ADDENDUM NO.03 TO CONTRACT NO. <u>1533</u> For EDGEWATER BRANCH LIBRARY 6000 NORTH BROADWAY STREET NEW CONSTRUCTION PROJECT #08050

DATE: 12/29/2011

NOTICE OF CHANGES IN CONTRACT DOCUMENTS

The following changes are hereby made in the Contract Documents.

Changes to Book 3: TECHNICAL SPECIFICATIONS:

Change 1: Section 15535 – Add word "excavated" to 3.1-D and strike section 3.5, because an additional test bore is not required.

Changes to DRAWINGS:

Change 1:	SV-4 Bottom Excavation Exhibit Add Site Prep Phase 3 As-Built Surveys into the Site Prep Documents, included for reference, for the condition of the backfill on the site at the completion of the third phase of site prep.
Change 2:	SV-5-A Backfill Exhibit Add Site Prep Phase 3 As-Built Surveys into the Site Prep Documents, included for reference, for the condition of the backfill on the site at the completion of the third phase of site prep.
Change 3:	SV-5-B Backfill Exhibit Add Site Prep Phase 3 As-Built Surveys into the Site Prep Documents, included for reference, for the condition of the backfill on the site at the completion of the third phase of site prep.
Change 4:	SV-5-C Backfill Exhibit Add Site Prep Phase 3 As-Built Surveys into the Site Prep Documents, included for reference, for the condition of the backfill on the site at the completion of the third phase of site prep.
Change 5:	A3.1 Clarification of placement of brick veneer masonry units, indicating layout of running bond and joint locations.
Change 6:	M2.2 Revisions to drawings D & E as indicated to clarify backfill materials, requirements, pips spacing, and pipe depth.
Change 7:	M3.1 Addition of E-Quest Building HVAC Load Summary.

Mayor Rahm Emanuel, Chairman

Erin Lavin Cabonargi, Executive Director

QUESTIONS & ANSWERS:

- Q1: 12/23/11: Per specifications 04810 Section 1.7E a structural engineer is required to be employed by the general contractor. In order to ensure all qualified bidders are bidding the same service, is it possible that this requirement be an allowance that all contractors must carry? This would ensure the most competitive of proposals from each of the qualified bidders is received.
- A1: Each Contractor will be required to meet the requirements listed in 04810 in hiring their masonry engineer. This will not be replaced by an allowance.
- **Q2:** 12/22/11: With the Edgewater Library Re-bid becoming Design/Build for the geothermal well component, whole building cooling and heating loads are required, both monthly peak (kbtuh) and monthly total (mbtu), to ensure the solution achieves the performance requirements. We have included a sample equest copy from another job as an example of what additional information is required. See RFI Attachment #6 12/23/11 Clarification: Per mechanical drawing M2.2, an annual Geothermal Vertical Heat Exchanger Performance Schedule and values are provided in upper left-hand corner of the page. Also, there was a provided geothermal report from GDTI dated 9/30/11 along with the specifications. However, in order to comply with notes per Detail A on dwg M2.2 for the geothermal contractor to provide shop drawings and calculations to the EOR for final approval that solution meets performance requirements, we request both monthly peak (kbtuh) and monthly total (mbtu) for the cooling and heating loads. We have attached a sample equest report from another project as an example of the additional information requested.
- A2: Refer to revised drawing M3.1 showing E-Quest Building HVAC Loads.
- Q3: 12/27/11: Geoexchange Plan, Section & Details Sheet M2.2. Bid drawing 09.30.11 Note: "Groundsource well field shall be capable of heat rejection/absorption as scheduled. Design water temperatures should be 85F during cooling and 40F in heating with an acceptable increase in temperature over 20 year period..." The above note defines the performance requirements for the geothermal field. Could you provide us with the most recent annual hourly coil loads (8760 hours total, Excel compatible format) so that we can design our field to meet these requirements?
- A3: The annual hourly coil loads are not currently available in Excel format. Refer to drawing M-3.1 for building load information.
- Q4: 12/27/11: Geoexchange Plan, Section & Details Sheet M2.2. Rebid drawing 12.13.11 D-M2.2 Geothermal Pipe Mains Trench Detail, and E-M2.2 Geothermal Circuit Trench Detail Notes "metallic pipe tracer tape @ 36" above all horizontal piping" and "tracer wire (typ.)"
 We typically install only metallic tracer tape for locating purposes above all horizontal piping. Is it required to install both the tracer wire and metallic tape?
- A4: Per the specifications, provide tracing tape above all lateral lines at 18" below grade. Provide tracer wire attached to all lateral mains.

