

Coffman Park Expansion*Phase One Improvements***Addendum #1**

June 5, 2013

Item #1: Fees / Inspections / Cable Materials associated with AEP / Time Warner duct bank will be billed to the City of Dublin.

Item #2: Fees / Inspections associated with proposed water line relocation will be billed to the City of Dublin.

Item #3: Contractors may assume that the water line to be relocated will be temporarily taken out of service.

Item #4: The "Temporary Bridge" described / detailed in the Drawings is intended to be utilized by the City of Dublin during the annual Irish Festival. The "moveable" portion of the bridge will be stored by the City of Dublin in a location to be determined. Foundations associated with the structure are intended to be permanent.

Item #5: The City of Dublin Engineering Department, AEP, and TWC will inspect manholes / duct banks associated with the utility burial portion of the Project. The contractor will be responsible for scheduling all inspections.

Item #6: The following applies to sheets C4 and C6 of the bid Drawings, "The BEBO structure foundation dimensions and reinforcing shown are approximate and are in the process of final design by Contech, the manufacturer. The foundations shall be constructed and the structures installed in accordance with the manufacturer's details and specifications. The cost difference between what is shown on the bid Drawings and the manufacturer's plans will be identified and agreed upon after the receipt of the manufacturer's plans".

Item #7: Regarding language indicated on page 2-22 – "List of Subcontractors", the City of Dublin waives the requirement that the general contractor provide 50% of the total contract work.

Item #8: Contractor shall complete all work associated with the re-aligned south park entry drive, and service drive to the utility / storage facilities as indicated in the Drawings no later than November 15, 2013.

Item #9: Contractor shall maintain vehicular access to the existing utility / storage facilities throughout construction.

Item #10: Provide unit cost for items indicated on Attachment 'A' with bid.

Item #11: Refer Attachment 'B' for additional requirements regarding Work associated with the proposed water line relocation.

Item #12: Modifications associated with specification section 04 43 00 Stone Masonry (see attached).

Item #13: Provide three (3) ADS beveled pipe terminations for 12" dia. ADS N12 drain lines that terminate @ open swale.

Item #14: Refer Attachment 'C' for updated Bidding Requirements.

Item #15: Contractor to provide shop drawings of service drive gate for review prior to fabrication. Pad lock loops to be fabricated from aluminum, not galvanized steel. All components of gate illustrated to have polyester powder coat finish (Color TBD).

Item #16: The site will be available for construction on or before August 19, 2013. Prior to this date, the site will be occupied with tents and equipment associated with the Dublin Irish Festival to be held on August 2 – August 4, 2013. Currently, it is expected that all contract documents will be prepared and signed by all parties during the first half of July, 2013.

Item #17: The two primary elevations (Detail A, sheet LZ-1.1) are 1/8"= 1'-0"

SECTION 044300 - STONE MASONRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes the following applications of stone masonry:
 - 1. Adhered to unit masonry concrete backup.
- B. Related Sections:
 - 1. Division Section "Cast-in-Place Concrete" for dovetail slots in concrete for anchoring stone.
 - 2. Division 04 Section "Exterior Stone Cladding" for descriptions of stone types required by this Section.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
 - 1. For stone varieties proposed for use on Project, include test data indicating compliance with physical properties required by referenced ASTM standards.
- B. Samples for Initial Selection: For colored mortar and other items involving color selection.
- C. Samples for Verification:
 - 1. For each stone type indicated. Include at least three samples in each set for each type of stone, exhibiting extremes of the full range of color and other visual characteristics expected in completed Work. Samples will establish the standard by which stone provided will be judged.
 - 2. For each color of mortar required.
- D. List of Materials Used in Constructing Mockups: List generic product names together with manufacturers, manufacturers' product names, sources of supply, and other information as required to identify materials used. Include mix proportions for mortar and source of aggregates.
 - 1. Submittal is for information only. Neither receipt of list nor approval of mockups constitutes approval of deviations from the Contract Documents unless such deviations are specifically brought to the attention of Architect and approved in writing.

