### **SECTION 101**

### PORTLAND CEMENT CONCRETE

1. In the Subsection **101.15 QUALITY ASSURANCE SAMPLING AND TESTING**, paragraph **101.15.2.2**, delete the first sentence and replace with the following:

At least one sample from each of the first three concrete loads delivered to the site shall be tested for slump, air content, and unit weight. One set of compressive strength test cylinders shall be obtained from one of these three loads at the direction of the Engineer. Beginning with the fourth load of concrete delivered to the project, one load from each sub-lot of ten (10) loads will be randomly selected for testing to include slump, air content, unit weight, cement content per cubic yard, and one set of compressive strength test cylinders. Sample requirements are subject to change at the discretion of the Engineer.

#### **SECTION 201**

### **CLEARING AND GRUBBING**

1. In Subsection **201.1 GENERAL**, delete the second sentence and replace with the following: Clearing and grubbing shall be performed in advance of the grading operations.

2. In Subsection **201.4.1 CONSTRUCTION METHODS**, add the following:

Clearing and grubbing operations shall include stripping of the existing ground surface. Stripping shall be achieved only by cutting, i.e., ground depressions or narrow sections of tributary arroyos should not be inadvertently filled during the foundation preparation. The resulting area shall be cut to provide a uniform, relatively level surface.

3. In Subsection **201.5 LIMIT LINES**, add the following:

Unless otherwise approved by the Engineer, limits of clearing & grubbing shall not exceed slope limits as shown with finished grade contours or slope limit lines the construction plans.

## **SECTION 1012**

### **NATIVE GRASS SEEDING**

1. In subsection **1012.4 MATERIALS** delete paragraphs **1012.4.1.1** and **1012.4.1.2** in their entirety and replace with the following:

<u>GrassSeedMix</u> shall include the following species and rates:

Indian Rice Grass: 5 lbs / acre
Galleta: 5 lbs / acre
Sideoats Gramma: 5 lbs / acre
Blue Gramma 5 lbs / acre
Sand Dropseed: 5 lbs / acre

Total grass seed mix application rate at 25.0 lbs / acre

WildflowerSeedMix shall include the following species and rates:

Globemallow 1 lb / acre
Purple Aster 1 lb / acre
Blue Flax 1 lb / acre
Mexican Hat 1 lb / acre
Blanket Flower 1 lb / acre

Total wildflower seed mix application rate at 5.0 lbs / acre

Seed rate is given in pounds of pure live seed (P.L.S.) per acre.

#### SECTION 1505

#### CONTROL OF STORM WATER AND NUISANCE FLOW

#### 1505.1 DESCRIPTION

This work covers the control of storm and nuisance flow water in the vicinity of this project.

### 1505.2 CONSTRUCTION REQUIREMENTS

All permanent work shall be performed in areas free from water. The CONTRACTOR shall construct and maintain all dikes and drainage ditches necessary for the elimination of water from work areas and shall furnish, install, maintain, and operate all necessary pumping and other dewatering equipment required for dewatering the various work areas. Two (2) types of flow can be expected:

- 1) Continuous or intermittent flow through the main arroyo;
- 2) Local sheet flow from adjacent properties or adjacent streets.

The CONTRACTOR is responsible for adequacy of the scheme or plans, or for furnishing all equipment, labor and materials necessary for dewatering the work areas and breaking up and removing such ice or snow as may have formed or settled in the work area. The CONTRACTOR shall be fully responsible for all dewatering operations, and the cost of all dewatering operations shall be included in the lump sum price for this work. The CONTRACTOR shall also be responsible for removal of any sediment deposited by storm and nuisance water, and the cost of sediment removal work shall be included in the lump sum price for this work.

In the event that storm flow, snowmelt or other water flows overtop the Contractor's diversion method, the Contractor will be responsible for any and all damage, including damage to the existing channel and any damage to new work and is responsible for immediate resolution and repair in a manner acceptable to SSACFCA.

Diversion methods may be by use of sand bag diversion channels, sand bag dams, pumping or piping around or over the work areas, or any method or combination.

