

DATE: September 3, 2020

ADDENDUM NO. 1
TO
CONSTRUCTION DOCUMENTS
FOR PROJECT NO. E008317

DESCRIPTION: **AML SITE 898, ENOS WETLAND**

LOCATION: **PIKE COUNTY, INDIANA**

FOR AGENCY: **DEPARTMENT OF NATURAL RESOURCES**

The information contained in this Addendum shall become a part of the basic plans and specifications the same as if originally incorporated therein. The original plans and specifications shall remain in their entirety, except as modified by this addendum. The items herein shall supersede information in the specifications and on the plans.

ITEM NO. 1:

The attached Special Provision covering Organic Substrate shall be added to Specifications.

END OF ADDENDUM

ORGANIC SUBSTRATE

The Standard Specifications are revised as follows:

SECTION 508, AFTER LINE 0, INSERT AS FOLLOWS:

SECTION 508 – ORGANIC SUBSTRATE

508.01 Description

This work shall consist of the earthwork, supplying of materials, hauling of materials, mixing of materials to create organic substrate, and placing the organic substrate as shown on the plans to construct wetlands to passively treat acid mine drainage.

508.02 Organic Substrate

Organic substrate shall be a homogeneous mixture of wood chips, agricultural lime, straw or hay, and compost. The materials shall be proportionally mixed at a location shown on the plans or approved by the Engineer, hauled, and placed in the wetland cells as shown. Material is to be wetted before blending agricultural lime and compost into the mixture. Mixture shall be placed by end dumping from trucks and leveling with an excavator or placed and leveled with an excavator to minimize compaction. Equipment will not be allowed on top of the finished mixture.

MATERIALS

508.03 Materials

Materials for organic substrate shall be in accordance with the following:

(a) Wood Chips

Wood chips shall be in accordance with 201.04(b).

(b) Agricultural Lime

Agricultural lime shall be in accordance with 401.

(c) Straw/Hay

Bales shall be shredded. Baling straps or wires shall be removed prior to shredding. The maximum amount of straw or hay used in the mixture shall not exceed 60% of the total of straw and hay.

(d) Compost

Compost shall consist of three parts by volume carbon based material such as straw, hay, corn stalks, leaves and/or wood chips and one part by volume of nitrogen based materials such as grass clippings, green silage, green haylage, or other similar materials approved by the Engineer.

The above ingredients shall be blended and composted to a uniform consistency. The temperature during composting shall remain between 105 °F and 145 °F. The compost shall result in a dark brown or black, humic material in which the initial constituents are no longer recognizable and further degradation is not noticeable.

Heavy metal, organic chemical and pathogen concentrations of the compost shall be within the limits established by federal and state environmental regulations. A representative sample shall be tested for the above to ensure compliance.

Material shall not contain more than 40% moisture by weight. The product may be damp but should not drip when squeezed.

Compost shall have an earthy smell when wetted and placed in a sealed plastic bag after 72 hours. The finished compost shall not heat when stacked in a pile.

Materials shall not be loaded at the source, weighed, hauled, delivered, or mixed if there has been precipitation within the previous 48 hours unless approved by the Engineer.

The Engineer will reject all materials not in accordance with the above criteria.

CONSTRUCTION REQUIREMENTS

508.04 General

Earthwork shall be in accordance with 203. Material shall be placed as shown on the plans or as directed by the Engineer.

508.05 Method of Measurement

Wood chips, agricultural lime, straw/hay, and compost will be measured by the ton. Weight receipts shall be retained by the Contractor and presented to the Engineer upon request. Loads of material determined by the Engineer to have an excessive moisture content will be rejected.

508.06 Basis of Payment

Wood chips supplied by the Contractor will be paid for in accordance with the Schedule of Supplemental Unit Prices.

Agricultural lime will be paid for in accordance with 401.

Straw/hay bales and compost will be paid for in accordance with the Schedule of Supplemental Unit Prices.

Supplemental Unit Items

Unit Symbol

<i>Wood Chips</i>	<i>TON</i>
<i>Straw/hay Bale</i>	<i>TON</i>
<i>Compost</i>	<i>TON</i>

The cost of all labor, materials, equipment, and tools necessary to stockpile, handle, mix, and place wood chips, straw/hay bales, and compost supplied by the Contractor shall be included in the respective item.

If materials are identified as being provided by the Division in stockpiles on-site, in stockpiles at an off-site location, or on-site chipping of trees to produce wood chips is specified in accordance with 201, the Contractor shall include the hauling, delivery, stockpiling, handling, mixing, and placing such materials in their base bid.

The cost of earthwork shall be included in the base bid
