DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
E. Lester Jones
Director

C. & G. SURVEY
L & A
DEC 20 1927
Acc. No.

State: Hawaiian Is...

DESCRIPTIVE REPORT
Topographic Hydrographic
Sheet No. 4292

LOCALITY
Hawaiian Islands
Kauai Island
 Nawiliwili Bay

192 7

CHIEF OF PARTY
Clem L. Garner
DESCRIPTIVE REPORT

to accompany

Topographic Sheet # B, Nawiliwili Bay, Kauai Island T.H.

Clem L. Garner, Chief of Party

Director's instructions dated Nov. 23, 1926.

LIMITS:

This sheet includes a detailed survey of the shore-line of Nawiliwili Bay from Kawai Pt. to Kamilo. Form lines, roads, and buildings are included to approximately 2/3 mile back from the coast.

GENERAL DESCRIPTION:

The shore-line of Nawiliwili Bay is composed of rocky bluffs except for the sand beach at the mouth of the Huleia River and from the dock to a point about 340 meters north of Kukii Pt. On the south side of the bay and south of the Huleia River the ground is high and rugged. On the north side of the bay the land back from the shore is mostly flat or gently sloping and is covered with sugar cane fields.

The breakwater extending from the south shore of the bay toward Kukii Pt. is about 10 feet high and is completed. The retaining wall extending out from the west shore is still under construction, being about one-half completed. A blueprint showing the proposed location of the retaining wall accompanies this sheet.

The inner part of the bay is obstructed by reefs but vessels anchor just outside the red buoy to load and discharge cargo. Passengers and cargo are carried between the ships and the dock in small boats. There is frequent communication with Honolulu and vessels of the Inter-island Steam Navigation Co. call here regularly. At the village of Nawiliwili transportation and communication may be obtained to all parts of the island. Supplies may be purchased here in limited quantities.

The Huleia River empties into the southwest corner of the bay and is navigable by small boats for a distance of 3 or 4 miles above the mouth but it's entrance is generally closed by a sand bar which is almost bare at time of low water.

The railroads shown are narrow gauge and used only for the construction of the retaining wall.

AIDS to NAVIGATION:

Minini Pt. and Kukii Pt. are each marked by lighthouses. The positions of these were located by triangulation. The only other aid to navigation is the red buoy shown on this sheet.
SURVEY METHODS:

The triangulation stations shown furnished control for this work and the survey was accomplished by the usual plane-table methods. Positions were found mostly by three point fix and re-sections. A traverse was run between Ninini Pt. light and Eukui Pt. light with a closing error of 3 meters which was adjusted. A closed traverse was run up the road west of Kawiliwili checking the final position by a three point fix. A spur traverse was run up the Huleia River.

Form lines were obtained as far back as the bluff line.

List of plane-table positions and statistics accompany this report.

Respectfully submitted,

J. C. Partington
Topographer

Approved and forwarded,

T. H. Kingle
Chief of Party
LIST of PLANE-TABLE POSITIONS

<table>
<thead>
<tr>
<th>Object</th>
<th>Latitude</th>
<th>D.M.</th>
<th>Longitude</th>
<th>D.P.</th>
<th>Height</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pole</td>
<td>21° 56'</td>
<td>1621</td>
<td>159° 21'</td>
<td>212</td>
<td>62</td>
<td>White Pole</td>
</tr>
<tr>
<td>Tank</td>
<td>21 56</td>
<td>1676</td>
<td>159 21</td>
<td>335</td>
<td></td>
<td>Lower one of two black tanks</td>
</tr>
<tr>
<td>Black</td>
<td>21 56</td>
<td>1587</td>
<td>159 21</td>
<td>1064</td>
<td></td>
<td>Black tank</td>
</tr>
<tr>
<td>Der</td>
<td>21 56</td>
<td>1728</td>
<td>159 21</td>
<td>1438</td>
<td></td>
<td>Derrick at head of bay</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>North gable of brown house</td>
</tr>
<tr>
<td>Brown</td>
<td>21 57</td>
<td>646</td>
<td>159 21</td>
<td>998</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dock</td>
<td>21 57</td>
<td>1147</td>
<td>159 21</td>
<td>494</td>
<td></td>
<td>Loading derrick on dock</td>
</tr>
<tr>
<td>West</td>
<td>21 57</td>
<td>1251</td>
<td>159 21</td>
<td>190</td>
<td></td>
<td>West white pillar of house</td>
</tr>
<tr>
<td>Derrick</td>
<td>21 57</td>
<td>842</td>
<td>159 21</td>
<td>68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statute miles of shoreline 9.0

Statute miles of roads and railroads 6.5
To: The Director,  
U. S. Coast and Geodetic Survey.

Through: Commanding Officer, Ship SURVEYOR,  
Inspector, Seattle Field Station.

From: J. C. Partington, Jr. H. & G. E.  
U. S. Coast and Geodetic Survey.

Subject: Discrepancies on topographic sheets.

In reply to your letter of November 15, 1928, reference 10 No C, I wish to state the following:

On the survey of topographic sheet No. 4292 Nawiliwili Bay, Kauai Island T. N., scale 1:5000, the survey methods were as follows: The plane table was set up at Ninini Point lighthouse and a traverse run to topographic signal Last.

Signal Last was located by a rod reading taken from the topographic signal between Ninini Point lighthouse and signal Last. This traverse could not be closed since there is no triangulation station on the sheet north of Ninini Point lighthouse and the trees inshore from signal Last obscured any triangulation station which could be used for resection.

On topographic sheet No. 4296 a traverse was run from Ninini Point lighthouse to a triangulation station north of topographic signal Last and signal Last was located as the traverse proceeded.

The position of signal Last as found on topographic sheet No. 4296 is probably correct and the discrepancy on sheet No. 4292 is no doubt due to an erroneous rod reading taken from a plane table set up at the topographic signal between Ninini Point lighthouse and signal Last.
The position of the adjusted shore line is shown on the tracing in red and the tracing returned herewith.

No comparison of the two sheets was made in the field in order to discover discrepancies between the two. In the future this will be closely watched by me.

J. C. Partington
Jr. M. & G. E.

R. R. L. S.
County M. Surveys.
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey. 8 4292
Register No.

State . Hawaiian Is. . . . . . . . . . . . . . . . . . .

General locality . Kauai Island . . . . . . . . . . .

Locality . . Nawiliwili Bay . . . . . . . . . . . . . .

Chief of party . Clem L. Garner . . . . . . . . . . .

Surveyed by . J. C. Partington . . . . . . . . . . .

Date of survey . January and February 1927 . . . . . . .

Scale . . . . . 1 : 5000 . . . . . . . . . . . . . . . . .

Heights in feet above . Mean high water . . . . . . .

Contour interval . 20 . feet.

Inked by J.C. Partington  Lettered by J.C. Partington . . .

Records accompanying sheet (check those forwarded): Photographs, Descriptive report, Horizontal angle books, Field computations, Data from other sources affecting sheet . . . . . . . .

Remarks: