NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

REQUEST
FOR
PROPOSALS

RFP

PIN
8502011HW0046P

PROJECT
HWK639W, Preliminary and Final Design Services for the Reconstruction of the Tillary Street Area, in the Borough of Brooklyn

SUBMISSION DEADLINE
June 2, 2011

MICHAEL R. BLOOMBERG
Mayor

DAVID J. BURNEY, FAIA
Commissioner

ERIC MACFARLANE, PE
Deputy Commissioner
Division of Infrastructures

DEPARTMENT OF DESIGN AND CONSTRUCTION

REQUEST FOR PROPOSALS

PROJECT: HWK639W

PRELIMINARY AND FINAL DESIGN SERVICES FOR THE RECONSTRUCTION OF THE TILLARY STREET AREA, BOROUGH OF BROOKLYN

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Printed on paper containing 30% post-consumer material.

PREFACE

The City of New York is committed to achieving excellence in the design and construction of its capital program, and building on the tradition of innovation in architecture and engineering that has contributed to the City's prestige as a global destination. As part of this effort, the Department of Design and Construction ("DDC") is pleased to announce the following contracting opportunity.

SECTION I. TIMETABLE

A. RFP Issuance

Submission Deadline: The proposer shall deliver, on or before **4:00PM** on **June 2, 2011**, the Proposal in a clearly marked envelope or package. The Proposal shall consist of FOUR separate clearly marked, sealed packages containing the following: (1) Technical Proposal (1 original and 6 copies), (2) DBE Participation Plan (1 original), (3) Doing Business Data Form, and (4) Fee Proposal (Attachment 5) (1 original).

Proposals shall be hand delivered to the contact person at the location listed below. Proposals received after the applicable due date and time prescribed in the RFP are late and will not be accepted except at the discretion of DDC pursuant to the applicable section of the City Procurement Policy Board Rules.

Kareem Alibocas (718) 391-3038
Professional Contracts Section
Department of Design and Construction
30-30 Thomson Avenue, 4th Floor (Entrance on 30th Place)
Long Island City, NY 11101
e-mail: alibocaka@ddc.nyc.gov

NOTE: Respondents are held responsible for ensuring that the Professional Contract Section receives the RFP response package by the deadline. Respondents are warned not to rely on signed delivery slips from their messenger services. Occasionally packages are delivered to the School Construction Authority located in the same building and the packages are not forwarded to the DDC Professional Contracts Section in a timely manner. Entrance to DDC is on 30th Place, *not* Thomson Avenue despite our Thomson Avenue house number.

B. Inquiries:

In the event a proposer desires any explanation regarding the meaning or interpretation of this RFP, such explanation must be requested in writing or by email, no later than one week prior to the submission date prescribed in the RFP. In the event DDC determines that it is necessary to respond to the inquiry in writing, such response will be furnished as an addendum to the RFP to all potential proposers and posted at the DDC website http://ddcftp.nyc.gov/rfpweb/. All inquiries must be directed ONLY to the contact person listed above.

C. Addenda:

Receipt of an addendum to this RFP by a proposer must be acknowledged by attaching an original signed copy of the addendum to the Technical Proposal. All addenda shall become a part of the requirements for this RFP.

D. RFP Schedule:

The following is the estimated timetable for receipt, evaluation, and selection of proposals. This is only an estimate and is provided to assist responding firms in planning.

1. Identify Consultant: Within four weeks of submission deadline.

2. Complete Registration: Approximately three months from date of consultant selection.

3. Commence Work: Upon receipt of written Advice of Award.

SECTION II. SUMMARY OF THE REQUEST FOR PROPOSALS

A. General:

The New York City Department of Design and Construction (DDC), Division of Infrastructure, intends to enter into a contract with an appropriately qualified firm to provide preliminary and final design services for the following Project: Reconstruction of the Tillary Street Area in the Borough of Brooklyn. See Figure 1 below for the project limits.

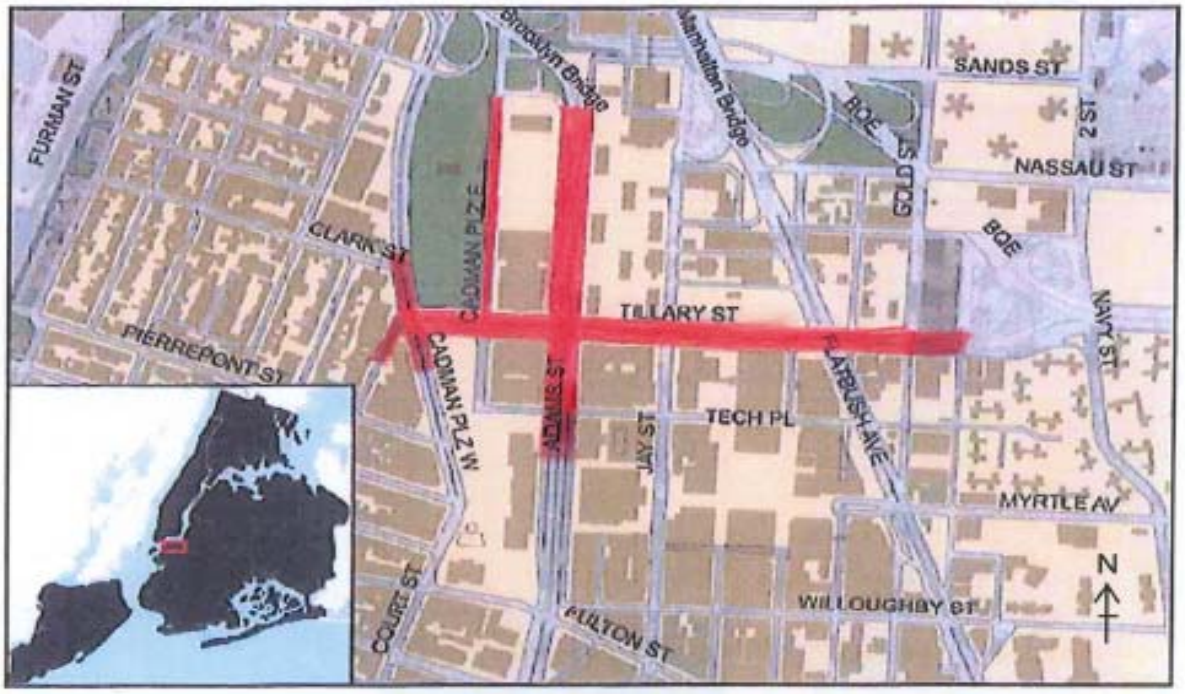


FIGURE 1 – PROJECT LIMITS

B. Background and Objectives:

Through this Request for Proposals ("RFP"), DDC is seeking an engineering firm to provide engineering design and related services for the project. The required services for the project are described in the Specific Requirements, included as Exhibit G to the attached contract. Your firm is invited to submit a proposal for undertaking the work described in this RFP.

C. Joint Ventures and Other Consultant Relationships

There is no minimum requirement for the proportion of work by either of the two joint venture partners. Joint ventures must carry the required insurance either as policies written specifically for the joint venture entity, or by using their existing single entity policies with endorsements written for the joint venture activity.

DDC does not recognize the corporate configuration wherein one company is "in association with" another. Relationships between two or more firms shall be either as joint venture partners or prime consultant/subconsultant. In the event that a proposal is received wherein two or more firms are described as being "in association with" each other, DDC will treat the relationship as one of prime consultant/subconsultant(s). The evaluation will be handled accordingly, and if selected, the final contract will show only the prime firm on the signature page, and all other firms will be listed as subconsultants in the appropriate exhibit.

SECTION III. SCOPE OF WORK AND CONTRACT CONDITIONS

A. Scope of Services

The Consultant shall provide, to the satisfaction of the Commissioner, all engineering design and related services necessary and required for the Project. The project involves Street Reconstruction, Landscaping and Urban Design. The Consultant's services shall be in accordance with the attached contract, including without limitation the following: (1) Article 6, (2) Specific Requirements (SR) (Exhibit G), and (3) General Requirements (GR) (Exhibit H).

B. Contract Provisions:

The services to be provided by the Consultant and all standards of performance applicable to the required work are set forth in the form of contract, attached hereto and incorporated herein as part of this RFP. Any firm awarded a contract as a result of this RFP will be required to sign this form of contract. The proposer is advised to carefully review the contract in its entirety before submitting a proposal.

C. Contract Term:

The contract shall commence as of the date of registration by the Comptroller and shall remain in effect until all required services have been completed. The time for completion of all required services, including reasonable review time by agencies whose approval the Consultant is required to obtain, shall be 1,095 consecutive calendar days ("ccds").

D. Insurance:

Requirements for insurance that must be provided by the Consultant and its subconsultants are specified in Article 7 of Appendix A. Appendix A is included as an Exhibit to the attached contract. The cost of all insurance is deemed included in payments to the Consultant, as set forth in the attached contract. The Proposer is advised to review such insurance requirements.

E. Payment Provisions:

The terms and conditions regarding payment to the consultant are set forth in Article 7 of the attached contract.

F. Participation by Disadvantaged Business Enterprises in Federal Aid Projects

The proposer is advised that the Project is a Federal Aid Project. The City of New York, DDC, is receiving funds from the United States Government for construction of the Project. Specifically, funding for the Project is being provided by the Federal Highway Administration ("FHWA"). Since the Project is a Federal Aid Project, the proposer is required to provide the maximum possible contracting opportunities for Disadvantaged Business Enterprises (DBEs). The DBE program is a federally regulated program that is administered by the New York State Department of Transportation (NYSDOT). The requirements for participation by DBEs are set forth in Attachment 8.

G. Compliance with Local Law 34 of 2007:

Pursuant to Local Law 34 of 2007, amending the City's Campaign Finance Law, the City is required to establish a computerized database containing the names of any "person" that has "business dealings with the city" as such terms are defined in the Local Law. In order for the City to obtain necessary information to establish the required database, vendors responding to this solicitation are required to complete the attached Doing Business Data Form and return it with this proposal, and should do so in a separate envelope. (If the responding vendor is a proposed joint venture, the entities that comprise the proposed joint venture must each complete a Data Form.) If the City determines that a vendor has failed to submit a Data Form or has submitted a Data Form that is not complete, the vendor will be notified by the agency and will be given four (4) calendar days from receipt of notification to cure the specified deficiencies and return a complete Data Form to the agency. Failure to do so will result in a determination that the proposal is non-responsive. Receipt of notification is defined as the day notice is e-mailed or faxed (if the vendor has provided an e-mail address or fax number), or no later than five (5) days from the date of mailing or upon delivery, if delivered.

H. Consultant's Personnel:

The terms and conditions regarding the Consultant's obligation to provide personnel for the performance of services for the project are set forth in Article 5 of the attached contract. The Consultant agrees, throughout the term of the Contract, to provide personnel for the performance of all required engineering design and related services for the Project. The Consultant shall provide such personnel through its own employees and/or through its Subconsultants.

I. Minimum Requirements Per Title

SERVICES AND JOB TITLES	ASCE (A) NICET (N) GRADE See Notes 1 & 2	Qualifications / Number of Years of Experience
Project Manager	A-VI	Professional License / 10 years
Project Engineer	A-IV	Professional License / 7 years
Senior Civil Engineer	A-V	Professional License / 7 years
Senior Structural Engineer	A-V	Professional License / 7 years
Engineer	A-III	
Junior Engineer	A-II	
Urban Design/Landscape Manager, RLA		Professional License / 10 years
Project / Senior Landscape Architect		7 years
Landscape Architect		4 years
Junior Landscape Architect		3 years
Arborist/ Forester		See Note 5
Survey Manager, R.L.S.		Professional License
Party Chief/Foreman	N-III	
Instrument Person	N-II	
Rod Person	N-I	
Senior Traffic Engineer	A-V	Professional License / 7 years
Traffic Engineer	A-III	
Junior Traffic Engineer – Technician	A-II	2 years
Project Environmental Engineer/Manager		Professional License / 10 years

SERVICES AND JOB TITLES	ASCE (A) NICET (N) GRADE See Notes 1 & 2	Qualifications / Number of Years of Experience
Senior Environmental Engineer/Planner		Professional License / 7 years
Environmental Engineer		
Junior Environmental Engineer		2 years
Certified Industrial Hygienist		Professional License / 7 years, See Note 6
Industrial Hygienist		4 years
Project Geotechnical Engineer / Manager	A-VI	Professional License / 10 years
Senior Geotechnical Engineer	A-V	Professional License / 7 years
Geotechnical Engineer	A-III	
Project Scientist		See Note 6
Senior Mechanical Engineer	A-V	Professional License / 7 years
Mechanical Engineer	A-III	
Senior Electrical Engineer	A-V	Professional License / 7 years
Electrical Engineer	A-III	
Archeologist/Historian		See Note 4
Senior Archeologist		See Note 4
Junior Archeologist		3 years
Senior CAD Operator	N-IV	7 years
CAD Operator	N-III	5 years
Junior CAD Operator	N-II	2 years

Notes:

(1) The minimum requirements for the specified titles shall be the requirements established for the various grade levels by the American Society of Civil Engineers (ASCE). The applicable requirements for the title in question shall be the most current requirements promulgated by the ASCE for that title as of the date on which the Consultant submitted its Proposal for the Contract.

(2) The minimum requirements for the specified titles shall be the requirements established for the various grade levels by the National Institute For Certification In Engineering Technologies (NICET). The applicable requirements for the title in question shall be the most current requirements promulgated by the NICET for that title as of the date on which the Consultant submitted its Proposal for the Contract.

(3) If a title requires a professional license, such license must be issued by the State of New York.

(4) The minimum requirements for the specified titles in Archeology shall be the requirements established by the National Park Service (NPS), as set forth below.

A graduate degree in archeology, anthropology, or closely related field plus:

(a) At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management;

(b) At least four months of supervised field and analytical experience in general North American archeology; and,

(c) Demonstrated ability to carry research to completion.

In addition to these minimum qualifications, the professional in historic archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period (36 CFR Part 1: Appendix A).

(5) The minimum requirements for the specified title of Arborist/Forester shall be the requirements established by the New York City Department of Parks and Recreation, as set forth below.

(a) Associate degree in forestry, arboriculture, horticulture, or related plant science field, and five years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction; or

(b) B.S. in forestry, arboriculture, horticulture, or related plant science field, and three years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction; or

(c) M.S. in forestry, arboriculture, horticulture, or related plant science field, and one year of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction; or

(d) Arborist certification from the N.Y.S. Arborists/International Society of Arboriculture Chapter, Inc., and three years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction; or

(e) Other state arborist certification recognized by the International Society of Arboriculture or the National Arborist Association, and three years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction.

(6) The minimum requirements for the specified Environmental Job Titles shall be the requirements set forth below:

(a) <u>Certified Industrial Hygienist</u> (CIH) - shall possess a CIH license granted by the American Board of Industrial Hygiene (ABIH) for at least five (5) years. An advanced degree (M.S., M.E., and PhD) in science or engineering is preferred. This individual will demonstrate at least fifteen (15) years of experience in this field of expertise with not less than 5 years practical experience in the environmental engineering / science fields.

<u>Duties</u>: The CIH will act as the lead and provide expert opinion on matters of industrial hygiene, site safety, and environmental compliance. This individual will review and interpret data, author environmental reports and site specific health and safety plans; and shall be responsible for all aspects, including execution and monitoring, of the health and safety program.

(b) Project Scientist – shall posses at a minimum a Bachelor's degree from an accredited university in the respective field of study and have six (6) years of practical experience in construction and/or design of building/infrastructure systems, building codes, fire/life–safety issues, and other topics related to general project design and development. Postgraduate education may supplement up to two (2) years of work experience. The individual will be required to demonstrate proficiency in understanding drawings, specifications, standards, codes regulations, etc. as they pertain to general construction practices and the environmental fields.

Duties: The Project Scientist will participate in a project from a hydro/geotechnical perspective, and will be called upon to provide expertise in, fire detection/suppression, life-safety and all other systems that are impacted by the environmental project. Also included are responsibilities for environmental report writing controlled inspections and most other activities that their education and background would dictate.

(7) No Payment for Principal: The Consultant shall not be entitled to payment for a principal's time performing oversight or management duties. This prohibition on payment for a principal's time shall not apply if the following criteria are met: (1) the principal is qualified to perform services in accordance with one of the titles set forth in Exhibit F (other than the title "Principal"), and (2) the principal is included in the approved Staffing Plan for such title.

SECTION IV. FORMAT AND CONTENT OF THE PROPOSAL

A. Proposal Subdivision Instructions:

Proposers should provide all information required in the format below. The proposal should be typed on both sides of 8½" X 11" paper. The City of New York requests that all proposals be submitted on paper with not less than 30% post-consumer material content, i.e., the minimum recovered fiber content level for reprographic paper recommended by the United States Environmental Protection Agency (for any changes to that standard please consult: http://www.epa.gov/epawaste/conserve/tools/cpg/index.htm). Pages should be paginated. The proposal will be evaluated on the basis of its content, not its length. Failure to comply with any of these instructions will not make the proposal non-responsive. Submit proposal in a clearly labeled, sealed package as follows:

1. Technical Proposal (one original and 6 copies): The Technical Proposal should contain all the information requested in Subsection B below, plus completed forms 254 and 255 for Proposer and its subconsultants. (These forms are available at the following website: http://www.nyc.gov/html/ddc/html/business/otherfrm.shtml). **Such forms shall not be altered in any way.**

2. Fee Proposal (1 original): The proposer shall submit Attachment 5 (Fee Proposal) in a clearly marked, sealed envelope. The Fee Proposal shall consist of the following three parts: (1) Part 1: Titles and All Inclusive Hourly Rates, (2) Part 2: Fee Schedule (Lump Sum Fees for All Specified Tasks), and (3) Part 3: Breakdown of Lump Sum Fees (in the form of a Staffing Table). If requested in writing by DDC, the proposer shall submit Part 4: Back Up Material for All Inclusive Hourly Rates, as described below. Submission of Part 4 shall be within two (2) business days of notice by DDC.

   Negotiation: DDC will conduct negotiations as described in Section V. (A.) of the RFP. The Fees and All Inclusive Hourly Rates negotiated with the successful proposer will be included in the final Contract.

   Increases: The Fees and All Inclusive Hourly Rates negotiated with the successful proposer and included in the Contract shall apply to the base term of the Contract. If the base term is extended, the Commissioner shall issue a change order to the Consultant increasing the Fees and All Inclusive Hourly Rates, subject to the conditions set forth below. If no such change order is issued, the Fees and All Inclusive Hourly Rates applicable to the base term of the Contract shall remain in effect throughout the extended term of the Contract.

   (1) No change order increasing the Fees and All Inclusive Hourly Rates shall be issued if the Commissioner determines that the Consultant is responsible for the delay or any material portion thereof.

   (2) Any increase in the Fees and All Inclusive Hourly Rates shall be based on whatever increase may have occurred during the base term of the Contact in the Employment Cost Index for Professional, Specialty and Technical Occupations, published by the U.S. Dept. of Labor, Bureau of Labor Statistics (the "Index") as determined by Engineering Audit office. If, during the base term of the Contract, the Index showed an increase, the Fees and All Inclusive Hourly Rates shall be increased. If, during the base term of the Contract, the Index declined or showed no increase, the Fees and All Inclusive Hourly Rates shall remain unchanged throughout the extended term of the Contract.

(3) Any increase in the Fees and/or All Inclusive Hourly Rates shall only apply to the portion of the work which the Consultant has not yet performed, as determined by the Commissioner. Any increase in the Fees and/or All Inclusive Hourly Rates shall not apply to any work performed by the Consultant during the base term of the Contract, even if payment for the same is made during the extended term.

(4) Any increase in the Fees and All Inclusive Hourly Rates shall not apply to any Change Order work issued during the base term of the Contract, even if such Change Order work was actually performed during the extended term. If any Change Order is issued during the extended term of the Contract, the increased All Inclusive Hourly Rates shall be used to negotiate a lump sum fee for such Change Order work.

Decreases: All Inclusive Hourly Rates shall be negotiated based on the qualifications and salary rates of the individuals identified in the Technical Proposal. The names of individuals identified as Key Personnel, as well as their titles and qualifications, shall be included in the Contract. In the event the Consultant fails to provide any individual identified in the Technical Proposal and included in the Contract, the Commissioner may decrease the All Inclusive Hourly Rate for such individual's title to an amount based on the qualifications and salary rate of the individual approved as a replacement.

B. Technical Proposal (one original and 6 copies):

The Technical Proposal shall contain the information described below.

1. Cover Letter: Submit a maximum of three pages, indicating the company name and address, and the name, address and telephone number of the person authorized to represent the firm. ***(Be sure to refer to the proper DDC project number and title).***

2. Experience of Firm & Subconsultants:

(a) Experience: The proposer and each of its subconsultant(s) shall provide a list of up to ten projects completed within the last 8 (eight) years, which demonstrate the firm's ability to provide services similar to those required for the Project described in this RFP. The proposer and each of its subconsultants shall provide information regarding prior projects in response to Question #8 of Form 255.

(b) Subconsultants: The proposer shall submit Attachment 2, identifying by name the subconsultants it intends to provide for the Project, as well as the type of services to be provided by each subconsultant.

(c) Joint Ventures: If the proposer is a joint venture, it shall delineate the Lead Consultant for this Project and the areas of technical responsibilities of each joint venture partner.

(d) Expertise: The proposer shall provide information indicating why the firm is especially qualified for the Project. The proposer shall provide such information in response to Question #10 of Form 255.

3. Personnel:

The proposer shall identify ALL individuals it will provide, throughout the term of the contract, to provide services as Project Personnel. Of the individuals identified as Project Personnel, the proposer shall indicate which individuals will provide services as "Key Personnel". The proposer shall submit resumes of all individuals identified in its proposal. Such individuals must be employees of the proposer or its subconsultant(s).

The proposer shall submit a detailed Project Organization Chart, which identifies by name, title and employer all proposed personnel for the Project. Such Chart shall also specify the responsibilities assigned to each title of personnel.

The proposer is advised as follows regarding personnel:

(a) The names of individuals identified as Key Personnel, as well as their titles and qualifications, shall be included in the Contract. The Consultant's obligations regarding Key Personnel are set forth in Article 5 of the Contract.

(b) Any proposed personnel must satisfy the minimum requirements per title set forth in Exhibit F to the attached Contract. All personnel performing services for the Project under the contract must be approved in advance by the Commissioner.

4. Technical Approach:

The proposer shall describe its planned program, technical as well as administrative, for successful completion of the project.

5. Project Schedule:

The proposer shall submit Attachment 3 (Project Schedule). The Project Schedule shall be in accordance with the following:

(a) The Project Schedule shall demonstrate completion of all required services for the Project, including reasonable review time by agencies whose approval the Consultant is required to obtain, in 1095 consecutive calendar days ("ccds").

(b) The Project Schedule shall organize the progress of the design into a series of milestones, and shall indicate the time for completion of each milestone. The time for completion of each milestone shall be indicated in consecutive calendar days from the contract commencement date. For the purpose of the Project Schedule, a "milestone" shall mean a critical point in the progress of the design which is achieved when a specified list of services and/or tasks has been completed. The Progress Schedule shall indicate the services and/or tasks that must be completed in order to achieve each milestone.

(c) In addition to the above, the proposer shall submit its detailed Project Schedule in the form of a Bar Chart, as described in the General Requirements, Section 4.40. The Bar Chart shall indicate the time for completion of each milestone indicated in the Project Schedule, as well as the interrelationship between activities required for the various milestones.

6. Firm's Capability:

The proposer shall submit Attachment 4, indicating its current and anticipated workload with DDC and New York City Department of Transportation. In completing Attachment 4, the proposer shall list any Requirements Contracts it holds, as well as each individual Task Order and Supplemental Task Order issued pursuant to such Requirements Contracts.

7. Performance Evaluation(s)

(a) Proposers with prior relevant NYC experience

Provide the firm's record of **relevant** design experience for the past ten years with DDC and other City of New York governmental departments, agencies, etc., including the contract number, project name, scope of work, duration, value of the construction project and value of the Proposer's contract. Include the respective City of New York's Agency Final Rating for performance of each contract and calendar date of rating.

(b) Proposers without relevant NYC experience

- State for the record that the proposer does not have relevant New York City experience.
- Provide indicators of the quality of the experience described in the proposal, including performance evaluations issued by comparable entities responsible for the development and maintenance of urban infrastructure assets.

8. Statement of Understanding:

The Statement of Understanding form included as Attachment 1 of this RFP should be signed by a responsible partner or corporate officer of the proposing firm and submitted with firm's Technical Proposal.

9. Acknowledgement of Addenda:

The Acknowledgement of Addenda form (Attachment 6) serves as the proposer's acknowledgement of the receipt of addenda to this RFP that may have been issued by the Agency prior to the proposal due date and time. The proposer should complete this form as instructed on the form.

C. Proposal Package Contents ("Checklist"):

The Proposal Package should consist of the following FOUR packages. Each package shall be clearly marked with the Project Name, Project Identification Number and the Name of the Proposer.

1. Technical Proposal (1 original and 6 copies):
   Separate sealed envelope, clearly marked as "Technical Proposal", including

   - Statement of Understanding (Attachment 1)
   - Identification of Subconsultants (Attachment 2)
   - Project Schedule (Attachment 3)
   - Current and Anticipated Workload Disclosure (Attachment 4)
   - Acknowledgement of Addenda (Attachment 6)

2. DBE Participation Plan (1 original): (Attachment 8)
   Separate sealed envelope, clearly marked as "DBE Participation Plan".

3. Doing Business Data Form (Attachment 9)
   Separate sealed envelope clearly marked as "Doing Business Data Form" containing a completed Doing Business Data Form.

4. Fee Proposal: (Attachment 5)
   Separate sealed envelope clearly marked as "Fee Proposal".

SECTION V. PROPOSAL EVALUATION AND CONTRACT AWARD PROCEDURES

A. Selection Process:

This is a Qualifications/Quality Based Selection (QBS) project. A DDC evaluation committee will review, evaluate and score all technical proposals pursuant to the criteria described below. This evaluation will determine each proposer's technical score. DDC reserves the right to interview proposers and visit their offices for the purpose of clarifying their proposals, after which their initial technical scores may be re-evaluated. Proposers will be ranked in accordance with their technical scores. The ranking will be submitted to the Executive Consultant Selection Committee (ECSC), who will certify the results and authorize fee negotiations to commence with the highest ranked firm. DDC will attempt to negotiate fair and reasonable Fees and All Inclusive Hourly Rates with the highest ranked firm. If negotiations are not successful, DDC will enter into negotiations with the next highest ranked firm. The City will award the Contract to the firm that is most qualified and that which the City is successful in negotiating compensation that is fair and reasonable.

Note: Each proposer is required to submit a Fee Proposal for the project; however, DDC will only open the Fee Proposal of the firm selected for negotiation in accordance with the process described above.

B. Technical Proposal Evaluation Criteria:

The Technical Proposal evaluation criteria are as follows:

1.	Firm's Capability:	(Weight 30%)
2.	Personnel – Qualifications and Experience:	(Weight 35%)
3.	Technical Approach:	(Weight 20%)
4.	Project Schedule:	(Weight 15%)

C. Basis of Award:

DDC will award a contract to the responsible proposer whose proposal is determined to be the highest quality and most advantageous to the City, taking into consideration the overall quality of the proposal as measured against factors or criteria as set forth in the RFP and successful negotiation of an appropriate fee. Such fee negotiation shall commence upon written notification and shall conclude not more than thirty days thereafter.

D. Supply and Service Employment Report:

Upon selection, the successful proposer will be required to submit one original copy of the Department of Small Business Services Supply and Service Employment Report, a copy of which can be downloaded from http://www.nyc.gov/html/ddc/html/business/otherfrm.shtml.
Upon written notification, the proposer must submit the Supply and Service Employment Report within ten days of such notification.

E. VENDEX:

Upon selection, the successful proposer will be required to submit proof of filing of the appropriate VENDEX Questionnaires. Upon written notification, the proposer must submit a Confirmation of VENDEX Compliance to DDC within ten days of official notification. A form for this confirmation is set forth in the RFP.

The proposer is advised that VENDEX Questionnaires and procedures have changed. See www.nyc.gov/vendex to download the new VENDEX Questionnaires and a Vendor's Guide to VENDEX or contact DDC's VENDEX Unit at 718-391-1845.

2. Submission:

VENDEX Questionnaires (if required) must be submitted directly to the Mayor's Office of Contract Services, ATTN: VENDEX, 253 Broadway, 9th Floor, New York, New York 10007.

3. Requirement:

Pursuant to Administrative Code Section 6-116.2 and the PPB Rules, proposers may be obligated to complete and submit VENDEX Questionnaires. If required, VENDEX Questionnaires must be completed and submitted before any award of contract may be made or before approval is given for a proposed subcontractor. Non-compliance with these submission requirements may result in the disqualification of the proposal, disapproval of a subcontractor, subsequent withdrawal of approval for the use of an approved subcontractor, or the cancellation of the contract after award.

F. Contract Finalization:

Upon selection, the successful proposer will be asked to finalize a contract with DDC subject to the conditions specified in the RFP and to the agency's standard contract provisions. The contents of the selected proposal, together with this RFP and any addendum/addenda provided during the proposal process, may be incorporated into the final contract to be developed by the agency.

SECTION VI. GENERAL INFORMATION TO PROPOSERS

A. Complaints

The New York City Comptroller is charged with the audit of contracts in New York City. Any proposer who believes that there has been unfairness, favoritism or impropriety in the proposal process should inform the Comptroller, Office of Contract Administration, 1 Centre Street, Room 835, New York, NY 10007; the telephone number is (212) 669-3000. In addition, the New York City Department of Investigation should be informed of such complaints at its Investigations Division, 80 Maiden Lane, New York, NY 10038; the telephone number is (212) 825-5959.

B. Applicable Laws

This Request for Proposals and the resulting contract award(s), if any, unless otherwise stated, are subject to all applicable provisions of New York State Law, the New York City Administrative Code, New York City Charter and New York City Procurement Policy Board (PPB) Rules. A copy of the PPB Rules may be obtained by contacting the PPB at (212) 788-7820.

The Consultant is advised that the Project is a Federal Aid Project. The City of New York, Department of Design and Construction, is receiving funds from the United States Government for construction of the Project. Specifically, funding for the Project is being provided by the Federal Highway Administration ("FHWA"). The Consultant must comply with the provisions of the Brooks Act and the USDOT Federal Highway Administration.

C. Contractual Requirements

1. Any firm awarded a contract as a result of this RFP will be required to sign the City's standard contract for Design and Related Services. A copy of the contract is attached for your information. The requirements for performance of this Project, as well as insurance, payment terms and all other provisions are contained in the contract.

2. Any information which may have been released either orally or in writing prior to the issuance of the RFP shall be deemed preliminary in nature and bind neither the City nor the Proposer.

3. The City will deal only with the Engineer and the City has no financial obligation to sub-consultants and sub-contractors of the Engineer. However, all sub-consultants and sub-contractors are subject to the City's contracting requirements including Equal Employment Opportunity (Executive Order #50 of 1980 as revised).

4. If this is an Infrastructure contract for engineering design services, the Proposer must negotiate with the agency the adoption of a schedule of payments and deliverables. In the event that a satisfactory decision cannot be reached regarding those schedules, the agency reserves the right to award to another proposer.

D. Contract Award

Contract award is subject to each of the following applicable conditions and any others that may apply: Requirements under 23 CFR Part 172 and 23 USC 112; New York City Fair Share Criteria; New York City MacBride Principles Law; submission by the proposer of the requisite New York City Department of Small Business Services/Division of Labor Services Employment Report and certification by that office; submission by the proposer of the requisite VENDEX Questionnaires/Affidavits of No Change and review of the information contained therein by the New York City Department of Investigation; all other required oversight approvals; applicable provisions of federal, state and local laws and executive orders requiring affirmative action and

equal employment opportunity; and Section 6-108.1 of the New York City Administrative Code relating to the Local Based Enterprises program and its implementation rules.

E. Proposer Appeal Rights

Pursuant to the PPB Rules, proposers have the right to appeal Agency non-responsiveness determinations and Agency non-responsibility determinations and to protest an Agency's determination regarding the solicitation or award of a contract.

F. Multi-Year Contracts

Multi-year contracts are subject to modification or cancellation if adequate funds are not appropriated to the Agency to support continuation of performance in any City fiscal year succeeding the first fiscal year and/or if the contractor's performance is not satisfactory. The Agency will notify the contractor as soon as is practicable that the funds are, or are not, available for the continuation of the multi-year contract for each succeeding City fiscal year. In the event of cancellation, the contractor will be reimbursed for those costs, if any, which are so provided for in the contract.

G. Prompt Payment Policy

Pursuant to the PPB Rules, it is the City's policy to process contract payments efficiently and expeditiously. The prompt Payment provisions set forth in the edition of the Procurement Policy Board Rules in effect at the time of this solicitation shall be applicable to payments made under a contract resulting from this solicitation. The provisions require the payment to contractors of interest payments made after the required payment date except as set forth in the Rules.

The contractor (consultant) must submit a proper invoice to receive payment, except where the contract provides that the contractor shall be paid at predetermined intervals without having to submit an invoice for each scheduled payment.

H. Prices Irrevocable

Prices proposed by the proposer shall be irrevocable until contract award, unless the proposal is withdrawn. Proposals may only be withdrawn by submitting a written request to the Agency prior to contract award but after the expiration of 90 days after the opening of proposals. This shall not limit the discretion of the Agency to request proposers to revise proposed prices through the submission of best and final offers and/or the conduct of negotiations.

I. Confidential, Proprietary Information or Trade Secrets

Proposers should give specific attention to the identification of those portions of their proposals that they deem to be confidential, proprietary information or trade secrets and provide any justification of why such materials, upon request, should not be disclosed by the City. Such information must be easily separable from the non-confidential sections of the proposal. All information not so identified may be disclosed by the City.

J. RFP Postponement/Cancellation

The Agency reserves the right to postpone or cancel this RFP in whole or in part, and to reject all proposals.

K. Proposer Costs

Proposers will not be reimbursed for any costs incurred to prepare proposals.

L. VENDEX Fees

Pursuant to PPB Rule 2-08(f)(2), the contractor will be charged a fee for the administration of the VENDEX system, including the Vendor Name Check process, if a Vendor Name Check review is required to be conducted by the Department of Investigation. The contractor shall also be required to pay the applicable required fees for any of its subcontractors for which Vendor Name Check reviews are required. The fee(s) will be deducted from payments made to the contractor under the contract. For contracts with an estimated value of less than or equal to $1,000,000, the fee will be $175. For contracts with an estimated value of greater than $1,000,000, the fee will be $350.

M. Charter Section 312(a) Certification

The Agency has determined that the contract(s) to be awarded through this Request for Proposals will not directly result in the displacement of any New York City employee.

_____ _____

ACCO Signature Date

ATTACHMENT 1

STATEMENT OF UNDERSTANDING

By signing in the space provided below, the undersigned certifies that the respondent (i) has read and understands the scope and requirements of this project, as described in the RFP and all attachments; (ii) has the capacity to execute this project, (iii) agrees to accept payment in accordance with the requirements of this RFP and the standard design contract, attached hereto, and (iv) will, if its proposal is accepted, enter into the attached Standard Contract with the New York City Department of Design and Construction.

Is the response printed on both sides, on recycled paper containing the minimum percentage of recovered fiber content as requested by the City in the instructions to this solicitation?

☐ **Yes** ☐ **No**

I hereby certify that my firm will carry all types of insurance specified in the contract.

The undersigned further stipulates that the information in this proposal is, to the best of knowledge, true and accurate.

_____
Name of Firm

By:_____ _____
Signature of Partner or Corporate Officer Date

_____ _____
Print Name Title

_____ _____
Telephone # EIN #

_____ _____
Address E-Mail Address

ATTACHMENT 2

IDENTIFICATION OF SUBCONSULTANTS

The proposer shall submit Attachment 2 as part of its Technical Proposal. In the space provided below, the proposer shall identify by name the Subconsultants it will provide throughout the term of the Contract, as well as the type of services to be provided by each subconsultant.

SUBCONSULTANT	TYPE OF SERVICES
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

ATTACHMENT 3

PROJECT SCHEDULE

The proposer shall submit Attachment 3 as part of its Technical Proposal. The Project Schedule shall be in accordance with the following:

(a) The Project Schedule shall demonstrate completion of all required services for the Project, including reasonable review time by agencies whose approval the Consultant is required to obtain, in 1,095 consecutive calendar days ("ccds").

(b) The Project Schedule shall organize the progress of the design into a series of milestones, and shall indicate the time for completion of each milestone. The time for completion of each milestone shall be indicated in consecutive calendar days from the contract commencement date. For the purpose of the Project Schedule, a "milestone" shall mean a critical point in the progress of the design which is achieved when a specified list of services and/or tasks has been completed. The Progress Schedule shall indicate the services and/or tasks that must be completed in order to achieve each milestone.

(c) In addition to the above, the proposer shall submit its detailed Project Schedule in the form of a Bar Chart, as described in the General Requirements, Section 4.40. The Bar Chart shall indicate the time for completion of each milestone indicated in the Project Schedule, as well as the interrelationship between activities required for the various milestones.

Note: If the proposer is selected to provide services for the Project, DDC reserves the right to make non-material changes to the Project Schedule at the time of Fee negotiation.

ATTACHMENT 4

CURRENT AND ANTICIPATED WORKLOAD DISCLOSURE

The proposer and his/her Sub-consultant(s) providing services on this project must complete a separate Current and Anticipated Work Load Disclosure form. The values shown *shall not* include: (1) amount owed to Sub-consultants and Sub-contractors, or, (2) amount owed for rental/purchase of equipment.

PROJECT ID: _____

PROJECT DESCRIPTION

_____
_____
_____
_____
_____
_____

FIRM NAME _____

CONTACT PERSON _____

PHONE (___) _____

FIRM ADDRESS:

_____
_____
_____
_____
_____

NUMBER OF FIRM'S DESIGN PERSONNEL IN THE OFFICE WHERE THIS PROJECT WILL BE ASSIGNED:

Project Manager _____ Project Engineer _____ Sr. Civil Engineer (HWY) _____

Firm's Total uncompleted Workload with NYCDDC/NYCDOT (From next page) $_____

Firm's Total Uncompleted Workload with other agencies $_____

CERTIFICATION

By signing in the space provided below, the proposer certifies that the dollar amounts set forth on this Attachment are true and accurate in all respects.

_____
Name of Firm

_____ _____
Signature of Partner or Corporate Officer Title

_____ _____
Print Name Date

ATTACHMENT 4 (continued)

CURRENT AND ANTICIPATED WORKLOAD
WITH NYCDDC/NYCDOT

FIRM NAME:_____

List ALL projects for which the firm currently has contracts with NYCDDC/NYCDOT **(HWY)** and those for which the firm has been officially selected. These shall be categorized as indicated below: Design & Construction Support Services and Other Projects with NYCDDC/NYCDOT(HWY).

If a Contract contains multiple task orders, list each task order.

Client Name/ Project Name	Contract #	Project Manager	Project Engineer	Type of Work	Uncompleted portion of Work ($000)	Percent complete to date (%)
DESIGN & Construction Support Services: For Street Reconstruction Projects includes Preliminary Design, Final Design and Total Design						
Subtotal					$	
Other Projects with NYCDDC/NYCDOT: Includes Traffic Engineering and Planning Services, Traffic Engineering & Safety, Environmental Engineering, Topographic Survey, Urban Design/Landscape Architecture, and other engineering design services.						
Subtotal					$	
Firm's Total Workload with NYCDDC/NYCDOT					$	

ATTACHMENT 5

FEE PROPOSAL

Submission: The proposer shall submit Attachment 5 (Fee Proposal) in a clearly marked, sealed envelope. The Fee Proposal shall consist of the following three parts: (1) Part 1: Titles and All Inclusive Hourly Rates, (2) Part 2: Fee Schedule (Lump Sum Fees for All Specified Tasks), and (3) Part 3: Breakdown of Lump Sum Fees (in the form of a Staffing Table). If requested in writing by DDC, the proposer shall submit Part 4: Back Up Material for All Inclusive Hourly Rates, as described below. Submission of Part 4 shall be within two (2) business days of notice by DDC.

Negotiation: DDC will conduct negotiations as described in Section V. (A.) of the RFP. The Fees and All Inclusive Hourly Rates negotiated with the successful proposer will be included in the final Contract.

Increases: The Fees and All Inclusive Hourly Rates negotiated with the successful proposer and included in the Contract shall apply to the base term of the Contract. If the base term is extended, the Commissioner shall issue a change order to the Consultant increasing the Fees and All Inclusive Hourly Rates, subject to the conditions set forth below. If no such change order is issued, the Fees and All Inclusive Hourly Rates applicable to the base term of the Contract shall remain in effect throughout the extended term of the Contract.

(1) No change order increasing the Fees and All Inclusive Hourly Rates shall be issued if the Commissioner determines that the Consultant is responsible for the delay or any material portion thereof.

(2) Any increase in the Fees and All Inclusive Hourly Rates shall be based on whatever increase may have occurred during the base term of the Contact in the Employment Cost Index for Professional, Specialty and Technical Occupations, published by the U.S. Dept. of Labor, Bureau of Labor Statistics (the “Index”) as determined by Engineering Audit office. If, during the base term of the Contract, the Index showed an increase, the Fees and All Inclusive Hourly Rates shall be increased. If, during the base term of the Contract, the Index declined or showed no increase, the Fees and All Inclusive Hourly Rates shall remain unchanged throughout the extended term of the Contract.

(3) Any increase in the Fees and/or All Inclusive Hourly Rates shall only apply to the portion of the work which the Consultant has not yet performed, as determined by the Commissioner. Any increase in the Fees and/or All Inclusive Hourly Rates shall not apply to any work performed by the Consultant during the base term of the Contract, even if payment for the same is made during the extended term.

(4) Any increase in the Fees and All Inclusive Hourly Rates shall not apply to any Change Order work issued during the base term of the Contract, even if such Change Order work was actually performed during the extended term. If any Change Order is issued during the extended term of the Contract, the increased All Inclusive Hourly Rates shall be used to negotiate a lump sum fee for such Change Order work.

Decreases: All Inclusive Hourly Rates shall be negotiated based on the qualifications and salary rates of the individuals identified in the Technical Proposal. The names of individuals identified as Key Personnel, as well as their titles and qualifications, shall be included in the Contract. In the event the Consultant fails to provide any individual identified in the Technical Proposal and included in the Contract, the Commissioner may decrease the All Inclusive Hourly Rate for such individual’s title to an amount based on the qualifications and salary rate of the individual approved as a replacement.

ATTACHMENT 5 (continued)

PART 1: Titles and All Inclusive Hourly Rates: In the table provided below, the proposer shall list all titles of Personnel that will be assigned to the Project, as identified in its Technical Proposal. For each title of Personnel, the proposer shall indicate an All Inclusive Hourly Rate, as well as the ASCE or NICET grade per title. The All Inclusive Hourly Rates will be used to negotiate fees in the event the proposer is selected to provide services for the Project. Thereafter, such All Inclusive Hourly Rates will be included in the contract and will only be used as set forth below:

(1) If the Consultant is directed to perform services that are not included in the specified tasks for Design fee(s), it will be done so on a time card basis. The All Inclusive Hourly Rates shall be used to calculate payment; or

(2) If a Change Order is issued to the Consultant, the All Inclusive Hourly Rate shall be used to negotiate a lump sum fee for the extra work.

TITLES OF PERSONNEL	ASCE (A) NICET (N) GRADE	ALL INCLUSIVE HOURLY RATE

ATTACHMENT 5 (continued)

PART 2: Fee Schedule (Lump Sum Fees for All Specified Tasks): In the space provided below, the proposer shall indicate a lump sum fee for each specified task, as well as a Total Preliminary Design Fee for Phase 1, a Total Final Design Fee for Phase 2, and a Total Final Design Fee for Phase 3. The scope of the required design services is described in detail in the Specific Requirements, included as Exhibit G to the attached contract.

A. PHASE 1 - PRELIMINARY DESIGN FEE: The Preliminary Design Fee for Phase 1 is comprised of the lump sum fees for the following tasks:

TASK:	GR Section	Lump Sum Fee
1. Project Development/Identification	4.1	$ _____
2. Topographic Survey	4.2	$ _____
3. Traffic Study Program	4.3	$ _____
4. Hardware and Basin Condition Inventory	4.4	$ _____
5. Tree Inventory	4.16	$ _____
6. Subsurface Exploration Program	4.5	$ _____
7. Vault Programs: Level I and II	4.6	$ _____
8. Railroad and Abandoned Trolley Facilities Research	4.7	$ _____
9. Roadway Pavement Design	4.8	$ _____
10. Sidewalk Cellar Doors Condition Inventory	4.28	$ _____
11. Schematic Geometric Design	4.10	$ _____
12. Schematic Landscape/Urban Design	4.31	$ _____
13. Design of Modification to Subway Ventilators	4.34	$ _____
14. Quantity and Cost Estimating	4.12	$ _____
15. Electronic Archiving and Indexing	4.27	$ _____

TOTAL PRELIMINARY DESIGN FEE FOR PHASE 1: **$** _____

B. PHASE 2 - FINAL DESIGN FEE: The Final Design Fee for Phase 2 is comprised of the lump sum fees for the following tasks:

16. Street Design Including Study and Design of Street Grades, Study and Design of Street Drainage and Permanent Street Signs	4.15	$ _____
17. Tree Impact Mitigation and Tree Planting Program	4.17	$ _____
18. Final Landscape/Urban Design	4.32	$ _____
19. Sewer Design	4.19	$ _____
20. Water Main Design	4.20	$ _____
21. Street Lighting System Design	4.21	$ _____
22. Traffic Signal System Design	4.22	$ _____
23. Construction Staging and Maintenance and Protection of Traffic	4.24	$ _____

ATTACHMENT 5 (continued)

24. Preparation of Specifications	4.25	$ _____
25. Review and Analysis of Bids	4.26	$ _____
26. Electronic Archiving and Indexing	4.27	$ _____

TOTAL FINAL DESIGN FEE FOR PHASE 2: **$** _____

C. PHASE 3 - FINAL DESIGN FEE: The Final Design Fee for Phase 3 is comprised of the lump sum fees for the tasks listed below. The proposer is advised that the City may decide not to proceed with final design services for Phase 3 in the event funding is not available. In such case, the scope of the required services shall be decreased to eliminate Phase 3.

27. Street Design Including Study and Design of Street Grades, Study and Design of Street Drainage and Permanent Street Signs	4.15	$ _____
28. Tree Impact Mitigation and Tree Planting Program	4.17	$ _____
29. Final Landscape/Urban Design	4.32	$ _____
30. Sewer Design	4.19	$ _____
31. Water Main Design	4.20	$ _____
32. Street Lighting System Design	4.21	$ _____
33. Traffic Signal System Design	4.22	$ _____
34. Construction Staging and Maintenance and Protection of Traffic	4.24	$ _____
35. Preparation of Specifications	4.25	$ _____
36. Review and Analysis of Bids	4.26	$ _____
37. Electronic Archiving and Indexing	4.27	$ _____

TOTAL FINAL DESIGN FEE FOR PHASE 3: **$** _____

D. ALLOWANCE FOR MONTHLY FEE FOR SCHEDULING AND PROGRESS REPORTING (G.R. 4.40): **$ 40,000.00**

E. ESTIMATED TOTAL AMOUNT FOR REIMBURSABLE SERVICES: **$**_____

TOTAL NOT TO EXCEED AMOUNT: Addition of (A) + (B) + (C) + (D) + (E): **$**_____

ATTACHMENT 5 (continued)

PART 3: Breakdown of Lump Sum Fee Per Task (Staffing Table Per Task)

The proposer shall provide a Breakdown of each Lump Sum Fee per Task set forth in Part 2: Fee Schedule. For each Task, the breakdown shall be in the form of a Staffing Table. For each task, the Staffing Table shall indicate the following: (1) required titles of personnel, (2) All Inclusive Hourly Rate per Title (as set forth in Part 1), (3) total estimated hours per title, and (4) total estimated amount per title.

The proposer is advised that the Breakdown of the Lump Sum Fee per Task shall be used for proposal analysis purposes only and shall not be binding for any other purpose under the Contract, including, without limitation, for payment purposes or in connection with a claim by the consultant for extra work and/or additional professional services.

In addition to the above, the proposer shall provide a breakdown of the Estimated Amount for Reimbursable Services. In its breakdown, the proposer shall indicate the types of Reimbursable Services it anticipates, as well as the estimated amount for each type of services. The proposer is advised as follows; (1) that any estimated amount for Reimbursable Services that is included in the final contract is not part of the fee, and (2) that the consultant is not entitled to any payment for Reimbursable Services unless it has received prior written authorization from the City to provide the same, and (3) that in most cases, the consultant will be required to conduct a competitive procurement for the required Reimbursable Services.

PART 4: Back up Material for All Inclusive Hourly Rates

If requested in writing by DDC, the proposer shall submit Back Up Material for All Inclusive Hourly Rates, as described below. Submission shall be within two (2) business days of written notice by DDC. Submission shall be in a clearly labeled, sealed package.

The required Back Up Material shall consist of Sections (A), (B) and (C) below.

(A) Actual Direct Salary Rate Per Hour: In its Technical Proposal (Item 3), the proposer identified ALL individuals who will provide services as Project Personnel. Such individuals must be employees of the proposer or its subconsultants. For each individual identified as Project Personnel in its Technical Proposal, the proposer shall submit the individual's Actual Direct Salary Rate per Hour, as defined below.

- An individual's actual annual direct salary shall be the salary amount directly payable to such employee on an annual basis and shall **NOT INCLUDE** any amount for the following costs or payments: (1) all payments for services performed during overtime hours (as defined in the attached contract); (2) all employer payments mandated by law, including without limitation, social security and Medicare taxes, insurance (Worker's Compensation, Employers Liability, Unemployment); (3) all employer contributions, if any, to retirement plans, including without limitation pension and/or deferred compensation plans, and (4) all costs for any and all other fringe and/or supplemental benefits.

- To compute an individual's actual annual direct salary per hour, the individual's actual annual direct salary, as defined above, shall be divided by 2080.

ATTACHMENT 5 (continued)

(B) Multiplier: The proposer shall submit its latest Overhead Audit Report that was performed by a cognizant agency (Federal Agency or State where the firm's accounting and financial records are located). The audit must have been performed in accordance with generally accepted auditing standards and in compliance with the cost principles contained in 48 CFR Part 31. In the absence of a cognizant Overhead Audit Report, the proposer shall submit indirect cost audit reports and associated financial statements and working papers detailing the proposer's overhead expenses for the two most recent fiscal years. These indirect cost audit reports will be reviewed by a cognizant agency.

The proposer shall submit the same Multiplier information for each subconsultant identified in its Technical Proposal.

(C) Payroll Register: The proposer shall submit its Payroll Register for the past twelve months, as well as the Payroll Register for each subconsultant identified in its Technical Proposal.

The proposer shall sign its Fee Proposal in the space provided below.

_____
Name of Firm

By:_____ _____
Signature of Partner or Corporate Officer Date

_____ _____
Print Name Title

_____ _____
Telephone # EIN#

ATTACHMENT 6

ACKNOWLEDGEMENT OF ADDENDA

TITLE OF THE REQUEST FOR PROPOSALS: HWK639W, Preliminary and Final Design Services for the Reconstruction of the Tillary Street Area, Borough of Brooklyn	PIN: 8502011HW0046P

Instructions: The proposer is to complete Part I or Part II of this form, whichever is applicable, and sign and date this form. This form serves as the proposer's acknowledgement of the receipt of Addenda to this Request for Proposals (RFP) which may have been issued by the Agency prior to the Proposal Due Date and Time

___Part I

Listed below are the dates of issue for each Addendum received in connection with this RFP.

Addendum # 1, dated _____
Addendum # 2, dated _____
Addendum # 3, dated _____
Addendum # 4, dated _____
Addendum # 5, dated _____
Addendum # 6, dated _____
Addendum # 7, dated _____
Addendum # 8, dated _____
Addendum # 9, dated _____
Addendum #10, dated _____

___Part II

No Addendum was received in connection with this RFP.

Proposer Name

Proposer's Authorized Representative:

Name: _____

Title: _____

Signature: _____

Date: _____

ATTACHMENT 7

CONFIRMATION OF VENDEX COMPLIANCE

The Proposer shall submit this Confirmation of VENDEX Compliance.

Name of Proposer: _____

Proposer's Address: _____

Proposer's Telephone Number: _____

Proposer's Fax Number: _____

Date of proposal Submission: _____

Project ID: _____

VENDEX Compliance: To demonstrate compliance with VENDEX requirements, the Proposer shall complete either Section (1) or Section (2) below, whichever applies.

(1) **Submission of Questionnaires to MOCS**: By signing in the space provided below, the Proposer certifies that as of the date specified below, the Proposer has submitted VENDEX Questionnaires to the Mayor's Office of Contract Services, Attn: VENDEX, 253 Broadway, 9th Floor, New York, New York 10007.

Date of Submission: _____

By: _____
(Signature of Partner or corporate officer)

Print Name: _____

(2) **Submission of Certification of No Change to DDC**: By signing in the space provided below, the Proposer certifies that it has read the instructions in a "Vendor's Guide to VENDEX" and that such instructions do not require the Proposer to submit VENDEX Questionnaires. The Proposer has completed **TWO ORIGINALS** of the Certification of No Change.

By: _____
(Signature of Partner or corporate officer)

Print Name: _____

ATTACHMENT 8

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PARTICIPATION

The Consultant is advised that the Project is a Federal Aid Project. The City of New York, DDC, is receiving funds from the United States Government for construction of the Project. Specifically, funding for the Project is being provided by the Federal Highway Administration ("FHWA"). Since the Project is a Federal Aid Project, the Consultant is required to provide the maximum possible contracting opportunities for Disadvantaged Business Enterprises (DBEs), as described below. The DBE program is a federally regulated program that is administered by the New York State Department of Transportation (NYSDOT).

An award of this contract is conditioned upon proposer compliance with the DBE requirements set forth below.

1. DBE Goal:
   The Consultant is required to use its best efforts to achieve an overall DBE Utilization Goal of **18%** of the total dollar value of the Contract.

2. Certified DBEs:
   When offering DBE participation, the Consultant is responsible for ensuring that all of the proposed DBE subconsultants are certified through the New York State Unified Certification Program (NYSUCP) for the type of work they are being proposed to perform. The Consultant is directed to NYSUCP's directory of DBEs at the following website: http://208.109.189.146/productions/nysdot/biznet . The certification must be in effect on the RFP response date.

3. DBE Participation Plan:
   The proposer is required to document sufficient DBE participation to meet the DBE utilization Goal of **18%** of the total dollar value of the Contract, or, in the alternative, to document adequate good faith efforts to do so. The proposer must submit a DBE Participation Plan that includes the items set forth below.

   (a) The names and addresses of DBE firms that will participate in this Contract;
   (b) A description of the work each DBE firm will perform;
   (c) The dollar amount of the participation of each DBE firm participating;
   (d) Written documentation of the proposer's commitment to use a DBE subconsultant whose participation it submits to meet the contract goal;
   (e) Written confirmation from the DBE that it is participating in the contract as provided in the proposer's commitment; and
   (f) If the contract goal is not met, evidence of good faith efforts to do so.

4. Good Faith Efforts:
   In order to award a contract to a proposer that has failed to meet the DBE Utilization Goal, DDC must determine that a proposer actively and aggressively sought to meet the goal. The kinds of efforts that are considered demonstrative of a "good faith effort" include, but are not limited to, the following documented actions:

   (a) Whether the consultant attended any pre-solicitation meetings that were scheduled to inform DBEs of contracting and subcontracting opportunities;

   (b) Whether the consultant advertised in general circulation, trade associations, and minority-focused media concerning subcontracting opportunities;

ATTACHMENT 8 (continued)

(c) Whether the consultant provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively;

(d) Whether the consultant followed up initial solicitations of interest by contacting DBEs to determine with certainty whether the DBEs were interested;

(e) Whether the consultant selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal (including, where appropriate, breaking down contracts into economically feasible units to facilitate DBE participation);

(f) Whether the consultant provided interested DBEs with adequate information about the plans, specifications, and requirements of the contract;

(g) Whether the consultant negotiated in good faith with interested DBS, not rejecting DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;

(h) Whether the consultant made efforts to assist interested DBEs in obtaining bonding (if applicable), lines of credit, or insurance required by the contract; and

(i) Whether the consultant effectively used the services of minority community organizations; minority contractor groups; local, state and federal minority business assistance offices; and other organizations that provide assistance in the recruitment and placement of DBEs.

ATTACHMENT 8 (continued)

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PARTICIPATION COVER SHEET

Include this cover sheet in the proposal package marked "DBE Participation Plan"

PIN: 8502011HW0046P

PROJECT NAME: HWK639W, Preliminary and Final Design Services for the Reconstruction of the Tillary Street Area, Borough of Brooklyn

Participation by DBE Sub-consultants: ☐ **is** ☐ **is not being proposed**[1]

If being proposed, attach the following:

1. Name(s) and Address(es) of proposed DBE firms.
2. Percentage(s) of assigned participation.
3. DBE Certification through NYSUCP

.

[1] If the proposer is unable to provide DBE participation, proof of good faith efforts as defined in Attachment 8 must be included in the proposal package.

ATTACHMENT 9

DOING BUSINESS DATA FORM

DOING BUSINESS ACCOUNTABILITY PROJECT

QUESTIONS AND ANSWERS ABOUT THE DOING BUSINESS DATA FORM

What is the purpose of this *Data Form*?

To collect accurate, up-to-date identification information about entities that have business dealings with the City of New York in order to comply with Local Law 34 of 2007 (LL 34), the recently passed campaign finance reform law. LL 34 limits municipal campaign contributions from principal officers, owners and senior managers of these entities and mandates the creation of a *Doing Business Database* to allow the City to enforce the law. The information requested in this *Data Form* must be provided, regardless of whether the entity or the people associated with it make or intend to make campaign contributions. No sensitive personal information collected will be disclosed to the public.

Why have I received this *Data Form*?

The contract, franchise, concession, grant or economic development agreement you are proposing on, applying for or have already been awarded is considered a business dealing with the City under LL 34. No proposal or application will be considered and no award will be made unless this *Data Form* is completed. Most transactions valued at more than $5,000 are considered business dealings and require completion of the *Data Form*. Exceptions include transactions awarded on an emergency basis or by publicly advertised, non-pre-qualified competitive sealed bid. Other types of transactions that are considered business dealings include real property and land use actions with the City.

What entities will be included in the *Doing Business Database*?

Entities that hold $100,000 or more in grants, contracts for goods or services, franchises or concessions ($500,000 or more for construction contracts), along with entities that hold any economic development agreements or pension fund investment contracts, are considered to be doing business with the City for the purposes of LL 34 and will be included in the *Doing Business Database*. Because all of the business that an entity does or proposes to do with the City will be added together, the *Data Form* must be completed for all covered transactions even if an entity does not currently do enough business with the City to be listed in the *Database*.

What individuals will be included in the *Doing Business Database*?

The principal officers, owners and certain senior managers of entities listed in the *Doing Business Database* are themselves considered to be doing business with the City and will also be included in the *Database*.

- **Principal Officers** are the Chief Executive Officer (CEO), Chief Financial Officer (CFO) and Chief Operating Officer (COO), or their functional equivalents. See the *Data Form* for examples of titles that apply.
- **Principal Owners** are individuals who own or control 10% of more of the entity. This includes stockholders, partners and anyone else with an ownership or controlling interest in the entity.
- **Senior Managers** include anyone who, either by job title or actual duties, has substantial discretion and high-level oversight regarding the solicitation, letting or administration of any contract, concession, franchise, grant or economic development agreement with the City. At least one Senior Manager must be listed or the Data Form will be considered incomplete.

I provided some of this information on the VENDEX Questionnaire; do I have to provide it again?

Although the *Doing Business Data Form* and the VENDEX Questionnaire request some of the same information, they serve entirely different purposes. In addition, the *Data Form* requests information concerning senior managers, which is not part of the VENDEX Questionnaire.

My organization is proposing on a contract with another firm as a Joint Venture that does not exist yet; how should the Data Form be completed?

A joint venture that does not yet exist must submit Data Forms from each of its component firms. If the joint venture receives the award, it must then complete a form in the name of the joint venture.

Will the information on this *Data Form* be available to the public?

The names and titles of the officers, owners and senior managers reported on the *Data Form* will be made available to the public, as will information about the entity itself. However, personal identifying information, such as home address, home phone and date of birth, will not be disclosed to the public, and home address and phone number information will not be used for communication purposes.

No one in my organization plans to contribute to a candidate; do I have to fill out this *Data Form*?

Yes. All entities are required to return this *Data Form* with complete and accurate information, regardless of the history or intention of the entity or its officers, owners or senior managers to make campaign contributions. The *Doing Business Database* must be complete so that the Campaign Finance Board can verify whether future contributions are in compliance with the law.

I have already completed a *Doing Business Data Form*; do I have to submit another one?

Yes. An entity is required to submit a *Doing Business Data Form* each time it proposes on or enters a transaction considered business dealings with the City. However, the *Data Form* has both a No Change option, which only requires an entity to report its EIN and sign the last page, and a Change option, which allows an entity to only fill in applicable information that has changed since the previous completion of the *Data Form*. No entity should have to fill out the entire *Data Form* more than once.

How does a person remove him/herself from the *Doing Business Database*?

Any person who believes that s/he should not be listed may apply for removal from the *Database* by submitting a Request for Removal. Reasons that a person would be removed include his/her no longer being the principal officer, owner or senior manger of the entity, or the entity no longer being in business. Entities may also update their database information by submitting an update form. Both of these forms are available online at www.nyc.gov/mocs (once there, click MOCS Programs) or by calling 212-788-8104.

