

T-12096

T- 12096

NOAA FORM 76-35
(6-80)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

THIS MAP EDITION WILL NOT BE FIELD EDITED

Map No.

T-12096

Edition No.

1

Job No.

PH-7118

Map Classification

CLASS III FINAL

Type of Survey

SHORELINE

LOCALITY

State

MICHIGAN

General Locality

DETROIT RIVER

Locality

ROUGE RIVER

19₇₁ TO 19₇₈

REGISTERED IN ARCHIVES

DATE

T-12096
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild R.C.-8 focal length L=152.21mm "L" "E" focal length E=152.71mm		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE ZONE Central MERIDIAN 90th	
TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
71L (c) 4731-4733	May 4, 1971	Not needed	1:30,000	N.A.	
* 71L (c) 5611-5613	May 14, 1971		1:30,000		
71L (c) 4706-4708	May 4, 1971		1:30,000		
77E (c) 1105-1111	May 28, 1977		1:20,000		
77E (c) 1126-1130	May 28, 1977		1:20,000		
78E (p) 9624-9628	Apr 26, 1978		1:20,000		

* REMARKS: The shoreline datum is the river level at the time of the May 14, 1971 photography. On this date the river level measured at the Fort Wayne Gage was 573.64 feet or 1.94 feet above the Lake St. Claire Low Water Datum.

2. SOURCE OF MEAN HIGH WATER LINE: Shoreline

All river levels were measured at the Fort Wayne Gage.
The river level on May 4, 1971 was 573.43 feet.
The river level on May 28, 1977 was 573.46 feet.
The river level on April 26, 1978 was 573.92 feet.
The shoreline on both sides of the river was compiled by photo interpretation of the above listed color 1971 compilation/bridging photography. The American side of the river was updated using 1977 color photography. The Canadian side of the river was updated using the 1978 panchromatic photography.

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

Not applicable

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
No survey	T-12095	T-12097	No survey

REMARKS

T-12096
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION (Premarking) ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	No information available	--
2. HORIZONTAL CONTROL	RECOVERED BY	
	ESTABLISHED BY	
	PRE-MARKED OR IDENTIFIED BY	
3. VERTICAL CONTROL	RECOVERED BY	
	ESTABLISHED BY	
	PRE-MARKED OR IDENTIFIED BY	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY	
	LOCATED (Field Methods) BY	
	IDENTIFIED BY	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input type="checkbox"/> NO INVESTIGATION	BY
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☐ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☐ NONE

7. SUPPLEMENTAL MAPS AND PLANS

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

T-12096

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete, pending field edit.	Mar1979	Class III manuscript	Aug 4, 1980	Aug 4, 1980
Final Review Class III	June 1984	Final Class III map No field edit performed	NOV 30 1984	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER pages	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		NOV 30 1984	Aids for navigation
4		NOV 30 1984	Landmarks for charts

