

Elevation QC Report

Project: California_Central_Coast_Lidar_2011

Contractor: Digital Mapping INC.

Data Delivery Date: 04/11/2011, 07

Date Data Reviewed: 04/11/2011 - 04

Reviewer: Eric Jaramillo

Total Square Miles Reviewed: 1105 sq. r

Elevation Type: LIDAR **Format:** .img **Grid Spacing:** 10 feet **Tile size:** 12.000 x 8.000

Projection: SPCS **Zone:** California Zone 3 and 4 **Datum:** NAD83 **Units:** Feet

Licensing: Public Domain **Metadata:** Project Level

Materials Received:

1st Delivery =
Ground Control placement report
Block 1 and 2 dem .img files
Block 1 and 2 classified .las files
Block 1 and 2 TIN .adf files
Metadata
Raw Lidar data .las files
Shape files
Waterbodies and breaklines .shp files
Control and Check point data .pdf files
2nd delivery =
DEM .img files
LAS .las point files
TIN .adf files
Control and Check point .shp files
No Intensity files were sent with this data

Vertical Accuracy Test Performed: No **Test Point Source:** Contractor

RMSE: 0.205 / 0.305

Vertical Accuracy Test Notes:

Contractor sent checkpoints to be used to validate Fundamental Vertical Accuracy, Supplemental Vertical Accuracy, and Consolidated Vertical Accuracy. Please see details of delivery below:

Block 1 zone 3 have 20 check points, (1=bare earth, 1=low grass, 14= sawgrass, 4=trees).

Block 2 zone 4 have 53 check points, (2=trees, 4=pavement, 20= low grass, 4=brushland, 23= bareground).

Block 1 should have 80 check points

Block 2 should have 100 check points

According to the Version 13 Spec (the standard for this project) there must be a minimum of 20 well distributed per landcover type throughout the dataset. There were multiple landcover categories without the minimum of 20 checkpoints. Also, the points are not well distributed throughout the dataset. There are several sample areas across the dataset, each containing at least 20 checkpoints. The NGTOC interprets the Version 13 Spec to mean that there should be a sampling distribution throughout the dataset on a per point basis, versus having several collection areas and sampling points only within these areas.

The NGTOC will accept the contractors report of a passing RMSE(z) value and by result a passing Accuracy(z), the NGTOC feels that more representative checkpoints (with a minimum of 20 in each landcover category) be provided in the future.

RMSE = (0.205 for zone 3) and (0.305 for zone 4) from the contractor.

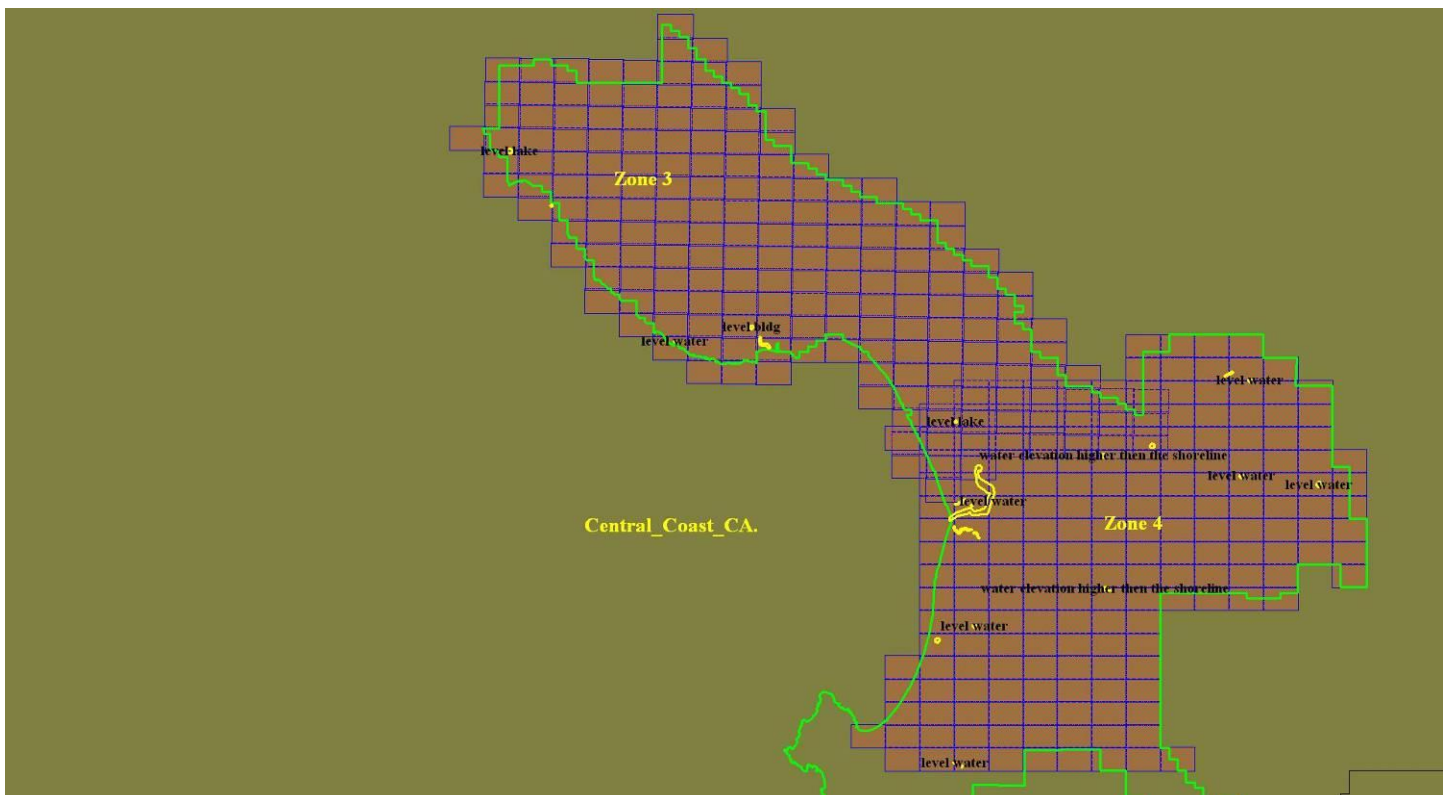
QC Review Summary:

All of California Central Coast (Zone 3 Block 1) and (Zone 4 Block 2) 10 foot Lidar data 1st and 2nd delivery was reviewed. This data was brought into Global Mapper as .img files for a QA/QC. More errors were found on the 2nd delivery of this project, lakes and water elevations not leveled, water elevations higher than the shoreline and a structure that needs to be leveled. These errors were fixed in Global Mapper. Elevation on the coast is 4 foot due to high tide. After talking with Teresa Dean we will accept this data and sent it to be archived.

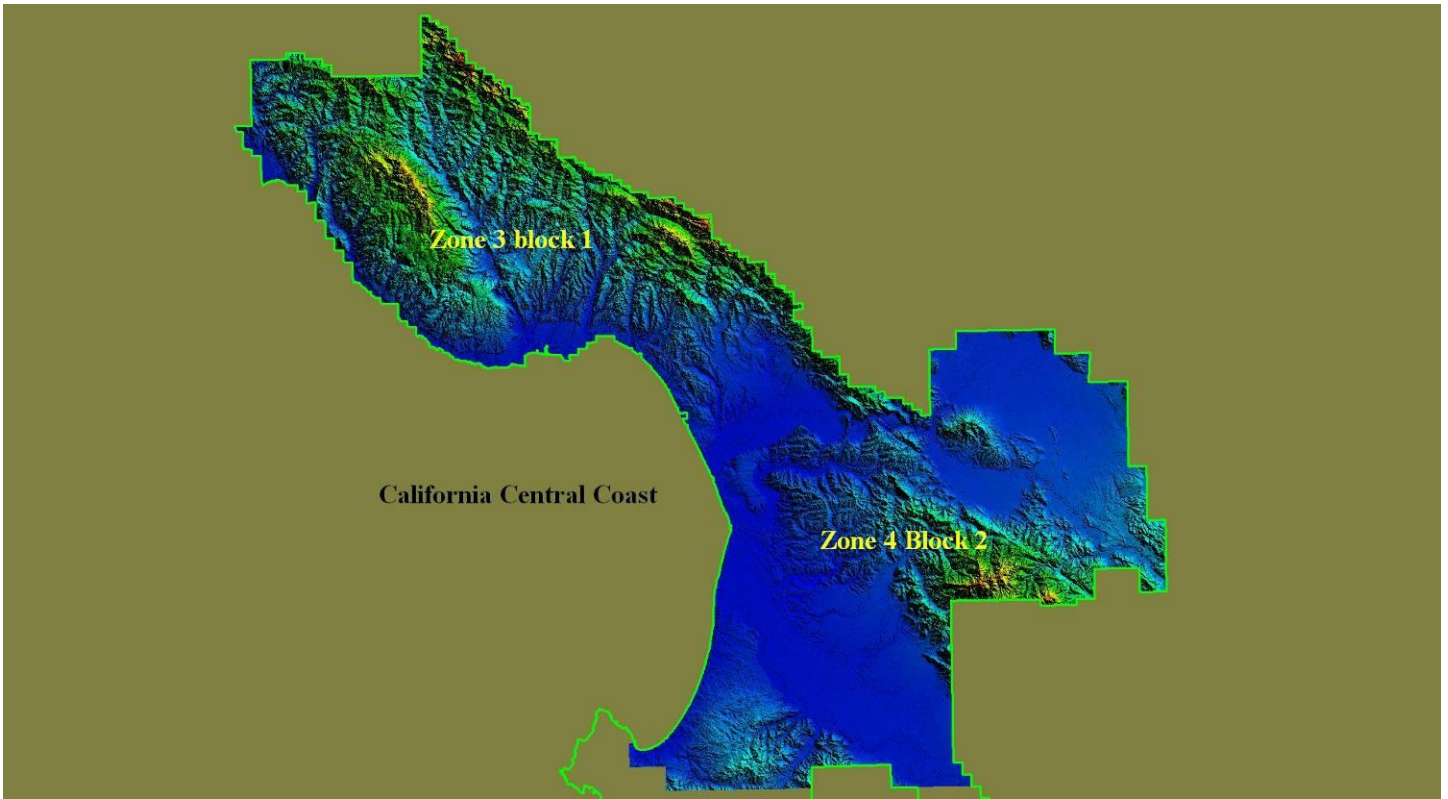
See JPEG Examples and document below

Conclusions: 1. 95% of Artifacts removed
2. 95% of vegetation penetrated
3. 98% of bldgs removed

