

**THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN AND CONSTRUCTION**

TO ALL BIDDERS FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY
AND REQUIRED FOR:

**NEW CROTON AQUEDUCT REHABILITATION
CONTRACT NOS.**

**CRO-334G – Structures and Equipment
CRO-334E – Electrical**

This Addendum is issued for the purpose of amending the requirements of the Contract Documents and is hereby made a part of said Contract Documents to the same extent as though it were originally included therein.

**PLEASE NOTE: THE BID DATE FOR CONTRACTS CRO-334G and E HAS BEEN
CHANGED TO May 15, 2008 AT 11:30 AM (LOCAL TIME).**

The pages of this Addendum are numbered sequentially. All Bidders should check this book carefully to verify that all pages are included. Should any pages be missing, notify the Department of Environmental Protection in writing.

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This Signature Page must be signed, dated, and detached from the book and submitted by the bidder with his/her bid as an acknowledgement of receipt of, having read, and inclusion of same in his/her bid.

Please Note: The bid sheets (Bid Schedule of Prices) for Contract No. CRO-334G have been revised by Addendum No. 2 dated April 10, 2008. Bidder is to submit these revised bid sheets. NO OTHER BID SHEETS WILL BE ACCEPTED FOR CONTRACT NO. CRO-334G.

Emily Lloyd
Commissioner

I acknowledge receipt of Addendum No. 2 for New Croton Aqueduct Rehabilitation, for Contract Nos. CRO-334G and CRO-334E.

Name of Bidder

**New Croton Aqueduct Rehabilitation
Contract Nos. CRO-334G, CRO-334E**

By: _____

Addendum to Contract Documents No. 2

Date: _____

**NEW CROTON AQUEDUCT REHABILITATION
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ADDENDUM NO. 2

GENERAL NOTES

1. All Bidders are advised that one (1) Addendum has previously been issued; in the event that Addendum No. 1 has not been received, Bidders are advised to contact Mr. Francis Lo, PE, Project Manager, NYCDEP at (718) 595-5474 to request copies of Addendum not received. It is the Bidders' responsibility to confirm receipt of all Addenda; NYCDEP will not be responsible for failure of Bidders to confirm receipt of Addenda.
2. Questions regarding the bid documents shall be submitted no later than May 1, 2008.
3. The written responses to Bidder questions are provided for information only and are not part of the Contract Documents. Where a written response to a Bidder question conflicts with the Contract Documents, the Contract Documents shall govern.

A. CONSTRUCTION CONTRACT INVITATION FOR BID: CONTRACT CRO-334G – STRUCTURES AND EQUIPMENT.

1. Insert the "Prime Contractor Pre-Award Meeting Statement" and the "Subcontractor Pre-Approval Statement" as new pages 2E and 2F in the Invitation for Bid. (See Attachment No. 1).
2. Pages 13A through 13C, delete Bid Schedule of Prices in its entirety and replace with the new Bid Schedule of Prices. (See Attachment No. 2). Revisions to the Bid Schedule of Prices are as follows:

Contract Item G-UP-13: Revised quantity from "20" to "47"

Contract Item G-UP-15: Revised description from "*Setups for Brick Replacement Work in Tunnel*" to "*Setups for Brick Replacement Work in Tunnel and Shafts*"

Contract Item G-UP-15: Revised quantity from "10" to "26"

Contract Item G-UP-16: Revised description from "*Brick Replacement in Tunnel*" to "*Brick Replacement in Tunnel and Shafts*"

Contract Item G-UP-16: Revised quantity from "250" to "310"

Contract Item G-UP-17: Revised quantity from "25" to "11"

Contract Item G-UP-18: Revised quantity from "1,500" to "5,000"

Contract Item G-UP-19: Revised quantity from "145" to "244"

Contract Item G-UP-20: Revised quantity from "15" to "20"

Contract Item G-UP-21: Revised quantity from "4,000" to "13,100"

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Contract Item G-UP-22: Revised description from "*Grouting - Drilling Grout and Vent Holes 6 Feet Minimum to 10 Feet Maximum Deep*" to "*Grouting - Drilling Grout and Vent Holes 6 Feet Minimum to 15 Feet Maximum Deep*"

Contract Item G-UP-22: Revised quantity from "14,800" to "20,100"

Contract Item G-UP-23: Revised quantity from "36,600" to "63,000"

Contract Item G-UP-24: Revised quantity from "20" to "35"

Contract Item G-UP-25: Revised quantity from "5" to "35"

B. CONSTRUCTION CONTRACT INVITATION FOR BID: CONTRACT CRO-334E – ELECTRICAL

1. Insert the "Prime Contractor Pre-Award Meeting Statement" and the "Subcontractor Pre-Approval Statement" as new pages 2E and 2F in the Invitation for Bid. (See Attachment No. 1).

C. INFORMATION FOR BIDDERS, STANDARD CONSTRUCTION CONTRACT AND SPECIFICATIONS

DETAILED SPECIFICATIONS

1. Page 001235, Detailed Specification 01120 – Multiple Contract Summary. Prior to Article 1.01, insert the following paragraph:

"Each Contractor is advised that the Detailed Specifications of Division 1 - General Requirements are applicable to all Contracts. The word "Contractor" when used in Division 1, shall apply to all Contractors. If a requirement applies to a specific Contractor only, it will be so specified."

2. Page 001237, Detailed Specification 01120 – Multiple Contract Summary. Delete Article 1.04.B.2 in its entirety and replace with the following:

"2. The second unwatered period is the responsibility of the CRO-334G Contractor. The planned period is from September 2009 to September 2010. The CRO-334G Contractor may have to pump up to 60 million gallons after the City unwaters the Aqueduct, to bring the water level to Elevation +4.0, the elevation at which the water level shall be maintained throughout the work by the CRO-334G Contractor. This work shall include obtaining permits necessary to discharge this water to City sewers. Work to achieve and maintain the Aqueduct in an unwatered condition shall be in accordance with General Specification 02240 – Dewatering and Detailed Specification 02240G – Dewatering."

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3. Page 001240, Detailed Specification 01120 – Multiple Contract Summary, at the end of Article 1.05.C.18, add the following sentence:

“This work includes coring and performing petrographic analyses within two zones where alkali-silica reaction is indicated at the brick-mortar interface.”

4. Page 001254C, Detailed Specification 01120 – Multiple Contract Summary. After Article 1.07.D add the following:
 - E. The Contractor is advised that all areas of the Aqueduct, including the tunnel, shafts, blow-offs, chambers, or other appurtenant structures, are categorized as Permit Required Confined Spaces. Rules are included in the NYCDEP’s Environmental, Health and Safety Policies and Procedures – Vol. 3, Confined Space Entry.

 - F. The Contractor is advised that asbestos-containing materials have been identified in roofing materials to be removed at Shaft Nos. 11A, 18 and 23. Refer to Detail Specification 01355 – Hazardous Materials Control.

 - G. The Contractor is advised that all personnel on-site at locations where NYCDEP stores chlorine (for example, Croton Lake Gate House and Jerome Park Reservoir) shall be required to participate and complete the requirements of NYCDEP’s Chlorine Safety Training.”

5. Page 001257, Detailed Specification 01140 - Work Restrictions and Working Hours. Delete Article 1.05.A in its entirety and replace with the following:
 - A. The Contractor’s attention is called to Title 24 of the administrative code of the City of New York, Section 24-163.3 (enacted via Local Law 77 on December 22, 2003) as well as the Department of Environmental Protection’s Notice of Promulgation of Chapter 14 of Title 15 of the Rules of the City of New York – Rules Concerning the Use of Ultra-Low Sulfur Fuel and Emissions Control Technology in Non-road Vehicles Used in City Construction (attached herewith as Attachment A). The Contractor shall comply with all technical requirements of these documents for the entire duration of the project.

 - B. The Contractor shall complete and submit to the Engineer the attached Local Law 77: DEP Monthly Reporting (Attachment B) to report on usage of Ultra Low Sulfur Diesel (ULSD) fuel and Best Available Technology in diesel-powered non-road vehicles for reducing emission of pollutants on a monthly basis.”

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6. Page 001267, Detailed Specification 01270 – Measurement and Payment. Delete Article 1.02.D in its entirety and replace with the following:

“D. Detailed Specification 01356 - Environmental Health and Safety Requirements”
7. Page 001269, Detailed Specification 01270 – Measurement and Payment. Delete Article 1.04.D.1.a in its entirety and replace with the following:

“a. Preparation and implementation of a Health and Safety Plan (per Detailed Specification 01356 - Environmental Health and Safety Requirements).”
8. Page 001275, Detailed Specification 01270 – Measurement and Payment. After Article 1.04.D.1.kk.3), add the following:
 - “4) Brick replacement, joint and crack repair, cleaning of efflorescence in the shaft chambers
 - 5) Brick replacement, joint and crack repair in the shaft blow-off tunnel”
9. Page 001277, Detailed Specification 01270 – Measurement and Payment. After Article 1.04.D.1.hhh, previously added by Addendum No. 1, add the following:

“iii. Coring and performing petrographic analyses within two zones where alkali-silica reaction is indicated at the brick-mortar interface in accordance with the requirements of Detailed Specification 02428 – Joint/Crack Repair and Brick Replacement.”
10. Page 001277, Detailed Specification 01270 – Measurement and Payment. Delete Article 1.04.E.1.a in its entirety and replace with the following:

“a. Preparation and implementation of a Health and Safety Plan (per Detailed Specification 01356 - Environmental Health and Safety Requirements).”
11. Page 001277, Detailed Specification 01270 – Measurement and Payment. Delete Article 1.04.E.1.b in its entirety.
12. Pages 001265 and 001266, delete Local Law 77: DEP Monthly Reporting Form in its entirety and replace with the new Local Law 77: DEP Monthly Reporting Form. (See Attachment No. 3).
13. Page 001283 Detailed Specification 01270 – Measurement and Payment. Article 1.06.B.6.b, replace description for G-UP-15 with the following: “*Setups for Brick Replacement Work in Tunnel and Shafts.*”

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14. Page 001283 Detailed Specification 01270 – Measurement and Payment. Article 1.06.B.6.d, replace description for G-UP-16 with the following: *“Brick Replacement in Tunnel and Shafts.”*
15. Page 001284 Detailed Specification 01270 – Measurement and Payment. Article 1.06.B.7.c, replace description for G-UP-22 with the following: *“Drilling Grout and Vent Holes 6 Feet Minimum to 15 Feet Maximum Deep.”*
16. Page 001313, Detailed Specification 01322 – Job Photographs. Delete Article 1.01.A in its entirety and replace with the following:
 - “A. This section covers the requirements for progress photographs of the work inside and outside the Aqueduct. The CRO-334G Contractor shall provide progress photographs for both Contracts.”
17. Page 001313, Detailed Specification 01322 – Job Photographs. Delete Articles 1.03.A and 1.03.B in their entirety and replace with the following:
 - “A. Payment for all work under this Specification will be made as part of the lump sum price bid for Contract Item No. G-LS-1 (see Detailed Specification 01270 – Measurement and Payment).
 - B. Payment for this portion of Contract Item No. G-LS-1 will be made as partial progress payments for this item. The last payment will be made upon submittal of all required photographs and electronic files.”
18. Page 001314, Detailed Specification 01322 – Job Photographs. Delete Article 1.05.A in its entirety and replace with the following:
 - “A. The photographer, when so directed by the Engineer, shall visit all sites of Work where the Contractor has Work, commencing within one (1) week from the Notice to Proceed and prior to start of work at any site, to take forty (40) photographs at Shaft Nos. 9, 11A, 14, 18, 23, and 25 and ten (10) photographs per each other site. The Contractor shall provide 8” x 10”, color prints of each exposure. The photographer shall be accompanied by the Engineer who shall provide instructions on the required direction and field of view for the photographs.”
19. Page 001314, Detailed Specification 01322 – Job Photographs. Delete Article 1.07.A in its entirety and replace with the following:
 - “A. The photographer, when so directed by the Engineer, shall visit all sites where the Contractor has completed his Work to take forty (40) photographs at Shaft Nos. 9, 11A, 14, 18, 23, and 25 and ten (10)

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photographs per each other site. The Contractor shall provide 8" x 10", color prints of each exposure."

20. Page 001314, Detailed Specification 01322 – Job Photographs. Delete Article 1.08.A in its entirety and replace with the following:

“A. The photographer shall photograph landscaping as described in Detailed Specification 02910G.”
21. Page 001363, Detailed Specification 01355 – Hazardous Materials Control. Article 1.03.A.3, replace: “remediation materials” with “hazardous materials”.
22. Page 001364, Detailed Specification 01355 – Hazardous Materials Control. Article 1.03.A.4, replace: “remediation materials” with “hazardous materials”.
23. Page 001364, Detailed Specification 01355 – Hazardous Materials Control. Delete Article 1.03.C in its entirety.
24. Page 001364, Detailed Specification 01355 – Hazardous Materials Control. Delete Article 1.04.A in its entirety and replace with the following:

“A. When remedial action is necessary for unforeseen hazardous materials or an upgrade in health and safety protocol requiring special expertise is necessary, the Engineer will submit the scope of work in writing to the Contractor. The Contractor shall then obtain proposals for the work, including prices, from three separate hazardous material specialists licensed and experienced in performing the work required, and submit them in writing to the Engineer within ten (10) consecutive calendar days of receiving the scope of work. The Engineer may select one proposal and direct the Contractor to engage the selected hazardous material specialist as a Subcontractor. Remediation work shall not commence until the Contractor receives written notice from the Engineer to proceed with the work. All remediation work shall be performed by the hazardous material specialist.”
25. Pages 001367 through 001376, delete Detailed Specification 01356 – Safe and Healthful Working Conditions in its entirety and replace with Detailed Specification 01356 – Environmental Health and Safety Requirements and update Table of Contents accordingly. No change to Attachment D, Pages 001377 through 001380. (See Attachment No. 4).

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26. Page 001411, Detailed Specification 01451 – Contractor’s Quality Control. Delete Articles 1.06.A, 1.06.B and 1.06.C in their entirety and replace with the following:
- “A. All work shall be in accordance with the requirements of General Specification 03300 – Cast-in-Place Concrete, as modified by Detailed Specification 03300G – Cast-in-Place Concrete.”
27. Page 001422, Detailed Specification 01520 – Temporary Construction Facilities and Equipment. Delete Articles 1.06.D.2.bb, 1.06.D.2.cc, and 1.06.D.2.dd in their entirety and replace with the following:
- “bb. Four (4) Compaq, Dell, Gateway, or equivalent Pentium Core Duo multimedia PC with integrated speakers as approved by the Engineer with the following features: 2 GB RAM, 1.44 MB (3-1/2") floppy disk drive, internal DVD±RW and 160 GB SATA disk drive as manufactured with integrated controller card, and integrated network card. Printer and PC shall be networked to laptop computer.
- cc. Two (2) Compaq, Dell, Gateway, or equivalent Pentium Core Duo, 2GHz, 1GB RAM;40GB Hard Drive with Windows XP Professional, MS Works, MSWORD, MS Excel, MS Project with installed manuals. The laptop shall be equipped with integrated network card.
- dd. Ten (10) Cellular telephones, i95cl model manufactured by Motorola, Inc. or equal, with voice mail, hands free accessories, and Nextel Free Incoming 600 service, together with full service plan which includes 3,600 minutes of air time.”
28. Page 001423, Detailed Specification 01520 – Temporary Construction Facilities and Equipment. Delete Article 1.06.D.2.jj in its entirety and replace with the following:
- “jj. All furniture, fixtures, equipment and utilities shall be in good condition, durable and of good standard industrial quality, as approved by the Engineer. The Contractor may substitute units built into the trailer for any of the items of furniture specified. Full maintenance and service contracts of phones, cell phones, computers, printers, photo copy machine, and fax machine shall be provided by the Contractor. The furniture, fixtures, equipment and utilities listed in this Article shall become the property of the Contractor after this Contract is completed, except for the filing cabinets which remain the property of the City and are to be delivered to a location designated by the Engineer.”

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29. Page 001423, Detailed Specification 01520 – Temporary Construction Facilities and Equipment. After Article 1.06.D.2.jj, add the following:
- “kk. Maintenance and Support
1. The Contractor shall furnish, at the Contractor's expense for the duration of the Contract, a renewable service contract for on-site maintenance of all hardware and software.
2. The maintenance response time for the hardware and software shall be not more than twenty-four (24) hours from the time of notification of a service related problem.”
30. Page 001425, Detailed Specification 01520 – Temporary Construction Facilities and Equipment. Delete Article 1.07.C.13 in its entirety and replace with the following:
- “13. Ten (10) portable air quality monitoring units: Three individual sensors in one unit capable of simultaneously and continuously monitoring for combustible gas, toxic gas, oxygen deficiency and other measurements as listed in the City's Confined Space Entry Procedures, appended to Detailed Specification 01356 – Environmental Health and Safety Requirements, including a rechargeable unit, with battery charger. The units shall be supplied with a sufficient stock of calibration gases to cover for all work throughout the duration of this Contract.”
31. Page 001435, Detailed Specification 01560 – Temporary Barriers and Enclosures. Delete Article 1.02.B in its entirety and replace with the following:
- “B. Detailed Specification 01356 - Environmental Health and Safety Requirements”
32. Page 001437, Detailed Specification 01560 – Temporary Barriers and Enclosures. Delete Article 1.05.C in its entirety and replace with the following:
- “C. The Contractor shall provide the equipment and personnel needed to perform emergency measures to contain spillages as specified in Detailed Specification 01356 - Environmental Health and Safety Requirements. The Contractor shall remove contaminated or hazardous materials for off-site disposal as specified in Detailed Specification 01355 – Hazardous Materials Control and Detailed Specification 02952 – Sediment and Debris Removal.”

