



## Delivery Lot Summary Report: Delivery Lot 5 – Edit Calls June 26, 2015

**USGS Contract: G10PC00025**

**USGS Task Order: G13PD00816**

**Task Order Name: Sandy Supplemental NCR (VA-MD-DC) QL2 Lidar Task Order**

**Contractor: Photo Science, A Quantum Spatial Company**

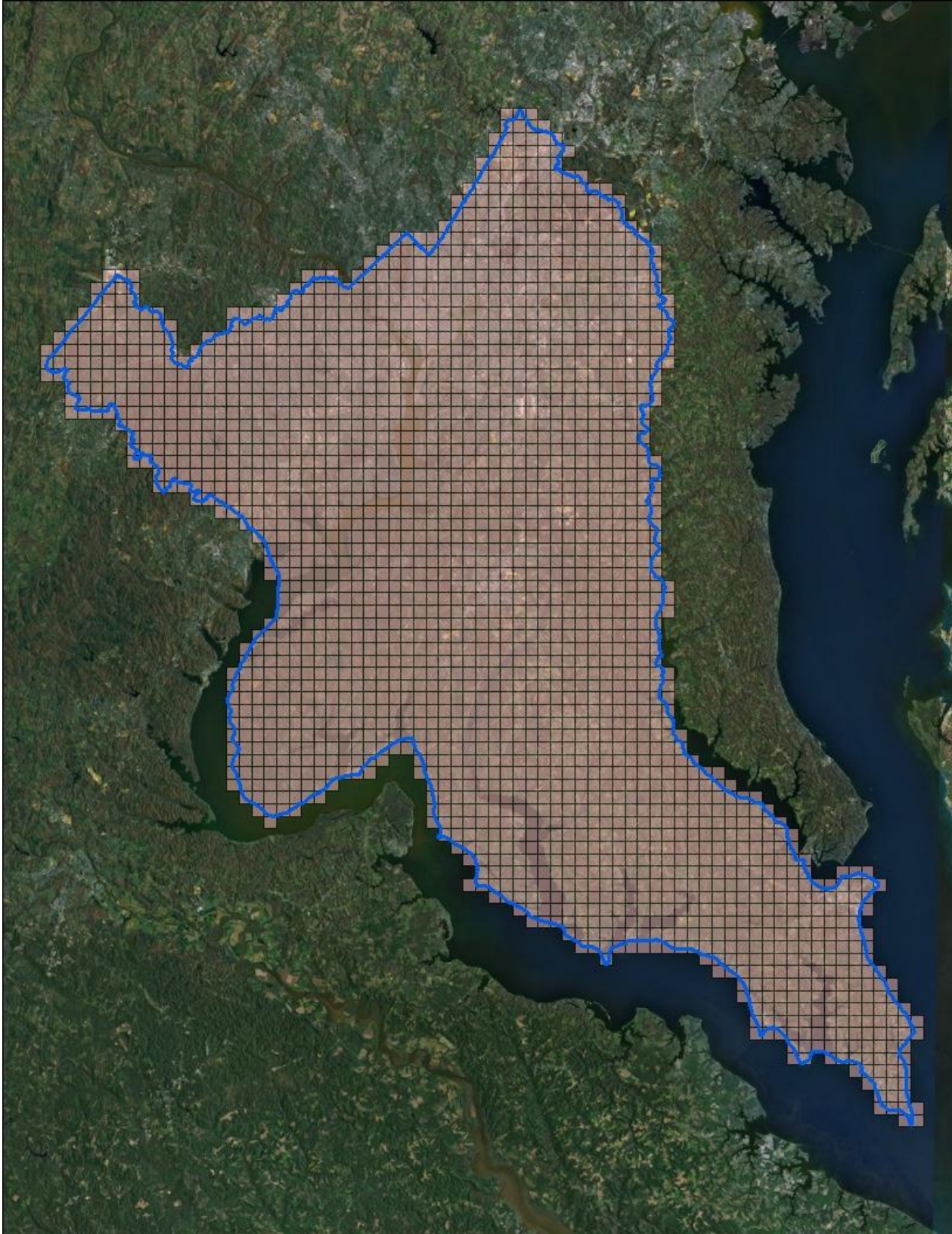
The following is a summary description of the edit call deliverables and other pertinent information that comprise the shipment of Delivery Lot 5 to USGS on June 26, 2015.