How long will an entity and its officers, owners and senior managers remain listed on the *Doing Business Database*?

- **Contract, Concession and Economic Development Agreement holders**: generally for the term of the transaction, plus one year.
- **Franchise and Grant holders**: from the commencement or renewal of the transaction, plus one year.
- **Pension investment contracts**: from the time of presentation on an investment opportunity or the submission of a proposal, whichever is earlier, until the end of the contract, plus one year.
- **Line item and discretionary appropriations**: from the date of budget adoption until the end of the contract, plus one year.
- **Contract proposers**: for one year from the proposal date or date of public advertisement of the solicitation, whichever is later.
- **Franchise and Concession proposers**: for one year from the proposal submission date.

For information on other transaction types, contact the Doing Business Accountability Project.

What are the new campaign contribution limits for people doing business with the City?

Contributions to City Council candidates are limited to $250 per election cycle; $320 to Borough President candidates; and $400 to candidates for citywide office. Please contact the NYC Campaign Finance Board for more information at www.nyccfb.info, or 212-306-7100.

The *Data Form* is to be returned to the contracting agency.

If you have any questions about the *Data Form* please contact the Doing Business Accountability Project at 212-788-8104 or DoingBusiness@cityhall.nyc.gov.

The City of New York
Mayor's Office of Contract Services
Doing Business Accountability Project

Doing Business Data Form

To be completed by the City Agency prior to distribution

Agency: DDC **Transaction ID:** 85011P0024/ 8502011HW0046P

Check One:	Transaction Type (check one):		
☒ Proposal	☐ Concession	☒ Contract	☐ Economic Development Agreement
☐ Award	☐ Franchise	☐ Grant	☐ Pension Investment Contract

Any entity receiving, applying for or proposing on an award or agreement must complete a Doing Business Data Form (see Q&A sheet for more information). Please either type responses directly into this fillable form or print answers by hand in black ink, and be sure to fill out the certification box on the last page. **Submission of a complete and accurate form is required for a proposal to be considered responsive or for any entity to receive an award or enter into an agreement.**

This Data Form requires information to be provided on principal officers, owners and senior managers. The name, employer and title of each person identified on the Data Form will be included in a public database of people who do business with the City of New York; no other information reported on this form will be disclosed to the public. **This Data Form is not related to the City's VENDEX requirements.**

Please return the completed Data Form to the City Agency that supplied it. Please contact the Doing Business Accountability Project at DoingBusiness@cityhall.nyc.gov or 212-788-8104 with any questions regarding this Data Form. Thank you for your cooperation.

Section 1: Entity Information

Entity Name: _____

Entity EIN/TIN: _____

Entity Filing Status (select one):

☐ Entity has never completed a Doing Business Data Form. *Fill out the entire form.*

☐ Change from previous Data Form dated _____. *Fill out only those sections that have changed, and indicate the name of the persons who no longer hold positions with the entity.*

☐ No Change from previous Data Form dated _____. *Skip to the bottom of the last page.*

Entity is a Non-Profit: ☐ Yes ☐ No

Entity Type: ☐ Corporation (any type) ☐ Joint Venture ☐ LLC ☐ Partnership (any type) ☐ Sole Proprietor ☐ Other (specify): _____

Address: _____

City: _____ State: _____ Zip: _____

Phone : _____ Fax : _____

E-mail: _____

Provide your e-mail address and/or fax number in order to receive notices regarding this form by e-mail or fax.

Section 2: Principal Officers

Please fill in the required identification information for each officer listed below. If the entity has no such officer or its equivalent, please check "This position does not exist." If the entity is filing a Change Form and the person listed is replacing someone who was previously disclosed, please check "This person replaced..." and fill in the name of the person being replaced so his/her name can be removed from the *Doing Business Database*, and indicate the date that the change became effective.

Chief Executive Officer (CEO) or equivalent officer

☐ This position does not exist

The highest ranking officer or manager, such as the President, Executive Director, Sole Proprietor or Chairperson of the Board.

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

☐ This person replaced former CEO: _____ on date: _____

Chief Financial Officer (CFO) or equivalent officer

☐ This position does not exist

The highest ranking financial officer, such as the Treasurer, Comptroller, Financial Director or VP for Finance.

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

☐ This person replaced former CFO: _____ on date: _____

Chief Operating Officer (COO) or equivalent officer

☐ This position does not exist

The highest ranking operational officer, such as the Chief Planning Officer, Director of Operations or VP for Operations.

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

☐ This person replaced former COO: _____ on date: _____

Section 3: Principal Owners

Please fill in the required identification information for all individuals who, through stock shares, partnership agreements or other means, **own or control 10% or more of the entity**. If no individual owners exist, please check the appropriate box to indicate why and skip to the next page. If the entity is owned by other companies, those companies do **not** need to be listed. If an owner was identified on the previous page, fill in his/her name and write "See above." If the entity is filing a Change Form, list any individuals who are no longer owners at the bottom of this page. If more space is needed, attach additional pages labeled "Additional Owners."

There are no owners listed because (select one):

☐ The entity is not-for-profit ☐ There are no individual owners ☐ No individual owner holds 10% or more shares in the entity

☐ Other (explain): _____

Principal Owners (who own or control 10% or more of the entity):

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

Remove the following previously-reported Principal Owners:

Name: _____ Removal Date: _____

Name: _____ Removal Date: _____

Name: _____ Removal Date: _____

Section 4: Senior Managers

Please fill in the required identification information for all senior managers who oversee any of the entity's relevant transactions with the City (e.g., contract managers if this form is for a contract award/proposal, grant managers if for a grant, etc.). Senior managers include anyone who, either by title or duties, has substantial discretion and high-level oversight regarding the solicitation, letting or administration of any transaction with the City. **At least one senior manager must be listed, or the Data Form will be considered incomplete.** If a senior manager has been identified on a previous page, fill in his/her name and write "See above." If the entity is filing a Change Form, list individuals who are no longer senior managers at the bottom of this section. If more space is needed, attach additional pages labeled "Additional Senior Managers."

Senior Managers:

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

First Name: _____ MI: _____ Last: _____

Office Title: _____

Employer (if not employed by entity): _____

Birth Date (mm/dd/yy): _____ Home Phone #: _____

Home Address: _____

Remove the following previously-reported Senior Managers:

Name: _____ Removal Date: _____

Name: _____ Removal Date: _____

Certification

I certify that the information submitted on these four pages and _____ additional pages is accurate and complete. I understand that willful or fraudulent submission of a materially false statement may result in the entity being found non-responsible and therefore denied future City awards.

Name: _____

Signature: _____ Date: _____

Entity Name: _____

Title: _____ Work Phone #: _____

Return the completed Data Form to the agency that supplied it.

For information or assistance, call the Doing Business Accountability Project at 212-788-8104.

Printed on paper containing 30% post-consumer material

THE CITY OF NEW YORK

DEPARTMENT OF DESIGN AND CONSTRUCTION

DIVISION OF INFRASTRUCTURE

30-30 THOMSON AVENUE
LONG ISLAND CITY, NEW YORK NEW YORK 11101

CONTRACT FOR ENGINEERING DESIGN AND RELATED SERVICES

PROJECT:	**Reconstruction of the Tillary Street Area**
BOROUGH:	**Brooklyn**
FMS NUMBER:	**HWK639W**
REGISTRATION NUMBER:	_____
PIN NUMBER:	**8502011HW0046P**
E-PIN:	**85011P0024**
CONSULTANT:	_____
	_____
	_____
	Telephone: _____
	Facsimile: _____

Standard Project Specific Contract (FHWA Funding)
Engineering Design and Related Services
April 2011

THIS AGREEMENT, made and entered into this _____ day of _____, _____, by and between the City of New York (the "City") acting by and through the Commissioner of the Department of Design and Construction (the "Commissioner") and _____ (the "Consultant"), located at _____.

WITNESSETH:

WHEREAS, the City desires to have engineering design and related services performed for the project described in the Specific Requirements, and

WHEREAS, the Consultant has been selected based upon and in consideration of its representation that it can perform the required services set forth herein in a timely and expeditious manner,

NOW, THEREFORE, in consideration of the mutual covenants and conditions herein contained, the parties hereto agree as follows:

ARTICLE 1 Definitions

1.1 "Agreement" shall mean the various documents that constitute the contract between the Consultant and the City, including (1) the Request for Proposals for the Contract ("RFP"); (2) the Proposal submitted by the Consultant, and (3) the Exhibits set forth below. In the event of any conflict between the Specific Requirements and any other component, the Specific Requirements shall prevail.

Exhibit A	Contract Information
Exhibit B	Subconsultants and Key Personnel
Exhibit C	Project Schedule
Exhibit D	Fee Schedule
Exhibit E	Titles of Personnel and All Inclusive Hourly Rates
Exhibit F	Minimum Requirements Per Title
Exhibit G	Specific Requirements
Exhibit H	General Requirements for Engineering Design and Related Services
Exhibit I	Requirements for Federal Aid Projects
Exhibit J	Appendix A: General Provisions Governing Contracts for Consultants, Professional, Technical, Human and Client Services

1.2 "Agency" shall mean a city, county, borough or other office, position, department, division, bureau, board or commission, or a corporation, institution or agency of government, the expenses of which are paid in whole or in part from the City treasury.

1.3 "Agency Chief Contracting Officer" or "ACCO" shall mean the position delegated authority by the Agency Head to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the City Chief Procurement Officer.

1.4 "City" shall mean the City of New York.

1.5 "City Chief Procurement Officer" or "CCPO" shall mean the position delegated authority by the Mayor to coordinate and oversee the procurement activity of Mayoral agency staff, including the ACCOs.

1.6 "Commissioner" or "Agency Head" shall mean the head of the Department or his or her duly authorized representative. The term "duly authorized representative" shall include any person or persons acting within the limits of his or her authority.

1.7 "Commissioner's Representative" shall mean the Assistant Commissioner designated by the Commissioner or any successor or alternate representative designated by the Commissioner.

1.8 "Comptroller" shall mean the Comptroller of the City of New York, his/her successors, or duly authorized

representatives.

1.9 “Consultant” or “Contractor” shall mean the entity entering into this Agreement with the Department.

1.10 "Contract" or "Contract Documents" shall mean the Agreement referred to in Paragraph 1.1 of this Article.

1.11 “Days” shall mean calendar days unless otherwise specifically noted to mean business days.

1.12 "Department" or "DDC" shall mean the Department of Design and Construction of the City of New York acting by and through the Commissioner thereof, or his/her duly authorized representative.

1.13 "Drawings" shall mean all graphic or written illustrations, descriptions, explanations, directions, requirements and standards of performance applied to the construction work.

1.14 "Government Entity" shall mean the United States, the State and City of New York, and any and every agency, department, court, commission, or other instrumentality or political subdivision of government of any kind whatsoever, now existing or hereafter created.

1.15 “Law” or “Laws” shall mean the New York City Charter (“Charter”), the New York City Administrative Code (“Admin. Code”), a local rule of the City of New York, the Constitutions of the United States and the State of New York, a statute of the United States or of the State of New York and any ordinance, rule or regulation having the force of law and adopted pursuant thereto, as amended, and common law.

1.16 "Mayor" shall mean the Mayor of the City of New York, his/her successors or duly authorized representatives.

1.17 "Modification" shall mean any written amendment of this Agreement signed by both the Department and the Consultant.

1.18 “Procurement Policy Board” or “PPB” shall mean the board established pursuant to Charter § 311 whose function is to establish comprehensive and consistent procurement policies and rules which have broad application throughout the City.

1.19 “PPB Rules” shall mean the rules of the Procurement Policy Board as set forth in Title 9 of the Rules of the City of New York (“RCNY”), § 1-01 et seq.

1.20 “Project” shall mean the Project for which engineering design and related services are required, as described in the Specific Requirements.

1.21 "Safety Standards" shall mean all laws, union rules and trade or industry custom or codes of any kind whatsoever, in effect from the date of this Agreement through Final Acceptance of the construction work, pertaining to worker safety and accident prevention applicable to the Project and/or the construction work (including, but not limited to, rules, regulations and standards adopted pursuant to the Occupational Safety and Health Act of 1970, as amended from time to time).

1.22 "Shop Drawing" shall mean any and all drawings, diagrams, layouts, explanations, illustrations, manufacturer's drawings or other written or graphic materials which illustrate any portion of the construction work.

1.23 "Site(s)" shall mean the area(s) upon or in which the construction work for the Project is carried on, and such other areas adjacent thereto as may be designated by the Commissioner.

1.24 "Specifications" shall mean all of the directions, requirements and standards of performance applied to the construction work.

1.25 “State” shall mean the State of New York.

1.26 "Subconsultant" shall mean any person, firm, or corporation, other than employees of the Consultant, who or

which contracts with the Consultant or his subconsultants to furnish, or actually furnishes services, labor, or labor and materials, or labor and equipment hereunder. All Subconsultants are subject to the prior written approval of the Commissioner.

ARTICLE 2 General Provisions

2.1 General Provisions governing the Contract, including insurance coverage the Consultant and its subconsultants are required to provide, are set forth in Appendix A. Appendix A is included as an Exhibit to the Contract.

ARTICLE 3 The Project

3.1 The Consultant shall provide all engineering design and related services required for the Project described in the Specific Requirements.

3.2 The City hereby retains the Consultant to perform the services hereinafter described, on the terms and conditions specified herein, and the Consultant agrees to so serve. The Consultant agrees to provide, to the satisfaction of the Commissioner, all engineering design and related services necessary and required for the Project, as set forth in this Contract. The Consultant hereby certifies that it has the necessary experience, expertise, staff and resources to fulfill its obligations under this Contract competently and efficiently.

ARTICLE 4 Time Provisions

4.1 Term of Contract: The contract shall commence as of the date of registration by the Comptroller and shall remain in effect until all required services have been completed. The time for completion of all required services, including reasonable review time by agencies whose approval the Consultant is required to obtain, shall be the number of consecutive calendar days indicated in Exhibit A.

4.2 Extension of Contract: Upon written application by the Consultant, the ACCO may grant an extension of time for performance of the Contract. Said application must state, at a minimum, in detail, each cause for delay, the date the cause of the alleged delay occurred, and the total number of delay in days attributable to such cause. The ruling of the ACCO shall be final and binding as to the allowance of an extension and the number of days allowed.

ARTICLE 5 The Consultant's Personnel

5.1 Provision of Personnel: The Consultant agrees, throughout the term of the Contract, to provide personnel for the performance of all required engineering design and related services for the Project, as set forth in Article 6. The Consultant shall provide all personnel required for the performance of such services through its own employees and/or through its Subconsultants, as set forth in Exhibit B, except as otherwise approved by the Commissioner. The Consultant specifically agrees that its employees, agents and Subconsultants shall possess the experience, knowledge and character necessary to qualify them individually for the particular duties they perform.

5.2 Key Personnel: The names of individuals identified as Key Personnel by the Consultant in its Proposal for the Contract, as well as their titles and qualifications, are set forth in Exhibit B. The Consultant specifically agrees to assign to the Project for its entire duration the individuals identified in Exhibit B as Key Personnel, unless otherwise approved by the Commissioner. Failure by the Consultant to provide such individual(s) identified in Exhibit B as Key Personnel shall be grounds for termination for cause.

5.2.1 Replacement of Key Personnel: No substitution for an individual identified in Exhibit B as Key Personnel shall be permitted unless approved in advance in writing by the Commissioner. Such approval will only be granted in the case of extenuating circumstances. Any proposed replacement for an individual identified as Key Personnel must possess qualifications substantially similar to those of the individual being replaced. In addition, at the Commissioner's request at any time, the Consultant shall remove any Key Personnel or other personnel and substitute another employee of the Consultant or Subconsultant reasonably satisfactory to the Commissioner. The Commissioner may request such substitution at any time, in his sole discretion.

5.3 Subconsultants: The Consultant shall engage such Subconsultants as may be necessary for the performance of

all required services for the Project. The Consultant specifically agrees to engage the Subconsultants set forth in Exhibit B. Such Subconsultants were identified by the Consultant in its Proposal for the Contract. Failure by the Consultant to provide such Subconsultants shall be grounds for termination for cause. The Consultant shall be responsible for the performance of services by all its Subconsultants, including maintenance of schedules, correlation of their work and resolution of all differences between them.

5.3.1 Approval: Provisions regarding subcontracting, including the requirements for approval, are set forth in Appendix A. Appendix A is included as an Exhibit to the Contract.

5.3.2 Replacement Subconsultants: No substitution for any Subconsultant shall be permitted unless approved in advance in writing by the Commissioner. Such approval will only be granted in the case of extenuating circumstances. Any proposed replacement Subconsultant must possess qualifications and experience substantially similar to those of the Subconsultant being replaced. In addition, at the Commissioner's request at any time, the Consultant shall remove any Subconsultant and substitute another Subconsultant reasonably satisfactory to the Commissioner. The Commissioner may request such substitution at any time, if, in his sole opinion, he determines that any Subconsultant may be unable to satisfactorily provide the required services in a timely fashion.

5.3.3 Payment: Expenses incurred by the Consultant in connection with furnishing Subconsultants for the performance of required services hereunder are deemed included in the payments by the City to the Consultant, as set forth in Article 7. The Consultant shall pay its Subconsultants the full amount due them from their proportionate share of the requisition, as paid by the City. The Consultant shall make such payment not later than seven (7) calendar days after receipt of payment by the City.

5.4 Services on a Time Card Basis: The Consultant may be directed to perform services for the Project on a time card basis. Such services include, without limitation: (a) Additional Professional Services, and (b) Construction Support Services. Services on a time card basis shall not be performed by the Consultant unless expressly authorized in advance in a written directive from the Commissioner. The requirements set forth below shall apply to the performance of such services.

5.4.1 Titles of Personnel: A list of titles of personnel, as well as All Inclusive Hourly Rates for such titles, are set forth in Exhibit E. Such list specifies the titles of personnel which may be required for the performance of time card services. The Consultant shall be required to provide such personnel through its own employees and/or through its Subconsultants.

5.4.2 Minimum Requirements Per Title: Personnel provided by the Consultant and/or its Subconsultants must satisfy the minimum requirements for the title in question set forth in Exhibit F. The Consultant shall provide resumes or other documentation acceptable to the Commissioner to demonstrate that personnel provided hereunder comply with the minimum requirements per title. In exceptional circumstances, the Commissioner, in his/her sole and absolute discretion, may modify the minimum requirements per title.

5.4.3 Staffing Plan: A Staffing Plan must be established and approved by the Commissioner prior to commencement of the performance of time card services. Such Staffing Plan shall include the items set forth below. Such Staffing Plan shall include only those personnel necessary for the performance of the required services.

(a) Key Personnel: Required titles and specific individual for each title, identified in Exhibit B
(b) Other Personnel: Required titles and specific individual for each title
(c) All Inclusive Hourly Rate for each specified individual, excluding any principals. The individual's All Inclusive Hourly Rate shall be the rate set forth in Exhibit E for the title for which the Commissioner determines the individual meets the qualification requirements.
(d) Total estimated hours and amount for each title
(e) Total estimated amount for all required titles of personnel

5.4.4 Payment Limitations: Payment to the Consultant for time card services is subject to the limitations set forth below

(a) Inclusion in Staffing Plan: The Consultant shall not be entitled to payment for any individual not

included in the approved Staffing Plan. The specific individuals identified in the approved Staffing Plan shall be considered Assigned Employees for the purpose of the Consultant's entitlement to payment for services performed by such individuals.

(b) Principal: The Consultant shall not be entitled to payment for a principal's time performing oversight or management duties. This prohibition on payment for a principal's time shall not apply if the following criteria are met: (1) the principal is qualified to perform services in accordance with one of the titles set forth in Exhibit F, and (2) the principal is included in the approved Staffing Plan for such title.

5.4.5 Proposed Staffing Plan: Within the time frame directed by the Commissioner, the Consultant shall submit a proposed Staffing Plan for the Project. Such proposed Staffing Plan shall include the items set forth above. With respect to each proposed individual, the Consultant shall provide: (1) the individual's resume, as well as any other information detailing his/her technical qualifications and expertise, and (2) the title for which the individual meets the qualification requirements, as set forth in Exhibit F.

5.4.6 Review and Approval of Staffing Plan: The Commissioner shall review the Consultant's proposed Staffing Plan and shall direct revisions to the same if necessary prior to final approval thereof. As part of such review, the Commissioner shall determine: (1) whether each proposed individual meets the qualification requirements for the applicable title, and (2) whether the All Inclusive Hourly Rate for each proposed individual is in accordance with the rate for the title for which the individual meets the qualification requirements. The Consultant shall revise the proposed Staffing Plan as directed, until such plan is approved in writing by the Commissioner.

5.4.7 Revisions to Staffing Plan: The Commissioner may, at any time, direct revisions to the Staffing Plan, including without limitation, increasing or decreasing the specified personnel, based upon the scope of required services for the Project. The Consultant shall increase or decrease the specified personnel, as directed by the Commissioner.

ARTICLE 6 - Scope of Services

6.1 General Description of Services: The Consultant shall provide, to the satisfaction of the Commissioner, all engineering design and related services necessary and required for the Project. The services to be provided by the Consultant shall include without limitation the services set forth in this Article 6. The Consultant shall provide the services set forth herein through its own employees and/or through its Subconsultants.

6.2 Design Services: The Design Services to be provided by the Consultant shall include all necessary and usual components and/or services in connection with Preliminary Design Services and/or Final Design Services, as set forth in the Specific Requirements and the General Requirements. Such Design Services shall be deemed to include the services set forth below.

6.2.1 All normal and routine services in connection with preparation of the required deliverables for the Project, as set forth in the Specific Requirements and the General Requirements, including, without limitation, research and investigation, unless expressly provided for as an Additional Service and/or a Reimbursable Service.

6.2.2 All services provided by the Consultant in connection with Reimbursable Services, except as otherwise expressly provided in Article 6.5.1(c). Such services shall include, without limitation, the following:

(a) Investigating and/or determining the need for Reimbursable Services;
(b) Administering, managing, supervising and coordinating Reimbursable Services, and
(c) Evaluating and incorporating data and/or material procured as Reimbursable Services into the design for the Project.

6.2.3 Deliverables: All required deliverables, including cost estimates, are subject to review and written approval by the Commissioner. All design documents are subject to approval by all regulatory agencies whose approval of the design is required, including without limitation, (1) the New York City Departments of Transportation, Environmental Protection, and Parks; (2) the Landmark's Preservation Commission; (3) the Public Design Commission, and (4) the New York State Departments of Transportation and Environmental Conservation.

6.2.4 Patented and Proprietary Items: The Consultant shall not, without the prior written approval of the Commissioner, specify for the Project, or necessarily imply the required use of any article, product, material, fixture or form of construction, the use of which is covered by a patent, or which is otherwise exclusively controlled by a particular firm or group of firms.

6.3 Project Schedule: The Consultant shall perform all required design services for the Project and submit all required deliverables in accordance with the Project Schedule set forth in Exhibit C.

6.4 Provisions Regarding Engineering Design and Related Services

6.4.1 Criteria for Services: All required engineering design and related services shall be in accordance with the following: (1) General Requirements; (2) Specific Requirements, and (3) all applicable local, state and federal laws, rules and regulations, including, without limitation, the New York City Building Code and the Americans With Disabilities Act.

6.4.2 Engineer of Record: All original drawings shall bear all required stamps of approval, including the seal and signature of the Engineer of Record, and shall be accompanied by all necessary applications, certificates, or permits of all local, state and federal agencies having jurisdiction over the Project.

6.4.3 Tropical Hardwoods: In accordance with Section 165 of the New York State Finance Law, design documents prepared by the Consultant shall not specify the use of tropical hardwoods, as defined in Section 165 of the State Finance Law, except as such use is permitted by the foregoing provision of law.

6.4.4 Artwork: The Consultant shall, if directed by the Commissioner, provide for the inclusion of artwork in the Project in accordance with Chapter 9, Section 224, of the New York City Charter and the rules and regulations promulgated thereunder. All costs for such artwork shall be paid from the Allowance for Artwork, as set forth in the Task Order. For services in connection with the artwork, the Consultant shall be entitled to a fee, as set forth in Article 7. To comply with Section 224 of the Charter, the Consultant shall be responsible for the items set forth below, as directed by the Commissioner.

(a) Consult with and cooperate with a panel established by the Commissioner of the Department of Cultural Affairs. The Consultant shall also prepare all data, documentation, drawings and plans to be presented to and considered by such panel.
(b) Engage an artist and administer and/or manage the services of such artist. For engagement of the artist, the Consultant shall use the standard form of contract approved by the Commissioner. The services of the artist shall be in accordance with the terms and conditions of such contract, including without limitation, requirements for fabrication, models, signage, shipping, insurance, storage, scaffolding, structural work and anchorage.

6.5 Additional Professional Services: The Consultant may be directed in writing by the Commissioner to provide Additional Professional Services for the Project, as set forth below. The Consultant shall provide such Additional Professional Services, if so directed. The Consultant shall provide such services through its own professional employees or through its Subconsultants, as directed in writing by the Commissioner.

6.5.1 Additional Professional Services shall be engineering services which the Commissioner determines are required for the Project and are in addition to or outside of the necessary and usual services in connection with Design Services, as set forth in Article 6.2. Additional Professional Services shall include, without limitation, the services set forth below.

(a) Changes to the design documents, as set forth in Articles 6.9.1(b) and 6.9.2.
(b) Support services during construction
(c) Engineering services to procure, manage and supervise Reimbursable Services that are required in connection with Additional Professional Services.
(d) Any other professional services, determined by the Commissioner to be necessary for the Project.

6.5.2 The Consultant may be directed to perform engineering services pursuant to a change order. If so

specified in the change order, the Consultant agrees to perform the engineering services specified therein in accordance with the terms and conditions applicable to the performance of Additional Professional Services.

6.5.3 Additional Professional Services shall not include the services set forth in Articles 6.9.1 (a) and 6.9.3 below.

6.5.4 The method of payment for the performance of Additional Professional Services shall be on a time card basis, as set forth in Article 7.

6.5.5 If the Consultant is of the opinion that any service it has been directed to perform constitutes an Additional Professional Service, the Consultant shall notify the Commissioner in writing within five (5) business days of such direction. The Commissioner's determination as to whether or not such services constitute Additional Professional Services shall be final, conclusive and binding upon the Consultant.

6.6 Reimbursable Services: The Consultant may be directed by the Commissioner to provide Reimbursable Services for the Project. If so directed, the Consultant shall provide such Reimbursable Services through entities approved by the Commissioner. Payment for Reimbursable Services shall be in accordance with the terms and conditions set forth in Article 7.

6.6.1 No Reimbursable Services shall be provided by the Consultant, or reimbursed hereunder, unless expressly authorized in a written directive from the Commissioner. For Reimbursable Services in excess of $150, such written authorization must be provided in advance of the expenditure.

6.6.2 The Consultant shall utilize the method of procurement directed by the Commissioner. If so directed, the Consultant shall conduct a competitive bid and/or proposal process for the specified Reimbursable Service. In general, such competitive process will be required if the cost of the specified Reimbursable Service exceeds $5,000.

6.6.3 The Consultant shall utilize the form of payment directed by the Commissioner. Payment for Reimbursable Services shall be in accordance with one of the following methods: (a) lump sum; (b) unit price, or (c) actual cost; except for long distance travel, as set forth in Article 7.

6.6.4 Reimbursable Services shall be such services determined by the Commissioner to be necessary for the Project, and may include, without limitation, the services set forth below.

(a) Subcontractor services for borings, rock cores and excavation of test pits.
(b) Subcontractor services for hazmat sampling or remediation services.
(c) Laboratory services for soil / rock classification, hazmat testing or other necessary testing or analysis.
(d) Filing fees and related application fees for New York City agencies
(e) Fees for street opening permits
(f) Reproduction and/or printing of deliverables, project documents and/or records, except for printing performed in the office of the Consultant or its subconsultant
(g) Photographic film, developing and printing.
(h) Procurement of copies of documents, data sheets, drawings and reports for reference and information.
(i) Long Distance Travel. In the event the Consultant is directed in advance in writing by the Commissioner to provide services which require long distance travel, the Consultant shall be reimbursed for expenses incurred in connection with such long distance travel. Long distance travel shall mean travel which is in excess of 75 miles from whichever of the following is closer to the destination: (1) Columbus Circle, or (2) the Consultant’s home office. Consultants and/or Subconsultants that are not located in New York City or its vicinity shall not be entitled to reimbursement for transportation expenses.
(j) Specialty subconsultants, i.e., subconsultants other than the Subconsultants set forth in Exhibit B.
(k) Renting of material and/or equipment.
(l) Any other services, determined by the Commissioner to be necessary for the Project.

6.6.5 In the event the Consultant is directed, as a Reimbursable Service, to purchase any items and/or equipment, such items and/or equipment shall, unless otherwise directed by the Commissioner, be the sole property of

the City upon delivery to the designated location. The Consultant shall prepare and maintain an accurate inventory of all items and/or equipment which it is directed to purchase pursuant to the Allowance for Reimbursable Services. Such inventory shall be provided to the City upon request. Upon completion of the required work, as directed by the Commissioner, the Consultant shall turn such items and/or equipment over to the City.

6.7 Non-reimbursable Services: Throughout the Contract, the Consultant shall be responsible for providing the non-reimbursable items and/or services set forth below. All costs for providing such items and/or services are deemed included in payments to the Consultant, as set forth in Article 7.

6.7.1 Overnight Delivery: The Consultant shall, when requested by the Commissioner, provide overnight delivery of the following Project documents: (a) design documents; (b) all required submittals, including without limitation shop drawings, material samples and catalogue cuts; (c) change orders; (d) documents with respect to payment, and (e) any other critical communications and/or documents.

6.7.2 Transportation: The Consultant shall provide transportation for all personnel performing services, including without limitation: (a) expenses for ordinary transportation (i.e., other than long distance travel, as set forth in Article 6.6), (b) expenses for time spent by personnel commuting or traveling, and (c) expenses for parking and tolls.

6.7.3 Equipment: The Consultant shall provide the items set forth below for all personnel performing services.

(a) All necessary CADD or computer usage time
(b) All necessary office supplies and/or tools
(c) Communications equipment and service, including without limitation cellular telephones. The telephone numbers of all personnel shall be submitted to the Commissioner.

6.8 Assistance to Commissioner: Should any claim be made or any action brought against the Commissioner or the City of New York relating to the design of the Project, the Consultant shall diligently render to the City without additional compensation any and all assistance which may be requested by the Commissioner.

6.9 Provisions Regarding Changes to the Design Documents

6.9.1 Changes Not Involving Scope:

(a) The Consultant shall revise and correct, without additional compensation therefore, any and all design documents until the same shall be accepted by the Commissioner and by all other agencies whose approval is required by law.
(b) Should any substantial change, other than a change in Project scope, make it necessary for the Consultant to change design documents after approval of the preliminary or final design documents, the Commissioner shall direct such change in writing. Such change shall constitute an Additional Professional Service.

6.9.2 Decrease in Scope: The Commissioner shall have the right to reduce the scope of the services of the Consultant hereunder, at any time and for any reason, upon written notice to the Consultant, specifying the nature and extent of such reduction. In such event, the Consultant shall be paid, in accordance with the payment terms set forth in Article 7, for services already performed prior to receipt of written notification of such reduction in scope, as determined by the Commissioner. Any services performed by the Consultant to revise the design documents as a result of the reduction in the scope of the Project shall constitute Additional Professional Services as set forth above.

6.9.3 Changes through Fault of Consultant: In the event that any change is required to the design documents because of defects of design or unworkability of details, or because of any other fault or errors of the Consultant, no additional compensation shall be paid to the Consultant for making such changes.

6.10 Ownership of Documents: As set forth in the General Provisions (Appendix A), any reports, documents, data, photographs, deliverables, and/or other materials produced pursuant to this Agreement, and any and all drafts and/or other preliminary materials in any format related to such items produced pursuant to this Agreement, shall upon their creation become the exclusive property of the City.

During the term of this Contract and at any time within the retention period set forth in the General Provisions, the Consultant shall, upon demand, promptly deliver such material, records or documents to the Commissioner, or make such records available to the Commissioner or his/her authorized representative for review and reproduction at such place as may be designated by the Commissioner. Thereafter, the City may utilize such material, records or documents in whole or in part or in modified form and in such manner or for such purposes or as many times as it may deem advisable without employment of or additional compensation to the Consultant. Should such documents prepared under this Contract be re-used by the City for other than the Project originally created, it is understood that the Consultant bears no responsibility whatsoever for such re-use except in those instances where he is re-employed for re-use of the documents.

ARTICLE 7 Payment Terms and Conditions

7.1 Total Payments

7.1.1 Maximum Amount: The Maximum Amount of the Contract is set forth in Exhibit A. Total payments for all services performed and all expenses incurred pursuant to this Agreement shall not exceed the Maximum Amount. The Maximum Amount does not represent a commitment or guarantee on the part of the City to pay such amount, unless it has been determined to be due and payable to the Consultant in accordance with the terms and conditions set forth herein.

7.1.2 Allowances: In the event the amount of the allowances set forth in Exhibit A are not sufficient, as determined by the Commissioner, to cover the cost of services which the Consultant is directed to provide, the Commissioner will increase the amount of such allowances. Notwithstanding the specific amounts allocated for allowances, as set forth in Exhibit A, the Commissioner may by issuance of a No Cost Change Order to the Consultant, reallocate such specific allowance amounts.

7.1.3 Executory Only: This Agreement shall be deemed executory only to the extent of the moneys appropriated and available for the purpose of the Agreement and no liability or account thereof shall be incurred beyond the amount of such moneys. It is therefore understood that neither this Agreement nor any representation by any public employee or officer creates any legal or moral obligation to request, appropriate or make available moneys for the purpose of this Agreement.

7.2 Payment for Design Services

7.2.1 Design Fee: The Design Fee is set forth in Exhibit A and is comprised of the Preliminary Design Fee for Phase 1, the Final Design Fee for Phase 2 and the Final Design Fee for Phase 3. The Design Fee is deemed to include all costs and expenses incurred by the Consultant and/or its Subconsultants in the performance of all required Preliminary and Final Design Services for the Project, as set forth in the Specific Requirements and the General Requirements, including all expenses related to management and overhead, all expenses in connection with providing the non-reimbursable items and/or services set forth in Article 6, and any anticipated profit. The Design Fee does not include any expenses for: (1) Time Card Services, and (2) Reimbursable Services.

7.2.2 Preliminary Design Fee for Phase 1: The Preliminary Design Fee for Phase 1 is set forth in Exhibit A. For the performance of all required Preliminary Design Services for Phase 1 of the Project, as set forth in the Specific Requirements and the General Requirements, the City agrees to pay and the Consultant agrees to accept a total lump sum fee in the amount of the Preliminary Design Fee for Phase 1. The Preliminary Design Fee for Phase 1 is comprised of the lump sum fees for the deliverables set forth in the Fee Schedule (Exhibit D). Upon written acceptance by the Commissioner of each respective deliverable, the Consultant shall be paid the lump sum fee for that deliverable, as set forth in the Fee Schedule.

7.2.3 Final Design Fee for Phase 2: The Final Design Fee for Phase 2 is set forth in Exhibit A. For the performance of all required Final Design Services for Phase 2 of the Project, as set forth in the Specific Requirements and the General Requirements, the City agrees to pay and the Consultant agrees to accept a total lump sum fee in the amount of the Final Design Fee for Phase 2. The Final Design Fee for Phase 2 is comprised of the lump sum fees for the deliverables set forth in the Fee Schedule (Exhibit D). Upon written acceptance by the Commissioner of each respective deliverable, the Consultant shall be paid the lump sum fee for that deliverable, as set forth in the Fee

Schedule.

7.2.4 Final Design Fee for Phase 3: The Final Design Fee for Phase 3 is set forth in Exhibit A. For the performance of all required Final Design Services for Phase 3 of the Project, as set forth in the Specific Requirements and the General Requirements, the City agrees to pay and the Consultant agrees to accept a total lump sum fee in the amount of the Final Design Fee for Phase 3. The Final Design Fee for Phase 3 is comprised of the lump sum fees for the deliverables set forth in the Fee Schedule (Exhibit D). Upon written acceptance by the Commissioner of each respective deliverable, the Consultant shall be paid the lump sum fee for that deliverable, as set forth in the Fee Schedule.

7.2.5 Partial Payments: Partial payments of the lump sum fee for any deliverable set forth in the Fee Schedule (Exhibit D) may be made to the Consultant on a monthly basis, based upon the Commissioner's determination that the Consultant is progressing the required work for the deliverable in a satisfactory fashion and in accordance with the schedule set forth in Exhibit C; provided, however, partial payments for the deliverable may not exceed 50% of the lump sum fee for the same, unless the Consultant submits a draft of the deliverable demonstrating satisfactory progress of the work.

7.2.6 Monthly Fee for Scheduling and Progress Reporting: The Consultant may be required to provide monthly Scheduling and Progress Reporting for the Project. If directed to do so, the Consultant shall be entitled to payment of a monthly fee for providing the required services. The General Requirements set forth requirements applicable to the monthly Scheduling and Progress Reporting, as well as the terms and conditions applicable to payment of the monthly fee. An Allowance for payment of such fee is set forth in Exhibit A.

7.2.7 Increases: If the base term of the Contract is extended, the Fees set forth in Exhibit D are subject to increases in accordance with Article 7.7.

7.3 Payment for Time Card Services

7.3.1 Allowance: An Allowance for Time Card Services is set forth in Exhibit A. Such allowance is established for payment to the Consultant for the performance of services by those individuals who have been assigned to provide services on a time card basis and are identified in the Staffing Plan approved by the Commissioner. The Consultant shall not be entitled to payment for the services of: (1) any individual not included in the approved Staffing Plan for time card services, or (2) any principal(s), unless such principal meets the criteria set forth below.

7.3.2 Maximum Price: In the event the Consultant is directed to perform services on a time card basis, the Not to Exceed Amount set forth in the Staffing Plan shall constitute the maximum price to be paid to the Consultant for providing the services specified therein. The Consultant shall not be entitled to payment in excess of such amount, unless the Commissioner, in his/her sole and absolute discretion, determines that exceptional circumstances exist which were not foreseeable by the parties and which were not attributable to any fault on the part of the Consultant.

7.3.3 Staffing Plan: In the event the Consultant is directed to perform services on a time card basis, a Staffing Plan must be established and approved by the Commissioner prior to commencement of the Consultant's services. Such Staffing Plan must specify the specific individuals for the performance of services and an All Inclusive Hourly Rate for each specified individual. The specific individuals set forth in the Staffing Plan shall be considered Assigned Employees for the purpose of payment hereunder.

7.3.4 All Inclusive Hourly Rates: An All Inclusive Hourly Rate for each Assigned Employee is set forth in the Staffing Plan. Such All Inclusive Hourly Rate shall be the rate set forth in Exhibit E for the title for which the Commissioner determines the Assigned Employee meets the qualification requirements. Such All Inclusive Hourly Rate shall apply to all hours during which an Assigned Employee performs services for the Project, including non-regular business hours. No increase in such rate shall be provided for services performed during non-regular business hours. Such All Inclusive Hourly Rates shall be deemed to include the items set forth below.

(a) All expenses incurred by the Consultant and/or its Subconsultants in the performance of all required services for the Project
(b) All expenses related to management and oversight, including, without limitation, any time spent by

principals performing such duties

(c) All expenses related to overhead and any anticipated profit

(d) All expenses related to providing the non-reimbursable items and/or services set forth in Article 6.

7.3.5 No Payment for Principals: The Consultant shall not be entitled to payment for a principal's time performing oversight or management duties. This prohibition on payment for a principal's time shall not apply if the following criteria are met: (a) such principal is qualified to perform services in accordance with one of the titles set forth in Exhibit F, and (b) such principal is included in the approved Staffing Plan for such title.

7.3.6 Amount of Payment: For any week during which an Assigned Employee performs services for the Project on a time card basis, payment to the Consultant for such employee's services for that week shall be calculated as follows: Multiply the amount set forth in subparagraph (a) by the number set forth in subparagraph (b).

(a) All Inclusive Hourly Rate applicable to the Assigned Employee. The All Inclusive Hourly Rate for an Assigned Employee shall be the rate set forth in Exhibit E for the title for which the Commissioner determines the employee meets the qualification requirements.

(b) Total number of hours set forth on time sheets completed by the Assigned Employee for the week in question during which the Assigned Employee actually performed services for this Project on a time card basis. This total number of hours shall NOT include the following: (1) any hours the Assigned Employee spent commuting and/or traveling; (2) any non-billable hours, as defined below; (3) any hours during which the Assigned Employee performed services for this Project covered under Fee(s); (4) any hours during which the Assigned Employee performed services for any other project; (5) any hours the Assigned Employee spent performing services for this Project for which the Consultant is not entitled to compensation, and (6) any non-regular business hours, unless otherwise authorized in advance, in writing by the Commissioner.

(c) Non-billable hours shall be defined as any hours set forth on time sheets completed by the Assigned Employee which have been allocated to any category or function other than services performed for this Project. Non-billable hours shall include without limitation: (1) compensated absence time, including without limitation vacation time, sick time, personal time and holidays; (2) performance of administrative tasks, or (3) any other time keeping category consistent with standard accounting practices.

7.3.7 Non-Regular Business Hours: The Commissioner may authorize the Consultant in advance in writing to have an Assigned Employee(s) perform services during non-regular business hours. Non-regular business shall be defined as any hours in excess of eight (8) hours per day, Monday through Friday (i.e., evenings, weekends and holidays). Payment for services on a time card basis performed during non-regular business hours shall be in accordance with the All Inclusive Hourly Rates set forth in Exhibit E. The Consultant shall not be entitled to any increase in such rates for services performed during non-regular business hours.

7.3.8 Requisitions: For any week(s) for which the Consultant is requesting payment for services performed by an Assigned Employee on a time card basis, the Consultant shall submit the documentation set forth below.

7.3.9 Increases: If the term of the Contract is extended, the All Inclusive Hourly Rates set forth in Exhibit E are subject to increases in accordance with Article 7.7.

7.3.10 Decreases: The names of individuals identified as Key Personnel by the Consultant in its Proposal for the Contract, as well as their titles and qualifications, are set forth in Exhibit B. Exhibit E lists the All Inclusive Hourly Rates applicable to titles of Key Personnel. Such All Inclusive Hourly Rates were negotiated based on the qualifications and salary rates of the individuals identified in Exhibit B. In the event the Consultant fails to provide any individual listed in Exhibit B, the Commissioner may decrease the All Inclusive Hourly Rate for such individual's title to an amount based on the qualifications and salary rate of the individual approved as a replacement.

7.3.11 Change Order Services: The Consultant may be directed to perform services pursuant to a change order. If so specified in the change order, the Consultant agrees to perform the services specified therein in accordance with all terms and conditions applicable to the performance of Time Card Services. Such change order shall specify an

upset amount for the performance of the Consultant's services and shall further specify one of the alternatives set forth below. No change order utilizing item (b) shall be valid unless signed by the Consultant.

(a) Upset amount will be increased if it is not sufficient to cover the cost of the required services, or
(b) Upset amount will not be increased and all costs in excess of the upset amount incurred by the Consultant in connection with the performance of the required services are the sole responsibility of the Consultant.

7.4 Payment for Reimbursable Services:

7.4.1 Allowance: An Allowance for Reimbursable Services is set forth in Exhibit A. Such allowance is established for payment for Reimbursable Services, as set forth in Article 6. In providing Reimbursable Services, the Consultant shall comply with all terms and conditions set forth in Article 6, including utilization of the method of procurement and form of payment directed by the Commissioner. If so directed, the Consultant shall conduct a competitive bid and/or proposal process for the specified Reimbursable Service. In general, such competitive process will be required if the cost of the specified Reimbursable Service exceeds $5,000.

7.4.2 Payment: Payment for Reimbursable Services (except for long distance travel) shall be as set forth below.

(a) If payment is on a lump sum basis, payment shall be based upon the percentage of completion.
(b) If payment is on a unit price basis, payment shall be based upon the number of completed units.
(c) If payment is based on actual cost, payment shall be the actual and reasonable cost, as indicated by receipted bills or any other data required by the Commissioner.

7.4.3 Long Distance Travel: Payment for long distance travel, as set forth in Article 6, shall be in accordance with the normal travel allowances of the City of New York for its own employees as provided in Comptroller's "Directive #6, Travel, Meals, Lodging and Miscellaneous Agency Expenses."

7.4.4 No Mark Up: The Consultant shall not be entitled to any mark-up for overhead and profit on payments for Reimbursable Services hereunder. All costs and expenses for overhead and/or profit in connection with the provision of Reimbursable Services are deemed included in the Design Fee for Design Services, or, if applicable, the All Inclusive Hourly Rates for Time Card Services.

7.4.5 Requisitions: For payment for Reimbursable Services, the Consultant shall submit the documentation set forth in this Article 7.

7.5 Payment for Artwork

7.5.1 Allowance: If applicable to the Project, an Allowance for Artwork is set forth in Exhibit A. Such allowance is established for payment for services the Consultant is directed to provide, as set forth in Article 6, for the inclusion of artwork in the Project in accordance with Chapter 9, Section 224, of the New York City Charter. No such services shall be provided by the Consultant, or paid from this allowance, unless expressly authorized in advance in a written directive from the Commissioner.

7.5.2 Amount of Payment: The amount of payment for the services of the artist engaged by the Consultant shall be calculated in accordance with the terms and conditions of the contract between the Consultant and the artist. Such contract is subject to prior written approval by the Commissioner.

7.5.3 Consultant's Fee: For services in connection with the artwork, the Consultant shall be entitled to a fee, as set forth below. Payment of such fee shall be based upon the percentage of completion of all required services in connection with the artwork.

(a) For Projects where the total actual cost of the artwork is $50,000 or less, the fee shall be fifteen (15%) percent of the total actual cost of the artwork.
(b) For Projects where the total actual cost of the artwork is more than $50,000, the fee shall be $7,500,

plus ten (10%) percent of the amount by which the total actual cost of the artwork exceeds $50,000.

7.6 Requisitions for Payment

7.6.1 Requisitions for payment may be submitted as the work progresses, but not more often than once a month. Requisitions shall be in the authorized form and shall set forth the services performed by the Consultant and the total amount of partial payment requested. The total amount of partial payment requested shall be broken down into the following categories, depending on the services performed: (1) Preliminary Design Services; (2) Final Design Services; (3) Time Card Services; (4) Artwork, and (5) Reimbursable Services. The Consultant shall submit one original and three (3) copies of each requisition for payment.

7.6.2 Requisitions for payment shall be accompanied by the documentation set forth below.

(a) Project Progress Report: The Consultant shall submit a current report indicating the percentage of completion of all required services for the Project. The progress report submitted as part of the payment requisition shall not constitute submission of the monthly Progress Report in accordance with the requirements set forth in the General Requirements.

(b) Fees: For any period for which the Consultant is requesting payment of any portion of the Fees set forth in Exhibit D, the Consultant shall provide one of the statements set forth below.

(1) Statement that the Consultant has received the Commissioner's written approval of the required deliverable.
(2) Statement that the Consultant is progressing the required work for the deliverable in a satisfactory and timely fashion. Partial payments for the deliverable may not exceed 50% of the lump sum fee for the same, unless the Consultant submits a draft of the deliverable demonstrating satisfactory progress of the work.

(c) Time Card Services: For any period for which the Consultant is requesting payment for services on a time card basis, the Consultant shall submit the documentation set forth below:

(1) Name and title of the Assigned Employee, as defined above.
(2) Commissioner approval of the Assigned Employee, either approved Staffing Plan or documentation approving the Assigned Employee as a replacement.
(3) All Inclusive Hourly Rate applicable to the Assigned Employee. The All Inclusive Hourly Rate for an Assigned Employee shall be the rate set forth in Exhibit E for the title for which the Commissioner determines the employee meets the qualification requirements.
(4) Number of hours worked each day by the Assigned Employee for the week(s) in question during which the Assigned Employee actually performed services for the Project on a time card basis.
(5) Detailed time sheets completed by the Assigned Employee for the week(s) in question. Such detailed time sheets shall reflect all hours of service by the Assigned Employee, including without limitation: (1) actual hours during which the employee performed services for this Project on a time card basis; (2) actual hours during which the employee performed services for this Project covered under Fee(s); (3) actual hours during which the employee performed services for other projects; (4) non-billable hours, as defined above; (5) actual hours, if any, during which the Assigned Employee performed services for this Project for which the Consultant is not entitled to compensation, and (6) any non-regular business hours.

(d) Artwork: For any period for which the Consultant is requesting payment for artwork, the Consultant shall submit a statement indicating the percentage of completion of all required services by the artist, as well as the total actual cost of the artwork to date.

(e) Reimbursable Services: For any period for which the Consultant is requesting payment for Reimbursable Services, the Consultant shall submit the documentation set forth below:

(1) Description of the Reimbursable Service the Consultant was directed to provide.
(2) If payment is on a lump sum basis, a report on the progress of the work, indicating the percentage of completion of all required services.
(3) If payment is on a unit price basis, a report indicating the number of completed units.
(4) If payment is based on actual cost, receipted bills or any other data required by the Commissioner.

7.6.3 All payments hereunder are contingent upon the Consultant's satisfactory performance of the required services. The Consultant shall not be entitled to any compensation for services or reimbursement for costs or expenses with respect to any such obligations not properly performed by it hereunder. The Commissioner is authorized to make deductions for any services performed hereunder which he/she determines to be unsatisfactory.

7.6.4 Following the receipt of a satisfactory requisition for payment, the Commissioner will approve a voucher in the amount certified for partial payment, less any and all deductions authorized to be made by the Commissioner under any terms of this Agreement or by law. This voucher will thereupon by filed with the Comptroller, with a copy thereof available to the Consultant if requested.

7.7 Increases: The Fees and All Inclusive Hourly Rates set forth in Exhibits D and E shall apply to the base term of the Contract. If the base term is extended, the Commissioner shall issue a change order to the Consultant increasing the Fees and All Inclusive Hourly Rates, subject to the conditions set forth below. If no such change order is issued, the Fees and All Inclusive Hourly Rates applicable to the base term of the Contract shall remain in effect throughout the extended term of the Contract.

7.7.1 No change order increasing the Fees and All Inclusive Hourly Rates shall be issued if the Commissioner determines that the Consultant is responsible for the delay or any material portion thereof.

7.7.2 Any increase in the Fees and All Inclusive Hourly Rates shall be based on whatever increase may have occurred during the base term of the Contact in the Employment Cost Index for Professional, Specialty and Technical Occupations, published by the U.S. Dept. of Labor, Bureau of Labor Statistics (the "Index"), as determined by the Engineering Audit Office. If, during the base term of the Contract, the Index showed an increase, the Fees and All Inclusive Hourly Rates shall be increased. If, during the base term of the Contract, the Index declined or showed no increase, the Fees and All Inclusive Hourly Rates shall remain unchanged throughout the extended term of the Contract.

7.7.3 Any increase in the Fees and/or All Inclusive Hourly Rates shall only apply to the portion of the work which the Consultant has not yet performed, as determined by the Commissioner. Any increase in the Fees and/or All Inclusive Hourly Rates shall not apply to any work performed by the Consultant during the base term of the Contract, even if payment for the same is made during the extended term.

7.7.4 Any increase in the Fees and All Inclusive Hourly Rates shall not apply to any Change Order work issued during the base term of the Contract, even if such Change Order work was actually performed during the extended term. If any Change Order is issued during the extended term of the Contract, the increased All Inclusive Hourly Rates shall be used to negotiate a lump sum fee for such Change Order work.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in triplicate, the day and year first above written, one copy to remain with the Commissioner, one copy to be filed with the Comptroller of the City of New York and one copy to be delivered to the Consultant.

THE CITY OF NEW YORK

By: _____
Deputy Commissioner

CONSULTANT:

By: _____

Print Name: _____

Title: _____

EIN: _____

Approved as to Form and Certified
as to Legal Authority

_____
Acting Corporation Counsel

Date: _____

ACKNOWLEDGMENT BY CORPORATION

State of _____ County of _____ ss:

On this ____ day of _____, _____ before me personally came _____, who being by me duly sworn, did depose and say that he/she resides in the City of _____ that he is the _____ of _____, the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; and that he signed his name thereto by like order.

_____

Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT BY COMMISSIONER

State of _____ County of _____ ss:

On this ____ day of _____, _____ before me personally came _____, to me known and known to me to be the Deputy Commissioner of the Department of Design and Construction of The City of New York, the person described as such in and who as such executed the foregoing instrument and he acknowledged to me that he executed the same as Deputy Commissioner for the purposes therein mentioned.

_____

Notary Public or Commissioner of Deeds

EXHIBIT A

CONTRACT INFORMATION

- Maximum Amount of Contract: Not to Exceed $_____
  [Comprised of items (1) through (4) below]

  (1) Design Fee: $_____
  [Comprised of (a), (b) and (c)below]

  (a) $_____ Preliminary Design Fee for Phase 1

  (b) $_____ Final Design Fee for Phase 2

  (c) $_____ Final Design Fee for Phase 3

  (2) Allowance for Time Card Services: Not to Exceed $ 0
  [Comprised of (a) and (b) below]

  (a) $___N/A Not to Exceed Amount for Additional Professional Services

  (b) $___N/A Not to Exceed Amount for Construction Support Services

  (3) Allowance for Monthly Fee for Scheduling
  And Progress Reporting: Not to Exceed $40,000

  (4) Allowance for Reimbursable Services: Not to Exceed $_____

- Term of Contract: The contract shall commence as of the date of registration by the Comptroller and shall remain in effect until all required services have been completed. The time for completion of all required services, including reasonable review time by agencies whose approval the Consultant is required to obtain, shall be 1095 consecutive calendar days ("ccds").

- Insurance Requirements: General Provisions governing the Contract, including insurance coverage the Consultant and its subconsultants are required to provide, are set forth in Appendix A. Appendix A is included as Exhibit J to the Contract. Insurance Requirements are set forth in Article 7 of Appendix A.

EXHIBIT B

SUBCONSULTANTS AND KEY PERSONNEL

(A) SUBCONSULTANTS: The subconsultants listed below were identified by Consultant in its Proposal for the Contract. The Consultant specifically agrees to engage such subconsultants for the Project.

(B) KEY PERSONNEL: The names of individuals identified as Key Personnel by the Consultant in its Proposal for the Contract, as well as their titles and qualifications, are set forth below. The Consultant specifically agrees to assign to the Project for its entire duration the individuals identified below as Key Personnel, unless otherwise approved by the Commissioner.

EXHIBIT C

PROJECT SCHEDULE

The Project Schedule set forth in this Exhibit C was submitted by Consultant as part of its Proposal for the Contract. The Consultant agrees to perform all required services in accordance with the Project Schedule.

EXHIBIT D

FEE SCHEDULE

The Fee Schedule is set forth on the following pages.

EXHIBIT E

TITLES and ALL INCLUSIVE HOURLY RATES

ALL INCLUSIVE HOURLY RATES: All Inclusive Hourly Rates per title are set forth below. Such All Inclusive Hourly Rates shall only apply if the Consultant is directed to perform services on a Time Card basis. Such All Inclusive Hourly Rates are subject to increases and/or decreases in accordance with Article 7.

EXHIBIT F: MINIMUM REQUIREMENTS PER TITLE

Key Personnel: The names of individuals identified as Key Personnel, as well as their titles and qualifications, are set forth in Exhibit B. For any title of Key Personnel, the minimum requirements per title shall be the **GREATER** of the following: (1) the qualifications for the title in question, as set forth in Exhibit B, or (2) the minimum requirements per title set forth below.

Other Personnel: For all other titles of personnel, the minimum requirements per title are set forth below

SERVICES AND JOB TITLES	ASCE (A) NICET (N) GRADE See Notes 1 & 2	Qualifications / Number of Years of Experience
Project Manager	A-VI	Professional License / 10 years
Project Engineer	A-IV	Professional License / 7 years
Senior Civil Engineer	A-V	Professional License / 7 years
Senior Structural Engineer	A-V	Professional License / 7 years
Engineer	A-III	
Junior Engineer	A-II	
Urban Design/Landscape Manager, RLA		Professional License / 10 years
Project / Senior Landscape Architect		7 years
Landscape Architect		4 years
Junior Landscape Architect		3 years
Arborist/ Forester		See Note 5
Survey Manager, R.L.S.		Professional License
Party Chief/Foreman	N-III	
Instrument Person	N-II	
Rod Person	N-I	
Senior Traffic Engineer	A-V	Professional License / 7 years
Traffic Engineer	A-III	
Junior Traffic Engineer – Technician	A-II	2 years
Project Environmental Engineer/Manager		Professional License / 10 years
Senior Environmental Engineer/Planner		Professional License / 7 years
Environmental Engineer		
Junior Environmental Engineer		2 years
Certified Industrial Hygienist		Professional License / 7 years, See Note 6
Industrial Hygienist		4 years
Project Geotechnical Engineer / Manager	A-VI	Professional License / 10 years
Senior Geotechnical Engineer	A-V	Professional License / 7 years
Geotechnical Engineer	A-III	
Project Scientist		See Note 6
Senior Mechanical Engineer	A-V	Professional License / 7 years
Mechanical Engineer	A-III	
Senior Electrical Engineer	A-V	Professional License / 7 years
Electrical Engineer	A-III	
Archeologist/Historian		See Note 4
Senior Archeologist		See Note 4
Junior Archeologist		3 years
Senior CAD Operator	N-IV	7 years
CAD Operator	N-III	5 years
Junior CAD Operator	N-II	2 years

Notes:

(1) The minimum requirements for the specified titles shall be the requirements established for the various grade levels by the American Society of Civil Engineers (ASCE). The applicable requirements for the title in question shall be the most current requirements promulgated by the ASCE for that title as of the date on which the Consultant submitted its Proposal for the Contract.

(2) The minimum requirements for the specified titles shall be the requirements established for the various grade levels by the National Institute For Certification In Engineering Technologies (NICET). The applicable requirements for the title in question shall be the most current requirements promulgated by the NICET for that title as of the date on which the Consultant submitted its Proposal for the Contract.

(3) If a title requires a professional license, such license must be issued by the State of New York.

(4) The minimum requirements for the specified titles in Archeology shall be the requirements established by the National Park Service (NPS), as set forth below.

A graduate degree in archeology, anthropology, or closely related field plus:

(a) At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management;
(b) At least four months of supervised field and analytical experience in general North American archeology; and,
(c) Demonstrated ability to carry research to completion.

In addition to these minimum qualifications, the professional in historic archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period (36 CFR Part 1: Appendix A).

(5) The minimum requirements for the specified title of Arborist/Forester shall be the requirements established by the New York City Department of Parks and Recreation, as set forth below.

(a) Associate degree in forestry, arboriculture, horticulture, or related plant science field, and five years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction; or

(b) B.S. in forestry, arboriculture, horticulture, or related plant science field, and three years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction; or

(c) M.S. in forestry, arboriculture, horticulture, or related plant science field, and one year of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction; or

(d) Arborist certification from the N.Y.S. Arborists/International Society of Arboriculture Chapter, Inc., and three years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction; or

(e) Other state arborist certification recognized by the International Society of Arboriculture or the National Arborist Association, and three years of full-time professional experience in landscape design and the field supervision of techniques to mitigate damage to existing trees from the negative impacts of construction.

(6) The minimum requirements for the specified Environmental Job Titles shall be the requirements set forth below:

(a) Certified Industrial Hygienist (CIH) - shall possess a CIH license granted by the American Board of Industrial Hygiene (ABIH) for at least five (5) years. An advanced degree (M.S., M.E., and PhD) in science or engineering is preferred. This individual will demonstrate at least fifteen (15) years of experience in this field of expertise with not less than 5 years practical experience in the environmental engineering / science fields.

Duties: The CIH will act as the lead and provide expert opinion on matters of industrial hygiene, site safety, and environmental compliance. This individual will review and interpret data, author environmental reports and site specific health and safety plans; and shall be responsible for all aspects, including execution and monitoring, of the health and safety program.

(b) Project Scientist – shall posses at a minimum a Bachelor's degree from an accredited university in the respective field of study and have six (6) years of practical experience in construction and/or design of building/infrastructure systems, building codes, fire/life–safety issues, and other topics related to general project design and development. Postgraduate education may supplement up to two (2) years of work experience. The individual will be required to demonstrate proficiency in understanding drawings, specifications, standards, codes regulations, etc. as they pertain to general construction practices and the environmental fields.

Duties: The Project Scientist will participate in a project from a hydro/geotechnical perspective, and will be called upon to provide expertise in, fire detection/suppression, life-safety and all other systems that are impacted by the environmental project. Also included are responsibilities for environmental report writing controlled inspections and most other activities that their education and background would dictate.

(7) No Payment for Principal: The Consultant shall not be entitled to payment for a principal's time performing oversight or management duties. This prohibition on payment for a principal's time shall not apply if the following criteria are met: (1) the principal is qualified to perform services in accordance with one of the titles set forth in Exhibit F (other than the title "Principal"), and (2) the principal is included in the approved Staffing Plan for such title.

