

# Rubin & Hays

ATTORNEYS AT LAW

Kentucky Home Trust Building, 450 South Third Street, Louisville, Kentucky 40202-1410  
Telephone (502) 569-7525 Telefax (502) 569-7555 www.rubinhays.com

RECEIVED

NOV 28 2016

Public Service  
Commission

CHARLES S. MUSSON  
W. RANDALL JONES  
CHRISTIAN L. JUCKETT

November 21, 2016

Ms. Talina R. Mathews  
Executive Director  
Public Service Commission  
P.O. Box 615  
Frankfort, Kentucky 40602

Case No. 2016-00407

Re: Breathitt County Water District PSC Application

Dear Ms. Mathews:

Enclosed please find the original and ten (10) copies of the Application of the Breathitt County Water District for a Certificate of Public Convenience and Necessity to construct and finance a waterworks project pursuant to KRS 278.020.

Also enclosed are two copies of the location map and one copy of the signed Plans and Specifications on electronic media.

**The Abandoned Mine Lands grant Memorandum of Agreement expires on June 30, 2017, therefore, the Project must be completed by that date. The District respectfully requests that the Commission issue the Certificate of Public Convenience and Necessity on or before December 31, 2016 in order to allow the contractors to begin work, this assuring completion by the June 30, 2017 deadline.**

If you need any additional information or documentation, please let us know.

Sincerely,

Rubin & Hays

By   
W. Randall Jones

WRJ:jl  
Enclosures  
cc: Distribution List

## DISTRIBUTION LIST

**Re: Breathitt County Water District - KY 315-28 Waterline Extension Project**

Mr. Estill McIntosh, Superintendent  
Breathitt County Water District  
1137 Main Street  
Jackson, Kentucky 41339  
[brethittwater@yahoo.com](mailto:brethittwater@yahoo.com)

Telephone: (606) 666-3800  
Fax: (606) 666-2860

Mr. Matt Steen, Project Development Engineer  
Nesbitt Engineering, Inc.  
227 North Upper Street  
Lexington, Kentucky 40507  
[msteen@nei-ky.com](mailto:msteen@nei-ky.com)

Telephone: (859) 233-3111

W. Randall Jones, Esq.  
Rubin & Hays  
Kentucky Home Trust Building  
450 South Third Street  
Louisville, Kentucky 40202  
[wrjones@rubinhays.com](mailto:wrjones@rubinhays.com)

Telephone: (502) 569-7534  
Fax: (502) 569-7555

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION**

IN THE MATTER OF:

RECEIVED

NOV 28 2016

**THE APPLICATION OF THE BREATHITT COUNTY )  
WATER DISTRICT FOR THE ISSUANCE OF A )  
CERTIFICATE OF PUBLIC CONVENIENCE AND )  
NECESSITY TO CONSTRUCT A WATER SYSTEM )  
IMPROVEMENTS PROJECT PURSUANT TO THE )  
PROVISIONS OF KRS 278.020 AND 807 KAR 5:001 )** **Public Service  
Commission**  
**Case No. 2016 - 00407**

\*\*      \*\*\*      \*\*\*\*      \*\*\*\*\*      \*\*\*\*\*      \*\*\*      \*\*

**APPLICATION**

The Applicant, Breathitt County Water District (the "District"), files this Application pursuant to KRS 278.020(1) and KAR 5:001, and all other applicable laws and regulations, and requests that the Kentucky Public Service Commission (the "Commission") granting the District a Certificate of Public Convenience and Necessity to construct a water system improvements project. In support of this Application, and in compliance with the rules and regulations of the Commission, the District states as follows:

1. The District was established in accordance with the provisions of Chapter 74 of the Kentucky Revised Statutes pursuant to an Order of the County Judge/Executive of Breathitt County, which Order is on file in the County Court Order Books in the office of the Clerk of Breathitt County, Kentucky. The District is now, and has been since its inception, regulated by the Commission, and all records and proceedings of the Commission with reference to the District are

incorporated in this Application by reference. The District does not have any Articles of Incorporation due to the fact that it is a statutory entity.

2. The governing body of the District is its Board of Commissioners which is a public body corporate, with power to make contracts in furtherance of its lawful and proper purpose as provided for in KRS 74.070 and all applicable law and regulations.

3. The mailing address of the District is as follows:

Breathitt County Water District  
c/o Mr. Estill McIntosh, Superintendent  
1137 Main Street  
Jackson, Kentucky 41339  
Telephone: (606) 666-3800  
Fax: (606) 666-2860  
Email: [breathittwater@yahoo.com](mailto:breathittwater@yahoo.com)

4. A general description of the District's water system property, together with a statement of the original cost, is contained in the District's Annual Report for 2015 which is on file with the Commission. The Annual Report is incorporated herein by reference.

5. Pursuant to 807 KAR 5:001, Section 15 - Applications for Certificates of Public Convenience and Necessity, the District hereby responds as follows:

- (i) Section 15(2)(a): Facts Relied Upon to Show Public Necessity: The proposed water improvements project (hereinafter the "Project") and the need for the Project is described in **Exhibit "A"** attached hereto.
- (ii) Section 15(2)(b): Copies of Permits: Required permits include a Kentucky Division of Water Construction Permit and Kentucky Transportation Cabinet Encroachment permit. Copies of both required permits are attached hereto as **Exhibit "B"**.




- (iii) Section 15(2)(c): Description of Proposed Location or Route. A description of the proposed location and routes of the construction are shown on the maps being filed herewith. The proposed Project will not compete with any other public utilities and will not result in any wasteful duplication.
  - (iv) Section 15(2)(d)(1) and (2): Maps to Suitable Scale and Plans and Specifications: two paper maps showing the location and route of the proposed Project are included with this Application. Also the Plans and Specifications in .pdf format on electronic storage medium are being filed with this Application.
  - (v) Section 15(2)(e) Financing: The District is financing the Project with the proceeds of an Abandoned Mine Lands grant in the amount of \$3,000,000 (see the Memorandum of Agreement attached hereto as **Exhibit "C"**).
  - (vi) Section 15(2)(f) Statement of Estimated Annual Cost of Operation: the proposed annual production and operation costs after the Project is placed in service are attached hereto as **Exhibit "D"**).
- 6. Certified copies of the bid tabulations for the Project and the Engineer's letter as to explanation of bid award on Contract #2 are attached hereto as **Exhibit "E"**.
  - 7. Final Project Budget is attached hereto as **Exhibit "F"**.
  - 8. No rate adjustment will be necessary.


**WHEREFORE**, the District respectfully requests that the Commission take the following actions:

- A. Grant the District a Certificate of Public Convenience and Necessity permitting the District to construct the Project; and
- B. Grant the District any other relief to which said District is entitled.

Breathitt County Water District

By   
Bobby Thorpe, Jr., Chairman  
1137 Main Street  
Jackson, Kentucky 41339  
Telephone: (606) 666-3800  
Fax: (606) 666-2860  
Email: [breathittwater@yahoo.com](mailto:breathittwater@yahoo.com)

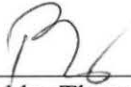
Rubin & Hays

By   
W. Randall Jones  
Kentucky Home Trust Building  
450 South Third Street  
Louisville, Kentucky 40202  
Phone: (502) 569-7525  
Fax: (502) 569-7555  
Counsel for Breathitt County Water District  
[wrjones@rubinhays.com](mailto:wrjones@rubinhays.com)

STATE OF KENTUCKY                    )  
  ) SS  
COUNTY OF BREATHITT                )

The affiant, Bobby Thorpe, Jr., being first duly sworn, states: That is the Chairman of the Breathitt County Water District, the Applicant in this case; that he has read the foregoing Application and has noted the contents thereof; that the same are true of his own knowledge and belief, except as to matters which are herein stated to be based on information or belief, and that these matters, believes to be true and correct.

IN TESTIMONY WHEREOF, witness the signature of the undersigned on the 11<sup>th</sup> day of November, 2016.

  
\_\_\_\_\_  
Bobby Thorpe, Jr., Chairman

SUBSCRIBED, SWORN TO AND ACKNOWLEDGED before me by Bobby Thorpe, Jr., Chairman of the Breathitt County Water District on this the 11<sup>th</sup> day of November, 2016.

My Commission expires: 12-28-2018.

  
\_\_\_\_\_  
Notary Public

Notary ID#: 523974

## **Breathitt County Water District**

### **KY 315/28 Waterline Extension Phase 1**

#### **Project Description**

Work is to include installation of approximately 17,680 LF of 8-inch, 22,320 LF of 6-inch, 20,640 LF of 4-inch, 6,800 LF of 3-inch and 3,630 LF of 2-inch waterline with 3,100 LF of various sized directionally drilled creek/river crossings and other appurtenances, Installation of two (2) duplex pump stations, a pressure reducing vault, a hydro pneumatic pump station, telemetry and electrical service and 117 service connections and all appurtenances. Work also includes installation of a 109,000 gallon ground storage tank – KY 315 and a 33,000 gallon ground storage tank – KY 28, Valve Vault at KY 315 tank, Access Road improvement, Excavation, final grading, site restoration and Fencing. The public necessity is to provide safe and reliable drinking water to the residents in the project area. There are no other existing water utilities in this area, therefore this project will not cause duplication of service. All extensions are connections made to existing BCWD waterlines.

#### **Funding**

That Applicant proposes to finance the construction of the Project through a Grant per a Memorandum of Agreement between the Commonwealth of Kentucky Energy and Environment Cabinet and Breathitt county Water District and administered by the Kentucky Division of Abandoned Mine Lands (AML). The funding grant is in the amount of \$3,000,000.

#### **Construction**

Setting out the date of December 1, 2016, when it is anticipated that construction will begin and May 31, 2017 when it is anticipated to end.

#### **Contact**

Estill McIntosh, 1137 Main Street, Jackson, KY 41339  
606-666-3800 ext 250, [Breathittwater@yahoo.com](mailto:Breathittwater@yahoo.com)  
Bobby Thorpe, Jr, Chairperson

MATTHEW G. BEVIN  
GOVERNOR



CHARLES G. SNAVELY  
SECRETARY

**ENERGY AND ENVIRONMENT CABINET**  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

AARON B. KEATLEY  
COMMISSIONER

300 SOWER BOULEVARD  
FRANKFORT, KENTUCKY 40601

November 17, 2016

Mr. Bobby Thorpe  
Breathitt Co Water District  
1137 Main St STE 305  
Jackson (Breathitt), KY 41339

RE: Breathitt Co Water District  
AI # 45303, APE20160001  
PWSID # 0131012-16-001  
KY 315/28 Waterline Extension Project  
Resubmittal  
Breathitt County, KY

Dear Mr. Thorpe:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 7,300 LF of 8" PVC, 10,380 LF of 8" DI, 23,690 LF of 6" PVC, 6,000 LF of 6" DI, 24,490 LF of 4" PVC, 250 LF of 4" DI, 6,800 LF of 3" PVC, 3,630 LF of 2" PVC water line, a pump station with 2 pumps at 350 gpm with 460' of TDH and second hydro pneumatic pump station at 15 gpm with 160' of TDH, one 109,000 gallon finished water storage tank, and a second 33,000 gallon finished water storage tank. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of this date with the requirements contained in the attached construction permit.