### **Sandy Supplemental NCR (VA-MD-DC) AOI Delivery Lot Map:**





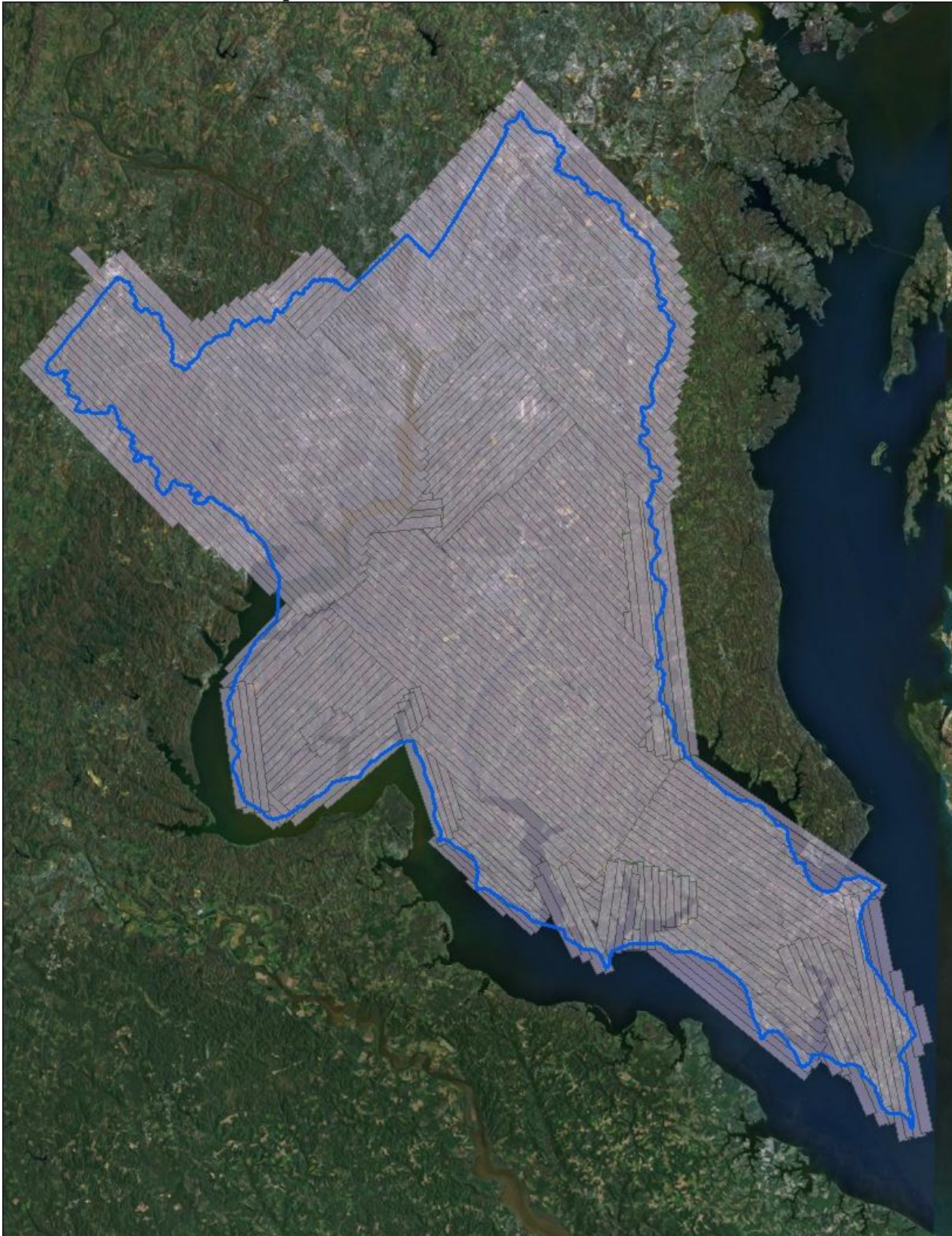
**Delivery Lot 5 Map:**



**All flight lines have been modified to show the correct LAS header information. All references to the 2011 adjustment have been removed from the header.**



