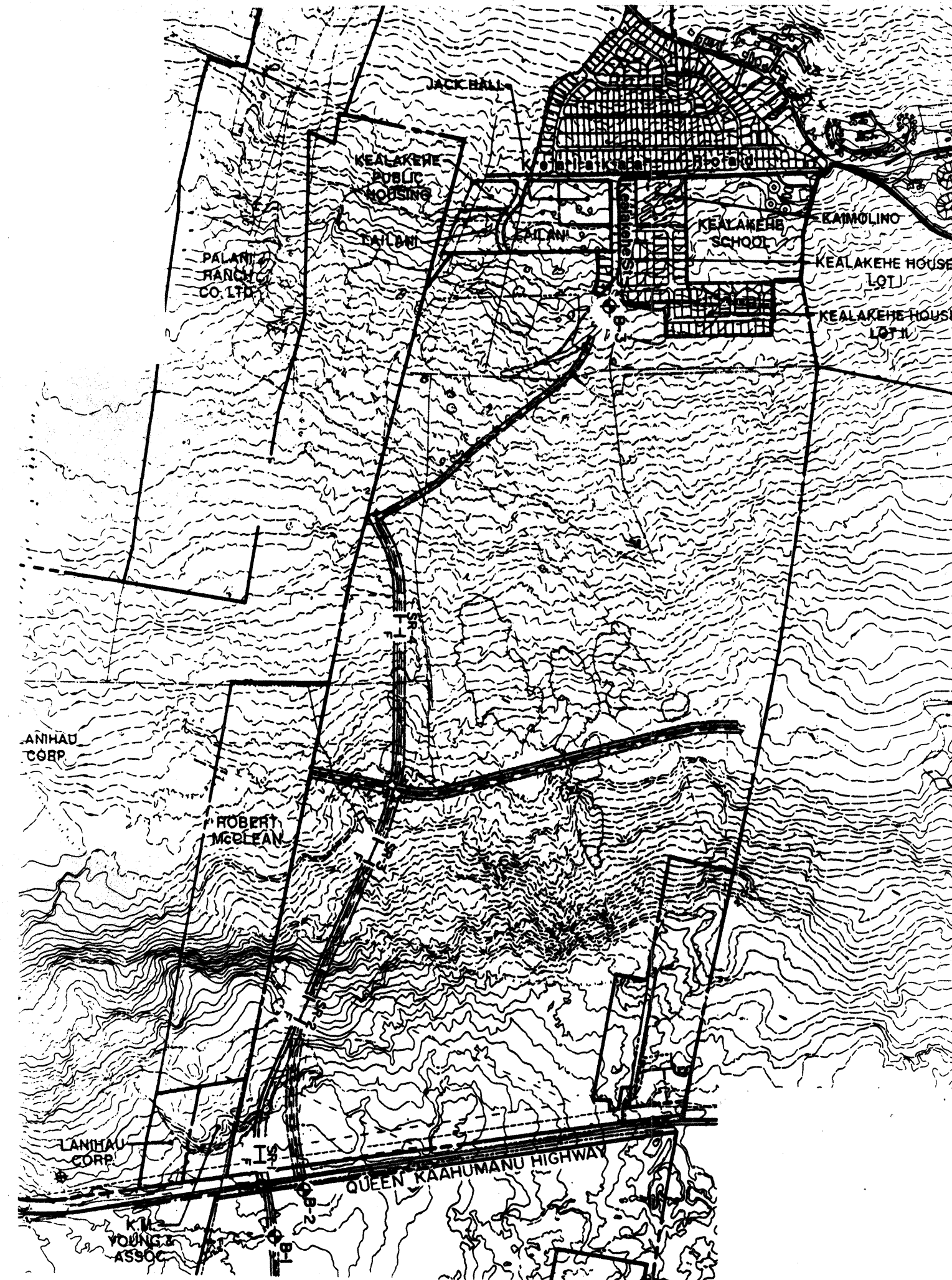