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

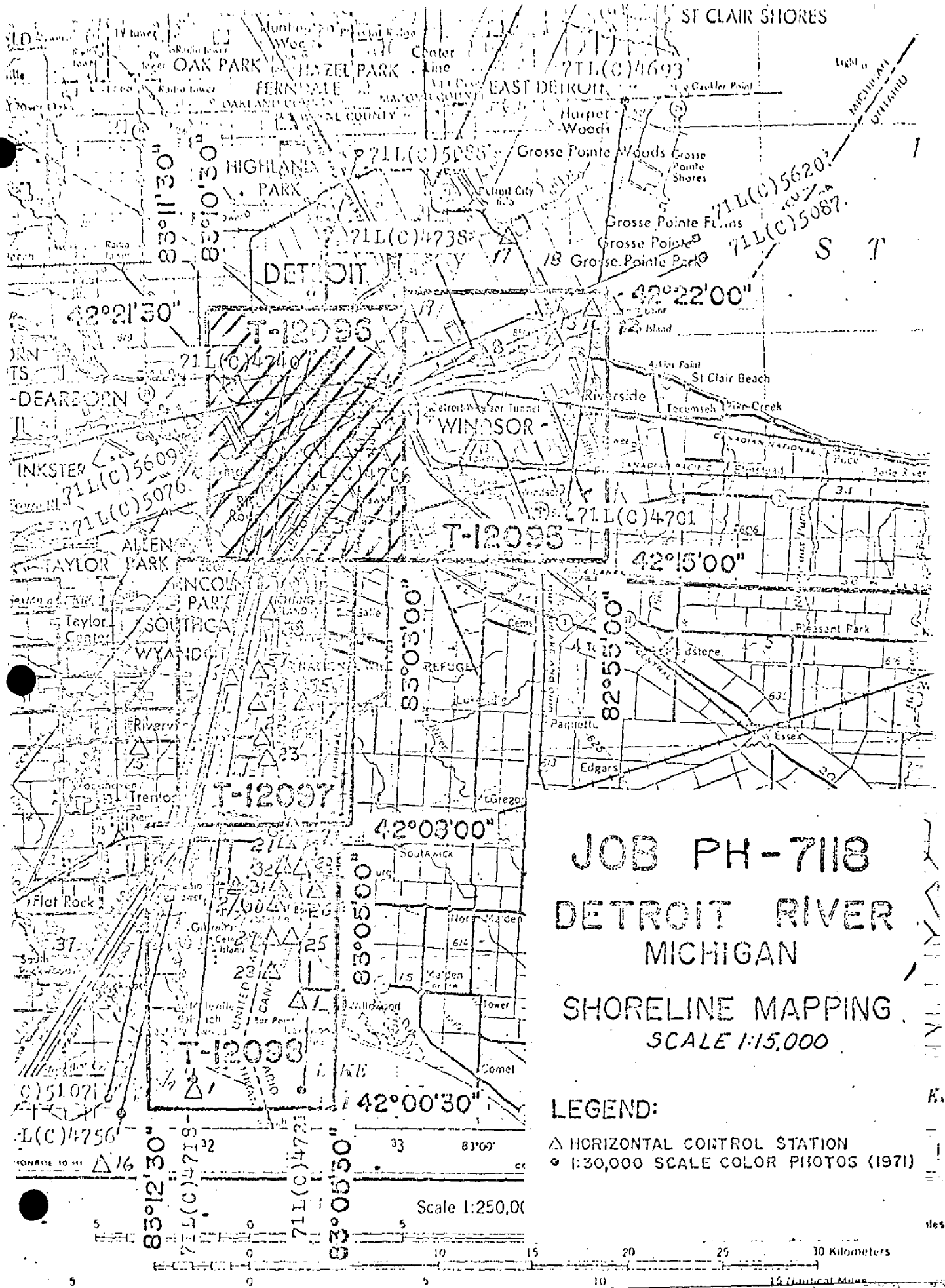
III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT
T-12096

This 1:15,000 scale shoreline map is one of four maps that makeup project PH-7118, Detroit River, Michigan.

This project encompasses the Detroit River from the south entrance at Lake Erie, latitude $42^{\circ}00'30''$ to the north entrance at Lake St. Clair, latitude $42^{\circ}22'00''$.

Correspondence from Chief, Photogrammetric Division dated May 14, 1984 called for the four maps to be registered as Class III maps.

Information concerning field work prior to compilation was not available.

Photographic coverage was provided in May 1971 for aerotriangulation using color film with the "L" camera (focal length 152.21 mm) at 1:30,000 scale. The same photography was used for compilation. Additional photography was taken in May 1977 and April 1978 to update compilation using the original control. The 1977 photography was used to update the American side of the river. The 1977 photography was taken with color film using the "E" camera (focal length 152.71 mm) at 1:20,000 scale. The 1978 photography was taken with panchromatic film using the "E" camera at 1:20,000 scale.

Analytic aerotriangulation was performed at the Washington Science Center in April 1971.

Compilation was performed at the Atlantic Marine Center from office interpretation of the 1971, 1977 and 1978 photography in October 1979.

