## **ADDENDUM #2**

### **DATED JANUARY 26, 2018**

# GENERAL CONSTRUCTION (GC) PHASE- CONTRACT #18-10 RENOVATION OF BUILDING 250 WATER TREATMENT PLANT (WTP) CITY OF ABERDEEN, ABERDEEN PROVING GROUND, MARYLAND

Bid due date is extended by a week, and now due on Tuesday February 13, 2018, by 2 pm at City of Aberdeen Hall.

The following changes are made to the GC Phase Bid documents as Addendum #2. All bidders are required to acknowledge receipt of this addendum in their bid form. Responses to bidders' questions as provided below are also part of this addendum.

- Section 00410- Bid sheet:
  - Page 3, Bid Item A-3 should read: Rigid Inclusion under Finished Water Tank and Pumping Station as per Section 02395.
  - o Page 4, Bid Item B-1 should read: Micropiles in Building 250 as per Section 02390.
  - o Page 4, Bid Item B-3: Insert \$100,000 for control system hardware as per the scope defined in Section 17441A.
  - o Page 5, Bid Item C-9 and C-10 Delete these two bid items.
  - o Page 5, Add a new Article as follows:
    - 6.03: Bidder shall submit a proposed schedule for this project to assure Owner that they understand complexity, and willing to do several parallel construction activities to meet this schedule. This schedule must include Owner supplied equipment and other subcontractors activities as per Section 01100, Para 1.03C.
- Section 01100, Para 1.03.C: Due to permitting delays, here is an expected revised schedule of the Owner supplied equipment and other subcontractors:
  - o Completion of demolition work by Neuber Environmental early April 2018.
  - Delivery of Iron removal pressure filters (by Westech) end of August 2018. A revised
     Scope of work and additional vendors drawings are attached with this addendum (revised

Attachment A-1).

- o Delivery of Packaged Granular Activated carbon Systems (by TiGG) end of July 2018.
  - Post tension Concrete Finished Water Tank and Pumping station (by Dutchland) This contractor can be ready to start mobilizing and start construction work by the end July 2018 and will need a minimum of 16 weeks (weather depending) to complete construction and testing.
- City Light & Power of Aberdeen- Any time after August 2018
- Section 01130 Measurement and payment
  - o Paragraph 1.04 B 2 and C.1. Change Ground Improvement Rigid Inclusion Section reference from 02390 to 02395.
  - o Paragraph 1.06 B 9 and 10 Bid items C-9 and C-10 are deleted.
- Section 01350 Health & Safety Requirements
  - o Page 2 EM385-1-1 (2008). It should read "Nov. 2014 or the latest Edition".
  - o A list of expected Activity Hazard Analysis (AHA) to be prepared by the General Contractor and a sample AHA for reference are attached with this addendum.
- Section 01380 Construction Video and Photographs: This section title should read "Construction Photos". A revised Section 01380 is attached with this addendum.
- Section 01400- Quality Control This section was missed in the original bid documents. It is attached with this addendum.
- Section 02390 Micropiles, Paragraph 1.01.A:
  - ADD the following after "8-inch diameter Micropiles": "...having a compressive design load of 70.5 kips,"
- Section 02520 Well Construction:
  - o This section was not included in the original bid documents as this work is being done by another subcontractor. However this section is attached with this addendum for reference.
- Section 03410 Precast Structural Concrete, Paragraph 1.02.B.4:
  - DELETE "Section 07190 "Water Repellents" for water-repellent finish treatments."