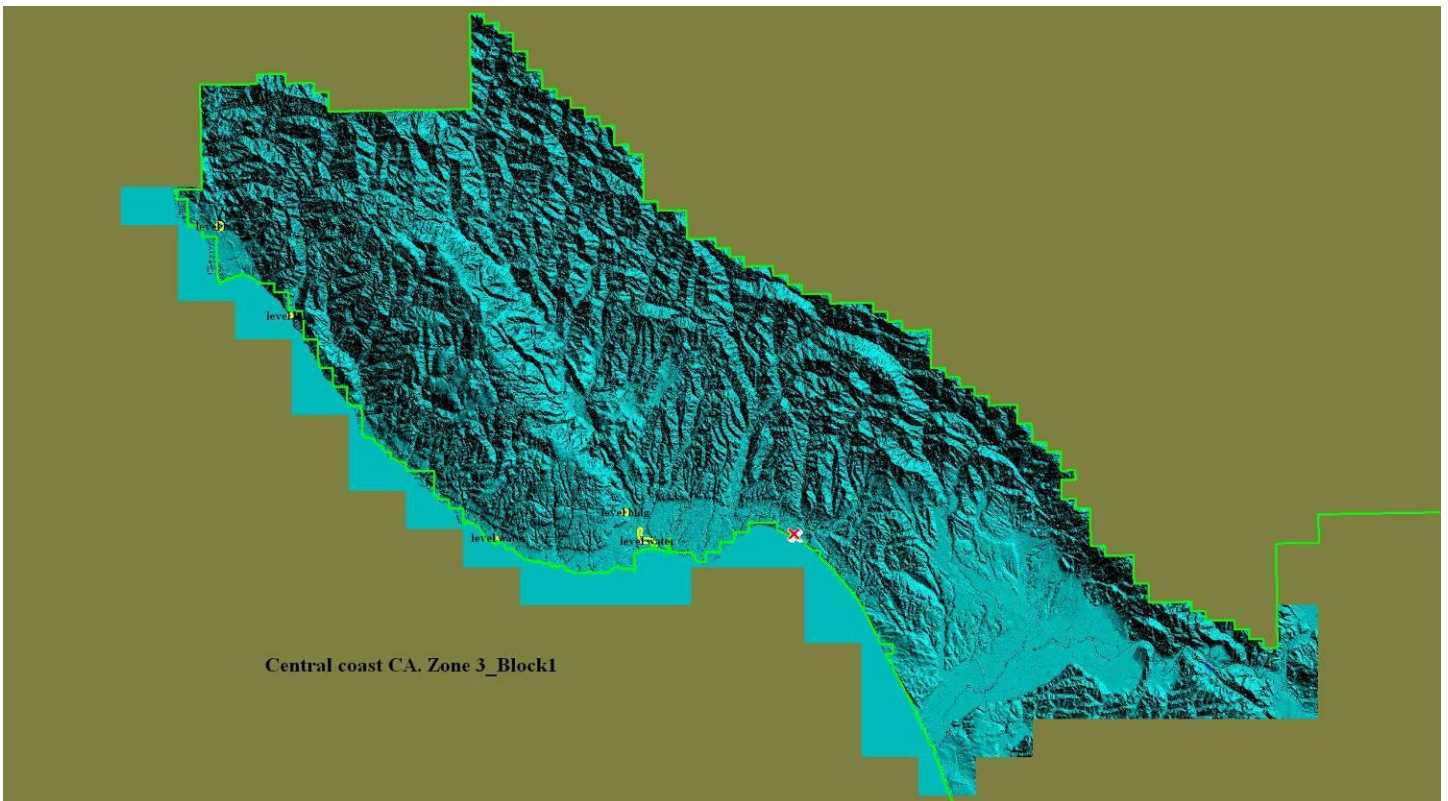
Central Coast CA. Block 1&2 Zones 3&4



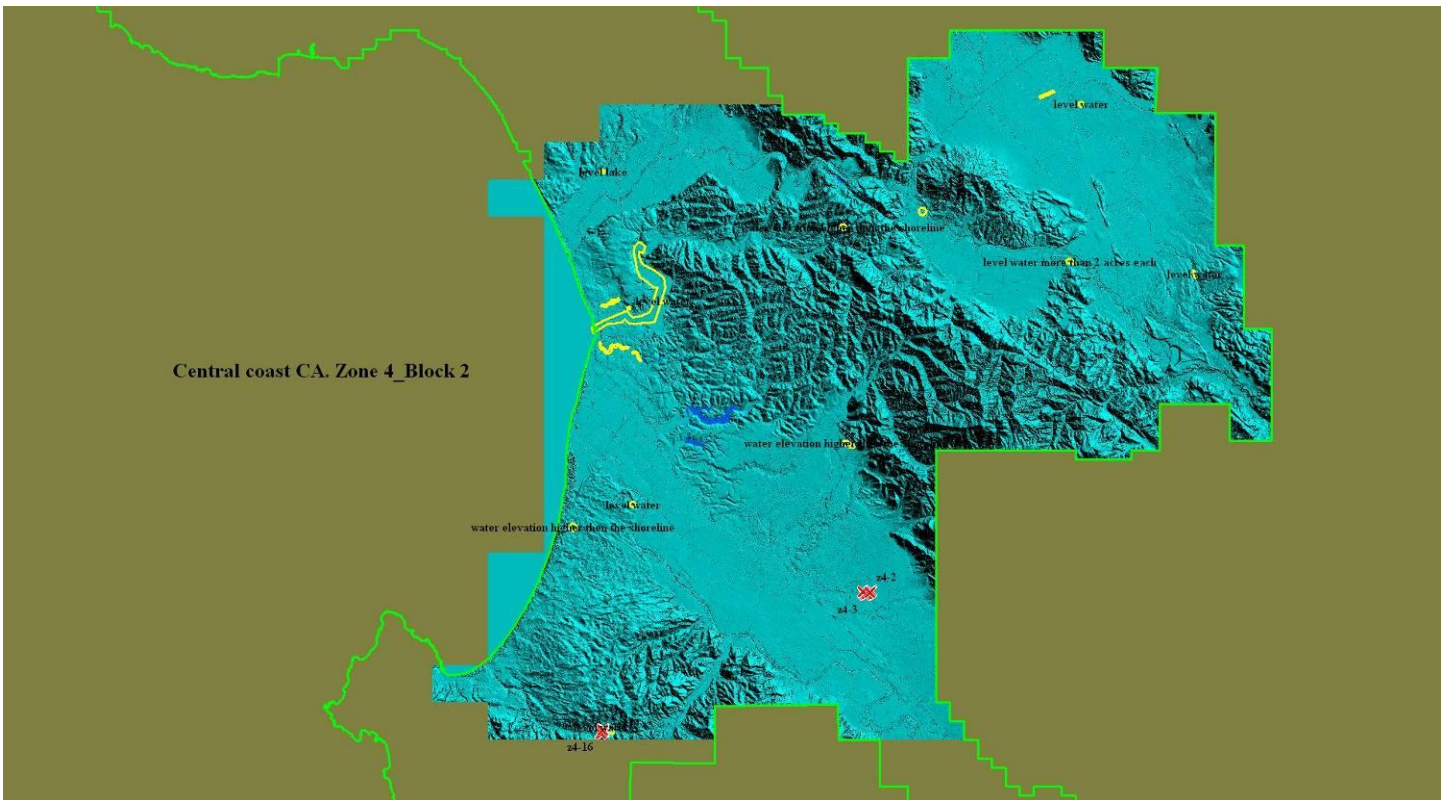