Final review was performed at the Atlantic Marine Center in June 1984. This map is to be registered as a Final Class III map.

The original base manuscript and all relevant data were forwarded to the Washington Science Center for final registration.

FIELD INSPECTION
T-12096

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and identification of the horizontal control necessary for the aerotriangulation of the project.

PHOTOGRAMMETRIC PLOT REPORT
Detroit River

June 1972

21. Area Covered

This report covers an area of the Detroit River south from latitude $42^{\circ} 22'$ to latitude $42^{\circ} 00'$. This job was bridged for the Lake Survey Center and will be compiled direct on the Kelsh Plotter at a scale of 1:6,000.

22. Method

Four (4) strips of photographs (strips 1 thru 4) were bridged using analytical aerotriangulation methods. All Strips except strip 4 were adjusted to either premarked control stations or to control stations identified direct. A tie point (common image point) from strip 3 was used as a terminal control station in strip 4. This was necessary because the target for GRASSY was not visible on the photography. Ties were made between all strips. The accompanying sketch shows the location of the strips of photographs and the horizontal control stations used in the bridging. Data for the 1:6,000 scale compilation of work sheets were plotted by the Coradomat on the Michigan (south zone) Coordinate System. *SEE PLANS*

23. Adequacy of Control

All horizontal control stations were premarked except for the following:

TRENTON RADIO STATION WGAR (center mast)
WYANDOTTE MUNICIPAL WATER TANK
WINDSOR AMBASSADOR BRIDGE North Tower
WINDSOR AMBASSADOR BRIDGE South Tower
WINDMILL PT L.H.

Station GRASSY (USLS) was marked with a four (4) foot square. This target could not be seen on the 1:30,000 scale bridging photography and was not used in the adjustment. Horizontal control was adequate.

24. Supplemental Data

USGS quadrangles and maps (Mines and Technical Surveys of Canada) were used to provide vertical control for the strip adjustment.

25. Photography


The following RC-8 photography was used in bridging:

1:30,000 scale


Strip 1 - 71-L(C)-5611 thru 5618
Strip 2 - 71-L(C)-4722 thru 4735
Strip 3 - 71-L(C)-4707 thru 4715
Strip 4 - 71-L(C)-5097 thru 5109