- Section 11211 HORIZONTAL SPLIT CASE PUMPS,
  - o Paragraph 2.01.E: DELETE "4X6-15" and REPLACE with "4x6-13H".
  - o Paragraph 2.02.A: In the last sentence, DELETE "4X6-15" and REPLACE with "4x6-13H".
  - Paragraph 3.06: DELETE paragraph in its entirety and REPLACE with "All exposed metal parts shall be cleaned, primed and finished with manufacturer's standard paint system.
     Color shall be approved by the Owner. All field touch-up painting shall be in accordance with Specification Section 09960, HIGH PERFORMANCE COATINGS."
- Section 13281 Asbestos Abatement, Section 13282 Lead in Construction and Appendix E Hazardous Material Report
  - These documents were not included in the original bid documents as this work is being done by another subcontractor. However these are attached with this addendum for reference.
- 15088 HVAC AND PLUMBING PIPING INSULATION:
  - This Section's title should read- "Piping Insulation"
  - o Under paragraph 1.01.A, add
    - 5. All exposed pressure pipe, valves and fittings inside ALL buildings.
  - Add Part 3.09, add a paragraph:
    - D: Indoor exposed pressure pipe, valves and fittings: 1" thick flexible elastomer with PVC jacketing.
- SECTION 02390 MICROPILES: ADD the following new paragraph 3.05:
  - "3.05. PILE LOAD TEST
    - The pile load test shall be performed on a pile not incorporated into the finished work. The test pile shall be located at an approved location within the central area of the new slab.
    - The axial compression load test shall be performed as directed by the Owner's Representative. The load test shall be in accordance with ASTM D 1143 with the modifications herein. Provide apparatus for applying the vertical loads as required by reaction frame attached to sufficient uplift piles to safely take the required load applied to the pile by hydraulic jack. The loading apparatus shall have a safe loading of 250 kips. Method A for the Quick Loading procedures shall be applied

until the test load is equal to 2.5 time the design load. The load shall be applied in increments as determined by the Owner's Representative and held for five minutes.

- The Owner's Representative will evaluate the results of the load tests within three working days of completing the tests. In the event that any test is not considered acceptable, the Owner's Representative will provide direction as to replacement testing or provide modifications to the design to produce an acceptable pile."
- SECTION 02731 OUTSIDE PIPING: ADD the following new paragraph 2.13:

#### o "2.13. GATE VALVES

- Gate valves shall be of the solid wedge, rubber encapsulated, resilient seat type. Valves shall be rated for 250 psi working pressure and hydrostatically tested to 500 psi in accordance with AWWA C-515. Valve bodies, bonnets and seal plates shall be ductile iron, with wedges totally encapsulated in rubber. Stems shall be manganese bronze. Bolts and hex heads shall be stainless steel.
- Resilient Seated Gate Valves shall be operated to open left of the non-rising stem type (NRS) in accordance with AWWA-C-515. NRS stem thrust collars shall be cast integral with the stem and machined to size. A stainless steel thrust bearing shall be incorporated, as required, to optimize operating torques. Operating stems for NRS Resilient Seat Gate Valves shall be equipped with O-Ring seals to prevent leakage past stem. All valves shall have two O-Rings above the stem thrust collar and one o-ring below.
- The internal and external iron surfaces of the valve body and bonnet shall be coated with fusion bonded epoxy to AWWA C-550 Standards. Gates for all valve sizes shall be completely encapsulated with elastomer including stem bore, and shall be field replaceable and provide a dual seal on the mating body seat. Valve shall be capable of installation in any position with rated sealing in both directions. Elastomer seats of specially compounded material shall be utilized and be capable of sealing under normal conditions. The valve body shall have integral guides engaging integral lugs in the gate in a tongue and groove manner, supporting the gate throughout the entire open/close travel. The inside and outside of valve body, bonnet and seal plate shall be coated with fusion bonded epoxy meeting AWWA-C-550 latest revision.
- Gate valves 18-inch and above shall be provided with spur gearing. All gate valves 18-inch and larger where the depth of cover prohibits installation of valve and valve box below grade shall be provided with bevel gearing.