EXHIBIT G

SPECIFIC REQUIREMENTS FOR PRELIMINARY AND FINAL DESIGN SERVICES

I. DESCRIPTION OF PROJECT

A. INTENT. It is the intent of this project to prepare Preliminary and Final Design documents for:

Project ID. HWK639W

RECONSTRUCTION OF TILLARY STREET AREA:

PHASE 1
PRELIMINARY DESIGN FOR:
ADAMS STREET FROM RED CROSS PLACE TO APPROXIMATELY 250' SOUTH OF TECH PLACE
TILLARY STREET FROM CADMAN PLAZA WEST TO APPROXIMATELY 260' EAST OF PRINCE STREET
CADMAN PLAZA EAST FROM RED CROSS PLACE TO APPROXIMATELY 200' SOUTH OF TILLARY STREET
PUBLIC OPEN SPACES AT CADMEN PLAZA WEST FROM CLARK STREET TO APPROXIMATELY 300' SOUTH OF TILLARY STREET INCLUDING APPROXIMATELY 300' ALONG CLINTON STREET

PHASE 2
FINAL DESIGN FOR:
ADAMS STREET FROM RED CROSS PLACE TO APPROXIMATELY 250' SOUTH OF TECH PLACE

PHASE 3
FINAL DESIGN FOR:
TILLARY STREET FROM CADMAN PLAZA WEST TO APPROXIMATELY 260' EAST OF PRINCE STREET
CADMAN PLAZA EAST FROM RED CROSS PLACE TO APPROXIMATELY 200' SOUTH OF TILLARY STREET
PUBLIC OPEN SPACES AT CADMEN PLAZA WEST FROM CLARK STREET TO APPROXIMATELY 300' SOUTH OF TILLARY STREET INCLUDING APPROXIMATELY 300' ALONG CLINTON STREET

TOGETHER WITH ALL WORK INCIDENTAL THERETO

BOROUGH OF BROOKLYN

B. BACKGROUND INFORMATION: The following is a list of documents that are pertinent to this project and will be provided by the City:

1. NYC Department of Transportation CPI for the project dated February, 2010.

2. Hazardous Waste and Site Contamination investigation results and study report.

C. OBJECTIVES: The purpose of this project is to redesign the area of Tillary and Adams Streets in Brooklyn to create a safer, more welcoming arrival into Downtown Brooklyn. The intersection of Tillary and Adams Streets is a major traffic center for vehicles, pedestrians, and bicyclists, and has historically been a high-crash location. As Downtown Brooklyn is revitalized, increasing numbers of tourists and other pedestrians are using the streets, and this site is often the first view that visitors see upon entering Brooklyn. Reconstructing the heavily used intersection will enhance traffic safety while improving the image of Brooklyn for the millions of tourists that cross the Brooklyn Bridge each year. The project includes the full street reconstruction of Tillary Street and Adams Street. A security barrier and bike lane will be added to Cadman Plaza East creating public access connecting the DUMBO neighborhood to Downtown Brooklyn. Temporary bicycle lanes on Tillary Street will be converted to permanent structures, along with the reconstruction of the medians and

walkways. Public open spaces will be created on Cadman Plaza West at Tillary Street adjacent to housing and higher education buildings.

The redesign of Tillary and Adams Streets shall be in accordance with the conceptual design set forth in Section VI of this SR. The redesign will enhance the safety of all users by decreasing vehicular travel speeds and lane shifting patterns, shortening crosswalk lengths and adding pedestrian space at the median. The Tillary Street medians will be landscaped and new street lighting and paving patterns will be included. The existing separated bike lane between Cadman Plaza West and Cadman Plaza East will be constructed as a raised Class 1 bike path with landscaping along the curb. On Adams Street north of Tillary Street, the proposed design will remove the concrete mall that currently separates local from through traffic entering the bridge and gives the impression of a highway rather than a city street. The extra space from tile malls can be added to the pedestrian and bicycle access path to the Brooklyn Bridge, which is currently a narrow concrete chute. As a result, the path can be heavily landscaped, enhancing the walking and cycling space while buffering it from traffic. Distinctive lighting and paving materials will be coordinated throughout the project. South of Tillary Street to Tech Place, existing on-street, Class 2 bike lanes will be relocated onto a shared-use Class 1 path with substantial landscaping within the widened median.

II. SERVICES TO BE PERFORMED BY THE CONSULTANT

PHASE 1: The Consultant shall perform the following Preliminary Design Tasks in accordance with the General Requirements (GR).

TASK 1: Project Development / Identification: GR Section 4.1.
In Lieu of PDI report the consultant shall provide a Design report as per GR Section 4.1A
TASK 2: Topographic Survey: GR Section 4.2. – The limits of the topographic survey are the limits of the project streets.
TASK 3: Traffic Study Program: GR Section 4.3.
TASK 4: Hardware and Basin Condition Inventory: GR Section 4.4
TASK 5: Tree Inventory: GR Section 4.16.
TASK 6: Subsurface Exploration Program: GR Section 4.5.
TASK 7: Vault Programs Level I and Level II: GR Section 4.6.
TASK 8: Railroad and Abandoned Trolley Facilities Research: GR Section 4.7.
TASK 9: Roadway Pavement Design: GR Section 4.8.
TASK 10: Sidewalk Cellar Doors Condition Inventory: GR Section 4.28.
TASK 11: Schematic Geometric Design: GR Section 4.10.
TASK 12: Schematic Landscape/Urban Design: GR Section 4.31.
TASK 13: Design of Modification To Subway Ventilators: GR Section 4.34.
TASK 14: Quantity and Cost Estimating: GR Section 4.12.
TASK 15: Electronic Archiving and Indexing: GR Section 4.27.

PHASE 2: The Consultant shall perform the following Final Design Tasks in accordance with the General Requirements (GR).

TASK 16: Street Design Including Study and Design of Street Grades, Study and Design of Street Drainage and Permanent Street Signs : GR Section 4.15
TASK 17: Tree Impact Mitigation and Tree Planting Program : GR Section 4.17
TASK 18: Final Landscape/Urban Design : GR Section 4.32
TASK 19: Sewer Design : GR Section 4.19
The estimated quantity of sewer to be replaced is 500 LF of 12”-18” combined sewer.
TASK 20: Water Main Design : GR Section 4.20
The estimated quantity of water main to be replaced is 10,000 LF below 36” size pipes.
TASK 21: Street Lighting System Design : GR Section 4.21
TASK 22: Traffic Signal System Design : GR Section 4.22
TASK 23: Construction Staging and Maintenance and Protection of Traffic : GR Section 4.24
TASK 24: Preparation of Specifications : GR Section 4.25

TASK 25: Review and Analysis of Bids : GR Section 4.26
TASK 26: Electronic Archiving and Indexing : GR Section 4.27

PHASE 3: The Consultant shall perform the following Final Design Tasks in accordance with the General Requirements (GR). The Consultant is advised that the City may decide not to proceed with final design services for Phase 3 in the event funding is not available. In such case, the scope of the required services shall be decreased to eliminate Phase 3.

TASK 27: Street Design Including Study and Design of Street Grades, Study and Design of Street Drainage and Permanent Street Signs : GR Section 4.15
TASK 28: Tree Impact Mitigation and Tree Planting Program : GR Section 4.17
TASK 29: Final Landscape/Urban Design : GR Section 4.32
TASK 30: Sewer Design : GR Section 4.19
The estimated quantity of sewer to be replaced is 250 LF of 12”-18” combined sewer.
TASK 31: Water Main Design : GR Section 4.20
The estimated quantity of water main to be replaced is 20,000 LF below 36” size pipes.
TASK 32: Street Lighting System Design : GR Section 4.21
TASK 33: Traffic Signal System Design : GR Section 4.22
TASK 34: Construction Staging and Maintenance and Protection of Traffic : GR Section 4.24
TASK 35: Preparation of Specifications : GR Section 4.25
TASK 36: Review and Analysis of Bids : GR Section 4.26
TASK 37: Electronic Archiving and Indexing : GR Section 4.27

III. SCHEDULING AND PROGRESS REPORTING: The Consultant shall prepare and submit monthly Progress Reports as set forth in GR Section 4.40.

IV. METHOD OF PAYMENT: Payment for all required services shall be in accordance with the terms and conditions set forth in Article 7 of the attached contract.

V. DELIVERABLES. Upon completion of the respective tasks, the Consultant shall submit the number of deliverables set forth below:

Preliminary Design – Phase 1

__20__ **Sets of Design Report**
__5__ **Sets of Traffic Study Report**
__5__ **Sets of Bound Prints of Schematic Geometric Design**
__5__ **Sets of Technical Supplements (All project back up documents)**
__5__ **Sets of Schematic Landscape/Urban Design Drawings and details**
__5__ **Copies of the Archiving CDs**

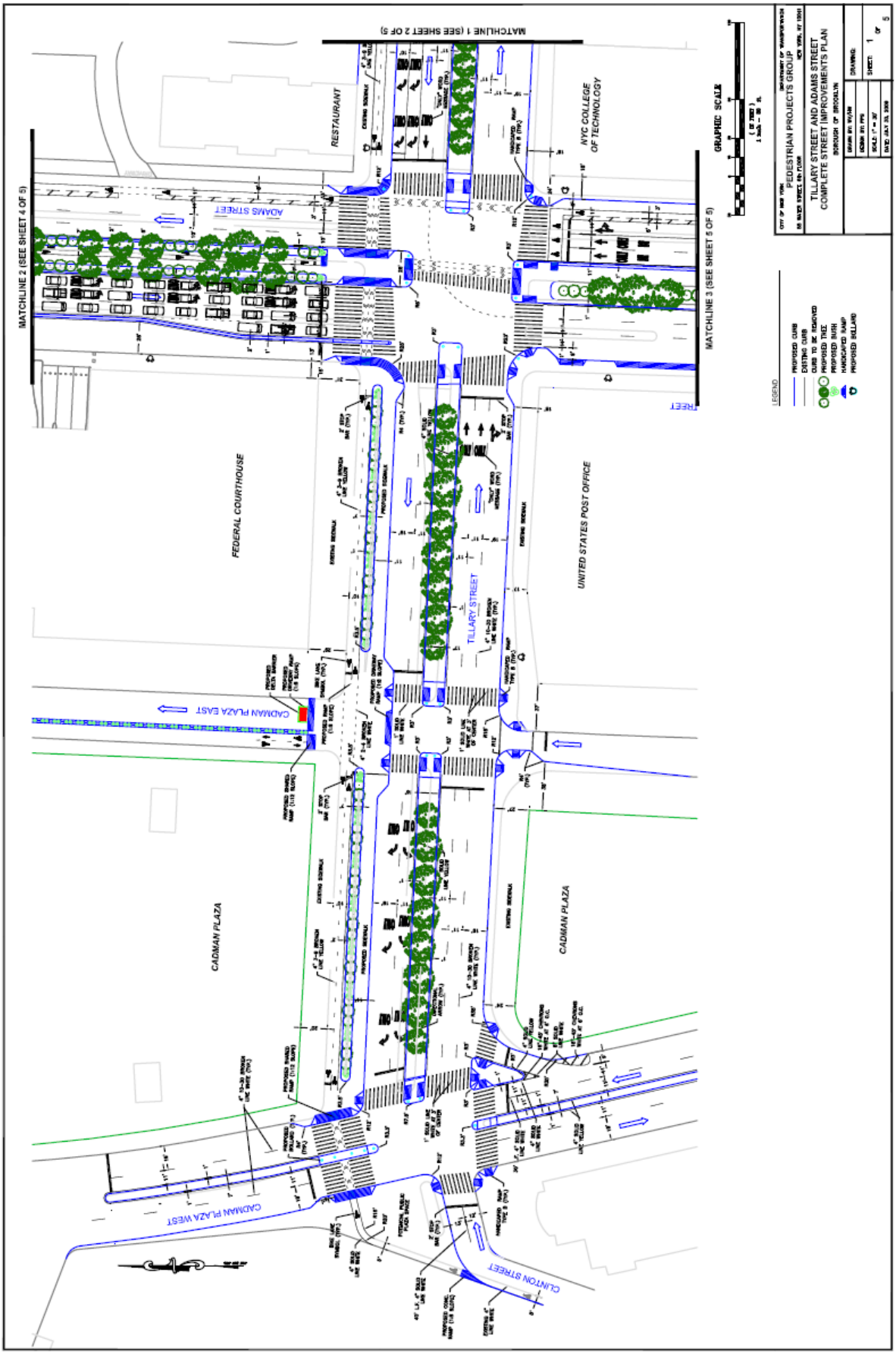
Final Design – Phase 2 - Adams Street

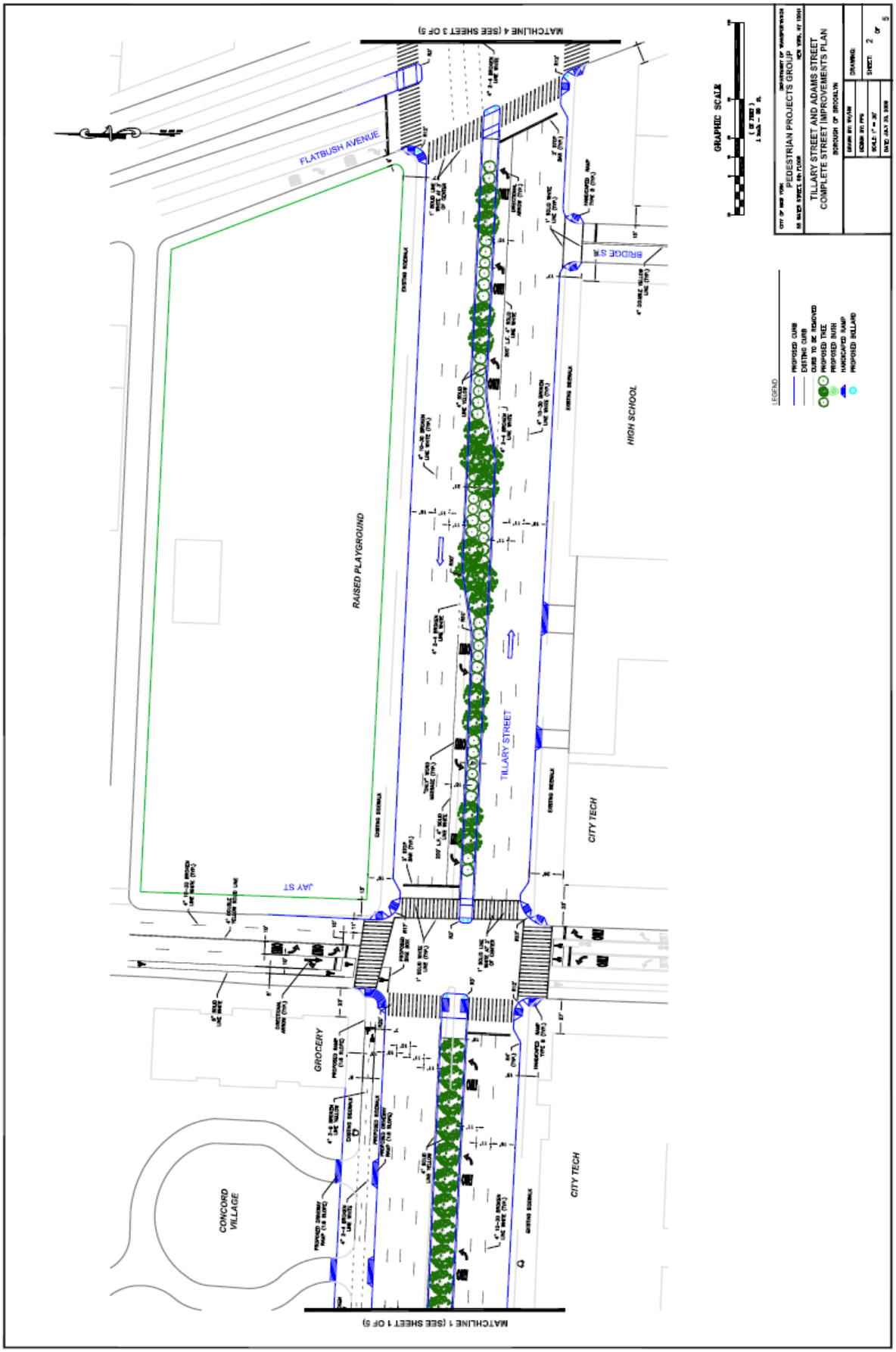
__60__ **Sets of bound paper prints of the signed Construction Contract Drawings**
__5__ **Sets of Specifications for the Construction Contract**
__5__ **Copies of the Archiving CDs**

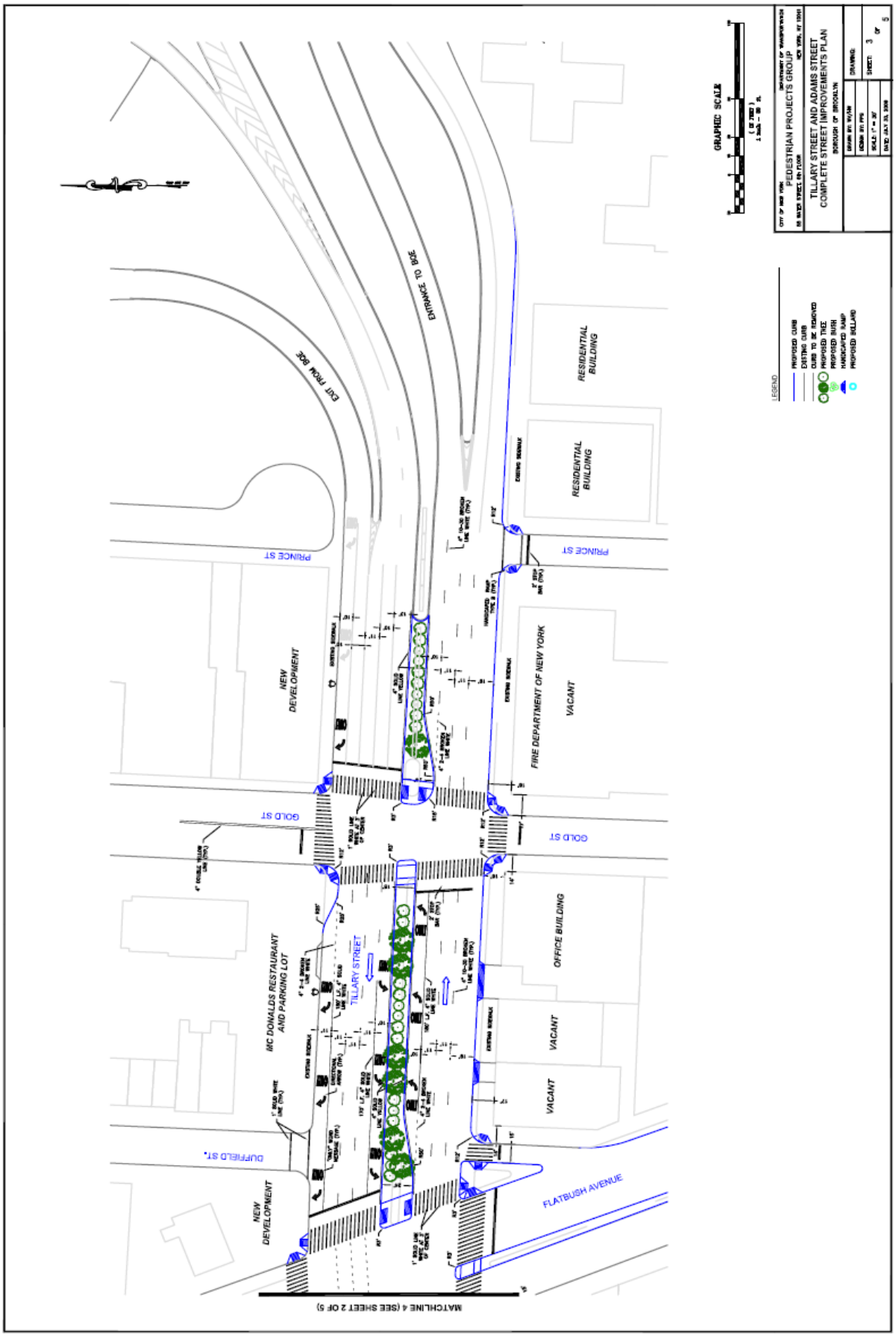
Final Design – Phase 3 - Tillary Street Area including Open Public Space at Cadman Plaza

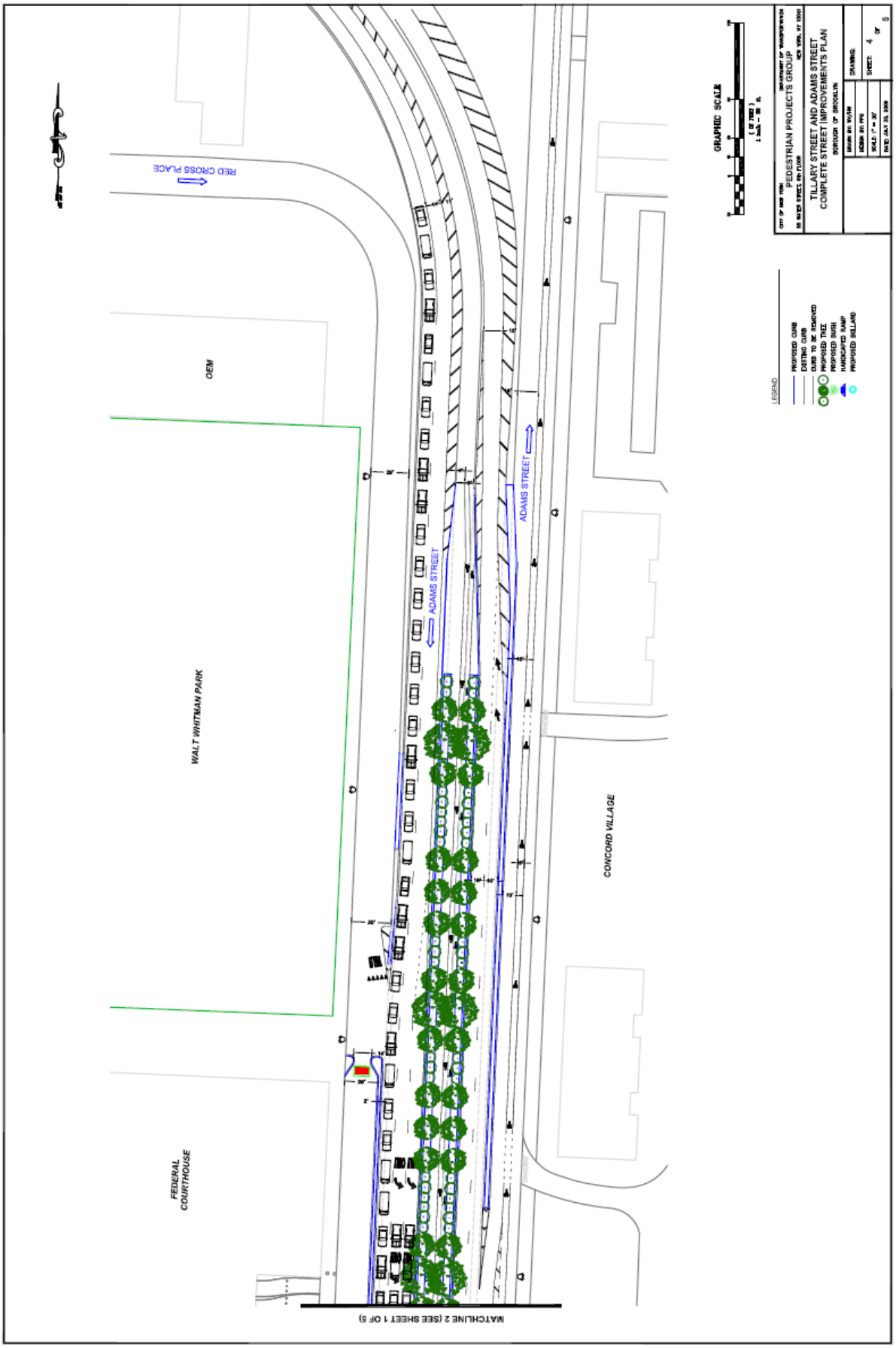
__60__ **Sets of bound paper prints of the signed Construction Contract Drawings**
__5__ **Sets of Specifications for the Construction Contract**
__5__ **Copies of the Archiving CDs**

VI. NYCDOT CONCEPTUAL DESIGN FOR RECONSTRUCTION OF TILLARY STREET AREA. The Consultant’s redesign of Tillary and Adams Streets shall be in accordance with the conceptual design set forth on the following pages.


MATCHLINE 1 (SEE SHEET 2 OF 5)
MATCHLINE 2 (SEE SHEET 4 OF 5)
MATCHLINE 3 (SEE SHEET 5 OF 5)
RESTAURANT
NYC COLLEGE OF TECHNOLOGY
ADAMS STREET
FEDERAL COURTHOUSE
UNITED STATES POST OFFICE
TILLARY STREET
CADMAN PLAZA EAST
CADMAN PLAZA
CADMAN PLAZA WEST
CLINTON STREET
GRAPHIC SCALE
LEGEND
PEDESTRIAN PROJECTS GROUP
TILLARY STREET AND ADAMS STREET
COMPLETE STREET IMPROVEMENTS PLAN
BOROUGH OF BROOKLYN


MATCHLINE 4 (SEE SHEET 3 OF 5)
FLATBUSH AVENUE
BRIDGE ST.
HIGH SCHOOL
RAISED PLAYGROUND
TILLARY STREET
CITY TECH
JAY ST
GROCERY
CONCORD VILLAGE
CITY TECH
MATCHLINE 1 (SEE SHEET 1 OF 5)
GRAPHIC SCALE
LEGEND
PROPOSED CURB
EXISTING CURB
CURB TO BE REMOVED
PROPOSED TREE
PROPOSED BUFFER
PROPOSED RAMP
PROPOSED BOLLARD
PEDESTRIAN PROJECTS GROUP
TILLARY STREET AND ADAMS STREET
COMPLETE STREET IMPROVEMENTS PLAN
BOROUGH OF BROOKLYN
DRAWING
SHEET 2 OF 5


GRAPHIC SCALE
PEDESTRIAN PROJECTS GROUP
TILLARY STREET AND ADAMS STREET
COMPLETE STREET IMPROVEMENTS PLAN
BOROUGH OF BROOKLYN
DRAWING:
SHEET: 3 OF 5
LEGEND
PROPOSED CURB
EXISTING CURB
CURB TO BE REMOVED
PROPOSED TREE
PROPOSED BURR
HANDICAPPED RAMP
PROPOSED BOLLARD
RESIDENTIAL BUILDING
RESIDENTIAL BUILDING
PRINCE ST
PRINCE ST
EXIT FROM BQE
ENTRANCE TO BQE
NEW DEVELOPMENT
FIRE DEPARTMENT OF NEW YORK
VACANT
GOLD ST
GOLD ST
OFFICE BUILDING
MC DONALDS RESTAURANT AND PARKING LOT
TILLARY STREET
VACANT
VACANT
DUFFIELD ST.
NEW DEVELOPMENT
FLATBUSH AVENUE
MATCHLINE 4 (SEE SHEET 2 OF 5)


RED CROSS PLACE
OEM
WALT WHITMAN PARK
FEDERAL COURTHOUSE
ADAMS STREET
ADAMS STREET
CONCORD VILLAGE
MATCHLINE 2 (SEE SHEET 1 OF 5)
GRAPHIC SCALE
LEGEND
PROPOSED CURB
EXISTING CURB
CURB TO BE REMOVED
PROPOSED TREE
PROPOSED BUSH
HANDICAPPED RAMP
PROPOSED BOLLARD
CITY OF NEW YORK
DEPARTMENT OF TRANSPORTATION
PEDESTRIAN PROJECTS GROUP
TILLARY STREET AND ADAMS STREET
COMPLETE STREET IMPROVEMENTS PLAN
BOROUGH OF BROOKLYN
DRAWING:
SHEET: 4 OF 5

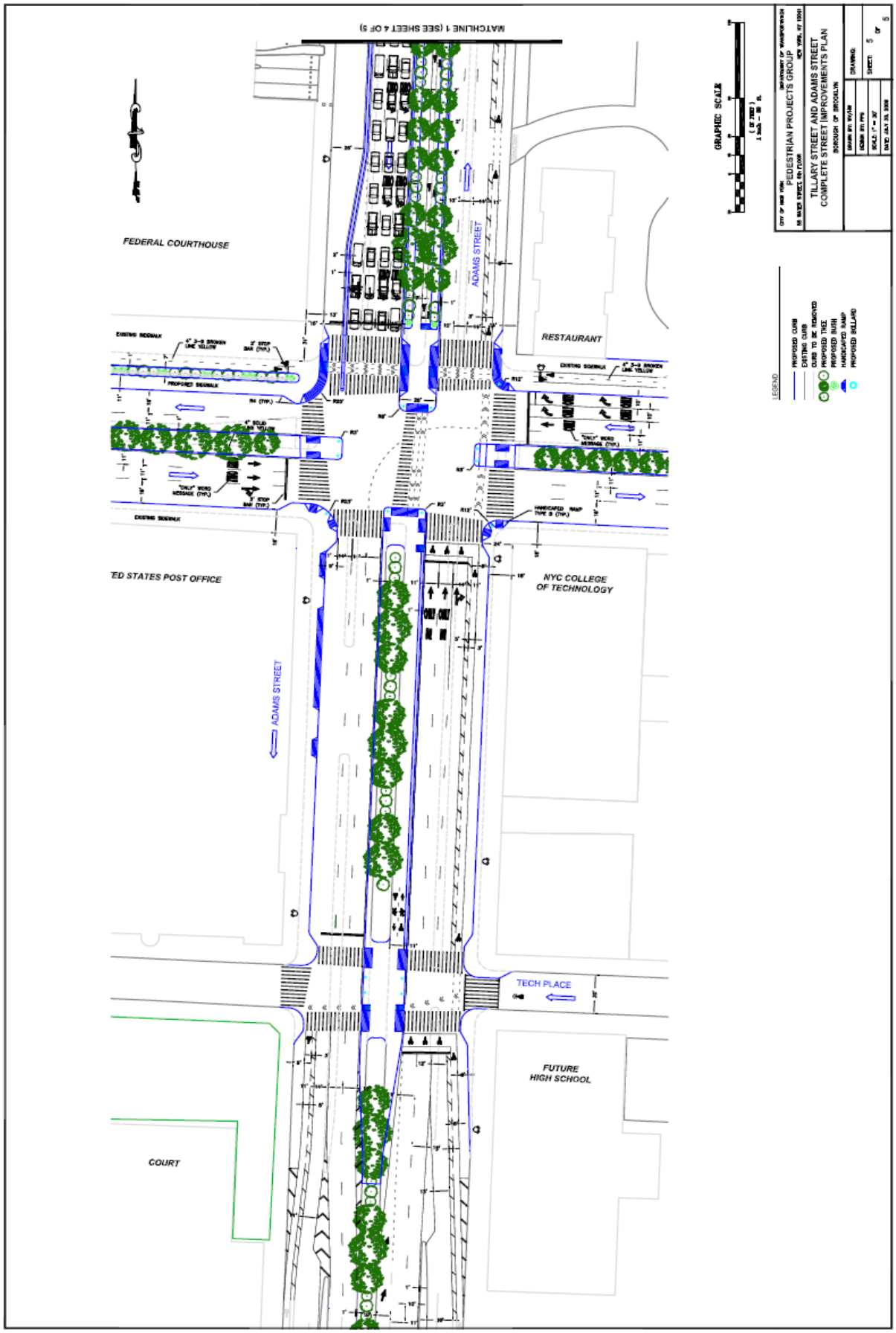

MATCHLINE 1 (SEE SHEET 4 OF 5)
FEDERAL COURTHOUSE
ADAMS STREET
RESTAURANT
EXISTING SIDEWALK
PROPOSED SIDEWALK
"ONLY" WORD MESSAGE (TYP.)
HANDICAPED RAMP TYPE B (TYP.)
ED STATES POST OFFICE
NYC COLLEGE OF TECHNOLOGY
ONLY / ONLY
TECH PLACE
FUTURE HIGH SCHOOL
COURT
GRAPHIC SCALE
LEGEND
PROPOSED CURB
EXISTING CURB
CURB TO BE REMOVED
PROPOSED TREE
PROPOSED BUSH
HANDICAPED RAMP
PROPOSED BOLLARD
CITY OF NEW YORK
DEPARTMENT OF TRANSPORTATION
PEDESTRIAN PROJECTS GROUP
TILLARY STREET AND ADAMS STREET
COMPLETE STREET IMPROVEMENTS PLAN
BOROUGH OF BROOKLYN
DRAWING:
SHEET: 5 OF 5

EXHIBIT H

GENERAL REQUIREMENTS FOR
ENGINEERING DESIGN AND RELATED SERVICES

****

The General Requirements are available at the website below.

http://www.nyc.gov/html/ddc/html/pubs/pubs_infrastdts.shtml

EXHIBIT H

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

GENERAL REQUIREMENTS

FOR

ENGINEERING DESIGN AND RELATED SERVICES

IN CONNECTION WITH

HIGHWAY, SEWER, WATER MAIN, STREET LIGHTING AND TRAFFIC SIGNAL WORK

AND OTHER WORK INCIDENTAL THERETO

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GENERAL REQUIREMENTS FOR DESIGN SERVICES

The General Requirements set forth the basic requirements to be met in the performance of various design services.

1. DEFINITIONS

(i) The words "Preliminary Design" where used herein are understood to mean the collection of data; identification, study and resolution of design issues; and the development of approved Conceptual-Schematic Geometric Designs.

(ii) The words "Preliminary Design Services" where used herein include the specific Preliminary Design Services identified in Section 2.3.A of these General Requirements and other design services that are needed to fully develop the Preliminary Design for a project including the preparation of a fully coordinated set of technical supplements, results and recommendations of studies, and schematic geometric designs.

(iii) The words "Final Design" where used herein are understood to mean development of detailed designs for street, sewer and water main work; the detailed design of all appropriate street elements and appurtenances; and the preparation of fully coordinated construction Contract Documents that are ready for bidding.

(iv) The words "Final Design Services" where used herein include the specific Final Design Services identified in Section 2.3.A of these General Requirements and other design services that are needed to fully develop the Final Design for a project including fully coordinated final contract documents.

(v) The Words "Extra Work" where used herein are understood to mean additional engineering design services not included in the contract.

2. GENERAL DESCRIPTION OF SERVICES

2.1. (a) SERVICES FOR A SPECIFIC PROJECT: The Consultant shall be required to provide engineering design and related services set forth in Article 6 of the Contract.

(b) SERVICES ON A TASK ORDER BASIS: When Requirements Contract is used, the Consultant shall be required to provide engineering design and related services for various infrastructure projects for the Department of Design and Construction on an as needed basis. In that event, the Commissioner shall issue a Task Order to the Consultant. The Consultant shall provide services in accordance with the Task Order for the Project specified therein. The Consultant shall not perform services pursuant to the Requirements Contract until the Commissioner has issued a Task Order. The engineering design and related services the Consultant may be required to provide for the Project specified in the Task Order shall include without limitation the services set forth in Article 6 of the Contract

2.2. PAYMENT FOR SERVICES: The terms and conditions regarding payment to the Consultant are set forth in Article 7 of the Contract.

2.3. TYPES OF SERVICES: The types of engineering design and related services that the Consultant is required to provide include preliminary and final design services, extra work and reimbursable services.

A. Preliminary and Final Design Services: The scope for preliminary and final design services for a specific project may include any of the tasks listed below:

(1) PROJECT DEVELOPMENT/IDENTIFICATION
(2) TOPOGRAPHIC SURVEY
(3) TRAFFIC STUDY PROGRAM
(4) HARDWARE AND BASIN CONDITION INVENTORY
(5) SUBSURFACE EXPLORATION PROGRAM
(6) VAULT PROGRAMS
(7) RAILROAD AND ABANDONED TROLLEY FACILITIES RESEARCH
(8) ROADWAY PAVEMENT DESIGN
(9) EMBANKMENT PROTECTION STUDY
(10) SCHEMATIC GEOMETRIC DESIGN
(11) ACQUISITION STUDY AND MAPPING
(12) QUANTITY AND COST ESTIMATING
(13) SEWER DATA SURVEY, AREA DRAINAGE AND GRADE STUDY, DRAINAGE PLAN

(14) HAZARDOUS WASTE AND SITE CONTAMINATION
(15) STREET DESIGN INCLUDING STUDY AND DESIGN OF STREET GRADES, STUDY AND DESIGN OF STREET DRAINAGE, AND PERMANENT STREET SIGNS
(16) TREE INVENTORY
(17) TREE IMPACT MITIGATION AND TREE PLANTING PROGRAM
(18) SEEPAGE BASIN AND/OR HIGHWAY DRAIN DESIGN
(19) SEWER DESIGN
(20) WATER MAIN DESIGN
(21) STREET LIGHTING SYSTEM DESIGN
(22) TRAFFIC SIGNALS SYSTEM DESIGN
(23) FINAL DESIGN OF RETAINING WALLS AND BULKHEADS
(24) CONSTRUCTION STAGING AND MAINTENANCE AND PROTECTION OF TRAFFIC
(25) PREPARATION OF SPECIFICATIONS
(26) REVIEW AND ANALYSIS OF BIDS
(27) ELECTRONIC ARCHIVING AND INDEXING
(28) SIDEWALK CELLAR DOORS CONDITION INVENTORY
(29) BUILDINGS RESEARCH
(30) CONSTRUCTION CONTRACT DURATION/SCHEDULING STUDY
(31) SCHEMATIC LANDSCAPE/URBAN DESIGN
(32) FINAL LANDSCAPE/URBAN DESIGN
(33) LANDSCAPE/URBAN DESIGN CONSTRUCTION SUPPORT SERVICES
(34) DESIGN OF MODIFICATIONS TO SUBWAY VENTILATORS
(35) ENVIRONMENTAL ASSESSMENT STATEMENT (EAS)
(36) UNIFORM LAND USE REVIEW PROCEDURE (ULURP)
(37) CLEANING, TELEVISION INSPECTION AND VIDEO TAPE RECORDING OF SEWERS
(38) DRAINAGE PLAN GRADE IMPACTS AND GRADE IMPACTS MITIGATION STUDIES
(39) FINAL DESIGN OF STEP STREET
(40) SCHEDULING AND PROGRESS REPORTING

The above tasks are described in detail in Section 4 of the General Requirements.

When the Consultant and/or DDC identify that the Project has a potential for use of the sustainable designs for any of the tasks provided in the scope of design Services, the Consultant shall incorporate these designs during development of such tasks as the Schematic Geometric Design alternatives, Schematic Landscape and/or Urban Design, Roadway Pavement Design and any other street elements. The Consultant shall follow High Performance Infrastructure-Best Management Practices (BMP) based on the core principles of sustainable design, as described in the DDC High Performance Infrastructure Guidelines, during the performance of the Design services. The Consultant shall analyze the environmental, social and economic benefits of each alternative and include the results of its studies and its recommendations in a report. In addition, the Consultant shall include the approved design alternative in the PDI report.

B. Extra Work: During the term of the contract due to unforeseen occurrences, additional engineering design services may be required in order to complete the project. Upon commissioner's written approval such a task shall be considered as Extra Work. Changes in the Contract due to such extra work shall be processed in accordance with the contract agreement.

C. Reimbursable Services: The Consultant may be directed by the Commissioner to provide Reimbursable Services for the Project, as set forth below. The Consultant shall provide such Reimbursable Services, if so directed in writing by the Commissioner. The Consultant shall provide such Reimbursable Services through entities approved by the Commissioner, and shall utilize the method of procurement and form of payment directed by the Commissioner. The Consultant is not entitled to payment for professional services to procure, manage and supervise Reimbursable Services required in connection with Preliminary Design Services and Final Design Services.

Reimbursable Services shall be such services determined by the Commissioner to be necessary for the Project, and may include, without limitation, the services set forth below:

(a) Subcontractor services for borings, excavation of test pits, cleaning and television inspection and video tape recording of sewers, and phase I testing and specifications for hazardous waste.
(b) Laboratory services for soil classification or other necessary testing or analysis.
(c) Printing of design documents, except for printing performed in the Consultant's office.
(d) Long distance travel. In the event the Consultant is directed in advance in writing by the Commissioner to provide services which require long distance travel, the Consultant shall be reimbursed for expenses incurred in connection with such long distance travel. Long distance travel shall mean travel which is in excess of 75 miles from whichever of the following is closer to the destination: (1) Columbus Circle, or (2) the Consultant's home office. Consultants and/or Subconsultants that are not located in New York City or its vicinity shall not be entitled to reimbursement for transportation expenses.

(e) Filing fees and related application fees for New York City agencies.
(f) Fees for street opening permits.
(g) Arboricultural services. Arboricultural services shall be in accordance with standards and requirements of the New York City Department of Parks and Recreation ("DPR") for tree planting, protection and preservation. The Commissioner reserves the right to direct that method of payment for Arboricultural Services shall be on a Time Card basis in accordance with the All Inclusive Hourly Rates set forth in the Contract.
(h) Bulk postage for Mass Mailings No.1 and No.2, Encroachment Notices, Cut and Fill Consent Notices, and requests for permission to enter private property, including certified mail with return receipts.
(i) Any other services, determined by the Commissioner to be necessary for the Project

2.4. CRITERIA FOR SERVICES: The Consultant shall perform all required engineering design and related services in accordance with the following: (a) the Specific Requirements for the Project issued by the Commissioner, (b) all applicable local, state and federal laws, rules and regulations, including without limitation, the New York City Building Code and the Americans with Disabilities Act and (c) the criteria set forth below:

A. New York City Department of Transportation Standard Details of Construction for Highway Work
B. New York City Department of Design and Construction, Infrastructure Division, Design Guidelines and Directives
C. New York City Department of Transportation Street Design Manual - 2009
D. New York City Department of Design and Construction, High Performance Infrastructure Guidelines- Oct. 2005
E. New York City Department of Transportation World Class Streets
F. New York City Department of Environmental Protection Sewer Design Standards
G. New York City Department of Environmental Protection Water Main Design Standards

DDC will provide the design standards to the Consultant or will advise the Consultant where such standards may be obtained.

- Additional Provisions Applicable to Design:

  (a) Separate Drawings: The Consultant shall prepare separate contract drawings for demolition, excavation, foundation, sewer lines and water mains (when warranted), structural work, street lighting work, and traffic signal work.

  (b) Coordination and Development: All contract drawings and specifications shall be properly coordinated so as to preclude the necessity for changes, adjustments or extra work orders during construction. All contract drawings and specifications shall be developed with construction details sufficiently shown and with figure dimensions given and specifications adequately stated so as to enable prospective bidders and contractors to make accurate and reliable estimates of the quantities, quality and character of the several kinds of labor and materials required to construct and complete the Project in a first class workmanlike manner and to accomplish adequately the purposes and uses intended for the Project.

  (c) Equipment or Materials: Any equipment or materials included in the contract drawings and specifications shall become a fixed part of the Project and shall be essential to render the Project fit for its intended use.

2.5. FINAL CONTRACT DOCUMENTS: Upon completion of the services required for the Project, the Consultant shall hand-deliver to the Commissioner the following as applicable:

(a) All material originally transmitted to the Consultant at the inception of the project;
(b) The complete set(s) of original signed Contract Documents;
(c) The complete set(s) of original contract specifications;
(d) The complete set(s) of Addenda;
(e) The original work sheets for the Consultant's quantity take-offs and cost estimates- both preliminary and final;
(f) The original Scope packet;
(g) Any permits that were needed;
(h) The original project files complete with all documentation;
(i) A complete computerized files index and one hard copy thereof, cross indexed by subject, activity, Agency and/or jurisdiction and/or persons name;
(j) All computer files including CAD files and scanned documents;
(k) All records, logs, computations, photographs, etc, compiled in connection with Borings, Soils Testing, Test Pits, etc;
(l) All contract records material shall be packaged and delivered to the City in temporary, uniform sized, matching, heavy duty flat file/roll file/letter file type cardboard shipping/transfer carton(s). Typed labels shall provide information on contents and number of cartons in the set.

3. DESIGN STANDARDS AND PROCEDURES

A. All information and data, which are part of the Commissioner's records, are available to the Consultant for the proper prosecution of this contract. This may be supplemented by information obtained from other agencies and sources. Before beginning the work to be done for each project, the Consultant shall make an examination of the site designated for the project, note all conditions and implications of same and make all necessary surveys pertaining to the project.

B. The Consultant shall perform design services and prepare the Contract Documents with reference to, and in conformity with, such information and data as to existing and legal lines, legal grades, approved drainage plans, sewers, subsurface structures, conditions and facilities, etc., as may be furnished to him by the Commissioner and other agencies, supplemented by information obtained from utility companies and others, and a personal examination, inspection and survey of the site by the Consultant. The Consultant shall obtain any such necessary additional information and data not furnished to him as aforesaid and shall design and plan the work with reference thereto and in complete conformity therewith.

C. The Consultant shall conform to the procedural standards as described hereinafter, and all design standards as identified in the latest edition of New York City Department of Design and Construction, Infrastructure Design Guidelines and Directives. The Consultant shall conform to instructions and/or directions promulgated at project strategy meetings, and/or conform to general and customary Agency practices, or as otherwise directed by the Commissioner.

The reporting, design and specifications of the project shall be in accordance with such standards of reporting, design and construction as the Commissioner may furnish. In the event that the Consultant recommends a patented article, he shall notify the Commissioner in writing of such designated article.

D. The Consultant shall be accountable to initiate actions deemed normal and customary by a prudent and responsible consultant; including incremental submissions and/or review(s) of the proposed designs to client agencies and interested parties, and coordination meetings that are needed to expeditiously resolve questions and concerns necessary to obtain required acceptance, concurrence and/or approvals, and to meet the project milestones on schedule.

E. The Consultant shall perform all appurtenant designs/analyses/ surveys/investigations that are necessary to develop completely integrated/coordinated designs.

F. The Consultant shall make all required submissions formally, timely and in writing, with a copy of all transmittals being sent to the Department of Design and Construction. Submissions shall be either hand delivered, delivered by messenger, overnight mail and/or other express delivery, facsimile transmittal, or electronic mail.

G. The Consultant shall perform the tasks that are included in the General Requirements and the Specific Requirements for each project in accordance with an incremental approach.

H. The Consultant shall complete the tasks that are included in the General Requirements and the Specific Requirements for each project for acceptance, concurrence, and/or approval, in accordance with the standards of the agencies/parties having jurisdictional responsibilities for said tasks and, further, conditioned upon acceptance by the Department.

I. All tasks shall be fully coordinated and fully integrated into the contract documents.

J. The Consultant shall develop/produce the Contract Documents, or portions thereof, for mass mailing(s) and/or incremental submissions to affected public, private and City agencies - as required, evaluate review comments and incorporate them into the contract documents - where appropriate. The Consultant shall provide sufficient numbers of bound, collated copies of documents, including reports, estimates, design packets, plans, as required, for the normal and reasonable progression of the Contract work.

K. The Consultant shall make all submissions in accordance with the approved work plan and schedule.

L. The Consultant shall thoroughly check <u>all</u> submissions for accuracy, completeness, and appropriateness prior to submission.

M. PERFORMANCE EVALUATION

The Consultant, including all sub-consultants, is hereby placed on notice that the City shall be preparing and filing performance evaluation reports - which will include an assessment of the Consultant's and each sub consultant's performance and will be specifically based on the quality and accuracy of submissions; completeness and thoroughness of submissions; promptness and timeliness of project submissions; and promptness and timeliness of meeting scheduled milestones.

N. DRAFTING REQUIREMENTS

1. All drafting, contract drawings and non contract drawings, including but not limited to sketches, design study drawings, working drawings, cross sections, profiles, and supplementary profiles, shall be prepared on a computer aided drafting and design (CAD) system.

2. The Consultant shall submit a sample(s) of drawing file(s) to the Commissioner at the initial drawings preparation stage and request that a translation test be run to determine compatibility with the Department's CAD system. The computerized drawing files shall be 100% compatible with the Department's CAD system and shall be 100% translatable. It shall be the Consultant's/Surveyor's responsibility to provide and insure compatibility with the Departments CAD system.

3. The Consultant shall, as directed by the Commissioner or as stipulated in the Specific Requirements for each project, prepare surveys, plans, specifications and estimates in either the British System of Measurement or the Metric System of Measurement.

4. The Consultant shall conform to currently applicable Departmental Standards in the plotting and drafting of all work, required under this contract. In general, this shall include, but not be limited to the following:

(a) All plotting shall be in ink, monochrome or color as directed.
(b) Drawing sheets will generally be F Size (28" x 40"). However the size of drawing sheets shall be customized to suit the needs of the specific project, and the size to be used for the project shall be determined by the Commissioner in consultation with Consultant.
(c) Plans and profiles shall generally be drawn to the following scales:

For English Measurements:

(i) Plans are to be drawn to a scale of 1" = 30' horizontally
(ii) Roadway profiles are to be drawn to a scale of 1" = 2' vertically and 1" = 30' horizontally
(iii) Sewer profiles are to be drawn to a scale of 1" = 5' vertically and 1" = 30' horizontally

For Metric Measurements:

(i) Plans are to be drawn to a scale of 1:300 horizontally
(ii) Roadway profiles are to be drawn to a scale of 1:30 vertically and 1:300 horizontally.

However, the scales shall be customized to meet the specific needs of each project, and shall be determined by the Commissioner in consultation with the Consultant.

(d) Final Contract Drawings shall be printed on double matte 4 mil mylar.
(e) All drawings shall utilize standard Departmental format(s), symbols, line styles, text fonts, font size, and layering conventions, or shall be customized as required by and subject to approval by the Commissioner.
(f) All printing and line work shall conform to current Departmental standards.
(g) All final contract drawings shall be in ink, on Hurculene or Mylar, or approved equal.

O. DESIGN COORDINATION

1. OTHER AGENCIES AND JURISDICTIONS

(a) The Consultant shall provide full coordination with all relevant individuals, agencies, utilities, and jurisdictions that have an interest in the project or are impacted by the project or its design, and shall execute the studies and designs required under the tasks included in the Specific Requirements in full coordination with all such entities.

(b) The Consultant shall provide such surveys, plots, prints, copies of the preliminary design documents, technical supplements, final design plans and contract documents, etc., as may be needed at conferences with the Commissioner and the representatives of other agencies relative to the project, and shall attend such conferences as required by the Commissioner.

The said surveys, profiles, reports, contract documents, etc., shall be approved or rejected by the Commissioner or modified by the Consultant as directed by the Commissioner.

(c) The Consultant shall take cognizance of other agencies' projects under design or construction within the vicinity of any project for which it is providing services, and shall coordinate the design proposals with the design(s) for such other project(s), in accordance with information obtained during coordination of the Design Program.

2. MEETINGS

(a) The Consultant shall expeditiously meet with the parties involved in issue(s) arising from or impacting on a project, to precisely and specifically identify the issue(s), to document prior actions, to obtain data and information, to identify alternatives, to record findings, and shall function as Chairperson in arranging for and conducting meetings and conferences as required.

(b) The Consultant shall generally perform all coordination with the various affected jurisdictions through personal contact. Coordination limited solely to telephone contact shall be considered inadequate for the purposes of this Contract.

(c) It shall also be understood that for the purposes of this contract, written communication alone shall be deemed an incomplete and inadequate strategy for "proper" coordination and problem resolution.

(d) The Consultant shall be responsible for the initiation of all actions regarding responses to requests to the Department and to other agencies/jurisdictions/individuals, for the initiation of incremental reviews, approvals and comments relative to the proposed design(s) or issue(s), including follow-up strategies, as required, and for the expeditious resolution of design questions, issues and concerns, with a view toward meeting the contractual and/or project milestone schedule.

(e) The Consultant shall be accountable to prepare specific and accurate draft and final minutes for meetings and conferences required in the timely performance of contractual work. The draft minutes shall be prepared and circulated among the interested parties within two (2) business days of the meeting. Upon receiving comments on the draft minutes by the interested parties, the Consultant shall revise the minutes, where appropriate, and shall coordinate the approval and distribution of final minutes.

3. CORRESPONDENCE

a) The Consultant shall be accountable to initiate, prepare, and distribute any correspondence necessary in connection with the timely performance of contractual work, respond to inquiries and/or answer questions.
b) The Consultant shall prepare and mail either directly or under signature of the Commissioner, all correspondence required for a successful and timely completion of contractual work. Each letter shall be "customized" to reflect the specifics of the correspondence's purpose and function, and shall be "specific" to the inquiry and/or request being made. Responses shall also be customized with specificity regarding the incoming question and/or inquiry, shall be logically organized, professionally written, and shall be complete and thorough.

4. INCREMENTAL AND FINAL REVIEWS

a) The Consultant shall be responsible for the initiation of all actions, including the reiteration of submissions needed to expedite and advance the development, approval and acceptance of the designs and contract documents in conformity with the project objectives.

b) As requested by the Department, the Consultant shall provide copies of appropriate correspondence and prints of drawings as may be required to keep various Agency(s) informed regarding the details/progress/status of the project.

c) The Consultant shall, in accordance with the Mass Mailings No. 1 and No. 2 required in the Street Design Task, and as otherwise deemed appropriate by the Commissioner, submit copies of Schematic Design Drawings, the Preliminary Contract Drawings and Pre-Final Contract Documents to the Department and to other City, public and private agencies, utilities and other parties which, based on project components and site conditions in the judgment of the Consultant jointly with the Commissioner, may have an interest in the project area.

d) The Consultant shall review, evaluate and incorporate comments received, as follows:

i) Where comments pertain to design being performed under the jurisdictional responsibility of other agencies, the Consultant shall make requested changes to the satisfaction of said agencies as long as those requests remain technically and policy wide reasonable.

ii) Where comments pertain to requested changes in street design or additional appurtenant work, the Consultant shall evaluate requested changes and additional appurtenant work and, upon receipt of approval by the Commissioner, shall incorporate and integrate all appropriate changes into the composite Pre-Final Contract Documents.

iii) Wherever, in his/her judgment, compliance with an agency requirement is not being recommended or pursued the Consultant shall advise the Commissioner. Where comments are deemed to be not feasible or practical, or where they are deemed to be incompatible with the design, the Consultant shall, as directed by the Commissioner meet with the affected agencies to discuss/develop alternate solutions.

iv) Where comments pertain to requests by various interested agencies to have their completed, furnished designs incorporated into the composite Contract Documents, the Consultant shall evaluate such requests and review submitted design documents (including plans, specifications and Consultant's estimates). Upon concurrence by the Commissioner, the Consultant shall coordinate the incorporation and integration of appropriate design documents into the composite Pre-Final Contract Documents, and shall make appropriate street design changes and/or adjustments as required.

v) Where certain design issues or comments remain unresolved, the Consultant shall arrange a meeting with the Commissioner and with the affected agencies to discuss acceptable solutions/alternatives.

vi) The Consultant, where directed by the Commissioner, shall present his designs to the Community Planning Boards.

5. SUBMISSION OF FINAL RECORDS

The Consultant shall file all required records and documents, not previously submitted, with the Commissioner within sixty (60) days of acceptance of the Preliminary Design and Investigation (PDI) Report by the Commissioner, or within sixty (60) days of the opening of bids for the construction contract or within sixty (60) days of the issue of notice by the Commissioner to the Consultant to cease work under this agreement.

6. PAYMENT

Cost of complying with the Design Standards and Procedures that are required herein shall be included in the Consultant's "Design Fee" unless otherwise stipulated in the Contract.

4. DESIGN TASKS

4.1 PROJECT DEVELOPMENT/IDENTIFICATION

Under this task, the Consultant shall assemble and review all record data for the project; conduct formal interviews with all governmental and non-governmental personnel, as directed by the Commissioner and as required for the efficient and thorough completion of the project, in order to ascertain all existing concerns, issues problems and programs directly related to the project area; fully coordinate all activities under this project with all Federal/State/City Agencies, public and private utilities, and organized groups which, in the opinion of the Commissioner and/or the Consultant, are necessary for the development of a fully coordinated design; and fully coordinate the work with various interested agencies as directed by the Commissioner. This shall include, but not be limited to, the following services:

A. The Consultant shall inspect the Project site and become familiar with the general and specific nature of the Project and surrounding area. The Consultant shall make a complete photographic record of the project area in order to illustrate the general nature/character of the neighborhood, as well as to illustrate the typical conditions and specific problems/issues/impacts of the proposed program and facilities. The photographs shall be either color or black and white, shall be presented in a four inch (4") by six inch (6") format, and shall be suitably indexed, bound and annotated in accordance with the directions of the Commissioner. The photographs shall be made part of the Technical Supplement Documentation required herein.

B. The Consultant shall assemble and review all available reports, designs, surveys, geological and boring data, maps, plans, documents, maintenance records, alignment maps, as-built drawings and construction photographs relative to the project, from, but not limited to the New York State Department of Transportation, Department of Environmental Protection, New York City Transit Authority, New York City Public Design Commission, New York City Department of City Planning, New York City Department of Parks and Recreation, Borough President's Office, New York City Police Department, Libraries, Historical Societies, and from other Federal/State/City/organized groups as may be directed by the Commissioner, or otherwise required for the purposes of fully coordinating the proposed street improvement program.

C. The Consultant shall obtain, and become familiar with, all applicable Departmental Design Directives, Standard Details of Construction, Administrative Procedural Bulletins and guidelines for the prosecution of the work/services under the various elements of the project, including all applicable New York State Department of Transportation guidelines where the project is State or Federally funded.

D. The Consultant shall interview all Department of Transportation maintenance and engineering personnel, as appropriate, to determine the location and extent of all problems and issues in the project area and immediate vicinity, where they affect the project.

E. The Consultant shall interview Department of Environmental Protection personnel, as appropriate, to determine the extent and location of all drainage, sewer and water supply problems/issues and proposed improvement programs by the City and/or Consultant, including catch basin rehabilitation, related to the project area and immediate vicinity, where they affect the project. The Consultant shall also coordinate with the Department of Environmental Protection relative to sewer cleaning and television inspection reports for any existing project sewers.

The Consultant shall review the results of sewer cleaning, sewer television inspection and manual sewer inspection programs performed under other contracts or by the Department of Environmental Protection personnel as they relate to this Project; coordinate the results and recommendations from said programs with this Project, and integrate and incorporate any required sewer work into the contract documents.

F. The Consultant shall interview Department of City Planning personnel, as appropriate, to determine the extent and location of all proposed development/improvement projects in the vicinity of the project area to ascertain the impact that these improvements will have on the project.

G. The Consultant shall interview the District Manager(s), Planning Board(s) personnel and additional interested parties, as deemed appropriate by the Commissioner, to determine their concerns regarding the project street(s).

H. The Consultant shall research and study the following in order to ascertain their impact on the proposed project: zoning, existing land use, traffic generators, traffic operations, legal grades, right-of-way ownership, horizontal alignment, vertical alignment, accident records, maintenance of traffic, revitalization/ construction, and the functional relationship of the site to the Borough/City.

I. The Consultant shall analyze the expressed needs and concerns of the parties contacted, and shall address those needs/concerns that are pertinent to the project. The Consultant shall be accountable to develop and pursue a recommended course of action and/or strategy to resolve those issues which are pertinent to the project in a timely manner and in accordance with the Contract time of completion stipulations.

J. The Consultant shall fully coordinate the identification of all current and future planning, design, and construction projects by the City such as Water Main projects, Park projects, Street Lighting projects, Fire and Police Communications projects, Traffic Signalization projects, etc. The Consultant shall recommend programming alternatives and staging, as required.

K. The Consultant shall fully coordinate the identification of all current and future planning, design, and construction projects of a significant nature by parties other than the City (private utilities, authorities, government and non-government agencies, abutting property owners, etc.), and shall recommend programming alternatives and staging, as required.

L. The Consultant shall coordinate the proposed program with the Local Community Board(s), the Borough President's Office, the Department of City Planning, the Department of Parks and Recreation, the Department of Environmental Protection, the New York City Public Design Commission, the New York State Department of Transportation, and other parties as may be designated by the Commissioner or as required for the efficient completion of the specific project, and shall identify and resolve all requirements, conditions and issues as presented by said parties. In addition, the Consultant shall hold a public meeting, to discuss/present the impacts/elements of the proposed reconstruction program.

M. The Consultant shall coordinate the proposed program with all public and private utilities and prepare a Preliminary Utility Impact Assessment report concerning the impact that the proposed improvement program will have on existing/proposed utility facilities.

N. The Consultant shall prepare and submit a Preliminary Design Report concerning, the Project. The report shall document all issues and concerns identified; existing substandard features and the measures proposed to address the issues and substandard features identified; alternative schematic designs considered and design recommendations that have been accepted by the Commissioner, including Sustainable Design alternatives, if any, as described in Section 2.3 and 4.10.2.e of these General Requirements.

O. The Consultant shall prepare a Technical Supplement to the Design Report. The Technical Supplement shall contain all applicable records/deliverables of the Preliminary Design Program. The sections of the Technical Supplement shall include, but not be limited to, the following: pavement design(s); tree inventory; topographic survey documentation; utility survey documentation; traffic study; subsurface exploration data; alternative schematic design treatment(s); correspondence and other documentation, as required.

4.1A DESIGN REPORT

For Federally Funded projects, the Consultant shall prepare a Project Scoping and Final Design Reports for the project based on the results of its investigations. Based on the complexity of the project and the type of funding sources, the Project Scoping and Final Design Reports shall be in accordance with the NYSDOT Project Development Manual and/or the NYSDOT Procedures for Locally Administered Federal Aid Projects. The Design Report will serve as the engineering report used to convey information on the project conditions, needs, objectives, transportation conditions, environmental concerns, feasible alternatives, and cost basis for the selection of the preferred alternative.

The Consultant shall follow the latest version of NYSDOT Project Development Manual and/or the NYSDOT Procedures for Locally Administered Federal Aid Projects for preparation of the Project Scoping Report/Final Design Report (PSR/FDR) to obtain design approval. The actual format and sections of the Design Report must follow the PSR/FDR Shell available on the NYSDOT website.
The website for the NYSDOT Project Development Manual is:
https://www.nysdot.gov/divisions/engineering/design/dqab/pdm
The website for the NYSDOT Procedures for Locally Administered Federal Aid Projects is:
https://www.nysdot.gov/divisions/operating/opdm/local-programs-bureau/locally-administered-federal-aid-projects

In conjunction with the Design Report, the Consultant shall prepare the National Environmental Policy Act (NEPA) and the State Environmental Quality Review Act (SEQRA) checklists and the City Environmental Quality Review (CEQR) Process for inclusion in the Final Design Report. The determination and the checklist shall be included in the report as an appendix.