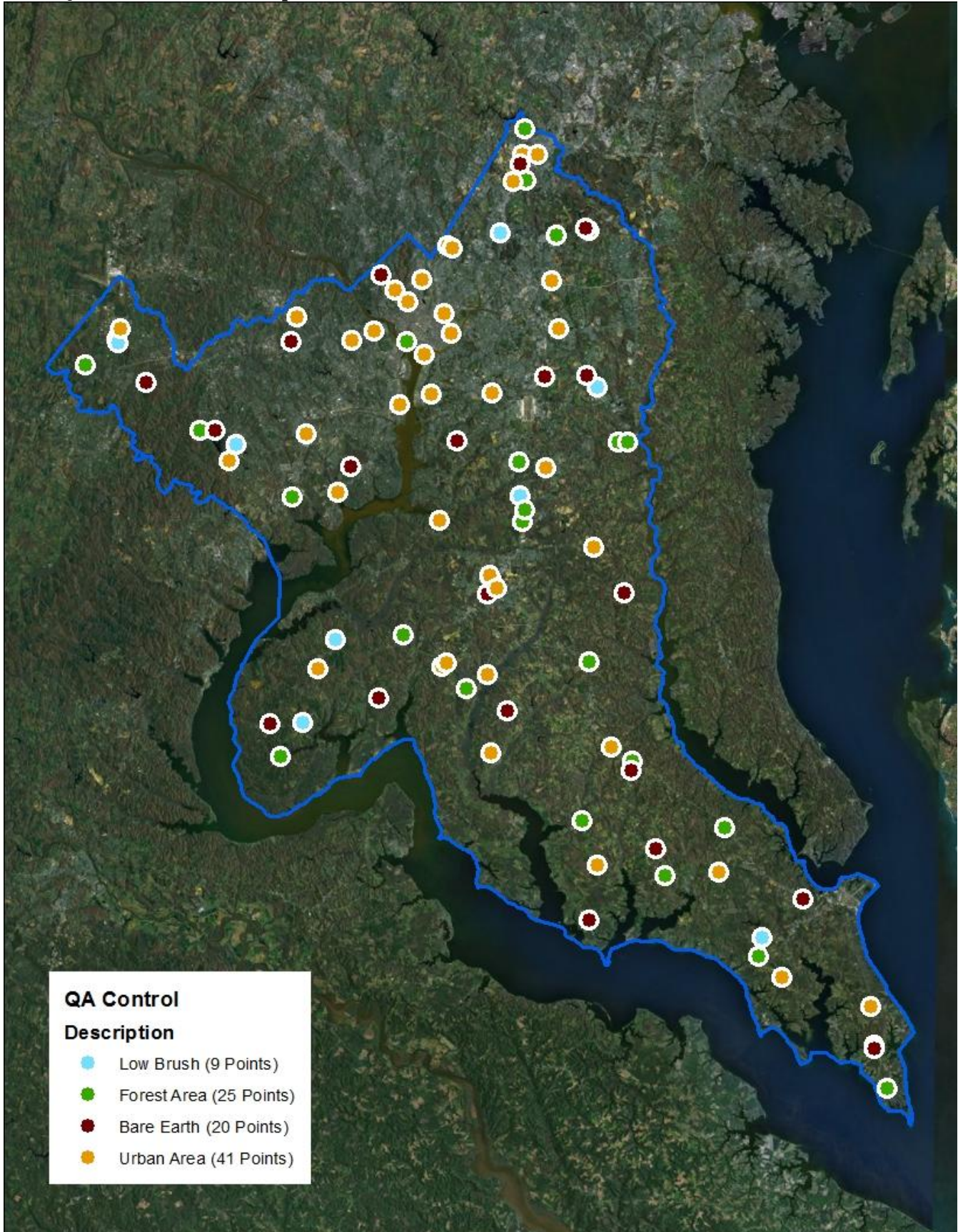
**Lot 5 Raw Point Cloud Map:**



**All flight lines have been modified to show the correct LAS header information. All references to the 2011 adjustment have been removed from the header.**



Lot 5 QA Control Points Map:



**Task Order Spatial Reference System:**

- Horizontal: UTM Zone 18 North, NAD83, Meters
- Vertical: NAVD88, GEOID12a, Meters