- E. Qualification Data: For qualified Installer.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs experienced stonemasons and stone fitters.
- B. Source Limitations for Stone: Obtain each variety of stone, from one quarry, whether specified in this Section or in another Section of the Specifications, with resources to provide materials of consistent quality in appearance and physical properties.
- C. Mockups: Build mockups to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Build mockup of typical wall area as shown on Drawings.
 - 2. Build mockups for each type of stone masonry walls and columns in sizes approximately 60 inches long by 36 inches high by full thickness, including face and backup wythes and accessories.
 - a. Include stone coping at top of mockup.
 - 3. Protect accepted mockups from the elements with weather-resistant membrane.
 - 4. Approval of mockups is for color, texture, and blending of stone; relationship of mortar and sealant colors to stone colors; tooling of joints; and aesthetic qualities of workmanship.
 - a. Approval of mockups is also for other material and construction qualities Architect specifically approves in writing.
 - b. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 5. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- D. Preinstallation Conference: Conduct conference at Project site.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- B. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- C. Deliver preblended, dry mortar mix in moisture-resistant containers designed for lifting and emptying into dispensing silo. Store preblended, dry mortar mix in delivery containers on elevated platforms, under cover, and in a dry location or in a metal dispensing silo with weatherproof cover.

- D. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

1.6 PROJECT CONDITIONS

- A. Protection of Stone Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed stone masonry when construction is not in progress.
 - 1. Extend cover a minimum of 24 inches down both sides and hold cover securely in place.
- B. Stain Prevention: Immediately remove mortar and soil to prevent them from staining the face of stone masonry.
 - 1. Protect base of walls from rain-splashed mud and mortar splatter by coverings spread on the ground and over the wall surface.
 - 2. Protect sills, ledges, and projections from mortar droppings.
 - 3. Turn scaffold boards near the wall on edge at end of each day to prevent rain from splashing mortar and dirt on completed stone masonry.
- C. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace stone masonry damaged by frost or freezing conditions. Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.
 - 1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F and above and will remain so until masonry has dried, but not less than 7 days after completing cleaning.
- D. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

1.7 COORDINATION

- A. Advise installers of other work about specific requirements for placement of reinforcement, veneer anchors, flashing, and similar items to be built into stone masonry.

PART 2 - PRODUCTS

2.1 STONE

- A. Varieties and Sources: Subject to compliance with requirements, provide stone of varieties and from sources complying with Division 04 Section "Exterior Stone Cladding."

2.2 LIMESTONE

- A. Limestone: Comply with ASTM C 568.

1. Limestone Cobble, 5"x5"x5" Ottawa Cobble, available at Lang Stone, 614-228-5489
2. Free-standing limestone wall, 'Shoreline Bluevein', available at Lang Stone, 614-228-5489
3. Thinset Limestone Veneer, Buff, sawn back, split sides, available at Wysong Stone, 937-962-2559
4. Full-depth Limestone Veneer, Buff, available at Wyson Stone, 937-962-2559
5. Limestone Wall Cap at Bridge, Indiana Limestone, Buff, available at Lang Stone 614-228-5489 (see plans for dimensions).

2.3 MORTAR MATERIALS

- A. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
 1. Low-Alkali Cement: Not more than 0.60 percent total alkali when tested according to ASTM C 114.
- B. Water: Potable.

2.4 VENEER ANCHORS

- A. Corrugated-Metal Veneer Anchors: Not less than 0.030-inch thick by 7/8-inch wide hot-dip galvanized steel sheet with corrugations having a wavelength of 0.3 to 0.5 inch and an amplitude of 0.06 to 0.10 inch.

2.5 ACCESSORIES

- A. Expanded Metal Lath: 3.4 lb/sq. yd., self-furring, diamond-mesh lath complying with ASTM C 847. Fabricate from structural-quality, zinc-coated (galvanized) steel sheet complying with ASTM A 653/A 653M, G60.
- B. Lath Attachment Devices: Material and type required by ASTM C 1063 for installations indicated.

