Notes Red	Plotted	Job No 0300.02	Division No. 10	F. B. 2309	Pg. 5
	Date	Survey of Beach Erosion			
Chkd.	Checked	Survey by Van Deren	Notes Van	Date 7-25-58	
	Date	Map No.	Indexed C. John	AUG 5 '58	

7-25-58

*3.0 on datum line

Time Check Gage time = 10.56 High: —

P.D.S.T. = 11.00 Low: —

Standard Time	Reading	P.D.S.T.
5.00 AM	3.6	6.00 AM
5-30 "	3.6	6-30
6-00 "	3.6	7-00
6-30 "	3.4	7-30
7-00 "	3.25	8-00
7-30 "	3.0	8-30
8-00 "	2.9	9-00
8-30 "	2.7	9-30
9-00 "	2.5	10-00
9-30 "	2.3	10-30
10-00 "	2.3	11-00
10-30 "	2.3	11-30
11-00 "	2.4	12-00
11-30 "	2.6	12-30 PM
12-00 "	2.75	1-00 "

Remarks

Hor. Ang.

Time

Depth

Rec. Adj.

Inst. Sight On At

Microfilmed March '86

F. B. 2309 Pg. 5-A | Job No. 0300.04 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Date 7-25-58 Date _____ No. _____

Survey by Van Derm[illegible] Notes Von Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

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

PLEASE RETURN TO
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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.

76208 S & E #307—7-55

76F309S CE #247—3-57

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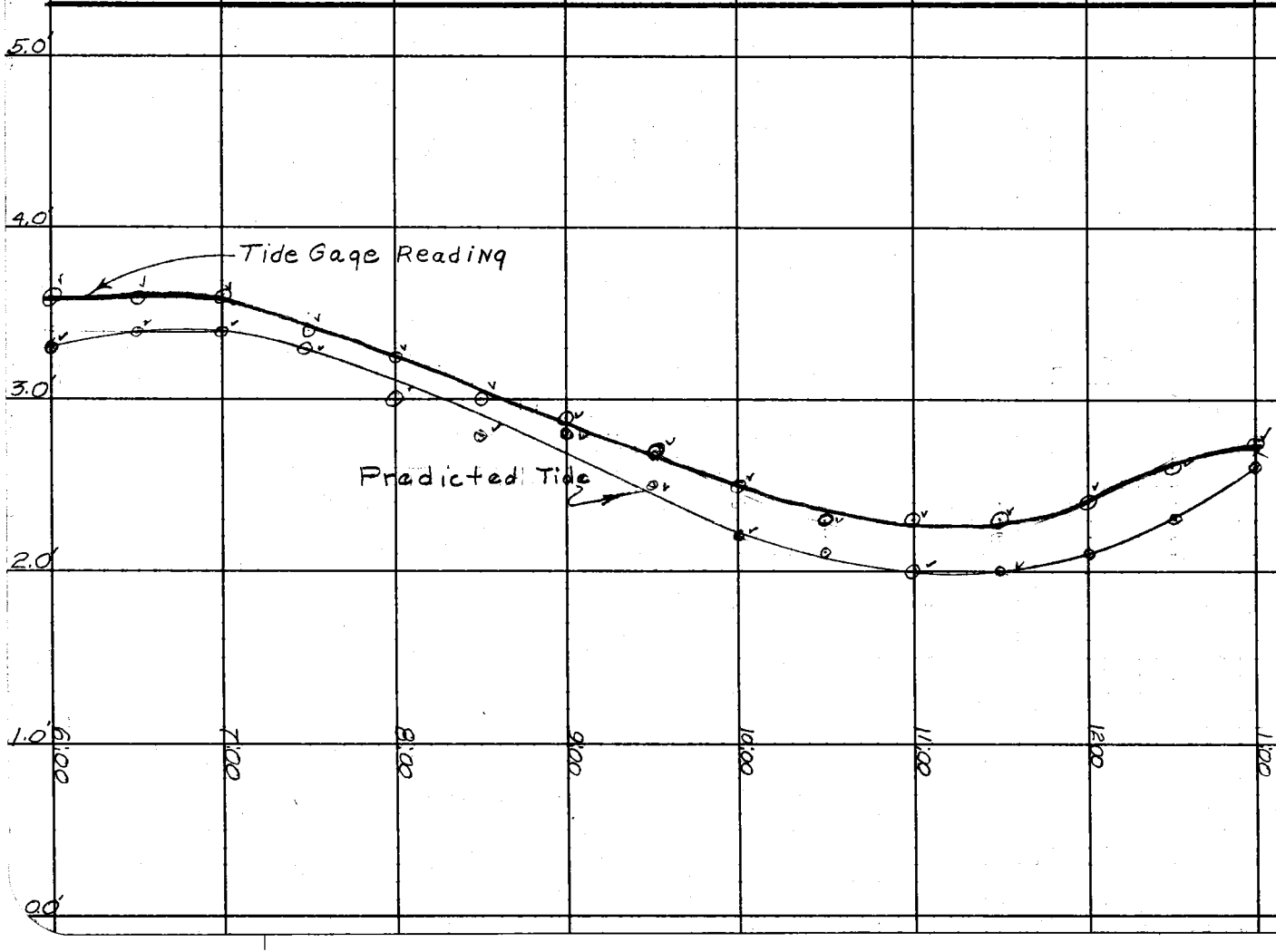

Notes Ck'd by
Map No.
Office Work L. Man ex
Checked J.S.H.
Date 9-4-58

Survey of 0300.02
JN Tape Std. °F
Surveyed by Van Daren
Notes
Indexed Date 7-25-58

F. B. 2309 PG. 6

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 215+00	Sight on 220+00
T.P. 22500	307	1976		1669	T.P CONT. FROM 225+00	
T.P.	520	2186	310	1666		INSHORE 220+00
T.P. 220+00	362	1988	560	1626	℄ ON	
			372	1616	6 FT. RT	W. EDGE WALK
			40	1597	7 " "	SAND TO W. OF WALL
			39	1600	15 " "	BOT. BRK
			31	1688	25 " "	TOP
			25	1740	70 " "	TOP
			50	1479	100 " "	
			65	1349	140 " "	BOT. BRK
			73	1266	180 " "	TOP
			91	1088	200 " "	
			103	966	215 " "	BOT.
			94	1055	270 " "	TOP "
			113	856	300 " "	
T.P.	1.1	6 3	147	52	352 " "	T.P
			30	33	57° 23'	78 'V
			55	08	55° 14'	121 'V
			67	-0 4	53° 12'	669 'V
			74	-1 1	51° 31'	629 'V
			95	-3 2	48° 49'	578 'V

Original notes obviously copied in reverse order. C.W.H. 9-30-58

Correct order

37°06'	378.	
40°30'	427.	
43°57'	482	
45°54'	516	
48°49	572	

Profile Notes Red. ____ Plotted ____ Job No. 2500.02 Division No. 10 F.B. 2307 Pg. 7.
No. ____ Date ____ Date ____ Survey of BEACH EROSION
X-Sec. Notes Chkd. ____ Checked ____ Survey by Engineering Division Date 7-24-56
No. ____ Date ____ Date ____ Map No. ____ Index No. [illegible]

76298 S & E #307—7-55

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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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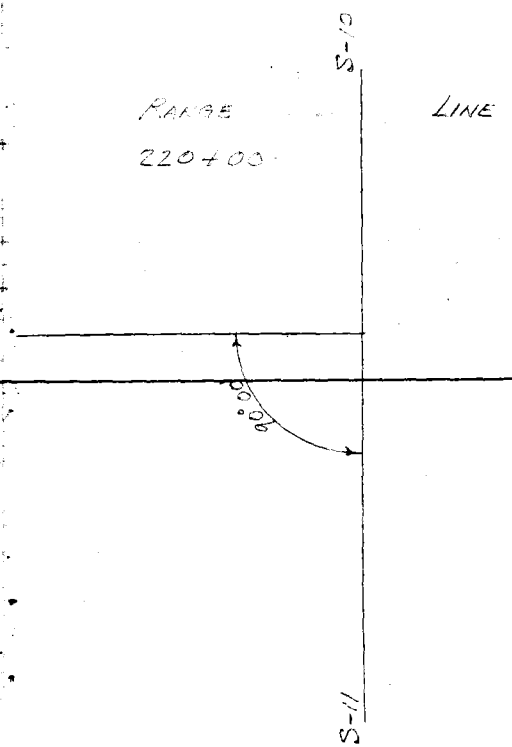
STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 215+00	Sight on 220+00
						∡ DIS.
		6 3	12 4	6.1	~~45° 51' 516'~~	51° 31' 629
			13 0	6.7	~~43° 57 482'~~	53° 12' 669'
			16 0	9.7	~~40° 30' 427'~~	55° 14' 721'
			16 4	10.1	~~37° 06 378'~~	57° 23' 782'

F. B. 2309 PG. 8 | 0300.02 Job No. Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Sur. Date Date No. X-Sec.
Survey by English Notes Dreier Notes Chkd. Checked
Indexed A. C. Johnson Date Date Date No.

Profile	Notes Red.	Plotted	Job No. 230004	Division No. 10	F. B. 2309 Pg. 9
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes TO	Date 7-25-58
No.	Date	Date	Map No.	Index [illegible] C. [illegible]	



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
220+00 S-11	1		8 05	90° 00	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
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	19				
	20				

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76298 S & E #307—7-55

76298 S & E #307—7-58

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On # Rec. Adj. Time Hor. Ang.	Depth				Inst. Sight At On Remarks #	Depth Rec. Adj. Time Hor. Ang.
220+00 S-11 21			90 00			
22			"			
23						
24						
25						
26			"			
27			"			
28						
29			"			
30			"			
31			"			
32			"			
33			"			
34			"			
35		2 15	"			

F. B. 2309 PG. 10

Job No. 030002 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION Date 7-25-58 Date No.

Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.

Indexed C. Johnson Date Date Date No.

76298 S & E #307—7-55

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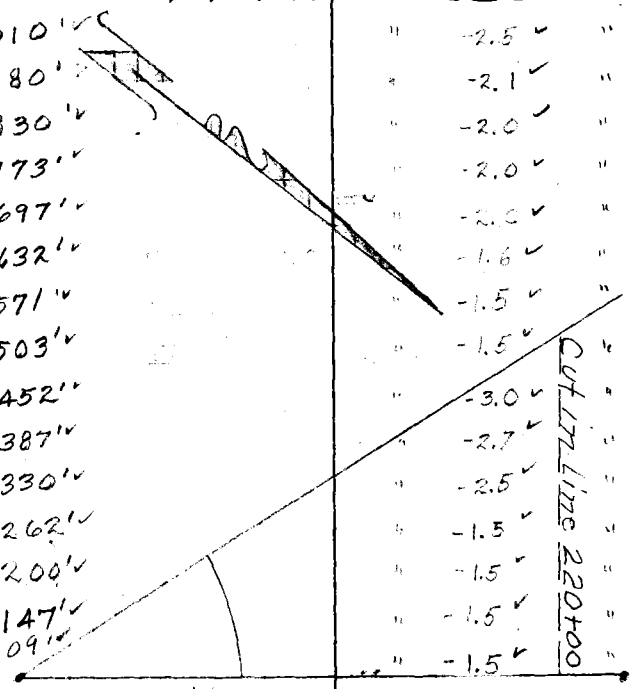
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OR PERSON MAKING CHANGE.

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	Boat	Zero	Tide	Total
		1	42.4	37.9	8:05	66° 13'	2,496'	+1.0	-2.3	-3.2	-4.5
		~~2~~				64° 47'	Cut in Line 220+00	"			"
		3	36.1	31.4		61° 18'	2,010'	"	-2.5	"	-4.7
		4	34.6	30.3		59° 40'	1,880'	"	-2.1	"	-4.3
		5	33.8	29.6		59° 00'	1,830'	"	-2.0	"	-4.2
		6	33.3	29.1		58° 11'	1,773'	"	-2.0	"	"
		7	32.4	28.2		57° 03'	1,697'	"	-2.0	"	"
		8	31.3	27.5		56° 01'	1,632'	"	-1.6	"	-3.8
		9	30.2	26.5		55° 00'	1,571'	"	-1.5	"	-3.7
		10	29.1	25.4		53° 48'	1,503'	"	-1.5	"	"
		11	28.7	23.5		52° 51'	1,452'	"	-3.0	"	-~~6~~5.2
		12	28.4	23.5		51° 35'	1,387'	"	-2.7	"	-~~5~~4.9
		13	27.1	22.4		50° 24'	1,330'	"	-2.5	"	-4.7
		14	24.4	20.7		48° 55'	1,262'	"	-1.5	"	-3.7
		15	23.7	20.0		47° 29'	1,200'	"	-1.5	"	"
		16	23.2	19.5		46° 12'	1,147'	"	-1.5	"	"
		17	22.6	18.9		45° 13'	1,109'	"	-1.5	"	"
		18	21.2	16.5		44° 00'	S-11 1,063'	"	-2.5	"	S-10 -4.7
		19	20.1	16.5		42° 37'	1,012'	"	-1.4	"	-3.6
		20	20.9	17.7		43° 44'	1,053' - ?	"	-1.0	"	-3.2



S-11

S-10

Profile Notes Red. Plotted Job No. 2300.02 Division No. 10 F. B. 2309 Pg. 11
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by Van Dover Notes R.T. Date 7-25-58
No. Date Date Map No. Indexed C. Johnson

76298 S & E #307—7-55

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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
		21	20.0	16.9		42° 06'	994'	
		22	19.0	15.9		41° 14'	964'	Cut in Line 220+00
		23	18.0	14.9		40° 15'	932'	
		24	16.5	13.4		39° 10'	897'	
		25	15.5	12.4		38° 06'	862'	Boat = +1.0
		26	14.6	11.5		37° 10'	834'	Zero = -.9
		27	13.7	10.6		36° 21'	810'	Tide = -3.2
5-11	5-10	28	13.3	10.2		35° 26'	783'	-3.1
		29	12.7	9.6		34° 30'	756'	
		30	11.8	8.7		33° 39'	733'	
		31	11.1	8.0		32° 47'	708'	
		32	10.4	7.3		31° 48'	682'	
		33	9.5	6.4		31° 13'	667'	
		34	8.6	5.5		29° 52'	631'	
		35	8.4	5.3	8:15	29° 32'	624'	

F. B. 2309 Pg. 12 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 2-25-58 Date No. X-Sec.
Survey by Van Doren Notes R.T. Notes Chkd. Checked
Indexed C. Johnson Date Date No.

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 220+00	Sight on 215+00
220+00	509	2135		1626	CONT. FROM 220+00	
215+00	244	1786	593	1542	℄ ON WALK	INSHORE 215+00
		174	259	1527	85 FT RT EDGE OF WALK	
			31	148	9 " " SAND AT EDGE OF WALK	
			37	142	25 " "	
			50	129	50 " " BOT. BRK	
			50	129	100 " "	
			50	129	150 " " TOP "	
			79	100	200 BOT. "	
			78	101	260 TOP	
			97	82	300 " "	
T.P.	05	58	126	53	335	
			41	17	38° 19' 395'	
			55	+03	41 16 439'	
			70	-12	45 00 500'	
			96	-38	48 33 566'	
			124	-66	51 58 639'	
			139	-81	54 38 705'	
			150	-92	56 41 761'	

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 13
No. ____ Date ____ Date ____ Survey of BEACH EROSION
X-Sec. Notes Chkd. ____ Checked ____ Survey by English & Dreier Date 7-25-5
No. ____ Date ____ Date ____ Map No. 1 Indexed [illegible] Date ____

76298 S & E #307—7-55

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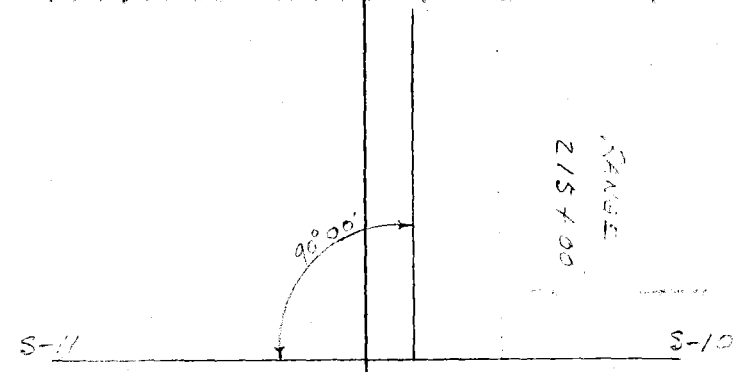
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
[illegible]	S-11	1		8 25	[illegible]		
		2					
		3					
		4					
		5					
		6					
		7					
		8					
		9					
		10					
		11					
		12					
		13					
		14					
		15					
		16					
		17					
		18					
		19					
		20		8 29			



Profile Notes Red. ____ Plotted ____ Job No. 03[illegible] Division No. 10 F. B. 2309 Pg. 15
No. ____ Date ____ Date ____ Survey of BEACH EROSION Notes T.O. Date 7-25-08
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren
No. ____ Date ____ Date ____ Map No. ____ Indexed C. J. [illegible] Date ____

F. B. 2309 Pg. 16 | Job No. 030002 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION Date 7-25-58 Date No.

Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

76298 S & E #307—7.55

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

76298 S & E #307—7-55

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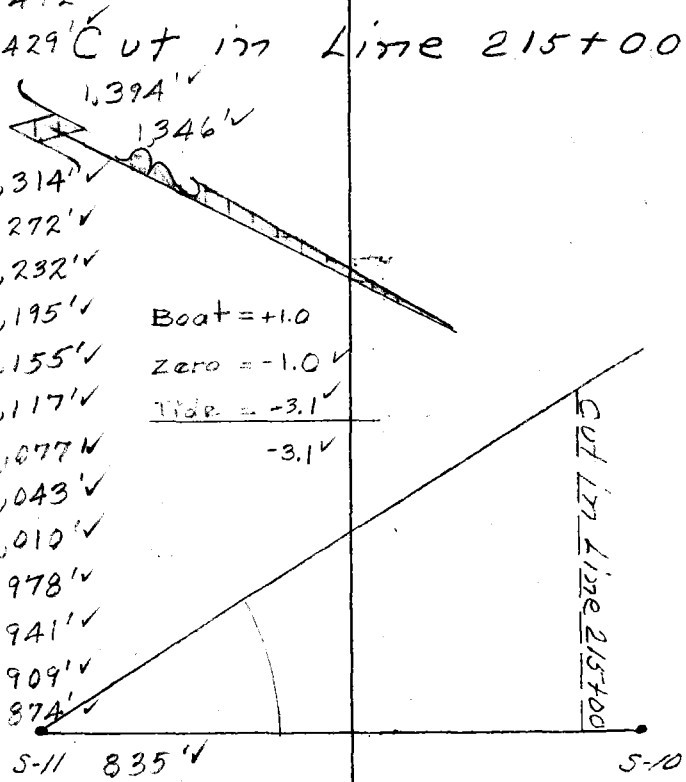
Profile No. ____ Notes Red. ____ Plotted ____ Job No. 4300.02 Division No. 12 F. B. 3309 Pg. 17
Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. No. ____ Notes Chkd. ____ Checked ____ Survey by Walter Pierson Notes PTT Date 9-25-58
Date ____ Date ____ Map No. ____ Index C. Johnson

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	27.8	24.7	8:25	42° 36'	1,472'
		2	27.4	24.3		41° 45'	1,429' Cut in Line 215+00
		3	27.1	24.0		41° 04'	1,394'
		4	25.9	22.8		40° 04'	1,346'
		5	25.2	22.1		39° 24'	1,314'
		6	24.6	21.5		38° 29'	1,272'
		7	24.1	21.0		37° 36'	1,232'
11-5	01-5	8	23.9	20.8		36° 46'	1,195'
		9	23.2	20.1		35° 50'	1,155'
		10	22.7	19.6		34° 56'	1,117'
		11	22.2	19.1		33° 59'	1,077'
		12	21.3	18.2		33° 06'	1,043'
		13	20.4	17.3		32° 15'	1,010'
		14	19.2	16.1		31° 26'	978'
		15	17.9	14.8		30° 27'	941'
		16	16.6	13.5		29° 36'	909'
		17	15.3	12.2		28° 39'	874'
		18	14.2	11.1		27° 35'	5-11 835'
		19	13.0	9.9		26° 13'	789'
		20	11.9	8.8	8:29	25° 30'	763'

Boat = +1.0
Zero = -1.0
Tide = -3.1
-3.1



F. B. 2309 Pg. 18 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Study Date 7-25-58 Date No.

Survey by Van Deven Notes R.T. Notes Chkd. Checked X-Sec.

Indexed A. C. Johnston Date Date Date No.

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On		Depth # Rec. Adj.	Time	Hor. Ang.		Remarks
S-11						
S-10						
						Cut in Line 215+00

76298 S & E #307—7-55

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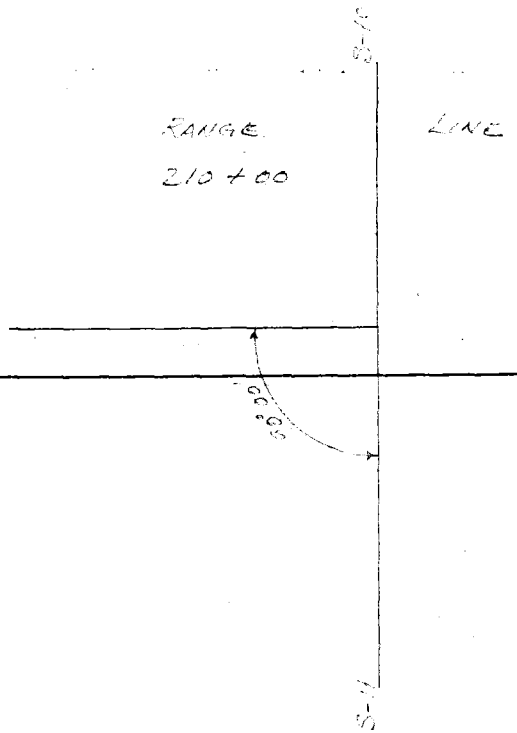
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Last at 205+00	Sight on 210+00
215+00	5 69	21 11		15 42	CONT. FROM LINE 2 OF 215+00	
210+00			5 59	15 52	& ON WALK	INSHORE 210+00
T.P.	3 03	18 56	5 58	15 53		
			2 8	158	41 LT. RT. SAND TO W OF BOARD FENCE	
			3 8	148	00 " "	
			3 0	136	135 " " TOP BRK	
			3 8	98	185 " " BOT	
			8 9	97	200 " "	
			8 5	101	240 " " TOP BRK	
			11 8	68	300	
T.P.	0 3	5 7	13 7	49	335	
			4 2	1 4	38° 39' 400'	
			5 7	0 0	42 11 453'	
			7 1	[illegible]	45 38 511'	
			[illegible]	[illegible]	49 30 586'	
			[illegible]	[illegible]	51 14 623'	
			13 [illegible]	-7 [illegible]	53 22 673'	
			15 6	-9 9	54 39 705'	

Profile Notes Red. Plotted Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 19
No. Date Date Survey of BEACH PROTECT Notes GEB Date 7-25-58
X-Sec. Notes Chkd. Checked Survey by
No. Date Date Map No. Indexed C. Johnson

Profile	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2309 Pg. 21
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-25-58
No.	Date	Date	Map No.	Indexed A. C. Johnson	



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
210+00 S-11	1		8 44	90° 00	
	2				
	3				
	4				
	5				
	6				
	7				
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	19				
	20				

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76298 S & E #307—7-55

F. B. 2309 Pg. 22 Job No. 030002 Division No. 10 Notes Red. ______ Plotted ______ Profile

Survey of BEACH EROSION Date 7-25-58 Date ______ No. ______

Survey by VAN DEREN Notes T. O. Notes Chkd. ______ Checked ______ X-Sec.

Indexed [redacted] Date ______ Date ______ Date ______ No. ______

STATION	B.S.	H.I.	F.S.	ELEV.	
Inst. Sight At On	# Depth Rec. Adj.		Time	Hor. Ang.	Remarks
210+00 S-11	21		8		
	22		8:30		
	23				
	24				
	25				
	26				
	27				
	28				
	29				

76298 S & E #307—7.55

PLEASE RETURN TO
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76298 S & E #307—7-55

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Profile No.____ Date____ Notes Rod____ Date____ Plotted____ Date____ Job No. 2300.02 Division No. 10 F. B. 2309 Pg. 23
X-Sec. No.____ Date____ Notes Chkd____ Date____ Checked____ Date____ Survey of Beach Erosion Study Survey by Vab Devon Notes by Date 7-25-58
Map No.____ Indexed by John

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
		1	30.3	27.4	8:44	41° 20'	1,628'	
		2	29.7	26.8		40° 52'	1,600'	Cut in Line 210+00
		3	29.2	26.3		39° 56'	1,548'	Shots 1 to 12
		4	29.1	26.2		39° 11'	1,508'	Boat = +1.0
		5	28.6	25.7		38° 18'	1,462'	Zero = -1.0
		6	27.6	24.7		37° 30'	1,419'	Tide = -2.9
		7	27.0	24.1		36° 39'	1,376'	-2.9
		8	26.7	23.8		36° 08'	1,351'	
S-10	S-11	9	26.3	23.4		35° 05'	1,299'	Shots 13 to 20
		10	25.6	22.7		33° 53'	1,243'	Boat = +1.0
		11	25.2	22.3		33° 00'	1,201'	Zero = -1.4
		12	24.6	21.7		31° 54'	1,151'	Tide = -2.9
		13	23.9	20.6		31° 08'	1,117'	-3.3
		14	23.1	19.8		30° 09'	1,075'	
		15	22.1	18.8		29° 13'	1,034'	
		16	21.3	18.0		28° 21'	999'	
		17	20.4	17.1		27° 33'	966'	
		18	18.9	15.6		26° 33'	S-11 925'	S-10
		19	17.7	14.4		25° 31'	882'	
		20	16.8	13.5		24° 44'	853'	

Cut in Line 210+00

76298 S & E #307—7-55

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F. B. 2309 Pg. 24 Job No. 700.02 Division No. 10 Notes Red. Plotted
Survey of Beach Erosion Study Date 2-25-58 Date
Survey by Van Dexen Notes N.T. Notes Chkd. Checked
Indexed C. Johnson Date Date Date

Profile No. X-Sec. No.

STATION Inst. At	STATION Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
		21	15.7	12.7		23° 58'	823'	
		22	14.5	11.5		23° 10'	792'	Cut in Line 210+00
		23	13.7	10.7		22° 24'	762'	
		24	12.9	9.9		21° 38'	734'	
		25	12.0	9.0		20° 42'	699'	Boat = +1.0
		26	11.3	8.3		20° 02'	675'	Zero = -1.1
		27	10.1	7.1		19° 08'	642'	Tide = -2.0
		28	9.2	6.2		18° 20'	612'	-3.0
		29	8.6	5.6	8:50	17° 35'	586'	
S-10	S-11							

76298 S & E #307—7-55

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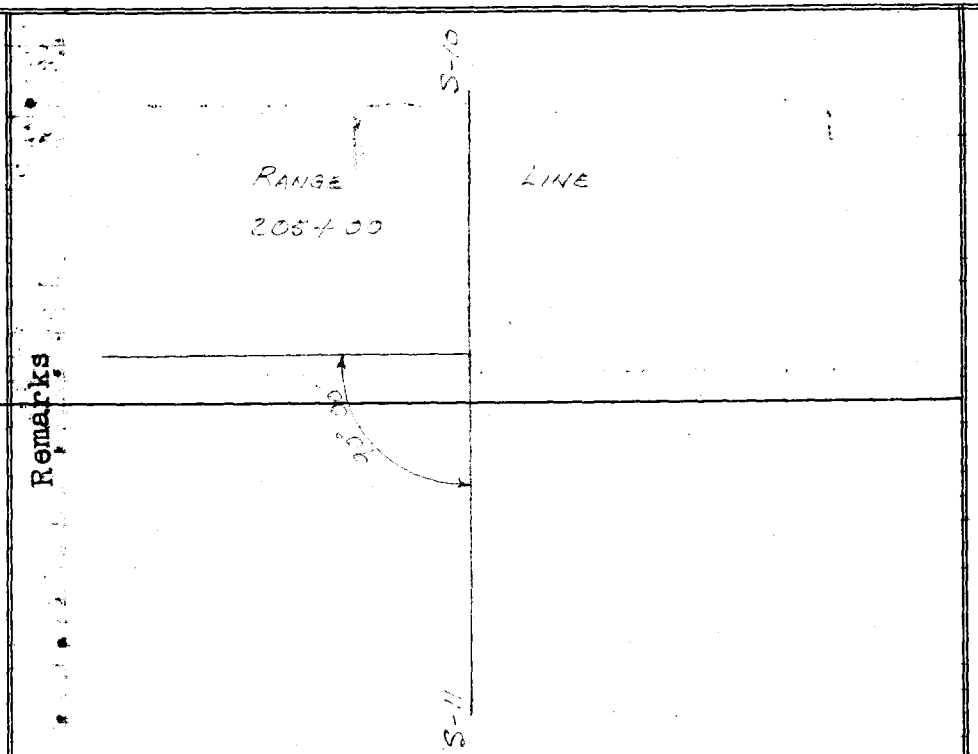
STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 200+00	Sight on 205+00
T.P.	303	18 56		1553	CONT. FROM LINE 3, 210+00	
T.P.	570	21 55	271	1585		INSHORE 205+00
205+00	292	19 18	529	1626	℄ ON WALK	
			306	1612	75 FT. RT., WALK	
			46	146	9 " " SAND, TO W. OF WALL	
			46	146	100 " "	
			50	142	145 " " TOP	BRK.
			90	102	200 " " BOT.	BRK.
			87	105	240 " " TOP.	BRK.
			133	59	300 " "	
T.P.	06	52	1460	458	325 " " T.P.	
			40	+12	38° 18' 395	
			57	-05	43 15 470	
			76	-24	45 44 513	
			92	-46	47 54 553	
			122	-70	50 53 615	
			146	-94	53 55 686	
			159	-107	55 38 731	

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 25
No. ____ Date ____ Date ____ Survey of BEACH EROSION
X-Sec. Notes Chkd. ____ Checked ____ Survey by English & Preier Date 7-25-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

Profile	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2309	Pg. 27
No.	Date	Date	Survey of BEACH EROSION			
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-25-58	
No.	Date	Date	Map No.	Indexed C. Johnson	Date	



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
205+00 S-11	1		9 04	90° 00'	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				

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76298 S & E #307—7-55

F. B. 2309 Pg. 28 | Job No. 23006 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION Date 7-25-58 Date _____ No. _____

Survey by VAN DEREN Notes T. C. 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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76298 S & E #307—7-55

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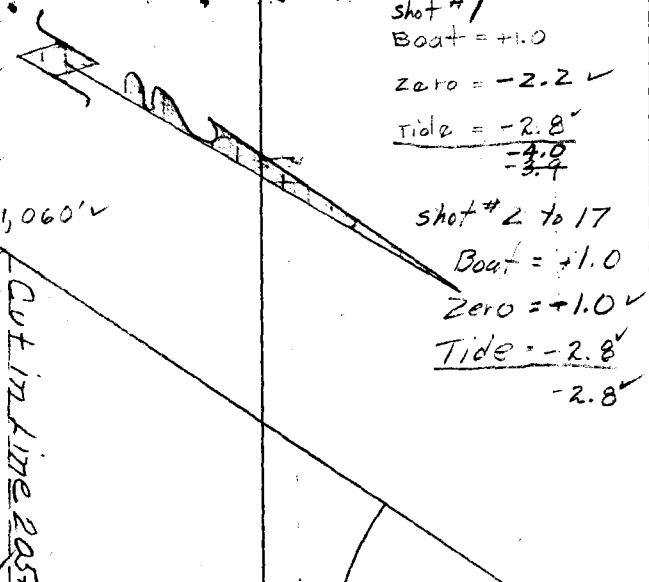
Profile No. ____ Notes Red. ____ Plotted ____ Job No. 3608-2 Division No. 10 F. B. 2309 Pg. 29
X-Sec. No. ____ Date ____ Date ____ Date ____ Survey of Beach Erosion Study
Notes Chkd. ____ Date ____ Checked ____ Map No. ____ Survey by Lay Deen Notes R.T. Date 7-25-58

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
		1	29.6	25.6	9:04	48° 24'	1520'	
		2	27.4	24.6		46° 15'	1411'	Cut in Line 205+00
		3	26.3	23.5		45° 00'	1350'	
		4	26.0	23.2		43° 33'	1283'	
		5	25.5	22.7		42° 23'	1233'	
		6	24.3	21.5		40° 34'	1156'	
		7	23.2	20.4		39° 20'	1106'	
		8	22.7	19.9		38° 07'	1060'	
		9	21.4	18.6		36° 47'	1010'	
		10	20.4	17.6		35° 11'	952'	
		11	18.4	15.6		33° 33'	895'	
		12	16.7	13.9		31° 38'	832'	
		13	15.1	12.3		30° 08'	783'	
		14	13.7	10.9		28° 47'	743'	
		15	12.5	9.7		27° 42'	709'	
		16	11.9	9.1		26° 47'	682'	
		17	11.1	8.3	9:08	26° 00'	659'	
		18						
		19						
		20						



01-S
11-S

F. B. 2309 Pg. 36 | Job No. 0300.02 Division No. 10 | Notes Red | Plotted | Profile

Survey of Beach Erosion Study | Date 7-25-58 | Date | No.

Survey by Van Deren | Notes R.T. | Notes Chkd. | Checked | X-Sec.

Indexed | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. Sight At On # Depth Rec. Adj. Time Hor. Ang.	Remarks
S-10						
S-11					21	Cut in line 205+00

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 195+00	Sight on 200+00
205+00	292	1918		1626	CONT. FROM LINE 3,	205+00
T.B.M. #11	570	2198	287	1631 (28)	T.B.M. #11 ELEV. 16285 THE STRAND &	82100-163 INSHORE 15th ST.
T.P. 200+00	275	1912	561	1637		200+00
			294	1618	75 FT. RT. EDGE	OF WALK
			25	166	8 " " SAND	TO W. OF WALL
			21	170	30 " " TOP	BREAK
			112	149	75 " " BOT.	"
			47	144	100 " "	
			49	142	135 " " TOP	"
			93	98	200 " " BOT.	"
			86	105	245 " " TOP	"
			127	64	300 " "	
T.P.	0 6	5 6	1410	502	328	
			48	08	37° 58' 390	
			66	-10	42 54 465	
			93	-37	46 40 530	
			120	-64	50 02 597	
			144	-88	52 34 653	
			150	-94	54 17 696	

Profile No. ____ Notes Red ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 31
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION
Notes Chkd. ____ Checked ____ Survey by ____ Notes G.F.P. Date 7-25-58
Date ____ Date ____ Map No. ____ Indexed ____ C. Job Desc.

76298 S & E #307—7-55

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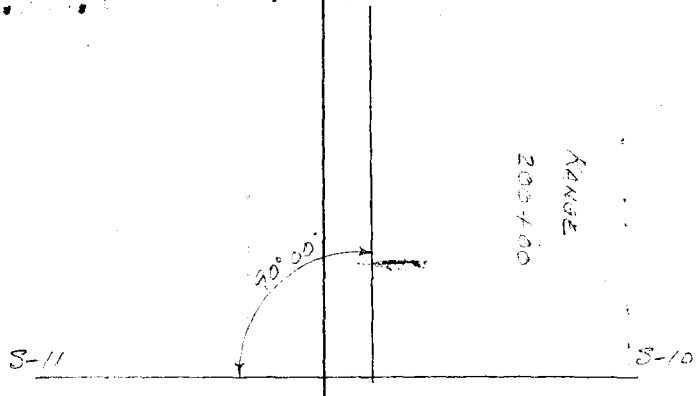
Do not extend notes this side of this line.

STATION	S. S.	H. I.	F. S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. / Adj.	Time	Hor. Ang.	Remarks	
200+03 S-11			9 15	90° 00'		
	2			"		
	3			"		
	4			"		
	5			"		
	6			"		
	7			"		
	8			"		
	9			"		
	10			"		
	11			"		
	12			"		
	13			"		
	14			"		
	15			"		
	16			"		
	17			"		
	18			"		
	19			"		
	20			"		



Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____
No. ____ Date ____ Date ____ Survey of BEACH EROSION
X-Sec. Notes Chkd. ____ Checked ____ Survey by VAN BUREN Notes 70 Date 7-25-58
No. ____ Date ____ Date ____ Map No. ____ Index C. Johnson

F. B. 2304 Pg. 33

76298 S & E #307—7-55

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F. B. 2309 Pg. 34 | Job No. 03000 | Division No. 10 | Notes Red. | Plotted | Profile

Survey of BEACH EROSION | Date 7-25-58 | Date | No.

Survey T. O. | Notes | Notes Chkd. | Checked | X-Sec.

Indexed | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	Depth # Rec.	Adj.	Time	Hor. Ang.	Inst. Sight At On Remarks	Depth # Rec. Adj. Time Hor.
290+00 S-11	21					
	22					
	23					
	24					
	25					
	26		9.20			

76298 S & E #307—7-55

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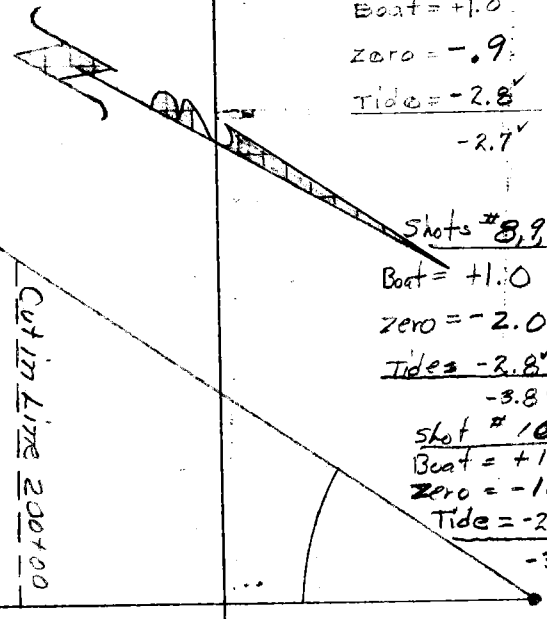
STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
S-10	S-11	1	29.6	26.9	9:15	62° 46'	1,652'	Cut in Line 200+00
		2	29.3	26.6		62° 23'	1,625'	Shots #1 to #7, #11 to #18, #21 to #26
		3	29.1	26.4		61° 58'	1,596'	
		4	28.8	26.0		61° 02'	1,536'	Boat = +1.0
		5	28.3	25.6		60° 10'	1,482'	zero = -.9
		6	27.8	25.1		59° 32'	1,445'	Tide = -2.8
		7	27.4	24.7		58° 25'	1,383'	-2.7
		8	27.0	24.0		57° 49'	1,351'	Shots #8, 9, 19, 20
		9	26.9	23.1		57° 06'	1,314'	
		10	26.1	23.0		56° 11'	1,269'	Boat = +1.0
		11	25.4	22.5		55° 02'	1,216'	zero = -2.0
		12	24.5	21.8		53° 58'	1,169'	Tides -2.8
		13	24.1	21.4		52° 58'	1,126'	-3.8
		14	23.3	20.6		51° 57'	1,086'	Shot #10
		15	21.9	19.2		50° 45'	1,040'	Boat = +1.0
		16	20.9	18.2		49° 44'	1,004'	zero = -1.3
		17	20.2	17.5		48° 22'	956'	Tide = -2.8
		18	19.3	16.6		47° 11'	S-11 917'	-3.1
		19	18.1	14.3		46° 07'	884'	
		20	16.7	12.9		44° 51'	846'	



Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2308 PG. 35
No. ____ Date ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Wm. Perry Noted J.T. Date 7-25-58
No. ____ Date ____ Date ____ Map No. ____ Indexed C. Johnson

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
		21	15.6	12.9		43° 46'	814'	
		22	14.5	11.8		42° 41'	784'	Cut in Line 200+00
		23	13.8	11.1		41° 24'	750'	
		24	12.9	10.2		40° 03'	715'	Boat = +1.0
		25	12.5	9.8		39° 06'	691'	zero = -0.9
		26	11.1	8.4	9:20	37° 38'	655'	Tide = -2.8
								-2.7
S-10	S-11							

F. B. 2309 Pg. 36 Job No. 0300.02 Division No. 10 Notes Red. Plotted No. Profile
Survey of Beach Erosion Study Date 7-25-58 Date No. X-Sec.
Survey by Van Deren Notes R.T. Notes Chkd. Checked No.
Indexed [redacted] Date Date Date

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 200+00	Sight on 195+00
200+00	275	1912		1637	CONT. FROM LINE 3, 200+00	INSHORE 195+00
T.P.	286	1936	262	1650		
195+00			277	1659	℄ ON WALK	
			301	1635	75 FT. RT. W. EDGE OF WALK	
			28	16.6	8 " " SAND TO W. OF WALL	
			29	165	25 " "	
			55	139	100 " "	
			66	128	150 " " TOP BRK	
			96	98	200 " " BOT "	
			91	103	265 " " TOP "	
			122	72	300 " "	
T.P	10	69	1350	586	318 " "	
			50	19	36° 30' 370	
			70	-21	40 15 424	
			86	-17	44 55 499	
			114	-45	47 49 552	
			138	-69	50 34 608	
			149	-80	53 00 664	
			156	-87	54 45 708	
			170	-101	56 43 762	

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 97
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Sub.
Notes Chkd. ____ Checked ____ Survey by English & Dreiss Date 7-25-58
Date ____ Date ____ Map No. ____ Indexed ____ Date ____

Profile	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2309 Pg. 39
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes I.O.	Date 7-25-58
No.	Date	Date	Map No.	Indexed C. Johnson	Date

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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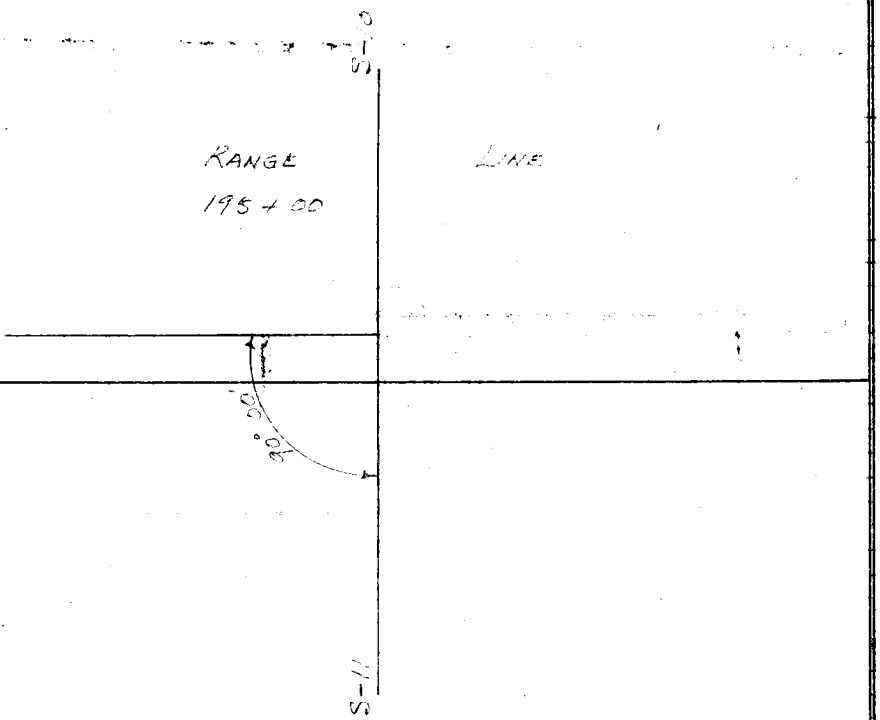
STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
195+00 S-11	1		9 32	90° 00'	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				



76298 S & E #307—7-55

76298 S & E #307—7-55

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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	# Rec. / Depth Adj.	Time	Hor. Ang.		Remarks	
195+00 S-11	21			90° 00'		
	22			" "		
	23			" "		
	24			" "		
	25			" "		
	26			" "		
	27		9 38	" "		

F. B. 2309 PG. 40 Job No. 030002 Division No. 10 Notes Red. Plotted Profile
Survey of BEACH EROSION Date 7-25-58 Date No.
Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.
Indexed C. J. [illegible] Date Date Date No.

76298 S & E #307—7-55

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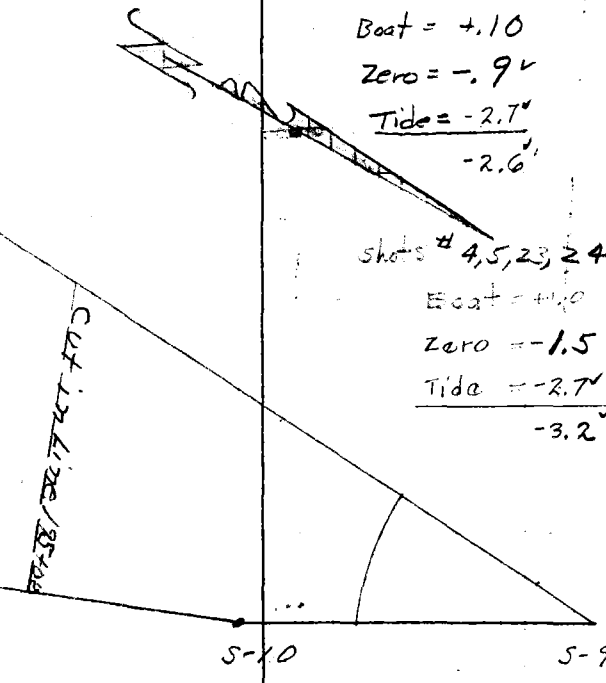
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor.	Ang.	Remarks
S-9	S-10	1	30.2	27.6	9:32	49°	46'	1626
		2	29.7	27.1		49°	05'	1591
		3	29.5	26.9	—	48°	33'	1562
		4	—			47°	52'	
		5	—			46°	33'	
		6	—			44°	42'	
		7	25.4	22.8		43°	56'	1340
		8	26.1	23.5		43°	12'	1307
		9	25.8	23.2		42°	28'	1276
		10	25.5	22.9		41°	32'	1235
		11	25.1	22.5		40°	40'	1202
		12	24.5	21.9		39°	40'	1161
		13	23.7	21.1		38°	41'	1122
		14	23.1	20.5		37°	49'	1,088
		15	22.4	19.8		37°	00'	1,056
		16	21.3	18.7		35°	57'	1,018
		17	19.8	17.2		34°	48'	977 S-11
		18	18.5	15.7		34°	04'	952
		19	17.1	14.5		33°	05'	917
		20	15.6	13.0		32°	11'	885

Cut in Line 195+00

Shots #1-3, 6-22, 25-27
Boat = +.10
Zero = -.9
Tide = -2.7
-2.6

Shots # 4, 5, 23, 24
Boat = +.10
Zero = -1.5
Tide = -2.7
-3.2



Profile Notes Red. Plotted Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 41
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by Van Deren Notes R.T. Date 7-25-58
No. Date Date Map No. Indexed C. Johnson Date

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
		21	15.1	12.5		31° 06	850	
		22	14.3	11.7		30° 21	826	Cut in Line 195+00
		23	14.0	10.8		28° 57	781	
		24	13.5	10.3		27° 55	747	See previous page for adjustment
		25	12.3	9.7		27° 16	726	
		26	11.9	9.3		26° 22	700	
		27	10.7	8.1	9:38	25° 43	680	
S-9	S-10							

F. B. 2309 Pg. 41 Job No. 0300-02 Division No. 10 Notes Red. Plotted Date 7-25-58 Date No. Profile
Survey of Beach Erosion Study Notes Chkd. Checked Date No. X-Sec.
Survey by Van Deren Notes R.T. Date
Indexed [illegible] Date

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 185+00 Sight on 190+00
T.P.	2 86	19 36		16 50	CONT. FROM LINE 2 195+00
B.M. 21-34	6 06	22 01	3 40	15 96	B.M. 21-34, ELEV. 15.958 F.B. 2100-163
					(TORRANCE D-4) THE STRAND & 19th ST
T.P. 190+00	2 88	19 54	5 35	16 66	℄ ON INSHORE 190+00
			3 14	16 40	8 ℄ FT RT. EDGE OF WALK
			3 0	16 5	9 " " SAND TO W. OF WALL
			2 7	16 8	30 " " TOP BRK
			4 9	14 6	100 " "
			5 2	14 3	160 " " TOP "
			8 5	11 0	200 " " BOT. "
			9 6	9 9	230 " " BOT. "
			9 2	10 3	270 " " TOP
			1 1 0	8 5	300 " "
T.P.	0 8	5 3	1500	4 54	352 " " T.P. TOP 1X2 FLUSH
			4 3	1 0	38° 56' 404
			5 8	-0 5	43 32 475
			8 6	-3 3	47 03 537
			11 2	-5 9	49 00 575
			12 0	-6 7	50 52 615
			14 0	-8 7	54 10 692
			14 8	-9 5	55 36 730
			15 2	-9 9	57 12 776

Profile No. ____ Date ____ Notes Red. ____ Date ____ Plotted ____ Date ____ Job No. 0300.02 Division No. 10 F.B. 2309 Pg. 93
X-Sec. No. ____ Date ____ Notes Chkd. ____ Date ____ Checked ____ Date ____ Survey of BEACH EROSION Survey by ENGLISH Notes Indexed ____ Date ____ Map No. ____ Date ____ Geo. Foto Date 7-25-58

Profile	Notes Red.	Plotted	Job No. C30002	Division No. 10	F. B. 2309	Pg. 45
No.	Date	Date	Survey of BEACH EROSION			
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T. O	Date 7-25-58	
No.	Date	Date	Map No.	Index [illegible]	Date	

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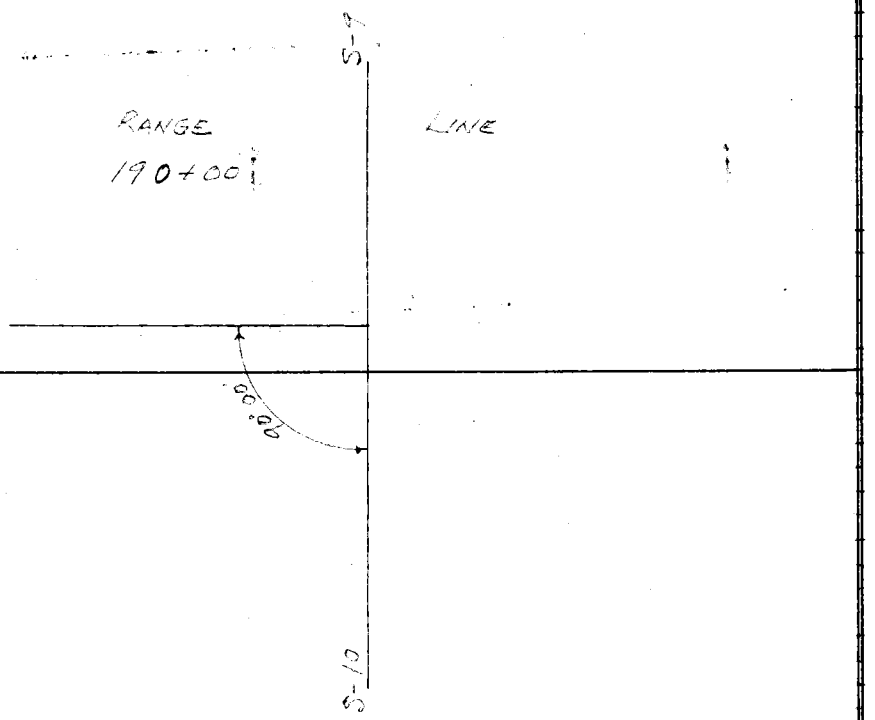

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On 190+00 S-10	#	Depth Rec. Adj.	Time	Hor. Ang.	
	1		9 46	90°00	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

76298 S & E #307—7-55

F. B. 2309 Pg. 46 | Job No. 030003 | Division No. 10 | Notes Red. | Plotted | Profile

Survey of BEACH EROSION | Date 7-25-58 | Date | No.

Survey by VAN DEREN | Notes T. O | Notes Chkd. | Checked | X-Sec.

Indexed A. C. Johnson | Date | Date | Date | No.

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	# Depth Rec. Adj.	Time	Hor. Ang.		Remarks	
190+00 S-10	21	9 52	93° 35			
	22					

76298 S & E #307—7-55

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STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.		Boat	Remarks Zero	Tide	Total
S-9	S-10	1	30.9	28.0	9:46	59° 00'	1664'	+1.0	-1.4	-2.5	-2.9
		2	29.7	26.7		57° 54'	1594'	+1.0	-1.5	"	-3.0
							Cut in Line 190+00				
		3	29.7	26.2		56° 34'	1515'	+1.0	-1.5	"	"
		4	28.1	25.1		55° 00'	1428'	+1.0	-1.5	"	"
		5	27.7	24.7		53° 55'	1372'	~~+1.0~~	-1.5	"	"
		6	27.4	23.9		52° 53'	1321'	+1.0	~~-2.0~~	"	-3.5
		7	24.2	23.4		51° 42'	1266'	+1.0	+0.7	"	-0.8
		8	23.1	22.6		50° 42'	1222'	+1.0	+0.4	"	-1.1
		9	22.8	21.3		49° 14'	1160'	+1.0	0	"	-1.5
		10	21.7	20.2		48° 13'	1119'	+1.0	0	"	"
		11	20.4	19.1		47° 04'	1075'	+1.0	+0.2	"	-1.3
		12	19.0	18.0		46° 00'	1036'	+1.0	+0.5	"	-1.0
		13	17.8	16.4		44° 56'	998'	+1.0	+0.1	"	-1.4
		14	16.8	14.9		43° 49'	957'	+1.0	-0.4	"	-1.9
		15	15.8	13.4		42° 43'	923'	+1.0	-0.9	"	-2.4
		16	14.7	12.6		41° 38'	889'	+1.0	-0.6	"	-2.1
		17	14.0	12.0		40° 32'	855'	+1.0	-0.5	"	-2.0 ~~+1.0~~
		18	13.5	11.0		39° 25'	822' S-10	+1.0	-1.0	"	-2.5 S-9
		19	12.8	10.4		38° 15'	788'	+1.0	-0.9	"	-2.4
		20	12.4	9.9		36° 49'	749'	+1.0	-1.0	"	-2.5

Profile No. ____ Notes Bkd. ____ Plotted ____ Job No. 2300.12 Division No. 10 F. B. 2309 Pg. 47
X-Sec. No. ____ Date ____ Notes Chkd. ____ Date ____ Checked ____ Date ____ Survey of Beach Erosion Study Survey by Kanderen Notes ____ Date 2-25-56 Map No. ____ Index ____

F. B. 2309 PG. 48 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Study Date 7-25-58 Date No.

Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.

Indexed C. Johnson Date Date Date No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	Depth # Rec. Adj.		Time	Hor. Ang.	Remarks	
S-9						
S-10						
	21 12.1'	9.2'		35° 25'	711'	
	22 11.6'	8.7'	9:52	34° 30'	687'	
	23					

Cut in Line 190+00

Bot +1.0 Zero -1.4' Tide -2.5 Total -2.9' -2.9'

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 190+00 Sight on 185+00
190+00	2 88	1954		16 66	CONT. FROM LINE 3, 190+00
T.P	5 56	2215	295	16 59	INSHORE 185+00
T.P. 185+00	296	1934	577	16 38	ON WALK
			310	16 24	6.5 FT. RT. W. EDGE WALK
			34	15 9	7 " " SAND TO W. OF WALK
			57	13 6	100 " "
			64	12 9	145 " " TOP SLIGHT BRK.
			87	10 6	200 " "
			93	10 0	220 " " BOT. BRK
			90	10 3	265 " " TOP "
			103	9 0	290 " " " "
			114	7 9	300 " "
T.P.	13	5 1	155	3 8	346 " " T.P
			39	1 2	37 40 386
			57	-0 6	42 54 465
			88	-3 7	46 51 533
			110	-5 9	49 14 580
			128	-7 7	51 17 624
			139	-8 8	53 34 677
			147	-9 6	55 40 732
			151	-10 0	57 21 780

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 49
Date ____ Date ____ Survey of BEACH EROSION
X-Sec. No. ____ Notes Chkd. ____ Checked ____ Survey by DREIER Notes G.E.D. Date 7-25-58
Date ____ Date ____ Map No. ____ Indexed ____ Date ____

Profile	Notes Red.	Plotted	Job No. 130002	Division No. 10	F. B. 2309 Pg. 51
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O. C. Johnson	Date 7-25-58
No.	Date	Date	Map No.	Indexed	Date

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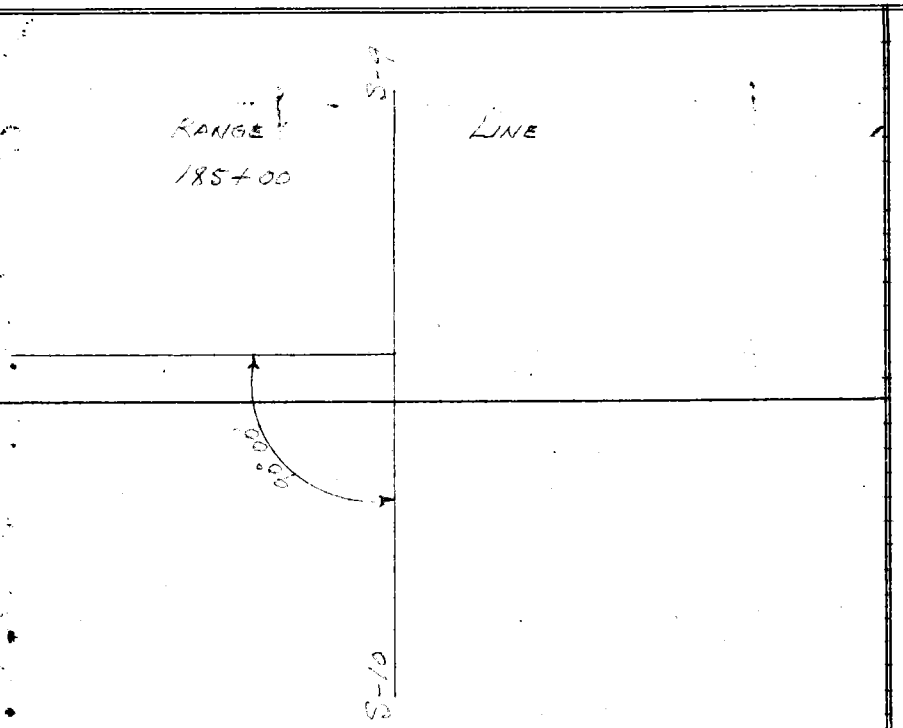
STATION	B. B.	H. I.	F. B.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
185+00 S-10	1		10 01	90° 00'	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	



76298 S & E #307—7-55

F. B. 2309 Pg. 52 | Job No. 030002 | Division No. 10 | Notes Red. | Plotted | Profile

Survey of BEACH EROSION | Date 7-25-58 | Date | No.

Survey by VAN DEREN | Notes T.O. | Notes Chkd. | Checked | X-Sec.

Indexed L. C. Johnson | Date | Date | Date | No.

76298 S & E #307—7-58

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STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
185+00 S-10					
	22				
	23				
	24		10 00		

76298 S & E #307—7-55

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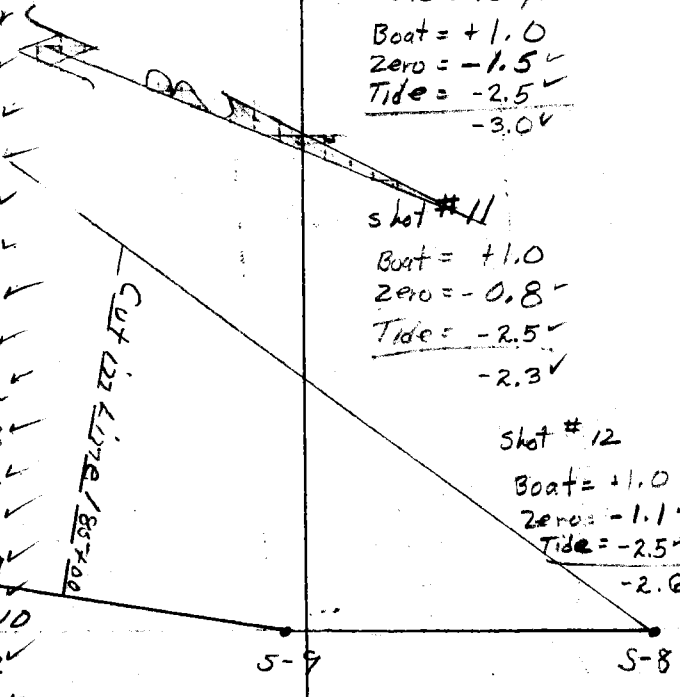
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
S-8	S-9	1	30.0	27.0	10:01	40° 11	1,569
		2	29.8	26.8		39° 22	1,516
		3	29.1	26.1		38° 30'	1,470
		4	28.1	25.1		37° 33'	1,422
		5	—			36° 30'	1,370
		6	27.5	24.5		34° 39'	1,282
		7	26.6	23.6		33° 47'	1,242
		8	25.5	22.5		32° 45'	1,196
		9	24.7	21.7		31° 47'	1,150
		10	23.8	20.8		31° 10'	1,123
		11	22.5	20.2		30° 20'	1,087
		12	21.3	18.7		29° 30'	1,052
		13	19.8	16.8		28° 27'	1,008
		14	18.1	15.1		27° 23'	964
		15	16.9	13.9		26° 24'	924
		16	15.7	12.7		25° 35'	889
		17	15.1	12.1		24° 35'	851
		18	14.1	11.1		23° 34'	812
		19	13.1	10.1		22° 33'	771
		20	13.4	10.4		21° 49'	743

Cut in Line 185+00

shots #1-10, 13-24
Boat = +1.0
Zero = -1.5
Tide = -2.5
-3.0

shot #11
Boat = +1.0
Zero = -0.8
Tide = -2.5
-2.3

Shot #12
Boat = +1.0
Zero = -1.1
Tide = -2.5
-2.6



Profile Notes Red. ____ Plotted ____ Job No. 030002 Division No. 10 F. B. 2309 Pg. 53
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren Notes R.T. Date 7-25-58
No. ____ Date ____ Date ____ Map No. ____ Indexed C. Jones Date ____

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
		21	12.6	9.6		21° 05	713	
		22	11.7	8.7		20° 14'	681	Cut in Line 185+00
		23	11.1	8.1		19° 27'	652	
		24			10:06	19° 03'		Boat = +1.0
								Zero = -1.5
								Tide = -2.5
								-3.0
5-8	5-9							

F. B. 2309 Pg. 54 Job No. 0300.02 Division No. 10 Notes Red. Plotted No. Profile
Survey of Beach Erosion Study Date 2-25-58 Date X-Sec.
Survey by Van Deren Notes R.T. Notes Chkd. Checked No.
Indexed C. Johnson Date Date Date

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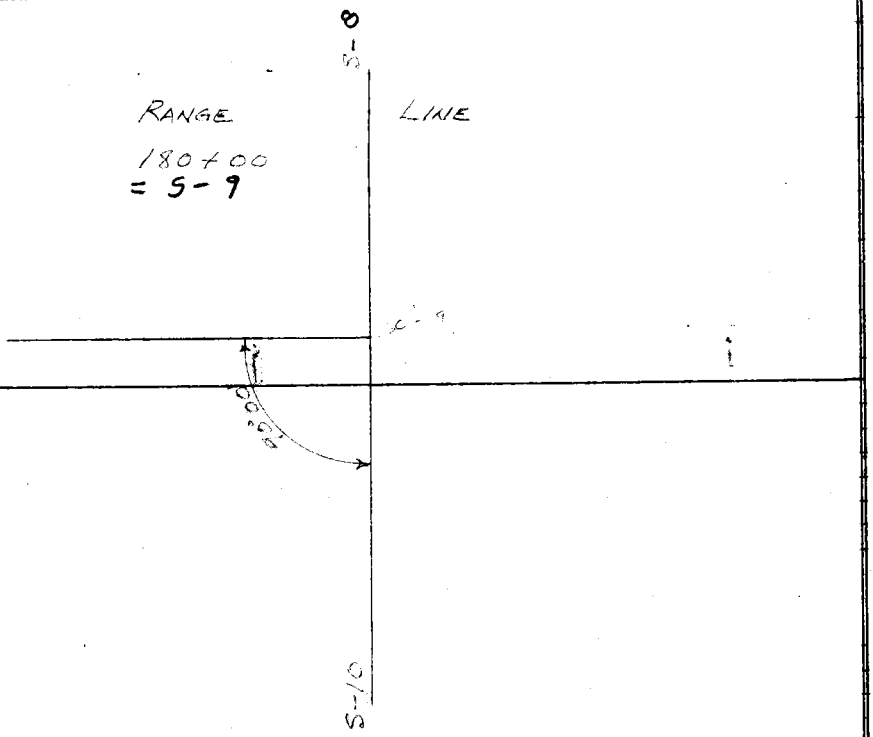
STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 185+00	Sight on 180+00
T.P. 185+00	296	.1934		1638	CONT. FROM LINE 3, 185+00	INSHORE 180+00
T.P.	544	22 18	260	1674		
180+00			511	1707	ON WALK	
			536	1682	9 FT. RT. W. EDGE OF WALK	
			55	167	10 " " SAND, TO W. OF WALL	
			44	178	40 " " TOP BRK	
			62	160	100 " "	
			64	158	125 " " TOP BRK	
			89	133	170 " "	
			110	112	200 " "	
			120	102	220 " " BOT. BRK	
			116	106	265 " " TOP "	
			130	92	290	
			145	77	300	
T.P.	15	53	1840	378	338 " " T.P. 1X2	
			48	05	38°45' 401	
			62	-09	4300 466	
			89	-36	4624 525	
			122	-69	4955 594	
			135	-82	5236 654	
			144	-91	5430 701	
			154	-101	5638 759	
			160	-107	5828 815	

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 55
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION
Notes Chkd. ____ Checked ____ Survey by DREIER Notes G.E.O. Date 7-25-58
Date ____ Date ____ Map No. ____ Indexed [illegible]

Profile	Notes Red.	Plotted	Job No. 230302	Division No. 10	F. B. 2309 Pg. 57
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 1-25-58
No.	Date	Date	Map No.	Indexed C. Johnson	Date



STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. At 180+00	Sight On S-10	Depth Rec. Adj.	Time 10 15	Hor. Ang. 90°00'	
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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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	
180+00	S-10	21			90° cc		
		22			" "		
		23			" "		
		24			" "		
		25			" "		
		26			" "		
		27			" "		
		28		10 21	" "		

F. B. 2309 PG. 58 Job No. 0300D2 Division No. 10 Notes Red. Plotted Profile
Survey of BEACH EROSION Date 7-25-58 Date No.
Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

76298 S & E #307—7-55

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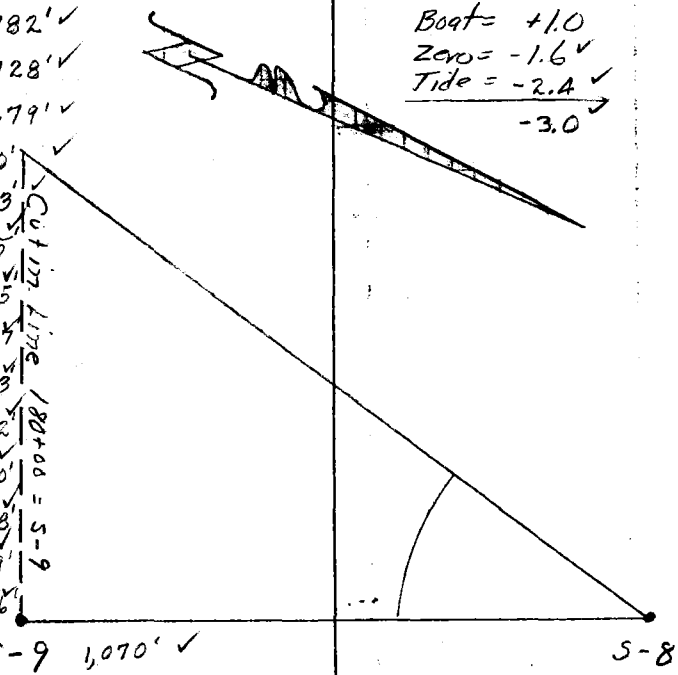
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
S-8	S-9	1	—		10:15	54° 33'	
		2	—			51° 56'	Cut in Line 180+00
		3	30.8	27.8		50° 44'	1,835'
		4	31.8	28.8		49° 54'	1,782'
		5	30.7	27.7		49° 02'	1,728'
		6	29.9	26.9		48° 13'	1,679'
		7	30.7	27.1		47° 33'	1,640'
		8	29.8	26.8		46° 43'	1,593'
		9	28.9	25.9		45° 51'	1,545'
		10	28.0	25.0		44° 43'	1,485'
		11	27.2	24.2		43° 34'	1,427'
		12	26.7	23.7		42° 28'	1,373'
		13	26.1	23.1		41° 36'	1,332'
		14	25.6	22.6		40° 41'	1,290'
		15	24.1	21.1		38° 51'	1,208'
		16	23.1	20.1		37° 55'	1,169'
		17	21.7	18.7		36° 40'	1,116'
		18	19.9	16.9		35° 30'	S-9 1,070'
		19	18.7	15.7		34° 17'	1,023'
		20	17.2	14.2		33° 06'	978'



Profile Notes Red. ____ Plotted ____ Job No. 300.02 Division No. 10 F. B. 2309 Pg. 59
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren Notes R.T. Date 7-25-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	15.7	12.7		31° 57'	936' ✓	
		22	15.1	12.1		31° 00'	902' ✓	Cut in Line 180+00
		23	14.4	11.4		30° 02'	867' ✓	
		24	14.2	11.2		29° 00'	831' ✓	Boat = +1.0
		25	13.2	10.2		27° 57'	797' ✓	Zero = -1.6 ✓
		26	12.8	9.8		26° 50'	759' ✓	Tide = -2.4 ✓
		27	12.3	9.3		25° 48'	725' ✓	-3.0 ✓
		28	11.7	8.7	10:21	24° 36'	687' ✓	
S-8	S-9							

F. B. 2309 Pg. 60 Job No. 0300.02 Division No. 10 Notes Red. Plotted No. Profile
Survey of Beach Erosion Study Date 7-25-58 Date X-Sec.
Survey by Van Deren Notes BT Notes Chkd. Checked No.
Indexed L. O. Jonathan Date Date Date

76298 S & E #307—7-55

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Do not extend notes this side of this line.

S-9 1707

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 180+00	Sight on 175+00
T.P.	5 44	22 18		16 74	CONT. FROM LINE 2, 180+00	
T.P.	3 87	20 99	5 06	17 12		IN SHORE 175+00
175+00			3 26	17 73	ON WALK	
			3 41	17 58	5 FT. RT W. EDGE OF WALK	
			3 5	17 5	6 " " SAND TO W. SIDE OF WALL	
			3 5	17 5	35 " " TOP BREAK	
			6 0	15 0	100 " "	
			8 3	12 7	170 " " TOP BRK	
			10 0	11 0	200 " " BOT. BRK	
			10 0	11 0	242 " " TOP	
			15 0	6 0	300 " "	
T.P.	2 3	5 6	17 40	3 59	327 " " T.P. 1 X 2	
			4 7	0 9	35° 56' 362	
			6 8	-1 2	38 30 398	
			6 6	-1 0	42 47 463	
			11 4	-5 8	47 30 546	
			13 0	-7 4	50 09 599	
			14 1	-8 5	52 18 647	
			14 9	-9 3	54 09 692	
			15 5	-9 9	55 05 716	

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 61
No. ____ Date ____ Date ____ Survey of BEACH EROSION
X-Sec. Notes Chkd. ____ Checked ____ Survey by DREIER Notes G.E.D. Date 7-25-58
No. ____ Date ____ Date ____ Map No. ____ Indexed C. J[illegible] Date ____

76298 S & E #307—7-55

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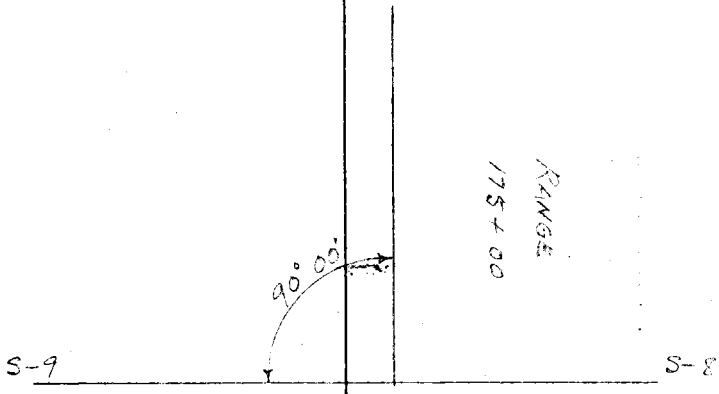
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
175+00	S-9	1			10 33	90° 00	
		2				" "	
		3				" "	
		4				" "	
		5				" "	
		6				" "	
		7				" "	
		8				" "	
		9				" "	
		10				" "	
		11				" "	
		12				" "	
		13				" "	
		14				" "	
		15				" "	
		16				" "	
		17				" "	
		18				" "	
		19				" "	
		20				" "	



Profile Notes Red. ____ Plotted ____ Job No. 030002 Division No. 10 F. B. 2309 Pg. 63
No. ____ Date ____ Date ____ Survey of BEACH EROSION
X-Sec. Notes Chkd. ____ Checked ____ Survey by VAN DEREN Notes T.O. Date 7-25-58
No. ____ Date ____ Date ____ Map No. ____ Indexed C. Johnson Date ____

F. B. 2309 Pg. 64 Job No. 0300,02 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION Date 7-25-58 Date _____ No. _____

Survey by VAN DEREN Notes T.O. Notes Chkd. _____ Checked _____ X-Sec.

Indexed C. Johnson Date _____ Date _____ Date _____ No. _____

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
175+00 S-9	21			90° 00		
	22			"		
	23			"		
	24			"		
	25			"		
	26		10 38	"		

76298 S & E #307—7-55

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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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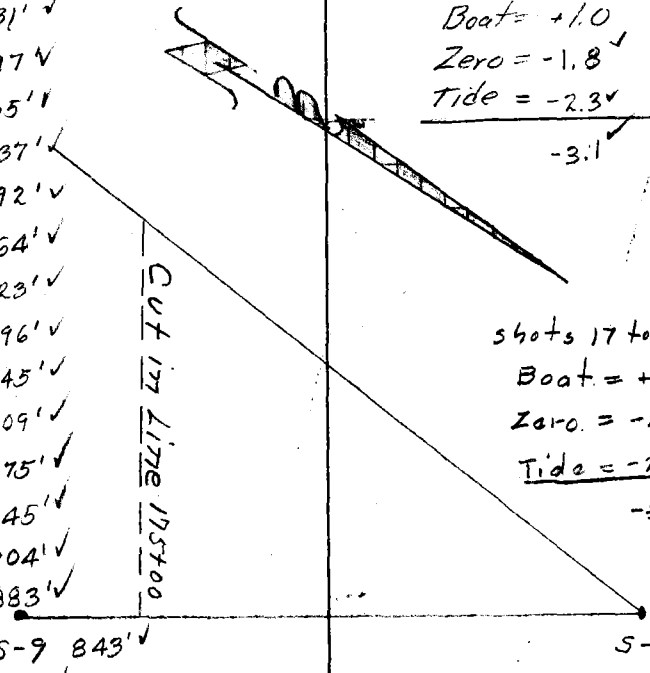
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	—		10.33	56° 47'	
		2	—			55° 04'	Cut in Line 175+00
		3	29.0	25.9		53° 52'	1370'
		4	28.1	25.0		53° 05'	1331'
		5	27.9	24.8		52° 22'	1297'
		6	27.1	24.0		51° 40'	1265'
		7	26.3	23.2		51° 03'	237'
		8	25.3	22.2		50° 00'	1192'
S-8	S-9	9	24.7	21.6		49° 20'	1164'
		10	24.1	21.0		48° 19'	1123'
		11	23.5	20.4		47° 37'	1096'
		12	22.2	19.1		46° 16'	1045'
		13	21.4	18.3		45° 15'	1009'
		14	19.9	16.8		44° 16'	975'
		15	18.6	15.5		43° 22'	945'
		16	17.3	14.4		42° 06'	904'
		17	16.8	13.5		41° 27'	883'
		18	15.6	12.3		40° 08'	S-9 843'
		19	15.0	11.7		38° 52'	806'
		20	14.4	11.1		37° 47'	775'



shots 1 to 16
Boat = +1.0
Zero = -1.8
Tide = -2.3
-3.1

shots 17 to 26
Boat = +1.0
Zero = -2.0
Tide = -2.3
-3.3

Profile Notes Red. Plotted Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 65
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by Van Deren Notes S.T. Date 7-25-58
No. Date Date Map No. Indexed C. Johnson Date

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	13.6	10.3		36° 31'	740'	
		22	13.3	10.0		35° 28'	712'	Cut in Line 175+00
		23	12.7	9.4		34° 07'	677'	
		24	11.9	8.6		33° 03'	651'	Boat = +1.0
		25	11.6	8.3		31° 42'	618'	Zero = -2.0
		26	11.4	8.1	10:38	30° 48'	596'	Tide = -2.3
								-3.3
S-8	S-9							

F. B. 2309 Pg. 66 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 7-25-58 Date No.
Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

Profile	Notes Red.	Plotted	Job No. 0300-02	Division No. 10	F. B. 2309 Pg. 67
No.	Date	Date	Survey of Beach Erosion		
X-Sec.	Notes Chkd.	Checked	Survey by Van Deren	Notes Van	Date 7-28-58
No.	Date	Date	Map No.	Indexed C. Johnson	Date

7-28-58

3.0 on datum line

Time Check Gage Time = 9.37 High = 4.7

P. D. S. T. = 10.39 Low = 3.7

	Standard Time	Reading	P. D. S. T.	
	5:00 AM	2.3	6.00	
	5-30 "	3.0	6-30	
	6-00 "	3.5	7-00	
	6-30 "	4.0	7-30	
	7-00 "	4.2	8-00	
	7-30 "	4.4	8-30	
	8-00 "	4.6	9.00	
	8-30 "	4.4	9-30	
	9-00 "	4.4	10-00	
	9-30 "	4.2	10-30	
	10-00 "	3.7	11.00	
ELEV.	10-30 "	3.6	11.30	
	11-00 "	3.1	12-00	
	11-30 "	2.8	12-30	
F. B.	12-00 "	2.6	1-00	
	12-30 P.M	2.4	1-30	
H. I.	1-00 "	2.3	2-00	
	1-30 "	2.4	2-30	
	2-00 "	2.5	3-00	
	2-30 "	2.9	3-30	
B. B.	3-00 "	3.2	4-00	
STATION				

Remarks

Hor. Ang.

Time

Depth

Rec. Adj.

Inst. Sight

At On

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76298 S & E #307—7-55

F. B. 2309 Pg. 67-A | 0300.02

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

Survey of Beach Erosion Date 7-28-58 Date No.

Survey by Van Deren Notes Van Notes Chkd. Checked X-Sec.

Indexed Date Date Date Date No.

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

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76298 S & E #307—7-55

76F309S CE #247—3-57

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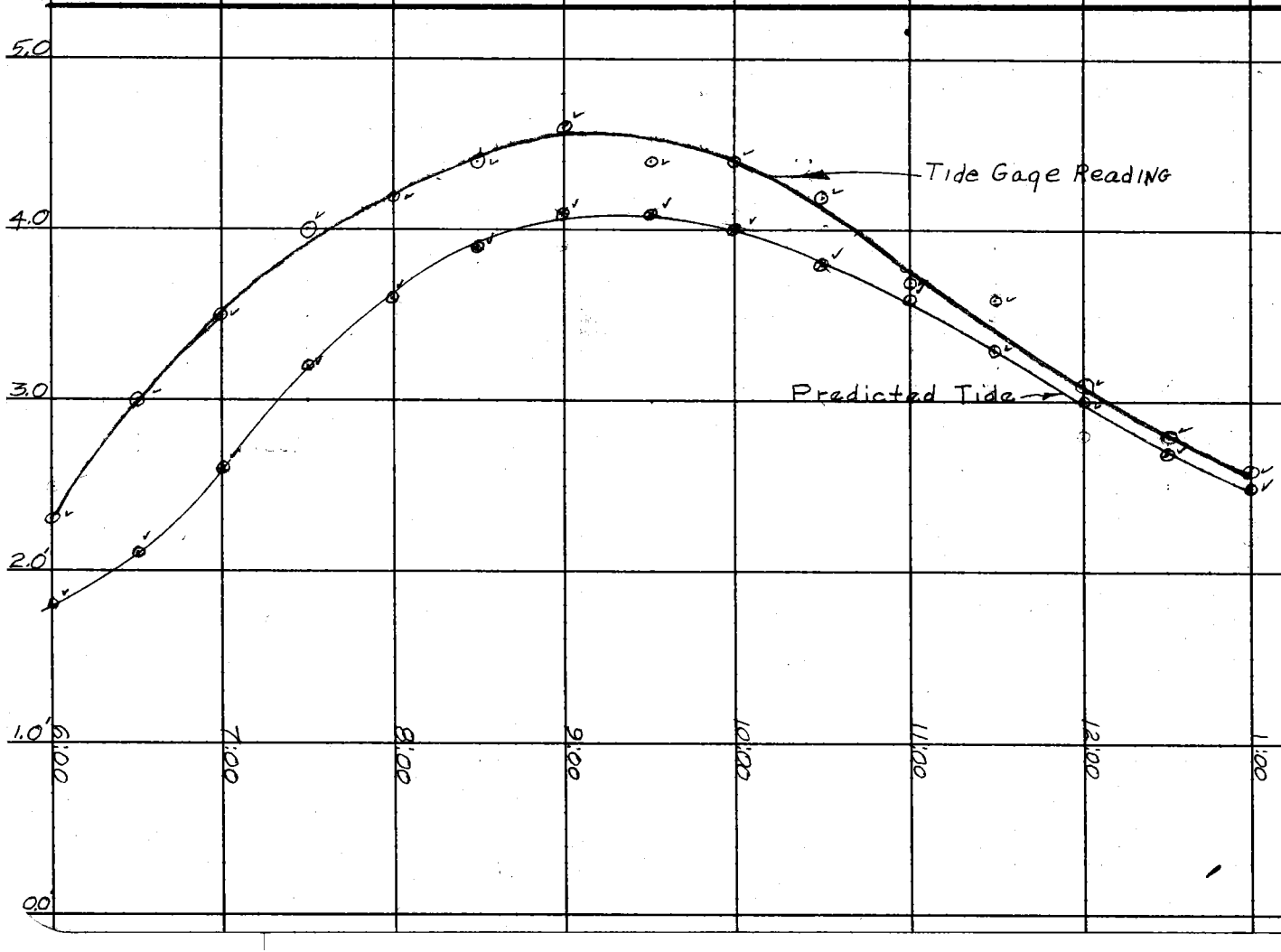

Notes Ck'd by
Map No.
Office Work L. Manley
Checked J.S.H.
Date 9-4-58

Survey of 0500.02
JN Tape Std °F
Surveyed by Van Deran
Notes Date 7-28-58
Indexed

F. B. 2309 PG. 68

76L298 307 8-53

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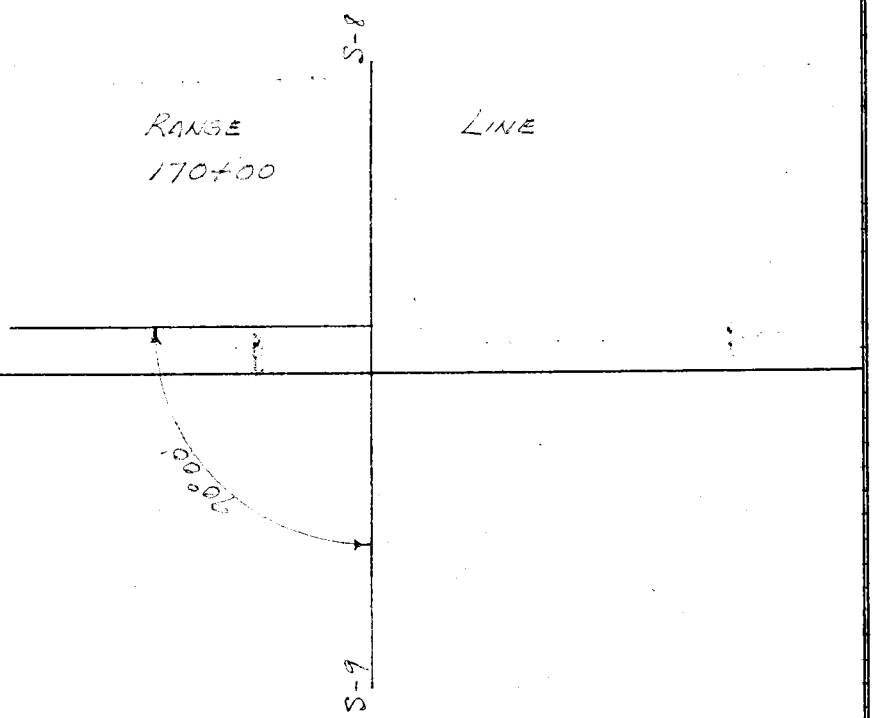
STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 175+00	Sight on 170+00
170+00	3 57	20.94 ~~21.0~~		17 37	F.B. 2100-164 Control line	Inshore 170+00
			3 8	17 ~~2~~ 1	11' R. Sand	
			2 7	18 ~~3~~ 2	03° 17' 29	
			6 1	14 ~~9~~ 8	10° 02' 88	
			8 3	12 ~~7~~ 6	14° 36' 130	
			10 5	10 ~~5~~ 4	18° 40' 169	
			10 4	10 ~~6~~ 5	22° 23' 206	
			11 2	9 ~~8~~ 7	25° 16' 236	
T.P.	2 9	8.6 ~~7~~	15 2	+5.7 ~~4.8~~	28° 51' 275 edge of water	
			5 0	+3.6 ~~2.7~~	30° 48' 298	
			7 7	+.9 ~~0.0~~	34° 44 347	
			8 9	-.3 ~~-1.2~~	38° 26' 397	
			10 3	-1.7 ~~-2.6~~	42° 02 451	
			14 5	-5.9 ~~-6.8~~	46° 43 531	
			16 3	-7.7 ~~-8.6~~	50° 24 604	
			17 6	-9.0 ~~-9.9~~	52° 20 648	

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 69
No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
X-Sec. Notes Chkd. ____ Checked ____ Survey by English Notes Ed. Date 7-28-58
No. ____ Date ____ Date ____ Map No. ____ Indexed C. J[illegible]

Profile	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2309 Pg. 71
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T. O.	Date 7-28-58
No.	Date	Date	Map No.	Indexed C. Johnson	



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
170+00 S-9	1		7 50	90° 00	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	

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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	
170+00	S-9	21			90° 05		
		22			" "		
		23			" "		
		24			" "		
		25			" "		
		26			" "		
		27			" "		
		28			" "		
		29			" "		
		30			" "		
		31			" "		
		32			" "		
		33			" "		
		34			" "		
		35			" "		
		36			" "		
		37			" "		
		38			" "		
		39			" "		
		40			" "		

F. B. 2309 PG. 72 Job No. 030002 Division No. 10 Notes Red. Plotted Profile
Survey of BEACH EROSION Date 7-28-58 Date No.
Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date No.

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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	
170+00	S-9	41			90° 00		
		42		7 57	"		

Profile Notes Red. ____ Plotted ____ Job No. 930003 Division No. 10 F. B. 7309 Pg. 73
No. ____ Date ____ Date ____ Survey of BEACH EROSION
X-Sec. Notes Chkd. ____ Checked ____ Survey by VAN DEREN Notes J.O. Date 7-28-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

F. B. 2309 Pg. 74 | Job No. 030002 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION Date 7-28-58 Date _____ No. _____

Survey by VAN DEREN Notes T.O. Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

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

76298 S & E #307—7-55

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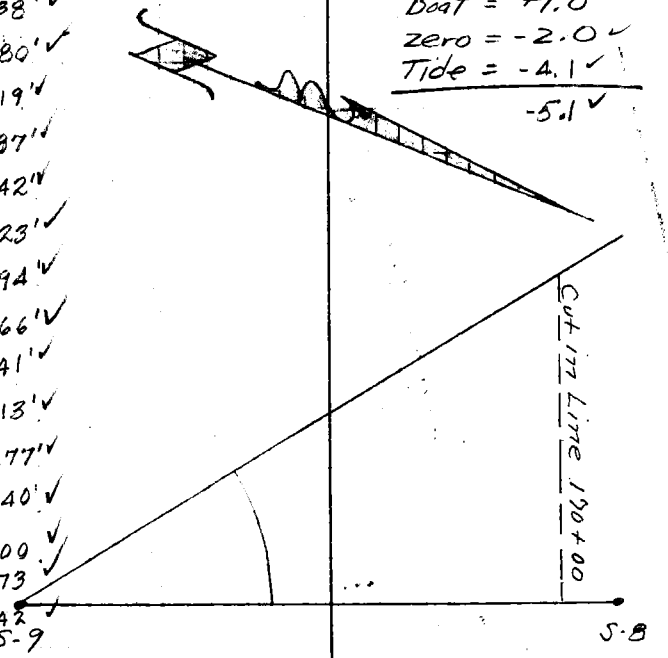
STATION Inst. At	Sight On	B. B. #	H. I. Depth Rec.	H. I. Adj.	F. B. Time	ELEV. Hor. Ang.	Remarks
		1	—		7:50	61° 20'	
		2	—			60° 45'	Cut in Line 170+00
		3	33.9	28.8		59° 31'	1,699'
		4	33.4	28.3		58° 36'	1,638'
		5	33.0	27.9		57° 40'	1,580'
		6	32.7	27.6		56° 38'	1,519'
		7	32.1	27.0		56° 05'	1,487'
		8	31.6	26.5		55° 15'	1,442'
S-9	S-8	9	31.2	26.1		54° 54'	1,423'
		10	30.7	25.6		54° 21'	1,394'
		11	30.4	25.3		53° 47'	1,366'
		12	30.0	24.9		53° 17'	1,341'
		13	29.7	24.6		52° 42'	1,313'
		14	29.2	24.1		51° 56'	1,277'
		15	28.7	23.6		51° 07'	1,240'
		16	28.2	23.1		50° 12'	1,200'
		17	27.7	22.6		49° 33'	1,173'
		18	27.3	22.2		48° 48'	1,142'
		19	26.8	21.7		48° 02'	1,112'
		20	25.8	20.7		46° 51'	1,067'



Profile Notes Red ____ Plotted ____ Job No. 030002 Division No. 10 F. B. 2309 Pg. 75
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren Notes RT Date 7-28-58
No. ____ Date ____ Date ____ Map No. ____ Index [illegible] G. Johnson

76298 S & E #307—7-55

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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	25.1	19.9		46° 07'	1,040'	
		22	24.1	18.9		45° 14'	1,008'	Cut in Line 170+00
		23	22.9	17.7		44° 29'	982'	
		24	21.9	16.7		43° 42'	956'	Boat = +1.0
		25	20.9	15.7		42° 57'	931'	Zero = -2.0
		26	19.8	14.6		42° 03'	902'	Tide = -4.2
		27	18.7	13.5		41° 04'	871'	-5.2
5-9	5-8	28	17.9	12.7		40° 06'	842'	
		29	17.3	12.1		39° 03'	811'	
		30	16.6	11.4		37° 45'	774'	
		31	16.1	10.9		36° 38'	744'	
		32	15.7	10.5		35° 27'	712'	
		33	15.0	9.8		34° 02'	675'	
		34	14.5	9.3		33° 04'	651'	
		35	14.1	8.9		32° 02'	626'	
		36	13.6	8.4		30° 57'	600'	
		37	12.7	7.5		29° 48'	573'	
		38	11.9	6.7		28° 42'	547'	
		39	11.0	5.8		27° 27'	519'	
		40	9.5	4.3		26° 21'	495'	
		41	8.3	3.1		25° 14'	471'	
		42	7.4	2.2	7:57	24° 25'	454'	

F. B. 2309 Pg. 76 Job No. 0300.02 Division No. 10 Notes Red. Plotted
Survey of Beach Erosion Study Date 7-28-58 Date No.
Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.
Indexed K. C. Johnson Date Date Date No.
Profile

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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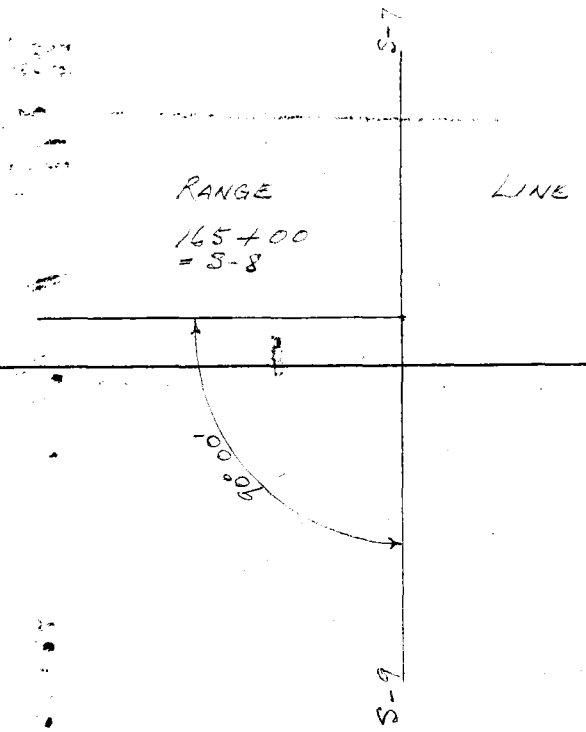
STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 170+00	Sight on 165+00
(5-8) 165+00	3.8	21 1		17 28	F.B. 2100-164 Control line	Inshore 165+00
			3 6	17 5	b R Sand	
			4 1	17 0	02° 48' 24'	
			7 0	14 1	08° 18 73	
			8 4	12 7	12° 23 110	
			10 6	10 5	16° 47 151	
			10 3	10 8	20° 35 188	
			14 6	6 5	25° 46 241	
T.P.	3 6	8 0	16 7	4 4	27° 32' 261 under Water	
			5 5	2 5	29° 34 284	
			8 0	0 0	35° 00 350	
			8 8	-0 8	37° 16' 380	
			10 2	-2 2	40° 35 428	
			13 0	-5 0	44° 33 492	
			15 0	-7 0	47° 06 538	
			16 2	-8 2	49° 39 589	
			17 0	-9 0	57° 25 627	
			17 9	-9 9	53° 12 668	

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 PG. 77
X-Sec. No. ____ Notes Chkd. ____ Date ____ Checked ____ Date ____ Survey of Beach Erosion Surv. Survey by English Notes Ed. Date 7-28-58 Map No. ____ Indexed [redacted]

Profile	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2309 Pg. 79
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes TO	Date 7-28-58
No.	Date	Date	Map No.	Indexed C. Johnson	



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
165+00 S-9	1		8 11	90° 00'	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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76298 S & E #307—7-55

F. B. 2309 Pg. 80 | Job No. 030002 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION Date 7-28-58 Date _____ No. _____

Survey by VAN DEREN Notes T.O. Notes Chkd. _____ Checked _____ X-Sec.

Indexed R. G. Johnson Date _____ Date _____ Date _____ No. _____

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On 165+00 S-9	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
	21			70° 00'		
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					
	32					
	33					
	34					
	35					
	36					
	37					
	38					
	39					
	40					

76298 S & E #307—7-55

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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	
165+00	S-9	41				95° 00		
		42						
		43			8 20	" "		

Profile Notes Red. ____ Plotted ____ Job No. 03C3033 Division No. 10 F. B. 2309 Pg. 81
No. ____ Date ____ Date ____ Survey of BEACH EROSION
X-Sec. Notes Chkd. ____ Checked ____ Survey by VAN DEREN Notes T.O. Date 7-28-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

C. Johnson

F. B. 2309 Pg. 82 Job No. 030002 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION Date 7-28-58 Date _____ No. _____

Survey by VAN DEREN Notes T. O. 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.	

Do not extend notes this side of this line.

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76298 S & E #307—7-55

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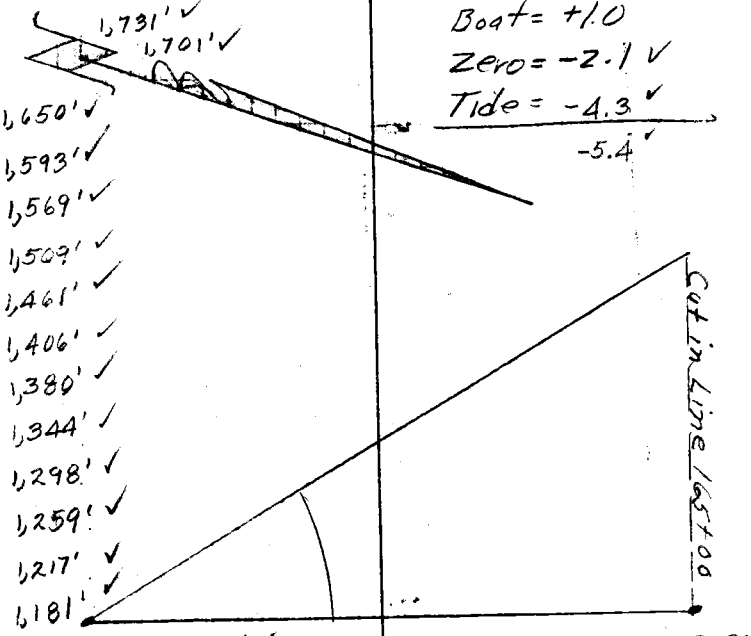
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	—		8:11	52° 32'	
		2	—			51° 10'	Cut in Line 165+00
		3	34.5	29.1		49° 45'	1,772'
		4	34.5	29.1		49° 06'	1,731' 1,701'
		5	34.3	28.9		48° 35'	Boat = +1.0
		6	33.7	28.3		47° 44'	1,650' Zero = -2.1
		7	33.1	27.7		46° 44'	1,593' Tide = -4.3
		8	32.6	27.2		46° 18'	1,569' -5.4
		9	32.2	26.8		45° 10'	1,509'
		10	31.5	26.1		44° 15'	1,461'
		11	31.1	25.7		43° 08'	1,406'
		12	30.8	25.4		42° 36'	1,380'
		13	30.4	25.0		41° 52'	1,344'
		14	29.9	24.5		40° 52'	1,298'
		15	29.4	24.0		40° 00'	1,259'
		16	28.9	23.5		39° 03'	1,217'
		17	28.2	22.8		38° 12'	1,181'
		18	27.4	22.0		37° 14'	S-9 1,140' S-8
		19	26.5	21.1		36° 08'	1,095'
		20	25.6	20.2		34° 54'	1,047'

S-9 S-8



Profile Notes Red. Plotted Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 83
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by Van Deren Notes R.T. Date 7-28-58
No. Date Date Map No. Indexed Date

76298 S & E #307—7-55

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F. B. 2309 Pg. 84 Job No. 2309.02 Division No. 10 Notes Red. Plotted
Survey of Beach Erosion Study Date 2-28-58 Date
Survey by Van Dorsten Notes R.T. Notes Chkd. Checked
Indexed L. C. Johnson Date Date Date
Profile No. X-Sec. No.

STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
		21	24.8	19.4		34° 00'	1013'	
		22	23.1	18.0		32° 45'	965'	Cut in Line 165+00
		23	22.1	16.7		31° 52'	933'	
		24	20.7	15.3		30° 46'	893'	
		25	19.7	14.3		29° 52'	861'	Boat = +1.0
		26	18.6	13.2		29° 04'	834'	Zero = -2.1
		27	17.8	12.4		28° 09'	803'	Tide = -4.3
5-9	5-8	28	16.9	11.5		27° 28'	780'	-5.4
		29	17.1	11.7		27° 00'	765'	
		30	16.6	11.2		26° 09'	737'	
		31	15.7	10.3		25° 10'	705'	
		32	15.4	10.2		24° 28'	683'	
		33	15.3	9.9		23° 35'	656'	
		34	14.9	9.5		22° 43'	629'	
		35	14.2	8.8		21° 45'	599'	
		36	13.7	8.3		21° 06'	579'	
		37	13.3	7.9		20° 15'	554'	
		38	12.9	7.5		19° 25'	528'	
		39	11.7	6.3		18° 48'	510'	
		40	11.0	5.6		17° 55'	485'	
		41	9.5	4.1		17° 05'	461'	
		42	8.6	3.2		16° 12'	437'	
		43	7.7	2.3	8:20	15° 40'	420'	

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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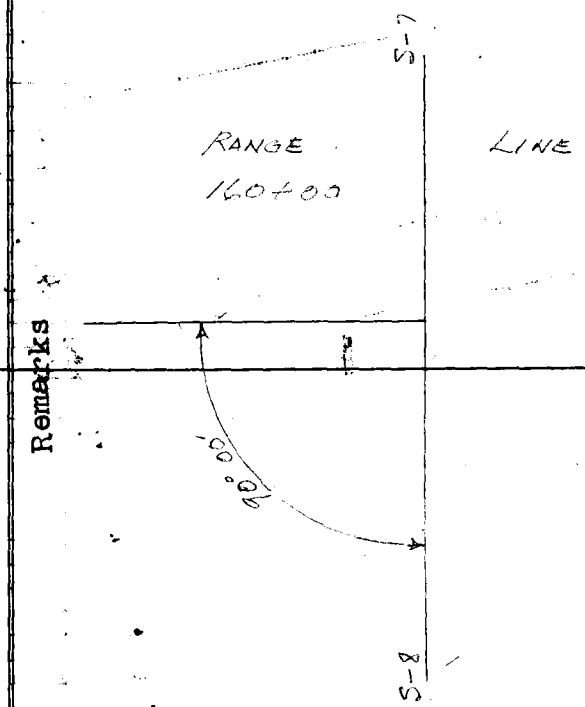
STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 165+00	Sight on 160+00
BM. S-8	542	2270		1728	BM. S-8 ELEV. 17.285 F.B. 2190-164	Inshore
T.P.	296	2034	532	1738		160+00
160+00			303	1731	℄ ON WALK	
			308	1726	5 FT. RT W. EDGE OF WALL	
			40	163	6 " " SAND TO W. OF WALL	
			40	163	20 " "	
			76	127	100 " "	
			96	107	140 " " BOT BRK	
			100	103	180 " " TOP "	
			120	83	200 " "	
T.P.	29	83	1490	544	230 " " T.P	
			63	20	28° 57' 277	
			87	-04	34° 25 343	
			103	-20	39° 27' 411	
			141	-58	44° 05 484	
			163	-80	47° 24 544	
			180	-97	50° 02 597	

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F.B. 2309 Pg. 85
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
Notes Chkd. ____ Checked ____ Survey by English Notes Ed. Date 7-28-58
Date ____ Date ____ Map No. ____ Indexed C. Johnson Date ____

Profile No.	Notes Red.	Plotted	Job No. 030002	Division No. 10
	Date	Date	Survey of BEACH EROSION	
X-Sec. No.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes I.O. Date 7-28-58
	Date	Date	Map No.	Index A. C. Johnson

F. B. 2309 Pg. 87



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
160+00 S-8	1		8 31	90° 00'	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	

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76298 S & E #307—7-55

F. B. 2309 Pg. 88 | Job No. 030002 Division No. 10 | Notes Red. | Plotted | Profile

Survey of BEACH EROSION | Date 7-28-58 | Date | No.

Survey by VAN [redacted] Notes T. T. O. | Notes Chkd. | Checked | X-Sec.

Indexed [redacted] C. Johnson | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. Sight At On	Depth Rec. Adj.	Time	Hor. Ang.	Remarks
					160+00 S-8			90° 00'	
	21								
	22								
	23								
	24								
	25								
	26								
	27								
	28								
	29								
	30								
	31								
	32								
	33								
	34								
	35								
	36								
	37								
	38								
	39								
	40								

76298 S & E #307—7-55

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76298 S & E #307—7-55

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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
160+00	S-8	41				90° 00'	
		42				" "	
		43				" "	
		44				" "	
		45				" "	
		46				" "	
		47				" "	
		48			8 41	" "	

Profile Notes Red. ____ Plotted ____ Job No. 2300.02 Division No. 10 F. B. 3309 Pg. 89
No. ____ Date ____ Date ____ Survey of BEACH EROSION
X-Sec. Notes Chkd. ____ Checked ____ Survey by VAN DEREN Notes T.O. Date 7-28-58
No. ____ Date ____ Date ____ Map No. ____ Indexed A. C. Johnson Date ____

F. B. 2309 Pg. 90 | Job No. 030005 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION Date 7-28-58 Date _____ No. _____

Survey by VAN DEREN Notes T.O Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

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

Do not extend notes this side of this line.

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76298 S & E #307—7-55

76298 S & E #307—7-55

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

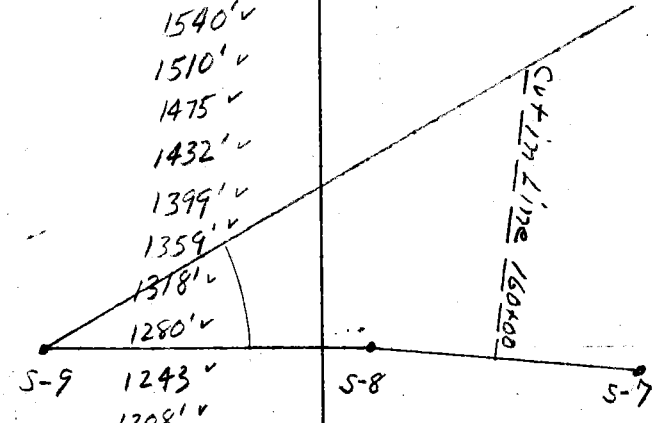
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	38.4	32.7	8:31	44° 54'	2,085
		2	37.3	31.6		43° 38'	2,001
		3	37.2	31.5		42° 46'	1,936
		4	36.1	30.4		41° 53'	1,879
		5	35.1	29.4		41° 11'	1830'
		6	34.8	29.1		40° 15'	1769'
		7	34.5	28.8		39° 35'	1727'
S-9	S-8	8	34.0	28.3		38° 25'	1658'
		9	33.4	27.7		37° 28'	1600'
		10	32.5	26.8		36° 30'	1540'
		11	32.1	26.4		35° 55'	1510'
		12	31.6	25.9		35° 20'	1475'
		13	31.1	25.4		34° 30'	1432'
		14	30.8	25.1		33° 52'	1399'
		15	30.5	24.8		33° 04'	1359'
		16	30.0	24.3		32° 20'	1318'
		17	29.5	23.8		31° 34'	1280'
		18	29.3	23.6		30° 53'	1243'
		19	29.0	23.3		30° 05'	1208'
		20	28.2	22.5		29° 14'	1169'

Cut in Line 160+00

Boat = +1.0
Zero = -2.3
Tide = -4.4
-5.7



Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 91
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren Notes P.T. Date 7-28-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____
C. Johnson

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	27.6	21.8		28° 30'	1132'	
		22	27.2	21.4		27° 41'	1090' Cut 177 Line 160+00	
		23	26.5	20.7		27° 03'	1060	
		24	25.8	20.0		26° 17'	1029'	Boat = +1.0
		25	25.2	19.4		25° 23'	985'	Zero = -2.3
		26	24.4	18.6		24° 47'	960'	Tide = -4.5
		27	23.8	18.0		24° 12'	933'	-5.8
S-9	S-8	28	22.9	17.1		23° 33'	909'	
		29	21.5	15.7		22° 52'	880'	
		30	21.0	15.2		22° 09'	848'	
		31	20.4	14.6		21° 30'	821	
		32	19.6	13.8		21° 00'	800'	
		33	19.0	13.2		20° 24'	775'	
		34	18.5	12.7		20° 07'	765'	
		35	18.0	12.2		19° 23'	732'	
		36	17.4	11.9		19° 06'	721'	
		37	17.3	11.5		18° 26'	693'	
		38	16.8	11.0		17° 55'	676'	
		39	16.5	10.7		17° 20'	652'	
		40	16.1	10.3		16° 45'	628'	

F. B. 2309 Pg. 92 Job No. 0300.02 Division No. 10 Notes Red. Plotted Date 7-28-58 Date Profile No. X-Sec. No.
Survey of Beach Erosion Study Notes Chkd. Checked Date
Survey by Van Dexen Notes R.T. Date
Indexed A. C. Johnson Date

76298 S & E #307—7-55

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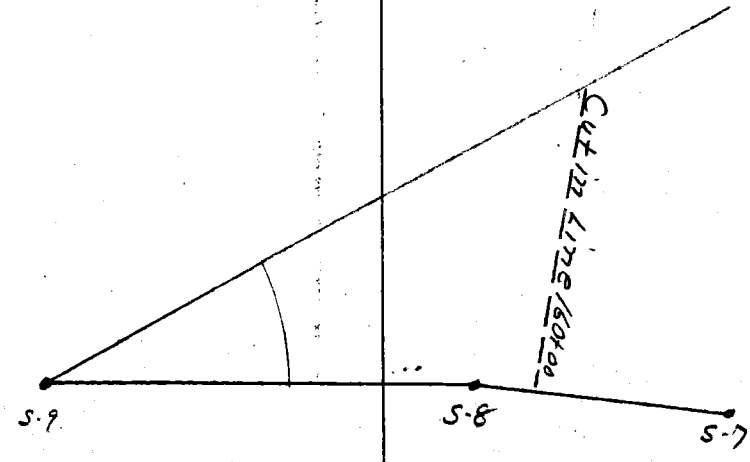
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		41	15.5	9.7		16° 08	605'
		42	15.4	9.6		15° 23	578'
		43	14.4	8.6		14° 34	546'
		44	13.9	8.1		14° 12	530'
		45	12.8	7.0		13° 23	500'
		46	11.7	5.9		12° 56	483'
		47	10.4	4.6		12° 17	460'
		48	9.1	3.3	8:41	11° 42	438'

Cut in Line 160+00

Boat = +1.0
Zero = -2.3
Tide = -4.5
-5.8



S-9 S-8

Profile Notes Red. Plotted Job No. 2300.02 Division No. 10 F. B. 2309 Pg. 93
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by VanDeren Notes R.T. Date 7-28-58
No. Date Date Map No. Indexed C. Johnson

F. B. 2309 Pg. 94 | Job No. 2300.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Study Date 7-28-58 Date No.

Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

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

76298 S & E #307—7-55

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76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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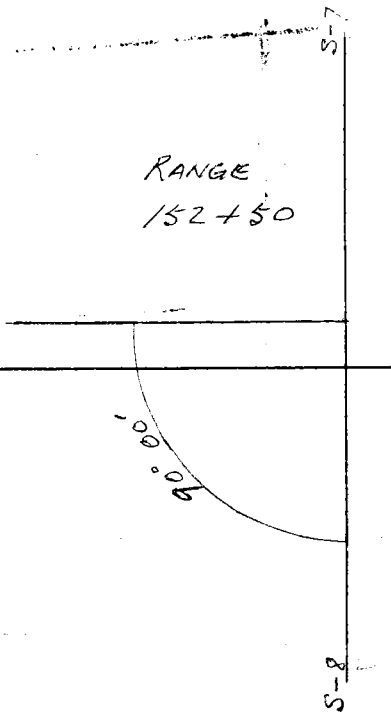
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 147+50	Sight on 152+50
T.P	2 96	20 34		17 38	CONT. FROM LINE 2 160+00	Inshore
T.P.	5 52	22 79	3 07	17 29		152+50
BM. 21-32	6 30	19 57	9 52	13 27	BM. 21-32 ELEV. 13.265 (TORRANCE D-3)	PER F.B. 2100-164
152+50			4 5	15 1	℄ ON SAND	
			6 7	12 9	60 FT RT TOP BRK	
			9 8	9 8	100 BOT "	
			9 4	10 2	155 TOP "	
			11 6	8 0	180	
T.P.	1 1	7 7	13 00	6 57	200	
			4 2	3 5	24° 29' 228	
			7 6	0 1	29° 45' 286	
			8 8	-1 1	34° 53 349	
			10 1	-2 4	37° 58' 390	
			20	-4 3	40° 50' 432	
			14 5	-6 8	43° 26' 473	
			15 7	-8 0	46° 07' 520	
			17 1	-9 4	48° 17' 561	
			18 0	-10 3	50° 16' 602	

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 95
No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
X-Sec. Notes Chkd. ____ Checked ____ Survey by English & Drew Date 7-28-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____
C. Johnson

Profile	Notes Red.	Plotted	Job No. 0300.02	Division No. 10	F. B. 2309 Pg. 97
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes 7.0	Date 7-28-58
No.	Date	Date	Map No.	Indexed C. Johnson	Date



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
152+50 S-8	1		9 00	90° 00'	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	

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76298 S & E #307—7-55

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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	
152+50	S-8	21			90 00		
		22			"		
		23			" "		
		24			" "		
		25			" "		
		26			" "		
		27			" "		
		28			" "		
		29			" "		
		30			" "		
		31			" "		
		32			" "		
		33		9 07	" "		

F. B. 2309 PG. 98 Job No. 030002 Division No. 10 Notes Red. Plotted Profile
Survey of BEACH EROSION Date 7-28-58 Date No.
Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

76298 S & E #307—7-55

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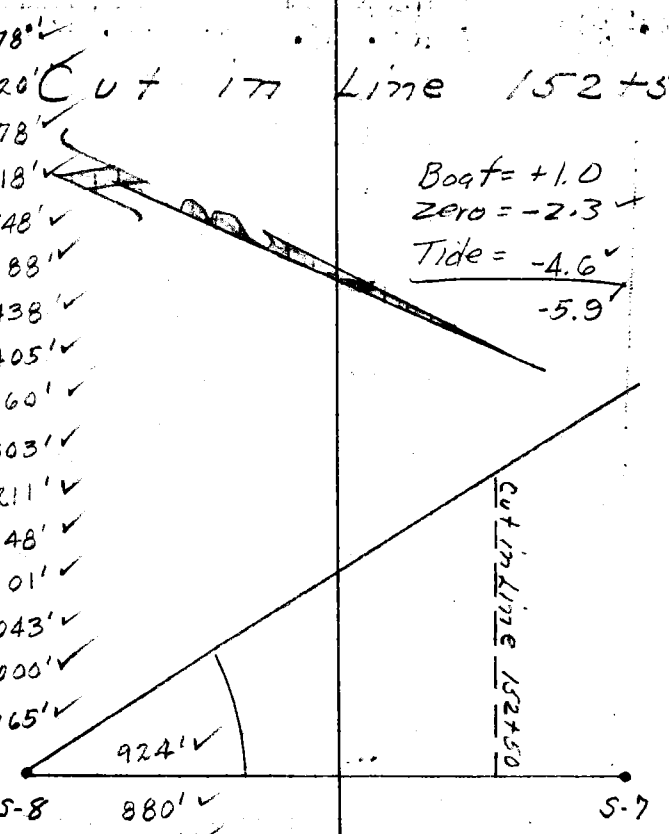
STATION Inst. At	Sight On	B. B. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
5-8	5-7	1	35.4	29.5	9:00	54° 53'	1,778'	Cut in Line 152+50
		2	34.5	28.6		54° 00'	1,720'	
		3	33.8	27.9		53° 18'	1,678'	
		4	33.2	27.3		52° 18'	1,618'	
		5	32.4	26.5		51° 04'	1,548'	Boat = +1.0
		6	31.7	25.8		49° 57'	1,488'	Zero = -2.3
		7	31.3	25.4		49° 00'	1,438'	Tide = -4.6
		8	31.0	25.1		48° 20'	1,405'	-5.9
		9	30.7	24.8		47° 24'	1,360'	
		10	29.9	24.0		46° 10'	1,303'	
		11	28.4	22.7		44° 06'	1,211'	
		12	28.1	22.2		42° 34'	1,148'	
		13	27.3	21.4		41° 23'	1,101'	
		14	26.5	20.6		39° 49'	1,043'	
		15	25.8	19.9		38° 40'	1,000'	
		16	24.7	18.8		37° 41'	965'	
		17	24.1	18.2		36° 28'	924'	
		18	22.4	16.5		35° 09'	880'	
		19	21.4	15.5		33° 53'	840'	
		20	20.6	14.7		32° 43'	803'	



Profile Notes Red ____ Plotted ____ Job No. 2300.02 Division No. 10 F.B. 2308 Pg. 99
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren Notes R.T. Date 9-28-58
No. ____ Date ____ Date ____ Map No. ____ Indexed [redacted]

76298 S & E #307—7-55

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F. B. 2309 Pg. 100 | Job No. 0300.02 Division No. 10 | Notes Red. | Plotted | Profile No.
Survey of Beach Erosion Study | Date 2-28-58 | Date | X-Sec. No.
Survey by Van Dexen | Notes R.T. | Notes Chkd. | Checked
Indexed C. Johnson | Date | Date | Date

STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
		21	19.4	13.5		31° 18'	760'	
		22	18.6	12.7		30° 22'	733'	Cut in Line 152+50
		23	17.8	11.9		29° 05'	695'	
		24	17.2	11.3		27° 51'	660'	Boat = +1.0
		25	16.7	10.8		26° 32'	624'	Zero = -2.3
		26	15.9	10.0		25° 42'	601'	Tide = -4.6
		27	15.4	9.5		24° 29'	569'	-5.9
S-8	S-7	28	14.6	8.7		23° 04'	533'	
		29	13.4	7.7		21° 45'	499'	
		30	12.2	6.3		20° 25'	465'	
		31	10.3	4.4		18° 43'	424'	
		32	8.6	2.7		17° 40'	399'	
		33	7.6	1.7	9:07	16° 04'	360'	

76L298 307 8-53

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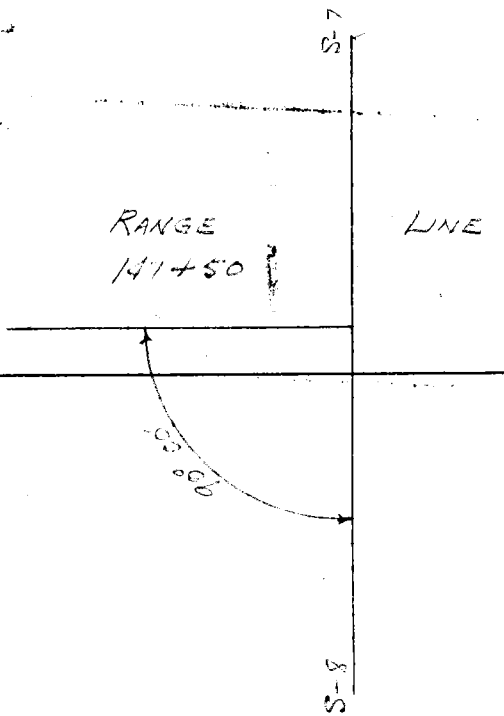
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Instr. @ 145+00	Sight on 147+50
B.M. 21-32	630	1957		1327	B.M. 21-32 ELEV. 13265	PER F.B. 2100-164 Inshore 147+50
T.P.	300	2029	228	1729	150+00	
147+50			44	159	℄ ON	
			10	193	40 FT LEFT	
			+60	263	95 " "	
			+67	270	100 " "	
			+69	272	118 " SAND TO W. OF WALK	
			67	136	70 FT RIGHT TOP BRK	
			86	117	100 " " BOT. BRK	
			88	115	140 " " TOP "	
			115	88	175 " "	
T.P.	241	870	1400	629	198 " " T.P.	
			57	30	43° 49' 240	
			80	07	48° 13' 280	
			91	-04	51° 18' 312	
			100	-13	55° 07' 359	
			117	-30	58° 46' 412	
			150	-63	62° 03 471	
			170	-83	63° 49' 509	
			187	-100	65° 31 549	

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 030002 Division No. 10 F.B. 2309 Pg. 101
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
Notes Chkd. ____ Checked ____ Survey by Dreier Notes English Date 7-28-58
Date ____ Date ____ Map No. ____ Indexed M. C. Johnson

Profile	Notes Red.	Plotted	Job No. 050002	Division No. 10	F. B. 2309 Pg. 103
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-28-58
No.	Date	Date	Map No.	Indexed C. Johnson	Date



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
147+50 S-8	1		9 28	90° 00'	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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76298 S & E #307—7-55

F. B. 2309 Pg. 104 | Job No. 030002 | Division No. 10 | Notes Red. | Plotted | Profile

Survey of BEACH EROSION | Date 7-28-58 | Date | No.

Survey by VAN DEREN | Notes T.O | Notes Chkd. | Checked | X-Sec.

Indexed A. C. Johnson | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. Sight At On	# Depth Rec. Adj.	Time	Hor. Ang.	Remarks
					147-8 S-8				
	21								
	22								
	23								
	24								
	25								
	26								
	27								
	28								
			3.32						

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76298 S & E #307—7-55

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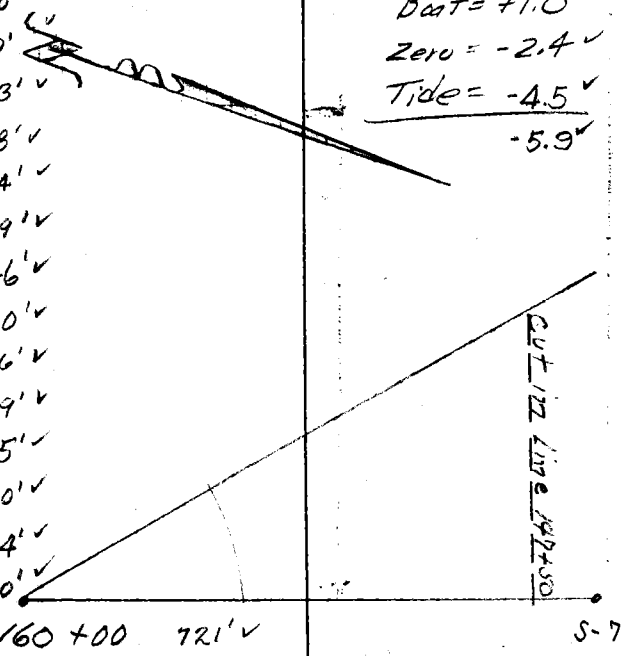
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
160+00	S-7	1	32.7	26.8	9:28	50° 32'	1,519'
		2	32.1	26.2		49° 51'	1,481' Cut in Line 147+50
		3	31.3	25.4		48° 40'	1,421'
		4	30.6	24.7		47° 25'	1,360'
		5	30.1	24.2		46° 21'	1,310'
		6	29.5	23.6		45° 17'	1,263'
		7	29.0	23.1		44° 00'	1,208'
		8	28.1	22.2		42° 27'	1,144'
		9	26.8	20.9		41° 18'	1,099'
		10	26.2	20.3		39° 55'	1,046'
		11	25.2	19.3		38° 22'	990'
		12	23.8	17.9		36° 51'	936'
		13	22.8	16.9		35° 44'	899'
		14	22.3	16.4		34° 42'	865'
		15	21.5	15.6		33° 36'	830'
		16	20.3	14.4		32° 26'	794'
		17	19.4	13.5		31° 17'	760'
		18	18.6	12.7		29° 58'	160+00 721'
		19	17.8	11.9		28° 38'	683'
		20	17.0	11.1		27° 04'	639'



Boat = +1.0
Zero = -2.4
Tide = -4.5
-5.9

Profile Notes Red. Plotted Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 105
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by Van Deren Notes R.T. Date 7-28-58
No. Date Date Map No. Indexed C. Johnson Date

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	16.3	10.4		25° 31'	596'	
		22	15.4	9.5		24° 27'	569' Cut in Line	147+50
		23	14.4	8.5		22° 42'	523'	
		24	13.1	7.2		21° 43'	498'	Boat = +1.0
		25	11.8	5.9		20° 17'	463'	Zero = -2.4
		26	10.1	4.2		18° 50'	426'	Tide = -4.5
		27	8.7	2.8		17° 39'	398'	-5.9
160+00		28	7.8	1.9	9:32	16° 16'	365'	
	S-7	29						
		30						
		31						
		32						
		33						

F. B. 2309 Pg. 166 Job No. 2300.02 Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 7-28-58 Date No. X-Sec.
Survey by Van Deren Notes R.T. Notes Chkd. Checked No.
Indexed [illegible] Date Date Date

76L298 307 8-53

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Instr. @ 145+00	Sight on 142+50
					CONT. FROM 147+50	
T.P.	300	20 29		17 29	T.P. 150+00	Inshore
T.P.	390	20 15	4 04	16 25		142+50
142+50			42	159	℄ 142+50	
			20	181	45 FT LEFT BOT. SLOPE	
			+75	276	100 " " TOP "	
			+83	284	115 " "	
			+84	285	124 " " SAND W. SIDE OF WALK	
			52	149	35 FT. RIGHT	
			70	131	60 " "	
			94	107	90 " " BOT BRK	
			98	103	100 " "	
			100	18.1	150 " " TOP "	
			119	82	180 " "	
T.P.	255	8 60	14 10	6 05	195 " "	
			61	+25	42° 30' 229	
			84	+02	48° 48' 286	
			100	-14	54° 11' 346	
			111	-25	57° 36' 394	
			137	-51	60° 46 447	
			161	-75	63° 35 503	
			180	-94	65° 14 542	

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F.B. 2309 Pg. 107
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
Notes Chkd. ____ Checked ____ Survey by Draper & E.E. Date 7-28-58
Date ____ Date ____ Map No. ____ Indexed C. Johnson Date ____

Profile	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2309 Pg. 109
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-28-58
No.	Date	Date	Map No.	Index [illegible] C. Johnson	

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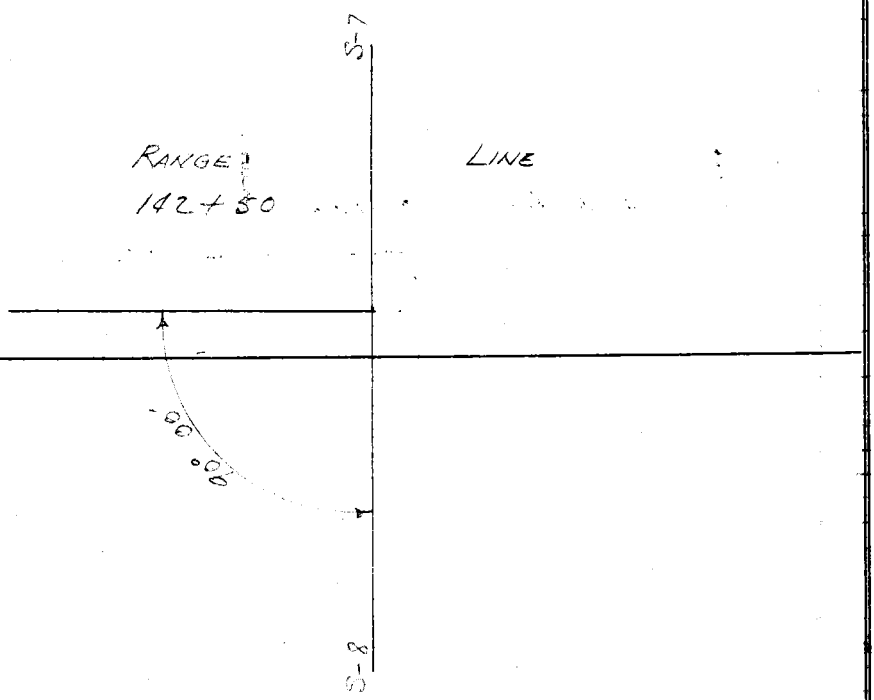
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
142+50 S-8	1		9:44	90° 00	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	



76298 S & E #307—7-55

F. B. 2309 Pg. 110 | Job No. 030002 | Division No. 10 | Notes Red. | Plotted | Profile

Survey of BEACH EROSION | Date 7-28-58 | Date | No.

Survey by VAN DEREN | Notes T.O. | Notes Chkd. | Checked | X-Sec.

Indexed C. Johnson | Date | Date | Date | No.

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
142450 S-8	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					
	32					
	33		9 50			

76298 S & E #307—7-55

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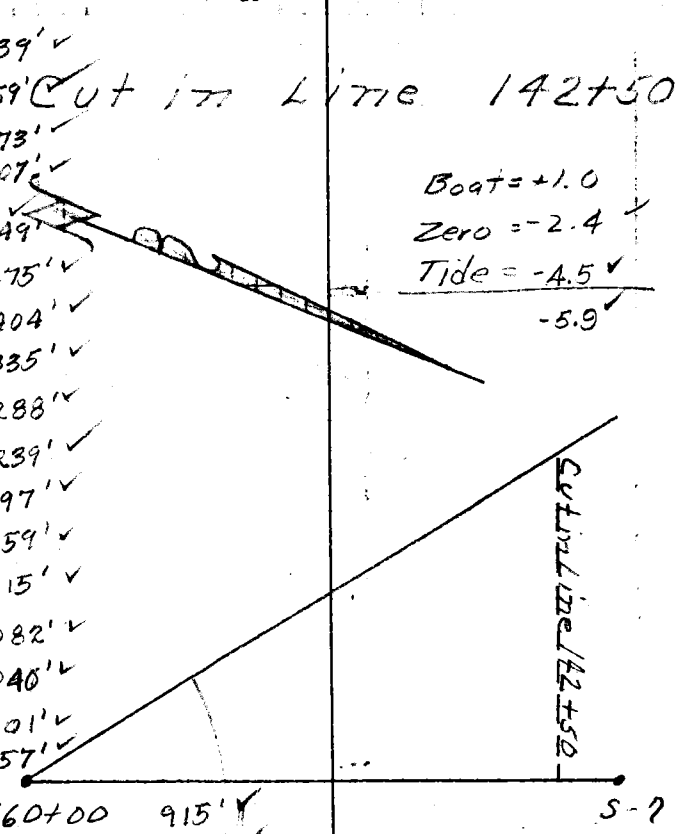
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
160+00	S-7	1	35.2	29.3	9:44	46° 25'	1,839'
		2	34.2	28.3		45° 08'	1,759' Cut in Line 142+50
		3	33.7	27.8		43° 43'	1,673'
		4	32.7	26.8		42° 34'	1,607'
		5	—			41° 30'	1,549'
		6	—			40° 07'	1,475'
		7	—			38° 44'	1,404'
		8	30.7	24.8		37° 21'	1,335'
		9	30.2	24.3		36° 21'	1,288'
		10	29.7	23.8		35° 18'	1,239'
		11	29.1	23.2		34° 23'	1,197'
		12	28.3	22.4		33° 30'	1,159'
		13	27.9	22.0		32° 30'	1,115'
		14	27.6	21.7		31° 44'	1,082'
		15	26.8	20.9		30° 43'	1,040'
		16	25.9	20.0		29° 46'	1,001'
		17	25.2	19.3		28° 41'	957'
		18	24.3	18.4		27° 36'	915'
		19	23.2	17.3		26° 42'	880'
		20	21.9	16.0		25° 37'	838'



Profile Notes Red. ____ Plotted ____ Job No. 030002 Division No. 10 F. B. 2309 Pg. 111
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren Notes R.T. Date 7-28-58
No. ____ Date ____ Date ____ Map No. ____ Index [illegible]

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	20.8	14.9		24° 42'	805'	
		22	19.6	13.7		23° 24'	758'	Cut in Line 142+50
		23	19.0	13.1		22° 52'	739'	
		24	18.4	12.5		21° 46'	698'	Boat = +1.0
		25	17.7	11.8		21° 09'	677'	Zero = -2.4
		26	16.9	11.0		20° 00'	637'	Tide = -4.5
160+00		27	16.6	10.7		19° 08'	607'	-5.9
		28	15.7	9.8		17° 51'	564'	
	S-7	29	14.7	8.8		16° 52'	530'	
		30	13.5	7.6		15° 27'	483'	
		31	11.4	5.5		14° 28'	452'	
		32	10.2	4.3		13° 09'	410'	
		33	7.9	2.0	9:50	12° 16'	380'	
		34						

F. B. 2309 Pg. 112 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 7-28-58 Date No. X-Sec.
Survey by Van Deren Notes R.T. Notes Chkd. Checked
Indexed C. Johnson Date Date Date No.

76L298 307 8-53

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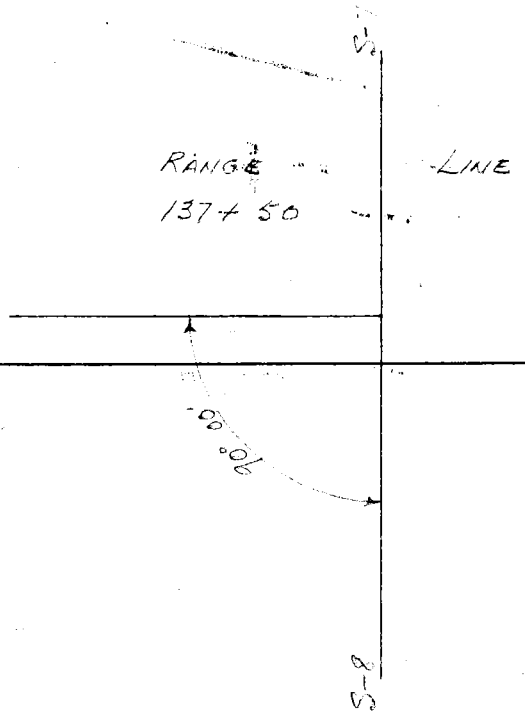
STATION	B. S.	H. I.	F. S.	ELEV.	Instr. @ 135+00	Sight on 137+50
T.P.	3 90	20 15		16 25	CONT. FROM LINE 2 142+50	Inshore 137+50
T.P	6 37	19.96	6 56	13 59		
137+50			51	14 9	℄	
			29	17 1	50 FT LEFT TOE OF SLOPE	
			+66	26 6	100 " "	
			+80	28 0	120 " " TOP OF S	
			+81	28 1	127 " " W. SIDE OF WALL	
			62	13 8	40 FT RIGHT TOP BRK	
			97	10 3	70 " " BOT "	
			92	10 8	100 " "	
			98	10 2	160 " " TOP BRK	
T.P.	1 74	8 60	13 10	6 86	191	
			50	3 6	41°45' 223	
			84	0 2	48°45' 285	
			101	-1 5	54°00' 344	
			115	-2 9	57°24' 391	
			134	-4 8	59°20' 422	
			160	-7 4	61°08 453	
			172	-8 6	64°07' 515	
			188	-10 2	65°55' 559	

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 1/13
No. ____ Date ____ Date ____ Survey of Beach Erosion Sum
X-Sec. Notes Chkd. ____ Checked ____ Survey by Dreier Notes Lamb Date 7-28-58
No. ____ Date ____ Date ____ Map No. ____ Indexed C. Johnson

Profile	Notes Red.	Plotted	Job No. 0300.02	Division No. 10	F. B. 2309	Pg. 115
No.	Date	Date	Survey of BEACH EROSION			
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-28-58	
No.	Date	Date	Map No.	Indexed A. C. Johnson	Date	



STATION	B. S.	H. I.	F. B.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
137+50 S-8	1		10 06	[illegible]	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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76298 S & E #307—7-55

F. B. 2309 Pg. 114 | Job No. 080002 | Division No. 10 | Notes Red. | Plotted | Profile

Survey of BEACH EROSION | Date 7-28-58 | Date | No.

Survey by VAN DEREN | Notes | Notes Chkd. | Checked | X-Sec.

Indexed [redacted] | Date | Date | Date | No.

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

76298 S & E #307—7-55

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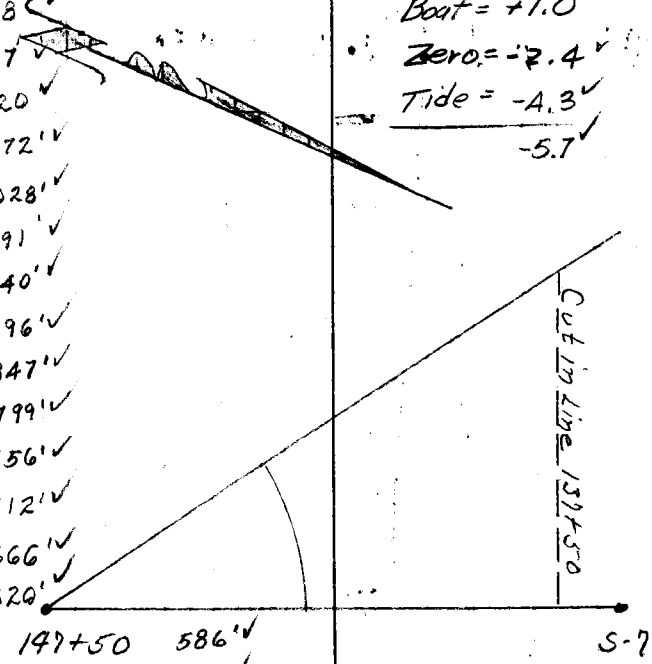
STATION Inst. At	Sight On	S. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
147+50	S-7	1	31.9	26.2	10:06	55° 02'	1,430'
		2	31.1	25.4		53° 40'	1,360 Cut in Line 137+50
		3	30.7	25.0		51° 55'	1,276'
		4	29.3	23.6		50° 37'	1,218
		5	28.6	22.9		49° 25'	1,167
		6	28.1	22.4		48° 15'	1,120
		7	27.4	21.7		47° 00'	1,072'
		8	26.6	20.9		45° 48'	1,028'
		9	25.8	20.1		44° 44'	991'
		10	24.6	18.9		43° 13'	940'
		11	23.3	17.6		41° 52'	896'
		12	21.7	16.0		40° 15'	847'
		13	20.3	14.6		38° 37'	799'
		14	19.2	13.5		37° 05'	756'
		15	18.5	12.8		35° 26'	712'
		16	17.5	11.8		33° 40'	666'
		17	16.7	11.0		31° 48'	620'
		18	15.6	9.9		30° 22'	586'
		19	14.8	9.1		28° 21'	540'
		20	14.1	8.4		26° 52'	507'

Boat = +1.0
Zero = -2.4
Tide = -4.3
-5.7



Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 117
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren Notes R.T. Date 7-28-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____
C. Johnson

76298 S & E #307—7-55

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F. B. 2309 Pg. 118 Job No. 0300.02 Division No. 10 Notes Red. Plotted
Survey of Beach Erosion Study Date 1-28-58 Date
Survey by Van Deren Notes A.T. Notes Chkd. Checked
Indexed C. Johnson Date Date
Profile No. X-Sec. No.

STATION Inst. At	Sight On	B. S. #	H. I. Rec.	Depth Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
		21	13.1	7.4		25° 07'	469'	
		22	11.4	5.7		24° 09'	448'	Cut in Line 137+50
		23	10.3	4.6		22° 42'	418'	
		24	9.1	3.4	10:10	21° 28'	393'	Boat = +1.0
		25						Zero = -2.4
147+50	S-7							Tide = -4.3
								-5.7

76L298 307 8-53

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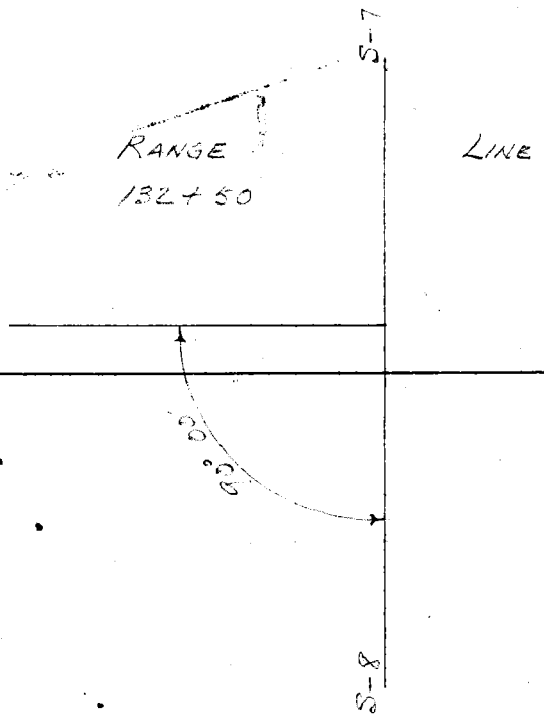
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Instr @ 135+00	Sight on 132+50
T.P.	6.37	19.96		13.59	CONT. FROM LINE 2, 137+50	Inshore
T.P.	4.05	20.63	3.38	16.58		132+50
132+50			4.7	15.9	℄	
			3.1	17.5	35 FT LEFT TOE OF SLOPE	
			+6.2	26.8	65 " " TOP OF "	
			+7.6	28.2	100 " "	
			+7.3	27.9	117 " " BASE OF WALL	
			6.4	14.2	50 FT RIGHT TOP	
			9.5	11.1	90 " "	
			9.8	10.8	100 " "	
			11.0	9.6	160 " "	
			13.0	7.6	190 " "	
			13.6	7.0	200 " "	
T.P.	2.0	7.83	1.480	5.83	210	
			5.2	2.6	43° 51'	240
			8.0	-0.2	49° 35'	294
			9.8	-2.0	54° 56'	356
			11.2	-3.4	58° 39'	410
			14.8	-7.0	61° 53'	468
			16.6	-8.8	64° 20	520
			18.2	-10.4	66° 15	568

10.8
9.8
2.0

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 23309 PG. 119
X-Sec. No. ____ Notes Date ____ Chkd. ____ Date ____ Checked ____ Date ____ Survey of Beach Erosion Survey Notes Elev. Date 7-28-58
Map No. ____ Indexed ____ Survey by Dreier & Lamb C. Johnson

Profile	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2304	Pg. 121
No.	Date	Date	Survey of BEACH EROSION			
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-28-58	
No.	Date	Date	Map No.	Indexed C. Johnson	Date	



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
132+50 S-7	1		10 21	90° 00'	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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76298 S & E #307—7-55

F. B. 2309 Pg. 122 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION Date 7-28-58 Date No.

Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.

Indexed A. C. Johnson Date Date Date No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
132450 S-8	21			90° 00		
	22					
	23					
	24					
	25					
	26					
	27		10 26			

76298 S & E #307—7-55

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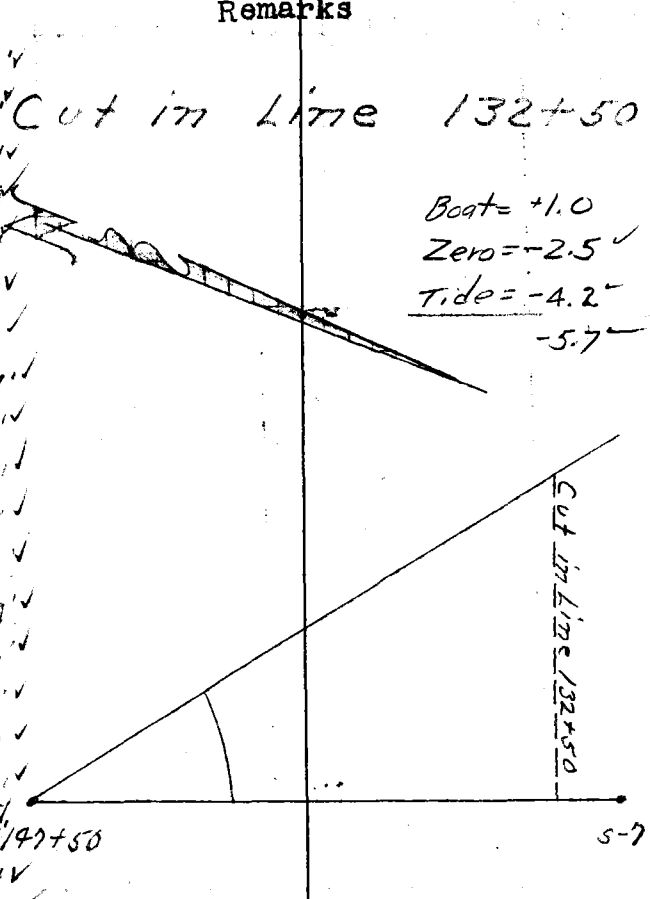
Profile No. ____ Date ____ Notes Chkd. ____ Date ____
X-Sec. No. ____ Date ____ Notes Red. ____ Date ____ Checked ____ Date ____ Map No. ____
Plotted ____ Date ____ Job No. 2301.12 Division No. 10 Survey of Beach & Eyes 1977 Survey by Vaj Deren Notes RT Date 9-28-58 Index C. Tebbe
F. B. 2309 Pg. 123

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
147+50	S-7	1	31.2	25.5	10:21	45° 15'	1,514'	
		2	31.3	25.6		44° 09'	1,457'	Cut in Line 132+50
		3	31.1	25.4		42° 39'	1,382'	
		4	29.9	24.2		41° 29'	1,326'	
		5	28.9	23.2		39° 56'	1,256'	Boat = +1.0
		6	28.3	22.6		38° 40'	1,200'	Zero = -2.5
		7	27.4	22.0		37° 00'	1,131'	Tide = -4.2
		8	26.4	21.2		35° 29'	1,067'	-5.7
		9	25.9	20.2		34° 07'	1,016'	
		10	25.1	19.5		32° 46'	966'	
		11	23.9	18.2		31° 28'	918'	
		12	23.2	17.5		30° 31'	884'	
		13	22.5	16.8		29° 30'	849'	
		14	21.6	15.9		28° 27'	813'	
		15	20.7	15.0		27° 22'	777'	
		16	20.1	14.4		26° 18'	741'	
		17	19.1	13.4		24° 56'	698'	
		18	18.1	12.4		23° 40'	657' 147+50	
		19	17.2	11.5		22° 29'	618'	
		20	16.7	11.0		21° 46'	599'	



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STATION		S. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	16.1'	10.4		20° 35'	564'	
		22	15.1'	9.4		19° 10'	522'	Cut in Line 132+50
		23	14.1'	8.4		18° 20'	497'	
		24	12.7'	7.0		17° 22'	470'	Boat = +1.0
		25	11.1'	5.4		16° 22'	441'	Zero = -2.5
		26	9.7'	4.0		15° 20'	411'	Tide = -4.2'
147+50	S-7	27	8.3'	2.6	10:26	14° 32'	389'	-5.7

F. B. 2309 Pg. 124 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 7-28-58 Date No. X-Sec.
Survey by Van Deren Notes R.T. Notes Chkd. Checked
Indexed C. Johnson Date Date Date No.

Profile No.	Notes Red.	Plotted	Job No. 0300.03	Division No. 10	F. B. 2309	Pg. 125
	Date	Date	Survey of Beach Erosion			
X-Sec. No.	Notes Chkd.	Checked	Survey by VanDeren	Notes Van	Date 7-29-58	
	Date	Date	Map No.	Indexed C. Johnson	Date	

7-29-58

3.0 on Datum Line

Time Check Gage time = 10.04 high 4.8

P.D.S.T. = 11.06 Low 3.8

Remarks	Standard Time	Reading	P.D.S.T.
	5-00 AM	1.5	6-00
	5-30 "	2.1	6-30
	6-00 "	2.8	7-00
	6-30 "	3.5	7-30
	7-00 "	3.8	8-00
	7-30 "	4.2	8-30
	8-00 "	4.5	9-00
	8-30 "	4.7	9-30
	9-00 "	4.6	10-00
	9-30 "	4.4	10-30
	10-00 "	4.2	11-00
	10-30 "	3.8	11-30
	11-00 "	3.5	12-00
	11-30 "	3.1	12-30
	12-00 "	2.7	1-00
	12-30 PM	2.3	1-30
	1-00 "	2.2	2-00
	1-30 "	2.2	2-30
	2-00 "	2.2	3-00
	2-30 "		
	3-00 "		

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

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76298 S & E #307—7-55

F. B. 2309 PG. 125 Job No. 030008 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Date 7-29-58 Date _____ No. _____

Survey by Van Deren Notes Van Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

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

76298 S & E #307—7-58

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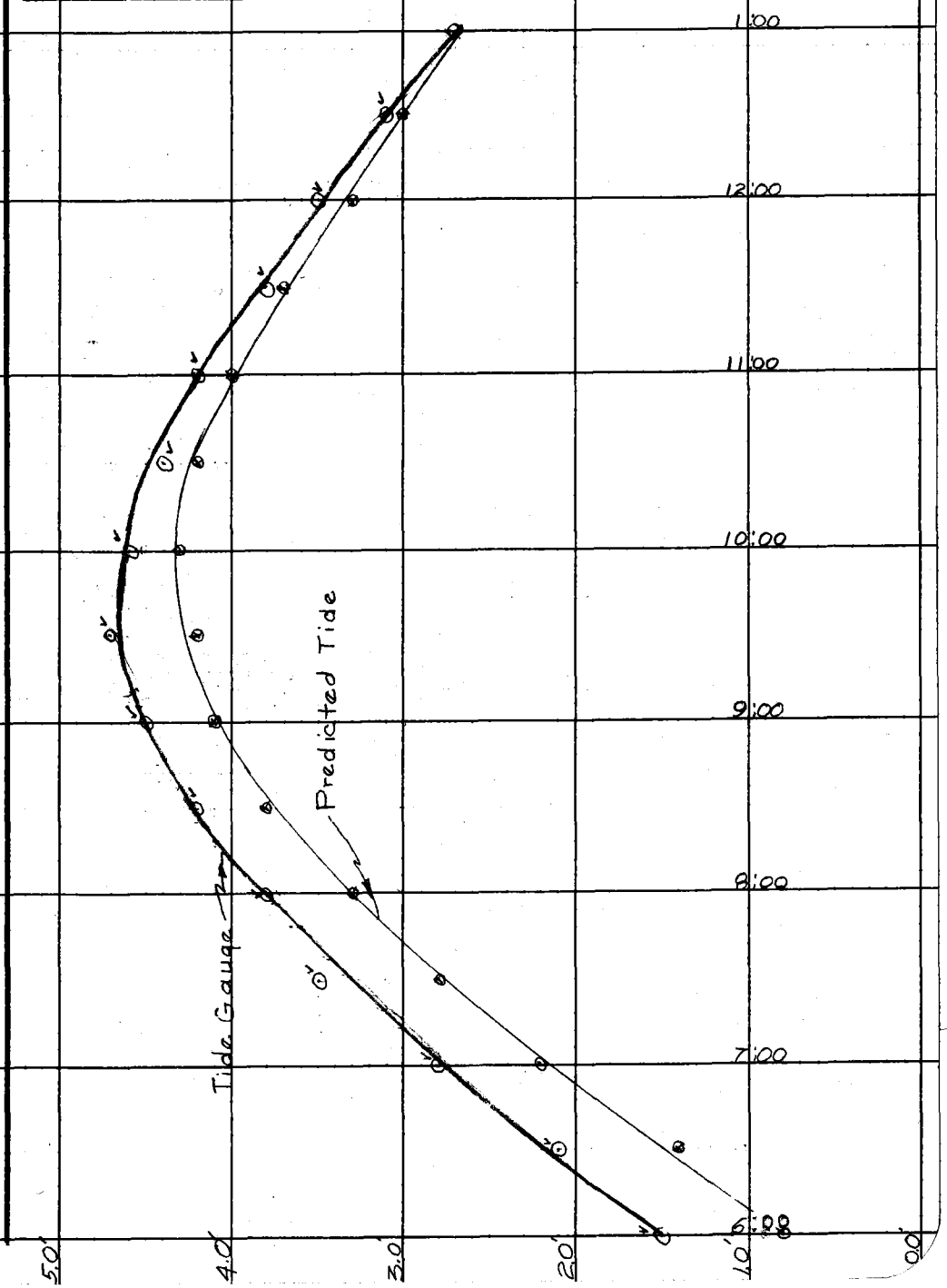
Notes Ck'd by	Survey of 0300.02	F. B. 2309 Pg. 126
Map No.	JN Tape Std °F	
Office Work L. Manley	Surveyed by Van Deren	
Checked J.S.H.	Notes Date 7-29-58	
Date 9-4-58	Indexed	



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76F309S CE #247—3-57

76L298 307 8-53

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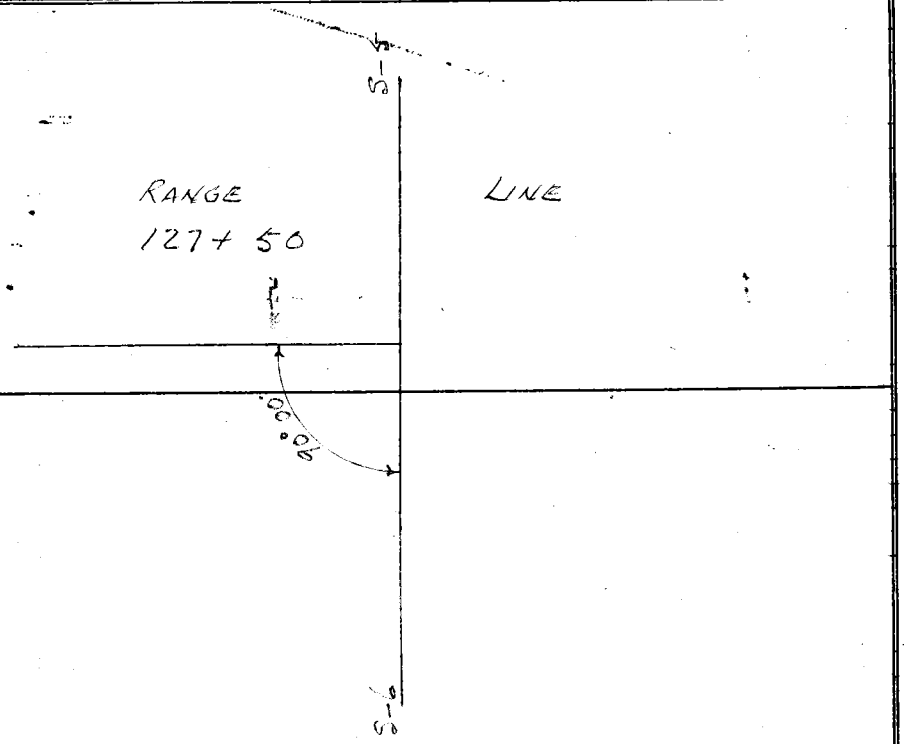
STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at S-6	Sight on 127+50
TP.	4 05	2063		16 58	CONT. FROM LINE 2, 132+50	Inshore
B.M. S-7	5 56	20 02	6 15	14 48 (46)	B.M. S-7, ELEV 14.462 PER F.B. 2100-165	127+50
127+50			+4 6	24 6	℄	
			+6 0	26 0	25 FT. LEFT	
			+4 5	24 5	21 FT RIGHT	
			0 0	20 0	37 " "	
			3 0	17 0	60 " RT. TOE OF SLOPE	
			4 5	15 5	100 " "	
			5 9	14 1	150 " " TOP BRK	
			9 1	10 9	185 " " BOT	
			9 3	10 7	200 " "	
			10 0	10 0	250 " "	
			12 6	7 4	290 " "	
TP	1 5	7 8	13 67	6 35	300 " "	
			6 5	1 3	61° 55' 360	
			8 5	-0 7	64 06 395	
			9 8	-2 0	66 15 436	
			11 5	-3 7	68 30 487	
			14 0	-6 2	70 47 551	
			16 3	-8 5	72 15 600	
			18 0	-10 2	73 51 663	

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 127
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
Notes Chkd. ____ Checked ____ Survey by English Notes Drier Date 7-29-58
Date ____ Date ____ Map No. ____ Indexed C. Johnson

Profile	Notes Red.	Plotted	Job No. 0300.02	Division No. 10	F. B. 2307	Pg. 129
No.	Date	Date	Survey of BEACH EROSION			
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes [illegible]	Date 7-29-58	
No.	Date	Date	Map No.	Indexed C. Johnson	Date	



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On 127+50 S-6	#	Depth Rec. Adj.	Time	Hor. Ang.	
	1		7 14	90°00'	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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76298 S & E #307—7-55

F. B. 2309 Pg. 130 | Job No. 030002 | Division No. 10 | Notes Red. | Plotted | Profile

Survey of BEACH EROSION | Date 7-29-58 | Date | No.

Survey by VAN DEREN | Notes T. O. | Notes Chkd. | Checked | X-Sec.

Indexed A. C. Johnson | Date | Date | Date | No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	Depth # Rec. Adj.		Time Hor. Ang.			Remarks
127+50 S-6	21			90°00'		
	22					
	23					
	24					
	25					
	26		7 20			

76298 S & E #307—7-55

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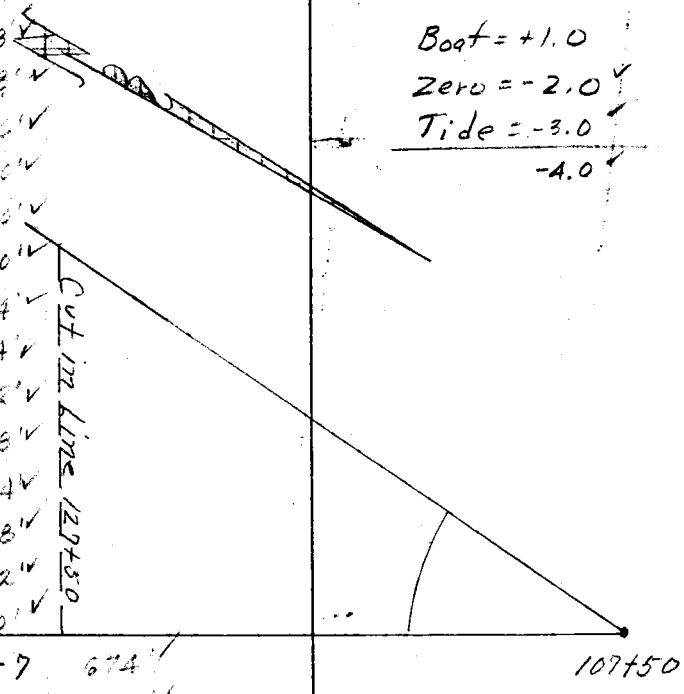
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	31.0	27.0	7:14	39° 47'	1,666'
		2	30.6	26.6		38° 30'	1,590'
		3	29.8	25.8		37° 18'	1,524'
		4	29.2	25.2		36° 17'	1,468'
		5	28.7	24.7		34° 57'	1,398'
		6	28.1	24.1		34° 31'	1,3[illegible]'
		7	27.3	23.3		32° 00'	1,250'
		8	26.5	22.5		30° 32'	1,1[illegible]'
107+50	S-7	9	25.6	21.6		29° 27'	1,130'
		10	24.7	20.7		28° 15'	1,074'
		11	22.5	18.5		26° 54'	1,014'
		12	20.5	16.5		25° 40'	962'
		13	18.4	14.4		24° 10'	898'
		14	17.5	13.5		22° 52'	844'
		15	16.5	12.5		21° 15'	778'
		16	15.9	11.9		20° 21'	742'
		17	15.2	11.2		19° 16'	700'
		18	14.3	10.3		18° 37'	S-7 674'
		19	13.7	9.7		17° 58'	648'
		20	13.1	9.1		17° 11'	618'



Boat = +1.0
Zero = -2.0
Tide = -3.0
-4.0

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 131
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren Notes R.T. Date 7-29-58
No. ____ Date ____ Date ____ Map No. ____ Indexed C. Johnson

76298 S & E #307—7-55

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F. B. 2309 Pg. 132 Job No. 0300.02 Division No. 10 Notes Red. Plotted. Profile No.
Survey of Beach Erosion Study Date 2-27-58 Date. X-Sec. No.
Survey by Van Peren Notes R.T. Notes Chkd. Checked. No.
Indexed C. Johnson Date Date. Date.

STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks	
		21	12.5	8.4		16° 33'	594'	
		22	11.6	7.5		15° 38'	560	Cut in Line 127+50
		23	10.5	6.4		15° 08'	540'	
		24	9.0	4.9 / 3.6		14° 26'	514'	Boat = +1.0
		25	7.7			13° 31'	485'	Zero = -2.0
		26	4.9	2.8	7:20	13° 00'	462'	Tide = -3.1
107+50	S-7							-4.1

76L298 S & E #307 9-54

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 120+00	Sight on 122+50
B.M. S-7	5 56	2002		14 46	B.M. S-7 ELEV. 14.462 F.B. 2100-165	Inshore 122+50
T.P.	5 68	19 77	5 93	14 09		
122+50			+62	26 0	℄ ON PARKING AREA	
			+63	26 1	19 FT LEFT	
			+61	25 9	27 FT RIGHT TOP OF SLOPE	
			00	19 8	50 " " ON SLOPE	
			40	15 8	65 " " TOE OF SLOPE	
			50	14 8	100 " "	
			49	14 9	155 " "	
			65	13 3	200 " " [illegible] BRK	
			102	9 6	230 " "	
			106	9 8	270 " "	
			134	6 4	300 " "	
T.P.	[illegible]	-7	13 66	6 11	50° 42' 306	
			5 5	[illegible]	56 21 376	
			9 2	-1 5	59 25 423	
			11 2	-3 5	61 02 452	
			12 4	-4 7	63 55 511	
			14 7	-7 0	65 26 547	
			16 4	-8 7	67 19 598	
			18 0	-10 3	71 23 742	

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 030002 Division No. 10 F. B. 2309 Pg. 133
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Sub. Date 7-29-58
Notes Chkd. ____ Checked ____ Survey by English Notes Dwn. Date
Date ____ Date ____ Map No. ____ Indexed C. Johnson

F. B. 2303 Pg. 134 | Job No. 0300.12 | Division No. 10 | Notes Red. | Plotted | Profile

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

Survey by English | Notes Dreier | Notes Chkd. | Checked | X-Sec.

Indexed [redacted] | Date | Date | Date | No.

76L298 S & E #307 9-54

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

Inshore
122+50

Profile	Notes Red.	Plotted	Job No. 0300.02	Division No. 10	F. B. 2309 Pg. 135
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-29-58
No.	Date	Date	Map No.	Indexed G. Johnson	

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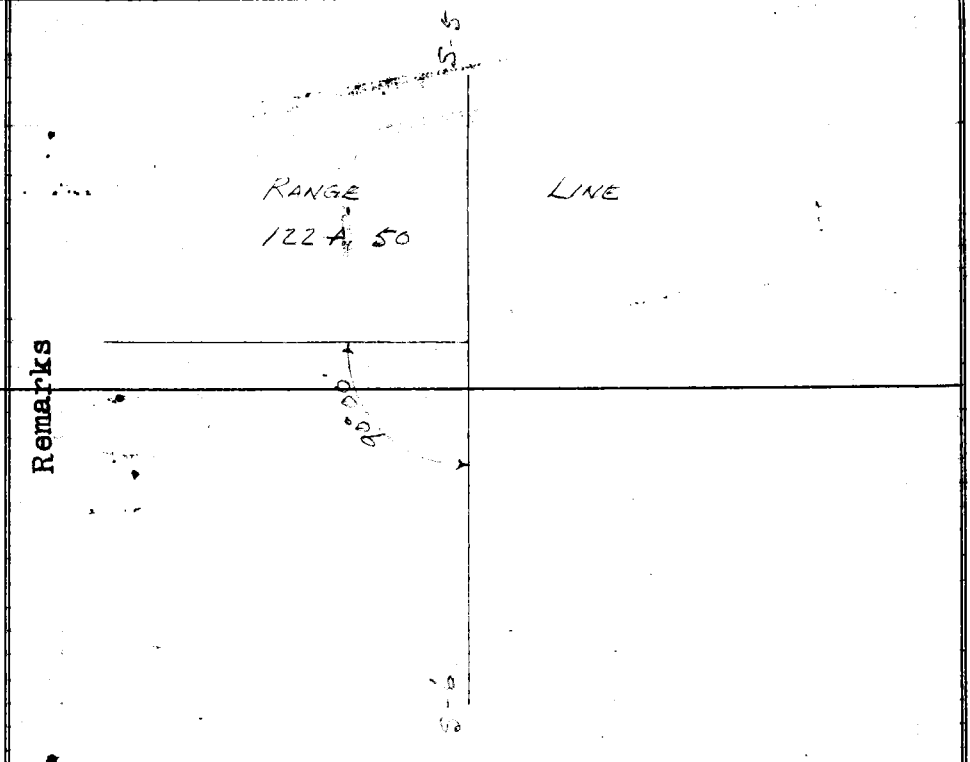
STATION	B. S.	H. I.	F. B.	ELEV.	Remarks
Inst. Sight At On 122+50 S-6	#	Depth Rec. Adj.	Time	Hor. Ang.	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				



76298 S & E #307—7-55

F. B. 2309 Pg. 136 Job No. 030005 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION Date 7-29-58 Date No.

Survey by VAN DEREN Notes 70 Notes Chkd. Checked X-Sec.

Indexed C. Johnson Date Date Date No.

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

76298 S & E #307—7-55

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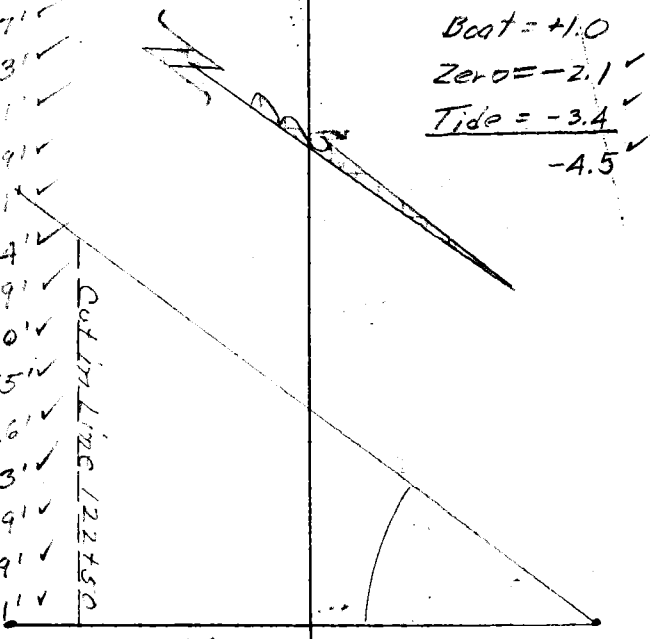
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	S. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
107+50	S-7	1	32.0	27.5	7:32	50° 15'	1,803'
		2	31.4	26.9		49° 31'	1,758' Cut in Line 122+50
		3	30.9	26.4		48° 48'	1,713'
		4	30.7	26.2		48° 00'	1,667'
		5	30.3	25.8		47° 35'	1,643'
		6	—			46° 51'	1,601'
		7	—			45° 44'	1,539'
		8	29.0	24.5		44° 15'	1,461'
		9	28.4	23.9		43° 07'	1,404'
		10	27.9	23.4		42° 10'	1,359'
		11	27.6	23.1		41° 20'	1,320'
		12	27.3	22.8		40° 21'	1,275'
		13	26.7	22.2		39° 15'	1,226'
		14	26.0	21.5		38° 30'	1,193'
		15	25.1	20.6		37° 28'	1,149'
		16	24.7	20.2		36° 28'	1,109'
		17	23.8	19.3		35° 16'	1,061'
		18	23.2	18.7		34° 23'	S-7 1,026'
		19	22.5	18.0		33° 20'	987'
		20	21.4	16.9		32° 06'	941'



Boat = +1.0
Zero = −2.1
Tide = −3.4
−4.5

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 137
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Study
Notes Chkd. ____ Checked ____ Survey by Van Deren Notes P.T. Date 7-29-58
Date ____ Date ____ Map No. ____ Indexed C. Johnson

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	20.3	15.6		31° 00'	902'	
		22	19.2	~~14.3~~ 14.5		29° 42'	855'	Cut in Line 122+50
		23	18.5	13.8		28° 32'	816'	
		24	17.5	12.8		27° 07'	768'	
		25	16.4	11.7		25° 57'	731'	Boat = +1.0
		26	15.8	11.1		25° 17'	704'	Zero = -2.3
		27	15.3	10.6		24° 06'	671'	Tide = -3.4
		28	14.4	9.7		23° 00'	636'	-4.7
107+50	S-7	29	13.4	8.7		22° 06'	609'	
		30	12.7	8.0		21° 00'	576'	
		31	11.5	6.8		19° 57'	545'	
		32	10.3	~~6.6~~ 5.6		19° 04'	519'	
		33	9.1	4.4	7:38	18° 07'	491'	
		34						

F. B. 2309 Pg. 138 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 7-29-58 Date No.
Survey by Van Dyke Notes R.T. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

76L298 S & E #307 9-54

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 122+00	Shift on 117+50
T.P.	5.68	19.77		14.09	CONT. FROM LINE 2, 122+50	Inshore 117+50
T.P.	4.15	19.69	4.23	15.54		
117+50			1.87	18.02		
			4.92	14.85	18 FT LEFT	
			4.74	14.95	25 FT RIGHT	TOP BRK
			5.0	14.77	50 FT RT	DN SLOPE
			2.2	17.47	60 " "	TOE OF SLOPE
			4.0	15.77	100 " "	
			5.7	14.07	140 " "	TOP BRK
			8.8	11.97	175 " "	BOT BRK
			9.0	10.77	200 " "	
			11.1	8.67	260 " "	
			13.4	6.37	300 " "	
T.P.	[illegible]	[illegible]	14.31	5.18	51 29 313	
			[illegible]	[illegible]	57 33 393	
			[illegible]	[illegible]	60 28 441	
			12.3	[illegible]	63 27 500	
			15.9	[illegible]	66 35 577	
			17.6	[illegible]	69 01 652	
			18.0	[illegible]	69 31 669	

Profile Notes Red. ____ Plotted ____ Job No. 03001.00 Division No. 10 F. B. 23309 Pg. 39
No. ____ Date ____ Date ____ Survey of Beach Profile Sur.
X-Sec. Notes Chkd. ____ Checked ____ Survey by English & Nash Date 7-29-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

F. B. 2309 Pg. 140 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Sur. Date Date No.

Survey by ~~C. Johnson~~ Notes Dreier Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

76L298 S & E #307 9-54

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

Inshore 117+50

76298 S & E #307—7-55

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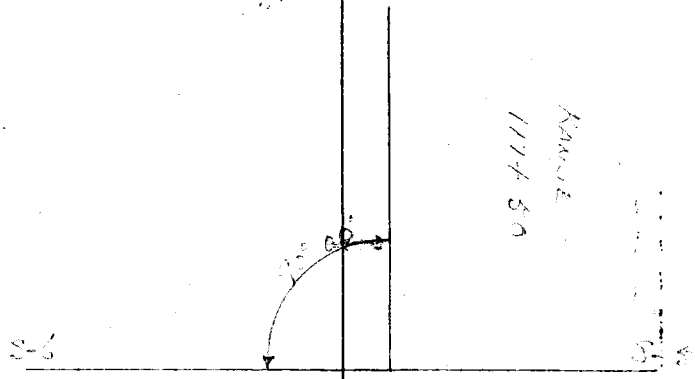
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
[illegible]			7 49	[illegible]		



Profile Notes Red. ____ Plotted ____ Job No. [illegible] Division No. [illegible]
No. ____ Date ____ Date ____ Survey of [illegible]
X-Sec. Notes Chkd. ____ Checked ____ Survey by [illegible]
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

F. B. 2319 Pg. 141

F. B. 2309 Pg. 142 Job No. 030002 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION Date 7-29-58 Date No.

Survey by VAN DEREN Notes T. O. Notes Chkd. Checked X-Sec.

Indexed A. C. Johnson Date Date Date No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	Depth # Rec. Adj.	Time	Hor. Ang.			Remarks
117450 S-6	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					
	32					
	33					
	34					
			7 57			

76298 S & E #307—7-55

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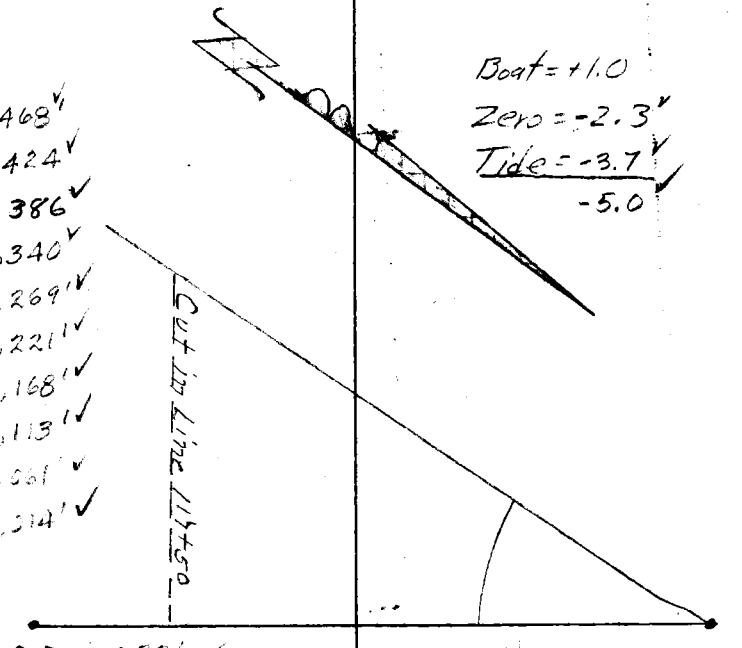
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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
107+50	S-7	1	—		7:49	60° 08'	
		2	30.8	25.8		59° 23'	1,690' Cut in Line 117+50
		3	30.4	25.4		58° 37'	1,639'
		4	—			57° 41'	
		5	—			56° 24'	
		6	28.7	23.7		55° 44'	1,468'
		7	28.5	23.5		54° 55'	1,424'
		8	28.5	23.5		54° 11'	1,386'
		9	28.4	23.4		53° 16'	1,340'
		10	28.0	23.0		51° 45'	1,269'
		11	27.3	22.3		50° 41'	1,221'
		12	26.7	21.7		49° 26'	1,168'
		13	25.9	20.9		48° 03'	1,113'
		14	25.1	20.1		46° 41'	1,061'
		15	24.2	19.2		45° 24'	1,014'
		16	—			44° 08'	
		17	—			42° 35'	
		18	21.7	16.7		41° 25'	S-7 882'
		19	20.5	15.5		40° 38'	858'
		20	19.5	14.5		39° 56'	837'



Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 143
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren Notes R.T. Date 2-29-58
No. ____ Date ____ Date ____ Map No. ____ Indexed C. Tolan Sam

76298 S & E #307—7-55

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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	
107+50	S-7	21	18.7	13.7		39° 00'	810'	
		22	18.1	13.1		38° 06'	784'	Cut in Line 117+50
		23	17.5	12.5		37° 08'	757'	
		24	16.8	11.8		36° 06'	729'	
		25	16.5	11.5		35° 26'	712'	Boat = +1.0
		26	16.1	11.1		34° 21'	683'	Zero = -2.3
		27	15.3	10.3		33° 06'	652'	Tide = -3.7
		28	14.7	9.7		31° 57'	624'	-5.0
		29	13.5	8.5		30° 35'	591'	
		30	12.7	7.7		29° 27'	565'	
		31	11.1	6.1		27° 44'	526'	
		32	9.5	4.5		26° 00'	488'	
		33	8.3	3.3		24° 55'	465'	
		34	7.6	2.6	7:57	23° 30'	435'	

F. B. 2309 Pg. 144 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 7-29-58 Date No. X-Sec.
Survey by Van Deren Notes R.F. Notes Chkd. Checked No.
Indexed C. Johnson Date Date Date

76L298 S & E #307 9-54

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 110+00	Sight on 112+50
T.P.	4 15	-19 69		15 54	CONT. FROM LINE 2, 117+50	Inshore 112+50
T.P.	5 53	22 08	3 14	16 55		
112+50			+37	25 8		
			+44	26 5	19 ft [illegible] BASE OF WALL	
			+33	25 4	30 FT RIGHT TOP SLOPE	
			0 0	22 1	35 " " ON SLOPE	
			2 5	19 6	40 " " TOE SLOPE	
			5 8	16 3	100 " "	
			8 1	14 0	150 " " TOP BRK	
			11 0	11 1	180 " " BOT "	
			11 5	10 6	200 " "	
			13 5	8 6	250 " "	
			15 7	6 4	290 " "	
T.P.	2 2	7 6	16 70	5 38	50° 49' 307	
			5 7	1 9	56 30 378	
			8 0	-0 4	59 07 418	
			11 0	-3 4	62 27 479	
			12 7	-5 1	64 23 522	
			15 5	-7 9	67 00 589	
			19 [illegible]	-11 4	69 15 660	

Profile Notes Red. ____ Plotted ____ Job No. 0300.[illegible] Division No. 10 F. B. 2309 Pg. 145
No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
X-Sec. Notes Chkd. ____ Checked ____ Survey by English Notes Plotted Date 2-27-58
No. ____ Date ____ Date ____ Map No. ____ Indexed C. Johnson Date ____

F. B. 2309 Pg. 146 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Sur. Date Date No.

Survey by English Notes Dreier Notes Chkd. Checked X-Sec.

Index L. C. Johnson Date Date Date No.

76L298 S & E #307 9-54

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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.		

Inshore 112+50

Profile	Notes Red.	Plotted	Job No. [illegible]	Division No. [illegible]	F. B. 2309 Pg. 147
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VANDEREN	Notes [illegible]	Date 7-29-58
No.	Date	Date	Map No.	Index [illegible]	

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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.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
112+50	1		8 17		
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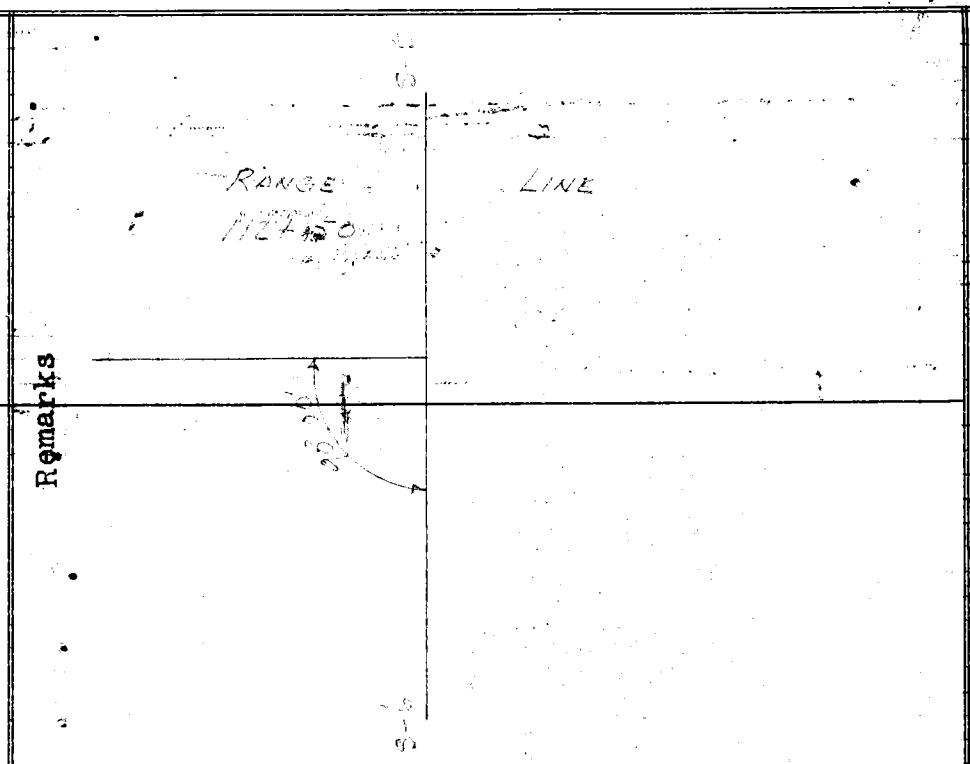

76298 S & E #307—7-55

F. B. 2309 Pg. 148 | Job No. 050002 | Division No. 19 | Notes Red. | Plotted | Profile

Survey of BEACH EROSION | Date | Date | No.

Survey by VAN GEREN | Notes T.O | Notes Chkd. | Checked | X-Sec.

Indexed K. C. Johnson | Date | Date | Date | No.

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
1/21/60 S-1	21			90° 00'	
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31		8.24		

76298 S & E #307—7-55

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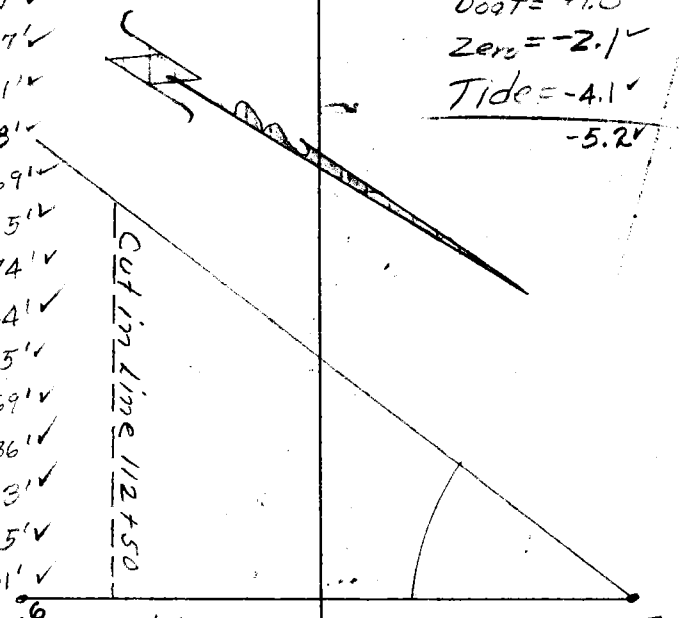
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
S-5	S-7	1	32.6	27.4	8:17	57° 47'	1,512' ✓
		2	32.3	27.1 ✓		56° 40'	1,832' ✓ Cut in Line 112+50
		3	31.0	25.8 ✓		54° 30'	1,689' ✓
		4	30.3	25.1 ✓		52° 57'	1,597' ✓
		5	29.8	24.6 ✓		51° 10'	1,497' ✓
		6	29.2	24.0 ✓		49° 06'	1,391' ✓
		7	28.6	23.4 ✓		47° 34'	1,318' ✓
		8	28.2	23.0 ✓		46° 28'	1,269' ✓
		9	27.7	22.5 ✓		45° 14'	1,215' ✓
		10	27.1	21.9 ✓		44° 15'	1,174' ✓
		11	26.5	21.3 ✓		43° 30'	1,144' ✓
		12	25.7	20.5 ✓		42° 31'	1,105' ✓
		13	25.0	19.8 ✓		41° 35'	1,069' ✓
		14	24.2	19.0 ✓		40° 42'	1,036' ✓
		15	23.8	18.6 ✓		39° 30'	993' ✓
		16	23.1	17.9 ✓		37° 48'	935' ✓
		17	22.2	17.0 ✓		36° 47'	901' ✓
		18	21.2	16.0 ✓		35° 52'	S-6 871' ✓
		19	20.1	14.9 ✓		34° 49'	837' ✓
		20	18.9	13.7 ✓		33° 16'	790' ✓



Boat = +1.0
Zero = -2.1 ✓
Tide = -4.1 ✓
-5.2 ✓

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 2300.02 Division No. 10 F. B. 2309 Pg. 149
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Study
Notes Chkd. ____ Checked ____ Survey by Van Deren Notes R.T. Date 9-29-58
Date ____ Date ____ Map No. ____ Indexed C. Johnson

76298 S & E #307—7-55

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F. B. 2309 Pg. 150 Job No. 0390.02 Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 7-29-58 Date No.
Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	18.1	12.4		32° 10'	758'	
		22	17.3	11.6		30° 07'	723'	Cut in Line 112+50
		23	16.6	10.9		29° 46'	689'	
		24	15.8	10.1		28° 38'	658'	Beat = +1.0
		25	14.7	9.0		27° 19'	623'	Zero = -2.5
		26	13.3	7.6		25° 39'	586'	Tide = -4.2
		27	12.1	6.4		24° 46'	556'	-5.7
		28	10.9	5.2		24° 00'	536'	
5-5	5-7	29	9.9	4.2		22° 48'	506'	
		30	9.3	3.6		21° 49'	482'	
		31	8.5	2.8	8:24	21° 12'	468'	

76L298 S & E #307 9-54

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STATION	B. S.	H. I.	F. S.	ELEV.	Vert. at 112+50	Sight on 112+50
T.P.	5 53	22 08		16 55	CONT. FROM LINE 2,	112+50 Inshore 107+50
T.P.	2 33	20 41	+00	18 08		
107+50			+50	25 41		
			+62	26 6	15 FT LEFT TOE OF SLOPE 25' W. OF WALL	
			+87	25 1	25 " RIGHT TOP OF SLOPE	
			00	24 4	38 " " " SLOPE	
			23	17 2	50 " "	
			65	13 2	100 "	
			80	12 4	140 " "	BRK
			105	9 6	170 " "	BRK
			135	9 1	200 " "	
			162	10 2	230 " "	BRK
			118	8 6	265 " "	
			137	6 7	300 " "	
T.P.	1 8	2 2	1400	6 41	306 " "	
			[illegible]	[illegible]	54° 13'	377
			[illegible]	[illegible]	58 30	408
			[illegible]	-1 7	62 19	477
			[illegible]	-3 0	64 01	513
			[illegible]	-4 3	66 14	568
			[illegible]	-7 3	67 53	615

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. ____ Pg. 151
No. ____ Date ____ Date ____ Survey of ____
X-Sec. Notes Chkd. ____ Checked ____ Survey by ____ Date ____
No. ____ Date ____ Map No. ____ Index ____

F. B. 2309 Pg. 152 | 0300.02

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

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

Survey by English Notes Dreier Notes Chkd. _____ Checked _____ X-Sec.

Indexed C. Johnson Date _____ Date _____ Date _____ No. _____

76L298 S & E #307 9-54

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 1100+00	Sight on 1450
		8 2	12 2	-9 0	69 53 683'	Inshore
			18 2	-16 0	70 26 704'	107+50

Profile No.	Notes Red.	Plotted	Job No. 083005	Division No. 10	F. B. 2809 Pg. 153
	Date	Date	Survey of BEACH EROSION		
X-Sec. No.	Notes Chkd.	Checked	Survey by VANDERKEN	Notes T.O.	Date 7-29-58
	Date	Date	Map No.	Index [redacted]	

STATION	B. B.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	# Rec. Adj.	Depth	Time	Hor. Ang.	
S-6	1		8 37	70° 00'	
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RANGE LINE

S-5

S-6

70° 00'

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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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76298 S & E #307—7-55

76298 S & E #307—7-55

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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	# Rec.	Depth Adj.	Time	Hor. Ang.	Remarks	
107+50	S-6	21			90 00		
		22			" "		
		23			" "		
		24		8 45	"		

F. B. 2309 Pg. 159 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile
Survey of BEACH EROSION Date 7-29-58 Date No.
Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.
Indexed K. C. Johnson Date Date Date No.

76298 S & E #307—7-55

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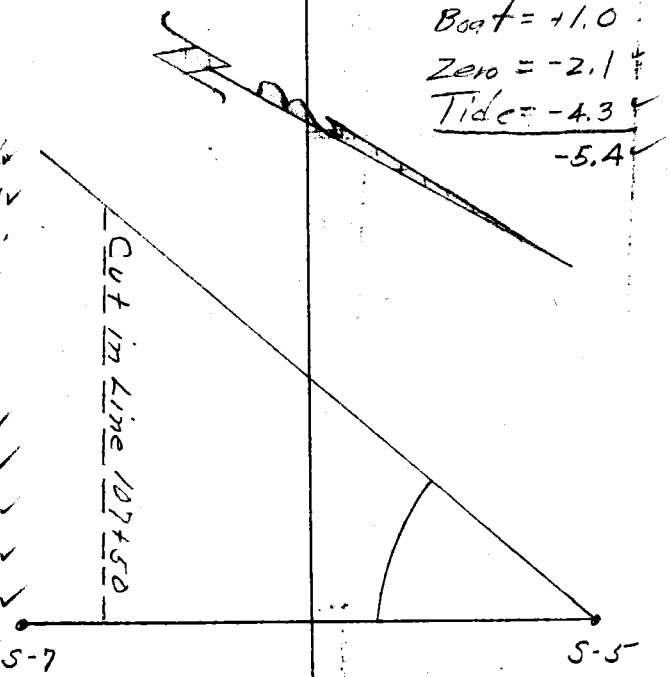
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	—		8:37	70° 45'	
		2	33.3	27.9		69° 34'	1892' Cut in Line 107+50
		3	32.6	27.2		69° 07'	1848'
		4	—			67° 49'	
		5	—			65° 48'	
		6	—			64° 24'	
		7	28.9	23.5		62° 41'	1365'
S-5	S-7	8	27.8	22.4		61° 22'	1292'
		9	27.5	22.1		60° 22'	1239'
		10	—			59° 06'	
		11	—			57° 09'	
		12	24.2	18.8		55° 06'	1011'
		13	23.4	18.0		54° 14'	979'
		14	21.7	16.3		52° 05'	905'
		15	19.8	14.4		50° 40'	860'
		16	18.7	13.3		49° 00'	811'
		17	17.7	12.3		46° 51'	752'
		18	16.6	11.2		44° 52'	701'
		19	15.9	10.5		43° 30'	669'
		20	14.9	9.5		41° 56'	633'



Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 155
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren Notes P.T. Date 7-29-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
		21	13.6	8.1		40° 40'	606' ✓	
		22	12.1	6.6		39° 25'	580' ✓	Cut in Line 107+50
		23	10.7	5.2		38° 00'	551' ✓	
		24	9.3	3.8	8:45	36° 38'	525' ✓	Boat = +1.0
		25						Zero = -2.1 ✓
		26						Tide = -4.4 ✓
		27						-5.5 ✓
S-5	S-7							

F. B. 2309 Pg. 152 Job No. 2300.02 Division No. 10 Notes Red. Plotted
Survey of Beach Erosion Study Date 7-29-58 Date No.
Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

76L298 S & E #307 9-54

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
T. P.	233	2041	—	1808	CONT. FROM LINE 2, 107+50	Inshore 102+50
T. P.	427	2169	309	1732		
			+55	27		
			+54	270	15 FT LEFT TOE OF SLOPE 26' W. OF WALK	
			+60	276	20 " RIGHT TOP OF BRK	
			00	216	32 " " ON SLOPE	
			25	191	40 " " TOE OF SLOPE	
			58	155	100 " "	
			81	135	150 " " TOP OF BRK	
			92	102	180 " " BOT " "	
			116	100	260 " "	
			128	88	260 " "	
			148	68	300 " "	
T. P.			1540	619	310 " "	
					55 02 358	
					58 08 402	
					60 50 448	
					63 30 502	
					65 55 559	
					68 01 619	
					69 36 672	
					755	

Profile Notes Red ____ Plotted ____ Job No. ____ Division No. ____ F. S. ____ Pg. 157
No. ____ Date ____ Date ____ Survey of ____
X-Sec. Notes Chkd. ____ Checked ____ Survey by ____ Date ____
No. ____ Date ____ Date ____ Map No. ____ Index C. Johnson

F. B. Pg. 158 Job No. Division No. Notes Red. Plotted Profile

Survey of Date Date No.

Survey by Notes Notes Chkd. Checked X-Sec.

Indexed E. C. Johnson Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.	
					Inshore 102+50

Do not extend notes this side of this line.

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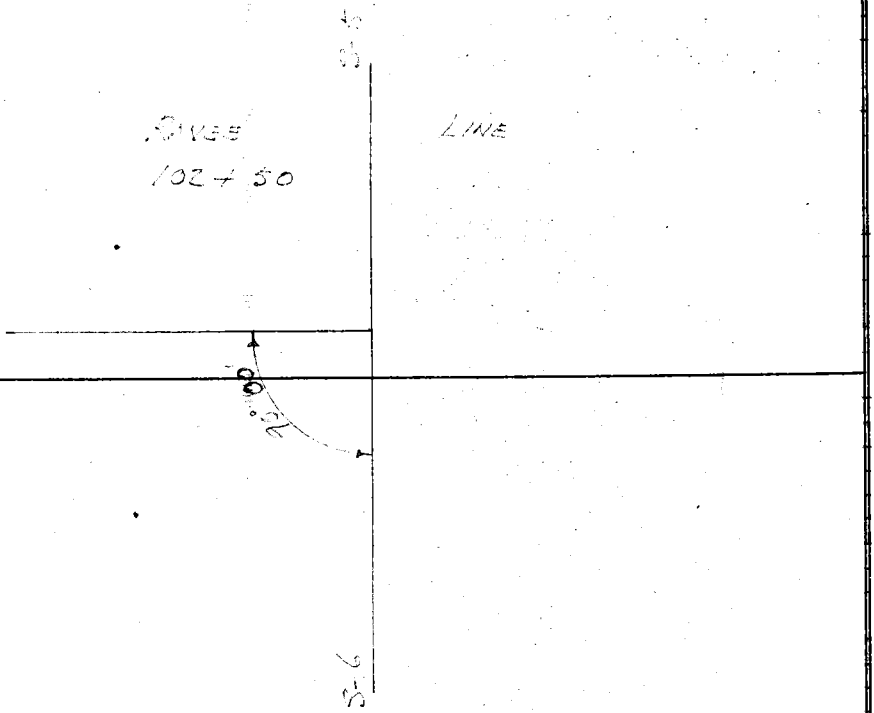
76L298 S & E #307 9-54

Profile	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2309	Pg. 159
No.	Date	Date	Survey of BEACH EROSION			
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes J.O.	Date 7-29-58	
No.	Date	Date	Map No.	Index [illegible]		



STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
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76298 S & E #307—7-55

76298 S & E #307—7-55

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STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
102450	S-6	21			90° 00'		
		22			" "		
		23			" "		
		24			" "		
		25			" "		
		26			" "		
		27			"		
		28			"		
		29			"		
		30		9 11	" "		

F. B. 2304 Pg. 160 Job No. 030002 Division No. 10 Notes Red. Plotted Profile
Survey of BEACH EROSION Date 7-29-58 Date No.
Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.
Indexed K. C. J. Date Date Date No.

76298 S & E #307—7-55

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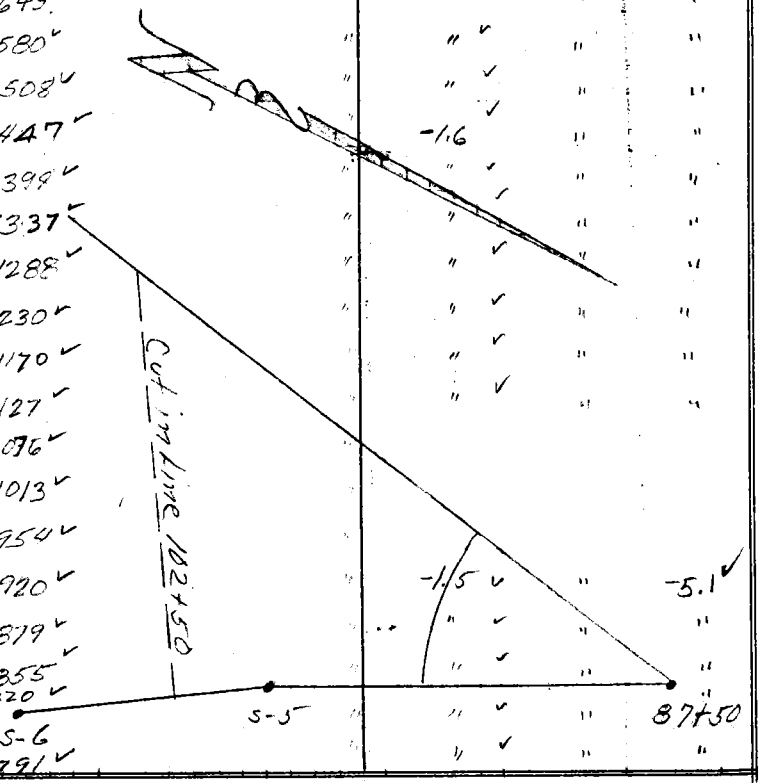
700 LOS ANGELES COUNTY ENGINEERING BLDG.

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	Boat	zero	Tide	Total
		1	31.8	26.6	9:05	48° 58'	1775	+1.0	-1.6	-4.6	-5.2
		2	31.3	26.1		48° 08'	1741 Cut in Line 102+50	"	"	"	"
		3	30.8	25.6		46° 38'	1649	"	"	"	"
		4	30.2	25.0		45° 27'	1580	"	"	"	"
		5	29.3	24.1		44° 07'	1508	"	"	"	"
		6	28.9	23.7		43° 01'	1447	"	-1.6	"	"
		7	28.4	23.2		42° 03'	1399	"	"	"	"
87+50	S-5	8	27.8	22.6		40° 51'	1337	"	"	"	"
		9	27.6	22.4		39° 45'	1288	"	"	"	"
		10	27.3	22.1		38° 29'	1230	"	"	"	"
		11	26.5	21.3		37° 08'	1170	"	"	"	"
		12	25.7	20.5		36° 06'	1127	"	"	"	"
		13	—			34° 52'	1076				
		14	—			33° 18'	1013				
		15	—			31° 49'	954				
		16	20.3	15.2		30° 52'	920	"	-1.5	"	-5.1
		17	19.4	14.2		29° 49'	879	"	"	"	"
		18	18.7	13.5		29° 05'	855	"	"	"	"
		19	17.9	12.7		28° 05'	820	"	"	"	"
		20	17.1	11.9		27° 15'	791	"	"	"	"



Profile No. ____ Notes Red. ____ Plotted ____ Job No. 2300.02 Division No. 10 F. B. 2309 Pg. 161
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Study
Notes Chkd. ____ Checked ____ Survey by Van Deren Notes R.T. Date 9-29-58
Date ____ Date ____ Map No. ____ Indexed C. Johnson Date

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	16.6	11.4		26° 04'	751	
		22	16.1	10.9		24° 55'	713	Cut in Line 102+50
		23	15.3	10.1		24° 02'	685	
		24	14.3	9.1		22° 56'	648	Boat = +1.0
		25	13.3	8.1		22° 02'	621	Zero = -1.6
		26	11.5	6.3		21° 01'	590	Tide = -4.6
		27	10.5	5.3		20° 23'	570	-5.2
89+50		28	9.3	4.1		19° 29'	542	
		29	8.4	3.2		18° 55'	525	
	S-5	30	7.8	2.6	9:11	18° 12'	504	

F. B. 2309 Pg. 162 Job No. 2300.01 Division No. 10 Notes Red. Plotted Profile No.
Survey of Beach Erosion Study Date 9-29-58 Date X-Sec. No.
Survey by Van Deren Notes R.T. Notes Chkd. Checked
Indexed [illegible] Date Date Date No.

76L293 S & E #307 9-54

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726 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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STATION	B. S.	H. I.	F. S.	ELEV.	Last at 92+50	Sight on 97+50
T.P.	4.27	21.59		17.32	CONT. FROM LINE 2, 102+59	Ashore
T.P.	3.31	[illegible]	4.67	16.92		97+50
97+50			+.69	27.1	℄ ON ASPHALT	
			+.69	27.1	12 FT LEFT BASE OF WALL	
			+.62	26.4	30 FT RIGHT TOP OF SLOPE	
			[illegible]	16.9	70 " " TOE " "	
			.50	15.2	100 " "	
			[illegible]	[illegible]	160 " " TOP BRK	
			9.6	10.6	190 " " BOT BRK	
			[illegible]	10.4	200 " "	
			11.3	8.9	265 " " TOP BRK	
			13.5	6.7	300 " "	
T.P.	[illegible]	[illegible]	13.8	6.4	308 " " T.P.	
			4.4	[illegible]	45° 45' 45' 360 ← 35° 45'	
			6.2	14	39 32 413	
			9.1	-1.5	43 14 470	
			10.6	-3.0	46 05 519	
			[illegible]	-6.2	49 02 576	
			13.3	-8.7	52 05 642	
			18.6	-14.0	53 37 679	

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 163
No. ____ Date ____ Date ____ Survey of Excel Extension Sewer
X-Sec. Notes Chkd. ____ Checked ____ Survey by Emil Neff Date 2-27-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

F. B. 2309 Pg. 164 | 0300.02

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

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

Survey by ~~A. C. Johnson~~ English Notes Dreier Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L298 S & E #307 9-54

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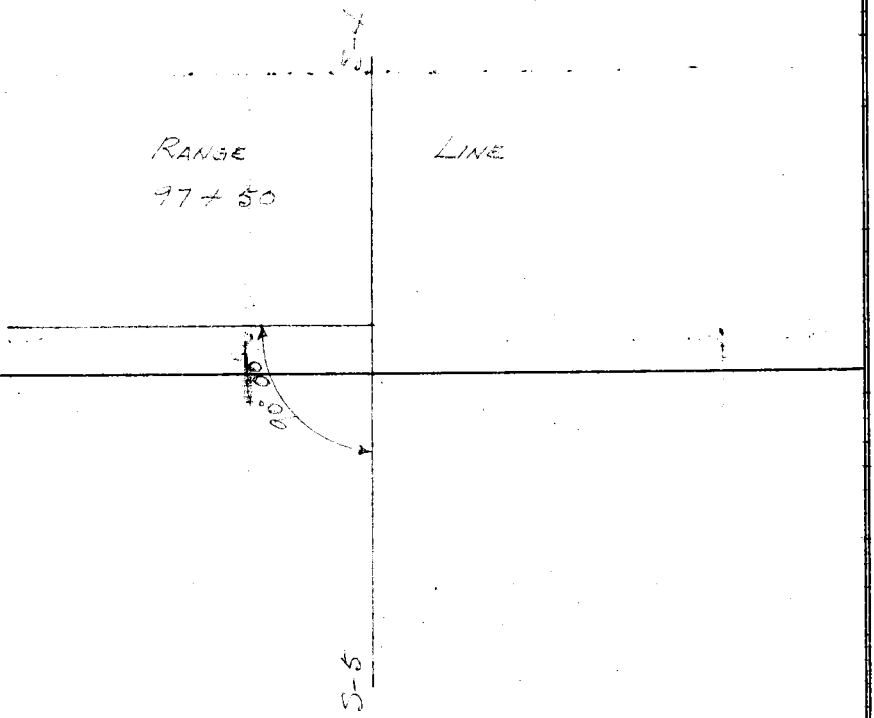
STATION	B. S.	H. I.	F. S.	ELEV.		

Inshore 97+50

Profile	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2309	Pg. 165
No.	Date	Date	Survey of BEACH EROSION			
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes [illegible]	Date [illegible]	
No.	Date	Date	Map No.	Indexed C. Johnson	Date	



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On #	Depth Rec. Adj.	Time	Hor. Ang.		
97+50 S-5					

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76298 S & E #307—7-55

F. B. 2309 Pg. 166 Job No. 030002 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION Date 7-29-58 Date No.

Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	Depth # Rec. Adj.		Time	Hor. Ang.		Remarks
97+50 S-5	21 22		9 44			

76298 S & E #307—7-55

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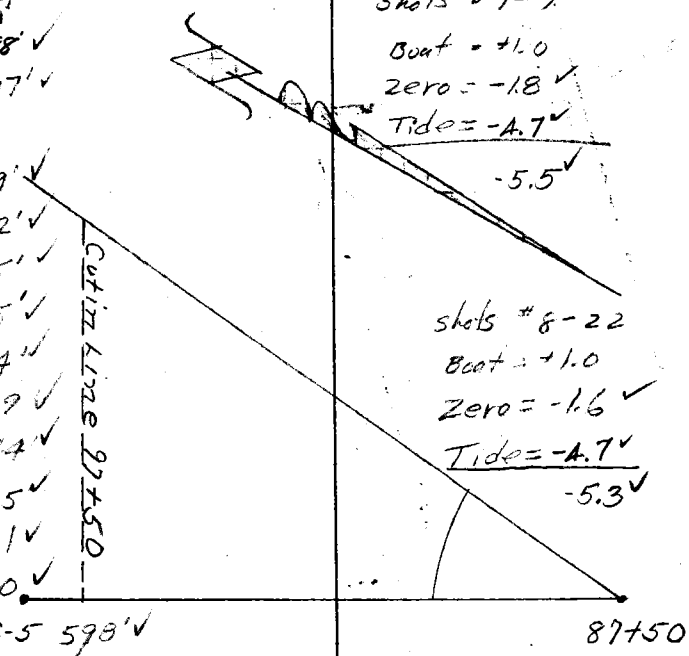
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	—		9:38	59° 37'	
		2	—			57° 21'	Cut in Line 97+50
		3	29.3	23.8		55° 12'	1439'
		4	28.5	23.0		54° 05'	1381'
		5	27.6	22.1		52° 11'	1288'
		6	27.3	21.8		50° 36'	1217'
		7	—			48° 13'	
87+50	S-5	8	24.8	19.5		46° 22'	1049'
		9	23.7	18.4		44° 47'	992'
		10	21.4	16.1		42° 28'	915'
		11	20.3	15.0		41° 12'	875'
		12	19.1	13.8		39° 50'	834'
		13	17.7	12.4		37° 56'	779'
		14	16.8	11.5		36° 38'	744'
		15	16.0	10.7		35° 10'	705'
		16	14.7	9.4		33° 28'	661'
		17	13.5	8.2		32° 12'	630'
		18	12.1	6.8		30° 54'	S-5 598'
		19	10.8	5.5		29° 28'	565'
		20	9.2	3.9		28° 14'	537'



Profile Notes Red. Plotted Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 167
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by Van Deven Notes R.T. Date 7-29-58
No. Date Date Map No. Indexed C. Johnson Date

76298 S & E #307—7-55

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.

STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
		21	8.1	2.8		26° 40'	502'	
		22	7.2	1.9	9:44	25° 45'	482'	Cut in Line 97+50
								Boat = +1.0
								Zero = -1.6
								Tide = -4.7
								-5.3
87+50	5-5							

F. B. 2309 Pg. 168 Job No. 030002 Division No. 10 Notes Red. Plotted No. Profile
Survey of Beach Erosion Study Date 7-29-58 Date X-Sec.
Survey by Van Deren Notes R.T. Notes Chkd. Checked No.
Indexed Date Date Date

76L298 S & E #307 9-54

PLEASE RETURN TO
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726 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 90+00	Sight on 92+50
T. P.	331	2023		1692	CONT. FROM LINE 2, 97+50	Inshore 92+50 (S.)
T. P.	293	2087	[illegible]	1794		
[illegible]+50S			+70	279	℄	
			+70	279	5 FT. LEFT	
			+71	280	30 FT RIGHT	TOP OF SLOPE
			28	181	55 " "	TOE OF SLOPE
			42	167	70 " "	
			50	159	100 " "	
			[illegible]	140	165 " "	TOP BRK
			95	114	200 " "	BOT BRK
			113	96	270 " "	TOP "
			134	75	300 " "	
T. P.	13	77	1450	63	317 " "	
			42	35	55° 54' 369	
			60	17	58 53 414	
			82	-05	61 18 457	
			101	-24	63 28 501	
			117	-40	65 31 549	
			142	-65	67 18 598	
			160	-83	68 10 624	
			170	-93	69 27 667	
			180	-103	70 10 693	

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 169
No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
X-Sec. Notes Chkd. ____ Checked ____ Survey by English Notes Prelel Date 7-29-58
No. ____ Date ____ Date ____ Map No. ____ Indexed C. Johnson

F. B. [illegible] Pg. 170 Job No. _____ Division No. _____ Notes Red. _____ Plotted _____ Profile

Survey of [illegible] Date _____ Date _____ No. _____

Survey by English Notes Diego Notes Chkd. _____ Checked _____ X-Sec.

Indexed ~~A. C. Johnson~~ Date _____ Date _____ Date _____ No. _____

STATION	B. B.	H. I.	F. B.	ELEV.	
					Inshore 92+50

76L298 S & E #307 9-54

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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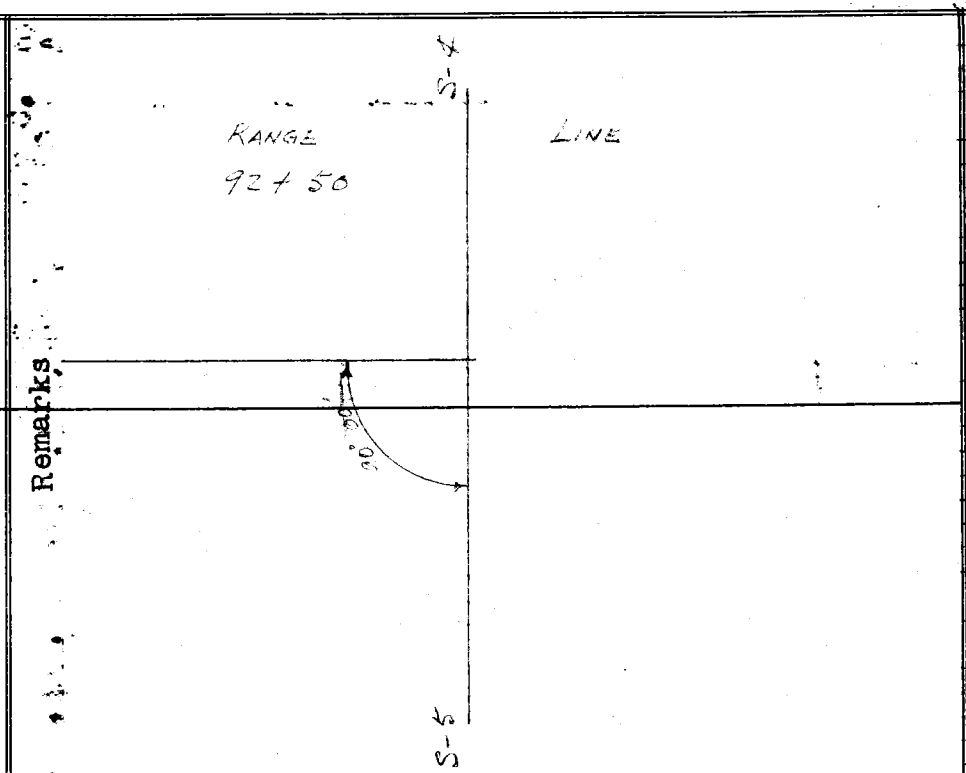
Profile	Notes Red.	Plotted	Job No. 020003	Division No. 10	F. B. 2309 Pg. 171
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes [illegible]	Date 7-29-58
No.	Date	Date	Map No.	Index [illegible]	



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On 92+50 S-5	#	Depth Rec. Adj.	Time	Hor. Ang.	
	1		10 05	90° 00'	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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76298 S & E #307—7-55

F. B. 2309 Pg. 172 | Job No. 0300.02 | Division No. 10 | Notes Red. | Plotted | Profile

Survey of BEACH EROSION | Date 7-29-58 | Date | No.

Survey by VAN DEREN | Notes T.O. | Notes Chkd. | Checked | X-Sec.

Indexed C. Johnson | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. Sight At On	# Depth Rec. Adj.	Time Hor. Ang.	Remarks
					72150 S-5			
	21							
	22							
	23							
	24							
	25							
	26							

76298 S & E #307—7-53

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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76298 S & E #307—7-55

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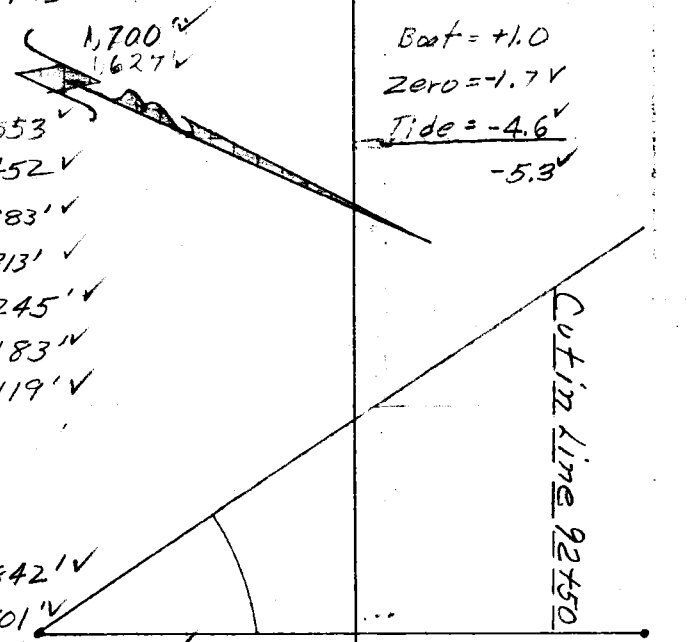
700 LOS ANGELES COUNTY ENGINEERING BLDG.

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
S-5	S-4	1	32.9	27.6	10:05	67° 43'	1,940'
		2	32.5	27.2		67° 06'	1,882' Cut in Line 92+50
		3	32.3	27.0		66° 05'	1,793'
		4	31.6	26.3		64° 56'	1,700'
		5	30.4	25.1		63° 58'	1,627'
		6	29.7	24.4		62° 53'	1,553'
		7	28.9	23.6		61° 18'	1452'
		8	28.7	23.4		60° 07'	1383'
		9	28.4	23.1		58° 48'	1313'
		10	27.9	22.6		57° 26'	1245'
		11	27.1	21.8		56° 06'	1183'
		12	25.6	20.3		54° 37'	1119'
		13	—			53° 06'	
		14	—			51° 00'	
		15	—			48° 32'	
		16	18.7	13.4		46° 38'	842'
		17	18.0	12.7		45° 12'	801'
		18	17.2	11.9		44° 02'	S-5 769'
		19	16.4	10.1		42° 31'	729'
		20	15.7	9.4		41° 27'	702'

Boat = +1.0
Zero = -1.7
Tide = -4.6
-5.3



Profile Notes Red. Plotted. Job No. 2300.02 Division No. 10 F. B. 2309 Pg. 173
No. Date Date Survey of Beach Erosion Study 9-21-58
X-Sec. Notes Chkd. Checked Survey by Van Deren & Co. Inc. Data
No. Date Date Map No. Indexed Date

76298 S & E #307—7-55

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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F. B. 2309 Pg. 174 Job No. 2300.02 Division No. 10 Notes Red. Plotted
Survey of Beach Erosion Study Date 2-29-58 Date No.
Survey by Van Dexen Notes R.T. Notes Chkd. Checked X-Sec.
Indexed L. C. Johnson Date Date Date No.
Profile

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. / Adj.	Time	Hor. Ang.	Remarks	
		21	14.2 / 8.8		39° 55'	665'	
		22	13.2 / 7.8		38° 14'	626'	Cut in Line 92+50
		23	11.9 / 6.5		37° 08'	602'	
		24	10.5 / 5.1		35° 50'	574'	
		25	9.3 / 3.9		34° 00'	537'	Boat = +1.0
		26	8.2 / 2.8	10:12	32° 35'	508'	Zero = -1.8
S-5	S-4						Tide = -4.6
							-5.4

76L298 307 10-51

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726 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 90+00	Sight on 87+50
T.P.	2 93	20 87		17 94	CONT. FROM LINE 2, 92+50	
T.P.	4 34	21 05	4 16	16 71		INSHORE 87+50 S.
87+50 S			+6 3	27 3	℄, ALSO NEAR TOE OF SLOPE FROM WALK	
			+5 4	26 4	32 FT RIGHT TOP OF SLOPE	
			3 7	17 3	55 " " TOE OF SLOPE	
			5 3	15 7	100 " "	
			7 1	13 9	160 " " TOP OF BRK.	
			10 8	10 2	200 " " BOT " "	
			10 5	10 5	270 " " TOP " "	
			13 2	7 8	300 " "	
T.P.	0 5	7 1	14 40	6 65	317 " "	
					0 1	
			5 3	1 8	58 06 402	
			7 8	-0 7	61 09 454	
			9 3	-2 2	63 44 507	
			10 2	-3 1	64 35 526	
			11 8	-4 7	66 34 577	
			13 9	-6 8	68 08 623	
			15 5	-8 4	69 20 663	
			17 2	-10 1	70 55 723	

Profile No. ____ Date ____ Notes Red ____ Plotted ____ Job No. 0300.02 Division No. 10 F.B. 2309 Pg. 175
X-Sec. No. ____ Date ____ Notes Chkd. ____ Date ____ Checked ____ Date ____ Survey of Beach Erosion Sur. Survey by English Name Dreier Date 7-29-58 Map No. ____ Index No. C. Johnson

Profile	Notes Red.	Plotted	Job No. 030008	Division No. 10	F. B. 2509	Pg. 177
No.	Date	Date	Survey of BEACH EROSION			
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-29-56	
No.	Date	Date	Map No.	Indexed [illegible]		

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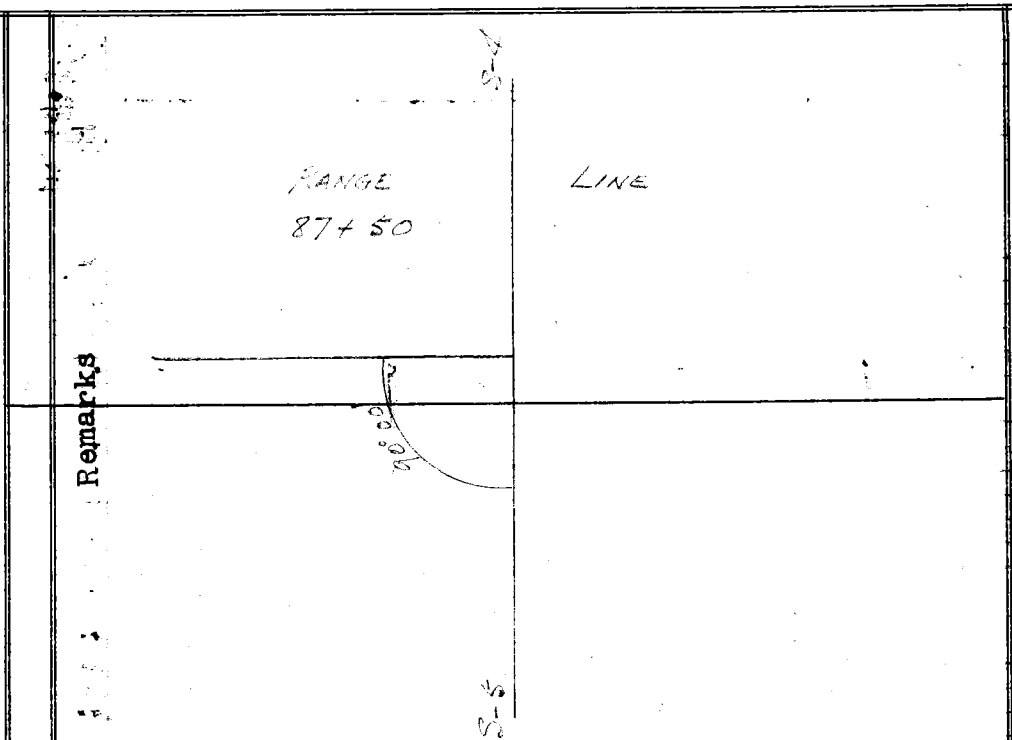
700 LOS ANGELES COUNTY ENGINEERING BLDG.

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. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
[illegible]	1		10 26	90° 00'	
	2			" "	
	3			" "	
	4			" "	
	5			" "	
	6			" "	
	7			" "	
	8			" "	
	9			" "	
	10			" "	
	11			" "	
	12			" "	
	13			" "	
	14			" "	
	15			" "	
	16			" "	
	17			" "	
	18			" "	
	19			" "	
	20			" "	



76298 S & E #307—7-55

F. B. 2309 Pg. 178 Job No. 030002 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION Date 7-29-58 Date _____ No. _____

Survey by VAN DEREN Notes T. O. Notes Chkd. _____ Checked _____ X-Sec.

Index C. Johnson Date _____ Date _____ Date _____ No. _____

76298 S & E #307—7-55

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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. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks
					87+50					
						21				
						22				
						23				
						24				
						29		10 32		

76298 S & E #307—7-55

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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.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	—		10:26	59° 05'	
		2	—			58° 09'	Cut in Line 87+50
		3	—			57° 26'	shots #1-5
		4	—			56° 34'	Boat = +1.0
		5	32.4	27.0		55° 39'	1,889' ✓ 1,962' Zero = -1.9 ✓
		6	31.6	26.6 ✓		54° 49'	1,835' ✓ Tide = -4.5
		7	31.5	26.5 ✓		53° 52'	1,774' ✓ -5.4 ✓
		8	30.9	25.9 ✓		53° 22'	1,742' ✓
S-5	S-4	9	—			52° 00'	shots #6-25
		10	—			50° 45'	Boat = +1.0
		11	—			49° 40'	Zero = -1.5 ✓
		12	—			46° 42'	Tide = -4.5 ✓
		13	—			45° 14'	-5.0 ✓
		14	—			43° 44'	
		15	—			41° 57'	
		16	—			39° 55'	
		17	—			39° 30'	
		18	—			33° 24'	S-5 S-4
		19	17.7	12.7 ✓		31° 25'	791' ✓
		20	16.8	11.8 ✓		31° 00	778' ✓

Cut in Line 87+50

Profile Notes Red. ____ Plotted ____ Job No. 4300.02 Division No. 10 F. B. 2309 Pg. 179
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren & Co. Notes by G.T. Date 2-29-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____

76298 S & E #307—7-55

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Do not extend notes this side of this line.

F. B. 2307 Pg. 180 Job No. 2700.02 Division No. 10 Notes Red. Plotted
Survey of Beach Erosion Study Date 7-29-58 Date No.
Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No. Profile

STATION Inst. At	Sight On	S. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks	
		21	15.5	10.5 ✓		29° 14'	725' ✓	
		22	13.8	8.8 ✓		27° 06'	663' Cut in Line	87+50
		23	11.6	6.6 ✓		24° 27'	589' ✓	
		24	9.8	4.8 ✓		23° 11'	554' ✓	Boat = +1.0 ✓
		25	8.1	3.1 ✓	10:35	21° 34'	512' ✓	Zero = -1.5
		26	—					Tide = -4.5 ✓
		27	—					-5.0 ✓
S-5	S-4							

Profile	Notes Red.	Plotted	Job No. 0300.02	Division No. 10	F. B. 2309 PG. 181
No.	Date	Date	Survey of Beach Erosion		
X-Sec.	Notes Chkd.	Checked	Survey by Van Deren	Notes Van	Date 7-30-58
No.	Date	Date	Map No.	Indexed A. C. Johnson	Date

7-30-58

3.0 on Datum Line

Time Check Gage time = —

P.D.S.T. = —

Standard Time	Reading	P.D.S.T.
5-00 AM	0.8	6-00
5-30 "	1.2	6-30
6-00 "	2.1	7-00
6-30 "	2.8	7-30
7-00 "	3.3	8-00
7-30 "	4.0	8-30
8-00 "	4.3	9-00
8-30 "	4.6	9-30
9-00 "	4.65	10-00
9-30 "	4.7	10-30
10-00 "	4.6	11-00
10-30 "	4.5	11-30
11-00 "	4.2	12-00
11-30 "	3.9	12-30
12-00 "	3.4	1-00
12-30 PM	3.1	1-30
1-00 "		
1-30 "		

Remarks

ELEV.

Hor. Ang.

F. B.

Time

H. I.

Depth

Rec. Adj.

S. S.

STATION

Inst. Sight

At On

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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76298 S & E #307—7-55

F. B. 2309 Pg. 181-A Job No. 030007 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Date 7-30-58 Date No.

Survey by Van Dorsen Notes Van Notes Chkd. Checked X-Sec.

Indexed E. C. Johnson Date Date Date No.

76298 S & E #307—7-55

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700 Los Angeles County Engineering Bldg.

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Do not extend notes this side of this line.

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

76F309S CE #247—8-57

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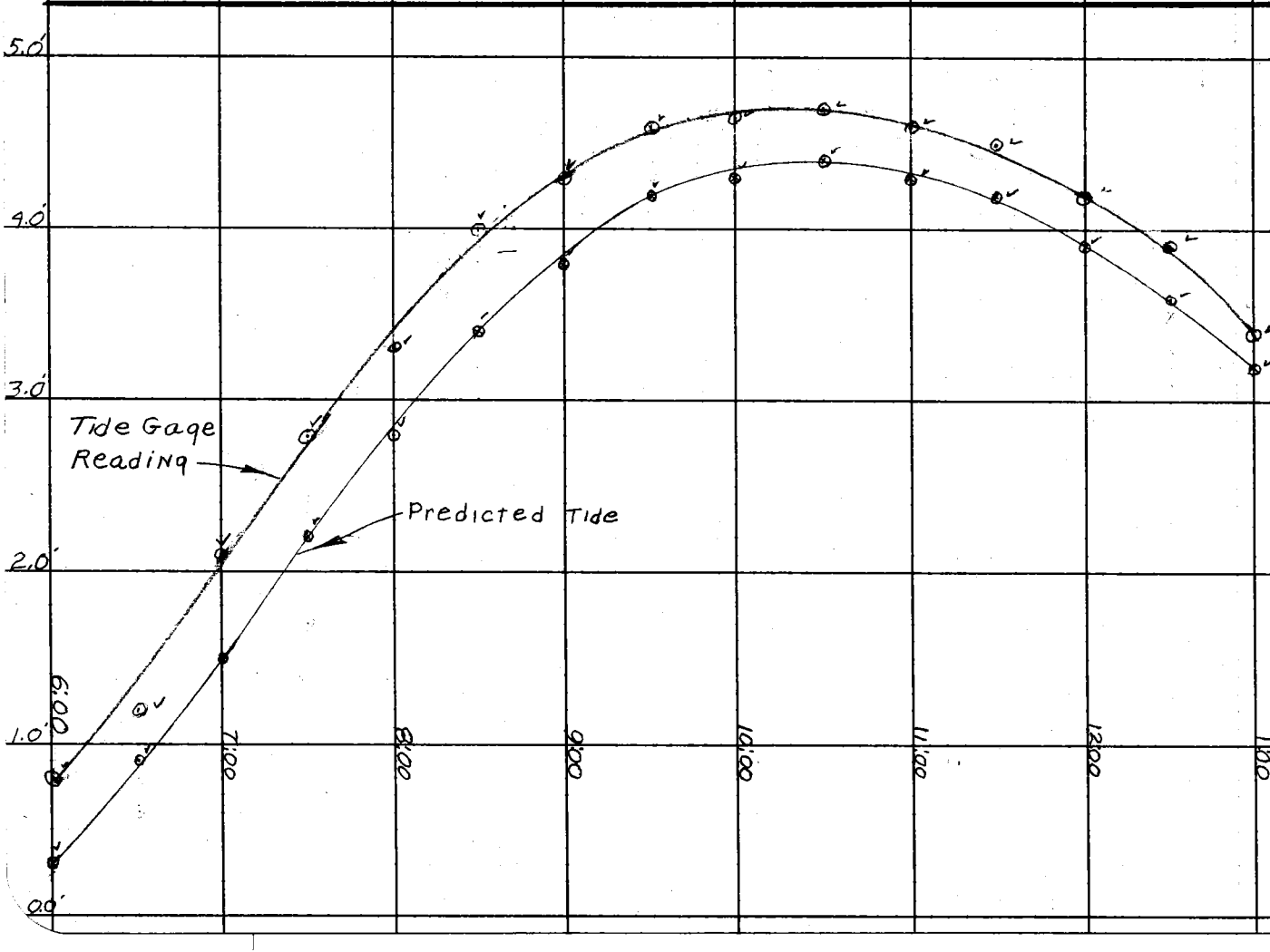
700 LOS ANGELES COUNTY ENGINEERING BLDG.

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.



Notes Ck'd by
Map No.
Office Work L. Manley
Checked J. S. H.
Date

Survey of 0300.02
JN Tape Std °F
Surveyed by Van Doran
Notes Date 7-30-58
Indexed

F. B. 2309 Pg. 182

76L298 307 10-51

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY
ENGINEERING BLDG.

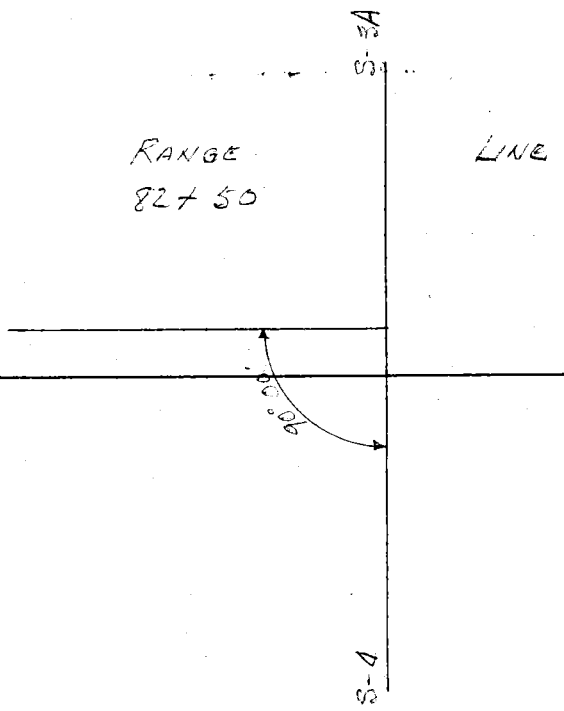
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Instr. @ 80+00	Sight on 82+50
T.P.	4 34	21 05		16 71	CONT. FROM LINE 2, 87+50S	INSHORE 82+50
T.P.	14 00	30 06	4 99	16 06		
S-4	11 00	35 95	5 11	24 95	S-4, ELEV. 24.956 PER	F.B. 2100-166
82+50			62	29 7		
			08	35 1	32 FT. LEFT	SAND W. SIDE OF WALK
			77	28 2	20 " RIGHT	TOP BRK
			157	20 2	50 " "	BOT "
T.P.	0 28	20 52	15 71	20 24	T.P.	
			36	16 9	100 FT. RIGHT	
			64	14 1	160 " "	TOP "
			10 9	9 6	200 " "	BOT "
			10 0	10 5	280 " "	TOP "
			11 3	9 2	300 " "	
T.P.	1 70	74 ~~8.4~~	14 8	57 ~~5.7~~	34 2 " "	
			43	+3.1 ~~4.1~~	56° 20' 375	
			80	-0.6 ~~0.4~~	61° 28' 460	
			96	-2.2 ~~-1.2~~	63° 23' 499	
			11 2	-3.8 ~~-2.8~~	65° 05 538	
			12 5	-5.1 ~~-4.1~~	66° 37 578	
			14 2	-6.8 ~~-5.8~~	67° 47 612	
			16 0	-8.6 ~~-7.6~~	69° 31 669	
			17 9	-10.5 ~~-9.5~~	70° 34 709	

Profile
No. ____ Date ____ Notes Red ____ Plotted ____ Job No. 0300.02 Division No. 10 F.B. 2309 Pg. 183
X-Sec.
No. ____ Date ____ Notes Chkd. ____ Checked ____ Survey of Beach Erosion Sur.
Date ____ Map No. ____ Survey by Dreier Notes Landa Date 7-30-58

Profile No.	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2309 Pg. 185
	Date	Date	Survey of BEACH EROSION		
X-Sec. No.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-30-58
	Date	Date	Map No.	Indexed G. Johnson	



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On 82+50 S-4	#	Depth Rec. Adj.	Time	Hor. Ang.	
	1		7 54	90° 00'	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	

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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76298 S & E #307—7-55

F. B. 2309 PG. 186 Job No. 030002 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION Date 7-30-58 Date No.

Survey by VAN DEREN Notes T. O Notes Chkd. Checked X-Sec.

Index [redacted] Date Date Date No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	Depth # Rec. Adj.	Time	Hor. Ang.		Remarks
X2480	3-4			90° 30'		
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					
	32					
	33					
	34					
	35					
	36					
	37					
	38					
	39					
	40					

Profile	Notes Red.	Plotted	Job No.	Division No.	F. B.	Pg. 187
No.	Date	Date	Survey of			
X-Sec.	Notes Chkd.	Checked	Survey by	Van Dorn Notes	Date	
No.	Date	Date	Map No.	Indexed C. Johnson	Date	

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STATION	B. B.	H. I.	F. B.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
82+30	41			90° 00'	
	42				
	43				

76298 S & E #307—7-55

F. B. 2309 Pg. 188 Job No. 0300.02 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION Date 7-30-58 Date _____ No. _____ X-Sec.

Survey by VAN DEREN Notes T.O. Notes Chkd. _____ Checked _____

Indexed _____ Date _____ Date _____ Date _____ No. _____

76298 S & E #307—7-55

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Do not extend notes this side of this line.

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

76298 S & E #307—7-55

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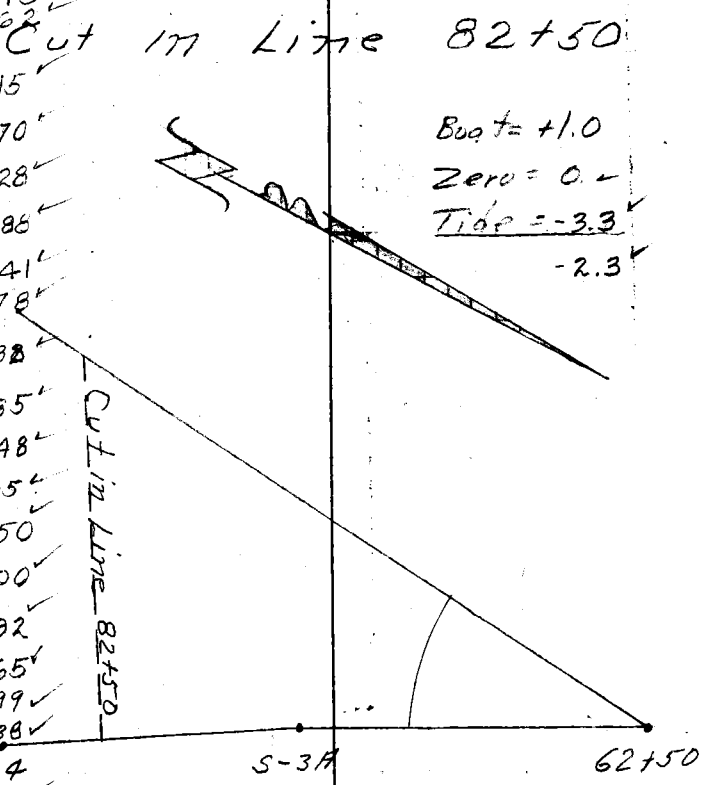
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
62+50	S-3A	1	32.2	29.9	7:54	50° 38'	2,495
		2	32.0	29.7		50° 15'	2,462
		3	31.6	29.3		49° 41'	2,415
		4	31.2	28.9		49° 09'	2,370
		5	31.0	28.7		48° 40'	2,328
		6	30.7	28.4		48° 10'	2,288
		7	30.5	28.2		47° 37'	2,241
		8	30.2	27.9		46° 47'	2,178
		9	30.2	27.9		46° 12'	2,138
		10	29.6	27.3		45° 34'	2,085
		11	29.2	26.9		44° 58'	2,048
		12	29.5	27.2		44° 22'	2,005
		13	29.3	27.0		43° 37'	1,950
		14	29.2	26.9		42° 53'	1,900
		15	28.2	25.9		41° 52'	1,832
		16	27.8	25.5		40° 47'	1,765
		17	27.3	25.0		39° 45'	1,699
		18	27.1	24.8		38° 45'	1,638
		19	26.8	24.5		37° 37'	1,573
		20	26.7	24.4		36° 49'	1,528



Profile Notes Red ____ Plotted ____ Job No. 0300.02 Division No. ____ F. B. 2309 Pg. 189
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by VanDeren Notes R.T. Date 7-30-58
No. ____ Date ____ Date ____ Map No. ____ Indexed [illegible]

76298 S & E #307—7-55

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F. B. 2309 Pg. 190 Job No. 2300.02 Division No. 10 Notes Red. Date 2-30-58 Plotted Date
Survey of Beach Erosion Study Notes Chkd. Date Checked Date
Survey by Van Deren Notes R.T. Date Profile No.
Indexed L. Jeffers Date X-Sec. No.

STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
		21	26.3	23.9		35° 25'	1,452	
		22	25.6	23.2		39° 00'	1,377	Cut in Line 82+50
		23	25.1	22.7		32° 40'	1,310	
		24	24.3	21.9		31° 22'	1,243	
		25	23.4	21.0		30° 06'	1,182	Bat = +1.0
		26	22.7	20.3		28° 57'	1,130	Zero = 0
		27	21.9	19.5		27° 52'	1,079	Tide = -3.4
62+50	S-34	28	20.9	18.5		26° 56'	1,037	-2.4
		29	20.2	17.8		26° 08'	1,002	
		30	19.2	16.8		25° 17'	966	
		31	18.3	15.9		24° 33'	932	
		32	17.3	14.9		23° 48'	902	
		33	16.3	13.9		23° 03'	870	
		34	15.3	12.9		22° 07'	831	
		35	14.4	12.0		21° 16'	796	
		36	13.9	11.5		20° 24'	761	
		37	12.8	10.4		19° 30'	724	
		38	11.5	9.1		18° 28'	684	
		39	10.6	8.2		17° 49'	657	
		40	9.4	7.0		17° 06'	630	
		41	8.1	5.7		16° 07'	594	
		42	7.0	4.6		15° 29'	568	
		43	6.4	4.0	8:02	14° 51'	543	

76L298 307 8-53

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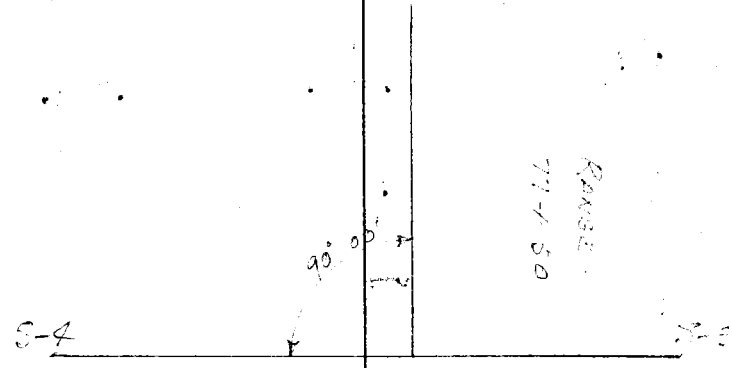
STATION	B. S.	H. I.	F. S.	ELEV.	Instr. @ 80+00	Sight on 77+50
T.P.	028	20 52		2024	CONT. FROM MIDDLE PAGE OF 82+50	Inshore
T.P.	491	21 20	423	1629		77+50 S
77+50			+85	297	℄	
			+74	286	20 FT RT. TOP SLOPE	
			00	212	42 FT " ON SLOPE	
			37	175	55 " " TOE SLOPE	
			51	161	100 " "	
			73	139	180 " " TOP BRK	
			92	120	200 " "	
			110	102	220 " " BOT "	
			104	~~118~~ 10.8	290 " "	
			110	102	300 " " TOP "	
T.P.	10	74	148	64	344 " " T.P.	
			38	+36	56° 38' 380	
			70	+04	60° 59' 451	
			88	-14	63° 23 499	
			104	-30	65° 00' 536	
			116	-42	66° 30' 575	
			134	-60	67° 58' 618	
			158	-84	69° 44 677	
			176	-102	70° 40 713	

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 191
No. ____ Date ____ Date ____ Survey of Beach Erosion Sur
X-Sec. Notes Chkd. ____ Checked ____ Survey by Dreier Notes Lamb Date 7-30-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ C. Johnson



Profile	Notes Red.	Plotted	Job No. 3300	Division No. 10	F. B. 2309 Pg. 193
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes [illegible]	Date 7-30-58
No.	Date	Date	Map No.	Indexed C. Johnson	

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STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
77+50 S-4			8 17	90° 00'	

RANGE LINE
77+50

S-4

76298 S & E #307—7-55

F. B. 2309 Pg. 194 | Job No. 030002 | Division No. 10 | Notes Red. | Plotted | Profile

Survey of BEACH EROSION | Date 7-30-58 | Date | No.

Survey by VAN DEREN | Notes T.O. | Notes Chkd. | Checked | X-Sec.

Indexed [redacted] C. Johnson | Date | Date | Date | No.

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					
	32					
	33					
	34					

76298 S & E #307—7-55

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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	30.7	28.0	8:17	56° 02'	2,282	
		2	29.9	27.2		55° 14'	2,218	Cut in Line 77+50
		3	29.7	27.0		54° 23'	2,145	
		4	29.2	26.5		53° 38'	2,090	Boat = +1.0
		5	28.6	25.9		52° 49'	2,022	Zero = 0
		6	28.2	25.5		52° 09'	1,972	Tide = -3.7
		7	27.9	25.2		51° 24'	1,920	-2.7
62+50	S-3A	8	27.8	25.1		50° 36'	1,864	
		9				49° 40'		
		10	—			48° 31'		
		11	28.2	25.5		45° 17'	1,545	
		12	27.2	24.5		43° 57'	1,475	
		13	26.6	23.9		42° 57'	1,421	
		14	26.3	23.6		42° 00'	1,375	
		15	25.7	23.0		41° 04'	1,328	
		16	25.3	22.6		39° 48'	1,272	
		17	24.4	21.7		38° 30'	1,215	
		18	23.6	20.9		37° 15'	S-4 1,160	S-3A 62+50
		19	22.8	20.1		35° 53'	1,104	
		20	21.7	19.0		34° 34'	1,051	

Cut Line 77+50

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 10-22 Division No. 10 F. B. 2309 Pg. 195
X-Sec. No. ____ Date ____ Notes Chkd. ____ Date ____ Checked ____ Date ____ Survey of Beach Erosion Study Survey by Van Dorn Notes Date 7-30-59 Map No. ____ Indexed ____ Date ____

76298 S & E #307—7-55

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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	
		21	20.4	17.6		33° 21'	1004	
		22	19.1	16.3		32° 23'	965 Cut in Line	77+50
		23	17.8	15.0		31° 21'	930	
		24	16.7	13.9		30° 17'	892	Boat = +1.0
		25	16.0	13.2		29° 09'	850	Zero = 0
		26	15.2	12.4		28° 07'	815	Tide = -3.8
		27	14.1	11.3		27° 01'	777	-2.8
62+50	S-3A	28	13.3	10.5		26° 03'	745	
		29	12.6	9.8		25° 05'	712	
		30	11.4	8.6		24° 04'	680	
		31	10.3	7.5		23° 06'	647	
		32	9.1	6.3		22° 05'	618	
		33	7.8	5.0		21° 07'	585	
		34	6.5	3.7	8:25	20° 07'	557	

F. B. 2309 Pg. 196 Job No. 300.02 Division No. 10 Notes Red. Plotted
Survey of Beach Erosion Study Date 7-30-58 Date No.
Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.
Indexed K. C. Johnson Date Date Date No.
Profile

76L298 307 8-53

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STATION	B. S.	H. I.	F. S.	ELEV.	Instr @ 70+00	Sight on 72+50
T.P	491	2120		1629	CONT. FROM LINE 2, 77+50	Inshore
T.P.	339	2032	427	1693		72+50
72+50			+88	29 1/5	℄	
			+89	292	12 FT. LEFT TOE	OF SLOPE
			+92	295	26 FT. RIGHT TOP	OF SLOPE
			32	171	60 " " BOT	"
			49	154	100 " "	
			68	13.5	200 " "	
			69	13.4	210 " " TOP	
			100	103	240 " " BOT	
			91	112	300 " "	
			89	114	318 " TOP	
T.P.	11	74	140	63	366	
			47	27	58°55' 415	
			79	-05	62°35' 482	
			97	-23	64°52' 533	
			116	-42	66°40' 580	
			154	-80	69°07' 655	
			175	-101	70°37 711	

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 197
No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
X-Sec. Notes Chkd. ____ Checked ____ Survey by Dreier Notes Landa Date 7-30-58
No. ____ Date ____ Date ____ Map No. ____ Indexed Date ____

76296 S & E #307—7-55

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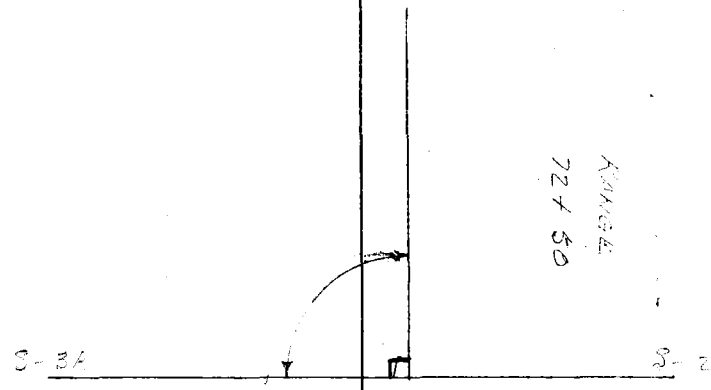
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	
Inst. At / Sight On	#	Depth Rec. / Adj.	Time	Hor. Ang.	Remarks
72+00 S-5A	1		8:30	90-00	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				



Profile Notes Red ____ Plotted ____ Job No. 23307 Division No. 10 F. B. 23307 Pg. 199
No. ____ Date ____ Date ____ Survey of RANCH EROSION Date 7-30-58
X-Sec. Notes Chkd. ____ Checked ____ Survey by KEN DERSON Notes ____ Date ____
No. ____ Date ____ Date ____ Map No. ____ Indexed ____

F. B. 2309 Pg. 200 Job No. 030002 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION Date 7-30-58 Date No.

Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.

Indexed C. Johnson Date Date Date No.

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At 72+50	Sight On S-3A	Depth # Rec. Adj.	Time	Hor. Ang.		Remarks
		21		90° 00'		
		22		" "		
		23		" "		
		24		" "		
		25		" "		
		26		" "		
		27		" "		
		28		" "		
		29		" "		
		30		" "		
		31		" "		
		32		" "		
		33		" "		
		34		" "		
		35		" "		
		36		" "		
		37		" "		
		38		" "		
		39	8 48	" "		

76298 S & E #307—7-55

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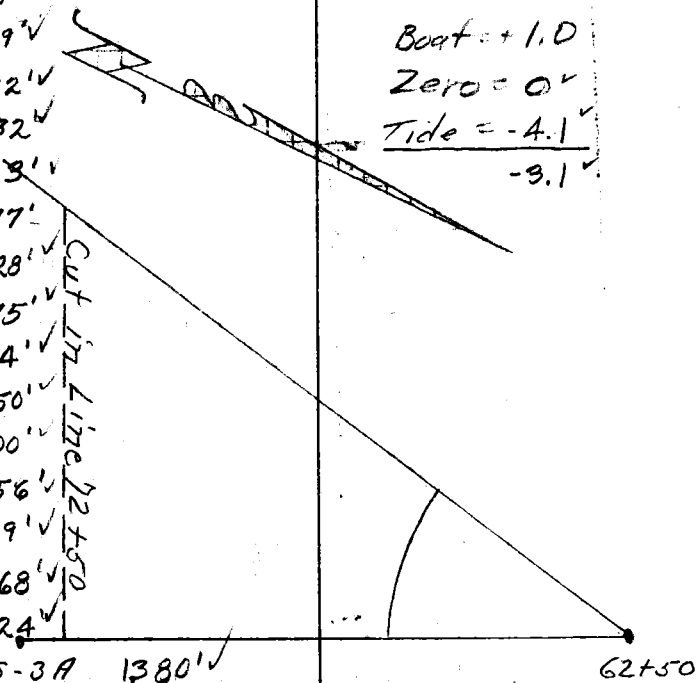
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
62+50	S-3A	1	30.6	27.5	8:39	66° 47'	2,331'
		2	30.4	27.3		65° 49'	2,227' Cut in Line 72+50
		3	30.2	27.1		65° 23'	2,183'
		4	29.9	26.8		65° 03'	2,149'
		5	29.3	26.2		64° 27'	2,092'
		6	28.7	25.6		63° 48'	2,032'
		7	29.3	26.2		63° 14'	1,983'
		8	—			61° 57'	1,877'
		9	30.0	26.9		61° 19'	1,828'
		10	29.4	26.3		60° 36'	1,775'
		11	29.1	26.0		59° 44'	1,714'
		12	28.7	25.6		58° 47'	1,650'
		13	28.8	25.7		58° 00'	1,600'
		14	28.7	25.6		57° 16'	1,556'
		15	28.5	25.4		56° 38'	1,519'
		16	28.1	25.0		55° 44'	1,468'
		17	27.8	24.7		54° 55'	1,424'
		18	27.2	24.1		54° 04'	S-3A 1,380'
		19	26.6	23.5		53° 04'	1,330'
		20	26.1	23.0		52° 02'	1,282'



Boat = +1.0
Zero = 0
Tide = -4.1
-3.1

Profile Notes Red. ____ Plotted ____ Job No. 2[illegible] Division No. 10 F. B. 2309 Pg. 201
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by VanDeren Notes RT. Date 7-30-58
No. ____ Date ____ Date ____ Map No. ____ Indexed A. G. Jon Date

76298 S & E #307—7-55

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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.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
62+50	S-3A	21	25.7	22.5		51° 07'	1,240'
		22	25.3	22.1		50° 00'	1,192' Cut in Line 72+50
		23	23.5	20.3		48° 10'	1,117
		24	22.5	19.3		47° 03'	1,074
		25	21.4	18.2		46° 02'	1,037
		26	20.4	17.2		45° 09'	1,005
		27	19.3	16.1		44° 12'	972'
		28	18.1	14.9		43° 08'	937'
		29	17.0	13.8		42° 00	900'
		30	16.3	13.1		41° 01'	870'
		31	15.7	12.5		39 58'	838'
		32	14.8	11.6		38° 55'	807'
		33	14.1	10.9		37° 57'	780'
		34	13.4	10.2		36° 50'	749'
		35	12.7	9.5		35° 21'	709'
		36	11.3	8.1		34° 00'	675'
		37	10.0	6.8		32° 41'	642'
		38	8.5	5.3		31° 15'	607'
		39	7.4	4.2	8:48	30° 17'	584'

Boat = +1.0
Zero = 0
Tide = -4.2
-3.2

F. B. 2309 Pg. 202 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 7-30-58 Date No.
Survey by Van Deven Notes R.T. Notes Chkd. Checked X-Sec.
Indexed K. C. Johnson Date Date Date No.

76L298 307 8-53

PLEASE RETURN TO
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726 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.	Instr. @ 70+00	Sight on 67+50
T.P.	339	2032		1693	CONT. FROM LINE 2, 72+50	Inshore
T.P.	449	2079	402	1630		67+50 S
67+50			+87	295	℄ ALSO TOE OF SLOPE FROM WALK	
			+84	292	21 FT RIGHT TOP OF SLOPE	
			04	204	50 " " TOE OF SLOPE	
			42	166	85 " "	
			49	159	100 " "	
			52	156	185 " "	
			57	151	200 " "	
			72	13.6	245 " " TOP BRK	
			100	108	275 " " BOT "	
			98	110	300 " "	
			93	115	345	
T. P.	22	80	150	58	400	
			39	41	59° 10' 419	
			80	00	63° 33 503	
			102	-22	65° 43 554	
			123	-43	67° 18 598	
			137	-57	68° 54 648	
			154	-74	69° 54 683	
			171	-91	71° 02 728	
			190	-11.0	72° 13 780	

Profile Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 PG. 203
No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
X-Sec. Notes Chkd. ____ Checked ____ Survey by Dreier Notes Land Date 7-30-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

Profile	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2307 Pg. 205
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes	Date 7-30-58
No.	Date	Date	Map No.	Indexed	

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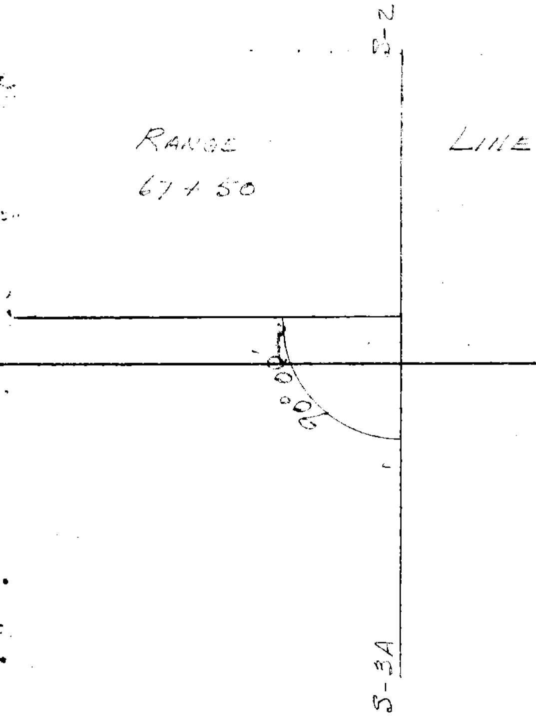
76298 S & E #307—7-55

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



F. B. 2309 Pg. 206 | Job No. 030002 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION Date 7-30-58 Date No.

Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

76298 S & E #307—7-85

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

76298 S & E #307—7-55

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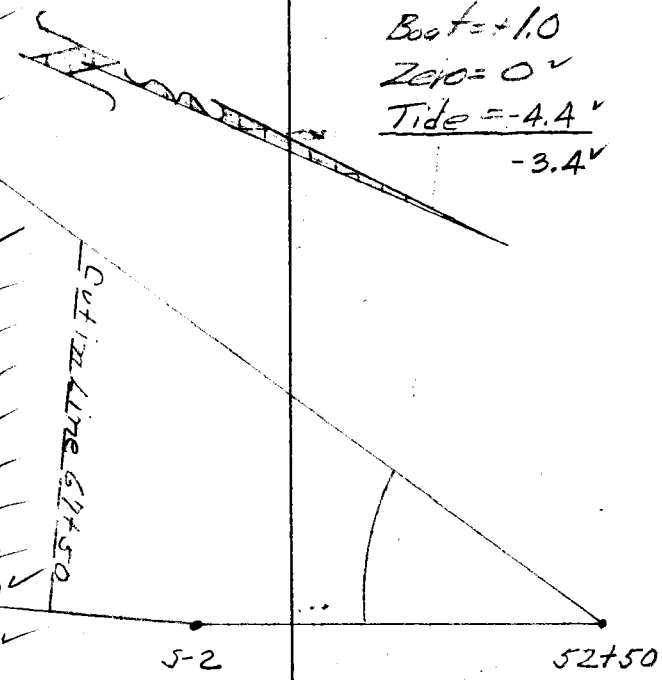
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	—		9:02	56° 24'	
		2	—			54° 06'	Cut in Line. 67+50
		3	—			51° 16'	
		4	29.2	25.8		48° 47'	1,582
		5	—			44° 22'	
		6	24.7	21.3		40° 00'	1,164
		7	23.4	20.0		38° 40'	1,110
52+50	S-2	8	22.5	19.1		37° 23'	1,060
		9	20.8	17.4		35° 58'	1006
		10	18.6	15.2		34° 08'	940
		11	17.0	13.6		32° 40'	889
		12	15.6	12.2		31° 14'	838
		13	14.3	10.9		30° 00'	798
		14	13.3	9.9		28° 48'	758
		15	12.3	8.9		27° 30'	715
		16	10.8	7.4		26° 14'	675
		17	9.0	5.6		25° 06'	640
		18	7.6	4.2	9:11	24° 15'	614
		19					
		20					



Boat = +1.0
Zero = 0
Tide = -4.4
-3.4

Profile Notes Red. Plotted Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 207
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by Van Deven Notes R.T. Date 7-30-58
No. Date Date Map No. Indexed Date

F. B. 2309 Pg. 208 Job No. 0300.02 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Study Date 7-30-58 Date _____ No. _____

Survey by Van Deven Notes R.T. Notes Chkd. _____ Checked _____ X-Sec.

Indexed C. Johnson Date _____ Date _____ Date _____ No. _____

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On		Depth # Rec. Adj.	Time	Hor. Ang.		Remarks
	21					
	22					
	23					
	24					
	25					

Cut in Line 67+50

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

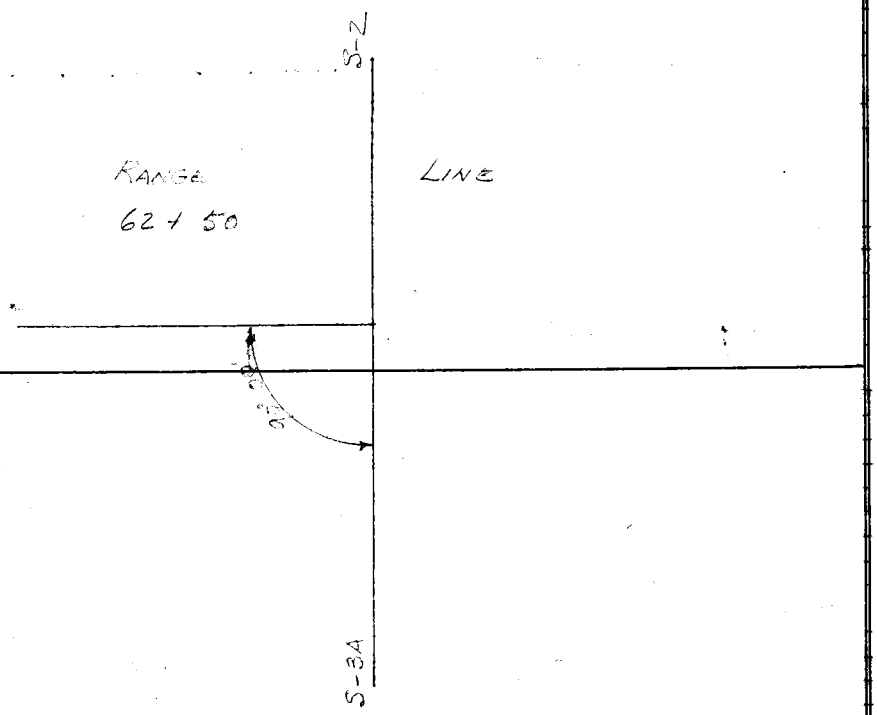
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst at 60+00	Sight on 62+50
T. P.	4 49	20 79		16 30	CONT. FROM LINE 2, 67+50	Inshore
T. P.	4 19	20 88	410	16 69		62+50 S
62+50						
			33	17 6	70 5 FT RT, W. SIDE OF LIFE GAURD STA.	
			47	16 2	100 " "	
			59	15 0	200 " "	
			73	13 6	260 " " TOP	BRK
			108	10 1	300 " " BOT	BRK
			93	11 6	370 TOP	"
			134	~~6 5~~ 7.5	400	
T. P.	1 3	7 2	150	5 9	415	
					° '	
			30	4 2	60° 16' 438	
			57	1 5	63° 11 507	
			90	-1 8	65° 50' 557	
			102	-3 0	67° 17' 597	
			123	-5 1	68° 42' 641	
			157	-8 5	70° 11 694	
			176	-10 4	70° 46 717	
			180	-10 8	72° 30' 793	

Profile Notes Red. Plotted Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 209
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by English Notes Date 7-30-58
No. Date Date Map No. Index

Profile	Notes Red.	Plotted	Job No. 03000	Division No. 10	F. B. 2309 Pg. 211
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-30-58
No.	Date	Date	Map No.	Checked H. G. Johnson	Date



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
62+50 S-3A	1		9 43	90° 00'	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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76298 S & E #307—7-55

F. B. 2309 Pg. 2/2 Job No. 930002 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION Date 7-30-58 Date No.

Survey by VAN DEREN Notes T. O. Notes Chkd. Checked X-Sec.

Indexed C. Johnson Date Date Date No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
62+50 S-3A	21			70°		
	22			"		
	23		9 51	"		

76298 S & E #307—7-55

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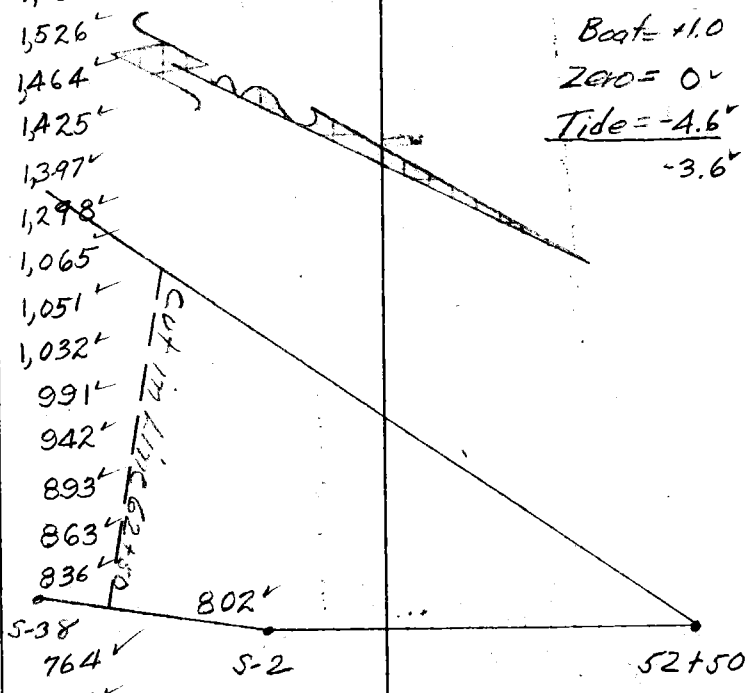
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	29.5	25.9	9:43	62° 31'	1,738
		2	29.5	25.9		62° 01	1,707 Cut in Line 62+50
		3	29.4	25.8		61° 12'	1,652
		4	29.3	25.7		59° 07'	1,526
		5	28.8	25.2		58° 00'	1,464
		6	28.6	25.0		57° 16'	1,425
		7	28.0	24.4		[illegible]	1,397
S-2	52+50	8	26.5	22.9		54° 39'	1,298
		9	22.6	19.0		49° 00'	1,065
		10	21.8	18.2		48° 48'	1,051
		11	21.0	17.4		48° 08'	1,032
		12	19.5	15.9		46° [illegible]	991
		13	18.1	14.5		45° 28'	942
		14	17.3	13.7		43° 52'	893
		15	16.1	12.5		42° 53'	863
		16	15.2	11.6		41° 57'	836
		17	14.3	10.7		40° 49'	802
		18	13.6	10.0		39° 25'	764
		19	12.3	8.7		38° 13'	731
		20	11.2	7.6		36° 56'	698



Boat = +1.0
Zero = 0
Tide = -4.6
-3.6

Profile Notes Red. Plotted Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 213
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by Van Deren Notes R.T. Date 7-30-58
No. Date Date Map No. Indexed Date

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	10.0	6.4		35° 50'	671	
		22	8.7	5.1		34° 50'	647	Cut in Line 62+50
		23	7.6	4.0	9:51	33° 37'	617	
		24	—					Boat = +1.0
		25	—					Zero = 0
								Tide = -4.6
								-3.6
52+50	5-2							

F. B. 2309 Pg. 214 Job No. 300.02 Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 7-30-58 Date No.
Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

76L298 307 8-53

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 60+00	Sight on 57+50
T.P.	4 19	20 88		16 69	CONT. FROM LINE 2, 62+50	Inshore
T.P.	7 21	23 40	4 69	16 19		57+50 S
57+50					ON PARKIN AREA	
			0 2	23 2	376 FT. RIGHT, SAND AT BOT. RET. WALL	
			50	18 4	75 " "	
			7 2	16 2	100 " "	
			8 8	14 6	150 " "	
			8 5	14 9	200 " "	
			9 2	14 2	285 " "	TOP BRK
			11 2	12 2	300 " "	
			12 8	10 6	315 " "	BOT BRK
			12 0	11 4	380 " "	TOP "
			14 1	9 3	400 " "	
T.P	28	8 2	18 0	5 4	449 " "	
			4 3	3 9	64° 08' 516	
			6 2	2 0	66° 30 575	
			11 3	-3 1	68° 53 647	
			14 3	-6 1	70° 18' 698	
			17 2	-9 0	71° 49 761	

Profile Notes Red. ____ Plotted ____ Job No. 030002 Division No. 10 F. B. 2309 Pg. 215
No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
X-Sec. Notes Chkd. ____ Checked ____ Survey by English Notes Drexler Date 7-30-58
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

Profile	Notes Red.	Plotted	Job No. 030002	Division No. 10	F. B. 2304 Pg. 217
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-30-58
No.	Date	Date	Map No.	Inspected J. C. Johnson	Date

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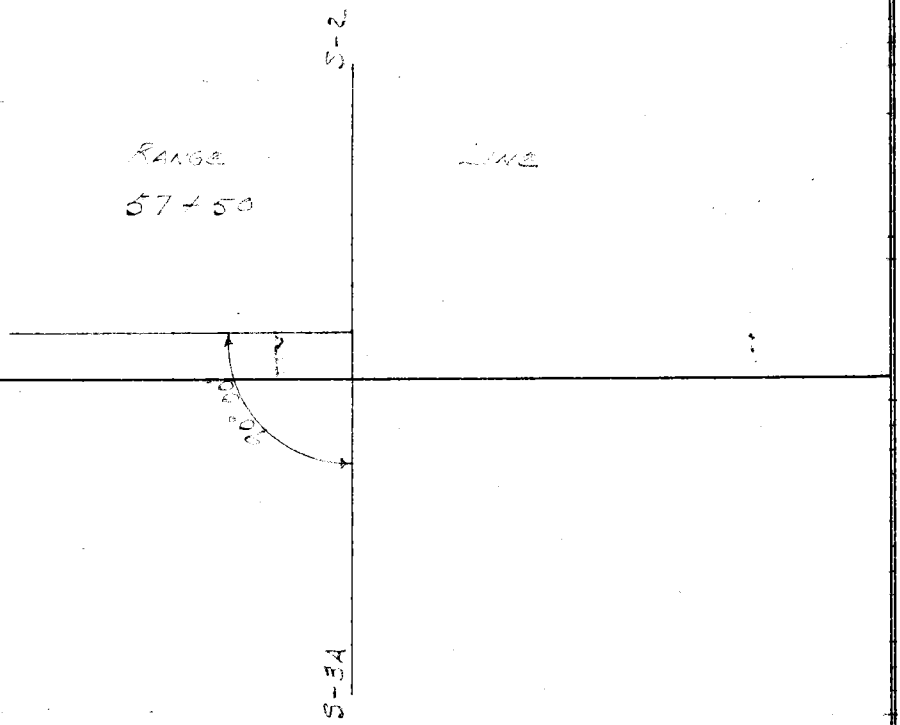
STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. At 57+50 Sight On S-3A	#	Depth Rec. Adj.	Time 10 34	Hor. Ang. 70° 00'	



76298 S & E #307—7-55

F. B. 2309 Pg. 218 | Job No. 030002 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION Date 7-30-52 Date _____ No. _____

Survey by VAN DEREN Notes: T. C. Notes Chkd. _____ Checked _____ X-Sec.

Indexed ~~E. O. Johnson~~ Date _____ Date _____ Date _____ No. _____

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

76298 S & E #307—7-55

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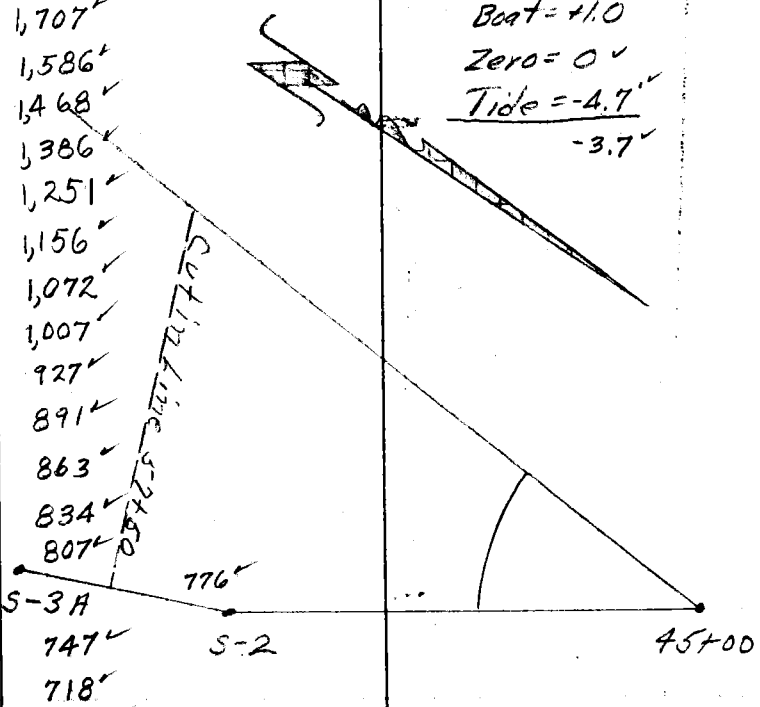
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	30.3	26.6	10:04	59° 40'	1,978
		2	30.6	26.9		58° 00'	1,860
		3	29.9	26.2		56° 32'	1,764
		4	29.8	26.1		55° 38'	1,707
		5	29.0	25.3		53° 30'	1,586
		6	27.8	24.1		51° 12'	1,468
		7	27.3	23.6		49° 32'	1,386
45+00	S-2	8	25.6	21.9		46° 31'	1,251
		9	24.2	20.5		44° 07'	1,156
		10	22.2	18.5		42° 02'	1,072
		11	20.1	16.4		40° 06'	1,007
		12	17.2	13.5		37° 43'	927
		13	16.1	12.4		36° 36'	891
		14	15.6	11.9		35° 40'	863
		15	15.0	11.3		34° 46'	834
		16	14.3	10.6		33° 52'	807
		17	13.7	10.0		32° 45'	776
		18	12.5	8.8		31° 47'	747
		19	11.4	7.7		30° 46'	718
		20	10.1	6.4		29° 48'	692

Cut in Line 57+50



Profile Notes Red. Plotted Job No. 03000 Division No. 10 F. B. 2309 Pg. 219
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by Van Deren Notes P.T. Date 7-30-58
No. Date Date Map No. Indexed C. Johnson Date

F. B. 2309 Pg. 220 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Study Date 7-30-58 Date No.

Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.

Indexed [redacted] C. Johnson Date Date Date No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. / Adj.	Time	Hor. Ang.		Remarks
45+00	21	9.1 / 5.4		28° 46	665	
S-2	22	7.6 / 3.9		29° 43	633	Cut in Line 57+50
	23	—	10:11	29° 03	616	
	24					Boat = +1.0
	25					Zero = 0
	26					Tide = -4.7
						-3.7

76L298 307 8-53

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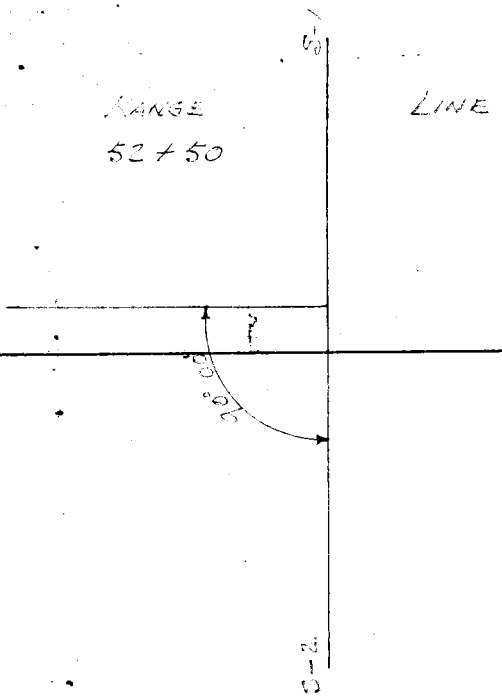
STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 50+00	Sight on 52+50
T.P.	7 21	23 40		16 19	CONT. FROM LINE 2, 57+50	Inshore
T.P.	6 70	23 87	6 23	17 17		52+50 S
			18	22 1	31 3 FT RIGHT SAND AT W. SIDE OF WALL	
			48	19 1	65 " "	
			67	17 2	90 " "	
			73	16 6	100 " "	
			90	14 9	200 " "	
			100	13 9	285 " " TOP BRK	
			116	12 3	300 " "	
			130	10 9	315 " " BOT "	
			124	11 5	385 " " TOP "	
			143	~~7 6~~ 9.6	400 " "	
T.P	0 4	7 5	168	7 1	419 " "	
			41	+3 4	61° 05' 453'	
			63	+1 2	64° 26 523'	
			91	-1 6	66° 30 575'	
			104	-2 9	67 58 618'	
			126	-5 1	69° 18 662'	
			150	-7 5	70° 18' 698'	
			170	-9 5	71° 36 752'	

Profile Notes Red. Plotted Job No. 0300.02 Division No. 10 F. B. 2309 PG. 221
No. Date Date Survey of Beach Erosion Sur.
X-Sec. Notes Chkd. Checked Survey by English & Dreer Date 7-30-58
No. Date Date Map No. Indexed [illegible] Date

Profile	Notes Red.	Plotted	Job No. [illegible]	Division No. [illegible]	F. B. [illegible]	Pg. 223
No.	Date	Date	Survey of BEACH EROSION			
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-30-58	
No.	Date	Date	Map No.	Indexed C. Jennings		



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
52+50 S-2	1			90°00'	
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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76298 S & E #307—7-55

F. B. 2309 Pg. 229 Job No. 030002 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION Date 7-30-58 Date _____ No. _____

Survey by VAN DEREN Notes T. O. Notes Chkd. _____ Checked _____ X-Sec.

Indexed [redacted] Date _____ Date _____ Date _____ No. _____

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
52+50 S-2	21					
	22					
	23					
	24					
	25					
	26		10 30			

76298 S & E #307—7-55

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STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks Boat	Zero	Tide	Total
		1	30.4	26.6	10:24	68° 09'	1871'	+1.0	-0.1	-4.7	-3.8
		2	30.6	26.2		67° 41'	1827'	"	-0.7	"	-4.4
		3	30.3	26.1		66° 45'	1746'	"	-0.5	"	-4.2
		4	29.6	25.4		66° 16'	1706'	"	+0.5	"	"
		5	29.4	25.7		65° 33'	1649'	"	0	"	-3.7
		6	29.2	25.3		64° 56'	1604'	"	-0.2	"	-3.9
		7	29.1	25.2		64° 14'	1554'	"	-0.2	"	"
45+00	S-2	8	28.9	25.1		63° 28'	1502'	"	-0.1	"	-3.8
		9	—			62° 08'					
		10	27.0	23.3		60° 25'	1,322'	"	0	"	-3.7
		11	26.2	22.2		59° 19'	1,264'	"	-0.3	"	-4.0
		12	25.2	21.2		57° 44'	1,188'	"	-0.3	"	"
		13	23.4	20.1		55° 58'	1,111'	"	+0.4	"	-3.3
		14	22.3	18.6		54° 43'	1,060'	"	0	"	-3.7
		15	21.2	17.8		53° 30'	1,013'	"	+0.3	"	-3.4
		16	19.4	15.7		52° 20'	971'	"	0	"	-3.7
		17	18.0	14.3		50° 56'	924'	"	0	"	"
		18	16.9	13.2		49° 47'	S-2 887N	"	0	"	45+00
		19	16.5	12.1		48° 31'	848'	"	-0.7	"	-4.4
		20	15.8	11.2		47° 22'	815'	"	-0.9	"	-4.6

Cut 177 2 line 52+50

Cut 171 line 52+50

Profile Notes Red. Plotted Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 225
No. Date Date Survey of Beach Erosion Study
X-Sec. Notes Chkd. Checked Survey by VanDeren Notes R.T. Date 7-30-58
No. Date Date Map No. Indexed C. Johnson

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.					
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	Boot	Zero	Tide	Total
		21	14.6	10.0		45° 53'	773' ✓	+1.0	-0.9 ✓	-4.7 ✓	-4.6' ✓
		22	13.6	9.0		44° 41'	742' Cut in Line 52+50		-0.9 ✓		
		23	11.5	6.9		42° 52'	696' ✓	"	-0.9 ✓	"	"
		24	10.4	5.8		41° 52'	672' ✓	"	-0.9 ✓	"	-4.6' ✓
		25	—			40° 11'					
		26	—		10:30	38° 56'					
45+00	5.2										

F. B. 2309 Pg. 226 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 7-30-58 Date No. X-Sec.
Survey by Van Deren Notes R.T. Notes Chkd. Checked No.
Indexed C. Johnson Date Date Date

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 50+00	Sight on 47+50
T.P.	670	23 87		17 17	CONT. FROM LINE 2, 52+50	Inshore
T.P.	714	23 96	7 05	16 82		47+50 S.
47+50			—		ON PARKING AREA	
			1 3	22 7	31 2 FT. RIGHT SAND AT BASE OF WALL	
			3 5	20 5	60 " "	
			6 2	17 8	100 " "	
			9 1	14 9	150 "	
			10 0	14 0	200 " "	
			10 2	13 8	265 " " TOP BRK	
			12 5	11 5	300 " "	
			13 5	10 5	330 " " BOT "	
			12 3	11 7	385 " " TOP "	
			13 7	10 3	400 " "	
T.P.	1 0	8 2	16 8	7 2	421	
			5 1	+3 1	61° 59' 470'	
			7 4	+0 8	64° 21' 521'	
			9 9	-1 7	67° 02 590'	
			11 7	-3 5	68° 37' 639'	
			14 3	-6 1	69° 50' 681'	
			17 6	-9 4	71° 39' 754'	

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 PG. 227
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Sur.
Notes Chkd. ____ Checked ____ Survey by English Notes Dicier Date 7-30-58
Date ____ Date ____ Map No. ____ Indexed ____ Date ____

Profile	Notes Red.	Plotted	Job No. [illegible]	Division No. 10	F. B. 2309 Pg. 229
No.	Date	Date	Survey of BEACH EROSION		
X-Sec.	Notes Chkd.	Checked	Survey by VAN DEREN	Notes T.O.	Date 7-30-58
No.	Date	Date	Map No.	Indexed C. Johnson	Date

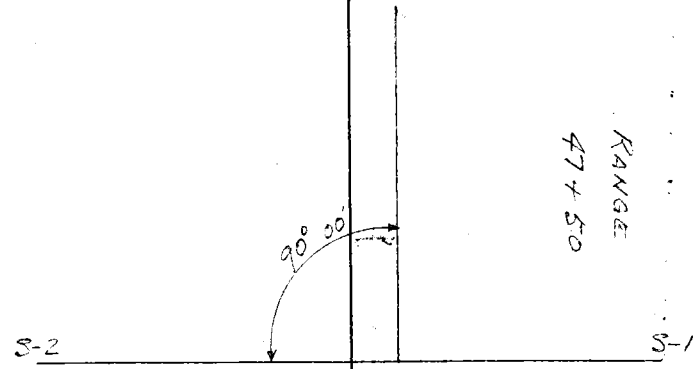
RANGE 47+50 LINE

S-1

S-2

90° 00'

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
47+50 S-2	1		10 44	90° 00'	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	
			10 48	"	



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76298 S & E #307—7-55

F. B. 2309 Pg. 230 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION Date 7-30-58 Date No.

Survey by VAN DEREN Notes T.O. Notes Chkd. Checked X-Sec.

Indexed Date 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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76298 S & E #307—7-55

76298 S & E #307—7-55

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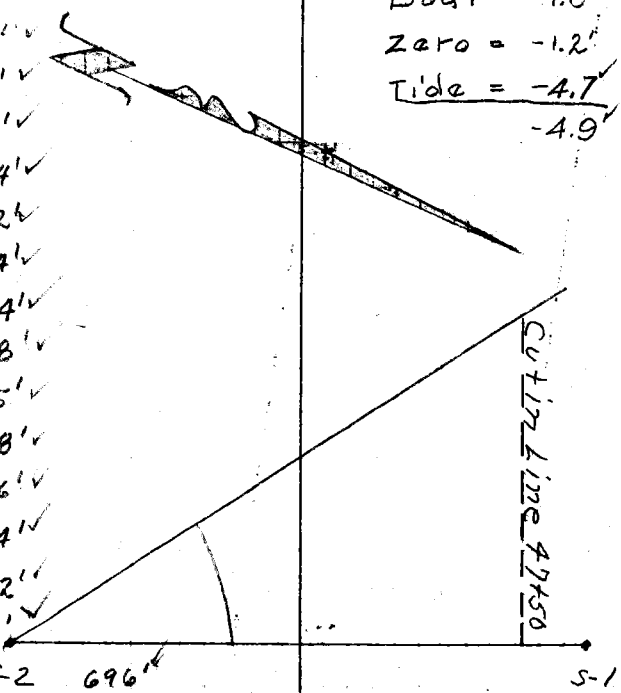
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	31.3	26.4	10:44	64° 00'	1,790'
		2	31.4	26.5		63° 04'	1,718' Cut in Line 47+50
		3	31.3	26.4		61° 15'	1,591'
		4	30.3	25.4		60° 03	1,516'
		5	29.2	24.3		58° 15'	1,411'
		6	28.2	23.3		56° 20'	1,310'
		7	27.6	22.7		54° 56	1,244'
S-2	S-1	8	26.4	21.5		53° 20'	1,172'
		9	25.0	20.1		51° 40'	1,104'
		10	23.6	18.7		49° 49	1,034'
		11	21.7	16.8		47° 22'	948'
		12	19.0	14.1		46° 03'	905'
		13	18.3	13.4		44° 49'	868'
		14	17.5	12.6		43° 47'	836'
		15	16.2	11.3		42° 18'	794'
		16	15.1	10.2		41° 08'	762'
		17	14.0	9.1		39° 10'	711'
		18	12.4	7.5		38° 33'	696'
		19	10.3	5.4		37° 30'	670'
		20	9.2	4.3	10:48	35° 50'	630'

Boat = +1.0'
Zero = -1.2'
Tide = -4.7'
-4.9'



Profile Notes Red ____ Plotted ____ Job No. 0300.02 Division No. 10 F. B. 2309 Pg. 231
No. ____ Date ____ Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. ____ Checked ____ Survey by Van Deren Notes R.T. Date 7-30-58
No. ____ Date ____ Date ____ Map No. ____ Indexed G. Johnson

F. B. 2309 Pg. 232 Job No. 300.02 Division No. 10 Notes Red. _____ Plotted _____

Survey of Beach Erosion Study Date 7-30-58 Date _____

Survey by Van Dorn Notes R.T. Notes Chkd. _____ Checked _____

Indexed C. Johnson Date _____ Date _____ Date _____

Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks
S-2							
S-1							
		21.					
		22.					
		23.					
		24.					
		25.					
							Cutting Line 47+50