



Purchasing Division

## **ADDENDUM NO. 2**

**DATE:** September 2, 2016  
**FROM:** City of Grand Junction Purchasing Division  
**TO:** All Offerors  
**RE:** B ½ Rd. Overpass at U.S. 50 Multimodal Conversion Project IFB-4199-16-DH

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:


1. The Contractor is responsible for providing Quality Control (QC) materials testing on this Project. The City will provide Quality Assurance (QA) testing per CDOT Form 250. Contractor's can refer to the 2016 CDOT Field Materials Manual, QA Frequency Guide Schedule for minimum materials sampling, testing and inspection.
2. Documents that must be included in the electronic bid submittal package are:
  - CDOT Form 606 - Anti-Collusion Affidavit
  - CDOT Form 1413 - Bidders List
  - CDOT Form 1414 - Anticipated DBE Participation Plan
  - Bid Schedule
3. Documents due to the Local Agency by the low responsible bidder by 4:30 p.m. on the fifth calendar day after the bid opening are:
  - CDOT Form 605 - Contractors Performance Capability Statement
  - CDOT Form 621 - Assignment of Anti-Trust Claims
  - CDOT Form 1415 - Commitment Confirmation (For each DBE listed in the Form 1414)
  - CDOT Form 1416 - Good Faith Effort Report (If the DBE goal has not been met)
4. Include the following Specification 506 - Geogrid Reinforcement in the Project Special Provisions. See Attached.

5. The 2-inch electrical conduit and NEMA pull box shall be securely fastened to the concrete bridge structure per National Electrical Code (NEC) requirements. Stainless Steel fasteners shall be used for connections to the bridge structure. Electrical fastening hardware will not be measured and paid for separately, but shall be included in the cost of the project.

The original solicitation for the project noted above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

A handwritten signature in black ink, appearing to read 'Duane Hoff Jr.', written in a cursive style.

Duane Hoff Jr., Senior Buyer  
City of Grand Junction, Colorado

**REVISION OF SECTION 506  
 GEOGRID REINFORCEMENT FOR THE ROADWAY EMBANKMENT**

Section 506 of the Standard Specifications is hereby revised for this project to include the following:

**DESCRIPTION**

This work consists of furnishing and installing geogrid reinforcement material, in accordance with these specifications and in conformity with the lines and grades shown on the plans or established.

**MATERIALS**

Geogrid is a polymer grid structure specifically fabricated for use as a soil reinforcement.

Geogrid reinforcement material shall conform to the following:

**GEOGRID**

<b>Physical Properties</b>	<b>Unit</b>	<b>*Characteristic Values</b>	
Roll Length	Feet	164	
Roll Width	Feet	9.8	
Roll Weight	Lb		
Mass per Unit Area	oz/sq yd		
Grid Pitch, Transverse Direction	inch		
Grid Pitch, Longitudinal Direction	inch		
<b>Mechanical Properties</b>	<b>Unit</b>	<b>Test Method</b>	<b>*Minimum Value</b>
Peak Tensile Strength	lb/ft	ASTM D 4595	1,310
Tensile Strength at 2% Strain, Machine Direction	lb/ft	ASTM D 4595	410
Tensile Strength at 2% Strain, Cross-Machine Direction	lb/ft	ASTM D 4595	620
Junction Efficiency	percent	GG2	93%

The geogrid reinforcement shall be composed principally of polypropylene or high density polyethylene.

The geogrid reinforcement shall contain stabilizers or inhibitors to prevent degradation of properties due to ultraviolet light exposure. The geogrid reinforcement shall be inert to all naturally occurring alkaline and acidic soil conditions.

The manufacturer shall furnish certified test reports from an independent laboratory indicating that the material meets the requirements of the specification.

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REVISION OF SECTION 506  
GEOGRID REINFORCEMENT FOR THE ROADWAY EMBANKMENT

**#CONSTRUCTION REQUIREMENTS**

Geogrid reinforcement shall be installed in accordance with the following:

- (a) Delivery, Storage, and Handling. Upon delivery, the Contractor shall check the geogrid to assure the proper material has been received. Special care shall be taken in the handling of geogrids manufactured from polypropylene at temperatures at or below 0 °F.
- (b) Geogrid Installation. Geogrid shall be laid at the proper elevation and alignment as shown on the plans or as directed by the Engineer. Geogrid shall be oriented such that the roll length runs parallel to the roadway alignment.

Parallel rolls shall be overlapped 1 foot. When a new roll is started, a 2 foot overlap shall be made over the end of the previous roll. Care shall be taken to ensure that geogrid sections do not separate at overlaps during construction.

Placement of geogrid around corners will require cutting of geogrid product and diagonal overlapping of same to ensure that excessive buckling of grid material does not occur.

Geogrid material shall be secured to the ground surface by placement of loose fill at the corners and edges or as directed by the Engineer.

- (c) Fill Placement Over Geogrid. Tracked construction equipment shall not operate directly upon the geogrid. A minimum fill thickness of 8 inches is required prior to operation of tracked vehicles over the geogrid.

Rubber-tire equipment may pass over the geogrid at slow speeds, less than 10 mph, if the underlying material is capable of supporting the loads without excessive rutting or causing damage to the mesh. Operators shall avoid sudden braking or sharp turning.

Fill material shall be back-dumped from trucks riding on top of the reinforced fill and bladed onto the geogrid in such a manner that the fill rolls onto the grid ahead, e.g., by gradually raising dozer blade while moving forward.

Material placed over the geogrid shall be compacted in accordance with the compaction requirements for embankment for this project or as directed. Care shall be taken to assure the geogrid reinforcement is not damaged.

Reinforced backfill shall be compacted to 95 percent of the maximum density as determined by AASHTO T-99. The moisture content of the backfill material prior to and during compaction shall be uniformly distributed throughout each layer and shall be within two percent of optimum.

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REVISION OF SECTION 506  
GEOGRID REINFORCEMENT FOR THE ROADWAY EMBANKMENT

**METHOD OF MEASUREMENT**

Geogrid reinforcement will be measured in place by the square yard of surface area, completed and accepted.

**BASIS OF PAYMENT**

The accepted quantities will be paid for at the contract unit price per square yard.

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Geogrid Reinforcement	Square Yard

Payment will be full compensation for all labor, materials, equipment, and other items necessary and incidental to the completion of the work. Additional geogrid for overlaps will not be measured and paid for, but shall be included in the work.