Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey  Shoreline (Photogrammetric)
Field No. Ph-5905  Office No. T-11630

LOCALITY

State  Washington
General locality  Snohomish River
Locality  Marysville

1959-1960
CHIEF OF PARTY
Lorne G. Taylor and Fred Natella

LIBRARY & ARCHIVES

DATE  April 1964
DESCRIPTIVE REPORT - DATA RECORD

T = 11630

Project No. (II): Ph-5905         Quadrangle Name (IV):

Photogrammetric Office (III): Portland, Oregon     Unit Chief: W. V. Hull
Instructions dated (II) (III): 10 Feb. 1960 II     Officer-in-Charge: Lorne G. Taylor
Supplement 1: 5 May 1960 II & III     and Fred Natella
Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Graphic
Manuscript Scale (III): 1:10,000
Stereoscopic Plotting Instrument Scale (III):
Scale Factor (III): None

Date received in Washington Office (IV): Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV):

Publication Scale (IV):
Geographic Datum (III): N.A. 1927
Vertical Datum (III): X
Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (3) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III):
MARYSVILLE SOUTH MUNICIPAL WATER TANK, 1941

Lat.: 48° 02' 58.598"  Long.: 122° 10' 36.625"

Plane Coordinates (IV):
State: Washington  Zone: North
Y = 385,733.56  X = 1,671,405.27

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.
Areas contoured by various personnel
(Show name within area)
(II) (III)
DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): W. V. Hull & R. B. Melby
Date: August 1960

Planimeter contouring by (II):
Date:

Completion Surveys by (II):
Date:

Mean High Water Location (III) (State date and method of location): 8-30-60 by field inspection and graphic compilation for Snohomish River. Other water areas were not field inspected.

Projection and Grids ruled by (IV): R. A. C.
Date: 10-10-60

Projection and Grids checked by (IV): J. D. C.
Date: 10-14-62

Control plotted by (III): J. L. Harris
Date: 1-13-61

Control checked by (III): L. L. Graves
Date: 1-31-61

Radial Plot or Stereoscopic Control extension by (III):

Stereoscopic Instrument compilation (III):

Manuscript delineated by (III): L. L. Graves, rough draft
J. L. Harris, scribing
C. C. Harris, stick-up
Date: 6-2-61
9-6-61
2-20-62

Photogrammetric Office Review by (III): C. C. Harris, rough draft
J. E. Deal, advance
Date: 6-6-61
5-10-62

Elevations on Manuscript checked by (II) (III):
Date:
DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): C&GS 9 lens - Focal length 8.25 inches & Camera "L".

PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>'60028 &amp; 60029</td>
<td>9-9-59</td>
<td>09:06</td>
<td>1:10,000</td>
<td>9.3' above M.L.L.W.</td>
</tr>
<tr>
<td>60100 thru 60102</td>
<td>n</td>
<td>09:55</td>
<td>n</td>
<td>9.5' n</td>
</tr>
</tbody>
</table>

Infrared photography taken simultaneously with the above was available for a small portion of the manuscript.

Tide (III)

Reference Station: Seattle, Washington
Subordinate Station: Everett, Washington

<table>
<thead>
<tr>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.6</td>
<td>11.3</td>
<td></td>
</tr>
<tr>
<td>7.4</td>
<td>11.1</td>
<td></td>
</tr>
</tbody>
</table>

Washington Office Review by (IV): Date:
Final Drafting by (IV): Date:
Drafting verified for reproduction by (IV): Date:
Proof Edit by (IV): Date:
Land Area (Sq. Statute Miles) (III): 13
Shoreline (More than 200 meters to opposite shore) (III): 8
Shoreline (Less than 200 meters to opposite shore) (III): 7
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 4
Number of BMs searched for (II): None
Number of Recoverable Photo Stations established (III): 2 recovered; 1 established
Number of Temporary Photo Hydro Stations established (III): None

Remarks:
FIELD INSPECTION REPORT
Map Manuscript T-11630
Project Ph-5905

Refer to the Field Inspection Report for the entire Project Ph-5905 by Wesley V. Hull, February 1960 to September 1960.

Filed with Desc. Report T 11584
PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-11930

Project Ph-5905

Refer to the combined radial plot report for T-11621, T-11622 and T-11628 thru T-11630, which is included in the Descriptive Report for T-11621 (1960).
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR Y-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GS-D OR PROJECTION LINE IN METERS</th>
<th>SCALE FACTOR</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVERETT, Weyer-Habuser LMBR. CO. SHORTER STACK, 1941</td>
<td>Wash. N.</td>
<td>N.A.</td>
<td>372,079.37</td>
<td>2079.37 (2920.63)</td>
<td>633.8 (890.2)</td>
<td>100</td>
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</tr>
<tr>
<td>EVERETT, Weyer-Habuser LMBR. CO. TALLER STACK, 1941</td>
<td>Wash. N.</td>
<td>1927</td>
<td>1,669,823.36</td>
<td>4823.36 (176.64)</td>
<td>1470.2 (53.8)</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>MARYSVILLE, NORTH MUNIC. WATER TANK 1941</td>
<td></td>
<td></td>
<td>387,215.65</td>
<td>2215.65 (2784.25)</td>
<td>675.3 (848.7)</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>MARYSVILLE, SOUTH MUNIC. WATER TANK 1941</td>
<td></td>
<td></td>
<td>385,733.56</td>
<td>733.56 (4266.44)</td>
<td>223.6 (1300.4)</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

1 FT = 0.3048006 METER

COMPUTED BY: J.L.H. DATE: 9-26-60 CHECKED BY: L.L.G. DATE: 1-12-61
31. **Delineation:**

Graphic methods were used for the compilation of planimetric detail.

Field inspection was adequate except as stated under Item 35 of this report.

32. **Control:**

Horizontal control was adequate.

33. **Supplemental Data:**

Map of Everett, Washington, City File Ph-4, Scale 1 inch = 800 Ft., revised 6-3-57.

Flat of Marysville, Washington, Hammond, Collier & Isaac, Scale 1 inch = 800 ft. approx.

34. **Contours and Drainage:**

Contours are not applicable.

Drainage was not field inspected. It was delineated by the compiler with reference to the U.S.G.S. Marysville, Washington, 7/2 minute quadrangle.

35. **Shoreline and Alongshore Details:**

The mean high-water line and alongshore details of the Snohomish River were adequately field inspected. For other water areas the field inspection was not satisfactory and consisted for the most part of the identification of piling and dolphins. The delineation of the mean high-water line of these streams was left entirely to the compiler.

All photography was taken when the tide was about 9.0 ft. above M.L.L.W. and the limits of foreshore areas could not be determined. Where the character of the foreshore area was furnished by the field inspector it has been indicated on the manuscript by a note.
The infrared photography was used to verify the field inspection of the mean high-water line of Snohomish River.

There are no low-water or shoal lines shown.

36. **Offshore Details:**

Numerous piling and dolphins are located offshore from the mean high-water line in these narrow streams.

37. **Landmarks and Aids:**

Form 567 is submitted for five landmarks.

There are no fixed aids to navigation.

38. **Control for Future Surveys:**

There were two recoverable topographic stations recovered in addition to the recovered triangulation. These were not identified and the location shown is the 1947 scaling by J. Battley.

No photo-hydro stations were located.

39. **Junctions:**

Satisfactory junctions were made with T-11629 on the west and T-11637 on the south. There are no contemporary surveys to the north and east.

40. **Horizontal Accuracy:**

Refer to the Descriptive Report for T-11627 (1960).

46. **Comparison with Existing Maps:**

Comparison was made with the U.S.G.S. Marysville, Washington, 7½ minute quadrangle, Scale 1:24,000, edition 1956.
47. Comparison with Nautical Charts:

Comparison was made with Nautical Chart No. 6450, 11th Edition, revised 9-5-60, hand corrected 4-15-61, Scale 1:80,000 at Lat. 47° 57'.

Comparison was made with Nautical Chart No. 6448, 7th Edition, 3-12-35, revised 10-5-59, Scale 1:40,000.

Items to be Applied to Nautical Charts Immediately:

None.

Items to be Carried Forward:

None.

Approved:  

Respectfully submitted:

Fred Natella, CAPT, C&GS  
J. Edward Deal  
Portland District Officer  
Cartographer
49. **Notes to the Hydrographer:**

None.
T & 11630

<table>
<thead>
<tr>
<th>Compilation Record</th>
<th>Completion Date</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Interior details added</td>
<td>May 11, 1962</td>
<td></td>
</tr>
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</table>
**PHOTOGRAMMETRIC OFFICE REVIEW**

<table>
<thead>
<tr>
<th>1. PROJECTION AND GRIDS</th>
<th>2. TITLE</th>
<th>3. MANUSCRIPT NUMBERS</th>
<th>4. MANUSCRIPT SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</table>

**CONTROL STATIONS**

<table>
<thead>
<tr>
<th>5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY</th>
<th>6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)</th>
<th>7. PHOTO HYDRO STATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
</tr>
</tbody>
</table>

**BENCH MARKS**

- NONE

**PLOTTING OF SEXTANT FIXES**

- NONE

**PHOTOMETRIC PLOT REPORT**

- X

**DETAIL POINTS**

- X

**ALONGSHORE AREAS (Nautical Chart Data)**

<table>
<thead>
<tr>
<th>12. SHORELINE</th>
<th>13. LOW-WATER LINE</th>
<th>14. ROCKS, SHOALS, ETC.</th>
<th>15. BRIDGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AIDS TO NAVIGATION**

- NONE

**LANDMARKS**

- NONE

**OTHER ALONGSHORE PHYSICAL FEATURES**

- X

**OTHER ALONGSHORE CULTURAL FEATURES**

- X

**PHYSICAL FEATURES**

<table>
<thead>
<tr>
<th>20. WATER FEATURES</th>
<th>21. NATURAL GROUND COVER</th>
<th>22. PLANETABLE CONTOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**STEREOSCOPIC INSTRUMENT CONTOURS**

- NONE

**CONTOURS IN GENERAL**

- NONE

**SPOT ELEVATIONS**

- NONE

**OTHER PHYSICAL FEATURES**

- X

**CULTURAL FEATURES**

<table>
<thead>
<tr>
<th>27. ROADS</th>
<th>28. BUILDINGS</th>
<th>29. RAILROADS</th>
<th>30. OTHER CULTURAL FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
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**BOUNDARIES**

<table>
<thead>
<tr>
<th>31. BOUNDARY LINES</th>
<th>32. PUBLIC LAND LINES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NONE</td>
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</tbody>
</table>

**MISCELLANEOUS**

<table>
<thead>
<tr>
<th>33. GEOGRAPHIC NAMES</th>
<th>34. JUNCTIONS</th>
<th>35. LEGIBILITY OF THE MANUSCRIPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**DISCREPANCY OVERLAY**

- NONE

**DESCRIPTIVE REPORT**

- X

**FIELD INSPECTION PHOTOGRAPHS**

- X

**FORMS**

- X

**REVIEWER**

- loisupa L. Harris

**SUPERVISOR**

- Edward Deal

**FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT**

- Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

**COMPILER**

- |

**SUPERVISOR**

- |

**REMARKS**

- |
48. Geographic Names:
Allen Creek
Ebey Island
Ebey Slough
Everett
Marysville
Munsen Creek
Quilceda Creek
Snohomish River
Smith Island
Spencer Island
Steamboat Slough
Tulalip Indian Reservation
Union Slough

Geographic Names Section
February 1963
61. **General Statement**

There are eight (8) shoreline maps of project PH-5905, Puget Sound, Washington. These maps were prepared primarily to provide basic maps, including the location of all non-floating aids and landmarks for use in revising our nautical charts and for control of proposed hydrographic surveys.

62. **Comparison with Registered Topographic Surveys**

<table>
<thead>
<tr>
<th>Map</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1388a</td>
<td>1:10,000</td>
<td>1872</td>
</tr>
<tr>
<td>T-1681</td>
<td>1:20,000</td>
<td>1885</td>
</tr>
<tr>
<td>T-1682</td>
<td>1:20,000</td>
<td>1885</td>
</tr>
<tr>
<td>T-1994</td>
<td>1:20,000</td>
<td>1888</td>
</tr>
</tbody>
</table>

Cultural and shoreline changes have been continuous with extensive cultural changes in the urban areas. These maps are supersede the above surveys for common area for nautical charting.

63. **Comparison with Maps of Other Agencies**

<table>
<thead>
<tr>
<th>Location</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeland, Washington</td>
<td>1:24,000</td>
<td>1953</td>
</tr>
<tr>
<td>Langley, Washington</td>
<td>1:24,000</td>
<td>1956</td>
</tr>
<tr>
<td>Tulalip, Washington</td>
<td>1:24,000</td>
<td>1956</td>
</tr>
<tr>
<td>Marysville, Washington</td>
<td>1:24,000</td>
<td>1956</td>
</tr>
</tbody>
</table>

There are cultural and shoreline differences, but in general the agreement is good.

64. **Comparison with Contemporary Hydrographic Surveys**

<table>
<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-8609</td>
<td>1:10,000</td>
<td>1960</td>
</tr>
<tr>
<td>H-8699</td>
<td>1:10,000</td>
<td>1961</td>
</tr>
<tr>
<td>H-8753</td>
<td>1:10,000</td>
<td>1963</td>
</tr>
</tbody>
</table>

Shoreline and control of subject surveys was furnished prior to hydrography and no changes of importance have been made. There is good agreement.

65. **Comparison with Nautical Charts**

<table>
<thead>
<tr>
<th>Chart</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>6448</td>
<td>1:40,000</td>
<td>1935 revised to 1962</td>
</tr>
<tr>
<td>6450</td>
<td>1:80,000</td>
<td>1961 revised to 1963</td>
</tr>
<tr>
<td>18456 (C)</td>
<td>1:80,000</td>
<td>1963</td>
</tr>
</tbody>
</table>

There are only minor differences between the charts and the subject manuscripts.
66. **Accuracy of Results and Future Surveys**

These surveys were prepared according to project instructions and are within the required accuracy for nautical charting.

Reviewed by:

[Signature]

L. C. Lande

Approved by:

[Signature]

Chief, Photogrammetric Branch

[Signature]

Chief, Photogrammetry Division

[Date] 4/2/64
## RECORD OF APPLICATION TO CHARTS

**FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-11630**

### INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In “Remarks” column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under “Comparison with Charts” in the Review.

<table>
<thead>
<tr>
<th>CHART</th>
<th>DATE</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>64418</td>
<td>1/18-85</td>
<td>M. Wiegand</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. Excluded</td>
</tr>
<tr>
<td>18441</td>
<td>4/24/80</td>
<td>B. A. Lilles</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. 49</td>
</tr>
<tr>
<td>84344</td>
<td>7-14-80</td>
<td>J. Smith</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. #10 Exam Do Corv</td>
</tr>
<tr>
<td>18443</td>
<td>7-14-80</td>
<td>J. Miller</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. 21</td>
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<tr>
<td>18443</td>
<td>2/24/81</td>
<td>D. C. Larson</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. 33</td>
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</tbody>
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**FORM C&GS-8352 SUPERSSEDES ALL EDITIONS OF FORM C&GS-276.**

**USCOMM-DC 8558-P69**