The Design Report shall be submitted to the NYCDDC and other Agencies designated by the Commissioner for review and comments. Upon approval from the NYCDDC, the Design Report will be sent to NYSDOT for Final Design Report Approval.

4.2 TOPOGRAPHIC SURVEY

Under this task the Consultant shall execute a Topographic survey and produce a Composite Utility Plan in conjunction with the Project.

A. LIMITS

1. The location and limits of the Topographic Survey are described in the Specific Requirements for each project.

2. The limits of the Topographic Survey(s) shall extend into intermediate intersections a distance of 50 feet, measured along the center line of the respective street from the building line projection, and 50 feet beyond the perimeter of all islands and gores. Additionally, the topographic survey shall include terminal intersections and extend 50 feet beyond into each intersection leg.

3. The surveyor shall locate property possession lines within the limits of the Topographic Survey.

B. GENERAL

1. The Consultant shall submit, for approval, the names and experience portfolios of all persons and Sub Consultants proposed for use concerning Topographic and Utility Survey(s) before start of work.

2. The Survey work shall include the field and office work, including drafting, required to make topographical and base line surveys, prepare Plan and Profile drawings and base line maps.

3. In preparing the Plan and Profile drawings, the Consultant shall take cognizance of the basic minimum requirements set forth herein, together with such other requirements as may be necessary for the complete fulfillment of this contract for the purpose for which it is intended.

4. All survey work shall be in the English System (U.S. Survey Foot).

5. All right-of-way (ROW) data, including baseline (centerline of ROW), baseline ties to survey control traverse, location of possession lines and location of property lines shall be prepared by a New York State licensed Land Surveyor. All topographic and utility data shall be prepared by or under the direct supervision of a licensed Land Surveyor. The Composite Utility Plan shall be prepared by a New York State licensed professional engineer.

6. The Datum Plane shall be “as in use” by the respective Borough President’s Office unless otherwise directed by the Commissioner.

7. Aerial Photogrammetry may be utilized for the preparation of survey plans as outlined in Section E. However, the Consultant will be required to conduct a detailed Topographical and Utility Survey by using standard electronic/ manual methods to produce utility/composite plans as per the contract specifications.

8. All elements of the Topographic Survey(s) shall be referenced by station and offset to a Center Line Baseline for the Mapped Street which shall be established/coordinated/tied into the coordinated survey traverse, in accordance with the current Departmental Standards

9. A stationed R.O.W. centerline baseline shall be provided and tied to the possession and/or R.O.W. lines.

10 All survey work procedures, minimum accuracy, and error of closure standards for traverses and/or Bench Runs shall conform to specifications required herein.

C. INFORMATION TO BE OBTAINED AND SHOWN

The complete topographical surveys are to be referenced by station offsets to the borough monument lines, or to base lines established from said borough monument lines or to established building lines in mapped streets, with all elevations referenced to established borough bench marks or to bench marks set from said borough bench marks. Where no physical monument system exists the Consultant shall research the survey record diagrams of local properties to identify fixed points on ground that have known dimensional ties to the legal Block and Lot lines that abut the project limits. Where no City coordinate system exists, the Consultant must perform the work in the required NY State Plane Coordinate system. Upon written authorization from the Commissioner, the Consultant may use an independent coordinate system.

The Topographic Survey(s) shall identify and locate all legal dimensions, property boundaries, and physical features within the contract limits that are needed to produce a comprehensive design, including, but not limited to, the following information:

1. Streets, Pavements and Curbs

a. Established R.O.W. width and legal grade of streets and easements. The established R.O.W. width shall be based on the lines as shown on the Final Maps for each respective borough's Topographical Bureau Final Map, or if the street has been revised, shall be based on the lines as shown on the Alteration Map for the same section of roadway.
b. Location and widths of existing streets, roadways, sidewalks and grass areas; and edge of pavements.
c. Block dimensions. If dimension can not be obtained from the Final City Map, block dimensions can be obtained from other sources such as Tax maps, private surveys etc.
d. Block interior corner angles.
e. Location and type of material of curbs, drop curbs, driveways, sidewalks, headers, edges of pavement and changes in types of pavements.
f. Elevations of the street surface (to nearest hundredth of a foot) at fifty (50) foot intervals including P.C.'s, P.T.'s, midpoint of corner curbs, and changes in grade that are six (6) inches or greater, taken at the center line of road, top and bottom of curbs or edge of pavement, back of walk, and right of way line.

2. Properties, Buildings, Walls, Overhead Structures

a. Location and frontage size of the existing buildings abutting the street, identified by house number, type of building (frame, brick, etc. as well as use such as school, gas station, commercial, residential etc.), and number of stories, entranceways, together with elevation of first floor, garage entrance and elevation of basement and/or cellar doors.
b. Lot and block numbers for each building.
c. Location and identification of all abutting tax lots by Lot and Block Numbers (including those encroaching into the mapped right-of-way).
d. Location of all street encroachments including but not limited to hedges, fences (including height, type of material), steps, stoops, cellar doors, gratings, and connecting manhole located outside of project limits.
e. Locations, height, width, and type of material of retaining walls.
f. Location and elevations giving clearance of the undersides of overpasses, ramps and bridges and all columns and abutments for all grade separating structures.

3. Surface drainage structures and sewers

a. Location of all surface drainage elements including, but not limited to swales/ditches, brooks/creeks, streams/channels, watercourses, retention area, headwalls, swamp areas, and other drainage structures or appurtenances.
b. Location of all types of sewers, manholes, catch basins, inlets and their connections to the sewers. Also, location of the nearest connected sewer manhole (which may fall outside of the project limits).
c. Rim (center of the cover) and invert elevations of the manholes and inverts of existing sewers and their direction of flow. Size and type of sewers, size of manhole covers, location of forced mains, and pumping stations.

4. Utilities and Subsurface Facilities

a. Location, identification and size of all utility manholes, vaults, transformer chambers, valve boxes and gratings.
b. Location of water mains, electrical conduits, gas mains, telephone conduits, traffic signal conduit systems, street lighting conduit and feed systems, fire alarm systems, steam lines, and fuel oil lines.
c. Location and size of subways and tunnels, subway entrances, emergency exits, stairs, ventilation gratings, fan chambers, any other Transit Authority structure, and visible railroad and/or trolley tracks.
d. The Consultant shall research all available records of public and private utilities to obtain information regarding the type size and location of existing utility facilities that exist within the project limits defined herein.
e. The Consultant shall reconcile discrepancies in the location and identification of subsurface elements between the topographic survey and utility records.

5. Surface Features and Overhead Utilities

Location of all physical topographical features, including but not limited to, hydrants, bollards, lampposts, telephone and electric poles, including guys, identification as may be shown on pole, fire alarm boxes, mail boxes, traffic stanchions location, and clearance of wire crossing over roadways.

6. Trees and other Surface Conditions

a. Location and caliper of trees. The caliper shall be measured in 2" increments at a location of two feet above the base of the tree.
b. Location of rock outcrops, ditches, brooks creeks, streams, swamp areas, wooded areas, etc.

7. Shore Lines and Soundings

a. Location, limits and description of existing shorelines and bulkhead lines, pierhead lines, designated wetlands, easements, Land grants and Land grant easements.
b. Soundings shall be shown for a minimum distance of 100 feet beyond the existing shoreline or bulkhead for a width of 75 feet on each side of the centerline of the street. The soundings shall be shown on a grid system at 25-foot intervals.

8. Intersections

a. Elevations of the street surface (to nearest hundredth of a foot) at P.C.'s, Midpoint, P.T.'s and/or change in grade, six (6) inches or greater, taken at the centerline of road, top and bottom of curbs and at house lines.
b. Topographic information as described in this section above shall be obtained at intersections into the lateral streets for a distance of 50 feet from the R.O.W. lines on each side of the route of the limits of the project, unless otherwise directed.

9. Additional Requirements for Highway Projects

a. The precise location of property and "possession" lines, where different from property lines – which shall be tied to the roadway centerline baseline and the survey traverse. Possession lines and/or property line shall be identified by a deed search for each property listed.
b. Identification of all types of right-of-way and mapped streets, including "paper" streets, tax map streets, utility easements and private streets by name/location.
c. Identification of plazas, malls and public areas.
d. Location of corner curb, pedestrian ramps, distinctive/special sidewalk areas, bus pads, traffic islands and traffic channelization and vaults.
e. Location of sidewalk hardware such as coal chutes, oil fills, cellar doors, under sidewalk drains, sidewalk elevators, building sidewalk ventilation gratings, traffic signals, traffic signal poles, parking signs, parking meters, traffic control boxes, traffic controllers, traffic loop detectors, police call boxes, traffic stanchions, structural columns, artwork (all types), newsstand kiosks, sidewalk retail areas, areaways, railroad gates, trackage and cellar windows at grade.
f. Direction of traffic (flow line of traffic), and the location and type of lane and crosswalk markings, including school cross markings.
g. Horizontal locations shall be taken to the nearest tenth (1/10) of a foot.
h. Vertical locations (elevations) shall be taken to the nearest hundredth (1/100) of a foot (or as specified by the Commissioner) longitudinally at fifty foot (50) stations.
i. Full right-of-way, cross-sections stationed along the centerline baseline shall be taken at 50 feet stationing, centerline of intersecting streets, building lines at each intersection, property lines at each intersection, curbline(s) at each intersection, all breaks in grade. Stationing elevations shall be taken at the building line(s), fence lines, encroachment lines, top and bottom of curbs (including malls), 1/4 points of all roadways widths, center line of street, front and back edges of ribbon sidewalks, possession lines, and widening lines(s) where applicable.
j. Spot elevations shall be taken at all street/sidewalk surface hardware locations. If utility is other than a manhole or small valve, elevation on all corners shall be taken. In addition, steps (top & bottom of first riser), platforms, all building entrances, all lot lines (at property line/fence line), first floors, garage floors, back of sidewalk at all pedestrian and vehicular entranceways, ground elevations at all pedestrian and vehicular building entrances and/or building line, traffic islands, top of curb at both ends of drop curbs, top and bottom of curb at centerline of all drop curbs, driveways at all garage entrances, parking aprons, intersections (as required), corners [within crosswalk sidewalk quadrant(s)], all sewer rims (center of the cover) and inverts, Transit Authority (TA) ventilator structures (all corners), TA emergency exits (all corners), and as otherwise required for design.
k. The Consultant shall obtain additional spot elevations as follows: the curbside of tree base at the centerline of all existing trees and significant shrubs within the sidewalk areas, roadway areas and/or within right-of-

way, top and bottom of curb in front of all trees, average root zone elevations nearest curb, top of sidewalk at front edge and at back edge, fence line and/or building line.

l. Clearance on all overhead structures that are less than 16 feet from the roadway, including the underside of each bridge/overpass stringer at each lane - including entrance and exit portal locations.

D. MINIMUM REQUIREMENTS FOR SURVEYS

For all survey work procedures, minimum accuracy, and error of closure standards for traverses and/or Bench Runs shall conform to specifications required herein.

1. Vertical Control

Benchmarks – One permanent benchmark must be set at each extremity of the job in places where they will not be disturbed by construction. For projects over 1000 feet long, permanent benchmarks shall be set at the extremities and a minimum of 700 feet apart and a maximum of 800 feet apart. Typical benchmarks on permanent objects include: steps, settlement cuts on brick buildings etc. or by setting copper plugs in concrete posts if other appropriate fixed points are not available. Benchmarks shall be referenced to the appropriate datum for the borough in which the work is being done. The required method of obtaining elevations is differential leveling. The accumulative error in benchmark elevations shall not exceed 0.002 feet per set-up. A minimum of two (2) Borough President Bench marks must be tied to and verified for each project. When Benchmarks exceed maximum accumulative error, other benchmarks must be reconnoitered and measured until found benchmarks meet accumulative error specifications. All benchmarks must be accompanied by a sketch and accurate description so as to be easily recoverable. All turning points shall be accurately described. If electronic differential leveling is to be used, the Consultant shall provide a sample printout for approval before proceeding with work. Using other methods to obtain elevations such as Trigonometric, Reciprocal leveling and or methods using GPS equipment is allowable, but must be pre-approved in writing by the Commissioner before work commences.

2. Horizontal Control

The complete surveys are to be referenced from established baselines/traverse, or tied to borough monument lines. Where no physical monument system exists, the Consultant shall research the survey record diagrams of local properties to identify fixed points on ground that have known dimensional ties to the legal Block and Lot lines that abut the project limits. Where no City coordinate system exists, the Consultant must perform the work in the required NY State Plane Coordinate system. Upon written authorization from the Commissioner, the Consultant may use an independent coordinate system.

The baseline shall include a minimum of one permanent mark at the beginning, ending and angle base line points including one point at each street intersection. All marks shall be permanent such as; cuts in concrete, Monuments as required in undeveloped areas (Section F), pre-existing borough monuments, masonry nails, re-bar or pipes with survey cap in grass area etc. All permanent marks (baseline/traverse control) shall be witnessed to three permanent structures in three separate quadrants, and measured to the nearest one hundredth of a foot (0.01'). The allowable minimum error (precision of closure) in the base line/traverse closure after angular adjustment shall be 1 in 20,000. Measurement methods, other than electronic Total Station, such as using GPS equipment is allowable, but must be pre-approved in writing by the Commissioner before work commences.

E. MINIMUM REQUIREMENTS FOR SURVEYS USING PHOTOGRAMMETRY:

1. If aerial survey methods are to be used, they must meet or exceed ASPRS Class 1 map accuracy standards for 1"=30' mapping (American Society for Photogrammetry and Remote Sensing).

2. When using aerial photography for the survey, consultant must supply the Commissioner with the electronic photo used for the project in either color and/or black and white photo. If digital photo, it can be delivered in a translatable file JPEG, BMP etc. In addition the Consultant deliver the electronic file of the planimetric information which was based on the photo (translatable to AutoCAD format).

3. Vertical Control *(No vertical control may be set using <u>aerial</u> GPS methods)*

Benchmarks – One permanent benchmark must be set at each extremity of the job in places where they will not be disturbed by construction. For projects over 1000 feet long, permanent benchmarks shall be set at the extremities and a minimum of 700 feet apart and a maximum of 800 feet apart. Typical Benchmarks on permanent objects includes: steps, settlement cuts on brick buildings etc. or by setting copper plugs in concrete posts if other appropriate fixed points are not available. Benchmarks shall be referenced to the appropriate datum for the borough in which the work is being done. The required method of obtaining elevations is differential

leveling. The accumulative error in benchmark elevations shall not exceed 0.002 feet per set-up. A minimum of two (2) Borough President Bench marks must be tied to and verified for each project. When benchmarks exceed maximum accumulative error, other benchmarks must be reconnoitered and measured until found benchmarks meet accumulative error specifications. All set benchmarks must be accompanied by a sketch and accurate description so as to be easily recoverable. All turning points shall be accurately described. If electronic differential leveling is to be used, the Consultant shall provide a sample printout for approval before proceeding with work. Using other methods to obtain elevations such as Trigonometric, Reciprocal leveling and or methods using GPS equipment is allowable, but must be pre- approved in writing by the Commissioner before work commences.

4. **Horizontal Control**

A traverse shall be established to tie in all aerial controls. All traverse points shall be permanent marks such as; cuts in concrete, Monuments as required in undeveloped areas, pre-existing borough monuments, masonry nails, re-bar or pipes with survey cap in grass area etc. All permanent marks (baseline/traverse control) shall be witnessed to three permanent structures in three separate quadrants, and measured to the nearest one hundredth of a foot (0.01'). The allowable minimum error (precision of closure) in the traverse after angular adjustment shall be 1 in 50,000. Measurement methods, other than electronic Total Station, such as using GPS equipment is allowable, but must be pre-approved in writing by the Commissioner before work commences.

F. REQUIREMENTS FOR UNDEVELOPED AREAS

1. In undeveloped areas such as park areas, all topographic information shall be obtained within the width of the Right of Way as shown on the Final City Map of the proposed project or where no map exists, information shall be shown within a width of 50 feet on each side of the Centerline of the proposed project.

2. Where the work is in an undeveloped area, the survey work shall include the establishment of a baseline and benchmarks according to the following requirements:

a. The baseline shall be established with concrete monuments at beginning, ending and angle base line points and shall not be spaced more than 780 feet apart. Monuments are to be established by making cut marks on fixed object (curbs, sidewalks, etc.) where possible. Where fixed objects are unavailable, concrete monuments are to be set as described in (B) below. The allowable minimum error (precision of closure) in the baseline/traverse after angular adjustment shall be 1 in 20,000.

b. Concrete Monuments - Monuments shall be of concrete, 4"x4", 4 feet in depth, flush with natural ground.

c. Monuments shall be located so that they will not be disturbed during construction of the Capital Project. A copper plug shall be set in the top of the concrete cylinder portion of the monument or may be substituted for another type of marking as pre-approved by the Commissioner.

d. Horizontal and Vertical Control specifications must be met as described in section D and E.

e. Sufficient fixed witness points shall be set for each base line monument far enough away so that construction operations will not disturb them.

f. Cross-sections stationed along the centerline baseline shall be taken at 50 feet stationing, centerline of intersecting streets, R.O.W. lines at each intersection, curb line(s) at each intersection, all breaks in grade. Stationing elevations shall be taken at the building line(s), fence lines, encroachment lines, top and bottom of curbs or edge of pavement (including malls), ¼ points of all roadways widths, center line of street, front and back edges of ribbon sidewalks, possession lines, and widening lines(s) where applicable.

G. BASELINE MAP FOR UNDEVELOPED AREAS:

1. Where the work is in an underdeveloped area, a map showing the base line shall be prepared. The map shall show the base line with all cuts and witnesses for each base line monument. If necessary, enlarged details shall be drawn to show the witnesses. Borough President monuments shall be shown with their coordinate. Distances between cuts, base line angle and coordination of angle points on the base line shall be included. The map shall give descriptions of the benchmarks and their elevations with respect to the borough datum plane.

2. The map shall be at 1”=30’ scale, on 28”x40” size drawing, properly titled with a reference to the proper datum plane, scale and date included

H. RECORD MAINTENANCE

1. The Consultant shall keep all field notes and office computations in a neat and orderly manner, and clearly indexed. These field notes and computations shall be open for inspection and checking during the course of the work and shall be available for review thereafter. The Consultant shall, at all times, cooperate with the Commissioner for such checking of field work as may be necessary.

2. The Consultant is required to keep copies of ***all*** submitted documentation for a minimum of six years after contract is fulfilled for the Department to access upon request. During the contract period, upon request, the Consultant shall provide the Commissioner/representative with legible copies of all field notes on standard loose leaf field book that contain standard survey formats. Notes on the drawings shall refer to field book number and respective pages.

I. PREPARATION AND SUBMISSION OF DRAWING

1. The Consultant shall prepare drawings for the specified locations of the proposed Capital Project by means of Computer Aided Design and Drafting System (CADD).

2. All surveys in this contract shall be plotted on a CADD system and the computerized drawings shall be submitted in AutoCAD 2010 or latest edition “DWG” format. Data files shall be submitted in ASCII format. Drawings shall be layered in accordance with current Department requirements. Use of x-refs are prohibited.

3. All drawings shall conform to the Department standards, which include object naming conventions and integrity, special line style, symbology, character styles, layering conventions, file names and drawings codes.

4. All electronic media shall be sent on CD-ROM.

5. All media shall be clearly labeled and a listing shall be provided along with the media to verify contents of media.

6. The Commissioner will provide samples of line styles, character styles, symbology, object names and allowable layers.

7. The Consultant shall also supply the following information:

   a. A key plan on the cover sheet with areas delineated and numbered corresponding to the areas and sheet number of the Survey with the legend, shall be shown. For projects of 4,000 linear feet or more, the key plan shall be prepared by the Consultant. The layout and sheet numbering of the project area will be reviewed by the Commissioner for sufficiency of design purposes before submission of preliminary survey drawings. Layout must be approved in writing by the Commissioner before submittal of preliminary survey drawings.
   b. All maps, records and documents used in the preparation of the completed survey, including all available records of public and private utilities within the project limits.
   c. The Consultant shall submit to the Commissioner all original survey field notes.

8. The Utility Profile shall be plotted under the corresponding Plan view.

9. Where the work requires only one sheet, the sheet shall be arranged so that sufficient space is available for notes legend, and key plan.

10. The Plan and Profile drawings shall show a match line to tie together areas depicted on different sheets.

11. Where more than one sheet is required, the sheets shall be numbered consecutively.

12. All individual locations shall show the North Meridian oriented to top of drawing or to right margin of the drawing.

J. CLEAN BASE PLANS

1. The Consultant shall prepare Clean Base Plans - which shall be graphic representation of the project that is suitable for use as a base plan set for the development of Schematic, Preliminary, and/or Final Contract Documents. Graphic elements that shall be shown include mapped right-of-way lines (including lengths, block

interior angles and ROW widths, Legal Grades), property lines, possession lines, lot lines, Block and Lot numbers, house number, buildings (including number of stories, type and usage), ancillary development, street/sidewalk hardware (manhole covers, poles, etc), existing curblines and edges of pavement, bulkhead and pier head lines, limits of wetlands, easements, trees, theoretical centerline baseline with stationing, and north arrow.

2. Text elements shall be limited to street names, stationing, and other "NECESSARY" items. Generally, elements to be excluded include, but are not limited to: elevations, lane lines, redundant text, "condition" text. There shall be no labeling of walks, grass, etc. The Consultant shall submit a "one-sheeter" sample for approval prior to the development of the Topographic Program. No elevations will be shown on this plan. The base map shall be plotted on a separate 28"x40" (F) size with a horizontal scale of 1"=30'.

K. TOPOGRAPHICAL PLAN

1. The Topographical Plan(s) shall be plotted by superimposing the Topographic Survey data on to the Clean Base Plan.

2. Inverts and Rim (center of the cover) elevation shall be shown for sewers and catch basins. All street surface elevations as described in section C.1 "f" shall be shown. Elevations shall be shown on City owned "irons" only (not on private utilities). Legal grades shall be shown. Separate spot elevation drawings shall be produced where a full data plotting would produce a "crowded" presentation - as directed by the City.

3. Topographical Plan(s) limits shall be coincident with the topographic survey limits and as herein defined - including the nearest connected manhole outside the project limits.

4. The Topographical Plan(s) shall be of 28"x40" (F) size, and the scale of the drawings shall be 1"=30'. The scale shall be shown below the Plan view.

L. UTILITY PLAN AND PROFILE

1. The Utility Plan(s) shall be plotted by superimposing the Utility data on the Base Plans excluding all shown elevations in the Plan view (except for Legal Grades, which must be shown both in Plan and Profile view).

2. The Utility Profile(s) generally shall include cross sections of all sewer manholes, and all sewer pipes which are shown on the utility plan (excluding those on side streets). In addition, rim and invert elevations for all shown manholes, and invert elevations, sewer type, size, and pipe material for all shown sewer pipes must be indicated. Legal grade and roadway center line profiles must also be shown on the utility profile. .

3. Sewer and Water utilities shall be identified by approved line type with the following information identified: type of utility, size, configuration, etc.

4. Existing and/or "From Record" Sewer and Water utility lines shall be indicated and plotted to scale with approved line types.

5. Inverts and Rim elevation shall be shown for sewers in Profile view only.

6 Profile(s) limits shall be coincident with the topographic survey limits and as herein defined.

7. The Profile shall be plotted under the corresponding Plan view on a sheet of 28"x40" (F) size, and the scale of the drawings shall be 1"=30' Horizontal and 1"=5' Vertical. The scale shall be shown below the Profile view on the drawing.

8. The drawings shall contain a statement of the datum planes for elevations.

9. R.O.W. centerline baseline stationing shall be shown in the Plan view.

10. Labeling of physical features is required on this plan.

11. Legal Grades shall be shown on both Plan and Profile view.

12. Water Main profile shall be shown when existing water mains are greater or equal to 24" in size.

M. HIGHWAY PROFILE DRAWINGS

The Consultant shall prepare separate profile drawings satisfying the following parameters:

1. The plotting of highway profiles shall include drawing to scales to be determined by the Commissioner, which shall generally include:

   a. A horizontal scale, which is to be consistent with the horizontal scale selected for the Topographic Survey. (Current generally adopted scale is 1”=30’)
   b. A vertical scale which shall be customized to reflect the specific site and which shall require pre approval by the Commissioner. Datum planes shall be customized for each profile. (Current generally adopted scale is 1”=2’)

2. Match lines shall coincide with those utilized for the plotted topographic survey(s). In addition, profiles shall be extended beyond match lines in either direction, as required, to include the adjacent intersection.

3. Legends and labels shall be drafted on each sheet along the length of the profile to ensure its clarity.

4. Two or more sets of profiles will be required for each street: either the Northerly and Southerly or Easterly and Westerly.

5. The following profile lines shall be plotted for each profile set: Center Line of existing roadway, Top of Curb, Bottom of Curb, Encroachment Line/Back of Sidewalk Line, Building Line, Property Line, Possession Line/Widening Line, and Legal Grade, unless otherwise approved by the Commissioner.

6. Each profile set shall contain numerical elevation values plotted and drafted for each profile line for <u>all</u> captured cross-sections, points, spot elevation and, shall include the location and size of fronts of buildings, abutting the street, identified by house number together with full length plotting of first floor elevations, doorways, entranceways, garage floors, loading docks and bays, and overhead structures.

7. All profiles shall be plotted on screened grid, clearly labeled and stationed with numerical axis values shown. Legend of line types shall be shown on each profile sheet.

N. SURVEY CONTROL MAP

1. A 1”=50’ scale plot (or scale suitable to DDC) of the traverse showing angles and/or bearings, elevations of points, point number and coordinates of points, distances of the traverse lines, and nearest street names, along with the designation and type of points, shall be shown.

2. Witness ties to Horizontal Control shall be plotted separately at a smaller scale.

3. The above plan shall be submitted along with the field notes when submitting the preliminary drawings.

O. 3-D FORMAT

In order to ensure that the electronic CADD files submitted are deemed usable by DDC’s design group and/or DDC’s consultant, the CADD files must contain 3-D intelligence for all major drawing elements so that a 3-D surface model can be created.

Following is a list of some of the major drawing features which may be encountered during plan preparation that must contain 3-D intelligence and how they are to be depicted in the electronic CADD file submittals:

1. All curb lines (top & bottom), edge of pavement lines (concrete, asphalt, stone, etc.), edge of sidewalk lines and roadway centerlines shall be created as a 3-D polyline/breakline.
2. All Utility and Highway profiles must be in 3-D intelligence and submitted in a format which is usable with any 3-D design package delivered in Autodesk DWG format.
3. All major grade changes depicted in within the drawing file shall be created using 3-D polylines/breaklines. Examples of major break changes may include sloping embankments, driveways, building steps and entrances, constructed walls, on-site drainage swales, overhead railway structures, bridge abutments, etc.
4. All standard DDC symbols utilized in the creation of the working drawing shall be inserted at the field located elevation and remain as an intelligent block (do not explode the inserted blocks into separate entities).

5. All 3-D polylines/breaklines created within the electronic CADD file must be one continuous line segment.

6. When requested, all contour information depicted within the supplied CADD file must retain its original 3-D intelligence and be usable with any 3-D design package delivered in Autodesk DWG format.

7. All electronic design files submitted to the NYCDDC during the Preliminary and Final submissions ***MUST*** be in the Carlson File Format to ensure a seamless transition of data between Consultant and Client Agency. The files required to be submitted are; Field Coordination Data (.crd), Existing Surface Data (.tin), Profile Data (.pro), and Alignment Data (.aln).

P. DOCUMENTS TO BE DELIVERED

The following survey materials shall be delivered to the Commissioner on completion of survey:

1. All computations (Raw data files and all electronic files supporting the survey including 3-D files) and all original field notes - shall be permanently bound, sharp, clear, crisp, clean and "fixed", dated, suitably indexed and in a format as approved by the Commissioner, signed and sealed with original seal and signature by a New York State Licensed Land Surveyor.

2. All computations (Raw data files and all electronic files supporting the survey) shall be submitted on CD ROM.

3. All original notes and all utility drawings, plans and plates, including but not limited to the following:

   a. All As-Built Sewer Information, including As-Built `structural details of chambers.
   b. All utility plates (electric, telephone, gas and fire, cable, etc. from affected utility).
   c. All NYC Transit Authority Information (including Conrail, Amtrak, Metro-North and LIRR), including electric ducts and structures as available from Transit Authority within 25' beyond the project limits.
   d. All Water Main Information, including schematic distribution plans [DDM(s)], tap cards, and Field cards from DEP.
   e. Section and Final Maps obtained from Borough President's Topographical Section.
   f. All relative information from NY State DOT Highways (as-built drawings etc).
   g. Tax maps, Alteration maps, monument worksheets, Final Sections etc.

4. Where the Consultant employs electronic surveying methods he/she shall provide a description of computer programs employed, the equipment used in connection with the survey, the CADD drawing and survey data files, and the survey computations - all in a format and medium to be pre-approved by the Commissioner.

5. The Consultant shall identify and provide the Commissioner with original working copies of all survey data source/reference material.

6. When using aerial photography for the survey, consultant must supply DDC with the actual photo of the color and/or black and white photo. If digital photo, it can be delivered in a translatable file JPEG, BMP etc. In addition the Consultant shall deliver the electronic file of the planimetric information which was based on the photo (translatable to AutoCAD format).

Q. PRELIMINARY SUBMITTAL

Four (4) sets of preliminary black and white prints of the legend sheet, Clean Base Map, Topographical Plan, Utility Plan and Profile, Highway Profiles, and Survey Control drawings including all traverse/baseline (and undeveloped area baseline, if applicable) drawings (Stamped Preliminary in RED), shall be submitted to the Commissioner for approval. Included with the preliminary drawings all deliverables, as described in section "P", shall be submitted along with dated transmittal letter. The transmittal shall be referenced to all job naming conventions such as: Project Capis ID. number, Project name, Contract Capis ID. number, and Contract Borough.

A sample color print of a drawing, selected by The Commissioner, in 3-D format shall be included in the Preliminary submittal.

R. FINAL SUBMITTAL

Upon acceptance of the preliminary Clean Base Map, Topographical Plan, Utility Plan and Profile, Highway Profiles, and Survey Control drawings, the Consultant shall hand deliver to Commissioner, the following:

1. A complete set of the plotted legend sheet, Clean Base Map, Topographical Plan, Utility Plan and Profile, Highway Profiles, and Survey Control drawings including all traverse/baseline (and undeveloped area baseline, if applicable) drawings, in ink, on reproducible drafting film (mylar, 4 mil) with original signature and seal of approved New York State Licensed Land Surveyor.

2. Two (2) sets of paper prints of the plotted Clean Base Map, Topographical Plan, Utility Plan and Profile, Highway Profiles, and Survey Control drawings including all traverse/baseline (and undeveloped area baseline, if applicable) drawings with original signature and seal of approved New York State Licensed Land Surveyor.

3. All electronic data and drawing files for the Final drawings and the survey Control Traverse, Topographic Survey in the required formats (AutoCAD 2010 or latest edition, ASCII and 3-D).

4.3 TRAFFIC STUDY PROGRAM

1. Under this task the Consultant shall develop a Traffic Study Program to incorporate the traffic data and analyses requirements of all other tasks included in the Specific Requirements of this Contract, and to supplement any available traffic data and analyses as necessary. Traffic data collection and analysis shall follow the guidelines provided in Exhibit 1 of Appendix III of NYCDDC Design Guidelines and Directives. The Consultant shall:

a) Review available traffic/transit data and/or analyses conducted within the last three years (including Automatic Traffic Recorder (ATR) counts, manual turning movement (TM)/vehicle classification (VC) counts, pedestrian/bicycle counts, transit information, travel time and delay runs, physical inventory of study location(s) and corridor(s), official and field verified signal timing, vehicular and pedestrian Levels of Service (LOS) analyses, accident data and analyses, etc.) and determine the adequacy of and need to update such data and analyses to meet the requirements of this Design program.

b) Identify, utilizing the project limits as the traffic study area, the locations and types of data to be collected including the number of additional Automatic Traffic Recorder (ATR) counts, TM/VC counts, pedestrian/bicycle counts, etc. ATR counts shall be taken at all major street approaches for nine consecutive days (including two weekends) and summarized in 15-minute increments. ATR counts shall be collected and summarized in approved state (NYSDOT) and city (NYCDOT) formats.

c) Conduct TMC and pedestrian/bicycle counts at all signalized and unsignalized intersections, and locations that exhibit operational and safety concerns for the AM, midday, PM peak periods during typical midweek days (Tuesday, Wednesday, and/or Thursday) as well as on weekends (Saturday/Sunday), if deemed necessary. TMC counts shall be collected concurrently with the ATR counts and should be summarized in 15-minute increments.

d) Perform vehicle classification counts, concurrently with the TMC, and summarized in 15-minute increments for each peak period to estimate heavy vehicle percentages for intersection levels of service (LOS) analyses, and to identify number of axles needed for pavement design.

e) Indicate all existing lane delineations and dimensions. Review and identify any inconsistencies in the official marking drawings and the field conditions within the project limits, including all terminal intersections. A scaled CAD drawing of the existing conditions must be submitted that should include existing lane configuration/assignments, curb regulations, bus stop locations, turn prohibitions, driveways, fire hydrants, sidewalk widths, street furniture, crosswalk widths and type (school, regular and hi-visibility), type of traffic controls (i.e., signal, stop, etc.) and any other features that would impact traffic flow, and affect curb use as well as design considerations.

f) Conduct a field observation to identify instances of double or illegal parking, queue length and number of queued vehicles (if possible), and any other observations that are relevant to reflect existing condition LOS.

g) Identify the additional research and analysis of accident data that is needed to provide for the proper completion of the other Tasks included in the specific requirements of this contract.

The Traffic Study Program should include a graphic presentation of all intersections to be included in the traffic study as well as the CAD file as described above.

2. The Consultant shall submit the proposed Traffic Study Program to the Commissioner for review and approval.

3. The Consultant shall submit for approval, the names and experience portfolios of all persons and subcontractors proposed for use in connection with the Traffic Study Program including traffic counts prior to start of work.

4. Upon approval of the proposed Traffic Study Program, by the Commissioner, the Consultant shall perform the required ATR and TMC, vehicle classification counts, pedestrian/bicycle counts, etc. to identify peak hours for traffic, transit and pedestrian analyses; determine traffic volumes to be used for levels of service analyses, signal warrant studies, pavement design(s), etc.; and to estimate the percentage of truck volumes and number of axles as necessary. Vehicle classification counts shall identify heavy vehicles including trucks and buses by number of axles.

5. The Consultant shall research the crash records of the New York City Police Department and the New York State Department of Transportation to obtain the latest available (three-year period) crash data (for vehicular, pedestrian and bicycle accidents) at intersections and mid-block locations within the project limits (including all terminal intersections and contiguous to the project limits, where needed). The consultant shall identify high-crash locations and make recommendations to improve pedestrian, bicycle and vehicular safety. A high crash location is one where there were 48 or more total crashes (reportable and non-reportable) or five or more pedestrian/bicycles injury crashes in any consecutive 12 months of the most recent 3-year period for which data is available.

6. The Consultant shall visit the site and become familiarized with the site conditions, analyze the latest available three-year accident data to determine accident patterns and probable contributing factors, and shall identify all substandard conditions contributing to the accidents, and propose appropriate mitigation measures.

7. The Consultant shall contact the respective NYCDOT's Borough Commissioner's Office for records of all outstanding traffic-related (i.e., pedestrian, bicycle, and vehicular) operational and safety complaints submitted by the Community Board(s) having jurisdiction over the project area, for consideration and improvements.

8. The Consultant shall contact the Department of City Planning (DCP) and NYC Economic Development Corporation (EDC) for information about any planned and/or approved future developments/actions (to occur within the project's design year) located within or at the close proximity of the project limits that can have potential impact on traffic throughout the project area.

9. The Consultant shall consider the traffic generators, land use, zoning, bus and bicycle routes, etc. that can impact the present and future traffic operations, and incorporate information with appropriate maps in the report.

10. In accordance with the NYCDOT procedures, the Consultant shall prepare signal warrant studies for unsignalized intersections that exhibit operational and safety problems in accordance with the approved Traffic Study Program. The Consultant shall prepare a left-turn signal warrant study if a left-turn phase is proposed. The signal warrant forms may be obtained from NYCDOT's Signals Division. The completed forms shall be submitted to Signals Division for review and approval.

11. The Consultant shall prepare a balanced traffic flow map and perform levels of service (LOS) analyses using the latest version of the Highway Capacity Software (HCS) or other software (i.e., CORSIM, AIMSUN, VISSIM, SYNCHRO, etc.) to be approved by NYCDOT for each analysis peak hour for the existing and future (design year with and without the project) conditions. In addition, a balanced traffic flow map and LOS analyses for estimated time of construction completion (ETC) shall also be prepared for each analysis peak hour. All signalized and unsignalized intersections that are identified for operational and safety concerns shall be included in LOS analyses. Accordingly, the Consultant shall recommend appropriate improvement measures as required.

12. The Consultant shall determine the future level of service based on the projection of traffic volumes that are expected to occur within the estimated time of construction completion plus the expected service life of the project (Design Year). The consultant shall use ETC+20 for design year traffic forecast, unless otherwise directed by the Commissioner. The New York State Department of Transportation's (NYSDOT) guidelines shall be followed if the project receives state or federal funds.

Pavement preventive and corrective maintenance as well as safety-related work do not usually require the design year traffic forecast. Year ETC+5 peak hour turning movement volumes should be determined for proposed signal installations that will meet the signal warrants in the design year, but do not meet the warrants for ETC+0.

Future LOS analysis shall be performed for both the no-action (future without the project) and action (future with project) conditions. The growth rate, presented in Exhibit 1 of Appendix III of NYCDDC Design Guidelines and Directives, used in determining the projected traffic volumes shall be subject to approval by the Commissioner.

13. The consultant shall use Mid-LOS "D" design criteria for project improvements that apply to intersection lane group(s) rather than the intersection approach or overall intersection. If future operation of a lane group exceeds mid-LOS "D", reasonable and feasible traffic improvement measures must be recommended so that the lane group is returned to mid-LOS D in the design year without adversely affecting another lane group. Identification of feasible and practical improvement measures should also be guided by NYCDOT's 2009 Street Design Manual, the detailed guide to the City's transportation policies.

14. The Consultant shall submit its draft findings and recommendations from the various studies performed under this task in a Traffic Study report to the Commissioner and shall revise the report in accordance with comments provided by the Commissioner.

15. Upon acceptance of the Traffic Study report by the Commissioner, the Consultant shall incorporate the results and recommendations of the traffic study into the other tasks included in the Specific Requirements for the Project.

4.4 HARDWARE AND BASIN CONDITION INVENTORY

1. Under this task the Consultant shall prepare hardware condition inventory of all existing City-owned (includes public authorities) manholes, catch basins/inlets, valve boxes, seepage basins, etc., and all related hardware including frames, adjustment rings, and covers within the project limits.

2. The Consultant shall visit the site and verify the existence of all City owned hardware (including public authorities) shown on the topographic survey within the project limits, reconcile any City- owned hardware discrepancies and correct the topographic survey. In addition, the consultant shall perform a visual inspection of the interior/exterior of all existing City-owned hardware and shall:

i) Identify the Size of manhole covers (not including the frame), condition of manhole covers and frames, material (brick/concrete/other) and condition of manhole structures;

ii) Identify the size and type of basins/inlets, with or without curb piece, condition of frame, grating & curb piece, material and condition of basin structures, determine if catch basin has a hood over the connecting pipe;

iii) Identify the Owner/Agency responsible for a particular piece of hardware;

iv) Make reasonable attempts to sufficiently clean catch basins/inlets, manholes and seepage basins within the project limits where debris interfere with the inspection, and if not feasible, determine the need for cleaning of the structure;

v) Identify each manhole, catch basin/inlet, valve box, seepage basin. inspected, by station and offset. If the plans with baseline stations are not available, all existing City-owned hardware as indicated above shall be located and referenced to the existing permanent objects/structures, and be identified on the plans;

3. The Consultant shall use the following criteria, when evaluating the condition of the hardware:

ABBREVIATION	CONDITION	DEFINITION
G	Good	Hardware is complete, all markings are clearly visible, sharp and appear new/fresh.
F	Fair	Hardware may have been chipped, etc. but this does not interfere with its functioning, markings are clearly visible/readable, no rocking, parts fit tightly together.
P	Poor	Rocking covers, misfitting covers, markings have substantially disappeared, worn frames.
B	Broken	Frame or cover broken, any visible parts are cracked, etc. which affect functioning.

4. The Consultant shall prepare and submit the hardware inventory incorporating all information indicated above, in tabular format. The Consultant shall also submit with the inventory table, an appropriately reduced scaled drawings of the project area that clearly indicate all identified manholes, catch basins/inlets, valve boxes, seepage basins, etc. reflected on the inventory table.

5. The Consultant shall perform the visual inspection of the existing manholes, catch basins/inlets, valve boxes, seepage basins, as an independent task. If the Consultant for his/her own convenience elects to perform the said inspection in conjunction with another assigned task in the project, he/she shall be required to obtain approval from the Commissioner for doing so, prior to performing the inspection.

4.5 SUBSURFACE EXPLORATION PROGRAM

A. Under this task the Consultant shall provide for the preparation of a Subsurface Exploration Program in conjunction with the Project. The Consultant shall perform soil borings, test pits and test strips, retrieve soil samples, analyze and classify soils, make subsurface investigations and perform geological research to provide soils data that is needed to complete the work required under all tasks that are included in the Specific Requirements for the Project.

B. The Consultant shall develop and prepare a subsurface exploration program indicating boring, test pit and test strip locations proposed. This subsurface exploration program shall be coordinated with any subsurface data provided by the City, and with any sub-surface data available from various public/private utilities, and shall incorporate all the boring, test pit and test strip locations developed for all tasks included in the Specific Requirements of the Design program. The proposed Subsurface Exploration Program shall be submitted to the Commissioner for review and approval.

C. The Consultant, complying with applicable City/State/Federal regulations, shall retain the services of a qualified boring contractor to obtain the required borings and two (2) inch split spoon soil samples, and shall provide supervision of said boring work. The Consultant shall provide for payment of required street opening permits. The boring subcontractor shall be required to provide a plumber's bond in accordance with current Department of Transportation requirements.

D. The Consultant, complying with applicable City/State/Federal regulations, shall retain the services of a sub-contractor to excavate required test pits, and shall provide supervision of said test pit work. The Consultant shall provide for payment of required street opening permits. The test pit sub-contractor shall be required to provide a plumber's bond in accordance with current Departmental requirements. The Consultant shall note and record the conditions of structures and facilities exposed by the test pits by taking measurements, making sketches and taking photographs.

E. The Consultant, complying with applicable City/State/Federal regulations, shall retain the services of a qualified soils laboratory to classify the soil by sieve analysis in accordance with the Unified Soil Classification System, to perform permeability tests as needed along the thirty (30) foot deep borings, and to ascertain the elevation of the existing groundwater table.

F. The Consultant shall make a visual and olfactory examination of the soil samples retrieved from the borings to determine the existence of noxious odors or other indicators of the presence of material that may be classified as hazardous.

G. Data obtained from the boring program shall be recorded in a format approved by the City and shall indicate soils information obtained and layer thicknesses encountered.

H. A photographic record of the soil samples retrieved shall be made for each boring.

I. Soil samples shall become the property of the Consultant and shall be stored in a secure location until all construction work has been completed and all related claims settled. The Consultant shall be responsible for the disposal of the soil samples. Storage and disposal of soil samples shall be in accordance with all applicable laws, rules and regulations.

J. Subsequent to review and acceptance by the Commissioner of the data obtained, the Consultant shall coordinate/incorporate the results of the subsurface exploration program into the relevant tasks that are included in the Specific Requirements for the Project.

4.6 VAULT PROGRAMS

A. The Consultant shall execute Level I thru Level V Vault Programs in conjunction with the project. These program levels are identified as follows:

(Levels I and II - applicable to Preliminary Design Phase, if needed)

Level I Program	- Research and Inspection
Level II Program	- Survey and Presentation

(Levels III THRU V - applicable to Final Design Phase, if needed)

Level III Program -	- In-Depth Vault Exploration
Level IV Program	- Recommendations and Identification of Vault Treatment Alternatives
Level V Program	- Preliminary and Final Vault Design

B. A vault, whether active, inactive or abandoned shall be defined, for the purposes of this task, as any space or enclosure below the sidewalk and/or roadway areas that is either directly or indirectly connected, at any time in the building's history, to the contiguous building structure. Areaways shall not be considered as Vaults.

1. Each "store vault" which may have been generated, at any time in the building's history, from the sub-division of a building vault shall be considered as one vault.

2. Sub-cellar/sub-basement vaults shall be considered as separate individual vaults.

3. Underground vaults, chambers or enclosures owned and operated by private utilities shall <u>NOT</u> be considered a vault except as herein stipulated.

C. To determine precisely the existence and nature of building vaults the Consultant shall develop a program to research, inspect and reinspect, as necessary, all properties and/or buildings along the project streets that have or may have vaults constructed within the limits of the adjacent right of way. The Consultant shall identify all properties on which buildings are constructed up to and abutting the right of way line by Lot and Block Numbers, and by street addresses, and shall prepare a list of all such properties for inclusion in the proposed Levels I and II Vault Program. Subject to approval by the Commissioner, buildings that are set back from the right of way line may be omitted from the program.

D. To assist the Consultant in completing the full requirements of the Level I Program, the Department will provide the Consultant with any available preliminary vault study information prepared in conjunction with this project, including all available notes, reports, information, measurements, etc., compiled in conjunction with said studies. The Consultant shall review the data contained in preliminary vault studies to ascertain the type and level of work required, and shall proceed with the verification and completion of any additional Level I and Level II requirements of this task, as stipulated herein. Any such preliminary vault study information provided to the Consultant is not intended to substitute for the requirements of the vault program.

E. The scope of work for the Level I thru Level V Vault Program shall include the performance of the following services:

1. <u>Level I Program</u> - <u>Research and Inspection.</u> The Consultant shall ascertain the existence of active, inactive or abandoned below-surface vault spaces for all properties listed in the program and shall make inspections and/or take measurements as herein stipulated.

   a) The Consultant shall make every reasonable effort to research all available sources for existing vault records. Particular attention shall be given to, but not be limited to, the following sources: The New York City Buildings Department; The New York City Department of Transportation's Division of Legal Affairs - Office of Litigation Services and Records Management, [55 Water St. new York, Phone (212) 839-9847]; The New York City Department of Transportation's Bureau of Highway

Operations (Permit Management Office/Plan Examination Unit), building owners and/or management agents, tenants, and the New York City Department of Finance.

b) The Consultant shall perform visual field inspection of the sidewalk condition(s) and sidewalk features fronting each building face and/or vacant parcel for the purpose of making an "engineering judgment" regarding the existence of below-surface vault spaces.

c) The Consultant shall enter and/or inspect the interior of all buildings/structures that are listed for the vault program, as required, for the purpose of determining the existence of cellar/basement entrances thereto.

d) The Consultant shall enter and visually inspect all accessible basements, cellar and subcellar spaces within all contiguous buildings/properties/structures for the purpose of ascertaining the existence of active, inactive and suspected and/or abandoned building vault spaces, including Transit Authority facilities where applicable.

e) The Consultant shall be solely responsible for obtaining permission from owners and/or tenants for entry into building cellar/basement areas or other areas of the site, as required, to perform the necessary inspections and/or measurements required in this and subsequent phases.

f) Since access to cellar/basement areas will require multiple attempts, the Consultant shall be solely responsible for developing optimum schedules for access in performing the inspections and/or measurements required in this and/or subsequent phases.

g) Based on the judgment of the Consultant, where an introductory letter could assist him/her in the performance of the vault program, the Consultant shall prepare, duplicate, mail and/or hand-deliver the introductory letters in accordance with a plan developed by the Consultant and approved by the Department.

h) The name(s) and address(es) of the current owner of record of each vault shall be obtained by the Consultant.

i) It shall be the responsibility of the Consultant to make translations of letters/notices where the Consultant deems it appropriate or where otherwise directed by the Department.

j) The Consultant shall develop, subject to the approval of the Department, a vault numbering index/identification system suitable for the requirements of the Level I Program and all subsequent levels of the vault program. Consideration will be given to the use of house numbers.

k) The Consultant shall prepare letters to the Department of Finance to ascertain if vault license fees have been paid for vaulted private properties.

l) The Consultant shall present the data collected to the Department in an approved format.

2. <u>Level II Program</u> - <u>Survey and Presentation</u>

a) The Consultant shall identify and measure <u>all</u> geometric features within and contiguous to the vault space in sufficient detail and accuracy to define the space and satisfy the requirements for providing all analyses, recommendations, and designs in all subsequent levels of the Vault Program. This shall include, but not be limited to, interior space dimensions (length, width, height), floor area dimensions, alcove dimensions, entrance/exit opening dimensions, access opening dimensions, stairways, foundations, building foundation wall (estimated), and location of cellar door/areaway access opening. The Consultant shall also provide the offset distances from face of the vault to the face of the curb line in front of the vault.

b) The consultant shall provide a general description of the vault's structural system (i.e. the make up of the roof system and the walls) and it's condition.

c) The Consultant shall study and determine the depth of the cover over the vault's roof, measured from surface of the sidewalk to top of the roof structure. The consultant shall determine the depth of the cover using non-destructive methods (i.e. surveying, etc.), and if utilizing such methods shall not be possible, the consultant shall then use other methods (i.e. probing, etc.) as approved by the Commissioner, to determine the depth of the cover. If any portions of the roof cover and/or the roof structure are disturbed due to Consultant's operations, the Consultant shall be required to restore the disturbed sections to their original conditions, as necessary. If the initial measurements indicate that the depth of the roof cover is more than two (2) feet, the consultant shall only be required to provide the approximate depth of the cover, and if the initial measurements indicate that the depth of the roof cover is less than two (2) feet, the consultant shall be required to provide the exact depth of the cover.

d) The Consultant shall identify all features, and possible sealed off and inaccessible areas or vaults that require additional in-depth exploration.

e) The Consultant shall reconcile or refute data obtained from records research and shall notify the Commissioner of all records research data which cannot reasonably be reconciled.

f) The Consultant shall prepare all vault program notes on heavy-duty 8 1/2" x 11 1/2" waterproof paper stock, compiled in a loose-leaf format or as otherwise approved. All lines, text, sketches and symbols shall be clear, crisp, and suitable for reproduction and electronic storage. All sheets shall be numbered, cross-referenced to the approved index system, dated and signed. Original survey notes, sketches, data, etc., filed in loose-leaf format, shall become the property of the Department. The Consultant shall provide working copies, review copies and analysis presentation copies as requested by the Department.

g) Inspections and notes shall be consecutive and complete: that is, where no vault space is pre-existing, a certification shall be provided as part of the survey notes which shall include a visual description of the cellar/basement external foundation wall, with the statement "No Vault".

h) The Consultant shall coordinate with the property owner to assist the property owner in taking actions to expose possibly sealed-off vaults, including debris removal, for reasonable access by the Consultant.

i) The Consultant shall maintain a meeting and coordination log for each property in a format approved by the Department, which shall include minutes of meetings, etc.

j) The Consultant shall provide a suitable number of good quality color photographs to adequately describe each vault space, including any special features, utilities and/or services.

(i) The photographs shall be in color, 4" x 6", mounted in an 8 1/2" x 11 1/2" loose-leaf format.

(ii) The photographs shall be referenced in accordance with the index system established for the Vault Program and shall be shown in plan with photo angles and directions.

(iii) The original photographs in loose-leaf format shall be provided to, and shall become the property of, the Department (each house number shall be on a separate page or set of pages).

k) The Consultant shall present the data to the Department in an approved format, which shall include the plotting of the vaults and incorporating all vault data herein obtained into the contract drawings for the project.

3. Level III Program - In-Depth Vault Exploration

a) The Consultant shall develop, request proposals for, execute and supervise an In-Depth Vault Exploration Program, which may consist of, but not be limited to, test pits, core borings, concrete testing, line and grade survey in the sidewalk areas, and soil bearing capacity tests inside the vaults that are to be reconstructed. This work shall include complete restoration in conjunction with test pits, drilled holes, removed walls, etc.

b) The exploration program shall generally:

(i) Verify the existence and extent of inaccessible spaces.

(ii) Provide soil bearing capacities for Buildings Department filings, where required.

(iii) Locate vault envelopes relative to the survey baselines(s) and elevation datum.

c) The Consultant may be required to include one or more of the following items in the program for in-depth vault exploration:

(i) Metal Detection;

(ii) Sidewalk Test Pits (Vaults) - 2' x 3' x 3' deep.

(iii) 1/2" diameter Drilled Pilot Holes for Vaults, variable depth.

(iv) Soil Bearing Capacity Tests Inside Vaults (for foundation design).

(v) Interior Vault Closure Wall Removal - miscellaneous materials (non-structural).

d) The Consultant shall submit a proposed exploration program, including the approximate location of each proposed item of work to the Department for review and approval.

e) Upon receiving approval, the Consultant shall prepare a location plan for all proposed exploration work and also prepare estimates of quantities, specifications and descriptions of work in sufficient detail to fully describe the work.

f) The Consultant shall identify and measure all visible structural elements of the vault space, including, but not limited to, bearing walls (material/thickness), columns (size), footings, beams (size/material), girders, roof slab material and structural system (visual inspection only).

g) The Consultant shall identify, locate and measure all services and utilities within and contiguous to the vault space including, but not limited to, electric service panels (size of panel box, number of circuits, service ampere ratings, house distribution panel boxes), natural gas service (entry, meter, shutoff), water service (entry, meter, shutoff, electric ground, pipe size), house trap location, house trap vent location and size, ventilation system, air conditioning system, heating system elements, telephone lines, sprinkler systems, alarm systems, lighting systems.

h) The Consultant shall provide a Certified Asbestos Investigator (CAI) to perform inspections and make an assessment of the possibility that asbestos installation(s) exist within the vault(s). All such installations identified shall be photographed and measured, and the results incorporated into a Preliminary Asbestos Inspection Report that shall be prepared by the CAI. The report shall identify and describe the location(s) and extent of possible asbestos installation(s). The photographs and measurements taken shall be included in a technical supplement to the Preliminary Asbestos Inspection Report.

Sampling and testing for asbestos, shall be performed, if needed.

i) The exploration program shall also include sampling and testing for asbestos by a Certified Asbestos Investigator (CAI) in vaults**.** The Consultant shall provide a CAI for asbestos identification, sampling and testing; and for preparing/filing Buildings Department and New York City Department of Environmental Protection asbestos forms.

j) The Consultant shall identify all decorative and miscellaneous elements of the vault space and contiguous areas including, but not limited to, floor coverings, ceiling and wall treatments/materials, built-in furniture, closure doors (type/material).

k) The Consultant shall prepare complete architectural plans, sections, and elevations, for each vault identified, complete with framing plans, plumbing and wiring location diagrams, and dimensions to adequately present the survey data. Drawings shall be in contract document format and contract document drafting quality to a scale and sheet size as approved by the Department, and shall be fully referenced to the approved index system. Each house number shall be formatted on a separate sheet. Architectural plans shall be used for submission to the Buildings Department, for preparation of vault rehabilitation contract documents and/or other purposes as deemed appropriate by the Consultant, and shall incorporate all data obtained during the Level I Program for research and inspection.

l) The Consultant shall fully develop and coordinate special conditions, provisions and requirements, including but not limited to maintenance of pedestrian and vehicular traffic, maintenance of frontage access, working hours and work schedules for the proposed in-depth vault exploration work.

m) The Consultant shall prepare an estimate of cost for the proposed work with unit prices based on information available from the City, other sources, and/or labor material analyses, as required.

n) The Consultant shall submit the original of all non-standard specifications, all special provisions and itemized cost estimate in a format as directed by the City. The originals shall be suitable for reproduction and binding as required.

o) The Consultant shall provide the services of a survey party to adequately check contractor's work on the in-depth exploration.

p) Consultant shall provide resident services to observe and set-up test procedures, record data and perform other specialized services as required to adequately complete the in-depth exploration program.

q) The Consultant shall present all data, results and information in a report format.

r) The Consultant may combine the in-depth vault exploration work with any Subsurface Exploration Program required under separate tasks that are included in the Specific Requirements of this Contract, upon written approval by the City.

s) The Consultant shall evaluate the results of the in-depth exploration program to verify the appropriateness/adequacy of the data obtained for the purposes of successfully completing the vault program.

t) All required Department of Transportation street opening permits in conjunction with the exploration program shall be paid by the Consultant, with reimbursement as an out-of-pocket expense. All insurance requirements shall be maintained in full force.

4. Level IV Program - Recommendations and Identification of Vault Treatment Alternatives.

a) The Consultant shall review and analyze all available vault data obtained in connection with the vault program, and shall synthesize the data with a view to developing recommendations and/or alternatives in connection with the disposition of each vault. The Consultant shall become familiar with the proposed sidewalk surfacing treatment of the street improvement project, and shall integrate the treatment with the vault program.

b) The Consultant shall evaluate the following vault disposition alternatives:

(i) Maintaining the vault space and roof/sidewalk slab as is.

(ii) Providing a new roof slab/sidewalk over the vault space to the required design elevation, while maintaining all services and utilities in place.

(iii) Abandonment of the vault space, which shall include the relocation of services and utilities within the vault, the bulkheading of all vault openings/entrances, and the partial demolition and filling in of the vault space.

(iv) Abandonment of the vault space, which shall include the bulkheading of all vault openings/entrances, the partial demolition and filling in of the vault space, and the relocation of services and utilities within the vault space by the owner.

Full consideration and study shall be given to, but not be limited to, the requirements of the adopted surface treatment and the setting and selection of sidewalk design grades.

c) The Consultant shall submit all recommendations and findings in a "separate report" format for each house number. Suitable summary tables and graphics shall be provided as directed by the Department. These recommendations shall be presented at design meetings.

d) The Consultant shall prepare a unit price estimate, based on assumptions relative to the design of each recommended vault disposition, and for one alternative.

e) The Consultant shall meet with each New York City-located property owner to discuss/explain the findings and to coordinate the work by the owners, with particular attention to utility service relocations and opening/door entrance closures by the owner, and other special circumstances regarding the vault usage and/or disposition. Property owners located outside the City shall be contacted by certified mail, with return receipts.

5. Level V Program - Preliminary/Final Vault Design

Upon being directed by the Department, the Consultant shall prepare fully developed and fully coordinated contract documents for disposition of selected vault(s), which shall be incorporated into the street reconstruction project. The work shall include, but not be limited to:

a) Preparation and development of Preliminary Plans for each selected vault in accordance with the respective vault disposition alternative report as approved by the Commissioner, with a sufficient level of detail to precisely describe the proposed vault work.

b) The Consultant shall develop a preliminary Consultant's Estimate, for all vault disposition work, based on a quantity take-off of unit items, in accordance with the general practice of the Department. Where Departmental unit prices are not available, the Consultant shall develop unit prices based on time and material analysis and/or comparable prices, as approved by the Department.

c) The Consultant shall provide the services of design consultants for the Vault Program for the following specialties: architectural/structural, HVAC, mechanical, electrical, and asbestos abatement.

d) Preparation of Final Plans, Specifications and Consultant's Estimate for the Vault Program, subject to the approval of the Commissioner.

e) Incorporation and integration of the Vault Program work into the composite street reconstruction contract documents.

f) Filing with, and obtaining approval from, the New York City Buildings Department for proposed work in connection with the building vaults, including payment of all filing fees, as required.

g) Coordinating with property owners and/or their authorized agents in the obtaining of property owner approvals and the execution of vault entry construction agreements, including all required preparation and registered mailings, with return receipts. An agreement shall be required for alteration of each vault.

h) All vault data, survey notes, photographs, minutes of meetings with owners/tenants, estimates, treatment alternatives, Buildings Department documents shall be indexed by house number and cross-referenced to Lot and Block number, and shall be formatted/maintained in a Technical Supplement format for <u>each</u> house number.

i) The Consultant shall be solely accountable to initiate all actions relative to owner coordination, the obtaining of data and information, owner/tenant consultations, incremental reviews of proposed designs by the Department, <u>including all coordination meetings</u>, as required to complete the vault program.

4.7 RAILROAD AND ABANDONED TROLLEY FACILITIES RESEARCH

1. The Consultant shall research available records regarding abandoned railroad facilities and trolley trackage within the project limits. The Consultant shall search the following record sources: The New York City Public Library Reference Desk, N.Y.C. Transit Authority, Private Utilities, Historical Societies,Trolley Museums.

2. The Consultant shall prepare an inspection/research form for each source, listing documents searched, date, time and results; individual forms shall be packaged into a technical supplement format.

3. The Consultant shall select and coordinate the location for test pits to ascertain the existence, nature, extent and location of abandoned railroad facilities and trolley trackage.

4. The Consultant shall combine the test pit program with any additional Subsurface Exploration Program required under separate tasks included in the Specific Requirements for the Project.

5. The Consultant shall provide field verification and field observation during test pit operations to ensure that all relevant available data is recorded at each test pit location.

6. The Consultant shall document each test pit in a format to be approved by the City.

7. The Consultant shall incorporate any abandoned railroad/trolley system data into the contract documents.

8. The Consultant shall design and incorporate any necessary abandoned railroad/trolley track work into the contract documents and fully coordinate the plans, specifications and estimates.

4.8 ROADWAY PAVEMENT DESIGN

1. Under this task the Consultant shall prepare roadway pavement design(s) to be performed in conjunction with the project.

2. The Consultant shall group the street locations and perform separate pavement designs for each group based on soil conditions and traffic volumes. As many as three (3) separate pavement designs may be required.

3. The Consultant, utilizing the traffic count data obtained under the Traffic Study Task included in the Specific Requirements for the Project, shall determine the appropriate traffic parameters to be used in conjunction with the AASHTO Pavement Design Guide. The Consultant shall integrate/evaluate the results of the mechanical traffic counts and/or manual turning counts provided, and any additional counts obtained under any other design/study element of this Total Design program with data obtained from the Department's Bureau of Traffic, where applicable, as well as from other sources.

4. The Consultant, utilizing any soils data provided by the City, soils data obtained under the Soils Investigation Program provided for in this Contract and taking into consideration the fill requirements for reconstructing the roadways to the proposed grades, shall determine the appropriate soil parameters to be used in conjunction with the AASHTO Pavement Design Guide, as specified herein. The Consultant shall review the soils data provided and any additional soils information obtained under any other task in this Design program as well as from other sources, as available.

5. The Consultant shall develop alternative pavement designs in accordance with the "AASHTO Interim Guide for Design of Pavement Structures, 1972" as currently amended by applicable Departmental Design Directives.

6. The Consultant, using the selected "best fit" soils and traffic count parameters as developed above, shall develop alternative designs for a rigid pavement, a flexible pavement, and a composite pavement for the listed streets and street segments. The design recommendations shall include, but not be limited to, pavement composition, pavement thickness and subgrade treatment.

7. The Consultant shall prepare a Pavement Design Letter Report containing a summary of all tests, classifications and analyses performed in conjunction with the pavement design. This report shall include, but not be limited to, such information as: existing pavement thickness, blow counts, boring logs, soil strata, soil classification, geological research data, traffic volumes, truck percentages, soil parameters, traffic parameters, design assumptions, alternate pavement designs for representative street groups/segments (based upon traffic and soil characteristics), and the design recommendations.

8. The letter report shall be submitted to the Commissioner for review and approval, the Consultant shall incorporate the approved pavement(s) into the Final Design Contract Documents.

4.9 EMBANKMENT PROTECTION STUDY

1. Under this task, the Consultant shall develop schematic designs for roadway protection along areas of fill and cut, to be incorporated into the proposed street improvement project. The scope of this task shall include review of the topographic and utility surveys, obtaining soil borings and analysis of soils, analysis of drainage facilities, development of schematic design(s) for roadway embankment protection and preparation of an Embankment Protection Letter Report.

2. The Consultant shall review the topographic and utility surveys with respect to existing elevations and drainage facilities, and shall reconcile these conditions with the proposed elevations and drainage facilities as developed under other tasks in the Specific Requirements for the Project.

3. The Consultant shall develop provisions to retain and protect existing or proposed roadway embankment in areas of fill and cut along various sections of roadway. The Consultant shall study various alternatives including, but not limited to, provision of sloped embankments and/or retaining structures at fill and cut locations, and shall identify and study the impact of each alternative on adjacent property and the measures needed to mitigate such impacts.

4. The Consultant shall present the proposed alternative treatments to the Commissioner in a strategy session and shall modify his proposals as directed by the Commissioner.

5. The Consultant shall prepare preliminary cost estimates for the construction of each alternative and shall identify, justify and recommend a specific alternative for each location based on an assessment of the impacts of various alternatives on adjacent property and the estimated cost of each alternative including the cost of impact mitigation measures.

6. The Consultant shall determine the soil data needed to design the embankment retaining structures and shall conduct classification, permeability and triaxial shear tests on the soil samples. These borings and tests shall be obtained and conducted under the Soils Investigation Program included in the Specific Requirements for the Project.

7. The Consultant, upon review of all existing and proposed conditions, including an analysis of soil samples, shall develop schematic designs for proposed embankment protection. These schematic designs shall indicate the limits of side slopes; the length, height and location of proposed retaining structures, including footings; drainage and access/egress provisions for private properties; and shall include proposed cross-sections showing new guardrails, fences, slope protection, etc., and indicating the relationships between existing and proposed conditions, including the locations of side slopes and the proposed retaining structures with respect to adjacent private property.

8. The Consultant shall prepare and submit to the Commissioner an Embankment Protection Letter Report, containing the schematic design recommendations, together with all supplemental sketches, maps, analyses, etc., that may be needed in the presentation of the Embankment Protection Study, including estimated construction costs.

9. The report shall also discuss any adverse problems that construction of embankment protection may have upon the project or upon adjacent property owners.

10. Upon review and acceptance of the Embankment Protection Letter Report by the Commissioner, all recommendations thus approved shall be incorporated into the schematic design for the project.

11. The Consultant shall prepare a technical supplement containing all recommendations of the Embankment Protection Letter Report, including copies of all sketches, maps, analyses, minutes of meetings, correspondence, etc., generated in conjunction with the Embankment Protection Study. This supplement shall be incorporated as an Appendix to the Design Report.

4.10 SCHEMATIC GEOMETRIC DESIGN

1. Under this task the Consultant shall prepare Schematic Geometric Design alternatives for the project street(s). The Schematic Geometric Designs shall indicate the proposed geometry of the roadway(s) including roadway widths, traffic lane(s), bike lane(s), bus lane(s), parking lane(s) and sidewalk width(s), pedestrian mall areas, mathematized alignment data that is sufficient to define alignment and layout in field, and pedestrian crosswalk locations. The Schematic Geometric Designs shall include the preliminary design of street grades and street drainage. The Schematic Geometric Designs shall indicate all necessary provisions for the channelization of traffic including all necessary pavement markings for vehicular lanes delineation and lane widths, pedestrian crossings and channelization and shall be developed within the limits of the mapped right-of-way. The Schematic Geometric Design Alternatives shall include alternate roadway and sidewalk widths, to accommodate traffic in the project street(s), and shall indicate any distinctive roadway and sidewalk treatments proposed including, but not limited to special pavements, lighting, bollards, benches and landscaping.

The consultant shall make a complete photographic record of the project area in order to illustrate the general nature/character of the neighborhood, as well as to illustrate the typical conditions and specific problems/issues/impacts of the proposed program and facilities. The photographs shall be either color or black and white, shall be presented in a four inch (4") by six inch (6") format, and shall be suitably indexed, bound and annotated in accordance with the directions of DDC. Photo log is not required if it is prepared under "Project Development/Identification" TASK 4.1-SECTION 4.

Prior to commencement of schematic geometric design, in order to illustrate the impact of the proposed geometrics on surrounding properties, street elements, encroachments, etc., the consultant shall visit the site and photograph project streets in a manner approved by DDC. The consultant shall prepare and submit to DDC a copy of the photo-log prior to start of schematic design.

2. In preparing the Schematic Geometric Design alternatives the Consultant shall:

a) Study the traffic data that is available and/or collected under this Design program, including traffic counts, accident data and level of service analyses for vehicles and pedestrians, and shall develop the design alternatives to mitigate and or eliminate any adverse safety, operational or substandard conditions which can be identified from the data analysis.

b) Coordinate the proposed schematic geometric design alternatives to meet the geometry and proposed geometric configuration of intersecting streets.

c) Design preliminary grades and street drainage; including preliminary top of curb elevations, preliminary roadway and sidewalk cross slopes, preliminary catch basin locations, and basin connections. Assess the impact of proposed preliminary design grades on private property, street drainage, subway structures; and modify and adjust the preliminary design grades to minimize adverse impacts identified.

d) Analyze the proposed schematic geometric designs and any other schematic geometric designs proposed by the City for the project streets with respect to their impact on existing trees, existing property, landscaping, access/egress of existing development, aesthetic treatments, acquisition needs, other City Agency's facilities and private utility facilities. The Consultant shall give special attention to the impact of proposed grades on adjacent property including, but not limited to, the drainage of such properties.

e) When a Consultant and/or DDC identify that the Project has a potential for use of the sustainable designs, as described in Section 2.3 of these General Requirements, the Consultant shall incorporate sustainable designs during development of the Schematic Geometric Design alternatives. The Consultant shall analyze the environmental, social and economic benefits of each alternative. The Consultant shall include the results of its studies, recommendations and the approved Sustainable Design alternative in the PDI report.

f) Prepare, graphically, an impact assessment plan (using a color-coded approved format) showing Right-of-Way and Possession Lines, and items requiring removal for each alternative under consideration.

g) Prepare an impact assessment report summarizing and quantifying the above impacts using a combination text and graphic format (full size continuous plan sheets employing multi-color display of impact types superimposed over screened clean Base Plan), and including cross sections, proposed and Legal Grades, and other details as needed to clarify design impacts/issues/concerns that have been identified.

h) Identify any requirement to perform an Environmental Assessment in accordance with applicable New York City and or New York State Environmental laws and regulations (CEQR, SEQRA) that may result from the proposed design.

i) Make every reasonable effort to mitigate all negative impacts, and make recommendations to the Commissioner on the selection of a specific schematic geometric design alternative.

j) Submit hard copy of the Schematic Geometric Design alternatives for review and present the alternative schemes to the Commissioner, including the impact assessment for each abutting property.

k) Present the schematic geometric design, selected by the Commissioner, to the Bureau of Traffic for review and approval, and incorporate review comments received from the Bureau of Traffic as directed by the Commissioner. Submit the approved schematic geometric plans to the office of School Safety Program, incorporate their comments as directed by The Commissioner; and obtain their concurrence.

l) Submit the schematic geometric design, selected by the Commissioner, to the private utility companies that own and operate facilities within the project and request their preliminary assessment of the impact that the proposed schematic geometric design will have on their utilities and the measures that they proposed to mitigate the identified impacts.

m) Upon acceptance of the final Schematic Geometric Design and mitigation package by the Commissioner and upon receipt of written notice to proceed from the Commissioner, the Consultant shall present jointly with the Commissioner, the recommended schematic geometric design and impact mitigation proposals to the affected Community Planning Board(s) at a formal public meeting/hearing. The presentation shall include display boards and or projections that are sufficiently detailed to clarify the work and design proposals.

n) Modify the Schematic Design and impact mitigation proposals, based on comments received from the Community Board and private utility companies as directed by the Commissioner.

o) Upon receipt of written notice to proceed from the Commissioner, commence other work in conjunction with the Final Design program.

4.11 ACQUISITION STUDY AND MAPPING

A. Under this task the Consultant shall provide for the preparation of an Acquisition Study and for the preparation of Acquisition and Damage Maps in connection with the acquisition of property, to be performed in conjunction with the Project.

B. The scope of work for the Acquisition Study shall include review of all design recommendations indicated in the modified Preliminary Design Report; collection of all pertinent tax payment and ownership data; (identification of properties that must be acquired by the City), investigation of the possibility of acquiring properties through Corporation Counsel Opinions (CCOs), obviating the need for formal acquisition procedures; preparation of an Acquisition Study Report; obtaining CCOs, where practicable; and attending all conferences, meetings and hearings, as required, to provide necessary engineering expertise to secure approvals.

C. The scope of work for Mapping shall include obtaining additional topographic survey data, and preparation of Acquisition and Damage Maps. No work shall begin on the preparation of Acquisition and Damage Maps pending approval and written authorization from the Commissioner.

D. ACQUISITION STUDY

1. The Acquisition Study shall analyze the problems involved in the acquisition of properties. It shall ascertain which properties are required for the proper construction of a roadway and whether these properties can be acquired through the use of CCOs. In addition, it shall deal with the impact of possible delays in obtaining acquisitions on the construction program.

2. The Consultant shall conduct surveys and studies and assemble data, including but not limited to the following:

   (a) The probable cost of the acquisitions (in dollars).

   (b) Any unusual problems, identified, that may be encountered in the acquisition of individual properties.

   (c) The probable length of time involved in the actual acquisitions.

3. The Acquisition Study Report shall include the study and analysis of the data assembled, including all recommendations of the modified Preliminary Design Report.

4. The Report shall recommend which locations shall be handled by CCO, which through regular acquisition mapping procedures, and the limits of the areas that should be acquired to allow for construction to be undertaken in accordance with the designs developed under this contract.

5. The Report shall include all sketches, maps, etc., that may be necessary in the presentation of the proposed mapping and subsequent acquisitions.

6. The Report shall include a program, complete with a time schedule, to obtain necessary surveys and data, and to prepare Acquisition and Damage Maps.

7. Identify any requirement to perform an Environmental Assessment in accordance with applicable New York City and/or New York State Environmental laws and regulations (CEQR, SEQRA) that may result from the proposed design.

8. Upon completion of the Acquisition Study, the Consultant shall prepare and deliver his findings and recommendations to the Commissioner in letter-report format.

9. Upon review and acceptance by the Commissioner of the Acquisition Study Report, including approval of the recommendations contained therein, the Consultant shall prepare the necessary documents and back-up material to enable the Commissioner to request the required Corporation Counsel Opinions.

10. The Consultant shall assist the City with his engineering expertise in obtaining the CCOs as well as acquisition by Eminent Domain Procedural Laws. He shall attend necessary conferences and meetings, upon the request of the Commissioner, to present all necessary engineering data, and prepare additional backup material, as required.

E. MAPPING.

Upon approval of proposed acquisition by the Commissioner, the Consultant shall:

1. Establish liaison with the Office of Land Use Coordination of the Department of Transportation.

2. The Office of Land Use Coordination will direct the Consultant to the Office of the Borough President, and to any other involved agency for instructions as to the technique and format of the proposed mapping.

3. The Consultant shall assemble all plotted surveys, profiles and other existing engineering data.

4. The Consultant shall obtain any additional survey information that is necessary.

5. The Consultant shall research and review available reports, designs and documents prepared by the City or other jurisdictions relative to the site or area.

6. The Consultant shall research and review all existing street mapping and legal grade systems relative to the site or area.

7. The Consultant shall prepare the maps in accordance with the instructions of the Office of the Borough President and any other involved City agency, and shall coordinate his work as it progresses.

8. The Consultant shall modify the maps as required by the Borough President until final approvals are obtained.

9. Originals of plans and maps shall be delivered to the required City agency, upon the instructions of the Commissioner.

F. ACQUISITION. The Consultant shall assist the City with his engineering expertise during the Acquisition procedure. This shall include, but not be limited to, the following:

1. Participation in all conferences and meetings on the acquisition, upon request of the Commissioner.

2. Attend public hearings, upon request of the Commissioner, to present the engineering background necessary.

3. Prepare reports, documentation, drawings or back-up material necessary to advance the proceedings.

G. USE OF EXISTING TOPOGRAPHIC SURVEY

1. The Consultant shall make use of the information gathered and plotted under the Topographic Survey Task included in the Specific Requirements of this contract.

H. ADDITIONAL SURVEY

1. In the event that additional survey information is needed in conjunction with the Acquisition, additional survey shall be performed, and the results plotted on the previously plotted Topographic Survey. All additional plotting shall be performed in conformity with original survey plotting.

2. The Additional Topographic Survey shall obtain all property lines, lot lines, curb lines, structures, encroachments, and other data necessary to complete the property Acquisition and Damage Maps. A licensed land surveyor, who is familiar with the particular acquisition requirements of the county in which the work is being performed, shall certify the additional survey.

I. DELIVERABLES. Upon completion of the Acquisition Study, and the Acquisition and Damage Maps, the Consultant shall hand-deliver to the Commissioner the following:

1. One complete set of every Acquisition and Damage Map, in ink, on reproducible drafting film (or other reproducible material as specified by the Office of the Borough President). The license and seal of a licensed land surveyor shall be affixed to the Acquisition and Damage Maps.

2. Five (5) sets of prints of every Acquisition and Damage Map.

3. All notes, studies, designs, analyses, drawings, calculations, data, etc., used in the preparation of the Acquisition Study and Mapping Task.

4. Copies of all correspondence to and from all agencies (City, State, Federal), Utilities, Community lanning Boards, and all others having jurisdiction or interest in the project or area.

5. Original survey notes and plotted survey tracings.

J. All original Topographic Survey information shall be dated, signed and certified to by a licensed surveyor. The License Seal of the surveyor and/or Registered Professional Engineer shall be shown on all plans, tracings and tabulation sheets.

K. All of the above material shall become the property of the Commissioner.

L. The acceptance and/or approval by the Commissioner of any part of the work as herein described shall not relieve the Consultant of responsibility for the completeness and/or accuracy of the Acquisition Study and Mapping prepared under this contract.

M. Upon review and acceptance by the Commissioner of the Acquisition Study Report, and upon the approval of recommendations contained therein, the Consultant shall incorporate the design requirements necessary to implement said recommendations into the Construction Contract Documents for the Project.

4.12 QUANTITY AND COST ESTIMATING

1. Under this task the Consultant, utilizing the Schematic Geometric Design Drawings, and the Preliminary and Final Contract Drawings, shall prepare detailed Estimates of Quantities and costs for all pay items of work that are required under the ensuing construction contract at various stages of this design program. The Estimate of Quantities and costs shall be used as the basis for the detailed Consultant's Estimate for the project.

The Consultant shall prepare and submit an updated estimate of quantities and costs at the following stages of the project:

a) For Preliminary Design projects:

At the completion of Preliminary Design.

b) For Total Design Projects:

1. Phase 1: at the completion of Preliminary Design;
2. Phase 2: at Mass Mailing No. 1 (approximately 40% design completion);
3. Phase 3: at Mass Mailing No. 2 (approximately 75% design completion);
4. Phase 4: At 100% design completion for use in bid documents.

c) For Final Design Projects:

1. Phase 1: at Mass Mailing No. 1 (approximately 40% design completion);
2. Phase 2: at Mass Mailing No. 2 (approximately 75% design completion);
3. Phase 3: At 100% design completion for use in bid documents.

The Consultant shall revise and resubmit the estimate of quantities and costs in accordance with comments from DDC.

Where special materials and amenities are proposed the Consultant shall prepare a cost comparison of the standard materials versus the special materials and amenities proposed.

2. The Consultant shall prepare the detailed Consultant's Estimate in accordance with currently applicable Departmental standards and procedures.

3. The Consultant's Estimate of Quantities and Cost shall be prepared and documented on computation sheets which shall indicate:

a) The estimator and checker’s name (printed);
b) The estimator and checker’s signature or initials;
c) Date that the estimate is prepared;
d) The Project ID. and street name;
e) Item number and description;
f) The specific station(s) and/or location or limits of the item;
g) Individual item summary sheets;
h) The measurements (including units) and/or counts, and computations;
i) List of all assumptions;
j) Completely identify all/any reference source material in accordance with standard bibliographical format;
k) Show all unit price adjustment factors.

4. Quantity take-off by CAD shall require preapproval from the Commissioner for methodology, programming and documentation.

5. Pay items and quantities for all Contract work shall specifically reflect the scope of work as defined in the contract documents.

6. Pay items and quantities for maintenance and protection of traffic work shall accurately reflect operations, staging, sequencing, working hours, weekend work, and conditions stipulated on the contract plans and in the specifications.

7. The Consultant shall provide a breakdown of the quantities and costs for the various items of work that are to be charged to each City agency's budget code(s) and to each private utility. Where participation by the State, Federal government and/or private parties is anticipated, a breakdown of costs chargeable to each is to be provided.

8. The Consultant shall prepare summary tables for all contract items - including quantities, unit prices, extensions and individual charges which shall be in sufficient detail to enable a reasonable projection of the project cost. The Consultant shall input this data into the Department's computerized scope/estimate program.

9. The level of accuracy for the estimate of quantities shall be rounded to appropriate whole multiples.

10. The Consultant shall prepare a composite Scope packet, in accordance with currently applicable Departmental standards and procedures.

11. The Consultant shall revise and update the Consultant's Estimate of Quantities and costs and account for all revisions to the contract drawings and specifications required during the review and/or bidding process.

12. The Consultant shall coordinate and incorporate estimates of quantities and cost for private utility work that is to be included in this contract. Estimates of quantities and unit prices for private utility work will be provided by the respective utility companies. Estimates of quantities and unit prices for Gas Cost Sharing Work will be provided by the Department.

13. Payment: Payment for this task shall be made at the completion of the various phases indicated below, contingent upon the Consultant's satisfactory completion of each phase, and submission of cost estimate, including all necessary back up documentation. The amount of payment for each phase shall be limited to the specified percentage of the total fee for "Quantity and Cost Estimating", as indicated below:

(A) Total Design:

a) Phase 1: at the completion of Preliminary Design, payment shall be equal to 25% of total fee for "Quantity and Cost Estimating";
b) Phase 2: at Mass Mailing No. 1, payment shall be equal to 25% of total fee for "Quantity and Cost Estimating";
c) Phase 3: at Mass Mailing No. 2, payment shall be equal to 25% of total fee for "Quantity and Cost Estimating";
d) Phase 4: at 100% design completion, payment shall be equal to 25% of total fee for "Quantity and Cost Estimating".

(B) Final Design:

a) Phase 1: at Mass Mailing No. 1, payment shall be equal to 30% of total fee for "Quantity and Cost Estimating";
b) Phase 2: at Mass Mailing No. 2, payment shall be equal to 30% of total fee for "Quantity and Cost Estimating";
c) Phase 3: at 100% design completion, payment shall be equal to 40% of total fee for "Quantity and Cost Estimating".

If the Consultant fails to prepare and submit to the Commissioner the cost estimate for any of the above mentioned phases, or delays submission of the cost estimate without any justifiable reasons, an amount equal to the percentage shown for each phase will be permanently forfeited from the payments for non-compliance, and the total contract amount will be reduced by that amount, accordingly.

4.13 SEWER DATA SURVEY, AREA DRAINAGE AND GRADE STUDY, DRAINAGE PLAN

A. Under this task, the Consultant shall:

1. Survey and plot all sewer data within the project limits as defined herein.

2. Perform a thorough review and study of all adopted and proposed drainage plans, sewers, easements, existing and legal street grades and mapped street systems within the project limits, and recommend all necessary changes thereto or, develop a new Drainage Plan for the Project in conjunction with a fully coordinated street, storm and sanitary sewers, or combined sewers improvement project.

B. SEWER DATA SURVEY

1. The Consultant shall research all available maps, plans, records, etc., and where as built data is missing, take appropriate field measurements/elevations of existing sanitary, combined or storm water sewers within the limits of the project, including interceptor sewers.

2. This records search and survey shall determine the locations, elevations and sizes of all existing sewers and appurtenances, outfalls, manholes, catch basins and drains.

3. The information to be obtained by the Consultant shall include, but not be limited to, the following:

   a) Distance from existing sewers' centerlines to an existing building line;

   b) Distance of manholes from the building line in the nearest intersecting street;

   c) Existing ground surface elevations and legal grades;

   d) Invert elevations of the existing sewers;

   e) Internal sizes of the existing sewers;

   f) Type of material used, i.e., concrete, brick, vitrified clays in existing sewer construction;

   g) Invert elevations of all existing house traps;

   h) Location of all mapped sewer easements.

4. The following criteria shall be observed:

   a) All measurements and elevations shall be taken at or to an existing manhole.

   b) All distance and internal sizes of the sewers shall be measured to the nearest one-tenth of a foot.

   c) All elevations shall be measured to the nearest one-hundredth of a foot, using the respective Borough Sewer Datum.

5. The Consultant shall plot the results of the Sewer Data Survey including the boundaries of all Drainage Areas located both within and contiguous to the project area, as determined by the water shed limits of all previously completed drainage plans, existing sewers and ridge lines as may be available.

6. The plotted Sewer Data Survey shall also show the locations of all mapped sewer easements with respect to mapped street lines, and shall locate and identify all structures and other major features encroaching upon the sewer easements.

7. The Consultant shall indicate, on the plotted Sewer Data Survey drawings, all locations at which field data were obtained.

8. The Consultant shall review all data thus obtained, and shall coordinate this data with the Topographic Survey and the Utility Survey.

9. The Consultant shall reconcile all discrepancies in the location and identification of all sewer elements.

10. The Consultant shall submit, to the Department, original survey notes and survey computations together with all sewer drawings, plans and plates, which shall become the property of the City.

11. The Consultant shall plot the Sewer Data Survey in accordance with the current Departmental Drafting Standards and requirements for Topographic and Utility Surveys.

12. The Consultant shall prepare a technical supplement on the Sewer Data Survey and shall incorporate this supplement as an Appendix to the Preliminary Design Report. The supplement shall include, but not be limited to, the following factors that may impact upon future sewer construction and/or drainage of the project area:

a) General description of all sewers located within the project area;

b) Maps of all existing drainage plans;

c) Maps of existing sewer easements;

d) Maps/sketches of all proposed sewer projects;

e) A discussion of all topographic feature;

f) Proposed mapping or demappings;

g) Outfall locations;

h) Encroachments upon sewer easements, etc.

C. DRAINAGE AND GRADE STUDY, AND DRAINAGE PLAN

1. This study shall provide for:

a) The retention of as many of the existing grades and as many of the existing street systems as possible, provided the procedures, concepts and criteria used in the design of these grades and street systems are in accordance with the design parameters of the Department, and of the Bureau of Sewers.

b) The retention of as much of the existing sanitary and storm water sewer systems(s) as possible, provided the sewers meet the present design criteria of the Bureau of Sewers. The Consultant must consider the age, condition and capacity of the existing sewer system in preparing the proposed drainage plans(s). In order to evaluate all the factors relating to this decision, the Consultant will be required to consult with the various Divisions of the Department of Environmental Protection that may have knowledge of the conditions affecting the sewers.

2. In evaluating the feasibility of revising existing drainage plan(s), the Consultant shall endeavor to accommodate the recommended changes within the mapped street widths and easements, and legal grade lines of the streets. In instances where such accommodation proves impractical, the Consultant shall judiciously modify street design proposals to enable the Consultant to produce a workable drainage plan.

3. Prior to commencing the design of the proposed drainage plan, the Consultant shall consult with the Drainage Section of the Department of Environmental Protection on the retention of the existing sewer and the proposing of sewers that slope contrary to the slope of the street, as determined from the final mapped grade.

4. The Consultant is advised that there may be other projects under current or future contracts between other consultants and the Department that should be considered in the design of this project.

5. When designing the sanitary and storm water sewers for this project, the tributary flow from adjacent areas, outside the limits of this project, must be included.

6. Previously completed drainage plans that affect the project area must also be considered.

7. With respect to sanitary sewer schemes, the Consultant shall be required to utilize all existing area interceptor sewers for sanitary sewer drainage.

8. The Design of all Sanitary and Storm Water Sewers shown on the proposed drainage plans shall:

a) Be based upon approved adopted final maps where available, and/or proposed grades and street systems, or upon otherwise available topographic maps of the area and corresponding final and/or proposed grades.

b) Be related to the prevailing zoning regulations, land occupancy and estimated future population with due allowance for practical ultimate need when the areas are fully built up.

c) Be related to the probable extent of pervious and impervious surface cover when the areas are fully developed. Underdeveloped residential, industrial, or commercial areas, parks, Government reservations, and institutional land shall be treated on an area basis only.

d) Be in conformity with current practices, requirements and design criteria of the Bureau of Water and Sewer Operations.

e) Include the streets, parkways and expressways, within the project area, shown on either adopted final maps, or on pending final maps, or on other maps as available for each of the sections.

f) Consider sewer(s) crossing existing or proposed expressways, parkways, subways (whether underground or elevated), railroads, subsurface utilities, etc.; and design the sewers in coordination with the appropriate City Departments, State, Federal, or public and private agencies having jurisdiction over these facilities.

g) Certain drainage studies related to sanitary and storm water sewers that were prepared by the Bureau of Sewers, over the years, may include, in part, drainage data for sections included in this study. In connection with the final design of drainage plans to be prepared under this study, it is intended to utilize the available data to their maximum usefulness and the City will make them available for the purpose.

h) Where existing drainage plans are available for all or sections of the Project Area they shall be reviewed to determine whether they satisfy current design criteria. If the existing drainage plans satisfy current deign criteria they shall be incorporated in the final drainage plans for this project. If the existing drainage plans do not satisfy current design criteria, new sewers shall be designed and incorporated in the final drainage plans for this project.

i) In connection with the preparation or review of drainage plans, the Consultant shall obtain all available preliminary studies, drawings, sketches, field data, office computations, memoranda, and any other pertinent data from the Bureau of Sewers.

j) All existing and proposed sanitary and storm water sewers shall be shown in worksheet form on plans and profiles. These plans and profiles shall show:

(i) In Plan:

Both building lines of sewered street and street crossings, block lengths, all street widths, final or proposed grades, single line for sanitary and storm water sewers and for all major utilities approximately located in sewered street, all sewer sizes and lengths.

(ii) In Profile:

A separate line for each curb where they are not coincident, inside top and bottom lines of sanitary and storm water sewers, inside top elevations of sewers at all changes of size and grade, sewer crossings with inside top elevations and clearances at point of crossing, all major utility crossings, sizes, slopes and velocities of sewers.

(iii) These plans and profiles shall be drawn to a horizontal scale of 1 inch equals 50 feet and a vertical scale of 1 inch equals 4 feet. These profiles shall be drawn in grid form.

k) The Consultant shall design a Drainage Plan in the currently required Bureau of Sewers format, and shall submit the Drainage Plan to the Bureau of Sewers for review and approval. The submission shall include relevant sewer and topographic data, and computations required by the Bureau of Sewers.

l) The Consultant shall revise the Drainage Plan in accordance with any comments received from the Bureau of Sewers and shall reiterate the submission until approval of the Drainage Plan is obtained from the Bureau of Sewers. The signature of the Authorized Department of Environmental Protection personnel on the Drainage Plan shall indicate its approval.

m) The Consultant shall prepare a technical supplement to the Drainage and Grade Study and shall incorporate this supplement as an Appendix to the Preliminary Design Report. This supplement shall include all maps, drawings, sketches, notes, calculations, proposed grades and street systems, proposed drainage plans, and all other information necessary for the presentation of a properly drained and graded street improvement project.

9. In evaluating the feasibility of retaining existing grades and street systems, the Consultant shall perform the following work:

a) Conduct a profile study of all existing street grades, and compare with adopted and proposed legal grades and with existing and proposed sewer profiles.

b) Conduct a general review of the Topographic Survey, noting the elevations of all first-floors and entrance ways (including garage and cellar doors, cellar windows, ventilation gratings, steps, loading docks, etc.) with respect to legal grades.

c) Conduct a general review of the mapped street systems, noting overall existing right-of-way widths, clearances between rights-of-way and building structures, and potential future encroachments and/or demolition with respect to right-of-way widening.

d) Study the present street system with respect to usage by passenger and commercial vehicles.

10. Upon review of all existing grades and street systems, the Consultant shall determine the impact that the raising and/or lowering of all streets to legal grade and/or the widening of rights-of-way will have upon the abutting properties and structures.

11. Upon evaluation of all data thus obtained, the Consultant shall determine, on the basis of feasibility, economic impact and preservation of the character of the neighborhood, those areas where retention of existing grades and street systems is both necessary and desirable.

12. The Consultant shall then design new proposed legal grades as necessary.

13. The design of all proposed legal grades shall be performed in accordance with procedures, concepts and criteria as required by the Department.

4.14 HAZARDOUS WASTE AND SITE CONTAMINATION

Under this task the Consultant shall conduct site investigations within the project limits to determine the extent and degree of any contamination that may exist, and develop procedures for any site remediation needed.

1. PRELIMINARY HAZARDOUS WASTE AND SITE CONTAMINATION INVESTIGATION

Using the following procedures the Consultant shall assess the site for potential involvement with hazardous waste:

a) The Consultant shall conduct an inspection of the site to determine existence of the following warning signs:

(i) Noxious odors emanating from the soil or water;
(ii) Discolored soil, water or foundations;
(iii) Leaking pipes, transformers, tanks, and barrels;
(iv) Dead vegetation or lack of vegetation.

b) The Consultant shall conduct Past Land Use Research of the area within and abutting the project limits to identify potential polluters and any indication of the likelihood of existing unknown contaminants. This should include but not be limited to the research of local assessor's records, City building permit records, title abstracts, long time area residents, local maps that are available for review at public libraries, United States Geological Survey records, available boring logs, Department of Conservation Right-to-Know survey results, historical societies' records, shipping and receiving documents, invoice records, detailed plant and site layout drawings, former employees, Department of Health and Department of Environmental Conservation employees.

Specific uses and activities of concern include, but are not limited to, chemical plants and refineries, auto body/repair shops, coal gasification plants, dry cleaning plants, electronics manufacturing, foundries, electro-plating operations, gasoline service stations, junk/scrap yards, metal and machine fabrication, municipal landfills, industrial landfills, paint shops, machine shops, printing shops, sludge management areas, transportation related chemical or petroleum spills, and rod and gun clubs.

c) The Consultant shall review the Department of Environmental Conservation's underground storage tank records and the results of leakage tests performed on such tanks.

d) The Consultant shall consult with the Health and Fire Departments to obtain information regarding known hazardous waste problems in the area.

e) The Consultant shall review the results of the Subsurface Exploration Program to determine if any of the above mentioned warning signs were identified.

2. PRELIMINARY HAZARDOUS WASTE AND SITE CONTAMINATION ASSESSMENT

The Consultant shall assess the results of the Preliminary Investigation and shall prepare and submit a report of the findings of the Preliminary Investigation and Assessment to the Commissioner. The report shall clearly state whether or not there is any indication that hazardous waste would be encountered by project activities, and shall advise the Commissioner on the need for conducting a Phase I Testing Program as specified below.

3. PHASE I TESTING

This may include air, soil and/or water sampling at the site. This testing may also include subsurface soil and/or water. The sampling shall determine what pollutants are present at the site and their concentrations. Testing of the samples shall be performed by a laboratory that is technically qualified to perform such work and listed, as such, by the DEC.

a) Where directed by the Assistant Commissioner Infrastructure Design the Consultant shall engage the services of a firm, that has been listed by the Department of Environmental Conservation (DEC) as being qualified to perform such work, to develop the scope of work for a Phase I Testing Program for the project site.

b) The Consultant shall develop the testing program in conformity with the requirements of any regulatory agency that has jurisdiction over such operations and shall submit his/her proposals to and meet with representatives of such agencies, as necessary, to ensure compliance with their requirements.

c) The Consultant shall submit the proposed scope of work for Phase I Testing and a proposal for conducting the testing program to the Commissioner for approval.

d) Upon approval of the Phase I Testing program by the Commissioner, the Consultant shall, using the services of the DEC listed firm and accepted laboratory, conduct the approved testing program.

e) The results of the testing shall be presented in a report to the Commissioner. The report shall detail the procedures employed during the field investigation and the field observations made; shall evaluate the technical data obtained; and indicate the nature, concentration and location of any contamination detected and the possible sources of such contamination. The report shall indicate, specifically, one of the following:

i) A finding of no contamination;
ii) A finding of minor contamination which poses no significant threat to health or the environment;
iii) A finding of potential significant threat to health or the Environment.

f) The report shall indicate the need for site remediation and for additional testing; the extent of remediation needed; and shall present and discuss procedures and methods that should be used to accomplish such remediation.

4. SPECIFICATIONS FOR SITE REMEDIATION

Where directed by the Commissioner, the Consultant, using the services of the DEC listed firm, shall develop and provide the Commissioner with specifications for site remediation work that are to be included in the proposed construction contract. The specifications shall include procedures for removing, storing, monitoring, testing, and disposal of contaminated materials; and for protecting workers and the public from contamination during construction operations.

4.15 STREET DESIGN INCLUDING STUDY AND DESIGN OF STREET GRADES, STUDY AND DESIGN OF STREET DRAINAGE, AND PERMANENT STREET SIGNS

1. Under this task the Consultant shall study and design street components and appurtenances; incorporate the various design elements developed under the other tasks included in the Specific Requirements of this Contract; prepare Preliminary, Pre-Final and Final Contract Documents incorporating other agencies design work, including the obtaining of comments/approvals for submissions that are complete with specifications, estimates and other ancillary items; and that are ready for bidding.

2. This Street Design Task is the basic design element of the Final Design Program that is to be executed under this Contract. Under the Street Design Task the Consultant shall coordinate the technical details of all the tasks included in the Specific Requirements, including (a) Study and Design of Street Grades, (b) Study and Design of Street Drainage and (c) Permanent Street Signs into the street design, and consolidate them into one unified, Bid-Ready Contract Document. The Consultant shall not proceed with work on any Final Design Task without prior written approval from the Commissioner.

3. In studying and designing the street elements, appurtenances and other appropriate elements of this project the Consultant shall:

a) Be responsible for expediting and advancing the development, approval and acceptance of the final schematic design in conformity with the project objectives.

b) In addition to the programmed Mass Mailings No.1 and No.2 required herein, be accountable to initiate actions for incremental review(s) of the proposed designs by various agencies and interested parties, including follow-up meetings to obtain expeditious resolution of questions and concerns as needed to permit approvals and to meet the approved contract time schedule.

c) Design the street(s) and execute the associated tasks including the preparation of Preliminary and Final Contract Documents generally in accordance with the approved Schematic Geometric Design and, where applicable, the approved Schematic Landscape/Urban Design for the Project as developed in accordance with these Specific Requirements.

4. In preparing the Preliminary Contract Documents the Consultant shall:

a) Develop the Preliminary Contract Documents for the project street(s) and associated tasks, in accordance with the requirements of this and the other tasks included in the Specific Requirements of this Contract.

b) Develop the Preliminary Contract Drawings by superimposing the approved schematic geometric design on the "Clean Base Map", unless otherwise specified by the Commissioner. In general, the Preliminary Contract Drawings shall be in sufficient detail, especially the proposed roadway geometrics, to allow the interested parties to visualize the intended Final Design concepts.

c) Incorporate the plotted Utility Survey and plotted profiles into the Preliminary Contract Drawings as directed by the Commissioner, and utilize the information available from these documents to check design assumptions and potential interference with utility facilities, substructures and abutting properties.

d) Prepare the Preliminary Contract Drawings to generally comply with the following requirements and as otherwise directed by the Commissioner:

i) The drawings shall show the locations of existing physical features, both surface and subsurface, which may affect the proposed work.

ii) The drawings shall show the horizontal locations and vertical locations of all work proposed under this project. Horizontal locations shall be established by station and offset. Horizontal and vertical locations shall be within the limits of accuracy established in the plotted Topographic Survey developed during the Preliminary Design Stage and herein modified and updated, and shall be tied to the project baseline.

iii) The drawings shall show essential information, which shall include, but not be limited to existing elevations, proposed design elevations, street drainage proposals developed under Subsections (a) Study and Design of Street Grades, and (b) Study and Design of Street Drainage, block and lot numbers, street addresses, sections, details, notes, sketches, and any other information needed to fully define the proposed design, in accordance with currently applicable Departmental Standards.

e) In addition to the sustainable design(s) approved by the Commissioner during the Schematic Geometric Design, when a Consultant and/or DDC identify any other street elements to have a potential for use of the sustainable design, as described in Section 2.3 of these General Requirements, the Consultant shall follow High Performance Infrastructure-Best Management Practices (BMP) based on the core principles of sustainable design during development of the Final Design. The Consultant shall analyze the environmental, social and economic benefits of each alternative and present the results of their studies and their recommendations in a report format to the Commissioner. The Consultant shall incorporate the approved design into the Final Design Documents.

f) Consolidate the Preliminary Contract Drawings and transmit them for information and review by all relevant City agencies, utilities and jurisdictions in accordance with the Department's Mass Mailing No. 1 requirements.

5. In preparing the Pre-Final Contract Documents the Consultant shall:

a) Develop the Pre-Final Contract Documents for the project street(s) and associated tasks, in accordance with the requirements of this and the other tasks included in the Specific Requirements.

b) Develop/design project curbs in conjunction with usage and depth of pavement, including type, locations and appropriate details.

c) Develop/design/coordinate and locate pedestrian ramps after an analysis of potential interference caused by existing/proposed facilities in the area. The specific location, configuration and grading of pedestrian ramps, contiguous sidewalks and gutter flow at apex of corners shall be designed and coordinated with the conditions and hardware within the corner quadrant including but not limited to traffic signals, catch basins, manholes, grates, lampposts, etc.

d) Reconcile existing driveway locations with building or property activity requiring a driveway access. The Consultant shall design driveway location(s) in accordance with current Department of Transportation procedures regarding replacement driveways.

e) Prepare customized letters, for City signature, to property owners where existing driveway is not being replaced or where it is proposed to reconfigure existing driveway.

f) Develop/design adjustments to City-owned castings including details necessary for special casting adjustments.

g) Develop/design non-structural adjustments to existing Transit Authority subway ventilators and emergency exits, including replacement and adjustment of frames, gratings and doors to proposed grades, and modification of ventilators to conform with aesthetic treatments proposed for curbs and sidewalks.

h) Coordinate the preparation of a Transit Authority Force Account Agreement to allow the City to reimburse the Transit Authority for the cost of providing inspectors at the site during test pits excavation, and for access to Transit Authority ventilators for possible field inspection. The Consultant shall provide separately for Transit Authority insurance required to cover inspection of Transit Authority facilities and excavation of test pits in the vicinity of such facilities.

i) Design and define the limits of pavement construction/ restoration for all streets affected by the proposed work.

j) Develop/design pavement markings for lane delineation, pedestrian crossings, channelization and for additional traffic controls as needed.

k) Include provisions for removing/relocation/resetting of Fire Department facilities, parking meters and the Bureau of Water Supply hydrant facilities that are affected by the proposed street design and integrate the designs into the contract documents.

l) Review the results of sewer cleaning, sewer television inspection and manual sewer inspection programs performed under other contracts or by the Department of Environmental Protection personnel as they relate to this Project; coordinate the results and recommendations from said programs with this Project, and integrate and incorporate required sewer work into the contract documents.

m) Prepare, where necessary, working drawings/cross-sections/supplementary profiles conforming to currently applicable Departmental Standards.

n) Incorporate preliminary maintenance of traffic alternatives for the various construction stages of the project. The preliminary maintenance of traffic alternatives, as developed by the Consultant, shall be reviewed/coordinated with the Commissioner, the Department of Transportation's Office of Construction Mitigation and Coordination and affected interested parties in accordance with the requirements of the Construction Staging and Maintenance and Protection of Traffic Task included in the Specific Requirements.

o) Incorporate the Preliminary Consultant's Estimate and Scope package prepared under the Quantity and Cost Estimating Task included in the Specific Requirements of this Contract.

p) Update the title sheet for the contract drawings and the legend/note/reference sheets.

6. In addition to incremental packets, the Consultant shall combine the Pre-Final Street Design contract drawings, the drawings for other tasks, the updated title sheet and the legend/note/reference sheets into one composite package of Pre-Final Contract Documents.

7. The Consultant shall transmit the composite Pre-Final Contract Documents to all relevant City agencies, utilities and jurisdictions for information and review in accordance with the Department's Mass Mailing No. 2 requirements.

8. The Consultant shall submit to the Department, copies of the composite contract documents and composite scope packet for a final technical and construction review.

9. The Consultant shall schedule and conduct a joint utilities Alignment Meeting to identify and provide for the mitigation of design impacts on utility facilities.

10. Upon completion of the final technical and construction reviews, the Consultant shall prepare composite Final Contract Documents.

11. In preparing the Final Contract Documents the Consultant shall:

a) Finalize the coordination, resolution and incorporation, as appropriate, of all review comments on the composite Pre-final Contract Documents, except that comments on other agency designs shall be addressed by the design agency; but shall, however, be coordinated by the Consultant.

b) Modify and correct, as appropriate, the detailed Pre-Final Contract Documents in accordance with the comments received from the interested reviewing parties. The Contract Drawings shall be incrementally resubmitted, as necessary, to the interested parties for review, comments and/or approval. This process shall be reiterated until such time as required approvals are obtained. Comments received on "other agency" designs shall be forwarded to the design agency for resolution or modification of its contract documents.

c) Upon receipt of approvals for the detailed Pre-Final Contract Document Package, including the maintenance of traffic schemes, consolidate the Contract Drawings into a single, unified document. The Contract Drawings shall include, but not be limited to such items as title sheets, tables of contents, table of quantities, survey control sheets, sections, details, plans, profiles and other items deemed necessary for the proper completion of the

Contract Drawings. In general, this consolidated set of Contract Drawings shall represent, as near as practicable, the final design for the project.

12. The Consultant shall prepare and distribute all notices that are required, prior to the advertising for bids for construction in accordance with currently applicable Departmental Standards and Procedures.

13. The Consultant shall apply for and obtain permits and approvals required in connection with the ensuing construction contract, as directed by the Commissioner.

14. All drawings, before being submitted to the Commissioner for final acceptance, shall bear the stamps of approval and be accompanied by all necessary applications, certificates, or permits of all City, State or Federal Agencies having jurisdiction over any phase of the work.

15. Upon completion of the detailed consolidated Contract Documents, including the incorporation of changes as required in conjunction with the final technical review, the Consultant shall submit the composite Contract Document package to the Commissioner for review and approval. This submission shall include, but not be limited to the following:

a) The original of the title sheet, signed by the Consultant, prepared in a format as approved by the Commissioner.
b) A set of paper prints of the Contract Drawings.
c) A copy of the Project Fact Sheet prepared in the currently required Departmental format.

16. The signature of the Commissioner on the title sheet of the Contract Drawings shall constitute approval of the Design.

17. Upon approval of the Contract Documents, the Consultant shall prepare and submit to the Commissioner, the complete Bid-Ready package of the Contract Documents. This package shall include the appropriate number of copies, as outlined in Section 2.5 of these General Requirements, of the following: complete, bound, signed Contract Drawings; complete, unbound Contract Specifications, Addenda and Bid Schedule Sheets; Composite Scope Packet; and approvals and permits required for the prosecution of the ensuing construction contract; all as required under the various tasks included in the Specific Requirements of this Contract.

18. The Consultant shall make no substantial changes to the Final Contract Documents, as approved by the Commissioner, unless specifically ordered to do so by the Commissioner.

(a) Study and Design of Street Grades

Under this subsection the Consultant shall study the existing grades and design proposed grades for the project's roadway(s), sidewalks, and intersection(s) including intersecting roadway(s) and sidewalks in accordance with the design criteria provided by the Commissioner or recommended by the Consultant and accepted by the Commissioner. The Consultant shall:

a) Where the topographic survey is to be provided under this Contract:

(i) Coordinate with the Surveyor, as appropriate, the integration of project topographic survey work with project grade design work in accordance with the project design needs and approved project schedule;

(ii) Be solely responsible to coordinate, with the surveyor, the quantity and/or location of spot elevations and profiles to be produced, and shall "customize" the data gathering to "specifically" satisfy the design requirements for all grade design;

b) Utilize existing topographic data to the extent necessary for the proper completion of this task;

c) Analyze in detail and design "best fit" project grades for top of curb, back of sidewalk, building line, fence line, or other grade control points or profiles with a view to minimizing negative impacts on adjacent development, adjacent properties (driveways, walkways, loading docks, parking areas, building entrances, steps, underground

structures and/or infrastructure, plant life - including trees), while providing for adequate roadway and property drainage, adequate sidewalk cross slopes and the design of measures needed to mitigate such impacts.

d) Develop/design project sidewalk cross slopes upon completion of a review of the project profiles in compliance with the requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) - specifically providing, where feasible, a continuous path having a 2% maximum cross slope with ramps having a maximum longitudinal slope of 5%, to the maximum extent possible in the design of curb and sidewalk grades;

e) Provide both graphic exhibit(s) and text to justify all "site infeasibilities". Prepare a final Americans with Disabilities Act Accessibility Guidelines "site infeasibility" justification report for all properties/locations that will have non-conforming sidewalks, in a format determined by the City. The report shall document in tabular, graphic and/or other preapproved format the location, nature, extent and justification for all locations at which, in the judgment of the Consultant, it is infeasible to comply with the 2% maximum sidewalk cross slope and 5% maximum longitudinal ramp slope requirement(s) of the Americans with Disabilities Act Accessibility Guidelines;

f) In conjunction with the mitigation of adverse property and street impacts (including substandard longitudinal gutter grades, street trees, shrubs, fences, walls, sidewalk removals, addition of entrance steps and access/egress solutions) the Consultant shall develop the "best technically feasible fit" top of curb for each block face and each individual property and intersecting street, through the performance of a detailed grade analysis and design, which shall consist of an intensified study and a reiterative design process for proposed grades on curb and sidewalk, and integrating into the detailed design process all of the factors listed above which will affect the desired solution;

g) Perform topographic surveys to obtain additional survey data including spot elevations to "fully support" the detailed grade design and reiterative grade design process where needed;

h) Locate and plot customized profiles, which shall require pre-approval by the City, for the purpose of executing the detailed analysis and design of project grades. Locate and plot customized cross sections, which shall require approval by the City, for the purpose of executing the detailed analysis and design of project grades;

i) Develop/design roadway crowns and/or cross slopes within the framework of Departmental or other approved standards and the existing crowns and cross slopes for streets abutting and/or intersecting the project limits;

j) Design sidewalk pavement grades at and into all intersections and terminal streets to meet the existing conditions and/or the proposed design in each intersecting street. The application and/or use of transition areas to satisfy this design requirement shall, for the purposes of this program, not be considered an adequate level of study and or design;

k) Reiterate the foregoing grade study and design requirements, until a "best fit" grade design is achieved, including, but not limited to: the plotting and study of additional profiles; plotting and study of additional cross sections, the securing and study of additional topographic data as described above, and as needed to meet/comply with the specific site constraints and specific site issues including, but not limited to, street/roadway drainage, required cover for storm sewers, drainage of private properties, and the Americans with Disabilities Act Accessibility Guidelines;

l) Incorporate and integrate the proposed design grades into the composite Contract Drawings and with other affected project components;

m) Prepare a "grade change exhibit" for the entire project site, in the standard format prescribed by the Department in consultation with the Topographical Bureau of the respective Borough President's Office, identifying all locations where the proposed design grades vary from the existing Legal Grades.

(b) Study and Design of Street Drainage

1. Under this subsection the Consultant shall study the site and tributary storm water flow patterns and/or their routings; study the proposed street grades developed under the preceding Subsection (a) Study and Design of Street Grades as described above; design the locations of proposed catch basins; design the locations of catch basin chute

connections to existing or proposed storm or combined sewers; and provide adequately for drainage of all streets that are included in this project.

2. In studying the existing street drainage facilities, researching storm water run-off and designing new drainage facilities the Consultant shall:

a) Utilize the topographic data provided to the extent necessary and applicable for the proper completion of this task;

b) Conduct a "rainy day survey" to observe all gutter flow routings, all ponding and flooding locations, and all inoperative catch basins and inlets;

c) Design the locations of catch basins and the routing of chute connections into appropriate storm or combined sewers;

d) In coordination with the Study and Design of Street Grades Task, analyze and design alternate sidewalk and street drainage schemes including, but not limited to, the adjustment of transverse sidewalk slopes and provision of longitudinal troughs.

e) Design all non-standard sewer appurtenances;

f) Design, coordinate and incorporate into the contract documents the conversion of existing manholes with 24 inch diameter frame and covers to manholes with 27 inch diameter frame and covers, and all other catch basins, manholes, basin connections, and non standard drainage appurtenances;

g) Provide a constructability review and reiterate all drainage design elements with regards to the mitigation of impacts with City owned facilities in accordance with pre-engineered methodology;

h) Present the street drainage plans to private utility companies for private utility impact assessment.

(c) Permanent Street Signs

1. Under this subsection the Consultant shall inspect and inventory the existing street signs, research and review the "street sign work order" records of the Bureau of Traffic Operations, make recommendations for modifications to the existing street signs and for new street signs, as appropriate.

2. The Consultant shall take into consideration all existing traffic regulatory signs, traffic warning signs, street name signs, including Landmark District special signs, parking regulation signs, and information signs, in executing the work required under this task.

3. The Consultant shall inventory all permanent street signs as defined above.

4. The Consultant shall design street signage required for the project street(s) in compliance with the latest standards of the Bureau of Traffic Operations, and/or the New York State Manual of Uniform Traffic Control Devices, where applicable, as determined by the Commissioner in consultation with the Consultant.

5. The Consultant shall present his/her proposals, for new street signage, to the Bureau of Traffic Operations for review and approval.

6. The Consultant shall prepare a list of all street signs required for this project in tabular format. The list shall indicate the text and size of each sign required, and the Consultant's estimated quantity for each sign.

7. The Consultant shall include a tabulation of all required street signs on the contract drawings being developed for this project in accordance with current Departmental requirements.

8. The Consultant shall prepare a list, including the quantities, of all street signs and street sign posts to be removed and installed during construction, in accordance with current Departmental policy, and shall include the items of work and their respective quantities in the construction bid documents.

4.16 TREE INVENTORY

1. Under this task the Consultant shall prepare a Tree Inventory for the project in accordance with current Departmental practice.

2. The Consultant shall prepare a Tree Inventory in accordance with current Departmental requirements as generally outlined below. Where it is available the Consultant will be permitted to "fully update" any tree inventory previously prepared by the City or its consultants. However, the deliverables required under this task shall be in full conformity with the current Departmental requirements. The Tree Inventory shall be prepared in a Technical Supplement Report format and shall include, but not be limited to:

a) A Key Plan identifying the stationing of each tree and/or planting;
b) An approved index numbering system;
c) Cut/fill magnitude at each location resulting from proposed design grades;
d) Specie of trees;
e) Diameter of trees;
f) Tree Condition - (healthy, diseased or dead).

3. The Consultant shall prepare a tree and plant life photo log of all trees and plant life located within the project area. The Tree Photo log shall be prepared in a Technical Supplement format and shall include, but not limited to:

a) The photo log shall show the base of each tree with its exposed root system, with particular emphasis on the extent to which the root system has grown within and/or heaved the existing curb and/or sidewalk. Photos shall be taken from an angle and distance which also show the trunk and crown or portions thereof of each tree (samples shall be submitted for approval prior to filming photo log).
b) Photos shall be in color;
c) Photos shall be 4" x 6" in size;
d) Photos shall be mounted in transparent jackets and shall be bound in hard cover binder;
e) Each photo shall indicate the tree index number, and proposed cut/fill data;
f) Date of photo;
g) Original photo log and one color copy shall be required.

4. The Consultant shall plot all tree and major shrub locations on "working" or other profiles by stationing, and the profiles at these locations shall show spot elevations at the curb, at the root zone and at the front of sidewalk (at back of tree). The Consultant shall coordinate and integrate the plotting of these profiles with the plotting of profiles produced under other tasks of this Final Design program.

4.17 TREE IMPACT MITIGATION AND TREE PLANTING PROGRAM

1. Under this task the Consultant shall incorporate tree impact mitigation analysis into the design of street grades, prepare a Tree Impact Mitigation Plan for incorporation into the contract documents and design/develop a tree planting program for the project in accordance with current Departmental practice.

2. The Consultant shall engage the services of a Forester/Arborist/Tree Consultant, who shall be approved by the City, in conjunction with the work required herein.

A) TREE IMPACT MITIGATION

a. The Consultant shall study and analyze the proposed schematic geometric design, the proposed design grades, the Tree Inventory, and the Tree Photo Log for the purpose of identifying locations where the proposed work has a potentially negative impact on existing trees. The Consultant shall identify construction impacts from all stages of the proposed work and design a tree impact mitigation program for each tree within the right-of-way.

b. The Consultant shall make every technically defensible and reasonable effort to preserve the existing trees from construction trauma and minimize potential tree loss and/or tree damage by:

a) The use of available techniques and standard mitigation strategies provided by the City and/or by developing and detailing special designs - as required;
b) Developing and proposing vertical and horizontal geometric roadway and/or sidewalk modifications;
c) Reiterating the design in accordance with design requirements included elsewhere in this agreement.

c. The Consultant shall incorporate the standard mitigation measures, and the standard details and special designs that are used to mitigate tree impacts, into the Composite Contract Documents.

d. The Consultant shall take-off an estimate of quantities for the work required to implement the tree impact mitigation proposals.

e. The Consultant, in conjunction with his Forester/Arborist/Tree Consultant, shall meet with representative(s) of the Department of Parks and Recreation to make a joint reconnaissance of the project site, and to present the proposed design, the findings of the tree impact study and the tree impact mitigation measures proposed and incorporate their concerns, where accepted by the DOT, into the composite contract documents.

f. The Consultant shall prepare, graphically, an impact assessment plan exhibit (using an approved color coded format) showing items requiring removal as a result of the design proposals under consideration. The exhibit shall indicate the right-of-way and possession lines. In addition, the Consultant shall provide a summary inventory of trees requiring removal.

10. Where the Department's standard tree impact mitigation procedures are inadequate or inappropriate, the Consultant shall prepare site specific construction protocol to protect all trees.

B) Tree Planting Program

A. The Consultant shall through its subconsultant Forester/Tree Consultant/Arborist design/develop a tree planting program for the project in accordance with current Departmental practice.

B. The Consultant, in consultation with the Forester/Arborist/Tree Consultant shall:

a) Inspect the site, Design Plans, Topographic Plans and Utility Plans for the purpose of identifying locations where new trees can be planted and identifying and listing all dead and diseased trees that must be removed;

b) Compute the quantity of the required replacement trees using the NYC Parks Department Trunk Formula Method, further documented in the International Society of Arborculture's (ISA's) Guide for Plant Appraisal, 9th edition, to determine the value of each tree to be removed.

c) Prepare a schematic tree planting plan superimposed on a modified set of Highway Design Plans (modified to indicate the locations of lampposts, traffic signals, hydrants and catch basins) to show the proposed location size and specie of each new tree that is to be planted and each existing tree that is to be removed;

d) Select the proposed locations for new trees in accordance with current Departmental guidelines for clearance to various utility facilities. Furthermore, in selecting the locations of the new trees the Consultant shall avoid interference with the existing underground City and private utilities.

e) The consultant shall study the site conditions and all available subsurface information/data, determine the need for special borings and develop the location plans, and take the borings (under Subsurface Exploration Program) specifically intended to analyze and determine the suitability of existing subsurface materials for planting purposes as approved and directed by the Commissioner. The consultant shall, recommend appropriate mitigation measures for soil quality improvements, when required.

f) Design the size and paving treatment for all tree pits within the project limits;

g) Present the proposed tree planting and tree removal plan to the Department of Transportation (DOT) for approval;

h) Upon receipt of concurrence from the Commissioner and in conjunction with the Forester/Arborist/Tree Consultant, meet with representative(s) of the Department of Parks and Recreation (DPR) to present the proposed tree planting/tree removal program, obtain their concurrence and/or concerns, and modify the tree planting/tree removal proposals until DPR's approval is obtained.

i) Incorporate the approved tree planting/tree removal plan into the Composite Contract Documents.

4.18 SEEPAGE BASIN AND/OR HIGHWAY DRAIN DESIGN

A. Under this task the Consultant shall provide for the preparation of Seepage Basin and/or Highway Drain Design(s) to be performed in conjunction with the Project. This work shall include the collection of sewer data, the development of boring locations, the study of soils analyses and soils classification results, the determination of storm water flow rates, the preparation of Seepage Basin and/or Highway Drain Design Letter Report, and the preparation of Seepage Basin and/or Highway Drain Design, including manholes, basin connections and other appurtenances necessary for the proper functioning of the seepage basin and/or highway drain system(s).

B. The scope of work for the Seepage Basin and/or Highway Drain Design includes performance of the following services:

a) The Consultant shall research and check available records of the Department of Environmental Protection (DEP) Bureau of Sewers to obtain pertinent information needed in the preparation of Seepage Basin and/or Highway Drain Design. The records to be researched and checked shall include, but not be limited to, the following:

1) As-built sewer plans;
2) Borough sewer maintenance records;
3) Drainage Plans
4) Proposed sewer construction and schedules;
5) Previous seepage basin construction;

b) The Consultant shall research and check available records of other City agencies and public utilities, including:

1) The plotted utility survey as furnished for the Final Design of the Project.
2) The records of various utilities regarding water mains, gas mains, electrical ducts, steam mains, and telephone and fire alarm systems.

c) The Consultant shall research available boring logs and soils analysis and classification results.

d) The Consultant shall coordinate the development of Seepage Basin and/or Highway Drain Design proposals with the Bureau of Sewers, and shall identify those locations requiring seepage basins and/or highway drains. The following are some of the factors that should be considered:

1) Need for drainage facilities based upon present drainage patterns and flows (present grades maintained);
2) Need for drainage facilities based upon future drainage patterns and flows (construction to legal grade, or to intermediate grades as determined in this Final Design Program);
3) Lack of existing storm sewer or combined sewer facilities at the site(s);
4) Possible future sewer construction at the site(s);
5) Highway drain(s) discharge provisions;
6) Where feasible, highway drains shall be proposed in preference to seepage basins.

e) The Consultant shall visit the site and shall conduct a visual inspection to confirm and/or correlate the information obtained from his research of available records with actual field conditions. Discrepancies shall be noted and reconciled, wherever possible, prior to the commencement of Seepage Basin and/or Highway Drain design.

f) The Consultant shall study the area contiguous to the project and shall:

1) Define and measure the tributary drainage areas;
2) Develop storm water run-off factors based on actual field conditions; and

3) Calculate design run-off and hydraulic flow rates for each proposed seepage basin and/or highway drain using the appropriate New York City Department of Environmental Protection design criteria;

g) The Consultant shall develop a soil boring locations plan to supplement the available soil data, as needed to complete the design of each proposed seepage basin, and shall incorporate said locations into the Subsurface Exploration Program provided for in this Contract;

h) The Consultant shall coordinate the design proposals with private utilities and the Department of Environmental Protection to identify and mitigate utility interference issues relative to proposed borings, seepage basin and highway drain locations, and shall incorporate approved utility accommodation work into the contract documents;

i) The Consultant shall review the soil samples and the results of the soils analysis, soil classification and permeability tests as obtained under the Subsurface Exploration Program, and shall determine the capacity of the soils to drain storm water at each proposed seepage basin location. The Consultant's review shall include:

1) All diaries, logs, test results, boring location plans, etc.;
2) The soil samples and soil classification and analysis results;
3) The results of soil permeability tests.

j) The Consultant shall design the proposed seepage basin and/or highway drains system to accommodate the design storm water run-off including the depth and diameter of the seepage basins to be installed at each location; and/or the invert elevations, sizes and drain pipe material to be used, along with all manholes, and drain pipe support and protection required.

k) The Consultant shall assemble information, tests and analyses obtained, and shall prepare a Seepage Basin Design and/or Highway Drain Letter Report containing the compilation and analysis of data obtained, recommended locations for seepage basins and/or highway drains, including approximate street grade elevations (based upon a coordinated review of grades in conjunction with all other street design tasks included in the Specific Requirements of this Contract), basin depths, types of seepage basins, approximate seepage basin array(s), and proposed construction.

l) The Consultant shall submit a draft of the Seepage Basin and/or Highway Drain Design letter report to the Commissioner for review and approval, and shall make revisions as the Commissioner may require.

m) Upon approval of the draft report by the Commissioner, the Consultant shall hand-deliver to the Commissioner three (3) copies of the Seepage Basin and/or Highway Drain Design letter report, and original notes, sketches, calculations, etc., used in the preparation of the Report.

n) The Consultant shall prepare Preliminary Seepage Basin and/or Highway Drains, Catch Basin and Basin Connection Construction Contract Documents including plans, specifications and Consultant's Estimate in accordance with the approved letter report, and shall submit the preliminary plans to the Commissioner, relevant City agencies, and to the utility companies for review comments and utility impact assessment and mitigation.

o) The Consultant shall modify locations as required and incorporate appropriate comments into the Seepage Basin and/or Highway Drains design, and shall prepare Final Seepage Basin and/or Highway Drains Construction Contract Documents, including plans, specifications, Consultant's estimate, etc., for incorporation into the Contract Documents of the Project in accordance with the Street Design Element contained in the Specific Requirements of this Contract.

p) The Consultant shall prepare Final Seepage Basin and/or Highway Drains Construction Contract Documents, and incorporate the Seepage Basin and/or Highway Drains Construction Contract Documents into the Final Consolidated Contract Documents for the Project.

