

6383a-b

U. S. COAST & GEODETIC SURVEY
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DEC 26 1935

Acc. No. _____

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: OREGON

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No. SIa & SIb

LOCALITY

COLUMBIA RIVER

BAKER BAY

SAND ISLAND

1935

CHIEF OF PARTY

Robert W. Knox

U. S. GOVERNMENT PRINTING OFFICE: 1930

6383a-b

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEYU. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

DEC 28 1935

REG. NO.

TOPOGRAPHIC TITLE SHEET

Acc. No. _____

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter Sla **T6383 a**

REGISTER NO.

State OregonGeneral locality Columbia River, Baker BayLocality Sand IslandScale 1 : 5 000 Date of survey July, 1935, 19Vessel Party No. 9Chief of Party Robert W. KnoxSurveyed by R. A. PhilleoInked by R W K

Heights in feet above _____ to ground to tops of trees

Contour Approximate contour Form line interval _____ feet

Instructions dated February 26, 1935, 19

Remarks: _____

DESCRIPTIVE REPORT
TO ACCOMPANY
TOPOGRAPHIC SHEETS LETTERS (FIELD) S1a & S1b
SAND ISLAND
OREGON
JULY, 1935

Instructions dated February 26, 1935

Robert W. Knox, H. & G. E.,
Chief of Party

GENERAL DESCRIPTION - Sand Island lies in front of Baker Bay, a shoal open bight formed by Cape Disappointment and the recession of the land to the north. It is an island formed by the concretion of river sand and silt due to the construction of various jetties and dikes. The shore line of the island, particularly on the river side, is constantly changing. Neither Broughten's survey of 1792 nor Rockwell's survey of 1869 show any indication of the island.

Three dikes, of piling, have been constructed off the south side of the Island in recent years and additional concretion along that side of the Island will undoubtedly result. The U. S. Engineers have constructed hearings relative to the advisability of diking and entirely blocking the channel between Cape Disappointment and Sand Island. It is thereby hoped the main ship channel can be kept at the controlling depth without continual dredging.

The Island is covered with a sparse growth of grass with small trees and brush on the northern portion. There is also considerable driftwood along the western shore of that section of the Island.

Sand Island was early deeded to the United States Government by the State of Oregon for defence purposes, but no improvements of a military nature were ever made. Until the State of Washington outlawed fish traps in 1934, the Government leased certain sections of the Island and adjacent waters to different fishing companies, and the waters, as a result, are studded with the dolphins and piling of numerous fish traps. No attempt was made to delineate individual traps except in a few cases, because 1) of their number and 2) the fact that they are located in non-navigable waters. Limiting piles and dolphins were intersected and the outer limits sketched in.

The low water line could be obtained only with the expenditure of a great deal of time and as it was anticipated that the area would be sounded out, no attempt was made to run it in except off the northwest tangent of the Island.

About the time the survey of Sand Island was begun its ownership was in litigation in the Federal Court in Portland, Oregon. The litigants included the Federal Government, the States of Oregon and Washington and several fishing interests. The Commandant at Fort Stevens suggested that a survey on a scale of 1:5 000 might serve an extremely useful purpose in time to come.

All signals used by the U. S. Engineers in their hydrographic surveys of the vicinity were transferred from their blueprints to the topographic sheets and then accurately located on the latter. These have been listed, along with other recoverable objects, and have been included with this report. As it appears probable that the U. S. Engineers will make more use of the survey than this Bureau, their coordinate system was overlaid on the sheets. The position of the grid with respect to the geographic system was computed from the stations VII USE 1935 and SANDS 1935.

LANDMARKS: The most prominent object on the island at the present time is an observation tower (TOWER, SAND ISLAND 1935) erected by the U. S. Army as an observation post. This is apparently a temporary structure and will probably collapse with the first wind of gale force. It is therefore recommended that it be not shown on the charts. The white water tank on the eastern end of the Island is prominent, otherwise there are no landmarks except the aids to navigation. A complete list of landmarks on form 567 is included with the report.


SURVEY METHODS: The alidade was adjusted before field work was undertaken and three and one-half meter rods were graduated from a measured base so that longer half-interval sights were possible,

Standard methods were used in running the traverses. Control was adequate and the closures were either flat or too small to be adjusted. The accuracy of the traverse was checked by the Chief of Party after the field work was completed by plotting two triangulation stations, BAY 1935 and BAKER 1935, which had not been computed at the time that section of the Island was surveyed. In one case the check was flat and the other, flat in latitude and about one meter error in longitude.

GEOGRAPHIC NAMES: No new names are included in the area covered by this survey.

COMPARISON WITH PREVIOUS SURVEYS: The shore line of the present survey was reduced to a scale of 1 : 20,000 and compared with the survey, on a like scale, of 1926. The included blue print shows the discrepancies.

