State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

NUMBER	PAGE
DEP16323	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
FRANK WHITTAKER
304-558-2316

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE

SHIP TO
ENVIRONMENTAL PROTECTION
DEPT. OF
OFFICE OF SPECIAL RECLAMATION
105 S. RAILROAD STREET
PHILIPPI, WV
26416-9998 304-457-3219

DATE PRINTED
11/06/2013

BID OPENING DATE: 11/14/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT

ADDENDUM NO. 1

THIS ADDENDUM IS ISSUED TO:

1) EXTEND THE BID OPENING DATE AND TIME.

2) PROVIDE THE ATTACHED TECHNICAL QUESTIONS & ANSWERS.

3) PROVIDE THE ATTACHED PRE-BID SIGN IN SHEET.

4) REVISE THE SPECIFICATIONS AND DRAWINGS.
THE REVISED SPECIFICATIONS & DRAWINGS ARE AVAILABLE UPON REQUEST BY CONTACTING DIANNA WRIGHT AT THE PHILIPPI OFFICE AT 304-457-4588 X 43276 OR 304-457-3219.

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

SOLICITATION NUMBER: DEP16323
Addendum Number: 01

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[✓] Modify bid opening date and time

[✓] Modify specifications of product or service being sought

[✓] Attachment of vendor questions and responses

[✓] Attachment of pre-bid sign-in sheet

[ ] Correction of error

[ ] Other

Description of Modification to Solicitation:

The bid opening date and time are extended to 11/14/2013 at 1:30 pm

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

The following questions were identified at the Pre-Bid Conference (PBC) conducted on-site on October 15, 2013. *The answers and clarifications provided herein take precedence over verbal answers at the PBC and previously provided specifications and descriptions provided in the Solicitation should there be any conflicts between the two.*

***LOCATION**: Treatment Site #1*

Q1: Are Item #3.0 Access Road Repair and Maintenance and Item #9.0 Incidental Stone the same thing or different?

A1: They are different items. Road Repair and Maintenance costs, including grading, pothole repair, ditching, etc. will be done for the amount placed under Bid Item #3.0. Any road surfacing needed in conjunction with Item #3.0 work can use Item #9.0, Incidental Stone.

Q2: Is this all limestone rock in Ditch A?

A2: All rock in Underdrain #1 is 3"-6" sandstone (Item #10.0). All rock in Ditch A is also sandstone (Item #11.0). Note that there is a rock size conflict in the specification for Ditch A. The correct size is 3"-6".

Q3: Do we install pipe under Ditch A?

A3: Ditch A will have a 60 mil HDPE liner placed on the bottom and near side, then a perforated 12" HDPE DR-17 pipe, then completed with rock to the final configuration shown on the plan. Note that the last 20 feet of the pipe before it connects to Vault A will be non-perforated. Ditch A typical detail is shown on the plans (Sheet 20).

Q4: How much of the existing underdrain pipe needs to be removed?

A4: Any seep collector pipes crossed by Ditch A will be cut and connected into the ditch pipe. Only that portion of the pipe cut out needs to be removed. The two existing culvert pipes leading from Ditch A to Ponds #1 and #2 will be removed in their entirety.

Q5: Does Ditch A have less than 1% slope?

A5: Yes. Final slope is estimated at approximately 0.5%. Actual final slope will be established based on the final elevation of Vault A inlet at the lower end (controlled by the siphon dosing system) and the invert of the existing culvert draining from Ditch A into Pond #1 at the upper end.

***LOCATION**: Treatment Site #2*

Q6: Do you have an elevation to work off of in setting the Aquafix #2 foundation and siphon dosing system components?

A6: All elevations for the hydraulic profile of the Aquafix #2 treatment system are shown on the plans (Sheet 4) and are based on an assumed elevation of 100.0 for the existing water surface at Pond #3, since this water elevation remains constant.

Q7: Do you have details on modifications you expect on the aquafix units? Do the aquafix units get painted too?

A7: Yes, In addition to being moved (per Item #13.2), Unit #2 will get cleaned, painted and the listed modifications performed (per Item #13.3). Unit #3 will also be cleaned, painted and modified (per Item #30.0). Note that the specifications for these items have been clarified and expanded to more thoroughly address this work (see Revised Specifications). Also see drawing sheets 7, 8 and 9.

Q8: Can we take the Aquafix units off-site to modify them?

A8: Yes. However, please note the additional requirements discussed in the specifications for Item #13.3 dealing with work performed off-site.

Q9: Is the new pad for Aquafix #2 still typically the same?

A9: For this existing system, we have to use the same pad, minus the raised pedestals that are on this one. New foundation details for Aquafix #2 are shown on Sheet 6.

Q10: Do we do anything special with the old Aquafix foundation?

A10: It sets low enough that you should be able to build Access Road A up around it and drive right over it, in which case it shouldn't need to be broken up or anything. Otherwise, it may be broken up, steel removed (see Item #8.0) and concrete taken to the Excess Spoil Disposal Area.

Q11: Are the feed and drive lines going from distribution box to aquafix unit #2 still fused pipe or normal schedule 30-40?

A11: They are HDPE DR-17 fused pipe (Bid Item #15.0).

Q12: You said there are block walls?

A12: Yes, concrete block, 2' x 2' x 6' long interlocking for walls. Wall details for each pond are shown on the individual pond drawings, Sheets 5, 15 and 16, and discussed in Items #21.0, #34.0 and #41.0. Shorter (4') blocks may be used, but note that blocks must still be interlocking with those of differing lengths and that this will require greater amounts of water stop to be applied, where applicable.

Q13: Do you have a disposal area for pond cleanings or can this be pumped to sludge cells?

A13: There is an area on the other side of Diversion Ditch C designated for disposal of pond cleanings. You will have to do some excavation and diking work to prepare it and provide containment. The cost for this work should be included in the individual pond cleaning items.

Q14: Does this pond water need to be treated during pumping? Can we divert it or do something special to keep it?

A14: If the construction sequence allows for it, you may be able to divert it to run through the lower Aquafix #3 unit. That way some treatment can be added to it prior to discharging.

Q15: All we're doing is painting Aquafix #3, right? We leave all the lines that are going in alone?

A15: See the answer to Question #7 for work to be performed on Aquafix #3. Work on the new feed and drive lines from the Pond #4 distribution box are covered under Bid Item #26.0.

Q16: What will be done with the existing line from Pond #4 to Aquafix #3?

A16: That line will no longer have water going through it. The valve can just be shut and the line left in place as long as it does not interfere with the new feed, drive or bypass lines.

LOCATION: *Treatment Site #3*

Q17: Do you have the elevation for top or bottom of the block walls?

A17: As shown on the individual plans for each pond, the top elevations are based on the final pond outlet elevation. The bottom elevation will be based on the final limit of excavation for existing ponds (Sheets 5 and 16) and on the finished bottom elevation for proposed ponds (Sheets 15 and 17).

Q18: Do you have some kind of footer detail on the walls?

A18: Wall details for each pond are shown on the individual pond drawings, Sheets 5, 15 and 16, and discussed in Items #21.0, #34.0 and #41.0.

Q19: Do you want the name put back on the repainted Aquafix units?

A19: No.

Q20: Does Aquafix #3 get the new drive system, or does it run the way it is?

A20: Aquafix #3 work does not include a new adjustable speed drive system. All work required for this unit is described in the specification for Item #30.0.

CLARIFICATIONS

REVISED SPECIFICATIONS: The following specifications have been revised: Sections 13.2, 13.3, and 30.0. Revised specifications have the designation "R" such as 13.2-R.

Note: Detectable Underground Utility Marking Tape specification has been added as technical specification Item 56.0 (NOT a separate bid item) and is now included in each bid item requiring

underground piping (Items 10.0, 12.0, 14.0, 15.0, 22.0, 26.0, 26.1, 37.0, 39.0, 43.0, 44.0 and 55.0).

REVISED DRAWING: Sheet 22 has been revised to list the correct aggregate size for the sludge cell underdrain as clean #4 sandstone. Revised drawings have the designation "R" such as 22.0-R.

The complete set of Revised Specifications, including all unrevised documents, and the revised Drawing are available upon request from Dianna Wright at the Philippi Office 304-457-4588 ext. 43276 or 304-457-3219.

12.0-R MANHOLE DISCHARGE LINE REDIRECTION

The existing manhole on the hillside behind Raw Water Pond #1 collects water from an underdrain and feeds it to Aquafix #1 via one (1) twelve-inch (12") HDPE line and two (2) two-inch (2") PVC lines. All lines from the manhole are to be cut and plugged on the Aquafix #1 side of Raw Water Pond #1 and the existing lines from the manhole redirected to connect to the upper end of the 12-inch perforated line in the bottom of proposed Ditch 'A'.

Note: Water from the manhole will be connected into the Ditch 'A' perforated 12-inch line, NOT into the 12-inch line proposed for Underdrain #1.

Underground Utility Marking Tape shall be installed for this system. See attached specification #56.0-R.

All labor and material needed to complete this work will be inclusive to this item.

