Section 45.0

Knoxville, Tennessee March 2022

STANDARD SPECIFICATIONS FOR GABION

1. <u>Description</u>

This work shall consist of the installation of gabions. This installation shall include the placing of filter fabric and the assembly, rock fill and placing of the gabions.

2. Materials

- (a) Gabions shall be a rectangular basket manufactured from heavily zinc coated steel wire of double twist hexagon weave, having a nominal mesh opening of 3 1/4" x 4 ½". The steel wire shall be heavily galvanized with zinc coating exceeding Federal Specification requirements (QQW-461H. Class 3). The mesh steel wire diameter shall be no less than 0.1181". The mesh edge wire and selvedge wire diameter shall be no less than 0.1535". The lacing steel wire for binding gabion units together shall be no less than 0.0866".
- (b) The limestone contents of the gabions shall consist of "surge" stone 6" to 14" with no more than 20% being 10" to 14".
- (c) Phillip Fibers Corporation Supac 8 NP non woven geotextile fabric or equal shall be installed under gabions as directed by the manufacturer or as directed by the Engineer.
- (d) Backfill and bedding shall be No. 57 stone per Section 903, TDOTSS, January 1, 2021 and all Supplemental Specifications thereto pertaining prior to the advertisement for this contract, or as directed by the Engineer.

3. Construction Requirements

All gabion assembly, filling and installation shall conform to the manufacturer's recommendation or to the Engineer's direction.

All geotextile fabric installation shall conform to the manufacturer's recommendations or to the Engineer's direction.

Minimum thickness of layers for crushed aggregate bedding and backfill shall be as shown on the Plans.

4. Method of Measurement

- (a) Gabions shall be measured per cubic yard.
- (b) No separate payment will be made for the clean "surge" stone fill for the gabions. The cost of stone is to be included in the bid price per cubic yard of the gabions.
- (c) No separate payment will be made for the non-woven geotextile fabric. The cost of the fabric is to be included in the bid price per cubic yard of the gabions.

(d) No separate payment will be made for the No. 57 stone backfill behind the gabions. The cost of the No. 57 backfill stone is to be included in the bid price per cubic yard of the gabions.

5. <u>Basis of Payment</u>

This item will be paid for at the Contract unit price per cubic yard of gabions, complete in place, which price shall fully compensate for all work, materials, labor, maintenance and other incidentals necessary to complete the item, in accordance with the Plans and Specifications.