Notes Ck'd by J. S. H.
k J. S. H.
G. W. H.
-10-60

Survey of Beach Erosion Studies
Tape
Surveyed by Uharriet
Notes Uharriet Date 7-22-60
Indexed H. E. Ott

F. B. 2905 Pg. 5

BEACH EROSION STUDIES

JULY 1960

J.N. 0300.02

STA. 315+40S TO STA. 230+00S

F. F.B. 2100

arriet	Lind	Sappel
terson	Goodwin	Smiley
lks	Wallace	Tuxford
ith, N.	Caro	Lieber
ler	Masuda	Hinzman
eboom		Blanchard
ammen-Sounder		
emaker-Skipper		

Microfilmed May '85.

F. B. 2805 PG. 6

RETURN TO
LOS ANGELES COUNTY ENGINEER
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Note: Any Additions or Changes on This Sheet Must be Made or Circled in Red Ink With Date and Name of Person Making Change.

Notes Ck'd by J. S. H.	Survey of Beach Erosion Study
Map No.	IN 230-03 Zone Std. °F
Office Work J. S. H.	Surveyed by Charriel
Checked C. W. H.	Notes Blanchard Date 7-20-60
Date 8-10-60	Indexed H. E. OTT

F. B. 2805 PG. 7

TIDE GAUGE READINGS

JULY 20, 1960

DATUM - MLLW

TIME - P.S.T.

TIME P.S.T.		GAUGE READING MLLW
5:00	AM	25
5:30		30
6:00		33
6:30		37
7:00		39
7:30		41
8:00		41
8:30		41
9:00		39
10:00		37
10:30		33
11:00		32

Note: Any Additions or Changes on This Sheet Must be Made or Circled in Red Ink With Date and Name of Person Making Change.

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763098 CE #247—7-55

F. B. 2805 PG. 8

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76L-298 S & E #307—1-56

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Profile No. Notes Red. W.S.H. Plotted C.W.H. Job No. Division No. 11 F. B. Pg.
X-Sec. No. Date 8-29-60 Date 10-24-60 Survey of
Notes Chkd. Checked J.S.H. Survey by Notes Date
Date 8-29-60 Date 10-24-60 Map No. Indexed H. E. Ott Date

STATION	B. S.	H. I.	F. S.	ELEV.		
					8-20 INSTR. 312+01.58	SIGHT ON 315+40
		21.89			DATUM MEAN LOWER LOW WATER	315+40 INSHORE
T.P.	5.37	22.89	4.41	17.48		
"	4.33	[illegible]	5.35	17.60		
315+40					CONTROL LINE	
			4.[illegible]	17.[illegible]	[illegible]	
—			4.2	[illegible]		14' Rt. [illegible]
			[illegible]	18.[illegible]		[illegible]
			9.2	12.[illegible]		42' Rt. [illegible]
[illegible]			11.[illegible]	[illegible]		57' Rt. BTM. [illegible]
	2.4	12.4				
			7.7	4.7		865 Rt. Mean tide line
T.P.			6.2	6.2	T.P.	
315+40	2.2	8.4				
"			2.9	5.5	13° 19' 80'	
			7.3	1.1	18° 53' 116'	
			9.7	-1.3	22° 57' 143'	

76L-298 S & E #307—1-56

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
315+40		84				
"			98	-1.4	27° 36'	177'
"			112	-2.8	31° 39'	208'
"			127	-4.3	35° 14'	239'
"			146	-6.2	39° 07'	275'
"			155	-7.1	41° 11'	296'
"			165	-8.1	44° 38'	334'

F. B. 2805 Pg. 10 Job No. 0300.02 Division No. 11 Notes Red J. S. H. Plotted C. W. H. Profile
Survey of BEACH EROSION STUDIES Date 8-29-60 Date 10-24-60 No. X-Sec.
Survey by LAND Notes J. C. GOODWIN Notes Chkd. CWH Checked J. S. H.
Indexed H. E. OH Date 9 SEPT 11 Date 8-29 60 Date 10-24-60 No.

76L-298 S & E #307—1-56

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S-21

STATION	B. S.	H. I.	F. S.	ELEV.	S-20 312+01.58	SIGHT ON 315+10
					DATUM MEAN LOWER LOW WATER	315+10 INSHORE
T.P.			4 32			
315+10			4 3		CONTROL LINE	
			4 3	17 3		
—			5 5	17 1		
			7 9	13		
			9 5	13		
T.P.			11 69	9 14	T.P.	
	04	10 3				
			5.6	47		72° RT. Mean tide line
T.P.	22	7.4	51	52	T.P.	
315+00			76	-0.2	19° 39' 110'	
"			82	-0.8	25° 02' 144'	
"			80	-0.6	29° 09' 172'	
"			97	-2.3	34° 14' 210'	

Profile Notes Red J. S. H. Plotted C. W. H. Job No. Division No. 11 F. B. 298 Pg. 11
No. Date 8-29-60 Date 10-24-60 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. Checked J. S. H. Survey by Notes Date 19 -
No. Date 8-29-60 Date 10-24-60 Map No. Indexed H. E. OH Date

76L-298 S & E #307—1-56

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F. B. 2805 Pg. 12 Job No. 0300.02 Division No. 11 Notes Red J. S. H. Plotted C.W.H. Profile
Survey of BEACH EROSION STUDIES Date 8-29-60 Date 10-24-60 No. X-Sec.
Survey by LWD Notes J.C. FOO DRAIN Notes Chkd. CWH Checked J.S.H.
Indexed H. E. OTT Date # D.S. Date 8-29-60 Date 10-24-60 No.

STATION	B. S.	H. I.	F. S.	ELEV.			
		~~2+65~~ 7.4			π at 3127+01.58 S.20		sight on 315+10
315+10			11.3	-3.9	38° 02'	241'	
"			12.6	-5.2	41° 28'	273'	
"			14.7	-7.3	45° 36'	315'	
"			15.8	-8.4	48' 14'	345'	
"			18.5	-11.1	51° 57'	394'	

76L-298 CE 307 11-58

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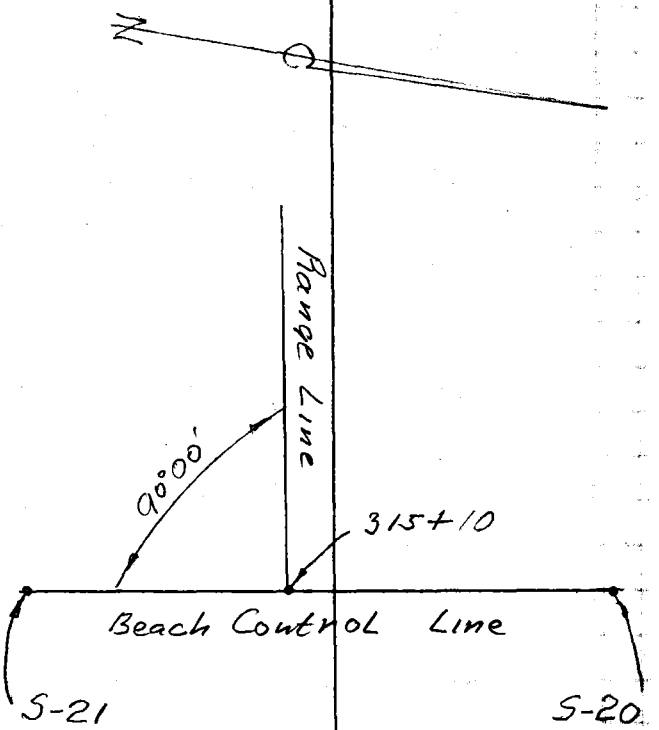
Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		1		5 13	90° 00'		
		2			"		
		3			"		
		4			"		
		5			"		
		6			"		
		7			"		
		8			"		
315+10	5-21	9			"		
		10			"		
		11			"		
		12			"		
		13			"		
		14			"		
		15			"		
		16			"		
		17			"		
		18			"		
		19			"		
		20			"		



Profile Notes Red J.S.H. Plotted C.W.H. Job No. 030002 Division No. 11 F.B. 28005 Pg. 13
No. Date 8-29-60 Date 10-24-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. C.W.H. Checked J.S.H. Survey by Pharmer Notes Dickson Date 1-20-60
No. Date 8-29-60 Date 10-24-60 Map No. Indexed H.E.O.H. Date

76L-298 CE 307 11-58

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F.B. 2805 Pg. 14 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted C.W.H. Profile
Survey of Beach Erosion Studies Date 8-29-60 Date 10-24-60 No. X-Sec.
Survey by Charnot Notes Tee boom Notes Chkd. C.W.H. Checked J.S.H.
Indexed H.E. Ott Date Date 8-29-60 Date 10-24-60 No.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		21			90° 00'		
		22			"		
		23			"		
		24			"		
		25			"		
		26			"		
		27			"		
315+10		28			"		
	5-21	29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40			"		

76L-298 CE 307 11-58

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
		41				90° 00'		
		42				"		
		43				"		
		44				"		
		45				"		
		46				"		
		47				"		
		48				"		
315+10	5-21	49				"		
		50				"		
		51				"		
		52				"		
		53				"		
		54				"		
		55				"		
		56				"		
		57				"		
		58				"		
		59				"		
		60			521	"		

Profile No. X-Sec. No. Notes Red J. S. H. Plotted C.W.H. Job No. 030002 Division No. 11 F.B. 28805 Pg. 15
Date 8-29-60 Date 10-24-60 Survey of Beach Erosion Studies
Notes Chkd. C.W.H. Checked J. S. H. Survey by Channel Notes Taken Date 7-20-60
Date 8-29-60 Date 10-24-60 Map No. Indexed H. E. Off Date

F.B. 2805 Pg. 16

Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by Uhavnet Notes Teeboom Notes Chkd. _____ Checked _____ X-Sec.

Indexed H. E. Ott Date _____ Date _____ Date _____ No. _____

STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At	Sight On	# Depth Rec. Adj.	Time	Hor.Ang.	

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76L-266 CE 307 11-59

76L-298 CE 307 11-58

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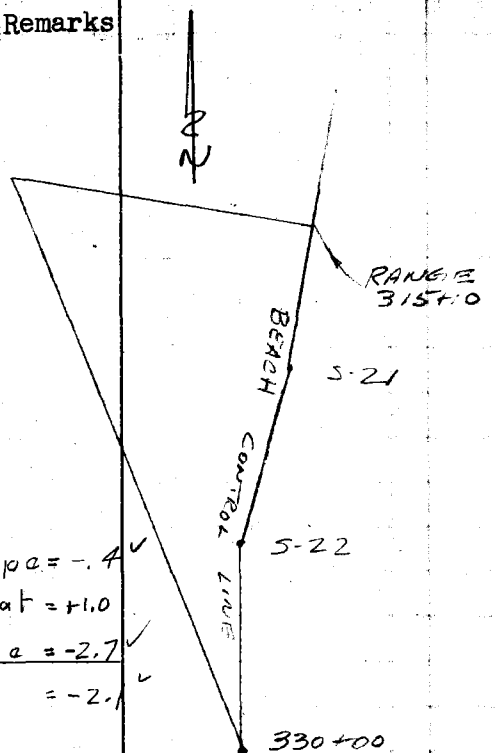
Profile No. ____ X-Sec. No. ____ Notes Red J. S. H. Plotted C. W. H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 17
Date 8-29-60 Date 10-24-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C. W. H. Checked J. S. H. Survey by [illegible] Notes [illegible] Date 7-20-60
Date 8-29-60 Date 10-24-60 Map No. ____ Indexed ____ Date ____

STATION Inst. At	Sight On	B.S.	H.I. Depth #	Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
330+00	5-22		1	269.5	267.4	5-13	59°-45'	2816'	
			2	274.9	272.8		59°-09'	2744'	
			3	268.7	266.6		58°-36'	2686'	
			4	265.5	263.4		58°-00'	2624'	
			5	261.3	259.2		57°-28'	2568'	
			6	259.2	257.1		57°-02'	2524'	
			7	253.9	251.8		56°-24'	2458'	
			8	247.3	245.2		55°-32'	2382'	
			9	246.2	244.1		55°-02'	2340'	
			10	240.5	238.4		54°-20'	2280'	
			11	233.0	230.9		53°-30'	2210'	
			12	227.5	225.4		52°-48'	2154'	Tape = -.4
			13	222.0	219.9		52°-07'	2100'	Boat = +1.0
			14	216.8	214.7		51°-21'	2044'	Tide = -2.7
			15	212.3	210.2		50°-21'	1967'	= -2.1
			16	208.3	206.2		49°-27'	1909'	
			17	202.7	200.6		48°-35'	1845'	
			18	197.3	195.2		47°-39'	1787'	
			19	188.2	186.1		46°30'	1720'	
			20	181.4	179.3		45°-16'	1650'	



76L-298 CE 307 11-58

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F.B. 2805 Pg. 18
Survey of BEACH EROSION STUDIES
Survey by CHARGE
Indexed
Notes
Date
Job No. 030002 Division No. 11 Notes Red J.S.H. Plotted C.W.H. Profile
Date 8-29-60 Date 10-24-60 No.
Notes Chkd C.W.H. Checked J.S.H. X-Sec.
Date 8-29-60 Date 10-24-60 No.

STATION		B.S.	H.I.		F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
330+00	S. 22	21	177.0	175.2		44°04'	1584'	
		22	171.2	169.4		42°23'	1496'	Tape = 0
		23	164.9	163.1		41°18'	1444'	Boat = +1.0
		24	156.8	155.0		40°03'	1383'	Tide = -2.8
		25	150.2	148.4		38°47'	1324'	-1.8
		26	142.8	141.0		37°10'	1252'	
		27	133.8	132.0		35°37'	1188' ?	
		28	126.7	124.9		34°14'	1130'	
		29	116.0	114.2		32°53'	1079'	
		30	109.1	107.3		31°35'	1030'	
		31	102.2	100.4		30°34'	993'	
		32	97.4	95.6		29°38'	959'	
		33	91.2	89.4		28°26'	917'	
		34	85.4	83.6		27°24'	882'	
		35	80.0	78.2		26°29'	850'	
		36	75.4	73.6		25°40'	823'	
		37	69.8	68.0		24°47'	794'	
		38	64.1	62.3		24°00'	769'	
		39	59.3	57.5		23°01'	738'	
		40	58.8	57.0		21°37'	695'	

76L-298 CE 307 11-58

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Profile No. ____ X-Sec. No. ____ Notes Red J.S.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 19
Date 8-29-60 Date 10-24-60 Survey of BETHCH BEACH STUDIES
Notes Chkd. C.W.H. Checked J.S.H. Survey by [illegible] Notes [illegible] Date 7-[illegible]-76
Date 8-25-60 Date 10-24-60 Map No. ____ Indexed ____ Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
330+00	S. 22	41	56.4	54.6		20°-36'	663'	Tape = 0'
		42	53.3	51.5		19°-40'	634'	Boat +1.0
		43	49.2	47.4		18°-42'	605'	Tide = -2.8
		44	41.4	39.6		18°-00'	584'	-1.8
		45	35.5	33.7		17°-26'	574'	
		46	29.0	27.2		16°-35'	543'	
		47	24.9	23.1		15°-48'	520'	
		48	22.1	20.3		15°-00'	499'	
		49	20.0	18.2		14°-14'	477'	
		50	17.7	15.9		13°-22'	453'	
		51	16.0	14.2		12°-40'	433'	
		52	14.3	12.5		11°-50'	410'	
		53	12.9	11.1		10°-59'	387'	
		54	11.8	10.0		10°-08'	363'	
		55	10.0	8.2		9°-21'	343'	
		56	9.4	7.6		8°-28'	319'	
		57	8.6	6.8		7°-47'	301'	
		58	7.9	6.1		7°-06'	283'	
		59	7.1	5.3		6°-33'	267'	
		60	6.2	4.4	5-21	5°-39'	243'	

PAUSE 315+10

F.B. 2805 Pg. 20 Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by HARRIET Notes SMITH, N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. Sight At On	# Depth Rec. Adj.		Time	Hor. Ang.	

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76L-296 CE 307 11-58

76L-298 S & E #307—1-56

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Profile No. ___ Notes Red J.S.H. Plotted C.W.H. Job No. ___ Division No. 11 F.B. 2[illegible] Pg. 21
X-Sec. No. ___ Date 8-29-60 Date 10-24-60 Survey of SEARCH & RESCUE STANDARDS
Notes Chkd. [illegible] Checked [illegible] Survey by [illegible] Noted [illegible] Date 19-[illegible]
Date 5-29-60 Date 10-24-60 Map No. ___ Indexed [illegible] Date ___

STATION	B. S.	H. I.	F. S.	ELEV.			
					INST @ 5-20 312+01.58		SIGHT ON 314+65
		21.65			DATUM MEAN LOWER LOW WATER		314+65 INSHORE
T.P.	[illegible]	[illegible]	[illegible]	17.[illegible]			
5-21 314+65			[illegible]	[illegible]	CENTRAL LINE		
			[illegible]	[illegible]	[illegible]		
—			5[illegible]	[illegible]			[illegible]
T.P. [illegible]			[illegible]	11.[illegible]	T.P.		[illegible]
	09	120					
			73	4.7			70° RT Mean [illegible] line
T.P.	09	6.2	67	5.3	T.P.		
314+65			71	-0.9	21° 36'	107'	
"			74	-1.2	26° 25'	136'	
"			75	-1.3	32° 09'	174'	
"			84	-2.2	38° 04'	219'	
"			104	-4.2	41° 55'	254'	
"			128	-6.6	47° 02'	307'	
"			145	-8.3	50° 18'	348'	
"			160	-9.8	52° 39'	381'	

F. B. 2805 Pg. 22 | Job No. 0300.02 | Division No. 11 | Notes Red | Plotted | Profile

Survey of BEACH EROSION STUDIES | Date | Date | No.

Survey by LIND | Notes J.C. GOODWIN & TAPPELL | Notes Chkd. | Checked | X-Sec.

Indexed H. E. OTT | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.

76L-298 S & E #307—1-56

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76L-298 CE 307 11-58

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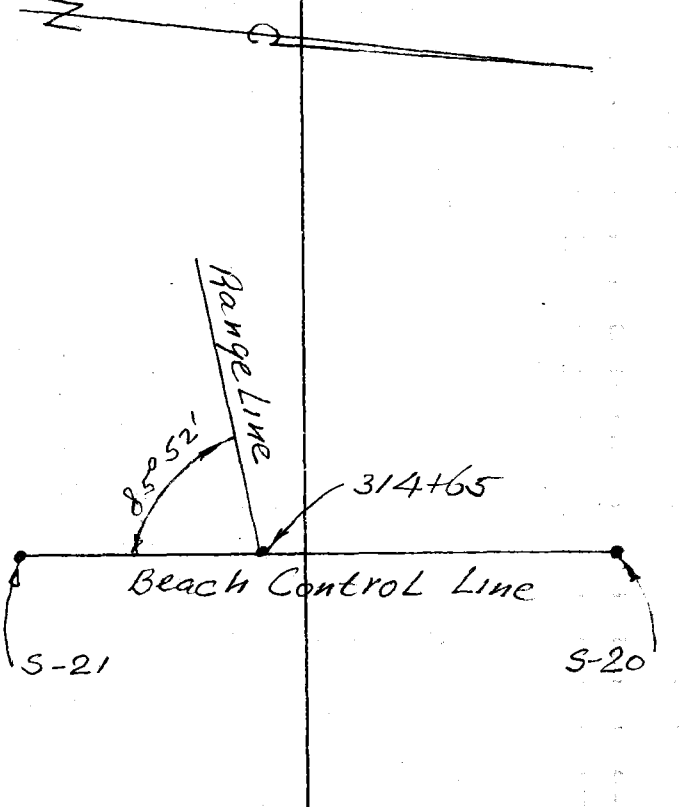
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	STATION Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor.Ang.	Remarks
		1		5 34	85°52'	
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
314+65	5-21	9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19			"	
		20			"	



Profile No. ____ X-Sec. No. ____
Notes Red J.S.H. Plotted C.W.H. Job No. ____ Division No. 11
Date 8-29-60 Date 10-24-60 Survey of Beach Erosion Studies
Notes Chkd. C.W.H. Checked J.S.H. Survey by Harris Notes Reduced Date 7-20-60
Date 8-29-60 Date 10-24-60 Map No. ____ Indexed ____ Date ____
2300.02
F.B. 2805 PG. 23

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

F.B. 2805 PG. 24 | Job No. 0300.02 | Division No. 11 | Notes Red J.S.H. Plotted C.W.H. | Profile No.
Survey of Beach Erosion Studies | Date 8-29-60 | Date 10-24-60 | X-Sec. No.
Survey by Maynor Teehoom | Notes Chkd. C.W.H. Checked J.S.H.
Indexed H.E. Ott | Date | Date 8-29-60 Date 10-24-60 No.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
314+65	5-21	21			85° 52'		
		22			"		
		23			"		
		24			"		
		25			"		
		26			"		
		27			"		
		28			"		
		29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40			"		

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor.Ang.	Remarks	
31465	5-21	41			85°52'		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
		47			"		
		48			"		
		49			"		
		50			"		
		51			"		
		52			"		
		53			"		
		54			"		
		55			"		
		56			"		
		57			"		
		58			"		
		59			"		
		60			"		

Profile Notes Red J.S.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 23
No. Date 8-29-60 Date 10-24-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. C.W.H. Checked J.S.H. Survey by Hydraulics Notes Chkd. Date 7-20-60
No. Date 8-29-60 Date 10-24-60 Map No. Indexed H.E. Date

F. B. 2805 Pg. 26 | 0300.02

Job No. _____ Division No. 10 Notes Red J. S. H. Plotted C. W. H. Profile

Survey of Beach Erosion Studies Date 8-29-60 Date 10-24-60 No. _____

Survey by Charriet Notes Teeboom Notes Chkd. C. W. H. Checked J. S. H. X-Sec.

Indexed H. E. Ott Date _____ Date 8-29-60 Date 10-24-60 No. _____

76L-206 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	STATION	B.S.	H.I.	F.S.	ELEV.
		61				83° 52'						
		62				"						
		63				"						
		64				"						
		65				"						
		66			5 42	"						

76L-298 CE 307 11-58

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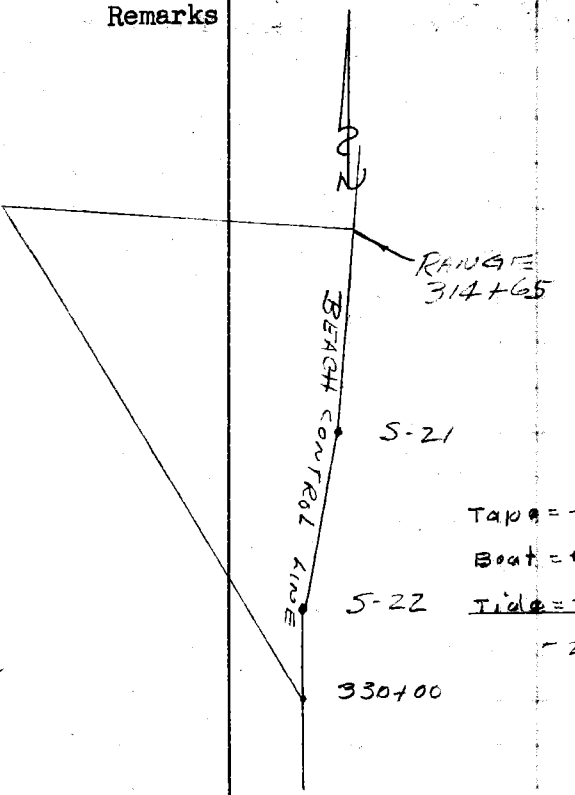
Do not extend notes this side of this line.

Profile No. ____ X-Sec. No. ____ Notes Red J. S. H. Plotted C. W. H. Job No. 030002 Division No. 11
Date 8-29-60 Date 10-24-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C. W. H. Checked J. S. H. Survey by [illegible] Notes [illegible] Date 7-20-60
Date 8-29-60 Date 12-24-60 Map No. ____ Indexed ____ Date ____

F.B. 2605 Pg. 27

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
330+00	S-22	1	292.2	289.6	5-34	65°35'	3206'
		2	291.6	289.0		65°-05	3138'
		3	290.1	287.5		64°-40	3088'
		4	289.0	286.4		64°-05	3013'
		5	287.9	285.3		63°-46	2977'
		6	287.7	285.1		63°-[illegible]	2911'
		7	—	—		62°-31	2840'
		8	280.4	277.8		62°-06	2790'
		9	278.7	276.1		61°-28	2722'
		10	276.8	274.2		60°-59	2675'
		11	271.7	269.1		60°-24	2620'
		12	268.0	265.4		59°-33	2540'
		13	263.5	260.9		58°-37	2455'
		14	258.1	255.5		58°-02	2412'
		15	251.6	249.0		57°-31	2360'
		16	246.1	243.5		56°-53	2307'
		17	240.4	237.8		56°-04	2242'
		18	236.3	233.7		55°-32	2203'
		19	229.5	226.9		54°-37	2137'
		20	224.9	222.3		53°-58	2095'



Tape = -.6
Boat = +1.0
Tide = -3.0
-2.6

76L-298 CE 307 11-58

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F.B. 2805 Pg. 28 Job No. 030002 Division No. 11 Notes Red J.S.H. Plotted C.W.H. Profile
Survey of BEACH EROSION STUDIES Date 8-29-60 Date 10-24-60 No.
Survey by UNGERER Notes SMITH Notes Chkd. C.W.H. Checked J.S.H. X-Sec.
Indexed 4.E. Off Date Date 8-29-60 Date 10-24-60 No.

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
330+00	S-22	21	217.9	215.5		53°-17'	2,046'	
		22	214.3	211.9		52°-35'	1,997'	-.4 21 to 38
		23	212.5	210.1		51°-23'	1,921'	Tape = -.1 39 to 40
		24	203.7	201.3		50°-08'	1,845'	Boat = +1.0
		25	189.8	187.4		48°-48'	1,763'	Tide = -3.0
		26	184.4	182.0		47°-57'	1,721'	-2.4 21 to 38
		27	180.2	177.8		47°-11'	1,679'	-2.1 39 to 40
		28	172.4	170.0		46°-17'	1,632'	
		29	165.4	163.0		45°-20'	1,584'	
		30	161.9	159.5		44°-12'	1,529'	
		31	159.3	156.9		42°-57'	1,471'	
		32	156.1	153.7		41°-27'	1,403'	
		33	151.8	149.4		40°-00'	1,339'	
		34	146.5	144.1		38°-58'	1,296'	
		35	138.1	135.7		37°-41'	1,242'	
		36	130.0	127.6		36°-27'	1,194'	
		37	124.0	121.6		35°-12'	1,146'	
		38	118.7	116.3		34°-07'	1,106'	
		39	110.5	108.4		32°-32'	1,050'	
		40	102.0	99.9		30°-45'	986'	

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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Profile No. ____ X-Sec. No. ____ Notes Red J. S. H. Plotted C. W. H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 29
Date 8-29-60 Date 10-24-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C. W. H. Checked J. S. H. Survey by WHEELER Notes SMITH Date 7-[illegible]-60
Date 8-29-60 Date 10-24-60 Map No. ____ Indexed H. E. OTT Date ____

STATION Inst. At	Sight On	#	H.I. Depth Rec.	H.I. Depth Adj.	B.S.	F.S.	Time	ELEV.	Hor. Ang.	Remarks
330+00	S-22	41	93.7	91.5					29°-18	938'
		42	88.3	86.1					28°-21	906'
		43	81.8	79.6					27°-15	867'
		44	75.4	73.2					26°-07	833'
		45	69.7	67.5					25°-05	800'
		46	63.7	61.5					24°-04	768'
		47	60.0	57.8					23°-[illegible]	743'
		48	58.2	56.0					21°-17	684'
		49	53.9	51.7					19°-46	639'
		50	49.0	46.8					18°-46	611'
		51	41.0	38.8					17°-41	578'
		52	34.1	31.9					16°-56	557'
		53	29.2	27.0					16°-15	537'
		54	24.9	22.7					15°-22	513'
		55	21.9	19.7					14°-32	490'
		56	18.9	16.7					13°-32	461'
		57	17.0	14.8					12°-43	439'
		58	15.0	12.8					11°-42	410'
		59	13.3	11.1					10°-45	385'
		60	12.2	10.0					9°-58	364'

Tape = -.1
Boat = +1.0
Tide = -3.1
-2.2

RANGE 3+47.65

76L-298 CE 307 11-58

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F.B. 2805 Pg. 30 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted C.W.H. Profile
Survey of BEACH EROSION STUDIES Date 8-29-60 Date 10-24-60 No. X-Sec.
Survey by JAMIESON SOUTHW Notes Chkd. C.W.H. Checked J.S.H.
Indexed M. E. OTT Date Date 8-29-60 Date 10-24-60 No.

STATION		B.S.	H.I.		F.S.	ELEV.			
Inst. At	Sight On	#	Depth Rec.	Depth Adj.	Time	Hor. Ang.		Remarks	
330+00	5-22	61	10.7	8.5		9°-07'	342'		Tape = -0.1
		62	9.6	7.4		8°-14'	318'		Boat = +1.0
		63	8.5	6.3		7°-20'	293'		Tide = -3.1
		64	7.6	5.4		6°-36'	273'		-2.2
		65	6.9	4.7		5°-44'	250'		
		66	6.2	4.0	542	5°-08'	234'		

76L-298 S & E #307—1-56

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 316+00		SIGHT ON 312+65
					DATUM MEAN LOWER LOW WATER		312+65 INSHORE
T.P.	[illegible]	[illegible]	4.77	16.[illegible]			
312+65			4.2	[illegible]	CONTROL LINE		
			[illegible]	[illegible]	SLT. BACK WALK		
			[illegible]	[illegible]			11' RT. TO [illegible]
			9.1	12.[illegible]			5' RT. [illegible]
T.P. FOR [illegible]			11.32	[illegible].05			
	06	107					
			6.6	47			70° RT. Mean Tide Line
T.P.	20	85	4.2	65	T.P.		
312+65			8.5	00	16° 32'	98'	
"			8.9	-0.4	24° 28'	148'	
"			10.4	-1.9	31° 16'	196'	
"			12.6	-4.1	37° 43'	246'	
"			15.0	-6.5	43° 48'	302'	
"			16.8	-8.3	48° 23'	350'	

Profile Notes Red. J.S.H. Plotted C.W.H. Job No. ____ Division No. 11
No. ____ X-Sec. Date 8-29-60 Date 10-24-60 Survey of [illegible]
Notes Chkd. [illegible] Checked J.S.H. Survey by [illegible] Notes [illegible] Date [illegible]
No. ____ Date 8-29-60 Date 10-24-60 Map No. ____ Indexed ____ Date ____

F. B. 2805 PG. 31

F. B. 2805 Pg. 32 | Job No. 0300.02 | Division No. 11 | Notes Red | Plotted | Profile

Survey of BEACH EROSION STUDIES | Date | Date | No.

Survey by LIND | Notes J. C. GOODWIN & JAPPELL | Notes Chkd | Checked | X-Sec.

Indexed | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.

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76L-298 S & E #307—1-56

76L-298 CE 307 11-58

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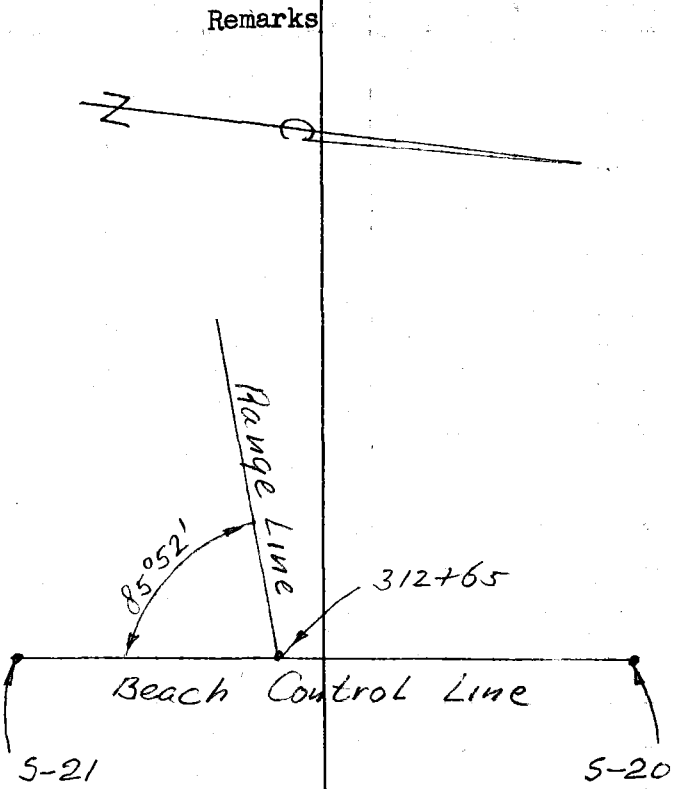
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		1		601	85°52'		
		2			"		
		3			"		
		4			"		
		5			"		
		6			"		
		7			"		
		8			"		
312+65	5-21	9			"		
		10			"		
		11			"		
		12			"		
		13			"		
		14			"		
		15			"		
		16			"		
		17			"		
		18			"		
		19			"		
		20			"		



Profile Notes Red J. S.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 53
Date 8-29-60 Date 10-24-60 Survey of Beach Erosion Studies
No. X-Sec. Notes Chkd. C.W.H. Checked J.S.H. Survey by Whaynes Notes Reduced Date 7-20-60
No. Date 8-29-60 Date 10-24-60 Map No. Indexed H. E. Ott Date

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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F. B. 2805 Pg. 34 | Job No. 0300.02 | Division No. 11 | Notes Red J. S. H. Plotted C. W. H. | Profile No.
Survey of Beach Erosion Studies | Date 8-29-60 Date 10-24-60 | X-Sec. No.
Survey by Journal Notes Tedoom | Notes Chkd. C. W. H. Checked J. S. H.
Indexed T. E. Orr Date | Date 8-29-60 Date 10-24-60 No.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		21			85° 52'		
		22			"		
		23			"		
		24			"		
		25			"		
		26			"		
		27			"		
312+65		28			"		
	5-21	29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40			"		

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		41			85° 52'		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
		47			"		
		48			"		
312+65	5-21	49			"		
		50			"		
		51			"		
		52			"		
		53			"		
		54			"		
		55			"		
		56			"		
		57			"		
		58			"		
		59			"		
		60			"		

Profile No. _____ X-Sec. No. _____
Notes Red J.S.H. Plotted C.W.H. Job No. 0300.02 Division No. 10
Date 8-29-60 Date 10-24-60 Survey of Beach Erosion Studies
Notes Chkd. C.W.H. Checked J.S.H. Survey by Wharvey Notes Checked Date 1-20-60
Date 8-29-60 Date 10-24-60 Map No. _____ Indexed H. E. Ott Date _____

F.B. 2805 PG. 33

F.B. 2805 Pg. 36

Job No. 0300.02 Division No. 10 Notes Red J. S. H. Plotted C. W. H. Profile

Survey of Beach Erosion Studies Date 8-29-60 Date 10-24-60 No.

Survey by Uharriet Notes Tezboom Notes Chkd. C. W. H. Checked J. S. H. X-Sec.

Indexed H. E. OTT Date Date 8-29-60 Date 10-24-60 No.

STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At 312+65					
Sight On S-21					
#	61				
	62				
	63				
	64				
	65				
Depth Rec. Adj.					
Time			6 09		
Hor. Ang.				83° 52'	
				"	
				"	
				"	

Do not extend notes this side of this line.

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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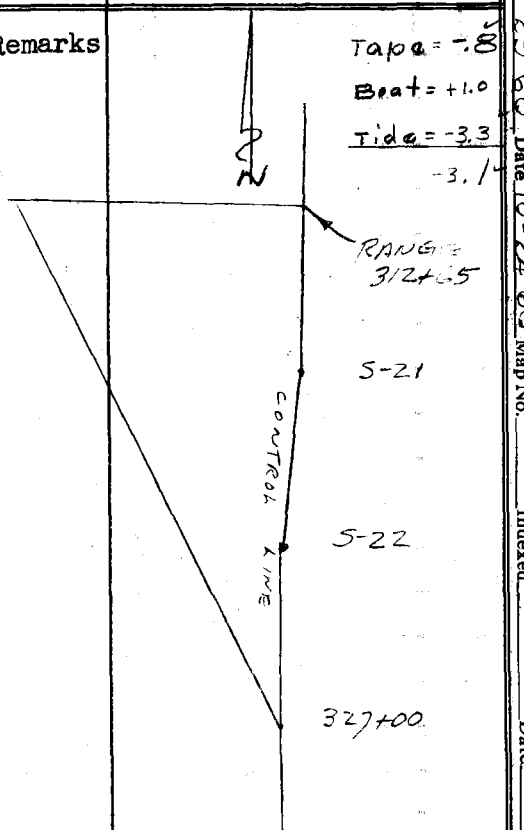
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
327+00	5-22	1	275.6	272.5	6-01	66°-43'	3149'
		2	274.8	271.7		66°-08'	3070'
		3	272.6	269.5		65°-39'	3011'
		4	271.6	268.5		65°-01'	2934'
		5	269.3	266.2		64°-17'	2847'
		6	262.3	259.2		63°-26'	2750'
		7	266.5	263.4		62°-43'	2680'
		8	263.0	259.9		62°-02'	2608'
		9	257.5	254.4		61°-26'	2548'
		10	250.9	247.8		60°-55'	2503'
		11	248.0	244.9		60°-16'	2447'
		12	244.0	240.9		59°-40'	2393'
		13	240.7	237.6		59°-01'	2339'
		14	235.7	232.6		58°-12'	2271'
		15	235.0	231.9		57°-06'	2187'
		16	228.0	224.9		56°-33'	2142'
		17	222.2	219.1		55°-56'	2097'
		18	217.0	213.9		55°-14'	2050'
		19	212.9	209.8		54°-17'	1990'
		20	210.9	207.8		53°-26'	1932'



Tape = -.8
Beat = +1.0
Tide = -3.3
-3.1

Profile Notes Red J.S.H. Plotted C.W.H. Job No. 0300.02 Division No. 11
No. X-Sec. Date 8-29-60 Date 10-24-60 Survey of BENCH ECOSION STUDIES
No. Notes Chkd. C.W.H. Checked J.S.H. Survey by HARDEST Notes Signed W. E. Date 7-20-60
Date 8-29-60 Date 10-24-60 Map No. Indexed Date

F.B. 2805 Pg. 57

76L-298 CE 307 11-58

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Do not extend notes this side of this line.

F.B. 2805 Pg. 38 Job No. 03000 Division No. 11 Notes Red. J. S. H. Plotted C. W. H. Profile No.
Survey of BEACH EROSION STUDIES Date 8-29-60 Date 10-24-60 X-Sec. No.
Survey by HARRIET Notes SMITH Notes Chkd. C. W. H. Checked J. S. H.
Indexed H. E. OTT Date Date 8-29-60 Date 10-24-60 No.

STATION		B.S.	H.I.		F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.		Time	Hor. Ang.		Remarks
32+00	5-22	21	208.5	205.5		52°-52'	1896'	Tape = -.6 21 to 27; -1.2 28 to 37; -1.1 38 to 40
		22	205.7	202.7		52°-11'	1855'	Boat = +1.0
		23	198.0	195.0		50°-50'	1774'	Tide = -3.4
		24	192.8	189.8		49°-46'	1715'	-3.0 21 to 27
		25	187.9	184.9		48°-45'	1660'	-3.6 28 to 37
		26	182.7	179.7		47°-55'	1618'	-3.5 38 to 40
		27	179.5	176.5		47°-08'	1579'	
		28	171.5	167.9		45°-42'	1510'	
		29	166.8	163.2		44°-36'	1460'	
		30	163.3	159.7		43°-38'	1415'	
		31	157.0	153.4		42°-28'	1365'	
		32	152.0	148.4		41°-22'	1318'	
		33	145.1	141.5		40°-08'	1268'	
		34	138.0	134.4		38°-56'	1220'	
		35	131.5	127.9		37°-33'	1169'	
		36	124.8	121.2		36°-10'	1118'	
		37	120.4	116.8		35°-01'	1077'	
		38	114.8	111.3		33°-46'	1032'	
		39	109.0	105.5		32°-11'	980'	
		40	104.8	101.3		31°-05'	943'	

76L-298 CE 307 11-58

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Profile No. ____ X-Sec. No. ____ Notes Red J. S. H. Plotted C.W.H. Job No. 6300.02 Division No. 11 F.B. 2805 Pg. 39
Data 8-29-60 Date 10-24-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C.W.H. Checked J. S. H. Survey by ____ Notes ____ Date ____
Date 8-29-60 Date 10-24-60 Map No. ____ Indexed H. E. ON Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
327+00	S. 22	41	99.0	95.5		29°-54'	906'	Tape = -1.1
		42	93.3	89.8		28°-40'	868'	Boat = +1.0
		43	87.4	83.9		27°-18'	824'	Tide = -3.4
		44	77.1	73.6		25°-37'	775'	-3.5
		45	71.5	68.0		24°-12'	734'	RANGE 312+65
		46	64.3	60.8		22°-45'	692'	
		47	58.0	54.5		21°-36'	661'	
		48	51.3	47.8		20°-19'	625'	
		49	43.2	39.7		19°-09'	593'	
		50	36.4	32.9		18°-23'	572'	
		51	31.2	27.7		17°-30'	548'	
		52	27.7	24.2		16°-32'	521'	
		53	25.2	21.7		15°-36'	498'	
		54	22.5	19.0		14°-47'	476'	
		55	20.4	16.9		13°-52'	453'	
		56	18.0	14.5		12°-42'	422'	
		57	16.2	12.7		11°-42'	397'	
		58	15.0	11.5		10°-42'	370'	
		59	13.9	10.4		9°-46'	348'	
		60	12.5	9.0		8°-48'	322'	

F.B. 2805 PG. 40 | Job No. 0300.02 | Division No. 11 | Notes Red J. S. H. | Plotted C. W. H. | Profile

Survey of BEACH EROSION STUDIES | Date 8-29-60 | Date 10-24-60 | No.

Survey by HARRIET Notes SMITH N | Notes Chkd. C. W. H. | Checked J. S. H. | X-Sec.

Indexed H. E. OTT | Date | Date 8-29-60 | Date 10-24-60 | No.

76L-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At 327+00					
Sight On S-22					
#	Depth Rec.	Adj.	Time	Hor. Ang.	
61	11.52	8.0	7:48	298'L	
62	10.52	7.0	8:03	280'L	
63	9.52	6.0	6:13	258'L	
64	8.82	5.3	5:30	240'L	
65	8.1L	4.6	4:52	225'L	
			6-09		
					Tape = -1.1'
					Boat = +1.0
					Tide = -3.4
					-3.5'

76L-298 S & E #307—1-56

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Profile No. ____ X-Sec. No. ____ Notes Red. J. S. H. Plotted S. W. H. Job No. ____ Division No. 11 F. B. ____ Pg. 11
Date 8-30-60 Date 10-25-60 Survey of ____ Notes Chkd. ____ Checked ____ Survey by ____ Notes E. OH Date ____
Date 8-30-60 Date 10-25-60 Map No. ____ Indexed ____ Date ____

STATION	B. S.	H. I.	F. S.	ELEV.		
					S-19 TN STA. 305+72.67	RIGHT OF 310+65
					DATUM MEAN LOWER LOW WATER	310+65 INSHORE
B.M. S-20			5 98	17 39	B.M. S-20 ELEV. =	17.400
" "	4 87	22 27		17 40		
			4 2	18 1	CONTROL LINE	
			4 2	18 1	6' LT. EDGE WALK	
			3 3	[illegible]		12' RT. TOP BANK
			7 7	12 [illegible]		27' RT. ET[illegible]
			10 5	11 [illegible]		39' RT. TOP BANK
			12 [illegible]	10 20		
T.P. FOR [illegible]	12	114				
310+65			67	47		75° Rt. Near tide line
T.P.	13	79	48	6 6	T.P.	
310+65			55	2.4	10° 25' 91'	
"			79	0 0	13° 31' 118'	
"			95	-1.6	19° 21' 173'	

76L-298 S & E #307—1-56

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F. B. 2805 Pg. 42 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted C.W.H. Profile
Survey of BEACH & PASICA STUDIES Date 8-30-60 Date 10-25-60 No. X-Sec.
Survey by LWD Notes J.C. GRADWOHL Notes Chkd CWH Checked J.S.H.
Indexed H.E. OTT Date & Reported Date 8-30-60 Date 10-25-60 No.

STATION	B. S.	H. I.	F. S.	ELEV.	inst 305+72.67 5-19	sight on 310+65
		27 ft				
		79'				
310+65			121	-4.2	23° 43' 216'	
"			141	-6.2	28° 02' 262'	
"			161	-8.2	31° 15' 299'	
"			172	-9.3	33° 32' 326'	

76L-298 CE 307 11-58

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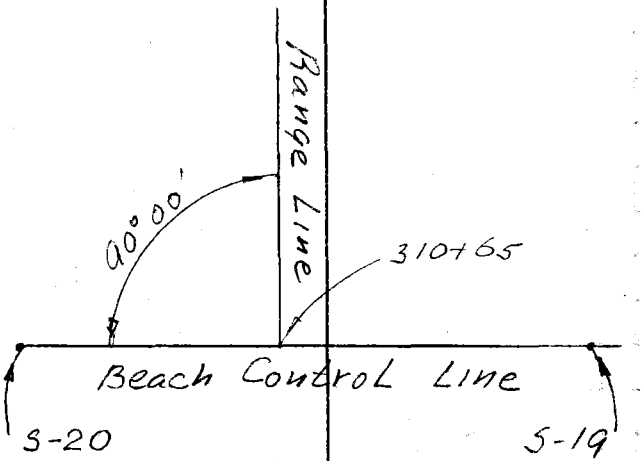
STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
		1			623	90° 00'		
		2				"		
		3				"		
		4				"		
		5				"		
		6				"		
		7				"		
		8				"		
310+65	5-20	9				"		
		10				"		
		11				"		
		12				"		
		13				"		
		14				"		
		15				"		
		16				"		
		17				"		
		18				"		
		19				"		
		20				"		



Profile Notes Red J.S.H. Plotted C.W.H. Job No. 0300.02 Division No. 11
No. X-Sec. Data 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
No. Notes Chkd. C.W.H. Checked J.S.H. Survey by Harris & Notes Reviewed Date 1-20-00
Date 8-30-60 Date 10-25-60 Map No. Indexed Date

F.B. 280 & Pg. 43

F.B. 280.5 Pg. 44 | 0300.02

Job No. _____ Division No. 11 Notes Red J. S. H. Plotted C. W. H. Profile

Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 No. _____

Survey by Uharriet H. E. Ott Notes Teeboom Notes Chkd. C. W. H. Checked J. S. H. X-Sec.

Indexed _____ Date _____ Date 8-30-60 Date 10-25-60 No. _____

76L-206 CE 507 11-58

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STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At 310+65					
Sight On 5-20					
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				
	32				
	33				
	34				
	35				
	36				
	37				
	38				
	39				
	40				

#	Rec.	Adj.	Time	Hor. Ang.
				90° 00'

76L-298 CE 307 11-58

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STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		41			90°00'		
		42			"		
		43			"		
		44		629	"		
310+65	5-20						

Profile Notes Red J.S.H. Plotted C.W.H. Job No. 03002 Division No. 11 F.B. 2805 Pg. 45
No. Date 8-30-60 Date 10-25-60 Survey of Beach Estates Stations
X-Sec. Notes Chkd. C.W.H. Checked J.S.H. Survey by Pharrer Noted Date 1-20-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H.E. Ott Date

F.B. 2805 PG. 46

0300.02

Job No. _____ Division No. 10 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by Uharriet Notes Teeboom Notes Chkd. _____ Checked _____ X-Sec.

Indexed H. E. OTT Date _____ Date _____ Date _____ No. _____

76L-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV.	
Inst. At	Sight On	# Depth Rec. Adj.	Time	Hor.Ang.	Remarks

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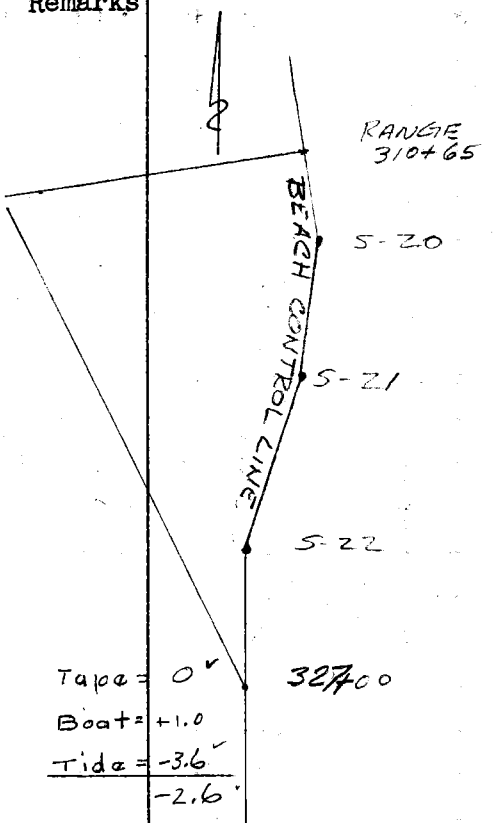
Profile No. ____ X-Sec. No. ____ Notes Red J. S. H. Date 8-30-60 Notes Chkd C. W. H. Date 8-30-60 Plotted C. W. H. Date 10-25-60 Checked J. S. H. Date 10-25-60 Job No. 0300-02 Survey of BEACH Survey by CHACKIEL Map No. ____ Division No. 11 Notes Spotted J. S. H. Date 7-20-60 Indexed ____ Date ____ F. B. 2805 PG. 47 STUDIES

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV. Hor.Ang.		Remarks
327400	S-22	1	244.6	242.0	6-23	58°-03'	2561'	
		2	238.7	236.1		56°-49'	2450'	
		3	234.8	232.2		55°-51'	2370'	
		4	228.8	226.2		54°-34'	2272'	
		5	221.7	219.1		53°-22'	2184'	
		6	216.6	214.0		52°-13'	2102'	
		7	212.7	210.1		51°-00'	2020'	
		8	208.5	205.9		49°-41'	1935'	
		9	202.7	200.1		48°-25'	1857'	
		10	196.1	193.5		47°-02'	1779'	
		11	187.8	185.2		45°-32'	1695'	
		12	179.3	176.7		44°-02'	1618'	
		13	171.8	169.2		42°-38'	1548'	
		14	164.8	162.2		41°-09'	1477'	
		15	156.5	153.9		39°-23'	1397'	
		16	145.5	142.9		37°-44'	1325'	
		17	134.2	131.6		35°-25'	1227'	
		18	126.7	124.1		33°-26'	1149'	
		19	120.6	118.0		31°-48'	1087'	
		20	113.3	110.7		30°-10'	1027'	



Tape = 0
Boat = +1.0
Tide = -3.6
-2.6

76L-298 CE 307 11-58

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F.B. 2805 Pg. 48 | Job No. 0300.02 | Division No. 11 | Notes Red J.S.H. Plotted C.W.H. | Profile No.
Survey of BEACH EROSION STUDIES | Date 8-30-60 | Date 10-25-60 | X-Sec. No.
Survey by WHARPNER | Notes SMITH IV | Notes Chkd. C.W.H. Checked J.S.H.
Indexed H. E. OTT | Date | Date 8-30-60 | Date 10-25-60

STATION		B.S.	H.I.		F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
327+00	5-22	21	105.8	103.4		28°-20'	961'	Tape = +.2
		22	95.8	93.4		26°-26'	892'	Boat = +1.0
		23	89.0	86.6		24°-34'	832'	Tide = -3.6
		24	80.2	77.8		22°-53'	811'	-2.4
		25	73.4	71.0		21°-29'	732'	
		26	67.0	64.6		20°-13'	691'	
		27	62.9	60.5		18°-46'	647'	
		28	58.2	55.8		17°-47'	616'	
		29	47.5	45.1		16°-30'	577'	
		30	36.4	34.0		15°-27'	546'	
		31	28.2	25.8		14°-30'	518'	
		32	23.8	21.4		13°-38'	492'	
		33	21.3	18.9		12°-48'	468'	
		34	19.1	16.7		11°-57'	443'	
		35	16.7	14.3		11°-10'	421'	
		36	15.0	12.6		10°-24'	398'	
		37	13.5	11.1		9°-26'	368'	
		38	12.0	9.6		8°-50'	352'	
		39	11.1	8.7		7°-43'	320'	
		40	10.0	7.6		6°-54'	297'	

76L-298 CE 307 11-58

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Profile No. X-Sec. No. Notes Red J.S.H. Plotted C.W.H. Job No. 0300-02 Division No. 11 F.B. 2805 Pg. 49
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C.W.H. Checked J.S.H. Survey by CHARLIE Noted [illegible] Date 7-20-60
Date 8-30-60 Date 10-25-60 Map No. Indexed H. E. OTT Date

STATION		B.S.	H.I.		F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		41	8.9	6.2		6°-03'	273'	Tape = -.1
		42	8.1	5.4		5°-03'	244'	Boat = +1.0
		43	7.5	4.8		4°-17'	223'	Tide = -3.6
		44	6.6	3.9	6-29	3°-48'	209'	-2.7
327+00	S-22							

PAGE 310+65

F.B. 2805 Pg. 50 Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by HARRIET Notes SMITH N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV.	
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor.Ang. Remarks

76L-298 S & E #307—1-56

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5-20 90°

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 305 + 72.67 (5-19)	OFFSET ON 308 + 65
		[illegible]			DATUM MEAN LOWER LOW WATER	308 + 65 INSHORE
T.P.	[illegible]	[illegible]	[illegible]	[illegible]		
309 + 65			[illegible]	[illegible]	CONTROL LINE	
			[illegible]	[illegible]	6' [illegible]	
—			6	7 7		8.5' [illegible]
			16 4	[illegible]		17' [illegible]
T.P. [illegible]			[illegible]	[illegible]		
	12	13 0				
			83	4 7		92° Rt. Mean tide line
T.P.	26	78	78	5.2	T.P.	
308 + 65			81	-0.3	23° 09' 125'	
"			95	-1.7	30° 52' 175'	
"			119	-4.1	39° 28' 241'	
"			140	-6.2	43° 40' 279'	
"			158	-8.0	47° 12' 316'	
"			172	-9.4	48° 06' 326'	
"						

Profile No. X-Sec. No. Notes Red J.S.H. Plotted C.W.H. Job No. Division No. 11 F. B. Pg. 51
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. Checked Survey by Notes Date -20-
Date 8-30-60 Date 10-25-60 Map No. Indexed H.E.O.M. Date

F. B. 2805 Pg. 52 | 0300.02 Job No. Division No. 11 Notes Red Plotted Profile

Survey of BEACH EROSION STUDIES Date Date No.

Survey by LMD Notes J.C. Goodwin & Jappell Notes Chkd Checked X-Sec.

Indexed Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.

76L-298 CE 307 11-58

PLEASE RETURN TO
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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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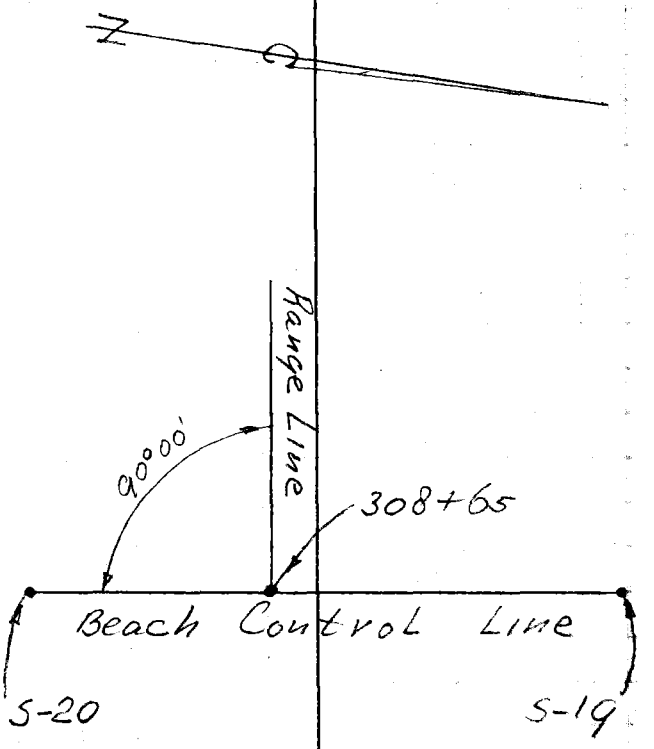
Do not extend notes this side of this line.

Profile No. ____ X-Sec. No. ____ Notes Red J. S. H. Plotted C. W. H. Job No. 030002 Division No. 11 F.B. 2805 Pg. 53
Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
Notes Chkd. C. W. H. Checked J. S. H. Survey by Wharrick Notes Room Date 7-20-60
Date 8-30-60 Date 10-25-60 Map No. ____ Indexed R. E. Ott Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		1		646	90° 00'	
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
308+65	5-20	8			"	
		9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19			"	
		20			"	



F.B. 280.5 Pg. 54 | 0300.02 Job No. Division No. 11 Notes Red J.S.H. Plotted C.W.H. Profile

Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 No.

Survey by Uharriet Notes Tee boom Notes Chkd. C.W.H. Checked J.S.H. X-Sec.

Indexed H.E. OTT Date Date 8-30-60 Date 10-25-60 No.

STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At	Sight On	Depth Rec. Adj.	Time	Hor. Ang.	
308+65					
	S-20				
	21			90° 00'	
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				
	32				
	33				
	34				
	35				
	36				
	37				
	38				
	39				
	40				

76L-298 CE 507 11-58

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76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor.Ang.	Remarks	
		41			90° 00'		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
308+65	5-20	47			"		
		48			"		
		49			"		
		50			"		
		51			"		
		52			"		
		53			"		
		54			"		
		55			"		
		56			"		
		57			"		
		58			"		
		59			"		
		60			"		

Profile Notes Red J.S.H. Plotted C.W.H. Job No. 030002 Division No. 11 F.B. 2805 Pg. 35
No. Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. C.W.H. Checked J.S.H. Survey by Phillips Notes Engineer Date 7-20-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H. E. Ott Date

76L-298 CE 307 11-58

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F.B. 2805 Pg. 56 | Job No. 0300.02 | Division No. 11 | Notes Red J. S. H. Plotted C.W.H. Profile
Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 No. X-Sec.
Survey by Wherrett Notes Teebooy Notes Chkd. C.W.H. Checked J.S.H.
Indexed Date Date 8-30-60 Date 10-25-60 No.

STATION		B.S.	H.I.		F.S.	ELEV		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor.Ang.	Remarks	
		61				90° 00		
		62				"		
		63				"		
		64				"		
		65				"		
		66				"		
		67				"		
30845		68				"		
	5-20	69				"		
		70			6 56	"		

76L-298 CE 307 11-58

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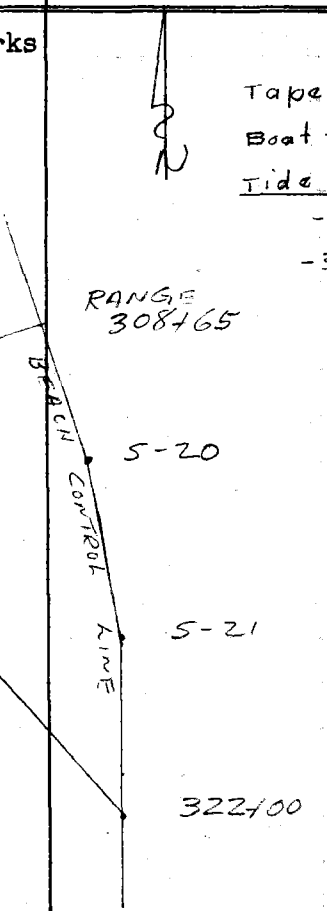
Profile No. ____ X-Sec. No. ____ Notes Red J.S.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2805 PG. 57
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C.W.H. Checked J.S.H. Survey by [illegible] Notes [illegible] Date [illegible]
Date 8-30-60 Date 10-25-60 Map No. ____ Indexed ____ Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
322+00	5-21	1	143.8	140.7	6-46	78°-12'	3205'	
		2	152.4	154.3		77°-44'	3149'	
		3	172.3	169.2		77°-19'	3086'	
		4	188.0	184.4		76°-51'	3018'	
		5	195.1	191.5		76°-28'	2970'	
		6	203.1	199.5		76°-05'	2915'	
		7	211.7	208.1		75°-38'	2861'	
		8	222.3	218.7		75°-15'	2820'	
		9	231.4	227.8		74°-54'	2771'	
		10	—	—		74°-33'	2740'	
		11	240.4	236.8		74°-11'	2700'	
		12	241.8	238.2		73°-37'	2638'	
		13	240.2	236.6		73°-06'	2580'	
		14	236.7	233.1		72°-42'	2541'	
		15	233.5	229.9		72°-13'	2495'	
		16	230.0	226.4		71°-45'	2452'	
		17	226.4	222.8		71°-12'	2400'	
		18	223.1	219.5		70°-33'	2341'	
		19	221.6	218.0		69°-51'	2279'	
		20	218.2	214.6		69°-06'	2218'	



= -.3 to 1-3
Tape = -.8
Boat = +1.0
Tide = -3.8
-3.1 1 to 3
-3.6 4 to 20

76L-298 CE 307 11-58

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F.B. 2805 Pg. 58 Job No. 0300.07 Division No. 11 Notes Red J.S.H. Plotted C.W.H. Profile
Survey of BEACH EROSION STUDIES Date 8-30-60 Date 10-25-60 No. X-Sec.
Survey by HARRIES Notes: SMITH N Notes Chkd. C.W.H. Checked J.S.H.
Indexed H. E. OTT Date Date 8-30-60 Date 10-25-60 No.

STATION		B.S.	H.I.		F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
3224.00	5-21	21	215.4	211.7		68°-41'	2186'	Tape = -.9
		22	214.1	210.4		68°-00'	2131'	Boat = +1.0
		23	211.7	208.0		67°-14'	2076'	Tide = -3.8
		24	207.6	203.9		66°-21'	2011'	-3.7
		25	203.5	199.8		65°-29'	1941'	
		26	200.4	196.7		64°-18'	1873'	
		27	196.1	192.4		63°-08'	1800'	
		28	188.2	184.5		62°-20'	1750'	
		29	183.0	179.3		61°-30'	1704'	
		30	178.4	174.7		60°-27'	1649'	
		31	174.0	170.3		59°-35'	1602'	
		32	170.2	166.5		58°-49'	1562'	
		33	165.9	162.2		57°-55'	1518'	
		34	161.0	157.3		56°-52'	1468'	
		35	157.6	153.9		55°-57'	1424'	
		36	153.7	150.0		55°-09'	1387'	
		37	149.0	145.3		54°-11'	1348'	
		38	146.3	142.6		53°-03'	1299'	
		39	143.9	140.2		51°-54'	1254'	
		40	136.2	132.5		50°-35'	1201'	

76L-298 CE 307 11-56

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Profile No. X-Sec. No. Notes Red J. S. H. Plotted C. W. H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 59
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C. W. H. Checked S. H. Survey by Notes Date
Date 8-30-60 Date 10-25-60 Map No. Indexed A E OH Date

STATION Inst. At	Sight On	#	H.I. Depth Rec.	H.I. Depth Adj.	B.S.	F.S.	Time	ELEV.	Hor. Ang.	Remarks
322+00	S. 21	41	129.0	125.3					49°-37'	1163'
		42	121.6	117.9					48°-34'	1124'
		43	114.7	111.0					47°-30'	1087'
		44	108.3	104.6					45°-48'	1030'
		45	102.9	99.2					44°-34'	989'
		46	98.7	95.0					43°-42'	959'
		47	93.2	89.5					42°-29'	921'
		48	88.2	84.5					41°-17'	884'
		49	82.5	78.8					39°-57'	844'
		50	78.0	74.3					38°-42'	805'
		51	74.5	70.8					37°-28'	770'
		52	70.3	66.6					36°-17'	736'
		53	64.3	60.6					34°-44'	693'
		54	56.5	52.8					33°-13'	652'
		55	50.6	46.9					32°-25'	633'
		56	45.2	41.5					31°-32'	608'
		57	39.0	35.3					30°-38'	585'
		58	33.2	29.5					29°-41'	561'
		59	29.2	25.5					28°-44'	537'
		60	26.1	22.4					27°-48'	512'

Tape = -.8
Boat = +1.0
Tide = -3.9
-3.7

RANGE 308+65

76L-298 CE 307 11-58

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F.B. 2805 Pg. 60 Job No. 0300.02 Division No. 11 Notes Red J. S. H. Plotted C. W. H. Profile
Survey of BEACH IEROSION STUDIES Date 8-30-60 Date 10-25-60 No. X-Sec.
Survey by CHARNET Notes SMITH N Notes Chkd C. W. H. Checked J. S. H.
Indexed H. E. OTT Date Date 8-30-60 Date 10-25-60 No.

STATION		B.S.	H.I.		F.S.	ELEV.			
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks	
3224+00	S-21	61	23.1	19.4		26°43'	484'		Tape = -.8
		62	21.1	17.4		25°52'	464'		Boat = +1.0
		63	19.5	15.8		24°54'	440'		Tide = -3.9
		64	17.4	13.7		24°01'	420'		-3.7
		65	15.5	11.8		23°51'	417'		
		66	13.9	10.2		21°41'	363'		
		67	12.1	8.4		20°39'	338'		
		68	11.2	7.5		19°47'	317'		
		69	10.0	6.3		18°41'	292'		
		70	8.8	5.1	6-56	17°50	272'		

76L-298 S & E #307—1-56

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 310+65	SIGHT ON 306+65
		23 27			DATUM MEAN LOWER LOW WATER	306+65 INSHORE
T.P.	[illegible]	[illegible]	[illegible]	[illegible]		
Sta. 65			[illegible]	[illegible]	CONTROL LINE	
			[illegible]	[illegible]	BACKWALK	
			[illegible]	[illegible]		15' RT. [illegible]
			[illegible]	17 [illegible]		19' RT. [illegible]
			6 9	[illegible]		19' RT. [illegible]
			[illegible]	[illegible]		
	14	14 9				
			102	47		99° RT. Mean tide line
T.P.	19	76	92	57	T.P.	
306+65			80	-0.4	18° 05' 131'	
"			92	-1.6	25° 09' 183'	
"			109	-3.3	30° 44' 238'	
"			130	-5.4	33° 26' 269'	

Profile Notes Red [illegible] Plotted C.W.H. Job No. Division No. 11 F. B. 2805 Pg. 61
No. Date 8-30-60 Date 10-25-60 Survey of [illegible] Sta. [illegible]
X-Sec. Notes Chkd. [illegible] Checked [illegible] Survey by Notes Date -20-6
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H. E. Ott Date

F. B. 2805 Pg. 62 | 0300.02

Job No. ____ Division No. 11 Notes Red J. S. H. Plotted C. W. H. Profile

Survey of BEACH EROSION STUDIES Date 8-30-60 Date 10-25-60 No. ____

Survey by SIND Notes J. C. GOODWIN Notes Chkd. C.W.H. Checked J. S. H. X-Sec.

Indexed H. E. OTT Date # SAPPELL Date 8-30-60 Date 10-25-60 No. ____

STATION	B. S.	H. I.	F. S.	ELEV.		
306+65						
"		76				
			153	-7.7		
			170	-9.4		
					1st at 310+65	
					38° 03' 313' V	
					41° 22' 352' V	
						Slight on 306+65

76L-298 S & E #307—1-56

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76L-298 CE 307 11-58

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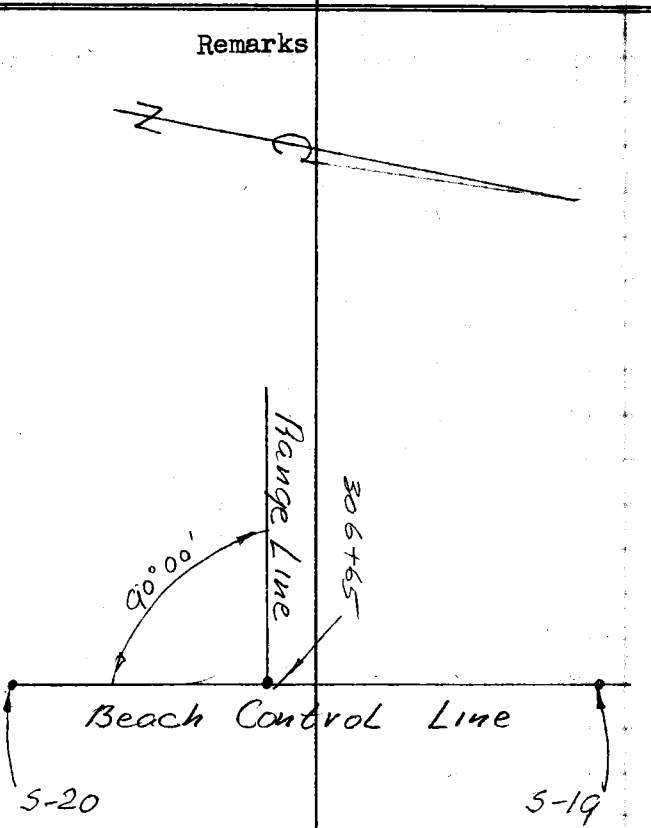
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		1			714	90° 00'	
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
306+65	5-20	8				"	
		9				"	
		10				"	
		11				"	
		12				"	
		13				"	
		14				"	
		15				"	
		16				"	
		17				"	
		18				"	
		19				"	
		20				"	



Profile Notes Red J. S. H. Plotted C. W. H. Job No. 230002 Division No. 11 F.B. 2805 Pg. 63
No. X-Sec. Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
Notes Chkd. C. W. H. Checked J. S. H. Survey by Wharrie Notes Tech. Date 7-20-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed Date

F.B. 2805 Pg. 64 | 0300.02 Job No. | Division No. 11 | Notes Red J.S.H. | Plotted C.W.H. | Profile

Survey of Beach Erosion Studies | Date 8-30-60 | Date 10-25-60 | No.

Survey by Uhavriet | Notes Teeboom | Notes Chkd. C.W.H. | Checked J.S.H. | X-Sec.

Indexed H. E. Ott | Date | Date 8-30-60 | Date 10-25-60 | No.

STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At 306+65					
Sight On 5-20					
# 21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					

Depth Rec. Adj. | Time | Hor. Ang. 90° 00'

Do not extend notes this side of this line.

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

76L-298 CE 507 11-58

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
		41				90° 00'		
		42				"		
		43				"		
		44				"		
		45				"		
		46				"		
		47				"		
		48				"		
306+65	5-20	49				"		
		50				"		
		51				"		
		52				"		
		53				"		
		54				"		
		55				"		
		56				"		
		57				"		
		58				"		
		59				"		
		60				"		

Profile Notes Red J.S.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 65
No. Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. C.W.H. Checked J.S.H. Survey by Harriet Notes Checked Date 7-20-00
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H.E.O.H. Date

F. B. 2805 Pg. 66 | 0300.02

Job No. _____ Division No. 11 Notes Red J. S. H. Plotted C. W. H. Profile

Survey of Beach Control Line Date 8-30-60 Date 10-25-60 No. _____

Survey by Marvel Notes Teeboom Notes Chkd. C. W. H. Checked J. S. H. X-Sec.

Indexed _____ Date 7- -60 Date 8-30-60 Date 10-25-60 No. _____

306465

5-20

STATION	B. S.	H. I.	F. S.	ELEV	Remarks
Inst. At	Sight On	Depth Rec. Adj.	Time	Hor. Ang.	
	61			90° 00'	
	62			"	
	63			"	
	64			"	
	65			"	
	66			"	
	67			"	
	68			"	
	69			"	
	70			"	
	71			"	
	72			"	
	73			"	
	74		7 24	"	

76L-298 CE 307 11-58

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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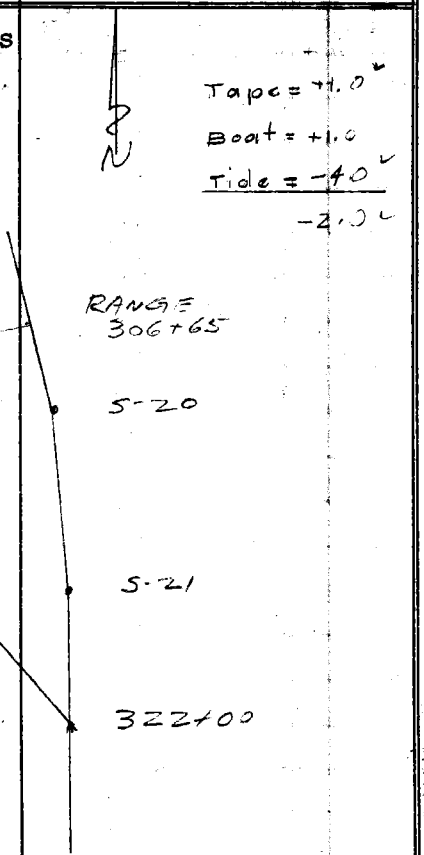
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

Profile No. ____ X-Sec. No. ____ Notes Red J. S. H. Plotted C. W. H. Job No. 0300 Division No. 1 F.B. 2805 Pg. 67
Date 8-30-60 Date 10-25-60 Survey of RECH ECOSEN STUDIES
Notes Chkd W. H. Checked J. G. H. Survey by [illegible] Note by [illegible] Date ____
Date 8-30-60 Date 10-25-60 Map No. ____ Indexed ____ Date ____

STATION Inst. At	Sight On	#	B.S. Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
322+00	5-21	1	72.6	70.6	7-14	77°-17'	3530'
		2	74.9	72.9		76°-46'	3442'
		3	79.7	77.7		75°-45'	3295'
		4	92.5	90.5		75°-11'	3218'
		5	108.8	106.8		74°-50'	3168'
		6	116.0	114.0		74°-20'	3102'
		7	105.5	103.5		73°-46'	3037'
		8	107.5	105.5		73°-13'	2968'
		9	128.8	126.8		72°-38'	2895'
		10	140.2	138.2		72°-15'	2855'
		11	141.0	139.0		71°-52'	2811'
		12	145.9	143.9		71°-31'	2777'
		13	148.5	146.5		71°-03'	2721'
		14	155.5	153.5		70°-33'	2671'
		15	172.1	170.1		70°-06'	2626'
		16	177.0	175.0		69°-36'	2580'
		17	184.2	182.2		68°-57'	2520'
		18	203.0	201.0		68°-33'	2485'
		19	206.5	204.5		68°-00'	2434'
		20	211.1	209.1		67°-16'	2374'



76L-298 CE 507 11-58

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

F.B. 2805 Pg. 68 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted C.W.H. Profile No.
Survey of BEACH EROSION STUDIES Date 8-30-60 Date 10-25-60 X-Sec. No.
Survey by HARRIET SMITH Notes Chkd. C.W.H. Checked J.S.H.
Indexed H.E. OH Date Date 8-30-60 Date 10-25-60

STATION		B.S.	H.I.		F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
322+00	S-21	21	211.1	209.1		66°-23'	2294'	Tape = +1.0
		22	207.3	205.3		65°-45'	2248'	Boat = +1.0
		23	203.5	201.5		64°-58'	2188'	Tide = -4.0
		24	199.5	197.5		64°-12'	2130'	-2.0
		25	194.2	192.2		63°-14'	2060'	
		26	188.3	186.3		62°-19'	1999'	
		27	181.3	179.3		61°-08'	1918'	
		28	180.0	178.0		60°-36'	1890'	
		29	183.5	181.5		59°-15'	1807'	
		30	180.2	178.2		58°-00'	1734'	
		31	172.0	170.0		57°-09'	1684'	
		32	164.2	162.2		56°-30'	1649'	
		33	161.1	159.1		55°-32'	1597'	
		34	158.9	156.9		54°-29'	1547'	
		35	159.9	157.9		53°-38'	1505'	
		36	157.4	155.4		52°-33'	1453'	
		37	151.8	149.8		51°-25'	1402'	
		38	146.5	144.5		49°-55'	1334'	
		39	138.7	136.7		48°-49'	1286'	
		40	133.3	131.3		47°-51'	1247'	

76L-298 CE 307 11-58

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Do not extend notes this side of this line.

Profile No. ____ X-Sec. No. ____ Notes Red J.S.H. Plotted C.W.H. Job No. 0300 02 Division No. 11 F.B. 2805 Pg. 69
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd C.W.H. Checked J.S.H. Survey by CHACKIE Notes ____ Date 7-20-60
Date 8-30-60 Date 10-25-60 Map No. ____ Indexed ____ Date ____

STATION Inst. At	Sight On	#	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
32+00	S-21	41	128.4	126.4		47°-00'	1214'	Tape = +1.0
		42	125.3	123.3		45°-53	1167'	Boat = +1.0
		43	122.5	120.5		44°-58'	1134'	Tide = -4.0
		44	117.4	115.4		44°-00'	1097'	-2.0
		45	113.0	111.0		42°-51	1056'	RANGE 30+65
		46	107.4	105.4		41°-44	1014'	
		47	96.2	94.2		45°-50	983'	
		48	91.0	89.0		40°-18	964'	
		49	86.8	84.8		39°-42	944'	
		50	81.9	79.9		38°-59	919'	
		51	76.0	74.0		38°-17	895'	
		52	70.3	68.3		37°-22	866'	
		53	64.1	62.1		36°-37	840'	
		54	58.0	56.0		35°-27	803'	
		55	54.1	52.1		34°-47	781'	
		56	51.4	49.4		33°-54	754'	
		57	48.1	46.1		32°-55	723'	
		58	42.4	40.4		31°-53	692'	
		59	35.9	33.9		31°-00	666'	
		60	32.0	30.0		30°-07	640'	

76L-296 CE 307 11-58

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F.B. 7805 Pg. 70 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted C.W.H. Profile
Survey of BEACH EROSION STUDIES Date 8-30-60 Date 10-25-60 No. X-Sec.
Survey by WARRENT Notes SMITH Notes Chkd. C.W.H. Checked J.S.H.
Indexed H.E. OTT Date Date 8-30-60 Date 10-25-60 No.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
322+00	5-21	61	28.7	26.6		29°07'	611'	Tape = +1.0
		62	26.5	24.4		28°12'	583'	Boat = +1.0
		63	23.9	21.8		27°22'	559'	Tide = -4.1
		64	22.0	19.9		26°22'	530'	-2.1
		65	20.5	18.4		25°26'	502'	
		66	18.4	16.3		24°18'	472'	
		67	16.0	13.9		23°08'	439'	
		68	14.9	12.8		22°06'	412'	
		69	13.0	10.9		21°05'	384'	
		70	11.7	9.6		20°12'	359'	
		71	10.9	8.8		19°29'	338'	
		72	9.5	7.4		18°37'	316'	
		73	8.2	6.1		17°27'	284'	
		74	7.0	4.9	7-24	16°47'	265'	

76L-298 S & E #307—1-56

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	5-19 π at 305 + 72.67	Sight on 302+14
[illegible]	4 9	26 48		21 57	DATUM MEAN LOWER LOW WATER	302+14 INSHORE
[illegible]	[illegible]	15 52	11 40	15 08		
302+14			4 7	10 8	CONTROL LINE	
			3 2	12 5	80' LT. EDGE SAND	
[illegible]			8 75	6 5		12' RT. EDGE [illegible]
	10	77				
					NOTE: [illegible] TOP OF BANK	
302+14			30	47		26° R. Mean tide line
"			82	-0.5	10° 42' 74'	
"			90	-1.3	14° 22' 102'	
"			90	-1.3	18° 05' 132'	
"			118	-4.1	23° 17' 180'	
"			136	-5.9	26° 56' 217'	
"			152	-7.5	30° 17' 255'	
"			172	-9.5	33° 27' 296'	

Profile No. ____ Date 8-30-60 Notes Red J.S.H. Plotted C.W.H. Job No. ____ Division No. 11 F. B. 2805 Pg. 71

X-Sec. No. ____ Date 10-25-60 Notes Chkd. ____ Date 10-25-60 Checked J.S.H. Survey of ____ Survey by ____ Map No. ____ Indexed ____ Date ____ Date ____ Date ____

F. B. 2805 Pg. 72

0300.02

Job No. Division No. 70 Notes Red Plotted Profile

Survey of BEACH EROSION STUDIES Date Date No.

Survey by LIND Notes J. C. GOODWIN Notes Chkd. Checked X-Sec.

Indexed Date J. Tappell Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.

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LOS ANGELES COUNTY ENGINEER

700 LOS ANGELES COUNTY ENGINEERING BLDG.

PLEASE RETURN TO

76L-298 S & E #307—1-56

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76L-296 CE 307 11-58

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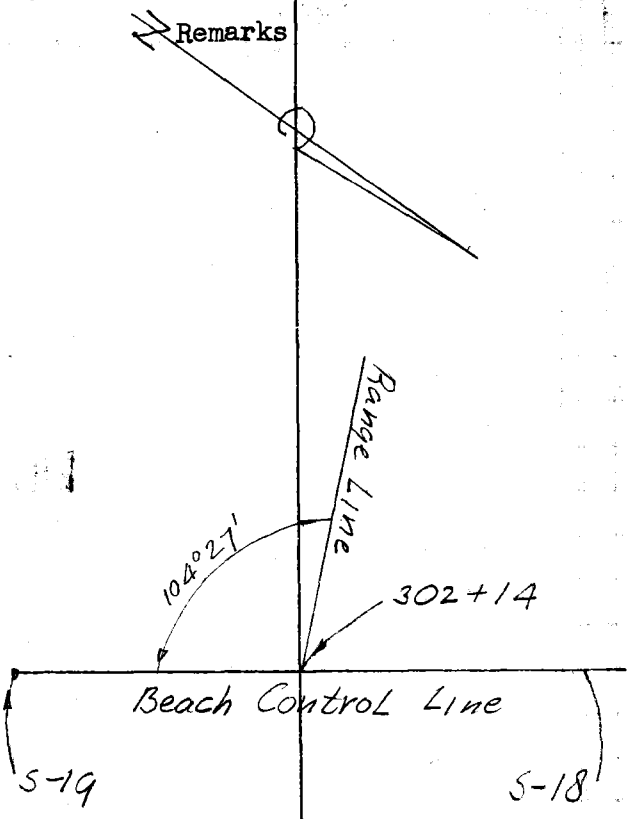
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor.Ang.	Remarks
302+14	5-19	1		8 18	104° 27'	
		2				
		3				
		4				
		5				
		6				
		7				
		8				
		9				
		10				
		11				
		12				
		13				
		14				
		15				
		16				
		17				
		18				
		19				
		20				



Profile No. X-Sec. No.
Notes Red J. S. H. Plotted C.W.H. Job No. 03002 Division No. 11 F.B. 28005 Pg. 73
Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
Notes Chkd C.W.H. Checked J. S. H. Survey by Wilhelm Notebook Date 7-20-60
Date 8-30-60 Date 10-25-60 Map No. Indexed H. & UH Date

76L-298 CE 307 11-58

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F.B. 2805 PG. 74 Job No. 03002 Division No. 11 Notes Red J.S.H. Plotted C.W.H. Profile
Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 No. X-Sec.
Survey by Harriet Notes Teedown Notes Chkd. C.W.H. Checked J.S.H. No.
Indexed Date Date 8-30-60 Date 10-25-60

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		21			104°27'		
		22			"		
		23			"		
		24			"		
		25			"		
		26			"		
		27			"		
		28			"		
302+14	5-19	29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40			"		

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		41			104° 27'		
		42			"		
		43			"		
		44		8 26	"		
302+14	5-19						

Profile Notes Red J. S. H. Plotted C. W. H. Job No. 030002 Division No. 11 F. B. 2805 Pg. 75
No. X-Sec. Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
No. Notes Chkd C. W. H. Checked J. S. H. Survey by Notes Reduced Date 7-10-62
Date 8-30-60 Date 10-25-60 Map No. Indexed Date

F.B. 2805 Pg. 76 | 0300.02

Job No. _____ Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Control Line Date _____ Date _____ No. _____

Survey by Uharriet Notes Teeboom Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At	Sight On	Depth #	Rec. Adj.	Time	Hor.Ang.

Do not extend notes this side of this line.

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76L-298 CE 307 11-58

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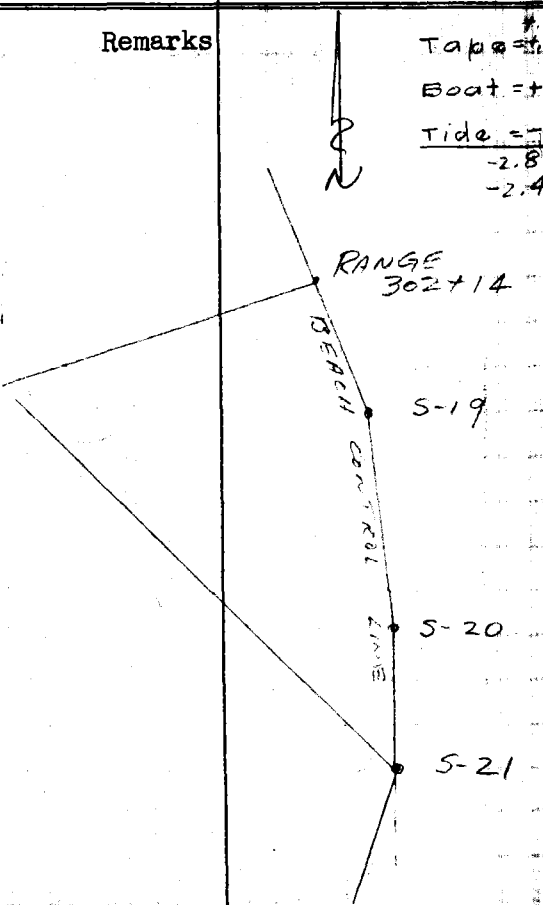
Profile No. X-Sec. No.
Notes Red. J.S.H. Plotted C.W.H. Job No. 0300.02 Division No. 11
Date 2-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. S.W.H. Checked J.S.H. Survey by [illegible] Date 2-20-60
Date 8-30-60 Date 10-25-60 Map No. Indexed Date
F.B. 2005 PG. 77

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
5-19	5-20	1	196.0	193.2	8-18	74°-09'	2715'	
		2	186.7	183.9		73°-22'	2651'	
		3	182.2	179.4		72°-43'	2582'	
		4	198.1	195.3		71°-57'	2514'	
		5	211.8	209.0		71°-08'	2442'	
		6	219.1	216.3		70°-17'	2374'	
		7	218.1	215.3		69°-26'	2308'	
		8	213.9	211.1		68°-46'	2258'	
		9	211.5	208.7		67°-32'	2169'	
		10	205.9	203.1		66°-28'	2090'	
		11	199.4	196.6		65°-20'	2017'	
		12	193.5	190.7		63°-55'	1927'	
		13	186.7	183.9		62°-50'	1864'	
		14	180.7	177.9		61°-28'	1787'	
		15	176.9	174.5		60°-07'	1711'	
		16	172.5	170.1		58°-09'	1608'	
		17	163.3	160.9		57°-00'	1552'	
		18	154.0	151.6		56°-00'	1505'	
		19	150.1	147.7		54°-35'	1442'	
		20	145.1	142.7		53°-05'	1377'	



Tape = +3.1 (1614) +1.7 (1520)
Boat = +1.0
Tide = -4.1
-2.8 (1614)
-2.4 (1520)

76L-298 CE 307 11-58

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F.B. 2805 Pg. 78 Job No. 0300.02 Division No. 10 Notes Red J. S. H. Plotted C. W. H. Date 10-25-60 No. Profile
Survey of BEACH EROSION STUDIES Date 8-30-60 Notes Chkd. C. W. H. Checked J. S. H. No. X-Sec.
Survey by HARRIET Notes SMITH, N Date
Indexed B. E. OTT Date

STATION Inst. At	STATION Sight On	#	B.S. Depth Rec.	B.S. Depth Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
S-21	S-20	21	140.2	138.2		51°-34'	1314'	+1.1 21 to 32
		22	133.2	131.2		49°-58'	1248	Tape = +.9 32 to 40
		23	126.8	124.8		48°-18'	1185'	Boat = +1.0
		24	121.0	119.0		46°-32'	1118'	Tide = -4.1
		25	116.2	114.2		44°-57'	1062'	-2.0 21 to 32
		26	110.6	108.6		43°-22'	1007'	-2.2 32 to 40
		27	103.7	101.7		41°-35'	948'	
		28	96.0	94.0		39°-36'	883'	
		29	87.0	85.0		37°-27'	813'	
		30	79.0	77.0		35°-28'	751'	
		31	69.9	67.9		33°-38'	698'	
		32	61.4	59.4		31°-39'	638'	
		33	54.9	52.7		30°-07'	596'	
		34	46.0	43.8		28°-52'	561'	
		35	35.6	33.4		27°-48'	528'	
		36	29.2	27.0		26°-32'	494'	
		37	25.7	23.5		25°-14'	457'	-?
		38	25.9	23.7		25°-29'	464'	
		39	22.2	20.0		24°-14'	430'	
		40	19.3	17.1		23°-09'	401	

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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Profile No. ____ Notes Red J.S.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2-806 Pg. 79
X-Sec. No. ____ Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd C.W.H. Checked J.S.H. Survey by WHIPPLE Notes by C.W.H. Date 7-20-60
Data 8-30-60 Date 10-25-60 Map No. ____ Indexed ____ Date ____

STATION Inst. At	Sight On	B.S.	H.I. #	Depth Rec.	Depth Adj.	F.S.	ELEV.	Hor.Ang.	Remarks	
			41	16.9	14.7			22°18'	378'	Tape = +.9
			42	15.5	13.3			21°25'	353'	Boat = +1.0
			43	14.6	12.4			20°46'	336'	Tide = -4.1
			44	11.5	9.3	8.26		18°48'	282'	-2.2
S-21	S-20									

RANGE 302+14

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK. WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B.S.	H.I.	F.S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. Adj.	Time	Hor.Ang.	Remarks	

F.B. 28025 Pg. 80

Job No. 0300.02 Division No. 11

Survey of BEACH ELSTON STUDIES

Survey by HARRIET SMITH

Notes

Indexed H. E. OTT Date

Notes Red Date

Notes Chkd. Date

Plotted Date

Checked Date

Profile No.

X-Sec. No.

76L-295 S & E #307—1-56

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 305 + 72.67 (5-19)	SIGHT ON 301+90
		15 52			DATUM MEAN LOWER LOW WATER	301 + 90 INSHORE
T.P.	1 97	13 37	3 40	12 12		
301 + 90			4 8	8 4	CONTROL LINE	
			2	12 5	59' Lt. 301+90	
			3 3	10 1	15' Lt. Top Bank	
T.P. Tide Gauge			1 32	5 4		Rt.
T.P.	11 56	33 57	3 [illegible]	[illegible]		
"	5 00	27 55	[illegible]	[illegible]		
5-19			6 00	[illegible]	[illegible]	21.565
T.P.	0 4	5 9		5 49	T.P. as above	
301+90			1 2	4 7		32° R. mean tide line
"			47	1.2	9° 24' 69'	
"			49	1.0	11° 32' 86'	
"			64	-0.5	14° 06' 106'	
"			77	-1.8	17° 38' 137'	
"			100	-4.1	20° 54' 168'	
"			112	-5.3	23° 54' 198'	

Profile Notes Red J. S. H. Plotted C. W. H. Job No. 2300-[illegible] Division No. 11 F. B. 2805 Pg. 81
Date 8-30-60 Date 10-25-60 Survey of BERTH FAST STUDIES
X-Sec. Notes Chkd J. S. H. Checked J. S. H. Survey by [illegible] Notes [illegible] Date 1-20-[illegible]
No. Date 9-30-60 Date 10-25-60 Map No. Indexed H. F. Ott Date

76L-298 S & E #307—1-56

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Do not extend notes this side of this line.

F. B. 2805 PG. 82 | Job No. 3300-02 | Division No. 11 | Notes Red. J. S. H. Plotted C. W. H. | Profile

Survey of BANK EROSION STUDIES Date 8-30-60 Date 10-25-60 No. | X-Sec.

Survey by CWHD Notes J.C. GRODWIN Notes Chkd. CWH Checked J. S. H. No.

Indexed H. E. OTT Date 8 JSPCH Date 9-30 60 Date 10-25-60 No.

STATION	B. S.	H. I.	F. S.	ELEV.		
					Tat. 305 5.19 + 72.67	Sight on 301+90
		59				
301+90			128	-6.9	27° 29' 238'	
"			150	-9.1	30° 35' 276'	
"			170	-11.1	32° 02' 295'	

76L-298 S & E #307—1-56

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STATION	B. S.	H. I.	F. S.	ELEV.	Sta. 298+65	Sta. 300+65
					DATUM MEAN LOWER LOW WATER	300+65 INSHORE
BM-S-19				21.57	B.M. S-19 El. 21.565 (M.L.L.W.) F.B. 2100-158	
	3.19	24.76				
T.P.			1069	14.07	T.P.	
	2.72	16.79				
T.P.			463	12.16	T.P.	
	0.02	12.18				
T.P.			776	4.42	T.P.	
	4.83	9.25				
T.P.			141	7.84	T.P.	
	2.32	10.16				
T.P.			758	2.58	T.P.	
	2.24	4.82				
300+65			35	1.3	9° 39' 35'	Toe Rock Slope
"			48	0.0	19° 35' 77'	
"			61	-1.3	27° 36' 115'	Edge of pier
					(Note: Same H.I. used for sta. 298+65)	

Profile Notes Red. C.W.H. Plotted C.W.H. Job No. ____ Division No. 11 F. B. 2305 Pg. 83
No. ____ Date 8-30-60 Date 10-25-60 Survey of ____
X-Sec. Notes Chkd. J.S.H. Checked J.S.H. Survey by ____ Notes ____ Date ____
No. ____ Date 8-30-60 Date 10-25-60 Map No. ____ Indexed H. E. Oh Date ____

F. B. 2805 Pg. 84 | Job No. 9320102 | Division No. 11 | Notes Red. | Plotted | Profile

Survey of SEWER EROSION STUDIES | Date | Date | No.

Survey by LMD | Notes J. C. GOODWIN | Notes Chkd | Checked | X-Sec:

Indexed | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.

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76L-298 S & E #307—1-56

76L-298 CE 307 11-58

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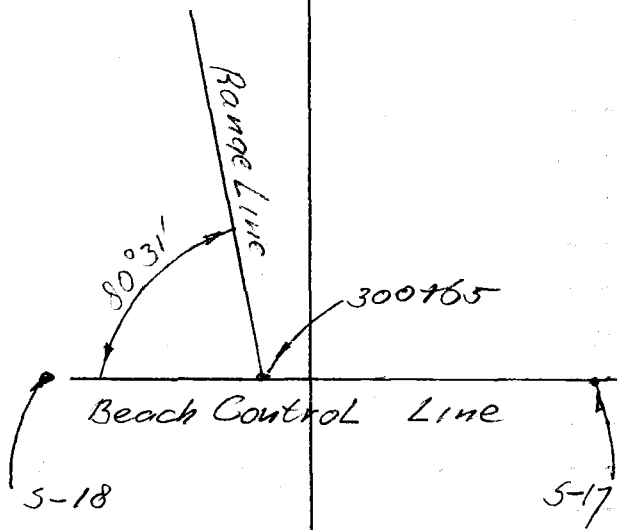
STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		1		8 46	80° 31'		
		2			"		
		3			"		
		4			"		
		5			"		
		6			"		
		7			"		
		8			"		
300+65	5-18	9			"		
		10			"		
		11			"		
		12			"		
		13			"		
		14			"		
		15			"		
		16			"		
		17			"		
		18			"		
		19			"		
		20			"		



Profile Notes Red C.W.H. Plotted C.W.H. Job No. 0300.02 Division No. 11
No. Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. J.S.H. Checked J.S.H. Survey by Harriet Notes Transcribed Date 7-20-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H.I. Chk. Date
F.B. 2805 Pg. 35

F.B. 2805 Pg. 86 | 0300.02

Job No. _____ Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile

Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 No. _____

Survey by Wharriet Notes Teeboom Notes Chkd. J.S.H. Checked J.S.H. X-Sec.

Indexed H.E.O. Date _____ Date 8-30-60 Date 10-25-60 No. _____

STATION	B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	# Depth Rec. Adj.	Time	Hor. Ang. 86° 31'		Remarks
300+65						
5-18						
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					
	32					
	33					
	34					
	35					
	36					
	37					
	38					
	39					
	40					

76L-208 CE 307 11-58

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76L-298 CE 307 11-58

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STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor.Ang.	Remarks	
		41				80° 31		
		42				"		
		43				"		
		44				"		
		45				"		
		46				"		
		47				"		
300+65	5-18	48			8 54	"		

Profile Notes Red. C.W.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 37
No. X-Sec. Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
Notes Chkd. J.S.H. Checked J.S.H. Survey by Unknown Notes Reduced Date 7-20-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H.E.O.N. Date

F. B. 2805 Pg. 88 0300.02

Job No. _____ Division No. 11 Notes Red C. W. H. Plotted C. W. H. Profile

Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 No. _____

Survey by Overriet Notes Tee boom Notes Chkd. J. S. H. Checked J. S. H. X-Sec.

Indexed _____ Date _____ Date 8-30-60 Date 10-25-60 No. _____

STATION	B. S.	H. I.	F. S.	ELEV	Remarks
Inst. At	Sight On	# Depth Rec.	Adj.	Time	Hor. Ang.

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76L-298 CE 307 11-58

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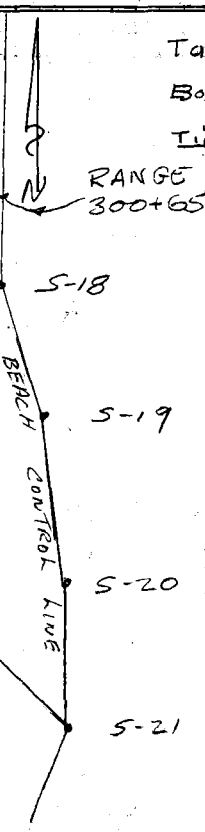
Profile No. X-Sec. No. | Notes Red C.W.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 | Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES | Notes Chkd. J.S.H. Checked J.S.H. Survey by WHARFT Notes Date 7-30-60 | Date 8-30-60 Date 10-25-60 Map No. Indexed H.E. OTT Date | F.B. 28005 Pg. 39

STATION Inst. At	Sight On	#	B.S.	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
S-21	S-20	1		228.2	225.4	8-46	74°-05'	2983'
		2		221.2	218.4		72°-08'	2778'
		3		207.1	204.3		68°-36'	2457'
		4		202.2	199.4		67°-25'	2364'
		5		198.3	195.5		66°-32'	2290'
		6		195.2	192.4		65°-29'	2212'
		7		192.1	189.3		64°-34'	2150'
		8		190.0	187.2		63°-44'	2089'
		9		187.3	184.5		62°-36'	2017'
		10		184.2	181.4		61°-26'	1938'
		11		175.5	172.7		59°-50'	1845'
		12		161.7	158.9		58°-08'	1748'
		13		158.0	155.2		57°-09'	1694'
		14		152.2	149.4		55°-30'	1606'
		15		148.9	146.1		54°-17'	1548'
		16		146.5	143.7		53°-03'	1488'
		17		141.0	138.2		51°-23'	1410'
		18		134.9	132.1		50°-12'	1357'
		19		129.5	126.7		49°-07'	1310'
		20		126.2	123.4		48°-17'	1274'



Tapa = +.2
Boat = +1.0
Tide = -4.0
-2.8

76L-298 CE 307 11-58

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F.B. 2805 Pg. 90 Job No. 0300.02 Division No. 10 Notes Red C.W.H. Plotted C.W.H. Date 10-25-60 No. Profile
Survey of BEACH EROSION STUDIES Date 8-30-60 Notes Chkd. J.S.H. Checked J.S.H. Date 10-25-60 No. X-Sec.
Survey by HARRIET SMITH Notes Date 8-30-60 Date 10-25-60 No.
Indexed H.E. OTT Date

STATION		B.S.	H.I.		F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
S-21	S-20	21	121.8	119.5		46°-47'	1212'	Tape = +.7
		22	118.3	116.0		45°-37'	1166'	Boat = +1.0
		23	113.8	111.5		44°-23'	1118'	Tide = -4.0
		24	108.0	105.7		43°-09'	1071'	-2.3
		25	104.9	102.6		41°-55'	1026'	
		26	99.5	97.2		40°-35'	977'	
		27	95.9	93.6		39°-36'	941'	
		28	91.2	88.9		38°-36'	907'	
		29	87.2	84.9		37°-26'	864'	
		30	82.3	80.0		36°-16'	825'	
		31	77.4	75.1		35°-00'	782'	
		32	71.5	69.2		33°-50'	746'	
		33	66.1	63.8		32°-40'	707'	
		34	59.2	56.9		30°-58'	650'	
		35	50.1	47.8		29°-35'	608'	
		36	41.0	38.7		28°-25'	572'	
		37	32.9	30.6		26°-47'	520'	
		38	29.0	26.7		25°-57'	495'	
		39	26.4	24.1		25°-06'	470'	
		40	23.9	21.6		24°-00'	436'	

76L-298 CE 307 11-58

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STATION Inst. At	Sight On	B.S.	H.I. # Rec.	Depth Adj.	F.S.	Time	ELEV. Hor. Ang.		Remarks	
			41	20.2 17.9			22°-58'	405'		Tape = +.7
			42	18.4 16.1			21°-58'	375'		Boat = +1.0
			43	15.8 13.5			20°-48'	340		Tide = -4.0
			44	13.3 11.0			19°-45'	308'		-2.3
			45	11.9 9.6			18°-45'	279'		
5	5		46	10.6 8.3			17°-56'	255'		
			47	9.5 7.2			16°-58'	226'		
			48	8.5 6.2		8-54	16°-24'	209'		
2	20									

RANGE 3001.65

Profile No. X-Sec. No. Notes Red C.W.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 91
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. S.H. Checked J.S.H. Survey by [illegible] Notes [illegible] Date 7-20-60
Date 8-30-60 Date 10-25-60 Map No. Indexed M.E. OTT Date

F.B. 2805 Pg. 92 | Job No. 0300.02 | Division No. 11 | Notes Red | Plotted | Profile

Survey of BEACH EROSION STUDIES | Date | Date | No.

Survey by UHARRIET Notes SMITH N | Notes Chkd. | Checked | X-Sec.

Indexed | Date | Date | Date | No.

STATION	B.S.	H.I.	F.S.	ELEV.	
Inst. At	Sight On	Depth # Rec. Adj.	Time	Hor. Ang.	Remarks

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76L-200 CE 307 11-58

76L-298 S & E #307—1-56

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 300+65		SIGHT ON 298+65
							298+65 INSHORE
		482	(carried from 300+65) PG. 83				
298+65			47	0.1	11° 16'	39'	Toe Rock Slope
"			5.9	-1.1	27° 48'	98'	
"			7.4	-2.6	36° 03'	132'	
"			10.6	-5.8	45° 12'	175'	
"			12.2	-7.4	51° 50'	213'	
"			14.3	-9.5	57° 32'	252'	
"			15.7	-10.9	61° 07'	282'	
"			17.4	-12.6	64° 17'	313'	
T.P.			10.9	3.73	T.P.		
	5.19	8.92					
T.P.			1.16	7.76	T.P.		
	1.50	9.26					
T.P.			4.80	4.46	T.P.		
	7.80	12.26					
T.P.			0.52	11.74	T.P.		
	4.62	16.36		13.65			
	10.61	~~23~~ 4 26	2.71	~~12.65~~			
BM S-19			2.67	21.59	BM S-19 El. 21.59 (MLLW)		F.B. 2100-158

Profile Notes Red. C.W.H. Plotted C.W.H. Job No. ____ Division No. 16 F. B. 2001 Pg. 93
No. ____ Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. [illegible] Checked [illegible] Survey by [illegible] Notes [illegible] Date 20
No. ____ Date 8-30-60 Date 10-25-60 Map No. ____ Indexed H. E. OTT Date ____

F. B. 2805 Pg. 94 | 0300102

Job No. _____ Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by LUND Notes J.C. GOODWIN Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B. S.	H. I.	F. S.	ELEV.

76L-298 S & E #307—1-56

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76L-298 CE 307 11-58

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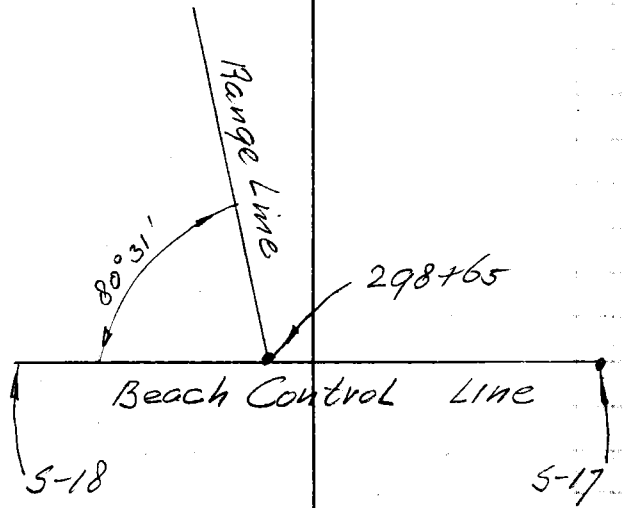
STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor.Ang.	Remarks	
		1		9 07	80° 31'		
		2			"		
		3			"		
		4			"		
		5			"		
		6			"		
		7			"		
		8			"		
298+65	5-18	9			"		
		10					
		11					
		12					
		13					
		14					
		15					
		16					
		17					
		18					
		19					
		20					



Profile Notes Red C.W.H. Plotted C.W.H. Job No. Division No. 11
Data 8-30-60 Data 10-25-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. J.S.H. Checked J.S.H. Survey by Hammond Note Keeper Date 7-20-60
No. Date 8-30-60 Date 10-25-60 Map No. Inked Date

0300.02

F.B. 2805 Pg. 95

F.B. 2805 Pg. 96 | 0300.02

Job No. _____ Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile

Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 No. _____

Survey by Harriet Notes Teeboom Notes Chkd. J.S.H. Checked J.S.H. X-Sec.

Indexed H. E. OTT Date _____ Date 8-30-60 Date 10-25-60 No. _____

STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At	Sight On	Depth Rec. Adj.	Time	Hor. Ang.	
298+65	5-18				
	21			80° 31'	
	22			"	
	23			"	
	24			"	
	25			"	
	26			"	
	27			"	
	28			"	
	29			"	
	30			"	
	31			"	
	32			"	
	33			"	
	34			"	
	35			"	
	36			"	
	37			"	
	38			"	
	39			"	
	40			"	

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76L-206 CE 307 11-58

76L-298 CE 307 11-58

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Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		41		9 15	80° 31'		
		42		9 24	"		
		43			"		
		44			"		
		45			"		
		46			"		
		47			"		
		48			"		
298+05	5-18	49			"		
		50			"		
		51			"		
		52			"		
		53			"		
		54			"		
		55			"		
		56			"		
		57			"		
		58		9 26	"		

Profile Notes Red C.W.H. Plotted C.W.H. Job No. 030002 Division No. 11 F.B. 2805 Pg. 97
No. Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. C.W.H. Checked C.W.H. Survey by Wharnel Notes Tolbert Date 7-20-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H.E. Off. Date

F. B. 2805 Pg. 98 | 0300.02

Job No. _____ Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by U Harriet Notes Teeboom Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

761-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV
Inst. At	Sight On	Depth # Rec. Adj.	Time	Hor. Ang.

Remarks

76L-298 CE 307 11-58

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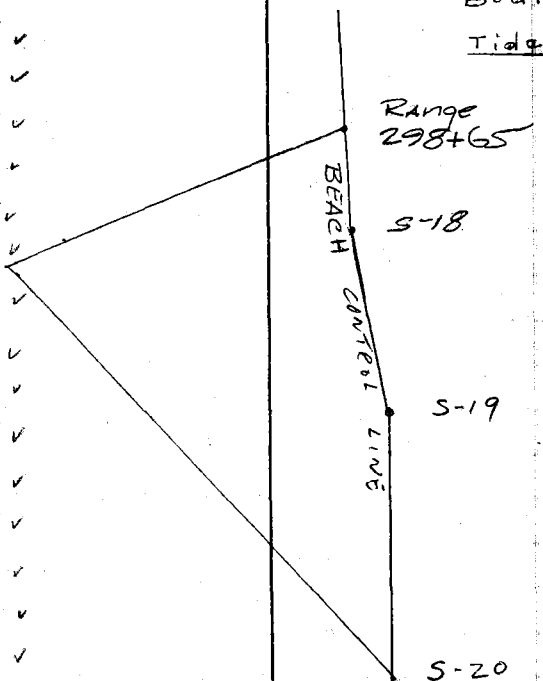
Profile No. X-Sec. No. Notes Red C.W.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 99
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. J.S.H. Checked J.S.H. Survey by WHARTON Notes Sent Date 7-30-60
Date 8-30-60 Date 10-25-60 Map No. Indexed Date

STATION Inst. At	Sight On	#	B.S. Rec.	H.I. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
S-20	S-19	1	229.0	226.1	9-07	80°-09'	3485'
		2	223.6	220.7		79°-40'	3400'
		3	218.7	215.8		79°-11'	3315'
		4	214.5	211.6		78°-33'	3214'
		5	212.5	209.6		77°-45'	3094'
		6	209.5	206.6		77°-02'	2982'
		7	204.9	202.0		76°-16'	2880'
		8	200.4	197.5		75°-25'	2777'
		9	197.8	194.9		74°-43'	2690'
		10	192.4	189.5		73°-54'	2597'
		11	187.8	184.9		73°-07'	2508'
		12	184.0	181.1		72°-13'	2419'
		13	180.2	177.3		71°-25'	2342'
		14	176.5	173.6		70°-39'	2268'
		15	172.8	169.9		69°-38'	2177'
		16	170.1	167.2		68°-50'	2110'
		17	167.5	164.6		67°-50'	2033'
		18	160.0	157.1		66°-56'	1961'
		19	154.8	151.9		66°-12'	1911'
		20	153.0	150.1		65°-23'	1854'

Tape = +.1
Boat = +1.0
Tide = -4.0
-2.9



76L-298 CE 307 11-58

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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F.B. 2805 Pg. 100 Job No. 0300.02 Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile
Survey of BEACH EROSION STUDIES Date 8-30-60 Date 10-25-60 No. X-Sec.
Survey by HARRIET Notes SMITH, R Notes Chkd. J.S.H. Checked J.S.H. No.
Indexed B.E. OH Date Date 8-30-60 Date 10-25-60

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
S-20	S-19	21	149.9	146.9		64°-32'	1799'	Tape = .0
		22	144.2	141.2		63°-13'	1716'	Boat = +1.0
		23	139.8	136.8		61°-56'	1634'	Tide = -4.0
		24	135.1	132.1		61°-00'	1584'	-3.0
		25	133.0	130.0		60°-33'	1558'	
		26	128.3	125.3		59°-19'	1493'	
		27	124.2	121.2		58°-14'	1438'	
		28	121.3	118.3		57°-11'	1385'	
		29	116.8	113.8		55°-53'	1323'	
		30	113.2	110.2		54°-51'	1279'	
		31	109.9	106.9		53°-43'	1230'	
		32	106.1	103.1		52°-03'	1162'	
		33	102.5	99.5		50°-44'	1107'	
		34	96.3	93.3		48°-58'	1040'	
		35	91.4	88.4		47°-39'	993'	
		36	85.0	82.0		45°-59'	935'	
		37	76.5	73.5		44°-32'	888'	
		38	69.0	66.0		43°-03'	839'	
		39	63.8	60.8		41°-53'	801'	
		40	60.9	57.9		40°-44'	765'	

76L-298 CE 307 11-58

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Profile No. X-Sec. No. Notes Red C.W.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 101
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C.H. Checked C.H. Survey by C.W.H. Notes C.W.H. Date 7-20-60
Date 8-30-60 Date 10-25-60 Map No. Indexed H.E.O. Date

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor.Ang.		Remarks
		41	55.0	52.1	9-15	39°-21'	726'	
		42	57.1	54.2	9-24	39°-45'	736'	
		43	39.8	36.9		37°-21'	666'	
		44	34.3	31.4		36°-23'	638'	
		45	30.9	28.0		35°-00'	601'	
		46	28.1	25.2		33°-42'	562'	
		47	25.6	22.7		32°-46'	540'	
		48	24.0	21.1		31°-21'	503'	
		49	22.0	19.1		30°-04'	470'	
		50	20.8	17.9		29°-09'	446'	
		51	19.3	16.4		28°-04'	419'	
		52	18.5	15.6		27°-10'	396'	
		53	18.0	15.1		26°-12'	372'	
		54	16.6	13.7		25°-09'	346'	
		55	15.3	12.4		24°-19'	326'	
		56	13.6	10.7		23°-15'	301'	
		57	12.4	9.5		22°-09'	275'	
		58	11.5	8.6	9-26	21°-25'	258'	

Tape = .0'
Boat = +1.0
Tide = -3.9
-2.9

PAINTED 2805

5-20
19-5

F.B. 2805 Pg. 102 Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by HARRIET Notes SMITH N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-296 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV.	Inst. At	Sight On	Depth # Rec.	Adj.	Time	Hor. Ang.	Remarks

76L-298 CE 307 11-58

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Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		41		9:15	39°-21'		Tape =
		42			39°-52'		Boat = +1.0
		43			38°-20'		Tide =
		44			37°-08'		
		45			36°-02'		
5-20	5-19	46			35°-00'		
		47			34°-03'		
		48			30°-42'		
		49					

RANGE 298+65

RETEST

Profile Notes Red ____ Plotted ____ Job No. 03000-2 Division No. 11 F.B. 2805 Pg. 103

No. ____ Date ____ Date ____ Date ____ Survey of BEACH EXPOSURE STUDIES

X-Sec. ____ Notes Chkd. ____ Checked ____ Survey by [illegible] Notes [illegible] Date 7-20-58

No. ____ Date ____ Date ____ Map No. ____ Indexed [illegible] Date ____

F.B. 2805 Pg. 104 Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by HARRIET Notes SMITH, N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV.	
Inst. At	Sight On	# Depth Rec. Adj.	Time	Hor.Ang.	Remarks

Notes Ck'd by J. S. H.	Survey of Beach Erosion Studies
~~Map No.~~	~~IN 0300-0~~ ~~Tape~~ ~~Sht~~ ~~of~~
Office Work J. S. H.	Surveyed by Uharriet
Checked C. W. H.	Notes Blanchard Date 7-21-60
Date 8-10-60	Indexed H. E. OTT

F. B. 2805 Pg. 105

TIDE GAUGE READINGS

JULY 21, 1960

DATUM - M.L.L.W.

TIME - P.S.T

TIME P.S.T	GAUGE READING M.L.W.
5:00 AM	20
5:30	25
6:00	29
6:30	34
7:00	37
7:30	40
8:00	40
8:30	42
9:00	41
9:30	40
10:00	38
10:30	36
11:00	34

Note: Any Additions or Changes on This Sheet Must be Made or Circled in Red Ink With Date and Name of Person Making Change.

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763098 CE #247—7-53

F. B. 2805 PG. 106

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76L-298 S & E #307—1-56

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST @ 300+65	4 STA AT 298+38.23
					DATUM MEAN LOWER LOW WATER	296+65 INSHORE
BM S-16				18 40	BM S-16, El. 18.396 (MLLW.) F.B. 2100-159 & 26	
	207	20 47			Fd Bt. spk. w&T. in mcdm. in entrance to pier 16'±W'ly from S.W. cor of conc. Bldg & 10'± S'ly from E. end of wooden railing fence.	
T.P.			1604	4.43		
	091	5 34				
296+65			49	0 4	7° 33' 35'	Toe Rock Sea Wall
"			61	-0.8	15° 22' 89'	
"			84	-3.1	22° 23' 139'	
"			117	-6.4	30° 01' 197'	
			144	-9.1	35° 25' 241'	
			165	-11.2	40° 10' 284'	

(Note: Same H.I. used for Sta. 294+65)

Profile Notes Red. C.W.H. Plotted C.W.H. Job No. Division No. 11
No. Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. J.S.H. Checked J.S.H. Survey by Notes Spoell Date 7-21-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H. E. OTT Date
F. B. 3985 Pg. 107

F. B. 2905 Pg. 108 | 0300-02

Job No. _____ Division No. 11 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by LIND Notes J.C. GOODWIN Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B. S.	H. I.	F. S.	ELEV.

76L-298 S & E #307—1-56

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76L-298 CE 307 11-58

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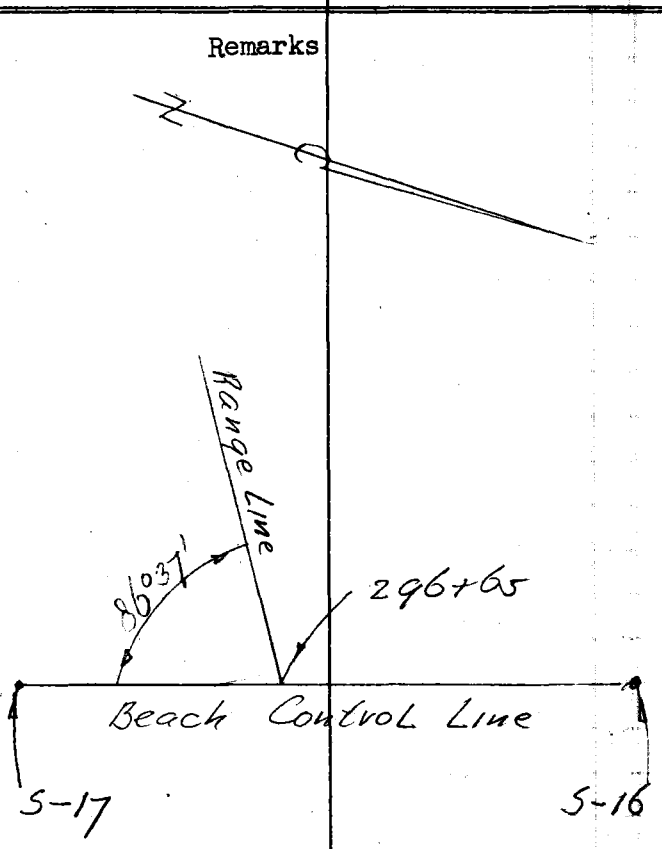
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
296+65	5-17	1			507	86° 37'	
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
		8				"	
		9				"	
		10				"	
		11				"	
		12				"	
		13				"	
		14				"	
		15				"	
		16				"	
		17				"	
		18				"	
		19				"	
		20				"	



Profile No. X-Sec. No. Notes Red C.W.H. Plotted C.W.H. Job No. 030002 Division No. 11 F.B. 2805 Pg. 109
Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Stk Oils
Notes Chkd. J.S.H. Checked J.S.H. Survey by Unknown Notes Taken Date 7-21-60
Date 8-30-60 Date 10-25-60 Map No. Tracing No. Date

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK. WITH DATE AND NAME OF PERSON MAKING CHANGE.

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F. B. 280.5 Pg. 110 Job No. 030002 Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile No.
Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 X-Sec. No.
Survey by Harnet Notes Teebom Notes Chkd. J.S.H. Checked J.S.H.
Indexed H.E. Ott Date Date 8-30-60 Date 10-25-60

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
296+65	5-17	21			86°37'		
		22			"		
		23			"		
		24			"		
		25			"		
		26			"		
		27			"		
		28			"		
		29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40					

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor.Ang.	Remarks	
		41			86° 37		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
		47			"		
		48			"		
296+65	5-17	49			"		
		50			"		
		51			"		
		52			"		
		53			"		
		54			"		
		55			"		
		56					
		57		5 16			

Profile Notes Red C.W.H. Plotted C.W.H. Job No. 03002 Division No. 11 F.B. 2805 Pg. 111
No. X-Sec. Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
Notes Chkd. J.S.H. Checked J.S.H. Survey by Harvey Notes Taken Date 7-7-60
No. Date 8-30-60 Date 11-25-60 Map No. Inked H. E. Ott Date

F.B. 2805 Pg. 112 | 0300.02 Job No. Division No. 11 Notes Red Plotted Profile

Survey of Beach Erosion Studies Date Date No.

Survey by Charriet Notes Tea Room Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

STATION	B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	Depth # Rec. Adj.	Time	Hor.Ang.		Remarks

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76L-266 CE 507 11-56

761-298 CE 307 11-58

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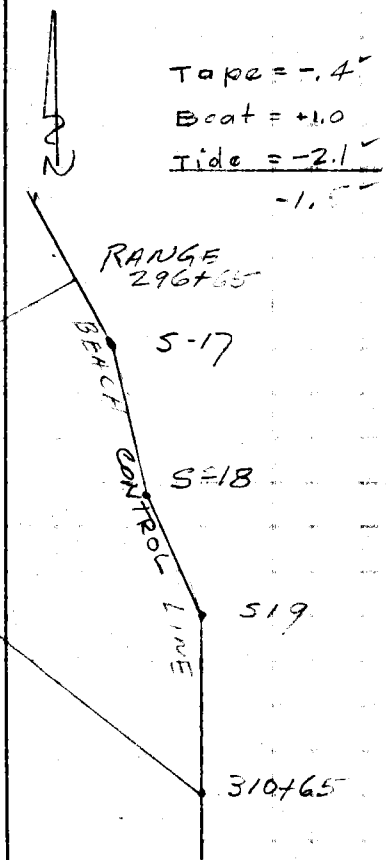
Do not extend notes this side of this line.

Profile No. X-Sec. No.
Notes Red C.W.H. Plotted C.W.H. Job No. Division No. 11
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. Checked Survey by Notes Date
Date 8-30-60 Date 10-25-60 Map No. Index No. Date
F.B. 2805 Pg. 1/3

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
310+65	5-19	1	136.3	134.8	5-07	80°-50'	2,554'
		2	140.7	139.2		79°-57'	2,478'
		3	157.0	155.5		79°-22'	2,426'
		4	158.9	157.4		79°-03'	2,396'
		5	157.4	155.9		78°-34'	2,360'
		6	160.6	159.1		78°-08'	2,316'
		7	170.7	169.2		77°-41'	2,286'
		8	159.2	157.7		76°-53'	2,222'
		9	144.5	143.0		75°-18'	2,180'
		10	140.0	138.5		75°-52'	2,146'
		11	141.5	140.0		75°-22'	2,111'
		12	136.2	134.7		74°-48'	2,072'
		13	131.9	130.4		74°-04'	2,022'
		14	131.8	130.3		73°-20'	1,964'
		15	136.7	135.2		72°-29'	1,921'
		16	147.9	146.4		71°-33'	1,864'
		17	136.6	135.1		70°-31'	1,805'
		18	139.5	138.0		69°-39'	1,754'
		19	138.5	137.0		68°-21'	1,688'
		20	154.7	153.4		67°-18'	1,633'



76L-298 CE 307 11-58

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F.B. 2805 Pg. 114 Job No. 0300.02 Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile No.
Survey of BEACH EROSION STUDIES Date 8-30-60 Date 10-25-60 X-Sec. No.
Survey by CHARRIER Notes SMITH Notes Chkd. J.S.H. Checked J.S.H.
Indexed H.E. OH Date Date 8-30-60 Date 10-25-60

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV Hor. Ang.		Remarks
310+65	S-19	21	148.0	146.4		65°-55'	1,566'	
		22	145.2	143.6		64°-43'	1,510'	
		23	131.4	129.8		62°-51'	1,428'	
		24	128.3	126.7		61°-10'	1,355'	
		25	124.9	123.3		59°-45'	1,301'	
		26	122.5	120.9		58°-18'	1,245'	
		27	117.0	116.0		56°-22'	1,172'	
		28	111.3	110.3		54°-55'	1,123'	
		29	106.0	105.0		53°-14'	1,066'	
		30	101.2	100.3		51°-22'	1,006'	
		31	95.3	94.3		49°-40'	952'	
		32	89.8	88.8		48°-15'	910'	
		33	85.7	84.7		47°-15'	879'	
		34	80.3	79.3		46°-19'	851'	
		35	74.5	73.5		45°-15'	821'	
		36	68.3	67.3		44°-38'	803'	
		37	62.7	61.7		43°-45'	779'	
		38	57.0	56.0		42°-54'	756'	
		39	48.9	47.9		41°-51'	727'	
		40	42.0	41.0		40°-55'	701'	

Tape = −.4' 21 to 26
+.2' 26 to 57
Boat = +1.0
Tide = −2.2'

−1.6' 21 to 26
−1.0' 26 to 57

76L-298 CE 307 11-58

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Profile No. X-Sec. No. Notes Red C.W.H. Plotted C.W.H. Job No. 0800.02 Division No. 11 F.B. 2805 Pg. 115
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. J.S.H. Checked J.S.H. Survey by UNDERWOOD Notes SMITH Date 7-21-60
Date 8-30-60 Date 10-25-60 Map No. Inked H.E. OTT Date

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
		41	36.8	35.8		40°-00'	677'	
		42	33.4	32.4		39°-22'	660'	
		43	30.9	29.9		38°-28'	636'	
		44	28.5	27.5		37°-22'	608'	
		45	26.9	25.9		36°-07'	575'	
		46	24.6	23.6		34°-57'	546'	
		47	22.5	21.5		33°-39'	513'	
		48	21.3	20.3		32°-33'	487'	
		49	20.0	19.0		31°-15'	455'	
		50	18.7	17.7		30°-08'	427'	
		51	17.7	16.7		28°-58'	399'	
		52	16.9	15.9		27°-47'	370'	
		53	13.8	12.8		26°-08'	331'	
		54	12.9	11.9		24°-47'	298'	
		55	11.0	10.0		23°-20'	263'	
		56	9.9	8.9		22°-20'	240'	
		57	8.5	7.5	5-16	21°-22'	218'	

Tape = +.2
Boat = +1.0
Tide = -2.
-1.0

RANGE 296+65

30+65 - 5-19

F.B. 2805 Pg. 116 Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by HARRIET Notes SMITH N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-296 CE 307 11-58

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Do not extend notes this side of this line.

STATION	B.S.	H.I.	F.S.	ELEV.	Inst. At	Sight On	Depth # Rec.	Adj.	Time	Hor. Ang.	Remarks

76L-298 S & E #307—1-56

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STATION	B. S.	H. I.	F. S.	ELEV.	TKS-17 300+65	S-17 ON 298+38.23
					DATUM MEAN LOWER LOW WATER	294+65 INSHORE
		(carried from previous Sta. 296+65) 534				
294+65			29	2.4	6° 48' 32'	Toe Rock Sea Wall
"			42	1.1	8° 53' 54'	
"			98	-4.5	19° 11' 162'	
"			120	-6.7	22° 56' 203'	
"			136	-8.3	26° 05' 237'	
"			154	-10.1	29° 08' 273'	
T.P.			195	3.39	T.P.	
	1651	1990				
BM S-16			148	18.42	BM S-16 El. 18.396 (MLLW.) F.B. 2100 - 26 & 159	

Profile Notes Red C.W.H. Plotted C.W.H. Job No. Division No.
No. X-Sec. Date 8-30-60 Date 10-25-60 Survey of
Notes Chkd. Checked Survey by Notes Date
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H. E. Ott Date

F. B. 2905 Pg. 117

F. B. 2905 Pg. 118

Job No. 0300102 Division No. 10 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by LIND Notes J. C. GOODWIN Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B. S.	H. I.	F. S.	ELEV.

76L-298 S & E #307—1-56

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76L-298 CE 307 11-58

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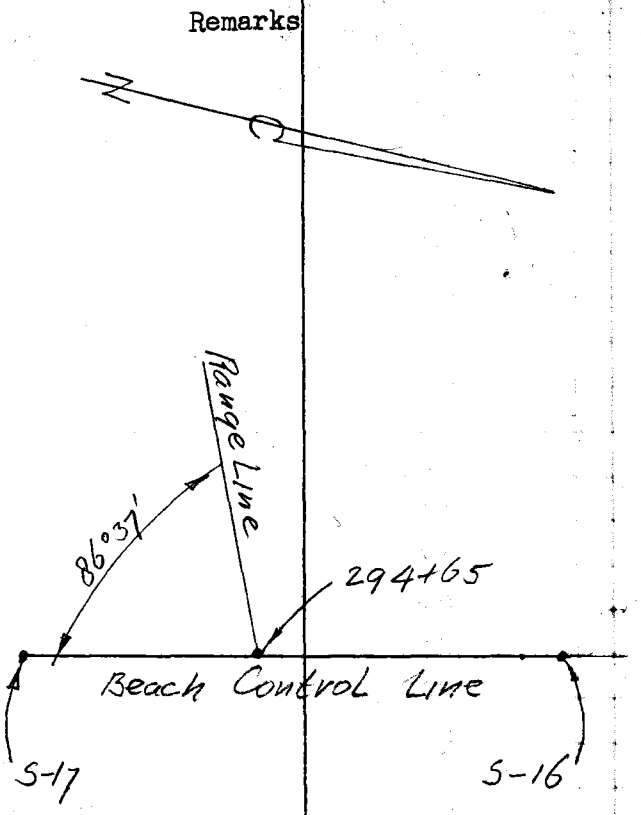
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1			532	86° 37'	
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
		8				"	
294+65	S-17	9				"	
		10				"	
		11				"	
		12				"	
		13				"	
		14				"	
		15				"	
		16				"	
		17				"	
		18				"	
		19				"	
		20				"	



Profile Notes Red C.W.H. Plotted C.W.H. Job No. 03 00 02 Division No. 11
No. Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. J.S.H. Checked J.S.H. Survey by Chance Notes Date 1-21-61
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H.E.O.T. Date
F.B. 2805 PG. 119

F.B. 2805 Pg. 120 Job No. 0300.02 Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile

Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 No.

Survey by Uhorriet Notes Smith, N. Notes Chkd. J.S.H. Checked J.S.H. X-Sec:

Indexed H. E. OTT Date Date 8-30-60 Date 10-25-60 No.

76L-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At 294+65					
Sight On 5-17					
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				
	32				
	33				
	34				
	35				
	36				
	37				
	38				
	39				
	40				

#	Rec.	Adj.	Time	Hor. Ang.
				86°37'

76L-298 CE 307 11-58

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Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		41			86° 37'		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
		47			"		
294+65	5-17	48			"		
		49			"		
		50			"		
		51			"		
		52			"		
		53			"		
		54			"		
		55			"		
		56			"		
		57			"		
		58			"		
		59			"		
		60			"		

Profile No. ____ X-Sec. ____ Notes Red. C.W.H. Plotted C.W.H. Job No. ____ Division No. 11 F.B. 2805 Pg. 12
Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
Notes Chkd. J.S.H. Checked J.S.H. Survey by Wharvel Notes Checked Date 7-21-60
Date 8-30-60 Date 10-25-60 Map No. ____ Indexed H. E. OTT Date ____

0300.02

F.B. 2805 Pg. 122 | 0300.02 Job No. | Division No. 11 | Notes Red C.W.H. | Plotted C.W.H. | Profile

Survey of Beach Erosion Studies | Date 8-30-60 | Date 10-25-60 | No.

Survey by [illegible] | Notes Teeboom | Notes Chkd. J.S.H. | Checked J.S.H. | X-Sec.

Indexed | Date | Date 8-30-60 | Date 10-25-60 | No.

STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At 294+65	Sight On 5-17				
	# 61				
	62				
	63				
	64				
	65				
	66				
	Rec. Adj.				
	Depth				
	Time		5.40		
	Hor. Ang.				
	86°37'				
	"				
	"				
	"				
	"				

Do not extend notes this side of this line.

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76L-296 CE 307 11-58

76L-298 CE 307 11-58

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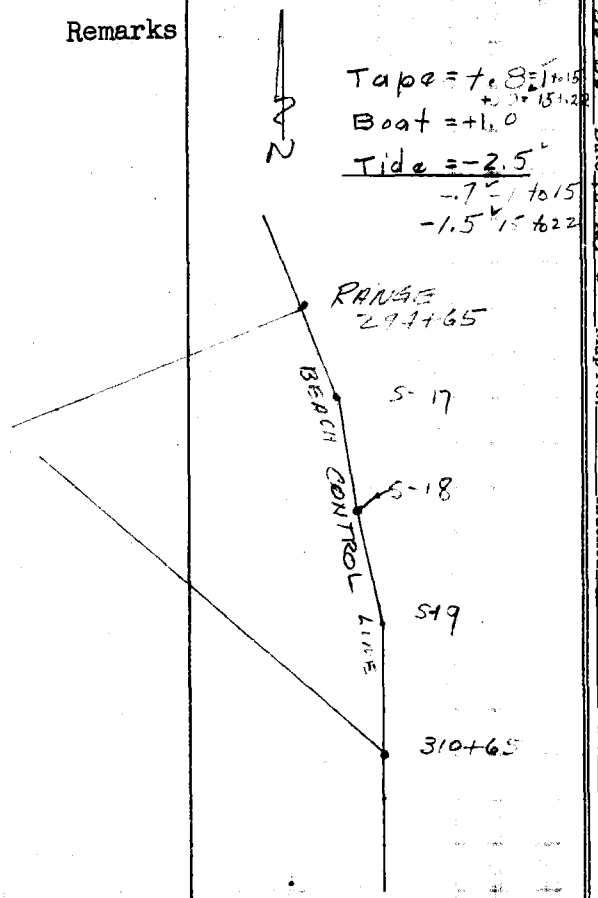
Profile No. _____ X-Sec. No. _____

Notes Red C.W.H. Plotted C.W.H. Job No. _____ Division No. 11
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. J.S.H. Checked J.S.H. Survey by [illegible] Notes [illegible] Date [illegible]
Date 8-30-60 Date 10-25-60 Map No. _____ Indexed [illegible] Date _____

F.B. 28005 Pg. 123

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
310+65	S-19	1	81.7	81.0	5-32	76°-57'	2,531'
		2	86.5	85.8		75°-49'	2,439'
		3	88.1	87.4		74°-43'	2,352'
		4	97.5	96.8		74°-00'	2,297'
		5	92.9	92.2		73°-05'	2,226'
		6	85.3	84.6		72°-17'	2,170'
		7	81.4	80.7		71°-39'	2,128'
		8	77.9	77.2		70°-54'	2,076'
		9	76.8	76.1		70°-08'	2,025'
		10	78.8	78.1		69°-23'	1,979'
		11	81.1	80.4		68°-28'	1,927'
		12	82.4	81.7		67°-37'	1,875'
		13	84.9	84.2		66°-31'	1,809'
		14	98.8	98.1		65°-18'	1,743'
		15	115.2	114.5		64°-49'	1,717'
		16	121.4	119.9		64°-17'	1,688'
		17	125.0	123.5		63°-35'	1,653'
		18	127.5	126.0		62°-44'	1,611'
		19	128.3	126.8		62°-05'	1,580'
		20	128.8	127.3		61°-26'	1,547'



76L-298 CE 307 11-58

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F.B. 2805 Pg. 124 Job No. 0300.02 Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile
Survey of BEACH EROSION STUDIES Date 8-30-60 Date 10-25-60 No. X-Sec.
Survey by WARREN SMITH Notes: Notes Chkd. J.S.H. Checked J.S.H.
Indexed H. E. OFF Date Date 8-30-60 Date 10-25-60 No.

STATION		B.S.	H.I.		F.S.	ELEV		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
310+65	5-19	21	125.5	123.7		60°-54'	1,524'	= +0.5 = 21+0.22
		22	117.9	116.4		60°-31'	1,507'	Tape = +.4 = 23+0.40
		23	107.4	106.3		59°-39'	1,466'	Boat = +1.0
		24	101.1	100.0		59°-01'	1,439'	Tide = -2.5
		25	93.6	92.5		58°-23'	1,411'	-1.5 - 21 to 22
		26	89.2	88.1		57°-46'	1,385'	-1.1 - 23 to 40
		27	86.9	85.8		57°-14'	1,361'	
		28	84.2	83.1		56°-30'	1,331'	
		29	81.2	80.1		55°-39'	1,296'	
		30	79.1	78.0		54°-56'	1,267'	
		31	74.3	73.2		53°-57'	1,231'	
		32	71.3	70.2		53°-06'	1,197'	
		33	68.6	67.5		52°-05'	1,160'	
		34	68.0	66.9		51°-05'	1,123'	
		35	67.8	66.7		50°-27'	1,101'	
		36	69.7	68.6		49°-24'	1,062'	
		37	74.5	73.4		48°-04'	1,015'	
		38	81.4	80.3		46°-56'	977'	
		39	79.9	78.8		45°-53'	942'	
		40	77.5	76.4		45°-03'	916'	

76L-298 CE 307 11-58

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Profile No. ____ X-Sec. No. ____ Notes Red C.W.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2705 PG. 125
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. J.J.H. Checked J.J.H. Survey by [illegible] Notes [illegible] Date 7-[illegible]-65
Date 8-30-60 Date 10-25-60 Map No. ____ Indexed H. E. OTT Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
		41	74.1	72.8		43°-55'	879'	Tape = +.3
		42	70.9	69.6		42°-44'	840'	Boat = +1.0
		43	66.5	65.2		41°-30'	803'	Tide = -2.6
		44	62.3	61.0		40°-08'	761'	-1.3'
		45	57.0	55.7		38°-48'	720'	RANGE 294+65
		46	48.2	46.9		37°-42'	688'	
		47	38.0	36.7		36°-33'	653'	
		48	33.3	32.0		35°-55'	635'	
		49	30.4	29.1		35°-15'	616'	
		50	28.9	27.6		34°-31'	595'	
		51	27.1	25.8		33°-46'	572'	
		52	25.5	24.2		33°-00'	551'	
		53	23.9	22.6		32°-04'	526'	
		54	22.0	20.7		31°-42'	515'	
		55	20.3	19.0		29°-40'	458'	
		56	18.8	17.5		28°-40'	431'	
		57	17.1	15.8		27°-43'	403'	
		58	16.1	14.8		27°-02'	385'	
		59	14.5	13.2		25°-53'	353'	
		60	13.0	11.7		24°-50'	325'	

310+65 S-19

76L-298 CE 307 11-58

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F.B. 2805 Pg. 126 Job No. 0300.02 Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile
Survey of BEACH EROSION STUDIES Date 8-30-60 Date 10-25-60 No. X-Sec.
Survey by CHARGE Notes SMITH N. Notes Chkd. J.S.H. Checked J.S.H. No.
Indexed B. E. Date Date 8-30-60 Date 10-25-60

STATION		B.S.	H.I.		F.S.	ELEV			
Inst. At	Sight On		Depth # Rec.	Adj.	Time	Hor. Ang.		Remarks	
		61	11.7	10.4		23°-49'	298'		Tape = +.3
		62	10.8	9.5		22°-51'	271'		Boat = +1.0
		63	9.4	8.1		21°-51'	244'		Tide = -2.6
		64	8.7	7.4		21°-06'	223'		-1.3
		65	7.6	6.3		20°-33'	208'		
		66	6.5	5.2	5-40	19°-49'	187'		
310+65	5-19								

76L-298 CE 307 11-58

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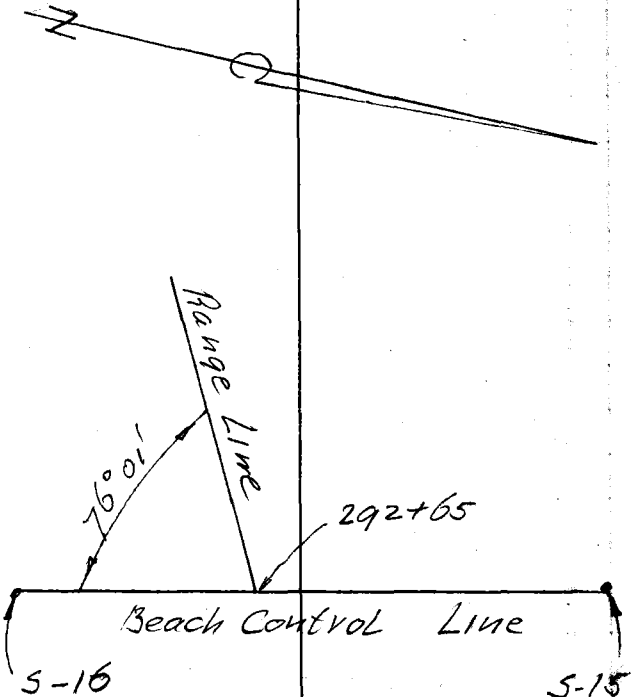
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
292+65	S-16	1			5 51	76° 01	
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
		8				"	
		9				"	
		10				"	
		11				"	
		12				"	
		13				"	
		14				"	
		15				"	
		16				"	
		17				"	
		18				"	
		19				"	
		20				"	



Profile Notes Red C.W.H. Plotted C.W.H. Job No. 030002 Division No. 11 F.B. 2805 Pg. 127
Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
No. X-Sec. Notes Chkd. J.S.H. Checked J.S.H. Survey by C. Hughes Notes Date 6-21-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H. E. Ott Date

76L-298 CE 307 11-58

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F.B. 2805 Pg. 128 Job No. 0300.02 Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile
Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 No. X-Sec.
Survey by Market Notes Tee boom Notes Chkd. J.S.H. Checked J.S.H. No.
Indexed E.E.O. Date Date 8-30-60 Date 10-25-60 No.

STATION		B.S.	H.I.	F.S.	ELEV	
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor.Ang.	Remarks
292+65	5-16	21		76°01'		
		22		"		
		23		"		
		24		"		
		25		"		
		26		"		
		27		"		
		28		"		
		29		"		
		30		"		
		31		"		
		32		"		
		33		"		
		34		"		
		35		"		
		36		"		
		37		"		
		38		"		
		39		"		
		40		"		

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		41			79° 01'		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
		47			"		
		48			"		
292+65	5-16	49		5 58	"		

Profile Notes Red C.W.H. Plotted C.W.H. Job No. Division No. 11 F.B. 2805 Pg. 129
No. Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Study
X-Sec. Notes Chkd. J.S.H. Checked J.S.H. Survey by Chaney Notes Tobey Date 7-21-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H.E. Ott Date

76L-296 CE 307 11-56

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Do not extend notes this side of this line.

STATION	B.S.	H.I.	F.S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. Adj.	Time	Hor.Ang.		Remarks

F.B. 2005 Pg. 130 Job No. 030002 Division No. 11 Notes Red ____ Plotted ____ Profile No. ____
Survey of Beach Erosion Studies Date ____ Date ____ X-Sec. No. ____
Survey by Dhamet Notes Tee Boom Notes Chkd. ____ Checked ____
Indexed E. L. C. Date ____ Date ____

76L-298 CE 307 11-58

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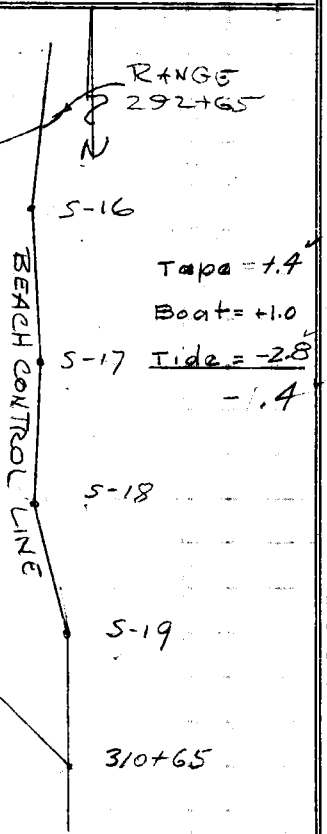
Profile Notes Red C.W.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 131
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
No. X-Sec. Notes Chkd. J.S.H. Checked J.S.H. Survey by [illegible] Notes [illegible] Date 7-21-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed [illegible] Date

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
310+65	5-19	1	67.2	65.8	5-51	70°-32'	2,328'
		2	66.4	65.0		69°-21'	2,242'
		3	66.0	64.6		68°-20'	2,172'
		4	65.5	64.1		66°-55'	2078'
		5	66.0	64.6		65°-23'	1,982'
		6	67.7	66.3		64°-08'	1,907'
		7	73.8	72.4		62°-45'	1,831'
		8	82.8	81.4		61°-55'	1,783'
		9	88.1	86.7		60°-49'	1,727'
		10	91.7	90.3		59°-53'	1,678'
		11	96.0	94.6		58°-50'	1,625'
		12	98.3	96.9		58°-01'	1,586'
		13	99.4	98.0		57°-18'	1,550'
		14	98.9	97.5		56°-17'	1,502'
		15	95.7	94.3		55°-06'	1,449'
		16	92.6	91.2		54°-00'	1,402'
		17	88.9	87.5		52°-48'	1,349'
		18	85.8	84.4		51°-57'	1,316'
		19	82.0	80.6		50°-55'	1,271'
		20	77.9	76.5		50°-02'	1,235'



Tape = +1.4
Boat = +1.0
Tide = -2.8
-1.4

76L-298 CE 307 11-58

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F.B. 2805 Pg. 132 Job No. 63 SEC. 02 Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile
Survey of BEACH EROSION STUDIES Date 8-30-60 Date 10-25-60 No.
Survey by ~~WHALE~~ Notes SMITH N Notes Chkd. J.S.H. Checked J.S.H. X-Sec.
Indexed ~~B.E. 011~~ Date Date 8-30-60 Date 10-25-60 No.

STATION	B.S.	H.I.	F.S.	ELEV		
Inst. At / Sight On	#	Depth Rec. / Adj.	Time	Hor. Ang.		Remarks
3/0+65 / 5-19	21	74.4 / 72.8		47°10'	1,200'	Tape = +.2
	22	70.2 / 68.6		48°07'	1,158'	Boat = +1.0
	23	66.4 / 64.8		4[illegible]	1,119'	Tide = -2.8
	24	63.9 / 62.3		4[illegible]	1,088'	-1.6
	25	60.8 / 59.2		44°08'	1,047'	
	26	57.5 / 55.9		4[illegible]	992'	
	27	55.6 / 54.0		4[illegible]	939'	
	28	54.1 / 52.5		40°42'	893'	
	29	51.9 / 50.3		37°[illegible]	844'	
	30	48.5 / 46.9		35°44'	800'	
	31	40.7 / 39.1		32°36	749'	
	32	36.2 / 34.6		35°50	724'	
	33	32.6 / 31.0		34°57	696'	
	34	30.3 / 28.7		34°05	668'	
	35	28.2 / 26.6		33°10'	639'	
	36	26.9 / 25.3		36°24	615'	
	37	25.9 / 24.3		31°35	588'	
	38	24.9 / 23.3		30°54	567'	
	39	24.0 / 22.4		30°12'	544'	
	40	22.9 / 21.3		29°25	521'	

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Profile No. ____ X-Sec. No. ____ Notes Red C.W.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 133
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. V.S.H. Checked V.S.H. Survey by [illegible] Notes [illegible] Date 7-21-60
Date 8-30-60 Date 10-25-60 Map No. ____ Indexed H.E. OH Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
		41	22.0	20.2		28°-36'	495'	Tape = +.1
		42	21.5	19.7		27°-55'	473'	Boat = +1.0
		43	19.4	17.6		27°-14'	450'	Tide = -2.9
		44	17.8	16.0		26°-05'	416'	-1.8
		45	16.2	14.4		25°-22'	395'	
		46	14.8	13.0		24°-35'	369'	
		47	13.1	11.3		23°-41'	342'	
		48	11.9	10.1		22°-56'	319'	
		49	10.1	8.3	5-58	22°-09'	296'	

Range 292+65

310+65

5+19

F.B. 2805 Pg. 134

Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by UHARMET Notes SMITH, N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

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STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.

76L-298 CE 307 11-58

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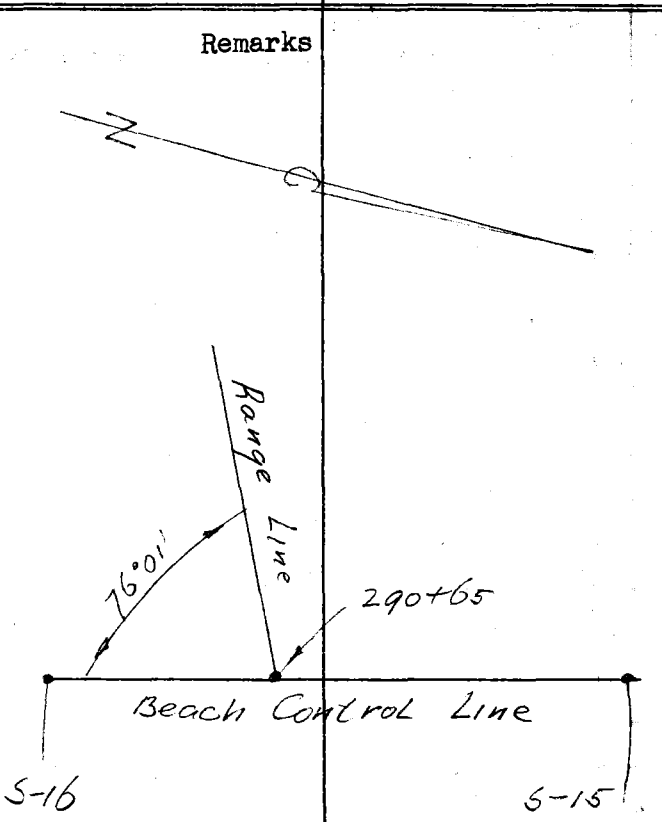
STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
290+65	5-16	1			648	76°01'	
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
		8				"	
		9				"	
		10				"	
		11				"	
		12				"	
		13				"	
		14				"	
		15				"	
		16				"	
		17				"	
		18				"	
		19				"	
		20				"	



Profile Notes Red C.W.H. Plotted C.W.H. Job No. Division No. 11
Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
No. X-Sec. Notes Chkd. J.S.H. Checked J.S.H. Survey by Unknown Notes Date 7-21-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H. E. OH Date
030032
F.B. 2805 Pg. 133

F.B. 2805 Pg. 136 | 030002 Job No. Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile

Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 No.

Survey by Uharriet Notes Teeboom Notes Chkd. J.S.H. Checked J.S.H. X-Sec.

Indexed H.E. OTT Date Date 8-30-60 Date 10-25-60 No.

STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At 290+65					
Sight On 5-16					
#	Rec.	Adj.	Time	Hor. Ang.	
21				76° 01'	
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					

Depth

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor.Ang.	Remarks	
		41			656	76° 01'	Ocean side	of Jetty
		42			659	"	Harbor side	of Jetty
		43				"		
		44				"		
		45				"		
		46				"		
		47				"		
		48				"		
		49				"		
290+65	5-16	50				"		
		51			700	"		

Profile Notes Red C.W.H. Plotted C.W.H. Job No. 030002 Division No. 11 F.B. 2805 Pg. 137
No. X-Sec. Data 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
No. Notes Chkd. J.S.H. Checked J.S.H. Survey by ~~Chained~~ Notes ~~Reduced~~ Date ~~7-21-60~~
Data 8-30-60 Date 10-25-60 Map No. Indexed H. E. Ott Date

F.B. 2805 Pg. 138 | 0300.02

Job No. _____ Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by Dharriet Notes Teeboom Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-296 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.

76L-298 CE 307 11-58

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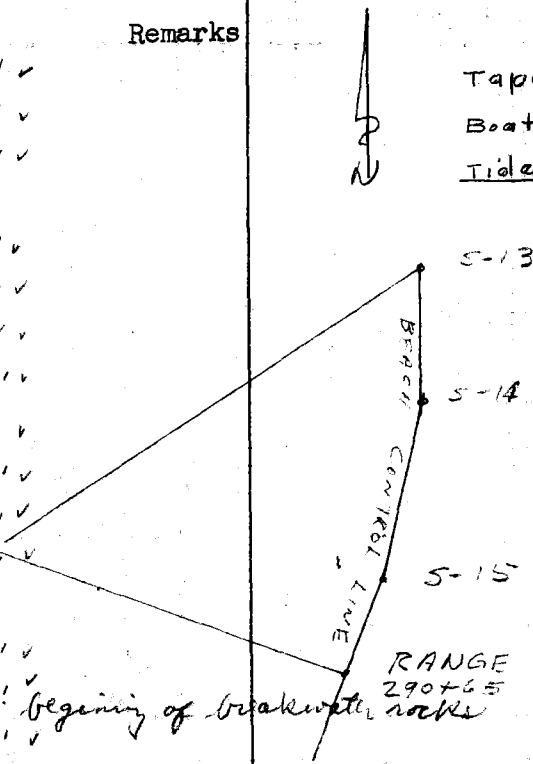
Profile Notes Red C.W.H. Plotted C.W.H. Job No. 0300.0 Division No. 11 F.B. 2805 Pg. 139
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
X-Sec. No. Notes Chkd. J.S.H. Checked J.S.H. Survey by [illegible] Notes [illegible] Date 7-21-60
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H.E.O.T. Date

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
5-13	5-14	1	63.2	61.0	6:48	47°48'	2,427'
		2	62.9	60.7		47°00'	2,363'
		3	63.2	61.0		45°55'	2,277'
		4	62.7	60.5		4 -	
		5	63.3	61.1		42°54'	2,049'
		6	64.6	62.4		41°-13'	1,935
		7	67.9	65.7		38°43'	1,767'
		8	69.9	67.7		37°05'	1,662'
		9	72.5	70.3		34°-50	1,528'
		10	67.9	65.7		33°17'	1,439'
		11	64.0	61.8		32°37'	1,402'
		12	59.9	57.7		30°40	1,291'
		13	56.1	53.9			
		14	53.2	51.0		29°41'	1,239'
		15	45.0	42.8		28°-58'	1,199' Begining of breakwater rocks
		16	33.6	31.4		28°-32	1,179'
		17	26.0	23.8		28°-10	1,158'
		18	20.1	17.9		27°42'	1,138'
		19	20.2	18.0		27°-15'	1,108'
		20	25.2	23.0		26°-54'	1,091'

Tape = +.4
Boat = +1.0
Tide = -3.6
-2.2



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F.B. 2805 Pg. 140 Job No. 0300.02 Division No. 11 Notes Red C.W.H. Plotted C.W.H. Date 10-25-60 No. Profile
Survey of BEACH EROSION STUDIES Date 8-30-60 Notes Chkd. J.S.H. Checked J.S.H. Date 10-25-60 No. X-Sec.
Survey by LHARRIETT Notes E.L.J.H. Date
Indexed

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
5-13	5-14	21	30.5	28.1		26°-28'	1,068'
		22	39.3	36.9		25°-48'	1,034' end of breakwater rocks
		23	38.9	36.5		25°-08'	1,001'
		24	39.9	36.5		24°-17'	959'
		25	36.8	34.4		23°-43'	930'
		26	36.0	33.6		23°-10'	903'
		27	34.9	32.5		22°-26'	866'
		28	33.8	31.4		21°-50'	839'
		29	32.4	30.0		21°-06'	802'
		30	30.8	28.4		20°-30'	772'
		31	30.0	27.6		19°-52'	744'
		32	29.6	27.2		19°-21'	719'
		33	28.8	26.4		18°-48'	691'
		34	28.1	25.7		18°-19'	669'
		35	27.3	24.9		17°-50'	647'
		36	26.1	23.7		17°-11'	615'
		37	24.5	22.1		16°-34'	587'
		38	22.9	20.5		16°-00'	561'
		39	21.8	19.4		15°-33'	539'
		40	18.8	16.4		15°-04'	519' beginning of silty rocks

Tape = +.2
Boat = +1.0
Tide = -3.6
-2.4

76L-298 CE 307 11-58

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Profile No. ____ X-Sec. No. ____ Notes Red C.W.H. Plotted C.W.H. Job No. 6300.02 Division No. 11 F.B. 2805 Pg. 14
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
Notes Chkd. J.S.H. Checked J.S.H. Survey by LHHEKE Notes ____ Date 7-21-60
Date 8-30-60 Date 10-25-60 Map No. ____ Indexed H.E. OTT Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor.Ang.	Remarks	
		41	12.2	9.6	6-56	14°-40'	499' OCEAN SIDE OF JETTY	
		42	11.5	8.9	6-59	11°-38'	361' HARBOR SIDE OF JETTY	
		43	16.6	14.0		11°-01'	334'	
		44	16.3	13.7		10°-32'	311'	Tape = +.1
		45	14.9	12.3		9°-33'	268'	Boat = +1.0
5	5	46	13.3	10.7		8°-42'	229'	Tide = -3.7
		47	12.4	9.8		8°-06'	203'	-2.6
		48	10.3	7.7		7°-14'	163'	
3	4	49	8.4	5.8		6°-38'	137'	
		50	5.1	2.5		5°-59'	107'	
		51	4.0	1.4	7-00	5°-45'	98'	

RANGE 290+65

F. B. 2805 Pg. 142 Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by VHARRIET Notes _____ Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B. S.	H. I.	F. S.	ELEV	
Inst. At	Sight On	#	Depth Rec.	Adj.	Time
					Hor. Ang.
					Remarks

76L-298 CE 307 11-58

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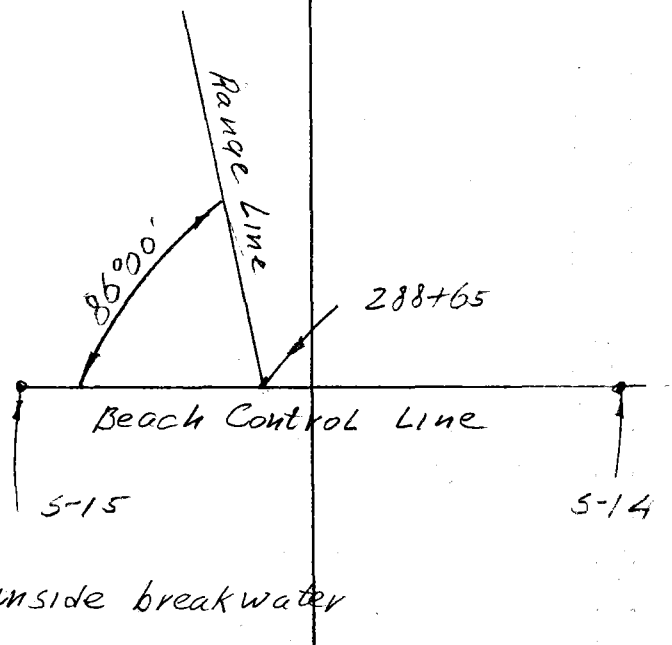
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		1		7 12	86° 00'	Outside breakwater
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
288+65	S-15	9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14		7 14	"	
		15		7 32	"	
		16			"	
		17			"	
		18			"	
		19			"	
		20			"	



Profile Notes Red C.W.H. Plotted C.W.H. Job No. 3300.02 Division No. 11
No. X-Sec. Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Study
No. Notes Chkd. J.S.H. Checked J.S.H. Survey by Hagerty Notebook Date
Date 8-30-60 Date 10-25-60 Map No. Indexed H. E. Ott Date

F.B. 2805 Pg. 143

F.B. 2805 Pg. 144 Job No. 030002 Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile
Survey of Beach Erosion Studies Date 8-30-60 Date 10-25-60 No. X-Sec.
Survey by Warren Notes Teebow Notes Chkd. J.S.H. Checked J.S.H. No.
Indexed H.E. OTT Date Date 8-30-60 Date 10-25-60 No.

78L-298 CE 307 11-58

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STATION		B.S.	H.I.	F.S.	ELEV		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
288+65	5-15	21			86° 00		
		22			"		
		23			"		
		24			"		
		25			"		
		26			"		
		27			"		
		28			"		
		29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40			"		

76L-298 CE 307 11-58

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STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor.Ang.	Remarks	
		41		1 36	85° 00'		
28+85	5-5						

Profile No. X-Sec. No. Notes Red C.W.H. Plotted C.W.H. Job No. 03002 Division No. 11 F.B. 2803 Pg. 145
Date 8-30-60 Date 10-25-60 Survey of Beach Erosion Studies
Notes Chkd. J.S.H. Checked J.S.H. Survey by Hancock Notes Checked Date 7-21-60
Date 8-30-60 Date 10-25-60 Map No. Inked Date

F.B. 2805 Pg. 146 Job No. 030002 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by Vhornet Notes Tee boom Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-266 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

STATION	B.S.	H.I.	F.S.	ELEV.	
Inst. At	Sight On	Depth # Rec. Adj.	Time	Hor. Ang.	Remarks

76L-298 CE 307 11-58

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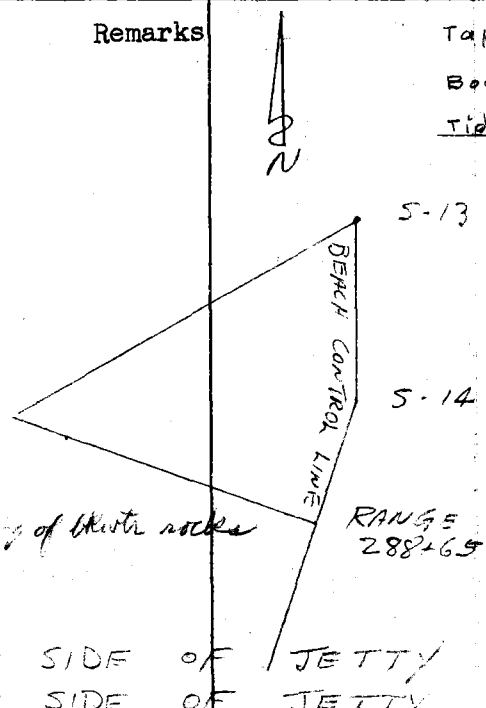
Do not extend notes this side of this line.

Profile No. ____ X-Sec. ____ Notes Rod C.W.H. Plotted C.W.H. Job No. 0300.02 Division No. 11 Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES Notes Chkd J.S.H. Checked J.S.H. Survey by C. HARPER Notes ____ Date 2-21-60 No. ____ Date 8-30-60 Date 10-25-60 Map No. ____ Traced H. E. OH Date ____ F.B. 2805 Pg. 147

STATION Inst. At	Sight On	#	B.S.	H.I. Depth Rec.	H.I. Depth Adj.	F.S.	Time	ELEV. Hor. Ang.	Remarks
5-13	5-14	1		—			7-12	48°-12'	—
		2		59.0	56.2			46°-20'	2,170'
		3		58.3	55.5			44°-22'	2,035'
		4		57.8	55.0			42°-43'	1,925'
		5		56.6	53.8			41°-12'	1,825'
		6		54.8	52.0				
		7		53.3	50.5			38°-11'	1,642'
		8		52.2	49.4			36°-30'	1,551'
		9		50.3	47.5			34°-55'	1,457'
		10		49.0	46.2			33°-45'	1,392'
		11		46.3	43.5			32°-47'	1,343' beginning of flat rocks
		12		36.4	33.6			32°-08'	1,308'
		13		25.2	22.4			31°-41'	1,286'
		14		17.2	14.4		7-14	31°-20'	1,268' OCEAN SIDE OF JETTY
		15		20.2	17.2		7-32	28°-03'	1,105' HARBOR SIDE OF JETTY
		16		33.6	30.6			27°-10'	1,061' end of flat rocks
		17		34.8	31.8			26-30'	1,029'
		18		33.8	30.8			25-35'	984'
		19		32.8	29.8			24°-54'	952'
		20		32.6	29.6			24°-05'	916'



Tape = .0
Boat = +1.0
Tide = -3.8
-2.8

Tape = .0
Boat = +1.0
Tide = -4.0
-3.0

76L-298 CE 307 11-58

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F.B. 2805 PG. 148 Job No. 0300.02 Division No. 11 Notes Red C.W.H. Plotted C.W.H. Profile No.
Survey of BEACH EROSION STUDIES Date 8-30-60 Date 10-25-60 X-Sec. No.
Survey by UHARRIET Notes Notes Chkd. J.S.H. Checked J.S.H.
Indexed H.E. OH Date Date 8-30-60 Date 10-25-60

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S.	Time	ELEV Hor. Ang.		Remarks
5-13	5-14	21	32.0	29.0			23°10'	876'	Tape = .0
		22	31.4	28.4			22°32'	845'	Boat = +1.0
		23	30.8	27.8			21°48'	815'	Tide = -4.0
		24	29.7	26.7			20°45'	767'	-3.0
		25	29.0	26.0					
		26	28.4	25.4					
		27	27.8	24.8			17°45'	633'	
		28	27.4	24.4			16°13'	567'	
		29	25.2	22.2			15°00'	516'	
		30	22.5	19.5			13°57'	471'	
		31	21.0	18.0			12°45'	420'	
		32	19.7	16.7			11°25'	367'	
		33	18.5	15.5			10°17'	319'	
		34	17.3	14.3			9°13'	271'	
		35	15.8	12.8			8°22'	239'	
		36	14.1	11.1			7°23'	198'	
		37	13.5	10.5			6°57'	180'	
		38	11.5	8.5			5°59'	139'	
		39	9.8	6.8			5°15'	110'	
		40	6.7	3.7			4°46'	89	

Profile No. Notes Red C.W.H. Plotted C.W.H. Job No. 030-[illegible] Division No. 11 F.B. 2805 Pg. 149
Date 8-30-60 Date 10-25-60 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. J.S.H. Checked J.S.H. Survey by [illegible] Notes [illegible] Date 7-21-65
No. Date 8-30-60 Date 10-25-60 Map No. Indexed H. E. Off. Date

RANGE 28 & 65

Tape = .0
Boat = +1.0
Tide = -4.0
-3.0

STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Sight On	# Rec. Adj. 41	Depth 5.1 ✓2.4	Time 7-36	Hor. Ang. 4°-34	76'
Inst. At	5-14				
	5-13				

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76L-298 CE 307 11-58

F.B. 2805 Pg. 150 Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by HARRIET Notes _____ Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At	Sight On	Depth # Rec.	Adj.	Time	Hor. Ang.

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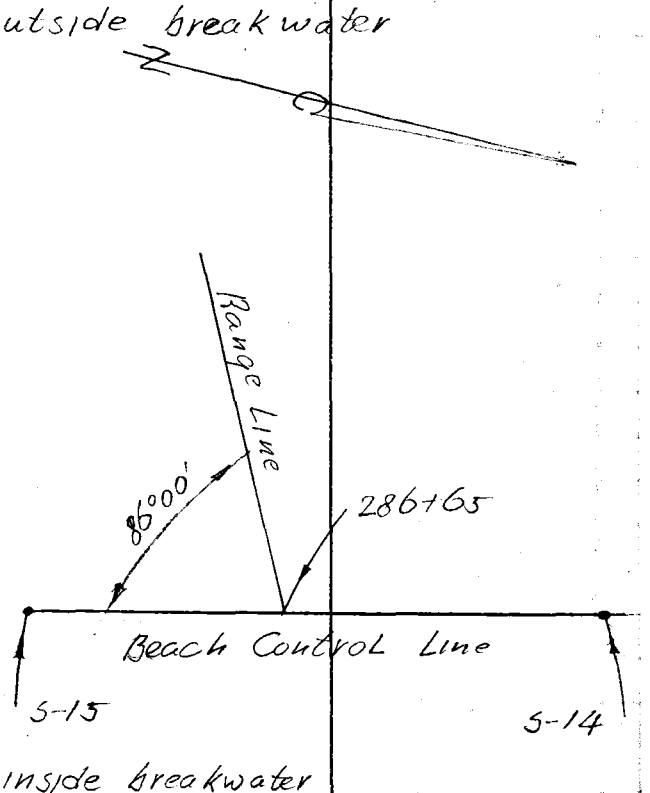
STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		1			757	86°00'	outside breakwater
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
		8				"	
286+65	5-15	9				"	
		10				"	
		11				"	
		12				"	
		13				"	
		14				"	
		15				"	
		16			8 00	"	
		17			8 16	"	
		18				"	
		19				"	
		20				"	



Profile No. X-Sec. No.
Notes Red J.S.H. Plotted J.S.H. Job No. 030002 Division No. 11
Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes Taken Date 1-21-60
Date 10-26-60 Date 10-27-60 Map No. Indexed [illegible] Date
F.B. 2805 Pg. 151

76L-298 CE 307 11-58

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F.B. 2805 Pg. 152 Job No. 6300.02 Division No. 11 Notes Red J. S.H. Plotted J. S.H. Profile
Survey of Beach Erosion Studies Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by Wharrey Notes Teedom Notes Chkd. C.W.H. Checked C.W.H.
Indexed H. E. Ott Date Date 10-26-60 Date 10-27-60 No.

STATION		B.S.	H.I.	F.S.	ELEV		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		21			86° 00'		
		22			"		
		23			"		
		24			"		
		25			"		
		26			"		
		27			"		
286+65	5-15	28			"		
		29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37		8 19	"		

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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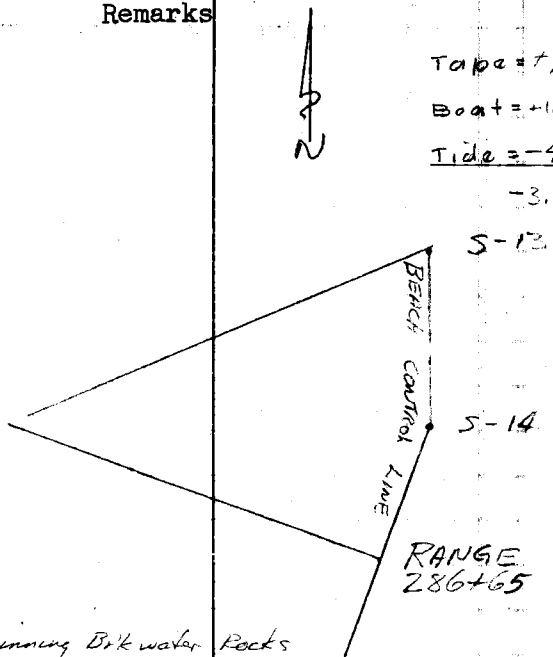
Profile No. ____ X-Sec. ____ Notes Red J.S.H. Plotted J.S.H. Job No. 0300.00 Division No. 11 F.B. 2805 Pg. 123
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes [illegible] Date [illegible]
Date [illegible] Date [illegible] Map No. ____ Indexed H.E. OTT Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
		1	56.4	53.3	7-57	54°-35	2,645'	
		2	55.5	52.4		53°-44	2,575'	
		3	54.9	51.8		52°-22	2,459'	
		4	53.9	50.8		51°-14	2,369'	
		5	53.5	50.4		50°-06	2,278'	
5-13	5-14	6	52.4	49.3		49°-07	2,205'	
		7	52.1	49.0		47°-47	2,110'	
		8	51.5	48.4		46°-34	2,029'	
		9	50.7	47.6		45°-20	1,947'	
		10	49.1	46.0		43°-10	1,810'	
		11	48.1	45.0		41°-42	1,723'	
		12	46.4	43.3		40°-05	1,631'	
		13	45.0	41.9		38°-54	1,562'	
		14	44.3	41.2		37°-57	1,514' Beginning Brk water Rocks	
		15	35.0	31.9		37°-10	1,470'	
		16	23.3	20.2	8-00	36°-35	1,441' OCEAN SIDE OF JETTY	
		~~17~~			8-02	~~33°-49~~	HARBOR SIDE OF JETTY	
		~~18~~				~~32°-56~~		
		~~19~~				~~31°-58~~	REJECT SHOTS	
		~~20~~				~~30°-20~~	17 THRU 34	

Tape = +.1
Boat = +1.0
Tide = -4.2
-3.1



76L-298 CE 307 11-58

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F.B. 2865 PG. 154 Job No. 0300.02 Division No. 11 Notes Red ____ Plotted ____ Profile No. ____
Survey of BEACH EROSION STUDIES Date ____ Date ____ X-Sec. No. ____
Survey by WHARRIET Notes SMITH N Notes Chkd. ____ Checked ____
Indexed H.E. OTT Date ____ Date ____ Date ____

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
5-13	5-14	21			29°-23'	REJECT SHOTS 17 THRU 34	
		22			28°-22'		
		23			26°-38'		
		24			25°-21'		
		25			24°-20'		
		26			23°-00'		
		27			21°-37'		
		28			20°-12'		
		29			18°-35'		
		30			16°-38'		
		31			15°-07'		
		32			13°-27'		
		33			11°-50'		
		34		8-05	9°-10'		
		35					

76L-298 CE 307 11-58

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Profile No. ____ Notes Red J. S. H. Plotted J. S. H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 155
X-Sec. No. ____ Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C. W. H. Checked C. W. H. Survey by [illegible] Notes ____ Date ____
Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H. E. OH Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
S-13	S-14	17	8.2	5.1	8-16	34°-00'	RERUN 1,311' HARBOR SIDE	OF JETTY
		18	19.5	16.4		33°-16'	1,277'	
		19	36.5	33.4		32°-21'	1,233' End of Brk water rocks	Tape = +.1
		20	37.0	33.9		31°-42'	1,200'	Boat = +1.0
		21	33.4	30.3		30°-19'	1,135'	Tide = -4.2
		22	33.0	29.9		28°-29'	1,055'	-3.1
		23	32.3	29.2		26°-36'	970'	
		24	30.9	27.8		24°-16'	870'	
		25	29.2	26.1		22°-01'	778'	
		26	27.9	24.8		20°-17'	707'	
		27	26.6	23.5		18°-20'	626'	
		28	25.0	21.9		16°-47'	566'	
		29	23.8	20.7		15°-16'	509'	
		30	22.2	19.1		13°-20'	432'	
		31	20.9	17.8		11°-36'	365'	
		32	19.7	16.6		10°-03'	307'	
		33	18.0	14.9		8°-31'	249'	
		34	17.6	14.5		7°-11'	198'	
		35	16.4	13.3		5°-50'	148'	
		36	14.0	10.9		4°-52'	111'	

PAGE 2869-65

F. B. 2805 Pg. 156 | Job No. 0300.02 Division No. 11 Notes Red J. S. H. Plotted J. S. H. Profile

Survey of BEACH EROSION STUDIES Date 10-26-60 Date 10-27-60 No.

Survey by HARRIET Notes SMITH N Notes Chkd. C. W. H. Checked C. W. H. X-Sec.

Indexed H. E. OH Date Date 10-26-60 Date 10-27-60 No.

76L-298 CE 307 11-58

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STATION	Inst. At / Sight On	B. S.	H. I.	F. S.	ELEV	Remarks
S-13						
S-14						
		# Rec. Adj. 36 11.8 ✓ 8.7	Depth Time 8-19	Hor. Ang. 4-08	82'✓	
						Tape = +.1 ✓ Boat = +1.0 Tide = -4.2 ✓ -3.1 ✓

76L-298 CE 307 11-58

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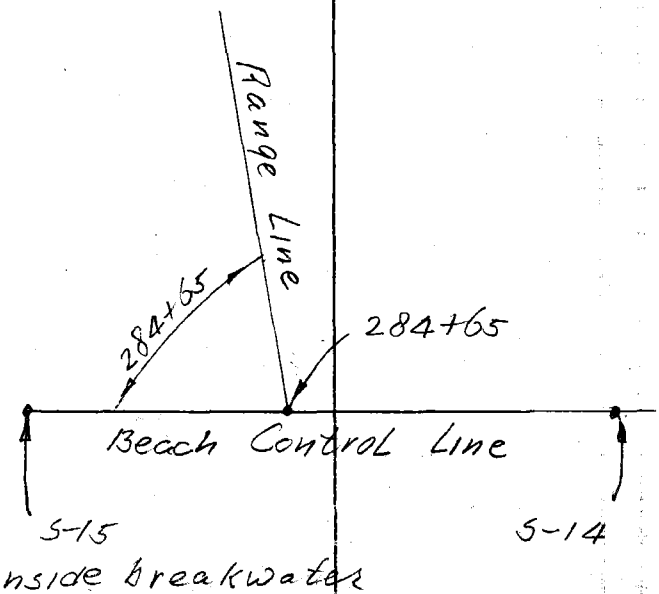
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		1			8 27	86° 00'	Outside breakwater
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
284+65	5-15	8				"	
		9				"	
		10				"	
		11				"	
		12				"	
		13				"	
		14				"	
		15			8 30	"	
		16			8 52	"	
		17				"	
		18				"	inside breakwater
		19				"	
		20				"	



Profile Notes Red J.S.H. Plotted J.S.H. Job No. 030002 Division No. 11 F.B. 2805 Pg. 157
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes [illegible] Date 7-21-60
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H.E. on Date

F. B. 2805 Pg. 158 | 030002

Job No. _____ Division No. 11 Notes Red J. S. H. Plotted J. S. H. Profile

Survey of Beach Erosion Studies Date 10-26-60 Date 10-27-60 No. _____

Survey by Uhorvat Notes Teeboom Notes Chkd. C. W. H. Checked C. W. H. X-Sec.

Indexed _____ Date _____ Date 10-26-60 Date 10-27-60 No. _____

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK. WITH DATE AND NAME OF PERSON MAKING CHANGE.

STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At 284+65					
Sight On 5-15					
#	Depth Rec.	Adj.	Time	Hor. Ang. 80° 00'	
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					
131					
132					
133					
134					
135					
136					
137					
138					
139					
140					

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		-41		8 56	86° 00'		
284+65	5-15						

Profile No. X-Sec. No.
Notes Red J. S. H. Plotted J. S. H. Job No. 23002 Division No. 11 F. B. 2805 Pg. 159
Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
Notes Chkd. C. W. H. Checked C. W. H. Survey by [illegible] Notes [illegible] Date 7-21-62
Date 10-26-60 Date 10-27-60 Map No. Inked H. E. Ott Date

F.B. 2805 Pg. 160 | 0300.02

Job No. _____ Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by Uhernet Notes Teeboom Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-296 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B.S.	H.I.	F.S.	ELEV.	
Inst. At	Sight On	Depth # Rec.	Adj.	Time	Hor. Ang.	Remarks

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK. WITH DATE AND NAME OF PERSON MAKING CHANGE.

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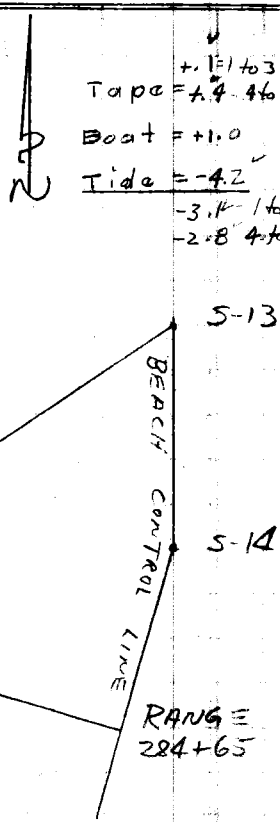
Profile No. X-Sec. Notes Red J.S.H. Plotted J.S.H. Job No. 0300 02 Division No. 11 F.B. 2805
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES PG. 161
Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes [illegible] Date 7-21-65
Date 10-26-60 Date 10-27-60 Map No. Tracing No. Date

STATION Inst. At	Sight On	#	B.S.	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
5-13	5-14	1		57.4	54.3	8-27	59°39'	2,885'
		2		56.7	53.6		58°41'	2,792'
		3		55.2	52.1		57°20'	2,664'
		4		53.9	51.7		55°49'	2,530'
		5		52.8	50.0		54°23'	2,412'
		6		51.9	49.1		53°02'	2,308'
		7		50.5	47.7		51°35'	2,199'
		8		49.3	46.5		49°55'	2,080'
		9		47.9	45.1		48°12'	1,962'
		10		46.4	43.6		46°23'	1,855'
		11		44.7	41.9		44°01'	1,716'
		12		42.6	39.8		42°19'	1,621' Beginning of rocks
		13		37.0	34.2		41°10'	1,561'
		14		22.2	19.4		40°17'	1,518'
		15		13.4	10.6	8-30	39°52'	1,495' OCEAN SIDE OF JETTY
		16				8-34	37°22'	1,370' HARBOR SIDE OF JETTY
		17					36°48'	
		18					36°10'	
		19					35°40'	
		20					35°07'	

REJECT SHOTS 16 THRU 42

+.1 1 to 3
Tape = +.4 4 to 15
Boat = +1.0
Tide = -4.2
-3.1 1 to 3
-2.8 4 to 15



76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

F.B. 2805 PG. 162 Job No. 0300.02 Division No. 11 Notes Red ____ Plotted ____ Profile ____
Survey of BEACH EROSION STUDIES Date ____ Date ____ No. X-Sec. ____
Survey by WHORRIST Notes SMITH N Notes Chkd. ____ Checked ____ No. ____
Indexed H. E. OTT Date ____ Date ____ Date ____

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		21			34°-36'		
		22			32°-35'	REJECTS SHOTS 16 THRU 42	
		23			30°-58'		
		24			28°-47'		
		25			27°-00'		
		26			24°-59'		
		27			23°-13'		
5-13	5-14	28			21°-44'		
		29			19°-54'		
		30			18°-26'		
		31			17°-05'		
		32			15°-33'		
		33			13°-30'		
		34			11°-42'		
		35			10°-07'		
		36			8°-27'		
		37			7°-04'		
		38			6°-02'		
		39			5°-09'		
		40			4°-		

76L-298 CE 307 11-58

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STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
S-13	S-14	~~41~~				~~3°-50~~	
		~~48~~			~~8-36~~		RERUN
		16			8-46	37°45'	HARBOR SIDE OF JETTY.
		17				37°34'	
		18				37°12'	
		19				36°-5'	
		20				36°-14'	REJECT
		21				35°47'	
		22				35°10'	SHOTS
		23				34°31'	
		24				33°50'	16 THRU 37
		25				32°27'	
		26				30°55'	
		27				29°51'	
		28				28°06'	
		29				26°27'	
		30				25°12'	
		31				23°15'	
		32				21°22'	
		33				19°22'	

Profile Notes Rod ____ Plotted ____ Job No. 0300 02 Division No. 11 F.B. 2505 Pg. 163
No. ____ X-Sec. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES
Notes Chkd. ____ Checked ____ Survey by WHAPPLET Notes SMITH Date 7-21-60
Date ____ Date ____ Map No. ____ Date ____ Date ____

76L-298 CE 307 11-58

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F. B. 2805 Pg. 164 Job No. 0300.02 Division No. 11 Notes Red ____ Plotted ____ Profile ____
Survey of BEACH EROSION STUDIES Date ____ Date ____ No. ____ X-Sec. ____
Survey by HARPER & SMITH N Notes ____ Notes Chkd. ____ Checked ____ No. ____
Indexed H. E. OTT Date ____ Date ____ Date ____

STATION	B.S.	H.I.	F.S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
	~~34~~			~~17°17~~		
	~~35~~			~~15°25~~		
	~~36~~			~~14°61~~		
	~~37~~		2.49	~~1.55~~		
	~~38~~					

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Profile Notes Red J.S.H. Plotted J.S.H. Job No. C300.02 Division No. 11 F.B. 2805 Pg. 165
No. Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes [illegible] Date [illegible]
Date 10-26-60 Date 10-27-60 Map No. Index [illegible] Date

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		16	10.5	6.4	8-52	37°30'	RERUN 1,376' HARBOR SIDE OF JETTY
		17	18.6	14.5		36°47'	1,340'
		18	37.4	33.3		36°14'	1,315' Bot of rocks
		19	36.5	32.4		35°41'	1,289'
		20	35.9	31.3		35°10'	1,266'
		21	35.6	31.5		34°37'	1,241'
		22	34.8	30.7		33°19'	1,184'
		23	33.4	29.3		31°51'	1,120'
		24	32.4	28.3		29°45'	1,033'
		25	31.5	27.4		28°16'	972'
		26	30.4	26.3		26°33'	903'
		27	29.2	25.1		24°32'	823'
		28	28.2	24.1		22°34'	749'
		29	27.2	23.1		20°35'	674'
		30	26.0	21.9		18°32'	600'
		31	25.1	21.0		16°39'	532'
		32	24.3	20.2		15°00'	474'
		33	22.9	18.8		13°33'	423'
		34	21.7	17.6		11°45'	360'
		35	20.4	16.3		10°11'	307'

Tide = -1.0
Boat = +1.0
Tide = -4.1
-4.1

RANGE 284+65

5-13

5-14

76L-296 CE 807 11-58

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F.B. 2805 Pg. 166 Job No. 6306.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Date 10-26-60 Date 10-27-60 No. Profile
Survey of BEACH EROSION STUDIES Date 10-26-60 Notes Chkd. C.W.H. Checked C.W.H. Date 10-27-60 No. X-Sec.
Survey by UNHARRIET Notes SMITH N
Indexed H. E. OTT Date

STATION		B.S.	H.I.		F.S.	ELEV.			
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks	
		36	19.3	15.2		8°-40'	288'		Tide = -1.0
		37	18.2	14.1		7°-07'	202'		Boat = +1.0
		38	16.1	12.0		5°-35'	143'		Tide = -4.1
		39	12.8	8.7		4°-12'	101'		-4.1
		40	11.1	7.0		3°-44'	85'		
5-13	5-14	41	8.8	4.7	8-56				

76L-298 CE 307 11-58

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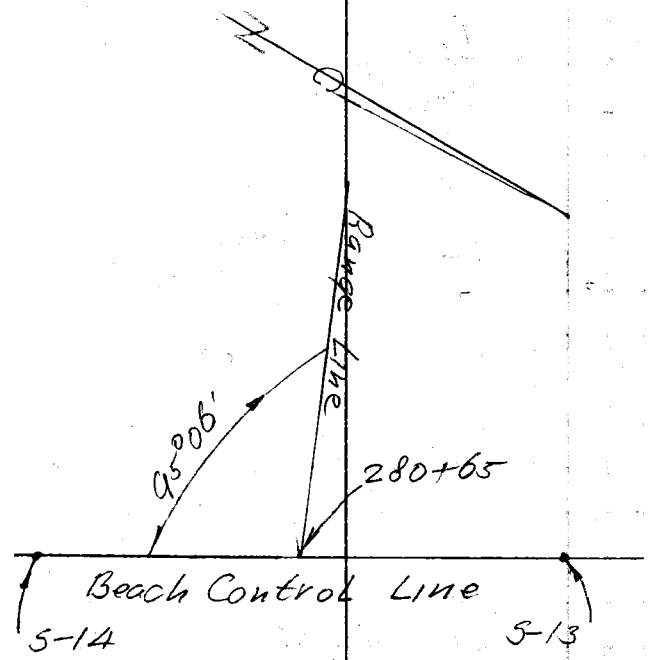
STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		1		924	95°06'	Outside breakwater
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
280+65	5-14	9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17		927	"	
		18		933	"	← Inside breakwater
		19			"	
		20			"	



Profile No. ____ X-Sec. ____ Notes Red J.S.H. Plotted J.S.H. Job No. 030002 Division No. 11
Data 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
Notes Chkd. C.W.H. Checked C.W.H. Survey by Wharrat Notes Taken by Date 7-21-60
No. ____ Date 10-26-60 Date 10-27-60 Map No. ____ Index No. ____ Date ____

F.B. 2805 Pg. 167

76L-298 CE 307 11-58

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F. B. 2805 Pg. 168 Job No. 0300.02 Division No. 11 Notes Red J. S. H. Plotted J. S. H. Profile No.
Survey of Beach Erosion Studies Date 10-26-60 Date 10-27-60 X-Sec. No.
Survey by Unknown Notes Tee Beam Notes Chkd. C. W. H. Checked C. W. H.
Indexed H. E. Ott Date Date 10-26-60 Date 10-27-60

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		21			95° 00'		
		22			"		
		23			"		
		24			"		
		25			"		
		26			"		
		27			"		
280+65	5-14	28			"		
		29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40			"		

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		41			95° 06'		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
		47		935	"		
280+65	5-14						

Profile Notes Red J.S.H. Plotted J.S.H. Job No. Division No. 11 F.B. 2805 Pg. 169
No. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. C.W.H. Checked C.W.H. Survey by Wherrier Notes Reduced Date 7-21-60
~~No. Date 10-26-60 Date 10-27-60 Map No. Indexed H.E. Ott Date~~

030002

F.B. 2805 Pg. 170 | 030002

Job No. _____ Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by Uharriet Notes Teeboom Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B.S.	H.I.	F.S.	ELEV.	
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks

Do not extend notes this side of this line.

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76L-296 CE 307 11-58

76L-298 CE 307 11-58

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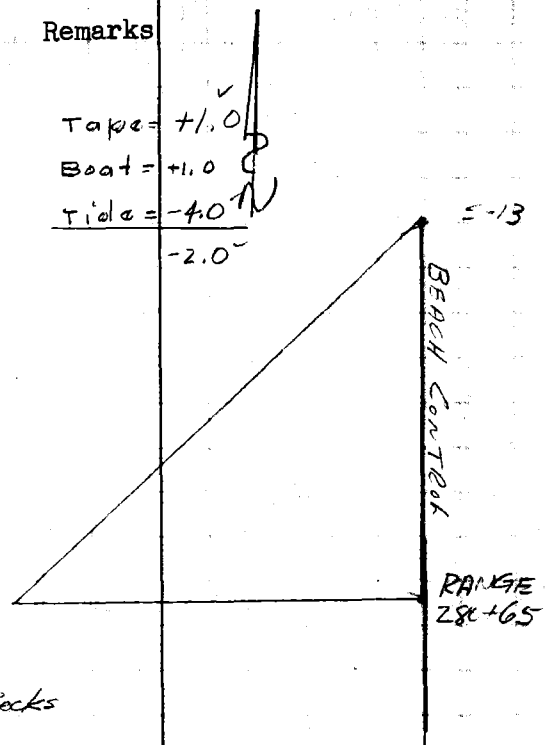
Profile Notes Red J. S. H. Plotted J. S. H. Job No. 0300 C2 Division No. 4
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C. W. H. Checked C. W. H. Survey by HUNAPPIER Notes Continued Date 7-21-60
Date 10-26-60 Date 10-27-60 Map No. Inked H. E. Oil Date
F.B. 2805 Pg. 1/2

STATION Inst. At	Sight On	#	H.I. Depth Rec.	H.I. Depth Adj.	B.S.	Time	F.S.	Hor. Ang.	ELEV.	Remarks
5	5	1	53.0	51.0		9 24		66°-24'	2,992'	
		2	52.0	50.0				65°-25'	2,882'	Tape = +1.0
		3	50.8	48.8				64-20'	2,768'	Boat = +1.0
		4	49.8	47.8				63°-24'	2,671'	Tide = -4.0
		5	48.9	46.9				62°-22'	2,571'	-2.0
		6	47.5	45.5				61°-15'	2,471'	
		7	47.0	45.0				60°-20'	2,392'	
		8	45.8	43.8				59°-35'	2,331'	
		9	44.5	42.5				58°-30'	2,248'	
		10	43.4	41.4				57°-35'	2,175'	
		11	42.6	40.6				56°-15'	2,045'	
		12	42.2	40.2				55°-05'	2,000'	
		13	41.1	39.1				53°-50'	1,922'	
		14	39.5	37.5				52°-57'	1,868'	
		15	38.0	36.0				52°-08'	1,818	Begin Rocks
		16	31.5	29.5						
		17	20.3	18.3		9-27		50°-51'	1,745'	OCEAN SIDE OF JETTY
		18	8.0	6.0		9-33		48°-08'	1,597'	HARBOR SIDE OF JETTY
		19	29.0	27.0				47°-26'	1,563'	
		20	34.0	32.0				47°-03'	1,546	Bot. Rock.



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F.B. 2805 Pg. 172 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile No.
Survey of BEACH EROSION STUDIES Date 10-26-60 Date 10-27-60 X-Sec. No.
Survey by HARRIET Notes SAN THA Notes Chkd. C.W.H. Checked C.W.H.
Indexed H.E. OH Date Date 10-26-60 Date 10-27-60

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S.	Time	ELEV. Hor. Ang.		Remarks
		21	34.0	31.9			46°56'	1,538'	Tape = +.9
		22	33.1	31.0			45°56'	1,491'	Boat = +1.0
		23	32.7	30.6			44°58'	1,446'	Tide = -4.0
		24	32.2	30.1			44°08'	1,407'	-2.1
		25	31.7	29.6			43°15'	1,368'	
		26	31.0	28.9			41°35'	1,296'	
		27	30.0	27.9			40°02'	1,233'	
		28	29.3	27.2			38°33'	1,173'	
		29	28.5	26.4			38°05'	1,155'	
		30	27.7	25.6			35°30'	1,058'	
		31	26.5	24.4			33°13'	971'	
		32	26.0	23.9			30°58'	898'	
		33	24.5	22.4			28°10'	807'	
		34	23.7	21.6			25°25'	719'	
		35	22.7	20.6			23°40'	667'	
		36	21.7	19.6			20°30'	571'	
		37	20.6	18.5			17°35'	486'	
		38	19.5	17.4			15°20'	422'	
		39	18.4	16.3			13°10'	363'	
		40	17.1	15.0			10°45'	294'	

76L-298 CE 307 11-58

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STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV. Hor.Ang.		Remarks
		41	16.0	13.9		9°-17'	254'	Tape = +.9
		42	14.6	12.5		7°-25'	203'	Boat = +1.0
		43	13.1	11.0		5°-42'	157'	Tide = -4.0
		44	11.0	8.9		4°-40'	128'	-2.1
		45	9.0	6.9		-		
		46	7.2	5.1		2°-27'	68'	
		47	5.0	2.9	9-35	1°-53'	53'	

S-13
14

RANGE 280465

Profile Notes Red J.S.H. Plotted J.S.H. Job No. Division No. 11 F.B. 2805 Pg. 173
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
No. X-Sec. Notes Chkd. C.W.H. Checked C.W.H. Survey by Notes Chkd. Date 2-21-60
Date 10-26-60 Date 10-27-60 Map No. Traced Date

76L-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. Adj.	Time	Hor.Ang.	Remarks	

F.B. 2805 Pg. 174 Job No. 0300.02 Division No. 11 Notes Red ____ Plotted ____ Profile
Survey of BEACH EROSION STUDIES Date ____ Date ____ No. ____ X-Sec.
Survey by HARRIET Notes SMR TR 40 Notes Chkd. ____ Checked ____ No. ____
Indexed ____ Date ____ Date ____

Notes Ck'd by	Survey of Beach Erosion Studies
~~Map No.~~	IN 2300.02 ~~Tape~~ ~~Std.~~ ~~°F~~
Office Work	Surveyed by Uharriet
Checked	Notes Blanchard Date 7-22-60
Date	Indexed H. E. Ott

F. B. 2806 PG. 175

TIDE GAUGE READINGS

JULY 22, 1960

DATUM - MLLW

TIME - P.S.T.

TIME PST	GAUGE READING MLLW
5:00	13
5:30	18
6:00	23
6:30	28
7:00	32
7:30	36
8:00	39
8:30	41
9:00	43
9:30	42
10:00	41
10:30	38
11:00	36

Note: Any Additions or Changes on This Sheet Must be Made or Circled in Red Ink With Date and Name of Person Making Change.

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763098 CE #247—7-53

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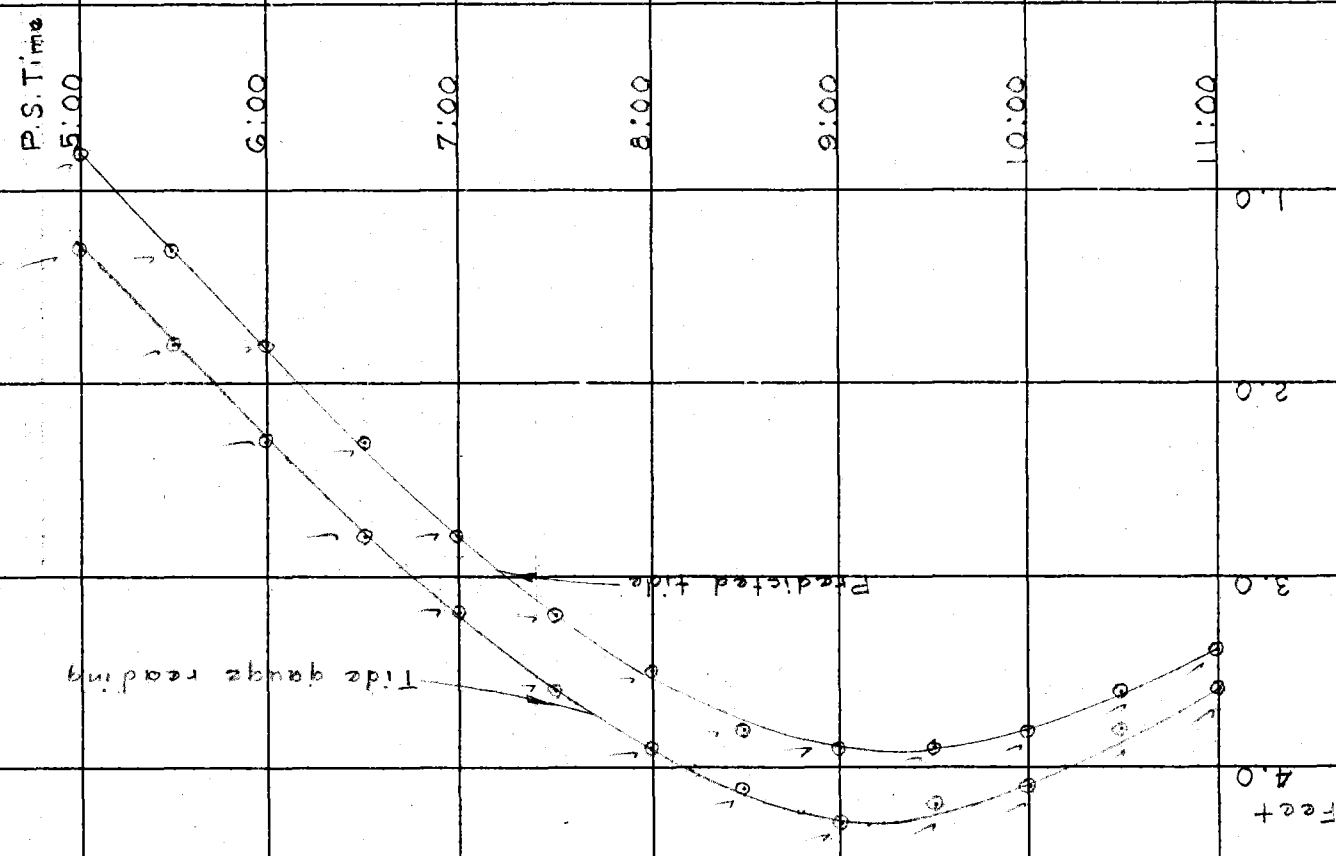

F.B. 2805 PG. 176

76L-298 CE 307 11-58

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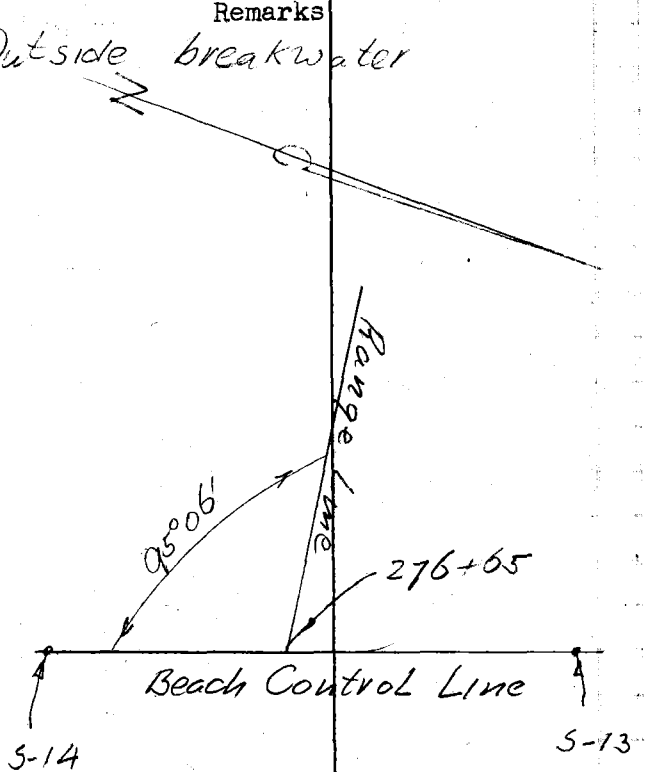
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		1			506	95°06'	Outside breakwater
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
276+65	5-14	8				"	
		9				"	
		10				"	
		11				"	
		12				"	
		13				"	
		14				"	
		15				"	
		16				"	
		17				"	
		18				"	
		19				"	
		20			510		



Profile No. X-Sec. No.
Notes Red J.S.H. Plotted J.S.H. Job No. Division No. 11
Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
Notes Chkd. C.W.H. Checked C.W.H. Survey by Wharnell Notes Taken Date 7-22-60
Date 10-26-60 Date 10-27-60 Map No. Indexed Date
03202
F.B. 2805 Pg. 177

76L-298 CE 307 11-58

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F.B. 2805 Pg. 178 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile
Survey of Beach Erosion Studies Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by Chapman Notes Tee boom Notes Chkd. C.W.H. Checked C.W.H.
Indexed B.L.Oh Date Date 10-26-60 Date 10-27-60 No.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
276+65	5-14	21		516	95°06'	Inside Breakwater	
		22			"		
		23			"		
		24			"		
		25			"		
		26			"		
		27			"		
		28			"		
		29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40					

76L-298 CE 307 11-58

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Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		41			95° 06'		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
		47			"		
		48			"		
276+65	5-14	49			"		
		50			"		
		51		5 20	"		

Profile Notes Red J. S. H. Plotted J. S. H. Job No. 2300.02 Division No. 11
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
Notes Chkd. C. W. K. Checked C. W. K. Survey by Wharton Notes Terbert Date 7-22-60
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H. E. Off Date
F. B. 2805 Pg. 179

F.B. 2805 PG. 180 | 0300.02

Job No. _____ Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by Uharriet Notes Tee Boom Notes Chkd. _____ Checked _____ X-Sec.

Indexed H. E. OD Date _____ Date _____ Date _____ No. _____

STATION	B.S.	H.I.	F.S.	ELEV.	
Inst. At	Sight On	Depth # Rec.	Adj.	Time	Hor. Ang.	Remarks

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76L-286 CE 307 11-58

76L-298 CE 307 11-58

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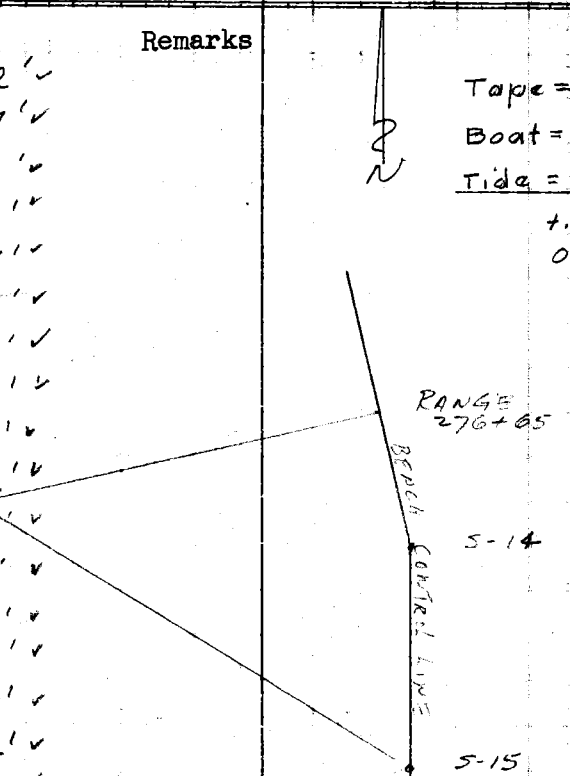
Profile No. ___ X-Sec. ___ Notes Red. J.S.H. Plotted J.S.H. Job No. ___ Division No. 4
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C.W.H. Checked C.W.H. Survey by ___ Notes ___ Date 7-22
Date 10-27-60 Date 10-27-60 Map No. ___ Indexed B.E. OH Date ___
F.B. 2205 Pg. 181

STATION Inst. At	STATION Sight On	B.S.	H.I. Depth # Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
5-15	5-14		1	56.6 57.1	5-06	75°-22'	3,762'
			2	55.8 56.3		74°-54'	3,667'
			3	54.5 55.0		74°-13'	3,516'
			4	53.3 53.8		73°-32'	3,400'
			5	51.8 52.3		72°-54'	3,287'
			6	50.4 50.9		72°-12'	3,173'
			7	48.8 49.3		71°-30'	3,038'
			8	47.3 47.8		70°-30'	2,920'
			9	45.7 46.2		69°-34'	2,791'
			10	43.9 44.4		68°-27'	2,662'
			11	41.9 42.4		67°-39'	2,508'
			12	40.6 41.1		66°-02'	2,390'
			13	39.4 39.9		64°-59'	2,289'
			14	38.0 38.5		63°-58'	2,194'
			15	37.1 37.6		63°-08'	2,120'
			16	35.5 35.5		62°-12'	2,044'
			17	34.4 34.4		61°-21'	1,981'
			18	32.0 32.0		60°-48'	1,939' Bot. Rocks
			19	21.3 21.3		60°-28'	1,918'
			20	15.1 15.1	5-10	60°-12'	1,898' OCEAN SIDE OF JETTY

Tape = +4.9 1 to 15, +4.4 16 to 20
Boat = +1.0
Tide = -1.4
+.5 1 to 15
0 16 to 20



76L-298 CE 307 11-58

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F.B. 2805 Pg. 182 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile
Survey of BEACH EROSION STUDIES Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by LAPAIE Notes SMITH N Notes Chkd. C.W.H. Checked C.W.H.
Indexed H.E. OTT Date Date 10-27-60 No.

STATION		B.S.	H.I.		F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
		21	9.9	10.3	5-16	58°-13'	1,764'	
		22	23.0	23.4		51°-54'	1,742'	
		23	32.0	32.4		[illegible]	1,707'	Est Docks
		24	31.6	32.0		[illegible]	1,664'	
		25	30.9	31.3		[illegible]	1,625'	
		[illegible]	30.0	30.4		[illegible]	1,554'	
5-15	5-14	27	29.3	29.7		[illegible]	1,489'	
		28	28.7	29.1		[illegible]	1,432'	
		29	27.8	28.2		[illegible]	1,350'	
		30	27.3	27.7		[illegible]	1,297'	
		31	26.8	26.7		[illegible]	1,236'	
		32	26.0	25.9		[illegible]	1,150'	
		33	25.3	25.2		[illegible]	1,079'	
		34	24.4	24.3		[illegible]	1,011'	
		35	23.8	23.7		[illegible]	941'	
		36	22.8	22.7		[illegible]	871'	
		37	21.7	21.6		[illegible]	821'	
		38	20.6	20.5		[illegible]	721'	
		39	19.8	19.7		[illegible]	653'	
		40	18.6	18.5		[illegible]	587'	

Tape = +.9 21 to 30
+.4 31 to 40
Boat = +1.0
Tide = -1.5
+.4 21 to 30
-.1 31 to 40

76L-298 CE 307 11-58

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Profile No. ____ X-Sec. ____ No. ____

Notes Red J.S.H. Plotted J.S.H. Job No. ____ Division No. ____
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C.W.H. Checked ____ Survey by ____ Notes ____ Date ____
Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H. E. OH Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
5' 5'	5 4		41 17.5	17.4		25°-47	512'	Tape = +.5
			42 16.3	16.2		23°-00	443'	Boat = +1.0
			43 15.2	15.1		20°-28	380'	Tide = -1.6
			44 13.9	13.8		17°-22	303'	-.1
			45 12.7	12.6		15°-20	261'	
			46 10.9	10.8		13°-50	218'	
			47 9.4	9.3		12°-00	184'	
			48 7.6	7.5		9°-29	150'	
			49 6.1	6.0		9°-00	117'	
			50 5.0	4.9		7°-10	87'	
			51 4.3	4.2	5-20	6°-52	72'	

PANAGE 2764 CS

F.B. ____ Pg. 1/53

F.B. 2805 Pg. 184

Job No. 0300 02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by HARRIET Notes SMITH N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-296 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV	
Inst. At	Sight On	Depth # Rec. Adj.	Time	Hor. Ang.	Remarks

76L-298 CE 307 11-58

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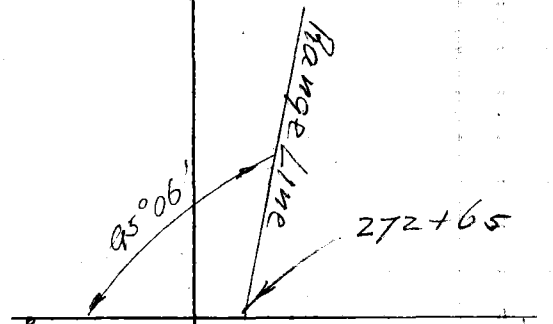
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		1		5 33	95°06'	Outside Breakwater
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
272+65	5-14	9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19			"	
		20		5 35	"	



Profile Notes Red J.S.H. Plotted J.S.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 183
Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
No. X-Sec. Notes Chkd. C.W.H. Checked C.W.H. Survey by Notes Date
Date 10-26-60 Date 10-27-60 Map No. Indexed H.E. OTT Date

76L-298 CE 307 11-58

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F.B. 2805 Pg. 186 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile
Survey of Beach Erosion Studies Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by Harrison Notes Toe Jacks Notes Chkd. C.W.H. Checked C.W.H.
Indexed Date Date 10-26-60 Date 10-27-60 No.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
272+65	514	21		541	95°06'	Inside Breakwater	
		22			"		
		23			"		
		24			"		
		25			"		
		26			"		
		27			"		
		28			"		
		29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40			"		

761-298 CE 307 11-58

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Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor.Ang.	Remarks	
		41			95° 06		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
		47		544	"		
272+65	5-14						

Profile Notes Red J. S. H. Plotted J. S. H. Job No. 03000 2 Division No. 11 F.B. 2603 Pg. 187
No. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. C. W. H. Checked C. W. H. Survey by Manno Notes Date 7-22-60
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H. E. Off. Date

F. B. 2805 PG. 188 | 030002

Job No. _____ Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by Vharriet Notes Teeboom Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV

Inst. At | Sight On | Depth # Rec. Adj. | Time | Hor. Ang. | Remarks

76L-298 CE 307 11-58

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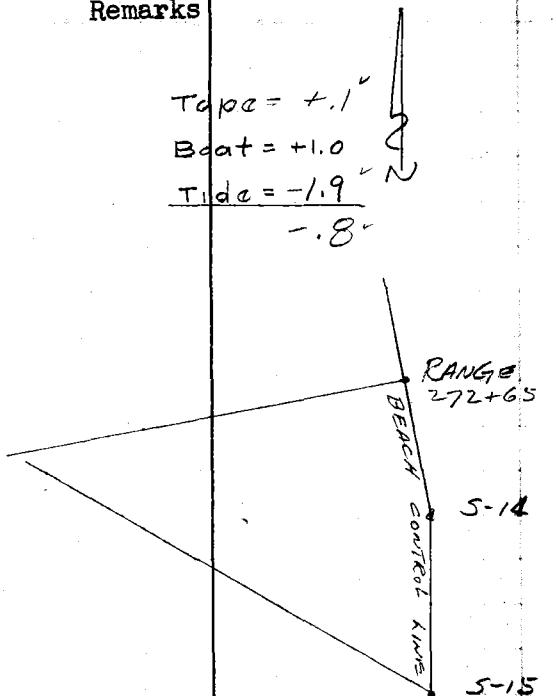
Profile No. ____ Notes Red J.S.H. Plotted J.S.H. Job No. ____ Division No. 11 F.B. 2805
X-Sec. No. ____ Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES Pg. 189
Notes Chkd. C. Wilt Checked C. Wilt Survey by ____ Notes ____ Date 10-22-60
Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H. E. OH Date ____

STATION Inst. At	Sight On	#	B.S.	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
5-15	5-14	1		57.4	56.6	5-33	70°-37'	3816'
		2		56.1	55.3		69°-58'	3708'
		3		54.6	53.8		69°-17'	3587'
		4		53.0	52.2		68°-26'	3450'
		5		51.6	50.8		67°-36'	3322'
		6		50.2	49.4		66°-45'	3202'
		7		48.7	47.9		65°-50'	3078'
		8		47.5	46.7		64°-58'	2970'
		9		46.4	45.6		64°-00'	2853'
		10		44.5	43.7		62°-52'	2724'
		11		43.8	43.0		61°-52'	2617'
		12		42.0	41.2		60°-50'	2517'
		13		41.1	40.3		59°-42'	2414'
		14		39.3	38.5		58°-15'	2284'
		15		37.5	36.7		57°-08'	2189'
		16		35.9	35.1		55°-49'	2085'
		17		34.9	34.1		54°-55'	2016'
		18		33.7	32.9		54°-10'	1968'
		19		31.0	30.2		53°-40'	1935' Dot Rocks
		20		12.9	12.1	5-35	53°-23'	1911' OCEAN SIDE OF JETTY

Tape = +.1
Boat = +1.0
Tide = -1.9
-.8



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F.B. 2805 Pg. 190
Survey of BEACH EROSION STUDIES
Survey by SMITH
Indexed
Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile
Notes Chkd. C.W.H. Checked C.W.H. X-Sec.
Date 10-26-60 Date 10-27-60 No.
Date 10-26-60 Date 10-27-60 No.

STATION		B.S.	H.I.		F.S.	ELEV		
Inst. At	Sight On	#	Depth Rec.	Depth Adj.	Time	Hor. Ang.		Remarks
		21	8.3?	7.2	5:41	51°-40'	1799'	HARBOR SIDE OF JETTY
		22	27.2	26.1		51°-16'	1773'	
		23	31.4	30.3		50°-52'	1745'	Bot Rocks
		24	32.0	30.9		50°-16'	1710'	
		25	32.2	31.1		49°-29'	1663'	
		26	32.0	30.9		48°-28'	1603'	
		27	30.4	29.3		47°-15'	1536'	
		28	29.6	28.5		45°-48'	1506'	
		29	28.8	27.7		44°-16'	1382'	
5-15	5-14	30	28.0	26.9		43°-51'	1365'	
		31	27.1	26.0		41°-20'	1240'	
		32	26.3	25.2		37°-35'	1163'	
		33	25.5	24.4		37°-40'	1081'	
		34	24.9	23.8		35°-00'	1010'	
		35	24.0	22.9		34°-12'	939'	
		36	23.0	21.9		33°-22'	871'	
		37	21.9	20.8		30°-13'	790'	
		38	20.9	19.8		28°-11'	718'	
		39	19.6	18.5		26°-05'	647'	
		40	18.9	17.8		24°-50'	604'	

Tape = -.1
Boat = +1.0
Tide = -2.0
-1.1

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV. Hor.Ang.	Remarks	
S-15	S-14	41	17.9	16.9		21°-31'	498'	Tape = 0
		42	16.5	15.5		19°-12'	423'	Boat = +1.0
		43	15.4	14.4		17°-13'	362'	Tide = -2.0
		44	14.2	13.2		15°-09'	300'	-1.0
		45	12.3	11.3		13°-40'	255'	RANGE 272+65
		46	11.8	10.8		12°-29'	219'	
		47	11.0	10.0	5.44	11°-42'	196'	

Profile Notes Red J.S.H. Plotted J.S.H. Job No. 03007 Division No. 11 F.B. 2805 Pg. 191
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes [illegible] Date [illegible]
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H. E. Ott Date

F.B. 2805 Pg. 192 Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by HARRIET Notes SMITH N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B.S.	H.I.	F.S.	ELEV.	
Inst. At	Sight On	Depth # Rec. Adj.	Time	Hor.Ang.	Remarks

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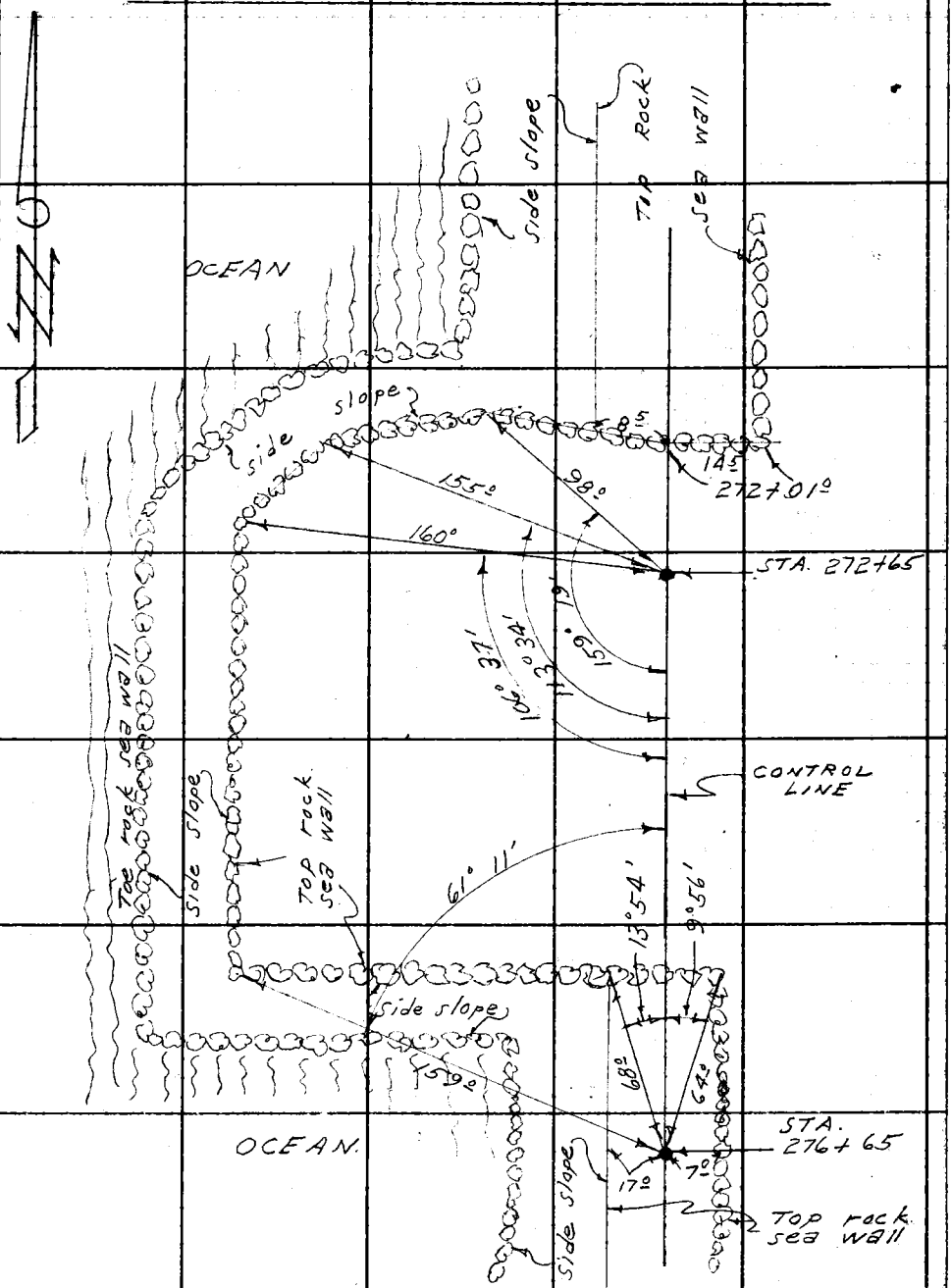
76L-288 CE 307 11-58

Notes Ck'd by	Survey of Beach Erosion Studies
Map No.	IN 0840.02 Tape Std. °F
Office Work	Surveyed by D. Sappell
Checked	Notes D.S. Date 7-24-60
Date	Indexed

F. B. 2805 PG. 193

H. F. OH

LOCATION OF NEW SECTION OF SEA WALL



Note: Any Additions or Changes on this Sheet Must be Made or Circled in Red Ink With Date and Name of Person Making Change.

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76F309P S&E #247 11-58

F. B. 2805 Pg. 194

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76L-298 S & E #307—1-56

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S-14 15°26

STATION	B. S.	H. I.	F. S.	ELEV.	S-13 264+96.16		271+55.6
					DATUM MEAN LOWER LOW WATER		271+55.6 ~~272+16~~ INSHORE
		6.93	(carried from		sta. 262+65)		
271+55.6			48	2.1	3° 46′	41′	Toe Rock sea wall
			94	-2.5	7° 33′	87′	
			126	-5.7	10° 24′	119′	
T.P.			170	5.23	T.P.		
	1068	15.91					
T.P.			1.18	14.73	T.P. - per sta 262+65		

Profile Notes Red J. S. H. Plotted J. S. H. Job No. Division No. 11 F. B. 2805 Pg. 13
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of [illegible] ERIC SON STUDIES
Notes Chkd. C. W. H. Checked C. W. H. Survey by [illegible] Notes [illegible] Date 7-[illegible]
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H. E. Ott Date

F. B. 2805 Pg. 196 | Job No. 0300.02 | Division No. 11 | Notes Red | Plotted | Profile

Survey of BEACH EROSION STUDIES | Date | Date | No.

Survey by LIND | Notes J.C. GOODWIN | Notes Chkd. | Checked | X-Sec.

Indexed | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.

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76L-298 S & E #307—1-56

76L-298 CE 307 11-58

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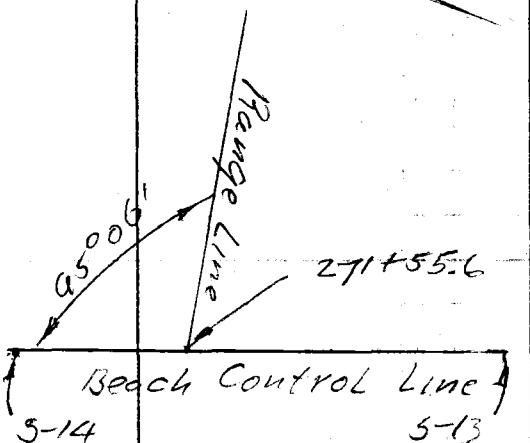
STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
271+55.6	S-14	1		607	95°06'	Inside Break water Only	
		2			"		
		3			"		
		4			"		
		5			"		
		6			"		
		7			"		
		8			"		
		9			"		
		10			"		
		11			"		
		12			"		
		13			"		
		14			"		
		15			"		
		16			"		
		17			"		
		18			"		
		19			"		
		20			"		



Profile Notes Red J.S.H. Plotted J.S.H. Job No. 030002 Division No. 11
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H.E.O.
Notes Chkd. C.W.H. Checked C.W.H. Survey by Hammer Notes Recorded Date 10-22-60
Date

F.B. 2805 Pg. 197

F.B. 2805 Pg. 138 | Job No. 030002 | Division No. 11 | Notes Red J. S. H. | Plotted J. S. H. | Profile

Survey of Beach Erosion Studies | Date 10-26-60 | Date 10-27-60 | No.

Survey by Dharriet | Notes Tee boom | Notes Chkd. C. W. H. | Checked C. W. H. | X-Sec.

Indexed H. E. Ott | Date | Date 10-26-60 | Date 10-27-60 | No.

76L-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At 271+55.6					
Sight On 5-14					
#	Rec.	Adj.	Time	Hor. Ang.	
21				95°06'	
22				"	
23				"	
24				"	
25				"	
26				"	
27				"	
28				"	
29				"	
30				"	
31			6 11	"	

76L-298 CE 307 11-58

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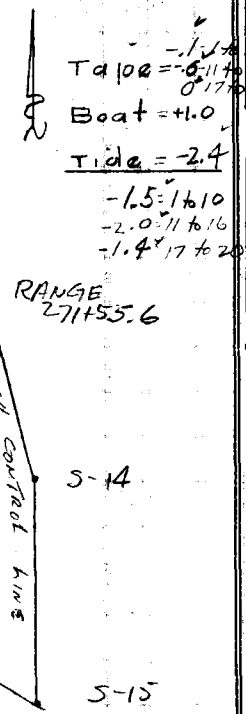
Profile No. X-Sec. No. | Notes Red J.S.H. Date 10-26-60 | Plotted J.S.H. Date 10-26-60 | Job No. 830 | Division No. 11 | Survey of BEACH EROSION STUDIES | F.B. 885 | Pg. 129

Notes Chkd. C.W.H. Date 10-26-60 | Checked C.W.H. Date 10-27-60 | Survey by [illegible] Map No. | Notes [illegible] Date [illegible] | Indexed [illegible]

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
5-15	5-14	1	8.6	7.1	6-07	49°-50'	1784' HARBOR SIDE OF JETTY
		2	24.0 (Top of rock 31.8)	22.5 (30.3)		49°-50'	1784' Bot Rock
		3	32.1	30.6		48°-37'	1707'
		4	32.4	30.9		48°-06'	1677'
		5	32.4	30.9		47°-16'	1629'
		6	31.7	30.2		46°-23'	1577'
		7	30.6	29.1		45°-20'	1521'
		8	29.6	28.1		43°-55'	1446'
		9	29.0	27.5		42°-41'	1382'
		10	28.7	27.2		41°-25'	1321'
		11	28.0	26.0		39°-56'	1246'
		12	27.0	25.0		38°-26'	1176'
		13	26.3	24.3		36°-50'	1105'
		14	25.6	23.6		35°-15'	1037'
		15	24.8	22.8		33°-27'	963'
		16	24.0	22.0		31°-44'	894'
		17	22.9	21.5		30°-49'	833'
		18	22.3	20.9		28°-13'	759'
		19	20.9	19.5		26°-12'	685'
		20	19.8	18.4		23°-56'	605'



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F.B. 2805 PG. 200 Job No. 0300.02 Division No. 11 Notes Red J. S. H. Plotted J. S. H. Profile
Survey of BEACH EROSION STUDIES Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by HARRIET Notes SMITH IV Notes Chkd. C. W. H. Checked C. W. H.
Indexed D. E. OTT Date Date 10-26-60 Date 10-27-60 No.

STATION		B.S.	H.I.		F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
		21	18.9	17.5		22°-29'	554'	Tape = 0
		22	18.4	17.0		20°-52'	501'	Boat = +1.0
		23	17.5	16.1		19°-13'	444'	Tide = -2.4
		24	17.0	15.6		17°-34'	389'	-1.4
		25	15.8	14.4		15°-54'	336'	
		26	14.9	13.5		14°-23'	286'	
		27	13.9	12.5		13°-13'	249'	
5-15	5-14	28	11.0	9.6		11°-17'	189'	
		29	8.3	6.9		-		
		30	6.8	5.4		8°-55'	115'	
		31	4.8	3.4	6-11	8°-05'	88	

76L-298 S & E #307—1-56

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 264 + 96.16 (S-13)		STA. 268+65
					DATUM MEAN LOWER LOW WATER		268+65 INSHORE
		69.3	(carried from Sta. 262+65)				
268+65			67	02	5° 57'	39'	Toe Rock Sea Wall
"			89	-2.0	10° 29'	68'	
"			116	-4.7	15° 16'	99'	

Profile Notes Red J.S.H. Plotted J.S.H. Job No. Division No. 11 F. B. 2801 Pg. 71
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. C.W.H. Checked C.W.H. Survey by Notes H. L. Ott Date 7-23-60
No. Date 10-26-60 Date 10-27-60 Map No. Indexed Date

F. B. 2805 Pg. 202 | 0300.02

Job No. Division No. 11 Notes Red. Plotted Profile

Survey of BEACH EROSION STUDIES Date Date No.

Survey by LND Notes J.C. GOODWIN Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.

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76L-298 S & E #307—1-56

76L-298 CE 307 11-58

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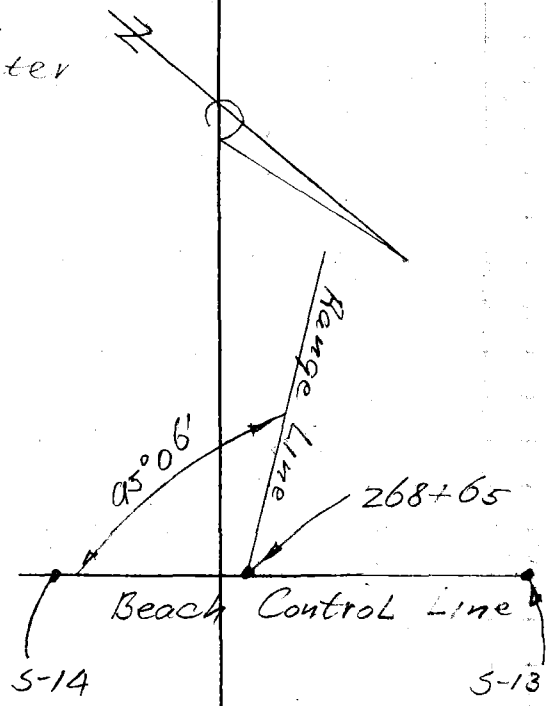
STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
268+65	S-14	1			642	95°06'	Outside Breakwater	
		2				"		
		3				"		
		4				"		
		5				"		
		6				"		
		7				"		
		8				"		
		9				"		
		10				"		
		11				"		
		12				"		
		13				"		
		14				"		
		15				"		
		16				"		
		17				"		
		18				"		
		19				"		
		20				"		



Profile No. X-Sec. No. Notes Red J.S.H. Plotted J.S.H. Job No. 0300.02 Division No. 11 F.B. 2005 Pg. 203
Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
Notes Chkd. C.W.H. Checked C.W.H. Survey by Illegible Notes Illegible Date 7-22-60
Date 10-26-60 Date 10-27-60 Map No. Indexed N.E. Ott Date

F.B. 2805 Pg. 204 | 0300.02 Job No. | Division No. 11 | Notes Red J. S. H. | Plotted J. S. H. | Profile

Survey of Beach Erosion Studies | Date 10-26-60 | Date 10-27-60 | No.

Survey by Vhayner H. L. Ott | Notes Tee boom | Notes Chkd. C. W. H. | Checked C. W. H. | X-Sec.

Indexed | Date | Date 10-26-60 | Date 10-27-60 | No.

76L-266 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At 268+65	Sight On 5-14				
	21	Depth Rec. Adj.	Time	Hor. Ang. 95°00'	
	22			"	
	23			"	
	24			"	
	25		6 46	"	
	26		6 52	"	Inside Breakwater
	27			"	
	28			"	
	29			"	
	30			"	
	31			"	
	32			"	
	33			"	
	34			"	
	35			"	
	36			"	
	37			"	
	38			"	
	39			"	
	40			"	

76L-298 CE 307 11-58

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STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor.Ang.	Remarks	
		40			95° 06'		
		41			"		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
		47			"		
268+65	5-14	48			"		
		49			"		
		50			"		
		51		657	"		

Profile Notes Red J. S. H. Plotted J. S. H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 225
No. Date 10-26-60 Date 10-27-60 Survey of Beach Eros/04 Stu/185
X-Sec. Notes Chkd. C.W.H. Checked C.W.H. Survey by Dhavner Notes Recorded Date 7-22-60
No. Date 10-27-60 Date 10-27-60 Map No. Indexed H. E. Ott Date

F. B. 2805 PG. 206 | 0300.02

Job No. _____ Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by Chamet Notes Tee boom Notes Chkd. _____ Checked _____ X-Sec.

Indexed H. E. Ott Date _____ Date _____ Date _____ No. _____

STATION	B. S.	H. I.	F. S.	ELEV		
258+65						
5-14						

Inst. At Sight On

Depth Rec. Adj.

Time

Hor. Ang.

Remarks

76L-298 CE 307 11-58

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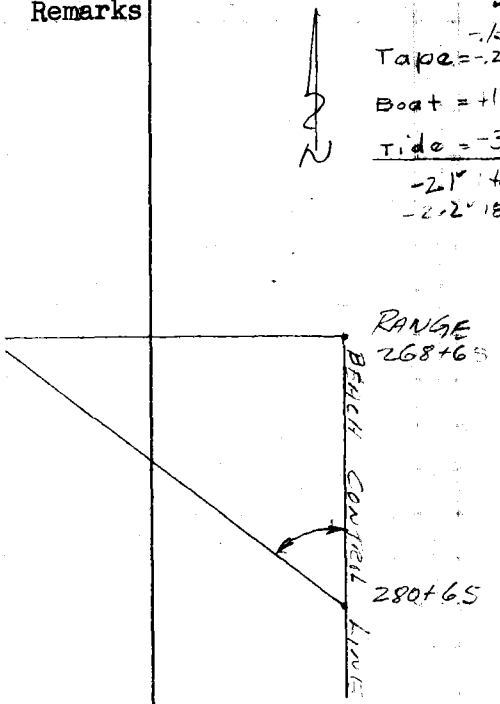
Profile Notes Red J. S. H. Plotted J. S. H. Job No. 0300.6 Division No. 4
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
No. X-Sec. Notes Chkd. C. W. H. Checked C. W. H. Survey by Notes Date
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H. E. OTT Date
F. B. 2805 Pg. 231

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
280+65	S-13	1	61.3	59.2	6-42	68°-37'	3,996'
		2	59.8	57.7		68°-15'	3,903'
		3	58.5	56.4		67°-48'	3,789'
		4	56.7	54.6		67°-15'	3,662'
		5	55.1	53.0		66°-58'	3,584'
		6	53.5	51.7		66°-23'	3,462'
		7	52.3	50.2		65°-55'	3,378'
		8	51.0	48.9		65°-24'	3,267'
		9	50.4	48.3		65°-01'	3,207'
		10	49.4	47.3		64°-34'	3,128'
		11	48.5	46.4		64°-11'	3,048'
		12	47.6	45.5		63°-42'	2,978'
		13	45.6	43.5		62°-37'	2,818'
		14	44.0	41.9		61°-43'	2,678'
		15	42.8	40.7		61°-07'	2,608'
		16	40.7	38.6		60°-04'	2,479'
		17	39.5	37.4		59°-07'	2,369'
		18	38.0	35.8		58°-05'	2,258'
		19	36.9	34.7		57°-10'	2,159'
		20	35.4	33.2		56°-14'	2,079'



-1.4 to 17
Tape = -2.1 18 to 20
Boat = +1.0
Tide = -3.0
-2.1 to 17
-2.2 18 to 20

76L-298 CE 307 11-58

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F.B. 2805 Pg. 208 Job No. 0300 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Date 10-26-60 Date 10-27-60 No. Profile

Survey of BEACH EROSION STUDIES Notes Notes Chkd. C.W.H. Checked C.W.H. Date 10-26-60 Date 10-27-60 No. X-Sec.

Survey by HARRIET SOUTH N Date

Indexed H. E. OTT Date

STATION Inst. At	STATION Sight On	B.S. #	H.I. Depth Rec.	H.I. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
280+65	5-13	21	34.6	32.3		56°25'	2,008'
		22	33.7	31.4		54°52'	1,963'
		23	32.6	30.3		54°27'	1,926' Bot Rock
		24	30.4	28.1		54°02'	1,896'
		25	19.0	16.7	6-46	53°45'	1,877' OCEAN SIDE OF JETTY
		26	13.0	11.8	6-52	52°10'	1,754' HARBOR SIDE OF JETTY
		27	27.6	26.4		51°48'	1,727' Bot Rock
		28	29.4	28.2		51°21'	1,698'
		29	29.7	28.5		50°39'	1,647'
		30	29.0	27.8		49°01'	1,546'
		31	28.0	26.2		46°49'	1,419'
		32	27.8	26.0		44°44'	1,310'
		33	26.9	25.1		42°46'	1,216'
		34	26.0	23.9		40°57'	1,134'
		35	25.0	22.9		38°37'	1037'
		36	24.5	22.4		36°32'	956'
		37	23.6	21.5		33°51'	860'
		38	22.3	20.2		31°29'	781'
		39	21.8	19.7		29°20'	713'
		40	20.9	18.8		26°47'	638'

Tape = -.3
Boat = +1.0
Tide = -3.0
-2.3

Tape = +.9 26 to 30
+.3 31 to 33
0 34 to 40
Boat = +1.0
Tide = -3.1

-1.2 26 to 30
-1.8 31 to 33
-2.1 34 to 40

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

Profile No. X-Sec. No. | Notes Red J.S.H. Plotted J.S.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 209
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C.W.H. Checked C.W.H. Survey by WHEELER Notes SMITH Date 7-27-60
Date 10-26-60 Date 10-27-60 Map No. Indexed N. L. OH Date

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
2801+65	S. 13	41	19.8	17.8		24°00'	559'	Tape = +.1
		42	18.8	16.8		21°-22'	489'	Boat = +1.0
		43	17.7	15.7		18°-18'	411'	Tide = -3.1
		44	16.0	14.0		14°-43'	324'	-2.0
		45	14.5	12.5		11°-38'	253'	RINGE 2687+65
		46	12.5	10.5		9°-26'	203'	
		47	11.1	9.1		7°-40'	165'	
		48	8.7	6.7		6°-18'	135'	
		49	7.0	5.0		-		
		50	5.7	3.7		4°-07	88'	
		51	3.9	1.9	6-57			

F.B. 2805 Pg. 210 Job No. 030002 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by U HARRIET Notes SMITH Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B.S.	H.I.	F.S.	ELEV	
Inst. At	Sight On	Depth # Rec.	Adj. Time	Hor.Ang.	Remarks

76L-296 CE 307 11-58

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76L-298 S & E #307—1-56

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STATION	B. S.	H. I.	F. S.	ELEV.	INST @ 264+65	Sight on [illegible]
					DATUM MEAN LOWER LOW WATER	264+65 INSHORE
		6.93	(carried from Sta. 262+65)			
264+65			26	4.3		74½ Rt. TOC S23 N31
"			75	-0.6		115 "
"			124	-5.5		162 "

Profile Notes Red J. S. H. Plotted J. S. H. Job No. Division No. 11 F. B. 2805 Pg. 211
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of [illegible] Stations
Notes Chkd. C. W. H. Checked C. W. H. Survey by [illegible] Notes Sargent Date 7-22-60
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H. E. Ott Date

F. B. 2805 Pg. 212 | 0300.02

Job No. Division No. 11 Notes Red. Plotted Profile

Survey of BEACH EROSION STUDIES Date Date No.

Survey by LIND Notes J.C. GOODWIN Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.

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76L-298 S & E #307—1-56

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76L-298 CE 307 11-58

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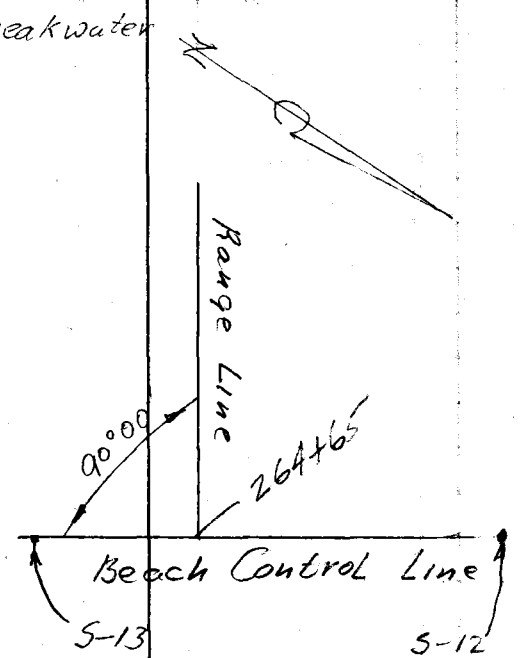
STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		1		7 34	90° 00	Outside Breakwater
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
264+65	5-13	9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19			"	
		20			"	



Profile Notes Red J. S. H. Plotted J. S. H. Job No. Division No. 11
No. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. C. W. H. Checked C. W. H. Survey by Khaurici Notes Date 1-22-58
No. Date 10-26-60 Date 10-27-60 Map No. Indexed N. E. Ott Date
F. B. 2805 Pg. 215
03 00 02

76L-298 CE 307 11-58

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F.B. 2805 Pg. 214 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile
Survey of Beach Erosion Study Date 10-26-60 Notes Chkd. C.W.H. Checked C.W.H. Date 10-27-60 No. X-Sec.
Survey by Harriet Notes Feebour Date 10-26-60 No.
Indexed M. E. OTT Date

STATION		B.S.	H.I.	F.S.	ELEV.	
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks
		21		737	90°00	
		22		811		Inside Breakwater
		23			"	
		24			"	
		25			"	
		26			"	
		27			"	
264+65	S-14	28			"	
		29			"	
		30			"	
		31			"	
		32			"	
		33			"	
		34			"	
		35			"	
		36			"	
		37			"	
		38			"	
		39			"	
		40				

761 298 CE 307 11-58

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STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		41			90°00'		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
		47			"		
		48			"		
264+65	5-14	49			"		
		50			"		
		51			"		
		52			"		
		53		8 15	"		

Profile Notes Red J. S. H. Plotted J. S. H. Job No. 0300.02 Division No. 11 F. B. 2805 Pg. 215
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
Notes Chkd. C. W. H. Checked C. W. H. Survey by Wharvel Notes Pelicc Date 7-22-65
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H. E. Ott Date

F. B. 2805 PG. 216 | 0300.02

Job No. _____ Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by Charmet Notes Teehoom Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-298 CE 307 11-58

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STATION	B. S.	H. I.	F. S.	ELEV	Remarks
Inst. At	Sight On	Depth # Rec.	Adj.	Time	Hor. Ang.

76L-298 CE 307 11-58

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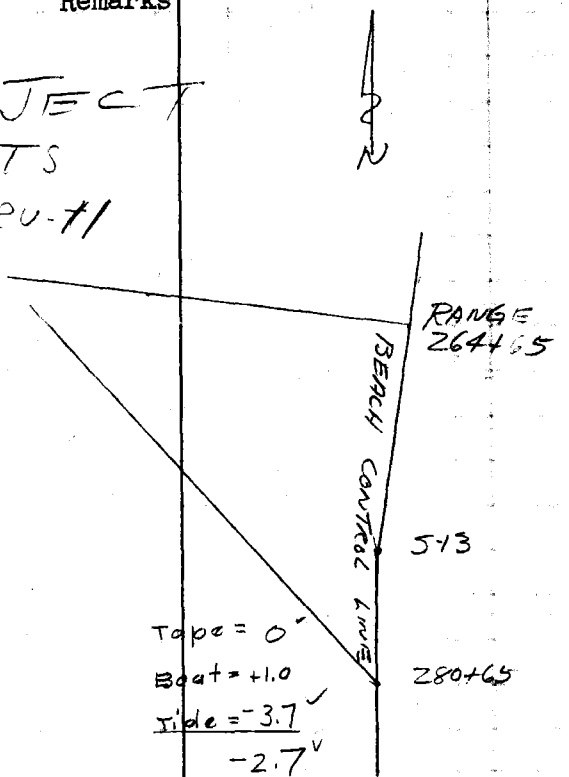
Profile No. ____ X-Sec. No. ____ Notes Red J.S.H. Plotted J.S.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 217
Notes Chkd. C.W.H. Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Date 10-26-60 Date 10-27-60 Map No. ____ Indexed W. E. OH Date ____ Survey by WHARRIS Notes ____ Date 7-22-60

STATION Inst. At	STATION Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
280+65	S-13	1			7-15	64°-35'	REJECT SHOTS 1-THRU-11	
		2				64°-07'		
		3				63°-30'		
		4				62°-56'		
		5				62°-02'		
		6				61°-07'		
		7				60°-11'		
		8				59°-25'		
		9				58°-36'		
		10				57°-36'		
		11			7-17	57°-12'		
		1	62.1	59.4	7-34	64°-15'	4098'	
		2	60.3	57.6		63°-43'	3969'	
		3	57.7	55.0		63°-00'	3834'	
		4	55.9	53.2		-		
		5	54.0	51.3		61°-20'	3515'	
		6	51.9	49.2		60°-20'	3349'	
		7	49.9	47.2		59°-13'	3180'	
		8	47.9	45.2		58°-10'	3028'	
		9	47.0	44.3		57°-13'	2899'	



Tape = 0'
Boat = +1.0
Tide = -3.7
-2.7

76L-298 CE 307 11-58

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F.B. 2805 PG. 218 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Date 10-26-60 Date 10-27-60 No. Profile
Survey of BEACH EROSION STUDIES Date 10-26-60 Notes Chkd. C.W.H. Checked C.W.H. No. X-Sec.
Survey by ~~W.L.C.H.~~ Notes SMITH Date 10-26-60 Date 10-27-60 No.
Indexed Date

STATION Inst. At	STATION Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
280+65	5-13	10	44.7	42.0		55°-55'	2738'	Tape = 0
		11	42.4	39.7		54°-30'	2580'	Boat = +1.0
		12	40.8	38.1		53°-21'	2460'	Tide = -3.7
		13	38.3	35.6		52°-03'	2330'	-2.7
		14	36.3	33.6		50°-48'	2216'	
		15	34.2	31.5		49°-45'	2125'	
		16	33.1	30.4		48°-48'	2047'	
		17	31.2	28.5		47°-52'	1972'	
		18	29.9	27.2		47°-20'	1931'	
		19	28.8	26.1		46°-43'	1889'	
		20	28.1	25.4		46°-22'	1862' Bot Rock -27.2	
		21	15.5	12.8	7-37	45°-56'	1830' OCEAN SIDE OF JETTY	
		~~22~~			~~7-46~~	~~44°-07'~~	HARBOR SIDE OF JETTY	
		~~23~~				~~43°-57'~~		
		~~24~~				~~43°-36'~~	REJECT	
		~~25~~				~~43°-03'~~	SHOTS	
		~~26~~				~~42°-29'~~	22 THRU 32	
		~~27~~				~~41°-30'~~		
		~~28~~				~~40°-05'~~		
		~~29~~				~~38°-54'~~		

76L-298 CE 307 11-58

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STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
		30				37°-51'		
		31				36°-80'		
		32			7-48	34°-17'		
		22			7-56	44°-10'	HARBOR SIDE OF JETTY	
		23				44°-03'	REJECT SHOTS	
280+65	S-13	24				43°-40'	22 THRU 27	
		25				43°-09'		
		26				42°-28'		
		27			7-57	41°-03'		
		22			8-00	44°-14'	HARBOR SIDE OF JETTY.	RANGE 280+65
		23				44°-09'		
		24				43°-55'	REJECT	
		25				43°-39'	SHOTS	
		26				43°-15'		
		27				42°-56'		
		28				42°-11'	22 THRU 51	
		29				41°-05'		
		30				40°-02'		
		31				39°-12'		
		32				38°-07'		

Profile Notes Red J. S. H. Plotted J. S. H. Job No. 030002 Division No. 11 F.B. 2-805 Pg. 219
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
No. Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes [illegible] Date 2-22-60
Date 10-26-60 Date 10-27-60 Map No. Indexed H. E. OH Date

76L-298 CE 307 11-58

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F. B. 2805 PG. 220 Job No. 03002 Division No. 11 Notes Red ____ Plotted ____ Profile ____
Survey of BEACH EROSION STUDIES Date ____ Date ____ No. ____ X-Sec. ____
Survey by CHARRIET Notes SMITH PU Notes Chkd. ____ Checked ____ No. ____
Indexed H. E. OTT Date ____ Date ____ Date ____

STATION		B. S.	H. I.	F. S.	ELEV	
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks
280+65	5-13	33			36°-47'	
		34			35°-20'	
		35			33°-40'	
		36			31°-45'	
		37			29°-42'	
		38			27°-42'	
		39			25°-05'	
		40			23°-00'	
		41			20°-32'	
		42			18°-02'	
		43			16°-00'	
		44			14°-08'	
		45			12°-19'	
		46			10°-30'	
		47			-	
		48			-	
		49				
		50				
		51		8-04		

76L-298 CE 307 11-58

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Profile No. ____ X-Sec. No. ____ Notes Red J. S. H. Plotted J. S. H. Job No. 03000.02 Division No. 11 F. B. 2805 Pg. 221
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C. W. H. Checked C. W. H. Survey by WHARTON Notes SHEET Date 7-22-60
Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H. E. OTT Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
280+65	S-13	22	11.0	7.9	8-11	44°-12'	1714'	HARBOR SIDE OF JETTY
		23	16.5	13.4		44°-05'	1705'	
		24	25.0	21.9		43°-49'	1688'	Tape = -.1
		25	28.7	25.6		43°-24'	1662'	Bot Rock Boat = +1.0
		26	29.0	25.9		42°-53'	1615'	Tide = -4.0
		27	29.5	26.4		42°-18'	1594'	-3.1 RANGE 264+65
		28	29.2	26.1		41°-28'	1545'	
		29	29.1	26.0		40°-29'	1488'	
		30	29.0	25.9		39°-32'	1434'	
		31	28.9	25.8		39°-12'	1418'	
		32	28.6	25.5		37°-51'	1346'	
		33	28.1	25.0		36°-38'	1281'	
		34	27.4	24.3		35°-00'	1203'	
		35	26.5	23.4		33°-05'	1114'	
		36	25.9	22.8		31°-20'	1037'	
		37	24.9	21.8		28°-24'	916'	
		38	23.9	20.8		26°-58'	859'	
		39	22.7	19.6		24°-45'	775'	
		40	21.6	18.5		22°-52'	709'	
		41	20.5	17.4		20°-27'	622'	

76L-298 CE 307 11-58

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F.B. 2805 Pg. 222 Job No. 030002 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile
Survey of BEACH EROSION STUDIES Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by HARRIET Notes SMITH, N Notes Chkd. C.W.H. Checked C.W.H.
Indexed H.E. OH Date Date 10-26-60 Date 10-27-60 No.

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV Hor. Ang.	Remarks	
280+65	5-13	42	19.0	16.0		18°10'	546'	Tape = 0
		43	18.1	15.1		16°20'	486'	Boat = +1.0
		44	17.1	14.1		14°39'	433'	Tide = -4.0
		45	16.0	13.0		12°42'	373'	-3.0
		46	15.2	12.2		11°03'	323'	
		47	14.6	11.6		9°15'	269'	
		48	13.9	10.9		8°00'	232'	
		49	11.6	8.6		6°46'	196'	
		50	8.7	5.7				
		51	6.7	3.7				
		52	4.6	1.6		4°30'	131'	
		53	3.1	.1	8-15	4°05'	118'	

76L-298 S & E #307—1-56

PLEASE RETURN TO
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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 264 + 96.16 (S-13)	Station 262 + 65
Bench		13		17	Bench Elev. 5.55	
					DATUM MEAN LOWER LOW WATER	262 + 65 INSHORE
262 + 65			51	16 4	Cont. Bot. Line	
			50	16 5	16' Ft. Bot. Line	
			59	16 1		47' Rt. Front.
			57	14 1		50' Rt. Rear Pr.
T.P.			6	14		30' Rt. Top Rock sea wall
	135	16 10				
T.P.			1056	5.54	T.P.	
	139	6.93				
262 + 65			46	2.3	35° 38' 166'	Toe Rock sea wall
"			75	-0.6	41° 56' 208'	
"			113	-4.4	47° 33' 253'	
"			145	-7.6	54° 02' 319'	

(Note: H.I. carried to sta. 264+65, 268+65, 271+55.6)

Profile Notes Red. J. S. H. Plotted J. S. H. Job No. Division No. 11 F. B. 2805 Pg. 223

No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies

Notes Chkd. CWH Checked CWH Survey by Date Notes Date

No. Date 10-26-60 Date 10-27-60 Map No. Indexed H. E. Ott Date

F. B. 2805 Pg. 224 0300.02

Job No. Division No. 11 Notes Red Plotted Profile

Survey of BEACH EROSION STUDIES Date Date No.

Survey by LIND Notes J.C. GOODWIN & Sappell Notes Chkd Checked X-Sec.

Indexed Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.

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76L-298 S & E #307—1-56

76L-298 CE 307 11-58

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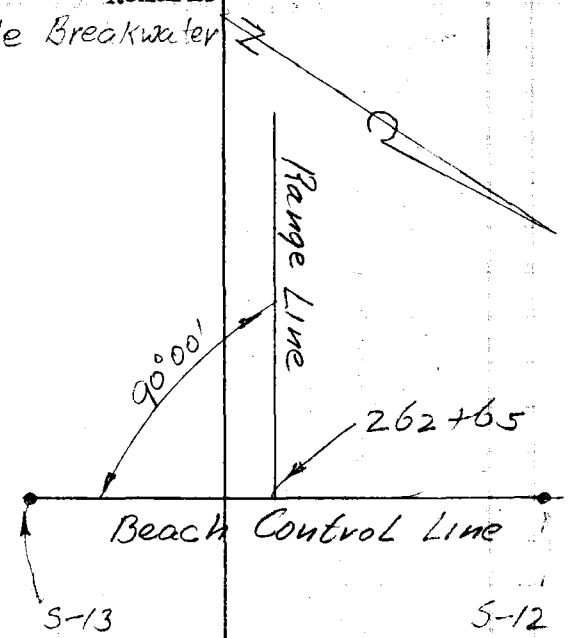
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		1		8 46	90°00'	Outside Breakwater
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
262+65	S-13	9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19			"	
		20			"	



Profile Notes Red J.S.H. Plotted J.S.H. Job No. 03-0002 Division No. 11 F.B. 2805 Pg. 225
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
Notes Chkd. C.W.H. Checked C.W.H. Survey by Hamel Notes Recorded Date 7-22-60
No. Date 10-26-60 Date 10-27-60 Map No. Indexed N. E. OK Date

76L-298 CE 307 11-58

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F.B. 2805 Pg. 226 Job No. 03-0.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile
Survey of Beach Erosion Studies Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by Unit Notes Freeboard Notes Chkd. G.W.H. Checked G.W.H. No.
Indexed Date Date 10-26-60 Date 10-27-60

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		21			90°00'		
		22			"		
		23			"		
		24		8.50	"		
		25		9.08	"	Inside Breakwater.	
		26			"		
		27			"		
262+65	5-13	28			"		
		29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40			"		

76L-298 CE 307 11-58

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Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
		41				90° 00'		
		42				"		
		43				"		
		44				"		
		45				"		
		46				"		
		47				"		
		48				"		
262+65	S-13	49				"		
		50				"		
		51				"		
		52				"		
		53				"		
		54				"		
		55				"		
		56				"		
		57				"		
		58			914	"		

Profile No. ____ Date 10-26-60 Notes Red J.S.H. Date 10-26-60 Plotted J.S.H. Date 10-27-60 Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 22
X-Sec. No. ____ Notes Chkd. C.W.H. Checked C.W.H. Date 10-27-60 Survey of Beach Erosion Studies
Survey by Wahrer Notes Tabulated Date 7-22-60
Map No. ____ Indexed H.E.O.M. Date ____

F. B. 2805 PG. 228 | 0300.02

Job No. _____ Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by Charriet Notes Feebeam Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At	Sight On	Depth # Rec. Adj.	Time	Hor. Ang.	

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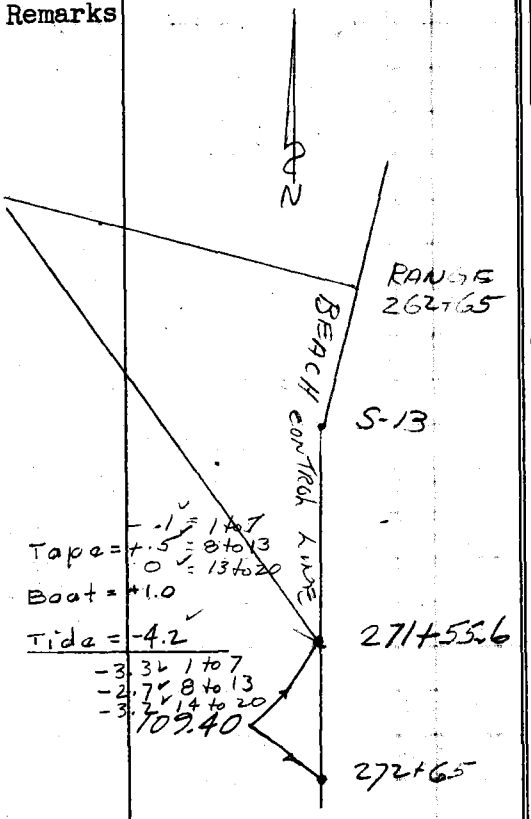
Profile No. ____ Notes Red J.S.H. Plotted J.S.H. Job No. 0300.0 Division No. 11
X-Sec. No. ____ Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes [illegible] Date [illegible]
Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H.E.OH Date ____

F.B. 2805 Pg. 229

STATION Inst. At	Sight On	B.S.	H.I. Depth #	Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
271+55.6	S-13		1	70.8	67.5	8-46	74°18'	4710'	
			2	69.4	66.1		73°57'	4560'	
			3	67.2	63.9		73°43'	4471'	
			4	64.4	61.1		73°15'	4270'	
			5	62.7	59.4		72°49'	4105'	
			6	60.8	57.5		72°25'	3984'	
			7	58.9	55.6		71°57'	3830'	
			8	55.6	52.9		71°21'	3647'	
			9	53.4	50.7		70°45'	3478'	
			10	51.2	48.5		70°09'	3320'	
			11	49.8	47.1		69°31'	3182'	
			12	48.1	45.4		68°52'	3039'	
			13	45.7	43.0		68°00'	2879'	
			14	43.5	40.3		66°54'	2680'	
			15	41.6	38.4		65°51'	2520'	
			16	39.2	36.0		64°46'	2370'	
			17	36.5	33.3		63°40'	2229'	
			18	34.7	31.5		62°48'	2132'	
			19	32.9	29.7		62°06'	2057'	
			20	31.7	28.5		61°25'	1987'	



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F.B. 2805 Pg. 230 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile
Survey of BEACH EROSION STUDIES Date 10-26-60 Date 10-27-60 No.
Survey by HARRIET Notes SMITH Notes Chkd. C.W.H. Checked C.W.H. X-Sec.
Indexed ON Date Date 10-26-60 Date 10-27-60 No.

STATION		B.S.	H.I.		F.S.	ELEV		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
271+55.6	5-13	21	30.3	27.1		60°50'	1931'	Tape = 0
		22	28.9	25.7		66°20'	1884'	Boat = +1.0
		23	27.3	24.1		59°52'	1846' Bot Rocks	Tide = -4.2
		24	18.5	15.3	8-50	59°28'	1813' OCEAN SIDE OF JETTY	-3.2
		25	11.0	8.1	9-09	58°58'	1702' HARBOR SIDE OF JETTY	
		26	17.5	14.6		58°07'	1701'	
		27	22.1	19.2		57°54'	1685'	+.4 25 to 28
		28	25.1	22.2		57°12'	1633'	Tape = -.1 29 to 40
		29	26.7	23.3		56°45'	1601'	Boat = +1.0
		30	27.8	24.4		56°18'	1568'	Tide = -4.3
		31	28.5	25.1		55°23'	1507'	-2.9 25 to 28
		32	28.5	25.1		54°33'	1459'	-3.4 29 to 40
		33	28.2	24.8		53°52'	1419'	
		34	28.1	24.7		53°04'	1373'	
		35	27.8	24.4		51°46'	1305'	
		36	27.5	24.1		50°26'	1235'	
		37	26.4	23.0		48°55'	1165'	
		38	25.0	21.6		47°25'	1100'	
		39	23.9	20.5		45°58'	1042'	
		40	23.1	19.7		44°34'	985'	

76L-298 CE 307 11-88

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Profile No. ____ X-Sec. No. ____ Notes Red J. S. H. Plotted J. S. H. Job No. 03000-02 Division No. 11
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. G.W.H. Checked C.W.H. Survey by LATHROP Notes SMITH Date 10-22-60
Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H. E. OTT Date ____
F.B. 2805 Pg. 231

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
271+55.6	5-13	41	22.3	19.1		42°-27'	916'	Tape = +.1 41 to 45; 0 46 to 58
		42	21.0	17.8		40°-30'	851'	Boat = +1.0
		43	18.6	15.4		-		Tide = -4.3
		44	18.6	15.4		36°-33'	733'	-3.2 41 to 45
		45	17.9	14.7		35°-46'	712'	-3.3 46 to 58
		46	17.8	14.6		34°-34'	680'	RANGE 262+65
		47	17.0	13.7		32°-14'	620'	
		48	16.9	13.6		30°-48'	585'	
		49	16.5	13.2		29°-04'	546'	
		50	16.1	12.8		26°-24'	486'	
		51	16.0	12.7		25°-10'	461'	
		52	15.4	12.1		22°-02'	398'	
		53	14.7	11.4		19°-54'	358'	
		54	12.5	9.2		16°-50'	300'	
		55	11.0	7.7		15°-39'	279'	
		56	9.3	6.0		14°-20'	256'	
		57	6.3	3.0		12°-28'	224'	
		58	4.4	1.1	9-14	11°-15'	203'	

F. B. 2805 Pg. 232 Job No. 030002 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by UHARRIET Notes SMITH N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-298 CE 307 11-58

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STATION	B. S.	H. I.	F. S.	ELEV	
Inst. At	Sight On	# Depth Rec.	Adj.	Time	Hor. Ang. Remarks

Notes Ck'd by J. S. H.	Survey of Beach Erosion Studies
Map No.	Surveyed by Charnet
Office Work J. S. H	Notes Blanchard Date 7-25-60
Checked C. W. H.	Indexed H. E. OTT
Date 8-10-60	

F. B. 2805 Pg. 233

TIDE GAUGE READINGS

JULY 25, 1960

DATUM - MLLW

TIME PST

TIME PST		GUAGE READING MLLW
5:00	AM	0.5
5:30		0.7
6:00		1.0
6:30		1.5
7:00		2.0
7:30		2.5
8:00		3.1
8:30		3.6
9:00		3.9
9:30		4.2
10:00		4.4
10:30		4.5
11:00		4.4

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765098 CE #247—7-59

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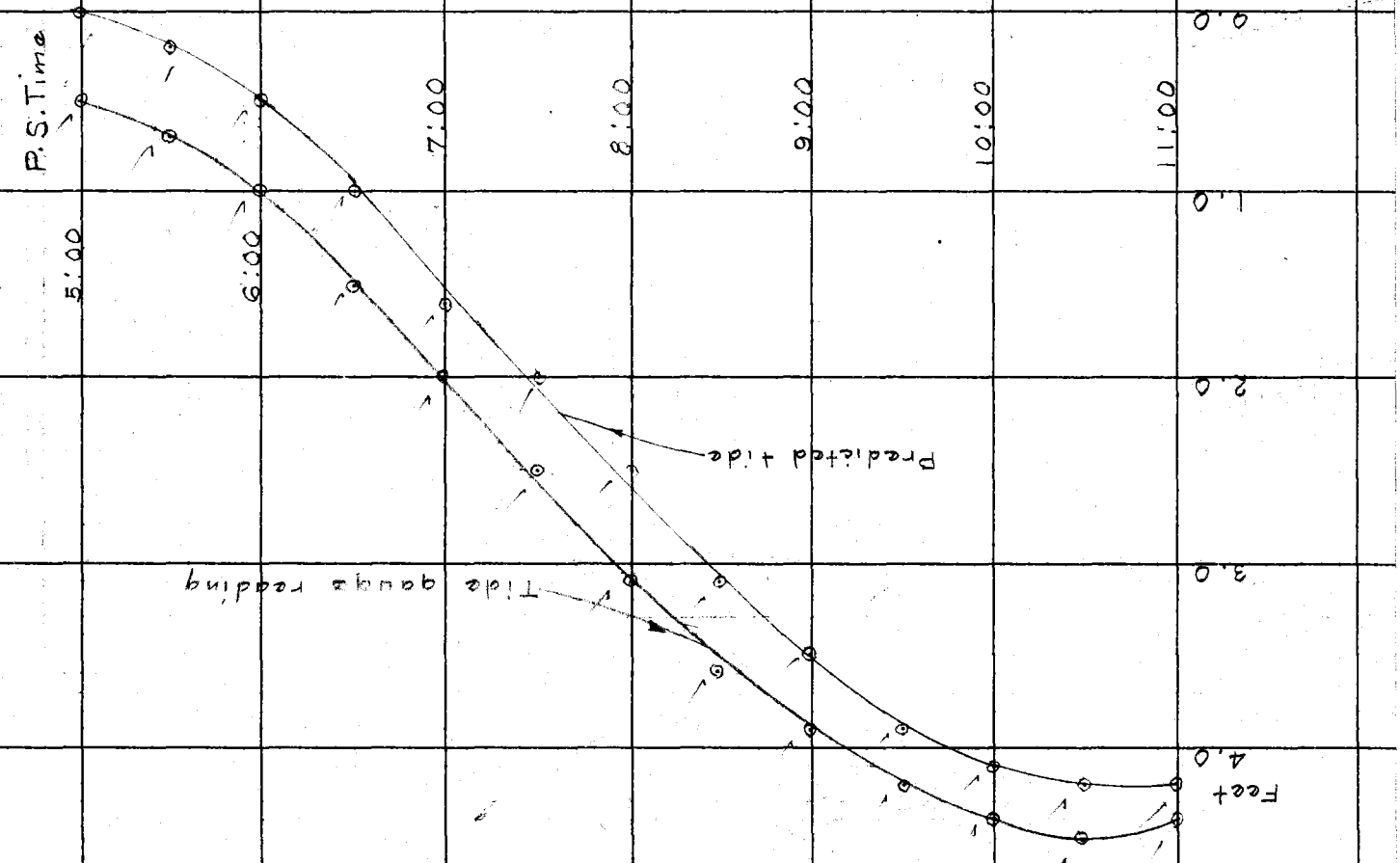

F. B. 2885 PG. 234

76L-298 S & E #307—1-56

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STATION	S. S.	H. I.	F. S.	ELEV.		
					INST. @ 264+96.16 S-13	SIGHT ON 258+65
		21 50			DATUM MEAN LOWER LOW WATER	258+65 INSHORE
258+65						
					15.6' LT.	
					T. P.	
	08	10 2				
258+65			76	2.6	25° 21'	299'
"			113	-1.1	29° 11'	353'
"			142	-4.0	31° 18'	384'
"			159	-5.7	33° 37'	420'

Profile Notes Red J.S.H. Plotted J.S.H. Job No. Division No. 1
No. Date 10-26-60 Date 10-27-60 Survey of Beach & Coastal Structures
X-Sec. Notes Chkd. Checked C.W.N. Survey by Notes Date
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H.E.O.M. Date

F. B. 2805 Pg. 235

F. B. 2805 Pg. 236

Job No. 0360.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by LMD Notes J.C. GOODWIN Notes Chkd _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B. S.	H. I.	F. S.	ELEV.

76L-298 S & E #307—1-56

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76L-298 CE 307 11-58

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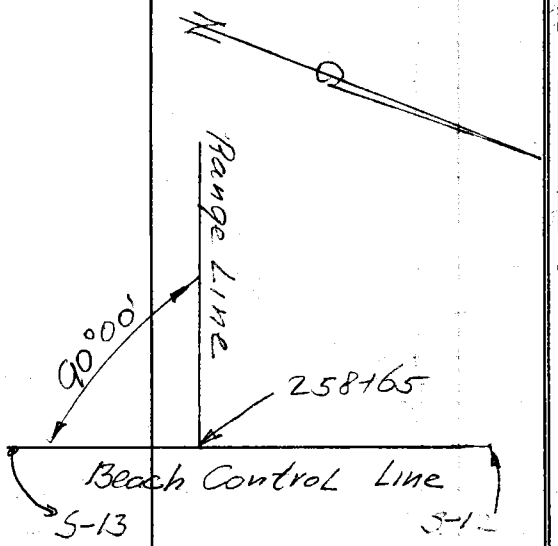
Profile No. ___ X-Sec. No. ___ Notes Red J.S.H. Plotted J.S.H. Job No. ___ Division No. 11 F.B. 285 Pg. 237
Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
Notes Chkd C.W.H. Checked C.W.H. Survey by Wharvet Notes Date 7-25-60
Date 10-26-60 Date 10-27-60 Map No. ___ Indexed H.F. Ott Date ___

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
258+65	S-13	1		526	90°00'	Outside Breakwater
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
		9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19			"	
		20			"	



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F.B. 2805 Pg. 238 Job No. 03000.02 Division No. 11 Notes Red J. S. H. Plotted J. S. H. Profile
Survey of Beach Erosion Studies Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by Uhorrod Notes Tee Boom Notes Chkd. C. W. H. Checked C. W. H.
Indexed H. E. Ott Date Date 10-26-60 Date 10-27-60 No.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		21			90°00'		
		22		5 31	"		
		23		5 45	"	Outside Breakwater	
		24			"		
		25			"		
		26			"		
		27			"		
		28			"		
258465	5-13	29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40			"		

76L-298 CE 307 11-58

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Profile No. ____ X-Sec. ____ Notes Red. J.S.H. Plotted J.S.H. Job No. 030002 Division No. 11 F.B. 2805 Pg. 239
Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
Notes Chkd. C.W.H. Checked C.W.H. Survey by Phillips Notes Technician Date 7-25-60
No. ____ Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H.E. Ott Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor.Ang.	Remarks	
258+65	5-13	41			90° 00'		
		42			"		
		43			"		
		44			"		
		45			"		
		46			"		
		47			"		
		48			"		
		49			"		
		50			"		
		51			"		
		52			"		
		53			"		
		54		549	"		

F. B. 2805 PG. 240 | Job No. 0300.02 | Division No. 11 | Notes Red | Plotted | Profile

Survey of Beach Erosion Studies | Date | Date | No.

Survey by Chevriot | Notes Teehoom | Notes Chkd. | Checked | X-Sec.

Indexed | Date | Date | Date | No.

STATION	B. S.	H. I.	F S.	ELEV
258+65	5-13			

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76L-298 CE 307 11-58

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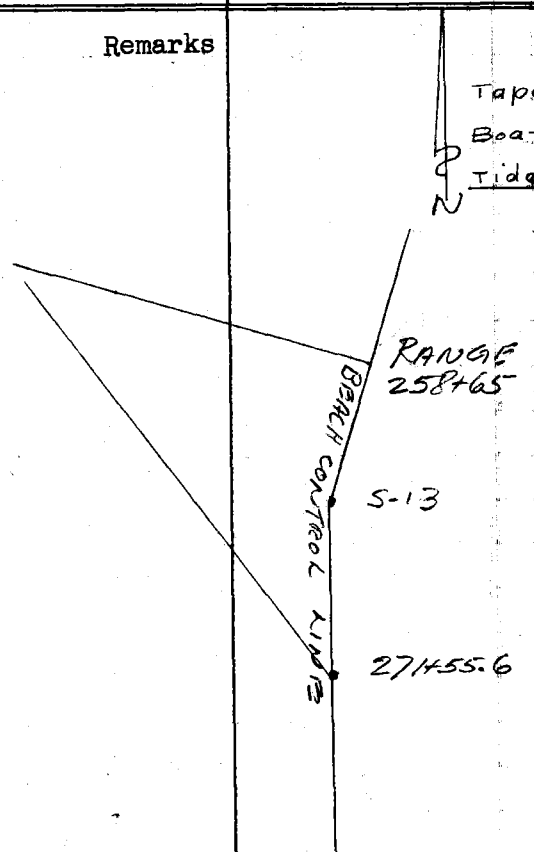
Profile No. ____ X-Sec. No. ____ Notes Red J. S. H. Plotted J. S. H. Job No. 0360.02 Division No. 11 F.B. 28.05 Pg. 241
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C. W. H. Checked C. W. H. Survey by [illegible] Notes [illegible] Date 7-25-60
Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H. E. OTT Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor.Ang.		Remarks
271+55.6	S-13	1	58.5	58.9	5-26	67°-48'	4140'	
		2	56.7	57.1		67°-22'	4028'	
		3	54.2	54.6		66°-34'	3830'	
		4	52.2	52.6		65°-53'	3681'	
		5	50.5	50.9		65°-08'	3522'	
		6	48.6	49.0		64°-12'	3359'	
		7	46.5	46.9		63°-09'	3173'	
		8	44.6	45.0		62°-26'	3060'	
		9	42.2	42.6		61°-12'	2876'	
		10	40.0	40.4		59°-54'	2701'	
		11	38.2	38.6		58°-44'	2568'	
		12	35.8	36.2		57°-29'	2428'	
		13	33.3	33.7		56°-22'	2308'	
		14	31.2	31.6		55°-18'	2209'	
		15	29.1	29.5		54°-08'	2105'	
		16	27.3	27.7		53°-12'	2029'	
		17	25.9	26.3		52°-24'	1966'	
		18	24.3	24.7		51°-44'	1915'	
		19	23.1	23.5		51°-06'	1869'	
		20	21.8	22.2		50°-36'	1829'	



76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

F.B. 2805 PG. 242 Job No. 0300.02 Division No. 11 Notes Red J. S. H. Plotted J. S. H. Date 10-26-60 Date 10-27-60 No. Profile No. X-Sec.
Survey of BEACH EROSION STUDIES Notes Chkd. C. W. H. Checked C. W. H.
Survey by HARRIET SMITH N Date 10-26-60 Date 10-27-60
Indexed Date

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV Hor. Ang.		Remarks
2714+55.6	5-13	21	20.8	21.2		50°-13'	1803'	Bot Rocks
		22	11.1	11.5	5-31	49°-57'	1700	OCEAN SIDE OF JETTY
		23	—		5-45	48°-15'	1672	HARBOR SIDE OF JETTY
		24	—			48°-10'	1667'	
		25	3.0	3.3		47°-30'	1627'	
		26	8.3	8.6		46°-47'	1584'	
		27	9.2	9.5		46°-11'	1549'	
		28	9.4	9.7		45°-24'	1506'	
		29	9.7	10.0		44°-35'	1461'	
		30	10.3	10.6		43°-43'	1416'	
		31	12.6	12.9		42°-44'	1365'	
		32	14.0	14.3		41°-54'	1326'	
		33	14.9	15.2		41°-00'	1282'	
		34	15.0	15.3		39°-55'	1232'	
		35	15.1	15.4		38°-47'	1182'	
		36	15.0	15.3		37°-43'	1137'	
		37	15.0	15.3		36°-32'	1091'	
		38	14.5	14.8		35°-3'	1048'	
		39	13.6	13.9		34°-06'	994'	
		40	13.0	13.3		33°-02'	955'	

Tape = +.1
Boat = +1.0
Tide = -.7
+.4
Shots 1-22

Tape = +.1
Boat = +1.0
Tide = -.8
+.3

76L-298 CE 307 11-58

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Profile No. ____ X-Sec. No. ____ Notes Red J.S.H. Plotted J.S.H. Date 10-26-60 Job No. 0300.02 Division No. 11 Notes Chkd C.W.H. Checked C.W.H. Date 10-27-60 Survey of BEACH EROSION STUDIES Survey by [illegible] Notes [illegible] Date [illegible] Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H.E. OH Date ____ F.B. 2805 PG. 243

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks	
		41	12.4	12.7		31°-53'	913'	Tape = +1.0
		42	11.9	12.2		30°-32'	866'	Boat = +1.0
		43	11.0	11.3		28°-45'	808'	Tide = -.8
		44	10.7	11.0		27°-05'	753'	+.3
271+55.6	5-13	45	10.1	10.4		25°-28'	704'	RANGE 258+65
		46	9.7	10.0		23°-48'	655'	
		47	9.0	9.3		22°-07'	607'	
		48	8.5	8.8		21°-21'	585'	
		49	8.0	8.3		19°-12'	525'	
		50	7.6	7.9		17°-54'	490'	
		51	7.0	7.3		16°-36'	455'	
		52	6.1	6.4		15°-23'	424'	
		53	4.4	4.7		14°-17'	396'	
		54	3.0	3.3	5-49	13°-09'	368'	

F. B. 2805 Pg. 244 Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by HARRIET Notes SMITH N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At	Sight On	Depth # Rec.	Adj.	Time	Hor.Ang.

76L-298 S & E #307—1-56

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 254+65	SIGHT ON —
					DATUM MEAN LOWER LOW WATER	254+65 INSHORE
254+65						
				15		
				13		
254+65	02	120	24	9 6		477 " both "
"			46	7 4		537 "
"			85	3 5		592 "
TP	36	84	72	4.8	T.P.	
"			62	2 2		612 RT.
"			96	-1.2		668 "
"			107	-2.3		690 "
"			120	-3.6		727 "
"			134	-5.0		760 "
"			141	-5.7		800 "

Profile Notes Red. J.S.H. Plotted J.S.H. Job No. ____ Division No. 11 F. B. 2805 PG. 245
Date 10-26-60 Date 10-27-60 Survey of [illegible]
No. ____ X-Sec. ____ Notes Chkd. [illegible] Checked [illegible] Survey by [illegible] Notes [illegible] Date ____
No. ____ Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H. E. Ott Date ____

F. B. 2805 PG. 246 | 0300-07

Job No. _____ Division No. 11 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by LIND Notes J. C. GOODWIN Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B. S.	H. I.	F. S.	ELEV.

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76L-298 S & E #307—1-56

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76L-296 CE 307 11-58

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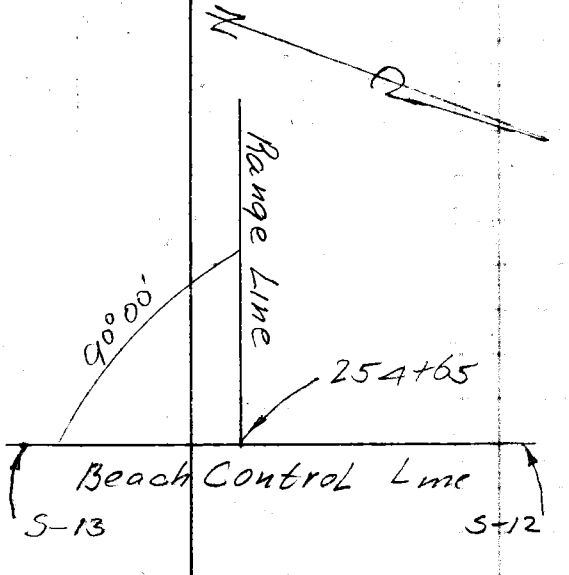
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
254+65	S-13	1		605	90°00'	Out side Breakwater	
		2			"		
		3			"		
		4			"		
		5			"		
		6			"		
		7			"		
		8			"		
		9			"		
		10			"		
		11			"		
		12			"		
		13			"		
		14			"		
		15			"		
		16			"		
		17			"		
		18			"		
		19			"		
		20			"		



Profile No. X-Sec. No.
Notes Red J.S.H. Plotted J.S.H. Job No. 0300.02 Division No. 11
Data 10-26-60 Data 10-27-60 Survey of Beach Erosion Studies
Notes Chkd. C.W.H. Checked C.W.H. Survey by Chartier Notes Date 1-25-60
Date 10-26-60 Date 10-27-60 Map No. Indexed H.E. OTT Date
F.B. 2805 Pg. 247

F.B. 2805 Pg. 248 | Job No. 0300.02 | Division No. 11 | Notes Red J.S.H. Plotted J.S.H. | Profile

Survey of Beach Erosion Studies Date 10-26-60 Date 10-27-60 No. X-Sec.

Survey by Charnet Notes Tee Gozum Notes Chkd. C.W.H. Checked C.W.H.

Indexed H.E.Ott Date Date 10-26-60 Date 10-27-60 No.

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		21			90°00'		
		22			"		
		23			"		
		24			"		
		25			"		
		26		6 08	"		
		27		6 29	"	Inside Breakwater	
		28			"		
254+65	5-13	29			"		
		30			"		
		31			"		
		32			"		
		33			"		
		34			"		
		35			"		
		36			"		
		37			"		
		38			"		
		39			"		
		40			"		

76L-298 CE 307 11-58

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Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor.Ang.	Remarks	
		41			90° 00'		
		42			"		
		43		633	"		
25 41 65	5-13						

Profile Notes Red J.S.H. Plotted J.S.H. Job No. 03000 Division No. 11
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
No. Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes [illegible] Date 1-25-61
Date 10-26-60 Date 10-27-60 Map No. Indexed H.E. Ott Date
F.B. 2803 Pg. 299

F.B. 2805 Pg. 250 | 0300.02

Job No. _____ Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of Beach Erosion studies Date _____ Date _____ No. _____

Survey by Teeboom Notes 7-25-60 Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At	Sight On	Depth #	Rec. Adj.	Time	Hor. Ang.
254+65					
5-13					

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76L-200 CE 307 11-58

76L-298 CE 307 11-58

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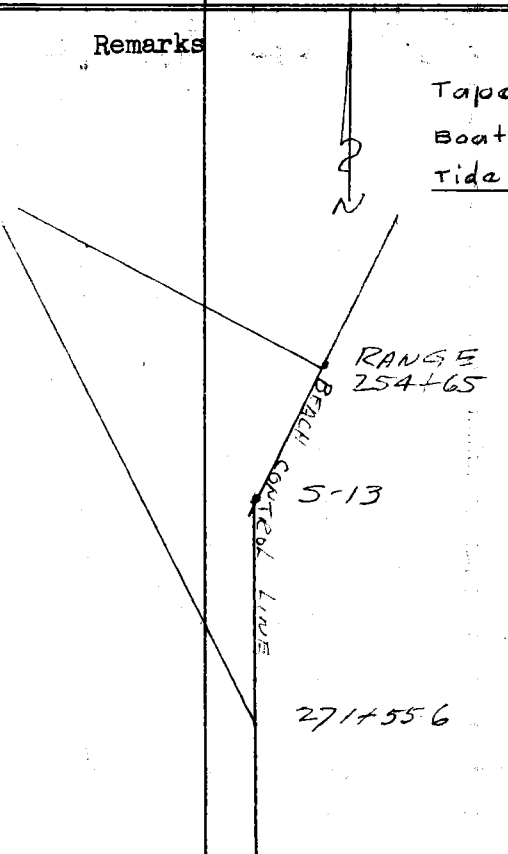
Profile No. ____ X-Sec. No. ____ Notes Red J.S.H. Plotted J.S.H. Job No. 0300.0 Division No. 11 Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES Notes Chkd. C.W.E. Checked C.W.E. Survey by WATKINS Notes ____ Date 7-25-60 Date 10-26-60 Date 10-27-60 Map No. ____ Indexed ____ Date ____

F.B. 2805 Pg. 251

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
271+55.6	5-13	1	55.3	55.8	6-05	61°-41'	3873'	
		2	54.1	54.6		61°-10'	3777'	
		3	51.5	52.0		60°-13'	3618'	
		4	50.6	51.1		59°-40'	3525'	
		5	49.1	49.6		59°-06'	3430'	
		6	47.9	48.4		58°-17'	3313'	
		7	46.2	46.7		57°-20'	3176'	
		8	44.8	45.3		56°-30'	3059'	
		9	43.4	43.9		55°-40'	2951'	
		10	41.5	42.0		54°-47'	2850'	
		11	40.3	40.8		53°-43'	2730'	
		12	39.1	39.6		53°-00'	2651'	
		13	37.6	38.1		51°-46'	2529'	
		14	36.6	37.1		50°-55'	2442'	
		15	34.9	35.4		49°-45'	2338'	
		16	33.1	33.6		48°-26'	2219'	
		17	30.5	31.0		47°-06'	2117'	
		18	27.8	28.3		45°-48'	2018'	
		19	25.6	26.1		44°-36'	1931'	
		20	22.3	22.8		43°-00'	1822'	



76L-298 CE 307 11-58

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F.B. 2805 Pg. 252 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile
Survey of BEACH EROSION STUDIES Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by HARRIET Notes SMITH N Notes Chkd. C.W.H. Checked C.W.H.
Indexed M.E. OTT Date Date 10-26-60 Date 10-27-60 No.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S.	Time	ELEV Hor. Ang.	Remarks	
271+55.6	S-13	21	20.3	21.0			1756'		Tape = +.8 = 21+26
		22	19.3	20.0			1694'		Boat = +1.0
		23	18.3	19.0			1645'		Tide = -1.1
		24	17.5	18.2					+.7
		25	16.9	17.6			1568'		
		26	12.5	13.2	6-08		1550'	Bot Racks	
		27	—		6-29	35°-28'	1390'	OCEAN SIDE OF JETTY	
		28	—			33°-54'	1311'	HARBOR SIDE OF JETTY	
		29	—			32°-47'	1257'		
		30	4.8	5.2		31°-38'	1203'		Tape = +.9 = 30+40
		31	6.1	6.5		30°-18'	1143'		Boat = +1.0
		32	6.7	7.1		29°-30'	1111'		Tide = -1.5
		33	6.9	7.3		28°-33'	1069'		+.4
		34	7.6	8.0		27°-23'	1018'		
		35	7.5	7.9		26°-07'	967'		
		36	6.4	6.8		24°-58'	920'		
		37	5.2	5.6		24°-00'	883'		
		38	4.9	5.3		23°-11'	853'		
		39	5.0	5.4		22°-19'	820'		
		40	4.5	4.9		21°-20'	783		

76L-298 CE 307 11-58

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STATION Inst. At	Sight On	B.S. # Rec.	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor.Ang.		Remarks
271+55.6	S-13	41	4.0	4.5		20°46'	762'	Tape = +1.0 = 41+43
		42	2.9	3.4		20°03'	736'	Boat = +1.0
		43	—		6-33	18°-55'	696'	Tide = -1.5
								+.5

RANGE 254+65

Profile Notes Red J.S.H. Plotted J.S.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 233
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
X-Sec. No. Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes [illegible] Date [illegible] 26-60
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H. E. OTT Date

F. B. 2805 Pg. 254 Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by HARRIET Notes SMITH N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At	Sight On	Depth # Rec. Adj.	Time	Hor. Ang.	

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78L-298 CE 307 11-58

76L-298 S & E #307—1-56

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Profile No. X-Sec. No.
Notes Red. J.S.H. Plotted J.S.H. Job No. Division No.
Date 10-26-60 Date 10-27-60 Survey of
Notes Chkd. Checked C.W.H. Survey by Notes
Date 10-26-60 Date 10-27-60 Map No. Indexed Date
R.E. OTT Date
F. B. 2005 PG. 255

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 245+00	SIGHT ON 253+10
		22.07			DATUM MEAN LOWER LOW WATER	253+10 INSHORE
S.M.S-1						
253+10						
						RT.
						RT.
						RT.
						RT.
						RT.
T.P.						
253+10	0.20	14.52	0.4	14.2		440 " Top Pil.
"			4.4	10.2		444 " bott "
"			5.0	9.6		5.0 " Top or
"			9.9	4.7		542 " Mean tide line
T.P.	0.00	3.66	10.93	3.66	T.P.	
253+10			3.4	0.3	40° 39' 696'	
"			5.2	-1.5	43° 52' 178'	
"			7.5	-3.8	46° 58' 868'	

76L-298 S & E #307—1-56

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst at 245+00		Sight on 253+10
		3.66					
253+10			8.9	-5.2	49° 27'	947'	
"			9.6	-5.9	51° 14'	1008'	
"			10.3	-6.6	53° 27'	1093'	
"			13.5	-9.8	55° 44'	1189'	
"			15.3	-11.6	57° 38'	1278'	

F. B. 2805 — Pg. 256

Job No. [illegible] Division No. [illegible] Notes Red. J. S. H. Plotted J. S. H. Profile
Survey of [illegible] Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by [illegible] Notes [illegible] Notes Chkd. [illegible] Checked C. W. H. No.
Indexed [illegible] Date [illegible] Date 10-26-60 Date 10-27-60 No.

76L-298 CE 307 11-58

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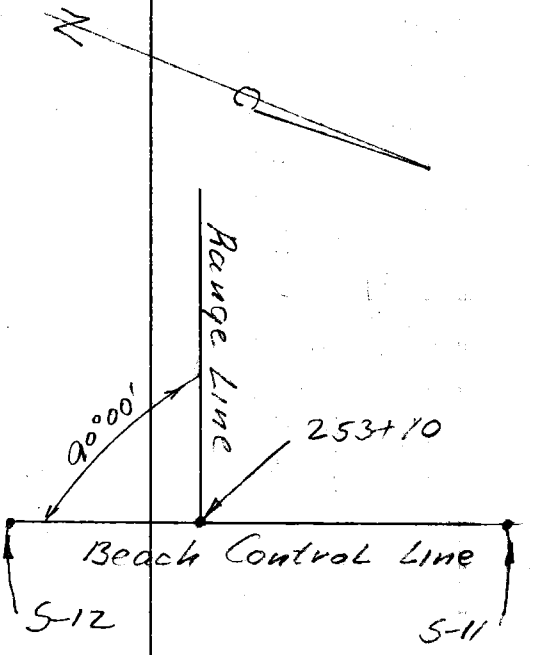
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
		1			7 23	90° 00'	
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
253+10	5-12	8				"	
		9				"	
		10				"	
		11				"	
		12				"	
		13				"	
		14				"	
		15				"	
		16				"	
		17				"	
		18				"	
		19				"	
		20				"	



Profile Notes Red J. S. H. Plotted J. S. H. Job No. 030002 Division No. 11
No. Data 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. C. W. H. Checked C. W. H. Survey by Wharvet Notes Reviewed Date 7-25-60
No. Data 10-26-60 Date 10-27-60 Map No. Indexed H. E. Ott Date
F.B. 2805 Pg. 257

76L-298 CE 307 11-58

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F.B. 2805 Pg. 238 Job No. 0300.02 Division No. 11 Notes Red J. S. H. Plotted J. S. H. Profile
Survey of Beach Erosion Studies Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by ~~Chief~~ Notes Tee boom Notes Chkd. C. W. H. Checked C. W. H. No.
Indexed Date Date 10-26-60 Date 10-27-60

STATION		B.S.	H.I.		F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
253+10	5-12	21				90° 00'		
		22				"		
		23				"		
		24				"		
		25				"		
		26				"		
		27				"		
		28				"		
		29				"		
		30				"		
		31				"		
		32				"		
		33				"		
		34				"		
		35				"		
		36				"		
		37				"		
		38				"		
		39				"		
		40				"		

76L-298 CE 307 11-58

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Do not extend notes this side of this line.

STATION		B.S.	H.I.	F.S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor.Ang.	Remarks	
		41			90° 00'		
		42		7 28			
253+10	S-12						

Profile Notes Red J. S. H. Plotted J. S. H. Job No. 030002 Division No. 11 F. B. 2805 Pg. 29
No. X-Sec. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
No. Notes Chkd. C. W. H. Checked C. W. H. Survey by Wharnet Notes ~~Checked~~ Date 7-25-70
Data 10-26-60 Date 10-27-60 Map No. Indexed H. E. Oil Date

76L-298 CE 307 11-58

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Do not extend notes this side of this line.

STATION	B.S.	H.I.	F.S.	ELEV		
Inst. At / Sight On	#	Depth Rec. Adj.	Time	Hor.Ang.		Remarks

F.B. 2805 Pg. 260 Job No. 0300.02 Division No. 11 Notes Red ____ Date ____ Plotted ____ Date ____ Profile No. ____
Survey of Beach Erosion Studies Date ____ X-Sec. No. ____
Survey by Wharriet Notes Teeboom Notes Chkd. ____ Date ____ Checked ____ Date ____
Indexed ____ Date ____

76L-298 CE 307 11-58

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Profile No. ____ X-Sec. No. ____

Notes Red J.S.H. Plotted J.S.H. Job No. 0300.02 Division No. 11 F.B. 2805 PG. 261

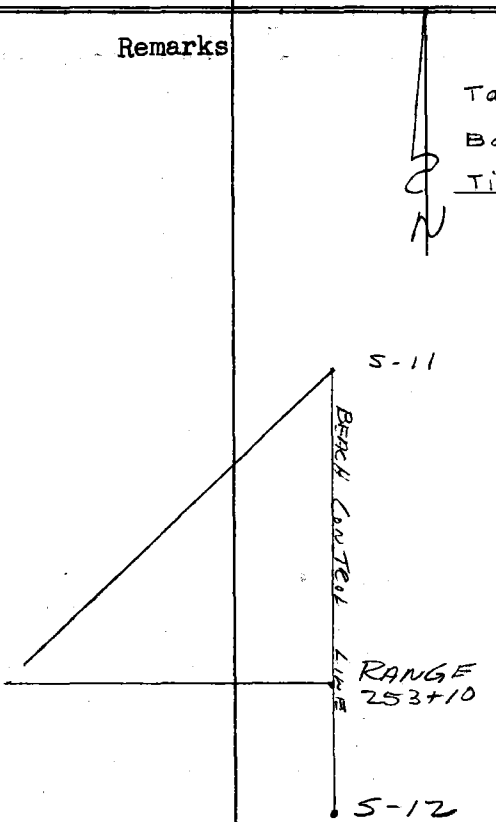
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES

Notes Chkd. E.W.H. Checked E.W.H. Survey by Whatcott Notes Smith Date 7-25-60

Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H. E. OTT Date

STATION Inst. At	Sight On	#	B.S.	H.I. Depth Rec.	H.I. Depth Adj.	F.S.	Time	ELEV. Hor. Ang.		Remarks
5-11	5-1	1		49.6	49.1		7-23	56°-28'	3335	
		2		48.5	48.0			55°-57'	3271	
		3		47.1	46.6			55°-20'	3196	
		4		45.5	45.0			54°-16'	3072	
		5		44.6	44.1			53°-20'	2968	
		6		43.3	42.8			52°-39'	2895	
		7		42.0	41.5			51°-52'	2816	
		8		40.3	39.8			50°-45'	2705	
		9		39.8	39.3			49°-54'	2625	
		10		38.7	38.2			48°-52'	2530	
		11		37.4	36.9			47°-55'	2446	
		12		36.6	36.1			47°-03'	2374	
		13		35.3	34.8			46°-06'	2296	
		14		34.4	33.9			45°-11'	2223	
		15		33.3	32.8			44°-15'	2153	
		16		31.8	31.3			43°-12'	2075	
		17		30.5	30.0			42°-15'	2007	
		18		29.2	28.7			41°-11'	1934	
		19		27.8	27.3			40°-15'	1872	
		20		26.2	25.7			39°-12'	1803	

Tape = +1.0
Boat = +1.0
Tide = -25
-.5'



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F.B. 2805 PG. 262 Job No. 0300-02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Date 10-26-60 Date 10-27-60 No. Profile
Survey of BEACH EROSION STUDIES Notes Chkd. C.W.H. Checked C.W.H. Date 10-26-60 Date 10-27-60 No. X-Sec.
Survey by ~~[illegible]~~ Notes SMITH, N
Indexed Date

STATION		B.S.	H.I.		F.S.	ELEV		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
5-11	5-12	21	24.2	23.7		38°-08'	1735	
		22	22.8	22.3		37°-32'	1697	Tape = +1.0
		23	20.9	20.4		36°-10'	1694	Boat = +1.0
		24	19.3	18.8		35°-52'	1598	Tide = -2.5
		25	17.9	17.4		35°-02'	1549	-.5
		26	16.2	15.7		34°-14'	1503	
		27	15.2	14.7		33°-25'	1459	
		28	14.4	13.9		32°-42'	1419	
		29	13.5	13.0		31°-55'	1377	
		30	12.9	12.4		31°-12'	1339	
		31	12.2	11.7		30°-27'	1299	
		32	11.3	10.8		29°-41'	1260	
		33	10.4	9.9		28°-38'	1207	
		34	9.6	9.1		27°-53'	1169	
		35	9.5	9.0		26°-58'	1125	
		36	8.1	7.6		25°-56'	1074	
		37	6.8	6.3		25°-10'	1039	
		38	6.0	5.5		24°-07'	990	
		39	5.7	5.2		23°-20'	953	
		40	5.2	4.7		22°-35'	919	

76L-298 CE 307 11-58

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Profile No. ____ X-Sec. No. ____ Notes Red J.S.H. Plotted J.S.H. Job No. e300°7 Division No. 11 Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes [illegible] Date 2-25-60 Date 10-27-60 Date 10-27-60 Map No. ____ Indexed ____ Date ____

F.B. 2805 PG. 263

STATION Inst. At	Sight On	B.S.	H.I. # Rec.	Depth Adj.	F.S.	ELEV.	Hor. Ang.	Remarks	
11-5	5-12		41	4.8 4.3			20°-37	875	Tape = +1.0 Boat = +1.0 Tide = -2.5 -.5 RANGE 253+10
			42	4.3 3.8	7-28		20°-55	844	

F.B. 2805 Pg. 264 Job No. 0300.02 Division No. 11 Notes Red _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by HARRIET Notes SMITH N Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L-298 CE 307 11-58

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STATION	B.S.	H.I.	F.S.	ELEV	
Inst. At	Sight On	Depth #	Rec. Adj.	Time	Hor.Ang. Remarks

76L-298 S & E #307—1-56

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 245+00	SIGHT ON 250+00
					DATUM MEAN LOWER LOW WATER	250+00 INSHORE
T.P.	5.53	[illegible]	[illegible]	[illegible] 72		
250+00			[illegible]	17 7	CONTROL LINE	
			[illegible]	[illegible] 5	4' LT. BACK [illegible]	
			[illegible]	[illegible] 4		[illegible]
			[illegible]	16 [illegible]		[illegible]
			[illegible]	15 8		102 FT. [illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible] 74		
(149° OFFSET)			4 3	13 3	5' LT. SHORE [illegible]	
			1 7	14 9		38' RT. [illegible]
			2 3	17 3		52' RT. [illegible]
			3 4	14 [illegible]		10' RT. [illegible]
T.P.			4 5	15 44		246' RT. [illegible]
FIRE SHIP PREV. 250+00	0.10	15.54	34	12.1		221 " bott. Br.
"			49	10.6	40° 26' 426'	Top "
"			108	4.7	43° 31' 475'	Mean tide line
T.P.	1.18	4.52	1.220	3.34	T.P.	
250+00			35	1.0	49° 23' 583'	

Profile Notes Red J.S.H. Plotted J.S.H. Job No. ____ Division No. ____ F. B. 2 [illegible] Pg. 265
No. ____ Date 10-26-60 Date 10-27-60 Survey of [illegible]
X-Sec. Notes Chkd. [illegible] Checked [illegible] Survey by [illegible] Notes [illegible] Date [illegible]
No. ____ Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H. E. OTT Date

76L-298 S & E #307—1-56

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STATION	B. S.	H. I.	F. S.	ELEV.	∡ at 245+00		Sight on 250+00
		45					
250+00			5.5	-1.0	52° 34'	653'	
"			7.5	-3.0	55° 00'	714'	
"			9.5	-5.0	56° 59'	769'	
"			11.1	-6.6	59° 09'	837'	
"			13.0	-8.5	61° 15'	911'	
"			14.0	-9.5	63° 32'	1004'	
T.P.	6.40	21.84		15.44	T.P. preceeding pg		
248+59			4.8	17.0			333° R of cont. line Top brk.
"			9.9	11.9			343° " bott "
248+45.5			8.4	13.4			333° " Toe slope.

F. B. 2805 Pg. 266

Job No. _____ Division No. 1 Notes Red. J.S.H. Plotted J.S.H. Profile

Survey of Sta. Line Easement Stations Date 10-26-60 Date 10-27-60 No. X-Sec.

Survey by Land Notes J.C., J.S.H., W.H. Notes Chkd. C.W.H. Checked C.W.H. No.

Indexed H. E. Ott Date & Typed Date 10-26-60 Date 10-27-60

76L-298 CE 307 11-58

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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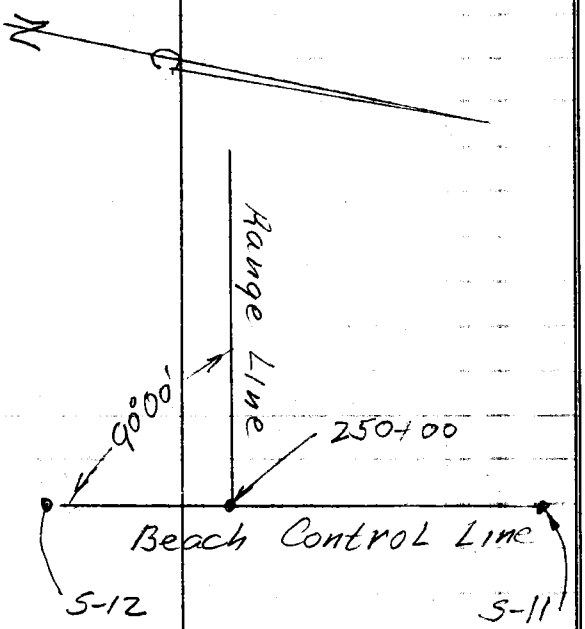
STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
250+00	S-12	1		757	90°00'	
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
		9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19			"	
		20			"	



Profile Notes Red J.S.H. Plotted J.S.H. Job No. 03003.02 Division No. 11 F.B. 2085 PG. 267
No. Date 10-26-60 Date 10-27-60 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. C.W.H. Checked C.W.H. Survey by Hansel Notes Approved Date 10-25-60
No. Date 10-26-60 Date 10-27-60 Map No. Indexed H.E. OH Date

F.B. 2805 Pg. 268 | 0300.02 Job No. ____ Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile

Survey of Beach Erosion Studies Date 10-26-60 Date 10-27-60 No. ____

Survey by Ukanjet Notes Teeboom Notes Chkd. C.W.H. Checked C.W.H. X-Sec.

Indexed ____ Date ____ Date 10-26-60 Date 10-27-60 No. ____

STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At 250+00					
Sight On S-12					
#	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				
Rec. Adj.					
Depth					
Time					
Hor. Ang.					
				90 00'	
				"	
				"	
				"

76L-298 CE 307 11-58

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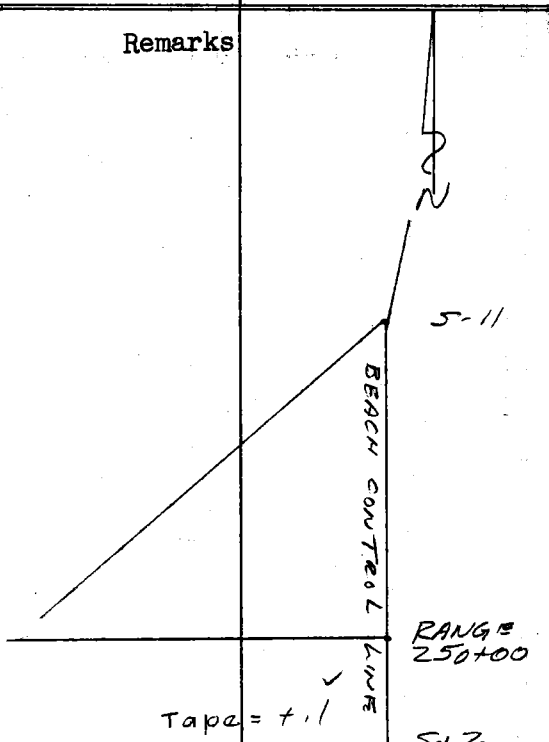
Profile No. ____ Notes Red J.S.H. Plotted J.S.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 269
X-Sec. No. ____ Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. C.W.H. Checked C.W.H. Survey by [illegible] Notes [illegible] Date 7-25-60
Date 10-26-60 Date 10-27-60 Map No. ____ Indexed H. E. on Date ____

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
5-11	5-12	1	51.2	49.2	7-57	60°-48'	3399	
		2	50.4	48.4		60°-15'	3325	
		3	49.3	47.3		59°-40'	3247	
		4	48.0	46.0		58°-51'	3145	
		5	46.7	44.7		58°-06'	3053	
		6	45.0	43.0		57°-01'	2928	
		7	43.4	41.4		55°-46'	2793	
		8	41.7	39.7		54°-37'	2675	
		9	40.0	38.0		53°-26'	2561	
		10	38.5	36.5		52°-10'	2447	
		11	37.3	35.3		51°-06'	2354	
		12	36.4	34.4		49°-42'	2240	
		13	35.0	33.0		48°-21'	2136	
		14	33.7	31.7		46°-54'	2031	
		15	32.0	30.0		45°-08'	1910	
		16	29.8	27.8		43°-36'	1809	
		17	26.9	24.9		41°-47'	1699	
		18	24.7	22.7		40°-18'	1611	
		19	22.1	20.1		38°-24'	1507	
		20	19.8	17.8		36°-42'	1416	



Tape = +.1
Boat = +1.0
Tide = -3.1
-2.0

76L-298 CE 307 11-58

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F.B. 2805 Pg. 270 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile No.
Survey of BEACH EROSION STUDIES Date 10-26-60 Date 10-27-60 X-Sec. No.
Survey by WAGRINET Notes SMITH, N Notes Chkd C.W.H. Checked C.W.H.
Indexed H.E. OIT Date Date 10-26-60 Date 10-27-60 No.

STATION Inst. At	STATION Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV Hor. Ang.		Remarks
11-5	11-2	21	17.7	15.7		34°-58'	1328	Tape = +.1
		22	16.3	14.3		33°-46'	1265	Boat = +1.0
		23	15.1	13.1		32°-28'	1208	Tide = -3.1
		24	13.9	11.9		30°-45'	1131	-2.0
		25	12.1	10.1		29°-10'	1060	
		26	10.8	8.8		27°-24'	984	
		27	9.3	7.3		25°-41'	916	
		28	8.0	6.0		24°-02'	847	
		29	6.8	4.8		22°-36'	790	
		30	5.5	3.5		21°-36'	752	
		31	4.2	2.2	8-02	20°-09'	697	

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 240+00		SIGHT ON 245+00
T.P.	5.07	22.42		17.35	DATUM MEAN LOWER LOW WATER		245+00 INSHORE
245+00			5.1	17.3	CONTROL LINE		
			4.8	17.6	14.2' LT. BACK WALK		
			5.2	17.2			5.3' FRONT WALK
			5.5	16.9			1.5' RT. TOP BANK
			8.8	13.6			166' RT. BTM. BANK
			9.3	13.0			200' RT. BETWEEN BANKS
T.P.			11.57	10.85			350' RT. TOP BANK
	1.02	33.37					
245+00			7.1	4.08	37° 36'	385'	MEAN HIGH LINE
T.P.			7.72	4.15	T.P.		
	0.70	4.35					
245+00			3.0	1.3	41° 26'	441'	
"			5.3	-0.5	45° 16'	505'	
"			5.9	-1.1	48° 32'	566'	
"			9.7	-4.9	52° 40'	656'	
"			11.01	-6.2	54° 21'	697'	
"			12.7	-7.9	56° 18'	750'	
"			14.6	-9.8	58° 10'	805'	

Profile Notes Red J.S.H. Plotted J.S.H. Job No. Division No. 11
No. X-Sec. Date 10-26-60 Date 12-27-60 Survey of BEACH EROSION STUDIES
Notes Chkd. Checked C.W.H. Survey by Notes Date
No. Date 10-26-60 Date 12-27-60 Map No. Indexed H. E. OTT Date

F. B. 2805 Pg. 11

F. B. 2805 Pg. 272 0500.02

Job No. Division No. 11 Notes Red. Plotted Profile

Survey of BEACH EROSION STUDIES Date Date No.

Survey by LIND Notes J.C. GOODWIN Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.

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76L-293 S & E #307—1-56

76L 298 CE 397 11-58

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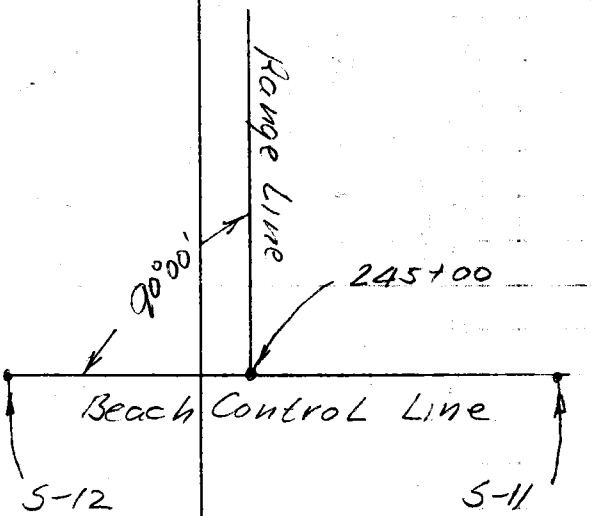
Do not extend notes this side of this line.

Profile No. ____ Date 10-26-60 Notes Red J. S. H. Date 10-26-60 Plotted J. S. H. Date 10-27-60 Job No. 03000.02 Survey of Beach Erosion Studies Division No. 11
X-Sec. No. ____ Date 10-26-60 Notes Chkd. C. W. H. Date 10-26-60 Checked C. W. H. Date 10-27-60 Map No. ____ Survey by Hanson Notes Reviewed Date 1-25-60 Indexed ____ Date ____
F. B. 2005 Pg. 213

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
245+00	5-12	1		8.18	90° 00'	
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
		9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19			"	
		20			"	



F.B. 2805 Pg. 274 | Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile

Survey of Beach Erosion Studies Date 10-26-60 Date 10-27-60 No.

Survey by Charriel Notes Teeboom Notes Chkd. C.W.H. Checked C.W.H. X-Sec.

Indexed E. OTT Date Date 10-26-60 Date 10-27-60 No.

76L-298 CE 307 11-58

PLEASE RETURN TO
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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At 245+00					
Sight On 5-12					
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				
	32				
	33				
	34				
	35				
	36				
# Rec. Adj. Depth					
Time			8 23		
Hor. Ang. 90° 00'					

76L-298 CE 307 11-58

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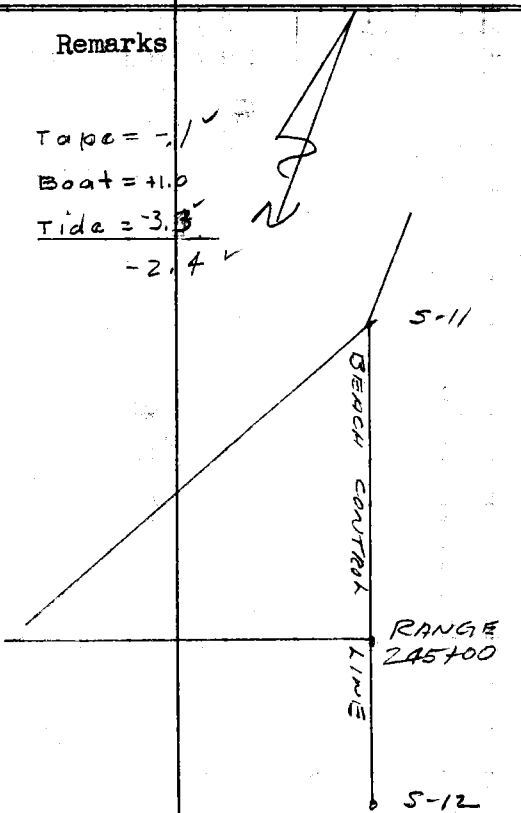
Profile No. Notes Red J.S.H. Plotted J.S.H. Job No. 0300.02 Division No. 11 F.B. 2805 PG. 275
Date 10-26-60 Date 10-27-60 Survey of BEACH EROSION STUDIES
X-Sec. No. Notes Chkd. C.W.H. Checked C.W.H. Survey by WHICKET Notes SMITH Date 7-25-60
Date 10-26-60 Date 10-27-60 Map No. Indexed H. E. OTT Date

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
5-11	5-12	1	55.7	53.3	8-18	69°-33'	3755	
		2	54.5	52.1		69°-07'	3669	Tape = -.1
		3	53.3	50.9		68°-44'	3597	Boat = +1.0
		4	52.1	49.7		68°-15'	3510	Tide = -3.3
		5	51.1	48.7		67°-48'	3430	-2.4
		6	49.9	47.5		67°-07'	3317	
		7	48.7	46.3		66°-36'	3235	
		8	47.3	44.9		65°-51'	3122	
		9	46.1	43.7		65°-02'	3007	
		10	44.4	42.0		64°-12'	2897	
		11	43.2	40.8		63°-22'	2792	
		12	41.8	39.4		62°-21'	2673	
		13	40.3	37.9		61°-26'	2572	
		14	39.0	36.6		60°-26'	2458	
		15	37.5	35.1		59°-00'	2330	
		16	36.6	34.2		58°-03'	2244	
		17	35.1	32.7		56°-43'	2132	
		18	33.2	30.8		54°-51'	1988	
		19	31.3	28.9		52°-51'	1848	
		20	29.7	27.3		50°-55'	1723	



76L-296 CE 307 11-58

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK. WITH DATE AND NAME OF PERSON MAKING CHANGE

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F.B. 2805 Pg. 276 Job No. 0300.02 Division No. 11 Notes Red J. S. H. Plotted J. S. H. Date 10-27-60 No. Profile
Survey of BEACH EROSION STUDIES Date 10-26-60 Notes Chkd. C.W.H. Checked C.W.H. No. X-Sec.
Survey by WHARNET Notes SMITH N Date 10-26-60 Date 10-27-60 No.
Indexed N.E. Off Date

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV Hor. Ang.		Remarks
5-11	5-12	21	27.9	25.4		48°-56'	1607	Tape = -.1
		22	26.6	24.1		47°-12'	1512	Boat = +1.0
		23	24.4	21.9		45°-14'	1411	Tide = -3.4
		24	23.2	20.7		42°-32'	1284	-2.5
		25	21.1	18.6		41°-03'	1219	
		26	19.0	16.5		39°-03'	1135	
		27	16.9	14.4		37°-05'	1058	
		28	14.9	12.4		35°-05'	983	
		29	13.3	10.8		33°-36'	930	
		30	12.2	9.7		32°-36'	896	
		31	11.2	8.7		31°-29'	857	
		32	10.3	7.8		30°-35'	827	
		33	9.1	6.6		29°-30'	792	
		34	7.9	5.4		28°-55'	773	
		35	7.0	4.5		26°-59'	713	
		36	6.0	3.5	8-23	25°-35'	671	

76L-298 S & E #307—1-56

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INSTRD 235+00	CHECK ON 240+00
		[illegible]			DATUM MEAN LOWER LOW WATER	240+00 INSHORE
T.P.	[illegible]	[illegible]	[illegible]	[illegible]		
240+00			5 2	17 1	[illegible]	CURVE
			5 2	[illegible]	15' RT. [illegible]	
			5 3	17 1		45' RT. FRONT WALL
			6 2	16 1		100' RT. BEACH WALL
			8 5	13 1		200' RT. BEACH APEX
T.P.			11 06	11 33		298' RT. TOP BERM.
	098	12.28				
240+06			76	47	35° 17' 354'	Mean tide line
T.P.			6 39	5.33	T.P.	
	011	5.50				
240+00			35	2.0	39° 02' 405'	
"			52	0.3	43° 27' 474'	
"			60	-0.5	46° 00' 518'	
"			78	-2.3	49° 30' 585'	
"			100	-4.5	52° 03' 641'	
"			111	-5.6	53° 48' 683'	
"			121	-6.6	55° 27' 726'	

Profile No. ____ Notes Red J.S.H. Plotted J.S.H. Job No. ____ Division No. ____ F. B. 2805 Pg. 277
Date 10-28-60 Date 10-28-60 Survey of [illegible]
X-Sec. No. ____ Notes Chkd. CWH Checked C.W.H. Survey by [illegible] Notes [illegible] Date [illegible]
Date 10-28-60 Date 10-28-60 Map No. ____ Indexed H. E. Ott Date ____

76L-298 S & E #307—1-56

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

F. B. 2805 — Pg. 278 Job No. Division No. 11 Notes Red. J. S. H. Plotted J. S. H. Profile
Survey of BEACON [illegible] Date 10-28-60 Date 10-28-60 No. X-Sec.
Survey by ~~H. EWOH~~ Notes J. C. GOODWIN Notes Chkd. C. W. H. Checked C. W. H. No.
Indexed Date J. TOPPELL Date 10-28-60 Date 10-28-60 No.

STATION	B. S.	H. I.	F. S.	ELEV.	π at 235+00		Sight on 240+00
		22 36					
		550					
240+00			140	-8.5	57° 36'	788	
"			147	-9.2	58° 44'	823	
"			168	-11.3	60° 35'	887	

76L-298 CE 307 11-58

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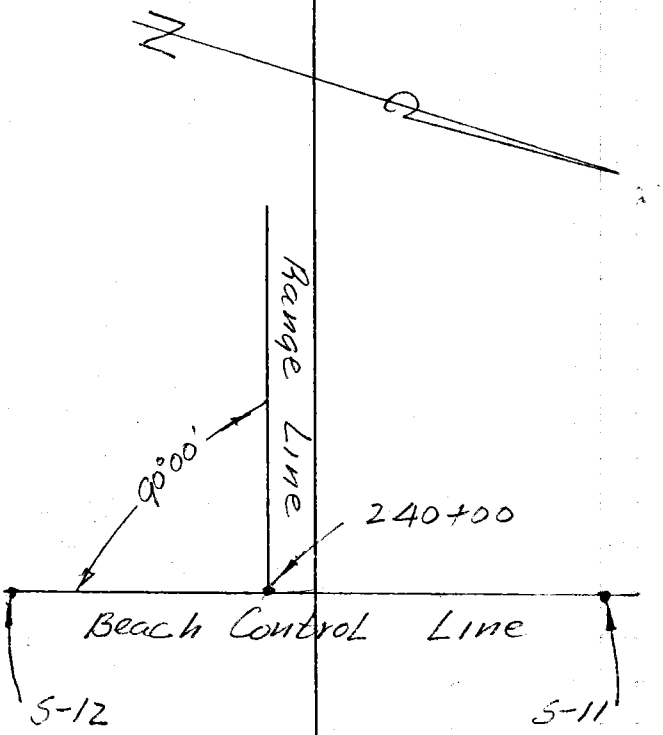
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor.Ang.	Remarks
		1			835	90° 00'	
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
		8				"	
240+00	5-12	9				"	
		10				"	
		11				"	
		12				"	
		13				"	
		14				"	
		15				"	
		16				"	
		17				"	
		18			837	"	



Profile Notes Red J. S. H. Plotted J. S. H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 279
No. ~~X-Sec.~~ Date 10-28-60 Date 10-28-60 Survey of Beach Erosion Studies
~~Notes Chkd. C. W. H. Checked C. W. H. Survey by Highway Notes Reviewed Date 7-25-60~~
No. Date 10-28-60 Date 10-28-60 Map No. Indexed ~~H. E.~~ OIL Date

F.B. 2805 Pg. 280 | 0300.02 Job No. ____ Division No. 11 Notes Red ____ Plotted ____ Profile

Survey of Beach Erosion Studies Date ____ Date ____ No. ____

Survey by Dharriet Notes Tee boom Notes Chkd. ____ Checked ____ X-Sec.

Indexed ____ Date ____ Date ____ Date ____ No. ____

STATION	B.S.	H.I.	F.S.	ELEV		Remarks
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.
240+00						
S-12						

Do not extend notes this side of this line.

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76L-268 CE 307 11-58

76L-298 CE 307 11-58

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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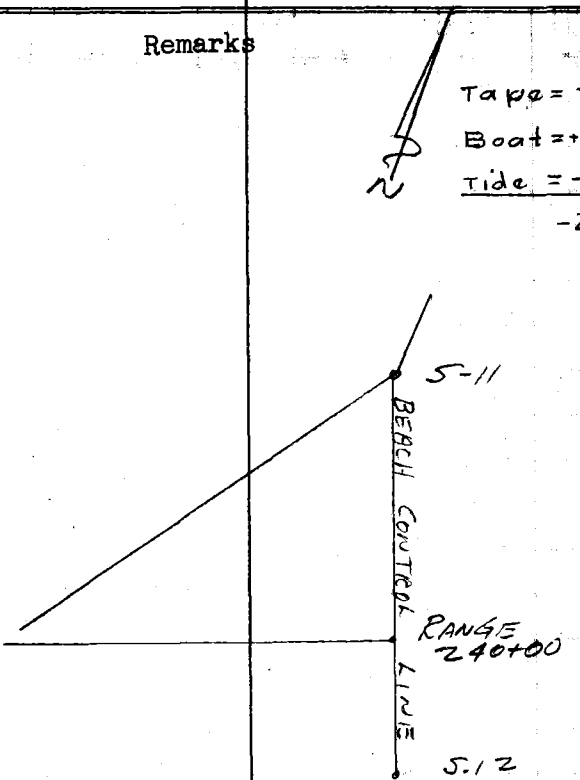
Profile Notes Red J. S. H. Plotted J. S. H. Job No. 0300.02 Division No. 11 F. B. 2805 Pg. 281
No. X-Sec. Date 10-28-60 Date 10-28-60 Survey of BEACH EROSION STUDIES
No. Date 10-28-60 Date 10-28-60 Map No. Indexed H. E. OH Date

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.		Remarks
S-11	S-12	1	30.1	27.4	8-35	62°-14'	1709	
		2	29.2	26.5		61°-10'	1635	
		3	27.7	25.0		59°-48'	1546	
		4	27.3	24.6		58°-40	1479	
		5	26.1	23.4		57°-02'	1388	
		6	24.5	21.8		55°-29'	1309	
		7	23.3	20.6		53°-40'	1224	
		8	21.8	19.1		51°-47	1143	
		9	20.1	17.4		50°-29'	1091	
		10	18.2	15.5		48°-39'	1022	
		11	16.1	13.4		46°-41'	955	
		12	13.6	10.9		44°-23'	881	
		13	11.9	9.2		42°-33'	826	
		14	10.5	7.8		41°-15'	789	
		15	9.8	7.1		39°-36'	744	
		16	8.9	6.2		37°-53'	700	
		17	8.0	5.3		36°-41'	671	
		18	7.0	4.3	8-37	35°-13	635	

Tape = -.1
Boat = +1.0
Tide = -3.6
-2.7



76L-298 CE 307 11-58

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV		
Inst. At / Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	

F. B. 2-805 Pg. 282
Job No. 0300.02 Division No. 11
Survey of BEACH EROSION STUDIES
Survey by CHARPIET Notes SMITH, N
Indexed Date
Notes Red Date
Notes Chkd. Date
Plotted Date
Checked Date
Profile No.
X-Sec. No.

76L-298 S & E #307—1-56

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LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	S. S.	H. I.	F. S.	ELEV.	LEFT @ 240+00		RIGHT @ 235+03
		22 36			DATUM MEAN LOWER LOW WATER		235+00 INSHORE
	+95	22 10	5 21	17 15			
235+00			5 1	17 ~~9~~ 0	CONTROL LINE		
			4 8	~~[illegible]~~ 17 3	16.31 LT. BRK. WALL		
			5 3	~~[illegible]~~ 16 8			5' RT. FRONT WALL
			5 4	~~[illegible]~~ 16 7			85' RT. TOP BRK.
			9 5	~~[illegible]~~ 12 6			200' FT. BTM. BRK.
T.P. FOR SWIM PERM.			10 44	11 66			270' RT. TOP BRK.
B.M. 5-11			5 35	16 75	B.M. 5-11 ELEV. =		16.745 per F.B. 2100 '62
T.P.				11.66	T.P. Above		
T.P.	0 47	12 13	7 34	4.79	T.P.		
235+00	0 78	5.57	00	4 7	32° 17'	316'	Mean tide line
"			39	1.7	37° 39'	386'	
"			57	-0.1	42° 26'	457'	
"			78	-2.2	47° 20'	543'	
"			110	-5.4	50° 42'	611'	
"			120	-6.4	52° 52'	660'	
"			130	-7.4	54° 55'	712'	

Profile Notes Red J.S.H. Plotted J.S.H. Job No. Division No.
No. X-Sec. Date 10-28-60 Date 10-28-60 Survey of
Notes Chkd. CWH Checked C.W.H. Survey by Notes Date
No. Date 10-28-60 Date 10-28-60 Map No. Indexed H.E.O.T. Date

F. B. 2805 Pg. 253

F. B. 2805 — Pg. 284

Job No. _____ Division No. 11 Notes Red J. S. H. Plotted J. S. H. Profile

Survey of BEACH EROSION STUDIES Date 10-28-60 Date 10-28-60 No. _____

Survey by LIND Notes J.C. BROWN Notes Chkd. CWH Checked C. W. H. X-Sec.

Indexed H. E. OTT Date & Tappell Date 10-28-60 Date 10-28-60 No. _____

76L-298 S & E #907—1.56

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
235+00		5.57			N 24 240+00	SIGHT ON 235+00
"			14.2	3.5		
			15.3	(-9.7)	56° 48' 764'	
					58° 06' 803'	

76L-298 CE 307 11-58

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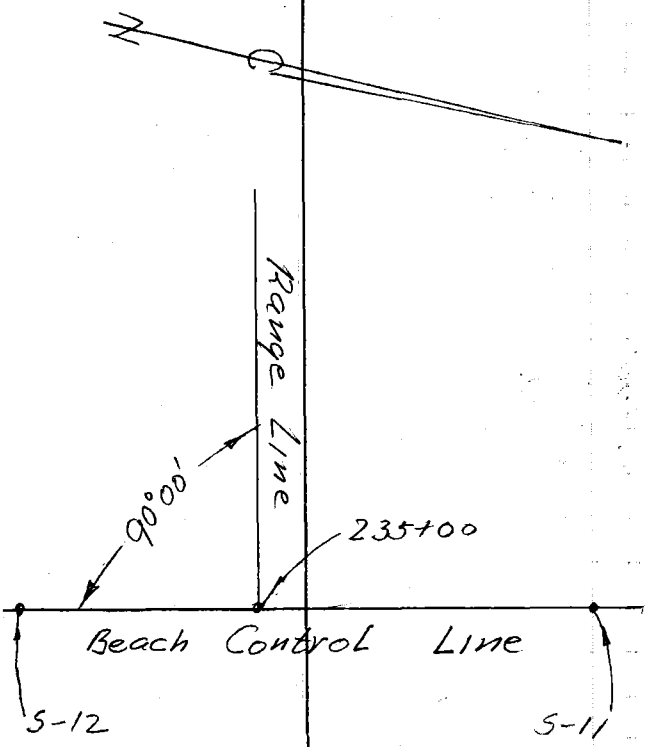
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
235+00	S-12	1		9 00	90° 00'	
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
		9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17				
		18				
		19				
		20				



Profile Notes Red J. S. H. Plotted J. S. H. Job No. 0300.02 Division No. 11 F. B. 2805 Pg. 285
No. ~~Y Sec.~~ Date 10-28-60 Date 10-28-60 Survey of Beach Estates
~~Note Circle G.W.H. Control G.W.H. Survey by Hartman Note Tabulate Rev. 7-25-60~~
No. Date 10-28-60 Date 10-28-60 Map No. Indexed H. E. Ol Date

F.B. 2805 Pg. 286 | 0300.02

Job No. _____ Division No. 11 Notes Red J.S.H. Plotted J.S.H. Profile

Survey of Beach Erosion Studies Date 10-28-60 Date 10-28-60 No. _____

Survey by Uharriet Notes Teeboom Notes Chkd. C.W.H. Checked C.W.H. X-Sec.

Indexed H.E. Off Date _____ Date 10-28-60 Date 10-28-60 No. _____

76L-208 CE 307 11-58

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE

Do not extend notes this side of this line.

STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At 235+00	Sight On 5-12	# Rec. Adj. 21	Depth Time 903	Hor. Ang. 90°00'	

76L-298 CE 307 11-58

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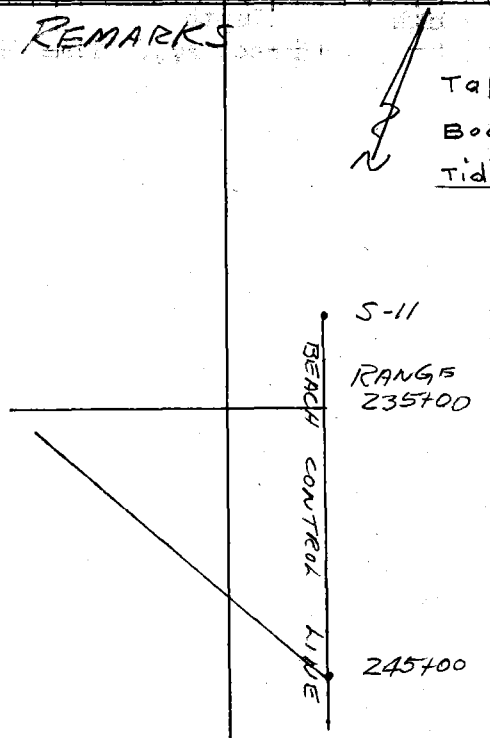
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION INST. AT	STATION SIGHT ON	B.S. #	H.I. DEPTH REC.	H.I. DEPTH ADJ.	F.S. TIME	ELEV. HOR-ANG		REMARKS
245+00	11-5	1	31.8	28.8	9-00	59°-01'	1665	
		2	30.4	27.4		58°-06'	1607	
		3	29.4	26.4		57°-09'	1549	
		4	28.9	25.9		55°-42'	1466	
		5	27.7	24.7		54°-15'	1389	
		6	26.8	23.8		53°-00'	1327	
		7	25.5	22.5		51°-30'	1257	
		8	24.1	21.1		49°-55'	1188	
		9	22.3	19.3		48°-27'	1128	
		10	20.1	17.1		47°-47'	1102	
		11	18.1	15.1		45°-05'	1003	
		12	16.1	13.1		43°-20'	943	
		13	14.3	11.3		41°-15'	877	
		14	13.3	10.3		39°-40'	829	
		15	12.2	9.2		38°-35'	798	
		16	11.1	8.1		36°-35'	742	
		17	9.9	6.9		34°-57'	699	
		18	9.3	6.3		33°-17'	656	
		19	8.0	5.0		31°-19'	608	
		20	6.5	3.5		29°-52'	574	



Profile Notes Red J.S.H. Plotted J.S.H. Job No. 0300.02 Division No. 11 F.B. 2805 Pg. 287
No. Date 10-28-60 Date 10-28-60 Survey of BEACH TOPOGRAPHY STATIONS
No. Date 10-28-60 Date 10-26-60 Map No. Indexed H. E. OTT Date

76L-298 CE 307 11-58

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE

Do not extend notes this side of this line.

F.B. 2805 Pg. 288 Job No. 0300.02 Division No. 11 Notes Red J.S.H. Plotted J.S.H. Date 10-28-60 Profile No.
Survey of BEACH EROSION STUDIES Date 10-28-60 X-Sec. No.
Survey by HARRIET Notes SMITH W Notes Chkd. C.W.H. Checked C.W.H.
Indexed H.E. OTT Date Date 10-28-60 Date 10-28-60

STATION	B.S.	H.I.	F.S.	ELEV		
Inst. At / Sight On	#	Depth Rec. / Adj.	Time	Hor. Ang.		Remarks
2457+00 / 5-11	21	5.1 / 2.1	9-03	28°-25	541	Tape = -.1 Boat = +1.0 Tide = -3.9 -3.0

76L-298 S & E #307—1-56

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S-11

STATION	B. S.	H. I.	F. S.	ELEV.	int at 225+00		Sight on 230+00
[illegible]		[illegible]		16 75	DATUM MEAN LOWER LOW WATER		230+00 INSHORE
239+00			[illegible]	[illegible]	CONTROL LINE		
			[illegible]	[illegible]	[illegible]		
			[illegible]	[illegible]			[illegible]
			61	15 7			100' RT BEACH AREA
			64	15 4			40' RT TOP BRK
			93	12 5			[illegible] 37 W. BRK.
			[illegible]	12 [illegible]			[illegible]
TP			10 98	15 79			[illegible]
	170	12 49					
230+00			78	4 7	30° 29'	294'	Mean tide line
T.P.			710	5.39	T.P.		
	093	6.3 2					
230+06			50	1.3	35° 53'	362'	
"			66	-0.3	41° 48'	447'	
"			76	-1.3	44° 34'	492'	
"			90	-2.7	46° 54'	534'	
"			110	-4.7	49° 19'	582'	

Profile Notes Red J.S.H. Plotted J.S.H. Job No. Division No.
No. Sec. Date 10-28-60 Date 10-28-60 Survey of
Notes Chkd. C.W.H. Checked C.W.H. Survey by Notes Date
No. Date 10-28-60 Date 10-28-60 Map No. Indexed H. E. OTT Date

F. B. 2805 PG. 25

F. B. 280 Pg. 290 | 0320-02

Job No. ____ Division No. 11 Notes Red J. S. H. Plotted J. S. H. Profile

Survey of BEACH EROSION STUDIES Date 10-28-60 Date 10-28-60 No. ____

Survey by CLND Notes J. S. GOODWIN & SAPPH Notes Chkd. C.W.H. Checked C.W.H. X-Sec.

Indexed H. E. OTT Date ____ Date 10-28-60 Date 10-28-60 No. ____

STATION	B. S.	H. I.	F. S.	ELEV.	
230+00		6.32			
"			12.3	-6.0	51° 51' 637'
"			13.2	-6.9	54° 49' 709'
"			14.0	-7.7	56° 02' 742'
"			15.1	-8.8	57° 11' 775'
"			17.0	-10.7	59° 27' 847'
Inst at 225+00					Sight on 230+00

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76L-298 S & E #307—1-56

76L-298 CE 307 11-58

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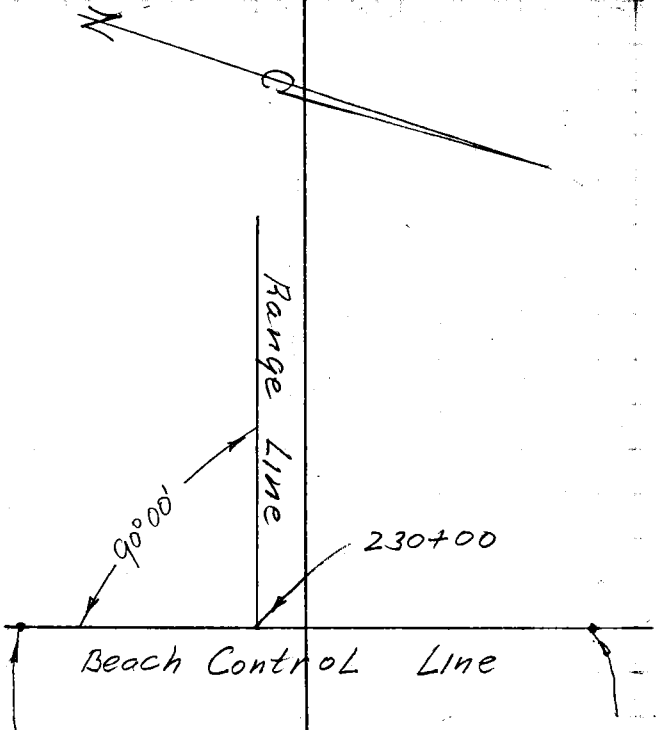
STATION Inst. At	Sight On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
230+00	5-11	1		920	90° 00'	
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
		9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19		922	"	



Profile Notes Red J. S. H. Plotted J. S. H. Job No. 0300.02 Division No. 11
No. Date 10-28-60 Date 10-28-60 Survey of Beach Erosion Study
Notes Chkd. C. W. H. Checked C. W. H. Survey by [illegible] Notes [illegible] Date 7-25-60
No. Date 10-28-60 Date 10-28-60 Map No. Indexed H. E. OTT Date

F.B. 2805 Pg. 29

F.B. 2805 Pg. 292 | 0300.02

Job No. _____ Division No. 11 Notes Red J. S. H. Plotted J. S. H. Profile

Survey of Beach Erosion Studies Date 10-28-60 Date 10-28-60 No. _____

Survey by Dharriet Notes Teeboom Notes Chkd. C. W. H. Checked C. W. H. X-Sec.

Indexed H. E. OTT Date _____ Date 10-28-60 Date 10-28-60 No. _____

STATION	B.S.	H.I.	F.S.	ELEV	Remarks
Inst. At 230+00					
Sight On 5-11					
# Rec. Adj.		Depth			
Time					
Hor. Ang.					

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76L-200 CE 307 11-58

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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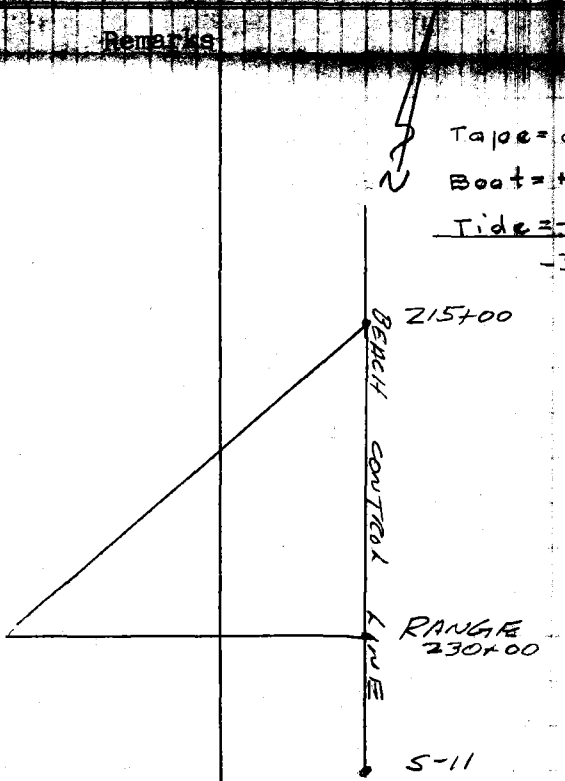
Notes Red J.S.H. Plotted J.S.H. Job No. 0300.02 Division No. 11 F.B. 2005 Pg. 23

Date 10-28-60 Date 10-28-60 Survey of BEACH SOUNDINGS STUDIES

No. Date -60 Date 10-28-60 Map No. Indexed H.E. OTT Date

STATION Inst. At	Sight On	B.S.	H.I. Depth Deg.	H.I. Depth Min.	F.S. Time	ELEV. Hor. Ang.		Remarks
5-11	215+00	1	30.9	27.8	9-20	48°-29'	1695	
		2	30.4	27.3		47°-04'	1613	
		3	29.2	26.1		45°-47'	1542	
		4	27.6	24.5		44°-25'	1470	
		5	26.9	23.8		42°-55'	1395	
		6	25.6	22.5		41°-12'	1313	
		7	24.3	21.2		39°-50'	1251	
		8	22.7	19.6		38°-00'	1172	
		9	20.8	17.7		36°-07'	1095	
		10	18.6	15.5		33°-57'	1010	
		11	16.1	13.0		31°-49'	930	
		12	13.9	10.8		30°-10'	872	
		13	11.8	8.7		28°-27'	813	
		14	10.5	7.4		26°-35'	750	
		15	9.5	6.4		25°-12'	707	
		16	8.8	5.7		23°-56'	666	
		17	8.2	5.1		22°-53'	633	
		18	7.3	4.2		21°-42'	597	
		19	6.4	3.3	9-22	20°-41'	567	



F.B. 2805 Pg. 294 Job No. 0300.02 Division No. 11 Notes Red Plotted

Survey of BEACH EROSION STUDIES Date Date

Survey by HARRIET Notes SMITH N Notes Chkd. Check

Indexed Date Date Date