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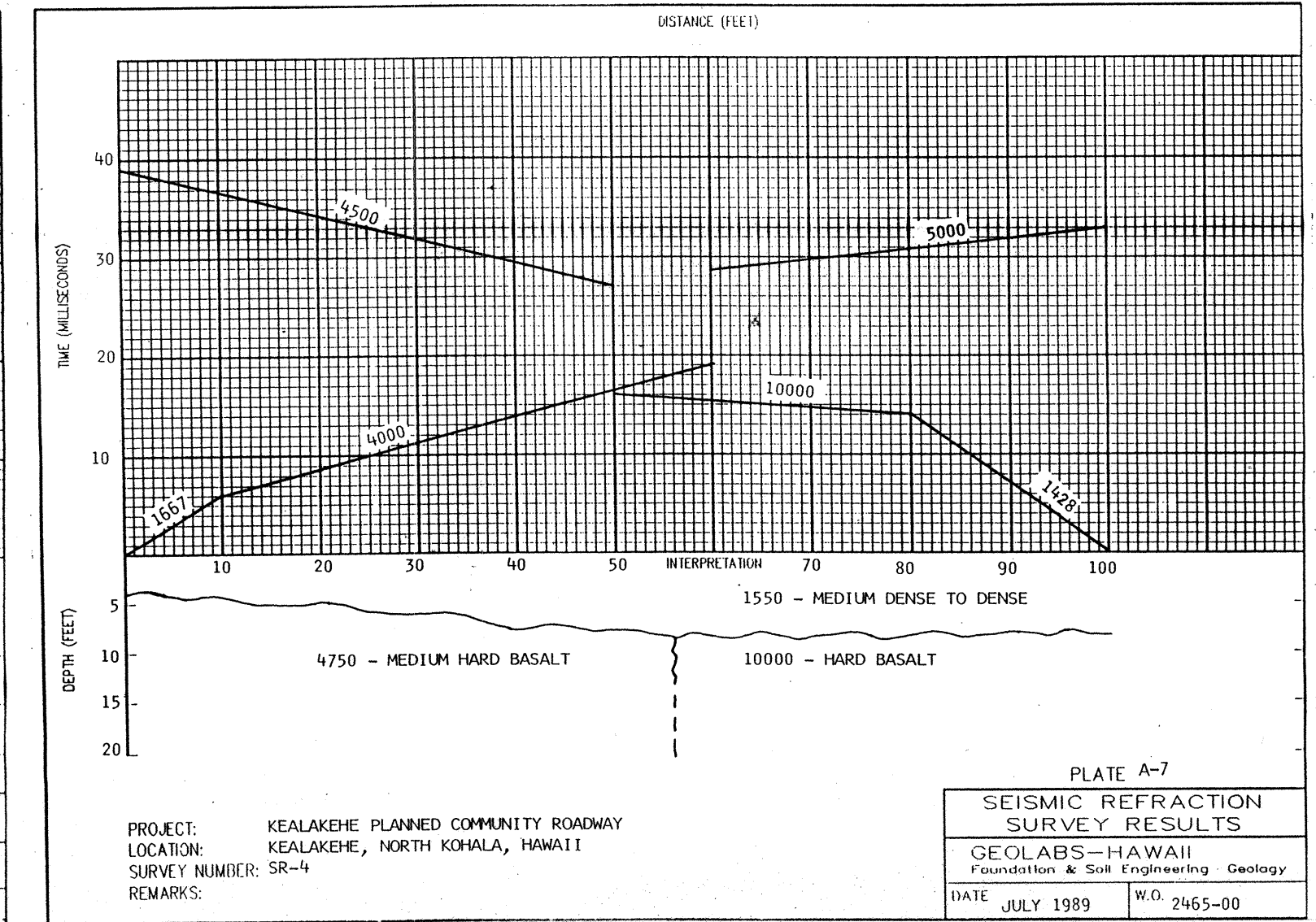
