**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION**
**OFFICE OF ABANDONED MINE LANDS AND RECLAMATION**
**CONSTRUCTION DRAWINGS**

**AUGUST 2014**

**ENGINEER:**

**CTL ENGINEERING OF WEST VIRGINIA, INC.**

**PATRICK E. BAGLIA**

**WV P.E. 9297**

**BID QUANTITIES**

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
<th>UNIT</th>
</tr>
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<tbody>
<tr>
<td>1.1</td>
<td>MOBILIZATION/DENMobilization</td>
<td>1</td>
<td>LS</td>
</tr>
<tr>
<td>2.4</td>
<td>CONSTRUCTION LAYOUT</td>
<td>1</td>
<td>LS</td>
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<td>3.4</td>
<td>QUALITY CONTROL</td>
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<td>LS</td>
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<tr>
<td>4.1</td>
<td>SITE PREPARATION</td>
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<td>LS</td>
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<td>4.2</td>
<td>ACCESS ROAD/REhabilitation</td>
<td>1,760</td>
<td>TON</td>
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<td>5.1</td>
<td>EROSION CONTROL</td>
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<td>LP</td>
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<td>5.2</td>
<td>STABILIZATION</td>
<td>670</td>
<td>LP</td>
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<td>6.1</td>
<td>RECLAMATION</td>
<td>2.9</td>
<td>PLAN VIEW AC</td>
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<td>7.1</td>
<td>12&quot; DIA. PIPE CHANNEL</td>
<td>865</td>
<td>LP</td>
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<td>7.2</td>
<td>16&quot; DIA. PIPE CHANNEL</td>
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<td>LP</td>
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<td>7.3</td>
<td>24&quot; DIA. PIPE</td>
<td>40</td>
<td>LP</td>
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<td>7.4</td>
<td>36&quot; DIA. PIPE</td>
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<td>LP</td>
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<td>7.5</td>
<td>LOW WATER CROSSING</td>
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<td>EACH</td>
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<td>8.1</td>
<td>UNCLASSIFIED EXCAVATION</td>
<td>2,876</td>
<td>CY</td>
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<td>101</td>
<td>PILOT HOLES</td>
<td>788</td>
<td>LP</td>
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<td>102</td>
<td>16&quot; DIA. STEEL CASING</td>
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<td>124</td>
<td>SODA ASH BRICKETTES</td>
<td>35</td>
<td>EACH</td>
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</tbody>
</table>

**USGS**

**PRESTON COUNTY ROADS**

**SHEET INDEX**

<table>
<thead>
<tr>
<th>TITLE</th>
<th>SHEET NO.</th>
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</thead>
<tbody>
<tr>
<td>TITLE SHEET</td>
<td>1</td>
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<tr>
<td>ELEVATION CONTROL</td>
<td>2</td>
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<tr>
<td>RECLAMATION PLAN</td>
<td>3</td>
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<tr>
<td>TAX MAP OVERLAY</td>
<td>4</td>
</tr>
<tr>
<td>PROPOSED SITE PROFILES</td>
<td>5</td>
</tr>
<tr>
<td>REPORTS</td>
<td>6</td>
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<tr>
<td>DETAIL SHEETS</td>
<td>9-10</td>
</tr>
</tbody>
</table>

**WEST VIRGINIA MISS UTILITY**

**1-800-245-4848**

*THE LOCATION OF ALL UTILITIES HANDS ON EMBYS THE RESPONSIBILITY OF THE CONTRACTOR. THIS DRAWING SHOWN FOR INFORMATION PURPOSES ONLY. THIS DRAWING IS NOT TO SCALE. IT DOES NOT GUARANTEE THE LOCATION OF THE UTILITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AND VERIFY LOCATION OF UTILITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE LOCATION OF ALL UTILITIES AND TO USE APPROPRIATE SAFETY PRECAUTIONS.*
EXISTING PONDS TO BE DEWATERED AND REGRADED

GARBAGE TO BE HAULED TO AN APPROVED DISPOSAL AREA

MOVING OF CONCRETE SLABS TO BE COORDINATED WITH LANDOWNER

END PROPOSED DITCH A

BEGINNING PROPOSED DITCH A

40 L.F. 15" HDPE CULVERT

EXISTING RETAINING WALL MUST REMAIN UNDISTURBED

NOTE
EXISTING PONDS TO BE DEWATERED AND REGRADED

GARBAGE TO BE HAULED TO AN APPROVED DISPOSAL AREA

MOVING OF CONCRETE SLABS TO BE COORDINATED WITH LANDOWNER

PROPOSED DITCH B

LIMITS OF DISTURBANCE

CONSTRUCTION LIMITS

PROPERTY LINE

INSET LIMIT

SCALE: 1"=50'

MATCH LINE - THIS SHEET

MATCH LINE - THIS SHEET

LEGEND

EXISTING CONTOURS (2' INTERVAL)

EXISTING CONTOURS (10' INTERVAL)