If you have any questions concerning this project, please contact me at 502-782-6955.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Goode".

Greg Goode, P.E.  
Engineering Section  
Water Infrastructure Branch  
Division of Water

Enclosures

C: Nesbitt Engineering Inc  
Breathitt County Health Department  
Division of Plumbing



## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

Activity ID No.:APE20160001

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**PORT0000000045 (Waterline Extension) 7,300 LF of 8" PVC, 10, 380 LF of 8" DI, 23,690 LF of 6" PVC, 6,000 LF of 6" DI, 24,490 LF of 4" PVC, 250 LF of 4" DI, 6,800 LF of 3" PVC, 3,630 LF of 2" PVC:**

### Narrative Requirements:

Condition No.	Condition
T-1	Construction of this project shall not result in the water system's inability to supply consistent water service in compliance with 401 KAR 8:010 through 8:600. [401 KAR 8:100 Section 5]
T-2	The public water system shall not implement a change to the approved plans without the prior written approval of the cabinet. [401 KAR 8:100 Section 4(3)]
T-3	A proposed change to the approved plans affecting sanitary features of design shall be submitted to the cabinet for approval in accordance with Section 2 of this administrative regulation. [401 KAR 8:100 Section 4(2)]
T-4	During construction, a set of approved plans and specifications shall be available at the job site. Construction shall be performed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 3(1)]
T-5	Unless construction begins within two (2) years from the date of approval of the final plans and specifications, the approval shall expire. [401 KAR 8:100 Section 3(3)]
T-6	Upon completion of construction, a professional engineer shall certify in writing that the project has been completed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 4(1)]
T-7	The system shall be designed to maintain a minimum pressure of 20 psi at ground level at all points in the distribution system under all conditions of flow. [Recommended Standards for Water Works 8.2.1, Drinking Water General Design Criteria IV.1.a]
T-8	Water lines should be hydraulically capable of a flow velocity of 2.5 ft/s while maintaining a pressure of at least 20 psi. [Drinking Water General Design Criteria IV.1.b]
T-9	The normal working pressure in the distribution system at the service connection shall not be less than 30 psi under peak demand flow conditions. Peak demand is defined as the maximum customer water usage rate, expressed in gallons per minute (gpm), in the pressure zone of interest during a 24 hour (diurnal) time period. [Drinking Water General Design Criteria IV.1.d]
T-10	When static pressure exceeds 150 psi, pressure reducing devices shall be provided on mains or as part of the meter setting on individual service lines in the distribution system. [Drinking Water General Design Criteria IV.1.c]
T-11	The minimum size of water main in the distribution system where fire protection is not to be provided should be a minimum of three (3) inch diameter. Any departure from minimum requirements shall be justified by hydraulic analysis and future water use, and can be considered only in special circumstances. [Recommended Standards for Water Works 8.2.2, Drinking Water General Design Criteria IV.2.b]

## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

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**PORT0000000045 (Waterline Extension) 7,300 LF of 8" PVC, 10, 380 LF of 8" DI, 23,690 LF of 6" PVC, 6,000 LF of 6" DI, 24,490 LF of 4" PVC, 250 LF of 4" DI, 6,800 LF of 3" PVC, 3,630 LF of 2" PVC:**

### Narrative Requirements:

Condition No.	Condition
T-12	Water mains not designed to carry fire-flows shall not have fire hydrants connected to them. [Recommended Standards for Water Works 8.4.1.b]
T-13	Flushing devices should be sized to provide flows which will give a velocity of at least 2.5 feet per second in the water main being flushed. [Recommended Standards for Water Works 8.2.4.b, Recommended Standards for Water Works 8.4.1.b]
T-14	No flushing device shall be directly connected to any sewer. [Recommended Standards for Water Works 8.2.4.b, Recommended Standards for Water Works 8.4.1.b]
T-15	Pipe shall be constructed to a depth providing a minimum cover of 30 inches to top of pipe. [Drinking Water General Design Criteria IV.3.a]
T-16	Water mains shall be covered with sufficient earth or other insulation to prevent freezing. [Recommended Standards for Water Works 8.7]
T-17	A continuous and uniform bedding shall be provided in the trench for all buried pipe. Backfill material shall be tamped in layers around the pipe and to a sufficient height above the pipe to adequately support and protect the pipe. Stones found in the trench shall be removed for a depth of at least six inches below the bottom of the pipe. [Recommended Standards for Water Works 8.7]
T-18	Water line installation shall incorporate the provisions of the AWWA standards and/or manufacturer's recommended installation procedures. [Recommended Standards for Water Works 8.7]
T-19	All materials used for the rehabilitation of water mains shall meet ANSI/NSF standards. [Recommended Standards for Water Works 8.1]
T-20	Packing and jointing materials used in the joints of pipe shall meet the standards of AWWA and the reviewing authority. [Recommended Standards for Water Works 8.1]
T-21	All tees, bends, plugs and hydrants shall be provided with reaction blocking, tie rods or joints designed to prevent movement. [Recommended Standards for Water Works 8.7]
T-22	All materials including pipe, fittings, valves and fire hydrants shall conform to the latest standards issued by the ASTM, AWWA and ANSI/NSF, where such standards exist, and be acceptable to the Division of Water. [Recommended Standards for Water Works 8.1]
T-23	Water mains which have been used previously for conveying potable water may be reused provided they meet the above standards and have been restored practically to their original condition. [Recommended Standards for Water Works 8.1]



## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

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**PORT0000000045 (Waterline Extension) 7,300 LF of 8" PVC, 10, 380 LF of 8" DI, 23,690 LF of 6" PVC, 6,000 LF of 6" DI, 24,490 LF of 4" PVC, 250 LF of 4" DI, 6,800 LF of 3" PVC, 3,630 LF of 2" PVC:**

### Narrative Requirements:

Condition No.	Condition
T-24	Manufacturer approved transition joints shall be used between dissimilar piping materials. [Recommended Standards for Water Works 8.1]
T-25	Pipes and pipe fittings containing more than 8% lead shall not be used. All products shall comply with ANSI/NSF standards. [Recommended Standards for Water Works 8.1]
T-26	The minimum size of water main which provides for fire protection and serving fire hydrants shall be six inch diameter. [Drinking Water General Design Criteria IV.2.a, Recommended Standards for Water Works 8.2]
T-27	Gaskets containing lead shall not be used. Repairs to lead?joint pipe shall be made using alternative methods. [Recommended Standards for Water Works 8.1]
T-28	Pipe materials shall be selected to protect against both internal and external pipe corrosion. [Recommended Standards for Water Works 8.1]
T-29	Dead end mains shall be equipped with a means to provide adequate flushing. [Recommended Standards for Water Works 8.2]
T-30	The hydrant lead shall be a minimum of six inches in diameter. Auxiliary valves shall be installed on all hydrant leads. [Recommended Standards for Water Works 8.4.3]
T-31	A sufficient number of valves shall be provided on water mains to minimize inconvenience and sanitary hazards during repairs. [Recommended Standards for Water Works 8.3]
T-32	Wherever possible, chambers, pits or manholes containing valves, blow?offs, meters, or other such appurtenances to a distribution system, shall not be located in areas subject to flooding or in areas of high groundwater. Such chambers or pits should drain to the ground surface, or to absorption pits underground. The chambers, pits and manholes shall not connect directly to any storm drain or sanitary sewer. Blow?offs shall not connect directly to any storm drain or sanitary sewer. [Recommended Standards for Water Works 8.6]
T-33	At high points in water mains where air can accumulate provisions shall be made to remove the air by means of air relief valves. [Recommended Standards for Water Works 8.5.1]
T-34	Automatic air relief valves shall not be used in situations where flooding of the manhole or chamber may occur. [Recommended Standards for Water Works 8.5.1]

## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

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**PORT0000000045 (Waterline Extension) 7,300 LF of 8" PVC, 10, 380 LF of 8" DI, 23,690 LF of 6" PVC, 6,000 LF of 6" DI, 24,490 LF of 4" PVC, 250 LF of 4" DI, 6,800 LF of 3" PVC, 3,630 LF of 2" PVC:**

### Narrative Requirements:

Condition No.	Condition
T-35	The open end of an air relief pipe from automatic valves shall be extended to at least one foot above grade and provided with a screened, downward-facing elbow. [Recommended Standards for Water Works 8.5.2.c]
T-36	Discharge piping from air relief valves shall not connect directly to any storm drain, storm sewer, or sanitary sewer. [Recommended Standards for Water Works 8.5.2.d]
T-37	Water pipe shall be constructed with a lateral separation of 10 feet or more from any gravity sanitary or combined sewer measured edge to edge where practical. If not practical a variance may be requested to allow the water pipe to be installed closer to the gravity sanitary or combined sewer provided the water pipe is laid in a separate trench or undisturbed shelf located on one side of the sewer with the bottom of the pipe at least 18 inches above the top of the gravity sanitary or combined sewer pipe. [Drinking Water General Design Criteria IV.3.b]
T-38	Water lines crossing sanitary, combined or storm sewers shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sanitary, combined or storm sewer with preference to the water main located above the sanitary, combined or storm sewer. [Drinking Water General Design Criteria IV.3.c]
T-39	At crossings, one full length of water pipe shall be located so both joints will be as far from the sewer as possible. [Recommended Standards for Water Works 8.8.3.b]
T-40	There shall be no connection between the distribution system and any pipes, pumps, hydrants, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into the system. [Recommended Standards for Water Works 8.10.1]
T-41	Water utilities shall have a cross connection program conforming to 401 KAR 8. [Recommended Standards for Water Works 8.10.1]
T-42	Installed pipe shall be pressure tested and leakage tested in accordance with the appropriate AWWA Standards. [Recommended Standards for Water Works 8.7.6]
T-43	New, cleaned and repaired water mains shall be disinfected in accordance with AWWA Standard C651. The specifications shall include detailed procedures for the adequate flushing, disinfection, and microbiological testing of all water mains. In an emergency or unusual situation, the disinfection procedure shall be discussed with the Division of Water. [Recommended Standards for Water Works 8.7.7]
T-44	Valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair; the valves shall be easily accessible, and not subject to flooding for pipes crossing underwater. [Recommended Standards for Water Works 8.9.2.b]

## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

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**PORT0000000045 (Waterline Extension) 7,300 LF of 8" PVC, 10, 380 LF of 8" DI, 23,690 LF of 6" PVC, 6,000 LF of 6" DI, 24,490 LF of 4" PVC, 250 LF of 4" DI, 6,800 LF of 3" PVC, 3,630 LF of 2" PVC:**

### Narrative Requirements:

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Condition No.	Condition
T-45	Permanent taps or other provisions to allow insertion of a small meter to determine leakage and obtain water samples on each side of the valve closest to the supply source for pipes crossing. [Recommended Standards for Water Works 8.9.2.c]