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33. Page 001439, Detailed Specification 01570 – Temporary Controls. Delete Article 1.02.C in its entirety and replace with the following:
- “C. Detailed Specification 01356 - Environmental Health and Safety Requirements”
34. Page 001445, Detailed Specification 01570 – Temporary Controls. Delete Article 3.04.H in its entirety and replace with the following:
- “H. The Contractor shall include in his Health and Safety Plan (HASP), to be prepared as specified in Detailed Specification 01356 - Environmental Health and Safety Requirements, the control measures he will employ to ensure compliance with all specified noise requirements.”
35. Page 001446, Detailed Specification 01570 – Temporary Controls. Delete Article 3.05.G in its entirety and replace with the following:
- “G. The Contractor shall include in the Health and Safety Plan (HASP), to be prepared as specified in Detailed Specification 01356 - Environmental Health and Safety Requirements, the control measures he will employ to ensure compliance with all specified particulate requirements.”
36. Page 001479, Detailed Specification 01781 – Project Closeout. Delete Article 1.04.A in its entirety and replace with the following:
- “A. Upon completion of the work and as a condition precedent to final acceptance, the Contractor shall provide all labor and material required to furnish final copies - working drawings in accordance with the requirements of Article 4 of the General Conditions. The submittal must be approved by the Engineer. If the Contractor chooses to use a Consultant to perform this work, the choice of Consultant shall be submitted to the Engineer for approval.”
37. Page 001479, Detailed Specification 01781 – Project Closeout. After Article 1.04.B, insert the following new article:
- “C. The Contractor shall also provide information to the Engineer necessary to prepare the As-Built drawings, as specified in Article 4 of the General Conditions.”
38. Page 001552, Detailed Specification 02401 – Shaft Covers and Gratings. Delete Article 3.01.A in its entirety and replace with the following:
- “A. All work performed under this section shall conform to the requirements of 29 CFR 1926, Subpart S and to the requirements of Detailed

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Specification 01356 - Environmental Health and Safety Requirements.”

39. Page 001573, Detailed Specification 02428 – Joint/Crack Repair and Brick Replacement. Delete Article 1.01.A in its entirety and replace with the following:
- “A. This section covers the work required for repairing and repointing joints and cracks in the brick lining of the pressurized section of the New Croton Aqueduct and in the brick lining of the shafts of the New Croton Aqueduct with non-shrink high performance prepackaged tuck point repair mortar.”
40. Page 001573, Detailed Specification 02428 – Joint/Crack Repair and Brick Replacement. Delete Article 1.01.C in its entirety and replace with the following:
- “C. Prominent joints/cracks have been observed in previous inspections in the Aqueduct and their approximate locations are shown on the Drawings. The Contractor shall repair all such joints/cracks, and other joints/cracks exceeding ¼ inch in width that may be discovered by the Engineer in the field during the course of the Work within this Contract.”
41. Page 001573, Detailed Specification 02428 – Joint/Crack Repair and Brick Replacement. Delete Article 1.01.E in its entirety and replace with the following:
- “E. The Engineer will direct the amount of bricks to be replaced where bricks are missing or damaged.”
42. Page 001573, Detailed Specification 02428 – Joint/Crack Repair and Brick Replacement. After Article 1.01.F add the following:
- “G. This section covers the work required for coring and performing petrographic analyses within two zones where alkali-silica reaction is indicated at the brick-mortar interface.
- H. Joint/crack repair includes repointing of joints in brickwork.”
43. Page 001574, Detailed Specification 02428 – Joint/Crack Repair and Brick Replacement. Delete Article 1.03.A.1 in its entirety and replace with the following:
- “1. Measurement for payment for setting up for joint/crack repairs in the tunnels will be based on the number of setups made for such operations.
- a. Each area in the tunnels identified by stationing on the Drawings as requiring joint/crack repairs will be counted as a single setup. Areas in the tunnels identified by stationing on the Drawings will not be separately measured for setup payments if the distance