TREATMENT SITE TWO

13.0-R AQUAFIX SYSTEM #2 RELOCATION/MODIFICATION

Aquafix #2 for Treatment Site Two shall be relocated approximately one hundred twenty lineal feet (120 LF) east of the northwest corner of Pond #3. New location must be approved by the on-site DEP representative. This will require a new foundation pad to be constructed for the Aquafix Unit and the old foundation disposed of in an approved manner. Existing Aquafix structure shall then be dismantled and reassembled on the new foundation. All labor and materials for this work will be inclusive to the respective bid items.

13.1 FOUNDATION

This item shall be paid for per lump sum after completion of the foundation and acceptance by the DEP.

SUB-FOUNDATION

The sub-foundation shall be undercut to remove all fill (unconsolidated material) down to a competent foundation as determined by the DEP on site representative. The sub-foundation shall be constructed in substantial conformity to the plans and/or specifications. The DEP on site representative shall be present during this work.

The sub-foundation material shall be suitable material free of particles larger than three inches in diameter and consist of granular material conforming to WVDOH specification 716.1.1.2. A bearing capacity of approximately six (6) tons per square ft. should be obtained.

Compaction shall be done with a suitable compactor to obtain approximately 98% Standard Proctor Density. Layers shall be six (6) inches or less in thickness before compaction is initiated. Moisture content of the fill material shall be controlled to obtain maximum compaction.

FOUNDATION

The foundation shall be Type II (Sulfate Resistant) Concrete and shall conform to the dimensions and shape shown in the detail drawings and specifications. Include all reinforcing bars with supports and anchor bolts as necessary. Provide all forms, personnel and equipment required for the placement, finishing, and curing of the concrete. The concrete shall be consolidated with use of an internal spud vibrator to liquefy the concrete so that entrapped air and water can come to the surface. Also, supplement the mechanical vibrator by hand-spading, rodding, or tamping. Adverse weather conditions shall be avoided during completion of this item. WVDOH specifications (Section 601-Construction Manual) for concrete shall apply to this item. Concrete shall cure for a minimum of 5 to 7 days before the silo may be erected in place. Excavation for the foundation is incidental to this item with no separate payment being made. Concrete shall meet a minimum 28-day compressive test strength of 4000 psi, and the slump shall be between 2 and 3 inches during placement of concrete.

NOTE: The channel in the foundation is to receive water from the new Distribution Box (separate bid item). After treatment with the reagent, the water will exit the foundation into new Diversion Weir 'A' (separate bid item).

13.2-R STRUCTURAL ELEMENTS

Payment for all of the work specified below shall be made based on the lump sum contract price after completion and acceptance by the DEP.

DOSING UNIT AND SILO

This item includes all work necessary to dismantle, re-install and initiate operation of an Aquafix water powered dosing unit (Unit type MSS-SM-OA-50), as described herein. This item shall be subcontracted to:

Aqua-Fix Water Treatment Systems.
Michael Jenkins
301 Maple Lane
Kingwood, WV 26537 Telephone: (304) 329-1056.

Structural elements shall be warranted by the manufacturer to withstand normal static and dynamic loads as commonly accepted by industry. Changes to these specifications shall be made only with the written approval of the Program Manager.

An eight foot (8') extension shall be added to the existing steel silo capacity, bringing the total volume to approximately 30 tons of CaO (or approximately 23 tons of Hydrated Lime).

The silo shall be equipped with an interior ladder, an exterior ladder with a protective cage and a lockable steel safety door, a steel safety fence around the top of the silo, and a filler pipe to extend to the unloading port. A steel cone shall be placed at the base of the silo to direct the discharge of the reagent through a steel flange, which is sized and located to accommodate the reagent dispensing unit. Silo shall include a vent pipe to prevent pressure buildup during filling. An emergency pop off valve shall be included in case the vent pipe malfunctions. Pneumatic filling of the silo is to be utilized.

An insulated steel security enclosure attached to the silo structure support system to protect the dosing unit from vandalism and the weather is required. The wall thickness of the silo enclosure shall be equivalent to the steel used in the construction of the silo. The enclosure shall be equipped with a hinged, lockable steel door of sufficient size to facilitate removal of the dosing unit for repair and/or future replacement. The enclosed structure shall be fitted with a propane heating unit with a capacity to prevent freezing of the dosing unit during the winter. The heater will include all needed piping, regulator and fittings to connect to the tank. A 100 gallon tank shall be included, and will need to be filled one time.

Painting of the silo and steel security enclosure shall be done in accordance with the specification under Item 13.3, Modify Aquafix System #2, PAINTING.

The dosing unit, silo, and filler pipe shall be designed to facilitate the use of Calcium Oxide (CaO) or Hydrated Lime during the service life of the unit. A water line will be installed to power the water wheel. This portion of the work shall include the initial filling and the start-up of the unit, at the direction of the Program Manager, to confirm that all units function as intended. Any repairs and/or adjustments required to the unloading system and dosing unit to allow them to function as designed shall be performed at no cost to the DEP. The system shall be operated successfully for a one-week period before acceptance by the DEP. All settling ponds and riprap ditches leading to them must be completed before testing is initiated. The Calcium Oxide shall be thirty (30) tons in amount and delivered as scheduled by the onsite DEP representative.

