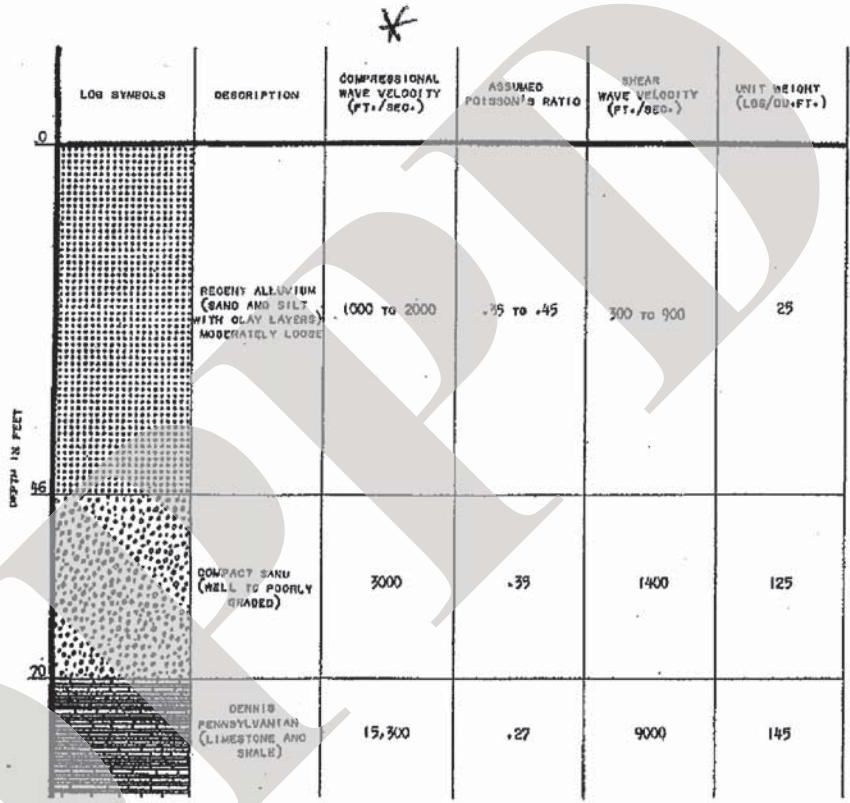


REVISION  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_

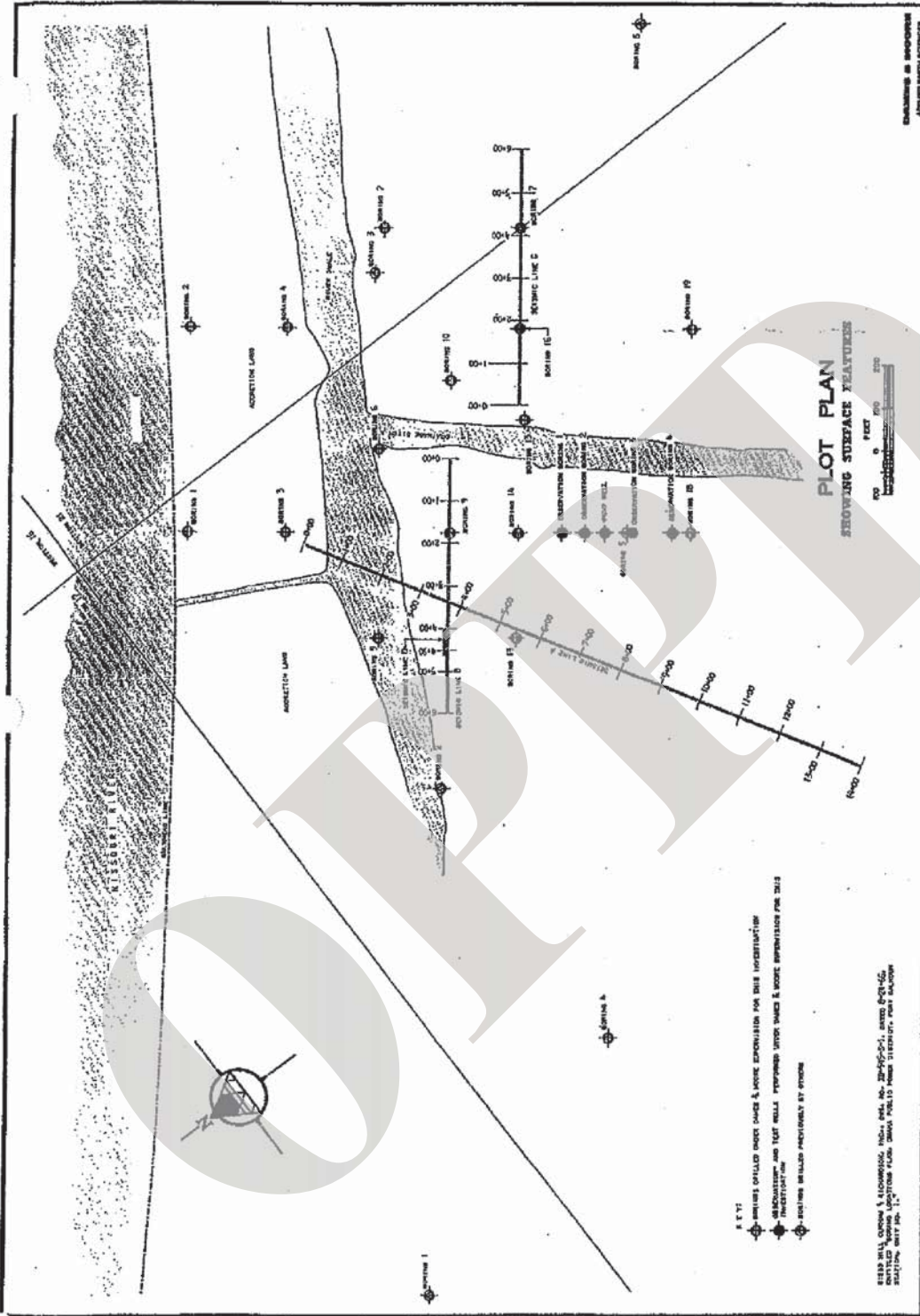
FILE # 4862-001  
BY: D.J.G. DATE: 11-2-90  
CHECKED BY: DATE: 11/6/90