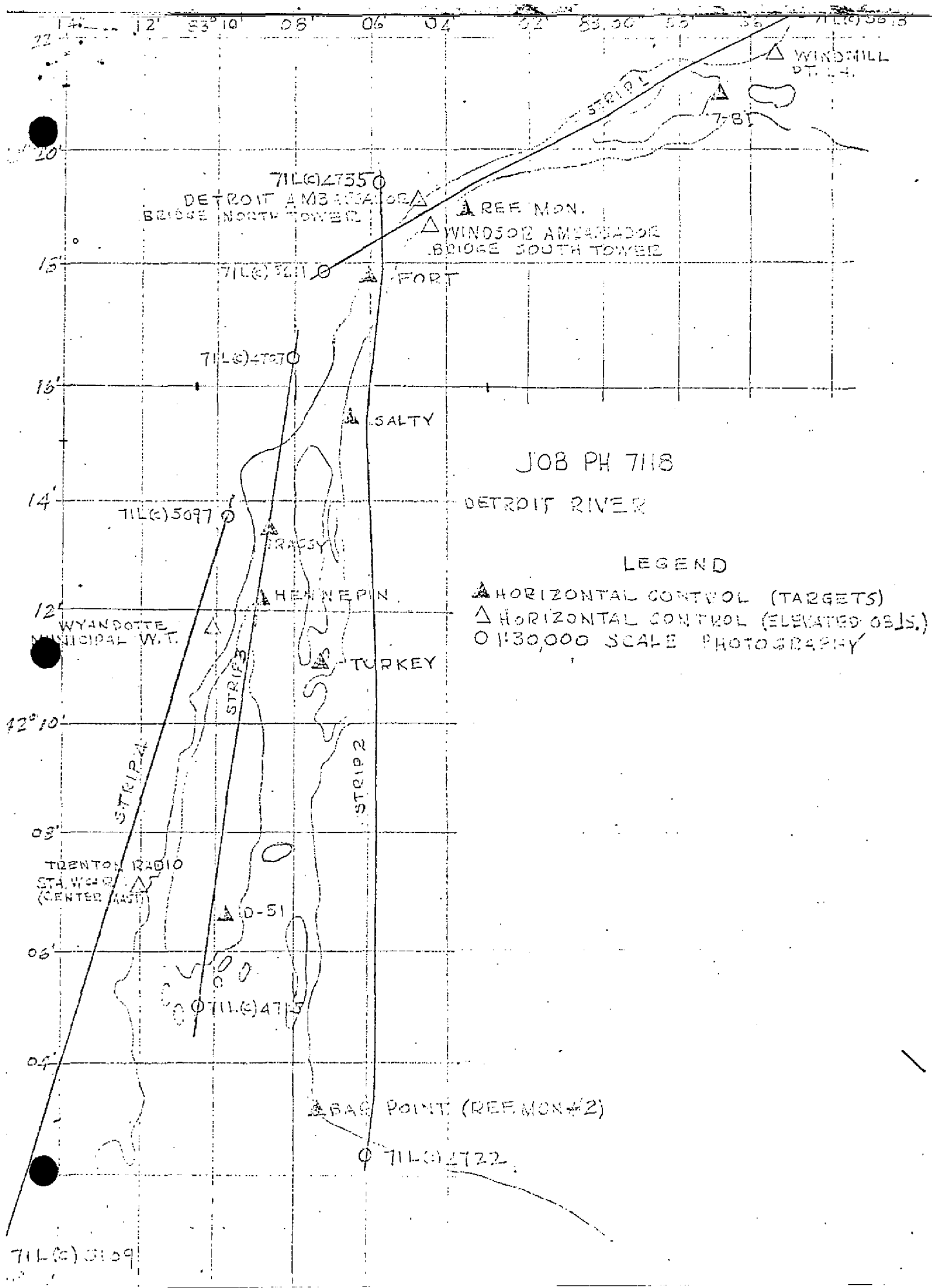
The photography was dark in the corners. This was not only troublesome during the bridging operation but may cause difficulty during compilation.

Respectfully submitted:


Donald M. Brant
Cartographer

Approved and forwarded:


Henry P. Eichert, Chief
Aerotriangulation Section



DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	STATION NAME	JOB NO.	GEODEIC DATUM		ORIGINATING ACTIVITY	
			PH-7118	N.A. 1927	Coastal Mapping Unit, AMC	
		SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET STATE Michigan ZONE South	GEOGRAPHIC POSITION ϕ LATITUDE λ LONGITUDE	REMARKS
T-12096	REFERENCE MONUMENT 9-42 (IBC), 1942	Bridge Form 164	13100	X= 2,344,229.459	ϕ	
				Y= 299,463.077	λ	
	WINDSOR-AMBASSADOR BRIDGE, SOUTH TOWER, 1957	420832 1033	13010	X= 2,340,964.89	ϕ	
				Y= 297,691.45	λ	
	DETROIT-AMBASSADOR BRIDGE, NORTH TOWER, 1957	420832 1032	13102	X= 2,340,139.83	ϕ	
				Y= 299,347.66	λ	
	SALTY (LSC), 1971	Bridge Form 164	32100	X= 2,332,516.762	ϕ	
				Y= 279,950.008	λ	
	FORT (LSC), 1971	Bridge Form 164	11100	X= 2,335,213.639	ϕ	
				Y= 293,062.896	λ	
				X=	ϕ	
				Y=	λ	
				X=	ϕ	
				Y=	λ	
				X=	ϕ	
				Y=	λ	
				X=	ϕ	
				Y=	λ	
				X=	ϕ	
				Y=	λ	
				X=	ϕ	
				Y=	λ	
				X=	ϕ	
				Y=	λ	
COMPUTED BY				COMPUTATION CHECKED BY		DATE
F. Margiotta			DATE 8/23/77	A. C. Rauck, Jr.		9/15/77
LISTED BY			DATE	LISTING CHECKED BY		DATE
A. C. Rauck, Jr.			8/22/77	F. Margiotta		8/23/77
HAND PLOTTING BY			DATE	HAND PLOTTING CHECKED BY		DATE

COMPILATION REPORT
T-12096

31 - DELINEATION

Delineation was accomplished using the B-8 stereoplotting instrument and graphic compilation methods. The map is based on office interpretation of the May 1971, 1:30,000 scale bridging/compilation color photographs. Supplemental photographs, flown in May 1977 and April 1978, were used to graphically update the American and Canadian sides, respectively, using the original 1971 control.

All photographs used to compile the map are listed on form 76-36B. The photography was adequate. The times of photography were not needed because the river levels are recorded as a daily mean, since there is no actual tide.

32 - CONTROL

The horizontal control was adequate. Refer to the Photogrammetric Plot Report dated June 1972.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

Contours are not applicable to this project. Drainage was compiled by office interpretation of the photographs.

35 - SHORELINE AND ALONGSHORE DETAILS

The shoreline and alongshore details were compiled from office interpretation of the compilation photographs with the supplemental photographs used to update the map as described in Item #31. The shoreline compiled was the visible line of contact between land features and the water surface at the time of photography.

36 - OFFSHORE DETAILS

No unusual problems. See Item #31.

37 - LANDMARKS AND AIDS

Appropriate copies of 76-40 forms are submitted with this report.

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

See the attached form 76-36B, Item #5 of the Descriptive Report concerning junctions.

40 - HORIZONTAL AND VERTICAL ACCURACY

Refer to the Photogrammetric Report dated June 1972. See Item #32.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with the following U.S. Geological Survey Quadrangles: Dearborn, Michigan, scale 1:24,000, dated 1968, photorevised 1973; and Detroit, Michigan-Ontario, scale 1:24,000, dated 1968, photorevised 1973.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following National Ocean Survey Chart 14853, scale 1:15,000, 7th edition, dated April 17, 1976.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by,

Joanne Roderick
Joanne Roderick
Cartographer
March 12, 1979

Approved,

James L. Byrd, Jr.
James L. Byrd, Jr.
Chief, Coastal Mapping Unit

REVIEW REPORT
SHORELINE
T-12096

61. GENERAL STATEMENT

See Summary included with this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with U.S. Geological Survey Quadrangles: Dearborn, Michigan, and Detroit, Michigan-Ontario. Both dated 1968, photorevised 1973, scale 1:24,000.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

There is no contemporary hydrographic survey within the limits of the map.

65. COMPARISON WITH NAUTICAL CHARTS

A comprison was made with NOS Charts: 14848, 45th edition, scale 1:30,000, dated April 21, 1982; 14853, 8th edition, scale 1:15,000, dated April 14, 1979; and 14854, 9th edition, scale 1:15,000, dated October 15, 1983.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This map complies with the Project Instructions and meets the requirements for National Standards of Map Accuracy.

Submitted by,

Lowell O. Neterer, Jr.

Lowell O. Neterer, Jr.

Final Reviewer

Approved for forwarding,

Billy H. Barnes

Billy H. Barnes

Chief, Photogrammetric Section, AMC

Approved,

Gregory Z. Thomas

Chief, Photogrammetry Section, Rockville

Ronald K. Brewer

Chief, Photogrammetry Branch,
Rockville

May 16, 1984

GEOGRAPHIC NAMES

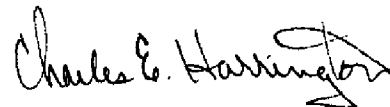
FINAL NAME SHEET

PH-7118 (Detroit River, Michigan)

TP-12096

Ambassador Bridge (cultural)	Norfolk and Western (RY)
Chesapeake and Ohio (RY)	Old Channel
Conrail (RR)	River Rouge
Detroit	River Rouge (locality)
Detroit River	Short Cut Canal
Detroit Toledo and Ironton (RR)	Windsor
Ecorse	Yawkey
Essex Terminal (RY)	Zug Island

Approved by:



Charles E. Harrington
Chief Geographer
Nautical Charting Division

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				ORIGINATING ACTIVITY				
NONFLOATING AIDS ON THE WATER FOR CHARTS				LOCALITY				DATE				
REPORTING UNIT (Field Party, Ship or Office) Coastal Mapping Unit, AMC, Norfolk, VA				STATE Michigan				Detroit River				
DATE Aug. 1977												
The following objects HAVE <input type="checkbox"/> HAVE NOT <input checked="" type="checkbox"/> been inspected from seaward to determine their value as landmarks. OPR PROJECT NO.				JOB NUMBER PH-7118				SURVEY NUMBER T-12096				
CHARTING NAME N/A				DATUM N.A. 1927				METHOD AND DATE OF LOCATION (See instructions on reverse side)				
DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)				POSITION LATITUDE LONGITUDE D.M. Meters ° / D.P. Meters				OFFICE FIELD CHARTS AFFECTED				
LIGHT	Detroit Edison Cell Light 2							NOT IDENTIFIABLE				14853 14848
LIGHT	Detroit Edison Cell Light 1							"				"
LIGHT *	North Pier Light (Not in 1977 Light List or 1983)							"				"
LIGHT *	South Pier Light (Not in 1977 Light List or 1983)							"				"
LIGHT	Detroit Lime Company Light							"				"
	*These lights are on the Canadian side of the river and are not carried in the U.S. Light List.											

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	FIELD ACTIVITY REPRESENTATIVE OFFICE ACTIVITY REPRESENTATIVE <input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION' <i>(Consult Photogrammetric Instructions No. 64.)</i>	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field P - Photogrammetric L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75 *FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				LANDMARKS FOR CHARTS				ORIGINATING ACTIVITY					
REPORTING UNIT (Field Party, Ship or Office)		STATE		LOCALITY		DATE		METHOD AND DATE OF LOCATION (See instructions on reverse side)				CHARTS AFFECTED					
TO BE CHARTED <input checked="" type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED		AMC, Norfolk, VA		Michigan		Detroit River		Aug. 1977									
The following objects HAVE <input type="checkbox"/> BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS.		SURVEY NUMBER		DATUM		POSITION		LATITUDE		LONGITUDE		OFFICE		FIELD		CHARTS AFFECTED	
OPR PROJECT NO.		JOB NUMBER		T-12096		N.A. 1927		D.M. Meters		D.P. Meters							
CHARTING NAME		DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)		LATITUDE		LONGITUDE		D.M. Meters		D.P. Meters		OFFICE		FIELD		CHARTS AFFECTED	
STACKS	Northwesterly of Two	42 16	55.87	83 06	38.93	77 E(C) 1107 May 28, 1977	14848										
STACKS	Southeasterly of Two	42 16	54.48	83 06	33.30	77 E(C) 1107 May 28, 1977	14853										
STACK		42 16	1681	83 06	763		14854										
STACK		42 16	49.23	83 06	35.74	"	"										
STACK		42 17	1519	83 07	819	"	"										
STACK		42 17	12.35	83 08	15.19	"	"										
STACK		42 17	381	83 08	348	"	"										
STACK		42 17	02.01	83 08	01.44	"	"										
STACK		42 17	62	83 08	33	"	"										
STACK		42 17	19.54	83 07	59.49	"	"										
STACK		42 17	603	83 07	1363	"	"										
GAS HOLDER		42 17	50.79	83 09	04.32	77 E(C) 4706 May 4, 1971	"										
GAS HOLDER		42 17	1567	83 09	99	"	"										
CHIMNEYS	Northwesterly of Six	42 17	35.62	83 06	3.71	77 E(C) 1109 May 28, 1977	"										
CHIMNEYS		42 17	1099	83 06	85	"	"										
CHIMNEYS	Southeasterly of Six	42 17	34.16	83 06	1.31	77 E(C) 1109 May 28, 1977	"										
CHIMNEYS		42 17	1054	83 06	30	"	"										