CRANE

This shall include furnishing a crane of sufficient capacity to unload and erect the silo structure on its foundation and to install the reagent dispensing unit. The silo is estimated to weigh less than 10 tons. Payment for this work shall be included in this bid item.

13.3-R MODIFY AQUAFIX SYSTEM #2

Modification of the relocated lime dispensing unit structure (Aqua-Fix) shall include the following upgrades. See attached drawing for details and specifications. Payment is for all of the work specified below and in the attached details and shall be paid per each unit structure modified.

If contractor elects to remove the silo and/or structure or components from site for modification then, prior to such removal, the contractor must provide the proposed location of offsite modification as well as availability for the WVDEP to inspect progress of work. This shall include notification from the contractor on progress of work, and contractor must verify with time stamped photos the cleaning and surface preparation prior to priming and painting of silo and/or structure or components.

ACCESS DOOR – An additional four foot (4') access door shall be located and installed at the direction of the on-site DEP representative in accordance with the attached drawings. Steel for materials shall be of same grade as those existing on structure. All adjoining stiffeners and support angle steel shall be fully welded to ensure structural integrity. "Spot welding" materials together shall be used for supporting steel or steel stiffeners, and shall be a minimum of 3-inch (3") long welds, at a maximum of 1 foot spacing. Door shall also include three welded hinges, a door pull on each side of door, and a welded tab for holding door open on outside wall, see detailed drawings. Door installation shall include removing any affected insulation prior to door modifications, then replacement of insulation with original attachments or use of Loctite or approved equivalent adhesive.

Line item shall also include all parts/materials shown in the Latch Detail View including door pin, two plates, two inch plate welded on door, 3.5 inch plate as a lock weather guard. The latch shall be made to either unlock door from outside, or open the door from the inside by removing the pin.

A piece of 2 x 2 inch angle steel shall be welded on the roof above the access door, and sloped to prevent water from running down the door. Painting for all accompanying materials shall be included in this line item.

WALKING GRATE - Walking grate shall be installed to insure safe movement over treatment trough. Four feet non corrodible fiberglass anti-slip grading of grate shall be installed from the edge of the structure towards the outlet of the dosing unit. Grating must be cut to fit the trough's varying width. Top of grating shall be level with top of concrete. To support the grating use: 2 inch by 2 inch by ¼ inch thick stainless steel angle, which shall be fastened to each side of the trough with removable hex head bolt anchors for concrete. These anchors shall be stainless steel 3/8 diameter and 2.25 inch length. Use a minimum of four anchors per side, see detailed drawings. Installation shall be field proven and in compliance with the construction documents and specifications.

GABLE VENT - A twelve inch by twelve inch gable vent shall be installed at a location determined by DEP onsite representative. Vent shall be Builders Edge 12" x 12" white vinyl gable vent or equivalent. Hole, grinding, finishing, adhesive and painting to install vent shall be included in this line item. Adhesive to secure vent shall be Loctite Heavy Duty Construction Adhesive that is approved for use on metal.

PAINTING - The silo and steel security enclosure shall be painted Tan. Painting process requirements including temperature, humidity etc. shall be performed in accordance with manufactures recommendations. See below 'Steel Surface Preparation prior to painting' requirements. All steel surfaces on the interior and exterior of the enclosure and exterior of the silo shall be thoroughly cleaned, primed, and painted, utilizing Carboline brand Rustbond FC primer and two to three coats of Carboline brand Carbothane 133HB paint, or approved equivalents.

Steel Surface Preparation prior to painting:

The interior shall have the insulation removed prior to cleaning for painting and then replaced.

The surface shall be prepared by non-blast cleaning to a SSPC-SP2, SP3, or SP12-WJ4 requirement (Structural Steel Protective Coatings, Surface Preparation standards). However any areas that remain deeply pitted with rust, once the above cleaning is complete, shall be abrasive blast cleaned –SP6 requirement. The interior shall have the insulation removed prior to cleaning for painting and then replaced.

In preparing a previously painted surface, all grease, oil, dirt, other foreign substances, all corrosion and all paint that shows evidence of corrosion, peeling, excessive thickness, brittleness, blistering, checking, scaling, poor adhesion, or general disintegration shall be removed. It is essential that the removal of the old paint be carried back around the edges of the spot or area until an area of completely intact and adhering paint film, with no rust or blisters underneath, is attained. Edges of tightly adherent paint remaining around the area to be recoated shall be feathered so that the repainted surface can have a smooth appearance. The remaining old paint shall have sufficient adhesion so that it cannot be lifted as a layer by inserting a blade of a putty knife under it or be removed by wire brushing or light scraping. The rate of cleaning may vary from one area to the next in order to achieve the desired end condition.

All laminar and stratified rust that has formed on the existing steel surfaces shall be removed. Pack rust formed along the perimeter of mating surfaces of connected plates or shapes shall be removed to the extent feasible without mechanically detaching the mating surface. Any rust remaining after cleaning shall be tight and intact when examined using a dull putty knife. The entire dosing unit and frame shall be sandblasted, primed, and repainted. Remove cable and winch system with brackets, and remove and plug wire access piping.

After cleaning, lightly sand or abrade the existing remaining paint to roughen and degloss the surface prior to repainting.

TOP HATCH GRATE - Top hatch grate shall be installed to insure safety when accessing top hatch of dosing unit. An approximately 2 foot by 2 foot section of non-corrodible fiberglass anti-slip grading of grate of 1.5 inch thickness shall be installed inside of the top hatch of the dosing unit. Grating must be cut to fit the top hatch's varying width and length, and may be slightly different at each site. Grating shall have 1.5 inch by 1.5 inch openings. Top of grating shall be level with top of the hatch and must allow for complete closing of the top hatch lid. Grating shall be supported by installation of 1 inch by 1 inch by ¼ inch thick stainless steel angle, which shall be welded on the entire circumference of all adjoining surfaces to insure structural integrity. "Spot welding" materials together is not acceptable. Installation shall be field proven and in compliance with the construction documents and specifications.

INLET TARGET BOX - Inlet target box will be mounted on the silo roof. Target box will be securely mounted to silo with a continuous weld to insure a dust and water tight enclosure. Target box will be designed to reduce the velocity of the chemical being conveyed and allow it to drop into the storage bin in an even pattern. The existing fill pipe will be modified to connect to target box and entire circumference of filler pipe will be welded to target box as to insure a dust and water tight connection.

LIME DISPENSING UNIT - The lime dispensing unit will be lowered by reducing the length of the silo support legs (H-Beams). The contractor will be required to modify roof of structure in order to facilitate the lowing of the silo. Installation of a 'drop tube' at the bottom of the 'cone' to 'lower' the unit is not acceptable. An additional 8 feet height section above the 'cone' section shall be added to this silo.

Contractor is responsible for removing the remaining calcium oxide prior to relocation. Calcium Oxide may be removed pneumatically or by any other means found acceptable by WVDEP Engineer. Any chemical removed can be utilized on-site for revegetation/vegetative enhancement following established procedures.

The Aquafix lime dispenser shall have the wheel covers replaced with new stainless steel covers and the entire unit, frame and associated components shall be sandblasted, primed, and repainted per the PAINTING specification.

GENERAL WELDING AND REPAIR - Repair (weld) any cracked or broken hinges, loose metal, or roof-to-wall seams that may be broken or loose. (Note: Unless otherwise directed, complete welding shall be performed on all items requiring repair. 'Spot' welding may only be performed under this paragraph as specifically approved and directed by the on-site DEP representative.)

A piece of 2 x 2 inch angle steel shall be welded on the roof above the main access door, and sloped to prevent water from running down the door.

Remove cable and winch system with brackets, and remove and plug wire access piping. Remove old platform, tank, and associated piping inside of building which was used as the water mixing tank.

WVDEP agent on-site prior to installation.

BAFFLE CURTAIN – TYPE B

Baffle curtains #2 (Pond #3) and curtains #3 & #4 (Pond #4) shall be of an ultraviolet (UV) resistant type vinyl coated polyester material (Aero-Flo, Inc. Tough Guy Turbidity Barriers, Type 2 or 3 DOT or approved equal). Each will consist of a top floatation boom, an impervious fabric skirt extending downward underwater, and a heavy galvanized steel chain sealed into a hem along the bottom of the skirt to provide ballast and prevent water from flowing underneath.

Curtains shall have a minimum total weight rating of 17 oz./sq. yd. Stryofoam floats of minimum size 3" x 4" x 24" shall be hot seam sealed into the top of baffle curtain, and shall be evenly spaced 4 inches apart end to end. A grommet shall be placed between each of the styrofoam floats. A 5/16 inch diameter stainless steel wire cable shall be seamed into the top of the baffle to anchor at the sides of the pond. The cable and bottom chain shall extend 10 feet past the cut length of the baffle curtain on each end. A 1/4 inch diameter link chain shall be hot seam sealed into the bottom of the baffle for weight, and to anchor at the sides of the pond. Chain shall be bolted at each end through the top hot seam to create another anchor point for the curtain.

