

6691

6691

Form 504 Rev. April 1935 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Topographic <del>Hydrographic</del>	Sheet No. T-6691
U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES MAR 18 1940 Acc. No. _____	
State WASHINGTON	
LOCALITY SOUTHEAST SHORE, PADILLA BAY	
193 9	
CHIEF OF PARTY Robert W. Knox.	

Applied to Chart 6380 Mar. 10/41 BOP.  
" " " 6300 " 20/41  
" " " 6376 Aug 7, 1944 JTW

DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

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

Field No. L.....

REGISTER NO. T-6691

T6691

State..... Washington.....

General locality..... Padilla Bay.....

Locality..... *South and East Side of Padilla Bay*  
~~Swinomish Slough to Joe Leary Slough~~.....

Scale..... 1:10,000..... Date of survey..... September, 1939....., 19.....

Vessel..... U. S. C. & G. S. Ship Explorer.....

Chief of party..... Robert W. Knox.....

Surveyed by..... J. C. Tison, Jr.....

Inked by..... JCT Jr.....

Heights in feet above..... MHHW..... to ground ~~to tops of trees~~

~~Contour~~; -Approximate contour, -Form line interval..... -feet

Instructions dated..... April 12, 1939....., 19.....

Remarks:..... No form lines appear upon this sheet.....



DESCRIPTIVE REPORT  
TOPOGRAPHIC SHEET T-6691  
SOUTHEAST SHORE, PADILLA BAY  
WASHINGTON

INSTRUCTIONS:

The survey of sheet T-6691, a part of project HT-233, was accomplished under the Director's instructions dated April 12, 1939, as modified by letter of June 24, 1939. ✓

LIMITS AND SCALE:

This sheet was surveyed on a scale of 1:10,000. It covers the shore line from immediately east of the Padilla Bay entrance of the Swinomish Slough in  $\phi 48^{\circ} 27.6'$ ,  $\lambda 122^{\circ} 30.8'$ , north and east to  $\phi 48^{\circ} 30.8'$ ,  $\lambda 122^{\circ} 29.1'$ . A satisfactory junction of shore line detail was made in the field with sheet T-6690 in the vicinity of Swinomish Slough. ✓

CONTROL AND SURVEY METHODS:

The control consisted of 2nd order triangulation, both main scheme and intersection, accomplished by the party during the season. No old triangulation was recovered. The triangulation is based upon the NA1927 datum and extends from an adjusted line in Skagit along the Swinomish Slough to Padilla Bay. ✓

Standard survey methods were used. The rods were checked on a measured base by the topographer with the alidade used at the beginning of the season. With the exception of the traverses listed below, all topographic features were located from plane table positions determined or checked by means of a solution of the three-point problem. All off lying features were located either by direct rod readings or from three or more intersecting cuts giving a strong determination. ✓

The following traverses (closed) were run on this sheet:

1. From Whitney 1939 eastward along the Great Northern Railroad to the eastern limit of the sheet, and return; no appreciable closing error and no adjustment necessary. ✓
2. From View 1939 southward to Indian 1939, tying into Ling 1939 enroute; no appreciable closing error and no adjustment necessary. ✓
3. From View 1939 northward to Bayview 1939; no appreciable error and no adjustment necessary. ✓
4. From Bayview 1939 northward to Leary 1939 tying in enroute at Black Cross 1939 the geographic position of which was not available for plotting on the sheet at the time the traverse was run. The closing error of this traverse was slightly less than 4 meters, it being too ✓

long by that amount in a northerly direction. The plane table position of Black Cross was slightly more than 2 meters north of the computed position. The traverse was adjusted in the field according to standard practice.

#### FORM LINES:

No form lines appear on the sheet.

#### GENERAL DESCRIPTION OF TOPOGRAPHIC FEATURES:

South of the town of Bayview the ground is flat and behind the dikes is covered with cultivated fields; north of this village the timber and brush covered hills rise steeply from the beach to an elevation of 20 to 40 feet and then more gradually to somewhat more than 100 feet. The gravel covered county road approaches the beach in but one place, near Lind 1939.

The edge of the low water shown is the outer limits of the gravel and shingle beach and the beginning of the mud flats. Where no such line appears it may be assumed that the mud flats extend to the high water line.

These mud flats bear at low water over a great portion of the water area of the sheet, and as the accurate determination of the low water could only be done by the hydrographer, no such attempt was made by the topographer.