Central Coast CA. Block 1&2 Zones 3&4 2



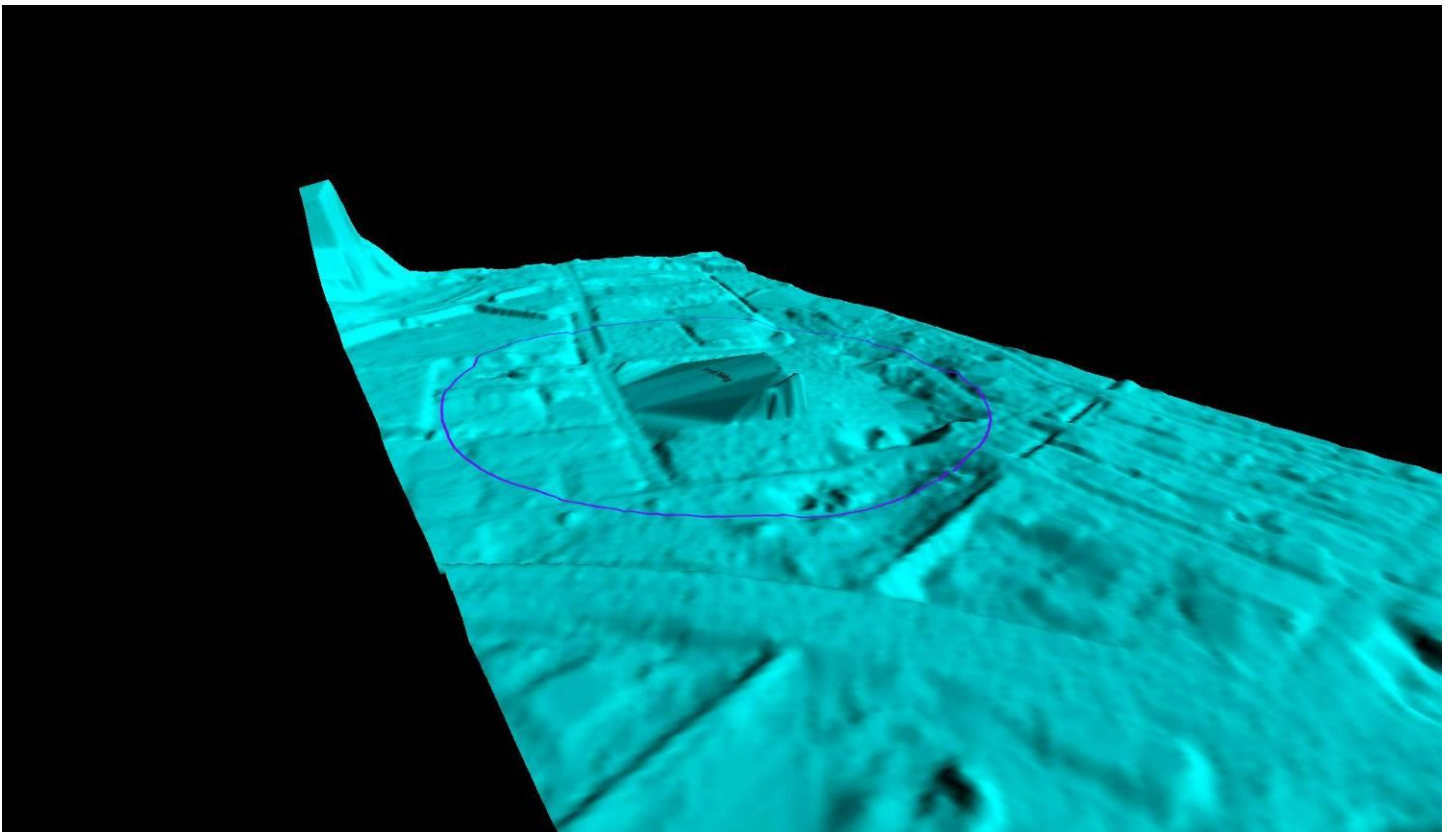
Central Coast CA. Zone 3 block 1



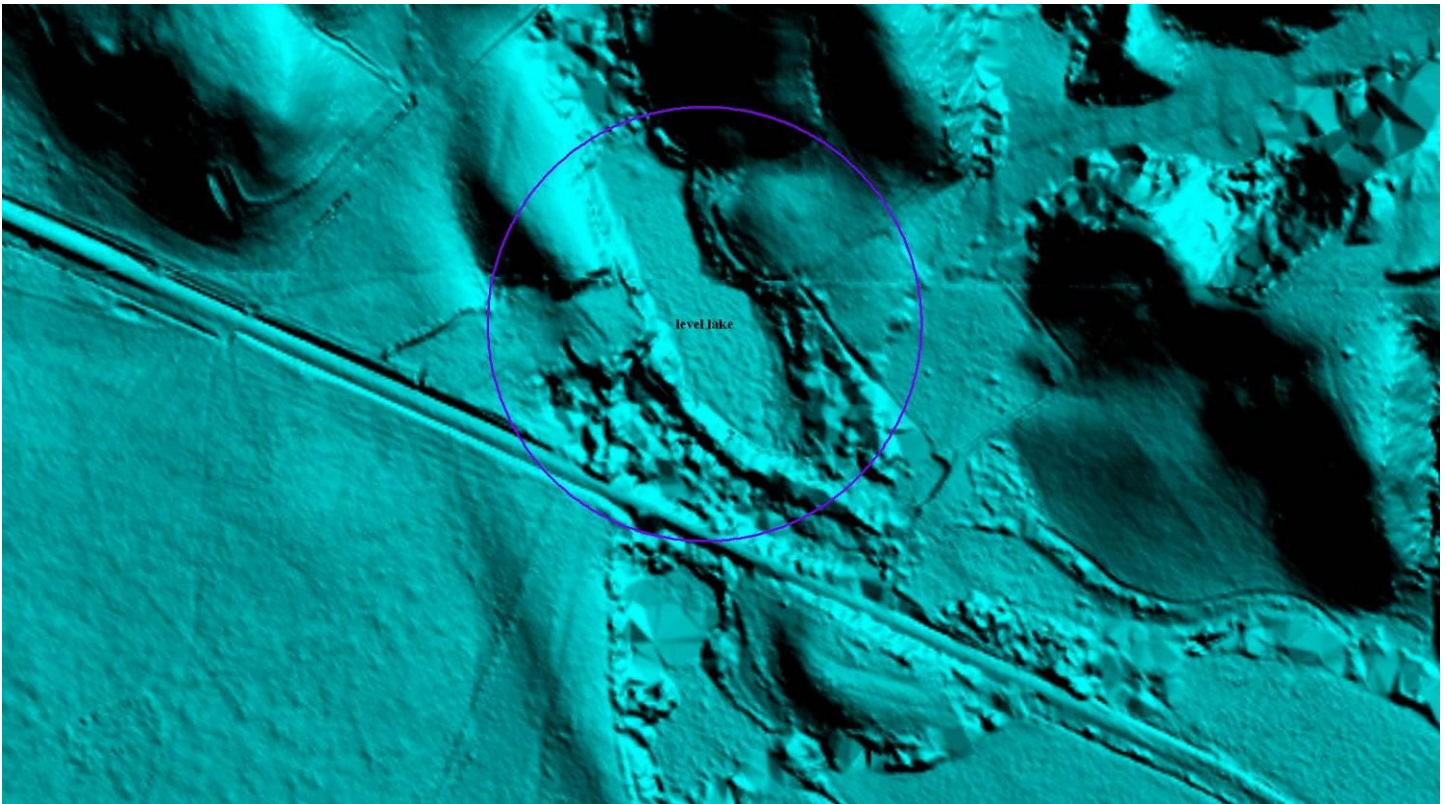