Secure anchor points (pipe, rods, or treated posts) shall be installed at the ponds edge, as shown on the plans, to hold the baffle in place. Anchor points and the baffle location shall be approved by the DEP onsite representative before installation. The wire cable and chain shall be attached in such a way to allow for easy disconnect while sludge is being pumped from the pond.

All cable fasteners, eye bolts, and other accessories shall be stainless steel to prevent corrosion, and shall be incidental to this pay item. The curtains must be contoured to fit on the slopes of the pond walls.

The baffle curtain opening slots (for curtains #2, #3 & #4) shall be cut into the curtain below the hot seam seal at the top of the baffle, as indicated on the attached drawing. The spacing and the size of the slots shall be determined by the DEP engineer or onsite representative, and shall be cut at the time of installation.

TREATMENT SITE THREE

30.0-R MODIFY AQUAFIX SYSTEM #3

Modification of the existing lime dispensing unit structure (Aqua-Fix) shall include the following upgrades. See attached drawing for details and specifications. Payment is for all of the work specified above and in the attached details and shall be paid per each unit structure modified.

Access Door (3 feet wide)
Walking Grate
Gable Vent
Painting
Top Hatch Grate
Inlet Target Box
Lime Dispensing Unit
General Welding and Repair

Construction specifications for Modify Aquafix System #3 shall be the same as those for Bid Item #13.3, Modify Aquafix System #2, except:

1. Additional access door will be three feet (3') wide (see attached plans) and located at the direction of the on-site DEP representative;

2. 8' silo extension will not be required;

3. Dispensing unit will not be lowered.

31.0 CONSTRUCT POND #5

Construct new Pond #5 to the lines and grades indicated in this design package. All labor and materials to complete this construction will be inclusive to the Pond #5 item.

EROSION AND POLLUTION CONTROL - Construction operations will be carried out in such a manner that erosion and water pollution will be minimized.

SITE PREPARATION - The pond site shall first be cleared of all woody vegetation. The limits of the excavation and spoil placement areas shall be staked, and the depth of cut from the ground surface to the pond bottom indicated on the stakes. The excavated ground surface slopes shall be no steeper than 1 horizontal to 1 vertical and the entire foundation surface shall be scarified. Sod and topsoil shall be stripped from the embankment site and stockpiled for use on the embankment.

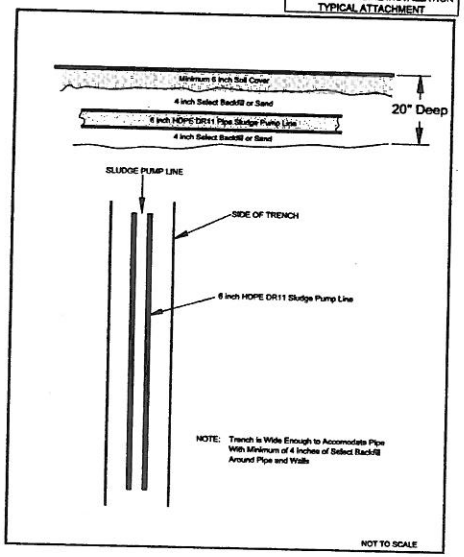
EXCAVATION - Excavation and placement of the fill material shall be done as near to the staked lines and grades as skillful operation of the equipment will permit. Side slopes of the excavated pond will be sloped no steeper than 2 horizontal to 1 vertical in earth, 1 horizontal to 1 vertical in weathered rock and ¼ horizontal to 1 vertical in durable rock.

Should any coal seams be encountered and exposed within the excavation limits of the pond, the outcrop area will be over-excavated a minimum distance of four (4) feet horizontally, then backfilled to the extent practicable utilizing the most impervious nontoxic non-acid shales, clays or other materials available on site. This sealing procedure will be performed for all outcrops both above and below the permanent pool elevation.

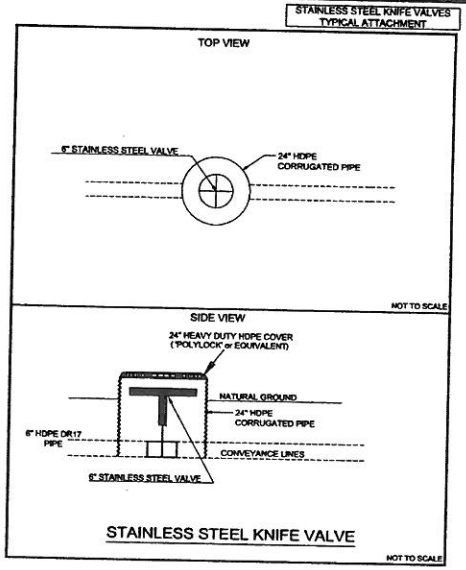
SELECTION AND PLACEMENT OF EMBANKMENT MATERIALS - The most impervious material available on site shall be used in the embankment. When sandy or gravelly material is encountered, it should be placed in the outer shell of the downstream portion of the embankment. The distribution and gradation of materials throughout the fill shall be such that there will be no lenses, pockets, or layers of material differing substantially in texture or gradation from the surrounding material. Where it is necessary to use material of varying texture and gradation, the more impervious material shall be placed in the upstream and center portions of the dam. Weak or compressible areas, which cannot be satisfactorily compacted, shall be removed and replaced with properly compacted fill material.