**Deliverables Summary:**

1. C.1.d.(i) Raw Point Cloud Data (calibrated and control adjusted): Included
  - LAS v1.2 Point Record Format 1
  - Total Number of Swath Files: 321
  - Total File Size: 1.0 TB (1,102,797,369,344 bytes)
  - Individual Swath Outline Shape File
2. C.1.d.(ii) Classified Point Cloud: Included
  - LAS v1.2, Point Record Format 1 including File Source ID w/assigned value of 65,535
  - Classification Schema:
    - (01) Code 1 – Processed, but unclassified
    - (02) Code 2 – Bare-earth ground
    - (03) Code 7 – Noise
    - (04) Code 9 – Water
    - (05) Code 10 – Ignored Ground (Breakline Proximity)
    - (06) Code 17 – Overlap Default
    - (07) Code 18 – Overlap Ground
    - (08) Code 25 – Overlap Water
  - Total Number of Tiles: 2,283
  - Tile Dimensions: 1,500m x 1,500m
  - Total File Size: 796 GB (854,793,703,424 bytes)
  - Delivery Lot 5 Tile Shape Files (Lot 5 Boundary & Lot 5 Individual Tiles)
3. C.1.d.(iii) Bare Earth Surface (Raster DEM): Included
  - Format: ERDAS .IMG
  - Resolution: 1 meter grid cell size
  - Hydro Conditioning: Hydro Flattened
  - Total Number of Tiles: 687
  - Tile Dimensions: 1,500m x 1,500m (same used for Classified Point Cloud)
  - Total File Size: 5.4 GB (5,774,536,704 bytes)
4. C.1.d.(iv) Control:
  - Delivery Lot 5 QA Control Check Point Location Shape File Extract: Included
  - Delivery Lot 5 QA Control Check Point Published Values Extract .xls file: Included
5. C.1.d.(v) LiDAR Intensity Image: Included
  - Format: Grayscale, 8-bit, GeoTiff
  - Resolution: 1 meter grid cell size
  - Total Number of Tiles: 2,283
  - Tile Dimensions: 1,500m x 1,500m (same used for Classified Point Cloud)
  - Total File Size: 6.8 GB (7,353,237,504 bytes)



- 6. C.1.d.(vi) Breaklines: Included
  - Format: ESRI Shapefile (.shp)
  - Coverage: Lot 5 Continuous, Non-Tiled
  - Total File Size: 12.0 MB (12,603,392 bytes)
- 7. C.1.d.(vii) Metadata: Included
  - Format: FGDC compliant, XML
  - File Types: Project, Lift, Tiled deliverable product group (classified .las, DEM, & Intensity)
- 8. C.1.d.(viii) Project Report:
  - Delivery Lot Summary Report: Lot 5 Included
  - Overall Project Report: To Be Delivered upon final acceptance.
- 9. Lot 5 QA & Accuracy Reporting
  - FOCUS Report: Included
  - Lot 5 Provisional FVA/SVA/CVA Testing Results: .xls file Included
  - LAS Analysis (Excel File): Included
  - Raster Analysis (Excel File): Included

**Lot 5 Provisional Accuracy Reporting:**

- Number of QA Check Points falling within Delivery Lot 5 by Tested Land Cover Type:
  - Bare Earth (BE): 20
  - Forested (FO): 25
  - Low Brush (SW): 9
  - Urban (UA): 41
- Testing:

**Raw FVA**

	Count	Minimum	Maximum	St. Dev	RMSE	95%	95th	Mean	Median	Skew
RAW FVA	20	-0.100	0.128	0.061	0.061	0.119	-	0.01	0.00	0.48

**FVA, SVA, CVA**

	Count	Minimum	Maximum	St. Dev	RMSE	95%	95th	Mean	Median	Skew
SVA	75	-1.068	0.178	0.136	0.138	-	0.088	-0.03	-0.01	-6.13
CVA	95	-1.068	0.178	0.124	0.125	-	0.091	-0.02	-0.01	-6.42
Bare Earth (FVA)	20	-0.114	0.124	0.060	0.059	0.115	-	0.00	-0.01	0.35
Tall Weeds	0	-	-	-	-	-	-	-	-	-
Brush Lands	9	-0.105	0.048	0.051	0.051	-	0.033	-0.02	0.00	-0.99
Forested	25	-1.068	0.178	0.231	0.229	-	0.136	-0.04	0.00	-3.94
Urban Areas	41	-0.101	0.088	0.041	0.045	-	0.057	-0.02	-0.02	0.27
Sawgrass	0	-	-	-	-	-	-	-	-	-
Swamp / Wetland	0	-	-	-	-	-	-	-	-	-
LIDAR Calibration	0	-	-	-	-	-	-	-	-	-

**Delivery Lot Notes/Comments:**

Delivery Lot 5 also includes recent agreement between USGS and Quantum Spatial on the population of the file source ID for classified tiled .las file using a numeric value of "65,535". All task order classified .las tiles file source ID will be populated with this numeric value.

Please note, the P56 area, requested to be flattened, have not been completed for this initial delivery, but will be flattened as requested for the final delivered LOT6 dataset.

All edit calls have been reviewed and modified as possible. Some of the calls reflect the differences between triangulation methods used during our DEM creation process. While all attempts were made to reflect this in the edit calls, some may have been missed during notation/review.

*The UTM18 / UTM18 (2011) header information has been corrected in the LAS/Raw FL/Intensity Images, to reflect the UTM18 noted in the final SOW. This is the reason for the full redelivery of these products.*