TYPICAL GEOLOGIC COLUMN

DAMES & MOORE

PLATE II C-1



ENGINEERING & SURVEYING  
ARCHITECTURAL RECORDS  
PLATE 18-1

**KEY:**

- STATIONING CALLED FROM CORNER & BEING EXPLANATION FOR THIS INDICATION
- STATIONING AND TIE LINE INFORMATION SHOWN WITHIN THIS & BEING EXPLANATION FOR THIS
- STATIONING SHOWN WITHIN THIS & BEING EXPLANATION FOR THIS

STATION 17  
STATION 16  
STATION 15  
STATION 14  
STATION 13  
STATION 12  
STATION 11  
STATION 10  
STATION 9  
STATION 8  
STATION 7  
STATION 6  
STATION 5  
STATION 4  
STATION 3  
STATION 2  
STATION 1

ACQUISITION LANE  
EXHIBITION LANE

0+00 0+10 0+20 0+30 0+40 0+50 0+60 0+70 0+80 0+90 1+00

0 100 200  
FEET

0+00 0+10 0+20 0+30 0+40 0+50 0+60 0+70 0+80 0+90 1+00

100-2187  
100-2187  
100-2187  
100-2187

## IB-5

Detailed descriptions of the soils and bedrock encountered in the borings are presented on Plates IB-2a through IB-2h, Log of Borings. The soils were classified in accordance with the Unified Soil Classification System described on Plate IB-3. The number of blows required to drive the sampler a distance of one foot into the undisturbed material below the advancing boring is recorded in the column entitled, "Blow Count" at the left of the log of each boring. The percent recovery obtained during rock coring operations is also presented in this column. Data relative to the energy used to advance the sampler are presented at the bottom of each log of boring.

Ground surface elevations are presented above each boring log and refer to U.S.C. & G.S., Mean Sea Level Datum. Data concerning the depth of the static ground water table after the completion of drilling operations and the date on which the boring was completed are presented beneath each boring log.

DEEP GEOPHYSICAL REFRACTION SURVEY

A deep geophysical refraction survey (three survey lines) was performed during this investigation. The seismic lines were 1,100 feet (Line A); 600 feet (Line B); and 600 feet (Line C) in length. The purposes of this work were to indicate:

- 1) the depth to bedrock;
- 2) the compressional wave velocities in the bedrock; and
- 3) the compressional wave velocities in the soil overburden.

DAMES &amp; MOORE

IB-6

An Electrotech Seismic Timer (12 channel) was used to record the results of the deep refraction survey. A dynamite blast near each end of the profile lines was used as the energy source. The dynamite charges were placed in drill holes at depths of approximately 7 to 20 feet below the ground surface. Geophones were located at 100-foot intervals along Seismic Line A and 50-foot intervals along Seismic Lines B and C. The geophones, which are sensitive transducers that detect vibrations and convert them to electrical currents, were connected to the seismic timer.

The time-distance data obtained were plotted and average straight line slopes were drawn through the plotted points. The velocity of compressional wave propagation in the upper soils was computed from the plotted data. The results of the deep geophysical refraction survey are presented on Plate IB-4.

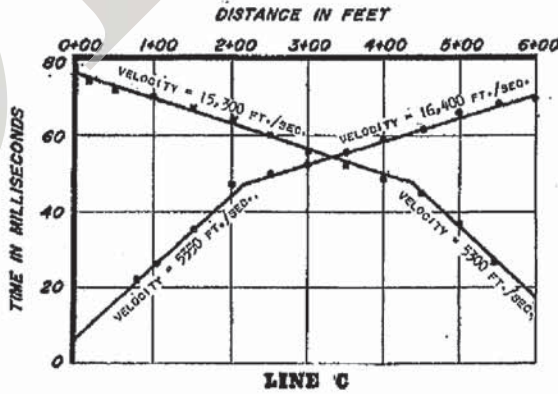
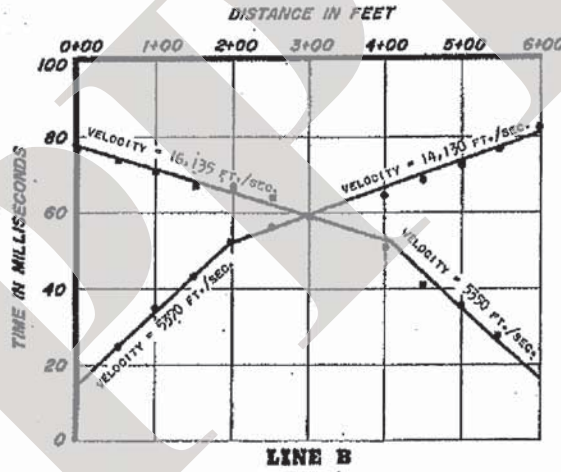
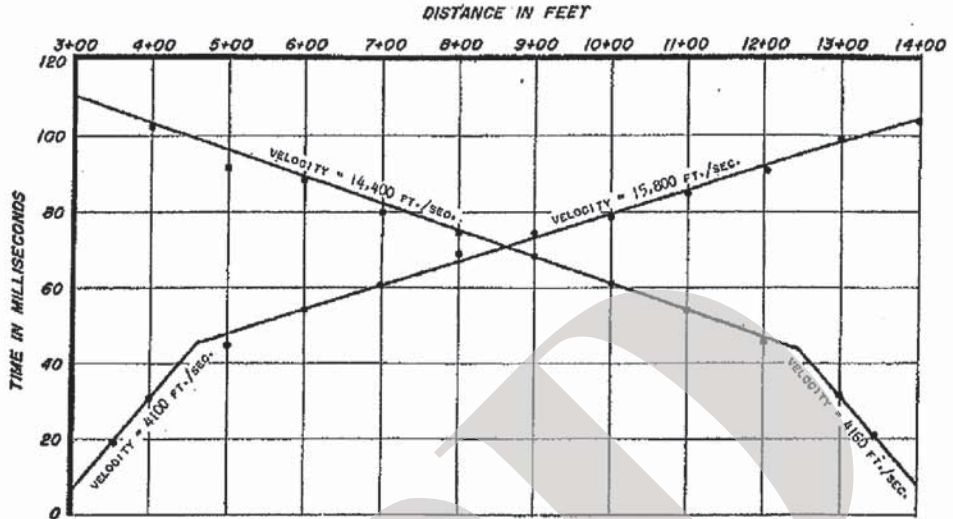
A short line was used to investigate an apparent anomaly in a longer line (Line A). The anomaly was a group of timber piles from an old revetment.

SHALLOW GEOPHYSICAL REFRACTION SURVEY

A shallow refraction survey was performed between Stations 4+00 and 4+60 of Deep Seismic Line B. This survey assisted in evaluating the velocity of compressional waves in the upper soils.

A Dynametric Model 117B Seismic Timer was used for this work. A geophone was placed at the ends of the profile segment. The required energy source was provided by seismic caps detonated near the ground surface at ten-foot intervals along the seismic line. The velocity data obtained from the shallow refraction survey are presented on Plate IB-5.

DAMES & MOORE



DEEP REFRACTION SURVEY

DAMES & MOORE

PLATE IB-4

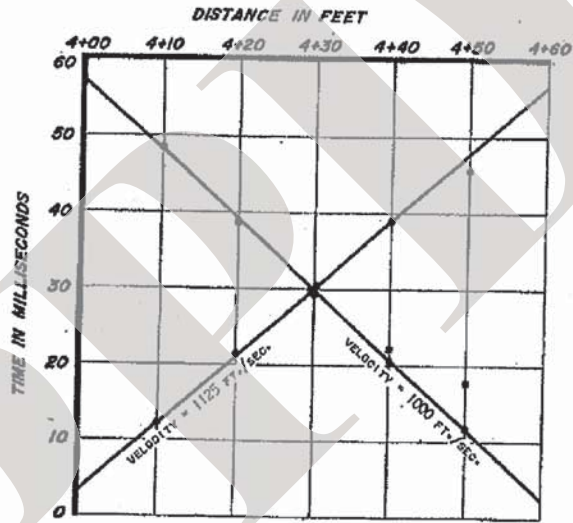
1025

REVISIONS  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_

FILE: 4882-001  
BY: ADB DATE: 11-1-56  
CHECKED BY: \_\_\_\_\_ DATE: 11/2/56

REVISIONS  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
PART: \_\_\_\_\_

FILE: 486B-001  
BY: ADP DATE: 1/1/13  
CHECKED BY: \_\_\_\_\_ DATE: 1/1/13



LINE D

### SHALLOW REFRACTION SURVEY

DAMES & MOORE

PLATE IB-5  
1026