furnish with the signed bid a signed statement which sets forth in detail the reasons therefor. If the Bidder is uncertain as to whether it can make the foregoing certifications, it shall so indicate in a signed statement furnished with its bid, setting forth in such statement the reasons for its uncertainty. With respect to the foregoing certification in paragraph "2g", if the Bidder cannot make the certification, it shall provide, in writing, with the signed bid: (i) a list of the name(s), address(es), telephone number(s), and place(s) of principal employment of each such individual or organization; and (ii) a statement as to whether such individual or organization has a "financial interest" in this Contract, as described in the Procurement Disclosure Policy of the Authority (a copy of which is available upon request to the Chief Procurement Officer of the Procurement Department of the Authority). Such disclosure is to be updated, as necessary, up to the time of award of this Contract. As a result of such disclosure, the Port Authority shall take appropriate action up to and including a finding of non-responsibility.

Failure to make the required disclosures shall lead to administrative actions up to and including a finding of non-responsiveness or non-responsibility.

Notwithstanding that the Bidder may be able to make the foregoing certifications at the time the bid is submitted, the Bidder shall immediately notify the Authority in writing during the period of irrevocability of bids and the term of the Contract, if Bidder is awarded the Contract, of any change of circumstances which might under this clause make it unable to make the foregoing certifications, might render any portion of the certifications previously made invalid, or require disclosure. The foregoing certifications or signed statement shall be deemed to have been made by the Bidder with full knowledge that they would become a part of the records of the Authority and that the Authority will rely on their truth and accuracy in awarding and continuing this Contract. In the event that the Authority should determine at any time prior or subsequent to the award of this Contract that the Bidder has falsely certified as to any material item in the foregoing certifications, has failed to immediately notify the Port Authority of any change in circumstances which might

make it unable to make the foregoing certifications, might render any portion of the certifications previously made invalid, or require disclosure, or has willfully or fraudulently furnished a signed statement which is false in any material respect, or has not fully and accurately represented any circumstance with respect to any item in the foregoing certifications required to be disclosed, the Authority may determine that the Bidder is not a responsible Bidder with respect to its bid on the Contract or with respect to future bids on Authority contracts and may exercise such other remedies as are provided to it by the Contract with respect to these matters. In addition, Bidders are advised that knowingly providing a false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (see e.g. New York Penal Law, Section 175.30 et seq.). Bidders are also advised that the inability to make such certification will not in and of itself disqualify a Bidder, and that in each instance the Authority will evaluate the reasons therefor provided by the Bidder. Under certain circumstances the Bidder may be required as a condition of Contract award to enter into a Monitoring Agreement under which it will be required to take certain specified actions, including compensating an independent Monitor to be selected by the Port Authority, said Monitor to be charged with, among other things, auditing the actions of the Bidder to determine whether its business practices and relationships indicate a level of integrity sufficient to permit it to continue business with the Port Authority.

3. Bidder Eligibility for Award of Contracts - Determination by an Agency of the State of New York or New Jersey Concerning Eligibility to Receive Public Contracts

Bidders are advised that the Authority has adopted a policy to the effect that in awarding its contracts it will honor any determination by an agency of the State of New York or New Jersey that a Bidder is not eligible to bid on or be awarded public contracts because the Bidder has been determined to have engaged in illegal or dishonest conduct or to have violated prevailing rate of wage legislation.

The policy permits a Bidder whose ineligibility has been so determined by an agency of the State of New York or New Jersey to submit a bid on a Port Authority contract and then to establish that it is eligible to be awarded a contract on which it has bid because (i) the state agency determination relied upon does not apply to the Bidder, or (ii) the state agency determination relied upon was made without affording the Bidder the notice and hearing to which the Bidder was entitled by the requirements of due process of law, or (iii) the state agency determination was clearly erroneous or (iv) the state determination relied upon was not based on a finding of conduct demonstrating a lack of integrity or violation of a prevailing rate of wage law.