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW	OFFICE ACTIVITY REPRESENTATIVE
ACTIVITIES	<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field P - Photogrammetric L - Located Vis - Visually V - Verified 1 - Triangulation 5 - Field identified 2 - Traverse 6 - Theodolite 3 - Intersection 7 - Planetable 4 - Resection 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	III. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 II. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				ORIGINATING ACTIVITY			
<input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED				REPORTING UNIT (Field Party, Ship or Office) Coastal Mapping Unit, AMC, Norfolk, VA		STATE Michigan		LOCALITY Detroit River		DATE Aug. 1977	
The following objects HAVE <input type="checkbox"/> BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS.				JOB NUMBER PH-7118		SURVEY NUMBER T-12096		DATUM N.A. 1927		METHOD AND DATE OF LOCATION (See instructions on reverse side)	
OPR PROJECT NO. N/A				DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)		POSITION		LATITUDE		LONGITUDE	
CHARTING NAME								° / °		D.P. Meters	
TOWER				42 17	36.78	83 05	53.47	77 E(C) 1109 May 28, 1977			14848 14853
TANK				42 17	59.96	83 05	34.71	"			"
CHIMNEYS	Northwesterly of Six			42 18	13.84	83 05	28.16	77 E(C) 1111 May 28, 1977			"
CHIMNEYS	Southeasterly of Six			42 18	12.09	83 05	25.58	"			"
TANK				42 18	20.22	83 06	2.40	"			"
TANK				42 18	23.63	83 05	19.03	"			"
STACKS*	Northeasterly of Two			42 17	18.18	83 05	31.95	78 E(P) 9626 April 26, 1978			"
STACKS*	Southwesterly of Two			42 17	17.11	83 05	32.65	"			"
TOWER*				42 17	25.99	83 05	25.40	"			"
					802		582				

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection P - Photogrammetric Vis - Visually 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				ORIGINATING ACTIVITY							
<input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED				REPORTING UNIT (If field Party, Ship or Office) Coastal Mapping Unit, AMC, Norfolk, VA				<input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)							
The following objects HAVE <input type="checkbox"/> HAVE NOT <input checked="" type="checkbox"/> been inspected from seaward to determine their value as landmarks. OPR PROJECT NO. N.A.				JOB NUMBER PH-7118 SURVEY NUMBER T-12098 ⁶				LOCALITY Detroit River STATE Michigan DATUM N.A. 1927				DATE Aug. 1977			
CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	LATITUDE		LONGITUDE		POSITION		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED					
		° /	D.M. Meters	° /	D.P. Meters		OFFICE	FIELD							
STACKS	Northeasterly of thirteen	42 15	9.04 229	83 07	27.79 637		77 E(C) 1105 May 28, 1977		14853 14848						
STACKS	Southwesterly of thirteen	42 15	3.34 108	83 07	33.76 774		"		"						
STACKS	Northwesterly of Ten	42 15	22.26 687	83 07	31.32 718		"		"						
STACKS	Southeasterly of Ten	42 15	19.22 593	83 07	26.09 598		"		"						
TANK		42 16	16.24 501	83 08	12.83 294		77 E(C) 1107 May 28, 1977		"						
STACKS	Westerly of Three	42 16	26.67 823	83 06	46.21 1059		77 E(C) 1107 May 28, 1977		14848 14853 14854						
STACKS	Center of Three	42 16	26.28 811	83 06	44.81 1027		77 E(C) 1107 May 28, 1977		"						
STACKS	Easterly of Three	42 16	25.96 801	83 06	43.20 990		"		"						
TOWER *		42 15	21.00 648	83 06	10.25 235		78 E(C) 9627 April 26, 1978		14853 14848						

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	OFFICE ACTIVITY REPRESENTATIVE <input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions* require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods. **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	<input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	FIELD ACTIVITY REPRESENTATIVE OFFICE ACTIVITY REPRESENTATIVE <input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
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