4.19 SEWER DESIGN

A. Under this task the Consultant shall provide for the preparation of Sewer Design to be performed in conjunction with the project. This work shall include the rehabilitation, relocation, or replacement of existing sewers and/or the installation of new sewers, including the design of necessary appurtenances, all in accordance with a prescribed Drainage Plan.

B. The scope of work for Sewer Design shall include performance of the following services:

1. Preparation of a Preliminary Sewer Design which shall include:

a) Plotting of existing and proposed sewers, and sewer rehabilitation work on Utility Plans for the project streets in standard Departmental format.

b) Plotting of profiles for existing and proposed sewers in standard Departmental format.

c) Designing and locating all necessary chambers, manholes and other appurtenances.

d) Researching and reviewing all available soil data for the project area, identifying soils exploration requirements to provide additional data that is needed to complete the design, and incorporating the soils exploration requirements into the Subsurface Exploration Program provided for in this Contract.

e) Designing all bedding, encasement and piles for the support and protection of sewers and sewer appurtenances in accordance with the latest standards of the Department.

2. Submission of the Preliminary Sewer Design to the Commissioner for review and comments, and incorporation of the Commissioner's comments on the Preliminary Design before incorporating the design into the Preliminary Contract Documents under the Street Design Task.

3. Preparation of Final Sewer Design and obtaining approval from the Commissioner prior to incorporating the Final Sewer Design into the Final Contract Documents in accordance with the Street Design Task.

C. Development of Contract Documents

1. In preparing the Contract Drawings and any addenda to the standard Sewer Specifications that are needed, the Consultant shall take cognizance of the basic minimum requirements set forth herein, together with such other requirements as may be proper for the complete fulfillment of this contract for the purpose for which the project is to be used. The proposed construction is to be designed generally in accordance with the requirements of any other agency having jurisdiction as the design progresses.

2. The Consultant shall review all boring and soil data obtained in other sections of this program with a view to identifying unacceptable fill material for purpose of preparing estimates of quantities that are to be included in the contract documents.

D. Surveys

In preparing Sewer Design, the Consultant shall utilize information as obtained in the Topographic and Utility Surveys for the Project, and test pit and/or boring information as may be provided by the various public/private utilities, and soils information obtained under the Soils Exploration Program provided for under this Contract. The Consultant shall supplement this information with field trips, additional surveys and searches for information as may be required.

E. Sewer Design: In connection with Sewer Design, the Consultant shall provide the following services:

1. Prepare preliminary and final designs superimposed over the composite utility plan, addenda to Standard Sewer Specifications, estimates of cost, including utility charges and Gas Cost Sharing reimbursements (if any), and such pertinent engineering data as may be required. The design drawings shall be in accordance with current Departmental standards and guidelines, and shall show, to the satisfaction of the Commissioner, all necessary sewer design details.

2. Present the Sewer Design Plans to private utility companies for private utility impact assessment and alignment coordination.

3. During design, confer and meet with representatives of the Commissioner in order to coordinate requirements for the design of the proposed project. In addition, the Consultant shall confer with, and where and when necessary, meet with other City, State or Federal Agencies and private utilities having jurisdiction in order to integrate any of their requirements or contemplated work into this project.

4.20 WATER MAIN DESIGN

A. Under this task the Consultant shall provide for the preparation of Water Main Design to be performed in conjunction with the project. This design work shall include the rehabilitation, replacement or relocation of existing Water Mains and/or the installation of new Water Mains, including the design of other appurtenances, in accordance with a pre-engineered lane selection methodology.

B. The scope of work for the Water Main Design shall include the performance of the following services:

a) Preparation of a Schematic Water Main Design, the submission of said design to the Commissioner for review and comment, and obtaining approval of the Schematic Design from the Commissioner.

b) Coordinating and meeting with affected public/private utilities with regard to lane selection and/or interference mitigation in accordance with pre-engineering methodology.

c) Coordinating with Keyspan Energy/Consolidated Edison regarding New York State enabling legislation relative to City reimbursement for interference mitigation, including review of the gas cost-sharing analysis prepared by Keyspan Energy/Consolidated Edison, and incorporation of Keyspan Energy/Consolidated Edison items of work in the Contract Documents.

d) Preparing Preliminary Water Main Design and obtaining approvals from the Commissioner prior to incorporating the design into the Preliminary Contract Documents under the Street Design Task.

e) Preparing Final Water Main Design and obtaining approvals from the Commissioner prior to incorporating the Final Water Main Design into the Final Contract Documents under the Street Design Task.

C. Development of Contract Documents

a) In preparing the Contract Drawings and addenda to the Standard Water Main Specifications, the Consultant shall take cognizance of the basic minimum requirements set forth herein, together with such other requirements as may be necessary and proper for the complete fulfillment of this contract for the purpose for which the project is to be used. The proposed water mains are to be designed, generally, in accordance with the requirements of any other agencies having jurisdiction as the design progresses.

b) The Consultant shall review all boring and soil data obtained under other tasks in this design program with a view to identifying unacceptable fill material for purpose of preparing estimates of quantities that are to be included in the contract documents.

D. Surveys

In preparing Water Main Design, the Consultant shall utilize information as contained in the plotted Topographic and Utility Surveys for the Project, and test pit and/or boring information as may be provided by the various public/private utilities. The Consultant shall supplement this information with field trips, additional surveys and searches for information as may be required.

E. Water Main Design

In connection with Water Main Design, the Consultant shall provide the following services:

a) Prepare preliminary and final designs superimposed over the composite utility plan, addenda to Standard Water Main Specifications, estimates of cost, incorporating utility charges and Keyspan Energy/Consolidated Edison reimbursements (if any), and such pertinent engineering data as may be required. The design shall be in accordance with current Departmental standards and guidelines, and shall show, to the satisfaction of the Commissioner, all necessary water main design details including, but not limited to, valves, valve chambers, and fire hydrants.

b) Present the Water Main Design plans to private utility companies for private utility impact assessment and alignment coordination.

c) During design, confer and meet with representatives of the Commissioner in order to coordinate requirements for the design of the proposed project. In addition, the Consultant shall confer with and, where and when necessary, meet with other City, State or Federal Agencies and private utilities having jurisdiction in order to integrate any of their requirements or contemplated work into this project.

4.21 STREET LIGHTING SYSTEM DESIGN

1. Under this task the Consultant shall design a lighting system and electrical appurtenances in connection with the illumination of streets, avenues and public spaces within the project and shall prepare cost estimates for the proposed work. The design will include provisions for removal and relocation of existing street lighting facilities and installation of new lighting facilities.

2. Unless otherwise approved by the Department of Transportation, Bureau of Traffic, Division of Signals and Street Lighting, the level of illumination required is a maintained average of one (1) foot candle, a maintenance factor of 0.58 and a uniformity ratio of 6 to 1 (average to minimum) for Local Roads. For Expressways, Major Roads, and Collector Roads, the illumination level shall be 1.5 to 2 foot candles with a uniformity ratio of 3 to 1 (average to minimum).

3. The design shall conform with the latest standards and specifications of the Department of Transportation, Bureau of Traffic, Division of Signals and Street Lighting; the Illuminating Engineering Society of North America (IESNA); the American Association of State Highway Officials; and the National Electrical Code (NEC).

Should any conflict occur between these specifications, standards and codes, the Division of Signals and Street Lighting shall make the final decision on the requirement.

4. The Consultant shall prepare preliminary drawings, showing the location and details of all equipment to be installed in connection with the proposed Street Lighting design, the electrical connections and electrical services, and shall submit the preliminary drawings to the Department of Transportation, Bureau of Traffic, Division of Signals and Street Lighting for review and comments.

5. Drawings prepared and symbols used shall be in standard Bureau of Traffic, Division of Signals and Street Lighting format.

6. The submission of preliminary drawings to the Division of Signals and Street Lighting shall include:

   a) The Consultant's photometric calculations for the proposed design which shall be performed using CALA, ALADIN, AGI or other software programs which shall be subject to pre-approval by the Division of Signals and Street Lighting;

   b) Parameters used in the calculation, including roadway and sidewalk widths, mounting height, luminaire position (overhang, setback, spacing), wattage and luminaire classification.

7. The Consultant shall address the review comments and incorporate the requirements of the Division of Signals and Street Lighting in the proposed design.

8. The Consultant shall prepare preliminary estimates of quantities and cost for the proposed Street Lighting work based on the revised preliminary drawings. The estimates shall be in standard Division of Signals and Street Lighting format. The Consultant shall incorporate the preliminary estimate of quantities and cost into the Consultant's Estimate for Mass Mailing No. 2 as provided for in the Quantity and Cost Estimating Task included in the Specific Requirements of this Contract

9. The Consultant shall prepare and submit final drawings, for the proposed Street Lighting design, to the Division of Signals and Street Lighting for review and approval.

10. The final drawings shall include the proposed electrical distribution system and shall be submitted with an analysis of the voltage drop for the proposed City distribution system including voltage drop calculations.

11. The Consultant shall prepare and submit to the Division of Signals and Street Lighting, for review and approval, pre-final estimates of quantities and cost for the proposed Street Lighting Work.

12. The Consultant shall revise the final drawings and estimates to incorporate comments received from the Division of Signals and Street Lighting.

13. Upon receipt of final approval of the drawings and estimates for proposed Street Lighting work from the Division of Signals and Street Lighting, the Consultant shall incorporate the final Street Lighting plans and estimates into the Contract Documents as provided for in the Street Design Task included in the Specific Requirements of this Contract. The Consultant shall submit to the Division of Signals and Street Lighting, for record purpose, the following:

   a) A set of final drawings on mylar for the Street Lighting Work;
   b) A copy of the final estimate for Street Lighting Work;
   c) The photometric calculations using maintenance factors of 1 and 0.58.

4.22 TRAFFIC SIGNALS SYSTEM DESIGN

1. Under this task the Consultant shall design traffic signals and appurtenances in connection with traffic controls required for streets within the project and shall prepare cost estimates for the proposed Traffic Signal Work. The design will include provisions for modification, removal and relocation of existing traffic signal facilities and installation of new traffic signal facilities.

2. The design shall conform to the latest standards and specifications of the Department of Transportation, Bureau of Traffic, Division of Signal Controls.

3. The Consultant shall design the locations of traffic signal poles in coordination with the schematic geometric design developed for the project including, but not limited to, traffic lane(s) configuration, pedestrian crosswalks, traffic flow direction, mall and roadway widths, and pedestrian ramp locations.

4. The Consultant shall review available subsurface data and inspect existing buildings in the vicinity of proposed Traffic signal poles to identify possible impacts with proposed traffic signal pole foundations.

5. The Consultant shall prepare preliminary drawings, showing the location and details of all traffic signal poles, mast arms, signal heads, cables, conduits, traffic controllers, and loop detectors and/sensors that are to be removed, relocated, modified, or installed in connection with the proposed Traffic Signals design and shall submit the preliminary drawings to the Department of Transportation, Bureau of Traffic, Division of Signal Controls for review and comments.

6. Drawings prepared and symbols used shall be in standard Bureau of Traffic, Division of Signal Control's format.

7. The Consultant shall address the review comments and incorporate the requirements of the Division of Signal Control into the proposed design.

8. The Consultant shall prepare preliminary estimates of quantities and cost for the proposed Traffic Signal Work based on the revised preliminary drawings. The estimates shall be in standard Division of Signal Control format. The Consultant shall incorporate the preliminary estimate of quantities and cost into the Consultant's Estimate for Mass Mailing No. 2 as provided for in the Quantity and Cost Estimating Task included in the Specific Requirements of this Contract.

9. The Consultant shall prepare and submit pre-final drawings, for the proposed Traffic Signals, to the Division of Signal Control for review and approval.

10. The Consultant shall prepare and submit to the Division of Signal Control, for review and approval, pre-final estimates of quantities and cost for the proposed Traffic Signal Work.

11. The Consultant shall revise the pre-final drawings and estimates to incorporate comments received from the Division of Signal Control.

12. Upon receipt of approval of the drawings and estimates for proposed Traffic Signal Work from the Division of Signal Control, the Consultant shall incorporate the final Traffic Signal plans and estimates into the Final Contract Documents.

4.23 DESIGN OF RETAINING WALLS AND BULKHEADS

1. Under this task the Consultant shall develop Final Design(s) for retaining walls and bulkheads including but not limited to waterfront structures.

2. PRELIMINARY CONSTRUCTION CONTRACT DRAWINGS

a) The Consultant shall study the findings and recommendations of any embankment protection study that was previously conducted for the project.

b) The Consultant shall determine the nature and extent of subsurface exploration that is needed to update and supplement previous studies and to complete the final design. The Consultant shall incorporate the subsurface exploration requirements in the scope of work to be performed under the Subsurface Exploration Task included in the Specific Requirements of the Contract.

c) The Consultant shall study the results of the subsurface exploration program performed and the design details being developed for reconstruction of adjacent street.

d) The Consultant shall design and prepare preliminary construction contract drawings for the retaining wall/bulkhead. The drawings shall be sufficiently detailed to clearly show the location, limits and structural composition of retaining wall/bulkhead to be reconstructed; the extent of structural replacement and repairs needed; and any aesthetic repairs and/or treatments proposed.

e) The Consultant shall prepare updated preliminary cost estimates for the proposed retaining wall/bulkhead.

f) The Consultant shall include the preliminary construction contract drawings in the programmed Mass Mailing No.1 that is required under the Street Design Task.

g) The Consultant shall modify the preliminary construction contract drawings to incorporate comments received in response to Mass Mailing No. 1, as approved by the Commissioner.

3. FINAL CONSTRUCTION CONTRACT DOCUMENTS

a) The Consultant shall develop detailed construction contract drawings for the retaining wall/bulkhead.

b) The Consultant shall coordinate the Final Design details with the design details being developed for reconstruction of the adjacent street.

c) The Consultant shall prepare all submissions to City, State and Federal Agencies to obtain required approvals and permits. Such submissions shall include as required, but shall not be limited to, drawings, specifications, estimates, design criteria and computations.

d) The Consultant shall determine and advise the Commissioner of the need for temporary easements on private property to facilitate construction and shall, as directed by the Commissioner, prepare appropriate documentation and serve notices on property owners, and meet with property owners and other parties as needed to obtain such easements.

e) The Consultant shall prepare detailed cost estimates and specifications for the proposed work.

f) The Consultant shall develop Pre-final Contract Documents for reconstruction/construction of the retaining wall/bulkhead, including drawings, specifications and estimates.

g) The Consultant shall submit the Pre-final Design contract documents to the Commissioner for review and approval, and shall incorporate the approved drawings in the programmed Mass Mailing No. 2.

h) The Consultant shall modify the Pre-final construction contract documents to incorporate comments received in response to Mass Mailing No. 2, as approved by the Commissioner.

4.24 CONSTRUCTION STAGING AND MAINTENANCE AND PROTECTION OF TRAFFIC

1. Under this task the Consultant shall analyze, develop, design, and fully integrate into the Composite Contract Documents, a specific and detailed plan for the maintenance and protection of traffic during the execution of construction work on the project and for the staging of all proposed construction contract work which shall, hereinafter, be referred to as the Maintenance and Protection of Traffic (MPT) Plan.

2. MPT, for the purposes of this contract shall refer to, include and address all pedestrian traffic within and crossing the site, all modes of vehicular traffic within and crossing the site, and access and egress for all properties fronting and/or affected by the proposed construction work.

3. At the appropriate stage in the development of the Composite Contract Documents and/or as accepted in the design work schedule or as otherwise directed by the Commissioner, the Consultant shall initiate the MPT planning activity.

4. The Consultant shall develop a "Specific MPT Plan", which shall be specific to the site and specific to the site properties. The plan shall provide, where appropriate, for construction work to be advanced concurrently in subsections of the project to allow for accelerated completion of the work.

5. The Consultant shall examine various MPT strategies for portions and/or all of the project street(s) including but not limited to proposals for street closures, full or partial detour(s), one-way street conversions or other appropriate MPT staging techniques.

6. The Consultant shall familiarize him/herself regarding the operation, activity and intensity of traffic within the project site on a block by block and zone of influence basis, and shall identify, analyze, study and address and/or mitigate issues including, but not limited to, the following: main line traffic volumes; intersecting street(s) traffic volumes; turning movements; vehicular classifications {cars, trucks, buses, railroad(s)}, curbside activity (loading and unloading); parking requirements; planned special events (parades, street fair(s), marathon); special traffic generators (hospitals, police stations, large parking garages or areas); public or private institutional properties; manufacturing/warehousing facilities, supermarkets, fire stations, government buildings, parks, schools, subway stations; intense traffic generators (all types of commercial, manufacturing, warehousing establishments); other current or planned construction projects within the zone of influence; and all sources of pedestrian activity.

7. The Consultant shall develop the MPT plan generally in three stages - as follows:

A. STAGE 1 - CONCEPTUAL MPT PLAN. In this stage the Consultant shall:

a) Conceptualize the overall MPT strategy and, more specifically, conceptualize subdividing the project for concurrent staging of the work where applicable, and the staging of each category of the proposed construction work (such as sewer lining, sewer reconstruction, catch basin/inlet installation and basin/inlet connections, water mains - 12, 20, 36, 48 inch, installation of hydrants, curb construction, sidewalk construction, roadway base construction, and laying roadway wearing course);

b) Meet with and present his/her conceptual scheme to the Commissioner including presentation of the rationale for pursuing the selected MPT strategy based on the information, analysis and issues identified above. The presentation shall include graphics, which shall be suitable and adequate to demonstrate/represent the conceptual scheme(s);

c) Upon receipt of general concurrence from the Commissioner or direction to pursue additional alternative(s) the Consultant shall proceed with Stage II of the MPT development.

B. STAGE II - PRELIMINARY MPT DEVELOPMENT. In this stage the Consultant shall:

a) Respond to the questions and concerns raised during the Conceptual MPT planning strategy session and develop the MPT proposals to a preliminary level of detail for each stage of construction work (such as but not limited to sewer lining, sewer reconstruction, catch basin/inlet installation and basin/inlet connections, water mains - 12, 20, 36, 48 inch, installation of hydrants, curb construction, sidewalk construction, roadway base construction, and laying roadway wearing course);

b) Develop and provide graphics and notes to specifically describe the proposed MPT plans for each category of construction work. For this presentation the Consultant may be permitted to use 8 1/2 by 11 or 8 1/2 by 14 inch sheet sizes, as an alternative to the standard contract drawing sheet size, with hand drawn sketches provided that the graphics are of a professional quality and acceptable to the City;

c) The Consultant shall meet with and present the Preliminary MPT Plan to the Commissioner;

d) Upon receipt of general concurrence from the Commissioner or direction to pursue additional alternatives and/or expand the specificity of the MPT proposal, the Consultant shall request a review of the proposed MPT scheme by the Department of Transportation's Office of Construction Mitigation and Coordination.

C. STAGE III - FINAL MPT DEVELOPMENT. In this stage the Consultant shall:

a) Develop and prepare final MPT plans and fully incorporate the final MPT plans into the composite final contract documents;

b) The Consultant shall fully integrate and incorporate any comments and/or stipulations received from the Department of Transportation's Office of Construction Mitigation and Coordination into the Composite Final Contract Documents.

4.25 PREPARATION OF SPECIFICATIONS

Under this task, the Consultant shall prepare and print complete sets of Specifications for the ensuing construction contract. The specifications, which shall include boiler plate, required Addenda and Bid Schedule Sheets, shall be prepared within the framework of the following parameters:

1. Standard Specifications of the Department and of the agencies having jurisdiction over various elements of the project shall be used as directed by the Commissioner.

2. Addenda shall contain either modifications to standard items or complete descriptions for new items of work. In addition, addenda may contain special provisions for conducting the work, including but not limited to time of construction, maintenance of traffic stipulations, insurance requirements, State/Federal requirements, and incorporation of additional provisions for both private and City-Owned Utility work.

3. The Specifications shall conform to the appropriate Standard Specifications for the various items of work involved; excepting where there is no standard specification for a proposed bid item or item of work, the Consultant shall prepare the necessary special specification, as an Addendum to the Standard Specifications, and shall submit such special specification to the Commissioner for review and approval.

Where required by the Commissioner, the Consultant shall prepare a justification for New York State Department of Transportation (NYSDOT) review - specifically outlining the technical circumstances requiring a new specification write-up and shall be responsible for obtaining NYSDOT approval of new specifications.

4. Bid Schedule sheets will be provided to the Consultant by the Commissioner for incorporation into the Specifications. The Bid Schedule sheets will contain contract bid items listed by item number and description, presented in standard Departmental format, and will be produced in accordance with the detailed Consultant's Estimate and Scope packet produced and provided by the Consultant under other tasks included in the Specific Requirement of this Contract.

5. The Consultant shall provide Supplemental Data in standard Departmental format for the Bid Schedule, as needed, and shall verify the Bid Schedule, produced by the Commissioner, for correctness.

6. When directed by the Commissioner, collated and bound copies of the complete Specifications, Addenda and Bid Schedule Sheets shall be furnished by the Consultant for technical and construction reviews in accordance with the approved project schedule.

7. When directed by the Commissioner, the Consultant shall prepare a draft specification in accordance with the approved project schedule.

8. The Consultant shall print, inspect, and deliver to the Department the required number of collated, unbound, sets of the completed Specifications for advertisement as outlined in Section 2.5 of these General Requirements and Specific Requirements.

9. During advertisement, the Consultant shall answer all questions submitted by prospective bidders and, when and as required, expeditiously prepare, notify and distribute addenda to prospective bidders.

10. The Consultant shall continuously maintain, update and submit to the Commissioner "on demand" (at any time during the public advertisement period) a complete bidders' inquiry and disposition report (IDR) which shall, at a minimum, identify each question exactly as phrased by the prospective bidder's inquiry (questions with multiple issues or sub-questions shall be subdivided and listed as separate questions - suitably numbered in the IDR, the date inquiry was received and the date of the Consultant's response, method of delivery (fax, certified letter, telephone, other), name of proposed bidder, disposition (must be specific and complete) and date of close out. The format of the IDR shall be as approved by the City.

4.26 REVIEW AND ANALYSIS OF BIDS

1. Under this task the Consultant shall evaluate and analyze the unit bid prices submitted for the work included in the proposed construction contract for this project, compare the bids received from the various bidders, and submit a letter report of his/her findings to the Commissioner to assist the Commissioner in deciding to award a contract for the proposed work.

2. The Commissioner will provide the Consultant with a tabulation of the Consultant's estimate of quantities and prices for the various items of work along with the prices submitted by each bidder and their extended amounts. Also provided by the Commissioner will be a Bid Analysis Report containing a tabulation of all the unit prices submitted by the apparent low bidder that exceed the Consultant's estimated price by more than fifteen (15) percent, and a tabulation of all the bid items with the percentage deviation of the low bidder's price for each from the Consultant's estimated price.

3. The Consultant shall study, analyze and compare the prices submitted by each of the three lowest bidders and of other bidders where required by the Commissioner. The Consultant shall, based on the Consultant's experience and judgment, attempt to identify the possibility for unbalanced bids (including "penny bids" and "front loading") and any indications of collusion in the pricing of bids.

4. Where the unit price bid for any item of work exceeds the Consultant's estimated unit price by more than fifteen (15) percent, the Consultant shall study the item's payment provisions and appropriate design details, and recheck the estimated quantity for each such item, restudy the contract documents and identify and quantify any possible overrun or underrun in the estimated quantity for each such item, and the impact of such overrun or underrun on the bids received and on the ranking of bidders.

5. The Consultant shall identify all items of work (including items of work not identified in the Commissioner's Bid Analysis Report) submitted by each of the lowest three bidders, and of other bidders where required by the Commissioner, that appears, in the judgment of the Consultant, to be lower or higher than it is reasonable to anticipate.

6. The Consultant shall compare the pricing of items in the bids received and shall identify any bids in which items of work have been priced in a manner that indicates possible collusion by bidders in the preparation of bids.

7. The Consultant shall identify any bids received and the relevant items of work in such bids where it appears that any bidder unbalanced items of work, that are to be performed during the early stages of construction (referred to as "front loading").

8. The Consultant shall report his/her "initial findings" to the Commissioner by telephone or facsimile transmittal within two working days of the tabulation of bids being made available by the Commissioner.

9. The Consultant shall prepare and submit to the Commissioner a written statement of his/her findings within four working days of the tabulation of bids being made available by the Commissioner.

10. The Consultant shall not have any direct or indirect contact with any bidder regarding the bids received. Any such contact requested or found necessary shall be referred to the appropriate Department personnel for action.

4.27 ELECTRONIC ARCHIVING AND INDEXING

1. INTENT. It is the intent of this task to provide for assembling, indexing and electronic archiving of project records and documentation.

2. RECORDS KEEPING. Records shall be kept complete in a central project file which the Consultant shall maintain. This file shall contain letters, reports, field notes, sketches, computations, telephone messages, diaries, surveys, marked-up drawings, worksheets, data, research records, computer printouts, payments, problem reports, applications, renderings, permits, etc. Additionally, the central project file shall be kept in a format in accordance with currently applicable Departmental Standards and Procedures, which in general shall mean a format which shall facilitate retrieval of information, and customized indexing of the required records.

3. ELECTRONIC ARCHIVING:

a) For Preliminary Design and Investigation projects the Consultant shall assemble, index, prepare and submit:

1. PDF files of executed Contract/Task Order(s)
2. PDF files of the PDI Report
3. PDF files of all technical supplements
4. PDF files of important documents (CPIs, signoff letters, etc.)
5. PDF files of all payment requisitions
6. Digital files of all photos
7. Digital files (AutoCAD 2004 or latest edition) of the approved schematic Geometric Design and Pavement Marking plans
8. Digital (AutoCAD 2004 or latest edition) files of the final survey

b) For Final Design projects the Consultant shall assemble, index, prepare and submit:

1. PDF files of executed Contract/Task Order(s)
2. PDF files of other important documents (CPIs, sign off letters, etc.)
3. PDF files of all payment requisitions
4. PDF files of conformed (all addenda incorporated) bid documents (i.e. Plans, Specifications, and Estimate)
5. PDF files of the Design Report (for Federally funded projects)
6. Digital files of all photos
7. Digital files (AutoCAD 2004 or latest edition) of all final plans

c) For Total Design projects the Consultant shall assemble, index, prepare and submit all applicable items listed under (a) and (b) above.

4. ELECTRONIC DOCUMENT STORAGE. The Consultant shall record all required PDF files on CDs. All files shall be custom indexed and stored in such manner to allow for electronic search/retrieval and printing.

a) Scanning

(i) To insure maximum clarity all documents shall be scanned to a minimum of 400 dpi.

(ii) All documentation shall be scanned to PDF image.

(iii) All drawings shall be scanned to a positive image, regardless of the original polarity.

(iv) All supporting text documents shall be scanned into separate folders titled by the type of document or file name.

(v) All documents within each folder shall be scanned as a multi-page PDF image (i.e.: Letters, Reports, Minutes, Work Sheets, etc.).

b) Indexing and Retrieval

(i) The Consultant shall customize the index of stored documents to allow for electronic search/retrieval.

(ii) The stored documents shall be retrievable and printable from any PC that is operating with Microsoft Windows 2000 Professional or Windows NT, Microsoft Office 2000 Professional, AutoCAD 2004 or latest edition, and has a CD-ROM drive. No additional software or licenses shall be needed.

(iii) As Built Drawings

All As Built drawings shall be scanned to a separate folder, titled As Builts.

All drawings shall be titled by drawing name.

All drawings shall be retrievable by:
Project ID.
Contract name
Drawing number
Drawing name

(iv) Shop Drawings

All Shop drawings shall be scanned to a separate folder, titled Shops.

All drawings shall be titled by drawing name.

All drawings shall be retrievable by:
Project ID.
Contract name
Vender name
Drawing number
Drawing name

(v) The construction contract shall be custom indexed and its text shall be retrievable by division numbers and/or titles (Standard Construction Contract, "Information for Bidders" Notices, Addenda, General Conditions, General Provisions, General Requirements, Bid Booklet and Miscellaneous sections; all as applicable), numbers and/or titles of Sections and Subsections in each division, and the contract work item numbers.

(vi) It shall be possible to print the documents from each CD in normal full size pages/sheets or in detailed zoomed view for sections of drawing sheets, on a standard type printer or plotter.

c) Compact Discs (CDs)

(i) Five (5) copies of the original CDs shall be required.

d) The Consultant shall provide a printed Document Index, and the electronic file of the same, including an abstract of the document content for the central project file.

4.28 SIDEWALK CELLAR DOORS CONDITION INVENTORY

A. Under this task element the Consultant shall conduct a survey and prepare a condition inventory of all cellar doors within the limits of this project.

B. The Consultant shall establish and define criteria for, and prepare a rating scale for the condition of cellar doors.

C. The Consultant shall visit the site and make a visual inspection of every existing cellar door that is located within the limits of the mapped right-of-way(s). The Consultant shall note the condition of each cellar door inspected, and shall measure and record the dimensions of each cellar door.

D. The Consultant shall take a photograph of each cellar door. The photographs shall be in color and prints shall be 4 inches by 6 inches in size to produce a photo log. All prints shall be appropriately marked/numbered for easy identification/correlation and an index of all the photographs shall be prepared and inserted in the photo log. The index shall identify the cellar door(s) in each photograph by location, including Block and Lot number, street name and house number. The original photo log and one color copy shall be provided to the Commissioner.

E. The Consultant shall prepare a tabulated summary of the condition inventory, by station, for all cellar doors. The inventory shall include a tabulation and sequential listing of all cellar doors, the identification of each cellar door by the marking/number used in the photo log and the size, rated condition and location of each cellar door.

F. The Consultant shall verify that all cellar doors are incorporated in the topographic survey.

G. The Consultant shall perform the visual inspection of the existing sidewalk cellar doors, as an independent task. If the Consultant for his/her own convenience elects to perform the said inspection in conjunction with another assigned task in the project, he/she shall be required to obtain approval from the Commissioner for doing so, prior to performing the inspection.

4.29 BUILDINGS RESEARCH

1. Under this task the Consultant shall research the records of all existing buildings for properties abutting the project streets, ascertain the nature of their construction and whether or not grade waivers were issued by the City for the construction of each building, to allow the City to determine liability for damage to property that may result from construction and construction operations that are to be performed in connection with this project.

2. The Consultant shall research the records of the respective County Clerks' Office to locate the original Certificates of Occupancy for each building and to determine whether or not a waiver of grade was issued for each property at the time each building was erected thereon.

3. The Consultant shall research the records of the New York City Department of Buildings to ascertain the nature of the foundations provided for each building.

4. The Consultant shall research the records of the Topographic Bureau of the respective Borough Presidents' Office to supplement the data obtained from the records of the County Clerks' Offices and the Department of Buildings. The Consultant shall obtain the dates on which the original legal grades were established as well as any subsequent changes/remapping of lines and grades.

5. The Consultant shall obtain copies and dates of all relevant records located, and shall record the source and file location of each item of record obtained.

6. The Consultant shall report on the results of the research conducted on the buildings. The report shall be prepared in tabular format with a graphical summary complete with legend, and shall be submitted to the Commissioner for approval. The report shall indicate:

(a) The City Block and Lot Number of each property in ascending order.
(b) The type and usage of each building that exists on each lot.
(c) The nature of construction of each building and its foundation.
(d) Buildings for which waivers of grade were issued at the time of construction.

7. The Consultant shall prepare an index for and shall include all records obtained, under this task, in Technical Supplement to the Design Report produced under the Project Development/Identification Task included in the Specific Requirements for the Project.

4.30 CONSTRUCTION CONTRACT DURATION/SCHEDULING STUDY

1. Under this task the Consultant shall develop and study alternate construction staging proposals and corresponding schedules for each staging proposal, and analyze the general impact of each proposal on the community and on traffic and traffic operations, for the purpose of assessing the optimum time to be allowed for the proposed construction contract duration and finalize the development of the Maintenance and Protection of Traffic Plans in accordance with an approved staging proposal.

2. The Consultant shall study the design proposals, as-available contract documents, review relevant design/study support data and perform additional reconnaissance, as necessary, to familiarize itself with the project site and area.

3. The Consultant shall identify all significant work activities and develop productivity rates, for the various elements of construction activities identified, for use in this construction staging/time study analysis.

4. The Consultant shall prepare/develop a "baseline" construction staging plan. The Consultant shall take cognizance of the impact of the staging plan on contract duration, the community and on traffic circulation and operations, and identify possible mitigation measures.

5. The Consultant shall develop time/productivity curves for the proposed construction staging and for each construction contract activity included in the contract - including, but not limited to, sewer lining/sewer construction, catch basin installation, basin connections, water mains (12, 20, 36, 48 inch or metric equivalents and other sizes), curb and sidewalk work, roadway base, roadway pavement, tree planting, street lighting, traffic signal, and any other work proposed.

6. The Consultant shall present its preliminary construction staging and scheduling analysis to the Commissioner at a meeting. The presentation shall include the use of professional quality overheads and/or graphic display boards as exhibits, supplemented with handouts and other presentation material.

7. Upon general concurrence from the Commissioner or direction to pursue different and/or additional construction staging strategies the Consultant shall develop two accelerated construction staging alternatives and their corresponding schedules. The Consultant shall take cognizance of the impact of the accelerated work/staging plans on the community and on traffic circulation and operations, and identify possible mitigation measures.

8. The Consultant shall present its fully developed construction staging and duration analyses to the Commissioner at a meeting. The presentation shall include the use of professional quality overheads and/or graphic display boards as exhibits, supplemented with handouts and other presentation material.

9. The Consultant shall incorporate the construction staging and scheduling alternative, accepted by the Commissioner, into the Composite Contract Documents' Maintenance and Protection of Traffic Plans.

4.31 SCHEMATIC LANDSCAPE/URBAN DESIGN

Under this task the Consultant shall provide for the preparation of a Schematic Landscape/urban design including provision of pedestrian amenities to be performed in conjunction with the Project.

The scope of work for the schematic landscape/urban design shall include performance of the following services:

1. The consultant shall study the site conditions and all available subsurface information/data, determine the need for special borings and develop the location plans, and take the borings (under Subsurface Exploration Program) specifically intended to analyze and determine the suitability of existing subsurface materials for planting purposes as approved and directed by the Commissioner. The consultant shall, recommend appropriate mitigation measures for soil quality improvements, when required.

2. The consultant shall prepare a Schematic Landscape/Urban Design coordinated with the Schematic Geometric Street Design elements developed for the project; submit the said design to other Agencies designated by the Commissioner, and to the Public Design Commission for review and comment; and obtain approval and or acceptance of the Schematic Landscape/Urban Design from the Commissioner.

3. INCREMENTAL REVIEWS: The Landscape Architect/Urban Designer shall be accountable to initiate all actions for incremental review of proposed designs by the Department, other Agencies designated by the Commissioner and the Public Design Commission, <u>including all follow-up meetings</u>, as required, to expeditiously resolve all questions and concerns necessary to develop designs, to obtain the approval of said agencies, and to advance the project to completion.

4. The Consultant's Landscape Architect/Urban Designer shall study all data obtained and designs developed under the other tasks included in the Specific Requirements for the Project, and develop a functional Schematic Landscape/Urban Design for the project. This shall include, but not be limited to, the following:

a When a Consultant and/or DDC identify landscape/urban design elements to have a potential for use of the sustainable design, the Consultant shall follow High Performance Infrastructure-Best Management Practices (BMP) based on the core principles of sustainable design during development of Schematic Design. The Consultant shall analyze the environmental, social and economic benefits of each alternative and include the results of their studies and their recommendations in a report. The Consultant shall incorporate the approved design into the Preliminary Design Documents.

b The Consultant and Landscape Architect/Urban Designer shall review the topographic and utility surveys, the Preliminary Design/Investigation Report for the project, maintenance records, boring and test pit results, and all technical supplements prepared in connection with the program.

c The Landscape Architect/Urban Designer shall prepare a report compiling all relevant base data for the landscape of the project and other locations within the project limits including a complete photographic record of the project area in order to illustrate the general character of the environs, as well as to illustrate the typical conditions and specified problems/issues/impacts of the proposed project. All graphics shall be reduced and included in a 8.5" x 11" report. The photographic record shall be 4" x 6" format, and shall be suitably indexed, bound, annotated and submitted with the final contract documents.

d The Landscape Architect/Urban Designer, in coordination with the Consultant, shall develop conceptual designs for the landscaping/urban design.

e The Schematic Landscape/Urban design for the above themes shall be bounded by the following elements:

(i) Proposed geometric curb alignment as developed under the Schematic Design Task.

(ii) Existing and proposed substructures and utilities within the area of the project site.

f. The conceptual design shall respond to, but not be limited to, the following urban design criteria:

(i) Encourage appropriate use and discourage inappropriate use of public spaces.

(ii) Create an opportunity for public art.

(iii) Plans for future development of the abutting properties in accordance with existing zoning regulation.

g. Pedestrian landscape treatment may include, but not be limited to, the following:

(i) Sidewalks and pavements consisting of special materials such as granite, hexagonal asphalt block pavers, bluestone and stone screenings.

(ii) Granite curbing.

(iii) Tree Planting.

(iv) Special tree pits.

(v) Special street lighting and low-level pedestrian lighting that will be subject to approval by the Department of Transportation. Street lighting must conform to the Department of Transportation standards. Proposed designs shall be coordinated with the Department of Transportation's Bureau of Traffic Operations, Division of Signals and Street Lighting.

(vi) New traffic signals/poles that will be subject to approval by the Department of Transportation. Traffic signals must conform to the Department of Transportation standards. Proposed designs shall be coordinated with the Department of Transportation's Bureau of Traffic Operations, Division of Signals and Street Lighting.

(vii) Relocation of utilities, as required.

(viii) Consideration of the use of the Department of Parks and Recreation's standard benches.

h. The Landscape Architect/Urban Designer shall develop/recommend not more than two alternate landscape treatments for the project. These landscape treatments shall correspond to the schematic geometric treatments as developed in cooperation with the Consultant, and shall include, but not be limited to, such items as curb and sidewalk treatments; tree planting; pedestrian amenities; street and pedestrian lighting; street furniture; signage; and traffic signal systems.

i. The Landscape Architect/Urban Designer shall identify and quantify all impacts for each alternative.

j. The Landscape Architect/Urban Designer shall present each of the proposed Landscape treatment alternatives in schematic plan view(s) using a "modified" clean base format. The modified clean base plans shall be reformatted/matched to present linear continuity for individual thoroughfares/segments/routes. Suitable key location figures and/or key windows shall be employed, and cross-sections shall be required where appropriate. All elements of the schematic landscape/urban design presentation plans, including sheet size, scale, sheet coverage and indexing, shall be subject to the approval of the Commissioner.

k. The Landscape Architect/Urban Designer shall submit the proposed schematic landscape/urban design(s) to the Commissioner, for review. Upon approval, the Landscape Architect/Urban Designer shall present the recommended schematic design to other Agencies designated by the Commissioner, and the Public Design Commission for their review and comments; and to various other interested parties, as directed by the Commissioner, for their comment(s).

l. The Landscape Architect/Urban Designer shall evaluate all comments received and shall analyze each concern. Upon consultation with the Department's Infrastructure Design Division the Landscape Architect/Urban Designer shall prepare a letter report to the Department summarizing all comments and concerns, and making all necessary recommendations.

m. The Landscape Architect/Urban Designer shall be required to either modify the original schematic design or prepare one additional alternative schematic design responding to identified concerns where, in the judgment of the Landscape Architect/Urban Designer and the Commissioner, the adjustments/modifications are in the best interests of the City of New York, are technically defensible and represent acceptable architectural practice.

n. The Landscape Architect/Urban Designer shall submit the proposed Schematic Landscape/Urban Design to the Commissioner for review. Upon acceptance by the Commissioner, the Landscape Architect/Urban Designer shall present the recommended schematic design to other agencies designated by the Commissioner, and to the affected Community Planning Board(s), and the Public Design Commission at formal public meetings/hearings, and shall incorporate the schematic design into a Schematic Landscape/urban design Technical Supplement.

o. Upon acceptance of the final Schematic Landscape/urban design by the Department and upon receipt of written notice to proceed by the Commissioner, the Landscape Architect/Urban Designer shall commence work in conjunction with the Final Design Services of the Project.

4.32 FINAL LANDSCAPE/URBAN DESIGN

Under this task the Consultant shall provide for the preparation of a final landscape/urban design including the provision of pedestrian amenities to be performed in conjunction with the Project.

1. The Landscape Architect/Urban Designer shall provide the following services:

a. When a Consultant and/or DDC identify landscape/urban design elements to have a potential for use of the sustainable design, the Consultant shall follow High Performance Infrastructure-Best Management Practices (BMP) based on the core principles of sustainable design during development of Final Design. The Consultant shall analyze the environmental, social and economic benefits of each alternative and include the results of their studies and their recommendations in a report. The Consultant shall incorporate the approved design into the Design Documents.

b. The preparation of final construction contract documents for Landscaping/Urban Design work which shall be advanced in two phases as follows:

(i) The preparation of Preliminary Landscape/Urban Design in cooperation with the Department and the Public Design Commission; and obtaining approvals from the Department and from said Agency prior to incorporation of the Preliminary Landscape/Urban Design into the Preliminary Contract Documents under the Street Design Task.

(ii) The preparation of Final Landscape/Urban Design in cooperation with the Department and other agencies designated by the Commissioner and the Public Design Commission; and obtaining approvals from the Department and from said Agency prior to incorporation of the Final Landscape/urban design into the Final Contract Documents under the Street Design Task.

c. INCREMENTAL REVIEWS: The Landscape Architect/Urban Designer shall be accountable to initiate all actions for incremental review of proposed designs by the Department, other Agencies designated by the Commissioner and the Public Design Commission, <u>including all follow-up meetings</u>, as required, to expeditiously resolve all questions and concerns necessary to develop designs, to obtain the approval of said agencies, and to advance the project to completion.

d. Prepare preliminary and final contract drawings, addenda to Standard Department and Department of Parks Specifications, estimates of cost, and such pertinent architectural data as may be required. The drawings shall be in accordance with the standards of the Department, and shall show, to the satisfaction of the Commissioner, all necessary Landscape/Urban Design details.

(i) Contract documents shall include but not be limited to the following list of separate contract drawings:

Topographic Survey
Removals Plan
Layout Plan
Site Plan
Grading and Utilities Plan
Planting Plan
Sections and Elevations
Details

(ii) During design, confer and meet with the Commissioner in order to coordinate requirements for the design of the proposed project. In addition, the Landscape Architect/Urban Designer shall confer with, and where and when necessary, meet with other City, State or Federal Agencies and private utilities having jurisdiction in order to integrate any of their contemplated work into this project.

Complete sets of prints of the plans, specifications and cost estimates shall be submitted for Preliminary, Final and Compliance Review.

(iii) Contract drawings shall be developed for the following landscape items:

(i) Removals and Excavation
(ii) Pavements and Curbs
(iii) Fencing
(iv) Site Furniture
(v) Miscellaneous Construction
(vi) Planting
(vii) Drainage and Water Supply
(viii) Lighting

(ix) Monuments and Art Work

e. In preparing the Contract Drawings and addenda to the Standard Specification of the Department, the Landscape Architect/Urban Designer shall take cognizance of the basic minimum requirements set forth herein, together with such other requirements as may be stipulated and proper for the complete fulfillment of this contract for the purposes for which the projects is to be used. The proposed construction is to be designed generally in accordance with these Specific Requirements of the contract, subject to such further requirements of the Department, the Public Design Commission, and any other agencies having jurisdiction as the design progresses.

f. In preparing the Final Landscape/Urban Design, the Landscape Architect/Urban Designer shall utilize all information as contained in the plotted topographic and Utility Surveys for the Project. The Architect shall supplement this information with field trips and additional searches for information as may be required, including obtaining supplemental surveys.

4.33 LANDSCAPE/URBAN DESIGN CONSTRUCTION SUPPORT SERVICES

During the construction stages of the project the Landscape Architect/Urban Designer will be required to inspect and approve shop drawings, material samples and the landscaping work being performed by the contractor to ensure that the landscaping materials and the finished work meet the quality and standards specified.

The Landscape Architect/Urban Designer will be required to visit the site at various stages of the landscaping work to inspect the landscaping being performed, and shall provide such instructions and guidance to the Contractor as is necessary and appropriate to ensure that the required quality of the landscaping work is achieved.

The Commissioner will transmit the necessary shop drawings to the Landscape Architect/Urban Designer for review and approval and will, in consultation with the Landscape Architect/Urban Designer, advise the Landscape Architect/Urban Designer of the need and schedule for inspecting various phases of the landscaping work as the work progresses.

4.34 DESIGN OF MODIFICATIONS TO SUBWAY VENTILATORS

1. Under this task the Consultant shall research and study the details of existing subway structures and facilities, develop preliminary and final designs, preliminary and final cost estimates, and specifications for modification of subway ventilators as needed to implement street reconstruction proposals.

2. PRELIMINARY DESIGN

(a) The Consultant shall utilize any topographic and utility data provided to the extent necessary for the proper completion of this task.

(b) The consultant shall supplement any survey and utility data provided by conducting additional research of Transit Authority, and public and private utilities' records; and by conducting additional field surveys to ensure that there is adequate and accurate data to identify possible design alternatives and to fully develop the design details.

(c) The Consultant shall develop and provide the Commissioner with an estimate of the number of days and locations at which it intends to have personnel conducting surveys within the subway structure. The Consultant shall coordinate, with the Department, the development of a Transit Authority Force Account to allow the City to reimburse the Transit Authority for the cost of its personnel assigned to facilitate the Consultant's field surveys of the subway structure and its facilities.

(d) The Consultant shall identify design alternatives for modifying the subway ventilator(s) to allow for implementation of the street reconstruction proposals. Proposed modifications may include, but not be limited to, relocation of ventilators, and modification of the subway structure and facilities.

(e) The Consultant shall develop design alternatives in full coordination with the Transit Authority. All modifications to the subway structure and Transit Authority facilities are to be designed in accordance with design criteria stipulated by the Transit Authority, or recommended by the Consultant and accepted by the Transit Authority. Design details shall conform to the Transit Authority's standards.

(f) The Consultant shall prepare preliminary drawings for the design alternatives identified. The preliminary drawings shall include plans, profiles and cross sections drawn to scale; shall indicate overall dimensions of existing structural elements that are to be modified and of the new construction proposed including hardware and equipment that must be removed and/or installed.

(g) The Consultant shall make a preliminary assessment of the impact that each design alternative will have on existing sewers, water mains, and all other City owned facilities, identify and recommend measures that can be implemented to mitigate those impacts, and prepare preliminary drawings for the mitigation measures recommended.

(h) The Consultant shall submit the preliminary drawings for the design alternatives, including details of proposed City owned utilities impact mitigation measures, to all private utility companies that own and operate facilities within the project limits. The Consultant shall ask each utility company to make a preliminary assessment of the impact of each design alternative on its facilities and to identify private utilities impact mitigation proposals for each alternative.

(i) The Consultant shall develop preliminary estimates of the cost of implementing each design alternative considered including the cost of measures proposed to mitigate City owned utility impacts.

(j) The consultant shall identify, on the Preliminary Drawings, the existing utilities that may be impacted and shall submit the preliminary drawings and preliminary cost estimates for the design alternatives to the Commissioner along with recommendations, including justification, for selection of a preferred alternative(s). The Consultant shall meet with the Commissioner and present the design alternatives, recommendations and justifications.

(k) The Consultant shall incorporate comments received from the Commissioner on the preliminary design alternatives and shall revise the preliminary drawings accordingly.

(l) Upon acceptance of a preferred design alternative(s) by the Commissioner the Consultant shall submit the preferred alternative to the Transit Authority for approval/acceptance and shall meet with the Transit Authority's representatives, if required, to present the proposed design. The presentation shall include, if appropriate, discussion of other design alternatives considered and justification for selection of the preferred design.

(m) The Consultant shall advise the Commissioner of all design requirements imposed by the Transit Authority. Where approved by the Commissioner, the Consultant shall incorporate such requirements in the proposed design(s), resubmit the proposed design to the Transit Authority, and obtain the Transit Authority's written approval/ acceptance of the proposed design.

(n) The Consultant shall not commence any work on the Final Design for modification of subway ventilator(s) without written authorization from the Commissioner to proceed with such work.

3. FINAL DESIGN

(a) Upon receipt of written instructions from the Commissioner to proceed with work on the final design for modification of subway ventilators, the Consultant shall proceed to design, and develop details and construction contract drawings, specifications and final cost estimates for the approved/accepted design alternative(s).

(b) The contract drawings shall show all dimensions and indicate all materials, including requirements for hardware and equipment,, that are needed to modify the existing ventilator(s), and include details for demolition of and/or sealing the existing ventilator(s) where necessary and for construction of the new ventilator(s).

(c) The Consultant shall develop final design details for the mitigation of City owned utility impacts and shall include the design details in the construction contract drawings that are being developed.

(d) The Consultant shall submit the construction contract drawings to the Transit Authority for review and comments and shall include the construction contract drawings in the programmed Mass Mailing No. 1 required under the Street Design Task included in these Specific Requirements.

(e) The Consultant's submission of construction contract drawings to the Transit Authority shall include the consultant's design computations where required by the Transit Authority.

(f) The Consultant shall meet with private utility representatives to coordinate the design and implementation of measures needed to mitigate private utility impacts.

(g) The Consultant shall revise the construction drawings to incorporate comments received from the Transit Authority and in responses to Mass Mailing No. 1 submissions, as approved by the Commissioner.

(h) The consultant shall prepare detailed specifications for all work needed to modify the subway ventilator(s).

(i) The Consultant shall prepare itemized cost estimates for constructing the proposed modifications to ventilator(s) and shall include the detailed cost estimate in the Consultant's Estimate for this project.

(j) The Consultant shall submit the revised construction contract drawings and specifications for the proposed work to the Transit Authority for review and approval. The Consultant shall include the construction contract drawings, for modification of ventilators, in the programmed Mass Mailing No. 2 required under the Street Design Task that is included in these Specific Requirements.

(k) Upon receipt of written approval of the contract drawings and specifications, for proposed subway ventilator modifications, from the Transit Authority, the Consultant shall incorporate the subway ventilator modification drawings, specifications, and cost estimates in the construction contract documents for this project.

4.35 ENVIRONMENTAL ASSESSMENT STATEMENT (EAS)

Under this task, the consultant shall collect all pertinent data and prepare an Environmental Assessment Statement (EAS) for the proposed project work as described in this section. The Consultant shall assess the potential impacts of the proposed project construction to satisfy the environmental review requirements of The City Environmental Quality Review process (CEQR) and the New York State Environmental Quality Review Act (SEQRA) in order to implement this project. The scope of the EAS shall meet the requirements for all tasks (i.e. ULURP, Acquisition, Adding or Removing Traffic Lanes, Etc.) that require Environmental Assessments in the specific requirements for the project.

The Consultant shall conduct a detailed study of the impact of the proposed street improvement project as specified here below in accordance with the City Environmental Quality Review (CEQR) process as set forth in Executive Order 91 of 1977 and its amendments. The Consultant shall use the methodologies and environmental impact thresholds detailed in the CEQR Technical Manual and its appendices dated 2001. Upon completion of the Environmental review the Consultant shall duly fill out the attached CEQR Environmental Assessment Statement.

If any of the proposed action triggers review by New York State Department of Environmental Conservation, the Consultant shall conduct additional assessment in accordance with State Environmental Quality Review Act (SEQRA) as set forth in 6NYCRR Part 617. For the SEQRA process the following current blank forms from New York State Department of Environmental Conservation should be used which are downloadable from New York State website:

i. Joint Application for Permit
ii. Full Environmental Assessment Form
iii. Negative Declaration Form
iv. Positive Declaration Form
v. Structural Archeological Assessment Form

The EAS shall include, but not be limited to the following. For definitions, assessment methods, determining impact significance etc, the consultant shall refer to appropriate chapters indicated below in the CEQR technical manual:

1. **Land use, zoning, and public policy (Refer to Chapter 3A of CEQR technical Manual)**

   The Consultant shall examine the potential impact of the proposed plan in terms of land use and zoning the project area.

2. **Socioeconomic conditions (Refer to Chapter 3B of CEQR technical Manual)**

   The Consultant shall examine the potential impacts of the proposed plan upon fiscal and economic issues, water and sewer rates, employment, wages and salaries, economic activity, tax revenues, and NYC capital and operational budget expenditures.

3. **Community facilities and services (Refer to Chapter 3C of CEQR technical Manual)**

   The Consultant shall examine the potential impacts of the proposed plan upon community facilities and services in the project area.

4. **Open Space (Refer to Chapter 3D of CEQR technical Manual)**

   The Consultant shall examine the potential impacts of the proposed plan upon open space and recreational resources in the project area.

5. **Historic resources (Refer to Chapter 3F of CEQR technical Manual)**

   The Consultant shall examine the potential impacts of the proposed plan upon cultural resources in the project area, including archaeological and historic resources.

6. **Urban design / visual resources (Refer to Chapter 3G of CEQR technical Manual)**

   The Consultant shall examine the potential impacts of the proposed plan upon urban design and visual resources in the project area.

7. Neighborhood character (Refer to Chapter 3H of CEQR technical Manual)

The Consultant shall examine the potential impacts of the proposed plan upon neighborhood character in the project area.

8. Natural resources (Refer to Chapter 3I of CEQR technical Manual)

The Consultant shall examine the potential impacts of the proposed plan on natural resources including wetlands and upland areas. This effort shall include detailed tree inventory report for the project area and an assessment of tree loss as an environmental impact.

The Consultant shall examine the potential impacts of the proposed plan on existing natural habitats and wildlife within all the wooded areas surrounding the project site.

The Consultant shall identify any permits or other regulatory approvals, which may be required to facilitate the proposed plan, contact the respective agencies, and secure information on the applications and supporting materials. These permits may include the following:

- Wetland Permits (NYSDEC), and Army Corps of Engineers.
- Authorizations and other approvals under the City Planning Commission.

9. Hazardous materials (Refer to Chapter 3J of CEQR technical Manual)

The Consultant shall incorporate the results of the "Preliminary Investigation and Assessment of Site Contamination" with regard to Hazardous Waste within the Project Streets. For those locations, the Consultant shall conduct a Phase I analysis. The Phase I analysis will be based on historical and current land use patterns along with site surveys. Once locations are identified where hazardous materials may be an issue, the Consultant shall propose a site-sampling program in order to characterize the potential for significant impact. The Consultant shall propose a sampling program for the hazardous materials sampling along with the development of a conceptual mediation approach.

10. Waterfront revitalization program (Refer to Chapter 3K of CEQR technical Manual)

The Consultant shall verify if the project limits are situated within the designated boundaries of New York City's Coastal Zone. If this is the case, the consultant shall examine the potential impacts of the proposed action for their consistency with the City's Local Waterfront Revitalization Program (LWRP). The WRP consistency assessment form, which is included in the CEQR manual, shall be utilized for this purpose. For a detailed explanation of the Waterfront Revitalization Program and its policies, the consultant shall obtain the City Planning's publication of the *New York City Waterfront Revitalization Program.*

11. Infrastructure (Refer to Chapter 3L of CEQR technical Manual)

a) The Consultant shall assess the potential environmental impact of the proposed infrastructure improvement including the installation of new sanitary and storm sewers and the reconstruction of the Project Streets, on the existing infrastructure facilities such as the water supply system, sewage treatment and storm water systems.

b) The Consultant shall examine the potential impacts of the proposed plan upon public and private utilities in the Project Streets.

c) The Consultant shall assess the potential environmental impacts of any growth-inducing aspects of the proposed plan including, but not limited to, the construction of new storm water and sanitary sewer system, street reconstruction and the impact of change in grade if any. The Engineer shall estimate the additional demand flow created by the proposal based on current formulas provided by the Department.

d) The Consultant shall examine the potential impacts on City Water Pollution Control Plants (WPCPs) from additional sanitary flow collected by the sanitary system proposed as part of the project. In accordance with State Pollution Discharge elimination Permits and applicable water quality standards, the potential effects of the greater sanitary flow on water quality of receiving bodies should be analyzed.

12. Solid Waste and sanitation services (Refer to Chapter 3M of CEQR technical Manual)

The Consultant shall examine the potential impacts of the proposed plan upon solid waste generation and sanitation services.

13. Traffic and Parking (Refer to Chapter 3O of CEQR technical Manual)

Traffic Study:

i. The consultant shall examine the potential impacts of the current vehicular and pedestrian traffic and the projected increase in traffic for the next 20 years. The results of the traffic study done for this project under the PDI program should be utilized for these purposes. The Consultant shall develop a computer traffic model for the proposed roadway along the project streets using the current industry software as approved by the Department.

ii. The Consultant shall conduct turning lane analysis for the projected traffic because of widening of the project streets if any.

iii. The Consultant shall study accident data and make a comparative analysis of the existing conditions with regard to vertical and horizontal sight distance and the proposed vertical and horizontal sight distance at the critical intersections and along the project streets in accordance with the current AASHTO standards.

iv. In conducting the detailed traffic study of the project area as detailed in General Requirements, the Consultant shall investigate the current traffic data, the projected traffic increase (20 year design), the type of traffic and substantiate the proposed lane widths, proposed schematic design and the proposed geometric layout of project streets in accordance with AASHTO standards. The Consultant shall pay particular attention to the list of projects proposed by the Department of Transportation in their 10 year Capital Commitment Plan, that are within the vicinity of the project.

v. Parking conditions: The consultant shall examine the potential impact of the proposed action on parking resources in the area.

14. Transit and pedestrians (Refer to Chapter 3P of CEQR technical Manual)

The consultant shall examine the potential impacts of the proposed action on public transportation facilities and services and on pedestrian flows.

15. Air Quality (Refer to Chapter 3Q of CEQR technical Manual)

The Consultant shall assess the potential transportation and air quality impacts of the de-mapping of mapped but un-built streets and creation of a new street layout. The Consultant shall assess the potential air quality impact of the projected increase in traffic counts for the Project Streets and in its vicinity, giving due consideration to the future growth in the project area. In assessing the air quality impact, the Consultant shall take into consideration the affect of the proposed roadway reconstruction, sewer and water main installation. This should include an analysis on the duration of road closure that would take place during the sewer, water main and street construction work.

16. Noise (Refer to Chapter 3R of CEQR technical Manual)

The Consultant shall assess the potential noise level generated because of the increase in traffic counts for the Project Streets and its vicinity.

17. Construction impacts (Refer to Chapter 3S of CEQR technical Manual)

The Consultant shall assess the potential for construction related impacts, including potential impacts to water quality. A description of the construction process for all aspects of the proposed plan should be provided in the EAS along with general mitigation.

18. Public Health (Refer to Chapter 3T of CEQR technical Manual)

The consultant shall assess the potential impacts of the proposed action on public health of the community or certain group of individuals in the project site.

General:

Upon completion of the Environmental Assessment Study, the Consultant shall publish a detailed report and the results of this Study, in a format, which is acceptable to the Department.

4.36 UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

Under this task the Consultant shall provide the following services that are necessary for a complete ULURP action process:

A. ULURP Application

In preparing the ULURP application package, the Consultant shall obtain and become familiar with the following booklets/documents available through the NYC Department of City Planning:

1. Department of City Planning Land Use Review Application Package
2. Uniform Land Use Review Procedure (ULURP)
3. Information for Applicants for Alterations in the City Map

1. The Consultant shall arrange a pre-application meeting with New York City Department of City Planning, Technical Review Unit (NYCDCP-TRU) prior to the preparation of the ULURP applications. NYCDCP-TRU will provide guidelines and requirements for preparation of the application, related drawings, and attachments.

2. The Consultant shall provide a survey in accordance with New York City Department of City Planning (NYCDCP) standards. In preparing the Maps for the ULURP Application, the Consultant shall utilize, where applicable, all information as contained in the plotted Topographic and Utility Surveys. The Consultant shall supplement this information with field trips, additional surveys and searches for information as may be required.

