



## Transmittal

If enclosures are not received as noted below,  
please call sender or Woolpert at 937.461.5660

Date: October 31, 2016

Re: Task Name: Mesa County CO QL2 Lidar  
Task Order Number: G15PD00937  
Delivery Lot 4: Final Data Deliverables

To: USGS/NGTOC  
Kathryn Yoder  
Denver Federal Center  
Building 810 Entrance E-11,MS 510  
Denver, CO 80225-0046  
303.202.4419

Order Number: 75927.03

Shipped Via: FedEx Overnight

We are sending you

Shop Drawings  
  Samples  
  Specifications  
  Plans  
  Change Order  
 Other 1 4TB Hard Drive

| Copies | Date      | No.  | Description   |
|--------|-----------|------|---|
| 1      | 31-OCT-16 | 3283 | Classified Point Cloud in LAS1.4 format in NAD83(HARN) UTM12, NAVD88 GEOID 12B, US Feet   |
| 1      | 31-OCT-16 | 560  | Raw Unclassified Swath Point Cloud in LAS1.4 format in NAD83(HARN) UTM12, NAVD88 GEOID 12B, US Feet   |
| 1      | 31-OCT-16 | 3283 | Hydrologically-flattened Bare Earth Surface (Raster DEM) in .img format at 4 ft cell size in NAD83(HARN) UTM12, NAVD88 GEOID 12B, US Feet           |
| 1      | 31-OCT-16 | 1    | Hydrologically-flattened Mosaic of Bare Earth Surface (Raster DEM) in .img format at 4 ft cell size in NAD83(HARN) UTM12, NAVD88 GEOID 12B, US Feet |
| 1      | 31-OCT-16 | 3283 | 8-Bit gray-scale intensity GeoTIFF images at 4ft cell size in NAD83(HARN) UTM12, NAVD88 GEOID 12B, US Feet  |
| 1      | 31-OCT-16 | 1    | Tile index shape file in Esri .shp format in NAD83(HARN) UTM12, NAVD88 GEOID 12B, US Feet   |
| 1      | 31-OCT-16 | 1    | Data Extent shape file in Esri .shp format in NAD83(HARN) UTM12, NAVD88 GEOID 12B, US Feet  |
| 1      | 31-OCT-16 | 1    | PolygonZ file for water bodies two acres and greater in area used for hydrologic-flattening in NAD83(HARN) UTM12, NAVD88 GEOID 12B, US Feet         |
| 1      | 31-OCT-16 | 1    | PolylineZ file for rivers 30 m (100 ft) and greater used for hydrologic-flattening in NAD83(HARN) UTM12, NAVD88 GEOID 12B, US Feet                  |
| 1      | 31-OCT-16 | 1    | Bridge Breakline shape file used in DEM generation in NAD83(HARN) UTM12, NAVD88 GEOID 12B, US Feet  |

|   |           |     |   |
|---|-----------|-----|---|
| 1 | 31-OCT-16 | 3   | Control point shape files in Esri .shp format for lidar check points and QC points in NAD83(HARN) UTM12, NAVD88 GEOID 12B, US Feet                      |
| 1 | 31-OCT-16 | 662 | Classified Point Cloud in LAS1.4 format in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet   |
| 1 | 31-OCT-16 | 662 | Hydrologically-flattened Bare Earth Surface (Raster DEM) in .img format at 4ft cell size in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet                |
| 1 | 31-OCT-16 | 1   | Hydrologically-flattened Mosaic of Bare Earth Surface (Raster DEM) in .img format at 4 ft cell size in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet     |
| 1 | 31-OCT-16 | 662 | 8-Bit gray-scale intensity GeoTIFF images at 4ft cell size in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet  |
| 1 | 31-OCT-16 | 1   | Tile index shape file in Esri .shp format in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet   |
| 1 | 31-OCT-16 | 1   | Data Extent shape file in Esri .shp format in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet  |
| 1 | 31-OCT-16 | 1   | PolygonZ file for water bodies two acres and greater in area used for hydrologic-flattening in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet             |
| 1 | 31-OCT-16 | 3   | Control point shape files in Esri .shp format for lidar check points and QC points in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet                      |
| 1 | 31-OCT-16 | 1   | Bridge Breakline shape file used in DEM generation in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet  |
| 1 | 31-OCT-16 | 15  | QL1 Classified Point Cloud in LAS1.4 format in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet   |
| 1 | 31-OCT-16 | 17  | QL1 Raw Unclassified Swath Point Cloud in LAS1.4 format in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet   |
| 1 | 31-OCT-16 | 15  | QL1 Hydrologically-flattened Bare Earth Surface (Raster DEM) in .img format at 2ft cell size in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet            |
| 1 | 31-OCT-16 | 1   | QL1 Hydrologically-flattened Mosaic of Bare Earth Surface (Raster DEM) in .img format at 2 ft cell size in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet |
| 1 | 31-OCT-16 | 15  | QL1 8-Bit gray-scale intensity GeoTIFF images at 2ft cell size in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet  |
| 1 | 31-OCT-16 | 1   | QL1 Tile index shape file in Esri .shp format in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet   |
| 1 | 31-OCT-16 | 1   | QL1 Data Extent shape file in Esri .shp format in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet  |
| 1 | 31-OCT-16 | 1   | QL1 PolygonZ file for water bodies two acres and greater in area used for hydrologic-flattening in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet         |
| 1 | 31-OCT-16 | 3   | Control point shape files in Esri .shp format for lidar check points and QC points in NAD83(HARN) UTM13, NAVD88 GEOID 12B, US Feet                      |
| 1 | 31-OCT-16 | 54  | Task level FGDC compliant metadata (per product/per UTM delivery/per Quality Level) in .xml format  |
| 1 | 31-OCT-16 | 1   | Lidar Processing Report in .PDF Format  |
| 1 | 31-OCT-16 | 1   | Survey Report in .PDF Format  |

The attached electronic document is an instrument of service prepared by Woolpert and is being provided solely as a convenience to the user. **Woolpert makes no representation regarding fitness for any particular purpose, or suitability for use with any software or hardware. Due to the easily alterable nature of electronic documents, through either intentional or unintentional means, Woolpert does not make any express or implied warranty for the accuracy or completeness of this information.** Hard copies (i.e., prints, paper copies, etc.) shall prevail in any dispute over accuracy or sufficiency of electronic documents. This information is proprietary and shall not be copied or used for any purpose not authorized in writing by Woolpert. By and through its use of the information contained hereon, the user agrees to indemnify and hold Woolpert harmless from any loss, damage, liability or cost, including reasonable attorney's fees, arising from any use or reuse of any electronic document or information.

**NOTES- 2 ft interval contours based on township boundaries and associated metadata will be generated and delivered upon final acceptance of DEM product**

There is a known expectation that the LAS1.4 header information will be non-compliant due to the lack of an appropriate EPSG code for NAD83 (HARN) UTM Survey Feet. This was concluded on the 10/18/16 call with NGTOC (Kim Mantey, Kathryn Yoder, Patrick Emmett, and Tim Saultz) and Woolpert.

Signature:

---

Mike Meiser  
937.531.1582