Section 57.0

Knoxville, Tennessee March 2013

# TECHNICAL SPECIFICATIONS FOR WIRE MESH MATTRESSES

#### 1. <u>Description</u>

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

## 2. <u>Materials</u>

- (a) Wire mesh mattresses shall be a rectangular mattress manufactured from heavily zinc coated steel wire of double twist hexagon weave, having a nominal mesh opening of 2 ½" x 3 ¼". 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 0.0866". The mesh edge wire and selvedge wire diameter shall be no less than 0.1063". The lacing steel wire for binding wire mesh mattress units together shall be no less than 0.0866". Each wire mesh mattress shall be 12' x 6' x 6" consisting of four (4) area cells.
- (b) The limestone contents of the wire mesh mattresses shall consist of 4" to 6" "Surge" Stone.
- (c) Phillip Fibers Corporation Supac 8 NP non-woven geotextile fabric or equal shall be installed under the wire mesh mattresses as directed by the manufacturer or as directed by the Engineer.

### 3. Construction Requirements

All wire mesh mattress 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.

#### 4. Method of Measurement

- (a) Wire mesh mattresses shall be measured by the square yard of surface area.
- (b) No separate payment will be made for the clean "surge" stone fill for the wire mesh mattresses. The cost of stone is to be included in the square yard of surface area bid price.
- (c) No separate payment will be made for the non-woven geotextile fabric. The cost of the fabric is to be included in the square yard of surface area bid price.
- (d) No separate payment will be made for any subgrade preparation required. The cost of all subgrade preparation is to be included in the square yard of surface area bid price.

# 5. Basis of Payment

This item will be paid for at the Contract unit price per square yard of wire mesh mattress, 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 Project Plans and Specifications.