Central Coast CA. Zone 4 block 2



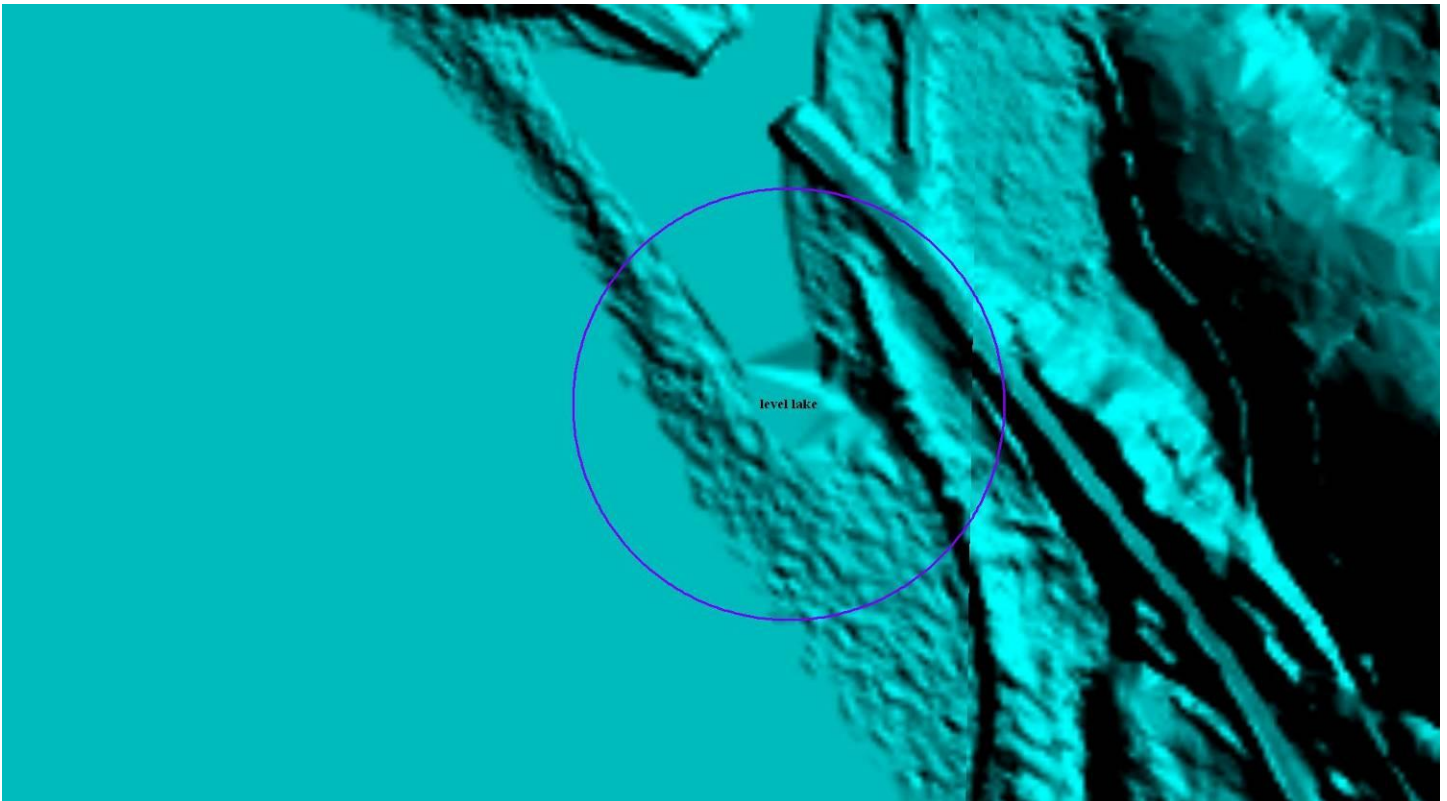
Level building Fixed



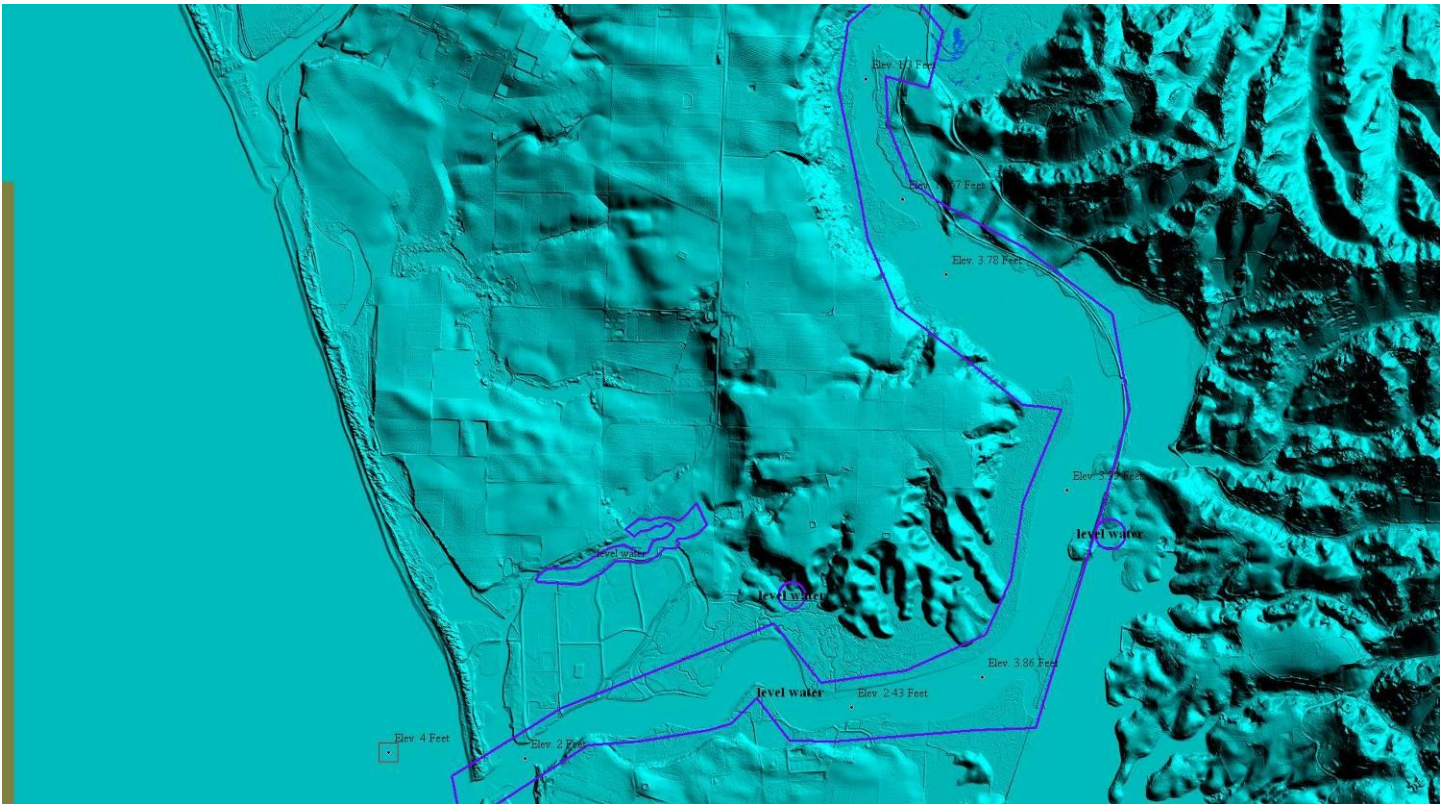
