| | |
|---|---|
| Notes Ck'd by | Survey of BEACH EROSION STUDIES |
| Map No. | W. 8412 Tape No. 012 St'd 84 °F |
| Office Work | Surveyed by F Blanchard |
| Checked | Notes FHB Date 7-19-51 |
| Date | Indexed C. Johnson 8-23-51 |

F.B. 1296 Pg. 5

# BEACH EROSION STUDIES

## J.N. 8412

## POINT DUME-TO-SEQUIT CN.

Station 0+00 to station 272+25

RANGE LINES & PROFILE

## BOOK 3 OF 4 BOOKS

## — ZUMA DIVISION —

| REF | PARTY |
|---|---|
| F.B. 930 | Blanchard<br>Crumley<br>Mack<br>Mitchell<br>Stangeland<br>ENGLISH<br>SAPPELL<br>Anderson<br>Natapoff<br>Varsolavich<br>BAY<br>Vollnagle<br>Sonnenschein<br>Sutter<br>SHURE<br>EVANS<br>HOWIE<br>Dougherty |

LOS ANGELES COUNTY SURVEY
726 LOS ANGELES COUNTY ENGINEERING BLDG.
7 6 1947 2-51

RETURN TO
LOS ANGELES COUNTY SURVEYOR
725 LOS ANGELES COUNTY
ENGINEERING BLDG.

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

Do not extend notes this side of this line.

F.B. _____ PG. _____

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

152
47
105

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 0+00 | 2.9 | 152 | | 1234 | C.S. MON. 2-1A | INHALE |
| " | | | 21 | 131 | SAND | SHORE ∠ 90° |
| | | | 0.0 | 152 | 27 RT. | Toe SL. |
| | | | 3.3 | 119 | 47 LT | TOP SL. |
| | | | 6.1 | 91 | 63 " | BRK |
| (TRANS. ON 5+00) | | | 9.0 | 62 | 81 " | " |
| ∠s T.P. | 3.5 | 82 | 10.5 | 47 T.P. | 92 " | Water |
| 13°-06' | | | 6.4 | 18 | 116 calc. | |
| 17°-28' | | | 8.4 | -0.2 | 157 calc. | |
| 24°-17' | | | 11.2 | -3.0 | 225 calc. | |
| 26°-01' | | | 13.0 | -4.8 | 244 calc. | |

SHORE
0+00

Profile No. ____ Notes Red ____ Plotted ____ Job No. 8464 Division No. 1 Page 7
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (EUNIA BEACH)
Notes Chkd RDW Checked ____ Survey by C.V.C. Notes C.V.C. Date 7-19-51
Date 9-12-51 Date ____ Map No. ____ Indexed Johnson Date ____

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

16.3
4.7
11.6

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 5+00 | 11.1 | 26.7 | | 15.62 ✓ 1x2 | | SHORE ∡ 90° |
| | | | 10.7 | 15.0 ~~12.9~~ | 25.5 RT | TOO SL. |
| | | | 7.0 | 15.2 ~~10.7~~ | 49 " | BRK ON SL. |
| | | | 3.7 | 23.0 ~~22.9~~ | 65 " | " " " |
| | | | 0.7 | 20.0 ~~5.9~~ | 86 " | " " " |
| " | 0.7 | 16.3 | | 15.62 ✓ 1x2 ABOVE | | |
| | | | 18 | 14.5 | 16 LT. | Beach |
| | | | 27 | 13.6 | 7.4 " | " " |
| | | | 36 | 12.7 | 100 " | |
| | | | 37 | 12.6 | 124 " | |
| (TRANS. ON 10+00) | | | 67 | 9.6 | 143 " | |
| ∡s 19°-40' T.P. | 2.9 | 7.6 | 11.6 | 4.7 T.P. | TAPE 178 " (calc 178.7) | Water |
| 22°-52' | | | 6.8 | 0.8 | 211 calc | OCEAN FLOOR |
| 26°-09' | | | 8.6 | -1.0 | 245 calc. | " " |
| 29°-44' | | | 10.3 | -2.7 | 285.5 calc. | " " |
| 32°-00' | | | 11.4 | -3.8 | 312 calc. | " " |
| 33°-33' | | | 12.3 | -4.7 | 332 calc. | " " |

SHORE 5+00

F.B. 1296 Pg. 8 2 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES (ZUMA BEACH) Date Date No.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd RWW Checked X-Sec.
Indexed A. C. Johnson Date 7-19-51 Date 9-12-51 Date No.

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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 | # | Color | Time | Hor. Ang. | Remarks |
| Z-1A 0+00 | 10+00 | 1 | R&Y | 7 13⁵ | 89° 50 | |
| | | 2 | R | | 89° 50 | |
| | | 3 | Y | | 89° 43 | |
| | | 4 | R&Y | 7 20 | 89° 37 | |
| | | 5 | R | | 89° 51 | |
| | | 6 | Y | | 89° 48 | |
| | | 7 | R&Y | 7 21⁵ | 90° 00 | |
| | | 8 | R | | 89° 58 | |
| | | 9 | Y | | 89° 14 | |
| | | 10 | R&Y | 7 23 | 89° 24 | |
| | | 11 | R | | 89° 17 | |
| | | 12 | Y | | 89° 54 | |
| | | 13 | R&Y | 7 25 | 89° 42 | |
| | | 14 | R | | 89° 42 | |
| | | 15 | Y | | 89° 42 | |
| | | 16 | R&Y | 7 28 | 89° 42 | |
| | | 17 | R | | 89° 42 | |
| | | 18 | Y | | 89 24 | |
| | | 19 | R&Y | 7 32 | 90 29 | |

BANGE
0+00

Profile Notes Red ____ Plotted ____ Job No. 8412 Division No. V 0 F.B. 296 Pg. 9
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by E.H.B. Notes M.S. Date 7-20-51
No. ____ Date ____ Date ____ Map No. ____ Indexed C. Johnson Date ____

FORM 30[illegible] 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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 | # | Color | Time | Hor. Ang. | Remarks | |
| 5+00 | 10+00 | 1 | R-Y | 7 49 | 90°14 | | |
| | | 2 | R | | 90°05 | | |
| | | 3 | Y | | 89°52 | | |
| | | 4 | R-Y | 7:51 | 9[illegible]10 | | |
| | | 5 | R | | 8[illegible]57 | | |
| | | 6 | Y | | 9[illegible]10 | | |
| | | 7 | R-Y | 7:54 | 90°10 | | |
| | | 8 | R | | 90°[illegible]9 | | |
| | | 9 | Y | | 90°23 | | |
| | | 10 | R-Y | 7:57 | 89°56 | | |
| | | 11 | R | | 90°17 | | |
| | | 12 | Y | | 90°05 | | |
| | | 13 | R-Y | 7:59$^5$ | 90°33 | | |
| | | 14 | R | | 90°19 | | |
| | | 15 | Y | | 90°33 | | |
| | | 16 | R-Y | 8 02$^5$ | 90°04 | | |
| | | 17 | R | | 89°45 | | |
| | | 18 | Y | | 90°00 | | |
| | | 19 | R-Y | 8 05$^5$ | 89°27 | | |

RANGE 5+00

Profile No. X-Sec. No.

Job No. 8412 Division No. V Notes Red. Plotted
Survey of Beach Erosion Studies Date 7-20-51 Date
Survey by F.H.B. Notes M.S. Notes Chkd. Checked
Indexed A. C. Johnson Date Date Date

PG. 10

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 10+00 | 0+00 | 1 | R & Y | 7:13 | 33° 15' | | |
| | | 2 | R | | 32° 47' | | |
| | | 3 | Y | | 32° 14' | | |
| | | 4 | R & Y | 7:20 | 31° 37' | | |
| | | 5 | R | | 30° 47' | | |
| | | 6 | Y | | 30° 08' | | |
| | | 7 | R & Y | 7:21 | 29° 30' | | |
| | | 8 | R | | 28° 55' | | |
| | | 9 | Y | | 28° 11' | | |
| | | 10 | R & Y | 7:23 | 27° 50' | | |
| | | 11 | R | | 27° 01' | | |
| | | 12 | Y | | 25° 49' | | |
| | | 13 | R & Y | 7:25 | 24° 41' | | |
| | | 14 | R | | 23° 29' | | |
| | | 15 | Y | | 21° 17' | | |
| | | 16 | R & Y | 7:28 | 20° 40' | | |
| | | 17 | R | | 19° 20' | | |
| | | 18 | Y | | 17° 57' | | |
| | | 19 | R & Y | 7:32 | 16° 50' | | |

CUT IN 0+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 Pg. 11
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by Blanchard Notes MACK Date 7-20-51
No. ____ Date ____ Date ____ Map No. ____ End of Johnson Date ____

76L298 307 4-50

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.**

F. B. 1296 Pg. 12 Job No. 8412 Division No. Notes Red Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by Blanchard Notes MACK Notes Chkd Checked X-Sec.
Indexed C. Johnson Date 7-20-51 Date Date No.

| STATION | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 10+00 | 5+00 | 1 | R & Y | 7:49 | [illegible] 59' | . | |
| | | 2 | R | | [illegible] 38' | . | |
| | | 3 | Y | | 54° 14' | . | |
| | | 4 | R & Y | 7:51 | 53° 33 | . | |
| | | 5 | R | | 53° 09 | . | |
| | | 6 | Y | | 52° 18' | . | |
| | | 7 | R & Y | 7:54 | 51° 51 | . | |
| | | 8 | R | | 51° 02' | . | |
| | | 9 | Y | | 49° 38' | . | |
| | | 10 | R & Y | 7:57 | 49° 23' | . | |
| | | 11 | R | | 48° 08' | . | |
| | | 12 | Y | | 47° 43' | . | |
| | | 13 | R & Y | 8:00 | 46° 30' | . | |
| | | 14 | R | | 45° 14' | . | |
| | | 15 | Y | | 43° 38' | . | |
| | | 16 | R & Y | 8:02 | 42° 33' | . | |
| | | 17 | R | | 38° 33' | . | |
| | | 18 | Y | | 34° 07' | . | |
| | | 19 | R & Y | 8:05 | 31° 33 | . | |

CUT IN 5+00

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | R-Y | 7.13 06.13 | 25.9 24.8 | 25.2 | 0.3 | 24.9 | |
| 2 | R | | 25.5 23.8 | 24.4 | | 24.1 | |
| 3 | Y | | 23.7 22.7 | 23.0 | | 22.7 | |
| 4 | R-Y | 7.20 06.20 | 22.7 21.6 | 22.0 | 0.4 | 21.6 | |
| 5 | R | | 21.2 20.0 | 20.4 | | 20.0 | |
| 6 | Y | | 20.1 18.9 | 19.3 | | 18.9 | |
| 7 | R-Y | 7.21 06.21 | 19.0 17.8 | 18.2 | 0.5 | 17.7 | |
| 8 | R | | 18.1 16.8 | 17.2 | | 16.7 | |
| 9 | Y | | 17.1 15.7 | 16.2 | | 15.7 | |
| 10 | R-Y | 7.23 06.23 | 15.9 14.7 | 15.1 | 0.6 | 14.5 | |
| 11 | R | | 14.9 13.6 | 14.0 | | 13.4 | |
| 12 | Y | | 13.7 12.5 | 12.9 | | 12.3 ~~13.5~~ | |
| 13 | R-Y | 7.25 06.25 | 12.9 11.5 | 12.0 | 0.6 | 11.4 | |
| 14 | R | | 11.3 10.5 | 10.8 | | 10.2 | |
| 15 | Y | | 11.6 10.0 | 10.5 | | 9.9 | |
| 16 | R-Y | 7.27 06.27 | 10.3 9.0 | 9.4 | 0.7 | 8.7 | |
| 17 | R | | 9.3 8.0 | 8.4 | | 7.7 | |
| 18 | Y | | 8.3 7.0 | 7.4 | | 6.7 | |
| 19 | R-Y | 7.32 06.32 | 7.2 6.0 | 6.4 | 0.7 | 5.7 | |

BOAT 0+00

Profile Notes Red. LCW Plotted ____ Job No. 8412 Division No. V ① F.B. 1296 PG. 13
No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. T.M.I. Checked ____ Survey by F.H.B. Notes ER.V Date 7-20-51
No. ____ Date 9-14-51 Date ____ Map No. ____ Indexed A.C. Johnson Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Ht. Tide | Adj. Depth | Remarks |
| 1 | R-Y | 7 49 0649 | 26.6 25.5 | 25.9 | 1.1 | 24.8 | |
| 2 | R | | 25.8 24.4 | 24.9 | | 23.8 | |
| 3 | Y | | 25.0 23.3 | 23.9 | | 22.8 | |
| 4 | R-Y | 7 51 0651 | 23.5 22.0 | 22.5 | 1.2 | 21.3 | |
| 5 | R | | 22.5 21.0 | 21.5 | | 20.3 | |
| 6 | Y | | 21.2 19.7 | 20.2 | | 19.0 | |
| 7 | R-Y | 7 54 0654 | 19.9 18.5 | 19.0 | 1.3 | 17.7 | |
| 8 | R | | 19.0 17.5 | 18.0 | | 16.7 | |
| 9 | Y | | 17.5 16.2 | 16.6 | | 15.3 | |
| 10 | R-Y | 7 57 0657 | 16.3 15.0 | 15.4 | 1.3 | 14.1 | |
| 11 | R | | 15.0 13.7 | 14.1 | | 12.8 | |
| 12 | Y | | 14.1 12.7 | 13.2 | | 11.9 | |
| 13 | R-Y | 7 59 0659 | 13.3 11.7 | 12.2 | 1.4 | 10.8 | |
| 14 | R | | 12.0 10.7 | 11.1 | | 9.7 | |
| 15 | Y | | 11.0 9.5 | 10.0 | | 8.6 | |
| 16 | R-Y | 8 02 0702 | 10.3 8.5 | 9.1 | 1.4 | 7.7 | |
| 17 | R | | 8.6 7.4 | 7.8 | | 6.4 | |
| 18 | Y | | 8.0 6.0 | 6.7 | | 5.3 | |
| 19 | R-Y | 8 05 0705 | 7.5 5.0 | 5.8 | 1.4 | 4.4 | |

Boat 5+00

F. B. 1296 Pg. 14 Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-20-51 Date No.
Survey by F.H.B. Notes M.S. Notes Chkd. T.M.I. Checked X-Sec.
Indexed A. C. Johnson Date Date 2-14-51 Date No.

FORM 307 5M 1-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

14.1
4.7
9.4

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 10+00 | 38 | 20.7 | | 16.87 | 1x2 Stk, flush, Top Brk | |
| | | | 47 | 16.0 | 12° RT Bot Brk | SHORE ∡ 90° |
| | | | 43 | 16.4 | 33° RT | |
| | | | 26 | 18.1 | 60' RT, Toe of slope | |
| | | | 37 | 17.0 | 6' LF | BRK |
| | | | 54 | 15.3 | 12 LF | " |
| | | | 57 | 15.0 | 24 LF | " |
| | | | 50 | 15.7 | 27 LF | " |
| | | | 59 | 14.8 | 33 LF | " |
| (TRANS ON 15+00) | | | 62 | 14.5 | 56 LF | " |
| ∡s | | | 76 | 13.1 | 73 LF | " |
| 10°-06' T.P. | 16 | 14.1 | 82 | 12.5 | T.P. 90' LF. (calc 89.), Top Brk ON BEACH | |
| 11°-58' | | | 41 | 10.0 | 107 " (Calc 106) | |
| 16°-04' T.P. | 30 | 7.7 | 94 | 4.7 | T.P. 145 " (Calc. 144) | Water |
| 20°-11' | | | 73 | 0.4 | 184' Calc. | Ocean Floor |
| 23°-20' | | | 89 | -12 | 216' Calc. | " " |
| 27°-08' | | | 105 | -28 | 256' " | " " |
| 30°-43' | | | 120 | -43 | 297' " | " |

SHORE
10+00

Profile No. ___ Notes Red ___ Plotted ___ Job No. 8412 Division No. ___ Date ___ Date ___ Survey of Beach Erosion Studies (Zuma) Notes Chkd ___ Checked ___ Survey by C.V.C. Note C.V.C. Date 7-19-51 Date 9-12-51 Date ___ Map No. ___ Indexed C. Johnson Date ___

3 F.B. 1295 No. 13

FORM 307 5M 1-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

16.4
47
11.7

F.B. 1746 Pg. 70 Job No. 8412 Division No. Notes Red Plotted Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date Date No.
Survey by G.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked X-Sec.
Indexed H. C. JOHNSON Date 7-19-51 Date 9-12-51 Date No.

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 15+00 | 91 | 258 | | 16 75 | 1x2 stk, flush | SHORE ∡ 90° |
| | | | 77 | 18 | 16° RT | |
| | | | 63 | 195 | 25° RT | |
| | | | 70 | 18 | 32 RT | |
| | | | 48 | 21 | 55 RT | |
| | | | 44 | 21 | 66 RT | |
| | | | 24 | 23 | 82 RT | |
| | | | 32 | 22 | 90' RT | |
| | | | 09 | 24 | 100' RT | |
| | | | 94 | 16 | 17 LT | |
| (TRANS ON 20+00) | | | 106 | 15 | 27 LT | |
| 4°-44' T.P | 14 | 164 | 108 | 150 | T.P. 42' LT (Calc 41.4) | Top Brk Beach |
| 5°-57' | | | 44 | 120 | 53' LT (Calc 52') | " |
| 8°-38' | | | 82 | 8 | TAPE 76' " (Calc 76') | " |
| 11°-15' T.P. | 27 | 7.4 | 117 | 47 | T.P./100 " (Calc 99.4) | WATER |
| 15°-55' | | - | 69 | 05 | 243 " Calc | Ocean FLOOR. |
| 20°-00' | | | 86 | -17 | 182 " " | " " |
| 22°-30' | | | 99 | -25 | 207 " " | " " |
| 26°-58' | | | 115 | -41 | 254 " " | " " |
| 30°-12' | | | 128 | -54 | 291 " " | " " |

SHORE 15+00

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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 | # | Color | Time | Hor. Ang. | Remarks |
| 10+00 | 15+00 | 1 | R&Y | 9 02 | 89°42 | |
| | | 2 | R | | 90°10 | |
| | | 3 | Y | | 89°30 | |
| | | 4 | R&Y | 9:04.5 | 88°58 | |
| | | 5 | R | | 89°25 | |
| | | 6 | Y | | 89°15 | |
| | | 7 | R&Y | 9:06.5 | 89°22 | |
| | | 8 | R | | 89°48 | |
| | | 9 | Y | | 89°57 | |
| | | 10 | R&Y | 9:08.5 | 89°34 | |
| | | 11 | R | | 89°44 | |
| | | 12 | Y | | 89°27 | |
| | | 13 | R&Y | 9 11 | 89°28 | |
| | | 14 | R | | 89°28 | |
| | | 15 | Y | | 89 44 | |
| | | 16 | R&Y | 9 13.5 | 89 48 | |
| | | 17 | R | 9 14 | 89 54 | |

RANGE
10+00

Profile No. ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. V (3) F.B. 2296 Pg. 17
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
Notes Chkd ____ Date ____ Checked ____ Date ____ Survey by F.H.B. Notes M.S. Date 7-20-51
Map No. ____ Date ____ Mapped C. Johnson Date ____

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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 | # | Color | Time | Hor. Ang. | Remarks | |
| 15+00 | 20+00 | 1 | R-Y | 9:31 | 90°00 | | |
| | | 2 | R | | 89°54 | | |
| | | 3 | Y | | 89°54 | | |
| | | 4 | R-Y | 9 33⁵ | 89°46 | | |
| | | 5 | R | | 89°39 | | |
| | | 6 | Y | | 89°46 | | |
| | | 7 | R-Y | 9 37 | 88°52 | | |
| | | 8 | R | | 89°58 | | |
| | | 9 | Y | | 89°38 | | |
| | | 10 | R-Y | 9:42 | 89°44 | | |
| | | 11 | R | | 89°19 | | |
| | | 12 | Y | | 89°37 | | |
| | | 13 | R-Y | 9 44⁵ | 88°12 | | |
| | | 14 | R | | 89°05 | | |
| | | 15 | Y | | 89°34 | | |
| | | 16 | R-Y | 9 48⁵ | 89°34 | | |
| | | 17 | R | | 89°51 | | |
| | | 18 | Y | | 89°13 | | |
| | | 19 | R-Y | 9 50 | 89°2 | | |

RANGE 15+00

F.B. 2296 Pg. 18 Job No. 8412 Division No. V Notes Red Plotted No. Profile
Survey of BEACH EROSION STUDIES Date 7-20-51 Date X-Sec.
Survey by F.H.B. Notes M.S. Notes Chkd Checked No.
Indexed C. Johnson Date Date Date

76L298 307 4-50

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.

Profile Notes Red ____ Plotted ____ Job No. 2412 Division No. ____ F. B. 1296 Pg. 19
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by Blanchard Notes MACK Date 7-20-51
No. ____ Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

| STATION | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 15+00 | 10+00 | 1 | R-Y | 9:02 | 56°03' | | |
| | | 2 | R | | 55°04' | | |
| | | 3 | Y | | 54°39' | | |
| | | 4 | R-Y | 9:04 | 54°25' | | |
| | | 5 | R | | 53°22' | | |
| | | 6 | Y | | 52°33' | | |
| | | 7 | R-Y | 9:07 | 51°37' | | |
| | | 8 | R | | 50°20' | | |
| | | 9 | Y | | 49°37' | | |
| | | 10 | R-Y | 9:09 | 48°42' | | |
| | | 11 | R | | 48°06' | | |
| | | 12 | Y | | 47°10' | | |
| | | 13 | R-Y | 9:11 | 45°49' | | |
| | | 14 | R | | 44°54' | | |
| | | 15 | Y | | 41°53' | | |
| | | 16 | R-Y | 9:14 | 39°52' | | |
| | | 17 | R | 9:15 | 37°58' | | |

Continue 10+00 to

76L298 307 4-50

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.**

F. B. 1296 Pg. 20 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by Blanchard Notes MACK Notes Chkd. Checked X-Sec.
Indexed H. C. Johnson Date 7-20-51 Date Date No.

| STATION Inst. At | Sight On | B. S. # | H. I. Color | F. S. Time | ELEV. Hor. Ang. | Remarks |
|---|---|---|---|---|---|---|
| 20+00 | 15+00 | 1 | R-Y | 9:31 | 58°40' | |
| | | 2 | R | | 58°18' | |
| | | 3 | Y | | 57°43' | |
| | | 4 | R-Y | 9:33 | 56°48' | |
| | | 5 | R | | 56°15' | |
| | | 6 | Y | | 55°18' | |
| | | 7 | R-Y | 9:37 | 54°49' | |
| | | 8 | R | | 51°53' | |
| | | 9 | Y | | 51°07' | |
| | | 10 | R-Y | 9:42 | 49°59' | |
| | | 11 | R | | 49°20' | |
| | | 12 | Y | | 47°02' | |
| | | 13 | R-Y | 9:45 | 46°02' | |
| | | 14 | R | | 42°20' | |
| | | 15 | Y | | 37°15' | |
| | | 16 | R-Y | 9:48 | 35°33' | |
| | | 17 | R | | 31°42' | |
| | | 18 | Y | | 30°51' | |
| | | 19 | R-Y | 9:50 | 29°54' | |

CUT IN 15+00

76L298 307 4-50

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 10+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | RY | 9:02 0802 | 28.2 27.1 | 27.5 | 2.9 | 24.6 | |
| 2 | R | | 27.1 25.9 | 26.3 | | 23.4 | |
| 3 | Y | | 26.2 24.9 | 25.3 | | 22.4 | |
| 4 | R.Y. | 9:04 0804 | 24.5 23.5 | 23.8 | 3.0 | 20.8 | |
| 5 | R | | 23.5 22.4 | 22.8 | | 19.8 | |
| 6 | Y | | 22.3 21.1 | 21.5 | | 15.5 | |
| 7 | R.Y. | 9:07 0807 | 20.9 19.9 | 20.2 | 3.0 | 17.2 | |
| 8 | R | | 20.0 18.8 | 19.2 | | 16.2 | |
| 9 | Y | | 18.6 17.7 | 18.0 | | 15.0 | |
| 10 | R.Y. | 9:09 0809 | 17.5 16.4 | 16.8 | 3.0 | 13.8 | |
| 11 | R | | 16.1 15.1 | 15.4 | | 12.4 | |
| 12 | Y | | 15.2 14.1 | 14.5 | | 11.5 | |
| 13 | R.Y. | 9:11 0811 | 14.3 13.1 | 13.5 | 3.1 | 10.4 | |
| 14 | R | | 13.9 12.1 | 12.7 | | 9.6 | |
| 15 | Y | | 12.8 11.0 | 11.6 | | 8.5 | |
| 16 | R.Y. | 9:14 0814 | 11.7 10.0 | 10.6 | 3.2 | 7.4 | |
| 17 | R | 9:15 0815 | 10.4 9.0 | 9.5 | 3.2 | 6.3 | |
| 18 | Y | | | | | | |
| 19 | R.Y. | | | | | | |
| 20 | R | | | | | | |

BOAT
10+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. V F. B. 1296 Pg. 21
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd TM.I Checked ____ Survey by F.H.B. Notes F.R.Y. Date 7-20-51
No. ____ Date 9-14-51 Date ____ Map No. ____ Indexed E. C. Johnson Date ____

76L298 307 4-50

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.

F. B. 1290 Pg. 22 | Job No. 8412 Division No. K Notes Red. ____ Plotted ____ Profile ____
Survey of Beach Estates Inc. Date 7-20-51 No. ____ X-Sec. ____
Survey by F.H.B. Notes 1/4/1929 Notes Chkd. T.M.I. Checked ____
Indexed H. C. Johnson Date ____ Date 9-10-51 No. ____

STATION 15+00

| # | Color | Time | Meas. Depth | Bottom | Ht. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 29.1 | | | | |
| 1 | RY | 9:31 08 31 | 27.8 28.7 | 28.2 | 3.5 | 24.7 | |
| 2 | R | | 26.8 27.3 | 27.4 | | 23.9 | |
| 3 | Y | | 25.7 26.1 | 26.2 | | 22.7 | |
| 4 | RY | 9:33 08 33 | 24.5 25.5 | 25.0 | 3.6 | 21.4 | |
| 5 | R | | 23.3 24.0 | 24.0 | | 20.4 | |
| 6 | Y | | 21.8 22.2 | 22.8 | | 19.2 | |
| 7 | RY | 9:37 08 37 | 21.0 23.0 | 21.9 | 3.7 | 18.2 | |
| 8 | R | | 20.2 20.7 | 21.1 | | 17.4 | |
| 9 | Y | | 19.0 19.5 | 19.6 | | 15.9 | |
| 10 | R.Y. | 10:42 ? 0842 | 18.0 18.6 | 18.5 | 3.8 | 14.7 | |
| 11 | R | | 17.0 17.5 | 17.5 | | 13.7 | |
| 12 | Y | | 15.9 17.0 | 16.4 | | 12.6 | |
| 13 | RY | 10:44 0844 | 14.8 16.0 | 15.5 | 3.8 | 11.7 | |
| 14 | R | | 13.8 14.4 | 14.5 | | 10.7 | |
| 15 | Y | | 12.6 13.0 | 13.2 | | 9.4 | |
| 16 | RY | 10:49 0849 | 11.0 12.0 | 11.7 | 3.9 | 7.8 | |
| 17 | R | | 10.0 11.0 | 10.7 | | 6.8 | |
| 18 | Y | | 9.0 10.0 | 9.7 | | 5.8 | BOAT 15+00 |
| 19 | RY | 10:50 0850 | 8.0 | 8.7 | 3.9 | 4.8 | |
| 20 | R | | | | | | |

FORM 307 5M 1-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

15.6
47
10.9

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 20+00 | 8.0 | 22.7 ✓ | | 14.69 ✓ | 1x2 Stk flush | SHORE ∡ 90° |
| | | | 75 | 15.2 ✓ | 15 R-E | |
| | | | 63 | 16.4 ✓ | 38 R-E | |
| | | | 55 | 17.2 ✓ | 51 R-E | |
| | | | 44 | 18.3 ✓ | 75 R-E | |
| | | | 30 | 19.7 ✓ | 82 RE | |
| | | | 30 | 19.7 ✓ | 100 R-E | |
| (TRANS. ON 25+00) | | | 76 | 15.1 ✓ | 14 L-W | |
| | | | 79 | 14.8 ✓ | 30 L-W | |
| ∡ 5°-08' T.P. | 15 | 15.6 ✓ | 86 | 14.1 ✓ | T.P. 46 ✓ TAPE L-W, Top Brk (calc 45') | |
| | | | 54 | 10.2 ✓ | 71 LT | |
| 10°-42' ✓ | | | 89 | 6.7 ✓ | 95 LT (calc 94') | |
| 12°-29' ✓ T.P. | 28 | 75 ✓ | 109 | 4.7 ✓ | T.P. 111 ✓ (calc 111') water | |
| 16°-17' ✓ | | | 67 | 0.8 ✓ | 146 ✓ calc. | ocean FLOOR |
| 19°-27' ✓ | | | 77 | -0.2 ✓ | 177 ✓ calc. | " " |
| 22°-30' ✓ | | | 91 | -1.6 ✓ | 207 ✓ " | " " |
| 25°-50' ✓ | | | 111 | -3.6 | 242 ✓ " | " |
| 28°-46 ✓ | | | 123 | -4.8 ✓ | 275 ✓ " | " |

SHORE
20+00

Profile No. ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. 5 F.B. 1206 Pg. 23
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA ...)
Notes Chkd. [illegible] Checked ____ Survey by C.V. CRUMLEY Notes C.V.C. Date 7-19-51
No. ____ Date 9-12-51 Date ____ Map No. ____ Indexed [illegible] Date ____

FORM 307 5M 1-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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. | | |
|---|---|---|---|---|---|---|
| 25+00 | 48 | 19 2 | | 14 40 | 1x2 stk, flush (SHORE ∡ 90°) | 30.78 MON. |
| | | | 40 | 15 2 | 14 R-E | 2.52 |
| | | | 34 | 15 8 | 24 R-E | 33.30 H.I. |
| | | | 13 | 17 9 | 34 R-E | 8.84 |
| | | | 10 | 18 | 46 R-E, Bot of fill | 24.46 - 30+00 |
| | | | 52 | 14 | 12 L-W | 1.38 |
| | | | 65 | 12 | 19 L-W | 25.84 H.I. |
| (TRANSION 20+00) | | | 57 | 13 | 47 L-W | 5.20 |
| | | | 57 | 13 | 70 L-W | 20.64 - 35+00 |
| 9°-34' T.P. | 33 | 16 1 | 64 | 1 8 | T.P. 84 L-W TAPE (Calc 84) | 4.00 |
| 12°-25' | | | 72 | 8 | TAPE 110 LT (calc. 110 | 24.64 H.I. |
| 15°-57' T.P. | 0.0 | 47 | 114 | 47 | T.P. 143 LT (142' calc) | 12.15 |
| 17°-56' | | | 16 | 31 | ~~168~~ 162 calc. Water | 12.49 T.P. Rock |
| 25°-04' | | | 56 | -0 | 234' LT ocean FLOOR. | 0.71 |
| 28°-50' | | | 71 | -24 | 275' " " " | 13.20 H.I. |
| 33°-33' | | | 94 | -47 | 332' " | 3.80 |
| 40°-24' | | | 133 | -8 | 425' " " " | 9.40 1x2 40+00 |
| | | | | | | 4.37 |
| | | | | | | 13.77 H.I. |
| | | | | | | 8.72 |
| | | | | | | 5.05 45+00 1x2 |
| | | | | | | 9.24 |
| | | | | | | 14.29 H.I. |
| | | | | | | 0.89 |
| | | | | | | T.P. 13.40 Thread of Bolt S.W. Cor Piling |

SHORE 25+00

F.B. 1296 Pg. 24 Job No. 8412 Division No. Notes Red. Plotted. Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date. Date. No. X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked. Checked.
Indexed R. C. Johnson Date 7-20-51 Date 9-12-51 Date. No.

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

Do not extend notes this side of this line.

Profile No. ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. V

X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES

Notes Chkd ____ Checked ____ Survey by F.H.B. Notes M.S. Date 7-2051

Date ____ Date ____ Map No. ____ Indexed ____ Date ____

F.B. 1296 Pg. 25

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| Inst. At 20+00 | Sight On 25+00 | # | Color | Time | Hor. Ang. | Remarks |
| | | 1 | R-Y | 10 01 | 88°59 | |
| | | 2 | R | | 90°15 | |
| | | 3 | Y | | 89°54 | |
| | | 4 | R-Y | 10:05 | 89°54 | |
| | | 5 | R | | 89°54 | |
| | | 6 | Y | | 89°35 | |
| | | 7 | R-Y | 10:07 | 90°05 | |
| | | 8 | R | | 89°30 | |
| | | 9 | Y | | 89°59 | |
| | | 10 | R-Y | 10 09 | 89°59 | |
| | | 11 | R | | 89°15 | |
| | | 12 | Y | | 89°46 | |
| | | 13 | R-Y | 10 13 | 89°15 | |
| | | 14 | R | | 89°40 | |
| | | 15 | Y | | 90°34 | |
| | | 16 | R-Y | 10 18 | 90°00 | |
| | | 17 | R | | 89°44 | |
| | | 18 | Y | 10 19 | 90°04 | |

RANGE
20+00

FORM 302 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

Do not extend notes this side of this line.

F.B. 298 PG. 26 | Job No. 8412 Division No. V Notes Red ____ Plotted ____ No. ____ Profile
Survey of Beach Erosion Studies Date 7-20-51 Date ____ No. ____ X-Sec.
Survey by F.H.B. Notes M.S. Notes Chkd ____ Checked ____
Indexed J. C. Johnson Date ____ Date ____

| STATION | B.S. | H.I. | F.S. | ELEV. | | |
|---|---|---|---|---|---|---|
| Inst. At 25+00 Sight On 20+00 | # | Color | Time | Hor. Ang. | Remarks | |
| | 1 | R-Y | 10 32 | 89°34 | | |
| | 2 | R | | 89°15 | | |
| | 3 | Y | | 89 38 | | |
| | 4 | R-Y | 10:36 | 89°38 | | |
| | 5 | R | | 89°51 | | |
| | 6 | Y | | 89°30 | | |
| | 7 | R-Y | 10 40 | 89°47 | | |
| | 8 | R | | 89°56 | | |
| | 9 | Y | | 90°04 | | |
| | 10 | R-Y | 10:42 | 89°41 | | |
| | 11 | R | | 90°00 | | |
| | 12 | Y | | 90°00 | | |
| | 13 | R-Y | 10 43 | 90°15 | | |
| | 14 | R | | 89°20 | | |
| | 15 | Y | | 89°38 | | |
| | 16 | R-Y | 10:46 | 89°38 | | |
| | 17 | R | | 90°16 | | |
| | 18 | Y | 10:47 | 90°44 | | |

RANGE 25+00

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 25+00 | 20+00 | 1 | R-Y | 10:01 | 56°39' | | |
| | | 2 | R | | 55°15' | | |
| | | 3 | Y | | 54°03' | | |
| | | 4 | R-Y | 10:05 | 53°27' | | |
| | | 5 | R | | 52°25' | | |
| | | 6 | Y | | 51°21' | | |
| | | 7 | R-Y | 10:07 | 50°16' | | |
| | | 8 | R | | 48°44' | | |
| | | 9 | Y | | 46°34' | | |
| | | 10 | R-Y | 10:09 | 45°04' | | |
| | | 11 | R | | 45°23' | | |
| | | 12 | Y | | 40°55' | | |
| | | 13 | R-Y | 10:13 | 38°27' | | |
| | | 14 | R | | 35°49' | | |
| | | 15 | Y | | 30°15' | | |
| | | 16 | R-Y | 10:18 | 31°20' | | |
| | | 17 | R | | 29°44' | | |
| | | 18 | Y | 10:19 | 28°30' | | |

Cut 1H
20+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. S. 1796 Pg. 27
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by Blanchard Notes MACK Date 7-20-51
No. ____ Date ____ Date ____ Map No. ____ Indexed A. C. Johnson Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 20+00 | 25+00 | 1 | R-Y | 10:32 | 57° 14' | | |
| | | 2 | R | | 56° 29' | | |
| | | 3 | Y | | 55° 14' | | |
| | | 4 | R-Y | 10:36 | 54° 33' | | |
| | | 5 | R | | 53° 18' | | |
| | | 6 | Y | | 52° 15' | | |
| | | 7 | R-Y | 10:40 | 51° 18' | | |
| | | 8 | R | | 47° 44' | | |
| | | 9 | Y | | 48° 26' | | |
| | | 10 | R-Y | 10:42 | 47° 28' | | |
| | | 11 | R | | 45° 57' | | |
| | | 12 | Y | | 44° 16' | | |
| | | 13 | R-Y | 10:44 | 42° 12' | | |
| | | 14 | R | | 40° 35' | | |
| | | 15 | Y | | 38° 32' | | |
| | | 16 | R-Y | 10:46 | 36° 13' | | |
| | | 17 | R | | 34° 05' | | |
| | | 18 | Y | 10:47 | 32° 09' | | |

CUT IN 25+00

F. S. 1296 Pg. 28 Job No. 8412 Division No. Notes Red Plotted Profile
Survey of Beach Erosion Studies Date Date No. X-Sec.
Survey by Blanchard Notes MACK Notes Chkd. Checked
Indexed R. C. Johnson Date 7-20-51 Date Date No.

76L298 307 4-50

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 20+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 10:01 0901 | 29.1 28.2 | 28.5 | 4.1 | 24.4 | |
| 2 | R. | | 27.7 26.8 | 27.1 | | 23.0 | |
| 3 | Y. | | 26.5 25.5 | 25.8 | | 21.7 | |
| 4 | R.Y. | 10:05 0905 | 26.0 24.3 | 24.9 | 4.2 | 20.7 | |
| 5 | R | | 24.3 23.0 | 23.4 | | 19.2 | |
| 6 | Y | | 23.5 21.7 | 22.3 | | 18.1 | |
| 7 | R.Y. | 10:07 0907 | 22.3 20.6 | 21.2 | 4.2 | 17.0 | |
| 8 | R | | 21.2 19.2 | 19.9 | | 15.7 | |
| 9 | Y | | 19.4 18.0 | 18.5 | | 14.3 | |
| 10 | R.Y. | 10:09 0909 | 18.0 16.8 | 17.2 | 4.2 | 13.0 12.9 | |
| 11 | R. | | 17.9 15.7 | 16.4 | | 12.2 | |
| 12 | Y. | | 17.0 14.6 | 15.4 | | 11.2 | |
| 13 | R.Y. | 10:13 0913 | 15.2 13.0 | 13.7 | 4.3 | 9.4 | |
| 14 | R. | | 13.2 11.9 | 12.3 | | 8.0 | |
| 15 | Y. | | 11.8 10.5 | 10.9 | | 6.6 | |
| 16 | R.Y. | 10:18 0918 | 10.9 9.5 | 10.0 | 4.4 | 5.6 | |
| 17 | R | | 9.8 8.0 | 8.6 | | 4.2 | |
| 18 | Y. | 10:19 0919 | 9.2 7.0 | 7.7 | 4.4 | 3.3 | |
| 19 | RY | | | | | | |
| | R | | | | | | |

BOAT
20+00

Profile. Notes Red. ____ Plotted ____ Job No. 8412 Division No. V F.B. 1296 Pg. 29
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. T.M.I. Checked ____ Survey by E.H.B. Notes E.R.Y. Date 7-20-51
No. ____ Date 9-14-51 Date ____ Map No. ____ Indexed Johnson Date 9-1

76L298 307 4-50

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 25+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | RY | 10:32 0932 | 29.8 28.8 28.5 | 29.1 | 4.6 | 24.5 | |
| 2 | R | | 27.5 28.0 | 27.8 | | 23.2 | |
| 3 | Y | | 26.5 27.3 | 27.0 | | 22.4 | |
| 4 | RY | 10:36 0936 | 25.1 25.8 | 25.8 | 4.6 | 21.2 | |
| 5 | R. | | 23.7 24.3 | 24.4 | | 19.8 | |
| 6 | Y. | | 22.7 22.9 | 23.2 | | 18.6 | |
| 7 | R.Y | 10:40 0940 | 21.7 22.3 | 22.1 | 4.7 | 17.4 | |
| 8 | R | | 20.3 20.9 | 21.0 | | 16.3 | |
| 9 | Y | | 18.9 19.5 | 19.6 | | 14.9 | |
| 10 | RY | 10:42 0942 | 17.5 18.0 | 18.2 | 4.7 | 13.5 | |
| 11 | R | | 16.0 16.5 | 16.7 | | 12.0 | |
| 12 | Y | | 14.7 15.5 | 15.3 | | 10.6 | |
| 13 | RY | 10:44 0944 | 13.7 14.3 | 14.3 | 4.7 | 9.6 | |
| 14 | R | | 12.7 13.1 | 13.2 | | 8.5 | |
| 15 | Y | | 11.7 12.2 | 12.2 | | 7.5 | |
| 16 | RY | 10:46 0946 | 10.7 11.4 | 11.2 | 4.7 | 6.5 | |
| 17 | R | | 9.7 10.0 | 10.3 | | 5.6 | |
| 18 | Y | 10:47 0947 | 8.3 | 8.9 | 4.7 | 4.2 | |
| | R.Y. | | | | | | |
| | R. | | | | | | |

BOAT 25+00

F. B. 1296 PG. 30

Job No. 8412 Division No. X Notes Red. Plotted Profile

Survey of Beach Erosion Studies Date 7-20-50 Date No.

Survey by F.H.B. Notes Vollnagle Notes Chkd. T.M.I. Checked X-Sec.

Indexed A. C. Johnson Date Date 2-14-51 Date No.

FORM 307 5M 1-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

15.4
4.1
16.7

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 30+00 | 20 | 265 ✓ | | 24.46 | 1X2 Stk, flush. | W. edge of road |
| | | | 24 | 24.4 | 25 Right East pav., | Bot Berm |
| | | | 16 | 24.9 | 8 Left West | SHORE ∡ 90° |
| | | | 20 | 24.5 | 16 L-W, Top Bk | |
| | | | 66 | 19.9 | 22 L-W, Bot Bk | |
| | | | 87 | 17.8 | 31 L-W | |
| | | | 89 | 17.6 | 38 L-W | |
| TRANS ON 35+00 | | | 107 | 15.8 | 45 L-W Top Brk | |
| T.P. | 12 | 154 ✓ | 123 | 142 ✓ | T.P. 49 L-W Bot Brk | (−11.3 − 1.0 = 12.3) |
| | | | 59 | 9.5 ✓ | 73' LT | |
| ∡s 12°-48' ✓ T.P. | 09 | 56 ✓ | 107 | 47 ✓ | T.P. 113 LT − (Calc 114 ✓) | |
| 15°-34' ✓ | | | 31 | 25 ✓ | 138 ✓ − (Calc. 139 ✓) | WATER |
| 19°-30' ✓ | | | 56 | 00 ✓ | 177 ✓ calc | ocean FLOOR |
| 23°-22' ✓ | | | 71 | −15 ✓ | 216 ✓ " | " " |
| 26°-33' ✓ | | | 83 | −27 ✓ | 250 ✓ " | " " |
| 29°-28' ✓ | | | 95 | −39 ✓ | 282 ✓ " | " " |
| 33°-13 ✓ | | | 117 | −61 ✓ | 327 ✓ " | " " |

SHORE
30+00

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ 7 P. 126 Pg. 31
Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA)
Notes Chkd Rout Checked ____ Survey by C.V. CRUNLEY Notes C.V.C. Date 7-20-51
Date 9-12-51 Date ____ Map No. ____ Indexed Johnson Date ____

FORM 307 5M 1-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

14.0
4.7
9.3

Do not extend notes this side of this line.

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 35+00 | 40 | 24.6 ✓ | | 20 64 ✓ | Bt. spk in road | SHORE ∡ 90° |
| | | | 41 | 20 5 ✓ | 8 R-E, pav | |
| | | | 27 | 21 [illegible] ✓ | 24 R-E, Toe of slope | |
| | | | 38 | 20 [illegible] ✓ | 9 L-W | |
| | | | 33 | 21 [illegible] ✓ | 17 L-W, Top Bk | |
| TRANS. ON 30+00 T.P | 0.9 | 14.0 ✓ | 115 | 13.1 ✓ | 22' L-W Bot Bk. | (-11.6 - 1.0 = -12.6) |
| | | | 70 | 70 ✓ | 52' LT | |
| 8°-07' ✓ T.P. | 09 | 56 ✓ | 93 | 47 ✓ | T.P. 72 " (Calc 71') | |
| 11°-10' ✓ | | | 32 | 2 [illegible] ✓ | 100' LT (calc 99') | Water |
| 16°-17' ✓ | | | 57 | -0 1 ✓ | 146' LT. Calc. | ocean FLOOR |
| 20°-35' ✓ | | | 77 | -2 1 ✓ | 188' " " | " " |
| 23°-16' ✓ | | | 86 | -3 0 ✓ | 215' " " | " " |
| 25°-54' ✓ | | | 93 | -3 1 ✓ | 243' " " | " " |
| 28°-56' ✓ | | | 107 | -5 1 ✓ | 277' " " | " " |
| 33°-35' ✓ | | | 133 | -7 7 ✓ | 332' ✓ | " " |

SHORE 35+00

F.B. 296 Pg. 32 8 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date Date No. X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd Checked
Indexed R. C. Johnson Date 7-20-51 Date 9-12-51 Date No.

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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 | # | Color | Time | Hor. Ang. | Remarks |
| 30+00 | 35+00 | 1 | R-Y | 11 03 | 90° 04 | |
| | | 2 | R | | 90° 14 | |
| | | 3 | Y | | 90° 14 | |
| | | 4 | R-Y | 11 05 | 90° 14 | |
| | | 5 | R | | 90° 14 | |
| | | 6 | Y | | 90° 14 | |
| | | 7 | R-Y | 11 07 | 90° 12 | |
| | | 8 | R | | 90° 12 | |
| | | 9 | Y | | 90° 02 | |
| | | 10 | R-Y | 11 09 | 89° 55 | |
| | | 11 | R | | 89° 55 | |
| | | 12 | Y | | 89° 55 | |
| | | 13 | R-Y | 11:11 | 89° 49 | |
| | | 14 | R | | 90° 28 | |
| | | 15 | Y | | 90° 01 | |
| | | 16 | R-Y | 11:14 | 90° 22 | |
| | | 17 | R | | 90° 04 | |
| | | 18 | Y | | 90° 04 | |
| | | 19 | R-Y | 11:15 | 90° 04 | |
| | | 20 | R | 11:16 | 90° 04 | |

RANGE
30+00

Profile
No. ____ Date ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. V
X-Sec. Notes Chkd. ____ Checked ____ Survey of Beach Erosion Studies
No. ____ Date ____ Date ____ Survey by F H B Notes M.S. Date 7-20-51
Map No. ____ Inked ____ Date ____

F.B. 7296 Pg. 33

FORM 301 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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 | # | Color | Time | Hor. Ang. | Remarks | |
| 35+00 | 30+00 | 1 | R-Y | 11:27 | 88°59 | | |
| | | 2 | R | | 89°03 | | |
| | | 3 | Y | | 89°46 | | |
| | | 4 | R-Y | 11:34 | 89°40 | | |
| | | 5 | R | | 89°33 | | |
| | | 6 | Y | | 90°00 | | |
| | | 7 | R-Y | 11:36.5 | 89°24 | | |
| | | 8 | R | | 89°31 | | |
| | | 9 | Y | | 89°33 | | |
| | | 10 | R-Y | 11 38.5 | 89°39 | | |
| | | 11 | R | | 89°52 | | |
| | | 12 | Y | | 90°46 | | |
| | | 13 | R-Y | 11 41 | 90°47 | | |
| | | 14 | R | | 88°32 | | |
| | | 15 | Y | | 89 23 | | |
| | | 16 | R-Y | 11 46 | 88 34 | | |
| | | 17 | R | | 88 34 | | |
| | | 18 | Y | | 88 34 | | |
| | | 19 | R-Y | 11:49 | 88 [illegible]6 | | |

RANGE 35+00

F.B. 1296 PG. 34 | Job No. 8412 | Division No. V | Notes Red. | Plotted | Profile
Survey of Beach Erosion Studies | Date 7-20-51 | Date | No. | X-Sec.
Survey by E.H.B. | Notes M.S. | Notes Chkd. | Checked | No.
Indexed C. Johnson | Date | Date | Date

761.298 307 4-50

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. | |
|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks |
| 35+00 | 30+00 | 1 | R-Y | 11:03 | 58°21' | |
| | | 2 | R | | 57°07' | |
| | | 3 | Y | | 56°20' | |
| | | 4 | R-Y | 11:05 | 55°32' | |
| | | 5 | R | | 54°40' | |
| | | 6 | Y | | 53°38' | |
| | | 7 | R-Y | 11:07 | 51°52' | |
| | | 8 | R | | 50°51' | |
| | | 9 | Y | | 50°03' | |
| | | 10 | R-Y | 11:09 | 49°17' | |
| | | 11 | R | | 47°04' | |
| | | 12 | Y | | 45°47' | |
| | | 13 | R-Y | 11:11 | 44°54' | |
| | | 14 | R | | 42°06' | |
| | | 15 | Y | | 40°38' | |
| | | 16 | R-Y | 11:14 | 37°08' | |
| | | 17 | R | | 35°36' | |
| | | 18 | Y | | 32°57' | |
| | | 19 | R-Y | 11:15 | 29°08' | |
| | | 20 | R | 11:16 | 27°00' | |

CUT IN
30+00

Profile Notes Red ____ Plotted ____ Job No. 8412 Division No. ____ F.S. 1296 Pg. 35
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd ____ Checked ____ Survey by Blanchard Notes Mark Date 7-20-51
No. ____ Date ____ Date ____ Map No. ____ Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks | |
| 30+00 | 35+00 | 1 | R-Y | 11:27 | 58°43' | ✓ | |
| | | 2 | R | | 57°02' | ✓ | |
| | | 3 | Y | | 55 13' | ✓ | |
| | | 4 | R-Y | 11:34 | 54°36' | ✓ | |
| | | 5 | R | | 53°52' | ✓ | |
| | | 6 | Y | | 52°15' | ✓ | |
| | | 7 | R-Y | 11:36 | 51°18' | ✓ | |
| | | 8 | R | | 50°14' | ✓ | |
| | | 9 | Y | | 49°11' | ✓ | |
| | | 10 | R-Y | 11:39 | 47°42' | ✓ | |
| | | 11 | R | | 45°17' | ✓ | |
| | | 12 | Y | | 43°32' | ✓ | |
| | | 13 | R-Y | 11:41 | 41°44' | ✓ | |
| | | 14 | R | | 35°24' | ✓ | |
| | | 15 | Y | | 33°49' | ✓ | |
| | | 16 | R-Y | 11:46 | 30°55' | ✓ | |
| | | 17 | R | | 29°00' | ✓ | |
| | | 18 | Y | | 26°44' | ✓ | |
| | | 19 | R-Y | 11:49 | 24°17' | ✓ | |

CUT IN 35+00

F.B. 1296 Pg. 26 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No. X-Sec.
Survey by Blanchard Notes MACK Notes Chkd. Checked
Indexed R. C. Johnson Date 7-20-51 Date Date No.

76L298 307 4-50

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 30+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 11:03 10.03 | 30.6 29.2 29.4 | 29.7 | 4.8 | 24.9 | |
| 2 | R | | 28.0 28.6 | 28.5 | | 23.7 | |
| 3 | Y | | 27.0 27.5 | 27.5 | | 22.7 | |
| 4 | R.Y. | 11:05 10.05 | 25.9 26.3 | 26.4 | 4.9 | 21.5 | |
| 5 | R | | 24.8 25.0 | 25.3 | | 20.4 | |
| 6 | Y. | | 23.8 23.8 | 24.2 | | 19.3 | |
| 7 | R.Y. | 11:07 10.07 | 22.7 23.0 | 23.1 | 4.9 | 18.2 | |
| 8 | R. | | 21.6 22.1 | 22.1 | | 17.2 | |
| 9 | Y. | | 20.2 20.9 | 20.8 | | 15.9 | |
| 10 | R.Y | 11:09 10.09 | 19.0 19.2 | 19.6 | 4.9 | 14.7 | |
| 11 | R. | | 18.0 18.9 | 18.4 | | 13.5 | |
| 12 | Y | | 17.0 18.0 | 17.6 | | 12.7 | |
| 13 | RY | 11:11 10.11 | 16.0 16.0 | 16.7 | 4.9 | 11.8 | |
| 14 | R | | 14.9 15.9 | 15.3 | | 10.4 | |
| 15 | Y. | | 13.9 14.5 | 14.6 | | 9.7 | |
| 16 | R.Y. | 11:14 10.14 | 12.8 13.9 | 13.4 | 4.9 | 8.5 | |
| 17 | R | | 11.6 11.9 | 12.4 | | 7.5 | |
| 18 | Y. | | 10.4 10.7 | 10.9 | | 6.0 ~~5.9~~ | |
| 19 | R.Y. | 11:15 10.15 | 9.3 9.0 | 9.8 | 4.9 | 4.9 | |
| 20 | R | 11:16 10.16 | 8.0 | 8.3 | | 3.4 | |

BOAT 30+00

Profile Notes Red. Plotted Job No. 8412 Division No. V F.B. 1296 Pg. 37
No. Date Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. T.M.I. Checked Survey by F.H.B. Notes E.R.V. Date 7-20-51
No. Date 2-14-51 Date Map No. E Indexed C Johnson Date

76L298 307 4-50

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 35+00 | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| # Color | Time | Meas. Depth | Bottom | Ht. Tide | Adj. Depth | Remarks |
| | | 30.6 | | | | |
| RY | 11:27 10.27 | 29.2 29.4 | 29.7 | 5.0 | 24.7 | |
| R | | 28.2 28.2 | 28.6 | | 23.6 | |
| Y | | 26.8 27.2 | 27.3 | | 22.3 | |
| R.Y. | 11:34 10.34 | 25.8 26.3 | 26.3 | 5.0 | 21.3 | |
| R. | | 24.5 24.8 | 25.1 | | 20.1 | |
| Y. | | 23.5 23.4 | 23.9 | | 18.9 | |
| R.Y. | 11:36 10.36 | 22.4 22.8 | 22.7 | 5.0 | 17.7 | |
| R. | | 21.5 21.8 | 21.9 | | 16.9 | |
| Y. | | 20.5 21.0 | 20.9 | | 15.9 | |
| R.Y. | 11:39 10.39 | 19.5 20.2 | 20.0 | 5.1 | 14.9 | |
| R. | | 18.2 19.0 | 18.9 | | 13.8 | |
| Y. | | 16.8 17.3 | 17.5 | | 12.4 | |
| R.Y. | 11:41 10.41 | 15.8 15.8 | 16.3 | 5.1 | 11.2 | |
| R | | 14.3 14.1 | 14.8 | | 9.7 | |
| Y. | | 12.8 12.8 | 13.2 | | 8.1 | |
| R.Y. | 11:46 10.46 | 11.4 11.1 | 11.9 | 5.1 | 6.8 | |
| R. | | 10.0 10.7 | 10.4 | | 5.3 | |
| Y. | | 8.5 9.0 | 9.2 | | 4.1 | |
| R.Y. | 11:49 10.49 | 7.0 | 7.7 | 5.1 | 2.6 | |
| R. | | | | | | |

BOAT 35+00

F. B. 1296 Pg. 38 Job No. 8412 Division No. V Notes Red. LCW. Plotted ____ Profile ____
Survey of Beach Erosion Studies Date 7-20-51 Date ____ No. ____
Survey by F.H.B. Notes Vollnagle Notes Chkd. T.M.I. Checked ____ X-Sec. ____
Indexed R. C. Johnson Date ____ Date 2-17-51 Date ____ No. ____

FORM 307 5M 1-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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. | | |
|---|---|---|---|---|---|---|
| 40+00 | 93 | 187 | | 940 | 1x2 Stk, 5" dn | |
| " " | | | 89 | 98 | On Control Line, ground level | |
| | | | 61 | 126 | 17 R-E Bot Bk. | SHORE ∡ 90° |
| | | | 06 | 181 | 20 R-E, Top Bk | |
| | | | 00 | 187 | 54 R-E | |
| " " (TRANS. ON) 45+00 ∡ 2°-33' | 3.80 | 132 | | 940 | 1x2 ABOVE | |
| | | | 68 | 64 | 23 LT. (Calc 22') | |
| 4°-14' T.P. | 16 | 63 | 85 | 47 | T.P. 37 " (Calc 37') | |
| 7°-50' | | | 43 | 20 | 69' calc | WATER |
| 12°-13' | | | 70 | -07 | 108 " | OCEAN FLOOR |
| 16°-28' | | | 85 | -22 | 148 " | " |
| 23°-39' | | | 114 | -51 | 219' " | " " |
| 25°-07' | | | 118 | -55 | 234 " | " " |

13.2
4.7
4
0.5

SHORE
40+00

Profile No. ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. 9 F.B. 1116 PG. 39
Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA)
X-Sec. No. ____ Notes Chkd. [illegible] Checked ____ Survey by C.V.C. Notes C.V.C. Date 7-20-51
Date 9-17-51 Date ____ Map No. ____ Indexed [illegible] Date ____

FORM 307 5M 1-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

7.7
4.7
3.0

Do not extend notes this side of this line.

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 45+00 | 9.24 | 14.29 | | 5.05 | 1X2 ON Beach | Water |
| | | | 72 | 7[illegible] | 19' RT | Beach SHORE ∠ 90° |
| | | | 27 | 11[illegible] | 50 " | " |
| | | | 0.0 | 14[illegible] | 58' " | Bot Bank |
| | | | +5.1 | 19[illegible] | 61 " | TOP Bank S.ly edge OF 2 STORY HOUSE |
| (TRANS. ON 40+00) | 26 | 77 | | 5.5 | 1X2 ABOVE Water | |
| 0°-41' | | | 30 | 47 | 6. LT. (Calc 6') | OCEAN FLOOR |
| 4°-34' | | | 63 | 1[illegible] | 40' " Calc. | " " |
| 8°-34' | | | 86 | -0.7 | 75' " " | " " |
| 11°-16' | | | 96 | -1.9 | 100' " " | " " |
| 16°-49' | | | 114 | -3.7 | 151' " " | " " |
| 21°-42' | | | 13.5 | -5.[illegible] | 199' " " | " " |

SHORE 45+00

F.B. 1296 Pg. 40 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date Date No. X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked
Indexed C. Johnson Date 7-20-51 Date 9-12-51 Date No.

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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 | # | Color | Time | Hor. Ang. | Remarks |
| 40+00 | 45+00 | 1 | R&Y | 7 53 | 89° 42 | |
| | | 2 | R | | 89° 30 | |
| | | 3 | Y | | 89° 39 | |
| | | 4 | R&Y | 7 56 | 89° 17 | |
| | | 5 | R | | 89° 10 | |
| | | 6 | Y | | 89° 35 | |
| | | 7 | R&Y | 8:00 | 89° 04 | |
| | | 8 | R | | 89° 10 | |
| | | 9 | Y | | 89° 00 | |
| | | 10 | R&Y | 8.04 | 89° 05 | |
| | | 11 | R | | 89° 59 | |
| | | 12 | Y | | 89° 13 | |
| | | 13 | R&Y | 8 09 | 89° 49 | |
| | | 14 | R | | 89° 49 | |
| | | 15 | Y | | 90 02 | |
| | | 16 | R&Y | 8 12 | 90 31 | |
| | | 17 | R | 8 13 | 91 30 | |

RANGE
40+00

Profile
No. ____ Date ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. V ①
X-Sec. No. ____ Date ____ Notes Chkd. ____ Date ____ Survey of Beach Erosion Studies
Survey by F.H.B. Notes M.S. Date 7-23-51
Map No. ____ Date ____ Indexed ____ Date ____

F.B. 7296 Pg. 41

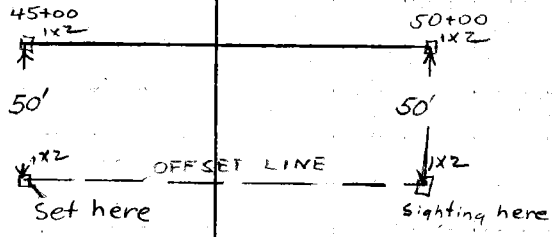
FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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 | # | Color | Time | Hor. Ang. | Remarks | |
| | | 1 | R-Y | 8:30 | 89 24 | | |
| 45+00 | 50+00 | 2 | R | | 89 01 | | |
| 50' OFF | 50' OFF | 3 | Y | | 89 27 | | |
| | | 4 | R-Y | 8 34 | 89 27 | | |
| | | 5 | R | | 89 16 | | |
| | | 6 | Y | | 89 58 | | |
| | | 7 | R-Y | 8 40 | 89 14 | | |
| | | 8 | R | | 88 54 | | |
| | | 9 | Y | | 89 34 | | |
| | | 10 | R-Y | 8 43 | 89 22 | | |
| | | 11 | R | | 89 04 | | |
| | | 12 | Y | | 89 55 | | |
| | | 13 | R-Y | 8 45 | 89 15 | | |
| | | 14 | R | | 89 03 | | |
| | | 15 | Y | | 90 08 | | |
| | | 16 | R-Y | 8 47 | 90 00 | | |




RANGE 45+00

N

F.B. 729 PG. 42 Job No. 8412 Division No. V Notes Red Plotted Profile
Survey of Beach Erosion Studies Date 7-23-51 Date No.
Survey by F.H.B Notes M.S Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date No.

76L298 307 4-50

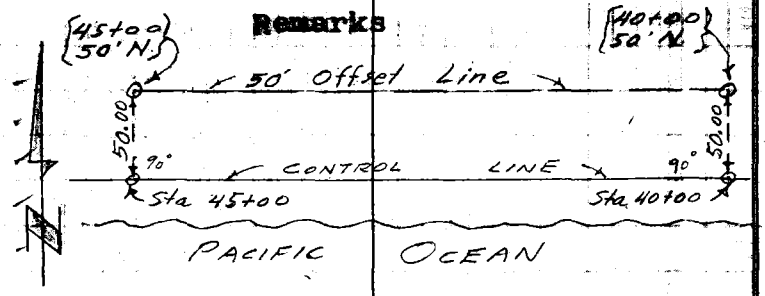
PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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. |
|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. |
| 45+00 offset 50' N | 40+00 offset 50' N | 1 | RY | 7:53 | 59°53' |
| | | 2 | R | | 58°56' |
| | | 3 | Y | | 58°21' |
| | | 4 | RY | 7:56 | 57°37' |
| | | 5 | R | | 56°53' |
| | | 6 | Y | | 55°02' |
| | | 7 | RY | 8:00 | 53°18' |
| | | 8 | R | | 52°06' |
| | | 9 | Y | | 50°42' |
| | | 10 | RY | 8:04 | 50°22' |
| | | 11 | R | | 49°39' |
| | | 12 | Y | | 49°45' |
| | | 13 | RY | 8:09 | 43°12' |
| | | 14 | R | | 42°05' |
| | | 15 | Y | | 37°50' |
| | | 16 | RY | 8:12 | 36°39' |
| | | 17 | R | 8:13 | 35°11' |

**Remarks**




CUT IN 40+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1296 Pg. 43
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by Blanchard Notes MACK Date 7-23-51
No. ____ Date ____ Date ____ Map No. ____ Date ____

76L296 307 4-50

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

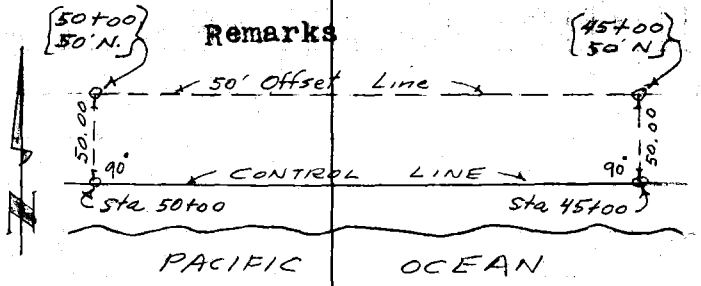
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

**Do not extend notes this side of this line.**

F.B. 1296 Pg. 44 | Job No. 8412 Division No. | Notes Red. | Plotted | Profile
Survey of Beach Erosion Studies | Date | Date | No.
Survey by Blanchard Notes MACK | Notes Chkd | Checked | X-Sec.
Indexed C. Johnson Date 7-23-57 | Date | Date | No.

| STATION | B. S. | H. I. | F. S. | ELEV. |
|---|---|---|---|---|
| Inst. Sight At On 50+00 45+00 offset 50'N offset 50'N | # | Color | Time | Hor. Ang. |
| | 1 | RY | 8:29 | 57° 50' |
| | 2 | R | | 56° 30' |
| | 3 | Y | | 55° 34' |
| | 4 | RY | 8:34 | 54° 08' |
| | 5 | R | | 50° 52' |
| | 6 | Y | | 47° 36' |
| | 7 | RY | 8:40 | 47° 27' |
| | 8 | R | | 46° 30' |
| | 9 | Y | | 43° 49' |
| | 10 | RY | 8:42 | 42° 30' |
| | 11 | R | | 41° 53' |
| | 12 | Y | | 38° 50' |
| | 13 | RY | 8:45 | 35° 43' |
| | 14 | R | | 32° 10' |
| | 15 | Y | 8:46 | 32° 48' |
| CUT 12 45+00 | | | | |

Remarks



76L298 307 4-50

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 40+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 7:53 0653 | 28.5 25.6 27.5 | 26.6 | 0.8 | 25.8 | |
| 2 | R. | | 24.6 28.0 | 25.6 | | 24.8 | |
| 3 | Y. | | 23.6 27.8 | 25.1 | | 24.3 | |
| 4 | R.Y. | 7:56 0656 | 22.6 26.6 | 24.3 | 0.8 | 23.5 | |
| 5 | R | | 21.6 23.8 | ~~22.9~~ 23.3 | | ~~22.1~~ 22.5 | |
| 6 | Y. | | 20.6 23.2 | 21.7 | | 20.9 | |
| 7 | R.Y. | 8:00 0700 | 19.6 22.6 | 20.8 | 0.8 | 20.0 | |
| 8 | R. | | 18.6 20.0 | 19.9 | | 19.1 | |
| 9 | Y. | | 17.5 20.7 | 18.3 | | 17.5 | |
| 10 | R.Y. | 8:04 0704 | 16.3 20.2 | 17.8 | 0.9 | 16.9 | |
| 11 | R. | | 15.0 20.0 | 16.7 | | 15.8 | |
| 12 | Y. | | 14.0 18.0 | 16.0 | | 15.1 | |
| 13 | R.Y. | 8:08 0708 | 13.0 18.0 | 14.7 | 0.9 | 13.8 | |
| 14 | R. | | 12.0 14.0 | 14.0 | | 13.1 | |
| 15 | Y. | | 11.0 13.8 | 12.0 | | 11.1 | |
| 16 | R.Y. | 8:13 0713 | 10.0 13.5 | 11.3 | 1.0 | 10.3 | |
| 17 | R. | 8:14 0714 | 9.0 | 10.5 | 1.0 | 9.5 | |
| 18 | Y | | | | | | |
| 19 | R.Y. | | | | | | |
| 20 | R. | | | | | | |

BOAT
40+00

Profile Notes Red LCW Plotted ____ Job No. 8412 Division No. V F. B. 1296 Pg. 45
No. ____ Date 9-5-51 Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. T.M.I. Checked ____ Survey by F.H.B. Notes E.R.V. Date 7-23-51
No. ____ Date 2-17-51 Date ____ Map No. ____ Bind Tobinson Date ____

76L298 307 4-50

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 45+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 8:29 0729 | 28.1 25.9 | 26.6 | 1.2 | 25.4 | |
| 2 | R. | | 28.2 24.4 | 25.7 | | 24.5 | |
| 3 | Y. | | 26.8 23.2 | 24.4 | | 23.2 | |
| 4 | R.Y. | 8:34 0734 | 25.0 22.0 | 23.0 | 1.3 | 21.7 | |
| 5 | R. | | 23.3 20.8 | 21.6 | | 20.3 | |
| 6 | Y. | | 21.2 19.8 | 20.3 | | 19.0 | |
| 7 | R.Y. | 8:39 0739 | 21.0 18.8 | 19.5 | 1.3 | 18.2 | |
| 8 | R. | | 21.0 17.7 | 18.8 | | 17.5 | |
| 9 | Y. | | 19.0 16.7 | 17.5 | | 16.2 | |
| 10 | R.Y. | 8:42 0742 | 18.0 13.2 | 14.8 ~~15.1~~ | 1.4 | 13.4 ~~13.7~~ | |
| 11 | R. | | 17.0 14.0 | 15.0 | | 13.6 | |
| 12 | Y | | 17.3 13.0 | 14.4 | | 13.0 | |
| 13 | R.Y. | 8:44 0744 | 15.0 12.0 | 13.0 | 1.4 | 11.6 | |
| 14 | R. | | 13.0 10.5 | 11.3 | | 9.9 | |
| 15 | Y. | | 12.0 9.0 | 10.0 | | 8.6 | |
| 16 | R.Y. | 8:47 0747 | 12.0 8.0 | 9.3 | 1.5 | 7.8 | BOAT 45+00 |
| 17 | R. | | | | | | |
| 18 | Y. | | | | | | |
| 19 | R.Y. | | | | | | |
| 20 | R. | | | | | | |

F. S. 1296 Pg. 46 Job No. 8412 Division No. V Notes Red. LAW Plotted Profile
Survey of Beach Erosion Studs Date 9-5-51 Date No.
Survey by F.H.B. Notes Vellnagle Notes Chkd. T.M.I. Checked X-Sec.
Indexed C. Johnson Date 7-23-51 Date 9-17-51 Date No.

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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. | | |
|---|---|---|---|---|---|---|
| 50+00 | 10.7 | 17.1 | | 6.36 | 1X2 ON Beach | SHORE 4.90 |
| | | | 10.2 | 6.92 | Sand | |
| | | | 7.3 | 9.82 | 25' RT. | |
| | | | 4.1 | 13.02 | 50' " 1X2 offset (12.99 PROFILE NOTES) | |
| | | | 2.1 | 15.02 | 69 " BRK. | |
| T.P. | 5.4 | 21.8 | 0.7 | 16.4 | T.P. 75' " Top BRK. | |
| | | | 4.4 | 17.4 | 91 " BRK | |
| | | | 2.2 | 19.6 | 99 " Top " | |
| | | | 3.6 | 18.2 | 112 " BRK " | |
| | | | 3.4 | 18.4 | 136 " " | |
| | | | 3.5 | 18.3 | 175 " Toe SL. | |
| (TRANS. ON 55+00) | | | 3.0 | 18.8 | 183" Edge PAV. | |
| 50+00 | 0.7 | 7.1 | | 6.36 | 1X2 ABOVE BASE LINE | |
| 4°-16' | | | 4.2 | 2.9 | TAPE 372 T. calc. | Water |
| 6°-51' | | | 5-6 | 1.5 | 600 " calc. | Ocean FLOOR |
| 9°-38' | | | 6.9 | 0.2 | 85 " calc. | " " |
| 12°-32' | | | 7.6 | -0.5 | 111 " " " | " " |
| 16°-45' | | | 9.0 | -1.9 | 150 " " " | " " |
| 26°-15' | | | 13.0 | -5.9 | 247 " " " | " " |
| | | | | | | HIGH SURF SWELLS, |

SHORE 50+00

Profile No. ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 2445 (4)
X.Sec. ____ Date ____ Date ____ Survey BEACH EROSION STUDIES (SUMA)
Notes Chkd. ____ Checked ____ Survey by C.V.C. Notes C.V.C. Date 7-23-51
Date 9-12-51 Date ____ Map No. ____ Indexed JOHNSON Date ____

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

14.4
4.7
9.7

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 55+00 | 6.9 | 195✓ | | 12.63✓ | 1X2 FL. ON Beach | |
| | | | 64 | 13.1✓ | 25' RT T.SL. | |
| | | | 47 | 12.8✓ | 40 " Top SL. | |
| | | | 44 | 15.1✓ | 94 " | Beach. |
| | | | 46 | 12.9✓ | 126 " | " |
| | | | 62 | 13✓ | 167 " | " |
| (TRANS. ON 60+00) | | | 70 | 15✓ | 200 " | " |
| 55+00 | 1.8 | 144✓ | | 12.63 | 1X2 ABOVE | |
| | | | 28 | 11.5✓ | 21 LT. | |
| | | | 78 | 6.6 | 63 " | |
| 9°-11' T.P. | 11 | 58✓ | 97 | 4.7✓ T.P | 81✓ " (Calc 81) | Water |
| 15°-12' ✓ | | | 48 | 10✓ | 136✓ Calc. | |
| 20°-18' ✓ | | | 63 | -✗5 | 185✓ " | |
| 24°-41' ✓ | | | 80 | -22✓ | 230✓ " | |
| 27°-00' ✓ | | | 88 | -[illegible]✓ | 255✓ " | |

SHORE 55+00

SEE PAGE 250

F.B. 1296 Pg. 48 12 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date Date No. X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd [illegible] Checked
Indexed [illegible] C. Johnson Date 7-23-51 Date 9-12-51 Date No.

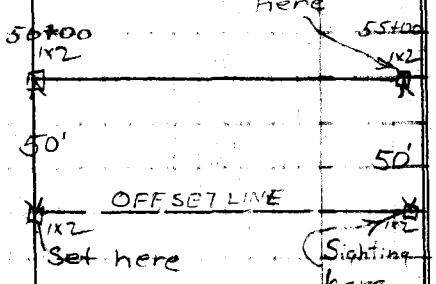
FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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 | # | Color | Time | Hor. Ang. | Remarks |
| 50+00 | 55+00 | 1 | R-Y | 8 59 | 90° 22 | Cutting In Inst. here |
| 50' OFF | 50' OFF | 2 | R | | 90° 22 | 50+00 1x2 — 55+00 1x2 |
| | | 3 | Y | | 90° 22 | |
| | | 4 | R-Y | 9 015 | 89° 37 | |
| | | 5 | R | | 89° 49 | 50' — 50' |
| | | 6 | Y | | 89° 49 | OFFSET LINE |
| | | 7 | R-Y | 9 06 | 89° 49 | 1x2 Set here — 1x2 Sighting here |
| | | 8 | R | | 90° 14 | |
| | | 9 | Y | | 89° 31 | |
| | | 10 | R-Y | 9 08 | 89° 31 | |
| | | 11 | R | | 88° 38 | |
| | | 12 | Y | | 89° 48 | |
| | | 13 | R-Y | 9 11 | 90° 53 | |
| | | 14 | R | | 89° 31 | |
| | | 15 | Y | 9 13 | 89° 38 | |



Range 50+00

Profile No. ____ Date ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. V

X-Sec. No. ____ Date ____ Notes Chkd ____ Checked ____ Survey of Beach Erosion Studies

Survey by F.H.B. Notes M.S. Date 7-23-51

Map No. ____ Indexed Johnson Date ____

F.B. 1/48 Pg. 49

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

Do not extend notes this side of this line.

F.B. 4296 PG. 50 | Job No. 8412 Division No. V | Notes Red | Plotted | Profile
Survey of Beach Erosion Studies | Date 7-23-51 | Date | No.
Survey by F.H.B. | Notes MS | Notes Chkd | Checked | X-Sec.
Indexed R. C. Johnson | Date | Date | Date | No.

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| Inst. At / Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 55+00 60+00 | 1 | R-Y | 9:30 | 90 46 | | |
| | 2 | R | | 91 09 | | |
| | 3 | Y | | 90 32 | | |
| | 4 | R-Y | 9 32 | 90 32 | | |
| | 5 | R | | 90 44 | | |
| | 6 | Y | | 90 18 | | |
| | 7 | R-Y | 9 36 | 89 59 | | |
| | 8 | R | | 90 30 | | |
| | 9 | Y | | 91 22 | | |
| | 10 | R-Y | 9:38 | 91 15 | | |
| | 11 | R | | 90 45 | | |
| | 12 | Y | | 90 09 | | |
| | 13 | R-Y | 9 42 | 90 28 | | |
| RANGE 55+00 | | | | | | |

76L298 307 4-50

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.

Profile No. _____ Notes Red. _____ Date _____ Plotted _____ Date _____ Job No. 8412 Division No. _____ Survey of Beach Erosion Studies Survey by Blanchard Notes Mack Date 7-23-51 Map No. _____ Index Johnson Date _____

X-Sec. No. _____ Notes Chkd. _____ Date _____ Checked _____ Date _____

F. B. 1296 PG. 51

| STATION | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | | Remarks |
| 55+00 | 50+00 | 1 | RY | 8:59 | 52°23' | - | |
| | | 2 | R | | 51°53' | - | |
| | | 3 | Y | | 51°12' | - | |
| | | 4 | RY | 9:01 | 50°57' | - | |
| | | 5 | R | | 47°52' | - | |
| | | 6 | Y | | 45°32' | - | |
| | | 7 | RY | 9:05 | 43°18' | - | |
| | | 8 | R | | 41°27' | - | |
| | | 9 | Y | | 39°25' | - | |
| | | 10 | RY | 9:08 | 39°25' | - | |
| | | 11 | R | | 36°09' | - | |
| | | 12 | Y | | 35°21' | - | |
| | | 13 | RY | 9:11 | 33°15' | - | |
| | | 14 | R | | 31°56' | - | |
| | | 15 | Y | 9:14 | 27°27' | - | |

CUT IN
56+00

76L298 307 4-50

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.**

F. B. 1296 Pg. 52 Job No. 8412 Division No. Notes Red. Plotted. Profile
Survey of Beach Erosion Studies Date Date No.
Survey by Blanchard Notes MACK Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date 7-23-51 Date Date No.

| STATION | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | | Remarks |
| 60+00 | 55+00 | 1 | RY | 9:29 | 54°37 | - | |
| | | 2 | R | | 53°19 | - | |
| | | 3 | Y | | 52°31 | - | |
| | | 4 | RY | 9:32 | 51°43 | - | |
| | | 5 | R | | 50°21 | - | |
| | | 6 | Y | | 48°56 | - | |
| | | 7 | RY | 9:36 | 47°51 | - | |
| | | 8 | R | | 45°49 | - | |
| | | 9 | Y | | 44°03 | - | |
| | | 10 | RY | 9:38 | 43°40 | - | |
| | | 11 | R | | 40°48 | - | |
| | | 12 | Y | | 37°24 | - | |
| | | 13 | RY | 9:42 | 35°36 | - | |

CUT 1 2
55+00

76L298 307 4-50

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 50+00

| # | Color | Time | B. S. | H. I. | F. S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks | |
| | | | | 27.5 | | | | | |
| 1 | R.Y. | 8:58 | | 25.9 | 26.4 | 1.6 | 24.8 | | |
| | | 0758 | | 26.0 | | | | | |
| 2 | R. | | | 24.9 | 25.3 | | 23.7 | | |
| | | | | 25.9 | | | | | |
| 3 | Y. | | | 23.9 | 24.6 | | 23.0 | | |
| | | | | 25.7 | 23.8 | | 22.1 | | |
| 4 | R.Y. | 9:01 | | 22.9 | ~~23.9~~ | 1.7 | ~~22.2~~ | | |
| | | 0801 | | 24.0 | | | | | |
| 5 | R. | | | 21.5 | 22.3 | | 20.6 | | |
| | | | | 22.2 | | | | | |
| 6 | Y. | | | 20.5 | 21.1 | | 19.4 | | |
| | | | | 21.2 | | | | | |
| 7 | R.Y. | 9:05 | | 19.5 | 20.1 | 1.8 | 18.3 | | |
| | | 0805 | | 20.5 | | | | | |
| 8 | R. | | | 18.0 | 18.8 | | 17.0 | | |
| | | | | 19.4 | | | | | |
| 9 | Y. | | | 16.8 | 17.7 | | 15.9 | | |
| | | | | 20.0 | | | | | |
| 10 | R.Y. | 9:08 | | 15.0 | 16.7 | 1.8 | 14.9 | | |
| | | 0808 | | 17.5 | | | | | |
| 11 | R. | | | 14.0 | 15.2 | | 13.4 | | |
| | | | | 16.2 | | | | | |
| 12 | Y. | | | 13.0 | 14.1 | | 12.3 | | |
| | | | | 15.5 | | | | | |
| 13 | R.Y. | 9:10 | | 11.5 | 12.8 | 1.9 | 10.9 | | |
| | | 0810 | | 12.5 | | | | | |
| 14 | R. | | | 10.5 | 11.2 | | 9.3 | | |
| | | | | 10.8 | | | | | |
| 15 | Y | 9:14 | | 7.5 | 8.6 | 1.9 | 6.7 | | |
| | | 0814 | | | | | | | |
| 16 | R.Y. | | | | | | | | |
| 17 | R. | | | | | | | | |
| 18 | Y | | | | | | | | |
| 19 | R.Y. | | | | | | | | |
| 20 | R. | | | | | | | | |

Boat
0700

Profile No. ____ Notes Red. LGW Plotted ____ Job No. 8412 Division No. ____ F. B. 1298 PG. 53
Date 8-5-51 Date ____ Survey of Beach Erosion Studies
X-Sec. No. ____ Notes Chkd. TM.L. Checked ____ Survey by F.H.B. Notes F.R.K. Date 7-23-51
Date 9-17-51 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 4-50

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 55+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Ht. Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 9:29 0829 | 28.9 26.5 | 27.3 | 2.1 | 25.2 | |
| 2 | R | | 28.5 25.5 | 26.5 | | 24.4 | |
| 3 | Y. | | 26.5 24.3 | 25.0 | | 22.9 | |
| 4 | R.Y. | 9:31 0831 | 25.5 23.3 | 24.0 | 2.1 | 21.9 | |
| 5 | R. | | 23.8 21.8 | 22.5 | | 20.4 | |
| 6 | Y. | | 23.0 20.8 | 21.5 | | 19.4 | |
| 7 | R.Y. | 9:35 0835 | 21.7 19.3 | 20.1 | 2.2 | 17.9 | |
| 8 | R. | | 20.0 18.2 | 18.8 | | 16.6 | |
| 9 | Y. | | 21.0 16.9 | 18.3 ~~[illegible]~~ | | 15.1 ~~[illegible]~~ | |
| 10 | R.Y. | 9:38 0838 | 20.0 15.9 | 17.3 ~~[illegible]~~ | 2.2 | 15.1 ~~[illegible]~~ | |
| 11 | R | | 16.5 14.0 | 14.8 | | 12.6 | |
| 12 | Y. | | 17.8 12.0 | 13.9 | | 11.7 | |
| 13 | R.Y | 9:42 0842 | 15.0 10.2 | [illegible] | 2.3 | 9.5 | |
| 14 | R. | | | | | | |
| 15 | Y | | | | | | |
| 16 | R.Y. | | | | | | |
| 17 | R. | | | | | | |
| 18 | Y. | | | | | | |
| 19 | R.Y. | | | | | | |
| 20 | R | | | | | | |

BOAT 55+00

F. B. 1296 Pg. 54 Job No. 8412 Division No. V Notes Red. RCW Plotted ____ Profile ____
Survey of Beach Erosion Studies Date 9-5-51 Date ____ No. ____
Survey by F.H.B. Notes Vollmogle Notes Chkd. T.M.I. Checked ____ X-Sec. ____
Indexed R. C. Johnston Date 7-23-51 Date 9-17-51 Date ____ No. ____

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

7.5
4
2.8

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 60+00 | 4.9 | 17.3 | | 12.41 | 1 X 2 6" DN. | |
| " " | | | 4.6 | 12.7 | Sand | |
| | | | 5.5 | 11.8 | 30' RT. | Beach |
| | | | 6.3 | 11.0 | 78' " | " |
| | | | 7.1 | 10.2 | 161 | " |
| | | | 8.1 | 9.2 | 200' " | " |
| | | | 4.1 | 13.2 | 32 LT | |
| | | | 4.8 | 12.5 | 55 " | |
| (TRANS. ON 65+00) | | | 6.6 | 10.7 | 69 " | |
| 10°-28' T.P. | 0.8 | 7.5 | 10.6 | 6.7 T.P. | TAPE 92 " (Calc 92') | |
| 12°-35' | | | 2.8 | 4.7 | 112' " (Calc 112) | Water |
| 15°-51' | | | 5.2 | 2.3 | 142' " Calc. | ocean FLOOR |
| 19°-07' | | | 7.2 | 0.3 | 173' " " | " " |
| 22°-31' | | | 8.0 | -0.5 | 207' " " | " |
| 27°-15' | ? | | 9.5 | -2.0 | 257' " | " |
| 27°-53' | ? | | 9.8 | -2.3 | 265' | " |

SHORE
60+00

SEE PAGE 250

Profile No. ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. ____ 13 Page 1206 Pg. 55
Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA)
X-Sec. No. ____ Notes Chkd. [illegible] Checked ____ Survey by F.V.C. Notes C.V.C. Date 7-23-51
Date 9-12-51 Date ____ Map No. ____ Indexed ____ Date ____

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

16.0
4.7
17.3

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 65+00 | 32 | 160 | | 12[illegible] | 1X2 FLush on Beach | |
| | | | 54 | 10[illegible] | 50' RT. Beach | |
| | | | 70 | [illegible] | 100' " " | |
| | | | 78 | 8[illegible] | 153 " | |
| (TRANS. ON 70+00) | | | 70 | [illegible] | 200 " | |
| 2°-45' | | | 28 | 13[illegible] | TAPE 24' LT (calc. 24') | |
| 4°-54' | | | 50 | [illegible] | 43' " / calc 43') | |
| 6°-58' | | | 75 | 8[illegible] | 61' " (calc 61') | Water |
| 10°-53' T.P. | 24 | 71 | 113 | 4[illegible] T.P. | 97 ("Calc. 96') | ocean FLOOR |
| 14°-40' | | | 51 | 2[illegible] | 131 calc. | " " |
| 17°-27' | | | 67 | [illegible] | 157 " | |
| 21°-16' | | | 77 | [illegible] | 195 " | |
| 33°-49' | | | 128 | -5[illegible] | 335 | |
| 31-05' | | | 112 | -4[illegible] | 301 " | |

SHORE
65+00
SEE PAGE 251

F.B. 1296 PG. 56 14
Job No. 8412 Division No. 1 Notes Red. Plotted
Survey of BEACH EROSION STUDIES (ZUMA) Date Date No.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date 7-23-51 Date 9-12-51 Date No.
Profile

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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 | # | Color | Time | Hor. Ang. | Remarks |
| 60+00 | 55+00 | 1 | R-Y | 9:59 | 89°22 | |
| | | 2 | R | | 90°40 | |
| | | 3 | Y | | 90°10 | |
| | | 4 | R-Y | 10 02⁵ | 90°04 | |
| | | 5 | R | | 89°51 | |
| | | 6 | Y | | 89°59 | |
| | | 7 | R-Y | 10 04 | 89°56 | |
| | | 8 | R | | 89°45 | |
| | | 9 | Y | | 90°09 | |
| | | 10 | R-Y | 10 07⁵ | 90 19 | |
| | | 11 | R | | 90°09 | |
| | | 12 | Y | | 89°50 | |
| | | 13 | R-Y | 10 09 | 90°04 | |
| | | 14 | R | | 90°14 | |
| | | 15 | Y | | 90°31 | |
| | | 16 | R-Y | 10 10 | 92°52 | |

RANGE 60+00

Profile
No. ____ Date ____ Notes Red. ____ Date ____ Plotted ____ Date ____ Job No. 8412 Division No. V (5) Survey of Beach Erosion Studies
X-Sec. No. ____ Date ____ Notes Chkd. ____ Date ____ Checked ____ Date ____ Survey by E.H.B. Notes MS Date 7-23-51
Map No. ____ Indexed ____ Date ____ C. Johnson

F.B. 2296 Pg. 57

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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 | # | Color | Time | Hor. Ang. | Remarks | |
| 65+00 | 60+00 | 1 | R-Y | 10:29 | 89°30 | . | |
| | | 2 | R | | 89°46 | . | |
| | | 3 | Y | | 89°35 | . | |
| | | 4 | R-Y | 10:32 | 89°59 | . | |
| | | 5 | R | | 89°59 | . | |
| | | 6 | Y | | 90°13 | . | |
| | | 7 | R-Y | 10 33 5 | 90°37 | . | |
| | | 8 | R | | 91°15 | . | |
| | | 9 | Y | | 89°52 | . | |
| | | 10 | R-Y | 10 36 | 90°23 | . | |
| | | 11 | R | | 89°33 | . | |
| | | 12 | Y | | 90°00 | . | |
| | | 13 | R-Y | 10 38 5 | 90°00 | . | |
| | | 14 | R | | 89°36 | . | |
| | | 15 | Y | 10 43 | 92°35 | . | |

RANGE
65+00

F.B. 429 PG. 58 Job No. 8412 Division No. V Notes Red. Plotted No. Profile
Survey of Beach Erosion Studies Date 7-23-51 Date X-Sec.
Survey by F.H.B. Notes M.S. Notes Chkd. Checked No.
Indexed C. Johnson Date Date Date

76L298 307 4-50

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 | | S. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 55+00 | 60+00 | 1 | RY | 9:59 | 56°01' | | |
| | | 2 | R | | 54°26' | | |
| | | 3 | Y | | 54°03' | | |
| | | 4 | RY | 10:02 | 52°51' | | |
| | | 5 | R | | 52°12' | | |
| | | 6 | Y | | 51°08' | | |
| | | 7 | RY | 10:03 | 50°04' | | |
| | | 8 | R | | 48°49' | | |
| | | 9 | Y | | 46°58' | | |
| | | 10 | RY | 10:07 | 44°33' | | |
| | | 11 | R | | 42°56' | | |
| | | 12 | Y | | 40°32' | | |
| | | 13 | RY | 10:08 | 39°00' | | |
| | | 14 | R | | 37°47' | | |
| | | 15 | Y | | 35°26' | | |
| | | 16 | RY | 10:10 | 33°07' | | |

CUT IN 60+00

Profile Notes Red ____ Plotted ____ Job No. 8412 Division No. ____ F.S. 1201 To 59
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
Notes Chkd. ____ Checked ____ Survey by Blanchard Notes MACK Date 7-23-56
No. ____ Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 4-50

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.

F.B. 1296 Pg. 80 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey for Beach Erosion Studies Date Date No.
Survey by Blanchard Notes MACK Notes Child Checked X-Sec.
Indexed C. Johnson Date 7-23-51 Date Date No.

| STATION | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight Pt. | On | # | Color | Time | Hor. Ang. | Remarks | |
| 60+00 | 65+00 | 1 | RY | 10:28 | 55° 14' | | |
| | | 2 | R | | 52° 45' | | |
| | | 3 | Y | | 52° 25' | | |
| | | 4 | RY | 10:32 | 51° 25' | | |
| | | 5 | R | | 50° 29' | | |
| | | 6 | Y | | 49° 45' | | |
| | | 7 | RY | 10:33 | 48° 47' | | |
| | | 8 | R | | 47° 50' | | |
| | | 9 | Y | | 45° 26' | | |
| | | 10 | RY | 10:35 | 45° 00' | | |
| | | 11 | R | | 43° 04' | | |
| | | 12 | Y | | 39° 36' | | |
| | | 13 | RY | 10:38 | 37° 43' | | |
| | | 14 | R | | 35° 09' | | |
| | | 15 | Y | 10:43 | 33° 34' | | |
| CUT IN 65+00 | | | | | | | |

76L298 307 4-50

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, GIVE DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION 60+00

| # | Color | B. S. Time | H. I. Depth | F. S. Bottom | ELEV. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 29.0 | | | | |
| 1 | R.Y. | 9:58 0858 | 26.5 | 27.3 | 2.6 | 24.7 | |
| | | | 27.1 | | | | |
| 2 | R. | | 25.5 | 26.0 | | 23.4 | |
| | | | 26.6 | | | | |
| 3 | Y. | | 24.3 | 25.1 | | 22.5 | |
| | | | 24.3 | | | | |
| 4 | R.Y. | 10:02 0902 | 23.0 | 23.4 | 2.6 | 20.8 | |
| | | | 24.5 | | | | |
| 5 | R. | | 22.0 | 22.8 | | 20.2 | |
| | | | 23.5 | | | | |
| 6 | Y. | | 20.5 | 21.5 | | 18.9 | |
| | | | 22.0 | | | | |
| 7 | R.Y. | 10:03 0903 | 19.5 | 20.3 | 2.6 | 17.7 | |
| | | | 20.3 | | | | |
| 8 | R. | | 18.5 | 19.1 | | 16.5 | |
| | | | 19.0 | | | | |
| 9 | Y. | | 17.3 | 17.9 | | 15.3 | |
| | | | 19.0 | | | | |
| 10 | R.Y. | 10:07 0907 | 15.8 | 16.9 | 2.6 | 14.3 | |
| | | | 17.0 | | | | |
| 11 | R. | | 14.2 | 15.1 | | 12.5 | |
| | | | 14.3 | | | | |
| 12 | Y. | | 12.7 | 13.2 | | 10.6 | |
| | | | 12.8 | | | | |
| 13 | R.Y. | 10:08 0908 | 11.2 | 11.7 | 2.7 | 9.0 | |
| | | | 12.1 | | | | |
| 14 | R. | | 10.1 | 10.8 | | 8.1 | |
| | | | 10.5 | | | | |
| 15 | Y. | | 8.7 | 9.3 | | 6.6 | |
| | | | 9.9 | | | | |
| 16 | R.Y. | 10:09 0909 | 6.3 | 7.5 | 2.7 | 4.8 | |
| 17 | R. | | | | | | |
| 18 | Y. | | | | | | |
| 19 | R.Y. | | | | | | |
| 20 | R. | | | | | | |

BOAT
60+00

Profile No. ____ Date 2-5-61 Notes Red. KWK Plotted ____ Job No. 2412 Division No. 1 F.B. 4298 Page 1
X-Sec. No. ____ Notes Chkd. TMJ Date ____ Checked ____ Survey of Beach Erosion Study
Date 2-17-61 Date ____ Map No. ____ Survey by F.K.B. Notes F.R.Johnson Date 2-13-61
Indexed Johnson Date ____

F. B. 1296 Pg. 62 | Job No. 8412 Division No. V Notes Red. RWC Plotted | Profile No.
Survey of Beach & Erosion Study Date 7-23-51 | X-Sec. No.
Survey by E.H.B. Notes Vallnagle Checked T.M.L. | Indexed L. C. Johnson Date 2-14-51 Date

76L298 307 4-50

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 1+00 | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| # | Color | Time | Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | R.Y | 10:27 0927 | 29.5 27.3 27.1 | 28.0 | 3.2 | 24.8 | |
| 2 | R. | | 25.8 25.9 | 26.2 | | 23.0 | |
| 3 | Y. | | 24.8 25.3 | 25.2 | | 22.0 | |
| 4 | R.Y. | 10:31 0931 | 23.5 24.2 | 24.2 | 3.2 | 21.0 | |
| 5 | R. | | 22.0 23.0 | 22.7 | | 19.5 | |
| 6 | Y. | | 21.0 22.0 | 21.7 | | 18.5 | |
| 7 | R.Y. | 10:33 0933 | 19.7 20.5 | 20.5 | 3.2 | 17.3 | |
| 8 | R. | | 18.7 19.5 | 19.3 | | 16.1 | |
| 9 | Y. | | 17.5 17.9 | 18.2 18.1 | | 15.0 14.9 | |
| 10 | R.Y. | 10:35 0935 | 16.0 17.5 | 16.6 | 3.3 | 13.3 | |
| 11 | R. | | 14.7 15.0 | 15.6 | | 12.3 | |
| 12 | Y. | | 13.5 16.0 | 14.7 | | 11.4 | |
| 13 | R.Y. | 10:38 0938 | 10.8 10.8 | 12.8 | 3.3 | 9.5 | |
| 14 | R. | | 9.5 10.4 | 10.9 | | 7.6 | |
| 15 | Y | 10:42 0942 | 7.8 | 8.7 | 3.4 | 5.3 | BOAT 65+00 |
| 16 | R.Y | | | | | | |
| 17 | R. | | | | | | |
| 18 | Y | | | | | | |
| 19 | R.Y. | | | | | | |
| 20 | R | | | | | | |

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| 70+00 | 20 | 14.4 ~~16.4~~ | | 12.4 ~~14.4~~ | VKR ON Beach. | |
| " | | | 15 | 14.9 | " Sand | |
| | | | 16 | 14.8 | 49 RT. | Beach. |
| (TRANSIT ON 75+00) | | | 17 | 14.7 | 80 " | BRK. |
| | | | 18 | 15.2 | 100 " | TOES. |
| 1°-42' | | | 15 | 14.9 | 14' LT (15' calc) | |
| | | | 42 | 15.2 | 36 " | |
| | | | 64 | ~~15.0~~ | 65 " | |
| 8°-38' T.P. | 37 | 11.5 | 86 | 7.8 T.P. | 76 " | Water. |
| 12°-05' | | | 68 | 4.7 | 107 " | |
| 14°-35' | | | 82 | 3.3 | 130 " | |
| 17-13' | | | 83 | 3.2 | 155 " | |
| 20°-15' | | | 102 | -0.7 ~~1.3~~ | 184 " | |
| 22°-50' | | | 98 | -0.3 | 211 " | |
| 22-30 | | | 99 | -0.4 ~~1.0~~ | 207 " | |
| TRAN. ON 65+00 T.P. | 29 | 17.3 | | 14.4 T.P. N.V. | | |
| * 11°-09' T.P. | 15 | 7.3 | 115 | 5.8 T.P. | 99' LT. (Calc. 98.6) | Water ocean FLOOR |
| 14°-05' | | | 48 | 2.5 | 125.5 calc. | |
| 18°-21' | | | 42 | 3.1 | 166 calc. | |
| 22°-15' | | | 52 | -0.1 | 206.6 calc. | |
| 26°-07' | | | 65 | -0.4 | 245 " | |
| 30°-49' | | | 83 | -1.0 | 298 " | |
| 33°-36' | | | 105 | -1.2 | 332 " | |
| 35°-37' | | | 115 | -1.2 | 356 " | |

Public Notes Bed Plotted Job No. 6A2-0-0-0-0-0 Sheet No. 1
No. Date Date Date Survey BEACH EROSION STUDIES
Name Chief Party Survey Party VAC Chief of Party J. C. Johnson Date
No. Date Map No. Tracing Date

70+00

SITE

32+/- TO 75+00

76L298 307 4-50

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.

16.8
47
121

Do not extend notes this side of this line.

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 75+00 | 47 | 16.8 | | 12 08 | 1X2 ON Beach | |
| " | | | 42 | 12 6 | Sand | |
| | | | 36 | 13 2 | 12' RT | Beach |
| | | | 32 | 13 6 | 49' " | |
| | | | 18 | 15 0 | 77 " | |
| | | | 07 | 16 1 | 100 " | |
| | | | 05 | 16 3 | 124 " | |
| | | | 45 | 12 3 | 18' LT | |
| | | | 42 | 12 6 | 40 " | Top |
| TRANS. ON | | | 70 | 9 8 | 60 " | |
| 70+00 | | | 90 | 7 8 | 82 " | |
| 12°-42' T.P. | 01 | 48 | 121 | 4 7 | T.P. 112 (Calc 112.7) | Water |
| 16°-03' | | | 22 | 2 6 | 144' Calc. | ocean FLOOR |
| 19°-42' | | | 36 | 1 2 | 179 Calc. | " " |
| 24°-47' | | | 39 | X 9 | 231' Calc. | " " |
| 28°-34' | | | 52 | -0 4 | 272' " | " " |
| 33°-35' | | | 75 | -2 7 | 332' " | " " |
| 38°-07' | | | 113 | -6 5 | 392' " | " " |

SHORE
75+00
SEE PAGE 252

F.S. 1296 Pg. 621 16 Job No. 8212 Division No. Notes Red Plotted Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date Date No. X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. [illegible] Checked
Indexed C. Johnson Date 7-24-51 Date 9-18-51 Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 70+00 | 65+00 | 1 | R-Y | 10 59 | 90 14 | , | |
| | | 2 | R | | 90 03 | , | |
| | | 3 | Y | | 89 48 | , | |
| | | 4 | R-Y | 11 02 | 89 18 | , | |
| | | 5 | R | | 89 34 | , | |
| | | 6 | Y | | 89 41 | , | |
| | | 7 | R-Y | 11 05 | 89 19 | , | |
| | | 8 | R | | 89 30 | , | |
| | | 9 | Y | | 89 12 | , | |
| | | 10 | R-Y | 11 08 | 89 40 | , | |
| | | 11 | R | | 89 53 | , | |
| | | 12 | Y | | 89 31 | , | |
| | | 13 | R-Y | 11 10 | 90 39 | , | |
| | | 14 | R | | 89 28 | , | |
| | | 15 | Y | | 90 34 | , | |
| | | 16 | R-Y | 11 15 | 90 45 | , | |
| | | 17 | R | 11:17 | 92 06 | , | |

RANGE
70+00

Profile Notes Red. ____ Plotted ____ (7) Job No. 8412 Division No. V F. B. 1296 Pg. 65
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by FHB Notes M.S. Date 7-23-51
No. ____ Date ____ Date ____ Map No. A Indexed Johnson Date ____

76L298 307 4-50

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 Inst. At | STATION Sight On | B. S. # | H. I. Color | F. S. Time | ELEV. Hor. Ang. | Remarks |
|---|---|---|---|---|---|---|
| 75+00 | 70+00 | 1 | R-Y | 7 06 | 90 03 | |
| | | 2 | R | | 90 03 | |
| | | 3 | Y | | 90 03 | |
| | | 4 | R-Y | 7 08 | 90°37 | |
| | | 5 | R | | 89 51 | |
| | | 6 | Y | | 90°30 | |
| | | 7 | R-Y | 7 11 | 89 58 | |
| | | 8 | R | | 90°18 | |
| | | 9 | Y | | 90°00 | |
| | | 10 | R-Y | 7 15 | 89 42 | |
| | | 11 | R | | 89°38 | |
| | | 12 | Y | | 89 45 | |
| | | 13 | R-Y | 7 18 | 89 45 | |
| | | 14 | R | | 90 02 | |
| | | 15 | Y | | 89 31 | |
| | | 16 | R-Y | 7 25 | 89 45 | |

RANGE 75+00

F. B. 1296 Pg. 66 Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-24-51 Date No.
Survey by F.H.B. Notes M.S. Notes Chkd. Checked X-Sec.
Indexed R. C. Johnson Date Date Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 65+00 | 70+00 | 1 | RY | 10:59 | 53°59' | | |
| | | 2 | R | | 53°40' | | |
| | | 3 | Y | | 53°18' | | |
| | | 4 | RY | 11:02 | 52°02' | | |
| | | 5 | R | | 51°03' | | |
| | | 6 | Y | | 48°22' | | |
| | | 7 | RY | 11:04 | 47°09' | | |
| | | 8 | R | | 46°09' | | |
| | | 9 | Y | | 45°15' | | |
| | | 10 | RY | 11:08 | 44°01' | | |
| | | 11 | R | | 42°15' | | |
| | | 12 | Y | | 40°52' | | |
| | | 13 | RY | 11:10 | 39°13' | | |
| | | 14 | R | | 38°13' | | |
| | | 15 | Y | | 37°25' | | |
| | | 16 | RY | 11:15 | 33°59' | | |
| | | 17 | R | 11:16 | 29°11' | | |

Cut in 70+00

Profile Notes Red. _____ Plotted _____ Job No. 8412 Division No. _____ F. B. 1296 No. 67
No. _____ Date _____ Date _____ Survey of Beach Erosion Studies
Misc. Notes Chkd. _____ Checked _____ Survey by Blanchard Notes MACK Date 7-23-51
No. _____ Date _____ Date _____ Map No. _____ Indexed Johnson Date _____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 70+00 | 75+00 | 1 | RY | 7.05 | 55°34' | | |
| | | 2 | R | | 55°07' | | |
| | | 3 | Y | | 54°20' | | |
| | | 4 | RY | 7.08 | 53°10' | | |
| | | 5 | R | | 53°08' | | |
| | | 6 | Y | | 51°20' | | |
| | | 7 | RY | 7.10 | 50°47' | | |
| | | 8 | R | | 49°39' | | |
| | | 9 | Y | | 47°10' | | |
| | | 10 | RY | 7.15 | 45°59' | | |
| | | 11 | R | | 45°28' | | |
| | | 12 | Y | | 44°01' | | |
| | | 13 | RY | 7.19 | 42°56' | | |
| | | 14 | R | | 41°38' | | |
| | | 15 | Y | | 39°10' | | |
| | | 16 | RY | 7.25 | 37°05' | | |

CUT IN 75+00

F. B. 1296 Pg. 68 Job No. 8412 Division No. Notes Red. Date Plotted Date No. Profile
Survey of Beach Erosion Studies Notes Chkd. Date Checked Date No. X-Sec.
Survey by E.H.B. Notes CBS Date 7-24-51
Indexed C. Johnson

76L298 307 4-50

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 70+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 10:58 0958 | 29.5 28.0 | 28.5 | 3.8 | 24.7 | |
| 2 | R. | | 29.2 26.7 | 27.5 | | 23.7 | |
| 3 | Y. | | 27.0 25.3 | 25.9 | | 22.1 | |
| 4 | R.Y. | 11:01 10.01 | 26.0 24.0 | 24.7 | 3.8 | 20.9 | |
| 5 | R. | | 24.4 22.5 | 23.1 | | 19.3 | |
| 6 | Y. | | 23.2 21.0 | 21.7 | | 17.9 | |
| 7 | R.Y. | 11:04 10.04 | 22.0 19.8 | 20.5 | 3.9 | 16.6 | |
| 8 | R. | | 20.7 18.5 | 19.2 | | 15.3 | |
| 9 | Y. | | 19.9 17.3 | 18.2 | | 14.3 | |
| 10 | R.Y. | 11:07 10.07 | 18.5 16.0 | 16.8 | 3.9 | 12.9 | |
| 11 | R. | | 17.1 15.0 | 15.7 | | 11.8 | |
| 12 | Y. | | 15.9 13.6 | 14.4 | | 10.5 | |
| 13 | R.Y. | 11:09 10.09 | 14.8 12.4 | 13.2 | 4.0 | 9.2 | |
| 14 | R. | | 13.5 11.0 | 11.8 | | 7.8 | |
| 15 | Y. | | 12.8 9.8 | 10.8 | | 6.8 | |
| 16 | R.Y. | 11:14 10.14 | 10.3 8.3 | 9.0 | 4.0 | 5.0 | |
| 17 | R. | 11:16 10.16 | 10.3 6.0 | ~~7.2~~ 7.4 | 4.0 | ~~3.2~~ 3.4 | |
| 18 | Y. | | | | | | |
| 19 | R.Y. | | | | | | |
| 20 | R. | | | | | | |

BOAT
70+00

Profile Notes Red Rout Plotted Job No. 8412 Division No. V F. B. 1296 Pg. 69
No. Date 9-5-51 Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd TMI Checked Survey by E.H.B. Notes E.R.K. Date 7-23-51
No. Date 9-17-51 Date Map No. Indexed Johnson Date

76L298 307 4-50

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.**

F. B. 1296 Pg. 70 Job No. 8412 Division No. V Notes Red. LCW Plotted ____ Profile ____ No. ____
Survey of Beach Erosion Study Date 7-24-51 Date ____ X-Sec. ____ No. ____
Survey by E.H.B. Notes Vallnagle Notes Chkd. T.M.L. Checked ____
Indexed C. Johnson Date ____ Date 2-17-51

| STATION 75+00 # | Color | Time | B. S. | H. I. Meas. Depth | F. S. Bottom | ELEV. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | R.Y. | 7:06 0606 | | 28.0 26.3 27.0 | 26.9 | 1.8 | 25.1 | |
| 2 | R. | | | 24.7 26.0 | 25.5 | | 23.7 | |
| 3 | Y. | | | 23.3 24.5 | 24.2 | | 22.4 | |
| 4 | R.Y. | 7:08 0608 | | 22.3 22.8 | 23.0 | 1.8 | 21.2 | |
| 5 | R. | | | 20.7 21.2 | 21.4 | | 19.6 | |
| 6 | Y. | | | 19.2 20.3 | 19.9 | | 18.1 | |
| 7 | R.Y. | 7:11 0611 | | 18.0 18.5 | 18.8 | 1.8 | 17.0 | |
| 8 | R. | | | 16.2 16.7 | 17.0 | | 15.2 | |
| 9 | Y. | | | 14.3 15.1 | 15.1 | | 13.3 | |
| 10 | R.Y. | 7:15 0615 | | 13.1 14.1 | 13.8 | 1.7 | 12.1 | |
| 11 | R. | | | 12.1 13.1 | 12.8 | | 11.1 | |
| 12 | Y. | | | 11.1 12.0 | 11.8 | | 10.1 | |
| 13 | R.Y. | 7:19 0619 | | 10.0 11.8 | 10.7 | 1.7 | 9.0 | |
| 14 | R. | | | 9.0 9.0 | 9.9 | | 8.2 | |
| 15 | Y. | | | 7.5 7.5 | 8.0 | | 6.3 | |
| 16 | R.Y. | 7:25 0625 | | 5.5 | 6.2 | 1.7 | 4.5 | BOAT 75+00 |
| 17 | R. | | | | | | | |
| 18 | Y. | | | | | | | |
| 19 | R.Y. | | | | | | | |
| 20 | R. | | | | | | | |

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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. | | |
|---|---|---|---|---|---|---|
| 80+00 | 5.1 | 17.1 | | 12.02 | 1x2 ON Beach | |
| | | | 4.7 | 12.4 | Sand | |
| | | | 3.2 | 13.9 | 44 RT. | |
| | | | 2.9 | 14.2 | 74' " | |
| | | | 1.1 | 16.0 | 100' " | |
| | | | +1.0 | 18.1 | 112' | |
| | | | 4.2 | 12.9 | 36 LT. | |
| | | | 4.0 | 13.1 | 73 TOP | SL |
| (TRAN. ON 75+00) | | | 8.3 | 8.8 | 100' " | " |
| 15°-03' T.P. | 0.6 | 5.7 | 12.0 | 5.1 | T.P. 135 TAPE " (Calc 134.5') | |
| 18°-16' | | | 3.0 | 2.7 | 165' Calc. Water | |
| 21°-54' | | | 3.9 | 1.8 | 201' Calc. | ocean FLOOR |
| 24°-07' | | | 4.8 | 0.9 | 224' " | " " |
| 27°-06' | | | 4.6 | 1.1 | 256' " | |
| 29°-57' | | | 5.1 | 0.6 | 288' " | |
| 32°-33' | | | 5.8 | -0.1 | 319' " | |
| 33°-45' | | | 6.3 | -0.6 | 334' " | |
| 36°-19' | | | 7.6 | -1.9 | 368' | |
| | | | ~~13.5~~ | ~~-7.8~~ | | |
| 44°-10' | | | 13.0 | -7.3 | 486' | |
| 41°-58' | | | 11.2 | -5.5 | 450' | |

SHORE 80+00
SEE PAGE 253

Profile No. ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. 17 F.B. 1796 Pg. 71
Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA)
X-Sec. No. ____ Notes Chkd. [illegible] Checked ____ Survey by C. V. CRUNLEY Notes C.V.C. Date 7-24-51
Date 9-18-51 Date ____ Map No. ____ Indexed Johnson Date ____

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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. | | |
|---|---|---|---|---|---|---|
| 85+00 | 5.2 | 17.7 | | 12.5 | 1x2 on Beach | |
| | | | 4.8 | 12.9 | Sand | |
| | | | 4.3 | 13.4 | 59 RT. | |
| | | | 3.6 | 14.1 | 89 " | |
| | | | 2.6 | 15.1 | 121 " | Toe SL. |
| | | | 4.9 | 12.8 | 53 LT. | |
| | | | 4.6 | 13.1 | 99 " | Top SL |
| TRANS. ON 80+00 | | | 6.7 | 11.0 | 108 " | |
| T.P. | 0.0 | 5.7 | 12.0 | 5.7 | T.P. 147 ? " | |
| 16°-20' (Leave this shot out) | | | 2.5 | 3.2 | 147 157 Calc | Water. |
| 19°-27' | | | 4.2 | 1.5 | 177 " | ocean FLOOR |
| 25°-12' | | | 4.3 | 1.4 | 235 " | " " |
| 33°-14' | | | 5.4 | 0.3 | 328 " | " " |
| 37°-37' | | | 7.2 | -1.5 | 385 " | " " |
| 40°-16' | | | 9.0 | -3.3 | 424 " | " " |
| 44°-01' | | | 11.7 | -6.0 | 483 ~~463~~ " | " " |

SHORE
85+00
SEE PAGE 253

F.B. 296 PG. 72 18
Job No. 8412 Division No. Notes Red. Plotted
Survey of BEACH EROSION STUDIES (ZUMA. Date Date No.
Survey by C.V.C. RUMLEY Notes C.V.C. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date 7-24-51 Date 9-12-51 Date No.
Profile

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time | Hor. Ang. | Remarks | |
| 80+00 85+00 | 1 | R-Y | 7:40 | 89°53' | | |
| | 2 | R | | 90°15' | | |
| | 3 | Y | | 90°16' | | |
| | 4 | R-Y | 7:45 | 90°01' | | |
| | 5 | R | | 90°00' | | |
| | 6 | Y | | 90°01' | | |
| | 7 | R-Y | 7:47 | 90°01' | | |
| | 8 | R | | 90°22' | | |
| | 9 | Y | | 90°14' | | |
| | 10 | R-Y | 7:50 | 89°24' | | |
| | 11 | R | | 89°53' | | |
| | 12 | Y | | 89°42' | | |
| | 13 | R-Y | 7:52 | 89°05' | | |
| | 14 | R | | 89°51' | | |
| | 15 | Y | | 89°21' | | |
| | 16 | R-Y | 7:56 | 89°16' | | |
| | 17 | R | 7:57 | 89°34' | | |

RANGE
80+00

Profile Notes Red. Plotted Job No. 8412 Division No. (2) V F. B. 1246 Pg. 73
No. Date Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. Checked Survey by F.H.B. Notes M.S. Date 7-24-57
No. Date Date Map No. Indexed Johnson Date

76L398 307 4-50

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.**

F. B. 1296 Pg. 174 Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of Beach Erosion Study Date 7-24-57 Date Date No.
Survey by E.H.B. Notes M.S. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

| STATION | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | | Remarks |
| 85+00 | 80+00 | 1 | R-Y | 8 12 | 90°00' | | |
| | | 2 | R | | 90°00' | | |
| | | 3 | Y | | 89°51' | | |
| | | 4 | R-Y | 8:15 | 90°01' | | |
| | | 5 | R | | 90°01' | | |
| | | 6 | Y | | 89°18' | | |
| | | 7 | R-Y | 8:18 | 89°32' | | |
| | | 8 | R | | 90°02' | | |
| | | 9 | Y | | 89°48' | | |
| | | 10 | R-Y | 8:21 | 89°[illegible] | | |
| | | 11 | R | | 89°42' | | |
| | | 12 | Y | | 89°34' | | |
| | | 13 | R-Y | 8 24 | 90°33' | | |
| | | 14 | R | | 90°33' | | |
| | | 15 | Y | | 90°35' | | |
| | | [illegible] | R-Y | 8 27 | 90°44' | | |

RANGE 85+00

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time | Hor. Ang. | Remarks | |
| 85+00 80+00 | 1 | RY | 7:41 | 57°37' | | |
| | 2 | R | | 56°33' | | |
| | 3 | Y | | 56°02' | | |
| | 4 | RY | 7:45 | 55°44' | | |
| | 5 | R | | 54°48' | | |
| | 6 | Y | | 54°26' | | |
| | 7 | RY | 7:48 | 53°46' | | |
| | 8 | R | | 52°39' | | |
| | 9 | Y | | 50°44' | | |
| | 10 | RY | 7:50 | 50°18' | | |
| | 11 | R | | 48°35' | | |
| | 12 | Y | | 47°25' | | |
| | 13 | RY | 7:52 | 46°18' | | |
| | 14 | R | | 44°33' | | |
| | 15 | Y | | 43°52' | | |
| | 16 | RY | 7:56 | 42°38' | | |
| | 17 | R | 7:57 | 41°55' | | |

Cut in 80+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 Pg. 75
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes C.B.S. Date 7-24-51
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 80+00 | 85+00 | 1 | RY | 8 12 | 57° 55' | | |
| | | 2 | R | | 57° 14' | | |
| | | 3 | Y | | 56° 25' | | |
| | | 4 | RY | 8:15 | 55° 35' | | |
| | | 5 | R | | 55° 46' | | |
| | | 6 | Y | | 55° 16' | | |
| | | 7 | RY | 8:18 | 54° 15' | | |
| | | 8 | R | | 53° 31' | | |
| | | 9 | Y | | 52° 40' | | |
| | | 10 | RY | 8:21 | 51° 57' | | |
| | | 11 | R | | 50° 54' | | |
| | | 12 | Y | | 48° 58' | | |
| | | 13 | RY | 8:24 | 47° 41' | | |
| | | 14 | R | | 45° 52' | | |
| | | 15 | Y | | 44° 10' | | |
| | | 16 | RY | 8:27 | 42° 54' | | |

CUT IN 85+00

F. B. 1296 Pg. 76
Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by F.H.B. Notes C.B.S. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date 7-24-51 Date Date No.

76L298 307 4-50

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 80+00

| # | Color | B. S. Time | H. I. Meas. Depth | F. S. Bottom | ELEV. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | R.Y. | 7:41 0641 | 28.7 26.2 28.2 | 27.0 | 1.6 | 25.4 | |
| 2 | R. | | 24.8 25.3 | 25.9 | | 24.3 | |
| 3 | Y. | | 23.3 24.0 | 24.0 | | 22.4 | |
| 4 | R.Y. | 7:46 0646 | 22.0 22.7 | 22.7 | 1.6 | 21.1 | |
| 5 | R. | | 20.6 22.5 | 21.3 | | 19.7 | |
| 6 | Y. | | 19.6 21.2 | 20.6 | | 19.0 | |
| 7 | R.Y. | 7:48 0648 | 18.2 19.0 | 19.2 | 1.6 | 17.6 | |
| 8 | R. | | 16.5 16.9 | 17.3 | | 15.7 | |
| 9 | Y. | | 14.8 16.3 | 15.5 | | 13.9 | |
| 10 | R.Y. | 7:51 0651 | 13.8 15.0 | 14.6 | 1.6 | 13.0 | |
| 11 | R. | | 12.5 13.5 | 13.3 | | 11.7 | |
| 12 | Y | | 11.0 13.5 | 11.8 | | 10.2 | |
| 13 | R.Y. | 7:53 0653 | 10.0 11.8 | 11.2 | 1.6 | 9.6 | |
| 14 | R. | | 9.0 10.0 | 9.9 | | 8.3 | |
| 15 | Y. | | 8.0 9.0 | 8.7 | | 7.1 | |
| 16 | R.Y | 7:57 0657 | 7.0 8.5 | 7.7 | 1.6 | 6.1 | |
| 17 | R. | 7:58 0658 | 6.0 | 6.8 | 1.6 | 5.2 | |
| 18 | Y | | | | | | |
| 19 | R.Y. | | | | | | |
| 20 | R. | | | | | | |

BOAT 80+00

Profile Notes Red. LCWF Plotted ____ Job No. 8412 Division No. V F.B. 1296 Pg. 77
No. ____ Date 9-5-51 Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. T.M.J. Checked ____ Survey by E.H.B. Notes E.R.V. Date 7-24-51
No. ____ Date 9-17-51 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 4-50

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 85+00 | | B. S. | H. I. | F. S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | | Remarks |
| 1 | R.Y. | 8:13 0713 | 27.5 26.0 26.3 | 26.5 | 1.6 | 24.9 | | |
| 2 | R. | | 24.6 24.6 | 25.2 | | 23.6 | | |
| 3 | Y. | | 22.8 22.8 | 23.4 | | 21.8 | | |
| 4 | R.Y. | 8:16 0716 | 21.4 21.8 | 21.9 | 1.6 | 20.3 | | |
| 5 | R. | | 19.8 20.8 | 20.5 | | 18.9 | | |
| 6 | Y. | | 17.8 19.5 | 18.8 | | 17.2 | | |
| 7 | R.Y. | 8:19 0719 | 16.8 17.8 | 17.7 | 1.6 | 16.1 | | |
| 8 | R. | | 15.8 17.3 | 16.5 | | 14.9 | | |
| 9 | Y. | | 14.8 15.9 | 15.6 | | 14.0 | | |
| 10 | R.Y. | 8:21 0721 | 13.8 14.9 | 14.5 | 1.6 | 12.9 | | |
| 11 | R. | | 12.8 12.4 | 13.5 | | 11.9 | | |
| 12 | Y. | | 11.8 12.4 | 12.0 | | 10.4 | | |
| 13 | R.Y. | 8:24 0724 | 10.4 10.8 | 11.1 | 1.7 | 9.4 | | |
| 14 | R. | | 8.3 9.5 | 9.1 | | 7.4 | | |
| 15 | Y. | | 6.5 8.5 | 7.5 | | 5.8 | | |
| 16 | R.Y. | 8:27 0727 | 5.5 | 6.5 | 1.7 | 4.8 | | |
| 17 | R. | | | | | | | |
| 18 | Y. | | | | | | | |
| 19 | R.Y. | | | | | | | |
| 20 | R. | | | | | | | |

BOAT 85+00

F. B. 1296 Pg. 78 Job No. 8412 Division No. K Notes Red. RCW Plotted Profile
Survey of Beach Erosion Studies Date 7-23-51 Date No. X-Sec.
Survey by F.H.B. Notes Vollnagle Notes Chkd. T.M.I. Checked No.
Indexed C. Johnson Date Date 2-17-51 Date

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

13.0 / 4.7 8.3 15.16 20.8 / 5.6 / 15.2 20.8 / 8.2 / 12.6

| STATION | B. S. | H. I. | F. S. | ELEV. | | SHORE ∠ 90° |
|---|---|---|---|---|---|---|
| 90+00 | 3.2 | 20.8 | | 17.57 | 1X2 Top Bank | SLY side Parking AREA |
| | | | 43 | 16.5 | 10' RT - PARKING AREA - T.S. | |
| | | | 82 | 12.6 | 30 LT Toe SL Beach | |
| (TRANS. ON 95+00) | | | 81 | ~~13.7~~ 12.7 | 115 " TOP SL. | |
| 13°-58' T.P. | 2.6 | 13.0 | 104 | 10.4 | T.P. TAPE 125 " (Calc. 124.4) | BRK. |
| 16°-36' | | | 58 | 7.2 | 150 " (Calc 149) | |
| 18°-56' | | | 83 | 4.7 | 172 " (Calc. 171.5) | Water ± 3.0 |
| 22°-14' T.P. | 2.5 | 5.1 | 104 | 2.6 | T.P 205 " (Calc. 204.4) | |
| 27°-47' | | | 40 | 1.1 | 264' Calc. | Ocean FLOOR |
| 32°-42' | | | 43 | 0.8 | 321' " | |
| 38°-45' | | | 57 | -0.6 | 402' " | |
| 41°-27' | | | 74 | -2.3 | 422' " | |
| 46°-48' | | | 112 | -6.1 | 533' " | |

SHORE 90+00

SEE PAGE 254

Profile No. ___ Notes Red ___ Plotted ___ Job No. 8412 Division No. 19 F. 1296 Pg. 79
X-Sec. No. ___ Date ___ Date ___ Survey of BEACH EROSION STUDIES ZUMA
Notes Chkd. [illegible] Checked ___ Survey by C.V.C. Notes C.V.C. Date 7-24-51
Date 9-12-51 Date ___ Map No. ___ Indexed ___ Date ___

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

166
4.7
11.9

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 95+00 | 6.0 | 166 | | 1057 | 1X2 ON Beach | |
| | | | 55 | 11 | sand. | |
| | | | 45 | 12 | 22' RT. | Toe SL. |
| | | | 26 | 14 | 40' " | Side Sl. |
| | | | 00 | 16 | 55 " | " " (S. Side PARK LOT. |
| | | | 48 | 11 | 59 LT. | Beach |
| | | | 39 | 12 | 106.5 " | TOP SL. |
| | | | 71 | 9 | 125. " | |
| (TRANS. ON 90+00) | | | 106 | 6 | 152 " | |
| 18°-12' T.P. | 08 | 5.5 | 119 | 47 | T.P. 165 " (Calc 164.4) | |
| 20°-57' | | | 27 | 23 | 191.5 Calc. | |
| 25°-07' | | | 40 | 15 | 234' " | |
| 26°-59' | | | 48 | 07 | 255' " | |
| 29°-37' | | | 45 | 10 | 284' " | |
| 32°-06' | | | 45 | 1 | 314' " | |
| 34°-08' | | | 47 | 08 | 339' " | |
| 35°-41' | | | 52 | 03 | 359' " | |
| 36°-51' | | | 57 | -02 | 374' | |
| 41°-03' | | | 73 | -15 | ~~431~~ 435 | |
| 42°-22' | | | 80 | -25 | 456' " | |
| 45°-11' | | | 99 | -45 | 503' " | |
| 45°-33' | | | 102 | -47 | 509' " | |
| 48°-04' | | | 127 | -72 | 557' | |

SHORE
95+00
SEE PAGE 255

F.B. 296 PG. 80 | 20
Profile
Survey of BEACH EROSION STUDIES (ZUNIA) Date
Survey by CLICRUMLEY Notes C.V.C. Notes Chkd. Date
Indexed Date 7-24-51 Date 9-18-51
Plotted No.
Notes Red. No.
Division No. X-Sec.
Job No. 8412

76L298 307 4-50

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 | | S. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 90+00 | 95+00 | 1 | R&Y | 8:48 | 90°00' | | |
| | | 2 | R | | 90°10' | | |
| | | 3 | Y | | 90°15' | | |
| | | 4 | R&Y | 8:50 | 90°09' | | |
| | | 5 | R | | 90°08' | | |
| | | 6 | Y | | 90°18' | | |
| | | 7 | R&Y | 8:54 | 90°27' | | |
| | | 8 | R | | 90°10' | | |
| | | 9 | Y | | 90°05' | | |
| | | 10 | R&Y | 8:56 | 90°07' | | |
| | | 11 | R | | 89°58' | | |
| | | 12 | Y | | 89°28' | | |
| | | 13 | R&Y | 8:57 | 90°15' | | |
| | | 14 | R | | 90°15' | | |
| | | 15 | Y | 9:00 | 89°26' | | |
| | | ~~16~~ | ~~R&Y~~ | ~~9:00~~ | | | |

RANGE
90+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. V F. B. 1296 Pg. 81
Date ____ Date ____ Survey of BEACH EROSION STUDIES
Sec. Notes Chkd. ____ Checked ____ Survey by E.H.B. Notes MN Date 7-24-51
Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 95+00 | 100+00 | 1 | R&Y | 9:13 | 90° 00' | | |
| | | 2 | R | | 90° 00' | | |
| | | 3 | Y | | 90° 35' | | |
| | | 4 | R&Y | 9:16 | 90° 08' | | |
| | | 5 | R | | 90° 00' | | |
| | | 6 | Y | | 89° 52' | | |
| | | 7 | R&Y | 9:19 | 90° 10' | | |
| | | 8 | R | | 89° 55' | | |
| | | 9 | Y | | 90° 14' | | |
| | | 10 | R&Y | 9:22 | 89° 42' | | |
| | | 11 | R | | 90° 06' | | |
| | | 12 | Y | | 90° 27' | | |
| | | 13 | R&Y | 9:24 | 89° 44' | | |
| | | 14 | R | | 89° 42' | | |
| | | 15 | Y | 9:25 | 88° 58' | | |
| | | 16 | R&Y | | | | |

RANGE
95+00

F. B. 1296 Pg. 82
Job No. 8412 Division No. ✓ Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date 7-24-51 Date No.
Survey by E.H.B. Notes M.N. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 95+00 | 90+00 | 1 | RY | 8:49 | 58° 39' | | |
| | | 2 | R | | 57° 38' | | |
| | | 3 | Y | | 57° 14' | | |
| | | 4 | RY | 8:50 | 56° 43' | | |
| | | 5 | R | | 56° 52' | | |
| | | 6 | Y | | 55° 54' | | |
| | | 7 | RY | 8:54 | 54° 22' | | |
| | | 8 | R | | 53° 27' | | |
| | | 9 | Y | | 52° 17' | | |
| | | 10 | RY | 8:56 | 50° 57' | | |
| | | 11 | R | | 50° 16' | | |
| | | 12 | Y | | 49° 01' | | |
| | | 13 | RY | 8:57 | 47° 40' | | |
| | | 14 | R | | 47° 12' | | |
| | | 15 | Y | 9:00 | 45° 46' | | |

Cut in 90+00

Profile Notes Red. ____ Plotted [illegible] Job No. 8412 Division No. ____ P. 4296 Page 73
No. ____ Date ____ Date 2-25-51 Survey of Beach Erosion Studies
E. Sec. Notes Chkd. ____ Checked ____ Survey by F.H.R. Notes C.B.S. Date 7-24-51
No. ____ Date ____ Date ____ Map No. ____ Date ____

76L298 307 4-50

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 | | S. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 100+00 | 95+00 | 1 | RY | 9:13 | 58° 49' | | |
| | | 2 | R | | 57° 54' | | |
| | | 3 | Y | | 57° 15' | | |
| | | 4 | RY | 9:16 | 56° 17' | | |
| | | 5 | R | | 55° 32' | | |
| | | 6 | Y | | 55° 17' | | |
| | | 7 | RY | 9:19 | 54° 40' | | |
| | | 8 | R | | 54° 08' | | |
| | | 9 | Y | | 52° 59' | | |
| | | 10 | RY | 9:21 | 52° 56' | | |
| | | 11 | R | | 51° 23' | | |
| | | 12 | Y | | 48° 53' | | |
| | | 13 | RY | 9:24 | 47° 53' | | |
| | | 14 | R | | 46° 08' | | |
| | | 15 | Y | 9:25 | 45° 14' | | |

CUT IN 95+00

F.B. 1296 Pg. 84 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by E.H.B. Notes C.B.S. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date 7-24-51 Date Date No.

76L298 307 4-50

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 90+00 | | B. S. | H. I. | F. S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | | Remarks |
| 1 | R.Y. | 8:48 0748 | 28.0 26.1 27.5 | 26.7 | 1.8 | 24.9 | | |
| 2 | R. | | 25.0 26.0 | 25.8 | | 24.0 | | |
| 3 | Y. | | 23.5 23.4 | 24.3 | | 22.5 | | |
| 4 | R.Y. | 8:51 0751 | 22.0 23.0 | 22.5 | 1.8 | 20.7 | | |
| 5 | R | | 20.5 21.5 | 21.3 | | 19.5 | | |
| 6 | Y | | 19.2 21.2 | 20.0 | | 18.2 | | |
| 7 | RY | 8:54 0754 | 17.5 19.0 | 18.7 | 1.8 | 16.9 | | |
| 8 | R | | 15.5 16.2 | 16.7 | | 14.9 | | |
| 9 | Y | | 14.5 14.5 | 15.1 | | 13.3 | | |
| 10 | RY | 8:56 0756 | 13.0 13.0 | 13.5 | 1.8 | 11.7 | | |
| 11 | R | | 11.5 12.5 | 12.0 | | 10.2 | | |
| 12 | Y | | 10.0 10.2 | 10.8 | | 9.0 | | |
| 13 | RY | 8:57 0757 | 8.5 10.5 | 9.1 | 1.8 | 7.3 | | |
| 14 | R. | | 7.5 9.5 | 8.5 | | 6.7 | | |
| 15 | Y | 9:01 0801 | 6.5 | 7.5 | 1.8 | 5.7 | | |
| 16 | RY | | | | | | | |
| 17 | R | | | | | | | |
| 18 | Y | | | | | | | |
| 19 | RY | | | | | | | |
| 20 | R | | | | | | | |

BOAT 90+00

Profile Notes Red. RCW Plotted _____ Job No. 8412 Division No. V F. B. 1296 PG. 85
No. _____ Date 9-5-51 Date _____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. TMJ Checked _____ Survey by F.H.B. Notes E.R.V. Date 7-24-51
No. _____ Date 2-17-51 Date _____ Map No. _____ Indexed A. C. Johnson Date _____

F. B. 1296 Pg. 86 | Job No. 8412 Division No. V Notes Red. Plotted | Profile No.
Survey of Beach Erosion Studies Date 7-24-51 Date | X-Sec. No.
Survey by E.H.B. Notes Valleyjogle Notes Chkd. T.M.I. Checked
Indexed C. Johnson Date Date 2-17-51 Date | No.

76L298 307 4-50

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 # | Color | B. S. Time | H. I. Meas. Depth | F. S. Bottom | ELEV. Ht. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 28.0 | | | | |
| 1 | R.Y. | 9:13 0813 | 26.5 26.8 | 27.0 | 1.9 | 25.1 | |
| 2 | R. | | 25.0 25.4 | 25.6 | | 23.7 | |
| 3 | Y. | | 23.4 23.8 | 24.1 | | 22.2 | |
| 4 | R.Y. | 9:16 0816 | 21.7 22.0 | 22.4 | 2.0 | 20.4 | |
| 5 | R. | | 20.2 20.5 | 20.8 | | 18.8 | |
| 6 | Y. | | 18.4 19.0 | 19.1 | | 17.1 | |
| 7 | R.Y. | 9:19 0819 | 17.5 17.6 | 18.0 | 2.0 | 16.0 | |
| 8 | R. | | 15.6 16.2 | 16.3 | | 14.3 | |
| 9 | Y. | | 14.5 15.2 | 15.1 | | 13.1 | |
| 10 | R.Y. | 9:22 0822 | 13.2 15.0 | 13.9 | 2.0 | 11.9 | |
| 11 | R. | | 11.7 13.3 | 12.5 | | 10.8 | |
| 12 | Y. | | 10.0 10.6 | 11.1 | | 9.1 | |
| 13 | R.Y. | 9:25 0825 | 8.0 9.8 | 8.8 | 2.0 | 6.8 | |
| 14 | R. | | 7.0 8.5 | 7.9 | 2.1 | 5.8 | |
| 15 | Y | 9:26 0826 | 5.0 | 6.2 | 2.1 | 4.1 | BOAT 95+00 |
| 16 | R.Y | | | | | | |
| 17 | R. | | | | | | |
| 18 | Y | | | | | | |
| 19 | R.Y | | | | | | |
| 20 | R | | | | | | |

FORM 307.10M 10-46

PLEASE RETURN TO
**LOS ANGELES COUNTY SURVEYOR**
700 HALL OF RECORDS

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.**

165
4.7
17.8

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 100+00 | 61 | 16.5 | | 1036 | 1X2 ON Beach. | |
| | | | 58 | 107 | Sand | |
| | | | 47 | 118 | 36' RT | Toe SL. |
| | | | 32 | 133 | 51' " | SL. |
| | | | 00 | 165 | 71 " | Top " - S. side Parking |
| | | | 49 | 116 | 53 LT | |
| | | | 48 | 117 | 106 " | Top SL. |
| TRANS. ON 95+00 | | | 86 | 79 | 135 " | |
| 18°-19" T.P. | 20 | 67 | 11.8 | 47 | T.P. TAPE 166 (Calc. 165.5) | Water. |
| 23°-28' | | | 49 | 18 | 217' calc. | ocean FLOOR. |
| 28°-08' | | | 67 | 00 | 267' " | " " |
| 32°-10' | | | 57 | 10 | 314' " | |
| 38°-17' | | | 70 | -03 | 395' " | |
| 42°-38' | | | 95 | -28 | 460' " | |
| 43°-30' | | | 99 | -32 | 474' " | |
| 42°-43' | | | 96 | 29 | 462 " | |
| 47°-26' | | | 125 | -58 | 544' " | |

SHORE
100+00
SEE PAGE 256

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. 24 F.P. 296 Pg. 87
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA)
Notes Chkd. [illegible] Checked ____ Survey by C.V. CRUMLEY Notes C.V.C. Date 7-24-51
Date 9-12-51 Date ____ Map No. ____ Indexed [illegible] Date ____

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

16.4
4.7
11.1

Do not extend notes this side of this line.

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 105+00 | 65 | 164 | | 9 89 | 1x2 on Beach | |
| | | | 60 | 10 4 | Sand | |
| | | | 52 | 11 2 | 72' RT. | Beach |
| | | | 38 | 12 6 | 100' " | " |
| | | | 27 | 13 7 | 125 " Toe | SL. |
| | | | 44 | 12 0 | 92' LT. | |
| (TRANS. ON | | | 59 | 10 5 | 100' " | |
| 100+00) | | | 82 | 8 2 | 116' " | |
| 16°-50' T.P. | 20 | 67 | 117 | 4 7 | T.P. TAPE 151' (Calc. 151) | Water. |
| 21°-33' | | | 53 | 4 | 197' " | ocean FLOOR. |
| 24°-45' | | | 60 | 0 7 | 231' " | " " |
| 29°-57' | | | 60 | 0 7 | 288' " | |
| 34°-43' | | | 64 | 3 | 346' " | |
| 37°-58' | | | 73 | -0 6 | 390' " | |
| 38°-44' | | | 79 | -1 2 | 401' " | |
| 42°-45' | | | 102 | -3 5 | 462' " | |
| 44°-03' | | | 113 | -4 6 | 484' " | |

SHORT
105+00
SEE PAGE 257

F.B. 7296 Pg. 88 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date Date No. X-Sec.
Survey by Notes Notes Chkd. RAW Checked
Indexed E. Johnson Date 7-24-51 Date 9-12-51 Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 100+00 | 105+00 | 1 | R&Y | 9:41 | 90° 13' ✓ | | |
| | | 2 | R | | 90° 15' ✓ | | |
| | | 3 | Y | | 90° 18' ✓ | | |
| | | 4 | R&Y | 9:43 | 90° 39' ✓ | | |
| | | 5 | R | | 90° 13' ✓ | | |
| | | 6 | Y | | 90° 13' ✓ | | |
| | | 7 | R&Y | 9:46 | 90° 20' ✓ | | |
| | | 8 | R | | 89° 47' ✓ | | |
| | | 9 | Y | | 90° 24' ✓ | | |
| | | 10 | R&Y | 9:49 | 89° 52' ✓ | | |
| | | 11 | R | | 90° 04' ✓ | | |
| | | 12 | Y | | 89° 50' ✓ | | |
| | | 13 | R&Y | 9:51 | 90° 02' ✓ | | |
| | | 14 | R | | 89° 27' ✓ | | |
| | | 15 | Y | | 89° 41' ✓ | | |
| | | 16 | R&Y | 9:53 | 89° 33' ✓ | | |
| | | 17 | R | 9:54 | 90° 13' ✓ | | |

RANGE
100+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ✓ F.B. 1296 Page 89
No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes MN Date 7-24-51
No. ____ Date ____ Date ____ Map No. ____ Indexed Chn. 10 Date ____

76L298 307 4-50

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 | | S. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| ~~Inst.~~ Sight At | On | # | Color | Time | Hor. Ang. | Remarks | |
| 105+00 | 100+00 | 1 | R&Y | 10:06 | 90° 01' | - | |
| | | 2 | R | | 89° 38' | - | |
| | | 3 | Y | | 89° 55' | - | |
| | | 4 | R&Y | 10:08 | 89° 48' | - | |
| | | 5 | R | | 90° 02' | - | |
| | | 6 | Y | | 89° 51' | - | |
| | | 7 | R&Y | 10:11 | 89° 57' | - | |
| | | 8 | R | | 89° 43' | - | |
| | | 9 | Y | | 89° 57' | - | |
| | | 10 | R&Y | 10:13 | 90° 15' | - | |
| | | 11 | R | | 90° 00' | - | |
| | | 12 | Y | | 89° 58' | - | |
| | | 13 | R&Y | 10:15 | 89° 57' | - | |
| | | 14 | R | | 90° 40' | - | |
| | | 15 | Y | | 90° 49' | - | |
| | | 16 | R&Y | 10:17 | 90° 25' | - | |
| | | 17 | R | | 90° 11' | - | |
| | | 18 | Y | 10:18 | 90° 01' | - | |

RANGE 105+00

F. B. 1296 PG. 90 Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date Date No.
Survey by EHB Notes M. N. Notes Chkd. Checked X-Sec.
Indexed R. C. Johnson Date 7-24-51 Date Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 105+00 | 100+00 | 1 | RY | 9:42 | 58° 39' | | |
| | | 2 | R | | 57° 57' | | |
| | | 3 | Y | | 57° 31' | | |
| | | 4 | RY | 9:44 | 57° 01' | | |
| | | 5 | R | | 56° 52' | | |
| | | 6 | Y | | 56° 07' | | |
| | | 7 | RY | 9:47 | 56° 00' | | |
| | | 8 | R | | 55° 15' | | |
| | | 9 | Y | | 54° 29' | | |
| | | 10 | RY | 9:49 | 54° 17' | | |
| | | 11 | R | | 53° 39' | | |
| | | 12 | Y | | 51° 31' | | |
| | | 13 | RY | 9:52 | 48° 59' | | |
| | | 14 | R | | 47° 50' | | |
| | | 15 | Y | | 46° 53' | | |
| | | 16 | RY | 9:53 | 45° 17' | | |
| | | 17 | R | 9:54 | 44° 13' | | |

CUT IN
100+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ P.B. 1246 Pg. 97
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by E.H.B. Notes CBS Date 7-24-51
No. ____ Date ____ Date ____ Map No. ____ Index Johnson Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | Inst. Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 100+00 | 105+00 | 1 | RY | 10:07 | 57° 54' | | |
| | | 2 | R | | 57° 30' | | |
| | | 3 | Y | | 57° 08' | | |
| | | 4 | RY | 10:09 | 56° 52' | | |
| | | 5 | R | | 56° 28' | | |
| | | 6 | Y | | 56° 03' | | |
| | | 7 | RY | 10:11 | 55° 16' | | |
| | | 8 | R | | 55° 04' | | |
| | | 9 | Y | | 54° 06' | | |
| | | 10 | RY | 10:12 | 53° 12' | | |
| | | 11 | R | | 52° 20' | | |
| | | 12 | Y | | 52° 01' | | |
| | | 13 | RY | 10:15 | 50° 04' | | |
| | | 14 | R | | 48° 07' | | |
| | | 15 | Y | | 46° 44' | | |
| | | 16 | RY | 10:17 | 46° 33' | | |
| | | 17 | R | | 44° 34' | | |
| | | 18 | Y | 10 18 | 42° 56' | | |

CUT IN 105+00

F. B. 1296 Pg. 92 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by E.H.B. Notes C.B.S. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date 7-24-51 Date Date No.

76L298 307 4-50

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 108+08

| # | Color | Time | B. S. | H. I. | F. S. | ELEV. | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 28.4 | | | | |
| 1 | R.Y. | 9:42 | | | | | 26.8 | 27.3 | 2.2 | 25.1 | |
| | | 0842 | | | | | 27.5 | | | | |
| 2 | R | | | | | | 25.8 | 26.4 | | 24.2 | |
| | | | | | | | 26.5 | | | | |
| 3 | Y. | | | | | | 24.5 | 25.2 | | 23.0 | |
| | | | | | | | 25.5 | | | | |
| 4 | R.Y. | 9:44 | | | | | 23.5 | 24.2 | 2.3 | 21.9 | |
| | | 0844 | | | | | 24.0 | | | | |
| 5 | R. | | | | | | 22.5 | 23.0 | | 20.7 | |
| | | | | | | | 22.0 | | | | |
| 6 | Y. | | | | | | 21.0 | 21.3 | | 19.0 | |
| | | | | | | | 21.8 | | | | |
| 7 | R.Y. | 9:46 | | | | | 20.0 | 20.6 | 2.3 | 18.3 | |
| | | 0846 | | | | | 21.0 | | | | |
| 8 | R. | | | | | | 18.2 | 19.1 | | 16.8 | |
| | | | | | | | 19.3 | | | | |
| 9 | Y. | | | | | | 17.2 | 17.9 | | 15.6 | |
| | | | | | | | 18.0 | | | | |
| 10 | R.Y. | 9:49 | | | | | 15.8 | 16.5 | 2.3 | 14.2 | |
| | | 0849 | | | | | 16.8 | | | | |
| 11 | R. | | | | | | 14.8 | 15.5 | | 13.2 | |
| | | | | | | | 15.2 | | | | |
| 12 | Y. | | | | | | 13.4 | 14.0 | | 11.7 | |
| | | | | | | | 13.6 | | | | |
| 13 | R.Y. | 9:52 | | | | | 11.9 | 12.5 | 2.4 | 10.1 | |
| | | 0852 | | | | | 12.0 | | | | |
| 14 | R. | | | | | | 10.2 | 10.8 | | 5.4 | |
| | | | | | | | 10.4 | | | | |
| 15 | Y | | | | | | 8.8 | 9.3 | | 6.9 | |
| | | | | | | | 9.7 | | | | |
| 16 | R.Y. | 9:53 | | | | | 7.7 | 8.4 | 2.4 | 6.0 | |
| | | 0853 | | | | | 8.5 | | | | |
| 17 | R. | 9:54 | | | | | 6.0 | 6.8 | 2.4 | 4.4 | |
| | | 0854 | | | | | | | | | |
| 18 | Y | | | | | | | | | | |
| 19 | R.Y. | | | | | | | | | | |
| 20 | R | | | | | | | | | | |

BOAT
108+08

Profile No. _____ Notes Red. Chk'd Date 9-5-51 Plotted _____ Job No. 8412 Division No. X F.B. 1796 PG. 93
X-Sec. No. _____ Notes Chkd. TM.L Date 9-17-51 Checked _____ Survey of Beach Erosion Studies
Survey by F.K.C. Notes F.B.K. Date 7-24-51
Map No. _____ Indexed _____ Date _____

76L298 307 4-50

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 105+00 | | B. S. | H. I. | F. S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | | Remarks |
| 1 | R.Y. | 10:07 0907 | 28.9 27.0 27.5 | 27.6 | 2.5 | 25.1 | | |
| 2 | R. | | 26.0 26.4 | 26.5 | | 24.0 | | |
| 3 | Y. | | 25.0 25.2 | 25.5 | | 23.0 | | |
| 4 | R.Y. | 10:09 0909 | 23.7 24.7 | 24.2 | 2.6 | 21.6 | | |
| 5 | R. | | 22.7 23.3 | 23.4 | | 20.8 | | |
| 6 | Y. | | 21.7 22.2 | 22.2 | | 19.6 | | |
| 7 | R.Y. | 10:11 0911 | 20.2 21.1 | 20.9 | 2.6 | 18.3 | | |
| 8 | R | | 19.2 19.0 | 19.8 | | 17.2 | | |
| 9 | Y. | | 17.5 18.0 | 18.0 | | 15.4 | | |
| 10 | R.Y. | 10:13 0913 | 16.1 17.2 | 16.7 | 2.6 | 14.1 | | |
| 11 | R. | | 15.0 15.3 | 15.7 | | 13.1 | | |
| 12 | Y. | | 13.2 13.5 | 13.9 | | 11.3 | | |
| 13 | R.Y. | 10:15 0915 | 11.5 13.0 | 12.2 | 2.6 | 9.6 | | |
| 14 | R. | | 10.2 11.8 | 11.1 | | 8.5 | | |
| 15 | Y. | | 9.2 10.9 | 10.1 | | 7.5 | | |
| 16 | R.Y. | 10:17 0917 | 8.2 9.8 | 9.1 | 2.7 | 6.4 | | |
| 17 | R. | | 6.2 7.7 | 7.4 | | 4.7 | | |
| 18 | Y. | 10:18 0918 | 5.0 | 5.9 | 2.7 | 3.2 | | |
| 19 | R.Y. | | | | | | | |

BOAT 105+00

F.B. 1296 Pg. 94 Job No. 8412 Division No. V Notes Red RCW Plotted
Survey of Beach Erosion Studies Date 7-24-51 Date No. X-Sec.
Survey by F.H.B. Notes Vollnagle Notes Chkd. T.M.L. Checked
Indexed C. Johnson Date Date 9-17-51 Date No.
Profile

FORM 307 5M 1-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

164
47
117

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 110+00 | 52 | 164 | | 1112 | 1 X 2 ON Beach | |
| | | | 45 | 119 | Sand. | |
| | | | 39 | 125 | 63' RT | |
| | | | 33 | 131 | 112' " | |
| | | | 44 | 120 | 35' LT. | |
| TRANS ON 105+00 | | | 42 | 122 | 77 " | TOP SL. |
| ~~13°-06'~~ | | | 80 | 84 | 100 " | |
| 13°-06 | | | 99 | 65 | TAPE 117 (Calc. 116.4) | Water |
| 15°-08' T.P | 29 | 76 | 117 | 47 T.P | 136 " (Calc 135) | |
| 18°-19' | | | 56 | 20 | 165' Calc. | ocean FLOOR |
| 19°-53' | | | 68 | 08 | 181' " | |
| 23°-39' | | | 74 | 02 | 218' " | |
| 27°-22' | | | 79 | -03 | 258' " | |
| 29°-55' | | | 76 | 00 | 288' " | |
| 33°-28' | | | 81 | -05 | 330' " | |
| 37°-17' | | | 85 | -09 | 381' " | |
| 40°-45' | | | 111 | -35 | 431 | |

SHORE
110+00

SEE PAGE 257

Profile No. ___ Notes Red. ___ Plotted ___ Job No. 8412 Division No. 23 Page 95
Date ___ Date ___ Survey of BEACH EROSION STUDIES (ZUMA)
X-Sec. No. ___ Notes Chkd. [illegible] Checked ___ Survey by ___ Notes ___ Date 7-24-51
Date 9-12-51 Date ___ Map No. ___ Indexed Johnson Date ___

FORM 307 5M 1-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

16.0
4.7
11.3

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 115+00 | 5.1 | 16.0 | | 10.87 | 1 x 2 on Beach | |
| | | | 48 | 11.2 | Sand | |
| | | | 42 | 11.8 | 35' RT | |
| | | | 34 | 12.[illegible] | 100' " | BRK |
| | | | 39 | 12.[illegible] | 34' LT | |
| | | | 36 | 12.[illegible] | 53 " | TOP SL |
| | | | 7.1 | 8.[illegible] | 77 " | |
| TRANS-ON 110+00 | | | 98 | 6.[illegible] | 100' | |
| 13°-23' T.P. | 1.7 | 6.4 | 113 | 4.[illegible] | T.P. TAPE 119 " (calc. 119) | Water |
| 17°-03' | | | 44 | 2.0 | 153' calc. | Ocean FLOOR |
| 21°-14' | | | 61 | 0.3 | 194 " | " " |
| 25°-46' | | | 51 | 1.3 | 241' " | " " |
| 28°-21' | | | 55 | 0.9 | 270' " | " " |
| 32°-56' | | | 65 | -0.1 | 324' " | " " |
| 35°-41' | | | 76 | -1.2 | 359' " | " " |
| 38°-48' | | | 90 | -2.6 | 402' " | " " |
| 38°-43' | | | 95 | -3.1 | 401' " | " " |
| 42°-53' | | | 117 | -5.3 | 464' " | " " |

SHORE 115+00 SEE PAGE 258

F.B. 4296 Pg. 96 24 Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date Date X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked No.
Indexed C. Johnson Date 7-25-51 Date Date

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 110+00 | 115+00 | 1 | R&Y | 10:34 | 90°41' ✓ | | |
| | | 2 | R | | 90°41' ✓ | | |
| | | 3 | Y | | 90°23' ✓ | | |
| | | 4 | R&Y | 10:38 | 90°09' ✓ | | |
| | | 5 | R | | 90°09' ✓ | | |
| | | 6 | Y | | 90°20' ✓ | | |
| | | 7 | R&Y | 10:40 | 89°57' ✓ | | |
| | | 8 | R | | 90°54' ✓ | | |
| | | 9 | Y | | 90°20' ✓ | | |
| | | 10 | R&Y | 10:43 | 89°48' ✓ | | |
| | | 11 | R | | 90°09' ✓ | | |
| | | 12 | Y | | 89°34' ✓ | | |
| | | 13 | R&Y | 10:45 | 89°36' ✓ | | |
| | | 14 | R | | 89°32' ✓ | | |
| | | 15 | Y | | 89°25' ✓ | | |
| | | 16 | R&Y | 10:46 | 89°42' ✓ | | |
| | | 17 | R | | | | |

RANGE
110+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ✓ (8) F. B. 1296 Pg. 97
No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. ____ Checked ____ Survey by E.H.B. Notes M.N. Date 7-26-57
No. ____ Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 4-50

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 Inst. At | STATION Sight On | B. S. # | H. I. Color | F. S. Time | ELEV. Hor. Ang. | Remarks |
|---|---|---|---|---|---|---|
| 115+00 | 110+00 | 1 | R-Y | 10:59 | 89 26 | |
| | | 2 | R | | 89 11 | |
| | | 3 | Y | | 90 28 | |
| | | 4 | R-Y | 11:01 | 90 32 | |
| | | 5 | R | | 90 08 | |
| | | 6 | Y | | 89 58 | |
| | | 7 | R-Y | 11:04 | 89 13 | |
| | | 8 | R | | 89 09 | |
| | | 9 | Y | | 89 51 | |
| | | 10 | R-Y | 11:07 | 90 12 | |
| | | 11 | R | | 88 57 | |
| | | 12 | Y | | 89 56 | |
| | | 13 | R-Y | 11:09 | 91 37 | |
| | | 14 | R | | 91 10 | |
| | | 15 | Y | | 90 16 | |
| | | 16 | R-Y | 11:10 | 91 44 | |

RANGE 115+00

F. B. 1296 Pg. 98 ⑨ Job No. 8412 Division No. X Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-24-51 Date No.
Survey by E.H.B. Notes M.S. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date No.

76L298 307 4-50

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.

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1296 Pg. 29
Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. No. ____ Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes C.B.S. Date 7-24-51
Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

| STATION Inst. At | Sight On | B. S. # | H. I. Color | F. S. Time | ELEV. Hor. Ang. | Remarks | |
|---|---|---|---|---|---|---|---|
| 115+00 | 110+00 | 1 | RY | 10:35 | 57° 11' | | |
| | | 2 | R | | 56° 31' | | |
| | | 3 | Y | | 55° 35' | | |
| | | 4 | RY | 10:38 | 55° 10' | | |
| | | 5 | R | | 54° 27' | | |
| | | 6 | Y | | 54° 03' | | |
| | | 7 | RY | 10:41 | 52° 48' | | |
| | | 8 | R | | 52° 12' | | |
| | | 9 | Y | | 52° 12' | | |
| | | 10 | RY | 10:43 | 50° 37' | | |
| | | 11 | R | | 49° 06' | | |
| | | 12 | Y | | 48° 07' | | |
| | | 13 | RY | 10:45 | 47° 24' | | |
| | | 14 | R | | 46° 59' | | |
| | | 15 | Y | | 45° 03' | | |
| | | 16 | RY | 10:47 | 42° 28' | | |

CUT IN
~~115+00~~
110+00

76L298 307 4-50

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.**

F. B. 1296 PG. 100 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by E.H.B. Notes E.F.E. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

| STATION | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | | Remarks |
| 110+00 | 115+00 | 1 | RY | 10:59 | 57° 30' | . | |
| | | 2 | R | | 56° 39' | . | |
| | | 3 | Y | | 55° 34' | . | |
| | | 4 | RY | 11:02 | 54° 26' | . | |
| | | 5 | R | | 54° 30' | . | |
| | | 6 | Y | | 52° 54' | . | |
| | | 7 | RY | 11:05 | 51° 18' | . | |
| | | 8 | R | | 50° 30' | . | |
| | | 9 | Y | | 49° 39' | . | |
| | | 10 | RY | 11:07 | 47° 59' | . | |
| | | 11 | R | | 47° 21' | . | |
| | | 12 | Y | | 45° 14' | . | |
| | | 13 | RY | 11:09 | 42° 37' | . | |
| | | 14 | R | | 41° 16' | . | |
| | | 15 | Y | | 40° 01' | . | |
| | | 16 | RY | 11:11 | 36° 46' | . | |
| | | 17 | R | | | | |

CUT IN 115+00

76L298 307 4-50

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 110+00 | | B. S. | H. I. | F. S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | | Remarks |
| 1 | R.Y. | 10:35 09 35 | 29.0 27.2 | 27.8 ✓ | 2.9 | 24.9 ✓ | | |
| 2 | R | | 28.0 26.2 | 26.8 ✓ | | 23.9 ✓ | | |
| 3 | Y. | | 26.2 24.5 | 25.1 ✓ | | 22.2 ✓ | | |
| 4 | R.Y. | 10:38 09 38 | 24.5 23.0 | 23.5 ✓ | 2.9 | 20.6 ✓ | | |
| 5 | R. | | 22.6 21.5 | 21.9 ✓ | | 19.0 ✓ | | |
| 6 | Y. | | 21.5 19.8 | 20.4 ✓ | | 17.5 ✓ | | |
| 7 | R.Y. | 10:41 09 41 | 19.5 18.0 | 18.5 ✓ | 3.0 | 15.5 ✓ | | |
| 8 | R. | | 18.5 16.8 | 17.4 ✓ | | 14.4 ✓ | | |
| 9 | Y. | | 17.5 15.8 | 16.4 ✓ | | 13.4 ✓ | | |
| 10 | R.Y. | 10:43 09 43 | 16.0 14.5 | 15.0 ✓ | 3.0 | 12.0 ✓ | | |
| 11 | R. | | 15.3 13.0 | 13.8 ✓ | | 10.8 ✓ | | |
| 12 | Y. | | 13.9 12.0 | 12.6 ✓ | | 9.6 ✓ | | |
| 13 | R.Y. | 10:45 09 45 | 12.9 11.0 | 11.6 ✓ | 3.0 | 8.6 ✓ | | |
| 14 | R. | | 11.7 9.5 | 10.2 ✓ | | 7.2 ✓ | | |
| 15 | Y. | | 10.3 8.0 | 8.8 ✓ | | 5.8 ✓ | | |
| 16 | R.Y. | 10:47 09 47 | 9.5 5.0 | 6.5 ✓ | 3.0 | 3.5 ✓ | | |
| 17 | R | | | | | | | |
| 18 | Y | | | | | | | |
| 19 | R.Y. | | | | | | | |

BOAT
110+00

Profile Notes Red. RCW Plotted _____ Job No. 8412 Division No. V F.B. 1296 Pg. 101
No. _____ Date 9-6-51 Date _____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. TM Checked _____ Survey by E.H.B. Notes ERV Date 7-24-51
No. _____ Date 9-17-51 Date _____ Map No. _____ Indexed Johnson Date _____

76L298 307 4-50

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 115+00 | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | RY. | 10:59 0959 | 29.0 27.5 27.5 | 28.0 | 3.2 | 24.8 | |
| 2 | R | | 26.0 26.0 | 26.5 | | 23.3 | |
| 3 | Y. | | 24.5 24.2 | 25.0 | | 21.8 | |
| 4 | R.Y. | 11:02 10.02 | 23.3 22.8 | 23.6 | 3.2 | ~~18.4~~ 20.4 | |
| 5 | R. | | 21.5 21.5 | 21.9 | | 18.7 | |
| 6 | Y. | | 20.0 20.0 | 20.5 | | 17.3 | |
| 7 | R.Y. | 11:04 10.04 | 18.5 18.0 | 19.0 | 3.3 | 15.7 | |
| 8 | R. | | 17.0 16.5 | 17.3 | | 14.0 | |
| 9 | Y. | | 15.0 15.0 | 15.5 | | 12.2 | |
| 10 | R.Y. | 11:07 10.07 | 13.5 14.0 | 14.0 | 3.3 | 10.7 | |
| 11 | R. | | 12.0 12.4 | 12.7 | | 9.4 | |
| 12 | Y. | | 10.4 11.5 | 11.1 | | 7.8 | |
| 13 | R.Y. | 11:09 10.09 | 8.8 10.5 | 9.7 | .4 | 6.3 | |
| 14 | R. | | 7.5 9.7 | 8.5 | | 5.1 | |
| 15 | Y. | | 6.5 8.0 | 7.6 | | 4.2 | |
| 16 | R.Y. | 11:11 10.11 | 5.5 | 6.3 | 3.4 | 2.9 | |
| 17 | R. | | | | | | |
| 18 | Y. | | | | | | |
| 19 | R.Y. | | | | | | |

BOAT 115+00

F. B. 1298 Pg. 102

Job No. 8412 Division No. V Notes Red. RCW Plotted _____ Profile _____

Survey of Beach Erosion Studies Date 7-24-51 Date _____ No. _____

Survey by F.H.B. Notes Vollmagle Notes Chkd. T.M.I. Checked _____ X-Sec. _____

Indexed R. C. Johnson Date _____ Date 2-17-51 Date _____ No. _____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 120+00 | 45 | 16.5 | | 11.98 | 1X2 ON Beach | |
| | | | 40 | 12.5 | Sand | |
| | | | 39 | 12.6 | 22' RT. | |
| | | | 26 | 13.9 | 40 " | |
| | | | 21 | 14.4 | 41 " TOP | BLACK TOP WALK |
| | | | 38 | 12.7 | 26' LT TOP SL | |
| | | | 64 | 10.1 | 45 " | |
| | | | 87 | 7.8 | 64 " | |
| TRANS. ON 115+00 | | | 105 | 6.0 | 83 " | BRK |
| 11°-30' T.P. | 12 | 5.9 | 118 | 4.7 | T.P. TAPE 103 " (Calc 102) | WATER |
| 16°-32' | | | 44 | 1.5 | 148' Calc. | BRK |
| 20°-02' | | | 58 | 0.1 | 182' | OCEAN FLOOR |
| 23°-06' | | | 67 | -1.0 | 213' " | " |
| 26°-30' | | | 58 | +0.1 | 249' " | " |
| 28°-48' | | | 67 | -0.8 | 275' " | " |
| 31°-58' | | | 64 | -0.5 | 312' " | " |
| 34°-48' | | | 72 | -1.3 | 347' " | " |
| 37°-01' | | | 82 | -2.3 | 377' " | " |
| 41°-31' | | | 116 | -5.7 | 443' " | " |

SHORE
120+00
SEE PAGE 258

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ 25 F.B. 1196 PG. 103
No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA)
X-Sec. Notes Chkd. [illegible] Checked ____ Survey by C.V. CRUMLEY Notes C.V.C. Date 7-25-51
No. ____ Date 9-12-51 Date ____ Map No. ____ Indexed ____ Date ____

F.B. 7296 PG. 104 26

Job No. 8412 Division No. _____ Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES (ZUMA) Date _____ Date _____ No. _____

Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. _____ Checked _____ X-Sec.

Indexed A. C. Johnson Date 7-25-51 Date _____ Date _____ No. _____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 125+00 | 49 | 171 | | 1721 | 1x2 on Beach | |
| | | | 44 | 127 | Sand | |
| | | | 51 | 120 | 26' RT | |
| | | | 42 | 129 | 43' " | |
| | | | 08 | 163 | 62' " | |
| | | | 09 | 162 | 68 " | |
| | | | 43 | 118 | 82 " | |
| | | | 23 | 148 | 93 | |
| | | | 13 | 158 | 100 " | |
| | | | 47 | 124 | 15 LT | Top SL. |
| | | | 73 | 98 | 32 " | |
| | | | 107 | 64 | 60 " | |
| | | | 116 | 55 | 75 " | |
| TRANS ON 120+00 | | | | | | |
| 9°36' T.P. | 08 | 55 | 124 | 47 T.P. | TOE 85 (Calc 85) | Water |
| 14°-27' | | | 42 | 3 | ~~144~~ 129 Calc. | BRK |
| 18°-01' | | | 56 | 1 | 163 " | Ocean Floor |
| 22°-04' | | | 58 | 3 | 203' " | |
| 24°-29' | | | 51 | 2 | 228 " | |
| 28°-22' | | | 58 | 3 | 210 " | |
| 32°-48' | | | 64 | 1 | 322 " | |
| 36°-22' | | | 80 | 25 | 369 " | |
| 40°-00' | | | 10.7 | 52 | 420 " | |
| 41°-11' | | | 11.7 | 62 | 437 " | |

SHORE
125+00

SEE PAGE 259

171
49
124

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | OH | # | Color | Time | Hor. Ang. | | Remarks |
| 120+00 | 117+00 | 1 | R & Y | 700 | 89 37 | - | |
| | | 2 | R | | 89 12 | - | |
| | | 3 | Y | | 89 36 | - | |
| | | 4 | R & Y | 703 | 89 36 | - | |
| | | 5 | R | | 89 36 | - | |
| | | 6 | Y | | 89 24 | - | |
| | | 7 | R & Y | 705 | 89 24 | - | |
| | | 8 | R | | 89° 24 | - | |
| | | 9 | Y | | 89° 29 | - | |
| | | 10 | R & Y | 708 | 89° 38 | - | |
| | | 11 | R | | 89° 26 | - | |
| | | 12 | Y | | 89° 51 | - | |
| | | 13 | R & Y | 709 | 90° 01 | - | |
| | | 14 | R | | 90 12 | - | |
| | | 15 | Y | | 90 12 | - | |
| | | 16 | R & Y | 711 | 89 57 | - | |

RANGE
120+00

Profile Notes Red ____ Plotted ____ Job No. 8412 Division No. V F. B. 1276 Pg. 105
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by FHB & C Notes MS Date 7-25-51
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

76L298 307 4-50

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 Inst. At | STATION Sight On | B. S. # | H. I. Color | F. S. Time | ELEV. Hor. Ang. | Remarks |
|---|---|---|---|---|---|---|
| 125+00 | 120+00 | 1 | R & Y | 7 20 | 90°00 | - |
| | | 2 | R | | 90°13 | - |
| | | 3 | Y | | 90°03 | - |
| | | 4 | R & Y | 7 22 | 90°16 | - |
| | | 5 | R | | 89°57 | - |
| | | 6 | Y | | 89°49 | - |
| | | 7 | R & Y | 7 24 | 90°18 | - |
| | | 8 | R | | 90°28 | - |
| | | 9 | Y | | 90°33 | - |
| | | 10 | R & Y | 7 29 | 90°24 | - |
| | | 11 | R | | 90°24 | - |
| | | 12 | Y | | 91°01 | - |
| | | 13 | R & Y | 7 30 | 90°27 | - |
| | | 14 | R | | 89°59 | - |
| | | 15 | Y | | 89°59 | - |
| | | 16 | R & Y | 7 32 | 89°59 | - |
| | | 17 | R | | 91°08 | - |
| | | 18 | Y | 7 34 | 90°11 | - |

RANGE 125+00

F. B. 1296 Pg. 106 Job No. 8412 ② Division No. V. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-25-51 Date No. X-Sec.
Survey by F H B Notes M.S Notes Chkd. Checked No.
Indexed R. C. Johnson Date Date Date No.

76L298 307 4-50

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 Inst. At | STATION Sight On | B. S. # | H. I. Color | F. S. Time | ELEV. Hor. Ang. | Remarks | |
|---|---|---|---|---|---|---|---|
| 115+00 | 120+00 | 1 | RY | 7:00 | 58° 25' | | |
| | | 2 | R | | 57° 07' | | |
| | | 3 | Y | | 55° 43' | | |
| | | 4 | RY | 7:04 | 54° 52' | | |
| | | 5 | R | | 53° 38' | | |
| | | 6 | Y | | 53° 11' | | |
| | | 7 | RY | 7:06 | 52° 21' | | |
| | | 8 | R | | 51° 47' | | |
| | | 9 | Y | | 50° 08' | | |
| | | 10 | RY | 7:08 | 48° 04' | | |
| | | 11 | R | | 47° 45' | | |
| | | 12 | Y | | 45° 50' | | |
| | | 13 | RY | 7:10 | 44° 38' | | |
| | | 14 | R | | 42° 47' | | |
| | | 15 | Y | | 41° 19' | | |
| | | 16 | RY | 7:11 | 38° 15' | | |

CUT IN 120+00

Profile Notes Red_____ Plotted_____ Job No. 8417 Division No._____ F. B. 1296 Pg. 102
No._____ Date_____ Date_____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd._____ Checked_____ Survey by Blanchard Notes Mack Date 7-25-51
No._____ Date_____ Date_____ Map No._____ Indexed Johnson Date_____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 120+00 | 125+00 | 1 | RY | 7:21 | 56° 53' | | |
| | | 2 | R | | 56° 00' | | |
| | | 3 | Y | | 55° 40' | | |
| | | 4 | RY | 7:22 | 54° 58' | | |
| | | 5 | R | | 53° 40' | | |
| | | 6 | Y | | 52° 58' | | |
| | | 7 | RY | 7:25 | 52° 00' | | |
| | | 8 | R | | 50° 46' | | |
| | | 9 | Y | | 49° 55' | | |
| | | 10 | RY | 7 29 | 49° 01' | | |
| | | 11 | R | | 48° 12' | | |
| | | 12 | Y | | 46° 40' | | |
| | | 13 | RY | 7 31 | 45° 38' | | |
| | | 14 | R | | 44° 05' | | |
| | | 15 | Y | | 42° 47' | | |
| | | 16 | RY | 7:32 | 41 48 | | |
| | | 17 | R | | 39° 13' | | |
| | | 18 | Y | 7:34 | 36° 57' | | |

CUT IN 125+00

F. B. 1296 PG. 108 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No. X-Sec.
Survey by Blanchard Notes MACK Notes Chkd. Checked
Indexed K. C. Johnson Date 7-25-51 Date Date No.

76L298 307 4-50

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 120+00 | | B. S. | H. I. | F. S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom Tide | | Adj. Depth | | Remarks |
| | | | 29.0 | | | | | |
| 1 | R.Y. | 7:00 0600 | 27.7 | 28.1 | 2.5 | 25.6 | | |
| | | | 28.7 | | | | | |
| 2 | R. | | 26.5 | 27.2 | | 24.7 | | |
| | | | 27.0 | | | | | |
| 3 | Y. | | 25.0 | 25.7 | | 23.2 | | |
| | | | 25.0 | | | | | |
| 4 | R.Y. | 7:04 0604 | 23.5 | 24.0 | 2.5 | 21.5 | | |
| | | | 23.2 | | | | | |
| 5 | R. | | 21.9 | 22.3 | | 19.8 | | |
| | | | 22.0 | | | | | |
| 6 | Y. | | 20.2 | 20.8 | | 18.3 | | |
| | | | 20.6 | | | | | |
| 7 | R.Y. | 7:06 0606 | 18.6 | 19.3 | 2.5 | 16.8 | | |
| | | | 18.9 | | | | | |
| 8 | R. | | 17.4 | 17.9 | | 15.4 | | |
| | | | 17.6 | | | | | |
| 9 | Y | | 15.6 | 16.3 | | 13.8 | | |
| | | | 14.9 | | | | | |
| 10 | R.Y. | 7:08 0608 | 13.9 | 14.2 | 2.5 | 11.7 | | |
| | | | 13.6 | | | | | |
| 11 | R. | | 12.8 | 13.4 | | 10.9 | | |
| | | | 13.5 | | | | | |
| 12 | Y. | | 11.5 | 12.2 | | 9.7 | | |
| | | | 12.0 | | | | | |
| 13 | R.Y. | 7:10 0610 | 10.0 | 10.7 | 2.5 | 8.2 | | |
| | | | 10.6 | | | | | |
| 14 | R | | 8.5 | 9.2 | | 6.7 | | |
| | | | 9.5 | | | | | |
| 15 | Y. | | 7.0 | 7.8 | | 5.3 | | |
| | | | 7.5 | | | | | |
| 16 | R.Y. | 7:12 0612 | 6.0 | 6.5 | 2.5 | 4.0 | | |
| 17 | R. | | | | | | | |
| 18 | Y. | | | | | | | |
| 19 | R.Y. | | | | | | | |
| 20 | R | | | | | | | |

BOAT
120+00

Profile Notes Red. LCW. Plotted LCW. Job No. 8412 Division No. V F. B. 1296 PG. 109
No. Date 9-6-51 Date 9-25-51 Survey of Beach Erosion Studies
X-Sec. Notes Chkd. TMI Checked Survey by F.H.B. Notes E.RV Date 7-25-51
No. Date 9-17-51 Date Map No. Indexed Date

76L298 307 4-50

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 125+00

| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | R.Y. | 7:21 0621 | 29.0 27.5 | 28.0 | 2.5 | 25.5 | |
| 2 | R. | | 27.8 26.0 | 26.6 | | 24.1 | |
| 3 | Y. | | 27.1 24.8 | 25.6 | | 23.1 | |
| 4 | R.Y. | 7:22 0622 | 26.3 23.8 | 24.6 | 2.5 | 22.1 | |
| 5 | R. | | 24.3 22.7 | 23.2 | | 20.7 | |
| 6 | Y. | | 23.0 21.0 | 21.7 | | 19.2 | |
| 7 | R.Y. | 7:25 0625 | 21.5 20.0 | 20.5 | 2.5 | 18.0 | |
| 8 | R | | 20.0 18.5 | 19.0 | | 16.5 | |
| 9 | Y. | | 18.7 17.0 | 17.6 | | 15.1 | |
| 10 | R.Y. | 7:28 0628 | 18.0 15.8 | 16.5 | 2.5 | 14.0 | |
| 11 | R. | | 16.5 14.8 | 15.4 | | 12.9 | |
| 12 | Y. | | 15.2 13.8 | 14.3 | | 11.8 | |
| 13 | R.Y. | 7:31 0631 | 14.2 12.8 | 13.3 | 2.5 | 10.8 | |
| 14 | R. | | 13.0 11.2 | 11.8 | | 9.3 | |
| 15 | Y. | | 11.5 9.8 | 10.4 | | 7.9 | |
| 16 | R.Y. | 7:33 0633 | 10.2 8.5 | 9.1 | 2.5 | 6.6 | |
| 17 | R. | | 9.3 7.0 | 7.8 | | 5.3 | |
| 18 | Y. | 7:34 0634 | 7.3 5.0 | 5.8 | 2.5 | 3.3 | BOAT 125+00 |
| 19 | R.Y. | | | | | | |
| 20 | R | | | | | | |

F. B. 1296 Pg. 110

Job No. 8412 Division No. V Notes Red. Rew. Plotted _____ Profile _____

Survey of Beach Erosion Studies Date 7-25-51 Date _____ No. _____

Survey by F.H.B. Notes Vallnagle Notes Chkd. T.M.L. Checked _____ X-Sec. _____

Indexed R. C. Johnson Date _____ Date 2-17-51 Date _____ No. _____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 130+00 | 4.9 | 16.7 ✓ | | 11.8 | — 1X2 on Beach | |
| | | | 45 | 12.2 ✓ | Sand | |
| | | | 68 | 9.9 ✓ | 64' RT | |
| | | | 60 | 10.7 ✓ | [illegible] | |
| | | | 40 | 12.7 ✓ | 110' " | |
| | | | 53 | 11.4 ✓ | 125' " | Toe SL. |
| | | | 47 | 12.0 ✓ | 14' LT | |
| | | | 7[illegible] | 9.4 ✓ | 32 " | |
| | | | 103 | 6.4 ✓ | 55 " | |
| [illegible] | | | 110 | 5.7 ✓ | 70 " | |
| 9°32' ✓ T.P. | 1.9 | 6.6 ✓ | 12.0 | 4.7 ✓ T.P. | Tape 84 (Calc 84') ✓ | Water. |
| 15°55' ✓ | | | 55 | 1.1 ✓ | 143' Curc. ✓ | BREAK |
| 21°-01' ✓ | | | 74 | -0.8 ✓ | 192 " ✓ | OCEAN FLOOR |
| 23°-13' ✓ | | | 64 | +0.2 ✓ | 215' " ✓ | " |
| 35°-10' ✓ | | | 68 | -0.2 ✓ | 291' " ✓ | " |
| 37°-17' ✓ | | | 95 | -2.9 ✓ | 381' " ✓ | " |
| 40°-45' ✓ | | | 120 | -5.4 ✓ | 431 " ✓ | " |

SHORE 100+00
SEE PAGE 259

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ 27 F.B. 296 PG. 111
Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA)
X-Sec. No. ____ Notes Chkd. [illegible] Checked ____ Survey by C.V.C. Notes C.V.C. Date 7-25-51
Date 9-12-51 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 135+00 | 49 | 167 | | 11.76 | 1X2 on Beach. | |
| | | | 44 | 12 3 | SAND. | |
| | | | 54 | 11 3 | 35 RT | |
| | | | 51 | 11 5 | 48 " | |
| | | | 22 | 14 5 | 55 " | |
| | | | 61 | 10 5 | 69 " | |
| | | | 46 | 12 1 | 77 " | |
| | | | 56 | 11 1 | 100 " | |
| | | | 45 | 12 2 | 17 LT. | TOP SL. |
| (TRANS. ON 130+00) | | | 73 | 9 4 | 36 " | |
| | | | 104 | 6 3 | 61 " | |
| 9°-30' T.P. | 17 | 64 | 120 | 4 7 | T.P. TAPE 84 (Calc 84) | WATER. |
| 15°-50' | | | 50 | 1 1 | 142 Calc. | BRK |
| 19°-15' | | | 66 | -2 2 | 175 " | OCEAN FLOOR. |
| 21°-25' | | | 63 | +2 1 | 196 " | " " |
| 24°-34' | | | 60 | +2 1 | 229 " | " " |
| 29°-32' | | | 66 | -2 2 | 287 " | " |
| 33°-38' | | | 77 | -1 3 | 333 " | |
| 38°-02' | | | 102 | -2 7 | 391 " | " " |
| 41°-16' | | | 124 | -6 6 | 439 " | " " |

SHORE 135+00 SEE PAGE 260

F.B. 296 PG. 112 28

Job No. 8412 Division No. Notes Red. Plotted Date Date No. Profile

Survey of BEACH EROSION STUDIES (ZONA) Date Notes Chkd. Checked Date X-Sec.

Survey by C.V. CRUMLEY Notes C.V.C. Date 7-25-51 Date No.

Indexed R. C. Johnson

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | | Remarks |
| 130+00 | 125+00 | 1 | R-Y | 7:45 | 89°26 | - | |
| | | 2 | R | | 90°07 | - | |
| | | 3 | Y | | 90°04 | - | |
| | | 4 | R-Y | 7:44 | 90°04 | - | |
| | | 5 | R | | 89°48 | - | |
| | | 6 | Y | | 90°10 | - | |
| | | 7 | R-Y | 7:46 | 90°25 | - | |
| | | 8 | R | | 90°51 | - | |
| | | 9 | Y | | 90°02 | - | |
| | | 10 | R-Y | 7:49 | 90°32 | - | |
| | | 11 | R | | 90°21 | - | |
| | | 12 | Y | | 90°38 | - | |
| | | 13 | R-Y | 7:51 | 90°30 | - | |
| | | 14 | R | | 90°30 | - | |
| | | 15 | Y | | 91°16 | - | |
| | | 16 | R-Y | 7:55 | 90°32 | - | |
| | | 17 | R | 7:57 | 88°07 | - | |

RANGE
130+00

Profile Notes Red. ____ Plotted ____ Job No. 84/12 Division No. V F. B. 1296 Pg. 113
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by E.H.B. Notes M.S. Date 7-25-51
No. ____ Date ____ Date ____ Map No. ____ Ended Johnson Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | | Remarks |
| 135+00 | 130+00 | 1 | R-Y | 8 [illegible] | [illegible] 25 | - | |
| | | 2 | R | | 8[illegible] 51 | - | |
| | | 3 | Y | | [illegible] 52 | - | |
| | | 4 | R-Y | 8 10 | 8 [illegible] | - | |
| | | 5 | R | | [illegible] | - | |
| | | 6 | Y | | [illegible] | - | |
| | | 7 | R-Y | 8 [illegible] | [illegible] | - | |
| | | 8 | R | | 8 [illegible] | - | |
| | | 9 | Y | | [illegible] | - | |
| | | 10 | R-Y | 8 15 | 89 29 | - | |
| | | 11 | R | | 86 53 | - | |
| | | 12 | Y | | 8 19 | - | |
| | | 13 | R-Y | 8 17.5 | 89 04 | - | |
| | | 14 | R | | 90 14 | - | |
| | | 15 | Y | | 90 13 | - | |
| | | 16 | R-Y | 8 20 | 89 00 | - | |
| | | 17 | R | | 89 [illegible] | - | |
| | | 18 | Y | 8:21 | 91 05 | - | |

RANGE 135+00

F. B. 1296 Pg. 114 Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-25-51 Date No.
Survey by E.H.B. Notes M.S. Notes Chkd. Checked X-Sec.
Indexed R. C. Johnson Date Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 125+00 | 130+00 | 1 | RY | 7 42 | 57° 52' | | |
| | | 2 | R | | 56° 24' | | |
| | | 3 | Y | | 55° 27' | | |
| | | 4 | RY | 7:45 | 53° 59' | | |
| | | 5 | R | | 53° 29' | | |
| | | 6 | Y | | 52° 21' | | |
| | | 7 | RY | 7:47 | 51° 20' | | |
| | | 8 | R | | 49° 46' | | |
| | | 9 | Y | | 48° 32' | | |
| | | 10 | RY | 7:50 | 47° 09' | | |
| | | 11 | R | | 46° 12' | | |
| | | 12 | Y | | 44° 14' | | |
| | | 13 | RY | 7:52 | 43° 27' | | |
| | | 14 | R | | 43° 09' | | |
| | | 15 | Y | | 41° 06' | | |
| | | 16 | RY | 7:56 | 38° 12' | | |
| | | 17 | R | 7:57 | 35° 04' | | |

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. No. ____ Notes Chkd. ____ Checked ____ Survey by Blanchard Notes Mack Date 7-25-57
Date ____ Date ____ Map No. ____ Index Johnson Date ____

1296 - 115

CUT IN

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks | |
| 130+00 | 135+00 | 1 | RY | 8:08 | 57° 57' | | |
| | | 2 | R | | 56° 09' | | |
| | | 3 | Y | | 55° 39' | | |
| | | 4 | RY | 8:10 | 53° 06' | | |
| | | 5 | R | | 52° 42' | | |
| | | 6 | Y | | 51° 59' | | |
| | | 7 | RY | 8:14 | 51° 33' | | |
| | | 8 | R | | 51° 11' | | |
| | | 9 | Y | | 49° 49' | | |
| | | 10 | RY | 8:16 | 49° 09' | | |
| | | 11 | R | | 48° 13' | | |
| | | 12 | Y | | 47° 08' | | |
| | | 13 | RY | 8:18 | 45° 42' | | |
| | | 14 | R | | 43° 39' | | |
| | | 15 | Y | | 42° 04' | | |
| | | 16 | RY | 8:20 | 41° 04' | | |
| | | 17 | R | | 39° 08' | | |
| | | 18 | Y | 8:21 | 37° 18' | | |

CUT IN 135+00

F. S. 1296 Pg. 116 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No. X-Sec.
Survey by Blanchard Notes MACK Notes Chkd. Checked
Indexed C. Johnson Date 7-25-51 Date Date No.

76L298 307 4-50

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 130+00 | B. S. | H. I. | F. S. | ELEV.

| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 29.0 | | | | |
| 1 | R.Y. | 7:42 06 42 | 27.2 27.0 | 27.8 | 2.5 | 25.3 | |
| 2 | R. | | 25.8 26.0 | 26.2 | | 23.7 | |
| 3 | Y. | | 24.5 24.6 | 25.0 | | 22.5 | |
| 4 | R.Y. | 7:45 06 45 | 23.2 24.0 | 23.7 | 2.5 | 21.2 | |
| 5 | R | | 22.2 23.0 | 22.8 | | 20.3 | |
| 6 | Y. | | 20.9 21.0 | 21.6 | | 19.1 | |
| 7 | R.Y | 7:46 06 46 | 19.5 19.3 | 20.0 | 2.5 | 17.5 | |
| 8 | R. | | 18.0 17.9 | 18.4 | | 15.9 | |
| 9 | Y | | 16.4 15.8 | 16.9 | | 14.4 | |
| 10 | R.Y. | 7:49 06 49 | 14.6 14.2 | 15.0 | 2.5 | 12.5 | |
| 11 | R. | | 13.0 13.0 | 13.4 | | 10.9 | |
| 12 | Y. | | 11.5 12.2 | 12.0 | | 9.5 | |
| 13 | R.Y. | 7:52 06 52 | 10.5 11.5 | 11.1 | 2.5 | 8.6 | |
| 14 | R. | | 9.5 10.5 | 10.2 | | 7.7 | |
| 15 | Y | | 8.5 8.5 | 9.2 | | 6.7 | |
| 16 | R.Y. | 7:55 06 55 | 6.0 6.3 | 6.8 | 2.5 | 4.3 | |
| 17 | R | 7:57 06 57 | 4.0 | 4.8 | 2.5 | 2.3 | |
| 18 | Y | | | | | | |
| 19 | R.Y. | | | | | | |
| 20 | R. | | | | | | |

BOAT 130+00

Profile Notes Red. LWW Plotted _____ Job No. 8412 Division No. V
No. _____ Date 9-6-51 Date _____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. T.M.I. Checked _____ Survey by F.H.B. Notes E.R.Y. Date 7-25-51
No. _____ Date 2-17-51 Date _____ Map No. _____ Indexed C. Johnson Date _____

P.B. 1296 Pg. 117

76L298 307 4-50

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 135+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Ht. Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 8:08 0708 | 28.3 26.8 | 27.3 | 2.5 | 24.8 | |
| 2 | R. | | 26.8 25.6 | 26.0 | | 23.5 | |
| 3 | Y. | | 25.5 24.0 | 24.5 | | 22.0 | |
| 4 | R.Y. | 8:10 0710 | 25.3 22.5 | 23.4 | 2.5 | 20.9 | |
| 5 | R. | | 22.5 21.1 | 21.6 | | 19.1 | |
| 6 | Y. | | 21.7 20.0 | 20.6 | | 18.1 | |
| 7 | R.Y. | 8:14 0714 | 20.2 18.8 | 19.3 | 2.5 | 16.8 | |
| 8 | R. | | 19.4 17.7 | 18.3 | | 15.8 | |
| 9 | Y | | 18.5 16.3 | 17.0 | | 14.5 | |
| 10 | R.Y. | 8:16 0716 | 17.0 15.2 | 15.8 | 2.5 | 13.3 | |
| 11 | R. | | 15.8 14.1 | 14.7 | | 12.2 | |
| 12 | Y. | | 15.1 13.1 | 13.8 | | 11.3 | |
| 13 | R.Y. | 8:18 0718 | 13.3 11.5 | 12.1 | 2.5 | 9.6 | |
| 14 | R | | 12.5 10.0 | 10.8 | | 8.3 | |
| 15 | Y | | 11.6 9.0 | 9.9 | | 7.4 | |
| 16 | R.Y. | 8:20 0720 | 10.2 7.5 | 8.4 | 2.5 | 5.9 | |
| 17 | R | | 8.8 6.5 | 7.3 | | 4.8 | |
| 18 | Y | 8:21 0721 | 7.3 5.0 | 5.8 | 2.5 | 3.3 | BOAT 135+00 |
| 19 | RY | | | | | | |
| 20 | R | | | | | | |

F. B. 1296 Pg. 118 Job No. 8412 Division No. V Notes Red. LCW Plotted ____ Profile ____
Survey of Beach Erosion Studies Date 7-25-51 Date ____ No. ____
Survey by F.H.B. Notes Vollnagle Notes Chkd. T.N.J. Checked ____ X-Sec. ____
Indexed L. C. Johnson Date ____ Date 9-17-51 Date ____ No. ____

76L298 307 5-49

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.**

6.2
4.7
1.5

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 140+00 | 33. | 150 | | 11 69 | on 1x2 stk see pg. | |
| 140+00 | | | 27 | 123 | on sand | |
| 20R | | | 33 | 117 | " " base of | line of dumes |
| 28R | | | 00 | 150 | " " top of | line of dumes |
| 32 L | | | 28 | 122 | " " ( beach | ) |
| TRANS. ON 135+00 47 L | | | 53 | 97 | " " ( " | ) |
| 8°-12'-73 L | -0.4 | 6.2 | 8.4 | 66 | 1x2 fl. w sand (72 calc) | (beach) |
| 9°-55' | | | 06 | 56 | 88' LT (calc 87) | Water |
| 11°-10' | | | 15 | 47 | 99 " (calc 99) | |
| 17°-07' | | | 52 | 10 | 154 calc. | BRK. |
| 21°-28' | | | 68 | -06 | 197 " | OCEAN FLOOR |
| 24°-02' | | | 60 | +02 | 223 " | " |
| 29°-00' | | | 61 | +01 | 277 " | " |
| 33°-21' | | | 69 | -07 | 329 " | " |
| 36°-15' | | | 82 | -20 | 367 " | " |
| 40°-05' | | | 109 | -47 | 421 " | " |
| 41°-18' | | | 120 | -58 | 439 " | " |

SHORE
140+00
SEE PAGE 260

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 PG. 119
Date ____ Date ____ Survey of BEACH EROSION STUDIES (TRANCAS)
X-Sec. No. ____ Notes Chkd. [illegible] Checked ____ Survey by C.V.C. & MINOR Notes C.V.C. & MINOR Date 7-25-51
Date 9-12-51 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 5-49

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.

7.2
4.7
2.5

**Do not extend notes this side of this line.**

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 145+00 | 5.0 | 14.6 | | 9.61 | 1x2 stk (see pg. ) | |
| 145+00 | | | 4.6 | 10.00 | on sand | |
| 56R | | | 5.5 | 9.1 | " " at bldg. line | |
| 63L | | | 2.1 | 12.5 | " " | |
| (TRANS. ON) 140+00 71L | | | 4.1 | 10.5 | " " (calc 99) | |
| 11°-11'-100 L T.P. | 0.1 | 69 | 7.8 | [illegible] | T.P. 1x2 stk fl. w. sand | |
| 13°-26' | | | 1.4 | 5.5 | 121 LT (calc 130) | Water |
| 14°-25' | | | 2.2 | 4.7 | 130 " (calc 129) | |
| 21°-23' | | | 6.5 | [illegible] | 196 - calc. | [illegible] |
| 25°-27' | | | 6.2 | [illegible] | 238 " | |
| 30°-15' | | | 6.5 | [illegible] | 292 | " |
| 35°-49' | | | 8.2 | [illegible] | 361 " | |
| 39°-38' | | | 10.0 | [illegible] | 414 " | " " |
| 41°-43' | | | 11.2 | [illegible] | 446 | " " |
| 43°-02' | | | 12.0 | [illegible] | 467 " | " |

SHORE
145+00
SEE PAGE 261

F.B. 1296 PG. 120
Job No. 84-12
Division No.
Notes Red.
Plotted
Date
No.
Profile
Survey of BEACH EROSION STUDIES (TRANCAS.)
Date
X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C.
Notes Chkd.
Checked
Date
No.
Indexed H. C. Johnson Date 7-25-51

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 140+00 | 135+00 | 1 | R-Y | 8:34 | 89°54 | - | |
| | | 2 | R | | 89°54 | - | |
| | | 3 | Y | | 89°54 | - | |
| | | 4 | R-Y | 8:36 | 89°49 | - | |
| | | 5 | R | | 89°27 | - | |
| | | 6 | Y | | 89°27 | - | |
| | | 7 | R-Y | 8:38.5 | 89°08 | - | |
| | | 8 | R | | 89°31 | - | |
| | | 9 | Y | | 89°22 | - | |
| | | 10 | R-Y | 8:40.5 | 89°00 | - | |
| | | 11 | R | | 88°24 | - | |
| | | 12 | Y | | 90°00 | - | |
| | | 13 | R-Y | 8:42.5 | 89°27 | - | |
| | | 14 | R | | 89°27 | - | |
| | | 15 | Y | | 90°13 | - | |
| | | 16 | R-Y | 8:44.5 | 89°49 | - | |
| | | 17 | R | | 90°06 | - | |
| | | 18 | Y | 8:45.5 | 90°20 | - | |

RANGE
140+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. Y F.B. 1296 Pg. 121
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes M.S. Date 7-25-51
No. ____ Date ____ Date ____ Map No. ____ Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 145+00 | 130+00 | 1 | R-Y | 8 59 | 89°45 | - | |
| | | 2 | R | | 89°32 | - | |
| | | 3 | Y | | 90°04 | - | |
| | | 4 | R-Y | 9 03⁵ | 90°26 | - | |
| | | 5 | R | | 90°12 | - | |
| | | 6 | Y | | 89°55 | - | |
| | | 7 | R-Y | 9 05⁵ | 89°55 | - | |
| | | 8 | R | | 89°59 | - | |
| | | 9 | Y | | 90°12 | - | |
| | | 10 | R-Y | 9 07⁵ | 89°32 | - | |
| | | 11 | R | | 89°50 | - | |
| | | 12 | Y | | 90°15 | - | |
| | | 13 | R-Y | 9 10 | 90°15 | - | |
| | | 14 | R | | 90°28 | - | |
| | | 15 | Y | | 89°46 | - | |
| | | 16 | R-Y | 9 13 | 89°39 | - | |
| | | 17 | R | 9 13⁵ | 89°27 | - | |

RANGE 145
145+00

F. B. 1296 Pg. 122 Job No. V ⑥ Division No. 8412 Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-25-51 Date No.
Survey by F.H.B. Notes M.S. Notes Chkd. Checked X-Sec.
Indexed R. C. Johnson Date Date Date No.

761.298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks | |
| 135+00 | 140+00 | 1 | RY | 8:34 | 57°26' | | |
| | | 2 | R | | 57°02' | | |
| | | 3 | Y | | 56°40' | | |
| | | 4 | RY | 8:36 | 55°12' | | |
| | | 5 | R | | 54°32' | | |
| | | 6 | Y | | 53°08' | | |
| | | 7 | RY | 8:39 | 52°39' | | |
| | | 8 | R | | 51°30' | | |
| | | 9 | Y | | 50°53' | | |
| | | 10 | RY | 8:41 | 49°45' | | |
| | | 11 | R | | 49°14' | | |
| | | 12 | Y | | 47°17' | | |
| | | 13 | RY | 8:43 | 45°50' | | |
| | | 14 | R | | 44°05' | | |
| | | 15 | Y | | 42°32' | | |
| | | 16 | RY | 8:45 | 41°29' | | |
| | | 17 | R | | 39°40' | | |
| | | 18 | Y | 8:46 | 38°33' | | |

CUT IN

Profile Notes Red. Plotted Job No. 8412 Division No. F.S. 1296 Pg. 123
No. Date Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. Checked Survey by Blanchard Notes Mack Date 7-25-51
No. Date Date Map No. Endorsed Johnson Date

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | | Remarks |
| 140+00 | 145+00 | 1 | RY | 8:59 | 59° 42' | - | |
| | | 2 | R | | 58° 57' | - | |
| | | 3 | Y | | 57° 39' | - | |
| | | 4 | RY | 9:04 | 54° 56 | - | |
| | | 5 | R | | 54° 39 | - | |
| | | 6 | Y | | 54° 09' | - | |
| | | 7 | RY | 9:06 | 53° 19 | - | |
| | | 8 | R | | 52° 13' | - | |
| | | 9 | Y | | 51° 27' | - | |
| | | 10 | RY | 9:08 | 50 35 | - | |
| | | 11 | R | | 49° 29 | - | |
| | | 12 | Y | | 48° 02 | - | |
| | | 13 | RY | 9:11 | 46° 07 | - | |
| | | 14 | R | | 44° 34 | - | |
| | | 15 | Y | | 43° 21' | - | |
| | | 16 | RY | 9:13 | 41° 02' | - | |
| | | 17 | R | 9:14 | 38° 12' | - | |

CUT IN
145+00

F. B. 1296 Pg. 124 Job No. 8412 Division No. Notes Red. Plotted. Profile
Survey of Beach Erosion Studies Date. Date. No.
Survey by Blanchard Notes MACK Notes Chkd. Checked. X-Sec.
Indexed R. C. Johnson Date. 7-25-51 Date. Date. No.

76L298 307 4-50

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.

Profile No. ____ Notes Red. LOUIE Plotted ____ Job No. 2442 Division No. V F.B. 1296 Pg. 125
Date 9-6-51 Date ____ Survey of BEACH EROSION STUDIES
X-Sec. No. ____ Notes Chkd. TMJ Checked ____ Survey by E.H.B. Notes E.R.V. Date 7-25-51
Date 9-17-51 Date ____ Map No. ____ Line Chkd. Date ____

STATION 140+00

| # | Color | Time | H. I. Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 28.1 | | | | |
| 1 | R.Y. | 8:34 0734 | 26.9 27.0 | 27.3 | 2.5 | 24.8 | |
| 2 | R. | | 25.5 26.4 | 26.0 | | 23.5 | |
| 3 | Y. | | 24.5 25.3 | 25.1 | | 22.6 | |
| 4 | R.Y. | 8:36 0736 | 23.5 26.0 | 24.1 | 2.5 | 21.6 | |
| 5 | R. | | 22.2 22.5 | 23.1 | | 20.6 | |
| 6 | Y. | | 20.8 20.5 | 21.4 | | 18.9 | |
| 7 | R.Y. | 8:39 0739 | 19.3 19.8 | 19.7 | 2.5 | 17.2 | |
| 8 | R. | | 18.0 18.3 | 18.6 | | 16.1 | |
| 9 | Y. | | 16.5 17.5 | 17.1 | | 14.6 | |
| 10 | R.Y. | 8:41 0741 | 15.3 16.0 | 16.0 | 2.5 | 13.5 | |
| 11 | R. | | 14.0 15.0 | 14.7 | | 12.2 | |
| 12 | Y. | | 13.0 14.0 | 13.7 | | 11.2 | |
| 13 | R.Y. | 8:43 0743 | 11.5 11.9 | 12.3 | 2.5 | 9.8 | |
| 14 | R. | | 9.9 10.1 | 10.6 | | 8.1 | |
| 15 | Y. | | 8.3 9.2 | 8.9 | | 6.4 | |
| 16 | R.Y. | 8:45 0745 | 7.0 8.0 | 7.7 | 2.5 | 5.2 | |
| 17 | R. | | 6.0 7.5 | 6.7 | | 4.2 | |
| 18 | Y. | 8:46 0746 | 5.0 | 5.8 | 2.5 | 3.3 | |
| 19 | R.Y. | | | | | | |
| 20 | R. | | | | | | |

BOAT
140+00

76L298 307 4-50

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 145+00 | | B. S. | H. I. | F. S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | | Remarks |
| 1 | R.Y. | 8:59 0759 | 28.2 26.8 | 27.3 | 2.5 | 24.8 | | |
| 2 | R. | | 28.2 25.8 | 26.6 | | 24.1 | | |
| 3 | Y. | | 26.5 24.5 | 25.2 | | 22.7 | | |
| 4 | R.Y. | 9:04 0804 | 25.0 23.0 | 23.7 | 2.5 | 21.2 | | |
| 5 | R. | | 23.5 22.0 | 22.5 | | 20.0 | | |
| 6 | Y. | | 22.7 21.0 | 21.6 | | 19.1 | | |
| 7 | R.Y. | 9:06 0806 | 21.2 19.7 | 20.2 | 2.5 | 17.7 | | |
| 8 | R. | | 20.2 18.3 | 18.9 | | 16.4 | | |
| 9 | Y. | | 19.3 16.8 | 17.6 | | 15.1 | | |
| 10 | RY | 9:08 0808 | 17.5 15.5 | 16.2 | 2.5 | 13.7 | | |
| 11 | R. | | 15.7 14.0 | 14.6 | | 12.1 | | |
| 12 | Y. | | 14.7 12.7 | 13.4 | | 10.9 | | |
| 13 | R.Y. | 9:11 0811 | 13.0 11.5 | 12.0 | 2.5 | 9.5 | | |
| 14 | R. | | 11.8 10.0 | 10.6 | | 8.1 | | |
| 15 | Y. | | 10.0 8.5 | 9.0 | | 6.5 | | |
| 16 | RY. | 9:13 0813 | 8.7 6.7 | 7.4 | 2.5 | 4.9 | | |
| 17 | R. | 9:14 0814 | 6.7 4.0 | 4.9 | 2.5 | 2.4 | | |
| 18 | Y | | | | | | | |
| 19 | RY | | | | | | | |
| 20 | R | | | | | | | |

BOAT 145+00

F. B. 1296 Pg. 126 Job No. 8412 Division No. V Notes Red LOW Plotted ____ Profile ____
Survey of Beach Erosion Studies Date 7-25-51 Date ____ No. ____
Survey by F.H.B. Notes Vollmegle Notes Chkd T.M.I. Checked ____ X-Sec. ____
Indexed A. C. Johnson Date ____ Date 2-17-51 Date ____ No. ____

76L298 307 5-49

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.

7.1
2.4

**Do not extend notes this side of this line.**

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 150+00 | 44 | 152 | | 10.78 | 1x2 stk (see pg. | SHORE ∡ 90° |
| 150+00 | | | 40 | 11.20 | on sand | |
| 20R | | | 41 | 11.1 | " " at bldg. line | |
| 50 L | | | 33 | 11.9 | " " | |
| 95 L | | | 22 | 13.0 | " " crest | |
| 113 L | | | 49 | 10.3 | " (Calc 140) beach | (∡ SFROM 50' OFFSET LINE SLY) |
| 10°-10° 140 L | 01 | 71 | 82 | 70 | 1x2 stk ft. w sand | |
| 12°-51' | | | 19 | 52 | 164 LT (Calc 164) | Water |
| 13°-37' | | | 24 | 47 | 172 (Calc 171) | |
| 17°-25' | | | 55 | 16 | 207 Calc. | BRK |
| 22°-10' | | | 71 | 00 | 254 Calc | OCEAN FLOOR |
| 24°-50' | | | 84 | -13 | 281 " | " " |
| 28°-26' | | | 68 | +03 | 321 " | " " |
| 30°-37' | | | 76 | -05 | 346 " | " " |
| 33°-25' | | | 75 | -04 | 380 " | " " |
| 37°-33' | | | 94 | -23 | 434 " | " " |
| 41°-02' | | | 115 | -44 | 485 " | " " |

TRANS ON 145+00 ON 50' OFFSET

50' HAS BEEN ADDED TO CALC DIST. OF ∡

SHORE
150+00

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1796 Pg. 127
Date ____ Date ____ Survey of BEACH EROSION STUDIES (TRANCAS)
X-Sec. No. ____ Notes Chkd [illegible] Checked ____ Survey by C.V.C. Notes C.V.C. Date 7-25-51
Date 9-18-51 Date ____ Map No. ____ Indexed Johnson Date ____

31

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 155+00 | 4 5 | 162 | | [illegible] | [illegible] (see pg. | ) SHORE ∡ 90° |
| 155+50 | | | 4 1 | 12.10 | on sand | |
| [illegible] | | | 2 3 | 12.0 | " " of bag. line | |
| (TRANS. 160+00 on [illegible] | | | 2 8 | 13.4 | " " | |
| | | | 5 8 | 10.4 | | |
| T.P. [illegible] | | | 9 8 | [illegible] | [illegible] (calc 122) | (X STRUT SO OUTER LINE SUP |
| 8°-10' | 07 | 71 | | | [illegible] ft W sand | |
| 9°-32' | | | 1 3 | [illegible] | 135' Lt (calc 134) | 18 ft. r |
| 11°-64' | | | 2 4 | [illegible] | 149 (calc 148) | |
| 15°-24' | | | 5 2 | [illegible] | 188 calc. | high |
| 18°-53' | | | 6 7 | [illegible] | 221 " | ocean [illegible] |
| 22°-02' | | | 7 4 | [illegible] | 252 " | " |
| 24°-26' | | | [illegible] | [illegible] | 277 " | |
| 28°-31' | | | 7 3 | [illegible] | 322 " | |
| 32°-20' | | | 7 [illegible] | [illegible] | 367 " | " |
| 35°-40' | | | 9 [illegible] | [illegible] | 409 " | " |
| 37°-17' | | | 10 [illegible] | [illegible] | 431 " | " |
| 38°-29' | | | 10 [illegible] | [illegible] | 448 " | " |

SHORE 155+00

F.B. 1296 PG. 128
Job No. 8412 Division No. ____ Notes Red. ____ Plotted ____ Profile ____
Survey of BEACH EROSION STUDIES (TRANSCAS.) Date ____ No. ____
Survey by CK/CRUMLEY Notes Chkd. ____ Checked ____ X-Sec. ____
Indexed A. C. Johnson Date 7-25-51 Date ____ No. ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 150+00 | 145+00 | 1 | R-Y | 9 27.5 | 90°00 | - | |
| | | 2 | R | | 89 45 | - | |
| | | 3 | Y | | 89 38 | - | |
| | | 4 | R-Y | 9 32 | 89 38 | - | |
| | | 5 | R | | 89 49 | - | |
| | | 6 | Y | | 89 49 | - | |
| | | 7 | R-Y | 9 35 | 89 49 | - | |
| | | 8 | R | | 90 18 | - | |
| | | 9 | Y | | 89 51 | - | |
| | | 10 | R-Y | 9 37 | 89 51 | - | |
| | | 11 | R | | 90 06 | - | |
| | | 12 | Y | | 90 06 | - | |
| | | 13 | R-Y | 9 40 | 89 38 | - | |
| | | 14 | R | | 90°05 | - | |
| | | 15 | Y | | 90°05 | - | |
| | | 16 | R-Y | 9 42 | 90°10 | - | |
| | | 17 | R | | 90°13 | - | |
| | | 18 | Y | 9 43 | 90°26 | - | |

PANGE
150+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. V F. B. 1296 Pg. 129
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by FHB Notes M.S. Date 7-25-51
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 155+00 | 160+00 | 1 | R-Y | 10 46 5 | 90°32 | 155+00 | 160+00 |
| | | 2 | R | | 90°32 | OFFSET LINE | "Cutting In" Instrument set here |
| | | 3 | Y | | 90°47 | 1x2 | 1x2 |
| | | 4 | R-Y | 10 49 | 90°27 | 50' | 50' |
| | | 5 | R | | 90°41 | 1x2 | 1x2 Sight here |
| | | 6 | Y | | 90°31 | "Line In" Instrument Set here | |
| | | 7 | R-Y | 10 53 | 90°41 | | |
| | | 8 | R | | 90°41 | | |
| | | 9 | Y | | 90 38 | | |
| | | 10 | R-Y | 10:55 | 90 38 | | |
| | | 11 | R | | 90 12 | | |
| | | 12 | Y | | 90°32 | | |
| | | 13 | R-Y | 10:57 | 90°03 | | |
| | | 14 | R | | 89°48 | | |
| | | 15 | Y | | 90°57 | | |
| | | 16 | R-Y | 10.59 | 92°04 | | |
| | | 17 | R | 11:00 | 90 45 | | |

RANGE 155+00

F. B. 1296 Pg. 130 (8) Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-25-51 Date No.
Survey by F.H.B. Notes MS Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks | |
| 145+00 | 150+00 | 1 | RY | 9:28 | 60°47' | - | |
| | | 2 | R | | 60°20' | - | |
| | | 3 | Y | | 59°17' | - | |
| | | 4 | RY | 9:32 | 57°51' | - | |
| | | 5 | R | | 56°58' | - | |
| | | 6 | Y | | 56°00' | - | |
| | | 7 | RY | 9:35 | 55°03' | - | |
| | | 8 | R | | 53°39' | - | |
| | | 9 | Y | | 53°21' | - | |
| | | 10 | RY | 9:37 | 52°33' | - | |
| | | 11 | R | | 51°44' | - | |
| | | 12 | Y | | 50°15' | - | |
| | | 13 | RY | 9:40 | 48°39' | - | |
| | | 14 | R | | 47°38' | - | |
| | | 15 | Y | | 47°02' | - | |
| | | 16 | RY | 9:43 | 45°12' | - | |
| | | 17 | R | | 42°54' | - | |
| | | 18 | Y | 9:44 | 40°59' | - | |

CUT IN
150+00

Profile Notes Red. Plotted Job No. 8412 Division No. F.B. 1296 Pg. 131
No. Date Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. Checked Survey by Blanchard Notes MACK Date 7-25-51
No. Date Date Map No. A Indexed C. Johnson Date

76L298 307 4-50

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

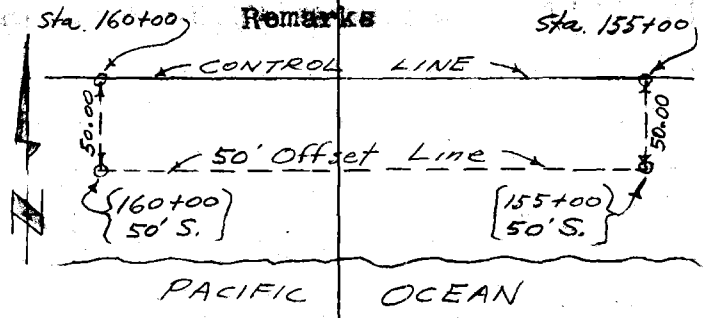
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

**Do not extend notes this side of this line.**

| STATION | | B. S. | H. I. | F. S. | ELEV. |
|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. |
| 160+00 offset 50' S. | 155+00 offset 50' S | 1 | RY | 10:47 | 57° 06' |
| | | 2 | R | | 56° 00' |
| | | 3 | Y | | 54° 39' |
| | | 4 | RY | 10:50 | 53° 33' |
| | | 5 | R | | 51° 20' |
| | | 6 | Y | | 50° 35' |
| | | 7 | RY | 10:54 | 49° 11' |
| | | 8 | R | | 48° 44' |
| | | 9 | Y | | 48° 18' |
| | | 10 | RY | 10:56 | 46° 49' |
| | | 11 | R | | 45° 30' |
| | | 12 | Y | | 44° 14' |
| | | 13 | RY | 10:57 | 42° 58' |
| | | 14 | R | | 42° 01' |
| | | 15 | Y | | 39° 52' |
| | | 16 | RY | 11:00 | 37° 13' |
| | | 17 | R | 11:01 | 35° 00' |

CUT IN 15 J+00

Remarks




F. B. 1296 Pg. 132 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of 13 Date Date No. X-Sec.
Survey by Notes Notes Chkd. Checked
Indexed B. C. Johnson Date Date Date No.

76L298 307 4-50

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 150+00 | B. S. | H. I. | F. S. | ELEV.

| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | RY | 9:28 08 28 | 28.2 27.0 27.7 | 27.4 | 2.5 | 24.9 | |
| 2 | R | | 26.0 26.3 | 26.6 | 2.5 | 24.1 | |
| 3 | Y | | 25.0 25.3 | 25.4 | 2.6 | 22.8 | |
| 4 | RY | 9:32 08 32 | 23.8 24.8 | 24.3 | 2.6 | 21.7 | |
| 5 | R | | 22.8 23.6 | 23.5 | | 20.9 | |
| 6 | Y | | 21.7 21.9 | 22.3 | | 19.7 | |
| 7 | RY | 9:35 08 35 | 20.2 20.1 | 20.8 | 2.6 | 18.2 | |
| 8 | R | | 18.5 19.0 | 19.0 | | 16.4 | |
| 9 | Y | | 17.5 17.7 | 18.0 | | 15.4 | |
| 10 | RY | 9:37 08 37 | 16.0 16.8 | 16.6 | 2.6 | 14.0 | |
| 11 | R | | 14.5 15.5 | 15.3 | | 12.7 | |
| 12 | Y | | 13.3 13.7 | 14.0 | | 11.4 | |
| 13 | RY | 9:40 08 40 | 11.5 11.5 | 12.2 | 2.6 | 9.6 | |
| 14 | R | | 10.0 11.2 | 10.5 | | 7.9 | |
| 15 | Y | | 9.0 9.0 | 9.7 | | 7.1 | |
| 16 | RY | 9:42 08 42 | 7.5 8.0 | 8.0 | 2.6 | 5.4 | |
| 17 | R | | 6.0 7.0 | 6.7 | | 4.1 | |
| 18 | Y | 9:44 08 44 | 4.3 | 5.2 | 2.6 | 2.6 | |
| 19 | RY | | | | | | |
| 20 | R | | | | | | |

BOAT
150+00

Profile No. ____ Notes Red. PWF Plotted ____ Job No. 8412 Division No. V
Date 9-6-51 Date ____ Survey of Beach Erosion Studies
X-Sec. No. ____ Notes Chkd. TM.I Checked ____ Survey by F.H.B Notes ERV Date 7-25-51
Date 2-17-51 Date ____ Map No. ____ Indexed E. C. Johnson Date ____

F.B. 1296 Pg. 133

76L298 307 4-50

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 155+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Ht. Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 10:47 0947 | 28.8 27.3 27.9 | 27.8 | 2.6 | 25.2 | |
| 2 | R. | | 26.3 26.3 | 26.8 | | 24.2 | |
| 3 | Y. | | 25.0 25.5 | 25.4 | | 22.8 | |
| 4 | R.Y. | 10:49 0949 | 23.9 24.5 | 24.4 | 2.6 | 21.8 | |
| 5 | R. | | 22.3 21.7 | 23.0 | | 20.4 | |
| 6 | Y. | | 20.5 20.6 | 20.9 | | 18.3 | |
| 7 | R.Y. | 10:53 0953 | 18.9 19.1 | 19.5 | 2.7 | 16.8 | |
| 8 | R. | | 17.4 18.0 | 18.0 | | 15.3 | |
| 9 | Y. | | 16.2 16.5 | 16.8 | | 14.1 | |
| 10 | R.Y. | 10:55 0955 | 14.8 14.5 | 15.4 | 2.7 | 12.7 | |
| 11 | R. | | 13.3 13.2 | 13.7 | | 11.0 | |
| 12 | Y. | | 12.0 11.9 | 12.4 | | 9.7 | |
| 13 | R.Y. | 10:57 0957 | 10.7 10.5 | 11.1 | 2.7 | 8.4 | |
| 14 | R | | 9.3 10.0 | 9.7 | | 7.0 | |
| 15 | Y. | | 7.8 8.8 | 8.5 | | 5.8 | |
| 16 | R.Y. | 10:59 0959 | 6.5 6.5 | 7.3 | 2.7 | 4.6 | |
| 17 | R. | 11:00 10.00 | 4.5 | 5.2 ~~3.7~~ | 2.7 | 2.5 ~~1.0~~ | BOAT 155+00 |

F. B. 1296 Pg. 134 Job No. 8412 Division No. V Notes Red. Lowe Plotted Date 7-25-51 Checked Date 2-17-51 Profile No. X-Sec. No.

Survey of Beach Erosion Studies Notes Vollnagle Date

Survey [redacted] Notes Chkd. T.M.L. Date

Indexed Date

76L298 307 5-49

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. | L | R |
|---|---|---|---|---|---|---|
| 160+00 | 3.1 | 16.7 ~~8.9~~ | | 13.58 ~~15.58~~ | ← 1x2 | |
| TRANS ON 155+00 - (50' OFFSET) | | | 4.9 | 11.8 ~~13.8~~ | | 93' R. |
| | | | 4.2 | 12.5 ~~14.5~~ | 50' L. 1x2 | sand dune |
| | | | 2.3 | 12.9 ~~14.9~~ | 65' " Brk. | |
| | | | 6.0 | 12.7 ~~14.7~~ | | |
| 6°-31' | 1.4 | 9.5 ~~9.8~~ | 3.3 | 6.4 ~~8.4~~ | TAPE 107' 1x2 | (Calc 107') Water |
| 8°-46' | | | 2.8 | 7.0 ~~9.0~~ | 127' LT. Calc. | |
| 12°-36' | | | 5.6 | 2.2 ~~4.2~~ | 160' " " | Brk. |
| 16°-15' | | | 6.8 | 1.0 ~~3.0~~ | 196' " " | |
| 21°-45' | | | 6.8 | 1.0 ~~3.0~~ | 250' " " | |
| 26°-41' | | | 7.5 | 0.3 ~~2.3~~ | 301' " " | |
| 30°-46' | | | 8.7 | -1.0 | 348' " " | |
| 34°-57' | 50' WAS ADDED TO CALC. DIST. | | 10.5 | -2.8 ~~-0.8~~ | 399' " " | |
| 36°-24' | | | 11.4 | -3.6 ~~-1.6~~ | 414' " " | |

N
15.58 1x2
2.43
H.I. 18.01
3.52
14.49
16.01
7.56
8.45

Profile No. ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 Pg. 35
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (TK. & NC 45)
Notes Chkd ____ Date 9-12-51 Checked ____ Date ____ Survey by CVC Notes CVC Calculated Indexed Johnson Date ____ Map No. ____ Date ____

Shore
160+00

76L298 307 5-49

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.

10.1
4.7
5.4

**Do not extend notes this side of this line.**

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 165+00 | 60 | 17.5 | | 11.5 | spk & t. (see pg. | |
| 165+00 | | | 60 | 11.5 | on sand | |
| 54R | | | 55 | 11.5 | " " at | bldg line |
| 50L | | | 15 | 16.5 | " " | TOP Sand Dune |
| (TRANS. on 160+00 50.0 FEET) 65L | | | 33 | 12.2 | " " " | " " TOP S.L. |
| 79L | | | 71 | 1[illegible] | " " | |
| 40-21' T.P. 88L | 13 | 15.1 | 87 | [illegible] | T.P. 1x2 stk (Calc) 88' f.l.w. | sand |
| 8°31' T.P. | 13 | 60 | 5.4 | [illegible] | T.P. 125' LT. (Calc 125') | Water |
| 13°-19' | | | 46 | [illegible] | 168' LT. Calc. | Brk. |
| 18°-03' | | | 61 | [illegible] | 213' " " | Ocean Floor |
| 21°-21' | | | 56 | [illegible] | 245' " " | " " |
| 28°-04' | | | 59 | [illegible] | 317' " " | " " |
| 33°-17' | | | 78 | [illegible] | 378' " " | |
| 38°-57' | | | 112 | -5.2 | 454' " " | |
| 40°-22' | | | 125 | -6.5 | 475' " " | |

50' WAS ADDED TO CALC. DIST.

SHORE 165+00

F.B. 1296 PG. 736
Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of BEACH EROSION STUDIES (FRANCAS) Date Date X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. & MITCHEL Notes Chkd. Checked No.
Indexed C. Johnson Date 7-25-2651 Date Date

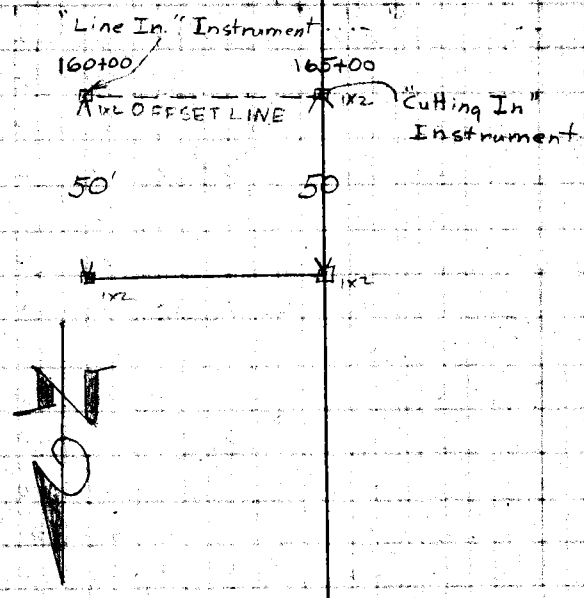
Profile Notes Red ____ Plotted ____ Job No. 8412 Division No. V | P.E. 1296 P.39
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd ____ Checked ____ Survey by FHB Notes MS Date 7-26-51
No. ____ Date ____ Date ____ Map No. ____ Date ____

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. | |
|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks |
| 160+00 | 165+00 | 1 | R-Y | 7:33 5 | 89°35 | — |
| | | 2 | R | | 89°28 | — |
| | | 3 | Y | | 89°15 | — |
| | | 4 | R-Y | 7:36 | 89°05 | — |
| | | 5 | R | | 89°42 | — |
| | | 6 | Y | | 89°25 | — |
| | | 7 | R-Y | 7:40 | 89°15 | — |
| | | 8 | R | | 88 50 | — |
| | | 9 | Y | | 88 45 | — |
| | | 10 | R-Y | 7:42 | 89°30 | — |
| | | 11 | R | | 89°23 | — |
| | | 12 | Y | | 89°10 | — |
| | | 13 | R-Y | 7:43 5 | 89°45 | ✓ |
| | | 14 | R | | 89°45 | ✓ |
| | | 15 | Y | | 90°24 | ✓ |
| | | 16 | R-Y | 7:45 | 89°54 | ✓ |
| | | 17 | R | | 89°53 | ✓ |
| | | 18 | Y | | 90 00 | ✓ |
| | | 19 | R-Y | 7:46 | 90 12 | ✓ |




RANGE
160+00

76L298 307 4-50

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.**

Profile No. ____ X-Sec. No. ____

Plotted ____ Date ____ Checked ____ Date ____

Notes Red ____ Date 7-26-51 Notes Chkd ____ Date ____

Job No. 842 Division No. V

Survey of Beach Erosion Studies

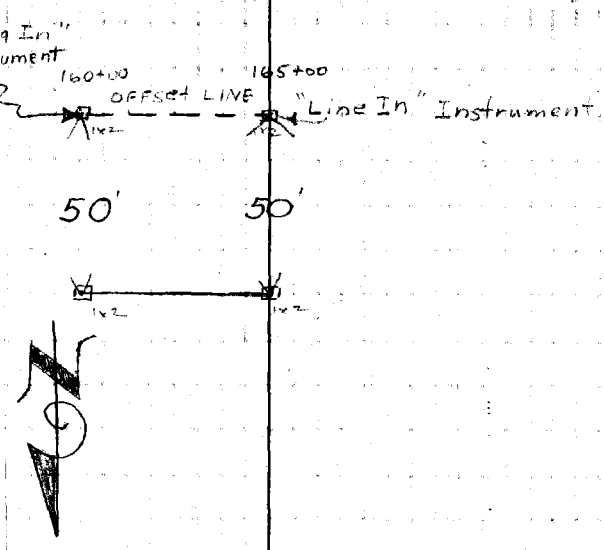
Survey by F.H.B. Notes M.S.

Indexed J.C. Job R.S.O.P.

F. B. 1296 PG. 13

| STATION Inst. Sight At | STATION On | B. B. # | H. I. Color | F. S. Time | ELEV. Hor. Ang. | | Remarks |
|---|---|---|---|---|---|---|---|
| 165+00 | 160+00 | 1 | RY | 7:55 | 90° 44' | ✓ | "Cutting In" Instrument |
| | | 2 | R | | 91° 00' | | |
| | | 3 | Y | | 90° 18' | ✓ | |
| | | 4 | RY | 7:57½ | 91° 04' | ✓ | |
| | | 5 | R | | 91° 17' | ✓ | |
| | | 6 | Y | | 90° 28' | ✓ | |
| | | 7 | RY | 7:59 | 90° 18' | ✓ | |
| | | 8 | R | | 90° 26' | ✓ | |
| | | 9 | Y | | 90° 48' | ✓ | |
| | | 10 | RY | 8:01 | 90° 35' | ✓ | |
| | | 11 | R | | 90° 30' | ✓ | |
| | | 12 | Y | | 90° 30' | ✓ | |
| | | 13 | RY | 8:03 | 91° 13' | ✓ | |
| | | 14 | R | | 90° 12' | ✓ | |
| | | 15 | Y | | 89° 49' | ✓ | |
| | | 16 | RY | 8:05 | 90° 07' | ✓ | |
| | | 17 | R | | 90° 18' | ✓ | |
| | | 18 | Y | 8:06 | 90° 06' | ✓ | |

RANGE 165+00



76L298 307 4-50

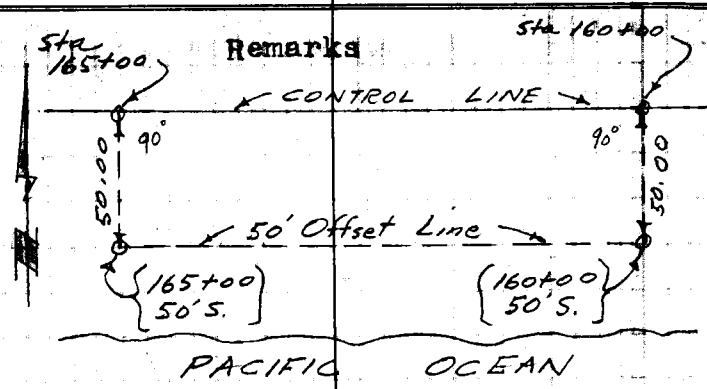
PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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. | |
|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | |
| 165+00 offset 50' S. | 160+00 offset 50' S. | 1 | RY | 7:33 | 57° 06' | - |
| | | 2 | R | | 56° 18' | - |
| | | 3 | Y | | 55° 32' | - |
| | | 4 | RY | 7:35 | 53° 46' | - |
| | | 5 | R | | 52° 10' | - |
| | | 6 | Y | | 50° 58' | - |
| | | 7 | RY | 7:39 | 50° 18' | - |
| | | 8 | R | | 49° 29' | - |
| | | 9 | Y | | 48° 34' | - |
| | | 10 | RY | 7:42 | 47° 02' | - |
| | | 11 | R | | 46° 12' | - |
| | | 12 | Y | | 45° 01' | - |
| | | 13 | RY | 7:43 | 43° 10' | - |
| | | 14 | R | | 41° 34' | - |
| | | 15 | Y | | 39° 39' | - |
| | | 16 | RY | 7:44 | 37° 59' | - |
| | | 17 | R | | 35° 25' | - |
| | | 18 | Y | | 33° 57' | - |
| | | 19 | RY | 7:45 | 31° 12' | - |

Remarks




CUT IN 160+00

Profile Notes Red. Plotted Job No. 8412 Division No. F.B. 796 Pg. 139
No. Date Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. Checked Survey by Blanchard Notes MACK Date 7-26-51
No. Date Date Map No. Date

76L298 307 4-50

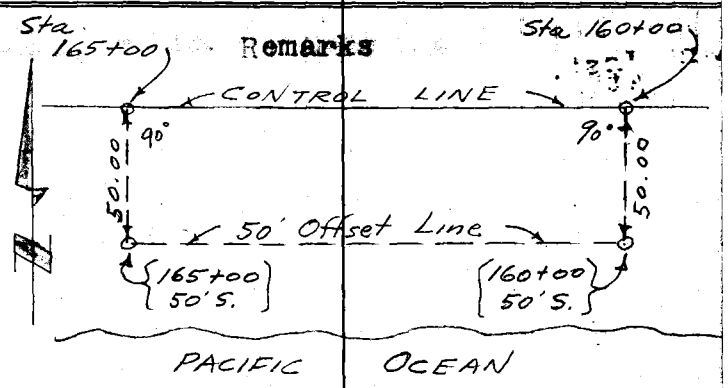
PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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. |
|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. |
| 160+00 offset 50'S | 165+00 offset 50'S | 1 | RY | 7:54 | 56° 21' |
| | | 2 | R | | 54° 27' |
| | | 3 | Y | | 53° 01' |
| | | 4 | RY | 7 57 | 51° 39' |
| | | 5 | R | | 50° 35' |
| | | 6 | Y | | 49° 25' |
| | | 7 | RY | 7:58 | 48° 25' |
| | | 8 | R | | 47° 25' |
| | | 9 | Y | | 45° 46' |
| | | 10 | RY | 8:00 | 45° 05' |
| | | 11 | R | | 44° 10' |
| | | 12 | Y | | 42° 58' |
| | | 13 | RY | 8:02 | 41° 01' |
| | | 14 | R | | 39° 54' |
| | | 15 | Y | | 39° 47' |
| | | 16 | RY | 8:04 | 37° 39' |
| | | 17 | R | | 35° 18' |
| | | 18 | Y | 8:05 | 33° 34' |

Remarks




# CUTIN 165+00

F. B. 1296 Pg. 140
Job No. Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No. X-Sec.
Survey by Blanchard Notes MACK Notes Chkd. Checked
Indexed C. Johnson Date 7-26-51 Date Date No.

76L298 307 4-50

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 160+00

| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 29.0 | | | | |
| 1 | R.Y. | 7:33 0633 | 27.4 27.4 | 27.9 | 3.0 | 24.9 | |
| 2 | R. | | 26.2 26.5 | 26.6 | | 23.6 | |
| 3 | Y. | | 25.0 25.4 | 25.5 | | 22.5 | |
| 4 | R.Y. | 7:35 0635 | 23.9 24.0 | 24.4 | 3.0 | 21.4 | |
| 5 | R. | | 22.9 23.0 | 23.3 | | 20.3 | |
| 6 | Y. | | 21.2 21.5 | 21.8 | | 18.8 | |
| 7 | R.Y. | 7:39 0639 | 20.2 20.4 | 20.6 | 3.0 | 17.6 | |
| 8 | R. | | 18.9 18.5 | 19.4 | | 16.4 | |
| 9 | Y | | 17.4 16.9 | 17.8 | | 14.8 | |
| 10 | R.Y | 7:41 0641 | 15.6 15.5 | 16.0 | 3.0 | 13.0 | |
| 11 | R. | | 14.5 14.0 | 14.8 | | 11.8 | |
| 12 | Y | | 13.0 12.5 | 13.3 | | 10.3 | |
| 13 | R.Y | 7:43 0643 | 11.5 11.0 | 11.8 | 3.0 | 8.8 | |
| 14 | R | | 10.0 9.5 | 10.3 | | 7.3 | |
| 15 | Y | | 8.5 8.5 | 8.8 | | 5.8 | |
| 16 | R.Y | 7:44 0644 | 7.5 7.0 | 7.8 | 3.0 | 4.8 | |
| 17 | R | | 6.9 5.9 | 6.3 | | 3.3 | |
| 18 | Y | | 4.7 5.2 | 5.1 | | 2.1 | |
| 19 | R.Y | 7:46 0646 | 3.5 | 4.1 | 3.0 | 1.1 | |
| 20 | R | | | | | | |

160+00 Boat

Profile Notes Red. EWC Plotted ' Job No. 84/2 Division No. 1 F.B. 1296 Pg. 14
No. Date 9-6-51 Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. T.N.C. Checked Survey by F.H.B. Notes E.R.Y. Date 7-25-51
No. Date 2-17-51 Date Map No. Date

76L298 307 4-50

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 165+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Ht. Tide | Adj. Depth | Remarks |
| 1 | RY. | 7:55 0655 | 28.1 27.3 26.8 | 27.6 | 3.0 | 24.6 | |
| 2 | R | | 25.8 25.8 | 26.1 | | 23.1 | |
| 3 | Y | | 24.8 24.3 | 25.1 | | 22.1 | |
| 4 | RY | 7:57 0657 | 23.3 23.3 | 23.6 | 3.0 | 20.6 | |
| 5 | R | | 22.3 21.7 | 22.6 | | 19.6 | |
| 6 | Y | | 20.6 20.1 | 21.0 | | 18.0 | |
| 7 | RY | 7:59 0659 | 19.0 18.5 | 19.4 | 3.0 | 16.4 | |
| 8 | R | | 17.4 17.5 | 17.8 | | 14.8 | |
| 9 | Y | | 15.9 16.0 | 16.4 | | 13.4 | |
| 10 | R.Y. | 8:01 0701 | 14.5 14.4 | 15.0 | 3.0 | 12.0 | |
| 11 | R. | | 13.3 13.0 | 13.7 | | 10.7 | |
| 12 | Y. | | 12.0 11.7 | 12.3 | | 9.3 | |
| 13 | RY. | 8:03 0703 | 10.5 10.2 | 10.9 | 3.0 | 7.9 | |
| 14 | R. | | 9.0 9.3 | 9.4 | | 6.4 | |
| 15 | Y. | | 8.0 8.2 | 8.4 | | 5.4 | |
| 16 | R.Y. | 8:05 0705 | 7.0 6.7 | 7.4 | 3.0 | 4.4 | |
| 17 | R. | | 5.5 5.5 | 5.9 | | 2.9 | |
| 18 | Y. | 8:06 0706 | 4.0 | 4.5 | 3.0 | 1.5 | BOTT 165+00 |
| 19 | R.Y. | | | | | | |
| 20 | R | | | | | | |

F. B. 1296 Pg. 142 Job No. 8412 Division No. V Notes Red. RCW Plotted ____ Profile ____
Survey of Beach Erosion Studies Date 7-25-51 Date ____ No. ____
Survey by F.H.B. Notes Vollnagle Notes Chkd. TMI Checked ____ X-Sec. ____
Indexed R. C. Johnson Date ____ Date 9-17-51 Date ____ No. ____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 170+00 | 2.4 | 173 | | 14.93 | 142 Flush or Sand Dune | |
| | | | 52 | 12.1 | 10' RT | Top SL. |
| | | | 49 | 12.4 | 80 " | BLDG LINE. |
| | | | 13 | 16.0 | 15 LT | Top Sand Dune |
| | | | 34 | 13.9 | 30 " | |
| TRUE LINE TRANS. OR 175+00 | | | 33 | 14.0 | 41.5 " | Top SL |
| | | | 77 | 9.6 | 61 " | BRK |
| | | | 77 | 7.6 | 77' " | |
| 10°-31' T.P. | 05 | 62 | 11.6 | 5.7 | T.P. 94' " (Calc 94) | |
| 12°-10' | | | 1.5 | 4.7 | 108 " (Calc 108) | Water |
| 18°-42' | | | 48 | 1.4 | 169' " calc. | BRK |
| 23°-08' | | | 49 | 1.3 | 214 " " | Ocean Floor |
| 26°-34' | | | 55 | 0.7 | 250' " " | " " |
| 29°-52' | | | 61 | 0.1 | 287 " " | " " |
| 32°-09' | | | 71 | -0.9 | 314 " " | " " |
| 34°-09' | | | 80 | -1.8 | 339 " " | " " |
| 36°-27' | | | 92 | -3.0 | 369 " | " " |
| 38°-36' | | | 104 | -4.2 | 399 " " | " " |
| 41°-15' | | | 120 | -5.8 | 439 " " | " " |

SHORE
170+00

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 Pg. 143
Date ____ Date ____ Survey of BEACH EROSION STUDIES (TRANCAS)
X-Sec. No. ____ Notes Chkd. Rew Date 9-12-51 Checked ____ Date ____ Survey by C.V. CRUMLEY Notes C.V.C. Date 7-26-51
Map No. ____ Indexed R. G. Johnson Date ____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 175+[illegible] | 4[illegible] | 179 | | 1[illegible]19 | 182 [illegible] | |
| | | | 46 | [illegible] | 13' RT | |
| | | | 2[illegible] | [illegible]6 | 21' " | TOP DUNE |
| | | | [illegible] | 1[illegible]6 | 3[illegible] " | " " |
| | | | 6[illegible] | [illegible]5 | 62 " | |
| | | | 51 | 1[illegible] | 67 " | |
| TRANS. ON 170+00 | | | 53 | 1[illegible]6 | 100' " | [illegible] |
| | | | 73 | 1[illegible]6 | 13' LT | |
| | | | 101 | [illegible]8 | 41 " | |
| 5°16' - T.P. | 05 | 64 | 120 | [illegible]9 T.P. | 47 " (Calc 46) | |
| 7°50' | | | 17 | [illegible]7 | 69 Calc. | Water |
| 9°31' | | | 28 | [illegible]6 | 84 " | |
| 13°23' | | | 51 | [illegible]3 | 119 " | BRK. |
| 16°27' | | | 59 | [illegible]5 | 148 " | OCEAN [illegible] |
| 19°12' | | | 6[illegible] | [illegible]4 | 174' " | " " |
| 23°01' | | | 60 | [illegible]4 | 212' " | " " |
| 27°03' | | | 69 | -[illegible]5 | 255 " | " " |
| 33°46' | | | 90 | -[illegible]6 | 334 " | " " |
| 37°39' | | | 120 | -[illegible]6 | 386 " | " " |

SHORE 175+00

F.B. 1296 PG. 144 36

Profile No. ___ X-Sec. ___ No. ___

Plotted ___ Date ___ Checked ___ Date ___

Notes Red. ___ Date ___ Notes Chkd. ___ Date ___

Division No. ___

Job No. 8412

Survey of BEACH EROSION STUDIES (TRANCAS)

Survey by G.V. CRUMLEY Notes C.V.C.

Indexed A. C. Johnson Date 7-26-51

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 170+00 | 175+00 | 1 | R-Y | 8:23 | 89°46 | - | |
| | | 2 | R | | 89°30 | - | |
| | | 3 | Y | | 89 31 | - | |
| | | 4 | R-Y | 8 27 | 89 31 | - | |
| | | 5 | R | | 89 31 | - | |
| | | 6 | Y | | 89 58 | - | |
| | | 7 | R-Y | 8 29 | 89 29 | - | |
| | | 8 | R | | 89 14 | - | |
| | | 9 | Y | | 89 18 | - | |
| | | 10 | R-Y | 8 32 | 88°56 | - | |
| | | 11 | R | | 90°01 | - | |
| | | 12 | Y | | 90°01 | - | |
| | | 13 | R-Y | 8 35 | 89 36 | - | |
| | | 14 | R | | 89 37 | - | |
| | | 15 | Y | | 89°13 | - | |
| | | 16 | R-Y | 8 37 | 89°20 | - | |
| | | 17 | R | | 89 52 | - | |
| | | 18 | Y | | 89 30 | - | |
| | | 19 | R-Y | 8 39 | 90 25 | - | |

RANGE
170+00

Profile Notes Red ____ Plotted ____ Job No. 8412 Division No. V (3) F.S. 1296 Pg. 145
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes M.S. Date 7-26-51
No. ____ Date ____ Date ____ Map No. ____ Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time | Hor. Ang. | Remarks | |
| 175+00 180+00 | 1 | RY | 8:55 | 89° 57' | | |
| | 2 | R | | 89° 43' | | |
| | 3 | Y | | 89° 12' | | |
| | 4 | RY | 8:58 | 89° 28' | | |
| | 5 | R | | 89° 12' | | |
| | 6 | Y | | 89° 44' | | |
| | 7 | RY | 9:02 | 89° 08' | | |
| | 8 | R | | 89° 46' | | |
| | 9 | Y | | 89° 46' | | |
| | 10 | RY | 9:05 | 89° 39' | | |
| | 11 | R | | 89° 30' | | |
| | 12 | Y | | 89° 23' | | |
| | 13 | RY | 9:08 | 89° 23' | | |
| | 14 | R | | 89° 44' | | |
| | 15 | Y | | 89° 50' | | |
| | 16 | RY | 9:10 | 90° 03' | | |
| | 17 | R | | 90° 35' | | |
| | 18 | Y | | 90° 35' | | |
| | 19 | RY | 9:12 | 89° 49' | | |
| | 20 | R | 9:13 | 91° 17' | | |

RANGE
175+00

F. S. 1296 Pg. 14 (4) Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-26-31 Date No.
Survey by F.H.B. Notes M.S. Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date No.

761.298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 175+00 | 170+00 | 1 | RY | 8:22 | 58°24' | | |
| | | 2 | R | | 57°29' | | |
| | | 3 | Y | | 55°48' | | |
| | | 4 | RY | 8:26 | 54°25' | | |
| | | 5 | R | | 53°30' | | |
| | | 6 | Y | | 51°53' | | |
| | | 7 | RY | 8:28 | 51°08' | | |
| | | 8 | R | | 50°06' | | |
| | | 9 | Y | | 49°10' | | |
| | | 10 | RY | 8:31 | 48°56' | | |
| | | 11 | R | | 47°08' | | |
| | | 12 | Y | | 46°43' | | |
| | | 13 | RY | 8:34 | 45°32' | | |
| | | 14 | R | | 44°20' | | |
| | | 15 | Y | | 43°30' | | |
| | | 16 | RY | 8:36 | 42°12' | | |
| | | 17 | R | | 40°01' | | |
| | | 18 | Y | | 39°18' | | |
| | | 19 | RY | 8:38 | 36°17' | | |

CUT IN 170+00

Profile Notes Red. ____ Plotted ____ Job No. 84 ____
No. ____ Date ____ Date ____ Survey of ____ Rosion Studios
X-Sec. Notes Chkd. ____ Checked ____ Survey by ____ Notes MACK Date 7-26-81
No. ____ Date ____ Date ____ Map No. ____ Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 180+00 | 175+00 | 1 | RY | 8:54 | 57°39' | | |
| | | 2 | R | | 56°43' | | |
| | | 3 | Y | | 56°08' | | |
| | | 4 | RY | 8:57 | 54°25' | | |
| | | 5 | R | | 53°15' | | |
| | | 6 | Y | | 51°20' | | |
| | | 7 | RY | 9:01 | 50°35' | | |
| | | 8 | R | | 49°18' | | |
| | | 9 | Y | | 48°14' | | |
| | | 10 | RY | 9:04 | 46°54' | | |
| | | 11 | R | | 47°01' | | |
| | | 12 | Y | | 45°37' | | |
| | | 13 | RY | 9:07 | 44°27' | | |
| | | 14 | R | | 42°38' | | |
| | | 15 | Y | | 41°20' | | |
| | | 16 | RY | 9:10 | 40°08' | | |
| | | 17 | R | | 39 35 | | |
| | | 18 | Y | | 38°30' | | |
| | | 19 | RY | 9:11 | 36°51' | | |
| | | 20 | R | 9:12 | 34°44' | | |

Cut on 175+00

F. S. 1296 Pg. 148 Job No. Notes Red. Plotted Profile
Survey of Beach Eros Indies Date Date No.
Survey by Blanchard Notes Chkd. Checked X-Sec.
Indexed by C. Johnson Date 26-51 Date No.

76L298 307 4-50

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 170+00

| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 28.0 | | | | |
| 1 | R.Y. | 8:23 0723 | 27.4 27.0 | 27.6 | 2.9 | 24.7 | |
| 2 | R. | | 26.2 25.7 | 26.5 | | 23.6 | |
| 3 | Y. | | 24.7 24.5 | 25.0 | | 22.1 | |
| 4 | R.Y. | 8:27 0727 | 23.7 23.5 | 24.0 | 2.9 | 21.1 | |
| 5 | R. | | 22.7 22.4 | 23.0 | | 20.1 | |
| 6 | Y. | | 21.5 21.0 | 21.8 | | 18.9 | |
| 7 | R.Y. | 8:29 0729 | 20.2 19.7 | 20.5 | 2.9 | 17.6 | |
| 8 | R. | | 18.9 18.1 | 19.2 | | 16.3 | |
| 9 | Y. | | 17.4 16.8 | 17.6 | | 14.7 | |
| 10 | R.Y. | 8:32 0732 | 15.8 15.7 | 16.1 | 2.9 | 13.2 | |
| 11 | R. | | 14.8 14.3 | 15.1 | | 12.2 | |
| 12 | Y. | | 13.5 12.8 | 13.8 | | 10.9 | |
| 13 | R.Y. | 8:35 0735 | 12.0 11.8 | 12.3 | 2.9 | 9.4 | |
| 14 | R. | | 11.0 10.8 | 11.3 | | 8.4 | |
| 15 | Y. | | 9.8 9.6 | 10.1 | | 7.2 | |
| 16 | R.Y. | 8:37 0737 | 8.8 8.3 | 9.1 | 2.9 | 6.2 | |
| 17 | R. | | 7.5 7.3 | 7.8 | | 4.9 | |
| 18 | Y. | | 6.5 6.2 | 6.8 | | 3.9 | |
| 19 | R.Y. | 8:39 0739 | 5.0 | 5.4 | 2.9 | 2.5 | |
| 20 | R. | | | | | | |

B097
170+00

Profile Notes Red. RWC Plotted ____ Job No. 8415 Division No. 1 F.B. 1296 Pg. 149
No. ____ Date 9-6-51 Date ____ Survey of Beach Erosion Study
X-Sec. Notes Chkd. TM Checked ____ Survey by EHB Notes ERV Date 7-26-51
No. ____ Date 9-17-51 Date ____ Map No. ____ Added Johnson Date ____

76L298 307 4-50

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 173+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Ht. Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 8:55 0755 | 28.8 27.5 27.8 | 27.9 | 2.9 | 25.0 | |
| 2 | R. | | 26.5 26.5 | 26.9 | | 24.0 | |
| 3 | Y. | | 25.5 25.7 | 25.8 | | 22.9 | |
| 4 | RY | 8:58 0758 | 24.5 24.7 | 24.9 | 2.9 | 22.0 | |
| 5 | R | | 23.5 23.2 | 23.9 | | 21.0 | |
| 6 | Y | | 22.0 22.0 | 22.4 | | 19.5 | |
| 7 | R.Y. | 9:01 0801 | 20.8 21.0 | 21.2 | 2.9 | 18.3 | |
| 8 | R. | | 19.8 19.5 | 20.2 | | 17.3 | |
| 9 | Y. | | 18.8 18.2 | 19.0 | | 16.1 | |
| 10 | R.Y. | 9:05 0805 | 17.3 17.1 | 17.6 | 2.9 | 14.7 | |
| 11 | R | | 16.0 16.0 | 16.4 | | 13.5 | |
| 12 | Y | | 15.0 15.0 | 15.3 | | 12.4 | |
| 13 | R.Y. | 9:08 0808 | 14.0 13.5 | 14.3 | 2.9 | 11.4 | |
| 14 | R. | | 12.5 12.0 | 12.8 | | 9.9 | |
| 15 | Y. | | 11.0 10.5 | 11.3 | | 8.4 | |
| 16 | R.Y. | 9:10 0810 | 9.5 9.5 | 9.8 | 2.9 | 6.9 | |
| 17 | R. | | 8.5 8.5 | 8.8 | | 5.9 | |
| 18 | Y. | | 7.3 7.5 | 7.7 | | 4.8 | |
| 19 | R.Y | 9:12 0812 | 6.3 7.1 | 6.7 | 2.9 | 3.8 | |
| 20 | R | 9:13 0813 | 4.8 | 5.6 | 2.9 | 2.7 | |

BOA 17 Stud

F. B. 1296 Pg. 150 Job No. 8412 Division No. V Notes Red. [illegible] Plotted ____ Profile ____
Survey of Beach Erosion Studies Date 9-6-51 Date ____ No. ____
Survey by F.H.B. Notes Vollnogle Notes Chkd. T.M.I. Checked ____ X-Sec. ____
Indexed R. C. Johnson Date 7-26-51 Date 9-17-51 Date ____ No. ____

76L298 307 5-49

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.

16.1
4.7
1.4

**Do not extend notes this side of this line.**

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 180+00 | 71 | 161 | | 90.4 | 1X2 ON BEACH | |
| | | | 61 | 100 | Sand | |
| | | | 1.3 | 14.8 | 24' RT | TOP Sand DUNE |
| | | | 38 | 12.3 | 33 " | TOP SC. |
| | | | 38 | 12.3 | 80 " | |
| | | | 43 | 11.8 | 100 " | |
| TRANS. ON 175+00 | | | 40 | 12.1 | 125 " | BLDG LINE. |
| | | | 92 | 6.9 | 22' LT. | |
| 5°-6' T.P. | 19 | 66 | 11.4 | 4.7 | T.P. TAPE 48 " (Calc 48') | |
| 7°-46' | | | 30 | 3.6 | 68' Calc. | BOTTOM FLOOR. |
| 12°-51' | | | 52 | 1.4 | 115 " | " |
| 17°-25' | | | 52 | 1.4 | 157 " | " |
| 23°-43' | | | 60 | 0.6 | 220 " | " |
| 29°-06' | | | 77 | -1.1 | 278 " | " |
| 34°-48' | | | 103 | -3.7 | 348 " | " |
| 38°-21' | | | 125 | -5.9 | 396 " | " |

SHORE
180+00

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 PG. 151
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (TRANCAS)
Notes Chkd. [illegible] Checked ____ Survey by C.V. CRUMLEY Notes C.V.C. Date 7-26-51
Date 9-12-51 Date ____ Map No. ____ Indexed [illegible] Date ____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 185+00 | 62 | 161 | | [illegible] | 1X2 ON BEACH | |
| | | | 57 | [illegible] | sand. | |
| | | | 34 | [illegible] | 17' RT. | |
| | | | 07 | [illegible] | 25' " | |
| | | | 34 | [illegible] | 35' " | |
| | | | 22 | [illegible] | 45' " | |
| | | | 35 | [illegible] | 55' " | |
| | | | 22 | [illegible] | 86' " | |
| | | | 16 | [illegible] | 100' " | |
| TRANS. ON 180+00 | | | 81 | [illegible] | 24 LT. | |
| 47°-07' T.P. | 22 | 69 | 114 | 47 T.P. | 63 (Calc 62) | Water |
| 12°-37' | | | 49 | 20 | 112 Calc. | BRK. |
| 18°-25' | | | 53 | 16 | 167 " | OCEAN FLOOR. |
| 23°-34' | | | 59 | 10 | 219 " | " " |
| 28°-02' | | | 69 | 00 | 266 " | " " |
| 30°-56' | | | 80 | -11 | 300 " | |
| 34°-31' | | | 101 | -32 | 344 " | |
| 38°-17' | | | 123 | -54 | 345 " | |

SHORE 185+00

F.B. 1296 PG. 152
Job No. 8412 Division No. Notes Red. Plotted Date No. Profile
Survey of BEACH EROSION STUDIES (TRANCAS) Date Checked Date No. X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Date
Indexed C. Johnson Date 7-26-51

76L298 307 4-50

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. | | | |
|---|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | | Remarks | |
| 180+00 | 185+00 | 1 | R-Y | 9 24 | 89° 29 | - | | |
| | | 2 | R | | 89° 29 | - | | |
| | | 3 | Y | | 89° 58 | - | | |
| | | 4 | R-Y | 9:29 | 90° 16 | - | | |
| | | 5 | R | | 89° 58 | - | | |
| | | 6 | Y | | 90° 05 | - | | |
| | | 7 | R-Y | 9 31 | 89° 58 | - | | |
| | | 8 | R | | 89° 28 | - | | |
| | | 9 | Y | | 90° 17 | - | | |
| | | 10 | R-Y | 9 32 | 90° 18 | - | | |
| | | 11 | R | | 90 03 | - | | |
| | | 12 | Y | | 90 03 | - | | |
| | | 13 | R-Y | 9.34 | 89° 52 | - | | |
| | | 14 | R | | 90° 10 | - | | |
| | | 15 | Y | | 90° 10 | - | | |
| | | 16 | R-Y | 9 36 | 90° 14 | - | | |
| | | 17 | R | | 89° 56 | - | | |
| | | 18 | Y | | 89 36 | - | | |
| | | 19 | R-Y | 9 39 | 90 52 | - | | |

RANGE
180+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. V (5) F. B. 1296 Pg. 453
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes M.S. Date 7-26-51
No. ____ Date ____ Date ____ Map No. ____ Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 185+00 | 190+00 | 1 | RY | 10:01 | 89° 14' | — | |
| | | 2 | R | | 89° 16' | - | |
| | | 3 | Y | | 89° 24' | - | |
| | | 4 | RY | 10:06 | 89° 30' | — | |
| | | 5 | R | | 89° 37' | — | |
| | | 6 | Y | | 89° 22' | — | |
| | | 7 | RY | 10:10 | 90° 22' | — | |
| | | 8 | R | | 90° 23' | — | |
| | | 9 | Y | | 89° 38' | - | |
| | | 10 | RY | 10:14 | 90° 26' | — | |
| | | 11 | R | | 89° 58' | - | |
| | | 12 | Y | | 90° 07' | - | |
| | | 13 | RY | 10:15 | 90° 07' | - | |
| | | 14 | R | | 89° 44' | - | |
| | | 15 | Y | | 89° 44' | — | |
| | | 16 | RY | 10:17 | 89° 51' | — | |
| | | 17 | R | | 89° 27' | - | |
| | | 18 | Y | | 89° 35' | - | |
| | | 19 | RY | 10:19 | 89° 45' | — | |

RANGE 185+00

F. B. 1296 Pg. 154 Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-26-51 Date No.
Survey by F.H.B. Notes M.S. Notes Chkd. Checked X-Sec.
Indexed A. C. Johnson Date Date Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks | |
| 165+00 | 180+00 | 1 | RY | 9:23 | 57°35' | | |
| | | 2 | R | | 56°02' | | |
| | | 3 | Y | | 54°50' | | |
| | | 4 | RY | 9:28 | 51°17' | | |
| | | 5 | R | | 50°08' | | |
| | | 6 | Y | | 49°02' | | |
| | | 7 | RY | 9:30 | 48°18' | | |
| | | 8 | R | | 47°15' | | |
| | | 9 | Y | | 45°58' | | |
| | | 10 | RY | 9:31 | 45°37' | | |
| | | 11 | R | | 44°05' | | |
| | | 12 | Y | | 43°06' | | |
| | | 13 | RY | 9:33 | 42°13' | | |
| | | 14 | R | | 40°53' | | |
| | | 15 | Y | | 39°27' | | |
| | | 16 | RY | 9:35 | 38°22' | | |
| | | 17 | R | | 35°58' | | |
| | | 18 | Y | | 33°41' | | |
| | | 19 | RY | 9:38 | 32°46' | | |

CUT IN 180+00

Profile Notes Red ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1296 Pg. 155
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd ____ Checked ____ Survey by Blanchard Notes MACK Date 7-26-51
No. ____ Date ____ Date ____ Map No. ____ Inked Johnson Date ____

76L29B 307 4-50

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.**

F. S. 1296 Fig. 156 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by Blanchard Notes MACK Notes Chkd Checked X-Sec.
Indexed C. Johnson Date 7-26-51 Date Date No.

| STATION | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks | |
| 190+00 | 185+00 | 1 | RY | 10:00 | 57°54' | | |
| | | 2 | R | | 57°07' | | |
| | | 3 | Y | | 54°48' | | |
| | | 4 | RY | 10:05 | 53°06' | | |
| | | 5 | R | | 52°54' | | |
| | | 6 | Y | | 52°05' | | |
| | | 7 | RY | 10:09 | 47°58' | | |
| | | 8 | R | | 45°09' | | |
| | | 9 | Y | | 45°24' | | |
| | | 10 | RY | 10:13 | 44°34' | | |
| | | 11 | R | | 43°57' | | |
| | | 12 | Y | | 42°52' | | |
| | | 13 | RY | 10:15 | 41°32' | | |
| | | 14 | R | | 40°36' | | |
| | | 15 | Y | | 40°32' | | |
| | | 16 | RY | 10:16 | 38°25' | | |
| | | 17 | R | | 37°24' | | |
| | | 18 | Y | | 35°50' | | |
| | | 19 | RY | 10:18 | 33°58' | | |

CUT IN 185+00

76L298 307 4-50

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 180+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 9:24 08 24 | 28.7 27.5 | 27.9 | 2.9 | 25.0 | |
| 2 | R. | | 27.3 26.3 | 26.6 | | 23.7 | |
| 3 | Y. | | 26.2 25.3 | 25.6 | | 22.7 | |
| 4 | R.Y. | 9:28 08 28 | 25.1 24.1 | 24.4 | 2.9 | 21.5 | |
| 5 | R. | | 23.4 22.8 | 23.0 | | 20.1 | |
| 6 | Y. | | 22.5 21.8 | 22.0 | | 19.1 | |
| 7 | R.Y. | 9:30 08 30 | 21.2 20.3 | 20.6 | 2.9 | 17.7 | |
| 8 | R. | | 20.1 19.3 | 19.6 | | 16.7 | |
| 9 | Y. | | 19.0 18.0 | 18.3 | | 15.4 | |
| 10 | R.Y. | 9:32 08 32 | 18.0 17.0 | 17.3 | 2.9 | 14.4 | |
| 11 | R. | | 16.5 15.7 | 16.0 | | 13.1 | |
| 12 | Y. | | 15.5 14.4 | 14.8 | | 11.9 | |
| 13 | R.Y. | 9:34 08 34 | 13.9 13.0 | 13.3 | 2.9 | 10.4 | |
| 14 | R. | | 12.8 11.8 | 12.1 | | 9.2 | |
| 15 | Y. | | 11.5 10.5 | 10.8 | | 7.9 | |
| 16 | R.Y. | 9:36 08 36 | 10.1 9.0 | 9.4 | 2.9 | 6.5 | |
| 17 | R. | | 8.7 7.8 | 8.1 | | 5.2 | |
| 18 | Y. | | 7.3 6.3 | 6.6 | | 3.7 | |
| 19 | R.Y. | 9:38 08 38 | 6.2 5.0 | 5.4 | 2.9 | 2.5 | |
| 20 | R. | | | | | | |

BOAT 180+00

Profile Notes Red. RCWF Plotted _____ Job No. 8412 Division No. V F.B. 1296 Pg. 157
No. _____ Date 9-6-51 Date _____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. TMI Checked _____ Survey by F.H.B. Notes E.R.V. Date 7-26-51
No. _____ Date 9-17-51 Date _____ Map No. _____ Indexed E. Johnson Date _____

76L298 307 4-50

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 185+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Ht. Tide | Adj. Depth | Remarks |
| 1 | RY | 10:00 0900 | 28.3 27.4 27.2 | 27.7 | 3.0 | 24.7 | |
| 2 | R | | 26.3 26.2 | 26.6 | | 23.6 | |
| 3 | Y | | 25.2 25.0 | 25.5 | | 22.5 | |
| 4 | RY | 10:05 0905 | 24.0 23.7 | 24.3 | 3.0 | 21.3 | |
| 5 | R | | 22.7 22.0 | 23.0 | | 20.0 | |
| 6 | Y | | 21.0 22.0 | 21.3 | | 18.3 | |
| 7 | RY | 10:10 0910 | 20.0 20.5 | 20.7 | 3.0 | 17.7 | |
| 8 | R | | 18.8 18.8 | 19.4 | | 16.4 | |
| 9 | Y | | 17.5 17.2 | 17.9 | | 14.9 | |
| 10 | RY | 10:14 0914 | 16.0 15.9 | 16.4 | 3.0 | 13.4 | |
| 11 | R | | 14.9 14.9 | 15.2 | | 12.2 | |
| 12 | Y | | 13.4 12.9 | 13.9 | | 10.9 | |
| 13 | RY | 10:15 0915 | 11.9 11.2 | 12.2 | 3.0 | 9.2 | |
| 14 | R | | 10.6 11.0 | 10.8 | | 7.8 | |
| 15 | Y | | 9.4 9.0 | 9.9 | | 6.9 | |
| 16 | RY | 10:17 0917 | 8.0 8.0 | 8.3 | 3.0 | 5.3 | |
| 17 | R | | 7.0 7.0 | 7.3 | | 4.3 | |
| 18 | Y | | 6.0 6.0 | 6.3 | | 3.3 | BOAT 180+00 |
| 19 | RY | 10:18 0918 | 5.0 | 5.3 | 3.0 | 2.3 | |
| 20 | R | | | | | | |

F. B. 1296 PG. 138

Job No. 8412 Division No. V Notes Red. [illegible] Plotted ____ Profile ____

Survey of Beach Erosion Studies Date 7-26-51 Date ____ No. ____

Survey by F.H.B. Notes Vol 1 mag/c Notes Chkd. T.M.I. Checked ____ X-Sec. ____

Indexed R. C. Johnson Date 7 Date 2-17-51 Date ____ No. ____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| | | | | | | SHORE ∡ 90° |
| 190+00 | 32 | 171 | | 1387 | 1X2 ON | Sand DUNE. |
| | | | 20 | 151 | 13' RT | TOP " |
| | | | 37 | 134 | 23 " | Toe SL. |
| | | | 20 | 151 | 80 " | BLDG LINE. |
| | | | 32 | 139 | 6 LT. | TOP DUNE |
| TRANS. ON 185+00 | | | 53 | 118 | 16 " | |
| | | | 63 | 108 | 33 " | |
| ∡s | | | 88 | 83 | 61 " | |
| 11°53' T.P. | 15 | 62 | 124 | 47 T.D. | 105 (Calc. 105') | WATER |
| 16°-50' | | | 41 | 21 | 151' calc. | BRK |
| 19°-30' | | | 45 | 17 | 177 calc | OCEAN FLOOR. |
| 21°-50' | | | 58 | 04 | 200' calc. | " |
| 24°-05' | | | 51 | 11 | 224' " | " |
| 26°-58' | | | 60 | 02 | 254' " | " |
| 29°-47' | | | 63 | -01 | 286' " | " |
| 32°-24' | | | 65 | -03 | 317' " | " |
| 34°-57' | | | 70 | -08 | 349' " | " |
| 39°-18' | | | 93 | -31 | 409' " | " |
| 42°-43' | | | 121 | -59 | 462' " | " |

SHORE 190+00

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 PG. 159
Date ____ Date ____ Survey of BEACH EROSION STUDIES/TRANCAS.
X-Sec. No. ____ Notes Chkd. [illegible] Checked ____ Survey by C.V. CRUMLEY Notes C.V.C. Date 9-26-51
Date 9-12-51 Date ____ Map No. ____ Indexed [illegible] Date ____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 195+00 | 30 | 171 | | [illegible] | 1X2 ON BEACH. | SHORE ∠ 90° |
| | | | 49 | [illegible] | 9' RT | |
| | | | 43 | [illegible] | 18' " | |
| | | | 23 | [illegible] | 24' " | |
| | | | 02 | [illegible] | 44' " | |
| | | | 00 | [illegible] | 52' " | |
| | | | 30 | [illegible] | 6' Lt. | |
| | | | 49 | [illegible] | 15' " | |
| TRANS. ON | | | 66 | [illegible] | 37' " | |
| 200+00 | | | 92 | [illegible] | 70' " | |
| 12°-15' T.P. | 23 | 70 | 124 | [illegible] T.P. | [illegible] (Calc 109) | Water |
| 16°-39' | | | 52 | [illegible] | 150' calc | Brk. |
| 21°-46' | | | 63 | [illegible] | 200' " | Ocean Flow |
| 23°-28' | | | 60 | [illegible] | 217' " | |
| 28°-14' | | | 64 | [illegible] | 268' " | |
| 31°-51' | | | 67 | [illegible] | 311' " | |
| 36°-10' | | | 80 | [illegible] | 366' " | |
| 41°-08' | | | 105 | [illegible] | 437' " | |
| 42°-48' | | | 120 | [illegible] | 463' " | |

SHORE 195+00

F.B. 1296 PG. 160 40
Job No. 8412 Division No.
Survey of BEACH EROSION STUDIES (TRANCAS)
Survey by C.V. CRUMLEY Notes C.V.C.
Indexed A. C. Johnson Date 7-26-51
Notes Red. Date
Notes Chkd. Date
Plotted Date
Checked Date
Profile No.
X-Sec. No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 190+00 | 185+00 | 1 | R-Y | 10:31 | 89°55' - | | |
| | | 2 | R | | 90°06' - | ∅ - 90° | |
| | | 3 | Y | | 90°00' - | | |
| | | 4 | R-Y | 10 36 | 90°03' - | | |
| | | 5 | R | | 90 28' - | | |
| | | 6 | Y | | 89 18' - | | |
| | | 7 | R-Y | 10 42 | 90 00' - | | |
| | | 8 | R | | 90°35' - | | |
| | | 9 | Y | | 90°00' - | | |
| | | 10 | R-Y | 10:44 | 89°58' - | | |
| | | 11 | R | | 89°57' - | | |
| | | 12 | Y | | 90°21' - | | |
| | | [illegible] | R-Y | 10 46 | 90°10' - | | |
| | | [illegible] | R | | 90°01' - | | |
| | | [illegible] | Y | | 90°30' - | | |
| | | [illegible] | R-Y | 10 49 | 90 12' - | | |
| | | 17 | R | | 89°58' - | | |
| | | 18 | Y | | 89 27' - | | |
| | | 19 | R-Y | 10:52 | 88°57' - | | |

RANGE
190+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. V (7) F.S. 1296 Pg 461
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes M.S. Date 7-26-51
No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 195+00 | 200+00 | 1 | R-Y | 11:07 | 89° 23' | | |
| | | 2 | R | | 89° 36' | | |
| | | 3 | Y | | 90° 15' | | |
| | | 4 | R-Y | 11:11 | 90° 15' | | |
| | | 5 | R | | 90° 15' | | |
| | | 6 | Y | | 90° 15' | | |
| | | 7 | R-Y | 11:13 | 89° 31' | | |
| | | 8 | R | | 89° 14' | | |
| | | 9 | Y | | 90° 33' | | |
| | | 10 | R-Y | 11:19 | 90° 26' | | |
| | | 11 | R | | 89° 41' | | |
| | | 12 | Y | | 89° 53' | | |
| | | 13 | R-Y | 11:21 | 89° 49' | | |
| | | 14 | R | | 89° 36' | | |
| | | 15 | Y | | 89° 50' | | |
| | | 16 | R-Y | 11:25 | 89° 50' | | |
| | | 17 | R | | 89° 36' | | |
| | | 18 | Y | | 89° 41' | | |
| | | 19 | R-Y | 11:28 | 89° 21' | | |
| | | 20 | R | 11:29 | 90° 35' | | |

RANGE 195+00

F. B. 1296 Pg. 162
Job No. [illegible] Division No. V Notes Red. Plotted Profile
Survey of [illegible] Date 7-26-51 Date No.
Survey by [illegible] Notes [illegible] Notes Chkd. Checked X-Sec.
Indexed A. C. Johnson Date Date Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks | |
| 185+00 | 190+00 | 1 | RY | 10:30 | 60°43' | | |
| | | 2 | R | | 59°09' | | |
| | | 3 | Y | | 58°21' | | |
| | | 4 | RY | 10 35 | 56°03' | | |
| | | 5 | R | | 54°18' | | |
| | | 6 | Y | | 53°54' | | |
| | | 7 | RY | 10:41 | 49°07' | | |
| | | 8 | R | | 48°22' | | |
| | | 9 | Y | | 47°45' | | |
| | | 10 | RY | 10:43 | 47°35' | | |
| | | 11 | R | | 47°20' | | |
| | | 12 | Y | | 46°48' | | |
| | | 13 | RY | 10:45 | 46°07' | | |
| | | 14 | R | | 45°14' | | |
| | | 15 | Y | | 44°50' | | |
| | | 16 | RY | 10:48 | 43°03' | | |
| | | 17 | R | | 41°12' | | |
| | | 18 | Y | | 40°05' | | |
| | | 19 | RY | 10 51 | 39°18' | | |

Profile Notes Red ____ Plotted ____ Job No. 8412 Division No. ____ 76L296 Pg. 163
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by Blanchard Notes Mack Date 7-24-51
No. ____ Date ____ Date ____ Map No. ____ Index John Johnson Date ____

Cut 14
190+00

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time | Hor. Ang. | Remarks | |
| 200+00 195+00 | 1 | RY | 11:06 | 62°03' | | |
| | 2 | R | | 60°58' | | |
| | 3 | Y | | 58°15' | | |
| | 4 | RY | 11:10 | 57°10' | | |
| | 5 | R | | 56°25' | | |
| | 6 | Y | | 55°23' | | |
| | 7 | RY | 11:12 | 54°01' | | |
| | 8 | R | | 53°30' | | |
| | 9 | Y | | 49°43' | | |
| | 10 | RY | 11:18 | 48°41' | | |
| | 11 | R | | 48°04' | | |
| | 12 | Y | | 47°12' | | |
| | 13 | RY | 11:20 | 46°51' | | |
| | 14 | R | | 46°09' | | |
| | 15 | Y | | 45°14' | | |
| | 16 | RY | 11:24 | 44°05' | | |
| | 17 | R | | 43°33' | | |
| | 18 | Y | | 42°02' | | |
| | 19 | RY | 11:27 | 40°10' | | |
| | 20 | R | 11:28 | 38°17' | | |

F.B. 1296 Pg. 161 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No. X-Sec.
Survey by Blanchard Notes Mack Notes Chkd. Checked
Indexed R. C. Johnson Date 7-26-51 Date Date No.

76L298 307 4-50

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 190+00 # | Color | B. S. Time | H. I. Meas. Depth | F. S. Bottom | ELEV. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 29.0 | | | | |
| 1 | R.Y. | 10:30 0930 | 27.7 27.8 | 28.1 | 3.1 | 25.0 | |
| 2 | R. | | 26.7 26.6 | 27.1 | | 24.0 | |
| 3 | Y. | | 25.7 26.0 | 26.0 | | 22.9 | |
| 4 | R.Y | 10:35 0935 | 24.7 25.0 | 25.1 | 3.1 | 22.0 | |
| 5 | R. | | 23.6 23.5 | 24.1 | | 21.0 | |
| 6 | Y. | | 22.0 21.0 | 22.5 | | 19.4 | |
| 7 | RY | 10:41 0941 | 20.2 19.5 | 20.5 | 3.1 | 17.4 | |
| 8 | R. | | 19.0 18.0 | 19.2 | | 16.1 | |
| 9 | Y. | | 17.5 17.1 | 17.7 | | 14.6 | |
| 10 | R.Y. | 10:43 0943 | 16.5 16.5 | 16.7 | 3.1 | 13.6 | |
| 11 | R. | | 15.3 15.1 | 15.7 | | 12.6 | |
| 12 | Y | | 14.1 14.0 | 14.4 | | 11.3 | |
| 13 | R.Y | 10:45 0945 | 13.0 13.0 | 13.3 | 3.1 | 10.2 | |
| 14 | R. | | 12.0 12.0 | 12.3 | | 9.2 | |
| 15 | Y | | 11.0 10.4 | 11.3 | | 8.2 | |
| 16 | R.Y. | 10:48 0948 | 9.4 8.8 | 9.7 | 3.2 | 6.5 | |
| 17 | R. | | 7.8 7.2 | 8.1 | | 4.9 | |
| 18 | Y. | | 6.7 6.8 | 6.9 | | 3.7 | |
| 19 | RY | 10:51 0951 | 5.3 | 5.8 | 3.2 | 2.6 | |
| 20 | R | | | | | | |

190+00 Bot

Profile Notes Red. Lewis Plotted _____ Job No. 3612 Division No. K Page 165
No. _____ Date 9-6-51 Date _____ Survey of Rancho Fairway Estates
X-Sec. Notes Chkd. TM Checked _____ Survey by F.H.B. Notes FRK Date 7-26-51
No. _____ Date 9-17-51 Date _____ Map No. _____ Date _____

76L298 307 4-50

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 195+00 | | B. S. | H. I. | F. S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | | Remarks |
| 1 | R.Y. | 11:06 10.06 | 28.1 27.7 27.1 | 27.8 | 3.2 | 24.6 | | |
| 2 | R. | | 26.5 26.0 | 26.7 | | 23.5 | | |
| 3 | Y | | 25.0 25.0 | 25.3 | | 22.1 | | |
| 4 | R.Y. | 11:11 10.11 | 24.0 24.0 | 24.3 | 3.2 | 21.1 | | |
| 5 | R. | | 23.0 23.9 | 23.3 | | 20.1 | | |
| 6 | Y. | | 22.0 21.8 | 22.6 | | 19.4 | | |
| 7 | R.Y. | 11:13 10.13 | 20.4 20.6 | 20.9 | 3.2 | 17.7 | | |
| 8 | R. | | 19.4 18.5 | 19.8 | | 16.6 | | |
| 9 | Y. | | 17.6 17.9 | 17.9 | | 14.7 | | |
| 10 | R.Y. | 11:19 10.19 | 16.3 16.0 | 16.8 | 3.3 | 13.5 | | |
| 11 | R. | | 15.1 14.9 | 15.4 | | 12.1 | | |
| 12 | Y. | | 13.9 14.0 | 14.2 | | 10.9 | | |
| 13 | R.Y. | 11:21 10.21 | 12.9 12.4 | 13.3 | 3.3 | 10.0 | | |
| 14 | R. | | 11.5 12.0 | 11.8 | | 8.5 | | |
| 15 | Y | | 10.4 10.0 | 10.9 | | 7.6 | | |
| 16 | R.Y. | 11:24 10.24 | 9.2 8.9 | 9.5 | 3.4 | 6.1 | | |
| 17 | R. | | 8.0 8.0 | 8.3 | | 4.9 | | |
| 18 | Y. | | 7.0 7.1 | 7.3 | | 3.9 | | |
| 19 | R.Y. | 11:27 10.27 | 5.9 6.0 | 6.3 | 3.4 | 2.9 | | |
| 20 | R. | 11:28 10.28 | 4.9 | 5.3 | 3.4 | 1.9 | | |

BOAT 195+00

Profile
X-Sec.
No.
Plotted
Date
Checked
Date
Notes Red
Date 7-26-51
Notes Chkd T.M.L.
Date 9-17-51
Division No. V
Job No. 8412
Survey of Beach Erosion Studies
Survey by F.H.B.
Notes Vol Nagle
Indexed A. C. Johnson
Date
P.B. 1296 Pg. 46

76L298 307 5-49

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.

147
47
75

**Do not extend notes this side of this line.**

| STATION | B. S. | H. I. | F. S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|
| 200+00 | 39 | 147 | | 10 76 | | 1 X 2 ON BEACH | SHORE ∡ 95° |
| | | | 33 | 11 2 | | Sand. | |
| | | | 27 | 12 0 | | 37' RT. | |
| | | | 11 | 13 6 | | 45' RT. | |
| | | | 16 | 13 1 | | 53 RT. | |
| (TRANS. ON 195+00) | | | 07 | 14 6 | | 57 TOE OF SLOPE of Bluff | |
| | | | 48 | 9.9 | | 14' LT. | |
| | | | 72 | 7 5 | | 37' " | |
| 8°-48' T.P. | 24 | 71 | 100 | 4 7 | T.P. | TAPE 77 " (Calc 77') | Water |
| 14°-16' | | | 50 | 2 1 | | 127 calc. | BRK. |
| 18°-05' | | | 57 | 1 4 | | 167' " | OCEAN FLOOR |
| 21°-10' | | | 57 | 1 4 | | 194' " | |
| 25°-02' | | | 59 | 1 3 | | 234 " | |
| 28°-45' | | | 64 | 0 7 | | 274' " | |
| 31°-27' | | | 71 | 0 0 | | 306' " | |
| 33°-25' | | | 78 | -0 7 | | 335' " | |
| 35°-35' | | | 87 | -1 6 | | 358' " | |
| 38°-37' | | | 101 | -3 0 | | 400' " | |
| 41°-13' | | | 120 | ~~-5 1~~ | | 438 " | |
| | | | | -4 9 | | | |

SHORE
200+00

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 PG. 167
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (TRANCAS)
Notes Chkd. Lowe Checked ____ Survey by C.V.C. Notes C.V.C. Date 7-26-51
Date 9-12-51 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 204+00 | 36 | 151 | | 1[illegible]4 ✓ | 1X2 ON B[illegible] | |
| | | | 30 | 1[illegible] ✓ | SAND | |
| | | | 16 | 1[illegible] ✓ | 13' RT | TOE SL. of B[illegible] |
| (TRANS. ON) | | | 66 | [illegible] ✓ | 20' LT | |
| 199+00 | 46°-01' ✓ | | 97 | [illegible] ✓ | TAPE 53 | (Calc 53') [illegible] |
| 7°-31' ✓ T.P. | 25 | 72 ✓ | 104 | [illegible] ✓ | T.P. 66 | (Calc. 66') |
| 12°-26' ✓ | | | 48 | [illegible] ✓ | 110 ✓ Calc. | [illegible] |
| 16°-07' ✓ | | | 70 | [illegible] ✓ | 145' ✓ " | [illegible] |
| 19°-13' ✓ | | | 57 | [illegible] ✓ | 174 ✓ " | " " |
| 21°-53' ✓ | | | 57 | [illegible] ✓ | 201 ✓ " | " " |
| 24°-31' ✓ | | | 64 | [illegible] ✓ | 228' ✓ " | " " |
| 27°-24' ✓ | | | 64 | [illegible] ✓ | 259 ✓ " | " " |
| 31°-16' ✓ | | | 72 | [illegible] ✓ | 304 ✓ | " " |
| 33°-23' ✓ | | | 83 | -1 ✓ | 330' ✓ " | " " |
| 37°-29' ✓ | | | 91 | -[illegible] ✓ | 383' ✓ " | " " |
| 40°-00' ✓ | | | 108 | [illegible] ✓ | 420 ✓ " | " " |
| 41°-48' ✓ | | | 115 | -6 ✓ | 447 ✓ " | " " |

SHORE
20+00

F.B. 7296 PG. 168 42 Job No. 8412 Division No. _____ Notes Red. _____ Plotted _____ Profile _____
Survey of BEACH EROSION STUDIES (TRANCAS) Date _____ Date _____ No. _____
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. _____ Checked _____ X-Sec. _____
Indexed A. C. Johnson Date 7-26-51 Date _____ Date _____ No. _____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time | Hor. Ang. | | Remarks |
| 200+00 204+00 | 1 | R-Y | 7 29 | 89°57 | - | Range: 200+00 |
| | 2 | R | | 90°05 | - | |
| | 3 | Y | | 89°55 | - | |
| | 4 | R-Y | 7 [illegible] | 90°03 | - | |
| | 5 | R | | 89°45 | - | |
| | 6 | Y | | 89°58 | - | |
| | 7 | R-Y | 7 34 | 89°46 | - | |
| | 8 | R | | 89°46 | - | |
| | 9 | Y | | 90°19 | - | |
| | 10 | R-Y | 7 37.5 | 89°36 | - | |
| | 11 | R | | 89°36 | - | |
| | 12 | Y | | 90°03 | - | |
| | 13 | R-Y | 7 42.5 | 89°55 | - | |
| | 14 | R | | 89 45 | - | |
| | 15 | Y | | 89 56 | - | |
| | 16 | R-Y | 7:44 | 89 39 | - | |
| | 17 | R | | 90 05 | - | |
| | 18 | Y | | 89 40 | - | |
| | 19 | R-Y | 7:46 | 90°12 | - | |
| | 20 | R | | 89°52 | - | |

RANGE
200+00

Profile Notes Red ____ Plotted ____ Job No. 8412 Division No. V (1) F.B. 1296 Pg. 169
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes M.S. Date 7-27-51
No. ____ Date ____ Date ____ Map No. ____ Reduced Johnson Date ____

F. B. 1296 Pg. 170 Job No. 8412 Division No. V Notes Red. Plotted Profile

Survey of Beach Erosion Studies Date 7-27-51 Date No.

Survey by FHB Notes M.S. Notes Chkd. Checked X-Sec.

Indexed R. C. Johnson Date Date Date No.

RANGE
200+00

| STATION | B.S. | H.I. | F.S. | ELEV. | Remarks |
|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time Hor. Ang. | | |
| 200+00 204+00 | 21 | | | 90 00 | |
| | 22 | R-Y | 7 48 | 80 55 | |

76L298 307 4-50

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.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 204+00 | 200+00 | 1 | R-Y | 7:30 | 68° 10' | | |
| | | 2 | R | | 67° 40' | | |
| | | 3 | Y | | 66 46 | | |
| | | 4 | R-Y | 7:32 | 65 50 | | |
| | | 5 | R | | 64 52 | | |
| | | 6 | Y | | 63° 55' | | |
| | | 7 | R-Y | 7:35 | 63° 20' | | |
| | | 8 | R | | 62° 55' | | |
| | | 9 | Y | | 60° 30' | | |
| | | 10 | R-Y | 7:38 | 60° 00' | | |
| | | 11 | R | | 58° 45' | | |
| | | 12 | Y | | 57 45 | | |
| | | 13 | R-Y | 7:43 | 55 45 | | |
| | | 14 | R | | 54 37 | | |
| | | 15 | Y | | 53° 50' | | |
| | | 16 | R-Y | 7:45 | 52° 45' | | |
| | | 17 | R | | 52 03 | | |
| | | 18 | Y | | 51 00 | | |
| | | 19 | R-Y | 7:47 | 49 20 | | |
| | | 20 | R | | 47 30 | | |

CUT IN
200+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ 7296 Page 77
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes English Date 7-27-56
No. ____ Date ____ Date ____ Map No. ____ L.G. Johnson Date ____

F.B. 1296 Pg. 172 Job No. 8412 Division No. Notes Red. Plotted Profile

Survey of Beach Erosion Studies Date 7-27-51 Date No.

Survey by E.H.B. Notes English Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

CUT IN
200+00

| STATION | B.S. | H.I. | F.S. | ELEV. | |
|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time | Hor. Ang. | Remarks |
| 204+00 200+00 | 21 | Y | | 46° 30' | |
| | 22 | R-Y | 7:49 | 43° 33' | |

76L298 307 4-50

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.

76L298 307 4-50

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 200+00

| # | Color | B. S. Time | H. I. Meas. Depth | F. S. Bottom | ELEV. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | R.Y. | 7:29 0629 | 29.3 28.0 28.0 | 28.4 | 3.4 | 25.0 | |
| 2 | R | | 26.4 26.8 | 26.9 | | 23.5 | |
| 3 | Y | | 25.3 26.1 | 25.8 | | 22.4 | |
| 4 | R.Y. | 7:32 0632 | 23.3 24.0 | 24.2 | 3.4 | 20.8 | |
| 5 | R | | 22.2 22.6 | 22.8 | | 19.4 | |
| 6 | Y | | 20.9 22.0 | 21.5 | | 18.1 | |
| 7 | R.Y. | 7:35 0635 | 19.5 20.1 | 20.3 | 3.4 | 16.9 | |
| 8 | R | | 18.5 23.5 | 19.0 | | 15.6 | |
| 9 | Y | | 22.0 23.0 | 22.5 | | 19.1 | |
| 10 | R.Y. | 7:38 0638 | 20.1 22.0 | 21.1 | 3.4 | 17.7 | |
| 11 | R | | 19.1 18.9 | 20.1 | | 16.7 | |
| 12 | Y | | 17.4 19.0 | 17.9 | | 14.5 | |
| 13 | R.Y. | 7:43 0643 | 16.1 15.9 | 17.1 | 3.4 | 13.7 | |
| 14 | R | | 14.8 14.6 | 15.2 | | 11.8 | |
| 15 | Y | | 13.1 13.9 | 13.6 | | 10.2 | |
| 16 | R.Y. | 7:45 0645 | 12.1 13.1 | 12.7 | 3.4 | 9.3 | |
| 17 | R | | 11.0 11.4 | 11.7 | | 8.3 | |
| 18 | Y | | 10.0 10.1 | 10.5 | | 7.1 | |
| 19 | R.Y. | 7:47 0647 | 9.0 9.3 | 9.4 | 3.4 | 6.0 | |
| 20 | R | | 7.8 | 8.3 | | 4.9 | |

BOAT
200+00

Profile Notes Red. LCMS Plotted ____ Job No. 8412 Division No. V F.B. 1298 Pg. 173
No. ____ Date 9-6-51 Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. T.M.I. Checked ____ Survey by F.H.B. Notes E.R.V. Date 7-27-51
No. ____ Date 9-17-51 Date ____ Map No. ____ Indexed C. Johnson Date ____

F. B. 1296 Pg. 174 Job No. 8412 Division No. V Notes Red. Lew. Plotted _____ Profile

Survey of Beach Erosion Studies Date 7-27-51 Date _____ No. _____

Survey by F.H.B. Notes Vollnagle Notes Chkd T.M.I. Checked _____ X-Sec.

Indexed A. C. Johnson Date _____ Date 9-17-51 Date _____ No. _____

76L298 307 4-50

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 | # | Color | B.S. Time | H.I. Meas. Depth | F.S. Bottom | ELEV. Ht. Tide | [illegible] Depth | [illegible] |
|---|---|---|---|---|---|---|---|---|
| 200+00 | 21 | Y | 7.49 | 9.6 | 7.4 | 3.4 | 4.0 | |
| | 22 | R.Y | 0649 | 6.3 | 6.1 | 3.4 | 2.7 | |
| | | R | | 8.0 | | | | |
| | | Y | | 5.2 | | | | |
| | | R.Y | | | | | | |

BOAT

200+00

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 204+00 | 200+00 | 1 | R&Y | 8:56 | 89°31' | | |
| | | 2 | R | | 89°48' | | |
| | | 3 | Y | | 89°59' | | |
| | | 4 | R&Y | 9:01 | 89°49' | | |
| | | 5 | R | | 89°49' | | |
| | | 6 | Y | | 89°28' | | |
| | | 7 | R&Y | 9:03 | 89°49' | | |
| | | 8 | R | | 89°56' | | |
| | | 9 | Y | | 89°22' | | |
| | | 10 | R&Y | 9:07 | 89°23' | | |
| | | 11 | R | | 89°39' | | |
| | | 12 | Y | | 89°18' | | |
| | | 13 | R&Y | 9:09 | 89°04' | | |
| | | 14 | R | | 88°58' | | |
| | | 15 | Y | | 89°01' | | |
| | | 16 | R&Y | 9:11 | 88°57' | | |
| | | 17 | R | | 89°15' | | |
| | | 18 | Y | | 89°54' | | |
| | | 19 | R&Y | 9:13 | 89°32' | | |
| | | 20 | R | | 89°08' | | |

RANGE
204+00

Profile Notes Red. Plotted Job No. 8412 Division No. V F.B. 1296 Pg. 175
No. Date Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. Checked Survey by F.H.B. Notes M.N. Date 7-27-51
No. Date Date Map No. Indexed Johnson Date

76L298 307 4-50

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.**

F. B. 1296 Pg. 174 Job No. 8412 Division No. Y Notes Red. Plotted Profile No.
Survey of Beach Erosion Studies Date 7-27-51 Date X-Sec. No.
Survey by EHB Notes MN Notes Chkd. Checked
Indexed C. Johnson Date Date Date No.

| STATION Inst. At | Sight On | B. S. # | H. I. Color | F. S. Time | ELEV. Her. Ang. | Remarks |
|---|---|---|---|---|---|---|
| 204+00 | 200+00 | 21 | Y | | 89° 19' | |
| | | 22 | R&Y | 9:17 | 89° 57' | |
| | | 23 | R | | 89° 45' | |
| | | 24 | Y. | | 89° 45' | |
| | | 25 | R&Y | 9:20 | 89° 48' | |
| | | 26 | R | 9:21 | 90° 18' | |

RANGE
204+00

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks | |
| 200+00 | 204+00 | 1 | R-Y | 8:57 | 69° 36' | . | |
| | | 2 | R | | 68° 45' | . | |
| | | 3 | Y | | 66° 48' | . | |
| | | 4 | R-Y | 9:02 | 66° 00' | . | |
| | | 5 | R | | 65° 02' | . | |
| | | 6 | Y | | 64° 40' | . | |
| | | 7 | R-Y | 9:03 | 63° 30' | . | |
| | | 8 | R | | 63° 10' | . | |
| | | 9 | Y | | 63° 26' | . | |
| | | 10 | R-Y | 9:07 | 63° 16' | . | |
| | | 11 | R | | 62° 11' | . | |
| | | 12 | Y | | 62° 13' | . | |
| | | 13 | R-Y | 9:10 | 61° 31' | . | |
| | | 14 | R | | 61° 03' | . | |
| | | 15 | Y | | 60° 29' | . | |
| | | 16 | R-Y | 9:11 | 59° 53' | . | |
| | | 17 | R | | 58° 55' | . | |
| | | 18 | Y | | 57° 50' | . | |
| | | 19 | R-Y | 9:14 | 55° 52' | . | |
| | | 20 | R | | 54° 52' | . | |

CUT IN 204+00

Profile Notes Red ____ Plotted ____ Job No. 8412 Division No. ____ B.B. 1296 Pg. 177
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes English Date 7-27-51
No. ____ Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 200+00 | 204+00 | 21 | Y | | 53° 58' | . | |
| | | 22 | R-Y | 9:18 | 48° 52' | . | |
| | | 23 | R | | 47° 25' | . | |
| | | 24 | Y | | 46° 39' | . | |
| | | 25 | R-Y | 9:20 | 46° 18' | . | |
| | | 26 | R | 9 21 | 41° 27' | . | |

CUT IN 204+00

F. B. 1296 Pg. 178 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-27-51 Date No.
Survey by F.H.B. Notes English Notes Chkd. Checked X-Sec.
Indexed R. C. Johnson Date Date No.

76L298 307 4-50

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.

Profile No. 1796 Pg. 1/2
Notes Red Louie Plotted Date 9-6-51
Job No. 5412 Division No. V
Survey of Beach Erosion Study
Notes Blue Checked Date 9-17-51
Survey by E.H.B. Notes E.B.L. Date 7-27-51
X-Sec. No. Date
Map No. Date

STATION 204+00

| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 29.7 | | | | |
| 1 | R.Y. | 9:56 | 28.0 | 28.6 | 3.3 | 25.3 | |
| | | | 28.1 | | | | |
| 2 | R. | 0756 | 27.0 | 27.4 | | 24.1 | |
| | | | 27.0 | | | | |
| 3 | Y. | | 25.9 | 26.3 | | 23.0 | |
| | | | 26.1 | | | | |
| 4 | R.Y. | 9:01 | 25.0 | 25.4 | 3.3 | 22.1 | |
| | | 08 01 | 25.1 | | | | |
| 5 | R | | 24.0 | 24.4 | | 21.1 | |
| | | | 23.5 | | | | |
| 6 | Y | | 22.5 | 22.8 | | 19.5 | |
| | | | 22.3 | | | | |
| 7 | R.Y. | 9:03 | 20.8 | 21.3 | 3.3 | 18.0 | |
| | | 08 03 | 20.4 | | | | |
| 8 | R. | | 19.1 | 19.5 | | 16.2 | |
| | | | 18.5 | | | | |
| 9 | Y. | | 17.3 | 17.7 | | 14.4 | |
| | | | 12.5 | | | | |
| 10 | R.Y. | 9:06 | 11.5 | 11.8 | 3.3 | 8.5 | |
| | | 08 06 | 13.6 | | | | |
| 11 | R. | | 12.6 | 12.9 | | 9.6 | |
| | | | 17.2 | | | | |
| 12 | Y | | 16.7 | 16.5 | | 13.2 | |
| | | | 20.8 | 21.1 | | 17.8 | |
| 13 | R.Y. | 9:09 | 21.8 | ~~22.1~~ | 3.3 | ~~18.8~~ | |
| | | 08 09 | 20.1 | | | | |
| 14 | R. | | 18.8 | 19.2 | | 15.9 | |
| | | | 18.0 | | | | |
| 15 | Y. | | 17.0 | 17.3 | | 14.0 | |
| | | | 16.7 | | | | |
| 16 | R.Y. | 9:10 | 15.9 | 16.2 | 3.3 | 12.9 | |
| | | 08 10 | 15.7 | | | | |
| 17 | R. | | 14.1 | 14.6 | | 11.3 | |
| | | | 14.1 | | | | |
| 18 | Y. | | 12.6 | 13.1 | | 9.8 | |
| | | | 15.3 | | | | |
| 19 | R.Y. | 9:13 | 14.1 | 14.5 | 3.3 | 11.2 | |
| | | 08 13 | 14.2 | | | | |
| 20 | R. | | 12.5 | 13.1 | | 9.8 | |

204+00

76L29B 307 4-50

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 204+00 # | Color | B. S. Time | H. I. Meas. Depth | F. S. Bottom | ELEV. Ht. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| 21 | Y | | 13.3 / 11.3 | 12.0 | 3.3 | 8.7 | |
| 22 | RY | 9:17 / 08 17 | 13.3 / 11.5 / 10.0 | 12.1 | 3.3 | 8.8 | |
| 23 | R | | 8.0 / 8.2 | 8.7 | | 5.4 | |
| 24 | Y | | 6.7 / 9.0 | 7.2 | | 3.9 | |
| 25 | RY | 9:19 / 08 19 | 5.7 / 5.4 | 6.8 | 3.3 | 3.5 | |
| 26 | R | 9:21 / 08 21 | 4.2 | 4.6 | 3.3 | 1.3 | |
| 27 | Y | | | | | | |
| 28 | RY | | | | | | |

BOAT 204+00

F. B. 1296 Pg. 180 Job No. 8412 Division No. 1 Notes Red. Lew. Plotted ___ Profile ___
Survey of Beach Erosion Studies Date 7-27-51 Date ___ No. ___
Survey by FHB Notes E.R.V. Notes Chkd. TM.L Checked ___ X-Sec. ___
Indexed by C. Johnson Date ___ Date 2-17-51 Date ___ No. ___

76L298 307 5-49

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

10.0

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

20.2

9.5
4.1
4.8

**Do not extend notes this side of this line.**

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 214+00 | 41 | 20 2 | | 16 05 | 1X2 ON BEACH | SHORE ∡ 90° |
| | | | 31 | 17 1 | SAND | |
| | | | 39 | 16 3 | 25' RT | TOE BLUFF |
| | | | 30 | 17 2 | 11' LT | BRK |
| TRANS. ON | | | 47 | 15 5 | 19 " | |
| 219+00 | | | 75 | 12 7 | 34 " | |
| ∡ ∡ 6°-37' | | | 97 | 10 5 | 47 " | |
| T.P. | 0.9 | 9 5 | 11 6 | 8 6 | T.P. TAPE 58 " (Calc 58') | |
| 8°-34' | | | 33 | 6 2 | 76 (Calc 75') | Water |
| 9°55' T.P. | 3 2 | 7 9 | 4 [illegible] | 4 7 | T.P. 88 (Calc 87') | BEACH |
| 12°46' | | | 6 7 | 1 2 | 113 Calc. | OCEAN FLOOR |
| 14°17' | | | 7 5 | 0 4 | 127' " | " " |
| 17°26' | | | 8 6 | -0 7 | 157' " | " " |
| 19°13' | | | 9 4 | -1 5 | 175' " | " " |
| 22°46' | | | 11 6 | -3 1 | 215' " | " " |
| 24°41' | | | 12 2 | -4 3 | 230' " | " " |
| 27°35' | | | 13 3 | -5 4 | 261' " | " " |

SHORE 214+00

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 7296 PG. 181
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (EXCAVAL)
Notes Chkd. [illegible] Checked ____ Survey by C.V. CRUMLEY Notes C.V.C. Date 7-27-51
Date 9-12-51 Date ____ Map No. ____ Index Johnson Date ____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 218+00 | 44 | 204 | | 1598 | 1X2 IN HOLE | SHORE ∡ 90° |
| | | | 42 | 162 | Sand | |
| | | | 55 | 149 | 26' RT | BRK |
| | | | 23 | 181 | 38 " | TOP BRK |
| | | | 29 | 175 | 47 " | BRK |
| | | | 15 | 189 | 59 " | |
| | | | 02 | 202 | 79 " | |
| | | | 04 | 200 | 84 " | S'LY edge RD. |
| | | | 38 | 166 | 18 LT. | TOP SL. ON BEACH. |
| | | | 48 | 156 | 25 " | " " |
| (TRANS. ON 213+00) | | | 82 | 122 | 39 " | " " |
| | | | 106 | 98 | 50 " | " " |
| ∡ 6°-14' T.P. | 16 | 10.2 | 118 | 8.6 | T.P. TAPE 55 " (Calc 55') | |
| 8°-53' T.P. | 33 | 86 | 55 | 47 | T.P. 79 " (calc. 78') | Water |
| 11°-31' | | | 65 | 15 | 102' calc. | BRK. |
| 14°-17' | | | 77 | 03 | 127' calc. | ocean FLOOR. |
| 17°-19' | | | 86 | -06 | 156' " | " " |
| 20°-34' | | | 102 | -22 | 188' " | " " |
| 24°-02' | | | 122 | -42 | 223' " | " " |
| 28°-37' | | | 151 | -71 | 273' " | " " |
| 31°-04' | | | 171 | -91 | 301' " | " " |

SHORE 218+00

F.B. 296 PG. 182 44
Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of BEACH EROSION STUDIES (ENCINAL) Date Date X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked No.
Indexed R. C. Johnson Date 7-27-51 Date Date

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 214+00 | 218+00 | 1 | R-Y | 9 39 | 90°38 | | |
| | | 2 | R | | 90°46 | | |
| | | 3 | Y | | 91°17 | | |
| | | 4 | R-Y | 9 44 | 90°40 | | |
| | | 5 | R | | 90°54 | | |
| | | 6 | Y | | 88°27 | | |
| | | 7 | R-Y | 9 49 | 89°40 | | |
| | | 8 | R | | 90°07 | | |
| | | 9 | Y | | 89°54 | | |
| | | 10 | R-Y | 9 53 | 89°40 | | |
| | | 11 | R | | 89 40 | | |
| | | 12 | Y | | 90 04 | | |
| | | 13 | R-Y | 9 55 | 89 52 | | |
| | | 14 | R | | 89 00 | | |
| | | 15 | Y | | 90°23 | | |
| | | 16 | R-Y | 9 58 | 88 58 | | |
| | | 17 | R | | 89 47 | | |
| | | 18 | Y | | 88 31 | | |
| | | 19 | R-Y | 10 01 | 89 58 | | |

RANGE
214+00

Profile Notes Red. Plotted Job No. 8412 Division No. V F. B. 1296 Pg. 183
No. Date Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. Checked Survey by F.H.B. Notes MS Date 7-27-51
No. Date Date Map No. Indexed Johnson Date

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 218+00 | 222+00 | 1 | R&Y | 10:13 | 90° 04' | | |
| | | 2 | R | | 90° 04' | | |
| | | 3 | Y | | 90° 36' | | |
| | | 4 | R&Y | 10:16 | 89° 38' | | |
| | | 5 | R | | 90° 04' | | |
| | | 6 | Y | | 90° 14' | | |
| | | 7 | R&Y | 10:19 | 89° 38' | | |
| | | 8 | R | | 89° 50' | | |
| | | 9 | Y | | 90° 7' | | |
| | | 10 | R&Y | 10:22 | 88° 56' | | |
| | | 11 | R | | 90° 42' | | |
| | | 12 | Y | | 90° 05' | | |
| | | 13 | R&Y | 10:26 | 88° 53' | | |
| | | 14 | R | | 89° 07' | | |
| | | 15 | Y | | 90° 03' | | |
| | | 16 | R&Y | 10:28 | 89° 42' | | |
| | | 17 | R | | 88° 48' | | |
| | | 18 | Y | | 89° 06' | | |
| | | 19 | R&Y | 10:31 | 89° 08' | | |
| | | 20 | R | | | | |

RANGE 218+00

F. B. 1296 Pg. 184 Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date 7-27-51 Date No.
Survey by F.H.B. Notes M.N. Notes Chkd. Checked X-Sec.
Indexed R. C. Johnson Date Date Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 218+00 | 214+00 | 1 | R-Y | 9:40 | 64° 29' | , | |
| | | 2 | R | | 63° 38' | . | |
| | | 3 | Y | | 62° 17' | . | |
| | | 4 | R-Y | 9:45 | 59° 14' | . | |
| | | 5 | R | | 58° 34' | . | |
| | | 6 | Y | | 55° 58' | . | |
| | | 7 | R-Y | 9:50 | 53° 36' | . | |
| | | 8 | R | | 49° 58' | . | |
| | | 9 | Y | | 48° 11' | . | |
| | | 10 | R-Y | 9:54 | 46° 35' | , | |
| | | 11 | R | | 43° 58' | . | |
| | | 12 | Y | | 41° 47' | . | |
| | | 13 | R-Y | 9:56 | 39° 14' | . | |
| | | 14 | R | | 35° 05' | . | |
| | | 15 | Y | | 34° 12' | . | |
| | | 16 | R-Y | 9:59 | 32° 28' | . | |
| | | 17 | R | | 32° 19' | . | |
| | | 18 | Y | | 27° 52' | . | |
| | | 19 | R-Y | 10:02 | 24° 29' | . | |

CUT IN
214+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 Pg. 185
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes English Date 7-27-51
No. ____ Date ____ Date ____ Map No. ____ Indexed A. C. Johnson Date ____

76L298 307 4-50

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.**

F. B. 1296 Pg. 186 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-27-51 Date No. X-Sec.
Survey by E.H.B. Notes Notes Chkd. Checked No.
Indexed A. C. Johnson Date Date Date

| STATION | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 222+00 | 218+00 | 1 | R-Y | 10 12 | 67 13 | . | |
| | | 2 | R | | 65° 03' | . | |
| | | 3 | Y | | 62° 21' | . | |
| | | 4 | R-Y | 10:16 | 61° 31' | . | |
| | | 5 | R | | 59° 22' | . | |
| | | 6 | Y | | 57° 51' | . | |
| | | 7 | R-Y | 10:20 | 56° 09' | . | |
| | | 8 | R | | 54° 11' | . | |
| | | 9 | Y | | 52° 29' | . | |
| | | 10 | R-Y | 10:22 | 50° 22' | . | |
| | | 11 | R | | 42° 27' | . | |
| | | 12 | Y | | 40° 09' | . | |
| | | 13 | R-Y | 10:26 | 39° 06' | . | |
| | | 14 | R | | 36° 31' | . | |
| | | 15 | Y | | 33° 20' | . | |
| | | 16 | R-Y | 10:29 | 31° 29' | . | |
| | | 17 | R | | 30° 27' | . | |
| | | 18 | Y | | 26° 01' | . | |
| | | 19 | R-Y | 10:31 | 22° 23' | . | |

CUT IN 218+00

76L298 307 4-50

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 214+00 # | Color | B. S. Time | H. I. Meas. Depth | F. S. Bottom | ELEV. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | R.Y. | 9:40 08 40 | 29.0 28.0 28.0 | 28.3 | 3.3 | 25.0 | |
| 2 | R. | | 27.0 26.7 | 27.3 | | 24.0 | |
| 3 | Y. | | 25.3 24.6 | 25.8 | | 22.5 | |
| 4 | R.Y | 9:45 08 45 | 23.6 23.8 | 23.9 | 3.3 | 20.6 | |
| 5 | R. | | 22.6 22.1 | 23.0 | | 19.7 | |
| 6 | Y. | | 21.1 20.7 | 21.4 | | 18.1 | |
| 7 | R.Y. | 9:49 08 49 | 19.5 19.3 | 19.9 | 3.3 | 16.6 | |
| 8 | R. | | 18.0 17.7 | 18.4 | | 15.1 | |
| 9 | Y. | | 16.5 17.0 | 16.9 | | 13.6 | |
| 10 | R.Y. | 9:53 08 53 | 15.3 15.1 | 15.9 | 3.3 | 12.6 | |
| 11 | R. | | 13.8 13.8 | 14.2 | | 10.9 | |
| 12 | Y | | 12.5 13.0 | 12.9 | | 9.6 | |
| 13 | R.Y | 9:55 08 55 | 11.0 11.1 | 11.7 | 3.3 | 8.4 | |
| 14 | R. | | 10.0 10.2 | 10.4 | | 7.1 | |
| 15 | Y. | | 9.0 9.2 | 9.4 | | 6.1 | |
| 16 | R.Y. | 9:58 08 58 | 7.9 8.2 | 8.3 | 3.3 | 5.0 | |
| 17 | R. | | 6.9 7.4 | 7.3 | | 4.0 | |
| 18 | Y. | | 5.9 6.1 | 6.4 | | 3.1 | |
| 19 | R.Y. | 10:01 0901 | 4.0 | 4.7 | 3.3 | 1.4 | |
| 20 | R. | | | | | | |

BOAT
214+00

Profile Notes Red PCW Plotted Job No. 8412 Division No. V F.B. 1296 Pg. 187
No. Date 9-6-51 Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd TMI Checked Survey by EHB Notes ERV Date 7-27-51
No. Date 9-17-51 Date Map No. Indexed Johnson Date

76L298 307 4-50

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.**

F. B. Pg. 188 Job No. 8412 Division No. V Notes Red. RCW Plotted _____ Profile _____
Survey of Beach Erosion Studies Date 7-27-51 Date _____ No. _____
Survey by F.H.B. Notes Vallnogle Notes Chkd. T.M.L. Checked _____ X-Sec. _____
Indexed R. C. Johnson Date _____ Date 9-17-51 Date _____ No. _____

| STATION | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| 218+00 | | | | | | | |
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 10:12 0912 | 29.0 28.0 | 28.3 | 3.3 | 25.0 | |
| 2 | R. | | 28.0 27.0 | 27.3 | | 24.0 | |
| 3 | Y. | | 27.0 26.0 | 26.3 | | 23.0 | |
| 4 | R.Y. | 10:16 0916 | 26.1 25.0 | 25.4 | 3.3 | 22.1 | |
| 5 | R. | | 25.0 24.0 | 24.3 | | 21.0 | |
| 6 | Y. | | 23.9 22.9 | 23.2 | | 19.9 | |
| 7 | R.Y. | 10:19 0919 | 22.4 21.3 | 21.7 | 3.3 | 18.4 | |
| 8 | R. | | 21.0 19.9 | 20.3 | | 17.0 | |
| 9 | Y. | | 20.0 18.7 | 19.1 | | 15.8 | |
| 10 | R.Y. | 10:22 0922 | 18.5 17.4 | 17.8 | 3.3 | 14.5 | |
| 11 | R. | | 17.9 16.9 | 16.6 | | 13.3 | |
| 12 | Y. | | 15.1 13.8 | 14.2 | | 10.9 | |
| 13 | R.Y. | 10:26 0926 | 14.0 12.7 | 13.1 | 3.3 | 9.8 | |
| 14 | R. | | 12.6 11.2 | 11.7 | | 8.4 | |
| 15 | Y. | | 11.3 9.8 | 10.3 | | 7.0 | |
| 16 | R.Y. | 10:28 0928 | 9.7 8.5 | 8.9 | 3.3 | 5.6 | |
| 17 | R | | 8.8 7.0 | 7.6 | | 4.3 | |
| 18 | Y. | | 7.0 5.0 | 5.7 | | 2.4 | |
| 19 | R.Y. | 10:30 0930 | 5.2 3.5 | 4.1 | 3.3 | 0.8 | |
| 20 | R | | | | | | |

BOAT 218+05

76L298 307 5-49

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.

7.9
6.7
3.2

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 222+00 | 31 | 190 | | 15 90 | 1X2 ON BEACH | SHORE ∡ 90° |
| | | | 54 | 13 6 | 22' RT. | Toe SL. |
| | | | 50 | 14 0 | 39' " | Toe SL of RD. |
| | | | 07 | 18 3 | 48 " | Side SL. of RD. |
| | | | 45 | 14 5 | 25' LT. | Top SL. |
| (TRANS. ON 217+00) | | | 61 | 12 9 | 37 " | |
| | | | 96 | 9 4 | 59 " | |
| ∡s 70-49' T.P. | 0.3 | 7 9 | 114 | 7.6 | T.P. TAPE 70 " (Calc 69') | |
| 9°-36' | | | 32 | 4 7 | 86' (Calc 85') | Water |
| 12°-35' | | | 68 | 1 1 | 112 Calc. | BRK. |
| 13°-10' | | | 80 | -0 1 | 117 " | Ocean FLOOR |
| 14°-20' | | | 73 | +0 6 | 128' " | " " |
| 17°-13' | | | 77 | +0 2 | 155' " | " " |
| 20°-59' | | | 92 | -1 3 | 192' " | " " |
| 27°-50' | | | 126 | -4 7 | 264 | " " |
| 31°-18' | | | 150 | -7 1 | 304 | " " |

SHORE
222+00

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 PG. 189
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (ENCINAL)
Notes Chkd. [illegible] Checked ____ Survey by C.V. CRUMLEY Notes C.V.C. Date 7-27-51
Date 9-12-51 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 5-49

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.

8.0
6.7
3.3

**Do not extend notes this side of this line.**

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 228+00 | 50 | 19 0 | | 13 75 | 1X2 FL. ON Beach | SHORE ∡ 90° |
| | | | 41 | 14 7 | 20' RT | BRK |
| | | | 25 | 16 5 | 28' " | TOE BLUFF |
| (TRANS. ON 221+00) | | | 50 | 14 0 | 11' LT | |
| | | | 30 | 16 0 | 16 " | |
| | | | 45 | 14 5 | 23 " | |
| 4 | | | 68 | 12 2 | 43 " | |
| | | | 98 | 9 2 | 64 " | |
| 7°-40' T.P. | 08 | 8 0 | 118 | 7 2 T.P. | TAPE 94 " (Calc. 94') | |
| 9°-25' | | | 33 | 4 7 | 117' " (Calc 116 | Water |
| 11°-40' | | | 61 | 1 9 | 145' Calc. | BRK |
| 13°-13' | | | 69 | 1 1 | 164' Calc. | OCEAN FLOOR |
| 15°-01' | | | 75 | 0 5 | 188' " | " " |
| 16°-17' | | | 77 | 0 3 | 204' " | " " |
| 18°-49' | | | 85 | -0 5 | 238' " | " " |
| 21°-19' | | | 95 | -1 5 | 273' " | " " |
| 24°-16' | | | 142 | -6 2 | 316' " | " " |
| 26°-12' | | | 160 | -8 0 | 344' " | " " |
| 28°-20' | | | 170 | -9 0 | 377' | |

SHORE 228+00

F.B. 1296 PG. 190 46'
Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of BEACH EROSION STUDIES (ENCINAL) Date Date X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked No.
Indexed R. C. Johnson Date 7-27-51 Date Date

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 222+00 | 224+00 | 1 | R-Y | 10 44 | 89°40 | | |
| | | 2 | R | | 89°32 | | |
| | | 3 | Y | | 90°11 | | |
| | | 4 | R-Y | 10:47 | 89°58 | | |
| | | 5 | R | | 90°41 | | |
| | | 6 | Y | | 90°33 | | |
| | | 7 | R-Y | 10:49 | 90°09 | | |
| | | 8 | R | | 90°00 | | |
| | | 9 | Y | | 90°51 | | |
| | | 10 | R-Y | 10:55 | 90°10 | | |
| | | 11 | R | | 90°36 | | |
| | | 12 | Y | | 89°26 | | |
| | | 13 | R-Y | 10 57 | 89 57 | | |
| | | 14 | R | | 89 26 | | |
| | | 15 | Y | | 89 51 | | |
| | | 16 | R-Y | 11:00 | 89°44 | | |
| | | 17 | R | | 89°43 | | |
| | | 18 | Y | | 90°12 | | |
| | | 19 | R-Y | 11 02 | 89 58 | | |
| | | 20 | R | | 89 57 | | |

RANGE 222+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. V F. B. 1296 Pg. 19
No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes M.S. Date 7-27-51
No. ____ Date ____ Date ____ Map No. ____ Checked G. Johnson Date ____

F.B. 1296 Pg. 192 Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of Bead Erosion Studies Date 7-27-51 Date No.
Survey by Fred H. Blanchard Notes M. Sennenschein Notes Chkd. Checked X-Sec.
Indexed B. C. Johnson Date Date Date No.

76L898 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| Inst. Sight. At On | # | Color | Time | Hor. Ang. | Remarks | |
| 222+00 224+00 | 21 | Y | | 89 28 | | |
| | 22 | R-Y | 11 04 | 89 [illegible] | | |
| | 23 | R | 11 06 | 90 26 | | |
| RANGE 222+00 | | | | | | |

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 228+00 | 222+00 | 1 | RY | 10:45 | 55°20' | | |
| | | 2 | R | | 56°00' | | |
| | | 3 | Y | | 53°07' | | |
| | | 4 | RY | 10:48 | 51°40' | | |
| | | 5 | R | | 50°42' | | |
| | | 6 | Y | | 49°55' | | |
| | | 7 | RY | 10:50 | 49°20' | | |
| | | 8 | R | | 47°05' | | |
| | | 9 | Y | | 44°32' | | |
| | | 10 | RY | 10:56 | 41°47' | | |
| | | 11 | R | | 41°00' | | |
| | | 12 | Y | | 40°15' | | |
| | | 13 | RY | 10:58 | 38°22' | | |
| | | 14 | R | | 35°30' | | |
| | | 15 | Y | | 32°40' | | |
| | | 16 | RY | 11:01 | 31°25' | | |
| | | 17 | R | | 30°31' | | |
| | | 18 | Y | | 29°22' | | |
| | | 19 | RY | 11:03 | 27°10' | | |
| | | 20 | R | | 25°25' | | |

CUT IN
222+99

Profile Notes Red. Plotted Job No. 8412 Division No. F. B. 1296 Pg. 193
No. Date Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. Checked Survey by F.H.B. Notes Sutter Date 7-27-51
No. Date Date Map No. Indexed C. Johnson Date J.

F. B. 1296 Pg. 192 Job No. 8412 Division No. _____ Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date 7-27-51 Date _____ No. _____

Survey by E.H.B. Notes Sutter Notes Chkd. _____ Checked _____ X-Sec.

Indexed R. C. Johnson Date 7-27-51 Date _____ Date _____ No. _____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| Inst. Sight At | # | Color | Time | Hor. Ang. | | Remarks |
| 228+00 | 21 | Y | | 23°25' | | |
| 222+00 | 22 | RY | 11 05 | 21°49' | | |
| | 23 | R | 11 07 | 19°09' | | |

SHT IN
222+00

76L298 307 4-50

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 222+00

| # | Color | Time | B. S. | H. I. Meas. Depth | F. S. Bottom | ELEV. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | R.Y | 10:44 09 44 | | 29.0 28.0 27.5 | 28.3 | 3.3 | 25.0 | |
| 2 | R | | | 26.5 26.7 | 26.8 | | 23.5 | |
| 3 | Y | | | 25.5 25.4 | 25.9 | | 22.6 | |
| 4 | R.Y | 10:47 09 47 | | 24.5 24.3 | 24.8 | 3.3 | 21.5 | |
| 5 | R | | | 23.0 23.3 | 23.4 | | 20.1 | |
| 6 | Y | | | 22.0 22.1 | 22.4 | | 19.1 | |
| 7 | R.Y | 10:49 09 49 | | 21.0 21.5 | 21.4 | 3.3 | 18.1 | |
| 8 | R | | | 20.0 24.5 | 20.5 | | 17.2 | |
| 9 | Y | | | 23.5 22.3 | 23.8 | | 20.5 | |
| 10 | RY | 10:55 09 55 | | 21.5 21.6 | 21.8 | 3.3 | 18.5 | |
| 11 | R | | | 20.3 20.3 | 20.7 | | 17.4 | |
| 12 | Y | | | 19.0 18.6 | 19.4 | | 16.1 | |
| 13 | R.Y | 10:57 09 57 | | 17.7 17.7 | 18.0 | 3.3 | 14.7 | |
| 14 | R | | | 16.6 16.0 | 17.0 | | 13.7 | |
| 15 | Y | | | 15.0 14.7 | 15.3 | | 12.0 | |
| 16 | RY | 11:00 10.00 | | 13.5 13.5 | 13.9 | 3.3 | 10.6 | |
| 17 | R | | | 12.3 12.1 | 12.7 | | 9.4 | |
| 18 | Y | | | 11.0 10.6 | 11.4 | | 8.1 | |
| 19 | RY | 11:02 10.02 | | 9.3 10.4 | 9.7 | 3.3 | 6.4 | |
| 20 | R. | | | 8.3 | 9.0 | | 5.7 | |

BOAT
222+00

Profile Notes Red LCW Plotted Job No. 8412 Division No. V F.B. 1296 Pg. 195
No. Date 9-6-51 Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. TM.L Checked Survey by E.H.B. Notes E.R.V. Date 7-27-51
No. Date 9-17-51 Date Map No. Indexed Johnson Date

76L298 307 4-50

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 222+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 21 | Y | | 8.5 / 6.8 / 6.8 | 7.4 | 3.3 | 4.1 | |
| 22 | R.Y | 11:04 / 10.04 | 5.3 / 5.8 | 5.8 | 3.3 | 2.5 | |
| 23 | R | 11:06 / 10.06 | 4.0 | 4.6 | 3.3 | 1.3 | |
| | Y | | | | | | |
| | R.Y | | | | | | |

BOAT 222+00

F. B. 1296 PG. 196 Job No. 8412 Division No. V Notes Red. Lewis Plotted ____ Profile ____
Survey of Beach Erosion Studies Date 7-27-51 Date ____ No. ____
Survey by F.H.B. Notes Vol/Nag/G Notes Chkd. T.M.L. Checked ____ X-Sec. ____
Indexed R. C. Johnson Date ____ Date 9-17-51 Date ____ No. ____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 232400 | 3 8 | 15 0 | | 11 24 | 1X2 ON Beach | SHORE. 4' ∡ 101-31' SIGHT ON Z-10' |
| | | | 23 | 12 7 | 29 RT | |
| | | | 12 | 13 8 | 37 " | Toe BLUFF |
| (577.14 base) | | | 48 | 10.2 | 34 LT | |
| | | | 60 | 9.0 | 38 " | |
| TRANS. ON | | | 76 | 7.4 | 66 " | |
| Z-11 (232477.4) | | | 95 | 5.5 | 96 " | |
| ∡ | | | 99 | 5.1 | 100 TAPE | Water |
| 10°-28' | | | 103 | 4 7 | 107 (105' calc) | |
| 11°-45' T.P. | 2 8 | 6 1 | 117 | 3 3 T.P. | 118 | |
| 15°-16' | | | 46 | 1 5 | 152 " | BRK |
| 18°-02' | | | 55 | 0 6 | 180 " | OCEAN F BOX |
| 20°-51' | | | 62 | -0 1 | 208 " | " " |
| 23°-15' | | | 70 | -0 9 | 233 " | " " |
| 24°-43' | | | 77 | -1 6 | 248 " | " " |
| 27°-39' | | | 92 | -3 1 | 279 " | " " |
| 31°-22' | | | 113 | -5 2 | 319 " | " " |
| 34°-53' | | | 137 | -7 6 | 360 " | " " |
| 39°-09' | | | 149 | -8 8 | 411 " | " " |

CALC. INTERSECT NOT 9.0

SHORE 232+00

Profile No. ____ Notes Red. T.M.L. Plotted ____ Job No. 8412 Division No. ____ 47 F.B. 296 Pg. 197
X-Sec. No. ____ Date ____ Notes Chkd. Date 9-12-51 Checked ____ Date ____ Survey of BEACH EROSION STUDIES (ENGINEER) Survey by C.V. CRUMLEY Notes C.V.C. Date 7-27-51 Map No. ____ Date ____ Checked by Gilchrison

76L298 307 5-49

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.

10"

**Do not extend notes this side of this line.**

| STATION | B. S. | H. I. | F. S. | ELEV. | | (1X2 ON ℄ 5.65) |
|---|---|---|---|---|---|---|
| 239+00 | 6 | 16 1 ✓ | | 10 04 ✓ | 1X2 - 35' OFFSET. | 232+00 |
| " | | | 5 5 | [illegible] ✓ | Sand | 11.24 1X2 |
| | | | 3 3 | [illegible] ✓ | 5% RT Toe Sand | 4.62 |
| (TRANS. ON 244+00) | | | +0 2 | [illegible] ✓ | 60 " | H.I. 15.86 ~~T.P.~~ |
| | | | +1 0 | 17 ✓ | 69 Top Sl. of Bluff | 5.32 |
| 239+00 Base | 25 | 8 2 ✓ | 10 35 | 5 65 ✓ | 1X2 ON BASELINE. | T.P. 10.54 Rock |
| 1°-58' ✓ | | | 35 | 4 ✓ | 17' LT (Calc 17') Water | 4.95 |
| 3°-32' ✓ | | | 43 | 3 ✓ | 31' Calc | H.I. 15.49 |
| 6°-30' ✓ | | | 67 | 1 5 ✓ | 57' Calc. | 9.8 |
| 10°-16' ✓ | | 4 | 80 | 0 2 ✓ | 91' " | 5.66 |
| 13°-22' ✓ | | 5 | 90 | -0 3 ✓ | 119' " | 8.55 |
| 16°-33' ✓ | | 6.1 | 101 | -1 9 ✓ | 149' " | 14.22 H.I. |
| 20°-45' ✓ | | 7.7 | 117 | -3 5 ✓ | 189' " | 4.16 |
| 24°-10' ✓ | | 9.0 | 130 | -4 8 ✓ | 224' " | 10.06 1X2 |
| 26°-29' ✓ | | 10.8 | 148 | -6 [illegible] ✓ | 249' " | |

SHORE 239+00

F.B. 12 PG. 198 Job No. [illegible] Division No. Notes Red. Plotted No. Profile
Survey of BEACH EROSION STUDIES Date Date X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked No.
Indexed R. C. Johnson Date 7-30-51 Date Date

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 228+00 | 222+00 | 1 | R&Y | 11:24 | 90° 00' | | |
| | | 2 | R | | 90° 00' | | |
| | | 3 | Y | | 90° 04' | | |
| | | 4 | R&Y | 11:28 | 90° 04' | | |
| | | 5 | R | | 90° 03' | | |
| | | 6 | Y | | 90° 03' | | |
| | | 7 | R&Y | 11:35 | 90° 29' | | |
| | | 8 | R | | 90° 13' | | |
| | | 9 | Y | | 90° 08' | | |
| | | 10 | R&Y | 11:38 | 90° 01' | | |
| | | 11 | R | | 90° 36' | | |
| | | 12 | Y | | 90° 28' | | |
| | | 13 | R&Y | 11:41 | 90° 34' | | |
| | | 14 | R | | 90° 18' | | |
| | | 15 | Y | | 90° 20' | | |
| | | 16 | R&Y | 11:43 | 90° 06' | | |
| | | 17 | R | | 90° 50' | | |
| | | 18 | Y | 11:44 | 91 03 | | |
| | | 19 | R&Y | | | | |
| | | 20 | R | | | | |

RANGE
228+00

Profile Notes Red. Plotted (6) Job No. 8412 Division No. V F. B. 1296 Pg. 199
No. Date Date Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. Checked Survey by F.H.B. Notes MS Date 7-27-51
No. Date Date Map No. A. Johnson Date

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 232+00 | 2-11 37+27 14 | 1 | R-Y | 12:04 | 79 [illegible] | | |
| | | 2 | R | | [illegible] | | |
| | | 3 | Y | | [illegible] | | |
| | | 4 | R-Y | 12:07 | 78 [illegible] | | |
| | | 5 | R | | [illegible] | | |
| | | 6 | Y | | [illegible] | | |
| | | 7 | R-Y | [illegible] | [illegible] | | |
| | | 8 | R | | 79 09 | | |
| | | 9 | Y | | 78 [illegible] | | |
| | | 10 | R-Y | 12 11 | [illegible] | | |
| | | 11 | R | | [illegible] | | |
| | | 12 | Y | | 78 07 | | |
| | | 13 | R-Y | 12 14 | 78 31 | | |
| | | 14 | R | | 78 03 | | |
| | | 15 | Y | | 78 [illegible] | | |
| | | 16 | R-Y | 12 16 | 78 21 | | |
| | | 17 | R | | 77 55 | | |
| | | 18 | Y | 12 18 | 77 [illegible] | | |

RANGE 232+00

F. B. 1296 Pg. 200 Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of BLUFF EROSION STUDIES Date 7-27-51 Date No.
Survey by FHB Notes M.S. Notes Chkd. Checked X-Sec.
Indexed K. C. Johnson Date Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks | |
| 222+00 | 228+00 | 1 | RY | 11:24 | 59°20' | - | |
| | | 2 | R | | 57°20' | - | |
| | | 3 | Y | | 56°55' | - | |
| | | 4 | RY | 11:29 | 56°20' | - | |
| | | 5 | R | | 52°50' | - | |
| | | 6 | Y | | 51°35' | - | |
| | | 7 | RY | 11:36 | 47°20' | - | |
| | | 8 | R | | 46°15' | - | |
| | | 9 | Y | | 43°30' | - | |
| | | 10 | RY | 11:39 | 39°45' | - | |
| | | 11 | R | | 37°40' | - | |
| | | 12 | Y | | 36°25' | - | |
| | | 13 | RY | 11:42 | 33°55' | - | |
| | | 14 | R | | 31°15' | - | |
| | | 15 | Y | | 28°40' | - | |
| | | 16 | RY | 11:44 | 27°55' | - | |
| | | 17 | R | | 26°40' | - | |
| | | 18 | Y | 11:45 | 24°00' | - | |

Cut in 228+00

Profile Notes Red. Plotted Job No. 8412 Division No.
No. Date Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. Checked Survey by E.H.B. Notes Sutter Date 7-27-51
No. Date Date Map No. [illegible] Date

F.B. 1296 Pg 201

76L298 307 4-50

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.**

F. B. 1296 Pg. 208 Job No. 6412 Division No. Notes Red. Plotted Profile No.
Survey of Beach Erosion Studies Date 7-27-51 Date X-Sec. No.
Survey by F.H.B. Notes Cutter Notes Chkd. Checked
Indexed L. C. Johnson Date 7-27-51 Date Date No.

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time | Hor. Ang. | | Remarks |
| ~~236+00~~ 232+50 | 1 | RY | 12:08 | 63°05' | - | |
| Z-11 | 2 | R | | 61°30' | - | |
| 237+77.14 | 3 | Y | | 60°00' | - | |
| | 4 | RY | 12:08 | 58°15' | - | |
| | 5 | R | | 57°00' | - | |
| | 6 | Y | | 54°08' | - | |
| | 7 | RY | 12:10 | 52°02' | - | |
| | 8 | R | | 50°15' | - | |
| | 9 | Y | | 47°15' | - | |
| | 10 | RY | 12:12 | 45°10' | - | |
| | 11 | R | | 43°12' | - | |
| | 12 | Y | | 41°10' | - | |
| | 13 | RY | 12:15 | 38°50' | - | |
| | 14 | R | | 35°10' | - | |
| | 15 | Y | | 32°55' | - | |
| Cut 12 | 16 | RY | 12:16 | 30°35' | - | |
| 232 too | 17 | R | | 27°10' | - | |
| | 18 | Y | 12:19 | 25°10' | - | |

76L298 307 4-50

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.**

Profile No. _____ Notes Red. RCW Plotted _____ Job No. 8412 Division No. Y
Date 9-6-51 Date _____ Survey of Beach Erosion Study
X-Sec. No. _____ Notes Chkd. TMJ Checked _____ Survey by EHB Notes EHB Date 7-27-51
Date 9-17-51 Date _____ Map No. _____ Date _____

F. 76296 PG. 203

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 228+00 | | | | | | |
| # Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| | | 29.0 | | | | |
| 1 RY | 11:23 | 28.0 | 28.3 | 3.3 | 25.0 | |
| | 10.23 | 27.0 | | | | |
| 2 R | | 26.8 | 26.9 | | 23.6 | |
| | | 26.5 | | | | |
| 3 Y | | 25.1 | 25.6 | | 22.3 | |
| | | 24.5 | | | | |
| 4 RY | 11:28 | 23.0 | 23.5 | 3.4 | 20.1 | |
| | 10.28 | 24.2 | | | | |
| 5 R | | 23.0 | 23.4 | | 20.0 | |
| | | 22.3 | | | | |
| 6 Y | | 21.0 | 21.4 | | 18.0 | |
| | | 21.2 | | | | |
| 7 RY | 11:35 | 20.0 | 20.4 | 3.4 | 17.0 | |
| | 10.35 | 20.6 | | | | |
| 8 R | | 19.9 | 19.5 | | 16.1 | |
| | | 18.7 | | | | |
| 9 Y | | 17.0 | 17.4 | | 14.0 | |
| | | 16.8 | | | | |
| 10 RY | 11:38 | 15.5 | 15.9 | 3.4 | 12.5 | |
| | 10.38 | 15.6 | | | | |
| 11 R | | 14.5 | 14.9 | | 11.5 | |
| | | 14.9 | | | | |
| 12 Y | | 12.9 | 13.6 | | 10.2 | |
| | | 12.7 | | | | |
| 13 RY | 11:41 | 11.4 | 11.8 | 3.4 | 8.4 | |
| | 10.41 | 11.6 | | | | |
| 14 R | | 10.4 | 10.8 | | 7.4 | |
| | | 11.0 | | | | |
| 15 Y | | 9.4 | 9.9 | | 6.5 | |
| | | 9.0 | | | | |
| 16 RY | 11:43 | 7.5 | 8.0 | 3.4 | 4.6 | |
| | 10.43 | 7.5 | | | | |
| 17 R | | 6.0 | 6.5 | | 3.1 | |
| | | 6.0 | | | | |
| 18 Y | 11:44 | 4.5 | 5.0 | 3.4 | 1.6 | |
| | 10.44 | | | | | |
| 19 RY | | | | | | |
| 20 R | | | | | | |

Boat
228+00

'76L298 307 4-50

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.

F. B. 1296 Pg. 1001 Profile No. ___ X-Sec. No. ___

Job No. 891.2 Division No. K Notes Red. RCW Plotted ___ Date ___

Survey of Beach Erosion Studies Date 7-27-51 Checked TMJ

Survey by E.H.R. Notes Valley Angle Notes Chkd. ___

Indexed H. C. Johnson Date ___ Date 2-17-51

| STATION 232+00 # | Color | Time | H. I. Meas. Depth | F. S. Bottom | ELEV. Ht. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 29.0 | | | | |
| 1 | R.Y. | 12:04 11.04 | 27.9 27.1 | 28.3 | 3.5 | 24.8 | |
| 2 | R | | 26.0 26.2 | 26.4 | | 22.9 | |
| 3 | Y | | 25.0 24.8 | 25.4 | | 21.9 | |
| 4 | R.Y. | 12:07 11.07 | 24.0 23.7 | 24.3 | 3.5 | 20.8 | |
| 5 | R | | 22.8 22.5 | 23.1 | | 19.6 | |
| 6 | Y. | | 21.2 20.8 | 21.6 | | 18.1 | |
| 7 | R.Y. | 12:09 11.09 | 19.7 19.1 | 20.1 | 3.5 | 16.6 ~~17.0~~ | |
| 8 | R | | 18.2 17.9 | 18.5 | | 15.0 | |
| 9 | Y | | 17.0 16.6 | 17.3 | | 13.8 | |
| 10 | R.Y. | 12:11 11.11 | 15.5 15.0 | 15.9 ~~15.8~~ | 3.6 | 12.3 12.2 | |
| 11 | R. | | 14.0 13.5 | 14.3 | | 10.7 | |
| 12 | Y. | | 12.5 12.3 | 12.8 | | 9.2 | |
| 13 | R.Y. | 12:14 11.14 | 11.6 11.7 | 11.8 | 3.6 | 8.2 | |
| 14 | R. | | 10.5 10.5 | 10.9 | | 7.3 | |
| 15 | Y | | 9.5 9.0 | 9.8 | | 6.2 | |
| 16 | R.Y. | 12:16 11.16 | 7.9 7.2 | 8.3 | 3.6 | 4.7 | |
| 17 | R. | | 6.0 6.0 | 6.4 | | 2.8 | |
| 18 | Y | 12:19 11.19 | 4.5 | 5.0 | 3.6 | 1.4 | BOAT 232+00 |
| 19 | R.Y. | | | | | | |
| 20 | R. | | | | | | |

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| [illegible] | 5.1 | 19.8 | | 14.7 | 1X2 ON 35' RT OFFSET | (SHORE ∠ 90°) |
| | | | 5.0 | 14.8 | 42' " | TOE BLUFF |
| | | | [illegible] | 15.6 | 15' " | TOP SL. Beach. |
| [illegible] | 1.0 | 11.8 | | 10.23 | [illegible] ON BASE LINE | |
| | | | 0.9 | 10.9 | Sand | |
| (TRANS. ON 35' OFFSET AT 238+00) | | | 6.4 | 5.4 | 3[illegible] L | Water |
| 9°-16' | 3.1 | 7.8 | 7.1 | 4.7 | 46' " (Calc 47') | |
| 14°-47' | | | 6.1 | 1.7 | 97' " calc. | OCEAN FLOOR |
| 17°-13' | | | 6.9 | 0.9 | 120' " " | " " |
| 20°-19' | | 4.2 | 8.2 | -0.4 | 150' " " | " |
| 23°-25' | | 5.8 | 9.8 | -2.0 | 182' " " | " |
| 26°-29' | | 6.7 | 10.7 | -2.9 | 214' " " | " |
| 30°-46' | | 9.5 | 13.5 | -5.7 | 263' " " | " |
| 35°-22' | | 12.3 | 16.3 | -8.5 | 320' " " | " |

35' WAS SUBTRACTED FROM CALC. DIST.

SHORE 243+00

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. 49 F.B. 1296 Pg 205
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA)
Notes Chkd. [illegible] Date 9-12-51 Checked ____ Survey by C.V. CRUMLEY Notes C.V.C. Date 7-30-51
Date ____ Date ____ Map No. ____ Date ____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 247+00 | 22 | 15.7 ✓ | | 13.26 ✓ | 1X2 ON. Base Line | |
| | | | 18 | 13.[illegible] ✓ | Sand | SHORE ∡ 90° |
| | | | 08 | 14.[illegible] ✓ | 8' RT. | |
| | | | 00 | 15.[illegible] ✓ | 21 " | Toe SL. B[illegible] |
| (TRANS. ON 250+00) | | | 37 | 12.[illegible] ✓ | 26 LT | |
| | | | 57 | 1[illegible] ✓ | 44 " | |
| 16°-04' ✓ T.P. | 30 | 77 ✓ | 11.0 | 4.[illegible] ✓ T.P. | TAPE 86 " (Calc 86 ✓) | Water |
| 23°-34' ✓ | | | 49 | [illegible] ✓ | 131 ✓ Calc. | [illegible] |
| 27°-40' ✓ | | | 61 | ✓ | 157' ✓ " " | OCEAN FLOOR |
| 32°-48' ✓ | | | 76 | 0[illegible] ✓ | 193' ✓ " | " |
| 42°-29' ✓ | | | 106 | -2[illegible] ✓ | 274' ✓ " | " " |
| 47°-31' ✓ | | 9.2 | 132 | -5[illegible] ✓ | 328' ✓ " | " " |
| 51°-18' ✓ | | 12.1 | 161 | -[illegible] ✓ | 374' ✓ " | " " |

SHORE
247+00

F.B. 1296 PG. 206 50
Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date Date No.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked X-Sec.
Indexed A. C. Johnson Date 7-30-51 Date Date No.

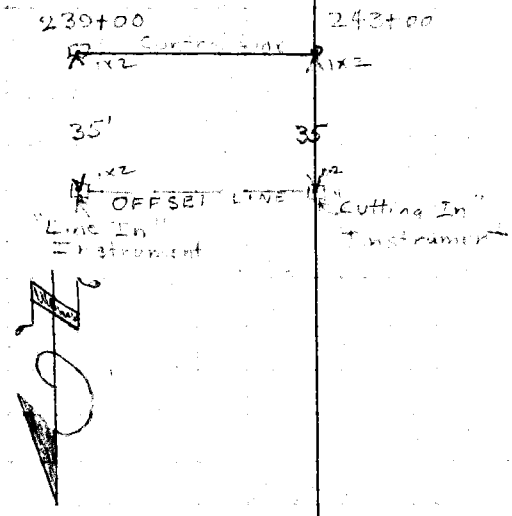
76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time | Hor. Ang. | | Remarks |
| 239+00 243+00 | 1 | R-Y | 7:18 | 89 24 | , | |
| 35' OFF 35' OFF | 2 | R | | 89°24 | , | |
| | 3 | Y | | 89°18 | , | |
| | 4 | R-Y | 7:21 | 89 00 | , | |
| | 5 | R | | 89°06 | , | |
| | 6 | Y | | 89°02 | , | |
| | 7 | R-Y | 7:25 | 89°30 | , | |
| | 8 | R | | 89°29 | , | |
| | 9 | Y | | 89°32 | , | |
| | 10 | R-Y | 7:28 | 89 52 | , | |
| | 11 | R | | 90°49 | , | |
| | 12 | Y | | [illegible] | , | |
| | 13 | R-Y | 7:34 | [illegible] | , | |
| | 14 | R | | 90°32 | , | |
| | 15 | Y | | 90°12 | , | |
| | 16 | R-Y | 7:[illegible] | 90 04 | , | |




RANGE
239+00

Profile Notes Red. Plotted Job No. 8412 Division No. V F.B. 1296 Pg. 207
No. Date Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. Checked Survey by F.H.B. Notes M.S. Date 7-30-51
No. Date Date Map No. Indexed Johnson Date

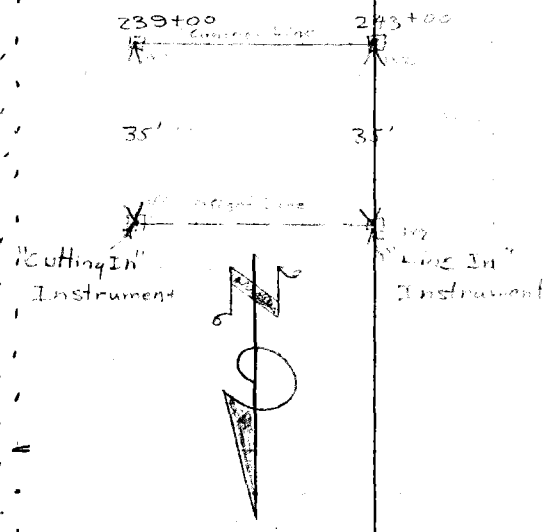
76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 243+00 | 239+00 | 1 | R&Y | 7:48 | 89° 52' | | |
| | | 2 | R | | 89° 6' | | |
| | | 3 | Y | | 89° 4' | | |
| | | 4 | R&Y | 7:51 | 89° 43' | | |
| | | 5 | R | | 90° 05' | | |
| | | 6 | Y | | 89° 51' | | |
| | | 7 | R&Y | 7:57 | 88° 47' | | |
| | | 8 | R | | 89° 2' | | |
| | | 9 | Y | | 89° 5' | | |
| | | 10 | R&Y | 8:02 | 88° 42' | | |
| | | 11 | R | | 88° 43' | | |
| | | 12 | Y | | 88° 55' | | |
| | | 13 | R&Y | 8:08 | 89° 20' | | |
| | | 14 | R | | 89° 54' | | |
| | | 15 | Y | | 88° 47' | | |
| | | 16 | R&Y | 8:10 | 89° 7' | | |




RANGE 243+00

F. B. 1296 Pg. 208 Job No. 8412 Division No. ✓ Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date 7-30-51 Date No.
Survey by E.H.B. Notes M.N. Notes Chkd. Checked X-Sec.
Indexed R. C. Johnson Date Date No.

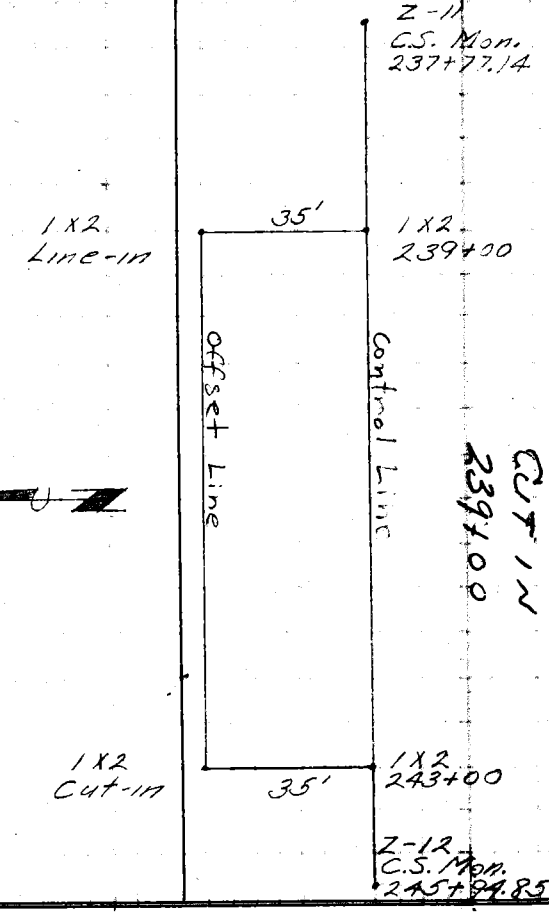
76L298 307 4-50

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. | |
|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks |
| 243+00 | 239+00 | 1 | RY | 7 18 | 64°23' | - |
| 35 ft | 35 ft | 2 | R | | 64°28' | - |
| off set | off set | 3 | Y | | 63°30' | - |
| | | 4 | RY | 7 21 | 62°09' | - |
| | | 5 | R | | 60°30' | - |
| | | 6 | Y | | 58°25' | - |
| | | 7 | RY | 7 25 | 55°55' | - |
| | | 8 | R | | 54°45' | - |
| | | 9 | Y | | 51°20' | - |
| | | 10 | RY | 7 29 | 46°00' | - |
| | | 11 | R | | 43°09' | - |
| | | 12 | Y | | 41°06' | - |
| | | 13 | RY | 7:35 | 36°54' | - |
| | | 14 | R | | 34°05' | - |
| | | 15 | Y | | 31°17' | - |
| | | 16 | RY | 7:38 | 29°11' | - |




Profile Notes Red. Plotted Job No. 8412 Division No. F.B. 1296 Pg. 209
No. Date Date Survey of Beach Erosion Studies
X-Sec. Notes Chkd. Checked Survey by F.H.B. Notes Sutter Date 7-30-51
No. Date Date Map No. Date

76L298 307 4-50

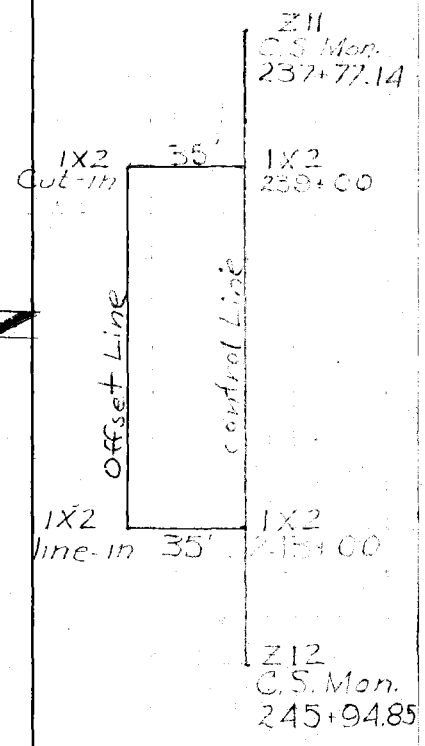
PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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. | | Remarks |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | | |
| 239+00 | 243+00 | 1 | RY | 7:48 | 65°[illegible]8' | | |
| 35 ft. | 35 ft. | 2 | R | | 65°[illegible]3' | | |
| off set | off set | 3 | Y | | 64°[illegible]8' | | |
| | | 4 | RY | 7:51 | 63°[illegible]0' | | |
| | | 5 | R | | 59°38' | | |
| | | 6 | Y | | 56°[illegible]3' | | |
| | | 7 | RY | 7:57 | 55°[illegible] | | |
| | | 8 | R | | 53°[illegible]1' | | |
| | | 9 | Y | | 51°[illegible]7' | | |
| | | 10 | RY | 8:02 | 49°[illegible]0' | | |
| | | 11 | R | | 44°[illegible]8' | | |
| | | 12 | Y | | 44°[illegible]3' | | |
| | | 13 | RY | 8:08 | 39°[illegible]5' | | |
| | | 14 | R | | 35°[illegible]0' | | |
| | | 15 | Y | | 35°[illegible]1' | | |
| | | 16 | RY | 8:10 | 32°[illegible]5' | | |

CUT IN 243+00




F. B. 1296 Pg. 210 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-30-51 Date No.
Survey by E.H.B. Notes Sutter Notes Chkd. Checked X-Sec.
Indexed R. C. Johnson Date 7-30-51 Date No.

76L298 307 4-50

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 239+00 | B. S. | H. I. | F. S. | ELEV.

| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 29.0 | | | | |
| 1 | R.Y. | 7:18 0618 | 27.4 | 27.9 | 3.3 | 24.6 | |
| | | | 28.0 | | | | |
| 2 | R. | | 26.4 | 26.9 | | 23.6 | |
| | | | 27.2 | 25.9 | | 22.6 | |
| 3 | Y. | | ~~25.2~~ | ~~25.7~~ | | ~~22.7~~ | |
| | | | 26.0 | | | | |
| 4 | R.Y | 7:21 0621 | 24.2 | 24.8 | 3.3 | 21.5 | |
| | | | 25.0 | | | | |
| 5 | R. | | 23.0 | 23.7 | | 20.4 | |
| | | | 23.0 | | | | |
| 6 | Y. | | 21.8 | 22.2 | | 18.9 | |
| | | | 21.2 | | | | |
| 7 | R.Y. | 7:24 0624 | 20.0 | 20.4 | 3.4 | 17.0 | |
| | | | 20.2 | | | | |
| 8 | R. | | 18.8 | 19.3 | | 15.9 | |
| | | | 18.1 | | | | |
| 9 | Y | | 17.3 | 17.6 | | 14.2 | |
| | | | 16.3 | | | | |
| 10 | R.Y | 7:28 0628 | 15.3 | 15.7 | 3.4 | 12.3 | Kelp between shots |
| | | | 11.2 | | | | |
| 11 | R. | | 10.0 | 10.4 | | 7.0 | Kelp between shots |
| | | | 12.5 | | | | |
| 12 | Y. | | 11.2 | 11.6 | | 8.2 | |
| | | | 11.6 | | | | |
| 13 | R.Y. | 7:35 0635 | 10.2 | 10.7 | 3.5 | 7.2 | |
| | | | 10.0 | | | | |
| 14 | R. | | 8.5 | 9.0 | | 5.5 | |
| | | | 8.7 | | | | |
| 15 | Y. | | 7.2 | 7.7 | | 4.2 | |
| | | | 7.5 | | | | |
| 16 | R.Y | 7:38 0638 | 5.5 | 6.2 | 3.5 | 2.7 | |
| 17 | R. | | | | | | |
| 18 | Y | | | | | | |
| 19 | R.Y | | | | | | |
| 20 | R | | | | | | |

239+00

B04 F

Profile Notes Red Pencil Plotted _____ Job No. 8412 Division No. K
No. _____ Date 2-6-51 Date _____ Survey of Beach Erosion Studies
Z-Sec. Notes Chkd. [illegible] Checked _____ Survey by E.H.B. Notes E.R.B. Date 7-30-51
No. _____ Date 2-17-51 Date _____ Map No. _____ Date _____

76L298 307 4-50

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 243+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Ht. Tide | Adj. Depth | Remarks |
| 1 | RY | 7:48 0648 | 29.1 27.6 | 28.1 | 3.6 | 24.5 | |
| 2 | R | | 27.4 26.0 | 26.5 | | 22.9 | |
| 3 | Y | | 26.6 24.7 | 25.3 | | 21.7 | |
| 4 | RY | 7:51 0651 | 24.9 23.1 | 23.7 | 3.7 | 20.0 | |
| 5 | R | | 23.6 21.5 | 22.2 | | 18.5 | |
| 6 | Y | | 22.2 20.4 | 21.0 | | 17.3 | |
| 7 | RY | 7:57 0657 | 19.9 18.4 | 18.9 | 3.7 | 15.2 | |
| 8 | R | | 18.2 16.5 | 17.1 | | 13.4 | Kelp between shot |
| 9 | Y | | 17.2 14.7 | 15.5 | | 11.8 | |
| 10 | RY | 8:02 0702 | 14.8 13.3 | 13.8 | 3.7 | 10.1 | |
| 11 | R | | 13.9 12.0 | 12.6 | | 8.9 | |
| 12 | Y | | 12.7 11.0 | 11.6 | | 7.9 | |
| 13 | RY | 8:08 0708 | 11.5 9.9 | 10.4 | 3.8 | 6.6 | |
| 14 | R | | 10.0 8.3 | 8.9 | | 5.1 | |
| 15 | Y | | 8.6 7.0 | 7.5 | | 3.7 | |
| 16 | RY | 8:11 0711 | 7.8 5.5 | 6.3 | 3.8 | 2.5 | |
| 17 | R | | | | | | |
| 18 | Y | | | | | | |
| 19 | RY | | | | | | |
| 20 | R | | | | | | |

BOAT 243+00

F. B. 1296 Pg. 212 Job No. 8412 Division No. V Notes Red. LWV Plotted ____ Profile ____
Survey of Beach Erosion Studies Date 7-30-51 Date ____ No. ____
Survey by E.H.B. Notes Vollnagle Notes Chkd. T.M.I. Checked ____ X-Sec. ____
Indexed R. C. Johnson Date ____ Date 9-17-51 Date ____ No. ____

76L298 307 5-49

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.**

140
47
93

| STATION | B. S. | H. I. | F. S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|
| 251+00 | 33 | 14.0 | | 10 70 | | 1X2 ON BASE | LINE. SHORE ∠ 90° |
| | | | 28 | 112 | | SAND. | |
| | | | 1.7 | 123 | | 10' RT | TOE SL. |
| | | | 46 | 94 | | 17 LT | BRK ON Beach |
| (TRANS. ON 246+00) | | | 7.5 | 65 | | 40 " | |
| | | | 84 | 5 ~~7~~ 6 | | 71 " | |
| T.P. | 4.4 | 9.1 | 93 | 4.7 | T.P. | 84. | WATER |
| | | | 62 | 29 | | 120' " | OCEAN FLOOR |
| 15°-57' | | | 73 | 18 | | 143' " | Calc. " " |
| 17°-19' | | 3.7 | 77 | 14 | | 156' " | " " " |
| 20°-14' | | 5.0 | 90 | 01 | | 184' " | " " " |
| 22°-17' | | 5.6 | 96 | -05 | | 205' " | " " |
| 27°-56' | | 8.1 | 121 | -30 | | 265' " | " " |
| 32°-01' | | 11.0 | 154 | -63 | | 313' " | " " |

SHORE
251+00

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ 54 F.B. 1296 PG. 213
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA)
Notes Chkd. RAW Checked ____ Survey by C.V.C. Notes C.V.C. Date 7-30-51
Date 9-12-51 Date ____ Map No. ____ Indexed A. Johnson Date ____

76L298 307 5-49

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.

13.7
4.7
9.0

**Do not extend notes this side of this line.**

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 255+00 | 38 | 13.7 ✓ | | 9.90 ✓ | 1x3 ON 50' RT OFFSET | SHORE ∡ 90° |
| | | | 31 | [illegible] ✓ | Sand " " | |
| | | | 15 | 12.2 ✓ | 70' RT | TOE SL. |
| TRANS. ON 265+00 | | | 40 | 9.[illegible] ✓ | 40' " | BRK. ON Beach |
| | | | 75 | [illegible] ✓ | Sand IN Base LINE | |
| 1°-21'-T.P | 28 | 7.5 ✓ | 9.0 | [illegible] ✓ | T.P. 24' LT | Calc 24' ✓ Water |
| 3°-10' ✓ | | | 51 | 2.[illegible] ✓ | 55' ✓ " Calc | OCEAN FLOOR |
| 4°-16' ✓ | | | 56 | [illegible] ✓ | 75' ✓ " " | " " |
| 6°-05' ✓ | | | 68 | [illegible] ✓ | 107' ✓ " " | " " |
| 7°-57' ✓ | | 3.9 | 79 | [illegible] ✓ | 140' ✓ " | " " |
| 9°-41' ✓ | | 5.5 | 95 | [illegible] ✓ | 171' ✓ " | " " |
| 11°-43' ✓ | | 7.4 | [illegible] | [illegible] ✓ | 207' ✓ " | " " |
| 13°-56' ✓ | | 9.3 | 132 | [illegible] ✓ | 248' ✓ " | " " |
| 15°-20' ✓ | | [illegible] | [illegible] | [illegible] ✓ | 274' ✓ " | " " |

SHORE
255+00

F.B. 1296 PG. 214 52
Job No. 8412 Division No. Notes Red. Plotted Profile No.
Survey of BEACH EROSION STUDIES (ZUMA) Date Date X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked
Indexed A. C. Johnson Date 7-30-51 Date Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time | Hor. Ang. | Remarks | |
| 247+00 Z-13 | 1 | R&Y | 8:28 | 89°48' | | |
| | 2 | R | | 90°36' | | |
| | 3 | Y | | 90°18' | | |
| | 4 | R&Y | 8:32 | 90°03' | | |
| | 5 | R | | 89°52' | | |
| | 6 | Y | | 90°26' | | |
| | 7 | R&Y | 8:36 | 90°10' | | |
| | 8 | R | | 89°55' | | |
| | 9 | Y | | 90°27' | | |
| | 10 | R&Y | 8:40 | 90°27' | | |
| | 11 | R | | 90°27' | | |
| | 12 | Y | | 89°59' | | |
| | 13 | R&Y | 8:43 | 89°57' | | |
| | 14 | R | | 89°12' | | |
| | 15 | Y | | 89°47' | | |
| | 16 | R&Y | 8:47 | 89°47' | | |
| | 17 | R | | 89°47' | | |
| | 18 | Y | | 88°52' | | |
| | 19 | R&Y | 8:50 | 89°53' | | |
| | 20 | R | 8 51 | 90°30' | | |

RANGE
247+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. V
No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes TAN Date 7-30-51
No. ____ Date ____ Date ____ Map No. ____ Indexed R. C. Johnson Date ____

E. B. 1296 Pg. 215

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 251+00 | 247+00 | 1 | R&Y | 9:01 | 89°21' | | |
| | | 2 | R | | 88°54' | | |
| | | 3 | Y | | 88°51' | | |
| | | 4 | R&Y | 9:07 | 89°05' | | |
| | | 5 | R | | 88°47' | | |
| | | 6 | Y | | 89°52' | | |
| | | 7 | R&Y | 9:10 | 88°46' | | |
| | | 8 | R | | 90°00' | | |
| | | 9 | Y | | 89°37' | | |
| | | 10 | R&Y | 9:18 | 88°27' | | |
| | | 11 | R | | 90°35' | | |
| | | 12 | Y | | 89°30' | | |
| | | 13 | R&Y | 9:22 | 89°11' | | |
| | | 14 | R | | 90°37' | | |
| | | 15 | Y | | 88°35' | | |
| | | 16 | R&Y | 9:25 | 88°14' | | |
| | | 17 | R | | 89°08' | | |
| | | 18 | Y | 9:27 | 90°14' | | |
| | | 19 | R&Y | | | | |
| | | 20 | R | | | | |

RANGE 257+00

F. B. 1296 Pg. 216 Job No. 8412 Division No. V Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date 7-30-51 Date No. X-Sec.
Survey by E.H.B. Notes M.N. Notes Chkd. Checked
Indexed R. C. Johnson Date Date No.

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| Z13 | 247+00 | | RY | 8:29 | 61°54' | | |
| | | | R | | 60°20' | | |
| | | 3 | Y | | 59°01' | | |
| | | 4 | RY | 8:31 | 58°25' | | |
| | | 5 | R | | 56°35' | | |
| | | 6 | Y | | 54°22' | | |
| | | 7 | RY | 8:36 | 53°52' | | |
| | | 8 | R | | 51°05' | | |
| | | 9 | Y | | 47°55' | | |
| | | 10 | RY | 8:41 | 46°[illegible] | | |
| | | 11 | R | | 45°20' | | |
| | | 12 | Y | | 44°30' | | |
| | | 13 | RY | 8:43 | 42°55' | | |
| | | 14 | R | | 38°22' | | |
| | | 15 | Y | | 36°46' | | |
| | | 16 | RY | 8:48 | 35°22' | | |
| | | 17 | R | | 34°51' | | |
| | | 18 | Y | | 31°46' | | |
| | | 19 | RY | 8:50 | 29°44' | | |
| | | 20 | R | 8:51 | 28°26' | | |

Cut in 247+00

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 Pg. 217
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd. ____ Checked ____ Survey by F.H.B. Notes Sutter Date 7-30-51
No. ____ Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks | |
| 247+00 | 251+00 | 1 | RY | 9:02 | 6[illegible]5 | - | |
| | | 2 | R | | 6[illegible] | - | |
| | | 3 | Y | | 6[illegible] | - | |
| | | 4 | RY | [illegible]:08 | 67[illegible]0 | - | |
| | | 5 | R | | 61[illegible]6 | - | |
| | | 6 | Y | | 58[illegible]0 | - | |
| | | 7 | RY | 9:11 | 5[illegible]8 | - | |
| | | 8 | R | | 5[illegible]5 | - | |
| | | 9 | Y | | 5[illegible]1 | - | |
| | | 10 | RY | 9:19 | 5[illegible]4 | - | |
| | | 11 | R | | 5[illegible]5 | - | |
| | | 12 | Y | | 4[illegible]2 | - | |
| | | 13 | RY | 9:22 | 4[illegible] | - | |
| | | 14 | R | | 4[illegible]3 | - | |
| | | 15 | Y | | 43[illegible] | - | |
| | | 16 | RY | 9:25 | 40[illegible] | - | |
| | | 17 | R | | 36[illegible]0 | - | |
| | | 18 | Y | 9:27 | 3[illegible]5 | - | |

CUT IN 257+00

F. B. 1296 Pg. 218 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date 7-30-51 Date No. X-Sec.
Survey by F.H.B. Notes Sutter Notes Chkd. Checked
Indexed R. C. Johnson Date 7-30-51 Date No.

76L298 307 4-50

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 247+00 # | Color | B. S. Time | H. I. Meas. Depth | F. S. Bottom | ELEV. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | R.Y | 8:28 0728 | 30.6 28.2 29.0 | 29.0 | 3.9 | 25.1 | |
| 2 | R. | | 27.2 28.0 | 27.8 | | 23.9 | |
| 3 | Y. | | 26.2 27.1 | 26.8 | | 22.9 | |
| 4 | R.Y | 8:31 0731 | 25.2 25.9 | 25.8 | 3.9 | 21.9 | |
| 5 | R. | | 24.2 24.8 | 24.8 | | 20.9 | |
| 6 | Y. | | 23.2 23.4 | 23.7 | | 19.8 | |
| 7 | R.Y | 8:36 0736 | 22.0 20.8 | 22.5 | 4.0 | 18.5 | |
| 8 | R. | | 19.5 19.7 | 19.9 | | 15.9 | Kelp between Shots |
| 9 | Y. | | 18.5 19.0 | 18.9 | | 14.9 | Kelp between Shots |
| 10 | R.Y | 8:41 0741 | 17.2 17.8 | 17.8 | 4.0 | 13.8 | |
| 11 | R. | | 16.1 15.8 | 16.7 | | 12.7 | |
| 12 | Y | | 14.3 14.7 | 14.8 | | 10.8 | |
| 13 | R.Y | 8:43 0743 | 13.1 13.2 | 13.6 | 4.0 | 9.6 | |
| 14 | R | | 11.1 14.7 | 11.8 | | 7.8 | |
| 15 | Y | | 13.0 12.2 | 13.6 | | 9.6 | |
| 16 | R.Y | 8:47 0747 | 11.0 12.4 | 11.4 | 4.0 | 7.4 | |
| 17 | R. | | 10.0 11.7 | 10.8 | | 6.8 | |
| 18 | Y | | 9.0 10.2 | 9.9 | | 5.9 | |
| 19 | R.Y | 8:50 0750 | 7.0 8.3 | 8.1 | 4.0 | 4.1 | |
| 20 | R | 8:51 0751 | 6.0 | 6.8 | 4.0 | 2.8 | |

BOAT 247+00

Profile Notes Red LOW Plotted ____ Job No. 8412 Division No. V F.B. 1296 Pg. 219
No. ____ Date 9-6-51 Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd TMI Checked ____ Survey by E.H.B. Notes E.R.V. Date 7-30-51
No. ____ Date 2-17-51 Date ____ Map No. ____ Date ____

76L298 307 4-50

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 25+00 | | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|---|
| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
| 1 | R.Y. | 9:02 0802 | 30.1 28.2 | 28.8 | 4.0 | 24.8 | |
| 2 | R | | 28.0 26.1 | 26.7 | | 22.7 | Kelp between Shots |
| 3 | Y | | 28.9 27.0 | 27.6 | | 23.6 | Kelp between Shots |
| 4 | R.Y | 9:07 0807 | 28.0 25.0 | 26.0 | 4.0 | 22.0 | |
| 5 | R | | 25.9 23.9 | 24.6 | | 20.6 | |
| 6 | Y | | 24.2 22.7 | 23.2 | | 15.2 19.2 | |
| 7 | R.Y | 9:10 0810 | 22.9 21.1 | 21.7 | 4.0 | 17.7 | |
| 8 | R | | 20.8 19.1 | 19.7 | | 15.7 | |
| 9 | Y | | 19.7 18.1 | 18.6 | | 14.6 | |
| 10 | RY | 9:18 0818 | 20.6 18.1 | 18.9 | 4.0 | 14.9 | |
| 11 | R | | 17.6 15.5 | 16.2 | | 12.2 | Kelp betwee Shot |
| 12 | Y | | 15.2 14.0 | 14.4 | | 10.4 | |
| 13 | RY | 9:22 0822 | 13.7 12.9 | 13.2 | 4.0 | 9.2 | |
| 14 | R | | 13.9 11.9 | 12.6 | | 8.6 | |
| 15 | Y | | 13.2 10.9 | 11.7 | | 7.7 | |
| 16 | RY | 9:25 0825 | 10.9 9.5 | 10.0 | 4.0 | 6.0 | |
| 17 | R | | 9.5 8.0 | 8.5 | | 4.5 | |
| 18 | Y | 9:28 0828 | 8.9 6.1 | 7.0 | 4.0 | 3.0 | |
| 19 | RY | | | | | | |
| 20 | R | | | | | | |

BOAT 25+00

F. B. 1296 Pg. 220 Job No. 8412 Division No. V Notes Red. Rew Plotted ____ Profile ____
Survey of Beach Erosion Studies Date 7-30-51 Date ____ No. ____
Survey by F.H.B. Notes Vollnagle Notes Chkd. T.M.L. Checked ____ X-Sec. ____
Indexed R. C. Johnson Date ____ Date 9-17-51 Date ____ No. ____

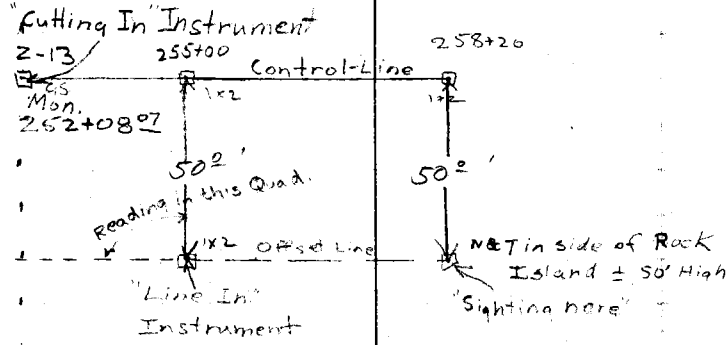
76L298 307 4-50

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. | |
|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. | Remarks |
| 255+00 | 258+20 | 1 | R-Y | 10:04 | 88°49 | "Cutting In" Instrument |
| 50' OFF | 50' OFF | 2 | R | | 89°04 | |
| | | 3 | Y | | 89°04 | |
| | | 4 | R-Y | 10:09 | 89°48 | |
| | | 5 | R | | 89°20 | |
| | | 6 | Y | | 89°10 | |
| | | 7 | R-Y | 10:16 | 89°12 | |
| | | 8 | R | | 89°12 | |
| | | 9 | Y | | 89°30 | |
| | | 10 | R-Y | 10 18 | 89°42 | |
| | | 11 | R | | 89°25 | |
| | | 12 | Y | | 90°04 | |
| | | 13 | R-Y | 10:21 | 89°26 | |
| | | 14 | R | | 90°21 | |
| | | 15 | Y | | 89°30 | |
| | | 16 | R-Y | 10 24 | 90°10 | |
| | | 17 | R | | 90°15 | |
| | | 18 | Y | | 90°25 | |
| | | 19 | R-Y | 10:28 | 88°56 | |
| | | 20 | R | | 90°52 | |



RANGE 255+00

Profile Notes Red. Plotted Job No. 8412 (5) Division No. V F.B. 1296 Pg. 221
No. Date Date Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. Checked Survey by F.H.B. Notes MS Date 7-30-51
No. Date Date Map No. Indexed Johnson Date

F. B. 1296 Pg. 222 Job No 8412 Division No. V Notes Red. Plotted Profile

Survey of BEACH EROSION STUDIES Date 7-30-51 Date No.

Survey by F.H.B Notes M.S. Notes Chkd. Checked X-Sec.

Indexed A. C. Johnson Date Date Date No.

RANGE
255+00

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time | Hor. Ang. | | Remarks |
| 255+00 | 21 | Y | 10:30 | 9:18 | | |
| 50'00 | | | | | | |

76L298 307 4-50

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.

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. |
|---|---|---|---|---|---|
| Just Right At | On | # | Color | Time | Hor. Ang. |
| Z13 | Z13A | 1 | RY | 10:05 | 73°05' |
| | | 2 | R | | 71°54' |
| | | 3 | Y | | 70°45' |
| | | 4 | RY | 10:09 | 69°18' |
| | | 5 | R | | 66°24' |
| | | 6 | Y | | 65°20' |
| | | 7 | RY | 10:17 | 63°52' |
| | | 8 | R | | 63°25' |
| | | 9 | Y | | 63°05' |
| | | 10 | RY | 10:19 | 61°57' |
| | | 11 | R | | 61°10' |
| | | 12 | Y | | 57°39' |
| | | 13 | RY | 10:21 | 57°37' |
| | | 14 | R | | 55°46' |
| | | 15 | Y | | 54°25' |
| | | 16 | RY | 10:25 | 52°10' |
| | | 17 | R | | 47°55' |
| | | 18 | Y | | 46°00' |
| | | 19 | RY | 10:29 | 44°00' |
| | | 20 | R | | 40°48' |

Remarks

Cut-in Z13
C.S. Mon.
252+08.07

Z13A
Br. Sok.
252+93.96

Control Line

1X2 50' 1X2
line-in 255+00

offset Line

CUT IN
255+00

Profile No. Name Plotted Date Job No. 8412 Division No.
Date Survey of Beach Erosion Studies
Name Chief Checked Date Survey by E.H.B. Yorke Suttle Date 7-30-55
No. Date Map No. Indexed Date

F.B. 1296 PG. 224

Job No. 8412 Division No. ____ Notes Red ____ Plotted ____ Profile

Survey of Beach Erosion Studies Date 7-30-51 Date ____ No. ____

Survey by F.H.B. Notes Sutter Notes Chkd ____ Checked ____ X-Sec.

Indexed C. Johnson Date ____ Date ____ Date ____ No. ____

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| Inst. Sight At On | # | Color | Time | Hor. Ang. | | Remarks |
| Z13 Z13A | 21 | Y | 10:30 | 3 [illegible] | | |

CUT IN
255+00

76L298 307 4-50

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.

Profile No. _____ Notes Red. LOWE Plotted _____ Job No. 8416 Division No. K F.B. 1296 P. 22
Date 9-7-51 Date _____ Survey of Beach Erosion Studies
X-Sec. No. _____ Notes Chkd. TM Checked _____ Survey by EHB Notes ERK Date 7-30-51
Date 7-17-51 Date _____ Map No. _____ Notes Johnson Date _____

| STATION 255+00 | | B.S. | Hrl. Meas. Depth | F.S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|---|
| # | Color | Time | | Bottom | Tide | Adj. Depth | Remarks | |
| | | | 29.9 | | | | | |
| 1 | RY | 10:05 | 28.4 | 28.9 | 4.0 | 24.9 | | |
| | | 0905 | 29.0 | | | | | |
| 2 | R | | 27.3 | 27.9 | | 23.9 | | |
| | | | 27.9 | | | 23.7 | | |
| 3 | Y | | 26.1 | 26.7 | | | | |
| | | | 26.8 | | | | | |
| 4 | RY | 10:09 | 25.0 | 25.6 | 4.0 | 21.6 | | |
| | | 0909 | 26.0 | | | | | |
| 5 | R | | 24.9 | 24.7 | | 20.7 | | |
| | | | 25.1 | | | | | |
| 6 | Y | | 23.0 | 23.7 | | 19.7 | | |
| | | | 24.3 | | | | | |
| 7 | RY | 10:17 | 22.0 | 22.8 | 4.0 | 18.8 | | |
| | | 0917 | 23.3 | | | | | |
| 8 | R | | 21.0 | 21.8 | | 17.8 | | |
| | | | 21.4 | | | | | |
| 9 | Y | | 18.9 | 19.7 | | 15.7 | | |
| | | | 20.1 | | | | | |
| 10 | RY | 10:18 | 17.8 | 18.6 | 3.9 | 14.7 | | |
| | | 0918 | 19.1 | | | | | |
| 11 | R | | 16.8 | 17.6 | | 13.7 | | |
| | | | 21.0 | | | | | |
| 12 | Y | | 19.2 | 19.8 | | 15.9 | mound of seaweed | |
| | | | 18.7 | | | | | |
| 13 | RY | 10:21 | 15.8 | 17.2 | 3.9 | 13.3 | | |
| | | 0921 | 18.8 | | | | | |
| 14 | R | | 16.5 | 17.3 | | 13.4 | | |
| | | | 16.8 | | | | | |
| 15 | Y | | 14.8 | 15.5 | | 11.6 | | |
| | | | 15.3 | | | | | |
| 16 | RY | 10:24 | 13.1 | 13.8 | 3.9 | 9.9 | | |
| | | 0924 | 14.0 | | | | | |
| 17 | R | | 12.1 | 12.7 | | 8.8 | | |
| | | | 12.1 | | | | | |
| 18 | Y | | 10.9 | 11.3 | | 7.4 | | |
| | | | 12.2 | | | | | |
| 19 | RY | 10:28 | 10.0 | 10.7 | 3.9 | 6.8 | | |
| | | 0928 | 11.9 | | | | | |
| 20 | R | | 9.0 | 10.0 | | 6.1 | | |

B045
255+00

F. B. 1296 Pg. 226

Job No. 8412 Division No. V Notes Red. Lew. Plotted _____ Profile

Survey of Beach Erosion Studies Date 7-30-51 Date _____ No. _____

Survey by F.H.R. Notes Vollnogle Notes Chkd. T.M.J. Checked _____ X-Sec.

Indexed A. C. Johnson Date _____ Date 2-17-51 Date _____ No. _____

| STATION | # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|---|
| 25 | 21 | Y | 10:30 | 90 | 7.6 | 3.9 | 3.7 | |
| | 22 | R.Y | 0930 | 69 | | | | |
| | 23 | R. | | | | | | |

BOAT
255+00

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.

76L298 307 4-50

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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. | | |
|---|---|---|---|---|---|---|
| 266+25 | 6.2 | 16.1 | | 9.88 | 1X2 ON 70' RT. | OFFSET LINE. |
| | | | 5.6 | 10.5 | Sand " " | SHORE ∡ 90° |
| TRANSIT ON | | | 1.3 | 14.8 | 99 " | BASE of BLUFF |
| 271+25 - 70' OFFSET | | | 9.8 | 6.3 | 46 " | WATER |
| 5°-51' T.P. | 4.0 | 8.7 | 11.4 | 4.7 T.P | 18 " (Calc. 19') | |
| 9°-31' | | | 7.0 | 1.7 | 14' Calc. LT | BRK |
| 11°-30' | | | 7.7 | 1.0 | 32' calc " | |
| 12°-30' | | | 8.1 | 0.6 | 41' Calc. " | |
| 17°-35' | | | 9.8 | -1.1 | 88' Calc. " | |
| 22°-21' | | | 11.6 | -2.9 | 136' calc | |

70' SUBTRACTED FROM Calc. DIST.

SHORE
266+25

Profile No. ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (DUMA) X-Sec. No. ____ Notes Chkd Lewis Checked ____ Survey by C.V.C. Notes C.V.C. Date 7-31-57 Date 9-12-57 Date ____ Map No. ____ Indexed E. C. Johnson Date ____

F.B. 1296 Pg. 227

FORM 307 10M 10-46

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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.

12.6
4.7 7.3
7.9 3.5
3.8

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| 272+25 | 50 | 12 ~~8~~ 5 | | 7 ~~5~~ 51 | 1x2 ON 70' RT | OFFSET. |
| | | | 6.4 | ~~2~~ 1 | Sand " | SHORE ∡ 90° |
| | | | 17 | 10 ~~8~~ 8 | 92' " | BASE of BLUFF |
| (TRANS. on 267+25 = 70' OFFSET) | | | 58 | 6 ~~7~~ 7 | 40 " | |
| | | | 68 | 5 ~~7~~ 7 | 24 " | Water |
| 7°-19' ✓ T.P. | 46 | 9 ~~8~~ 2 | 7.9 | 2 ~~6~~ 6 T.P. | 6 " (Calc 6') | Beach |
| 11°-42' ✓ | | | 68 | ~~4~~ 4 | 34' ✓ Calc. LT | OCEAN FLOOR |
| 14°-00' ✓ | | | 78 | ~~4~~ 4 | 55' ✓ Calc. " | " " |
| 16°-48' ✓ | | 4. | 8[illegible] | ~~6~~ 6 | 81' ✓ " " | " " |
| 19°-52' ✓ | | [illegible] | [illegible] | ~~5~~ 5 | 111' ✓ " " | " " |
| 25°-05' ✓ | | 7.7 | 11.7 | 2 ~~5~~ 5 | 164' ✓ " " | " " |
| 28°-53' ✓ | | 10.6 | 14.6 | 5 ~~4~~ 4 | 206' ✓ " " | " " |

70' SUBTRACTED FROM CALC. DIST.

SHORE
272+25

Profile
Plotted
Date
Checked
Date
Notes Red.
Date
Notes Chkd.
Date
Division No.
Job No. 8412
Survey of BEACH EROSION STUDIES (ZUMA)
Survey by C.V. CRUMLEY
Notes C.V.C.
Indexed A. C. Johnson
Date 7-31-51
X-Sec.
No.
No.
F.B. 1296 PG. 228

76L298 307 4-50

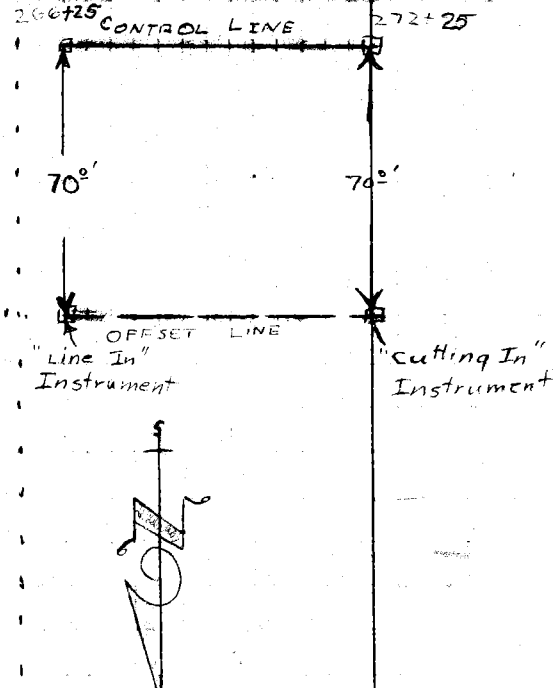
PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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. |
|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor. Ang. |
| 266+25 | 272+25 | 1 | R-Y | 8:43 | 89°49 |
| 70'OA | 70'OA | 2 | R | | 90°04 |
| | | 3 | Y | | 89°59 |
| | | 4 | R-Y | 8:46 | 90°05 |
| | | 5 | R | | 89°54 |
| | | 6 | Y | | 88°54 |
| | | 7 | R-Y | 8:53 | 89°39 |
| | | 8 | R | | 89°56 |
| | | 9 | Y | | 88°28 |
| | | 10 | R-Y | 9:00 | 89°43 |
| | | 11 | R | | 90°05 |
| | | 12 | Y | | 89°08 |
| | | 13 | R-Y | 9 03 | 89°38 |
| | | 14 | R | | 90°37 |
| | | 15 | Y | | 89°50 |
| | | 16 | R-Y | 9 06 | 90°03 |
| | | 17 | R | | 90°27 |
| | | 18 | Y | | 89°35 |
| | | 19 | R-Y | 9 08 | 90°59 |

Remarks




RANGE 266+25

Profile Notes Red. Plotted Job No. 8412 Division No. V F. B. 1296 Pg. 229
No. Date Date Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd. Checked Survey by M.S. Notes M.S. Date 7-31-51
No. Date Date Map No. Indexed Date

F. B. 1296 Pg. 230

Job No. B412 Division No. ✓ Notes Red. ② Plotted ____ Profile ____

Survey of BEACH EROSION STUDIES Date 7/31/51 Date ____ No. ____

Survey by E.H.B. Notes M.N. Notes Chkd. ____ Checked ____ X-Sec. ____

Indexed C. Johnson Date ____ Date ____ No. ____

76L298 307 4-50

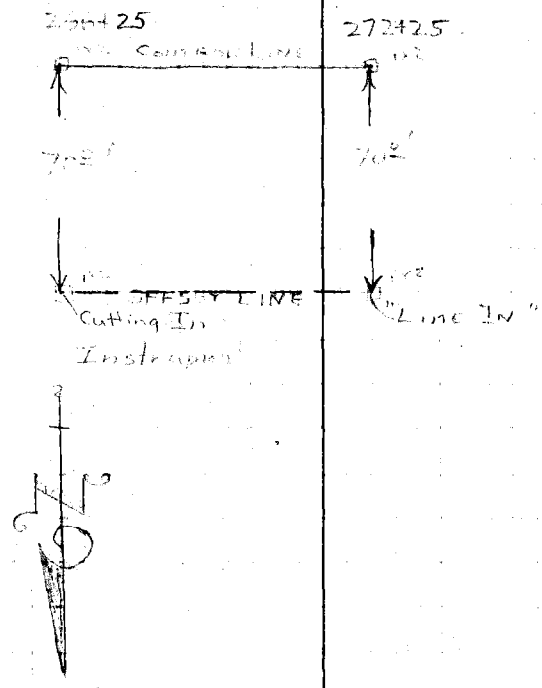
PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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. | | |
|---|---|---|---|---|---|---|---|
| Inst. At | Sight On | # | Color | Time | Hor, Ang. | Remarks | |
| 272+25 | 266+25 | 1 | R&Y | 9:14 | 90°14' | | |
| 70' OFF | 70' OFF | 2 | R | | 90°39' | | |
| | | 3 | Y | | 90°39' | | |
| | | 4 | R&Y | 9:17 | 90°52' | | |
| | | 5 | R | | 90°27' | | |
| | | 6 | Y | | 90°[illegible] | | |
| | | 7 | R&Y | 9:22 | 90°31' | | |
| | | 8 | R | | 90°32' | | |
| | | 9 | Y | | 89°59' | | |
| | | 10 | R&Y | 9:25 | 89°59' | | |
| | | 11 | R | | 90°[illegible] | | |
| | | 12 | Y | | 90°[illegible] | | |
| | | 13 | R&Y | 9:29 | 90°[illegible] | | |
| | | 14 | R | | 90°[illegible]2' | | |
| | | 15 | Y | | 90°[illegible]2' | | |
| | | 16 | R&Y | 9:34 | 90°[illegible] | | |
| | | 17 | R | 9:36 | 90°[illegible] | | |
| | | 18 | Y | | | | |
| | | 19 | R&Y | | | | |
| | | 20 | R | | | | |

RANGE 272+25



76L298 307 4-50

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 | | S. S. | H. I. | F. S. | ELEV. | | | |
|---|---|---|---|---|---|---|---|---|
| Inst. Sight At | On | # | Color | Time | Hor. Ang. | Remarks | | |
| 272+25 | 266+25 | 1 | RY | 8:44 | 60°35' | | | Z-14 C.S. Mon 265+23.21 |
| 70' Offset | | 2 | R | | 58°45' | 1X2 266+25 (Line-in) | 70' | 266+25 |
| Line | | 3 | Y | | 57°51' | | | |
| | | 4 | RY | 8:47 | 56°17' | | | |
| | | 5 | R | | 54°05' | | | |
| | | 6 | Y | | 51°28' | | | |
| | | 7 | RY | 8:53 | 47°47' | | | |
| | | 8 | R | | 46°30' | | | Water |
| | | 9 | Y | | 45°44' | | | |
| | | 10 | RY | 9:00 | 41°25' | | | |
| | | 11 | R | | 40°00' | | | |
| | | 12 | Y | | 38°09' | | | |
| | | 13 | RY | 9:03 | 36°18' | | | |
| | | 14 | R | | 34°04' | | | |
| | | 15 | Y | | 30°26' | | | |
| | | 16 | RY | 9:06 | 27°35' | | | |
| | | 17 | R | | 24°15' | 1X2 272+25 (Cut-in) | 70' | 272+25 |
| | | 18 | Y | | 22°10' | | | |
| | | 19 | RY | 9:08 | 21°02' | | | Z-15 C.S. Mon 275+52.56 |

CUT IN 266+25

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 5412 Division No. ____ Date ____ Date ____ Survey of Beach Erosion Studies

X-Sec. No. ____ Notes Chkd. ____ Checked ____ Survey by E.H.B. Notes Suitable Date 7-30-51

Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

S. 1296

76L298 307 4-50

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. | | |
|---|---|---|---|---|---|---|
| ~~Inst. Sight~~ At On | # | Color | Time | Hor. Ang. | Remarks | |
| ~~266+25~~ 272+25 | | | | | | Z14 |
| | 1 | RY | 9:15 | 59:29 | | C.S. Mon. |
| 70 ft. Offset | 2 | R | | 58:10 | 1X2 70' | 265+30.21 |
| Line | 3 | Y | | 5[illegible]:13 | 266+25 | 266+25 |
| | 4 | RY | 9:18 | 5[illegible]:28 | Cut-in | |
| | 5 | R | | 5[illegible]:00 | | |
| | 6 | Y | | 5[illegible]:30 | | |
| | 7 | RY | 9:23 | 5[illegible] | | |
| | 8 | R | | 5[illegible]:07 | | |
| | 9 | Y | | 49:17 | | |
| | 10 | RY | 9:26 | 4[illegible]:4 | | |
| | 11 | R | | 4[illegible]:07 | | |
| | 12 | Y | | 4[illegible]:8 | | |
| | 13 | RY | 9:30 | 4[illegible]:6 | | |
| | 14 | R | | 3[illegible]:2 | | |
| | 15 | Y | | 3[illegible]:4 | | |
| | 16 | RY | 9:35 | 2[illegible]:8 | 1X2 70' | 272+25 |
| | 17 | R | 9:36 | 2[illegible]:3 | 272+25 | |
| | | | | | Line-in | Z15 |
| | | | | | | C.S. Mon. |
| | | | | | | 275+52.56 |

Cut in 272+25

Survey of Beach Erosion Studies
Survey by F.H.B. Sutter
Indexed R. G. Johnson Date 7-31-51
Job No. 8412 Division No.
Notes Red. Date Plotted Date
Notes Chkd. Date Checked Date
Profile No. X-Sec. No.
F.R. 7296 Pg. 232

76L298 307 4-50

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 266+25

| # | Color | B. S. Time | H. I. Meas. Depth | F. S. Bottom | ELEV. Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| | | | 30.3 | 28.8 | | 25.0 | |
| 1 | RY | 8:43 0743 | 28.0 29.0 | ~~28.7~~ | 3.8 | ~~24.9~~ | |
| 2 | R | | 27.0 27.1 | 27.7 | | 23.9 | |
| 3 | Y | | 25.3 25.7 | 25.9 | | 22.1 | |
| 4 | RY | 8:47 0747 | 24.0 24.0 | 24.6 | 3.9 | 20.7 | |
| 5 | R | | 22.0 23.0 | 22.7 | | 18.8 | |
| 6 | Y | | 20.3 21.0 | 21.2 | | 17.3 | Kelp between shot. |
| 7 | RY | 8:53 0753 | 19.0 19.1 | 19.7 | 3.9 | 15.8 | |
| 8 | R | | 17.5 18.0 | 18.0 | | 14.1 | |
| 9 | Y | | 16.0 19.0 | 16.7 | | 12.8 | |
| 10 | RY | 9:00 0800 | 17.0 16.0 | 17.7 | 3.9 | 13.8 | |
| 11 | R | | 14.0 14.5 | 14.7 | | 10.8 | |
| 12 | Y | | 13.0 14.0 | 13.5 | | 9.6 | |
| 13 | RY | 9:03 0903 | 12.0 13.9 | 12.7 | 3.9 | 8.8 | |
| 14 | R | | 11.0 13.8 | 12.0 | | 8.1 | |
| 15 | Y | | 12.5 12.8 | 12.9 | | 9.0 | |
| 16 | RY | 9:07 0907 | 10.0 11.0 | 10.7 | 3.9 | 6.8 | |
| 17 | R | | 9.0 11.0 | 9.7 | 3.9 | 5.8 | |
| 18 | Y | | 8.0 10.0 | 9.0 | 4.0 | 5.0 | |
| 19 | RY | 9:09 0909 | 7.0 | 8.0 | 4.0 | 4.0 | |
| 20 | R | | | | | | |

Boat.
266+20

Profile No. ____ Notes Red. JCWK Plotted ____ Job No. 8412 Division No. K F.B. 1294 Pg. 23
Date 9-7-51 Date ____ Survey of Beach Erosion Studies
X-Sec. No. ____ Notes Chkd. ____ Checked ____ Survey by E.H.B. Notes ERK Date 7-31-51
Date ____ Date ____ Map No. ____ Info. ____ Date ____

76L298 307 4-50

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 272+25

| # | Color | Time | Meas. Depth | Bottom | Tide | Adj. Depth | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | RY | 9:15 08 15 | 29.5 28.4 28.1 | 28.8 | 4.0 | 24.8 | |
| 2 | R | | 27.0 27.0 | 27.4 | | 23.4 | |
| 3 | Y | | 25.5 25.5 | 26.0 | | 22.0 | |
| 4 | RY | 9:18 08 18 | 24.4 24.5 | 24.8 | 4.0 | 20.8 | |
| 5 | R | | 22.5 22.7 | 23.2 | | 19.2 | |
| 6 | Y | | 21.3 20.6 | 21.8 | | 17.8 | |
| 7 | RY | 9:23 08 23 | 19.0 19.4 | 19.5 | 4.0 | 15.5 | |
| 8 | R | | 17.9 18.3 | 18.4 | | 14.4 | |
| 9 | Y | | 16.9 17.5 | 17.4 | | 13.4 | |
| 10 | RY | 9:26 08 26 | 15.6 15.9 | 16.2 | 4.0 | 12.2 | |
| 11 | R | | 14.5 15.0 | 15.0 | | 11.0 | |
| 12 | Y | | 13.5 13.5 | 14.0 | | 10.0 | |
| 13 | RY | 9:30 08 30 | 12.1 12.5 | 12.6 | 4.1 | 8.5 | |
| 14 | R | | 11.1 12.0 | 11.6 | | 7.5 | |
| 15 | Y | | 10.0 10.3 | 10.7 | | 6.6 | |
| 16 | RY | 9:35 08 35 | 8.5 8.3 | 9.1 | 4.1 | 5.0 | |
| 17 | R | 9:36 08 36 | 6.0 | 6.8 | 4.1 | 2.7 | |
| 18 | Y | | | | | | |
| 19 | RY | | | | | | |
| 20 | R | | | | | | |

BOAT 272+25

F.B. 1296 Pg. 234 Job No. 8412 Division No. V Notes Red. Lew. Plotted Profile
Survey of Beach Erosion Studies Date 7-31-51 Date No.
Survey by F.H.B. Notes Vol Angle Notes Chkd. T.M.L. Checked X-Sec.
Indexed R. C. Johnson Date Date 9-17-51 Date No.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Profile No. | Notes Red. | Plotted | Job No. 8412 | Division No. V | F.B. 1296 | PG. 235 | |
| | Date | Date | Survey of Beach Erosion Studies | | | | |
| X-Sec. No. | Notes Chkd. T.M.L. | Checked | Survey by RJM | Notes RJM | Date 7/19/51 | | |
| | Date 8-27-51 | Date | Map No. | Indexed E. Johnson | Date 8-23-51 | | |

**BASE LINE PROFILE**

BEACH EROSION STUDIES

JN 8412

~PROFILE~

Point Dume to Sequit Canyon

Station 0+00 to Station 439+25

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

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.

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

76L298 307 5-49

76L298 307 5-49

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.

Profile No. ___ X-Sec. No. ___

Plotted ___ Date ___ Checked ___ Date ___

Notes Red. ___ Date ___ Notes Chkd. T.M.I. Date 8-27-57

Division No. V Job No. 8412 Pg. 236

Survey of Beach Erosion Studies

Survey by M. Fabell Notes M. Fabell

Indexed K. C. Johnson Date

| STATION | B. S. | H. I. | F. S. | ELEV. | | |
|---|---|---|---|---|---|---|
| BM ZB-5 | 4 36 | 16 73 | | 12 37 | BM ZB-5 Point Dume ~ At SW'ly Cliff on Beach Bt spk & W in head on shelf at Base of Cliff 9 ft. NE fr. pt. of cliff at Water line. Height = The Apt Cliff ZLA (5-C FB 930-87) Elev = 9.635 MSL (1st Run) F.B. 930-128 ~ 9.635 MSL + 2.74 = 12.375 M.L.L.W. | |
| 0+00 = POT Z-1-A | 7 14 | 19 48 | 4 39 | 12 34 | POT Z-1-A Point Dume at S'W'ly Cliff on beach ~ 45 ft N of Face of Cliff 15 ft SW of toe of slope of cliff base A C.S. Br. Cap Mon 18" dn 67.59 N of BM ZB-5 (For Loc. see FB 930-87) Elev = 9.595 M.S.L. per FB 930-128 9.596 MSL + 2.74 = 12.338 | |
| 5+00 | 4 49 | 20 11 | 3 86 | 12 2 | set 1/2 stk | |
| 10+00 | 3 18 | 20 85 | 3 24 | 16 7 | " " " | |
| 15+00 | 2 16 | 18 71 | 4 10 | 16 5 | " " " | |
| 20+00 | 5 65 | 20 34 | 4 22 | 14 9 | " " " | |
| 25+00 | 11 49 | 25 89 | 5 74 | 14 0 | " " " | |
| T.P. 26+90.21 = Z-2 | 10 74 | 35 27 | 1 36 | 24 3 | on rock | |
| | | | 4 45 | 30 3 | Z-2 (26+90.21) Pt. Rd. on beach = Cent. of "WESTWOOD" Beach Rd. 1.4 ft. Point of 200 ft W of Ho. on Beach ~ A C.S. Br. Cap. Mon of 18" dn. For Loc. See FB 930-88. Elev = 28.044 M.S.L. per FB 930-126 (1st Run) (Elev = 28.020 1st Run FB 930-129) 28.044 MSL + 2.74 = 30.784 M.L.L.W. | |
| 26+90.21 = Z-2 | 2 52 | 33 30 | | 30 8 | Corr Elev. (see above) | |
| 30+00 | 1 38 | 25 84 | 8 84 | 24 6 | set 1/2 stk on W edge Rd. | |
| 35+00 | 4 00 | 24 64 | 5 20 | 20 4 | set Bt. spk on W edge of Rd. | |

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| | | 24 64 | | | | |
| T.P. | 0 71 | 13 20 | 12 15 | 12 49 | rock on beach | |
| 40+00 | 4 37 | 13 77 | 3 80 | 9 40 | 1x2 on beach | |
| 45+00 | 9 24 | 14 29 | 8 72 | 5 05 | 1x2 on beach | |
| T.P. | 3 55 | 16 75 | 0 89 | 13 40 | on threads of bolt in SW Cor. of piling under NWly of 2 houses on beach | |
| 50+00 | 4 20 | 17 19 | 3 96 | 12 99 | 1x2 on beach | |
| 55+00 | 4 34 | 16 97 | 4 56 | 12 63 | 1x2 on beach | |
| 60+00 | 5 ~~4~~ 30 | 17 ~~16~~ 71 | 4 56 | 12 41 | " " " | |
| 65+00 | 4 82 | 17 63 | 4 90 | 12 81 | " " " | |
| 70+00 | 4 98 | 17 39 | 5 22 | 12 41 | " " " | |
| 75+00 | 6 85 | 18 93 | 5 31 | 12 08 | " " | |
| T.B.M. | | | 1 53 | 17 40 | T.B.M. (Near Z-3-B) 18 ft ± E of E edge of bldg (Co. Bldg #2471) & 4 ft S of S edge of above bldg. — A lg. Bt. Stk & W in S end of Walk — Tie Pt. to Z-3-B (for Loc. see FB 930-91) Elev. = 14.714 per FB 930-131 (first Run) 14.714 MSL + 2.74 = 17.454 MLLW | |
| TBM | 1 96 | 19 41 | | 17 45 | corr elev. (see above) | |
| 80+00 | 3 77 | 15 79 | 7 39 | 12 02 | 1x2 on beach. | 2 ties in P.P.s |
| 85+00 | 7 86 | 20 37 | 3 28 | 12 51 | 1x2 on beach | parking lot |
| 90+00 | 2 62 | 20 19 | 2 80 | 17 57 | 1x2 in sand bank at beach edge of | |
| 95+00 | 5 15 | 15 72 | 9 62 | 10 57 | 1x2 on beach | |
| 100+00 | 4 42 | 14 78 | 5 36 | 10 36 | 1x2 on beach | |
| 105+00 | 5 91 | 15 80 | 4 89 | 9 89 | 1x2 on beach | |

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. 1 F.B. 1296 Pg. 237
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
Notes Chkd. T.M.J. Checked ____ Survey by RJM Notes RJM Date 7/24/51
Date 8-27-57 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 5-49

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. | |
|---|---|---|---|---|---|
| | | 15 80 | | | contd from face of page |
| 110+00 | 4 55 | 15 67 | 4 68 | 11 12 | 1x2 stk on beach |
| 115+00 | 5 23 | 16 10 | 4 80 | 10 87 | 1x2 " " " |
| Z-4-B 119+96.69 | | | 5 88 | 10 22 | Z-4-B (119+96.69 ~ Beach Erosion Studies Control Line) Pacific Coast Hwy @ Sta 447+14 (±) & 162.22 S of Stk in Ctr. Strip. also 21.5 E & 47.7 S of L.A. Co. Comfort Sta. (Co. Bldg. No 2474 ~ See F.B. 1445-43 for " " Loc.) A C.S. Br. Cap Mon. dn 18" in Beach Sand ~ For Loc. See also F.B. 930-94. Elev = 7.500 MSL per FB 930-134 7.500 M.S.L. + 2.74 = 10.240 MLLW |
| Z 4-B 119+96.69 | 6 41 | 16 65 | | 10 24 | corr. Elev |
| 120+00 | 4 53 | 16 51 | 4 67 | 11 18 | 1x2 on beach |
| 125+00 | 4 63 | 16 84 | 4 30 | 11 21 | " " " |
| 130+00 | 4 21 | 16 02 | 5 03 | 11 31 | " " " |
| 135+00 | 4 61 | 16 37 | 4 26 | 11 76 | " " " |
| 140+00 | 4 62 | 16 31 | 4 68 | 11 69 | " " " |
| 145+00 | 7 09 | 16 70 | 6 70 | 9 61 | " " " Right Side Trancus Crk. |
| 150+00 | 4 83 | 15 61 | 5 92 | 10 78 | " " " |
| Z-5 150+22.88 | | | 5 69 | 9 92 | Z-5 (150+22.88 Beach Erosion Studies Control Line) Pacific Coast Hwy & Trancus Crk. opposite Entrance to "Country Store" 170 ft S of S. Side Broad Beach Rd. ~ A std. C.S. Br. Cap Mon dn 18" ~ For Loc. See FB930-96 ~ Elev = 7.131 MSL per FB930-136 ~ 7.131 MSL + 2.74 = 9.871 M.L.L.W. (1st Run) |
| Z-5 150+22.88 | 5 59 | 15 46 | | 9 87 | corr. elev., see above |
| 155+00 | 6 96 | 18 63 | 3 79 | 11 67 | 1x2 on beach |
| Z-5 | 7.13 | + 2.74 | 9.87 | | |

Profile No. ___ Plotted ___ Date ___ X-Sec. No. ___ Checked ___ Date ___

Job No. 8412 Division No. ✓ Notes Red. ___ Date ___ Notes Chkd. T.M.I. Date 8-27-51

Survey of Beach Erosion Studies Notes ___ Date ___

Survey by R.J.M. Notes R.J.M.

Indexed R. C. Johnson Date ___

F.B. 1296 PG. 238

76L298 307 5-49

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. | |
|---|---|---|---|---|---|
| | | 18 63 | | | contd fr. pg. |
| 160+00 | | | 5 05 | 13 58 | 1x2 on back side sm. sand dune |
| 160+00 | 6 63 | 19 20 | 6 06 | 12 57 | 50 ft L 1x2 on beach |
| 165+00 | | | 7 69 | 11 51 | W. Spk & + on back side of sand dune |
| 165+00 | 4 10 | 20 10 | 3 20 | 16 00 | 50 ft. L 1x2 on top of " " |
| Z-6 167+75 35 | | | 8 96 | 11 14 | Z-6 (167+75 35 Beach Erosion Studies Control Line) Broad Beach Road ±1752 ft. W of Int. of Pacific Coast Hwy at Trancas Creek & 80 ft ± S.E. of Ho. #31820 ~ A. Std. Br. Cap C.S. Mon. dn 14" For Loc. See F.B. 930- ) Elev = 8.392 MSL per F.B. 930-137 (First Run) ~ 8.392 MSL + 2.74 = 11.132 |
| Z-6 167+75 35 | 5 39 | 16 52 | | 11 13 | corr. Elev. (see above) |
| 170+00 | 3 33 | 18 26 | 1 59 | 14 93 | 1x2 on rear 1/3 of sand dune |
| 175+00 | 3 02 | 16 01 | 5 27 | 12 99 | 1x2 on beach edge of sand dunes |
| 180+00 | 4 07 | 13 11 | 6 97 | 9 04 | 1x2 on beach (below high water line) |
| 185+00 | 8 62 | 18 51 | 3 22 | 9 89 | 1x2 on beach ( " " " ) |
| 190+00 | 2 99 | 16 86 | 4 64 | 13 87 | 1x2 on beach edge of sand dune |
| Z-7 192+43 32 | | | 5 24 | 11 62 | Z-7 (= 192+43 32 Beach Erosion Studies Control Line) Broad Beach Road 5500 ft ± W of Trancas Cn (At Pacific Coast Hwy) 5 ft ± W of W line of Ho. No. 31344 ~ A Std Br. Cap. C.S. Mon dn. 18" & 158.5 S of spk in Broad Beach Rd. (For Loc. see FB 930-98) Elev = 8.804 MSL per FB 930-138 (1st Run) ~ 8.804 MSL + 2.74 = 11.544 MLLW. |
| Z-7 192+43 32 | 6 54 | 18 08 | | 11 54 | corrected elev. (see above) |
| 195+00 | | | 4 03 | 14.05 | 1x2 on beach near edge of sand |

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. V
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
Notes Chkd. T.M.I. Checked ____ Survey by R.J.M. Notes RJM Date 7/24/51
Date 8-27-57 Date ____ Map No. ____ Indexed T. Johnson Date ____

F.B. 7296 PG. 239

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| 195+00 | 1 95 | 16 00 | ✓ | 14 05 | ✓ | |
| 200+00 | 5 91 | 16 67 | ✓ 5 24 | 1[illegible] 76 | ✓ 1x2 on beach | |
| 204+00 | | | 5 13 | 1[illegible] 54 | ✓ 1x2 on beach | |
| 204+50 | 12 20 | 25 58 | ✓ 3 29 | [illegible] 38 | ✓ 1x1 on small shelf at foot of cliff | |
| T.P. | 10 88 | 35 99 | 0 47 | [illegible] 11 | ✓ TP on cliff | |
| T.P. | 9 38 | 44 92 | 0 45 | 35 54 | ✓ TP | |
| Z 8 205+24 27 | | | 2 43 | 4[illegible] | ✓ Z-8 (205+24 27 Beach Erosion Studies Control Line) Pacific Coast Hwy - opp. Sta 360+00 & 300 ft ± S of Water tank on S. Side "Broad Beach Rd." - A Std. C.S. Br. Cap Mon 8" dn in old R.R. R/W above beach - (For Loc. see FB 930-99) Elev = 39.727 M.S.L. per F.B 930-139 (1st Run) 39.727 MSL + 2.74 = 42.467 M.L.L.W. | |

End of this Beach Section

F.B. 1296 Pg. 240

Job No. 8412 Division No. ✓ Notes Red. Plotted Date No. Profile

Survey of Beach Erosion Studies Date No. X-Sec.

Survey by Mitchell Notes RJM Notes Chkd. T. M. I Checked Date No.

Indexed A. C. Johnson Date B-27-51

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| BM ZB 14 | 4 12 | 26 35 | | 21 93 | BM ZB-14 West Sea Level Dr. (=Lot "A" a street of Tr. No. 10630) Enter at Gate "Malaby-Encinal" on Broad Beach Road 500 ft ± W of Horiz Tank & Pump House & Go 0.30 mi ± S & W. to Ho. No. 31665 ~ A Bt. Spk in Lead in W end Conc. Apron at Gate (walk) Elev = 19.193 MSL per FB 930-142 (1st Run) 19.193 MSL + 2.74 = 21.933 M.L.L.W. | |
| 214+00 | 5 22 | 21 27 | 10 30 | 16 05 | 1x2 stk on beach | |
| 218+00 | 5 40 | 21 38 | 5 29 | 15 98 | 1x2 " " " | |
| 222+00 | 4 31 | 20 21 | 5 48 | 15 90 | 1x2 " " " | |
| 228+00 | 3 69 | 17 64 | 6 26 | 13 95 | 1x2 " " " | |
| 232+00 | 5 96 | 17 20 | 6 40 | 11 24 | 1x2 " " " | |
| Z 10 230+08 89 | | | 4 88 | 12 32 | Z-10 (230+08 89 Beach Erosion Studies Control Line West Sea Level Drive, Enter from Broad Beach Rd., Go S & E to END then 270 ft E on trail A Std C.S. Br. Cap Mon dn 18" on beach at toe of slope ~ See FB 930-100 for Loc. Elev. = 9.578 MSL per FB930-143 1st Run 9.578 MSL + 2.74 = 12.318 MLLW | |
| | | END OF THIS SECTION | | | | |
| | | BEGIN NEXT SECTION HERE | | | | |
| TBM | 1.96 | 12 65 | | 10 69 | T.B.M Chiseled "□" top 3 ft Rnd Rock on beach at mouth of Canyon at N end of 10 ft x 50 ft Rock Island and 25 ft N & 12 ft E of Z11 (=237+77 14 Beach Erosion Studies Control Line) as described on FB 930-144 & FB930-101. Elev. = 7.952 MSL per FB 930-144 (First Run) 7.952 MSL + 2.74 = 10.692 | |

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. 222 F.B. 1296 PG. 241
X-Sec. No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
Notes Chkd. T.M.I. Checked ____ Survey by RJM Notes RJM Date 7/26/51
Date 8-27-51 Date ____ Map No. ____ Indexed ____ Date ____

76L298 307 5-49

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. | |
|---|---|---|---|---|---|
| 239+00 | | 12 65 | 7 00 | 5 65 | 1x2 Edge of beach (tide line) |
| " T.P. | 8 65 | 18 69 | 2 61 | 10 04 | 35' N. off-set, 1x2 (Two lath tied base of cliff) |
| 243+00 | | | 8 46 | 10 23 | 1x2 Edge of beach (tide line) |
| " T.P. | 4 02 | 18 73 | 3 98 | 14 71 | 35' off-set 1x2 (Two lath tied at base of cliff) |
| Z 12 245+94.85 | | | 6 50 | 12 23 | Z 12 (= 245+94.85) Beach Erosion Studies control line) on beach 87.71 ft ± W. of CB. pt. W. end Broad Beach Rd. - 3' sq. of toe of slope - a strd. C.S. Brass Cap. Mon. down 18". For location see F.B. 930-102. Elev = 9.499 M.S.L., per F.B. 930-144 (First Run) 9.499 M.S.L. + 2.74 = 12.239 M.L.L.W. |
| Z-12 245+94.85 | 5 77 | 18 01 | | 12 24 | corrected Elev., see above. |
| 247+00 T.P. | 2 49 | 15.95 | 4 55 | 13 46 | T.P. 1x2 on beach (tide line) [illegible] |
| 251+00 T.P. | 4 60 | 15.30 | 5 25 | 10 70 | T.P. 1x2 on beach 60' N.W. of 40'x20'x20' Rock. |
| T.P. | 4 93 | 15.76 | 4 47 | 10 83 | T.P. ledge on rock. |
| 255+00 | | | 9 79 | 5 97 | 1x2 on beach (tide line) |
| " T.P. | 7 21 | 17.17 | 5 86 | [illegible] | 50' off-set 1x2, on beach [illegible] |
| T.P. | 4 74 | 18 13 | 3 72 | 13 39 | T.P. |
| Z 13-A 252+08 07 | | | 2 30 | 14 83 | Z 13-A (252+08 07 Beach Erosion Studies Control Line) A Bt. Spk in Notch, N end of High Rock Island 75± up from beach 85.89 ft W of Z 13 - See FB 930-103 for Loc. Elev. = 13.109 per FB 930-145 (1st Run MSL) 13.109 MSL + 2.74 = 15.849 MLLW |

END OF THIS SECTION

BEGIN NEXT SECTION OF PROFILE LEVELS ON next PG

F.B. 1296 PG. 242
Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of Beach Erosion Studies Date Date X-Sec.
Survey by R. J. MITCHELL Notes R. J. MITCHELL Notes Chkd. T. M. I. Checked No.
Indexed R. C. Johnson Date Date 8-27-57

76L298 307 4-50

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. | |
|---|---|---|---|---|---|
| BEGIN NEXT SECTION OF PROFILE HERE | | | | | |
| BMZB 16 | 5 41 | 12 50 | | 7.09 | BMZB 16 Bt. Spk in Lead Top of 4ft x 4ft Rock, up 25ft, 22ft S of Main Cliff & 15ft W of a high point at Base of trail leading down to beach from Hwy (Pacific Coast Hwy) Sta 300+30 ~ Elev. = 4.350 MSL per F.B. 930-147 (first Run) 4.350 MSL + 2.74 = 7.09 MLLW |
| 266+25 | 2 85 | 12 73 | 2 62 | 9 88 | 70ft Rt a 1x2 stk |
| 272+25 | 3 72 | 11 23 | 5 22 | 7 51 | 70ft Rt " " " |
| T.P. | 5 93 | 12 04 | 5 12 | 6 11 | |
| BMZB 17 | | | 0 98 | 11 06 | BMZB17 33ft±W & 16ft±S of Angle Pt. Z15 (as shown in F.B. 930-105) on top of high pt. at foot of narrow Canyon. A Bt. Spk in face of Blue Cliff at Base of Point Elev = 8.333 MSL per FB 930-148 (First Run) 8.333 MSL + 2.74 = 11.073 MLLW |
| BMZB-17 | 2 33 | 13 40 | | 11 07 | corrected Elev see above |
| 278+50 | 3 54 | 15 28 | 1 66 | 11 74 | 30 FT Rt a 1x2 stk |
| 284+50 | 4 65 | 13 38 | 6 55 | 8 73 | " " " " " " |
| 289+50 | 4 74 | 15 59 | 2 53 | 10 85 | 30 FT Rt " " " |
| BM671 | | | 4 47 | 11.12 | BM671 Elev 8.452 MSL per LB 331-192 An old Ct. Spk in top 6"x6" buff colored sandstone 6ft±S of toe of cliff & 860±ft E of Angle Pt. Z-16 (used as tie pt to POT Z-15-A FB 930-106. BM is 3½ mi± fr LA.-Ventura Co. Line Elev = 8.414 MSL per FB 930-150 (first run) 8.414 MSL + 2.74 = 11.154 MLLW |
| END OF THIS SECTION | | | | | |

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ✓ F.B. 1296 Pg. 243
No. ____ Date ____ Date ____ Survey of Beach Erosion Studies
X-Sec. Notes Chkd T.N.I. Checked ____ Survey by R. J. MITCHELL Notes R. J. MITCHELL Date 7/30/51
No. ____ Date 8-27-57 Date ____ Map No. ____ Indexed C. Johnson Date ____

76L298 307 4-50

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. | |
|---|---|---|---|---|---|
| | BEGIN NEXT SECTION | | | | |
| Z-16 303+30 47 | 0 60 | 24 32 | | 23 72 | Z-16 (303+30 47 Beach Erosion Studies Control Line) At mouth of canyon on sandy point at end of Rd. from Hwy ½ mi ± E of Decker Rd. Canyon has conc. alam 500 ft. ± up from beach ~ A Std C.S. Br. Cap Mon. - For Loc. see FB930-107. Elev = 20.977 MSL per FB930-150 (first Run) 20.977 MSL + 2.74 = 23.717 MLLW |
| T.P. | 1 08 | 13 46 | 11 94 | 12 38 | |
| 300+25 120 FT RIGHT | 2 19 | 12 60 | 3 05 | 10 41 | 120 ft Rt of Control Line, a 1x2 stk |
| 296+00 50 FT RIGHT | 3 54 | 12 63 | 3 51 | 9 09 | 50 ft Rt " " " " " " |
| BM 671 | | | 1 51 | 11 12 | Elev. = 11.154 ~ see face of this sheet |
| | END SECTION HERE | | | | |
| | BEGIN NEXT SECTION | | | | |
| Z-16 303+30 47 | 0 73 | 24 45 | | 23 72 | Z-16, 303+30 47, see above |
| 304+50 | 6 53 | 19 27 | 11 71 | 1[illegible] 74 | E 1x2 at toe of slope (two lath ties) |
| 308+2[illegible] | 3 33 | 18 75 | 3 85 | [illegible] 42 | 75' R. off-set 1x2 on beach (two lath ties) |
| 312+00 | 6 32 | 21 17 | 3 90 | 1[illegible] 35 | 75' R. off-set 1x2 at toe of cliff. |
| T.P. | 3 05 | 15 77 | 8 45 | 12 72 | T.P. |
| 317+75 | 7 26 | 19 73 | 3 30 | 12 47 | 25' R. off-set, 1x2 on beach (two lath ties) |
| 321+75 | 1 16 | 18 01 | 2 88 | 1[illegible] 85 | 25' R " " " " at toe of cliff. |
| T.P. | 6 01 | 15 70 | 8 32 | [illegible] 69 | T.P. |
| 325+50 | 5 70 | 16 63 | 4 77 | 10 93 | 45' R, off-set, 1x2 on beach ± 5 from cliff |
| 330+50 | 4 43 | 19 09 | 1 97 | 1[illegible] 66 | 45' R. " " " " " (two lath ties) |

F. B. 1296 Pg. 842

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

Survey of ____ Date ____ Date ____ No. ____

Survey by ____ Notes ____ Notes Chkd T. M. L. Checked ____ X-Sec. ____

Indexed A. C. Johnson Date ____ Date 8-27-51 Date ____ No. ____

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| | | 19 09 | | | | |
| 335+50 | 12 14 | 26 81 | 4 42 | 14 67 | ℄ 1x2 on beach, [illegible] | |
| 337+75.62 Z-19 | | | 1 25 | 25 56 | Z-19 (337+75.62 Beach Erosion Studies Control [illegible] down trail from Coast Hwy. [illegible] 334+56, W. end graded area, 65' ± W. of house on beach, [illegible] W. 33308 – A Strd. C.S. Brass Cp. Mon. [illegible] 4' ± For location see F.B. 990-110, E.L. = 22.802 M.L.L. per F.B. 130-155, [illegible] run. = 22.802 M.L.L. + 2.74 = 25.602 M.L.L.W. | |
| Z-19 | 2.13 | 27 73 | | 25 60 | Corr. elev.; for description see above | |
| T.P. | 1 87 | 17 74 | 11 86 | 15 87 | T.P. foot of trailer track. | |
| 340+50 | 4 65 | [illegible] | 5 53 | 12 21 | ℄ 1x2 on beach. | |
| 344+50 | | | 10 53 | 6 34 | ℄ 1x2 " " | |
| 344+50 | 3 25 | 12 18 | [illegible] | 8 93 | 25' R. off set, 1x2 on beach | |
| T.P. | 4 95 | [illegible] 63 | 5 50 | 6 68 | T.P. | |
| 348+50 | 2 08 | 11 78 | 1 93 | 9 70 | 2[illegible] R. [illegible] off set [illegible] base of slope [illegible] | |
| T.P. | 1 30 | 10 35 | 3 20 | 8 58 | T.P. | |
| 350+50 | 7 13 | 13 38 | 4 18 | 6 20 | ℄, 1x2 on beach | |
| 353+50 | 11 10 | 22 67 | 1 81 | 11 57 | ℄, " " " | |
| T.P. | 3 31 | 21 12 | 4 86 | 17 81 | T.P. | |
| 356+50 | 1 98 | 20 80 | 2 30 | 18 82 | ℄ 1x2 top sand dune | |
| 359+50 | | | 8 49 | 12 31 | 50' R. off-set 1x2, base of slope. | |
| 359+50 | 4 25 | 14 78 | 10 27 | 10 53 | ℄ 1x2 on beach. | |

Profile No. ____ Notes Red. ____ Plotted ____ Job No. ____ Division No. ____
X-Sec. No. ____ Date ____ Date ____ Survey of ____
Notes Chkd. T.M.L. Checked ____ Survey by ____ Notes ____ Date ____
Date 8-27-57 Date ____ Map No. ____ Index ____ Date ____

F.B. 1296 PG. 245

76L298 307 5-49

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.

11.497
216
14.23

Do not extend notes this side of this line.

Profile No. ____ X-Sec. No. ____
Plotted ____ Date ____ Checked ____ Date ____
Notes Red. ____ Date ____ Notes Chkd. T. M. L. Date 8-27-51
Division No. ____ Job No. ____
Survey of ____ Notes ____
Survey by ____ Date ____
Indexed R. G. Johnson
B. 1296 PG. 240

| STATION | B. S. | H. I. | F. S. | ELEV. | |
|---|---|---|---|---|---|
| | | 4 78 | | | |
| 352+50 | 0 00 | 12 82 | [illegible] | [illegible] | [illegible] R. [illegible] Top of Cliff. |
| BM Z-B 22 | | | 1 92 | [illegible] 50 | BM Z-B22, Large beat sort. + w. top of blue sand stone, 9'x14'x22' high - Spk. at 2.8' S. of face of bluff, 18' E. of old square and 300' ± E. of Z-22 (F.B. 936-113) Elev. = 7.882 M.S.L. per F.B. 930-157 First run - 7.882 M.S.L. + 2.74 = 10.622 M.S.L.W. |
| B.M. Z-B 23 | 1 88 | 16 12 | | 14 24 | ZB-23 el. 14.24 Large bt. Spk. F.W. in level top of yellow sandstone ledge ± 22' long cutting S.W.ly into ocean at base of traced flat spur S. side Rd. ± 145' W. of conc. box culvert dated 1925 on S.E. wall, 150' S. of 3/4" I.P. Top of Z-23 B |
| 380+00 | 7 60 | 14 14 | 9 58 | 06 54 | 1x2 Stk. on beach |
| 385+00 | 12 25 | 23 47 | 2 92 | 11 22 | " " " " |
| T.P. | 11 42 | 31 10 | 3 83 | 19 24 | T.P. |
| 390+00 | 5 77 | 34 67 | 2 20 | 28 [illegible] | 1x2 Stk. on Dirt bank above beach |
| 395+00 | 5 31 | 36 15 | 3 83 | 30 84 | " " N. edge Oiled Road |
| Z-24 | | | 5 67 | 30 48 | Z-24 el. 30.57 on Beach Rd. (Old H.S. R/W) ± 1200' W. of Nicholas Canyon, ± 22' E. of Black top Trail div. from top Bluff, at Bldg. Site A.C.S. 30" brass cap mon. 1/2" dia. Approx. Ofc. of R/W. |
| | 3 41 | 33 98 | | 30 57 | |
| 400+00 | 2 37 | 28 18 | 8 17 | 25. [illegible] | 1x2 Stk. S. edge oiled Rd. |
| 405+00 | 8 64 | 33 34 | 3 48 | 29 [illegible] | " " Dirt bank above Beach |

76L298 307 5-49

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. | | |
|---|---|---|---|---|---|---|
| Z-25 | | 33 34 | 2 94 | 30.40 | Z-25 el. 30.38 C.S. 30" brass cap mon. 12" dn. N. side old R.R. cut 8.54 S. of bank ± 2600' E. of Arroyo Sequit Coast Hwy. Bridge. | |
| | 2 66 | 33 04 | | 30 38 | | |
| 410+00 | 0 53 | 28 44 | 5 13 | 27 91 | 1x2 on Dirt bank above Beach | |
| T.P. | 0 50 | 16 92 | 12 02 | 16 42 | T.P. | |
| T.P. | 4 44 | 15 74 | 5 62 | 11 30 | T.P. | |
| 415+00 | 4 26 | 16 35 | 3 65 | 12 09 | 1x2 on beach | |
| 420+00 | 7 67 | 14 61 | 9 41 | 06 94 | " " " | |
| 420+00 40' R. | 2 38 | 14 31 | 2 68 | 11 93 | " " " | (40' offset right) |
| 425+00 40' R. | 3 85 | 15 97 | 2 19 | 12 12 | " " " | " " " |
| T.P. | 8 65 | 21 85 | 2 77 | 13 20 | | |
| 430+00 | 5 40 | 24 06 | 3 19 | 18 66 | " " Dirt bank above beach | |
| Z-26 | | | 5 73 | 18 33 | Z-26 el. 18.35 Coast Hwy. ± 500' E. of Arroyo Sequit bridge, ± 160' S. E. Top bank, S. side old R.R. R/W, ± 210' E. of old cross fence C.S. 30" brass cap mon. 6" dn. | |
| | 0 84 | 17 19 | | 18 35 | | |
| 435+00 75' R. | 3 64 | 14 81 | 8 02 | 11 17 | 1x2 on beach (75' offset right) | |
| 439+25 75' R. | 3 83 | 13 53 | 5 11 | 09 70 | " " " " " | |
| | | | 3 49 | 10.04 | B.M. ZB-26 el. 9.92 Coast Highway at Arroyo Sequit ± 300' S. of Bridge, ± 100' E. of residence on Bluff. Large Bt. Spk. & W. in lead, N. side of Sandstone ledge jutting into ocean, 30' from E. end | |

END OF SURVEY

Profile No. 278 X-Sec. No. 292

Notes Red. Date Plotted Date Notes Chkd. T.M.L. Date 8-27-51 Checked Date

Job No. 6419 Division No. Survey of BEACH EROSION STUDY Survey by F.H.B. Map No. Notes Eng'd Date 8-10-51 Index Date

F.B. 1296 Pg. 24

2 3 6 9
3 5 8
1 5 6 1
2 7 3 5

F.B. 1296 PG. 248

Job No._____ Division No._____ Notes Red._____ Plotted_____ Profile

Survey of_____ Date_____ Date_____ No._____

Survey by_____ Notes_____ Notes Chkd._____ Checked_____ X-Sec.

Indexed A. C. Johnson Date_____ Date_____ Date_____ No._____

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

76L298 307 5-49

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

Do not extend notes this side of this line.

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

| Profile No. | Notes Red. | Plotted | Job No. 8412 | Division No. | F.B. 1296 PG. 249 |
|---|---|---|---|---|---|
| | Date | Date | Survey of | | |
| X-Sec. No. | Notes Chkd. | Checked | Survey by | Notes | Date 8-17,20-1951 |
| | Date | Date | Map No. | Inked C. Johnson | Date 8-23-51 |

J.N. 8412

BEACH EROSION STUDIES

(ZUMA)

ADDITIONAL SHORE CROSS-SECTIONS.

AUGUST 17, 1951
20,

| STATION | B. S. | H. I. | F. S. | ELEV. |
|---|---|---|---|---|
| | | | | C.V. CRUMLEY<br>J.M. DOUGHERTY<br>W.D. BAY<br>MAX NATAPOF<br>A.C. GUIZADO |

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.

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

76L298 307 5-49

76L298 307 5-49

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. | SEE PAGE 48 | |
|---|---|---|---|---|---|---|
| 55+00 | 67 | 19 3 | | 12 63 | 1X2 ON Beach - PAGE 48 | |
| | | | 69 | 12 4 | 200' RT. | Beach |
| | | | 72 | 12 | 287 " | Toe SL. Park. LOT |
| | | | 50 | 14 3 | 314 " | Top Bank " " |
| | | | 60 | 13 3 | 316 " | Toe " " " |
| | | | 57 | 13 6 | 333 " | Toe SL. Zuma Beach RD |
| | | | 1.2 | 18 1 | 363 " | Top. SL Wedge " " |
| SHORE | | | | | | |
| | | | | | SEE PAGE 55 | |
| 60+00 | 25 | 14 9 | | 12 | 1X2 ON Beach - PAGE 55 | |
| | | | 57 | 9 2 | 200' RT. | Beach |
| | | | 52 | 9 1 | 300 " | " |
| | | | 48 | 10 | 385 " | " S. edge BRUSH. |

F.B. 1296 PG. 250 2

Job No. 8412 Division No. Notes Red. Plotted No. Profile

Survey of BEACH EROSION STUDIES (ZUMA) Date Date X-Sec.

Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked No.

Indexed A. C. Johnson Date 8-17-51 Date Date

76L298 307 5-49

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. | SEE PAGE 56 | | |
|---|---|---|---|---|---|---|---|
| 65+50 | 13 | 141 | | 128 | 1 X 2 ON Beach - PAGE 56 | | |
| | | | 60 | 81 | 165' RT | | Bottom Swale |
| | | | 50 | 9 | 200 " | | BRK |
| T.P. | 78 | 216 | 03 | 138 T.P. | 252 " | | S. side of Slope |
| | | | 67 | 149 | 272 " | | Top SL. |
| | | | 55 | 161 | 300 " | | " " |
| | | | 56 | 160 | 343 " | | W. edge BLDG |
| | | | 46 | 170 | 393 " | DIRT | Walk - N-side BLDG. |
| | | | 34 | 182 | 450 " | | PARKING LOT |
| | | | 23 | 193 | 500 " | | " " |
| | | | 14 | 202 | 551 | N. edge " | " Toe SL. coast Hwy |
| T.P. | 97 | 313 | 00 | 216 T.P. | | | |
| | | | 95 | 218 | 563 | BRK - S.Ly slope | " " |
| | | | 88 | 225 | 575 | BRK | " " " " |
| | | | 44 | 269 | 586 | | Top " " " " |
| | | | 52 | 261 | 592 | S.Ly edge Shoulder | Coast Highway |

INSHORE

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ 3 F.B. 1296 PG. 251
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA
Notes Chkd. RCW Checked ____ Survey by C.V. CRUMLEY Notes C.V.C. Date 8-17-51
Date 9-13-51 Date ____ Map No. ____ Indexed ____ Date ____

76L298 307 5-49

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. | SEE PAGE 63 | |
|---|---|---|---|---|---|---|
| 70+00 | 8.7 | 2~~4~~1 | | 1~~7~~ 11 | 1X2 ON Beach - | PAGE 63 |
| | | | 84 | 1~~2~~ 7 | 83' RT. " | |
| | | | 78 | 1~~5~~ 3 | 100 " " | Toe SL. |
| | | Black Pencil okay | 53 | 1~~5~~ 8 | 142 " BRK ON | " |
| | | | 47 | 1~~6~~ 4 | 161 " " | " |
| | | | 19 | ~~19~~ 2 | 193 TOP | SL |
| | | | 15 | ~~19~~ 3 | 200 " | " |
| T.P. | 64 | 2~~6~~8 6 | 0.9 | 2~~5~~ 2 | T.P. 239 | S. edge old conc. PAV. |
| | | | 72 | ~~19~~ 4 | 260 | Toe SL - of Main HWY. N " " " " |
| | | | 29 | ~~23~~ 7 | 276 | TOP Fill HWY |
| | | | 14 | ~~25~~ 2 | 294 | TOP Fill " |
| | | | 17 | ~~24~~ 9 | 300 | S. edge shoulder COAST HWY. |
| | | | | | SEE PAGE 64 | |
| 75+00 | 11.6 | 23.7 | | 12.03 | 1X2 ON Beach - | PAGE 64 |
| | | | 74 | 16.7 | 124' RT. | |
| | | | 70 | 16.7 | 130 " Toe SL. | HWY. |
| | | | 35 | 20.2 | 141 " BRK. ON | SL. |
| T.P. | 36 | 26.8 | 05 | 23.[illegible] | T.P. 154 " S. SL. | |
| | | | 23 | 24.5 | 156 " TOP | Fill |
| | | | 23 | 24.5 | 160 " " | " |
| | | | 3.0 | 23.8 | 166 " S. Edge | shoulder STATE HWY STA. 492+45± |

SHORE

F.B. 1296 PG. 252 4
Job No. ____ Division No. ____ Notes Red. ____ Plotted ____ Date ____ No. ____ Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date ____ Notes Chkd. [illegible] Checked ____ Date ____ No. ____ X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Date 8-17-51 Date 9-13-51
Indexed R. C. Johnson

76L298 307 5-49

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. | SEE PAGE 71 | |
|---|---|---|---|---|---|---|
| 80+00 | 11 8 | 23 8 | | 12 02 | 1X2 ON Beach - PAGE 71 | |
| | | | 5 8 | 18 0 | 112' RT Side SL. | |
| | | | 3 9 | 19 9 | 130 " BRK " | |
| | | | 2 7 | 21 1 | 141 " " | |
| | | | 1.6 | 22 2 | 146 TOP SL | |
| | | | 2.6 | 21 2 | 151 TOE SL. | |
| | | | 2 8 | 21 0 | 155 Gut. S. Side Shoulder of HWY | |
| | | | | | SEE PAGE 72 | |
| 85+00 | 10 8 | 23 3 | | 12 51 | 1X2 ON Beach - PAGE 72 | |
| | | | 8.3 | 15 0 | 121' RT. TOE SL of HWY | |
| | | | 3 7 | 19 6 | 137 " TOP " " | |
| | | | 3 7 | 19 6 | 142 BRK | |
| | | | 4 1 | 19 2 | 149 " | |
| | | | 3 4 | 19 9 | 163 TOP Berm S. Side HWY | |
| | | | 3 8 | 19 5 | 165 Gut " " | |

SHORE

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 PG. 253
Date ____ Date ____ Survey of BEACH EROSION STUDIES - (ZUMA)
X-Sec. No. ____ Notes Chkd. [illegible] Checked ____ Survey by C.V. CRUMLEY Notes C.V.C. Date 8-20-51
Date 9-12-51 Date ____ Map No. ____ Indexed ____ Date ____

76L298 307 5-49

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. | SEE PAGE 79 |
|---|---|---|---|---|---|
| 90+00 | 66 | 242 | | 17 57 | 1X2 on Top Bank - S. Side PARKING AREA - PAGE 79 |
| | | | 77 | 16 [illegible] | 10' RT. Toe SL. " " |
| | | | 79 | 16 [illegible] | 43' " BRK " " |
| | | | 87 | 15 [illegible] | 54 " Swale in " " |
| | | | 63 | 17 [illegible] | 89 " |
| | | | 91 | 15 [illegible] | 147 " BRK |
| | | | 75 | 1[illegible] | 154 " TOP BRK |
| | | | 82 | 16 [illegible] | 159 " Toe SL. HWY |
| | | | 53 | 18 9 | 167 " TOP " " |
| | | | 45 | 19 [illegible] | 175 " " " |
| | | | 47 | 19 [illegible] | 181 " " " |
| | | | 51 | 19 [illegible] | 185 Gut = S. edge Shoulder (HWY) |

SHORE

F.B. 1296 PG. 254 6 Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of BEACH EROSION STUDIES - (ZUMA) Date Date X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Lew Checked No.
Indexed A. C. Johnson Date 8-20-51 Date 9-18-51 Date

76L298 307 5-49

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. | SEE PAGE 80 | |
|---|---|---|---|---|---|---|
| 95+00 | 102 | 20.8 | | 1057 | 1X2 ON Beach - PAGE 80 | |
| | | | 88 | 120 | 22' RT. Toe SL. | S. Side park AREA |
| | | | 38 | 170 | 59 " TOP " | " " " |
| | | | 49 | 159 | 70 " Toe " | " " " |
| | | | 46 | 162 | 91 " BRK. IN | PARK " |
| | | | 5.7 | 151 | 150' " | " " |
| | | | 6.4 | 144 | 206 " Toe SL. | S. Side HWY |
| | | | 18 | 190 | 221 " TOP " | |
| | | | 21 | 187 | 232 " " | " " " |
| | | | 28 | 180 | 239 " shoulder | " " |

SHORE

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1296 Pg. 255
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA)
Notes Chkd. Rew Checked ____ Survey by C.V.C. Notes C.V.C. Date 8-20-51
Date 9-13-51 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 5-49

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. | SEE PAGE 87 | |
|---|---|---|---|---|---|---|
| 100+00 | 113 | 217 | | 10 36 | 1 X 2 on Beach - | PAGE 87 |
| | | | 52 | 16 [illegible] | 71' RT Top Bank | S. side Parking AREA |
| | | | 58 | 15 [illegible] | 79 " Bot " | " " " |
| | | | 54 | 16 [illegible] | 103 " BRK | IN " " |
| | | | 64 | 15 [illegible] | 150 " | " " " |
| | | | 69 | 14 [illegible] | 200 " | " " " |
| | | | 72 | 14 [illegible] | 250 " Toe Bank | S. Side Hwy |
| | | | 3.9 | 17 [illegible] | 259 Top | " " " |
| | | | 58 | 15 [illegible] | 266 Bot | " = Toe SL. " " |
| | | | 21 | 19 [illegible] | 276 BRK | " " |
| | | | 13 | 20 [illegible] | 285 Top | SL. " " |
| | | | 19 | 19 [illegible] | 288 Gut | - S. edge = Shoulder " |

SHORE

F.B. 1296 PG. 256 8 Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of BEACH EROSION STUDIES (2 OMA) Date Date X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. RCW Checked No.
Indexed C. Johnson Date 8-20-51 Date 9-13-51 Date

76L298 307 5-49

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. 13.1 13.7

| STATION | B. S. | H. I. | F. S. | ELEV. | SEE PAGE 88 | |
|---|---|---|---|---|---|---|
| 105+00 | 11.1 | 210 | | 989 | 1X2 ON Beach - PAGE 88 | |
| | | | 74 | 136 | 125' RT. | Toe SL. S. Bank PARKING AREA |
| | | | 37 | 173 | 140 " | Top " " " " |
| | | | 54 | 156 | 148 " | Toe " " " " |
| | | | 48 | 162 | 190 " | " " |
| | | | 52 | 158 | 231 " | BRK " " |
| | | | 57 | 153 | 245 | Toe SL. S. Side Hwy. |
| | | | 35 | 175 | 255 " | Top " " " |
| | | | 23 | 187 | 265 " | " " " " |
| | | | 29 | 181 | 271 | Shoulder - " " |
| | | | | | SEE PAGE 95 | |
| 110+00 | 10.3 | 214 | | 1112 | 1X2 ON Beach - PAGE 95 | |
| | | | 84 | 130 | 112' RT. | LOT |
| | | | 82 | 132 | 150 " | LOT |
| | | | 73 | 141 | 184 | BRK |
| | | | 61 | 153 | 202 | Toe SL. S. Side Hwy |
| | | | 52 | 162 | 210 | BRK " " |
| | | | 41 | 173 | 217 | Top " " " |
| | | | 43 | 171 | 219 | Gut - SHOULDER " " |

SHORE

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA)
Notes Chkd. SCHUT Date 9-12-57 Checked ____ Date ____ Survey by C.V.C. Notes C.V.C. Date 8-20-57
Map No. ____ Indexed J. Johnson Date ____

F.B. 1296 PG. 257

76L298 307 5-49

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.

96.7
3
12.6
14.4

| STATION | B. S. | H. I. | F. S. | ELEV. | SEE PAGE 96 |
|---|---|---|---|---|---|
| 115+00 | 10 4 | 21 3 | | 10 27 | 1X2 on Beach - PAGE 96 |
| | | | 86 | 12 | 100' RT BRK. |
| | | | 70 | 14 | 138 " TOE SL |
| | | | 60 | 15 | 145 " BRK " |
| | | | 59 | 15 | 157 " " |
| | | | 41 | 17 | 167 TOP SL - S. Side HWY |
| | | | 40 | 17 | 170 " " " " |
| | | | 47 | 16 | 172 Gut - S. edge Shoulder " |
| | | | | | SEE PAGE 103 |
| 120+00 | 10 4 | 22.4 | | 11 28 | 1X2 on Beach - PAGE 103 |
| | | | 81 | 14 | 41' RT TOP BLACK TOP Walk |
| | | | 83 | 14 | 72' " BRK " " |
| | | | 64 | 16 | 100' " " " |
| | | | 47 | 17 | 123 " " " |
| | | | 46 | 17 | 128 " S. Shoulder HWY |

SHORE

F.B. 1296 PG. 258 10
Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date Date X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. [illegible] Checked No.
Indexed R. C. Johnson Date 8-20-51 Date 9-13-51 Date

76L298 307 5-49

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.**

15.8 11.2

| STATION | B. S. | H. I. | F. S. | ELEV. | SEE PAGE 104 | |
|---|---|---|---|---|---|---|
| 125+00 | 107 | 229 | | 12 21 | 1X2 ON Beach - PAGE 104 | |
| | | | 72 | 15 7X | 100' RT BRK | |
| | | | 69 | 16 0X | 111 " TOE SL. | |
| | | | 36 | 19 3X | 130 " TOP | |
| | | | 37 | 19 2X | 134 " Bot Berm | |
| | | | 27 | 20 2X | 137 " TOP " | |
| | | | 39 | 19 0X | 144 " Bot " = S. edge Shoulder STATE HWY. | |
| | | | | | SEE PAGE 111 | |
| 130+00 | 105 | 223 | | 11 81 | 1X2 ON Beach - PAGE 111 | |
| | | | 110 | 11 3X | 125' RT. Toe SL Sand Hill | |
| | | | 90 | 13 3X | 142 Top " " | |
| | | | 85 | 13 8X | 161 BRK | |
| | | | 70 | 15 3X | 182 " | |
| | | | 68 | 15 5X | 191 Toe SL. S. side HWY | |
| | | | 41 | 18 2X | 200 TOP " " " | |
| | | | 37 | 18 6X | 202 " " " " | |
| | | | 4.4 | 17 9X | 206 Shoulder " " | |

SHORE

Profile No. ____ Notes Red. ____ Date ____ Plotted ____ Date ____ Job No. 8412 Division No. ____ F.B. 1296 Pg 259
X-Sec. No. ____ Notes Chkd. RLW Date 9-13-51 Checked ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA) Survey by C.V.C. Notes C.V.C. Date 8-20-51 Map No. ____ Indexed ____ Date ____

76L298 307 5-49

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. | SEE PAGE 112 | |
|---|---|---|---|---|---|---|
| 135+00 | 92 | 210 | | 11 16 | 1X2 on Beach – | PAGE 112 |
| | | | 98 | 11 2 | 100' RT | |
| | | | 100 | 11 | 123 " BRK | |
| | | | 90 | 12 5 | 163 " " | |
| | | | 81 | 12 9 | 185 TOE SL. | |
| | | | 48 | 16 2 | 200 TOP SL. S. Side HWY | |
| | | | 42 | 16 9 | 212 " " " " | |
| | | | 45 | 16 5 | 214 | Shoulder " " |
| | | | | | SEE PAGE 119 | |
| 140+00 | 77 | 194 | | 11 9 | 1X2 on Beach – | PAGE 119 |
| | | | 80 | 11 | 28' RT – Beach | Sand DUNE HAS BEEN GRADE OUT |
| | | | 35 | 15 9 | out " " – 22' West | – TOP DUNE |
| | | | 90 | 10 | 43 " BRK | N. Side Line of DUNES |
| | | | 96 | 9 8 | 50 " " | FLAT |
| | | | 95 | 9 | 89 " " | " |
| | | | 106 | 8 | 126 " | " |
| | | | 106 | 8 8 | 172 " | Toe SL. |
| | | | 95 | 9 9 | 178 | BRK |
| | | | 55 | 13 | 188 | " " |
| | | | 41 | 15 3 | 195 | Top SL. |
| | | | 3.6 | 15 8 | 200 | " " |
| | | | 2.9 | 16 5 | 204 | Shoulder S. side HWY |

SHORE

F.B. 1296 Pg. 260 12 Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of BEACH EROSION STUDIES (ZUMA) Date Date X-Sec.
Survey by C.V. CRUMLEY Notes C.V.C. Notes Chkd. Checked No.
Indexed C. Johnson Date 8-20-51 Date 9-13-51 Date

76L298 307 5-49

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. 9.1

| STATION | B. S. | H. I. | F. S. | ELEV. | SEE PAGE 120 | |
|---|---|---|---|---|---|---|
| | | | | | (W. SIDE TRANCAS CREEK BRIDGE | |
| 145+00 | 9.0 | 13 6 | | 9.61 | 1X2 ON Beach - PAGE 120 | |
| | | | 96 | 90 | 56' RT. | BLDG. LINE |
| | | | 90 | 96 | 84 " | BRK - FLAT. |
| | | | 92 | 94 | 137 " | " |
| | | | 87 | 99 | 169 " | TOE SL |
| | | | 48 | 138 | 184 " | BRK ON SL. |
| T.P. | 68 | 254 | 00 | 186 TP | 192 " | " " |
| | | | 46 | 208 | 198 " | TOP SL. S.Side HWY |
| | | | 50 | 204 | 200 " | " " " |
| | | | 54 | 200 | 203 " | Shoulder " " |

SHORE

Profile No. ____ Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ 13 [illegible] 1296 Page 261
X-Sec. No. ____ Date ____ Date ____ Survey of BEACH EROSION STUDIES (ZUMA
Notes Chkd. [illegible] Checked ____ Survey by C.V.C. Notes C.V.C. Date 8-21-51
Date 9-19-51 Date ____ Map No. ____ Indexed ____ Date ____

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

Survey of _____ Date _____ Date _____ X-Sec.

Survey by _____ Notes _____ Notes Chkd. _____ Checked _____

Indexed _____ Date _____ Date _____ Date _____ No. _____

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

76L298 307 5-49

LOS

726 Los

R. CHANGES
ADE OR
AND
GE.