3. The Consultant shall prepare maps (Land Use Map/Application Drawings and Preliminary Alteration Maps) suitable for submission to the NYCDCP for Pre-application review. The drawings will be prepared in accordance with the standards/instructions of the Department of City Planning, and the Topographical Bureau of the Office of the Borough President of Queens/Manhattan/Brooklyn/Staten Island/Bronx (as applicable).

4. The Consultant shall modify the drawings as required until approval (sign-off) is obtained from NYCDCP.

5. Upon review and approval (sign-off) by NYCDCP of the draft ULURP Application, the Consultant shall assemble and transmit to NYCDDC for review a single ULURP Application package, including application form for signature, and all required attachments. Upon receipt of the signed application from NYCDDC, the Consultant shall be required to duplicate the signed application form to be collated with the required attachments, and submit to NYCDCP.

6. The Consultant shall file the required number of copies of the application and attachments with the Central Intake Unit of NYCDCP (NYCDCP will determine the number of application packages to be filed).

7. <u>Documents to be delivered</u>:

   a) Upon being stamped “received” and assigned a ULURP number by NYCDCP, the Consultant shall immediately transmit to NYCDDC one (1) complete copy of the ULURP application package.

   b) On issuance by NYCDCP of the Precertification Report, the Consultant shall immediately transmit two (2) copies of that Report, with findings, to NYCDDC.

B. City Environmental Quality Review (CEQR)

The Consultant shall identify any requirement to perform an Environmental Assessment in accordance with applicable New York City and/or New York State Environmental laws and regulations (CEQR, SEQRA) that may result from the ULURP procedures required under this task.

C. Incremental Review

The Consultant shall initiate all actions for incremental review, of proposed Mapping, by the Office of Borough President of Queens/Manhattan/Brooklyn/Staten Island/Bronx (as applicable), and other involved City/Public Agencies including all follow-up meetings, as required, to expeditiously resolve all questions and concerns necessary to obtain all required approvals. The Consultant is required to:

- Participate in all conferences, meetings, and public hearings on the mapping, to present the necessary engineering background/expertise.

- The Consultant shall notify NYCDDC of the date, time, and location of the interagency conferences/meetings/hearings. NYCDDC will attend the conferences, etc. to monitor task for tracking purposes.

- Notify, by certified mail, return receipt requested, all property owners and mortgagors of each property abutting or underlying the map change; respond to any inquiries from said property owners or mortgagors; and account for all return receipts, returned notification letters, and written responses.

- Prepare reports, documentations, drawings or backup material necessary to advance the proceedings.

D. Final Deliverables

Upon completion of ULURP (Adoption of Maps), the Consultant shall hand-deliver to the NYCDDC the following:

1. One (1) complete set of every Map, in ink, on reproducible drafting film or other reproducible material as specified by the Topographical Bureau of the Office of the Borough President of Queens/Manhattan/Brooklyn/Staten Island/Bronx (as applicable) and a corresponding 35 sets of prints of every map for distribution to other agencies.

2. All notes, studies, designs, analysis, drawings, calculations, data, etc. used in the preparation of Maps, including a listing, in table form, showing Block and Lot numbers for each property abutting or underlying the map change; address of each property; name and address of each property owner, and name and address of the mortgagor (as applicable) for each lot, as obtained from a review of Department of Finance records.

3. Copies of all correspondence to and from all agencies (City, State, Federal), Utilities, Community Planning Boards, and all others having jurisdiction or interest in the project area.

4. Originals, and a single set of copies of all return receipts, returned letters, and written responses to/from all property owners and mortgagors of each property abutting or underlying the map change.

5. Original survey notes and plotted survey tracings. All original topographical survey information shall be dated, signed and certified by a licensed Surveyor. The license seal of the surveyor and/or Registered Professional Engineer shall be shown on all plans, tracings, and tabulation sheets.

6. The materials required under paragraphs D2 thru D5 above shall be presented in book form, and arranged in a series of sections indexed to identify the required materials. All materials shall be packaged and delivered to NYCDDC in temporary file type cartons.

4.37 CLEANING, TELEVISION INSPECTION AND VIDEO TAPE RECORDING OF SEWERS

1. Under this task the consultant is required to perform the following activities:

(a) Conduct a closed circuit television inspection and video tape recording of sewers which vary from eight (8) inches to forty-eight inches in their least inside dimension, and that are within or contiguous to the project limits. The sewers may vary in material of construction (e.g. clay cement, brick or concrete).

(b) Where deposits within the sewers prevent proper inspection and video taping of the sewers, manholes and appurtenances, the Consultant shall provide all labor, equipment and material required for the removal and disposal, in an approved manner, of all such deposits. Such deposits shall include debris, sediment, silt, refuse, timber, roots, and materials of all kinds which can be removed by conventional non-excavation type pipe cleaning equipment operating within the existing sewers and appurtenances. The cleaning operation shall include all shoveling, handling, picking, raking, loading, and placing in trucks, transporting to approved dumping places and there unloading, discharging and disposing of same according to the requirements of all agencies having jurisdiction.

Video tape recordings that do not clearly indicate the condition of sewers and appurtenances due to inadequate cleaning of the sewers and appurtenances, or due to improper lighting and focus of cameras, or due to the inadequacy, improper performance or operation of the equipment will not be accepted by the Commissioner.

2. The consultant shall engage the services of a subcontractor to perform the cleaning and inspection of sewers required under this task. The subcontractor shall employ an experienced supervisor who has a minimum of three (3) years experience in the field of pipeline inspection to supervise the entire inspection operation required under this task.

3. The Consultant shall execute all the requirements of this task in a manner approved by the Commissioner. All labor, experienced supervision, technicians, mobile television studios, electronic equipment, television and Polaroid cameras, materials and equipment required and needed to perform the work of this section shall be subject to the approval of the Commissioner.

4. The Consultant shall give the Commissioner five (5) days notice of his intention to commence the work required under this section.

5. It shall be the Consultant's responsibility to obtain any and all permits needed to do the work required under this task which shall include, but not be limited to, any permits required by the Department of Transportation (Bureau of Traffic Operations), Police Department, Fire Department and the Transit Authority.

6. The Consultant shall notify the Transit Authority, Department of Transportation (Bureau of Traffic Operations), Police Department and Fire Department twenty–four (24) hours prior to the start of the work, in a manner satisfactory to the Engineer, so that proper arrangements can be implemented for maintaining traffic during the course of the work.

7. TELEVISION INSPECTION AND VIDEOTAPE RECORDING

(a) Operation and movement of the video camera shall be remotely controlled from above the ground and from a mobile television studio, by a skilled technician.

(b) The technician shall have the capability to adjust the brilliance of the built-in lighting system and be able to change the focus of the television camera by remote control. The television camera shall be positioned as near as possible to the spring line of the sewer.

(c) The television camera shall be a radial eye camera. The lens of the camera shall be able to rotate three hundred sixty (360) degrees, and pan and tilt in any direction, left, right, up and down. Open joints, cracks, infiltration and spurs shall be viewed directly.

(d) The television camera shall be attached to a rod, cable, or other device that shall be metered to indicate the exact location of the camera, within the sewer, at all times. Where accessibility to a sewer is limited, and where permitted by the Consultant, a self-propelled camera may be used.

(e) An intercom system shall be used to coordinate the movement of the television camera at all times.

(f) Prior to television inspection, water shall be introduced to the upstream manhole to aid in identifying sags in the sewer.

(g) The view seen by the television camera shall be transmitted to a monitor of not less than fourteen (14) inches in width. The monitor shall be located inside the mobile television studio.

(h) The mobile television studio shall be large enough to accommodate up to four (4) persons comfortably seated for the purpose of viewing the monitor while the inspection is in progress. The Consultant's representative shall have access to view the television screen at all times.

(i) The equipment in the mobile television studio shall provide for simultaneous recording of each camera view on two separate videotapes.

(j) Two simultaneous video tape recordings of each view shall be made on standard format VHS tape cassettes and shall be recorded at the maximum speed at which the recorder can operate. The video recorder(s) shall permit the recording of both sound and video information. The recording unit(s) shall have the capability of recording both in color or black and white. The black and white mode shall be used for recording unless the Consultant can demonstrate that an equal or superior color recording can be made.

(k) Each videocassette shall have a label affixed with the following information:

Project ID.:
Consultant's Job No.:
Project Location:
Date Inspection Commenced:
Date Inspection Completed:
Name of Consultant:

(l) The Consultant shall require the subcontractor to provide all electricity needed for all operations, at its own cost and expense.

(m) The Consultant shall prepare a drawing, herein referred to as the "route sheet", that shows all sewer manholes and sewers within and contiguous to the project site in plan view. The manholes shall be numbered consecutively on the route sheet.

(n) As the television inspection proceeds, the supervisor shall observe and record the location and description of all defects that are found in the sewers and appurtenances. The locations of defects shall be correlated with the route sheet and shall include the distances from the centerline of an adjacent manhole to both the starting point and end of each defect. The record of defects (Sewer Defects Log) shall be prepared in standard Departmental format.

(o) The Consultant shall study the Sewer Defects Log and the video taped records and shall indicate, on the Sewer Defects Log, its recommended treatment for each defect. Such recommendation may include, but not be limited to, sewer replacement or rehabilitation by Department of Environmental Protection approved methods.

8. SEWER CLEANING

(a) All equipment and procedures for cleaning and removing deposits from the sewers shall be in accordance with current industry standards and shall be subject to approval by the Commissioner.

(b) Cleaning Manholes: The consultant shall provide all labor, equipment and materials required to clean the manholes which are clogged with materials and which require excavation type equipment to be used**.** The manholes that are to be cleaned shall be identified and approved by the Consultant prior to cleaning.

(c) Under no condition shall deposits that are removed from the sewer and appurtenances be placed on the adjacent ground surface pending disposal, but shall be placed in trucks or suitable container pending removal from the site. All deposits removed from the sewer during a workday shall be removed from the site by the end of that day. All trucks and containers shall be watertight if used to transport removed deposits over City streets.

(d) When a sewer condition or an obstruction, which cannot be relieved by the normal operation of the equipment, is encountered, the Consultant shall report such conditions to the Commissioner by telephone as soon as possible. In addition, the Consultant shall report such conditions as may occur on the reports required herein, including all pertinent information relating to the condition encountered.

(e) All material removed from the sewers under this task shall be disposed of in sanitary landfill operated by the Department of Sanitation, located in the borough of Staten Island, City of New York.

(f) The subcontractor shall submit to the Consultant the individual dump tickets or receipts issued by the operator of the approved dumpsite within forty-eight (48) hours of the removal of each load from the site. Failure to submit dump tickets or receipts within the specified time will affect the Consultant's payment for this work.

9. REPORTS.

(a) Daily Reports. The subcontractor shall prepare and submit daily, to the Consultant, a written report of the work performed the previous day. The daily reports shall be prepared by the subcontractor's experienced supervisor and shall bear his signature. Each report shall contain the following information:

(i) The type of material and major equipment being used by the subcontractor and the total number or employees of each category that work on the particular day;
(ii) Location and linear feet of sewers cleaned;
(iii) Location and linear feet of sewers televised;
(iv) Number of trips/loads/cubic yards to disposal site along with the dump tickets/receipts.
(v) Copy of the Sewer Defects Log

The experienced supervisor shall sign the daily report.

(b) Final Report

(i) Within ten (10) days of completion of the television inspection, the Consultant shall prepare and furnish the Commissioner with one original and one copy of a complete bound report of the television inspection and its results.

(ii) The report and copy thereof shall each include but not be limited to a log of the sections of sewers televised, the route sheet indicating schematically the locations and sections of sewers inspected and the sequence of the video tape recording with specific details as to service connections, water infiltration from the joints, the Sewer Defects Log indicating cracks and other defects observed in the sewers, other matters of interest noted during the inspection, and the video tape recordings.

(iii) The video tape recordings taken during the inspection shall be referenced as to their exact location on the route sheet and shall be submitted to the Commissioner with the report.

(iv) The Consultant shall sign the report certifying the recommendations made, the location and quantities of sewers cleaned, and the quantity of debris removed from sewers and appurtenances that were delivered to dump sites.

4.38 DRAINAGE PLAN GRADE IMPACTS AND GRADE IMPACTS MITIGATION STUDIES

Under these tasks the Consultant shall identify and study the impact that proposed sewers will have on existing and proposed street grades, and on adjacent properties if the proposed sewers are built in accordance with the Drainage Plan provided; and shall identify modifications to the drainage plan that may be implemented and/or may be studied in an effort to mitigate the street and property impacts identified.

1. In studying the impact of proposed sewers on street grades and adjacent properties the Consultant shall perform a Preliminary Sewer and Street Grades Study for the project. Under this study the Consultant shall examine and compare existing street elevations with the proposed sewer elevations provided on the Drainage Plan to determine the adequacy of cover above the proposed sewers, and shall identify and present to the Commissioner the locations at which the street grades would have to be adjusted to accommodate proposed sewers as shown on the Drainage Plan.

The Consultant shall follow the following criteria for depth of sewer covers:

a) The cover for sewers is defined as the distance between the ground surface and the outer top of the pipe.

For storm sewers, the minimum cover shall be 4'-0".

b) For sanitary and combined sewers, the minimum cover shall be 10'-0".

c) Where the cover for the sewers has to be reduced or is not adequate, an absolute minimum of 2.0 feet and 8.5 feet has been defined for storm sewers and sanitary/combined sewers respectively. When there is less than 4 feet cover or the maximum limit of cover as shown on DEP Sewer Design Standards is exceeded, the sewer pipe must be encased in 6" concrete.

For example:
i) if the cover is more than 20 feet for 10" ESVP pipe, and
ii) if the cover is more than 18', 16' and 15' for 12", 15" and 18" sewers respectively, the sewers shall be encased in concrete

2. The consultant shall perform a Study to clarify sewer and street grade impacts at locations identified in Subsection 1 above. The consultant shall:

a) Plot and superimpose working profiles of proposed sewers on profiles of the respective street segments including, as necessary, first floor, entrance, and cellar door, driveway, etc. elevations of adjacent buildings.

b) Develop and superimpose preliminary design street grade profiles that provide adequate cover for the proposed sewers.

c) Compare and assess the impact of proposed preliminary design grades on private property, and existing City owned facilities including, but not limited to, buildings, fences, encroachments, driveways, etc.

d) Utilize available topographic data to the extent needed to assess and study any impacts that may result from adjustments proposed to the street grades, and conduct additional topographic surveys as needed to complete this study.

e) The Consultant shall identify feasible mitigation measures that meet the New York City Department of Environmental Protection's design criteria and can be implemented to minimize negative impacts on street grades and adjacent properties. Such mitigation measures may include, but not be limited to:

(i) Adjustment of proposed sewer elevations and longitudinal slopes
(ii) Adjustment to cross sections (size/shape) for proposed sewers to minimize sewer impacts on street grades

f) The Consultant shall identify alternative measures, to mitigate the impact of new sewers on existing properties, which would require further detailed study. Such measures may include, but not be limited to:

(i) Rerouting the direction of sewer flows indicated on the drainage Plan
(ii) Revising the location of sewer outfalls and/or adding additional outfalls

(iii) Revising the location of discharge points for proposed sewers to existing sewers

3. The consultant shall prepare and submit a DRAINAGE PLAN GRADE IMPACTS AND GRADE IMPACTS MITIGATION STUDY REPORT to the Commissioner. The report shall:

(a) Identify the impacts, if any, of proposed sewers on street grades and adjacent properties and City owned facilities.

(b) Recommend feasible modifications to proposed sewer elevations, grades and sewer cross sections (size/shape) that may be implemented to mitigate street grade and property impacts.

(c) If necessary, identify alternative mitigation measures that may be studied to determine their feasibility.

(d) Include cross sections, photographs, and other graphic details as needed to show impacts/issues/concerns that have been identified.

(e) Identify private properties that will be adversely impacted by the proposed sewers and the nature of such impacts.

4. The Commissioner will review and, in consultation with the New York City Department of Environmental Protection, if necessary, comment on the DRAFT DRAINAGE PLAN GRADE IMPACTS AND GRADE IMPACTS MITIGATION STUDY REPORT, and may require the consultant to make such revisions, provide additional information, and make further studies, and to revise the report accordingly.

5. The consultant shall conduct further studies and make revisions to the DRAINAGE PLAN GRADE IMPACTS AND GRADE IMPACTS MITIGATION STUDY REPORT as directed by the Commissioner and shall submit the FINAL DRAINAGE PLAN GRADE IMPACTS AND GRADE IMPACTS MITIGATION STUDY REPORT to the Commissioner for acceptance.

4.39 FINAL DESIGN OF STEP STREET

Under this task the Consultant shall develop Final Design(s) for step street.

The design of the step street structure must be done in three phases as follow:

a) <u>Conceptual Design</u>

1) The Consultant shall inspect the site and become familiar with the general and specific nature of the Project and the surrounding area. The consultant shall prepare a photographic record, including all adjacent roadways and properties, review the topographic survey, study the elevations and grades, prepare a site plan, and document the existing conditions.

2) The Consultant shall prepare two or more alternative Schematic Designs (as directed by the Commissioner) for the step street and present along with impact assessment and an approximate cost estimate of each alternative to the Commissioner for review and approval. The conceptual design shall include site plan, typical cross section, geometric design including stair layouts, landscape design, street lighting, special treatment details along with material descriptions. A 3D rendering for each proposed alternative must also be submitted for review and approval.

3) The consultant shall present the "DDC approved" conceptual design(s) to the Public Design Commission, DOT Geometrics/Bridges, Parks Department, Community Board, and other City, State, and Federal agencies as needed and as directed by the Commissioner, for their review and approval.

4) Upon approval of the selected conceptual design by the Public Design Commission, DOT Geometrics/Bridges, Parks Department, Community Board, and other City, State, and Federal agencies as required, and as directed by the Commissioner, the consultant shall proceed with the Preliminary Design phase.

b) <u>Preliminary Design</u>

In conjunction with the preliminary design of the step street, the Consultant shall:

1) Gather and study all available information and records from all City agencies or private utilities who have interest in the existing or the proposed step street structure.

2) Collect and study all available record drawings pertaining to the existing step street structure or to the area where the new step street structure is to be installed at, and update site information, as necessary.

3) Study all available subsurface data, and develop and prepare a subsurface exploration program and take borings (under Subsurface Exploration Program) if required, indicating the locations and the specific requirements for borings, test pits and test strips, as needed.

4) Study the results of the subsurface investigation (i.e. borings, test pits, etc.) and utilize the data in designing a suitable foundation for the step street structure.

5) Design and prepare preliminary construction contract drawings for step street. The drawings shall be sufficiently detailed to clearly show the location, limits, and structural composition of the step street that is to be constructed. The drawings shall also indicate the extent of structural replacement/repairs as well as any aesthetic treatments and repairs for the step street that is to be reconstructed.

6) Include the preliminary construction contract drawings in the programmed Mass Mailing No.1 that is required under the Street Design Task and present the preliminary design drawings to DOT Geometrics/Bridges, Parks Department, Community Board, private utility companies, and other City, State and Federal agencies as needed and as directed by the Commissioner, for their review and comments.

7) Modify the preliminary construction contract drawings to incorporate comments received in response to Mass Mailing No. 1, as directed and approved by the Commissioner.

8) Prepare updated preliminary cost estimate for the proposed step street.

c) <u>Final Design</u>

1) The Consultant shall develop detailed construction contract documents for construction/reconstruction of the step street, including but not limited to detailed drawings (plan, elevation and section views, as well as any proposed landscaping work), specifications and estimate.

2) The Consultant shall coordinate the Final Design details of the step street with the design details being developed for reconstruction of the adjacent connecting streets.

3) The Consultant shall submit the pre-final Design contract documents to the Commissioner for review and approval, and shall incorporate the pre-final design documents in the programmed Mass Mailing No. 2 that is required under Street Design task and submit the documents to the Public Design Commission, DOT Geometrics/Bridges, Parks Department, Community Board, Private utility companies, and other City, State and Federal agencies and obtain required approvals and permits, as required. Such submissions shall include but shall not be limited to drawings, specifications, estimates, design criteria and computations, as needed.

4) The Consultant shall modify the Pre-final construction contract documents to incorporate comments received in response to Mass Mailing No. 2 as approved by the Commissioner, and finalize the contract documents.

5) Upon finalizing the construction drawings, The Consultant shall prepare detailed cost estimate and specifications for the approved proposed work.

6) The consultant shall prepare and present the finalized drawings for the step street to the Public Design commission for approval.

7) Consultant shall determine and advise the Commissioner of the need for temporary easements on private property to facilitate construction of the step street and shall, as directed by the Commissioner, prepare appropriate documentation and serve notices on property owners, and meet with property owners and other parties as needed to obtain such easements.

4.40 SCHEDULING AND PROGRESS REPORTING

(a) Upon written notice to proceed, all work required for the project specified in the Task Order/Contract shall be completed within the time schedule set forth in the Specific Requirements, unless the Commissioner, for good cause shown by the Consultant, extends the time of completion.

(b) The Consultant shall be required to submit a Progress Report in accordance with the requirements of this section. Such Progress Report shall consist of the following two components: a Bar Chart Schedule, and a Detailed Analysis of project's progress, as described in paragraph (e) below.

(1) For projects having a duration of six (6) months or less, the Commissioner may, in his/her discretion, suspend the requirement for the monthly Progress Report.

(2) For projects having a duration of longer than six (6) months, the Consultant shall be required to submit a monthly Progress Report; however, the Commissioner may, in his/her discretion, suspend the requirement for the monthly Progress Report.

(3) Suspension of the requirement for the monthly Progress Report may be for a specific month(s), or may be for the entire duration of the Task Order/Contract. Written notification of such suspension will be provided to the Consultant. In the event of such suspension, the Consultant shall not be entitled to payment of the Monthly Fee for the Progress Report.

(c) Upon receipt of notice to proceed with work required for the project, the Consultant shall prepare and submit to the Commissioner, within 10 working days of the date of such notice, a Bar Chart Schedule for the services required in connection with the project, for approval by DDC. The Consultant shall not be entitled to any payment for the initial Bar Chart Schedule described in this paragraph. The Bar Chart Schedule shall be prepared using Microsoft Project 2003 and shall be printed on 8 1/2" x 11" to 11" x 17" (fold-over) size paper. The Bar Chart Schedule shall indicate execution of all tasks as applicable, and shall include but not be limited to the following:

(1) Contract number and date, project name, names of Engineer-In-Charge and project Engineer, border, monthly calendar and weekly calendar;

(2) Dates for completion of required services;

(3) The tasks, sub-tasks and milestones to be undertaken or achieved in connection with the project including where applicable Preliminary Design, Mass Mailings, Pre-Final and Final Contract Documents;

(4) The interrelationship and dependency of the various activities required under the tasks included in the Specific Requirements of the project;

(5) The time needed to complete or achieve the various tasks, sub-tasks and milestones;

(6) Dates for completion/submission of any agency work by others, such as television sewer inspection program;

(7) The date for submission of the packages of Bid-Ready Contract Documents where applicable;

(8) The project's critical path;

(9) The dates for Consultant's performance evaluation which shall be prepared on a six (6) months basis (from the notice to proceed date) for the entire specified duration of the project.

(d) For the purpose of progress reporting, the date of the Notice To Proceed on any project shall be considered the monthly "Anniversary Date" for that project.

(e) Progress Report: No later than two (2) working days following the monthly "Anniversary Date", the Consultant shall submit a Progress Report, consisting of the two components set forth below.

(1) Bar Chart Schedule: The Consultant shall revise and update the Bar Chart Schedule to indicate (1) the actual start and completion dates of all tasks that have been completed, and (2) the projected start and completion date of all remaining tasks that are to be performed for the Project. The revised/updated Bar Chart Schedule shall reflect the project's current status at the end of the reporting period and shall include actual dates (year and month), as well as columns showing the cumulative percentage (%) completion of each task.

(2) Detailed Analysis: The Consultant shall prepare and submit to the Commissioner a Detailed Analysis of the project's progress. Such Detailed Analysis shall include, but not be limited to, the following: actual time used for each activity in the schedule; changes in targeted completion dates for the various activities in the schedule; the reasons for any delays in the targeted completion dates; the need and justification for any extensions of time; a narrative description of the work performed during the reporting period, including dates, facts, and breakdown by contract elements. In the absence of progress in the reporting period with respect to individual tasks, the Consultant shall refer to the previous progress report during which work was last performed on those tasks. The report shall also include a narrative description of the overall project schedule, project budget, work anticipated for the next reporting period and the needs from DDC necessary to move the project forward. In addition, the Consultant shall affix to the report a "Project Report Summary" table that includes the following columns/information:

(1) Task
(2) Description
(3) % Completion
(4) Scheduled Completion Date
(5) Projected Completion date
(6) Variance (weeks), (-) ahead (+) behind

(f) There shall be a monthly meeting with the Commissioner at which time the Consultant shall discuss: the actual progress of the project; the outstanding issues; and the necessary revisions to the project schedule. Based on the meeting discussions, and in accordance with directions provided by the Commissioner, the Consultant shall revise and resubmit the updated Bar Chart Schedule for the project. The Consultant shall not be entitled to any payment for the Bar Chart Schedule described in this paragraph.

(g) No later than two (2) working days following the monthly "Anniversary Date", the Consultant shall be required to submit to the Commissioner (via hand delivery or express mail) a revised/updated Progress Report. The Consultant shall continue to submit a monthly Progress Report until the final completion of the project, unless directed otherwise by the Commissioner.

(h) Monthly Fee for the Progress Report: For preparation and submission of the monthly Progress Report, in accordance with the requirements set forth herein, the Consultant shall be paid a monthly fee in the amount of $1000.00. The Monthly Fee for the Progress Report is deemed to include all costs and expenses incurred by the Consultant and/or its Subconsultants in connection with preparation of the monthly Progress Report, including all expenses related to management, overhead and any anticipated profit. Payment of the Monthly Fee for the Progress Report is subject to the conditions set forth below.

(1) The Progress Report must be complete and approved in writing by DDC.

(2) The Consultant must submit the Progress Report within the stipulated time frame, i.e., within two working days after the monthly "Anniversary Date". The Consultant shall not be entitled to payment of the Monthly Fee for the Progress Report for any Progress Report that is not submitted within the stipulated time frame, except as otherwise provided below.

(3) The Commissioner may, in his/her discretion, provide written authorization to the Consultant to submit the monthly Progress Report after the stipulated time frame has expired. In the event of such written authorization, the Consultant shall be entitled to payment of the Monthly Fee upon submission of an acceptable Progress Report.

(4) As part of its requisition for payment, the Consultant is required to submit a Project progress report. Such report submitted as part of the payment requisition, shall not constitute submission of the monthly Progress Report in accordance with the requirements of this section.

(5) If the Commissioner has provided written notification to the Consultant suspending the requirement for the Progress Report, the Consultant shall not be entitled to payment of the Monthly Fee for the Progress Report.

5. CERTIFICATION OF COMPLETENESS

The Consultant's final submission shall include certification that the completed work meets the requirements of the design contract and all applicable regulatory agencies. The certification shall be in the form of a letter attached to the submission.

EXHIBIT I

REQUIREMENTS FOR FEDERAL AID PROJECTS

The Consultant is advised that the Project is a Federal Aid Project. The City of New York, Department of Design and Construction ("DDC"), is receiving funds from the United States Government for construction of the Project. Specifically, funding for the Project is being provided by the Federal Highway Administration ("FHWA").

(1) Opportunities for DBEs: Since the Project is a Federal Aid Project, the Consultant is required to provide the maximum possible contracting opportunities for Disadvantaged Business Enterprises ("DBEs"). The Consultant must use its best efforts to afford DBEs the maximum practicable opportunity to participate in the Project.

(a) DBE Goal: The Consultant is required to use its best efforts to achieve an overall DBE utilization goal of 18% of the total dollar value of the Contract.

(b) Certified DBEs: When offering DBE participation, the Consultant is responsible for ensuring that all of the proposed DBE subconsultants are certified through the New York State Unified Certification Program (NYSUCP) for the type of work they are being proposed to perform. The Consultant is directed to NYSUCP's directory of DBEs at: http://208.109.189.146/productions/nysdot/biznet . The certification must be in effect on the RFP response date.

(c) Compliance: For the Department to periodically monitor compliance with DBE requirements, the Consultant and subconsultants shall submit information as required by Chapter 13 and Appendix 13 of NYSDOT Procedures for Locally-Administered Federal Aid Projects, available at the website set forth below:
https://www.nysdot.gov/divisions/operating/opdm/local-programs-bureau/locally-administered-federal-aid-projects)

(2) Required Provisions: Since the Project is a Federal Aid Project, the following appendices, attached to this Exhibit, are included as provision of the Contract.

(a) Appendix A-1: Supplemental Title VI Provisions (Civil Rights Act)

(b) Appendix A-2: Required Federal Provisions and Certifications

APPENDIX A-1:

SUPPLEMENTAL TITLE VI PROVISIONS (CIVIL RIGHTS ACT)

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

(1) **Compliance with Regulations:** The contractor shall comply with the Regulation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation of the United States, Title 49, Code of Federal Regulations, Part 21, and the Federal Highway Administration (hereinafter "FHWA") Title 23, Code of Federal Regulations, Part 200 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

(2) **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin, sex, age, and disability/handicap in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR, section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

(3) **Solicitations for Subcontractors, Including Procurements of Materials and Equipment:** In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potiential subcontactor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin, sex, age, and disability/handicap.

(4) **Information and Reports:** The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by NYSDOT or the FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to NYSDOT's Office of Civil Rights or FHWA, as appropriate, and shall set forth what efforts it has made to obtain the information.

(5) **Sanctions for Noncompliance:** In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, NYSDOT shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:

(a.) withholding of payments to the contractor under the contract until the contractor complies, and/or
(b.) cancellation, termination or suspension of the contract, in whole or in part.

(6) **Incorportation of Provisions:** The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

The contractor shall take such action with respect to any subcontract.or procurement as NYSDOT or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request NYSDOT to enter into such litigation to protect the interests of NYSDOT, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

APPENDIX A-2:

REQUIRED FEDERAL PROVISIONS AND CERTIFICATIONS

(1) RECORDS RETENTION

The Consultant shall establish and maintain complete and accurate records and documentation of the Project work and shall keep such records for a minimum of six years or three years after final payment is received, whichever is later. The City, State or Federal Highway Administration shall have access to such records during normal business hours at the office of the Consultant or a mutually agreeable location for the term specified for the purpose of auditing, inspection or copying.

(2) BROOKS ACT AND USDOT FEDERAL HIGHWAY ADMINISTRATION

The Consultant is advised that the Project is a Federal Aid Project. The City of New York, Department of Design and Construction, is receiving funds from the United States Government for construction of the Project. Specifically, funding for the Project is being provided by the Federal Highway Administration ("FHWA"). The Consultant must comply with the provisions of the Brooks Act and the USDOT Federal Highway Administration.

(3) CERTIFICATION REQUIRED BY 49 CFR, PART 29

Except as noted below, the signatory to this Agreement certifies that his other company and any person associated therewith in the capacity of owner, partner, director, officer or stockholder with five percent or more ownership:

A. Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
B. Has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three years;
C. Does not have a proposed debarment pending; and
D. Has not been indicted, convicted or had a civil judgment rendered against court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

(4) CERTIFICATION FOR FEDERAL-AID CONTRACTS

The prospective participant certified, by signing this Agreement, to the best of his or her knowledge and belief that:

A. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or any employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any federal grant; the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.
B. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit the standard "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts which exceed $100,000, and that all such sub-recipients shall certify and disclose accordingly.

(5) CERTIFICATION REQUIRED BY 40 CFR 1506.5(c)

The certification set forth below only applies if the work of the Project includes preparation of an Environmental impact Statement.

If the work of the PROJECT includes the preparation of an Environmental Impact Statement (EIS), the signatory to this Agreement, being duly sworn, certifies that its company and any person associated therewith in the capacity of owner, partner, director, officer, or major stockholder (five percent or more ownership) does not have any financial or other interest in the outcome of the project including:

1. An existing contract for the PROJECT's ROW incidental work or construction engineering; or
2. Ownership of land, options to buy land, or some business enterprise

EXHIBIT J

APPENDIX A

GENERAL PROVISIONS GOVERNING CONTRACTS FOR CONSULTANTS, PROFESSIONAL, TECHNICAL, HUMAN AND CLIENT SERVICES

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APPENDIX A

GENERAL PROVISIONS GOVERNING CONTRACTS FOR CONSULTANTS, PROFESSIONAL, TECHNICAL, HUMAN AND CLIENT SERVICES

ARTICLE 1 - DEFINITIONS

Section 1.01 Definitions

The following words and expressions, or pronouns used in their stead, shall, wherever they appear in this Agreement, be construed as follows, unless a different meaning is clear from the context:

A. "Agency Chief Contracting Officer" or "ACCO" shall mean the position delegated authority by the Agency Head to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the City Chief Procurement Officer.

B. "Agreement" shall mean the various documents, including this Appendix A, that constitute the contract between the Contractor and the City.

C. "City" shall mean The City of New York.

D. "City Chief Procurement Officer" or "CCPO" shall mean the position delegated authority by the Mayor to coordinate and oversee the procurement activity of Mayoral agency staff, including the ACCOs.

E. "Commissioner" or "Agency Head" shall mean the head of the Department or his or her duly authorized representative. The term "duly authorized representative" shall include any person or persons acting within the limits of his or her authority.

F. "Comptroller" shall mean the Comptroller of the City of New York.

G. "Contractor" shall mean the entity entering into this Agreement with the Department.

H. "Days" shall mean calendar days unless otherwise specifically noted to mean business days.

I. "Department" or "Agency" shall mean the City agency that has entered into this Agreement.

J. "Law" or "Laws" shall mean the New York City Charter ("Charter"), the New York City Administrative Code ("Admin. Code"), a local rule of the City of New York, the Constitutions of the United States and the State of New York, a statute of the United States or of the State of New York and any ordinance, rule or regulation having the force of law and adopted pursuant thereto, as amended, and common law.

K. "Procurement Policy Board" or "PPB" shall mean the board established pursuant to Charter § 311 whose function is to establish comprehensive and consistent procurement policies and rules which have broad application throughout the City.

L. "PPB Rules" shall mean the rules of the Procurement Policy Board as set forth in Title 9 of the Rules of the City of New York ("RCNY"), § 1-01 et seq.

M. "State" shall mean the State of New York.

ARTICLE 2 - REPRESENTATIONS AND WARRANTIES

Section 2.01 Procurement of Agreement

A. The Contractor represents and warrants that no person or entity (other than an officer, partner, or employee working solely for the Contractor) has been employed or retained to solicit or secure this Agreement upon any agreement or understanding for a commission, percentage, brokerage fee, contingent fee or any other direct or indirect compensation. Notwithstanding the preceding sentence, the Contractor may retain consultants to draft proposals, negotiate contracts, and perform other similar services. The Contractor further represents and warrants that no payment, gift, or thing of value has been made, given, or promised to obtain this or any other agreement

between the parties. The Contractor makes such representations and warranties to induce the City to enter into this Agreement and the City relies upon such representations and warranties in the execution of this Agreement.

B. For any breach or violation of the representations and warranties set forth in Paragraph A above, the Commissioner shall have the right to annul this Agreement without liability, entitling the City to recover all monies paid to the Contractor; and the Contractor shall not make claim for, or be entitled to recover, any sum or sums due under this Agreement. The rights and remedies of the City provided in this Section are not exclusive and are in addition to all other rights and remedies allowed by Law or under this Agreement.

Section 2.02 Conflicts of Interest

A. The Contractor represents and warrants that neither it nor any of its directors, officers, members, partners or employees, has any interest nor shall they acquire any interest, directly or indirectly, which conflicts in any manner or degree with the performance of this Agreement. The Contractor further represents and warrants that no person having such interest or possible interest shall be employed by or connected with the Contractor in the performance of this Agreement.

B. Consistent with Charter § 2604 and other related provisions of the Charter, the Admin. Code and the New York State Penal Law, no elected official or other officer or employee of the City, nor any person whose salary is payable, in whole or in part, from the City Treasury, shall participate in any decision relating to this Agreement which affects his or her personal interest or the interest of any corporation, partnership or other entity in which he or she is, directly or indirectly, interested; nor shall any such official, officer, employee, or person have any interest in, or in the proceeds of, this Agreement. This Paragraph B shall not prevent directors, officers, members, partners, or employees of the Contractor from participating in decisions relating to this Agreement where their sole personal interest is in the Contractor.

C. The Contractor shall not employ a person or permit a person to serve as a member of the Board of Directors or as an officer of the Contractor if such employment or service would violate Chapter 68 of the Charter.

D. through H. Not Used

Section 2.03 Fair Practices

A. The Contractor and each person signing on its behalf certifies, under penalties of perjury, that to the best of its, his or her knowledge and belief:

1. The prices and other material terms set forth in this Agreement have been arrived at independently, without collusion, consultation, communication, or agreement with any other bidder or proposer or with any competitor as to any matter relating to such prices or terms for the purpose of restricting competition;

2. Unless otherwise required by Law or where a schedule of rates or prices is uniformly established by a government agency through regulation, policy or directive, the prices and other material terms set forth in this Agreement which have been quoted in this Agreement and on the bid or proposal submitted by the Contractor have not been knowingly disclosed by the Contractor, directly or indirectly, to any other bidder or proposer or to any competitor prior to the bid or proposal opening; and

3. No attempt has been made or will be made by the Contractor to induce any other person or entity to submit or not to submit a bid or proposal for the purpose of restricting competition.

B. The fact that the Contractor (i) has published price lists, rates, or tariffs covering items being procured, (ii) has informed prospective customers of proposed or pending publication of new or revised price lists for such items, or (iii) has sold the same items to other customers at the same prices and/or terms being bid or proposed, does not constitute, without more, a disclosure within the meaning of this Section.

Section 2.04 VENDEX

The Contractor represents and warrants that it and its principals have duly executed and filed all required VENDEX Questionnaires and, if applicable, Certificates of No Change, pursuant to PPB Rule § 2-08 and in

accordance with the policies and procedures of the Mayor's Office of Contract Services. The Contractor understands that the Department's reliance upon the completeness and veracity of the information stated therein is a material condition to the execution of this Agreement, and represents and warrants that the information it and its principals have provided is accurate and complete.

Section 2.05 Political Activity

The Contractor's provision of services under this Agreement shall not include any partisan political activity or any activity to further the election or defeat of any candidate for public, political, or party office, nor shall any of the funds provided under this Agreement be used for such purposes.

Section 2.06 Religious Activity

There shall be no religious worship, instruction or proselytizing as part of or in connection with the Contractor's provision of services under this Agreement, nor shall any of the funds provided under this Agreement be used for such purposes.

Section 2.07 Unlawful Discriminatory Practices: Admin. Code § 6-123

As required by Admin. Code § 6-123, the Contractor will not engage in any unlawful discriminatory practice as defined in and pursuant to the terms of Title 8 of the City Administrative Code. The Contractor shall include a provision in any agreement with a first-level subcontractor performing services under this Agreement for an amount in excess of Fifty Thousand Dollars ($50,000) that such subcontractor shall not engage in any such unlawful discriminatory practice.

Section 2.08 Bankruptcy and Reorganization

In the event that the Contractor files for bankruptcy or reorganization under Chapter Seven or Chapter Eleven of the United States Bankruptcy Code, the Contractor shall disclose such action to the Department within seven (7) days of filing.

ARTICLE 3 - ASSIGNMENT AND SUBCONTRACTING

Section 3.01 Assignment

A. The Contractor shall not assign, transfer, convey or otherwise dispose of this Agreement, or the right to execute it, or the right, title or interest in or to it or any part of it, or assign, by power of attorney or otherwise, any of the monies due or to become due under this Agreement, without the prior written consent of the Commissioner. The giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments. Any such assignment, transfer, conveyance or other disposition without such written consent shall be void.

B. Before entering into any such assignment, transfer, conveyance or other disposal of this Agreement, the Contractor shall submit a written request for approval to the Department giving the name and address of the proposed assignee. The proposed assignee's VENDEX questionnaire must be submitted within thirty (30) Days after the ACCO has granted preliminary written approval of the proposed assignee, if required. Upon the request of the Department, the Contractor shall provide any other information demonstrating that the proposed assignee has the necessary facilities, skill, integrity, past experience and financial resources to perform the specified services in accordance with the terms and conditions of this Agreement. The Agency shall make a final determination in writing approving or disapproving the assignee after receiving all requested information.

C. Failure to obtain the prior written consent to such an assignment, transfer, conveyance, or other disposition may result in the revocation and annulment of this Agreement, at the option of the Commissioner. The City shall thereupon be relieved and discharged from any further liability and obligation to the Contractor, its assignees, or transferees, who shall forfeit all monies earned under this Agreement, except so much as may be necessary to pay the Contractor's employees.

D. The provisions of this Section shall not hinder, prevent, or affect an assignment by the Contractor for the benefit of its creditors made pursuant to the Laws of the State.

E. This Agreement may be assigned, in whole or in part, by the City to any corporation, agency, or instrumentality having authority to accept such assignment. The City shall provide the Contractor with written notice of any such assignment.

Section 3.02 Subcontracting

A. The Contractor shall not enter into any subcontract for an amount greater than Five Thousand Dollars ($5,000) for the performance of its obligations, in whole or in part, under this Agreement without the prior approval by the Department of the subcontractor. The Department hereby grants approval for all subcontracts for an amount that does not exceed Five Thousand Dollars ($5,000). The Contractor must submit monthly reports to the Department indicating all such subcontractors. All subcontracts must be in writing.

B. Prior to entering into any subcontract for an amount greater than Five Thousand Dollars ($5,000), the Contractor shall submit a written request for the approval of the proposed subcontractor to the Department giving the name and address of the proposed subcontractor and the portion of the services that it is to perform and furnish. At the request of the Department, a copy of the proposed subcontract shall be submitted to the Department. The proposed subcontractor's VENDEX Questionnaire must be submitted, if required, within thirty (30) Days after the ACCO has granted preliminary approval of the proposed subcontractor. Upon the request of the Department, the Contractor shall provide any other information demonstrating that the proposed subcontractor has the necessary facilities, skill, integrity, past experience and financial resources to perform the specified services in accordance with the terms and conditions of this Agreement. The Agency shall make a final determination in writing approving or disapproving the subcontractor after receiving all requested information. For proposed subcontracts that do not exceed Twenty-five Thousand Dollars ($25,000), the Department's approval shall be deemed granted if the Department does not issue a written approval or disapproval within forty-five (45) Days of the Department's receipt of the written request for approval or, if applicable, within forty-five (45) Days of the Department's acknowledged receipt of fully completed VENDEX Questionnaires for the subcontractor.

C. All subcontracts shall contain provisions specifying that:

1. The work performed by the subcontractor must be in accordance with the terms of the agreement between the City and the Contractor;

2. Nothing contained in the agreement between the Contractor and the subcontractor shall impair the rights of the City;

3. Nothing contained in the agreement between the Contractor and the subcontractor, or under the agreement between the City and the Contractor, shall create any contractual relation between the subcontractor and the City; and

4. The subcontractor specifically agrees to be bound by Section 4.07 and Article 5 of this Appendix A and specifically agrees that the City may enforce such provisions directly against the subcontractor as if the City were a party to the subcontract.

D. The Contractor agrees that it is as fully responsible to the Department for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by such subcontractors as it is for the acts and omissions of any person directly employed by it.

E. For determining the value of a subcontract, all subcontracts with the same subcontractor shall be aggregated.

F. The Department may revoke the approval of a subcontractor granted or deemed granted pursuant to Paragraphs (A) and (B) of this section if revocation is deemed to be in the interest of the City in writing on no less than ten (10) Days notice unless a shorter period is warranted by considerations of health, safety, integrity issues or other similar factors. Upon the effective date of such revocation, the Contractor shall cause the subcontractor to cease all work under the Agreement. The City shall not incur any further obligation for services performed by such subcontractor pursuant to this Agreement beyond the effective date of the revocation. The City shall pay for services provided by the subcontractor in accordance with this Agreement prior to the effective date of revocation.

G. The Department's approval of a subcontractor shall not relieve the Contractor of any of its responsibilities, duties and liabilities under this Agreement. At the request of the Department, the Contractor shall provide the Department a copy of any subcontract.

H. Individual employer-employee contracts are not subcontracts subject to the requirements of this Section.

ARTICLE 4 - LABOR PROVISIONS

Section 4.01 Independent Contractor Status

The Contractor and the Department agree that the Contractor is an independent contractor and not an employee of the Department or the City. Accordingly, neither the Contractor nor its employees or agents will hold themselves out as, or claim to be, officers or employees of the City, or of any department, agency or unit of the City, by reason of this Agreement, and they will not, by reason of this Agreement, make any claim, demand or application to or for any right or benefit applicable to an officer or employee of the City, including, but not limited to, Workers' Compensation coverage, Disability Benefits coverage, Unemployment Insurance benefits, Social Security coverage or employee retirement membership or credit.

Section 4.02 Employees

All persons who are employed by the Contractor and all consultants or independent contractors who are retained by the Contractor to perform services under this Agreement are neither employees of the City nor under contract with the City. The Contractor, and not the City, is responsible for their work, direction, compensation, and personal conduct while engaged under this Agreement. Nothing in the Agreement shall impose any liability or duty on the City for the acts, omissions, liabilities or obligations of the Contractor, or any officer, employee, or agent of the Contractor, or for taxes of any nature, or for any right or benefit applicable to an officer or employee of the City, including, but not limited to, Workers' Compensation coverage, Disability Benefits coverage, Unemployment Insurance benefits, Social Security coverage or employee retirement membership or credit. Except as specifically stated in this Agreement, nothing in this Agreement shall impose any liability or duty on the City to any person or entity.

Section 4.03 Removal of Individuals Performing Work

The Contractor shall not have anyone perform work under this Agreement who is not competent, faithful and skilled in the work for which he or she shall be employed. Whenever the Commissioner shall inform the Contractor, in writing, that any individual is, in his or her opinion, incompetent, unfaithful, or unskilled, such individual shall no longer perform work under this Agreement. Prior to making a determination to direct a Contractor that an individual shall no longer perform work under this Agreement, the Commissioner shall provide the Contractor an opportunity to be heard on no less than five (5) Days' written notice. The Commissioner may direct the Contractor not to allow the individual from performing work under the Agreement pending the opportunity to be heard and the Commissioner's determination.

Section 4.04 Minimum Wage

Except for those employees whose minimum wage is required to be fixed pursuant to Sections 220 or 230 of the New York State Labor Law or by City Administrative Code § 6-109, all persons employed by the Contractor in the performance of this Agreement shall be paid, without subsequent deduction or rebate, unless expressly authorized by Law, not less than the minimum wage as prescribed by Law. Any breach of this Section shall be deemed a material breach of this Agreement.

Section 4.05 Non-Discrimination: New York State Labor Law § 220-e

A. If this Agreement is for the construction, alteration or repair of any public building or public work or for the manufacture, sale, or distribution of materials, equipment, or supplies, the Contractor agrees, as required by New York State Labor Law § 220-e, that:

1. In the hiring of employees for the performance of work under this Agreement or any subcontract hereunder, neither the Contractor, subcontractor, nor any person acting on behalf of such Contractor or subcontractor, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates;

2. Neither the Contractor, subcontractor, nor any person on his or her behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under this Agreement on account of race, creed, color, disability, sex or national origin;

3. There may be deducted from the amount payable to the Contractor by the City under this Agreement a penalty of Fifty Dollars ($50) for each person for each calendar day during which such person was discriminated against or intimidated in violation of the provisions of this Agreement; and

4. This Agreement may be terminated by the City, and all monies due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this Section.

B. The provisions of this Section shall be limited to operations performed within the territorial limits of the State of New York.

Section 4.06 Non-Discrimination: Admin. Code § 6-108

If this Agreement is for the construction, alteration or repair of buildings or the construction or repair of streets or highways, or for the manufacture, sale, or distribution of materials, equipment or supplies, the Contractor agrees, as required by New York City Administrative Code § 6-108, that:

A. It shall be unlawful for any person engaged in the construction, alteration or repair of buildings or engaged in the construction or repair of streets or highways pursuant to a contract with the City or engaged in the manufacture, sale or distribution of materials, equipment or supplies pursuant to a contract with the City to refuse to employ or to refuse to continue in any employment any person on account of the race, color or creed of such person.

B. It shall be unlawful for any person or any servant, agent or employee of any person, described in Paragraph A above, to ask, indicate or transmit, orally or in writing, directly or indirectly, the race, color, creed or religious affiliation of any person employed or seeking employment from such person, firm or corporation.

C. Breach of the foregoing provisions shall be deemed a breach of a material provision of this Agreement.

D. Any person, or the employee, manager or owner of or officer of such firm or corporation who shall violate any of the provisions of this Section shall, upon conviction thereof, be punished by a fine of not more than One Hundred Dollars ($100) or by imprisonment for not more than thirty (30) Days, or both.

Section 4.07 Non-Discrimination: E.O. 50 -- Equal Employment Opportunity

A. This Agreement is subject to the requirements of City Executive Order No. 50 (1980) ("E.O. 50"), as revised, and the rules set forth at 66 RCNY § 10-01 et seq. No agreement will be awarded unless and until these requirements have been complied with in their entirety. The Contractor agrees that it:

1. Will not discriminate unlawfully against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status, sexual orientation or citizenship status with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, rates of pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment;

2. Will not discriminate unlawfully in the selection of subcontractors on the basis of the owners', partners' or shareholders' race, color, creed, national origin, sex, age, disability, marital status, sexual orientation, or citizenship status;

3. Will state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that all qualified applicants will receive consideration for employment without unlawful discrimination based on race, color, creed, national origin, sex, age, disability, marital status, sexual orientation or citizenship status, and that it is an equal employment opportunity employer;

4. Will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or memorandum of understanding, written notification of its equal employment opportunity commitments under E.O. 50 and the rules and regulations promulgated thereunder;

5. Will furnish before this Agreement is awarded all information and reports including an Employment Report which are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the City Department of Small Business Services, Division of Labor Services ("DLS"); and

6. Will permit DLS to have access to all relevant books, records, and accounts for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.

B. The Contractor understands that in the event of its noncompliance with the nondiscrimination clauses of this Agreement or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this Agreement and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of DLS, the Director of DLS may direct the Commissioner to impose any or all of the following sanctions:

1. Disapproval of the Contractor; and/or

2. Suspension or termination of the Agreement; and/or

3. Declaring the Contractor in default; and/or

4. In lieu of any of the foregoing sanctions, imposition of an employment program.

C. Failure to comply with E.O. 50 and the rules and regulations promulgated thereunder in one or more instances may result in the Department declaring the Contractor to be non-responsible.

D. The Contractor agrees to include the provisions of the foregoing Paragraphs in every subcontract or purchase order in excess of One Hundred Thousand Dollars ($100,000) to which it becomes a party unless exempted by E.O. 50 and the rules and regulations promulgated thereunder, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Director of DLS as a means of enforcing such provisions including sanctions for noncompliance. A supplier of unfinished products to the Contractor needed to produce the item contracted for shall not be considered a subcontractor or vendor for purposes of this Paragraph.

E. The Contractor further agrees that it will refrain from entering into any subcontract or modification thereof subject to E.O. 50 and the rules and regulations promulgated thereunder with a subcontractor who is not in compliance with the requirements of E.O. 50 and the rules and regulations promulgated thereunder. A supplier of unfinished products to the Contractor needed to produce the item contracted for shall not be considered a subcontractor for purposes of this Paragraph.

F. Nothing contained in this Section shall be construed to bar any religious or denominational institution or organization, or any organization operated for charitable or educational purposes, that is operated, supervised or controlled by or in connection with a religious organization, from lawfully limiting employment or lawfully giving preference to persons of the same religion or denomination or from lawfully making such selection as is calculated by such organization to promote the religious principles for which it is established or maintained.

ARTICLE 5 - RECORDS, AUDITS, REPORTS, AND INVESTIGATIONS

Section 5.01 Books and Records

The Contractor agrees to maintain separate and accurate books, records, documents and other evidence, and to utilize appropriate accounting procedures and practices, which sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this Agreement.

Section 5.02 Retention of Records

The Contractor agrees to retain all books, records, and other documents relevant to this Agreement, including those required pursuant to Section 5.01, for six years after the final payment or expiration or termination of this Agreement, or for a period otherwise prescribed by Law, whichever is later. In addition, if any litigation, claim, or audit concerning this Agreement has commenced before the expiration of the six-year period, the records must be retained until the completion of such litigation, claim, or audit. Any books, records and other documents that are created in an electronic format in the regular course of business may be retained in an electronic format. Any books, records, and other documents that are created in the regular course of business as a paper copy may be retained in an electronic format provided that the records satisfy the requirements of New York Civil Practice Law and Rules ("CPLR") 4539(b), including the requirement that the reproduction is created in a manner "which does not permit additions, deletions, or changes without leaving a record of such additions, deletions, or changes." Furthermore, the Contractor agrees to waive any objection to the admissibility of any such books, records or other documents on the grounds that such documents do not satisfy CPLR 4539(b).

Section 5.03 Inspection

A. At any time during the Agreement or during the record retention period set forth in section 5.02, the City, including the Department and the Department's Office of the Inspector General, as well as City, State and federal auditors and any other persons duly authorized by the City shall, upon reasonable notice, have full access to and the right to examine and copy all books, records, and other documents maintained or retained by or on behalf of the Contractor pursuant to this Article. Notwithstanding any provision herein regarding notice of inspection, all books, records and other documents of the Contractor kept pursuant to this Agreement shall be subject to immediate inspection, review, and copying by the Department's Office of the Inspector General and/or the Comptroller without prior notice and at no additional cost to the City. The Contractor shall make such books, records and other documents available for inspection in the City of New York or shall reimburse the City for expenses associated with the out-of-City inspection.

B. The Department shall have the right to have representatives of the Department or of the City, State or federal government present to observe the services being performed.

C. The Contractor shall not be entitled to final payment until the Contractor has complied with any request for inspection or access given under this Section.

Section 5.04 Audit

A. This Agreement and all books, records, documents, and other evidence required to be maintained or retained pursuant to this Agreement, including all vouchers or invoices presented for payment and the books, records, and other documents upon which such vouchers or invoices are based (e.g., reports, cancelled checks, accounts, and all other similar material), are subject to audit by (i) the City, including the Comptroller, the Department, and the Department's Office of the Inspector General, (ii) the State, (iii) the federal government, and (iv) other persons duly authorized by the City. Such audits may include examination and review of the source and application of all funds whether from the City, the State, the federal government, private sources or otherwise.

B. Audits by the City, including the Comptroller, the Department, and the Department's Office of the Inspector General, are performed pursuant to the powers and responsibilities conferred by the Charter and the Admin. Code, as well as all orders, rules, and regulations promulgated pursuant to the Charter and Admin. Code.

C. The Contractor shall submit any and all documentation and justification in support of expenditures or fees under this Agreement as may be required by the Department and by the Comptroller in the exercise of his/her powers under Law.

D. The Contractor shall not be entitled to final payment until the Contractor has complied with the requirements of this Section.

Section 5.05 No Removal of Records from Premises

Where performance of this Agreement involves use by the Contractor of any City books, records, documents, or data (in hard copy, or electronic or other format now known or developed in the future) at City facilities or offices, the Contractor shall not remove any such data (in the format in which it originally existed, or in any other converted or derived format) from such facility or office without the prior written approval of the Department's designated official. Upon the request by the Department at any time during the Agreement or after the Agreement has expired or terminated, the Contractor shall return to the Department any City books, records, documents, or data that has been removed from City premises.

Section 5.06 Electronic Records

As used in this Appendix A, the terms books, records, documents, and other data refer to electronic versions as well as hard copy versions.

Section 5.07 Investigations Clause

A. The Contractor agrees to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a State or City agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license that is the subject of the investigation, audit or inquiry.

B. 1. If any person who has been advised that his or her statement, and any information from such statement, will not be used against him or her in any subsequent criminal proceeding refuses to testify before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath concerning the award of or performance under any transaction, agreement, lease, permit, contract, or license entered into with the City, or State, or any political subdivision or public authority thereof, or the Port Authority of New York and New Jersey, or any local development corporation within the City, or any public benefit corporation organized under the Laws of the State, or;

2. If any person refuses to testify for a reason other than the assertion of his or her privilege against self-incrimination in an investigation, audit or inquiry conducted by a City or State governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to take testimony under oath, or by the Inspector General of the governmental agency that is a party in interest in, and is seeking testimony concerning the award of, or performance under, any transaction, agreement, lease, permit, contract, or license entered into with the City, the State, or any political subdivision thereof or any local development corporation within the City, then;

C. 1. The Commissioner or Agency Head whose agency is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license shall convene a hearing, upon not less than five (5) Days written notice to the parties involved to determine if any penalties should attach for the failure of a person to testify.

2. If any non-governmental party to the hearing requests an adjournment, the Commissioner or Agency Head who convened the hearing may, upon granting the adjournment, suspend any contract, lease, permit, or license pending the final determination pursuant to Paragraph E below without the City incurring any penalty or damages for delay or otherwise.

D. The penalties that may attach after a final determination by the Commissioner or Agency Head may include but shall not exceed:

1. The disqualification for a period not to exceed five (5) years from the date of an adverse determination for any person, or any entity of which such person was a member at the time the testimony was sought, from submitting bids for, or transacting business with, or entering into or obtaining any contract, lease, permit or license with or from the City; and/or

2. The cancellation or termination of any and all such existing City contracts, leases, permits or licenses that the refusal to testify concerns and that have not been assigned as permitted under this Agreement, nor the proceeds of which pledged, to an unaffiliated and unrelated institutional lender for fair value prior to the issuance of the notice scheduling the hearing, without the City incurring any penalty or damages on account of such cancellation or termination; monies lawfully due for goods delivered, work done, rentals, or fees accrued prior to the cancellation or termination shall be paid by the City.

E. The Commissioner or Agency Head shall consider and address in reaching his or her determination and in assessing an appropriate penalty the factors in Paragraphs (1) and (2) below. He or she may also consider, if relevant and appropriate, the criteria established in Paragraphs (3) and (4) below, in addition to any other information that may be relevant and appropriate:

1. The party's good faith endeavors or lack thereof to cooperate fully and faithfully with any governmental investigation or audit, including but not limited to the discipline, discharge, or disassociation of any person failing to testify, the production of accurate and complete books and records, and the forthcoming testimony of all other members, agents, assignees or fiduciaries whose testimony is sought.

2. The relationship of the person who refused to testify to any entity that is a party to the hearing, including, but not limited to, whether the person whose testimony is sought has an ownership interest in the entity and/or the degree of authority and responsibility the person has within the entity.

3. The nexus of the testimony sought to the subject entity and its contracts, leases, permits or licenses with the City.

4. The effect a penalty may have on an unaffiliated and unrelated party or entity that has a significant interest in an entity subject to penalties under Paragraph D above, provided that the party or entity has given actual notice to the Commissioner or Agency Head upon the acquisition of the interest, or at the hearing called for in Paragraph (C)(1) above gives notice and proves that such interest was previously acquired. Under either circumstance, the party or entity must present evidence at the hearing demonstrating the potential adverse impact a penalty will have on such person or entity.

F. Definitions

1. The term "license" or "permit" as used in this Section shall be defined as a license, permit, franchise, or concession not granted as a matter of right.

2. The term "person" as used in this Section shall be defined as any natural person doing business alone or associated with another person or entity as a partner, director, officer, principal or employee.

3. The term "entity" as used in this Section shall be defined as any firm, partnership, corporation, association, or person that receives monies, benefits, licenses, leases, or permits from or through the City, or otherwise transacts business with the City.

4. The term "member" as used in this Section shall be defined as any person associated with another person or entity as a partner, director, officer, principal, or employee.

G. In addition to and notwithstanding any other provision of this Agreement, the Commissioner or Agency Head may in his or her sole discretion terminate this Agreement upon not less than three (3) Days written notice in the event the Contractor fails to promptly report in writing to the City Commissioner of Investigation any solicitation of money, goods, requests for future employment or other benefits or thing of value, by or on behalf of any employee of the City or other person or entity for any purpose that may be related to the procurement or obtaining of this Agreement by the Contractor, or affecting the performance of this Agreement.

Section 5.08 Confidentiality

A. The Contractor agrees to hold confidential, both during and after the completion or termination of this Agreement, all of the reports, information, or data, furnished to, or prepared, assembled or used by, the Contractor under this Agreement. The Contractor agrees that such reports, information, or data shall not be made available to any person or entity without the prior written approval of the Department. The Contractor agrees to maintain the confidentiality of such reports, information, or data by using a reasonable degree of care, and using at least the same degree of care that the Contractor uses to preserve the confidentiality of its own confidential information. In the event that the data contains social security numbers or other Personal Identifying Information, as such term is defined in Paragraph B of this Section, the Contractor shall utilize best practice methods (e.g., encryption of electronic records) to protect the confidentiality of such data. The obligation under this Section to hold reports, information or data confidential shall not apply where the City would be required to disclose such reports, information or data pursuant to the State Freedom of Information Law ("FOIL"), provided that the Contractor provides advance notice to the City, in writing or by e-mail, that it intends to disclose such reports, information or data and the City does not inform the contractor, in writing or by e-mail, that such reports, information, or data are not subject to disclosure under FOIL.