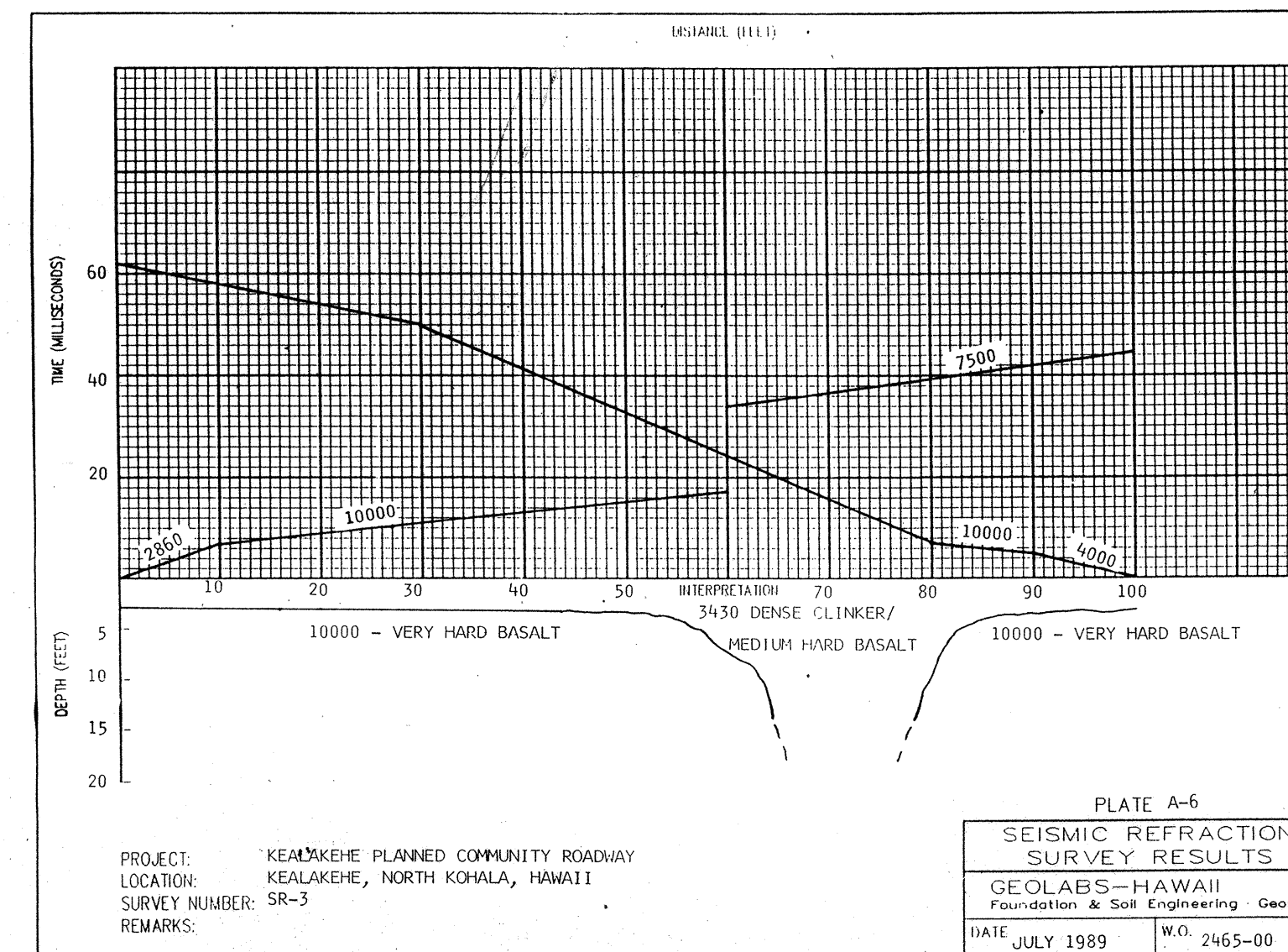
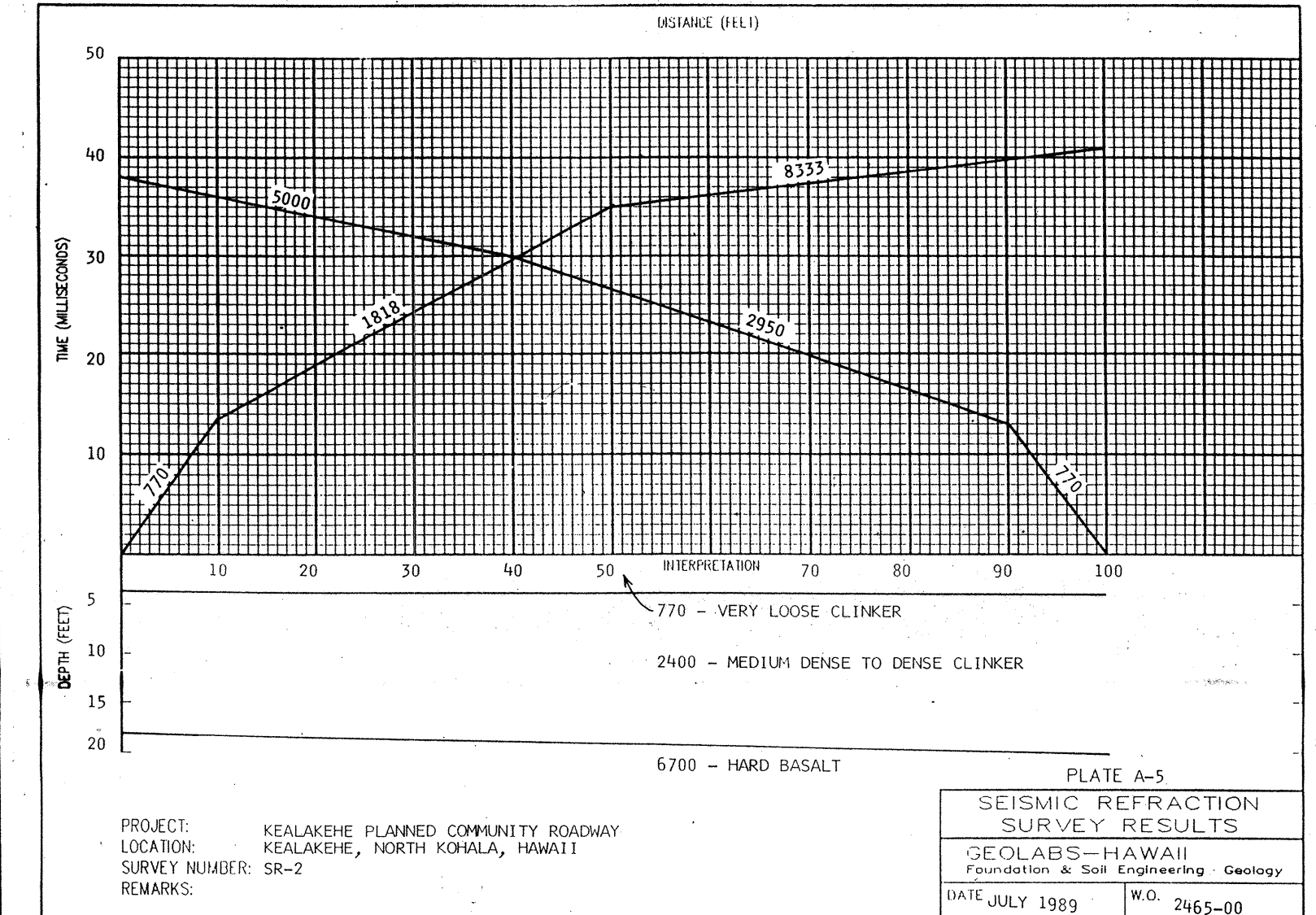
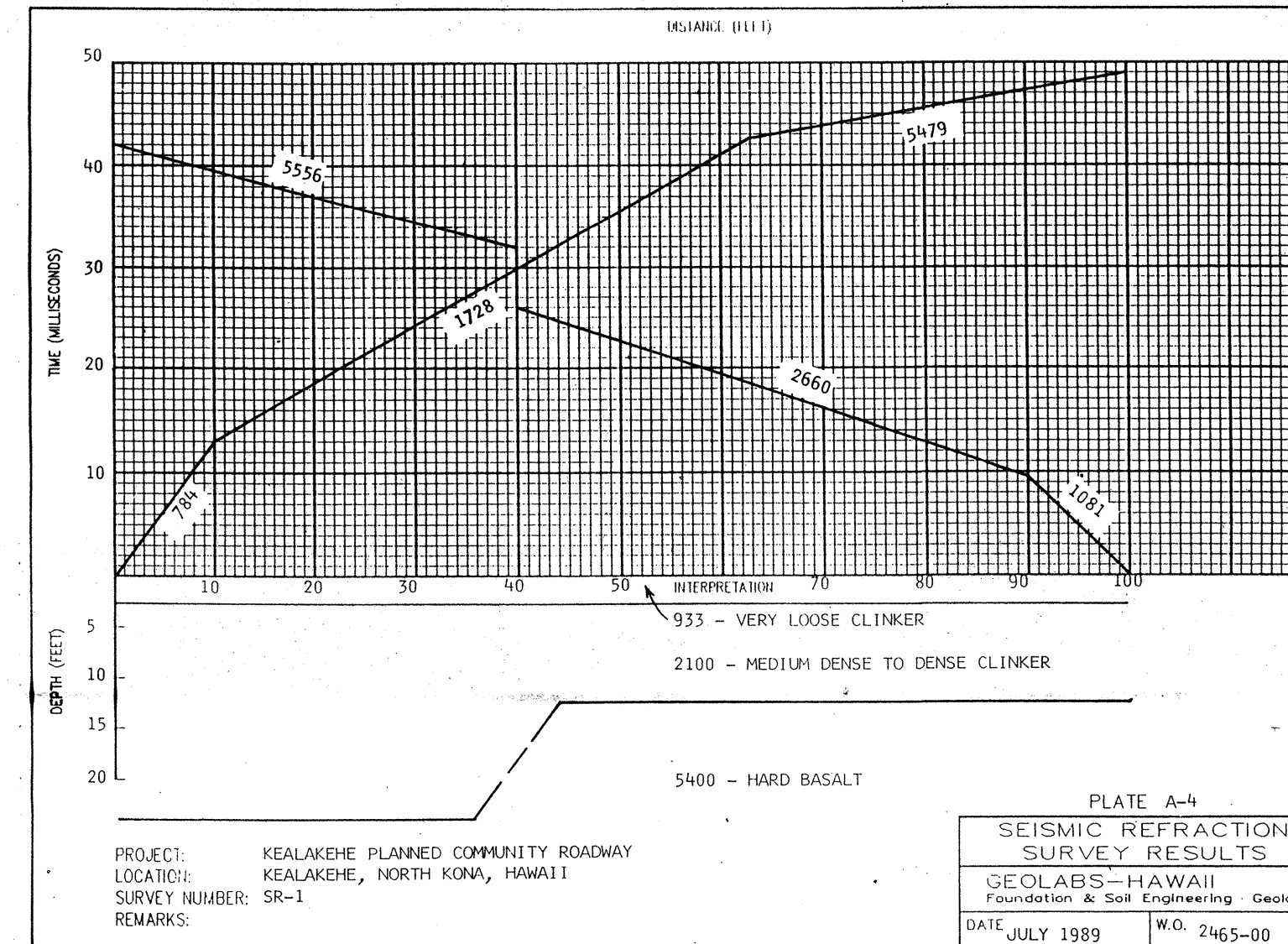