2.6 MASONRY CLEANERS

- A. Proprietary Acidic Cleaner: Manufacturer's standard-strength cleaner designed for removing mortar and grout stains, efflorescence, and other new construction stains from stone masonry surfaces without discoloring or damaging masonry surfaces; expressly approved for intended use by cleaner manufacturer and stone producer.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Diedrich Technologies, Inc.
 - b. Dominion Restoration Products.
 - c. EaCo Chem, Inc.
 - d. Hydrochemical Techniques, Inc.
 - e. Prosoco, Inc.

2.7 MORTAR MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures, unless otherwise indicated.
 1. Do not use calcium chloride.
 2. Limit cementitious materials in mortar to portland cement, mortar cement, and lime.
 3. Add cold-weather admixture (if used) at same rate for all mortar that will be exposed to view, regardless of weather conditions, to ensure that mortar color is consistent.
 4. Mixing Pointing Mortar: Thoroughly mix cementitious and aggregate materials together before adding water. Then mix again, adding only enough water to produce a damp, unworkable mix that will retain its form when pressed into a ball. Maintain mortar in this dampened condition for one to two hours. Add remaining water in small portions until mortar reaches desired consistency. Use mortar within 30 minutes of final mixing; do not retemper or use partially hardened material.
- B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in the form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.
- C. Mortar for Stone Masonry: Comply with ASTM C 270, Proportion Specification.
 1. Mortar for **Scratch Coat** / Setting Stone: Type S.
 2. **Integral bonding agent meeting ASTM C932 or ASTM C 1059.**

2.8 FABRICATION

- A. Fabricate stone to comply with sizes, shapes, and tolerances recommended by applicable stone association or, if none, by stone source, for faces, edges, beds, and backs.
 1. For limestone, comply with recommendations in ILI's "Indiana Limestone Handbook."
- B. Cut stone to produce pieces of thickness, size, and shape indicated, including details on Drawings. Dress joints (bed and vertical) straight and at right angle to face unless otherwise indicated.
- C. Cut and drill sinkages and holes in stone for anchors and supports.

- D. Carefully inspect stone at quarry or fabrication plant for compliance with requirements for appearance, material, and fabrication. Replace defective units before shipment.
 - 1. Clean sawed backs of stone to remove rust stains and iron particles.
- E. Thickness of Stone: Provide thickness as indicated on the plans.
- F. Shape stone for type of masonry (pattern) as follows:
 - 1. Split-bed, random-range ashlar with random course heights and random lengths (interrupted coursed).
- G. Finish exposed faces and edges of stone to comply with requirements indicated for finish and to match approved samples and mockups.
 - 1. Finish: Rock face (pitched face)
 - a. Finish exposed ends of copings same as front and back faces.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces indicated to receive stone masonry, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Examine substrate to verify that dovetail slots, inserts, reinforcement, veneer anchors, flashing, and other items installed in substrates and required for or extending into stone masonry are correctly installed.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.
- D. Verify that weeps have been installed @ **bridge concrete sub-slab** per details prior to stone cobble installation
- E. Verify compaction of granular base at stacked stone wall

3.2 PREPARATION

- A. Clean dirty or stained stone surfaces by removing soil, stains, and foreign materials before setting. Clean stone by thoroughly scrubbing with fiber brushes and then drenching with clear water. Use only mild cleaning compounds that contain no caustic or harsh materials or abrasives.
- B. Cut a minimum of two 1/8" x 3/16" depth lines at back side of thin limestone veneer. **Scuff the back surface of thin stone veneer to enhance mortar adhesion.**

