CITY OF SAN ANGELO

ITEM 216

ROLLING (PROOF)

216.1 DESCRIPTION.

This Item shall govern for furnishing and operating heavy pneumatic tired compaction equipment for locating unstable areas of earthwork or base.

216.2 EQUIPMENT.

The proofrolling equipment shall consist of not less than four (4) pneumatic tired wheels, running on axles carrying not more than two (2) wheels, and mounted in a rigid frame and provided with loading platform or body suitable for ballast loading. All wheels shall be arranged so that they will carry approximately equal loads when operating on uneven surfaces.

The proofroller under working conditions shall have a rolling width of from eight (8) feet to ten (10) feet, and shall be so designed that, by ballast loading, the gross load may be varied uniformly from 25 tons to 50 tons. The tires shall be capable of operating under various loads with variable air pressure up to 150 pounds per square inch. Tires shall be practically full of liquid. (Tires shall be considered as being practically full when liquid will flow from the valve stem of a fully inflated tire with the stem in the uppermost position). The operating load and tire pressure shall be within the range of the manufacturer's chart as directed by the Engineer. The Contractor shall furnish the Engineer charts or tabulations showing the contact areas and contact pressures for the full range of tire inflation pressures and for the full range of loading for the particular tires furnished.

The proofroller shall be towed by a suitable crawler-type tractor or rubber-tired tractor of adequate tractive capacity, or may be of the self-propelled type. A proofroller unit shall consist of either a self-propelled roller or combination of roller and towing tractor.

There shall be a sufficient quantity of ballast available to load the equipment to a maximum gross weight of 50 tons.

Rubber tired tractive equipment shall be used on base courses and asphalt pavements. Other type tractive equipment may be used on embankment subgrade. The heavy pneumatic tire roller unit shall be capable of turning 180 degrees in the crown width or operating in forward and reverse modes.

In lieu of the rolling equipment specified, the Contractor may, upon written permission from the Engineer, operate other compacting equipment that will produce equivalent results in the same period of time as the specified equipment. If the substituted compaction equipment fails to produce the desired results within the same period of time as would be expected of the specified equipment, as determined by the Engineer, its use shall be discontinued.

216.3 CONSTRUCTION METHODS.

This work shall be done only when directed by the Engineer. The subgrade and/or base layer shall be proofrolled to locate unstable areas when directed by the Engineer.

Within the ranges set forth in Article 216.2, the load and tire inflation pressures shall be adjusted as directed by the Engineer. It is proposed to use a contact pressure corresponding as nearly as practical to the maximum supporting value of the earthwork or base. A minimum of two (2) coverages of the proofroller shall be offset by not greater than one (1) tire width. Rollers shall be operated at speeds directed by the Engineer, which shall be between two (2) and six (6) miles per hour.

Where the operation of the proofroller unit shows an area to be unstable or non-uniform, it shall be corrected in accordance with the applicable Item of Work.

216.4 MEASUREMENT.

This Item will be measured by the actual hours the heavy pneumatic tire proofroller unit works as directed by the Engineer.

216.5 PAYMENT.

The equipment furnished and operated in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Rolling (Proof)". This price shall be full compensation for furnishing and operating all equipment; for all labor, tools, fuel and incidentals necessary to satisfactorily perform the work.

Unless otherwise provided on the Plans, payment for reworking unstable or uniform areas, removing and replacing materials, addition of stabilizing materials, and all compaction and incidentals necessary to correct all irregularities will not be made directly but will be considered as subsidiary to the various bid items.