APPROXIMATE BORING LOCATION
APPROXIMATE SEISMIC REFRACTION SURVEY LOCATION
REFERENCE: UNTITLED PLAN BY BELT COLLIN & ASSOCIATES, RECEIVED JULY 13, 1990.



SITE PLAN

KEALAKEHE PLANNED COMMUNITY ROADWAY
KEALAKEHE, NORTH KONA, HAWAII



BORING 1				BORING 2				BORING 3			
Sample	Moisture content	Dry density (pcf)	Blows per foot	Sample	Moisture content	Dry density (pcf)	Blows per foot	Sample	Moisture content	Dry density (pcf)	Blows per foot
Graph				Graph				Graph			
Depth (feet)				Depth (feet)				Depth (feet)			
Surface elevation				Surface elevation				Surface elevation			
SOIL DESCRIPTION				SOIL DESCRIPTION				SOIL DESCRIPTION			
GRAY COBBLES AND GRAVEL, DENSE, DRY (FILL)				GRAY VESICULAR BASALT, MODERATELY JOINTED, SLIGHTLY WEATHERED, HARD (HUALALAI BASALT)				GRAY SANDY GRAVEL, DENSE, DRY (CLINKER)			
RUN 1 REC= 100% RQD= 90%				RUN 1 REC= 100% RQD= 60%				RUN 1 REC= 90% RQD= 30%			
RUN 2 REC= 95% RQD= 95%				RUN 2 REC= 90% RQD= 45%				RUN 2 REC= 100% RQD= 60%			
BORING TERMINATED AT 14.0 FEET ON FEBRUARY 26, 1990				GRADES WITH SEVERELY JOINTED SEAMS AT 7.5 FT. AND 9.0 FT. GRADES TO MASSIVE AT 10.0 FT.				BORING TERMINATED AT 16.0 FEET ON FEBRUARY 27, 1990			
GROUNDWATER NOT ENCOUNTERED				BORING TERMINATED AT 17.0 FEET ON FEBRUARY 26, 1990				GROUNDWATER NOT ENCOUNTERED			

LEGEND

I 2.0" O.D. split-spoon sample
II Undisturbed ring sample
III Disturbed ring sample
IV Core sample
V Shelby tube sample
P Sampler pushed

Plastic limit
Liquid limit
Natural water content
Water level
T Torvane Shear (psf)
FV Field Vane Shear (psf)
Driving energy: 140 lb. wt., 30" drop

BORING LOG
GEOLABS-HAWAII
Foundation Engineering Soil Engineering Geology
W.O. 2465-00 JULY 1990
PLATE A-1

Rev	Date	Description	Eng	App
1				
2				
3				

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

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Client:
HOUSING FINANCE AND DEVELOPMENT CORPORATION
STATE OF HAWAII

VILLAGES OF LA'I'OPUA
MAUKA-MAKAI ROADWAY IMPROVEMENTS
PHASE 1
BORING LOGS & SEISMIC DATA

Designed by: _____ Date: _____
Drawn by: _____ Proj. no.: (BCA) 841.0404
Approved: _____
Date: _____ Date: _____