Between Indian Slough and Bayview many of the dikes are protected from wave action by pile breakwaters.

There are a great many piling in the bay marking oyster beds.

The small islet between O Bil and O Rig was formed as the result of dredging operations in the Swinomish Slough.

#### MARSHES:

Many marshes are included in this survey, but as all are clearly shown it is not considered necessary to further list and describe them.

#### MAGNETIC DECLINATION:

Three observations with both the compass declinometer and declinatoire were made, with the following results:

Station	compass declinometer No. 6			declinatoire No. 246		
	date	time	value	date	time	value
Tel	9-22-39	14:25	23° 06.1'	9-15-39	14:00	22° 32'
Bayview	9-22-39	9:53	23 33.0	9-21-39	9:40	22 20
Leary	9-22-39	11:35	23 14.1	9-22-39	9:10	23 12

Neither index nor diurnal corrections have been applied to the above.



Declinatoire No. 246 was standardized at the Lincoln Park (Seattle) magnetic station on May 3, 1939, at 14:46, and found to have a correction of +10', disregarding diurnal variation. ✓

Compass declinometer No. 6 when last standardized at Cheltenham had a correction of -5.6' to east declination. ✓

#### COMPARISON WITH PREVIOUS SURVEYS:

T-1747, survey of 1886 by J. J. Gilbert: many differences in detail are noted, as would be expected in a marshy area, but the unchangeable portions such as the shore line alongside what are undoubtedly the original dikes check remarkable well. The slight differences noted in Indian Slough could be laid to interpretation of the high water line by the two topographers. Diking has changed detail in Telegraph Slough but certain portions check nearly "flat". Attention is called to station "Large Barn" on the original sheet, which agrees within a meter or two to O Tuk. ✓

T-1746, survey of 1886 by J. J. Gilbert, is in excellent agreement with the present, with but two slight differences being noted: a) between O Cor and O Pop the shore line has receded a maximum of about 30 m and b) immediately north of O blu, in the marsh area, the present survey shows the high water line about 20 m offshore from the original. Otherwise, the high water lines of the two surveys fall practically together. ✓

#### LANDMARKS FOR CHARTS:

There are no prominent landmarks in this area. ✓

#### AIDS TO NAVIGATION:

A list of permanent aids to navigation has been submitted. Chart Letter 172 of 1940. ✓

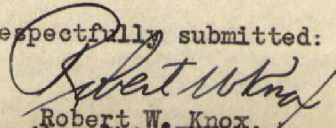
#### GEOGRAPHIC NAMES:

Telegraph, Indian and Joe Leary Sloughs are well established names. Whitney is merely a railroad way station and no evidence of Padilla as a town or village was found, and it therefore recommended that the latter two names be deleted from the chart. ✓

#### GENERAL:

Sufficient stations are permanently marked so that they will be available for future use in hydrography. Many others are marked by lead paint and strips of galvanized iron and should be recoverable for the next several years. All of the former stations have been described on form 524, and descriptions of the latter will be found in another part of this report. ✓

Respectfully submitted:

  
Robert W. Knox  
Commanding Ship Explorer.



LIST OF TRIANGULATION STATIONS

BAYVIEW, 1939 (Outside H.W.L.)  
 BLACK CROSS, 1939 (Outside H.W.L.)  
 DELLA, 1939  
 INDIAN, 1939  
 LEARY, 1939  
 LIND, 1939  
 Padilla Bay, Radio Pole, 1939 (Outside H.W.L.)  
 Swinomish Slough North Entrance 6 Light, 1939 (Outside H.W.L.)  
 TEL, 1939  
 U.S.E. B3 20.8, 1939  
 VIEW, 1939 (On H.W.L.)  
 WHITNEY, 1939

LIST OF TOPOGRAPHIC STATIONS

- Al - Center of sod duck blind on west side Telegraph Slough, off point of marsh on mud flat - not recoverable.  
 Ax - "No Trespass" sign on small post at outer base of dike on south side of East branch of Indian Slough - not recoverable.  
 Bil - Whitewashed driftwood around large stump lying on marsh. Marked by 2"x4" stake, with top painted red, projecting 1½-ft. above ground on N.W. side of stump. Located at west end of long island at N.E. side of entrance to Telegraph Slough - not recoverable.  
 Bin - West gable of large weatherbeaten barn, located at base of bluff on East side of cultivated field, 1.7 miles north of Bayview - recoverable.  
 Blu - Signal cloth on south end of long pile breakwater, marked by small metal diamond nailed on west face of end pile near its top. Red paint daubed around signal. 1.2 mi. north of Bayview - not recoverable.  
 Bo - Highest point of large outcropping boulder on beach outside H.W.L., ½ mile north of Bayview. Top of boulder is about 3-ft. above H.W. and it is largest in vicinity - recoverable.  
 Bush- Easterly and largest of several bushes growing near east end of narrow island off point between Telegraph and Indian Slough - not recoverable.  
 Cal - Center of sod and concrete duck blind on east side small marsh point in bight midway between Swinomish and Telegraph Slough entrances - not recoverable.  
 Cor - Northwest corner of old barge on beach south part of Bayview waterfront. Garbage is dumped over bluff just to south of the barge - not recoverable.  
 Cup - Center of peaked roof on square tower of large white farm house on East side Indian Slough. Farm house is second one south from Slough entrance - recoverable.

- Dan - Signal cloth wrapped around top of large tall stump imbedded in beach against outside of pile breakwater. Stump is largest in vicinity and just south of gravel spit making out into bay at south end of field  $1\frac{1}{2}$  miles north of Bayview. Stump daubed with red paint - not recoverable.
- Day - Whitewashed square on north face of wooden dike retaining wall. Wall makes slight turn to S.E. at the whitewash - not recoverable.
- Doc - Banner on tall post at edge of marsh near N.E. end low wood breakwater. 0.7 mi. south of Bayview. Marked in addition by a short 2"x4" stake, with top painted red, driven into marsh at base of tall post - not recoverable.
- Duk - Banner on N.W. corner of concrete duck blind on outer end of largest marsh point between Swinomish and Telegraph Sloughs - recoverable.
- El - Banner nailed to log imbedded on beach just south of Bayview. Marked in addition by short 2"x4" stake, with top painted red, driven into beach at base of banner. Red paint daubed on log around signal. Not recoverable.
- Fig - "No trespass" sign near outer end small marsh point on west side first small bight west of entrance to Telegraph Slough. Not recoverable.
- Fly - Banner on driftwood signal at edge of grass just south of small sandy point 1.6 mi. north of Bayview. Marked in addition by short 2"x4" stake, with top painted red, driven just inside edge of grass behind signal. Not recoverable.
- For - "No Trespass" sign at edge of bank on East side Indian Slough just south of East branch. Not recoverable.
- Fun - Northwest corner of green State Park restroom at top of bluff about 0.3 mi. north of Bayview. Recoverable.
- Gab - Southwest gable of large unpainted barn on north side of entrance to East branch of Indian Slough. Barn built out over mud. Recoverable.
- Go - "No trespass" sign on north bank of East branch Indian Slough on dike. Not recoverable.
- Hi - Westerly gable of 2-storey white store building at Bayview. Building is on piles over water and is southerly of two largest buildings on Bayview waterfront. Recoverable.
- Ho - West gable of northerly of two brown houses in edge of trees near south end marsh area, 1.0 miles north of Bayview. Recoverable.
- Hun - Whitewashed telephone pole just north of Bayview. Pole is at foot of low bluff and is marked by a small diamond of sheet metal nailed on its offshore side about 5-ft. above ground. Red paint daubed on pole. Not recoverable.
- Hut - Southwest corner of small unpainted building on lower slope of bluff just south of Bayview. Recoverable.



- If - Banner at edge of grass near south end marsh area, 1.0 miles north of Bayview. Marked in addition by short 2"x4" stake, with top painted red, driven in grass immediately back of banner. Not recoverable.
- Joe - Cloth on outer face of pile breakwater. Marked by small diamond of sheet metal nailed near top of pile on outer face, about 75 m. north of South end of breakwater, 1.7 mi. north of Bayview. Red paint daubed around signal. Not recoverable.
- Lad - Base of leaning pole with steps, on east side Telegraph Slough, about 0.3 mi. north of railroad. Not recoverable.
- Las - Red paint daubed on outer face pile breakwater near its north end. Marked in addition by small sheet metal diamond nailed on West face pile. On first point of land south of Joe Leary Slough. Not recoverable.
- Law - Whitewash at base of bluff. Marked by small 2"x4" stake, with top painted red, driven into side of bluff back of signal, 0.3 miles north of Bayview. Not recoverable.
- Lo - Whitewashed driftwood on marsh island at entrance to Indian Slough. Marked by short 2"x4" stake, with top painted red, driven into marsh on north side of signal. Not recoverable.
- Log - Cloth on north end of large log imbedded in beach. Red paint daubed on log around signal. 0.6 mi. north of Bayview. Not recoverable.
- Lone - Bushy fruit tree standing above in field on north side N'y farm house on E. side Indian Slough. Recoverable.
- Ned - Signal cloth on north end pile breakwater on N. side entrance to Telegraph Slough. Not recoverable.
- Hip - Tall piling in mud on south bank Indian Slough at southernmost turn in Slough. Not recoverable.
- No - Northerly gable of large unpainted barn. Largest barn at N'y farm house on E. side Indian Slough. Recoverable.
- Old - Westerly gable of large unpainted barn located on south side of and adjacent to State Highway No. 1, 0.7 mi. east of Swinomish Slough. Recoverable.
- Off - "No Trespass" sign at outer end small marsh point located on east side of first small bight west of Telegraph Slough. Not recoverable.
- Ox - "No Trespass" sign located on S.W. end of footwalk making out from E. side Telegraph Slough. Not recoverable.
- Pat - Whitewashed driftwood around 4' post daubed with red paint on north face sand dike running length of narrow island between Indian and Telegraph Sloughs. About 365 m. W. of east end Island. Marked in addition by short 2"x4" stake driven in sand just north of signal, with top painted red. Not recoverable.

- Pil - Cloth on outside face pile breakwater about  $\frac{1}{2}$  mile S. of Bayview. Marked by small sheet metal diamond nailed near top of pile on outside face and by red paint daubed around signal. Not recoverable.
- Pop - Whitewashed rocks and driftwood at foot of bluff, 0.2 mile north of Bayview. Marked by short 2"x4" stake, with top painted red, driven into face of bluff behind signal and by red paint daubed over pile of small rocks at base of signal. Not recoverable.
- Pot - North gable of northerly and smaller of two unpainted barns located just inside dike on east side of Indian Slough about 0.4 mi. N. of Whitney. Recoverable.
- Pup - Whitewashed stump imbedded at foot of bluff about 0.5 mi. north of Bayview. Marked by short 2"x4" stake, with top painted red, driven into face of bluff immediately behind signal, and by red paint daubed on stump. Not recoverable.
- Red - West gable large red barn on east side first farm house on north side railroad west of Telegraph Slough. Barn is largest of out-buildings around farm house. Recoverable.
- Rex - West gable large unpainted barn in dilapidated condition located just inside dike on east side Indian Slough about 0.4 mi. north of Whitney. Barn is southerly and larger of two. Recoverable.
- Rig - Northeast gable of abandoned houseboat hauled out on bank at east end long island between Indian and Telegraph Sloughs. Not recoverable.
- Rik - Fence post on top of dike on S.W. side Telegraph Slough, near entrance. Not recoverable.
- Ru - Banner on S.E. end pile breakwater about 0.5 mile S. of Bayview. Marked by small sheet metal diamond nailed to out face at top of piling and by red paint daubed around signal. Not recoverable.
- Rub - "No Trespass" sign at edge of marsh on west side Indian Slough, about 0.5 mi. north of Whitney. Not recoverable.
- Sap - West gable of large unpainted barn on west side gravel road at east end of E'ly branch of Indian Slough. Recoverable.
- Sig - "No Trespass" sign on N.E. bank of east branch of Indian Slough, about 150 m. inside entrance. Not recoverable.
- Sit - "No Trespass" sign on north side dike about 400 m. east of Swinomish Slough. Not recoverable.
- Sob - Banner on south end short section of pile breakwater about 0.6 mile S. of Bayview. Marked by small sheet metal diamond nailed at top of outer face of pile and by red paint daubed around signal. Not recoverable.
- Tall - Tall piling in mud close to east bank of Indian Slough just inside entrance. Not recoverable.

- Tank-** Center of red wooden water tank standing along in field on east side gravel road about 0.8 mile N.E. of Whitney. Recoverable.
- Tap -** Whitewashed rocks and driftwood at foot of bluff just north of State Park Area to north of Bayview. Marked by short 2"x4" stake driven into face of bluff behind signal and top painted red. Red paint was daubed on rocks around base of signal. Not recoverable.
- Tar -** Whitewashed driftwood around 5-ft. post daubed with red paint on north face of sand dike running length of narrow island between Telegraph and Indian Sloughs. About 420 m. east from west end island. Marked also by short 2"x4" stake, with top painted red, driven into sand just to north of signal. Not recoverable.
- Tax -** "No Trespass" sign at outer end small marsh point making out from N.W. side of first large point of land east of Swinomish Slough. Not recoverable.
- Tip -** Center of ventilator on saddle of roof of small red barn located about 100 m. south of State Highway No. 1 and about 0.7 mi. east of Swinomish Slough. Recoverable.
- Top -** Top of high leaning post just inside dike on west side Indian Slough about 0.5 mi. south of entrance. Not recoverable.
- Tree-** Banner on roots of offshore end large tree lying normal to beach and with inshore end jammed in bluff. Red paint daubed around signal. Located about 0.7 mi. north of Bayview. Not recoverable.
- Tuk -** Southwest corner of large unpainted barn located on west side of gravel road at head of Indian Slough. Barn is built on piling over mud flats. Recoverable.
- Vent-** Center of ventilator on saddle of roof of large red barn located between Telegraph and Indian Sloughs about 1/3 mi. north of railroad. Recoverable.
- Wax -** West gable of small unpainted barn on east side Indian Slough. Barn is northerly of two on bank of slough in rear of northernmost farm house on E. side slough. Recoverable.
- We -** Outer end small wooden footwalk on east side Indian Slough in rear of northerly farm house on east side slough. Not recoverable.
- Yel -** Northeast gable of yellow barn (weatherbeaten) in field on S. side State Highway No. 1, about 0.3 mi. S.E. from Swinomish Slough Highway Bridge. Recoverable.
- Zip -** Cloth nailed to S.W. end of long pile breakwater to N.E. of entrance to Indian Slough. Marked by small sheet metal diamond nailed near top of end piling and by red paint daubed around signal. Not recoverable.



## Remarks.

## Decisions

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# GEOGRAPHIC NAMES

Survey No.

**T6691**

Name on Survey

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A,	B,	C,	D	E	F	G	H	K	
<u>Padilla Bay</u>									1
<u>Bayview</u>									2
<u>Telegraph Slough</u>									3
<u>Whitney</u>									4
<u>Indian Slough</u>									5
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Names underlined in red approved  
by L. Heck on 4/14/40

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
DESCRIPTIVE REPORT  
PHOTOSTAT OF

~~No. 11~~

No. T **T6691**

received March 18, 1940  
registered April 9, 1940  
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
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RETURN TO

82	T. B. Reed
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✓ J.B.R.



DIVISION OF CHARTS

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6691 (1939) FIELD NO. L

Washington; South and East Sides of Padilla Bay

Surveyed in September 1939, Scale 1:10,000

Instructions dated April 12, 1939, (EXPLORER)

Plane Table Survey

Aluminum Mounted

Chief of Party - R. W. Knox.

Surveyed and inked by - J. C. Tison, Jr.

Reviewed by - J. A. McCormick, Nov. 13, 1940.

Inspected by - H. R. Edmonston.

1. Junctions with Contemporary Surveys.

A satisfactory junction was made with T-6690 (1939) on the south. There are no contemporary surveys on the north but the overlap with prior surveys shows satisfactory agreement.

2. Comparison with Prior Surveys.

T-1746 (1886); 1:10,000; T-1747 (1886), 1:10,000.

The descriptive report, page 3, covers this subject very nicely. Differences are confined mostly to marsh and spoil areas. Elsewhere, agreement of old and new surveys is good. The present survey supersedes those of 1886 in the common area.

3. Comparison with Chart 6380 (New Print of April 13, 1940)

Shoreline and slough detail charted in this area are from surveys discussed in the preceding paragraph. Some highway and railroad detail is from outside sources. The present survey supersedes all information now charted in the common area.

4. Condition of Survey.

Satisfactory.

5. Compliance with Instructions for the Project.

Satisfactory.

6. Additional Field Work Recommended.

None.

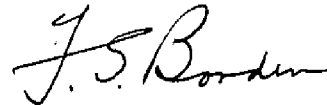
7. Superseded Surveys.

T-1746 in part  
T-1747 in part.

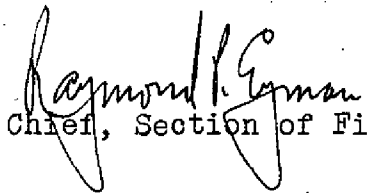
Examined and approved:



Thos. B. Reed,  
Chief, Section of Field Records.



Chief, Division of Charts.



Chief, Section of Field Work.



Chief, Division of H. & T.