PROPOSED CONTOURS (2' INTERVAL)

PROPOSED CONTOURS (10' INTERVAL)

STREAM

LIMITS OF DISTURBANCE

CONSTRUCTION LIMITS

ROADWAY

TREELINE

REFUSE

BORROW

PROPERTY LINE

RIP RAP CHANNEL

GROUTED RIP RAP CHANNEL

ACCESS ROAD

PROPERTY LINE AND ROAD NUMBER INFORMATION REPRESENTS AN APPROXIMATE BEST FIT ESTIMATE OF PROPERTY LINE LOCATION, EXISTING ROAD LOCATION, AND ROAD NUMBER INFORMATION. PROPERTY LINES SET OUT AND DESIGNATED WITHIN THESE CONSTRUCTION PLANS DO NOT REPRESENT A TRUE AND ACCURATE PROPERTY BOUNDARY SURVEY.

NOTES

PROPERTY LINE MARKED DYNAMITE MARKS INDICATE PROPERTY LINES SET OUT AT THE TIME OF CONSTRUCTION, BUT DO NOT REPRESENT A TRUE AND ACCURATE PROPERTY BOUNDARY SURVEY.

DRAWN BR: 7/13

APPROVED BR: TBD

DATE: 7/16/2022

115 SURVEY

PROJECT NO. 123456789

DRAWING NO. 013-09-2013

SHEET NO. 4
NOTE: ALL BORINGS WILL CONSIST OF DUAL RUNS SPACED 4 TO 6 FEET APART.
Quantiites: Site #1
CUT: 528 CU. YDS.
FILL: 694 CU. YDS.
NET FILL: 166 CU. YDS.

Quantiites: Site #2
CUT: 132 CU. YDS.
FILL: 413 CU. YDS.
NET FILL: 281 CU. YDS.

Legend:
EXISTING
PROPOSED
STRAW WATTLES SHALL BE PLACED AT DISCONTINUOUS SPACING AT BOTH ENDS OF THE WATTLE. BETWEEN THE WATTLE MAJOR AXES A MINIMUM SPACING LENGTH OF 10 FT. BETWEEN STRAW WATTLES SHALL NOT EXCEED THE LENGTH OF THE STRAW WATTLE PLUS 10 FT. TO ALLOW A MINIMUM LENGTH OF 20 FT. BETWEEN TWO WATTLE MAJOR AXES.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS STRAW WATTLES.

EXISITING BIODEGRADABLE WATTLES SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE WATTLES AFTER 1 YEAR. POLYPROPYLENE WATTLES SHALL BE REPLACED ACCORDING TO APPLICATION. STAKES MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED.

STABILIZATION OF THE AREA TRIBUTARY TO THE WATTLE, STAKES SHALL BE REMOVED. THE WATTLE MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED.

NOTES:
1. 1.5" CRUSHER RUN STONE SHALL MEET THE DESIGN REQUIREMENTS FOR CLASS I AGGREGATE AS SHOWN IN TABLE 704.6.24 OF THE ENGINEER, SOIL MATERIAL STANDARDS SPECIFICATIONS FOR SOILS AND BRIDGES.

2. ALL PROPOSED 24" HDPE CULVERT @ 16% SLOPE PROPOSAL (CROSS SECTIONS B1-B10)

3. AFTER EXCAVATING THE GROUT KEY TO THE DIMENSIONS SHOWN, PLACE GROUT IN THE EXCAVATION TO THE CHANNEL SUB GRADE PRIOR TO PLACING THE RIPRAP. EXTEND GROUT KEY LATERALLY THE FULL WIDTH OF THE CHANNEL AS SHOWN IN THE CROSS SECTION VIEWS.

4. INSTALL GROUT KEY AT THE JUNCTION OF ROCK RIPRAP CHANNEL WITH GROUTED ROCK RIPRAP CHANNEL AS SHOWN IN THE PROFILE VIEW.

GROUTED ROCK RIPRAP LINING OR GROUTED RIP RAP LINING.

VALID EXISTING FULL WIDTH OF DESIGN AND CROSS SECTION OPERATION.

NOTES:
1. EXTEND GROUT KEY LATERALLY THE FULL WIDTH OF THE CHANNEL, AS SHOWN IN THE CROSS SECTION VIEWS.

2. INSTALL GROUT KEY AT THE JUNCTION OF ROCK RIPRAP CHANNEL WITH GROUTED ROCK RIPRAP CHANNEL, AS SHOWN IN THE PROFILE VIEW.

3. AFTER EXCAVATING THE GROUT KEY TO THE DIMENSIONS SHOWN, PLACE GROUT IN THE EXCAVATION TO THE CHANNEL SUB GRADE PRIOR TO PLACING THE RIPRAP.
NOTES:
1. 1 1/2" CRUSHER RUN STONE SHALL MEET THE GRADATION REQUIREMENTS FOR CLASS 5 AGGREGATE IN TABLE 704.2A OF THE WVDOH STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES.