

Diag. Cht. No. 4116.				
Form 504				
U. S. DEPARTMENT OF COMMERCE				
COAST AND GEODETIC SURVEY				
DESCRIPTIVE REPORT				
Type of Survey SHORELINE (Photogrammetric)				
Field No. Office No. T-11900				
LOCALITY				
,				
Hawaii State				
Maui Island General locality				
· · · · · · · · · · · · · · · · · · ·				
Locality Kahului				
10 61				
1960 - 1961				
CHIEF OF PARTY				
H. J. Seaborg, Honelulu District Office W. E. Randall, Baltimore District Office				
remarra paretilore presentes Office				
LIBRARY & ARCHIVES				
DATE				

(9-66)			ENVIRONMENTAL :	U.S. DEPARTMENT OF COMMERCE SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY
	DESCRIPTIVE R	EPORT - DA1		COAST AND GRODE ITC SURVE
	2230	T -11900		
PROJECT NO. (II): PH-6012				
(21034)				
FIELD OFFICE (II):			CHIEF OF PART	Y
Honolulu, Ha	waii		H. J. Seat	oorg
PHOTOGRAMMETRIC OFFICE (III):			OFFICER-IN-CH	ARGE
Baltimore, M	aryland		W. E. Rand	all
INSTRUCTIONS DATED (III) (III):				
	14 Novemb 28 Novemb 13 June 1 16 Januar	per 1960 1961	٥	
METHOD OF COMPILATION (III): Kelsh Plotter	•			
MANUSCRIPT SCALE (III):		STEREOSC	OPIC PLOTTING IN	STRUMENT SCALE (III):
1:5,000		1:5,000)	
DATE RECEIVED IN WASHINGTON OF	TICE (IV):	DATE REF	PORTED TO NAUTIC	AL CHART BRANCH (IV):
APPLIED TO CHART NO.		DATE:		DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III):			VERTICAL DAT	UM (III): MHW
Old Hawaiian		•	Elevations shows	n se (25) refer to mean high water a se (5) refer to sounding detum ater or mean lower low water arks, page 2
·				
REFERENCE STATION (III):				
ДКЕ, 1912	LONG.:			
		.	MADJUSTED UNADJUSTE	
20° 531 00.679#	156° 29° 56.708	211	STATE	ZONE

199,856.81 /-/ ×=557,206.80 F/. Hawaii 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.

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II): DATE: J. C. Lajoye Feb. 1961 MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Mean high water-line located by Kelsh Plotter from October 1960 photography with the aid of field inspection notes. PROJECTION AND GRIDS RULED BY (IV): DATE 11-17-60 R.A.C. PROJECTION AND GRIDS CHECKED BY (IV): DATE J.D.C. 11-22-60 CONTROL PLOTTED BY (III): DATE 1-24-61 D. M. Brant DATE CONTROL CHECKED BY (III): H. P. Eichert 1-24-61 DATE RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): 1961 Aerotriangulation - Washington Office DATE STEREOSCOPIC INSTRUMENT COMPILATION (III): PLANIMETRY J. D. McEvoy 7-61 DATE CONTOURS 8-63 J. D. McEvoy J. D. McEvoy DATE MANUSCRIPT DELINEATED BY (III): 8-63 J. D. McEvoy DATE SCRIBING BY (III): DATE PHOTOGRAMMETRIC OFFICE REVIEW BY (III): D. M. Brant 8-63

REMARKS:

The datum plane for the contours on this survey is Mean Sea Level.

FIELD EDIT J.C. Lajoye May 1961
FIELD EDIT SHEET SUBMITTED

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

AMERA (KIND OR SOURCE) (III):

"W" Camera

	PI	OTOGRAPHS (III)			
NUMBER	DATE	TIME	SCALE	STAGE O	FTIDE
60 W 2303 & 2304	2 Oct. 1960	-0910_	1:25,000	1.0 ft. abo	ve MLLW
60 ₩ 2626 & 2627	10 Oct. 1960	0928	1:25,000	1.8 ft. abo	ve MLLW
		TIDE (III)			Diurna
				RATIO OF MEA	N SPRING

			RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Honolulu, Hawaii				1.2	1.9
BORDINATE STATION: Kahului, Hawaii				1.4	2.2
SUBORDINATE STATION:					
WASHINGTON OFFICE REVIEW BY (IV): Leo F. Beugnet, Atlantic Marine Center				1966	
PROOF EDIT BY (IV):			DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):	4	RECOVERED:	IDENTIFIE	D:	
NUMBER OF BM(S) SEARCHED FOR (II):	NUMBER OF BM(S) SEARCHED FOR (II): 0 RECOVERED: 0			D	
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III)):	0			
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED	o (III) :	8			

REMARKS:

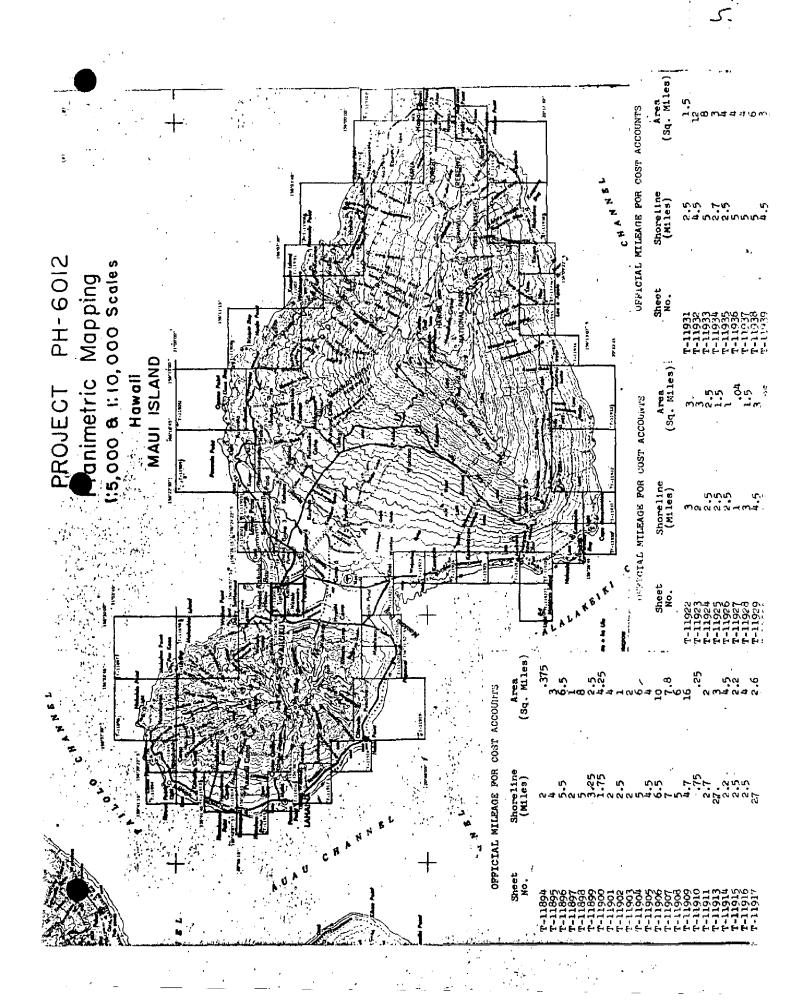
COMPILATION RECORD	COMPLETION DATE	REMARKS
Shoreline furnished for hydro	July 1961	Superseded
Compilation completed	Sept 1963	·
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SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT T-11900

Shoreline survey T-11900, compiled at 1:5,000 scale, covers a part of the shoreline of Maui Island, Hawaii in the vicinity of Kahului Harbor. This is one of forty-nine similar surveys in the same project made in advance of hydrography in the same area.

Compilation was by Kelsh Instrument using the 1:15,000 and 1:25,000 scale panchromatic photography obtained on 24 September 1961 and October 2nd and 10th 1960. Supplemental control established by Aerotriangulation was used for control of the Kelsh models.

Field operations preceding compilation included recovery and identification of horizontal control, field inspection and selection of photo-hydro stations.

A cronaflex copy of the incomplete map manuscript was: provided for preparation of the boat sheet. Specially prepared ratio photographs for locating hydrographic signals by photogrammetric methods and field edit purposes were furnished.

The manuscript is a vinylite sheet from which the smooth sheet was drafted and reproduced on cronaflex. One cronar positive and one cronar negative are forwarded for record and registry.

FIELD INSPECTION REPORT T-11900

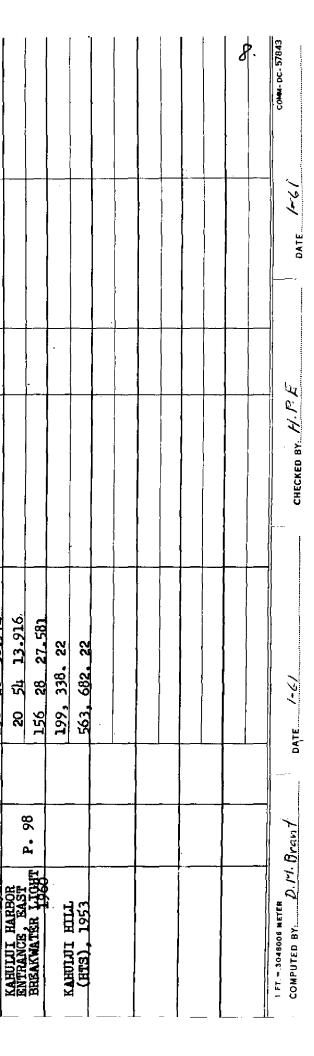
Please refer to the Field Inspection Report for Maui Island, Hawaii, dated 8 September 1962, bound with the Descriptive Report for T-11894.

NTROL RECORD DESCRIPTIVE REPORT U.S. DEPARTMENT OF COMMERCE

FORM 164 (4-23-54)

STATION

DISTANCE FACTOR DISTANCE FROM GAID OR PROJECTION LINE IN METERS IN METERS (BACK) FORWARD SCALE FACTOR (BACK) N.A. 1927 - DATUM FORWARD DATUM SCALE OF MAP 115,000 COAST AND, GEODETIC SURVEY OR PROJECTION LINE IN METERS DISTANCE FROM GRID IN FEET. (BACK) FORWARD LONGITUDE OR x-COORDINATE LATITUDE OR #-COORDINATE 38.hhl 2h.186 36.974 29.568 28.754 56.708 19-769 12.719 53 00.679 25,975 MAP T. 11900 PROJECT NO. PH 6012 53 45.53 59.60 S 28 S **3**8 29 29 8 23 88 굯 Old 20 Hawaiish156 8 156 156 8 156 156 ೪ 8 S 156 DATUM SOURCE OF INFORMATION (MOEX) KAHULUI HARBOR G.P. 98 FRONT LIGHT, 1960 P. 98 KAHULUI HARBOR G.P. P. 45 P. 67 P. 98 ኢ 98 ď ď. KAHULUI, RADIO STATION, KWVI, MAST, 1950 KAHULUI HARBOR ENTRANCE, WEST BREAKWATER LEGHT HEAR LIGHT, 1960 CATHOLIC CHURCH,



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LUKE, 1912

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PHOTOGRAMMETRIC PLOT REPORT T-11900

Please refer to the Photogrammetric Plot Report for the Western half of Maui Island which is bound with the Descriptive Report for T-11894.

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COMPILATION REPORT T-11900

31. DELINEATION

Planimetry was by Kelsh Instrument using the annotations on the field inspection photographs.

CONTROL

The supplemental control, established by aerotriangulation, was adequate in placement and density for control of the manuscript.

33. SUPPLEMENTAL DATA

No supplemental surveys were used to delineate the manuscript although the drainage pattern was checked against U.S.G.S. quadrangles in the area.

34. CONTOURS AND DRAINAGE

The area immediately surrounding Kahului Harbor was contoured by field methods directly on field photographs up to and including the 15 ft. contour. No difficulty was encountered in compiling the contours. It is noted that the area just south of and adjacent to the west@breakwater was being filled at the time of field work and the contours are not shown in this area.

Drainage was delineated by the Kelsh operator.

35. SHORELINE AND ALONGSHORE DETAIL

The mean high-water line and alongshore features were delineated by the Kelsh operator from field inspection photographs with the exception of the detail described in the following paragraph. The shoreline inspection was adequate for delineation of the manuscript.

A new rock bulkhead, built since the date of photography, was located by field survey methods on an ozalid copy of the incomplete manuscript by the field unit. This bulkhead runs southwestward from the west jetty to the fast land in Kahului Harbor.

36. OFFSHORE DETAILS

No offshore details for delineation were noted during compilation.

37. LANDMARKS AND AIDS

There are no landmarks within the limits of compilation. fixed aids to navigation have been reported on Form 567.

38. CONTROL FOR FUTURE SURVEYS

No topographic stations were established. Eight temporary photo-hydro stations were located during compilation. These have been listed in paragraph 49 of this report.

39. JUNCTIONS

Satisfactory junctions were made with T-11899 on the north and with T-11901 on the east. There are no contemporary surveys on the west or south.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with U.S.G.S. Wailuku, Hawaii quadrangle, 1:24,000 scale, edition of 1955.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with the following charts:

4116 12th edition, August 17, 1964 1:250,000 scale 4124 1:30,000 scale 3rd edition, May 3, 1965 4130 1:80,000 scale 4th edition, August 31, 1964

ITEMS TO BE APPLIED TO CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Approved:

Respectfully submitted:

Donald M. Brant

Carto. (Photo.)

J. Bull, CAPT., USESSA

Director, Atlantic Marine Center

48. Geographic Names List

Hobron Point Kahului Kahului Bay Kahului Harbor Paukukalo

> Geographic Names Section 5 February 1964

49. NOTES FOR THE HYDROGRAPHER

The following photo-hydro stations, identified by the field inspection party, were located during compilation.

0001	Fence corner, lumber yard	60 W 2626
0002	North gable of Ventilator MDG building	60 W 2626
0003	Tip of gross	60 W 2626
0004	Center of 11th (1st silver) quonset hut	60 W 2626
0005	Water gable, old house	60 W 2626
0006	Double highway sign	60 W 2626
0007	3rd palm tree	60 W 2626
8000	Northwest corner pier 2	60 W 2626
0009	Northwest corner pier 1	60 W 2626

C&G\$ FORM 1002	* '		U.	S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY		
(11-13-41)	PHOTOGRAMMETRIC OFFICE REVIEW TEMPLE T-11900					
50		IS	T-11900			
1. PROJECTION AND GRIDS	2. TITLE		3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE		
DMB	DMB		DMB	DMB		
CONTROL STATIONS	<u> </u>					
5. HORIZONTAL CONTROL STA	TIONS OF	6. RECOVERAN	BLE HORIZONTAL STATIONS AN THIRD-ORDER ACCURACY	7. PHOTO HYDRO STATIONS		
DMB		NONE (Topographic	stations)	DMB		
8. BENCH MARKS	9. PLOTTING	DF SEXTANT	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS		
DMB	NONE		DMB	DMB		
ALONGSHORE AREAS (Nautical						
12. SHORELINE	13. LOW-WATES	RLINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES		
DMB	NONE		DMB	DMB		
16. AIDS TO NAVIGATION	17. LANDMARK	(S	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES		
DMB	DMB		DMB	DMB		
PHYSICAL FEATURES						
20. WATER FEATURES		21. NATURAL	GROUND COVER	22. PLANETABLE CONTOURS		
DMB		<u> </u>	NONE	DMB		
23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS	IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES		
NONE	DMB		DMB	DMB		
CULTURAL FEATURES	I 20		7.00	Loo		
27. ROADS	28. BUILDINGS	i	29. RAILROADS	30. OTHER CULTURAL FEATURES		
DMB	DMB		DMB	DMB		
BOUNDARIES 31. BOUNDARY LINES			32. PUBLIC LAND LINES			
NONE			NONE			
MISCELLANEOUS						
33. GEOGRAPHIC NAMES		34. JUNCTIONS	i	35. LEGIBILITY OF THE		
DMB			DMB _.	DMB		
36. DISCREPANCY OVERLAY	37. DESCRIPTI	VE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS		
DMB	DMB		DMB	DMB		
40. REVIEWER Joseph Ster	nlerg		SUPERVISOR, REVIEW SECTION 1 Sept Heinberg			
For: D. M. Brant		<u> </u>	Joseph Meinte	7		
41. REMARKS (See attached shee		PIONE TO THE	ANUSCOIDT	<u>/_</u>		
42. Additions and corrections	furnished by th	e field completi	on survey have been applied to	the manuscript. The manu-		
script is now complete exc	- //	aer nem 43.	SUPERVISOR			
For D M Room	inberg +		Joseph Aten	beig		
43. REMARKS	()		1			
			9			
1						

FIELD EDIT REPORT T-11900

Please refer to the Field Edit Report for Maui Eland (Strips 1 through 7) bound with the Descriptive Report for T-11894.

REVIEW REPORT T-11900 SHORELINE April 27, 1966

61. GENERAL STATEMENT

See summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Comparison was made with Registered Surveys No. 2463, 1:2,500 scale made in 1899, approved Feb. 1, 1901 and No.4465 1:5,000 scale made in March and April 1929.

The shoreline, offshore and alongshore detail have changed since the date of these surveys. The major changes have been noted on the comparison sheet.

Survey T-11900 supersedes the prior surveys and should be used for future nautical chart construction in the area of this sheet.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with U.S.G.S. quadrangle Wailuku, Hawaii, 1:24,000 scale, edition of 1955. The two surveys are in good agreement except for the area just south of the west breakwater. This area has been filled and does not show on the U.S.G.S. quadrangle.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with copies of boat sheet H-8576 (SU-10-1-61) and H-8684 (PF-5-1-62). The shoreline for the boat sheets was obtained from copies of the map manuscript and there are no discrepancies.

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 4124, 1:30,000 scale, 3rd edition, May 3, 1965. The Chart and manuscript are in good agreement.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey compiles with project instructions and meets the National Standards for Map Accuracy.

Reviewed by:

Approved by:

J. Bull, CAPT., USESSA Director, Atlantic Marine Center

Approved by:

Chief, Cartographic Branch

Chief, Chart Division Marine

Chief, Operations Division

Chief, Photogrammetry Division

Form 567 (4-61)

<u>:</u>

F COMMERCE IC SURVEY COAST AND GEOD U.S. DEPARTME

Coast Pilot 4 % %

Photogrammetric Review Section Nautical Chart Branch

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO-BE-REWISED -- STRIKE OUT TWO . TO BE DELETED

0ct. 6

19 65

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks be charted on (deleted "from) the charts indicated.

Kihel, Maui Hawaii

D. M. Brant The positions given have been checked after listing by

							οlo	Joseph Stelnberg	TUDGER	3	Chief of Farty.
STATE H	Howel 1				POSITION			METHOD			
1				LATITUDE#	LONG	LONGITUDE		LOCATION		130K	CHARTS
CHARTING	DESCRIPTION	BIGNAL	•	D. M. BETERS	•	D. P. METERS	DATCM	BURVEY No.	LOCATION		
Kahului Har	Kahului Harbor, Entrance Range Front Light		20 53		156 28	<u>! </u>	Old Hawaii	Old Triang. Fe Hawailan T-11900	Feb.1961 000	×	4116,4124, 1130
The man was and	1960)				<u> </u>						
Kahului Harbor, (Kahului Harbor	,		8	3 753.0	156 28	28.751	=		Feb.1961x	K	1116,1124; 1130
	1960)			1							
Kahului Harl	Kahului Harbor, Entrance East Breakwater light	nt it	75 02	13.916	156.28	27.581	=	=	Feb.1961x x	×	1116,4124,
The state of the	1960)	(2)									
Kahului Hari	Kahului Harbor, Entrance West Breakwater Light (Kabului Harbor Entrance West, Breakwater Light.	it.	20 5	54 191	156 28	36.97h	=	tz	Feb. 1963×	,	4116,4124, OF LA
	1960)										
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This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 6-36, Fig. 79. Positions of charted landmarks and non-floating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

USCOMM-DC 25412-P61

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

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.

CHART	DATE	CARTOGRAPHER	REMARKS
4130	2-15-67	A. Johnson	Full Part Before After Verification Review Inspection Signed Via
		7	Drawing No. No Corr
4124	2/5/68	I SM Millra	Full Part Before After Verification Review Inspection Signed Via
	,		Drawing No. Examined 1/4 Critical Carection
4116	5/10/69	O. Chapman	Full-Part Before After Verification Review Inspection Signed Via
			Drawing No. 10 Cort thing Cht. 4/30 dwy 13
19342	9/24/79	Open E. Stombel	Full Post Before After Verification Review Inspection Signed Via
(4124)			Drawing No./9
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
	<u> </u>		Full Part Before After Verification Review Inspection Signed Via
		<u></u>	Drawing No.
 -		<u> </u>	Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
		<u> </u>	Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
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		<u> </u>	Full Part Before After Verification Review Inspection Signed Via
		,	Drawing No.
			<u> </u>