- Buried valves shall be furnished with mechanical joint ends as indicated on the drawings. All tapping valves shall be supplied with flanged connection as required for connection to tapping sleeve.
- F. Marking shall be in accordance with AWWA-C-515 Standards, to include name of manufacturer, the year of manufacture, maximum working pressure and size of valve. Resilient seated gate valves shall be covered by a ten year limited warranty against defective materials or workmanship.
- G. Resilient seated gate valves shall be Mueller 2300 series, American flow control Series 2500 "or equal"."
- Contract Drawing 01-A-601: ADD the following note under Type 1 door type: "Type 1 Doors shall be 3070 Typical except Door 202 shall be 2'-0" and Door 204 shall be 1'-10"."
- Contract Drawing 01-A-601: ADD the following note under Type 4 door type: "Door 104 shall be 2'-6" rather than 3'-0" shown as typical for Type 4 doors."
- Contract Drawing 01-A-602: DELETE window type "W5".
- Contract Drawing 01-A-602: For the window type labeled as "W2B" with notes "Clear upper sash" and "Frosted lower sash", RENAME as "W2C".
- Drawing #00-D-501 (sheet 123 of 212):
  - o Sump pumps detail and schedule were missing. It is attached with this addendum.
- Drawing #00-G-202A (sheet 2 of 35):
  - o Production Well #2 starting location has been modified from Northing 660,130.11, Easting 1,561,987.32 to Northing: 660,137.76, Easting: 1,561,980.87.
- Drawing #C-105C (sheet 5 of 35):
  - Some item numbers were duplicated, and a pressure transmitter was missed. A revised sheet C-105C is attached with this addendum.

#### **RESPONSES TO QUESTIONS RAISED BY THE BIDDERS:**

- 1. Prevailing Wage rates:
  - o Response: It is not required for this project.
- 2. Special steel procurement requirements: Buy American, Maryland Steel Procurement, etc.
  - Response: There are no requirements in this project.
- 3. This project's tax exempt status:
  - o This project is not tax exempt, thus bid must include all applicable federal, state and local taxes.
- 4. Is potable water available for testing:
  - o Response: The water is available at no charge. Contractor must provide necessary hoses and fitting to connect into existing nearby fire hydrant.
- 5. Fill material for Building 253 (tank):
  - Response: This material will be available at APG (within 2 miles from the project site).
     Contractor must load and haul, and be responsible for cleaning road for any spills. This material may not be suitable as topsoil.
- 6. It appears all testing is by the owner except for steel testing. Please verify:
  - o Response: Refer to Section 01453 for all testing requirements.
- 7. We all know not to scale drawings, however we all do it. There are a significant portion of the drawing set that doesn't print to the scale shown which will probably cause heartache later.
  - Response: If there are certain dimension are missing, we can get it. Or list the drawings with correct scale you need.
- 8. Will Neuber Environmental be setting up temporary site fence?
  - o Response: Neuber will setup silt fence and stabilized construction entrance, but GC will own it, repair and maintain it to MDE's satisfaction.
- 9. Can On-site safety officer (SSO) have other duties on site or is the representative truly a full-time safety presence?
  - o Response: SSO's primary duty is to be site safety officer and a go-to person. He may do other things provided safety aspect does not suffer.

- 10. What size is W-1 door sidelights? Do the sidelights sit up on a stoop?
  - o Response: Width of sidelights are to be verified in the field. The door size and jamb widths are provided in the Drawings, but the width of the sidelights depends on the remaining rough opening width. The sidelight sills should align with the window sills, which would require a stoop.
- 11. What kind of divided lites are needed? (i.e., gbg or sdl) and what size bar??
  - o Response: The type and size of lites / bars shall match the existing as closely as possible.
- 12. Is Pattern 62 acceptable as frosted glass??
  - o Response: Patterned clear glass is not an acceptable replacement for frosted glass.
- 13. Are these double hung to be Sterling sash or traditional?
  - Response: In consultation during design, Kolbe recommended the Heritage line in order to most accurately recreate the existing windows with the understanding that Maryland Historic Trust requires the most accurate replica windows possible.
- 14. Drawing C-105C (sheet 5 of 35) identifies two different pipe sections as item #8 "8"