During dry conditions, water may need to be added to the fill material during the placement process to achieve optimum compaction. If the fill material is over saturated with water, the material may need to be spread and aerated prior to placement at the fill site for compaction. The moisture content of the material should be such that when kneaded in the hand, it will just form a ball that will not readily separate.

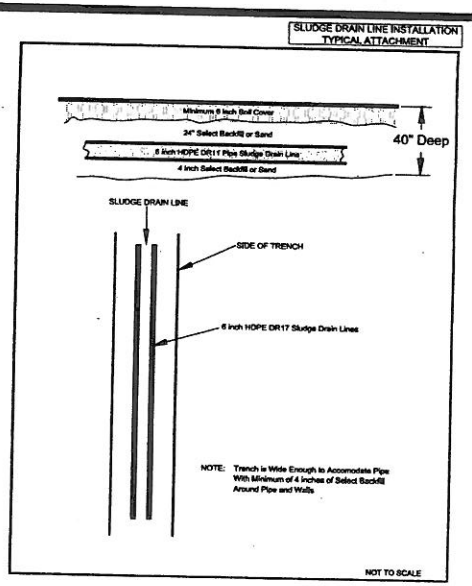
SLUDGE PUMP LINE INSTALLATION TYPICAL ATTACHMENT



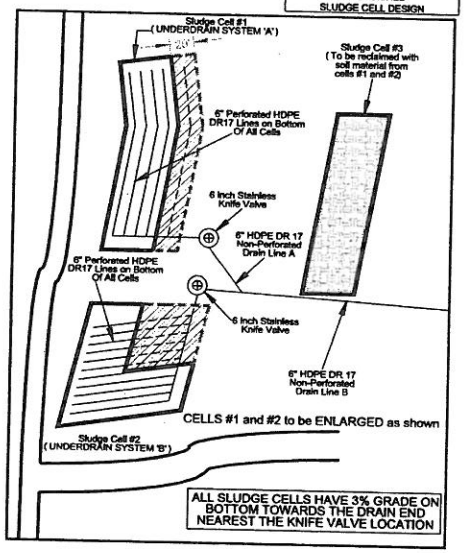
STAINLESS STEEL KNIFE VALVES TYPICAL ATTACHMENT



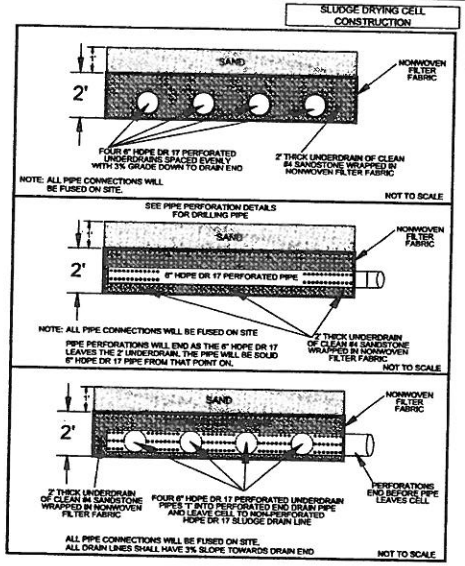
SLUDGE DRAIN LINE INSTALLATION TYPICAL ATTACHMENT



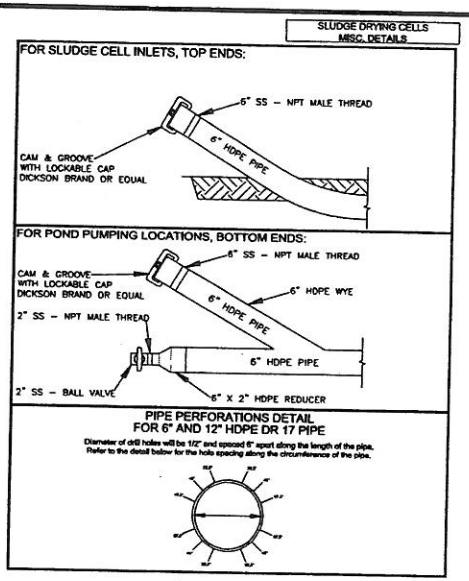
REFURBISHED SLUDGE CELL DESIGN



SLUDGE DRYING CELL CONSTRUCTION



SLUDGE DRYING CELLS MISC. DETAILS



OFFICE OF SPECIAL RECLAMATION
105 SOUTH RAILROAD STREET, SUITE 301
PHILIPPI, WEST VIRGINIA 26416
OFFICE: 1-304-457-3219
FAX: 1-304-457-5813