3.3 SETTING OF STONE MASONRY, GENERAL

- A. Perform necessary field cutting and trimming as stone is set.
 - 1. Use power saws to cut stone that is fabricated with saw-cut surfaces. Cut lines straight and true, with edges eased slightly to prevent snipping.
 - 2. Use hammer and chisel to split stone that is fabricated with split surfaces. Make edges straight and true, matching similar surfaces that were shop or quarry fabricated.
 - 3. Pitch face at field-split edges as needed to match stones that are not field split.
- B. Sort stone before it is placed in wall to remove stone that does not comply with requirements relating to aesthetic effects, physical properties, or fabrication, or that is otherwise unsuitable for intended use.
- C. Set stone to comply with requirements indicated on Drawings. Install supports, fasteners, and other attachments indicated or necessary to secure stone masonry in place. Set stone accurately in locations indicated with edges and faces aligned according to established relationships and indicated tolerances.
- D. Maintain uniform joint widths except for variations due to different stone sizes and where minor variations are required to maintain bond alignment if any. Lay walls with joints not less than 3/8 inch at narrowest points or more than 1/2 inch at widest points.
- E. Provide sealant joints of widths and at locations indicated.
 - 1. Keep sealant joints free of mortar and other rigid materials.

3.4 CONSTRUCTION TOLERANCES

- A. Variation from Plumb: For vertical lines and surfaces, do not exceed 1/4 inch in 10 feet. For external corners, expansion joints, control joints, and other conspicuous lines, do not exceed 1/4 inch in 20 feet.
- B. Variation from Level: For bed joints and lines of exposed lintels, sills, parapets, horizontal grooves, and other conspicuous lines, do not exceed 1/4 inch in 20 feet or 1/2 inch in 40 feet or more.
- C. Measure variation from level, plumb, and position shown in plan as variation of the average plane of the face of each stone from level, plumb, or dimensioned plane.
- D. Variation in Mortar-Joint Thickness: Do not vary from joint size range indicated.
- E. Variation in Plane between Adjacent Stones: Do not exceed one-half of tolerance specified for thickness of stone.

3.5 INSTALLATION OF STONE MASONRY (FULL DEPTH STONE)

- A. Anchor stone masonry to unit masonry with corrugated-metal veneer anchors unless otherwise indicated. Embed anchors in unit masonry mortar joints or grouted cells for distance at least one-half of unit masonry thickness.

- B. Space anchors to provide not less than 1 anchor per 2 sq. ft. of wall area. Install additional anchors within 12 inches of openings, sealant joints, and perimeter at intervals not exceeding 12 inches.
- C. Space anchors not more than 18 inches o.c. vertically and 32 inches o.c. horizontally, with not less than 1 anchor per 2.67 sq. ft. of wall area. Install additional anchors within 12 inches of openings, sealant joints, and perimeter at intervals not exceeding 12 inches.
- D. Anchor stone trim with stone trim anchors where indicated. Install anchors by fastening to substrate and inserting tabs and dowels into kerfs and holes in stone units. Provide compressible filler in ends of dowel holes and bottoms of kerfs to prevent end bearing of dowels and anchor tabs on stone. Fill remainder of anchor holes and kerfs with mortar.
- E. Set stone in full bed of mortar with full head joints unless otherwise indicated. Build anchors into mortar joints as stone is set.
- F. Fill space between back of stone masonry and concrete wall with mortar as stone is set.
- G. Rake out joints for pointing with mortar to depth of not less than 1/2 inch before setting mortar has hardened. Rake joints to uniform depths with square bottoms and clean sides.

3.6 POINTING

- A. Prepare stone-joint surfaces for pointing with mortar by removing dust and mortar particles. Where setting mortar was removed to depths greater than surrounding areas, apply pointing mortar in layers not more than 3/8 inch deep until a uniform depth is formed.
- B. Point stone joints by placing and compacting pointing mortar in layers not more than 3/8 inch deep. Compact each layer thoroughly and allow to become thumbprint hard before applying next layer.
- C. Tool joints, when pointing mortar is thumbprint hard, with a smooth jointing tool to produce the following joint profile:
 - 1. Joint Profile: Smooth, flat face slightly below edges of stone.