The full text of the resolution adopting the policy may be found in the Minutes of the Authority's Board of Commissioners meeting of September 9, 1993.

4. Contractor Responsibility, Suspension of Work and Termination

During the term of this Contract, the Contractor shall at all times during the Contract term remain responsible. The Contractor agrees, if requested by the Port Authority to present evidence of its continuing legal authority to do business in the States of New Jersey or New York, integrity, experience, ability, prior performance, and organizational and financial capacity.

The Port Authority, in its sole discretion, reserves the right to suspend any or all activities under this Contract, at any time, when it discovers information that calls into question the responsibility of the Contractor. In the event of such suspension, the Contractor will be given written notice outlining the particulars of such suspension. Upon issuance of such notice, the Contractor must comply with the terms of the suspension order. Contract activity may resume at such time as the Port Authority issues a written notice authorizing a resumption of performance under the Contract.

Upon written notice to the Contractor, and an opportunity to be heard with appropriate Port Authority officials or staff, the Contract may be terminated by Port Authority at the Contractor's expense where the Contractor is determined by the Port Authority to be non-responsible. In such event, the Port Authority or its designee may

complete the contractual requirements in any manner he or she may deem advisable and pursue available legal or equitable remedies for breach, including recovery of costs from Contractor associated with such termination.

5. No Gifts, Gratuities, Offers of Employment, Etc.

At all times, the Contractor shall not offer, give or agree to give anything of value either to a Port Authority employee, agent, job shopper, consultant, construction manager or other person or firm representing the Port Authority, or to a member of the immediate family (i.e., a spouse, child, parent, brother or sister) of any of the foregoing, in connection with the performance by such employee, agent, job shopper, consultant, construction manager or other person or firm representing the Port Authority of duties involving transactions with the Contractor on behalf of the Port Authority, whether or not such duties are related to this Contract or any other Port Authority contract or matter. Any such conduct shall be deemed a material breach of this Contract.

As used herein "anything of value" shall include but not be limited to any (a) favors, such as meals, entertainment, transportation (other than that contemplated by the Contract or any other Port Authority contract), etc. which might tend to obligate the Port Authority employee to the Contractor, and (b) gift, gratuity, money, goods, equipment, services, lodging, discounts not available to the general public, offers or promises of employment, loans or the cancellation thereof, preferential treatment or business opportunity. Such term shall not include compensation contemplated by this Contract or any other Port Authority contract. Where used herein, the term "Port Authority" shall be deemed to include all subsidiaries of the Port Authority.

The Contractor shall insure that no gratuities of any kind or nature whatsoever shall be solicited or accepted by it and by its personnel for any reason whatsoever from the passengers, tenants, customers or other persons using the Facility and shall so instruct its personnel.

In the event that the Contractor becomes aware of the occurrence of any conduct that is prohibited by this section entitled "No Gifts, Gratuities, Offers of Employment, Etc.", it shall report such occurrence to the Port Authority's Office of Inspector General within three (3) business days of obtaining such knowledge. (See "<http://www.panynj.gov/inspector-general>" for information about to report information to the Office of Inspector General). Failing to report such conduct shall be grounds for a finding of non-responsibility.

In addition, during the term of this Contract, the Contractor shall not make an offer of employment or use confidential information in a manner proscribed by the Code of Ethics and Financial Disclosure dated March 11, 2014, or as may be revised (a copy of which is available upon request to the Office of the Secretary of the Port Authority).

The Contractor shall include the provisions of this clause in each subcontract entered into under this Contract.