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## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

Activity ID No.:APE20160001

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**PORT0000000046 (Pump Stations) One pump station with 2 pumps at 350 gpm with 460' of TDH and second hydro pneumatic pump station at 15 gpm with 160' of TDH:**

### Narrative Requirements:

Condition No.	Condition
T-1	Pumping facilities shall be elevated to a minimum of three feet above the 100 year flood elevation, or three feet above the highest recorded flood elevation, whichever is higher, or protected to such elevations, [Recommended Standards for Water Works 6.1.1.a]
T-2	Pumping facilities shall be readily accessible at all times. [Recommended Standards for Water Works 6.1.1.b]
T-3	Pumping facilities shall be graded around the station so as to lead surface drainage away from the station. [Recommended Standards for Water Works 6.1.1.c]
T-4	Pumping facilities shall be protected to prevent vandalism and entrance by animals or unauthorized persons. [Recommended Standards for Water Works 6.1.1.d]
T-5	Raw and finished pump stations shall have adequate space for the installation of additional units if needed, and for the safe servicing of all equipment. [Recommended Standards for Water Works 6.2.a]
T-6	Raw and finished pump stations shall have floors that slope to a suitable drain. [Recommended Standards for Water Works 6.2.e]
T-7	Raw and finished pump stations shall provide a suitable outlet for drainage from pump glands without discharging onto the floor. [Recommended Standards for Water Works 6.2.f]
T-8	At least two pumping units shall be provided. With any pump out of service, the remaining pump or pumps shall be capable of providing the maximum pumping demand of the system. [Recommended Standards for Water Works 6.3]
T-9	Pumps shall have ample capacity to supply the peak demand against the required distribution system pressure without dangerous overloading, [Recommended Standards for Water Works 6.3.a]
T-10	Pumps shall be driven by prime movers able to meet the maximum horsepower condition of the pumps. [Recommended Standards for Water Works 6.3.b]
T-11	Pumps shall be provided with readily available spare parts and tools. [Recommended Standards for Water Works 6.3.c]
T-12	Pump stations shall have indicating, totalizing, and recording metering of the total water pumped. [Recommended Standards for Water Works 6.6.3]
T-13	Each pump shall have a standard pressure gauge on its discharge line. [Recommended Standards for Water Works 6.6.3.a]

## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

Activity ID No.:APE20160001

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**PORT0000000046 (Pump Stations) One pump station with 2 pumps at 350 gpm with 460' of TDH and second hydro pneumatic pump station at 15 gpm with 160' of TDH:**

### Narrative Requirements:

Condition No.	Condition
T-14	Each pump shall have a compound gauge on its suction line. [Recommended Standards for Water Works 6.6.3.b]
T-15	Where two or more pumps are installed, provision shall be made for alternation. [Recommended Standards for Water Works 6.6.5]
T-16	Provisions shall be made to prevent energizing the pump motor in the event of a backspin cycle. [Recommended Standards for Water Works 6.6.5]
T-17	Electrical controls shall be located above grade. [Recommended Standards for Water Works 6.6.5]
T-18	Equipment shall be provided or other arrangements made to prevent surge pressures from activating controls which switch on pumps or activate other equipment outside the normal design cycle of operation. [Recommended Standards for Water Works 6.6.5]
T-19	Pump stations shall have a power supply provided from at least two independent sources or a standby or an auxiliary source. [Recommended Standards for Water Works 6.6.6]
T-20	If standby power is provided by onsite generators or engines, the fuel storage and fuel line must be designed to protect the water supply from contamination. [Recommended Standards for Water Works 6.6.6]
T-21	All lubricants which come into contact with the potable water shall be certified for conformance to ANSI/NSF Standard 60. [Recommended Standards for Water Works 6.6.8]
T-22	Booster pumps stations shall have a bypass available. [Recommended Standards for Water Works 6.4.e]
T-23	Each booster pumping station shall contain not less than two pumps with capacities such that peak demand can be satisfied with the largest pump out of service. [Recommended Standards for Water Works 6.4.1]
T-24	All booster pumping stations shall be fitted with a flow rate indicating and totalizer meter. [Recommended Standards for Water Works 6.4.2]
T-25	Inline booster pumps shall be accessible for servicing and repairs. [Recommended Standards for Water Works 6.4.3]

## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

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**PORT0000000046 (Pump Stations) One pump station with 2 pumps at 350 gpm with 460' of TDH and second hydro pneumatic pump station at 15 gpm with 160' of TDH:**

### Narrative Requirements:

Condition No.	Condition
T-26	Each pump must have an isolation valve on the intake and discharge side of the pump to permit satisfactory operation, maintenance and repair of the equipment. [Recommended Standards for Water Works 6.6.1]
T-27	Each pump shall have a positive acting check valve on the discharge side between the pump and the shut?off valve. [Recommended Standards for Water Works 6.6.1]
T-28	Pump station piping shall be designed so that the friction losses will be minimized, not be subject to contamination, have watertight joints, be protected against surge or water hammer with suitable restraints when necessary, and be such that each pump has an individual suction line or the lines shall be manifolded that they will insure similar hydraulic and operating conditions. [Recommended Standards for Water Works 6.6.2]
T-29	Booster pumps taking suction from storage tanks shall be provided adequate net positive suction head. [Recommended Standards for Water Works 6.4.b]
T-30	Booster pumps shall controlled so that automatic shutoff or low pressure controllers maintain at least 20 psi in the suction line under all operating conditions. [Recommended Standards for Water Works 6.4.c]
T-31	Booster pumps taking suction from ground storage tanks shall be equipped with automatic shutoffs or low pressure controllers. [Recommended Standards for Water Works 6.4.c]
T-32	All automatic pump stations should be provided with automatic signaling apparatus which will report when the station is out of service. [Recommended Standards for Water Works 6.5]
T-33	All remote controlled stations shall be electrically operated and controlled and shall have signaling apparatus of proven performance. [Recommended Standards for Water Works 6.5]
T-34	Raw and finished pump stations shall have underground structure waterproofed. [Recommended Standards for Water Works 6.2.d]

## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

Activity ID No.:APE20160001

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**STOR0000000026 (Ground Storage Tank) One 109,000 gallon finished water storage tank, and a second 33,000 gallon finished water storage tank:**

### Narrative Requirements:

Condition No.	Condition
T-1	Water storage tanks shall have a minimum 100% turnover rate of once per 72 hours. [Drinking Water General Design Criteria IV.6.a]
T-2	Minimum water level for all gravity storage tanks shall maintain a minimum design pressure of 30 psi for all potential points of use supplied by the tank. [Drinking Water General Design Criteria IV.6.b]
T-3	Separate inlet and outlet is required on storage tanks; and the inlet has to be in the upper half of the tank (unless there is a separate mixing system). [Drinking Water General Design Criteria IV.6.c]
T-4	The maximum variation between high and low levels in storage structures providing pressure to a distribution system should not exceed 30 feet. [Recommended Standards for Water Works 7.3.1]
T-5	Finished water storage structures which provide pressure directly to the distribution system shall be designed so they can be isolated from the distribution system and drained for cleaning or maintenance without causing a loss of pressure in the distribution system. [Recommended Standards for Water Works 7.3.2]
T-6	The storage structure drain shall discharge to the ground surface with no direct connection to a sewer or storm drain. [Recommended Standards for Water Works 7.3.2]
T-7	Adequate controls shall be provided to maintain levels in distribution system storage structures. Level indicating devices should be provided at a central location. [Recommended Standards for Water Works 7.3.3]
T-8	The minimum storage capacity (or equivalent capacity) for systems not providing fire protection shall be equal to the average daily consumption. [Recommended Standards for Water Works 7.0.1.b]
T-9	The system should be designed to facilitate turnover of water in the reservoir. [Recommended Standards for Water Works 7.0.6]
T-10	Excessive storage capacity should be avoided to prevent potential water quality deterioration problems. [Recommended Standards for Water Works 7.0.1.c]
T-11	The overflow pipe shall be of sufficient diameter to permit waste of water in excess of the filling rate. [Recommended Standards for Water Works 7.0.7.d]
T-12	Finished water storage structures shall be designed with reasonably convenient access to the interior for cleaning and maintenance. [Recommended Standards for Water Works 7.0.8]



## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

Activity ID No.:APE20160001

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**STOR0000000026 (Ground Storage Tank) One 109,000 gallon finished water storage tank, and a second 33,000 gallon finished water storage tank:**

### Narrative Requirements:

Condition No.	Condition
T-13	Finished water storage structures shall be vented. Vents shall prevent the entrance of surface water, rainwater, bird, and animals. The overflow pipe shall not be considered a vent. Open construction between the sidewall and roof is not permissible. [Recommended Standards for Water Works 7.0.9]
T-14	Finished water storage structures and their appurtenances, especially the riser pipes, overflows, and vents, shall be designed to prevent freezing. Equipment used for freeze protection that will come into contact with the potable water shall meet ANSI/NSF Standard 61. [Recommended Standards for Water Works 7.0.13]
T-15	If a flapper valve is utilized, a screen shall be provide inside the valve. Provisions must be included to prevent the flapper from freezing shut. [Recommended Standards for Water Works 7.0.7.e]
T-16	The roof and sidewalls of all water storage structures must be watertight with no openings except properly constructed vents, manholes, overflows, risers, drains, pump mountings, control ports, or piping for inflow and outflow. [Recommended Standards for Water Works 7.0.10]
T-17	Any pipes running through the roof or sidewall of a metal storage structure must be welded, or properly gasketed. In concrete tanks, these pipes shall be connected to standard wall castings which were poured in place during the forming of the concrete. [Recommended Standards for Water Works 7.0.10.a]
T-18	Openings in the roof of a storage structure designed to accommodate control apparatus or pump columns, shall be curbed and sleeved with proper additional shielding to prevent contamination from surface or floor drainage. [Recommended Standards for Water Works 7.0.10.b]
T-19	Valves and controls should be located outside the storage structure so that the valve stems and similar projections will not pass through the roof or top of the reservoir. [Recommended Standards for Water Works 7.0.10.c]
T-20	Every catwalk over finished water in a storage structure shall have a solid floor with sealed raised edges, designed to prevent contamination from shoe scrapings and dirt. [Recommended Standards for Water Works 7.0.14]
T-21	The discharge pipes from water storage structures shall be located in a manner that will prevent the flow of sediment into the distribution system. [Recommended Standards for Water Works 7.0.15]
T-22	Smooth-nosed sampling tap(s) shall be provided to facilitate collection of water samples for both bacteriological and chemical analyses. The sample tap(s) shall be easily accessible. [Recommended Standards for Water Works 7.0.19]
T-23	Sewers, drains, standing water, and similar sources of possible contamination must be kept at least 50 feet from water storage facilities. Gravity sewers constructed of water main quality pipe, pressure tested in place without leakage, may be used at distances greater than 20 feet but less than 50 feet. [Recommended Standards for Water Works 7.0.2.c]

## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

Activity ID No.:APE20160001

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**STOR0000000026 (Ground Storage Tank) One 109,000 gallon finished water storage tank, and a second 33,000 gallon finished water storage tank:**

### Narrative Requirements:

Condition No.	Condition
T-24	The roof of the storage structure shall be well drained. Downspout pipes shall not enter or pass through the reservoir. [Recommended Standards for Water Works 7.0.10.d]
T-25	Porous material, including wood and concrete block shall not be used for potable water contact applications. [Recommended Standards for Water Works 7.0.11]
T-26	All finished water storage structures shall have suitable watertight roofs which exclude birds, animals, insects, and excessive dust. [Recommended Standards for Water Works 7.0.3]
T-27	Fencing, locks on access manholes, and other necessary precautions shall be provided to prevent trespassing, vandalism, and sabotage. [Recommended Standards for Water Works 7.0.4]
T-28	Ladders, ladder guards, balcony railings, and safely located entrance hatches shall be provided where applicable. [Recommended Standards for Water Works 7.0.12.a]
T-29	All water storage structures shall be provided with an overflow which is brought down to an elevation between 12 and 24 inches above the ground surface, and discharges over a drainage inlet structure or a splash plate. All overflow pipes shall be located so that any discharge is visible. [Recommended Standards for Water Works 7.0.7]
T-30	No drain on a water storage structure may have a direct connection to a sewer or storm drain. [Recommended Standards for Water Works 7.0.5]
T-31	The design shall allow draining the storage facility for cleaning or maintenance without causing loss of pressure in the distribution system. [Recommended Standards for Water Works 7.0.5]
T-32	No overflow may be connected directly to a sewer or a storm drain. [Recommended Standards for Water Works 7.0.7]
T-33	Proper protection shall be given to metal surfaces by paints or other protective coatings, by cathodic protective devices, or by both. [Recommended Standards for Water Works 7.0.17]
T-34	Paint systems shall meet ANSI/NSF standard 61. [Recommended Standards for Water Works 7.0.17.a]
T-35	Interior paint must be applied, cured, and used in a manner consistent with the ANSI/NSF approval. [Recommended Standards for Water Works 7.0.17.a]

## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

Activity ID No.:APE20160001

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**STOR0000000026 (Ground Storage Tank) One 109,000 gallon finished water storage tank, and a second 33,000 gallon finished water storage tank:**

### Narrative Requirements:

Condition No.	Condition
T-36	After curing, the coating shall not transfer any substance to the water which will be toxic or cause taste or odor problems. [Recommended Standards for Water Works 7.0.17.a]
T-37	Wax coatings for the tank interior shall not be used on new tanks. [Recommended Standards for Water Works 7.0.17.b]
T-38	Old wax coating must be completely removed before using another tank coating. [Recommended Standards for Water Works 7.0.17.b]
T-39	Finished water storage structures shall be disinfected in accordance with AWWA Standard C652. Two or more successive sets of samples, taken at 24-hour intervals, shall indicate microbiologically satisfactory water before the facility is placed into operation. [Recommended Standards for Water Works 7.0.18.a]
T-40	The disinfection procedure specified in AWWA Standard C652 chlorination method 3, section 4.3 which allows use of the highly chlorinated water held in the storage tank for disinfection purposes, is prohibited unless the initial heavily chlorinated water is properly disposed. [Recommended Standards for Water Works 7.0.18.c]
T-41	The overflow for a ground-level storage reservoir shall open downward and be screened with twenty-four mesh non-corrodible screen. [Recommended Standards for Water Works 7.0.7.b]
T-42	Each ground level structure manhole shall be elevated at least 24 inches above the top of the tank or covering sod, whichever is higher. [Recommended Standards for Water Works 7.0.8.2]
T-43	Each ground level structure manhole shall be fitted with a solid water tight cover which overlaps a framed opening and extends down around the frame at least two inches. The frame shall be at least four inches high. Each cover shall be hinged on one side, and shall have a locking device. [Recommended Standards for Water Works 7.0.8.2]
T-44	Ground level structure vents shall open downward with the opening at least 24 inches above the roof or sod and covered with twenty-four mesh non-corrodible screen. [Recommended Standards for Water Works 7.0.9.d]
T-45	The area surrounding a ground-level structure shall be graded in a manner that will prevent surface water from standing within 50 feet of it. [Recommended Standards for Water Works 7.0.16]
T-46	The bottom of ground level reservoirs and standpipes should be placed at the normal ground surface and shall be above the 100 Year Flood or the highest flood of record. [Recommended Standards for Water Works 7.0.2.b]

## Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

Activity ID No.:APE20160001

Page 13 of 13

**STOR0000000026 (Ground Storage Tank) One 109,000 gallon finished water storage tank, and a second 33,000 gallon finished water storage tank:**

### Narrative Requirements:

Condition No.	Condition
T-47	The roof of concrete reservoirs with earthen cover shall be sloped to facilitate drainage. [Recommended Standards for Water Works 7.0.10.e]
T-48	If the bottom elevation of a storage reservoir must be below normal ground surface, it shall be placed above the groundwater table. At least 50 percent of the water stored should be above grade. [Recommended Standards for Water Works 7.0.2.c]
T-49	The top of a partially buried storage structure shall not be less than two feet above normal ground surface. [Recommended Standards for Water Works 7.0.2.d]
T-50	If a water circulation system is used, it is recommended that the circulation pipe be located separately from the riser pipe. [Recommended Standards for Water Works 7.0.13]
T-51	Reservoirs with pre-cast concrete roof structures must be made watertight with the use of a waterproof membrane or similar product. [Recommended Standards for Water Works 7.0.10.f]

**Steen, Matt**

---

**From:** Potts, Greg (KYTC-D10) <greg.potts@ky.gov>  
**Sent:** Tuesday, January 26, 2016 8:19 AM  
**To:** Steen, Matt  
**Subject:** RE: Breathitt county water district, KY 315/28 Waterline

Yes, it has been approved upon pending receipt of bond in the amount of \$100,000. This email shall serve as notice. Please contact Breathitt County Water District. Thank You.

**From:** Steen, Matt [mailto:msteen@nei-ky.com]  
**Sent:** Monday, January 25, 2016 10:14 AM  
**To:** Potts, Greg (KYTC-D10)  
**Subject:** Breathitt county water district, KY 315/28 Waterline

Greg,  
Has the encroachment permit for the above project been approved pending contractor's bond?  
Thanks and let me know if you have any questions.

Matt Steen, Project Development Engineer  
Nesbitt Engineering Inc.  
Direct (859) 685-4523  
Cell (859) 559-2399



Kentucky Transportation  
Cabinet  
Department of Highways  
Permits Branch

TC 99-1 (A)  
8/2012  
Page 1 of 4

APPLICATION FOR ENCROACHMENT PERMIT

<b>Permittee Information</b>		<b>KYTC No.</b>	
Name: Breathitt County Water District		<b>Permit Information</b>	
Address: 1137 Main St		Address:	
		City: Jackson	
City: Jackson		State: KY	Zip:
State: KY	Zip: 41339	County: Breathitt	
Phone# 606-666-3800 ext 250		Route No. See Description	Mile-Point
Contact: Estill McIntosh		Longitude (X)	
Phone:	Cell:	Latitude (Y)	
Email: breathittwater@yahoo.com		<b>Information below to be filled out by KYTC</b>	
Contact:		<input type="checkbox"/> Air Right	<input type="checkbox"/> Entrance
Phone:	Cell:	<input type="checkbox"/> Utilities	<input type="checkbox"/> Other: _____
Email:			
		<input type="checkbox"/> Left	<input type="checkbox"/> Right <input type="checkbox"/> X-ing
<b>General Description of Work:</b>		Access:	<input type="checkbox"/> Full <input type="checkbox"/> Partial <input type="checkbox"/> by Permit

Install 8" waterline along KY 315 from mile-point 0.25 to mile-point 0.43  
Install 8" waterline along KY 315 from mile-point 0.00 to mile-point 0.08  
Install 8" & 6" waterline along KY 28 from mile-point 0.37 to mile-point 5.7  
Install 8" waterline along KY 1933 from mile-point 0.00 to mile-point 0.15  
Install 14" steel casing, bore & jack under KY 28 at mile-point 3.45  
Install 14" steel casing, bore & jack under KY 28 at mile-point 3.84  
Install 10.75" steel casing, bore & jack under KY 28 at mile-point 4.78  
Install 14" steel casing, bore & jack under KY 28 at mile-point 5  
Install 14" steel casing, bore & jack under KY 28 at mile-point 5.65  
Install 14" steel casing, bore & jack under KY 28 at mile-point 2.82  
Install 14" steel casing, bore & jack under KY 28 at mile-point 1.55  
Install 10.75" steel casing, bore & jack under KY 28 at mile-point 1.31  
Install 14" steel casing, bore & jack under KY 315 at mile-point 4.6  
Construct a pump station at KY 28 mile-point 3.45; 83d 29° 42.59' / 37d 23° 18.12"

THE UNDERSIGNED PERMITTEE(s) (being duly authorized representative or owner) DO AGREE TO ALL TERMS AND CONDITIONS ON THE TC 99-1 (A).

11/11/2016

Signature

Date

This is not a permit unless and until the permittee(s) receives an approved TC 99-1(B) from KYTC. This application will become void if not approved by the cancellation date. The cancellation date will be one year from the date the permittee submits their application.



## APPLICATION FOR ENCROACHMENT PERMIT

### TERMS AND CONDITIONS

1. The permit, including this application and all related and accompanying documents and drawings making up the permit, remains in effect and is binding upon the Applicant/Permittee, its successors and assigns, as long as the encroachment(s) exists and also until the permittee is finally relieved by the Department of Highways from all its obligations.
2. Applicant shall meet all requirements of the Clean Water Act if the project will disturb one acre or more, the applicant shall obtain a KPDES KYR10 Permit from the Kentucky Division of Water. All disturbed areas shall meet the requirements of the Department of Highway's Standard Specifications, Sections 212 and 213, as amended.
3. **INDEMNITY:**
  - A. **PERFORMANCE BOND:** The permittee shall provide to the Department a performance bond according to the Permits Manual, Section PE-203 as a guarantee of conformance with the Department's Encroachment Permit requirements.
  - B. **PAYMENT BOND:** At the discretion of the department, a payment bond will be required of the permittee to ensure payment of liquidated damages assessed to the permittee.
  - C. **LIABILITY INSURANCE:** Liability insurance will be required of the permittee (in an amount approved by the department) to cover all liabilities associated with the encroachment.
  - D. It shall be the responsibility of the permittee, its successors and assigns, to maintain all indemnities in full force and effect until the permittee is authorized to release the indemnity by the Department.
4. A copy of this application and all related documents making up the approved permit will be given to the applicant and shall be made readily available for review at the work site at all times.
5. Perpetual maintenance of the encroachment is the responsibility of the permittee, its successors and assigns, with the approval of the Department as required, unless otherwise stated.
6. Permittee, its successors and assigns, shall comply with and agrees to be bound by the requirements and terms of (a) this application and all related documents making up the approved permit, (b) by the Department's Permits Manual, and (c) by the Manual on Uniform Traffic Control Devices, both manuals as revised to and in effect on the date of issuance of the permit, all of which documents are made a part thereof by this reference. Compliance by the permittee, its successors and assigns, with subsequent revisions to applicable provisions of either manual or other policy of the Department may be made a condition of allowing the encroachment to persist under the permit.
7. Permittee agrees that this and any encroachment may be ordered removed by the Department at any time, and for any reason, upon thirty days written notice to the last known address of the applicant or to the address at the location of the encroachment. The permittee agrees that the cost of removing and of restoring the associated right-of-way is the responsibility of the permittee, its successors and assigns.
8. Permittee, its successors and assigns, agree that if the Department determines that motor vehicular safety deficiencies develop as a result of the installation or use of the encroachment, the permittee, its successors and assigns, shall provide and bear the expenses to adjust, relocate, or reconstruct the facilities, and/or add signs, auxiliary lanes, or other corrective measures reasonably deemed necessary by the Department within a reasonable time after receipt of a written notice of such deficiency. The period within which such adjustments, relocations, additions, modifications, and/or other corrective measures must be completed will be specified in the notice.