REQ. or P.O NO.	DEP16323
DESIGNED BY:	SRN
DRAWN BY:	RAC
CHECKED BY:	SRN
BUYER:	JS

West Virginia dep Division of Land Restoration Office of Special Reclamation

REVISIONS		
DATE:	BY:	COMMENT:
10/24/13	SRN	PRE-BID ADDENDUM #1

Ed-E Development Company, Inc.
Permit S-10-81
GLADESVILLE QUADRANGLE
MONONGALIA COUNTY, WEST VIRGINIA

SLUDGE CELLS DETAIL DRAWINGS

SCALE: NONE

DATE: JULY 2013

SHT. NO. 22-R

TOTAL 22

REQUEST FOR QUOTATION NO. DEP 16323

SIGN IN SHEET

PLEASE PRINT

Date: 10-15-2013

*** PLEASE BE SURE TO PRINT LEGIBLY - IF POSSIBLE, LEAVE A BUSINESS CARD**

FIRM & REPRESENTATIVE NAME	MAILING ADDRESS	TELEPHONE & FAX NUMBERS
Company: J F Allen Co Rep: James Allen Email Address: James.Allen@JFAllenCo.com	PO Box 2049 Buckhannon WV 26201	PHONE 304 472 8890 TOLL FREE FAX 304 472 8897
Company: Aquafit Systems Inc. Rep: Mike Jenkins Email Address: mjj@aquafit.com	301 Maple Lane Kingwood WV 26537	PHONE 304-329-1056 TOLL FREE FAX 304-329-1217
Company: Eagle Excavation Inc Rep: George Freshour Email Address:	P.O. Box 218 Kenna WV 25248	PHONE (304) 372-4378 TOLL FREE FAX (304) 372-4378
Company: Green Mountain Company Rep: David H. Bowman Email Address: DHB722e Yahoo.com	511 50th St Charleston WV 25304	PHONE 304-925-0253 TOLL FREE FAX 304-925-9230
Company: Cowgirl UP Inc Rep: Dennis C Elbon Email Address: DCE-cowgirlup@earthlink.net	PO Box 343 Simpson WV 26435	PHONE 304-739-4397 TOLL FREE FAX 304-626-1051 304-739-4401

REQUEST FOR QUOTATION NO. DEP16323

SIGN IN SHEET

PLEASE PRINT

Date: 10-15-2013

*** PLEASE BE SURE TO PRINT LEGIBLY - IF POSSIBLE, LEAVE A BUSINESS CARD**

FIRM & REPRESENTATIVE NAME	MAILING ADDRESS	TELEPHONE & FAX NUMBERS
Company: EASTERN ARROW CORP Rep: ANN WARDWELL Email Address: easternarrow@hotmail.com	PO Box 4108 CHARLESTON WV 25364	PHONE 304-414-0255 TOLL FREE FAX 0256
Company: Breakaway Inc. Rep: Doug Vincent Email Address: doug@breakawayWV.com	1075 Old Turnpike Rd Sutton WV 26601	PHONE 765-5317 TOLL FREE FAX 765-5389
Company: SUNRISE CONSTRUCTION Rep: THOMAS MOUSSER Email Address: TMOUSER@TRUEBAND.COM	RR 2 Box 256 MOATSVILLE WV 26405	PHONE 304-457-2109 TOLL FREE FAX 304-457-2115
Company: GREEN RIVER GROUP LLC Rep: MARTY TURNER Email Address: MTURNER@GREENRIVERGROUPLLC.com	PO BOX 18039 MORGANTOWN WV 26507	PHONE 681-285-5117 TOLL FREE FAX
Company: Foster Supply Rep: Dion Hamsley Email Address: dhamsley@fostersupply.com	RT 4 Box 414 Mt Clair WV 26301	PHONE 304-202-2351 TOLL FREE FAX 304-326-0196

-END- David McCoy - WV DEP

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: 01

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[ ] Addendum No. 1	[ ] Addendum No. 6
[ ] Addendum No. 2	[ ] Addendum No. 7
[ ] Addendum No. 3	[ ] Addendum No. 8
[ ] Addendum No. 4	[ ] Addendum No. 9
[ ] Addendum No. 5	[ ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

_____
Company

_____
Authorized Signature

_____
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012