3.7 INSTALLATION OF ADHERED STONE MASONRY VENEER

- A. Install lath over concrete to comply with ASTM C 1063.
- B. Install scratch coat over metal lath **1/2 inch thick to comply with ASTM C 926 ensuring that lath is completely covered with mortar to allow for scoring of the surface. Apply sufficient pressure and thickness to fully cover lath in mortar.**
- C. Apply mortar scratch coat to lath. **When scratch coat is thumb-print hard, scratch (score) the surface horizontally to create the final mortar scratch coat.** Allow to set.
- D. Apply thin set stone veneer to vertical wall face (see elevations for patterns). **Mist back side of thin set limestone before applying mortar.** Butter back side of thin set stone veneer to

provide complete coverage. Firmly press thin set to scratch coat applying equal pressure to ensure even distribution of mortar yielding a finished mortar bed of +/- 1/2 inch to 5/8 inch.

- E. Point stones / tool joints before mortar bed sets to ensure complete adhesion between mortar bed and pointing mortar.

3.8 INSTALLATION OF STONE WALL

- A. Verify compaction of granular bedding coarse prior to installation of stone wall.
- B. Place stones as indicated in the drawings to match existing stone walls on site (see photo on Drawings).

3.9 ADJUSTING AND CLEANING

- A. Remove and replace stone masonry of the following description:
 - 1. Broken, chipped, stained, or otherwise damaged stone. Stone may be repaired if methods and results are approved by Architect.
 - 2. Defective joints.
 - 3. Stone masonry not matching approved samples and mockups.
 - 4. Stone masonry not complying with other requirements indicated.
- B. Replace in a manner that results in stone masonry matching approved samples and mockups, complying with other requirements, and showing no evidence of replacement.
- C. In-Progress Cleaning: Clean stone masonry as work progresses. Remove mortar fins and smears before tooling joints.
- D. Final Cleaning: After mortar is thoroughly set and cured, clean stone masonry as follows:
 - 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
 - 2. Test cleaning methods on mockup; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before cleaning stone masonry.
 - 3. Protect adjacent stone and nonmasonry surfaces from contact with cleaner by covering them with liquid strippable masking agent, polyethylene film, or waterproof masking tape.
 - 4. Wet wall surfaces with water before applying cleaner; remove cleaner promptly by rinsing thoroughly with clear water.
 - 5. Clean stone masonry by bucket and brush hand-cleaning method described in BIA Technical Note No. 20 Revised II, using job-mixed detergent solution.
 - 6. Clean stone masonry with proprietary acidic cleaner applied according to manufacturer's written instructions.
 - 7. Clean limestone masonry to comply with recommendations in ILI's "Indiana Limestone Handbook."

3.10 EXCESS MATERIALS AND WASTE

- A. Excess Stone: Stack excess stone where directed by Owner for Owner's use.
- B. Disposal as Fill Material: Dispose of clean masonry waste, including mortar and excess or soil-contaminated sand, by crushing and mixing with fill material as fill is placed.
 - 1. Crush masonry waste to less than 4 inches in greatest dimension.
 - 2. Mix masonry waste with at least two parts of specified fill material for each part of masonry waste. Fill material is specified in Division 31 Section "Earth Moving."
 - 3. Do not dispose of masonry waste as fill within 18 inches of finished grade.
- C. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above, and other waste, and legally dispose of off Owner's property.