Level Lake 1 Fixed



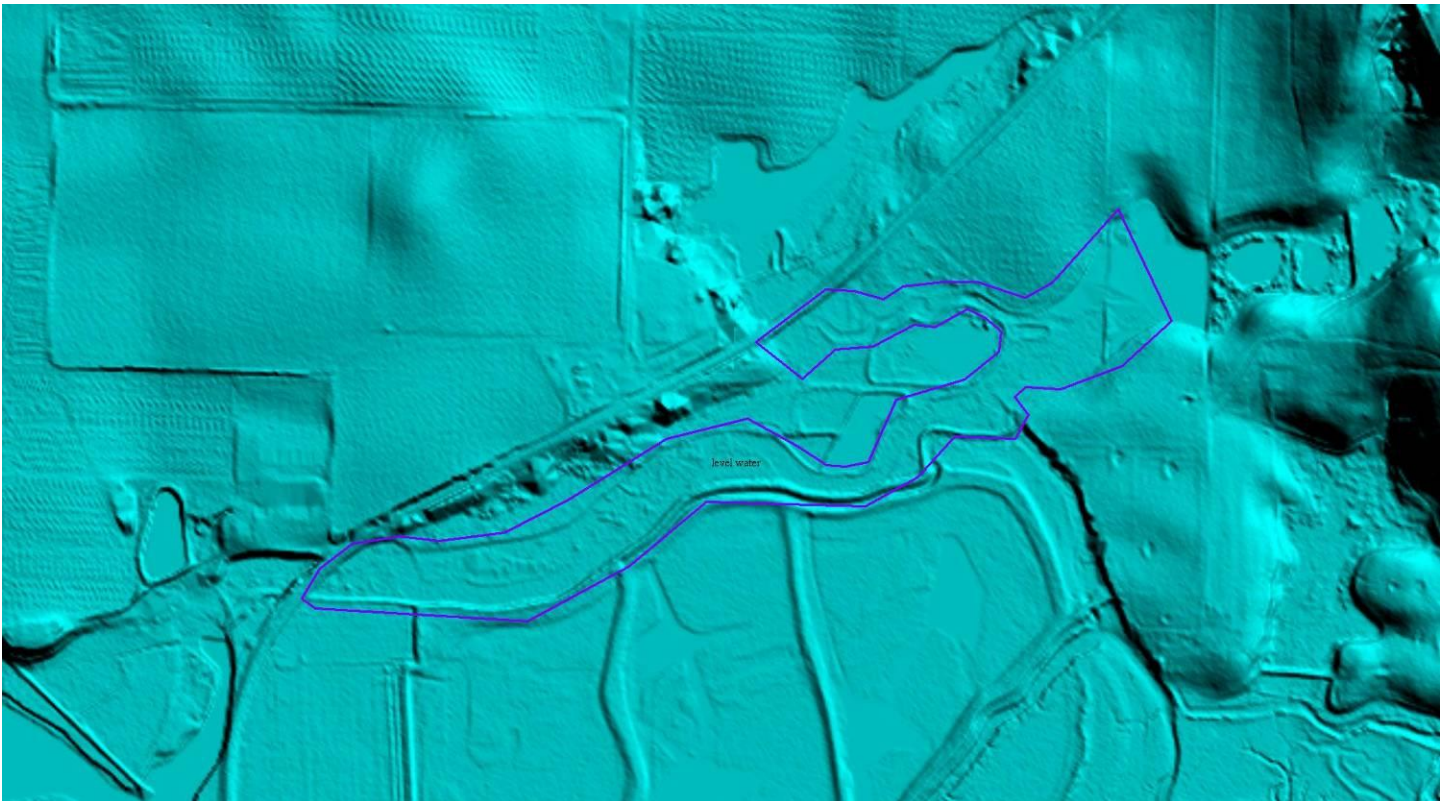
Level Lake 2 Fixed



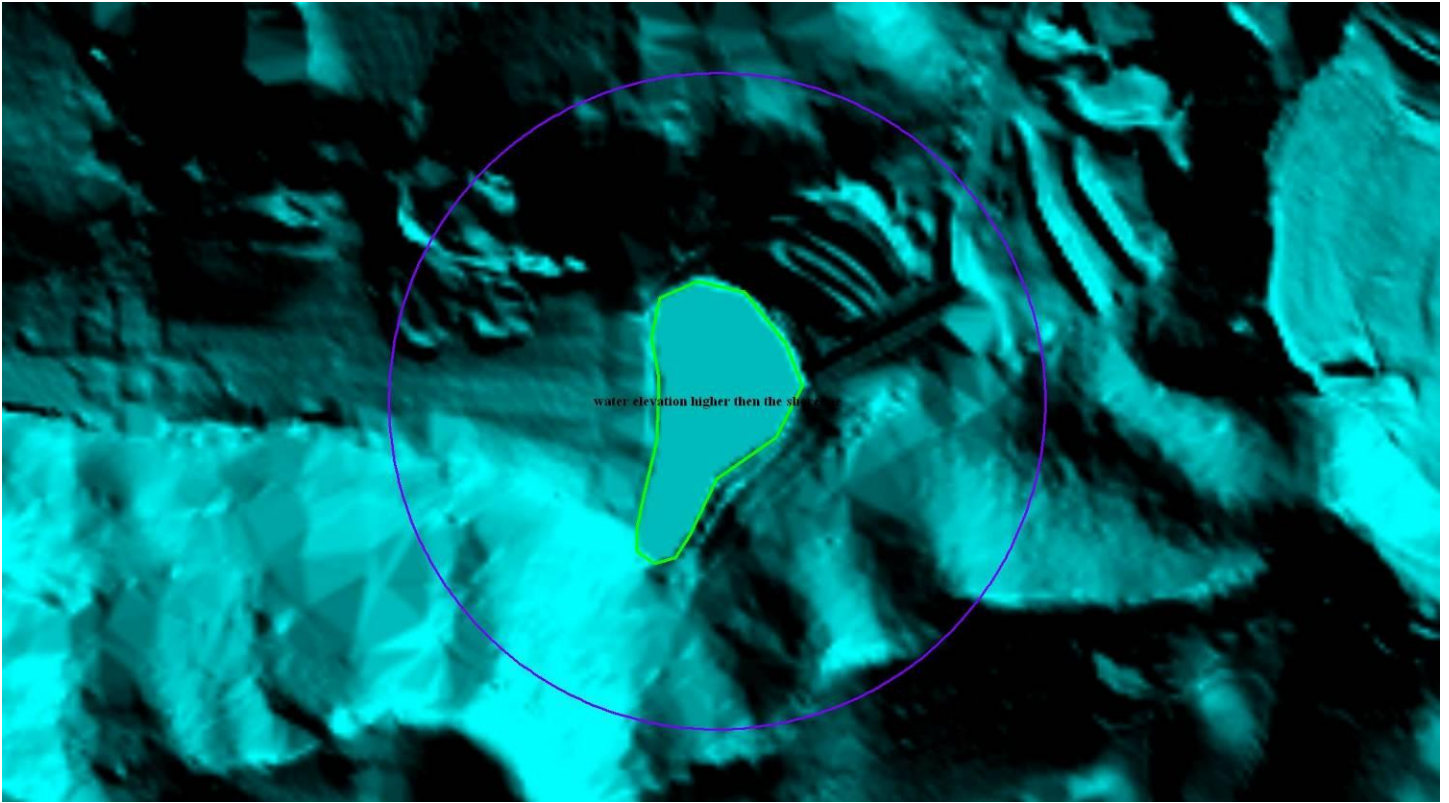
Water elevation error 1 (coast is at 4' then inland to 2', 2.43', 3.86', 3.99', 3.78', 1.3' not fixed could be high and low tide)



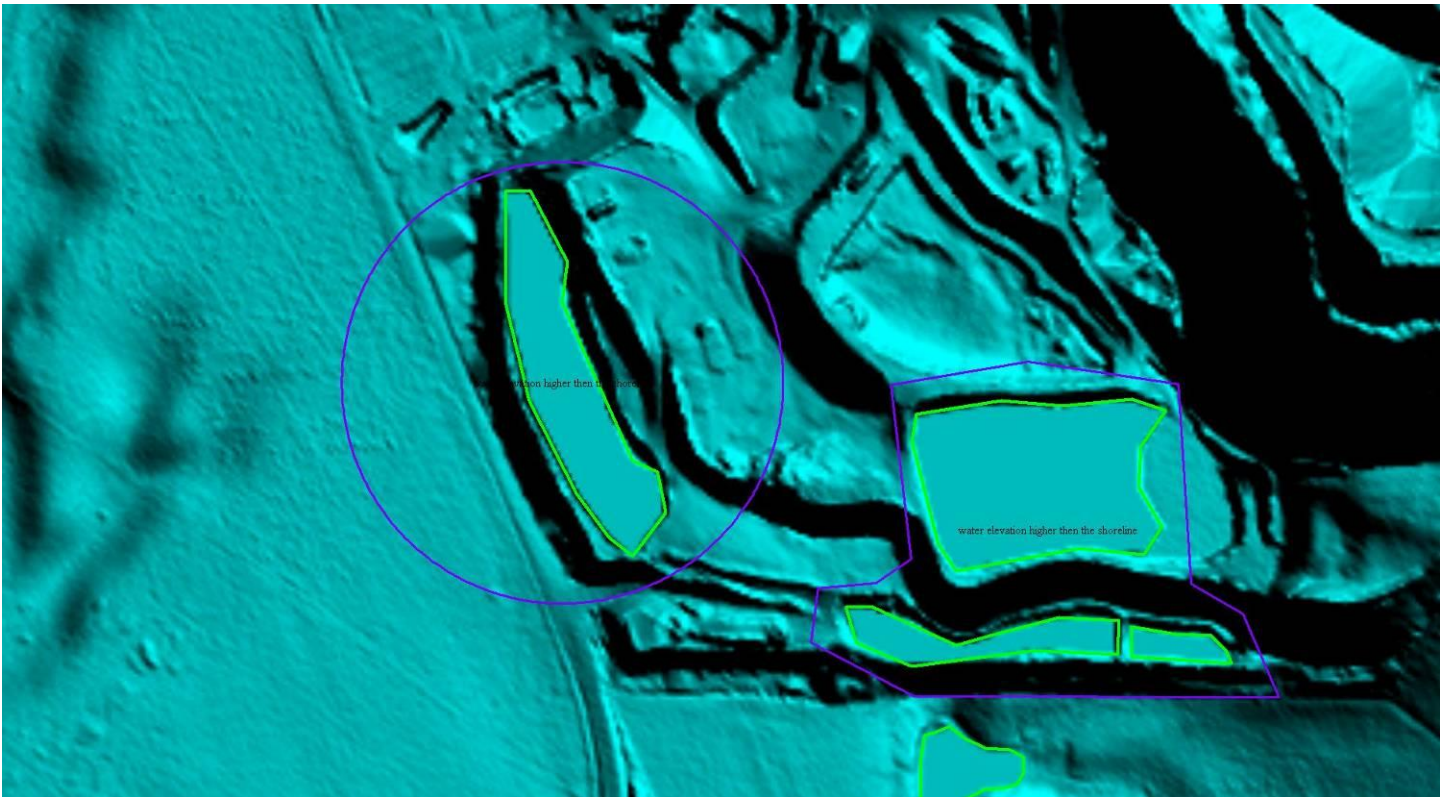
Water elevation error 2 Fixed



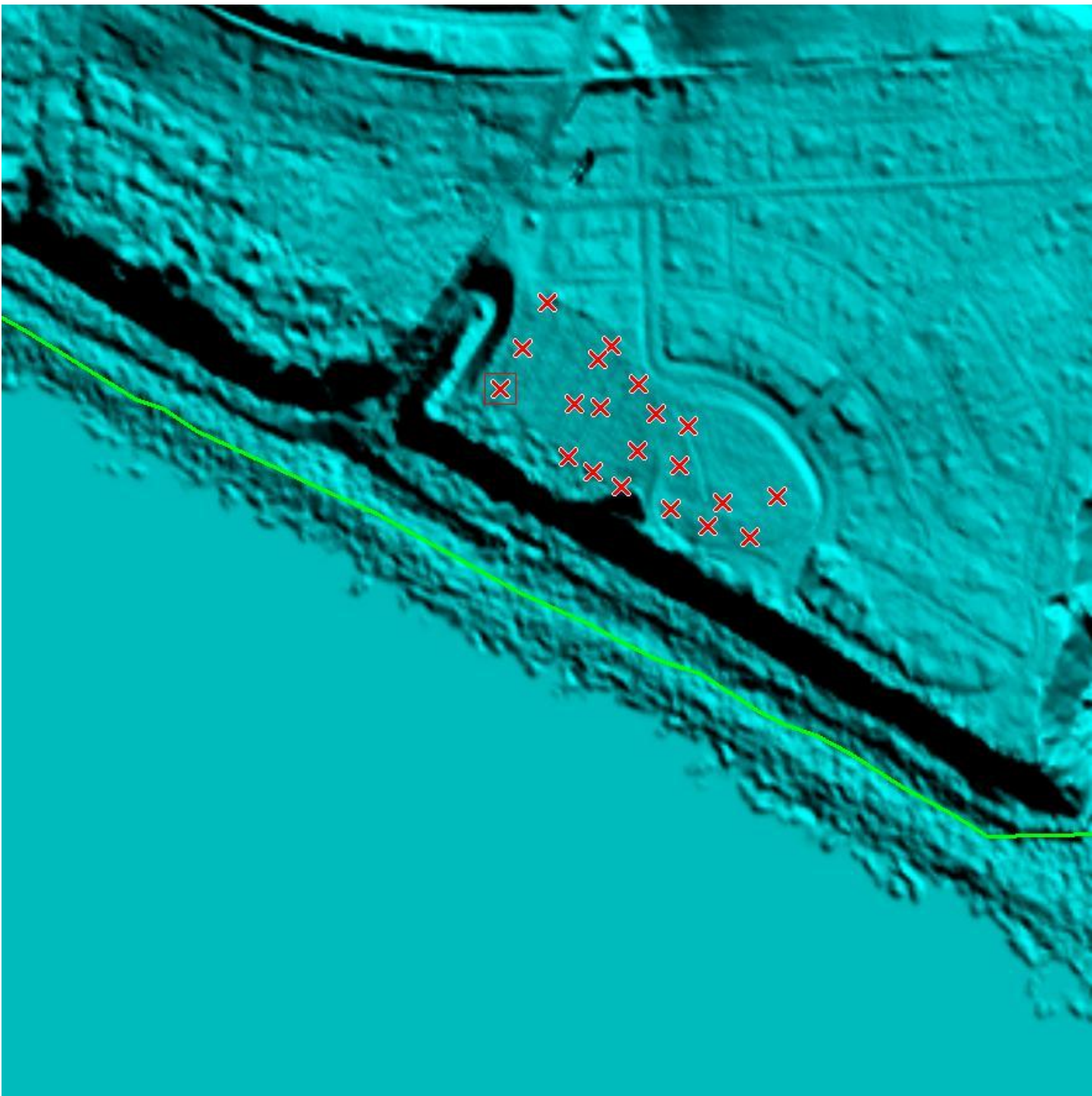
Water elevation higher then the shoreline 1 Fixed



Water elevation higher then the shoreline 2 Fixed



Central Coast CA. Block Zone 3 Block 1 Check points excepted



Central Coast CA. Block Zone 4 Block 2 Check points excepted



Central Coast CA. Block Zone 4 Block 2 Check points excepted

