



TETRA TECH EC, INC.

DOCKET

09-AFC-8

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January 7, 2010

California Energy Commission
Docket No. 09-AFC-8
1516 9th St.
Sacramento, CA 95814

Genesis Solar Energy Project - Docket Number 09-AFC-8

Docket Clerk:

Included with this letter is one hard copy and one electronic copy of the **Supplement to the Genesis Surface Drainage Data Requests sent 12/22/09 Items 179, 180, and 181.**

Sincerely,

Tricia Bernhardt
Project Manager/Tetra Tech EC

cc: Mike Monasmith /CEC Project Manager



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January 4, 2010

Ref: Genesis Solar Energy Project
File: 09-AFC-08

Mike Daly, PE
Genesis Water Analyst
Senior Project Manager, PSOMAS

Mr. Daly:

**SUBJECT: GENESIS SURFACE DRAINAGE DATA REQUESTS SENT 12-22-09
ITEMS 179, 180 AND 181**

Topography data from a 10-meter USGS map was used in the revised FLO-2D analysis for both onsite and offsite. The topographic data was reviewed in the Global Mapper software and there are no steps in the topography as there were in the 30-meter DEM file used in the previous analysis. In addition, the contours from the 10-meter USGS map were checked against the contours from the 2-ft Lidar data in the vicinity of the project site. The contours overlap reasonably.

Please refer to Attachment A for contour overlap between the 10-meter USGS map and the 2-ft Lidar data created in Global Mapper.

Please refer to Attachment B for a perspective view of the USGS map near the project site created in Global Mapper.

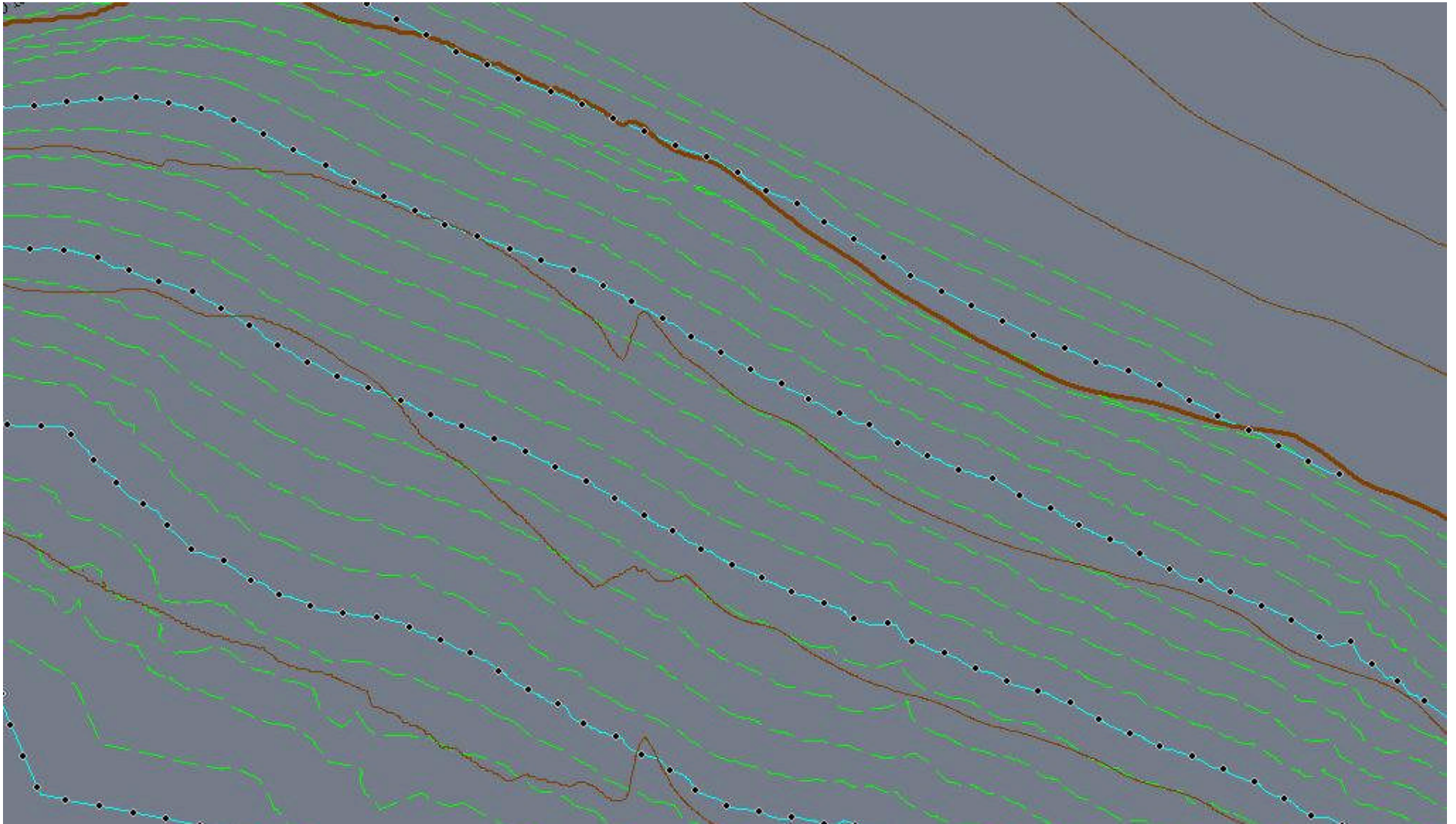
Please refer to Attachment C for a ground surface profile from FLO-2D. The topography data from the 10-meter USGS map was loaded into FLO-2D. The program interpolates the elevation data to assign elevations to each grid element. This profile shows a smooth transition from grid element to grid element. Note that the grid elements are 200 ft x 200 ft. However, smaller grid element sizes will be used for the comparison of existing versus proposed conditions.

Sincerely,

Dipti Sheth, PE

Bob Anders, PE

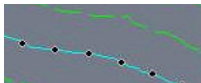
ATTACHMENT A
CONTOUR OVERLAP



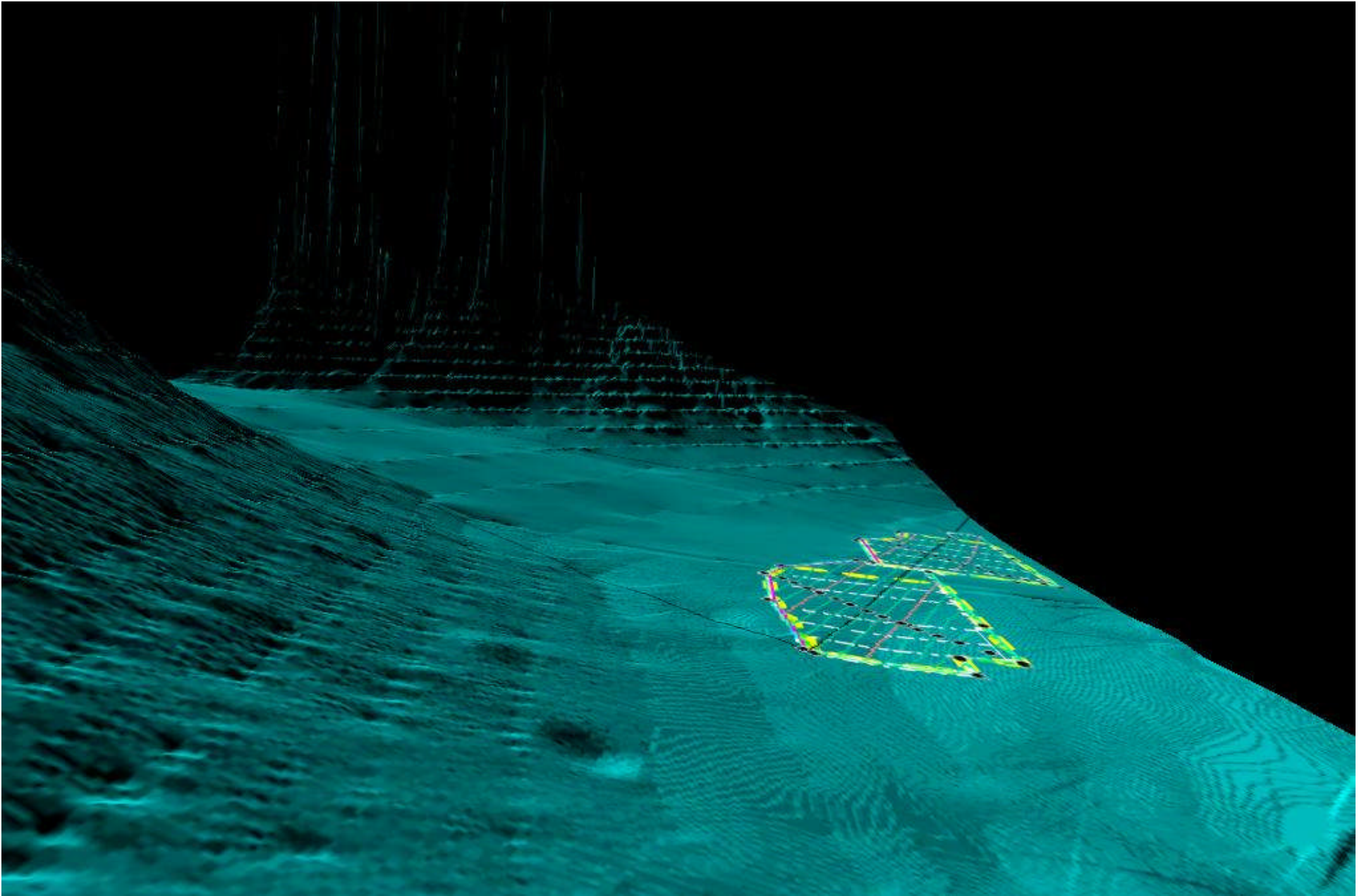
LEGEND: 10-METER USGS



2-FT LIDAR DATA



ATTACHMENT B
VIEW LOOKING FROM WEST



ATTACHMENT C
PROFILE TAKEN NEAR PROJECT SITE

Surface Elevation