END OF SECTION 04 43 00



MKSK COLUMBUS
462 South Ludlow Alley
Columbus, Ohio 43215
614.621.2796

Attachment 'A' – Unit Cost

Item P-1	\$ _____ / sf
Item P-3	\$ _____ / sy
Item P-5	\$ _____ / sy
Item W-1	\$ _____ / lf
8" dia. ADS N12 Pipe	\$ _____ / lf
12" dia. Ads N12 Pipe	\$ _____ / lf

Attachment 'B'

PLEASE ADD THE FOLLOWING NOTES TO THE ATTACHED PLAN Dublin Coffman Park Expansion Phase 1

GENERAL NOTES

- [] The City of Columbus Construction and Material Specifications, 2012 edition, including all supplements thereto, shall govern all construction items that are a part of this plan, unless otherwise noted.
- [] All water main materials and installations shall be in accordance with the current rules and regulations of the City of Columbus, Division of Water.
- [] All brass fittings associated with water work, including repairs to the existing system, shall conform to the **revised allowable lead extraction limit per the updated NSF/ANSI 61 Standard**. The Division of Water's Approved Materials List has been updated to reflect this requirement.
- [] No shuts are permitted to occur one (1) business day before a federal holiday, unless otherwise approved by the Engineer.
- [] It shall be unlawful for any person to perform any work on City of Columbus water line systems without first securing license to engage in such work, as indicated in Columbus City Code Section 1103.02 and 1103.06. This work includes any attachments, additions to or alterations in any city service pipe or appurtenances (including water service lines and taps). This requirement may be met by utilization of a subcontractor who holds a City of Columbus Water Contractor License or a Combined Water/Sewer Contractor License to perform this work. Utilization of a subcontractor must meet the licensing requirements of City of Columbus Building Code, in particular Section 4114.119 and 4114.529.
- [] No person shall begin construction or installation of a public water main until plans have been approved by the State of Ohio Environmental Protection Agency (OEPA).
- [] Approval on the part of the City of Columbus is given pursuant to the provisions of the Water Service Agreement between Dublin and the City of Columbus, Ohio, on April 13, 1993 and all subsequent amendments thereof. (must appear above Columbus signature block).
- [] The Contractor shall obtain the proper hydrant permit(s), and pay any applicable fees, for any approved hydrant usage deemed necessary for work under this improvement. Permits may be obtained through the Division of Water Permit Office (645-7330). The contractor shall adhere to all rules & regulations governing said permit and must have the original permit on site anytime in which the hydrant is in use. Cost to be included in the various bid items.
- [] All water mains shall be cleaned and flushed, also any water main 12-inch and larger must be properly pigged, in accordance with section 801.13 of the City of Columbus, Construction and Material Specifications.
- [] All water mains shall be pressure tested in accordance with section 801.14 of the City of Columbus Construction and Material Specifications.
- [] All water mains shall be disinfected in accordance with section 801.15 of the City of Columbus

Construction and Material Specifications. Special attention is directed to applicable sections of A.W.W.A. C-651. When the water mains are ready for disinfection, the Contractor shall submit three (3) sets of “as-built” plans (full size sheets only), the as-built survey coordinates, and a letter stating that the water mains have been pressure tested and need to be disinfected, to the City of Columbus, Division of Water. The contractor shall be responsible for all costs associated with the disinfection of all water mains constructed under this plan.

- [] Where indicated on the plans, the existing water main shall be abandoned; and any existing water services off this main shall be transferred to the new water main. Prior to abandonment of the existing water main, the proposed water main shall be pigged (if required), tested, chlorinated and put in service and then the existing water services shall be transferred. The Contractor shall maintain water services to all properties during construction of the new water main and shall notify all customers affected by the transfer of services. To ensure that all existing services are transferred to the new main, no water main shall be abandoned until the new water main has been put in service; all affected water services have been transferred; and the existing water main to be abandoned has been shut down for 24 hours. All visible valve boxes, fire hydrants, and service boxes on the water main to be abandoned, which will no longer be in service, shall be removed. All water mains to be abandoned shall be made water tight. The required surface restoration shall be paid for under the appropriate bid item(s).
- [] All water meters associated with this project shall be installed inside the proposed structure unless a meter pit is approved by the Administrator of the Division of Water. All meter pits must conform to Standard Drawing L-7103 for 5/8" through 1" meters or L-6317 A, B, C, D, & E for 1-1/2" or larger meters.
- [] No service connection permits shall be issued or connections made to any service taps until water mains have been disinfected by the City of Columbus, Division of Water.
- [] “Survey Coordinates” shall include all material, equipment, and labor necessary to obtain horizontal and vertical (northing, easting, and elevation) survey coordinates for the water main improvements. The survey coordinates shall be obtained for the completed water main construction and shall include all valves, tees, crosses, bends, deflections, plugs, reducers, tapping sleeves, blow offs, chlorination taps, fire hydrants, air releases, curb stops, casing pipe termini, and other fittings. Additional survey coordinates are required on the water main every 500’ where no fitting or other water main structure is being installed within that length of the improvement.