6. Conflict of Interest

During the term of this Contract, the Contractor shall not participate in any way in the preparation, negotiation or award of any contract (other than a contract for its own services to the Authority) to which it is contemplated the Port Authority may become a party, or participate in any way in the review or resolution of a claim in connection with such a contract if the Contractor has a substantial financial interest in the contractor or potential contractor of the Port Authority or if the Contractor has an arrangement for future employment or for any other business relationship with said contractor or potential contractor, nor shall the Contractor at any time take any other action which might be viewed as or give the appearance of conflict of interest on its part. If the possibility of such an arrangement for future employment or for another business arrangement has been or is the subject of a previous or current discussion, or if the Contractor has reason to believe such an arrangement may be the subject of future discussion, or if the Contractor has any financial interest, substantial or not, in a contractor or potential contractor of the Authority, and the Contractor's participation in the preparation, negotiation or award of any contract with such a contractor or the review or resolution of a claim in connection with such a contract is contemplated or if the Contractor has reason to believe that any other situation exists which might be viewed as

or give the appearance of a conflict of interest, the Contractor shall immediately inform the Chief Procurement Officer in writing of such situation giving the full details thereof. Unless the Contractor receives the specific written approval of the Chief Procurement Officer, the Contractor shall not take the contemplated action which might be viewed as or give the appearance of a conflict of interest. The Chief Procurement Officer may require the Contractor to submit a mitigation plan addressing and mitigating any disclosed or undisclosed conflict, which is subject to the approval of the Chief Procurement Officer and shall become a requirement, as though fully set forth in this Contract. In the event the Chief Procurement Officer shall determine that the performance by the Contractor of a portion of its Services under this Agreement is precluded by the provisions of this numbered paragraph, or a portion of the Contractor's said Services is determined by the Chief Procurement Officer to be no longer appropriate because of such preclusion, then the Chief Procurement Officer shall have full authority on behalf of both parties to order that such portion of the Contractor's Services not be performed by the Contractor, reserving the right, however, to have the Services performed by others and any lump sum compensation payable hereunder which is applicable to the deleted work shall be equitably adjusted by the parties. The Contractor's execution of this document shall constitute a representation by the Contractor that at the time of such execution the Contractor knows of no circumstances, present or anticipated, which come within the provisions of this paragraph or which might otherwise be viewed as or give the appearance of a conflict of interest on the Contractor's part. The Contractor acknowledges that the Authority may preclude it from involvement in certain disposition/privatization initiatives or transactions that result from the findings of its evaluations hereunder or from participation in any contract, which results, directly or indirectly, from the Services provided by the Contractor hereunder. The Port Authority's determination regarding any questions of conflict of interest shall be final.

7. Definitions

As used in this section, the following terms shall mean:

Affiliate - Two or more firms are affiliates if a parent owns more than fifty percent of the voting stock of each of the firms, or a common shareholder or group of shareholders owns more than fifty percent of the voting stock of each of the firms, or if the firms have a common proprietor or general partner.

Agency or Governmental Agency - Any federal, state, city or other local agency, including departments, offices, public authorities and corporations, boards of education and higher education, public development corporations, local development corporations and others.

Investigation - Any inquiries made by any federal, state or local criminal prosecuting and/or law enforcement agency and any inquiries concerning civil anti-trust investigations made by any federal, state or local governmental agency. Except for inquiries concerning civil anti-trust investigations, the term does not include inquiries made by any civil government agency concerning compliance with any regulation, the nature of which does not carry criminal penalties, nor does it include any background investigations for employment, or Federal, State, and local inquiries into tax returns.

Officer - Any individual who serves as chief executive officer, chief financial officer, or chief operating officer of the Bidder by whatever titles known.

Parent - An individual, partnership, joint venture or corporation which owns more than 50% of the voting stock of the Bidder.

If the solicitation is a Request for Proposal:

Bid - shall mean Proposal;

Bidder - shall mean Proposer;

Bidding - shall mean submitting a Proposal.

In a Contract resulting from the taking of bids:

Bid - shall mean bid;

Bidder - shall mean Bidder; except and until the Contract has been awarded, then it shall mean Contractor

Bidding - shall mean executing this Contract.

In a Contract resulting from the taking of Proposals:

Bid - shall mean Proposal;

Bidder - shall mean Proposer;

Bidding - shall mean executing this Contract.