Respectfully submitted:


Robert W. Knox,
Chief of Party.

Plane Table Positions

Sia

Object	Latitude		Longitude		Feet	Remarks
	DM	Feet	DP	Feet		
Lower Rear	46 16	869	534 S	123 59	952	13961 E
Sand Island Art.	46 15	1729	3789 S	123 59	929	14036 E brown top
Dolphin						
Peacock Spit Rear	46 15	1753	3710 S	123 59	721	14720 E
Pile	46 16	1010	66 S	123 59	705	14771 E
Pile	46 16	878	501 S	123 59	555	15264 E
Ilwaco Channel "2"	46 16	755	902 S	123 58	879	18417 E marker
Pile	46 16	590	1144 S	123 59	441	15638 E diamond shaped/
Pile 7	46 16	669	1181 S	123 59	14	17037 E
Cable Crossing	46 15	1259	5326 S	123 58	829	18581 E sign board
Stiffleg	46 15	1498	4544 S	123 58	488	19698 E
Jake	46 15	1024	6096 S	123 58	475	19742 E north high cor- ner dock house
USE Dolphin	46 15	1648	4051 S	123 58	332	20211 E wooden platfm 8x8 ft;el=12 ft
"B" Front	46 15	1807	3530 S	123 58	42	21163 E
Ilwaco Channel	46 15	1281	5253 S	123 57	1066	22018 E
Double pile	46 16	172	2816 S	123 59	500	15443 E
		Sib				
Pile	46 16	1685	2137 N	124 02	170	3879 E
Slanting Pile	46 17	8	2714 N	124 02	98	4114 E
Pile	46 16	1181	483 N	124 02	53	4263 E
Pile	46 16	1026	23 S	124 01	1250	4548 E
Joe	46 16	1187	505 N	124 01	1127	4955 E shack
Pile 13	46 17	1065	6184 N	124 01	579	6752 E NW corner of /
Pile 41	46 17	985	5921 N	124 01	339	7540 E
Dol	46 17	126	3103 N	124 00	1231	8828 E dolphin
Upper Rear	46 16	1697	2179 N	124 00	828	10142 E
Dredging Front.	46 17	492	4303 N	124 00	617	10840 E
Lower Front	46 16	1275	793 N	124 00	32	12756 E
Pete	46 16	744	950 S	124 00	830	10141 E slat signal N portion house on pier
Dolphin	46 16	1558	1558 S	124 00	289	11912 E
Zeke	46 16	136	2944 S	124 00	459	11354 E sig on dock hse
Eben	46 15	1773	3650 S	124 01	13	8609 E old scaffold
Jack	46 16	10	3357 S	124 01	385	7386 E ww on pile
IV USE	46 16	254	2557 S	124 00	1170	9028 E
Sand Island Cutt-	46 16	490	1781 S	124 01	206	7975 E
Off Rear						
Single Pile	46 17	347	3826 N	124 00	728	10477 E Ilwaco Channel
Cut Dolphin	46 16	228	2644 S	124 01	412	7301 E

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Astoria, OregonOctober 15, 1935, 193

DIRECTOR, U.S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted:

Robert W. Knox							Chief of Party.
DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED
	LATITUDE		LONGITUDE		DATUM		
	°	D.M. METERS	°	D.P. METERS			
(White water tank TANK, white Sand I, 1935)	46 15	1380.1	123 59	547.6	NA1927	tri	6151
The following aids to navigation the names of which are the same as they appear in the triangulation records							
Entrance Front	46 15	1617.2	123 59	1160.0	NA1927	tri	do
Entrance Rear	46 16	79.2	123 58	1039.6	do	do	do
Ilwaco Channel "5"	46 17	806.8	124 01	88.7	do	do	do
Ilwaco Channel "3A"	46 16	1512.4	124 00	365.0	do	do	do
Ilwaco Channel "3"	46 16	1188.3	123 59	969.6	do	do	do
Sand Island Lower Light Dike	46 15	1199.5	124 00	511.7	do	do	do
Sand Island Middle do	46 15	1002.4	123 59	825.9	do	do	do
Sand Island Dike Light	46 15	694.8	123 58	1088.1	do	do	do
Ilwaco Channel "2"	46 16	755.3	123 58	879.0	do	topo	do
Ilwaco Channel	46 15	1281.3	123 57	1066.4	do	do	do
The above positions have been verified in accordance with paragraph 4 of the instructions for preparation and submission of form 567 copy ✓ BUC.							
Robert W. Knox.							


A list of objects carefully selected because of their value as landmarks as determined from seaward, together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) Offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

APPROVAL OF CHIEF OF PARTY

Topographic sheets S1a and S1b have been inspected and approved by me. The field work was done under my occasional supervision.