Kentucky Transportation Cabinet  
Department of Highways  
Permits Branch

TC 99-1 (A)  
8/2012  
Page 3 of 4

**APPLICATION FOR ENCROACHMENT PERMIT**

9. Where traffic signals are required as a condition of granting the requested permit or are thereafter required to correct motor vehicular safety deficiencies, as determined by the Department, the costs for signal equipment and installation(s) shall be borne by the permittee, its successors and assigns, and/or the Department in its reasonable discretion and only in accordance with the Department's current policy set forth in the Traffic Operations Manual and Permits Manual. Any modifications to the permittee's entrance necessary to accommodate signalization (including necessary easement(s) on private property) shall be the responsibility of the permittee, its successors and assigns, at no expense to the Department.

10. The requested encroachment shall not infringe on the frontage rights of an abutting owner without their written consent as hereinafter described. Each abutting owner shall express their consent, which shall be binding on their successors and assigns, by the submission of a notarized statement as follows, "I (we), \_\_\_\_\_, hereby consent to the granting of the permit requested by the applicant along Route \_\_\_\_\_, which permit does affect frontage rights along my (our) adjacent real property." By signature(s)

\_\_\_\_\_, subscribed and sworn by \_\_\_\_\_, on this date \_\_\_\_\_.

11. The permit, if approved, is subject to the agreement that it shall not interfere with any similar rights or permit(s) previously granted to any other party, except as otherwise provided by law.

12. Permittee shall include documentation which describes the facilities to be constructed. Permittee, its successors and assigns, agrees as a condition of the granting of the permit to construct and maintain any and all permitted facilities or other encroachments in strict accordance with the submitted and approved permit documentation and the policies and procedures of the Department. Permittee, its successors and assigns, shall not use facilities authorized herein in any manner contrary to that prescribed by the approved permit. Only normal usage as contemplated by the parties and by this application and routine maintenance are authorized by the permit.

13. Permittee, its successors and assigns, at all times from the date permitted work is commenced until such time as all permitted facilities or other encroachments are removed from the right-of-way and the right-of-way restored, shall defend, protect, indemnify and save harmless the Department from any and all liability claims and demands arising out of the work, encroachment, maintenance, or other undertaking by the permittee, its successors and assigns, related or undertaken pursuant to the granted permit, due to any claimed act or omission by the permittee, its servants, agents, employees, or contractors. This provision shall not inure to the benefit of any third party nor operate to enlarge any liability of the Department beyond that existing at common law or otherwise if this right to indemnity did not exist.

14. Upon a violation of any provision of the permit, or otherwise in its reasonable discretion, the Department may require additional action by the permittee, its successors and assigns, up to and including the removal of the encroachment and restoration of the right-of-way. In the event additional actions required by the Department under the permit are not undertaken as ordered and within a reasonable time, the Department may in its discretion cause those or other additional corrective actions to be undertaken and the Department may and shall recover the reasonable costs of those corrective actions from the permittee, its successors and assigns.

15. Permittee, its successors and assigns, shall use the encroachment premises in compliance with all requirements of federal law and regulation, including those imposed pursuant to Title VI of the Civil Right Act of 1964 (42 U.S.C. § 2000d et seq.) and the related regulations of the U.S. Department of Transportation in Title 49 C.F.R. Part 21, all as amended.



#### APPLICATION FOR ENCROACHMENT PERMIT

**16.** Permittee, its successors and assigns, agree that if the Department determines it is necessary for the facilities or other encroachment authorized by the permit to be removed, relocated or reconstructed in connection with the reconstruction, relocation or improvement of a highway, the Department may revoke permission for the encroachment to remain under the permit and may order its removal, relocation or reconstruction by the permittee, its successors and assigns, at the expense of the permittee, except where the Department is required by law to pay any or all of those costs.

**17.** Permittee agrees that the authorized permit is personal to the permittee and shall remain in effect until such time as (a) the permittee's rights to the adjoining real property to have benefitted from the requested encroachment have been relinquished, (b) until all permit obligations have been assumed by appropriate successors and assigns, and (c) unless and until a written release from permit obligations has been granted by the Department. The permit and its requirements shall also bind the real property to have benefitted from the requested encroachment to the extent permitted by law. The permit and the related encroachment become the responsibility of the successors and assigns of the permittee and the successors and assigns of each property owner benefitting from the encroachment, or the encroachment may not otherwise permissibly continue to be maintained on the right-of-way. (Does not apply to utility encroachments serving the general public.)

**18.** If work authorized by the permit is within a highway construction project in the construction phase, it shall be the responsibility of the permittee to make personal contact with the Department's Engineer on the project in order to coordinate all permitted work with the Department's prime contractor on the project.

**19.** This permit is not intended to, nor shall it, affect, alter or alleviate any requirement imposed upon the permittee, its successors and assigns, by any other agency.

**20.** Permittee, its successors and assigns, agrees to contain and maintain all dirt, mud, and other debris emanating from the encroachment away from the surrounding right-of-way and the travel way of the highway hereafter and at all times that its obligations under the permit remain in effect.



## Commonwealth of Kentucky

## PURCHASE ORDER

## IMPORTANT

Show Doc ID number on all packages, invoices and correspondence.

Doc Description: KY HWY 315 28 PHASE I 33AG

Doc ID No: PO2 128 1500000868 1

Procurement Folder: 3492229

Procurement Type: MOA/PSC Exception

Administered By: Beth Wilson

Cited Authority: KRS45A.690(1)(D)11

Telephone: 502-564-2141

Issued By: Beth Wilson

C O N T R A C T O R	BREATHITT COUNTY WATER DISTRICT	
	1137 MAIN STREET	
	SUITE 305	
	JACKSON	KY 41339
	US	

Effective From: 2014-07-01

Effective To: 2017-06-30

Line	CL Description	Due Date	Quantity	Unit Issue	Unit Price	Contract Amt	Total Price
1	HWY 315 & 28 PHASE I		0.00		0.00000	3,000,000.00	3,000,000.00

Extended Description

This Memorandum of Agreement (MOA) in the amount of Three Million Dollars (\$3,000,000.00) will provide funding for the Construction of waterlines in and along Longs Creek Road, Morris Fork Road and Freemon Fork Roads, in Breathitt County, Kentucky. The project will be designed to work with the existing lines or systems located in those designated AML eligible areas as listed above. This system, when constructed, will be operated by the Breathitt County Water District, in Breathitt County, Ky.

B I L L T O	257749	S H I P T O	257749
	DIVISION OF AML - FRANKFORT		DIVISION OF AML - FRANKFORT
	2521 OLD LAWRENCEBURG RD		2521 OLD LAWRENCEBURG RD
	FRANKFORT		FRANKFORT
	US		US

<b>Total Order Amount:</b>	3,000,000.00
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## KY Hwy 315-28 Phase I Water Supply Project

### Scope of Services:

WHEREAS, a groundwater contamination studies known as the "Ky. Hwy. 315-28 AML Groundwater Contamination Study" performed by the Kentucky Division of Abandoned Mine Lands (AML) personnel, found that groundwater in an area that included: Longs Creek Road (Ky. Hwy. 315-28), Morris Fork Road, and Freemon Fork Road and shall include any side hollows within those designated areas in Breathitt County, Kentucky have been impacted by AML-eligible mining; and

WHEREAS, the study identified impacts from pre-law and interim coal mining as factors contributing to the reported groundwater problem; and

WHEREAS, approximately 143 residences located in the study areas described above are within the affected area, and a vast majority of those were found to be AML-eligible and

WHEREAS, the Cabinet and Breathitt County Water District hereafter referred to as the "Sub Recipient" shall enter into a Master Agreement Order which will provide funds for, among other things, the preparation of plans and specifications, and construction of potable water service into the above-referenced affected area; and

WHEREAS, the Cabinet and the Sub Recipient wish to begin preparations for an extension of water service into the previously described area, to provide relief to the AML-affected residents;

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NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, and for other good and valuable consideration, the receipt, mutuality and sufficiency of which is hereby acknowledged by the parties to this AGREEMENT, the Cabinet and the Sub Recipient hereby COVENANT AND AGREE as follows:

#### **OBLIGATIONS OF THE CABINET**

The Cabinet shall undertake the following obligations:

When requested to do so, the Cabinet shall forward the written report of any archaeological survey to the Kentucky Heritage Council and the Office of State Archaeology, University of Kentucky, for review.

The Cabinet shall review and concur, if acceptable, with proposed contracts for preparation of plans and specifications prepared by: Nesbitt Engineering.

The Cabinet shall provide Request for Payment forms to the Sub Recipient.

The Cabinet shall participate in monthly progress meetings, as necessary, and review monthly project financial and status reports received from the Sub Recipient.

The Cabinet shall process payments to the Sub Recipient promptly after receipt of monthly Requests for Payment and progress reports.

The Cabinet shall participate in the final inspection of the Project.

The Cabinet shall provide an affidavit form entitled, "Campaign Finance Law Compliance" to be included in the bid documents.

The Cabinet has been awarded a Federal grant to be used toward completion of the

1500000868	Document Phase Draft	Document Description KY HWY 315 28 PHASE I 33AG	Page 4 of 19
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Project, and the following information pertains to that award:

Catalog of Federal Domestic Assistance (CFDA) Number: 15.252,

CFDA Title: Abandoned Mine Lands Reclamation (AMLR) Program,

Award Name and Grant Number: Pending Issuance Abandoned Mine Lands Grant,

33rd Annual Grant Year

Federal Awarding Agency: Office of Surface Mining Reclamations and Enforcement,  
Department of the Interior

Applicable Compliance Requirements: Additional compliance requirements for this  
Project are contained in Circular A-133, a copy of which the Cabinet has provided to the  
Sub Recipient.

#### **OBLIGATIONS OF THE SUB RECIPIENT**

The Sub Recipient shall undertake the following obligations:

The Sub Recipient has or shall provide to the Cabinet completed design drawings,  
technical specifications and other construction-related documents in both paper and  
electronic format.

The Sub Recipient has or shall submit the necessary contract documents to the

1500000868	Document Phase Draft	Document Description KY HWY 315 28 PHASE I 33AG	Page 5 of 19
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Cabinet's Division of Water for its review and approval in accordance with Chapter 224 of the Kentucky Revised Statutes. The Sub Recipient shall obtain all other required permits or certifications.

The Sub Recipient shall comply with the provisions of Section 106 of the National Historical Preservation Act of 1966, as amended (16 U.S.C.&470); Executive Order No. 11593, which relates to the identification and protection of historic properties; and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. && 469(a)(1) et. seq). In particular, an archaeological survey shall be performed for all areas, such as tank sites and pump stations, proposed for disturbance outside the highway rights-of-way, unless the site and access thereto have previously been disturbed. Three copies of the written report resulting from such an archaeological survey shall be submitted to the Cabinet's Division of Abandoned Mine Lands.

The Sub Recipient shall provide adequate construction supervision during the period of contract performance. The Sub Recipient shall provide a copy of any contract for construction supervision to the Cabinet's Division of Abandoned Mine Lands for review and approval prior to execution.

The Sub Recipient shall submit, on a monthly basis, a Project status report to the Cabinet's Division of Abandoned Mine Lands. The report shall include a financial report prepared while construction activities are ongoing. A "Request for Payment" form with an itemization of eligible Project costs attached shall accompany monthly reports. The



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County Judge Executive, Mayor, District Chairman, or his or her designee shall sign the Request for Payment forms.

The Sub Recipient shall establish a special Project identification code for all work performed under this AGREEMENT and records shall be maintained of all related work, whether performed by the Sub Recipient, other governmental agencies, or private companies.

The Sub Recipient shall establish a separate bank account of Federal receipts, and shall submit monthly bank statements to the Cabinet as follows: Kentucky Division of Abandoned Mine Lands 2521 Lawrenceburg Road, Frankfort, Kentucky 40601.

The Sub Recipient has or shall submit Tabulation of Construction Bids and any Notices of Award to the Division of Abandoned Mine Lands.

The Sub Recipient and any of its subcontractors shall maintain records in accordance with 30 C.F.R. 886.24, which is incorporated into this AGREEMENT by reference. Project-related records shall be available for inspections and audit by the Cabinet.

The Sub Recipient shall submit copies of Resident Inspector Daily Reports and Progress Meeting Minutes to the Division of Abandoned Mine Lands.

The Sub Recipient shall submit As-Built plans upon completion of the Project.

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The Sub Recipient shall submit a written "close-out" report for the Project citing any problems occurring during the performance period of the contract, and the resolution of any problems.

The Sub Recipient shall schedule a "final" inspection with the Cabinet upon completion of Project construction work.

The Sub Recipient shall procure all engineering or construction contracts in accordance with applicable state and federal laws and regulations. Specifically, The Sub Recipient agrees to comply with all pertinent provisions of KRS 45A, "Kentucky Model Procurement Code".

The Sub Recipient shall have an audit performed in accordance with OMB Circular A-133, "Audits of State and Local Governments". A copy of the audit shall be provided to the Cabinet within 30 days after completion of the audit, but no later than nine months after the end of the audit period.

The Sub Recipient shall obtain prior Cabinet approval for acquisition of equipment under this MOA. Requests for equipment acquisition authorization, other than that implicit to the water supply project, shall be submitted to: Division of Abandoned Mine Lands 2521 Lawrenceburg Road Frankfort, Kentucky 40601.

The Sub Recipient shall require all consultants and contractors to carry Workers Compensation and Public Liability Insurance, with single limit coverage of at least

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\$1,000,000.00. Proof of insurance shall be submitted to the Cabinet upon request.

The Sub Recipient has or shall submit the names of the low bidder for the construction contract and all subcontracts to the Cabinet so that the Cabinet may conduct an Office of Surface Mining Applicant Violator System review. The Cabinet may reject the low bidder or any subcontractor if the review identifies the low bidder or subcontractor as a mining violator. The Sub Recipient shall provide the Cabinet with a copy of each contractor/subcontractor's federal ID#, mailing address and phone number.

43CFR12 is incorporated by reference.

The Sub Recipient shall require each bidder to sign and submit to the Division of Abandoned Mine Lands a Campaign Finance Law Compliance affidavit in accordance with KRS 45A.110 and KRS 45A.115. Failure by the bidder to provide the affidavit shall be grounds for disqualification.

The Sub Recipient shall retain all records relating to the Project until such records are audited by the Cabinet, or for three years after submitting the close-out report to the federal Office of Surface Mining, whichever first occurs. The Sub Recipient shall advise the Cabinet in writing if the Project is to be administered by another governmental entity on its behalf and the Project-related records will be maintained at an alternate site.

The Sub Recipient shall cooperate fully with the Cabinet in order to facilitate the obligations set out in this AGREEMENT including, but not limited to, allowing the

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Cabinet to inspect all records pertaining to the project at any time.

The Sub Recipient shall complete the project no later than June 30, 2017, unless the Cabinet grants a written extension.

#### **MUTUALITY OF OBLIGATIONS**

The obligations imposed upon the parties to this AGREEMENT are for the benefit of the parties and the timely fulfillment of each and every obligation in accordance with this AGREEMENT is necessary. The failure of any party to fulfill any of its obligations under this AGREEMENT shall constitute a breach of this AGREEMENT, and shall entitle the other party to commence appropriate legal or equitable action to enforce its rights under this AGREEMENT, unless the fulfillment of such obligation is waived or modified by the affected party. All waivers shall be in writing, signed by the affected party, and a waiver of one breach shall not constitute a waiver of any other breach.

In the event of a material breach by either party to this AGREEMENT, the other party may terminate this AGREEMENT, as provided in paragraph 8 herein, without further obligation to the other party. The rights of the parties to this AGREEMENT to pursue remedies for breach of any of the provisions hereof shall survive the termination, expiration, or cancellation of this AGREEMENT.

Except as otherwise provided to this AGREEMENT, the parties to this AGREEMENT

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shall be solely responsible for any costs incurred in fulfilling their obligations under this AGREEMENT.

### **TERM OF AGREEMENT**

This AGREEMENT shall be effective on July 01, 2014 or upon approval by the Government Contract Review Subcommittee if that constitutes a different date, and shall expire on June 30, 2017, or upon the final completion of the Project as specified in Sections 1 and 2 of this AGREEMENT, whichever first occurs, unless extended in writing by the parties or terminated earlier in accordance with the terms hereof.

### **ASSURANCES**

The parties shall comply with:

The Common Rule, which is incorporated by reference into this AGREEMENT.

The Anti-Drug Abuse Act (P.L. 100-690), which requires recipients of Federal funds to certify that they have met requirements designed to promote a drug-free workplace.

Federal statutes relating to nondiscrimination, including but not limited to:

Title VI of the Civil Rights Act of 1964 (P.L. 88-352), which prohibits discrimination on the basis of race, color, or national origin:

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Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683 and 1685-1686), which prohibits discrimination on the basis of sex;

Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of age;

The Drug Abuse Prevention, Treatment and Rehabilitation Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse;

The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism;

§§ 523-527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records;

Any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made;

Any other nondiscrimination statute(s) that apply to this AGREEMENT.

Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646), which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of federal or federally-assisted programs.

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The Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328), which limits the political activities of employees whose principal employment activities are funded in whole or in part with federal funds.

The Copeland Act (40 U.S.C. § 276(c) and 18 U.S.C. § 874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333), regarding labor standards for federally-assisted construction sub-agreements.

The flood insurance purchases requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234), which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000.00 or more.

The parties shall further:

Comply with environmental quality control measures pursuant to the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order No. 11514;

Notify violating facilities pursuant to Executive Order no. 11990;

Protect wetlands pursuant to Executive Order no. 11990;

Evaluate flood hazards in flood plains in accordance with Executive Order No. 11988;

Ensure actions comply with state implementation plans under Section 176(c) of the Clean Air act of 1955, as amended (42 U.S.C. §§ 7401 et seq.);



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Protect underground sources of drinking water pursuant to the Safe Drinking Water Act of 1974, as amended (P.L. 93-523;

Comply with the Endangered Species Act of 1973, as amended (P.L. 93-205); and

Comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. && 1270 et seq).

The parties shall comply with the Executive Branch Code of Ethics (KRS Chapter 11A) and all state statutes relating to nondiscrimination.

The parties certify, by the signatures of duly authorized representatives hereinafter affixed, that they are legally entitled to enter into this AGREEMENT and that they shall not be violating, either directly or indirectly, any conflict of interest statute of the Commonwealth of Kentucky by performance of this AGREEMENT. Further, the parties promise that they presently have no conflict of interest, in any manner or degree, with the performances of services required to be performed under this AGREEMENT, and that no persons having any such conflict of interest shall be employed.

#### **CHOICE OF LAW AND FORUM**

All questions as to the execution, validity, interpretation, construction, and performance of this AGREEMENT or any of its terms shall be governed by the laws of the Commonwealth of Kentucky.

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Any suit, action or other proceeding regarding the execution, validity, interpretation, construction, or performance of this AGREEMENT shall be filed in the Franklin Circuit Court of the Commonwealth of Kentucky.

#### **METHOD OF PAYMENT**

The maximum amount of compensation to the Sub Recipient from the Cabinet pursuant to this AGREEMENT is \$3,000,000.00 (Three Million Dollars), unless subsequently amended in writing. Any funds not expended pursuant to this AGREEMENT shall revert to or remain with the Cabinet. The Sub Recipient shall be reimbursed only for actual expenses incurred pursuant to this AGREEMENT. Payment shall be based on the percentage of the project that has been completed at the time that the request for payment is made.

Payments on this instrument shall not be authorized for services rendered after Government Contract Review Subcommittee disapproval of this instrument, unless the decision of the Committee is overridden by the Secretary of the Finance and Administration Cabinet or the agency head, if the agency has been granted delegation authority.

The parties agree that the Cabinet's funds are appropriated by the United States

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Congress from funds allocated to Kentucky pursuant to Section 402(g)(2) of Public Law 95-87. The parties further agree and understand that this AGREEMENT will only become effective upon approval of the Project by the U.S. Office of Surface Mining (OSM). The Catalog of Federal Domestic Assistance number for this Project is CFDA#15-252.

### **Contractor Employee Whistleblower Rights and Requirement**

To Inform Employees of Whistleblower Rights (Sep 2013)

This contract and employees working on this contract will be subject to the whistleblower rights and remedies in the pilot program on Contractor employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub. L. 112-239) and FAR 3.908.

The Contractor shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712,

as described in section 3.908 of the Federal Acquisition Regulation

The Contractor shall insert the substance of this clause, including this paragraph in all subcontracts over the simplified acquisition threshold.

#### **EFFECTIVE DATE:**

**All grants and contracts issued on or after July 1, 2013 through January 1, 2017**

<http://www.gpo.gov/fdsys/pkg/USCODE-2012-title41/pdf/USCODE-2012-title41-subtitleI-divsnC-chap47-sec4712.pdf>

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## Memorandum of Agreement Terms and Conditions

### **Cancellation clause:**

Either party may cancel the contract at any time for cause or may cancel without cause on 30 days' written notice.

### **Funding Out Provision:**

The state agency may terminate this contract if funds are not appropriated to the contracting agency or are not otherwise available for the purpose of making payments without incurring any obligation for payment after the date of termination, regardless of the terms of the contract. The state agency shall provide the contractor thirty (30) calendar days written notice of termination of the contract.

### **Reduction in Contract Worker Hours:**

The Kentucky General Assembly may allow for a reduction in contract worker hours in conjunction with a budget balancing measure for some professional and non-professional service contracts. If under such authority the agency is required by Executive Order or otherwise to reduce contract hours, the contract will be reduced by the amount specified in that document.

### **Access to Records:**

The state agency certifies that it is in compliance with the provisions of KRS 45A.695. "Access to contractor's books, documents, papers, records, or other evidence directly pertinent to the contract." The contractor, as defined in KRS 45A.030(9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

### **Effective Date:**

All Memorandum of Agreements are not effective until the secretary of the Finance and

Administration Cabinet or his authorized designee has approved the contract and until the contract has been submitted to the government contract review committee. However, Memoranda of Agreements \$50,000 or less are exempt from review by the committee and need only be filed with the committee within 30 days of their effective date for informational purposes only as provided under KRS 45A.700.

KRS 45A.695(7) Payments on personal service contracts and memoranda of agreements shall not be authorized for services rendered after government contract review committee disapproval, unless the decision of the committee is overridden by the secretary of the Finance and Administration cabinet or agency head, if the agency has been granted delegation authority by the secretary.

**Violation of tax and employment laws:**

KRS 45A.485 requires the contractor to reveal to the Commonwealth, prior to the award of a contract, any final determination of a violation by the contractor within the previous five (5) year period of the provisions of KRS chapters 136, 139, 141, 337, 338, 341, and 342. These statutes relate to the state sales and use tax, corporate and utility tax, income tax, wages and hours laws, occupational safety and health laws, unemployment insurance laws, and workers compensation insurance laws, respectively.

To comply with the provisions of KRS 45A.485, the contractor shall report any such final determination(s) of violation(s) to the Commonwealth by providing the following information regarding the final determination(s): the KRS violated, the date of the final determination, and the state agency which issued the final determination.

KRS 45A.485 also provides that, for the duration of any contract, the contractor shall be in continuous compliance with the provisions of those statutes which apply to the contractor's operations, and that the contractor's failure to reveal a final determination as described above or failure to comply with the above statutes for the duration of the contract, shall be grounds for the Commonwealth's cancellation of the contract and the contractor's disqualification from eligibility for future state contracts for a period of two (2) years.

Contractor must check one:

☒ The contractor has not violated any of the provisions of the above statutes within the previous five (5) year period.

☐ The contractor has violated the provisions of one or more of the above statutes within the previous five (5) year period and has revealed such final

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determination(s) of violation(s). A list of such determination(s) is attached

**Notifications:**

All notices, requests, demands, waivers, and other communications given as provided in this Agreement shall be in writing and sent to the following:

**Vendor (DUNS #): 793164166**

**Agency: Breathitt County Water District**

**Approvals:**

This contract is subject to the terms and conditions as stated. By affixing signatures below, the parties agree that electronic approvals may serve as electronic signatures. In addition, the parties verify that they are authorized to bind this agreement between parties and that they accept the terms of the agreement.

**Breathitt County Water District:**

I hereby acknowledge that I was informed of, understand, and agree to comply with applicable compliance requirements, as set forth in this MEMORANDUM OF AGREEMENT. I further acknowledge receipt of circular A-133 requirements from the Energy and Environment Cabinet.

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AGREED TO BY:

Bry  
Bobby Thorpe Jr., Chairman

Date 9/8/14

APPROVED AS TO FORM AND LEGALITY.

[Signature]  
Brandon Miller, County Attorney

Date 9/8/14

ENERGY AND ENVIRONMENT CABINET:

APPROVAL RECOMMENDED BY:

[Signature]  
Steve Hohmann  
Commissioner,  
Department for Natural Resources

Date 9/15/14

APPROVED AS TO FORM AND LEGALITY:

[Signature]  
C. Michael Haines Executive Director,  
Office of Legal Services

Date 9.16.14

AGREED TO BY:

[Signature]  
Leonard K. Peters, Secretary  
Energy and Environment Cabinet

Date 9-18-14



# Breathitt County Water District

KY 315/28 Waterline Extension Phase I

998-34

## Electrical Rates - AEP (Tariff 215-Medium General Service)

Monthly Basic Fee	\$ 17.50
Usage Rate	\$ 0.10198 per KWH for first 200 KWH
	\$ 0.08736 per KWH after first 200 KWH
Demand Charge	\$ 1.91 per KW

## Pump Data

Average Flow Rate	300	gpm
Horsepower	60	
Efficiency	0.75	
Hours of Operation	4.00	hours/day

## Demand of Customers

Estimated Customers	117	Homes
New - Total Estimate Flow	20,475	gallons/day

## Opinion of Probable Cost of Operation

### Proposed Operating Conditions

### New Production Cost

Purchase Price per 1,000 gallons (Purchased from the City of Jackson)	\$ 3.52
Total - Proposed Annual Cost of Purchased Water	\$ 26,306.28

### Operation Costs

#### Pumping Costs

Booster Station Electric Consumption		59.680	KW	239	KWH per Day	87,133	KWH per year		
Total Project Electric Consumption		59.680	KW	239	KWH per Day	87,133	KWH per year		
	Monthly Basic Fee ( x 12 months)						\$	210.00	
	Usage Rate (x 12 months)						\$	7,647.01	
	Demand Charge (x 12 months)						\$	1,367.87	
Total - Proposed Annual Pumping Cost									\$ 9,224.88
Total - Proposed Annual Production & Operation Costs									\$ 35,531.16

# Breathitt County Water District

## KY 315/28 Waterline Extension

### Opinion of Probable Construction Cost - Post Bid 11/16/16

Breathitt County, Kentucky

Contract 1 - Waterline		\$ 2,242,327.97
Contract 2 - Water Storage Tanks		\$ 441,067.00
Contract 1 Change order 1		\$ (89,097.26)
<b>Subtotal - Opinion of Probable Construction Cost =</b>		<b>\$ 2,594,297.71</b>
<b>Other Project Related Costs</b>		
Advertisizing		\$ 200
Engineering		
Design		\$ 156,516
Contract Admin.		\$ 39,129
Resident Observation		\$ 111,703
Permits		\$ 8,500
Easements, survey, etc		\$ 26,106
Environmental, Archeological, etc.		\$ 20,758
Design MOA Credit		\$ (110,000)
Project Contingencies	6%	\$ 152,790
<b>Total Opinion of Probable Project Cost</b>		<b>\$ 3,000,000.00</b>



nesbitt engineering, inc.  
providing smart solutions since 1976  
227 North Upper Street  
Lexington, KY 40507-1016

**Breathitt County Water District  
KY 315/28 Waterline Project Phase 1 - Contract 1 - Waterlines  
Certified Bid Tab**



Item #	Item	Unit	Quantity	L & L Excavation Salyersville, KY 41465		G & W Construction Morehead, KY 40351		Frederick & May Constr. Co. West Liberty, KY 41472		Flo-Line Contracting Monticello, KY 42633	
				Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
1	8" PVC SDR 17 Waterline	LF	3,150	\$ 15.00	\$ 47,250.00	\$ 14.63	\$ 46,084.50	\$ 15.50	\$ 48,825.00	\$ 17.75	\$ 55,912.50
2	8" PVC DR 14 Waterline	LF	4,150	\$ 18.00	\$ 74,700.00	\$ 16.61	\$ 68,931.50	\$ 16.56	\$ 68,724.00	\$ 18.85	\$ 78,227.50
3	8" D.I. Class 350 Waterline	LF	9,980	\$ 32.00	\$ 319,360.00	\$ 28.19	\$ 281,336.20	\$ 27.50	\$ 274,450.00	\$ 37.25	\$ 371,755.00
4	8" D.I. Class 350 Waterline With Nitrile Gaskets	LF	400	\$ 37.00	\$ 14,800.00	\$ 32.12	\$ 12,848.00	\$ 30.00	\$ 12,000.00	\$ 39.55	\$ 15,820.00
5	6" PVC DR 14 Waterline	LF	16,320	\$ 12.00	\$ 195,840.00	\$ 12.40	\$ 202,368.00	\$ 13.00	\$ 212,160.00	\$ 15.65	\$ 255,408.00
6	6" D.I. Class 350 Waterline	LF	5,500	\$ 25.00	\$ 137,500.00	\$ 22.38	\$ 123,090.00	\$ 22.50	\$ 123,750.00	\$ 33.35	\$ 183,425.00
7	6" D.I. Class 350 Waterline With Nitrile Gaskets	LF	500	\$ 27.00	\$ 13,500.00	\$ 23.08	\$ 11,540.00	\$ 23.50	\$ 11,750.00	\$ 34.70	\$ 17,350.00
8	4" PVC DR 14 Waterline	LF	15,610	\$ 8.00	\$ 124,880.00	\$ 9.75	\$ 152,197.50	\$ 10.00	\$ 156,100.00	\$ 13.50	\$ 210,735.00
9	4" PVC SDR 17 Waterline	LF	4,780	\$ 7.00	\$ 33,460.00	\$ 9.99	\$ 47,752.20	\$ 9.75	\$ 46,605.00	\$ 13.00	\$ 62,140.00
10	4" D.I. Class 350 Waterline With Nitrile Gaskets	LF	250	\$ 35.00	\$ 8,750.00	\$ 32.15	\$ 8,037.50	\$ 33.00	\$ 8,250.00	\$ 41.00	\$ 10,260.00
11	3" PVC SDR 17 Waterline	LF	6,800	\$ 5.50	\$ 37,400.00	\$ 1.35	\$ 9,180.00	\$ 8.31	\$ 56,508.00	\$ 12.35	\$ 83,980.00
12	2" PVC SDR 17 Waterline	LF	2,250	\$ 4.50	\$ 10,125.00	\$ 9.77	\$ 21,982.50	\$ 7.56	\$ 17,010.00	\$ 12.00	\$ 27,000.00
13	8" D.I.M.J. Gate Valve & Box	EA	11	\$ 1,700.00	\$ 18,700.00	\$ 1,280.92	\$ 13,870.12	\$ 1,300.00	\$ 14,300.00	\$ 1,500.00	\$ 16,500.00
14	6" D.I.M.J. Gate Valve & Box	EA	9	\$ 1,000.00	\$ 9,000.00	\$ 868.19	\$ 7,813.71	\$ 1,050.00	\$ 9,450.00	\$ 900.00	\$ 8,100.00
15	4" D.I.M.J. Gate Valve & Box	EA	13	\$ 800.00	\$ 10,400.00	\$ 752.12	\$ 9,777.56	\$ 850.00	\$ 11,050.00	\$ 700.00	\$ 9,100.00
16	3" D.I.M.J. Gate Valve & Box	EA	3	\$ 650.00	\$ 1,950.00	\$ 722.42	\$ 2,167.26	\$ 750.00	\$ 2,250.00	\$ 650.00	\$ 1,950.00
17	2" D.I.M.J. Gate Valve & Box	EA	0	\$ -	\$ -	\$ 682.54	\$ -	\$ 650.00	\$ -	\$ 600.00	\$ -
18	Flush Hydrant Assembly, Type 1	EA	15	\$ 4,000.00	\$ 60,000.00	\$ 3,503.23	\$ 52,548.45	\$ 3,500.00	\$ 52,500.00	\$ 4,200.00	\$ 63,000.00
19	Flush Hydrant Assembly, Type 3	EA	17	\$ 2,000.00	\$ 34,000.00	\$ 1,623.34	\$ 27,596.78	\$ 2,000.00	\$ 34,000.00	\$ 2,100.00	\$ 35,700.00
20	5/8" x 3/4" Radio Read Meters	EA	117	\$ 200.00	\$ 23,400.00	\$ 718.00	\$ 84,006.00	\$ 230.00	\$ 26,910.00	\$ 400.00	\$ 46,800.00
21	Tandem Meter Setter w/ IPRV	EA	117	\$ 750.00	\$ 87,750.00	\$ 986.07	\$ 115,370.19	\$ 900.00	\$ 105,300.00	\$ 600.00	\$ 70,200.00
22	1" PE CL250 Service Tubing	LF	2,680	\$ 3.50	\$ 9,380.00	\$ 6.00	\$ 16,080.00	\$ 7.56	\$ 20,260.80	\$ 12.00	\$ 32,160.00
23	3/4" PE CL250 Service Tubing	LF	3,650	\$ 4.50	\$ 16,425.00	\$ 5.00	\$ 18,250.00	\$ 7.25	\$ 26,462.50	\$ 11.50	\$ 41,975.00
24	3/4" Type K copper Service Tubing	LF	2,000	\$ 4.50	\$ 9,000.00	\$ 9.50	\$ 19,000.00	\$ 10.00	\$ 20,000.00	\$ 16.00	\$ 32,000.00
25	Pressure Reducing Valve & Vault	EA	1	\$ 20,000.00	\$ 20,000.00	\$ 15,000.00	\$ 15,000.00	\$ 23,000.00	\$ 23,000.00	\$ 16,500.00	\$ 16,500.00
26	Combination Air Relief Valve Assembly	EA	6	\$ 600.00	\$ 3,600.00	\$ 650.00	\$ 3,900.00	\$ 900.00	\$ 5,400.00	\$ 850.00	\$ 5,100.00
27	Flow Monitor Pit Assembly	EA	5	\$ 850.00	\$ 4,250.00	\$ 850.00	\$ 4,250.00	\$ 1,200.00	\$ 6,000.00	\$ 800.00	\$ 4,000.00
28	10" DR 9 HDPE PE 4710 Directional Drill W/ Leak Detection, Plan sheet C-2	LS	1	\$ 35,000.00	\$ 35,000.00	\$ 50,000.00	\$ 50,000.00	\$ 68,000.00	\$ 68,000.00	\$ 80,000.00	\$ 80,000.00
29	10" DR 9 HDPE PE 4710 Directional Drill W/ Leak Detection, Plan sheet C-44	LS	1	\$ 35,000.00	\$ 35,000.00	\$ 10,000.00	\$ 10,000.00	\$ 68,000.00	\$ 68,000.00	\$ 100,000.00	\$ 100,000.00
30	10" DR 9 HDPE PE 4710 Directional Drill	LF	600	\$ 65.00	\$ 39,000.00	\$ 120.00	\$ 72,000.00	\$ 120.00	\$ 72,000.00	\$ 150.00	\$ 90,000.00
31	8" DR 9 HDPE PE 4710 Directional Drill	LF	800	\$ 60.00	\$ 48,000.00	\$ 110.00	\$ 88,000.00	\$ 115.00	\$ 92,000.00	\$ 137.50	\$ 110,000.00
32	6" DR 9 HDPE PE 4710 Directional Drill	LF	600	\$ 55.00	\$ 33,000.00	\$ 72.50	\$ 43,500.00	\$ 105.00	\$ 63,000.00	\$ 90.00	\$ 54,000.00
33	4" DR 9 HDPE PE 4710 Directional Drill	LF	200	\$ 50.00	\$ 10,000.00	\$ 62.50	\$ 12,500.00	\$ 50.00	\$ 10,000.00	\$ 80.00	\$ 16,000.00
34	HWY X-ing Bore & Jack 10.75" STL Casing w. Carrier Pipe	LF	60	\$ 150.00	\$ 9,000.00	\$ 130.00	\$ 7,800.00	\$ 120.00	\$ 7,200.00	\$ 130.00	\$ 7,800.00
35	HWY X-ing Bore & Jack 14" STL Casing w. Carrier Pipe	LF	227	\$ 180.00	\$ 40,860.00	\$ 160.00	\$ 36,320.00	\$ 140.00	\$ 31,780.00	\$ 150.00	\$ 34,050.00
36	Waterline Marker	EA	40	\$ 60.00	\$ 2,400.00	\$ 80.00	\$ 3,200.00	\$ 50.00	\$ 2,000.00	\$ 80.00	\$ 3,200.00
37	KY 28 Duplex Pump Station	LS	1	\$ 190,000.00	\$ 190,000.00	\$ 189,430.00	\$ 189,430.00	\$ 119,000.00	\$ 119,000.00	\$ 245,000.00	\$ 245,000.00
38	Town Hill Duplex Pump Station	LS	1	\$ 230,000.00	\$ 230,000.00	\$ 219,600.00	\$ 219,600.00	\$ 89,000.00	\$ 89,000.00	\$ 274,862.00	\$ 274,862.00
39	SCADA Telemetry Package and 3 Phase Electrical Service	LS	1	\$ 135,000.00	\$ 135,000.00	\$ 125,000.00	\$ 125,000.00	\$ 136,000.00	\$ 136,000.00	\$ 150,000.00	\$ 150,000.00
40	Hydro Pneumatic Pump Station	LS	1	\$ 65,000.00	\$ 65,000.00	\$ 10,000.00	\$ 10,000.00	\$ 66,000.00	\$ 66,000.00	\$ 65,000.00	\$ 65,000.00
<b>Total Base Bid (Item # 1 to 40)</b>					\$2,197,680.00		\$2,242,327.97		\$2,216,995.30		\$2,985,000.00

Note: Highlighted numbers represent a mathematical error that has been corrected based on proposed unit cost pricing. Due to errors made on Frederick & Mays Bid Schedule, they have withdrawn their bid as of 11/15/16 @ 9:00am.

I hereby certify that the above tabulation accurately represents bids, received, opened and read for Breathitt Co Water District, KY 315/28 Waterline Extension Phase 1, Contract 1 on November 14, 2016, 11 am.

Project Engineer - Paul D. Nesbitt, PE

Date 11/15/16

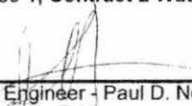


**Breathitt County Water District  
KY 315/28 Waterline Extension Phase 1 - Contract 2 - Water Storage Tanks  
Certified Bid Tab**

				KY Glass Lined Tank Systems		American Structures, Inc	
Item #	Item	Unit	Quantity	Unit Cost	Total Cost	Unit Cost	Total Cost
1	KY 315, 109,000 Gallon Ground Water Storage Tank (complete)	LS	1	\$ 182,217.00	\$ 182,217.00	\$ 192,754.00	\$ 192,754.00
2	KY 315, Valve Vault and Yard Piping	LS	1	\$ 47,725.00	\$ 47,725.00	\$ 63,007.00	\$ 63,007.00
3	KY 315, Access Road	LS	1	\$ 16,500.00	\$ 16,500.00	\$ 29,247.00	\$ 29,247.00
4	KY 28, 33,000 Gallon Ground Water Storage Tank (complete)	LS	1	\$ 146,948.00	\$ 146,948.00	\$ 138,059.00	\$ 138,059.00
5	8' Chain Link Fence & Gates (Both sites)	LF	600	\$ 32.50	\$ 19,500.00	\$ 30.00	\$ 18,000.00
<b>Total Base Bid (Item # 1 to 5)</b>					<b>\$412,890.00</b>		<b>\$441,067.00</b>

Note: Highlighted numbers represent a mathematical error that has been corrected based on proposed unit cost pricing.

I hereby certify that the above tabulation accurately represents bids, received, opened and read for Breathitt Co Water District, KY 315/28 Waterline Extension, Phase 1, Contract 2 Water Storage Tanks, on November 14, 2016 @ 11 am.


  
 Project Engineer - Paul D. Nesbitt, PE
 
 11/16/16  
 Date



**nesbitt engineering, inc.**  
providing proven solutions since 1976  
 227 North Upper Street  
 Lexington KY 40507-1016



November 17, 2016

Mr. Randy Jones  
Rubin & Hays  
450 South Third Street, Suite 300  
Louisville, Kentucky 40202

RE: Breathitt County Water District,  
KY 315/28 Waterline Extension Project

Dear Mr. Jones:

During the Breathitt County Water District's monthly meeting on 11/16/16, Nesbitt Engineering, Inc. presented the board with certified bid tabulations and recommendation of award letters. The recommendations for both contracts were discussed and the board voted to accept NEI's recommendation for contract 1. However the board elected to accept the next lowest bidder (American Structures Inc) for contract 2 in the best. They based this decision on the tank materials provided in each bid. Both KY Glass Lined Tank and American Structures Inc bid a bolted tank. American Structures Inc's tank is stainless steel and will never need painting. KY Glass Lined Tank specified a glass lined tank that will need periodic exterior painting and runs the risk of having cracked glass in the tank.

Therefore contract 1 was based upon the contractor's ability to complete the work on time. Contract 2 was based upon product materials.

Sincerely,

Michael M. Steen  
Project Development Engineer

c: Estill McIntosh, BCWD  
file





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**PROPOSED WATERLINE EXTENSIONS  
BREATHITT COUNTY WATER DISTRICT  
BREATHITT COUNTY, KY**

drawn by: <b>mms</b>	disk/file name:	job no.: <b>998-34</b>
date: <b>11/14/16</b>	last plot date: <b>NOV 28 2016</b>	scale: <b>NTS</b>

Public Service  
Commission