B. The Contractor shall provide notice to the Department within three (3) days of the discovery by the Contractor of any breach of security, as defined in Admin. Code § 10-501(b), of any data, encrypted or otherwise, in use by the Contractor that contains social security numbers or other personal identifying information as defined in Admin. Code § 10-501 ("Personal Identifying Information"), where such breach of security arises out of the acts or omissions of the Contractor or its employees, subcontractors, or agents. Upon the discovery of such security breach, the Contractor shall take reasonable steps to remediate the cause or causes of such breach, and shall provide notice to the Department of such steps. In the event of such breach of security, without limiting any other right of the City, the City shall have the right to withhold further payments under this Agreement for the purpose of set-off in sufficient sums to cover the costs of notifications and/or other actions mandated by any Law, or administrative or judicial order, to address the breach, and including any fines or disallowances imposed by the State or federal government as a result of the disclosure. The City shall also have the right to withhold further payments hereunder for the purpose of set-off in sufficient sums to cover the costs of credit monitoring services for the victims of such a breach of security by a national credit reporting agency, and/or any other commercially reasonable preventive measure. The Department shall provide the Contractor with written notice and an opportunity to comment on such measures prior to implementation. Alternatively, at the City's discretion, or if monies remaining to be earned or paid under this Agreement are insufficient to cover the costs detailed above, the Contractor shall pay directly for the costs, detailed above, if any.

C. The Contractor shall restrict access to confidential information to persons who have a legitimate work related purpose to access such information. The Contractor agrees that it will instruct its officers, employees, and agents to maintain the confidentiality of any and all information required to be kept confidential by this Agreement.

D. The Contractor, and its officers, employees, and agents shall notify the Department, at any time either during or after completion or termination of this Agreement, of any intended statement to the press or any intended issuing of any material for publication in any media of communication (print, news, television, radio, Internet, etc.) regarding the services provided or the data collected pursuant to this Agreement at least twenty-four (24) hours prior to any statement to the press or at least five (5) business Days prior to the submission of the material for publication, or such shorter periods as are reasonable under the circumstances. The Contractor may not issue any statement or submit any material for publication that includes confidential information as prohibited by this Section 5.08.

E. At the request of the Department, the Contractor shall return to the Department any and all confidential information in the possession of the Contractor or its subcontractors. If the Contractor or its subcontractors are legally required to retain any confidential information, the Contractor shall notify the Department in writing and set forth the confidential information that it intends to retain and the reasons why it is legally required to retain such information. The Contractor shall confer with the Department, in good faith, regarding any issues that arise from the Contractor retaining such confidential information. If the Department does not request such information, or the Law does not require otherwise, such information shall be maintained in accordance with the requirements set forth in Section 5.02.

F. A breach of this Section shall constitute a material breach of this Agreement for which the Department may terminate this Agreement pursuant to Article 10. The Department reserves any and all other rights and remedies in the event of unauthorized disclosure.

ARTICLE 6 - COPYRIGHTS, PATENTS, INVENTIONS, AND ANTITRUST

Section 6.01 Copyrights

A. Any reports, documents, data, photographs, deliverables, and/or other materials produced pursuant to this Agreement, and any and all drafts and/or other preliminary materials in any format related to such items produced pursuant to this Agreement, shall upon their creation become the exclusive property of the City.

B. Any reports, documents, data, photographs, deliverables, and/or other materials provided pursuant to this Agreement ("Copyrightable Materials") shall be considered "work-made-for-hire" within the meaning and purview of Section 101 of the United States Copyright Act, 17 U.S.C. § 101, and the City shall be the copyright owner thereof and of all aspects, elements and components thereof in which copyright protection might exist. To the extent that the Copyrightable Materials do not qualify as "work-made-for-hire," the Contractor hereby irrevocably transfers, assigns and conveys exclusive copyright ownership in and to the Copyrightable Materials to the City, free and clear of any liens, claims, or other encumbrances. The Contractor shall retain no copyright or intellectual property interest in the Copyrightable Materials. The Copyrightable Materials shall be used by the Contractor for no purpose other than in the performance of this Agreement without the prior written permission of the City. The Department may grant the Contractor a license to use the Copyrightable Materials on such terms as determined by the Department and set forth in the license.

C. The Contractor acknowledges that the City may, in its sole discretion, register copyright in the Copyrightable Materials with the United States Copyright Office or any other government agency authorized to grant copyright registrations. The Contractor shall fully cooperate in this effort, and agrees to provide any and all documentation necessary to accomplish this.

D. The Contractor represents and warrants that the Copyrightable Materials: (i) are wholly original material not published elsewhere (except for material that is in the public domain); (ii) do not violate any copyright Law; (iii) do not constitute defamation or invasion of the right of privacy or publicity; and (iv) are not an infringement, of any kind, of the rights of any third party. To the extent that the Copyrightable Materials incorporate any non-original material, the Contractor has obtained all necessary permissions and clearances, in writing, for the use of such non-original material under this Agreement, copies of which shall be provided to the City upon execution of this Agreement.

E. If the services under this Agreement are supported by a federal grant of funds, the federal and State government reserves a royalty-free, non-exclusive irrevocable license to reproduce, publish, or otherwise use and to authorize others to use, for federal or State government purposes, the copyright in any Copyrightable Materials developed under this Agreement.

F. If the Contractor publishes a work dealing with any aspect of performance under this Agreement, or with the results of such performance, the City shall have a royalty-free, non-exclusive irrevocable license to reproduce, publish, or otherwise use such work for City governmental purposes.

Section 6.02 Patents and Inventions

The Contractor shall promptly and fully report to the Department any discovery or invention arising out of or developed in the course of performance of this Agreement. If the services under this Agreement are supported by a federal grant of funds, the Contractor shall promptly and fully report to the federal government for the federal government to make a determination as to whether patent protection on such invention shall be sought and how the rights in the invention or discovery, including rights under any patent issued thereon, shall be disposed of and administered in order to protect the public interest.

Section 6.03 Pre-existing Rights

In no case shall Sections 6.01 and 6.02 apply to, or prevent the Contractor from asserting or protecting its rights in any discovery, invention, report, document, data, photograph, deliverable, or other material in connection with or produced pursuant to this Agreement that existed prior to or was developed or discovered independently from the activities directly related to this Agreement.

Section 6.04 Antitrust

The Contractor hereby assigns, sells, and transfers to the City all right, title and interest in and to any claims and causes of action arising under the antitrust laws of the State or of the United States relating to the particular goods or services procured by the City under this Agreement.

ARTICLE 7 - INSURANCE

Section 7.01 Agreement to Insure

The Contractor shall not commence performing services under this Agreement unless and until all insurance required by this Article is in effect, and shall ensure continuous insurance coverage in the manner, form, and limits required by this Article throughout the term of the Agreement.

Section 7.02 Commercial General Liability Insurance

A. The Contractor shall maintain Commercial General Liability Insurance covering the Contractor as Named Insured and the City as an Additional Insured in the amount of at least One Million Dollars ($1,000,000) per occurrence. Such insurance shall protect the City and the Contractor from claims for property damage and/or bodily injury, including death that may arise from any of the operations under this Agreement. Coverage under this insurance shall be at least as broad as that provided by the most recently issued Insurance Services Office ("ISO") Form CG 0001, shall contain no exclusions other than as required by law or as approved by the Department, and shall be "occurrence" based rather than "claims-made."

B. Such Commercial General Liability Insurance shall name the City, together with its officials and employees, as an Additional Insured with coverage at least as broad as the most recently issued ISO Form CG 20 10.

C. The Contractor shall ensure that each subcontractor adds the City, together with its officials and employees, as an Additional Insured under all Commercial General Liability Insurance policies obtained by a subcontractor covering work performed by such subcontractor under this Agreement with coverage at least as broad as the most recently issued ISO Form CG 20 26.

Section 7.03 Professional Liability Insurance

A. At the Department's direction, if professional services are provided pursuant to this Agreement, the Contractor shall maintain and submit evidence of Professional Liability Insurance appropriate to the type(s) of such services to be provided under this Agreement in the amount of at least One Million Dollars ($1,000,000) per claim. The policy or policies shall include an endorsement to cover the liability assumed by the Contractor under this Agreement arising out of the negligent performance of professional services or caused by an error, omission or negligent act of the Contractor or anyone employed by the Contractor.

B. All subcontractors of the Contractor providing professional services under this Agreement shall also maintain such insurance in the amount of at least One Million Dollars ($1,000,000) per claim, and the Contractor shall provide to the Department, at the time of the request for subcontractor approval, evidence of such Professional Liability Insurance on forms acceptable to the Department.

C. Claims-made policies will be accepted for Professional Liability Insurance. All such policies shall have an extended reporting period option or automatic coverage of not less than two (2) years. If available as an option, the Contractor shall purchase extended reporting period coverage effective on cancellation or termination of such insurance unless a new policy is secured with a retroactive date, including at least the last policy year.

Section 7.04 Workers' Compensation, Disability Benefits, and Employer's Liability Insurance

The Contractor shall maintain, and ensure that each subcontractor maintains, Workers' Compensation Insurance, Disability Benefits Insurance, and Employer's Liability Insurance in accordance with the Laws of the State on behalf of, or with regard to, all employees providing services under this Agreement.

Section 7.05 Unemployment Insurance

To the extent required by Law, the Contractor shall provide Unemployment Insurance for its employees.

Section 7.06 Business Automobile Liability Insurance

A. If vehicles are used in the provision of services under this Agreement, then the Contractor shall maintain Business Automobile Liability insurance in the amount of at least One Million Dollars ($1,000,000) each accident combined single limit for liability arising out of ownership, maintenance or use of any owned, non-owned, or hired vehicles to be used in connection with this Agreement. Coverage shall be at least as broad as ISO Form CA0001, ed. 10/01.

B. If vehicles are used for transporting hazardous materials, the Business Automobile Liability Insurance shall be endorsed to provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS-90.

Section 7.07 General Requirements for Insurance Coverage and Policies

A. All required insurance policies shall be maintained with companies that may lawfully issue the required policy and have an A.M. Best rating of at least A- / "VII" or a Standard and Poor's rating of at least A, unless prior written approval is obtained from the City Law Department.

B. All insurance policies shall be primary (and non-contributing) to any insurance or self-insurance maintained by the City.

C. The Contractor shall be solely responsible for the payment of all premiums for all required insurance policies and all deductibles or self-insured retentions to which such policies are subject, whether or not the City is an insured under the policy.

D. There shall be no self-insurance program with regard to any insurance required under this Article unless approved in writing by the Commissioner. Any such self-insurance program shall provide the City with all rights that would be provided by traditional insurance required under this Article, including but not limited to the defense obligations that insurers are required to undertake in liability policies.

E. The City's limits of coverage for all types of insurance required under this Article shall be the greater of (i) the minimum limits set forth in this Article or (ii) the limits provided to the Contractor as Named Insured under all primary, excess, and umbrella policies of that type of coverage.

F. All insurance policies required pursuant to Sections 7.02 and 7.03 shall contain an endorsement requiring that the issuing insurance company endeavor to provide the City with advance written notice in the event such policy is to expire or be cancelled or terminated for any reason, and to mail such notice to both the Commissioner [insert Agency name and appropriate address], and the New York City Comptroller, Attn: Office of Contract Administration, Municipal Building, One Centre Street, Room 1005, New York, New York 10007. Such notice is to be sent at least (30) days before the expiration, cancellation or termination date, except in cases of non-payment, where at least ten (10) days written notice would be provided.

Section 7.08 Proof of Insurance

A. For Workers' Compensation Insurance, Disability Benefits Insurance, and Employer's Liability Insurance, the Contractor shall file one of the following within ten (10) Days of award of this Agreement. ACORD forms are not acceptable proof of workers' compensation coverage.

1. C-105.2 Certificate of Workers' Compensation Insurance;
2. U-26.3 -- State Insurance Fund Certificate of Workers' Compensation Insurance;

3. Request for WC/DB Exemption (Form CE-200);

4. Equivalent or successor forms used by the New York State Workers' Compensation Board; or

5. Other proof of insurance in a form acceptable to the City.

B. For each policy required under this Agreement, except for Workers' Compensation Insurance, Disability Benefits Insurance, Employer's Liability Insurance, and Unemployment Insurance, the Contractor shall file a Certificate of Insurance with the Department within ten (10) Days of award of this Agreement. All Certificates of Insurance shall be (a) in a form acceptable to the City and certify the issuance and effectiveness of such policies of insurance, each with the specified minimum limits; and (b) accompanied by the endorsement in the Contractor's general liability policy by which the City has been made an additional insured pursuant to Section 7.02(B). All Certificate(s) of Insurance shall be accompanied by either a duly executed "Certification by Broker" in the form attached to this Appendix A or copies of all policies referenced in the Certificate of Insurance. If complete policies have not yet been issued, binders are acceptable, until such time as the complete policies have been issued, at which time such policies shall be submitted.

C. Certificates of Insurance confirming renewals of insurance shall be submitted to the Commissioner prior to the expiration date of coverage of policies required under this Article. Such Certificates of Insurance shall comply with the requirements of Section 7.08 (A) and Section 7.08(B), as applicable.

D. The Contractor shall provide the City with a copy of any policy required under this Article upon the demand for such policy by the Commissioner or the New York City Law Department.

E. Acceptance by the Commissioner of a certificate or a policy does not excuse the Contractor from maintaining policies consistent with all provisions of this Article (and ensuring that subcontractors maintain such policies) or from any liability arising from its failure to do so.

F. In the event the Contractor receives notice, from an insurance company or other person, that any insurance policy required under this Article shall expire or be cancelled or terminated for any reason, the Contractor shall immediately forward a copy of such notice to both the Commissioner of DDC, 30-30 Thomson Avenue, Long Island City, New York 11101, and the New York City Comptroller, Attn: Office of Contract Administration, Municipal Building, One Centre Street, Room 1005, New York, New York 10007.

Section 7.09 Miscellaneous

A. Where notice of loss, damage, occurrence, accident, claim or suit is required under a policy maintained in accordance with this Article, the Contractor shall notify in writing all insurance carriers that issued potentially responsive policies of any such event relating to any operations under this Agreement (including notice to Commercial General Liability Insurance carriers for events relating to the Contractor's own employees) no later than twenty (20) Days after such event. Such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Additional Insured as well as the Named Insured." Such notice shall also contain the following information: the number of the insurance policy, the name of the named insured, the date and location of the damage, occurrence, or accident, and the identity of the persons or things injured, damaged, or lost. The Contractor shall simultaneously send a copy of such notice to the City of New York c/o Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

B. The Contractor's failure to maintain any of the insurance required by this Article shall constitute a material breach of this Agreement. Such breach shall not be waived or otherwise excused by any action or inaction by the City at any time.

C. Insurance coverage in the minimum amounts required in this Article shall not relieve the Contractor or its subcontractors of any liability under this Agreement, nor shall it preclude the City from exercising any rights or taking such other actions as are available to it under any other provisions of this Agreement or Law.

D. The Contractor waives all rights against the City, including its officials and employees for any damages or losses that are covered under any insurance required under this Article (whether or not such insurance is actually procured or claims are paid thereunder) or any other insurance applicable to the operations of the Contractor and/or its subcontractors in the performance of this Agreement.

E. In the event the Contractor requires any subcontractor to procure insurance with regard to any operations under this Agreement and requires such subcontractor to name the Contractor as an additional insured under such insurance, the Contractor shall ensure that such entity also name the City, including its officials and employees, as an additional insured with coverage at least as broad as ISO form CG 20 26.

ARTICLE 8 - PROTECTION OF PERSONS AND PROPERTY AND INDEMNIFICATION

Section 8.01 Reasonable Precautions

The Contractor shall take all reasonable precautions to protect all persons and the property of the City and of others from damage, loss or injury resulting from the Contractor's and/or its subcontractors' operations under this Agreement.

Section 8.02 Protection of City Property

The Contractor assumes the risk of, and shall be responsible for, any loss or damage to City property, including property and equipment leased by the City, used in the performance of this Agreement, where such loss or damage is caused by any tortious act, or failure to comply with the provisions of this Agreement or of Law by the Contractor, its officers, employees, agents or subcontractors.

Section 8.03 Indemnification

The Contractor shall defend, indemnify and hold the City, its officers and employees harmless from any and all claims (even if the allegations of the lawsuit are without merit) or judgments for damages on account of any injuries or death to any person or damage to any property and from costs and expenses to which the City, its officers and employees may be subjected or which it may suffer or incur allegedly arising out of or in connection with any operations of the Contractor and/or its subcontractors to the extent resulting from any negligent act of commission or omission, any intentional tortious act, or failure to comply with the provisions of this Agreement or of the Laws. Insofar as the facts or Law relating to any claim would preclude the City from being completely indemnified by the Contractor, the City shall be partially indemnified by the Contractor to the fullest extent permitted by Law.

Section 8.04 Infringement Indemnification

The Contractor shall defend, indemnify and hold the City harmless from any and all claims (even if the allegations of the lawsuit are without merit) or judgments for damages and from costs and expenses to which the City may be subject to or which it may suffer or incur allegedly arising out of or in connection with any infringement by the Contractor of any copyright, trade secrets, trademark or patent rights or any other property or personal right of any third party by the Contractor and/or its subcontractors in the performance of this Agreement. The Contractor shall defend, indemnify, and hold the City harmless regardless of whether or not the alleged infringement arises out of compliance with the Agreement's scope of services/scope of work. Insofar as the facts or Law relating to any claim would preclude the City from being completely indemnified by the Contractor, the City shall be partially indemnified by the Contractor to the fullest extent permitted by Law.

Section 8.05 Indemnification Obligations Not Limited By Insurance Obligation

The indemnification provisions set forth in this Article shall not be limited in any way by the Contractor's obligations to obtain and maintain insurance as provided in this Agreement.

Section 8.06 Actions By or Against Third Parties

A. In the event any claim is made or any action brought in any way relating to Agreement, other than an action between the City and the Contractor, the Contractor shall diligently render to the City without additional compensation all assistance which the City may reasonably require of the Contractor.

B. The Contractor shall report to the Department in writing within five (5) business Days of the initiation by or against the Contractor of any legal action or proceeding in connection with or relating to this Agreement.

Section 8.07 Withholding of Payments

A. In the event that any claim is made or any action is brought against the City for which the Contractor may be required to indemnify the City pursuant to this Agreement, the City shall have the right to withhold further payments under this Agreement for the purpose of set-off in sufficient sums to cover the said claim or action.

B. In the event that any City property is lost or damaged as set forth in Section 8.02, except for normal wear and tear, the City shall have the right to withhold further payments under this Agreement for the purpose of set-off in sufficient sums to cover such loss or damage.

C. The City shall not, however, impose a setoff in the event that an insurance company that provided liability insurance pursuant to Article 7 above has accepted the City's tender of the claim or action without a reservation of rights.

D. The Department may, at its option, withhold for purposes of set-off any monies due to the Contractor under this Agreement up to the amount of any disallowances or questioned costs resulting from any audits of the Contractor or to the amount of any overpayment to the Contractor with regard to this Agreement.

E. The rights and remedies of the City provided for in this Section shall not be exclusive and are in addition to any other rights and remedies provided by Law or this Agreement.

Section 8.08 No Third Party Rights

The provisions of this Agreement shall not be deemed to create any right of action in favor of third parties against the Contractor or the City or their respective officers and employees.

ARTICLE 9 - CONTRACT CHANGES

Section 9.01 Contract Changes

Changes to this Agreement may be made only as duly authorized by the ACCO or his or her designee and in accordance with the PPB Rules. Any amendment or change to this Agreement shall not be valid unless made in writing and signed by authorized representatives of both parties. Contractors deviating from the requirements of this Agreement without a duly approved and executed change order document, or written contract modification or amendment, do so at their own risk.

Section 9.02 Changes Through Fault of Contractor

In the event that any change is required in the data, documents, deliverables, or other services to be provided under this Agreement because of negligence or error of the Contractor, no additional compensation shall be paid to the Contractor for making such change, and the Contractor is obligated to make such change without additional compensation.

ARTICLE 10 - TERMINATION, DEFAULT, AND REDUCTIONS IN FUNDING

Section 10.01 Termination by the City Without Cause

A. The City shall have the right to terminate this Agreement, in whole or in part, without cause, in accordance with the provisions of Section 10.05.

B. If the City terminates this Agreement pursuant to this Section, the following provisions apply. The City shall not incur or pay any further obligation pursuant to this Agreement beyond the termination date set by the City pursuant to Section 10.05. The City shall pay for services provided in accordance with this Agreement

prior to the termination date. In addition, any obligation necessarily incurred by the Contractor on account of this Agreement prior to receipt of notice of termination and falling due after the termination date shall be paid by the City in accordance with the terms of this Agreement. In no event shall such obligation be construed as including any lease or other occupancy agreement, oral or written, entered into between the Contractor and its landlord.

Section 10.02 Reductions in Federal, State and/or City Funding

A. This Agreement is funded in whole or in part by funds secured from the federal, State and/or City governments. Should there be a reduction or discontinuance of such funds by action of the federal, State and/or City governments, the City shall have, in its sole discretion, the right to terminate this Agreement in whole or in part, or to reduce the funding and/or level of services of this Agreement caused by such action by the federal, State and/or City governments, including, in the case of the reduction option, but not limited to, the reduction or elimination of programs, services or service components; the reduction or elimination of contract-reimbursable staff or staff-hours, and corresponding reductions in the budget of this Agreement and in the total amount payable under this Agreement. Any reduction in funds pursuant to this Section shall be accompanied by an appropriate reduction in the services performed under this Agreement.

B. In the case of the reduction option referred to in Paragraph A, above, any such reduction shall be effective as of the date set forth in a written notice thereof to the Contractor, which shall be not less than thirty (30) Days from the date of such notice. Prior to sending such notice of reduction, the Department shall advise the Contractor that such option is being exercised and afford the Contractor an opportunity to make within seven (7) Days any suggestion(s) it may have as to which program(s), service(s), service component(s), staff or staff-hours might be reduced or eliminated, provided, however, that the Department shall not be bound to utilize any of the Contractor's suggestions and that the Department shall have sole discretion as to how to effectuate the reductions.

C. If the City reduces funding pursuant to this Section, the following provisions apply. The City shall pay for services provided in accordance with this Agreement prior to the reduction date. In addition, any obligation necessarily incurred by the Contractor on account of this Agreement prior to receipt of notice of reduction and falling due after the reduction date shall be paid by the City in accordance with the terms of this Agreement. In no event shall such obligation be construed as including any lease or other occupancy agreement, oral or written, entered into between the Contractor and its landlord.

D. To the extent that the reduction in public funds is a result of the State determining that the Contractor may receive medical assistance funds pursuant to title eleven of article five of the Social Services Law to fund the services contained within the scope of a program under this Agreement, then the notice and effective date provisions of this section shall not apply, and the Department may reduce such public funds authorized under this Agreement by informing the Contractor of the amount of the reduction and revising attachments to this agreement as appropriate.

Section 10.03 Contractor Default

A. The City shall have the right to declare the Contractor in default:

1. Upon a breach by the Contractor of a material term or condition of this Agreement, including unsatisfactory performance of the services;

2. Upon insolvency or the commencement of any proceeding by or against the Contractor, either voluntarily or involuntarily, under the Bankruptcy Code or relating to the insolvency, receivership, liquidation, or composition of the Contractor for the benefit of creditors;

3. If the Contractor refuses or fails to proceed with the services under the Agreement when and as directed by the Commissioner;

4. If the Contractor or any of its officers, directors, partners, five percent (5%) or greater shareholders, principals, or other employee or person substantially involved in its activities are indicted or convicted after execution of the Agreement under any state or federal law of any of the following:

a. a criminal offense incident to obtaining or attempting to obtain or performing a public or private contract;

b. fraud, embezzlement, theft, bribery, forgery, falsification, or destruction of records, or receiving stolen property;

c. a criminal violation of any state or federal antitrust law;

d. violation of the Racketeer Influence and Corrupt Organization Act, 18 U.S.C. § 1961 et seq., or the Mail Fraud Act, 18 U.S.C. § 1341 et seq., for acts in connection with the submission of bids or proposals for a public or private contract;

e. conspiracy to commit any act or omission that would constitute grounds for conviction or liability under any statute described in subparagraph (d) above; or

f. an offense indicating a lack of business integrity that seriously and directly affects responsibility as a City vendor.

5. If the Contractor or any of its officers, directors, partners, five percent (5%) or greater shareholders, principals, or other employee or person substantially involved in its activities are subject to a judgment of civil liability under any state or federal antitrust law for acts or omissions in connection with the submission of bids or proposals for a public or private contract; or

6. If the Contractor or any of its officers, directors, partners, five percent (5%) or greater shareholders, principals, or other employee or person substantially involved in its activities makes or causes to be made any false, deceptive, or fraudulent material statement, or fail to make a required material statement in any bid, proposal, or application for City or other government work.

B. The right to declare the Contractor in default shall be exercised by sending the Contractor a written notice of the conditions of default, signed by the Commissioner, setting forth the ground or grounds upon which such default is declared ("Notice to Cure"). The Contractor shall have ten (10) Days from receipt of the Notice to Cure or any longer period that is set forth in the Notice to Cure to cure the default. The Commissioner may temporarily suspend services under the Agreement pending the outcome of the default proceedings pursuant to this Section.

C. If the conditions set forth in the Notice to Cure are not cured within the period set forth in the Notice to Cure, the Commissioner may declare the Contractor in default pursuant to this Section. Before the Commissioner may exercise his or her right to declare the Contractor in default, the Commissioner shall give the Contractor an opportunity to be heard upon not less than five (5) business days notice. The Commissioner may, in his or her discretion, provide for such opportunity to be in writing or in person. Such opportunity to be heard shall not occur prior to the end of the cure period but notice of such opportunity to be heard may be given prior to the end of the cure period and may be given contemporaneously with the Notice to Cure.

D. After the opportunity to be heard, the Commissioner may terminate the Agreement, in whole or in part, upon finding the Contractor in default pursuant to this Section, in accordance with the provisions of Section 10.05.

E. The Commissioner, after declaring the Contractor in default, may have the services under the Agreement completed by such means and in such manner, by contract with or without public letting, or otherwise, as he or she may deem advisable in accordance with applicable PPB Rules. After such completion, the Commissioner shall certify the expense incurred in such completion, which shall include the cost of re-letting. Should the expense of such completion, as certified by the Commissioner, exceed the total sum which would have been payable under the Agreement if it had been completed by the Contractor, any excess shall be promptly paid by the Contractor upon demand by the City. The excess expense of such completion, including any and all related and incidental costs, as so certified by the Commissioner, and any liquidated damages assessed against the Contractor, may be charged against and deducted out of monies earned by the Contractor.

Section 10.04 Force Majeure

A. For purposes of this Agreement, a force majeure event is an act or event beyond the control and without any fault or negligence of the Contractor ("Force Majeure Event"). Such events may include, but are not limited to, fire, flood, earthquake, storm or other natural disaster, civil commotion, war, terrorism, riot, and labor disputes not brought about by any act or omission of the Contractor.

B. In the event the Contractor cannot comply with the terms of the Agreement (including any failure by the Contractor to make progress in the performance of the services) because of a Force Majeure Event, then the Contractor may ask the Commissioner to excuse the nonperformance and/or terminate the Agreement. If the Commissioner, in his or her reasonable discretion, determines that the Contractor cannot comply with the terms of the Agreement because of a Force Majeure Event, then the Commissioner shall excuse the nonperformance and may terminate the Agreement. Such a termination shall be deemed to be without cause.

C. If the City terminates the Agreement pursuant to this Section, the following provisions apply. The City shall not incur or pay any further obligation pursuant to this Agreement beyond the termination date. The City shall pay for services provided in accordance with this Agreement prior to the termination date. Any obligation necessarily incurred by the Contractor on account of this Agreement prior to receipt of notice of termination and falling due after the termination date shall be paid by the City in accordance with the terms of this Agreement. In no event shall such obligation be construed as including any lease or other occupancy agreement, oral or written, entered into between the Contractor and its landlord.

Section 10.05 Procedures for Termination

A. The Department and/or the City shall give the Contractor written notice of any termination of this Agreement. Such notice shall specify the applicable provision(s) under which the Agreement is terminated and the effective date of the termination. Except as otherwise provided in this Agreement, the notice shall comply with the provisions of this Section. For termination without cause, the effective date of the termination shall not be less than ten (10) Days from the date the notice is personally delivered, or fifteen (15) Days from the date the notice is either sent by certified mail, return receipt requested, or sent by fax and deposited in a post office box regularly maintained by the United States Postal Service in a postage pre-paid envelope. In the case of termination for default, the effective date of the termination shall be as set forth above for a termination without cause or such earlier date as the Commissioner may determine. If the City terminates the Agreement in part, the Contractor shall continue the performance of the Agreement to the extent not terminated.

B. Upon termination or expiration of this Agreement, the Contractor shall comply with the City close-out procedures, including but not limited to:

1. Accounting for and refunding to the Department, within forty-five (45) Days, any unexpended funds which have been advanced to the Contractor pursuant to this Agreement;

2. Furnishing within forty-five (45) Days an inventory to the Department of all equipment, appurtenances and property purchased through or provided under this Agreement and carrying out any Department or City directive concerning the disposition of such equipment, appurtenances and property;

3. Turning over to the Department or its designees all books, records, documents and material specifically relating to this Agreement that the Department has requested be turned over;

4. Submitting to the Department, within ninety (90) Days, a final statement and report relating to the Agreement. The report shall be made by a certified public accountant or a licensed public accountant; and

5. Providing reasonable assistance to the Department in the transition, if any, to a new contractor.

Section 10.06 Miscellaneous Provisions

A. The Commissioner, in addition to any other powers set forth in this Agreement or by operation of Law, may suspend, in whole or in part, any part of the services to be provided under this Agreement whenever in his or her judgment such suspension is required in the best interest of the City. If the Commissioner suspends this Agreement pursuant to this Section, the City shall not incur or pay any further obligation pursuant to this Agreement beyond the suspension date until such suspension is lifted. The City shall pay for services provided in accordance with this Agreement prior to the suspension date. In addition, any obligation necessarily incurred by the Contractor on account of this Agreement prior to receipt of notice of suspension and falling due during the suspension period shall be paid by the City in accordance with the terms of this Agreement.

B. Notwithstanding any other provisions of this Agreement, the Contractor shall not be relieved of liability to the City for damages sustained by the City by virtue of the Contractor's breach of the Agreement, and the City may withhold payments to the Contractor for the purpose of set-off in the amount of damages due to the City from the Contractor.

C. The rights and remedies of the City provided in this Article shall not be exclusive and are in addition to all other rights and remedies provided by Law or under this Agreement.

ARTICLE 11 - PROMPT PAYMENT AND ELECTRONIC FUNDS TRANSFER

Section 11.01 Prompt Payment

A. The prompt payment provisions of PPB Rule § 4-06 are applicable to payments made under this Agreement. The provisions generally require the payment to the Contractor of interest on payments made after the required payment date, as set forth in the PPB Rules.

B. The Contractor shall submit a proper invoice to receive payment, except where the Agreement provides that the Contractor will be paid at predetermined intervals without having to submit an invoice for each scheduled payment.

C. Determination of interest due will be made in accordance with the PPB Rules and the applicable rate of interest shall be the rate in effect at the time of payment.

Section 11.02 Electronic Funds Transfer

A. In accordance with Admin. Code § 6-107.1, the Contractor agrees to accept payments under this Agreement from the City by electronic funds transfer. An electronic funds transfer is any transfer of funds, other than a transaction originated by check, draft, or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument or computer or magnetic tape so as to order, instruct, or authorize a financial institution to debit or credit an account. Prior to the first payment made under this Agreement, the Contractor shall designate one financial institution or other authorized payment agent and shall complete the "EFT Vendor Payment Enrollment Form" available from the Agency or at http://www.nyc.gov/dof in order to provide the commissioner of the Department of Finance with information necessary for the Contractor to receive electronic funds transfer payments through the designated financial institution or authorized payment agent. The crediting of the amount of a payment to the appropriate account on the books of a financial institution or other authorized payment agent designated by the Contractor shall constitute full satisfaction by the City for the amount of the payment under this Agreement. The account information supplied by the Contractor to facilitate the electronic funds transfer shall remain confidential to the fullest extent provided by Law.

B. The Agency Head may waive the application of the requirements of this Section to payments on contracts entered into pursuant to Charter § 315. In addition, the commissioner of the Department of Finance and the Comptroller may jointly issue standards pursuant to which the Agency may waive the requirements of this Section for payments in the following circumstances: (i) for individuals or classes of individuals for whom compliance imposes a hardship; (ii) for classifications or types of checks; or (iii) in other circumstances as may be necessary in the best interest of the City.

C. This Section is applicable to contracts valued at Twenty-Five Thousand Dollars ($25,000) and above.

ARTICLE 12 - CLAIMS

Section 12.01 Choice of Law

This Agreement shall be deemed to be executed in the City and State of New York, regardless of the domicile of the Contractor, and shall be governed by and construed in accordance with the Laws of the State of New York (notwithstanding New York choice of law or conflict of law principles) and the Laws of the United States, where applicable.

Section 12.02 Jurisdiction and Venue

The parties agree that any and all claims asserted by or against the City arising under or related to this Agreement shall solely be heard and determined either in the courts of the United States located in the City or in the courts of the State located in the City and County of New York. The parties shall consent to the dismissal and/or transfer of any claims asserted in any other venue or forum to the proper venue or forum. If the Contractor initiates any action in breach of this Section, the Contractor shall be responsible for and shall promptly reimburse the City for any attorneys' fees incurred by the City in removing the action to a proper court consistent with this Section.

Section 12.03 Resolution of Disputes

A. Except as provided in Subparagraphs (A)(1) and (A)(2) below, all disputes between the City and the Contractor that arise under, or by virtue of, this Agreement shall be finally resolved in accordance with the provisions of this Section and PPB Rule § 4-09. This procedure shall be the exclusive means of resolving any such disputes.

1. This Section shall not apply to disputes concerning matters dealt with in other sections of the PPB Rules or to disputes involving patents, copyrights, trademarks, or trade secrets (as interpreted by the courts of New York State) relating to proprietary rights in computer software, or to termination other than for cause.

2. For construction and construction-related services this Section shall apply only to disputes about the scope of work delineated by the Agreement, the interpretation of Agreement documents, the amount to be paid for extra work or disputed work performed in connection with the Agreement, the conformity of the Contractor's work to the Agreement, and the acceptability and quality of the Contractor's work; such disputes arise when the City Engineer, City Resident Engineer, City Engineering Audit Officer, or other designee of the Agency Head makes a determination with which the Contractor disagrees. For construction, this Section shall not apply to termination of the Agreement for cause or other than for cause.

B. All determinations required by this Section shall be clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination. Failure to make such determination within the time required by this Section shall be deemed a non-determination without prejudice that will allow application to the next level.

C. During such time as any dispute is being presented, heard, and considered pursuant to this Section, the Agreement terms shall remain in full force and effect and, unless otherwise directed by the ACCO or Engineer, the Contractor shall continue to perform work in accordance with the Agreement and as directed by the ACCO or City Engineer, City Resident Engineer, City Engineering Audit Officer, or other designee of the Agency Head. Failure of the Contractor to continue the work as directed shall constitute a waiver by the Contractor of any and all claims being presented pursuant to this Section and a material breach of contract.

D. Presentation of Dispute to Agency Head.

1. Notice of Dispute and Agency Response. The Contractor shall present its dispute in writing ("Notice of Dispute") to the Agency Head within the time specified herein, or, if no time is specified, within thirty (30) Days of receiving written notice of the determination or action that is the subject of the dispute. This notice requirement shall not be read to replace any other notice requirements contained in the Agreement. The Notice of Dispute shall include all the facts, evidence, documents, or other basis upon which the Contractor relies in support of its position, as well as a detailed computation demonstrating how any amount of money claimed by the Contractor in the dispute was arrived at. Within thirty (30) Days after receipt of the complete Notice of Dispute, the ACCO or, in the case of construction or construction-related services, the City Engineer, City Resident Engineer, City Engineering Audit Officer, or other designee of the Agency Head, shall submit to the Agency Head all materials he or she deems pertinent to the dispute. Following initial submissions to the Agency Head, either party may demand of the other the production of any document or other material the demanding party believes may be relevant to the dispute. The requested party shall produce all relevant materials that are not otherwise protected by a legal privilege recognized by the courts of New York State. Any question of relevancy shall be determined by the Agency Head whose decision shall be final. Willful failure of the Contractor to produce any requested

material whose relevancy the Contractor has not disputed, or whose relevancy has been affirmatively determined, shall constitute a waiver by the Contractor of its claim.

2. Agency Head Inquiry. The Agency Head shall examine the material and may, in his or her discretion, convene an informal conference with the Contractor and the ACCO and, in the case of construction or construction-related services, the City Engineer, City Resident Engineer, City Engineering Audit Officer, or other designee of the Agency Head, to resolve the issue by mutual consent prior to reaching a determination. The Agency Head may seek such technical or other expertise as he or she shall deem appropriate, including the use of neutral mediators, and require any such additional material from either or both parties as he or she deems fit. The Agency Head's ability to render, and the effect of, a decision hereunder shall not be impaired by any negotiations in connection with the dispute presented, whether or not the Agency Head participated therein. The Agency Head may or, at the request of any party to the dispute, shall compel the participation of any other contractor with a contract related to the work of this Agreement and that contractor shall be bound by the decision of the Agency Head. Any contractor thus brought into the dispute resolution proceeding shall have the same rights and obligations under this Section as the Contractor initiating the dispute.

3. Agency Head Determination. Within thirty (30) Days after the receipt of all materials and information, or such longer time as may be agreed to by the parties, the Agency Head shall make his or her determination and shall deliver or send a copy of such determination to the Contractor and ACCO and, in the case of construction or construction-related services, the City Engineer, City Resident Engineer, City Engineering Audit Officer, or other designee of the Agency Head, together with a statement concerning how the decision may be appealed.

4. Finality of Agency Head Decision. The Agency Head's decision shall be final and binding on all parties, unless presented to the Contract Dispute Resolution Board ("CDRB") pursuant to this Section. The City may not take a petition to the CDRB. However, should the Contractor take such a petition, the City may seek, and the CDRB may render, a determination less favorable to the Contractor and more favorable to the City than the decision of the Agency Head.

E. Presentation of Dispute to the Comptroller. Before any dispute may be brought by the Contractor to the CDRB, the Contractor must first present its claim to the Comptroller for his or her review, investigation, and possible adjustment.

1. Time, Form, and Content of Notice. Within thirty (30) Days of receipt of a decision by the Agency Head, the Contractor shall submit to the Comptroller and to the Agency Head a Notice of Claim regarding its dispute with the Agency. The Notice of Claim shall consist of (i) a brief statement of the substance of the dispute, the amount of money, if any, claimed and the reason(s) the Contractor contends the dispute was wrongly decided by the Agency Head; (ii) a copy of the decision of the Agency Head; and (iii) a copy of all materials submitted by the Contractor to the Agency, including the Notice of Dispute. The Contractor may not present to the Comptroller any material not presented to the Agency Head, except at the request of the Comptroller.

2. Agency Response. Within thirty (30) Days of receipt of the Notice of Claim, the Agency shall make available to the Comptroller a copy of all material submitted by the Agency to the Agency Head in connection with the dispute. The Agency may not present to the Comptroller any material not presented to the Agency Head, except at the request of the Comptroller.

3. Comptroller Investigation. The Comptroller may investigate the claim in dispute and, in the course of such investigation, may exercise all powers provided in Admin. Code §§ 7-201 and 7-203. In addition, the Comptroller may demand of either party, and such party shall provide, whatever additional material the Comptroller deems pertinent to the claim, including original business records of the Contractor. Willful failure of the Contractor to produce within fifteen (15) Days any material requested by the Comptroller shall constitute a waiver by the Contractor of its claim. The Comptroller may also schedule an informal conference to be attended by the Contractor, Agency representatives, and any other personnel desired by the Comptroller.

4. Opportunity of Comptroller to Compromise or Adjust Claim. The Comptroller shall have forty-five (45) Days from his or her receipt of all materials referred to in Paragraph (E)(3) above to investigate the disputed claim. The period for investigation and compromise may be further extended by

agreement between the Contractor and the Comptroller, to a maximum of ninety (90) Days from the Comptroller's receipt of all the materials. The Contractor may not present its petition to the CDRB until the period for investigation and compromise delineated in this Paragraph has expired. In compromising or adjusting any claim hereunder, the Comptroller may not revise or disregard the terms of the Agreement.

F. Contract Dispute Resolution Board. There shall be a Contract Dispute Resolution Board composed of:

1. the chief administrative law judge of the Office of Administrative Trials and Hearings ("OATH") or his or her designated OATH administrative law judge, who shall act as chairperson, and may adopt operational procedures and issue such orders consistent with this Section as may be necessary in the execution of the CDRB's functions, including, but not limited to, granting extensions of time to present or respond to submissions;

2. the City Chief Procurement Officer ("CCPO") or his or her designee; any designee shall have the requisite background to consider and resolve the merits of the dispute and shall not have participated personally and substantially in the particular matter that is the subject of the dispute or report to anyone who so participated; and

3. a person with appropriate expertise who is not an employee of the City. This person shall be selected by the presiding administrative law judge from a prequalified panel of individuals, established, and administered by OATH, with appropriate background to act as decision-makers in a dispute. Such individuals may not have a contract or dispute with the City or be an officer or employee of any company or organization that does, or regularly represent persons, companies, or organizations having disputes with the City.

G. Petition to CDRB. In the event the claim has not been settled or adjusted by the Comptroller within the period provided in this Section, the Contractor, within thirty (30) Days thereafter, may petition the CDRB to review the Agency Head determination.

1. Form and Content of Petition by the Contractor. The Contractor shall present its dispute to the CDRB in the form of a petition, which shall include (i) a brief statement of the substance of the dispute, the amount of money, if any, claimed, and the reason(s) the Contractor contends that the dispute was wrongly decided by the Agency Head; (ii) a copy of the decision of the Agency Head; (iii) copies of all materials submitted by the Contractor to the Agency; (iv) a copy of the decision of the Comptroller, if any, and (v) copies of all correspondence with, and material submitted by the Contractor to, the Comptroller's Office. The Contractor shall concurrently submit four complete sets of the petition: one to the Corporation Counsel (Attn: Commercial and Real Estate Litigation Division), and three to the CDRB at OATH's offices, with proof of service on the Corporation Counsel. In addition, the Contractor shall submit a copy of the statement of the substance of the dispute, cited in (i) above, to both the Agency Head and the Comptroller.

2. Agency Response. Within thirty (30) Days of receipt of the petition by the Corporation Counsel, the Agency shall respond to the statement of the Contractor and make available to the CDRB all material it submitted to the Agency Head and Comptroller. Three complete copies of the Agency response shall be submitted to the CDRB at OATH's offices and one to the Contractor. Extensions of time for submittal of the Agency response shall be given as necessary upon a showing of good cause or, upon the consent of the parties, for an initial period of up to thirty (30) Days.

3. Further Proceedings. The CDRB shall permit the Contractor to present its case by submission of memoranda, briefs, and oral argument. The CDRB shall also permit the Agency to present its case in response to the Contractor by submission of memoranda, briefs, and oral argument. If requested by the Corporation Counsel, the Comptroller shall provide reasonable assistance in the preparation of the Agency's case. Neither the Contractor nor the Agency may support its case with any documentation or other material that was not considered by the Comptroller, unless requested by the CDRB. The CDRB, in its discretion, may seek such technical or other expert advice as it shall deem appropriate and may seek, on it own or upon application of a party, any such additional material from any party as it deems fit. The CDRB, in its discretion, may combine more than one dispute between the parties for concurrent resolution.

4. CDRB Determination. Within forty-five (45) Days of the conclusion of all submissions and oral arguments, the CDRB shall render a decision resolving the dispute. In an unusually complex case, the CDRB may render its decision in a longer period of time, not to exceed ninety (90) Days, and shall so advise the parties at the commencement of this period. The CDRB's decision must be consistent with the terms of this Agreement. Decisions of the CDRB shall only resolve matters before the CDRB and shall not have precedential effect with respect to matters not before the CDRB.

5. Notification of CDRB Decision. The CDRB shall send a copy of its decision to the Contractor, the ACCO, the Corporation Counsel, the Comptroller, the CCPO, and, in the case of construction or construction-related services, the City Engineer, City Resident Engineer, City Engineering Audit Officer, or other designee of the Agency Head. A decision in favor of the Contractor shall be subject to the prompt payment provisions of the PPB Rules. The required payment date shall be thirty (30) Days after the date the parties are formally notified of the CDRB's decision.

6. Finality of CDRB Decision. The CDRB's decision shall be final and binding on all parties. Any party may seek review of the CDRB's decision solely in the form of a challenge, filed within four months of the date of the CDRB's decision, in a court of competent jurisdiction of the State of New York, County of New York pursuant to Article 78 of the Civil Practice Law and Rules. Such review by the court shall be limited to the question of whether or not the CDRB's decision was made in violation of lawful procedure, was affected by an error of Law, or was arbitrary and capricious or an abuse of discretion. No evidence or information shall be introduced or relied upon in such proceeding that was not presented to the CDRB in accordance with PPB Rules § 4-09.

H. Any termination, cancellation, or alleged breach of the Agreement prior to or during the pendency of any proceedings pursuant to this Section shall not affect or impair the ability of the Agency Head or CDRB to make a binding and final decision pursuant to this Section.

Section 12.04 Claims and Actions

A. Any claim against the City or Department based on this Agreement or arising out of this Agreement that is not subject to dispute resolution under the PPB Rules or this Agreement shall not be made or asserted in any legal proceeding, unless the Contractor shall have strictly complied with all requirements relating to the giving of notice and of information with respect to such claims as provided in this Agreement.

B. No action shall be instituted or maintained on any such claims unless such action shall be commenced within six (6) months after the date of filing with the Comptroller of the certificate for the final payment under this Agreement, or within six (6) months of the termination or expiration of this Agreement, or within six (6) months after the accrual of the cause of action, whichever first occurs.

Section 12.05 No Claim Against Officers, Agents or Employees

No claim shall be made by the Contractor against any officer, agent, or employee of the City in their personal capacity for, or on account of, anything done or omitted in connection with this Agreement.

Section 12.06 General Release

The acceptance by the Contractor or its assignees of the final payment under this Agreement, whether by check, wire transfer, or other means, and whether pursuant to invoice, voucher, judgment of any court of competent jurisdiction or any other administrative means, shall constitute and operate as a release of the City from any and all claims of and liability to the Contractor, of which the Contractor was aware or should reasonably have been aware, arising out of the performance of this Agreement based on actions of the City prior to such acceptance of final payment, excepting any disputes that are the subject of pending dispute resolution procedures.

Section 12.07 No Waiver

Waiver by either the Department or the Contractor of a breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the

terms of the Agreement unless and until the same shall be agreed to in writing by the parties as set forth in Section 9.01.

ARTICLE 13 - APPLICABLE LAWS

Section 13.01 PPB Rules

This Agreement is subject to the PPB Rules. In the event of a conflict between the PPB Rules and a provision of this Agreement, the PPB Rules shall take precedence.

Section 13.02 All Legal Provisions Deemed Included

Each and every provision required by Law to be inserted in this Agreement is hereby deemed to be a part of this Agreement, whether actually inserted or not.

Section 13.03 Severability / Unlawful Provisions Deemed Stricken

If this Agreement contains any unlawful provision not an essential part of the Agreement and which shall not appear to have been a controlling or material inducement to the making of this Agreement, the unlawful provision shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from the Agreement without affecting the binding force of the remainder.

Section 13.04 Compliance With Laws

The Contractor shall perform all services under this Agreement in accordance with all applicable Laws as are in effect at the time such services are performed.

Section 13.05 Americans with Disabilities Act (ADA)

A. This Agreement is subject to the provisions of Subtitle A of Title II of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12131 et seq. ("ADA") and regulations promulgated pursuant thereto, see 28 CFR Part 35. The Contractor shall not discriminate against an individual with a disability, as defined in the ADA, in providing services, programs, or activities pursuant to this Agreement. If directed to do so by the Department to ensure the Contractor's compliance with the ADA during the term of this Agreement, the Contractor shall prepare a plan ("Compliance Plan") which lists its program site(s) and describes in detail, how it intends to make the services, programs and activities set forth in the scope of services herein readily accessible and usable by individuals with disabilities at such site(s). In the event that the program site is not readily accessible and usable by individuals with disabilities, contractor shall also include in the Compliance Plan, a description of reasonable alternative means and methods that result in making the services, programs or activities provided under this Agreement, readily accessible to and usable by individuals with disabilities, including but not limited to people with visual, auditory or mobility disabilities. The Contractor shall submit the Compliance Plan to the ACCO for review within ten (10) Days after being directed to do so and shall abide by the Compliance Plan and implement any action detailed in the Compliance Plan to make the services, programs, or activities accessible and usable by the disabled.

B. The Contractor's failure to either submit a Compliance Plan as required herein or implement an approved Compliance Plan may be deemed a material breach of this Agreement and result in the City terminating this Agreement.

Section 13.06 Not Used

Section 13.07 Participation in an International Boycott

A. The Contractor agrees that neither the Contractor nor any substantially-owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the federal Export Administration Act of 1979, as amended, 50 U.S.C. Appendix. §§ 2401 et seq., or the regulations of the United States Department of Commerce promulgated thereunder.

B. Upon the final determination by the Commerce Department or any other agency of the United States as to, or conviction of, the Contractor or a substantially-owned affiliated company thereof, of participation in an international boycott in violation of the provisions of the Export Administration Act of 1979, as amended, or the regulations promulgated thereunder, the Comptroller may, at his or her option, render forfeit and void this Agreement.

C. The Contractor shall comply in all respects, with the provisions of Admin. Code § 6-114 and the rules issued by the Comptroller thereunder.

Section 13.08 MacBride Principles

A. In accordance with and to the extent required by Admin. Code § 6-115.1, the Contractor stipulates that the Contractor and any individual or legal entity in which the Contractor holds a ten percent (10%) or greater ownership interest and any individual or legal entity that holds a ten percent (10%) or greater ownership interest in the Contractor either (a) have no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations they have in Northern Ireland in accordance with the MacBride Principles, and shall permit independent monitoring of their compliance with such principles.

B. The Contractor agrees that the covenants and representations in Paragraph A above are material conditions to this Agreement.

C. This Section does not apply if the Contractor is a not-for-profit corporation.

Section 13.09 Not Used

ARTICLE 14 - MISCELLANEOUS PROVISIONS

Section 14.01 Conditions Precedent

A. This Agreement shall be neither binding nor effective unless and until it is registered pursuant to Charter § 328.

B. The requirements of this Section shall be in addition to, and not in lieu of, any approval or authorization otherwise required for this Agreement to be effective and for the expenditure of City funds.

Section 14.02 Merger

This written Agreement contains all the terms and conditions agreed upon by the parties, and no other agreement, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind either of the parties, or to vary any of the terms contained in this Agreement, other than a written change, amendment or modification duly executed by both parties pursuant to Article 9 of this Appendix A.

Section 14.03 Headings

Headings are inserted only as a matter of convenience and therefore are not a part of and do not affect the substance of this Agreement.

Section 14.04 Notice

A. The Contractor and the Department hereby designate the business addresses specified at the beginning of this Agreement as the places where all notices, directions, or communications from one such party to the other party shall be delivered, or to which they shall be mailed. Either party may change its notice address at any time by an instrument in writing executed and acknowledged by the party making such change and delivered to the other party in the manner as specified below.

B. Any notice, direction, or communication from either party to the other shall be in writing and shall be deemed to have been given when (i) delivered personally; (ii) sent by certified mail, return receipt requested; (iii) delivered by overnight or same day courier service in a properly addressed envelope with confirmation; or (iv) sent by fax or email and, unless receipt of the fax or e-mail is acknowledged by the recipient by fax or e-mail, deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage pre-paid envelope.

C. Nothing in this Section shall be deemed to serve as a waiver of any requirements for the service of notice or process in the institution of an action or proceeding as provided by Law, including the New York Civil Practice Law and Rules.

Section 14.05 Monies Withheld

When the Commissioner shall have reasonable grounds for believing that: (1) the Contractor will be unable to perform this Contract fully and satisfactorily within the time fixed for performance; or (2) a meritorious claim exists or will exist against the Contractor or the City arising out of the negligence of the Contractor or the Contractor's breach of any provision of this contract; then the Commissioner or the Comptroller may withhold payment of any amount otherwise due and payable to the Contractor hereunder. Any amount so withheld may be retained by the City for such period as it may deem advisable to protect the City against any loss and may, after written notice to the Contractor, be applied in satisfaction of any claim herein described. This provision is intended solely for the benefit of the City, and no person shall have any right against the Commissioner or claim against the City by reason of the Commissioner's failure or refusal to withhold monies. No interest shall be payable by the City on any amounts withheld under this provision. This provision is not intended to limit or in any way prejudice any other right of the City.

Section 14.06 Noise Control

The Contractor shall comply with Section 24-216(b) of the Administrative Code of the City of New York and with the New York City Noise Control Code and with all regulations issued pursuant to Section 24-216(b) of the Administrative Code or the Noise Control Code.

Section 14.07 Ultra Low Sulfur Diesel Fuel (Administrative Code)

Ultra Low Sulfur Diesel Fuel: In accordance with the provision of Section 24-163.3 of the New York City Administrative Code, the Contractor specifically agrees as follows:

I. Definitions: For the purpose of this Article, the following definitions apply:

A. "Contractor" means any person or entity that enters into a Public Works Contract with a City agency, or any person or entity that enters into an agreement with such person or entity, to perform work or provide labor or services related to such Public Works Contract.

B. "Lower Manhattan" means the area of New York County consisting of the area to the south of and within Fourteenth Street.

C. "Motor Vehicle" means any self-propelled vehicle designed for transporting persons or property on a street or highway.

D. "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 or section 7521 of title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.

E. "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty horsepower and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers and similar equipment, except that this term shall

not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five horsepower or less and that are not used in any construction program or project.

F. "Public Works Contract" means a contract with a City agency for a construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; a contract with a City agency for the preparation for any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; or a contract with a City agency for any final work involved in the completion of any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge.

G. "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million.

II. Ultra Low Sulfur Diesel Fuel

A. All Contractors shall use Ultra Low Sulfur Diesel Fuel in diesel-powered Nonroad Vehicles in the performance of this contract.

B. Notwithstanding the requirements of paragraph A, Contractors may use diesel fuel that has a sulfur content of no more than thirty parts per million to fulfill the requirements of this Part II, where the Commissioner of the New York City Department of Environmental Protection ("DEP Commissioner") has issued a determination that a sufficient quantity of Ultra Low Sulfur Diesel Fuel is not available to meet the needs of City agencies and Contractors. Any determination made pursuant to this subdivision shall expire after six months unless renewed.

C. Contractors shall not be required to comply with this Part II where the agency letting this contract makes a written finding, which is approved, in writing, by the DEP Commissioner, that a sufficient quantity of Ultra Low Sulfur Diesel Fuel, or diesel fuel that has a sulfur content of no more than thirty parts per million is not available to meet the requirements of Section 24-163.3 of the Administrative Code, provided that such Contractor in its fulfillment of the requirements of this contract, to the extent practicable, shall use whatever quantity of Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million is available. Any finding made pursuant to this subdivision shall expire after sixty days, at which time the requirements of this Part II shall be in full force and effect unless the agency renews the finding in writing and such renewal is approved by the DEP Commissioner.

D. Contractors may check on determinations and approvals issued by the DEP Commissioner pursuant to Section 24-163.3 of the Administrative Code, if any, at www.nyc.gov/dep or by contacting the Department issuing this solicitation.

E. The requirements of this Part II do not apply where they are precluded by federal or State funding requirements or where the contract is an emergency procurement.

F. The requirements of this Part II do not apply to Public Works Contracts entered into or renewed prior to June 19, 2004.

III. BEST AVAILABLE TECHNOLOGY

A. All Contractors shall utilize the best available technology for reducing the emission of pollutants for diesel-powered Nonroad Vehicles in the performance of this contract. For determinations of best available technology for each type of diesel-powered Nonroad Vehicle, Contractors shall comply with the regulations of the City Department of Environmental Protection, as and when adopted, Chapter 14 of Title 15 of the Rules of the City of New York (RCNY). The Contractor shall fully document all steps in the best available technology selection process and shall furnish such documentation to the Department or the DEP Commissioner upon request. The

Contractor shall retain all documentation generated in the best available technology selection process for as long as the selected best available technology is in use.

B. No Contractor shall be required to replace best available technology for reducing the emission of pollutants or other authorized technology utilized for a diesel-powered Nonroad Vehicle in accordance with the provisions of this Part III within three years of having first utilized such technology for such vehicle.

C. This Part III shall not apply to any vehicle used to satisfy the requirements of a specific Public Works Contract for fewer than twenty calendar days.

D. The Contractor shall not be required to comply with this Part III with respect to a diesel-powered Nonroad Vehicle under the following circumstances:

1. Where the agency makes a written finding, which is approved, in writing, by the DEP Commissioner, that the best available technology for reducing the emission of pollutants as required by those paragraphs is unavailable for such vehicle, Contractor shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle.
2. Where the DEP Commissioner has issued a written waiver based upon the Contractor having demonstrated to the DEP Commissioner that the use of the best available technology for reducing the emission of pollutants might endanger the operator of such vehicle or those working near such vehicle, due to engine malfunction, Contractor shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle, which would not endanger the operator of such vehicle or those working near such vehicle.
3. In determining which technology to use for the purposes of subsections (D)(1) and (D)(2) above, Contractor shall primarily consider the reduction in emissions of particulate matter and secondarily consider the reduction in emissions of nitrogen oxides associated with the use of such technology, which shall in no event result in an increase in the emissions of either such pollutant.
4. Contractors shall submit requests for a finding or a waiver pursuant to this subsection (D) in writing to the DEP Commissioner, with a copy to the ACCO of the Department issuing the solicitation. Any finding or waiver made or issued pursuant to subsections (D)(1) and (D)(2) above shall expire after one hundred eighty days, at which time the requirements of subsection A shall be in full force and effect unless the agency renews the finding, in writing, and the DEP Commissioner approves such finding, in writing, or the DEP Commissioner renews the waiver, in writing.

E. The requirements of this Part III do not apply where they are precluded by federal or State funding requirements or where the contract is an emergency procurement.

IV. Section 24-163 of the Administrative Code. Contractors shall comply with Section 24-163 of the New York City Administrative Code related to the idling of the engines of motor vehicles while parking.

V. COMPLIANCE

A. Contractor's compliance with these provisions may be independently monitored. If it is determined that the Contractor has failed to comply with any provision of this rider, any costs associated with any independent monitoring incurred by the City shall be reimbursed by the Contractor.

B. Any Contractor who violates any provision of this Article, except as provided in subsection (C) below, shall be liable for a civil penalty between the amounts of one thousand and ten thousand dollars, in addition to twice the amount of money saved by such Contractor for failure to comply with this Article.

C. No Contractor shall make a false claim with respect to the provisions of this Article to a City agency. Where a Contractor has been found to have done so, such Contractor shall be liable for a civil penalty of twenty thousand dollars, in addition to twice the amount of money saved by such Contractor in association with having made such false claim.

VI. REPORTING

A. For all Public Works Contracts covered by this Article, the Contractor shall report to the Department the following information:

1. The total number of diesel-powered Nonroad Vehicles used to fulfill the requirements of this Public Works Contract;
2. The number of such Nonroad Vehicles that were powered by Ultra Low Sulfur Diesel Fuel;
3. The number of such Nonroad Vehicles that utilized the best available technology for reducing the emission of pollutants, including a breakdown by vehicle model and the type of technology;
4. The number of such Nonroad Vehicles that utilized such other authorized technology in accordance with Part III, including a breakdown by vehicle model and the type of technology used for each such vehicle;
5. The locations where such Nonroad Vehicles were used; and
6. Where a determination is in effect pursuant to Part II.B or II.C, detailed information concerning the Contractor's efforts to obtain Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million.

B. The Contractor shall submit the information required by Paragraph A at the completion of work under the Public Works Contract and on a yearly basis no later than August 1 throughout the term of the Public Works Contract. The yearly report shall cover work performed the preceding fiscal year (July 1- June 30).

AFFIRMATION

The undersigned proposer or bidder affirms and declares that said proposer or bidder is not in arrears to the City of New York upon debt, contract or taxes and is not a defaulter, as surety or otherwise, upon obligation to the City of New York, and has not been declared not responsible, or disqualified, by any agency of the City of New York, nor is there any proceeding pending relating to the responsibility or qualification of the proposer or bidder to receive public contract except _____.

Full name of Proposer or Bidder *[below]*

_____

Address_____

City_____ State_____ Zip Code_____

CHECK ONE BOX AND INCLUDE APPROPRIATE NUMBER:

☐ A - Individual or Sole Proprietorships

SOCIAL SECURITY NUMBER _____

☐ B - Partnership, Joint Venture or other unincorporated organization

EMPLOYER IDENTIFICATION NUMBER _____

☐ C - Corporation

EMPLOYER IDENTIFICATION NUMBER _____

By: _____

Signature

_____

Print Name

_____

Title

If a corporation place seal here

Must be signed by an officer or duly authorized representative.

* Under the Federal Privacy Act, the furnishing of Social Security numbers by bidders or proposers on City contracts is voluntary. Failure to provide a Social Security number will not result in a bidder's/proposer's disqualification. Social Security numbers will be used to identify bidders, proposers or vendors to ensure their compliance with laws, to assist the City in enforcement of laws, as well as to provide the City a means of identifying businesses seeking City contracts.

CERTIFICATION BY BROKER

[Pursuant to Article Seven of Appendix A, every Certificate of Insurance must be accompanied by either the following certification by the broker setting forth the following text and required information and signatures or complete copies of all policies referenced in the Certificate of Insurance. In the absence of completed policies, binders are acceptable.]

CERTIFICATION BY BROKER

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects, and that the described insurance is effective as of the date of this Certification.

_____
[Name of broker (typewritten)]

_____
[Address of broker (typewritten)]

_____
[Signature of authorized officer of broker]

_____
[Name of authorized officer (typewritten)]

_____
[Title of authorized officer (typewritten)]

_____
[Contact Phone Number for Broker (typewritten)]

_____
[Email Address of Broker (typewritten)]

Sworn to before me this

_____ day of _____, 201_

_____

NOTARY PUBLIC