Check Valve", one appears to be a valve and the other a "tee" please clarify

- o Response: See revised drawing C-105C as attached.
- 15. Please identify the type of valves required for the following locations:
  - o 12" Valve on C-109A (8 of 35) coming off of the 16x12 Tee and 16" Valves on C302 (46 of 212) identified on "Profile 12-16-in Water-13"
    - Response: All underground shut-off valves shall be gate valve with MJ ends.
  - 8" Isolation Valve on 01-D-101 (130 of 212) on the 12" Filter Influent line right after the 12x8 reducer and 10" Isolation Valve on 01-D-301 (131 of 212) on the 12" backwash Supply Line.
    - Response: All aboveground isolation valves shall be flanged end gate valve.
  - o 4" Valve on the 4" Water Line on C110 (19 of 212):
    - Response: Gate valve with MJ ends.

- 16. Drawing C-109 (sheet 18 of 212) shows the revised BW line as 10" whereas drawing C-109A (8 of 35) shows this line as 12", please clarify:
  - o Response: Filter Backwash line-10" W-10 should read 12" W-10 (as per C-109A).
- 17. Please provide additional tie-in details for the 6" fire protection line coming off of the 12" BW Supply line.
  - o Response: Refer to sheet 01-D-301 showing the transition from the 12" line to the 6" line. The 6" line continues on sheets 01-P-102 and 01-F-102.
- 18. Please specify the material type for the 2" pipe for the FM from the Grinder PS to the Finished Water Pump Station.
  - Response: As per the pipe schedule, Outside Piping (less than 4-inches) Solvent Weld Sch. 80 PVC.
- 19. In the Dutchland scope letter it states that they are furnishing and installing "(2) 16" Effluent Pipe Assemblies with wall castings and 90-degree flare bends (Section B, Sheet 138)". Please provide highlighted drawings to show the extent of the pipe assembly referenced.
  - o Response- Marked up drawings 08-D-101, 102 and 301 (sheet #136 thru138) are attached with this addendum (to be inserted under Attachment A-3).
- 20. Pressure Filters- Westech Scope -Please confirm that face piping will be factory installed as specified and shown on scope sketch and that "checked" Optional Deduct A-4 No Shop Assembly should be disregarded.
  - o Westech's scope has been revised. See revised Attachment A-1 as attached.
- 21. What's the weight of each pressure filter tank supplied by Westech?
  - o Response: Each tank will weigh an estimated 30,000 lbs.
- 22. Do the pressure filter tanks rest on the feet in the attached drawing? Or in the platform? Is that platform supplied by Westech?
  - o Response: The tanks are each supported by two steel saddles towards the ends of each tank. Our drawing had shown a concrete housekeeping pad below the saddles, as most plants include them. Please see drawing identifying the saddles and the housekeeping pad (in attached revised Attachment A-1). For the Aberdeen project, they do not show a housekeeping pad, but do have the saddles mounted on a small concrete base on the floor. That concrete base is by the installing contractor.

- 23. Could you provide an estimate on how long would it take to the GC to field-mount all the components that are not factory-mounted by Westech?
  - Response: Westech has declined to provide an estimate, as it would highly depend in the individual work crew, their experience, and equipment available. However recommended installation steps are included in revised Attachment A-1.
- 24. Section 11950, Para 2.10- Who provides these startup chemicals:
  - o Response: These chemicals are for conditioning and disinfection of media, and these shall be provided by the Contractor.
- 25. Section 03420A- Precast Tanks What depth of aggregate subbase does Dutchland require for the base slabs and crane pad?
  - Dutchland typically requires a minimum of 6" of clean stone under the slab. However, because this tank is going to be built with rigid inclusions stone requirement for the subgrade should be defined by the Geotechnical engineer or the rigid inclusion subcontractor's design engineer. This is not a question Dutchland can answer for them. Regardless the subgrade will require at least 6" or whatever is required for the rigid inclusions whichever is greater. For the crane pad, Dutchland's requirement is whatever is required to provide a firm and stable pad in all weather conditions. We cannot define exactly what that is as each site has different variables that dictate what is required to provide a firm and stable pad in all weather conditions.
- 26. Since the Dutchland work is being procured by the City, will the City be escorting them while they perform their work?
  - Response: No, Dutchland will take care of their own workers.
- 27. Section 11960 GAC Filters Please confirm "supplier's" responsibilities in Para. 1.02.
  - o Responses -
    - 1.02A TIGG will not be responsible for the unloading, setting or installation.
    - 1.02B Compressed air will not be required since the truck will be equipped with a PTO and blower. Finished water will be required for the fill process.
    - 1.02C The GAC supplier will pre wash the GAC prior to delivery if Engineer selects this option. Disinfection of the equipment will be performed by the GC prior to GAC installation. After installation of the GAC into the vessels, the GC will fill the vessels with finished water to de aerate the GAC followed by a backwashing procedure prior to start up.