All survey coordinates shall be referenced to the applicable County Engineer’s Monuments, and shall be based on the North American Datum of 1983 (NAD 83) with the (NSRS2007) adjustment, with further reference made to the Ohio State Plane South Coordinate System, South Zone, with elevations based on NAVD 88 datum. All coordinates (Northing, Easting, Elevation) shall be referenced to the nearest hundredth (N xxxxxx.xx, E xxxxxx.xx, Elev. xxx.xx). All survey coordinates shall be accurate to within 1.0 foot horizontal and a tenth of a foot (0.10) or less vertical.

The coordinates shall be documented to the Municipality Engineer or designated Representative in digital spreadsheet form and shall include the applicable item, station, northing, easting, and elevation. Coordinates shall be submitted to the Municipality Engineer or designated Representative on a bi-weekly basis. Coordinates shall also be required to be submitted to the Division of Water as part of the request for chlorination.

Lump sum payment is full compensation for all work involved in obtaining and documenting the survey coordinates as described in this specification.

NOTE TO CONSULTANT: Provide the x, y, z coordinate table for proposed work and blank spaces for as-builts on the sheets as required by the C.O.C. Water Distribution Engineering Section.

SPECIAL NOTES

- [] The proposed water main shall be located a minimum distance of twenty (20) feet away from any structure, overhang or footer.
- [] All valve boxes, service boxes, and fire hydrants shall be located within the easement area.
- [] During construction, the Contractor shall use extreme caution not to damage the existing 16 inch water main due to minimal cover.
- [] Fire hydrant relocations shall conform to applicable sections of Item 809 of the Columbus Construction and Material Specifications. Work shall consist of removing the existing hydrant, installing new 6" pipe and fitting as required to locate the fire hydrant 2 feet from back of proposed curb or 8 feet off edge of pavement, resetting hydrant and blocking as required. All 6" pipe shall be installed at 4'-0" minimum cover. Hydrant extensions shall be provided per Item 810, as required. Relocated fire hydrants shall be adjusted to proper grade and faced in the proper direction. When a hydrant is relocated fifteen (15) feet or more from the "Typical Hydrant Setting" valve location (see L-6409 & L-6637), an additional valve shall be installed, and restrained, within two (2) feet of the relocated hydrant. Payment is to be included under Item 809, Fire hydrant relocated.
- [] No two (2) adjacent fire hydrants shall be taken out of service concurrently.
- [] Relocated fire hydrants shall be put back in service as soon as possible.
- [] The Contractor shall coordinate his work such that no water customer will have their service disrupted more than two (2) times throughout the duration of this project.

Attachment 'C'

INVITATION TO BID

Sealed proposals will be received from qualified bidders by:

**City of Dublin, Ohio
Parks & Open Space
6555 Shier Rings Road
Dublin, Ohio 43016**

until **2:00 p.m.** local time on **Tuesday, June 11, 2013** at which time the sealed proposals will be opened by the **Director of Parks & Open Space**, for the following project:

Coffman Park Phase I Construction

For all labor, materials and equipment necessary for the construction and associated site work for COFFMAN PARK PHASE I CONSTRUCTION as indicated within the plans and associated documents.

Service delivery shall be in accordance with contract documents.

Bidders shall submit with their proposals a certified check, cashier's check, letter of credit, or a satisfactory bid bond in an amount equal to five percent (5%) of the estimated value of the contract.