Q5: 12/27/11: Geoexchange Plan, Section & Details Sheet M2.2. Rebid drawing 12.13.11 – D-M2.2 Geothermal Pipe Mains Trench Detail, and E-M2.2 Geothermal Circuit Trench Detail – Note "5'-0" Min Center between Pipes"

This will dramatically increase the size of all trenches beyond the norm. We strongly recommend eliminating this minimum spacing requirement. Additionally, eliminating the spacing will shorten the duration of horizontal work and will leave other trades more room and time to operate around the geothermal field area. Would eliminating the spacing requirement be acceptable?

- A5: The spacing requirement may be reduced as shown in revised drawing M2.2.
- Q6: 12/27/11: Geoexchange Plan, Section & Details Sheet M2.2. Rebid drawing 12.13.11 D-M2.2 Geothermal Pipe Mains Trench Detail, and E-M2.2 Geothermal Circuit Trench Detail Note "6'-0" (Min)" in reference to the depth of the horizontal piping This depth will require the use of trench boxes to satisfy OSHA's requirements. Could we include trenches no deeper than 5'-0" to eliminate the use of trench boxes?
- A6: This is acceptable. Per the specifications, the minimum depth of the horizontal piping is 48". Sheet M2.2 has been updated to reflect this.
- Q7: 12/27/11: Geoexchange Plan, Section & Details Sheet M2.2. Rebid drawing 12.13.11 D-M2.2 Geothermal Pipe Mains Trench Detail, and E-M2.2 Geothermal Circuit Trench Detail Note 2. "Backfill with general fill to rough grade. Refer to civil specification for backfill"
 Specification section 15535 Geothermal Loop Heat Exchanger Part 3 Execution, 3.1 Inspection, D. "..., backfill with sand and rock free backfill material..."
 Does "general fill" mentioned on the detail drawing mean the same thing as the "rock free backfill material" required in the specification section mentioned above, and could we reuse the excavated soil from the horizontal trenches as backfill in addition to the sand bedding around the HDPE pipes?
- A7: Reuse the excavated soil from the trenches as backfill in addition to the sand bedding around the pipes. See Note 1/Details D and E on revised sheet M2.2 and revised specifications.
- **Q8:** 12/27/11: Geoexchange Plan, Section & Details Sheet M2.2. Rebid drawing 12.13.11 The geothermal ground loop system includes two pre-cast geothermal vaults. Attached is description of the grade accessible manifold chamber that we would use instead of the geothermal vaults. Would this be an acceptable alternate?
- A8: Provide pre-cast geothermal vaults as originally specified.
- **Q9:** 12/27/11: Specification section 15535 Geothermal Loop Heat Exchanger Part 3 Execution, 3.5 Test Bore, A. "A test bore has not been drilled. The Formation Thermal Conductivity Test and Data Analysis Report will need to be ascertained by the contractor. See Geothermal Bid" There is a formation thermal conductivity test and data analysis report, dated 09/30/11, provided with the projects' documents. Is there still a need for another test bore and a formation thermal conductivity test and data analysis?
- A9: An additional test bore is not required. Specification 15535 has been updated to reflect this.

Mayor Rahm Emanuel, Chairman

Erin Lavin Cabonargi, Executive Director

ADDENDUM NO. 03

DATE: 12/29/2011

- Q10: 12/27/11: Specification section 15535 Geothermal Loop Heat Exchanger Part 3 Execution, 3.1 Inspection, B. "The vertical holes of bores shall be clean (no permanent casing)"
 Would it be acceptable to use permanent casing to facilitate and accelerate the installation of the geothermal ground loop system?
- A10: Permanent casings are not acceptable.
- Q11: 12/27/11: Please confirm that the Geothermal Well System is to be included in the re-bid.
- A11: The geothermal well system is to be included in the re-bid.
- **Q12:** 12/27/11: In the Reading Room's the ceiling has been changed to AP 1. I could not find a new specification section 09511 in the re bid documents and the original bid documents AP 1 says "not used" in the specifications. Please provide material information on AP 1.
- A12: Refer to specification 09510.
- Q13: 12/27/11: Please confirm that per the piping schedule on P4.1, underground sanitary waste and vent piping can be either ductile cast iron or hub and spigot cast iron soil pipe.
- A13: Per Chicago Building Code table 18-29-702.2 (Underground Building drain and vent pipe) Cast-Iron hub and spigot and ductile iron pipe are permitted materials.

Answer, Yes per the piping schedule each material is acceptable.

List of Attachments:

BOOK 3 SPECIFICATIONS DATED 12/29/11 Section 15535

 DRAWINGS DATED 12/29/11, 12/23/11, 12/24/11

 Sheet SV-4
 Sheet SV-5-A

 Sheet SV-5-C
 Sheet A3.1

 Sheet M3.1
 Sheet M3.1

Sheet SV-5-B Sheet M2.2

END OF ADDENDUM NO. 03