#### 1505.3 BASIS OF PAYMENT

The bid item for this effort will be on a Lump Sum (LS) basis. Providing and maintaining the diversion and care of water, regardless of the amount of water actually handled, shall be paid for as follows:

Payment will be made as a percentage of the dollar amount of work completed to date minus the Mobilization bid item.

Pay Item Pay Unit

Control of Storm Water and Nuisance Flow

LS

#### **SECTION 1506**

#### **CONSTRUCTION STAKING**

## 1506.1 DESCRIPTION

This work consists of construction staking lines, grades, and layouts by the Contractor in accordance with the plans and specifications and as directed by the Engineer for the control and completion of the project.

### 1506.2 MATERIALS

The Contractor shall furnish all stakes, templates, straightedges, surveying equipment and other devices necessary for establishing, checking, marking, and maintaining points, including P.I.'s, P.C.'s, P.T.'s, and lines, grades and layouts. As directed by the Engineer, points shall be referenced so that they may later be re-established.

## 1506.3 CONSTRUCTION REQUIREMENTS

Local Survey Control has been set for vertical and horizontal control throughout the construction area. These stakes and marks shall constitute the field control by and in accordance with which the Contractor shall establish other necessary controls and perform the work.

The Contractor shall be responsible for all other control, slope stakes, cut stakes, offset stakes, bench marks, blue tops or other staking necessary for proper execution of the work, or as requested by the Project Manager, to assure compliance with the plans.

## 1506.4 CONSTRUCTION SURVEYS

The contractor shall obtain and pay for the services of a Professional Surveyor registered in the State of New Mexico to perform surveys consisting of the following phases:

- Phase 1: A cross section survey, with no greater than 50 foot spacing, to determine the location of existing ground prior to construction after clearing and grubbing and after removal of the trash and debris. Cross section data collected shall be of sufficient spacing, including all breaks in the terrain to be able to create an original ground digital terrain model (DTM). The "original ground" DTM shall be submitted to the Engineer for review and acceptance prior to proceeding with excavation, embankment or export of excess material. Cross section data must be sufficient to determine earthwork quantities.
- Phase 2: Cross-section and location surveys that may be made during the excavation and backfill construction for the purposes of verifying the contractor's work. Where shown, the excavation dimensions (pay limits for excavation) shown on the plans shall be used to determine the excavation cross-section for payment to the contractor. The cross-section data must be sufficient to verify the limits of excavation.
- Phase 3: A cross-section survey, at the same locations as the cross-sections in Phase 1 to determine the location of the finish grade at the completion of construction.
- Phase 4: The Phase 4 Survey will be completed during construction to demonstrate compliance with the design grades shown on the plan set. Phase 4 Survey will also include the update and completion of as-builts for the project and the submittal on a weekly basis of as-builts on a blue line set of the construction drawings, to the satisfaction of the Project Manager.

All surveys must be certified by the Professional Surveyor and include complete documentation. Cross sections of the Phase 1, 2 and 3 surveys and the pay limit for excavation as shown on the plans must be

used by the Professional Surveyor to compute the quantity of excavation, subject to the provisions for measurement in Section 203. Volume shall be based on the "average end area" computation. All computations of excavation and backfill must be submitted to the Engineer in sufficient detail. This submittal shall be such that methods and computations can be fully verified and are subject to approval by the Engineer. The Contractor shall also submit the electronic survey point files, including break lines, in a format compatible with Civil3D such that the Engineer can use the data for verification of cut/fill quantities.

At the end of the Project, the Engineer will transcribe the as-built information provided by the Contractor onto the mylar record drawing. The Contractor's Professional Surveyor will be required to stamp, sign and certify the information shown on the mylar As-Built drawings.

#### 1506.5 METHOD OF MEASUREMENT

Submit a construction staking schedule of values as part of Construction Progress Meetings or monthly progress schedule to the Project Manager for approval.

# 1506.6 BASIS OF PAYMENT

Pay Item	Pay Unit
Construction Staking	Lump Sum

Partial payments will be made in accordance with the approved construction staking schedule of values.