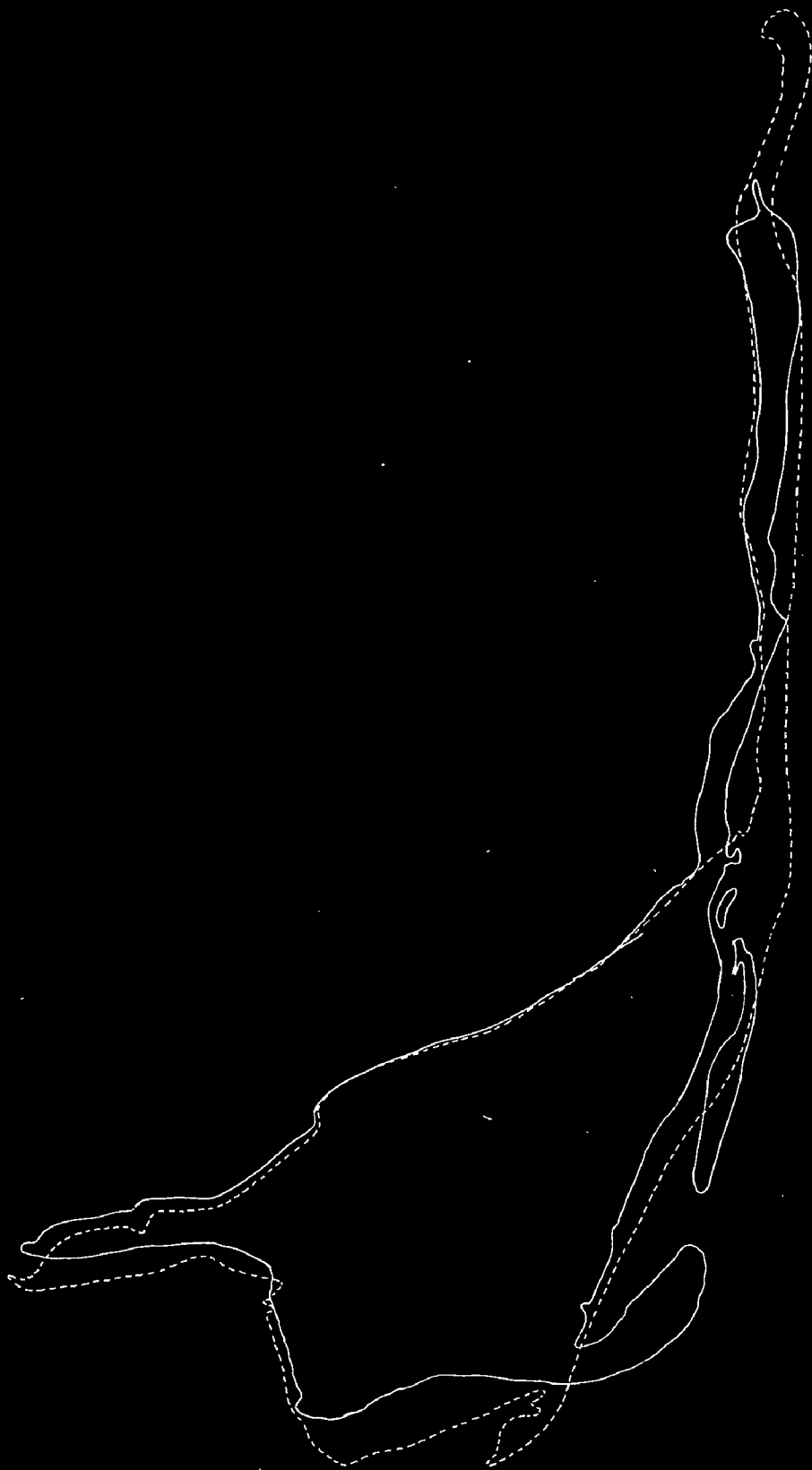

Robert W. Knox,
H. & G. Eng'r,
Chief of Party.

SAND ISLAND

1965 SURVEY

1966

SOME 150 000



SAND ISLAND

----- 1926 SURVEY
——— 1935

SCALE 1:20 000

Remarks

Decisions

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GEOGRAPHIC NAMES

Survey No. T6383a&b

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H GEOG. U. S. GOVERNMENT DICTIONARY	K MEANEY'S Names	
<u>Baker Bay</u> ✓	6151							✓	✓	1
<u>Sand Island</u> ✓	6151							✓	—	2
										3
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Names underlined in red approved
by *S. E. Meyer* on 1-24-56

MEMORANDUM

IMMEDIATE ATTENTION

~~SURVEY~~

DESCRIPTIVE REPORT

~~PHOTOGRAPH~~~~No. H~~

No. T 6383a&b

received Dec. 28, 1935
 registered Jan. 20, 1936
 verified
 reviewed
 approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
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RETURN TO

82	
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Jan. 21, 1936

C. K. Green

REVIEW OF TOPOGRAPHIC SURVEY No. 6383a.

Title (Par. 56) *Sand Island, Oregon*Chief of Party *R.W. Knox* Surveyed by *R.A. Philleo* Inked by *R.W. Knox*Ship *Field Party #9* Instructions dated *Feb. 26, 1935* Surveyed in *July, 1935*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. ~~The amount of vertical control that the Manual specifies for contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)~~
5. ~~The delineation of contours-formlines- is satisfactory. (Par. 49, 50.)~~
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *None Submitted*
7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, reefs, ~~coral reefs and rocks~~, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ✓
9. ~~Rocks and~~ other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) ✓

See reverse side

10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
11. ~~Locations and elevations of summits are given. (Par. 19, 51.)~~
12. ~~The tree line was shown on mountains. (Par. 16g.)~~

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

Paragraph 19

All previous surveys up to 1926, when T4251 was surveyed, were inspected and disregarded as far as making a comparison with the present survey T6383a. A comparison between T4251 (1926), and the present survey T6383a (1935), is made on a blue print attached to the descriptive report.

T6383a supersedes T1139b, T1138, T335, T317, H250, H273 and T4251 in part.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. ~~The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.~~
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMS and DPs, 68.) *None Submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) ✓
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) *Declination checked - Error +53' (uncorrected) Meridian shown in black* instead of red (*Erasod from sheet)* *Authority letter Feb. 17, 1938 - R.W. Knox (Filed in Des. Rept. T-65216.)* *Meridian on sheet corrected for declination error Mar. 2, 1938 G.R.*
18. The geographic datum of the sheet is *N.A. 1927 (Unadjusted)* and the reference station is correctly noted. (Par. 34.) *Field Computations Used*
19. Junctions with contemporary surveys are adequate. *Joins T 6383b on the East*
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. *Referred to the Chief of Party to clear up R.R. tracks and Sand Bank*
23. The Chief of Party inspected and approved the sheet and the descriptive report after review by ✓
24. Remarks:

Reviewed in office by *Chas. R. Bush Jr.* June 19, 1936

Examined and approved:

C. J. Green
Chief, Section of Field Records

L. O. Lobell
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work

G. H. de
Chief, Division of Hyd. and Top.

REVIEW OF TOPOGRAPHIC SURVEY No. 63836

Title (Par. 56) *Sand Island, Oregon*Chief of Party *R.W. Knox* Surveyed by *R.A. Philles* Inked by *R.W. Knox*Ship *Field Party #9* Instructions dated *Feb. 26, 1935* Surveyed in *July, 1935*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. ~~The amount of vertical control that the Manual specifies for contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)~~
5. ~~The delineation of contours-formlines- is satisfactory. (Par. 49, 50.)~~
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *None Submitted*
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, reefs, ~~coral reefs and rocks,~~ and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ✓
9. ~~Rocks and~~ other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) ✓
See Reverse Side
10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
11. ~~Locations and elevations of summits are given. (Par. 19, 51.)~~
12. ~~The tree line was shown on mountains. (Par. 16g.)~~

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

Paragraph 19

All previous surveys up to 1926, when T4251 was surveyed, were inspected and disregarded as far as making a comparison with the present survey T6383b. A comparison between T4251 (1926), and the present survey T6383b (1935), is made on a blue print attached to the descriptive report.

T6383b supersedes T1139b, T1138, T335, T317, H250, H273 and T4251 in part.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. ~~The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.~~
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) *None submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) ✓
17. The magnetic meridian was shown ✓ and declination was checked. ✓ (Par. 17, 52.) *Declination checked - Error +53' (uncorrected) Meridian shown in black instead of red ** *Meridian on sheet corrected for declination error. G.R. Mar. 2, 1938* *Authority letter Feb. 17, 1938-R.W. Knox. Filed in Des. Rept. T-65216* **(Erased from sheet)*
18. The geographic datum of the sheet is *N.A. 1927 (Unadjusted)* and the reference station is correctly noted. (Par. 34.) ✓
Field Computations Used
19. Junctions with contemporary surveys are adequate.
Joins T 6383a on the West
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. *Referred to the Chief of Party to clear up R.R. tracks and Sand Bank*
23. The Chief of Party inspected and approved the sheet and the descriptive report ~~after review by~~ ✓
24. Remarks:

Reviewed in office by *Chas. R. Bush Jr. June 19, 1936*

Examined and approved:

E. H. Green
Chief, Section of Field Records

L. O. Dolbert
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work

W. H. de
Chief, Division of Hyd. and Top.