- 28. Section 11960 GAC Filters Please confirm that the upper distributors and underdrains are factory installed.
  - o Response: Yes they will be.
- 29. Section 11960 GAC Filters Please confirm that false bottoms are factory installed and that contractor concrete fill is not required in the bottom of the vessels.
  - o Response: All under drains will be installed at the Factory. These vessels do not require a concrete fill.
- 30. Section 02519 3.01 references section 02730 for hydrostatic watermain testing. Please confirm this is meant to read section 02731, or provide the referenced section.
  - o Response: There is no section 02730. Hydro testing will be as per section 02731.
- 31. Section 02731 2.08 provides details for MJ to HDPE adapters, but does not give any information for MJ to FPVC connections. Please provide.
  - Response: As per the spec, 02731-2.02, fusible PVC (FPVC) shall be C-905, which is compatible with MJ fittings and can be restrained. An adapter is not required.
- 32. Section 11211 Paragraph 2.01.E: The specified Goulds pump size is 4x6-15, but the pump curve shown in drawing 00-D-001 corresponds to the size 4x6-13H. The pump curve for size 4x6-15 wouldn't meet all the duty points specified, so we will proceed to bid a Goulds pump size 4x6-13H.
  - o Response: See revisions to the specification as specified above.
- 33. Section 11211 Paragraph 3.06: Calls for specifications in Division 9, but the Paint Schedule on Section 09960 does not specify ferrous metals paint, only steel. Please advice which paint system is required for the pumps.
  - o Response: See revisions to the specification as specified above.
- 34. Section 11900 Paragraph 2.01.A: Can't find the schedule for the sump pumps on the Contract Drawings. Could you advise on the required capacity of the sump pumps?
  - Response: See revisions to the specification as specified above.
- 35. Micropiles per Section 02390 and drawing 01-S-101- There is no depth for these piles or a load provided for each pile. How do we test them and to what design criteria?
  - o RESPONSE: Refer to the "Typical Micropile" detail on sheet 00-S-002 for the tip elevation, which is referred to in paragraph 3.02.A of section 02390. The design criteria is referenced in the geotechnical report and additional details are provided in this addendum.

- 35. Will the Maryland Historical Trust (MHT) be a partner on this project? Have they reviewed the building plans? Have they approved the removal and replacement of the exterior wood trim?
  - o Response: MHT has reviewed the plans. We don't believe they will be involved as long as we are not changing the exterior look. However our architect will deal with them on case by case.
- 36. The new wood trim is to match the existing. Will the demo contractor save samples of the existing trim so that it can be matched?
  - o Response: Yes, we will ask them.
- 37. Will the general contractor be responsible for any hazmat abatement, specifically the doors and windows that are indicated to contain lead paint and be removed by the general contractor?
  - o Response: Yes, that's in Neuber's scope. Refer to Drawing sheet #7 and #8 of 212.
- 38. Is the general contractor responsible for removal and disposal of the water currently in the tanks below the floor slab of building 250, or in building 252? If yes, where can it be disposed of?
  - o Response: Neuber may pump out Building 252 water during demo work, but they will not pump out 250 sump water. All dirty water can be pumped in a nearby sewer system at a maximum rate of 50 gpm.
- 39. Does APG have any regulations regarding the 24hr operation of electric or diesel pumps and generators, mostly in regards to possible dewatering operations for underground pipe installations?
  - o Response: This area is away from residential area, so noise is not an issue, just safety will be. Refer to EM 385.1.1 for safety requirement (see section 01350).
- 40. Is there 24-hr access to the secure portion of the base for civilian badge holders if after hours maintenance or other work needs to be performed?
  - o Response: Normal working hours are 7 am 5 pm M-F. Any work outside this, must be pre-approved by the Owner and Tetra Tech (Tt) on as need basis. And if it is for any construction activity, it has to be overseen by Tt (this overtime work will be paid by the contractor). If it is just for maintenance, Tt does not need to be there. Refer to General Conditions under Section 00700 as well.
- 41. Does OSHA, MOSHA, or APG have jurisdiction for this site. If APG has jurisdiction, are the regulations regarding civilian contractors available?

- o Response: All of them have jurisdiction. Refer to EM 385.1.1 for safety requirement (and Section 01350).
- 42. Drawings C-106 and C-107 require GC to backfill and regrade the area where building 253 stood. Please provide expected final elevations of this area after the demo contractor has completed their work.
  - o Response: Demo contractor may fill this tank about 12" high. Final grade elevation is provided on C-107 as Elev. 9.0'. Existing Building 253 (tank) related drawings are attached with this addendum.
- 43. Concerning sheet 55, general note #6, because of the unquantifiable nature, it has been suggested by pile subcontractors that a unit rate or an allowance would be the best way to handle the cost.
  - o Response: Include the price for unknowns in the micropile footage bid unit price.
- 44. For what capacity are the Micropiles designed?
  - o Response: 70.5 kips.
- 45. Is a load test required to verify the rigid inclusion design and if so, please confirm it to be to 200% of design stress at the top of the inclusion?
  - o Response: Section 02395, par. 3.04 states that the RI designer develops a test program. Testing shall result in a minimum factor of safety of 1.5.
- 46. Specification section 15985.2.02 lists twelve manufacturers for HVAC control systems. Is the current facility or campus controlled/monitored by an incumbent control system such as Johnson/Metasys? Will this building require interface with offsite monitoring of HVAC controls to a central location complete with graphics and alarm annunciation points?
  - o Response: The building controls will be stand alone and not tie into APG's existing Johnson/Metasys system.
- 47. Drawing 08-D-301 illustrates motor operated dampers # 1, 2, and 3. Will the ATC/EMCS control these dampers? An exhaust Fan/Motor operated damper sequence of operation is not indicated on mechanical drawing 01-M-602.
  - o Response: VCP-8 located in the Finished Water Pumping Station will control the exhaust fans / motor operated dampers. See drawing 08-EI-101 and 08-EI-603.
- 48. C-106: Are there any drawings of Building 253 for determining backfill quantities?
  - o Response: Building 253 (tank) related drawings are attached with this addendum.

- 49. Drawing sheet 01-A-:
  - o Where is the W5 window located?
    - Response: Window W5 is not required. Window type has been deleted by addendum.
  - o There are two W2B window details? Should the one on the right be labeled W2C?
    - Response: Yes. The window type labeled as "W2B" with notes "Clear upper sash" and "Frosted lower sash" has been renamed as "W2C" by addendum.
- 50. Where do the horizontal binds go?
  - o Response: Blinds are required for the following in Building 250: Office 203 and east window in Lockers 209
- 51. 01-SD101: Please confirm the demolition of the landings and stairs (Item 6) is in our scope.
  - o Response: Interior demo is part of Neuber's scope.
- 52. C-121A & C-121B: What is "NRD"?
  - o Response: NRD=Non-Rooftop Disconnect. It was part of the SWM permit submission and can be ignored by the contractor.
- 53. C-001, Note 13: Will buttresses be required if joints are restrained with Megalugs or other type of restraining system?
  - o Response: Yes.
- 54. C-110: Should aggregate pipe bedding under new paved areas extend up to underside of paving regardless of pipe material?
  - o Response: Pipe bedding shall be as per detail W-1 on C-208, paving subgrade shall be as per R-3 on C-211, and backfill shall be as per spec 02200.
- 55. 02-S-301: The architectural drawings do not appear to show roof insulation. Please clarify.
  - o Response: Insulation is not required for the roof of Building 252.
- 56. 01-D-101: Please clarify if the 1  $\frac{1}{2}$ " compressed air piping furnished by the GAC vendor needs to be piped to anything.
  - o Response: For clarification, please see the Parts List item #10 on the GAC Adsorber Schematic on drawing 00-D-606.
- 57. Sheet #92, section 1 and 2 indicate "Existing wood trim and blocking". However all of has to be

demolished as per sheet 73 thru 77. Please clarify.

- o Response: Tetra Tech to respond.
- 58. The AD Drawings 201-204 indicate that all wood trim (note 3) is to be removed by the Demo Contractor. Drawing 01-A-501, sections 1&2, suggest that a portion is to remain which is stated as "existing wood trim". Please clarify the scope of the replacement of the wood trim.
  - o Response: Tetra Tech to respond.
- 59. Provide a width for the Type 1 doors shown on drawing 01-A-601
  - o Response: Type 1 Doors shall be 3070 Typical except Door 202 shall be 2'-0" and Door 204 shall be 1'-10". Note also that Door 104 shall be 2'-6" rather than 3'-0" shown as typical for Type 4 doors.
- 60. There is a W2C window on west elevation of drawing 01-A-204 but there is not a detail for this window on drawing 01-A-602. There are two details marked W2B. Please clarify.
  - o Response: The window type labeled as "W2B" with notes "Clear upper sash" and "Frosted lower sash" has been renamed as "W2C" by addendum.
- 61. Is Micropiles design required
  - o Response: No.
- 62. Our steel supplier's do not supply 8" diameter x 0.50" Micropiles casing, it is not a readily available or common size for Micropiles, would 7" or 9-5/8" Micropiles casing be acceptable to use?
  - o Response: Bids shall be based on 8" diameter micropiles per the contract documents.
- 63. What is the bond zone diameter of the Micropiles?
  - o Response: Minimum size is the diameter of the pipe.
- 64. Is a specific testing method required? Perhaps Verification testing on sacrificial piles or Proof Load Testing for example? If so, we'll need to know what the design loads will be and if we are testing in compression or tension, etc.
  - o Response: See pile load test per section 3.05 of specification section 02390, added by addendum.
- 65. A door supplier pointed out that the schedule on sheet 94 does not have a door width for type "1" doors. Please furnish.
  - o Response: Type 1 Doors shall be 3070 Typical except Door 202 shall be 2'-0" and

Door 204 shall be 1'-10". Note also that Door 104 shall be 2'-6" rather than 3'-0" shown as typical for Type 4 doors.

- 66. At the end of the rigid inclusion spec it says that the general contractor is responsible for permit for that work if required. Which agencies would need to be contacted to verify permit requirements?
  - o Response: Permits obtained by the Owner are listed in section 01400. Other permits required for the work are the responsibility of the Contractor.

#### **Attachments to Addendum #2:**

Revised Section 01380 - Construction Photographs

Section 01400 - Quality Control

Section 02502- Well Construction (Issued for reference only)

Section – 13281- Asbestos Abatement (Issued for reference only)

Section 13282 – Lead in Construction (Issued for reference only)

List of Activity Hazard Analysis (AHA) for GC phase and an example AHA

Appendix E – Hazardous Material report (Issued for reference only)

Revised Attachment A-1 -Westech's Scope of work with additional vendors drawings and recommended installation steps

Marked up Drawings 08-D-101, 102 and 301 (sheets #136 thru #138 of 212) showing Dutchland's scope related to piping (to be inserted under Attachment A-3).

Sump Pumps Details to be inserted under Drawing 00-D-501 (sheet 1#23 of 212)

Revised Drawing #C-105C (Sheet #5 of 35)

Existing Building 253 (tank) related 3 drawings.

**END OF ADDENDUM #2**