

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Materials Engineering Division

MECHANICAL ANALYSIS

Project DEBRIS QUALITY STUDY

Source Little Dalton Debris Dam

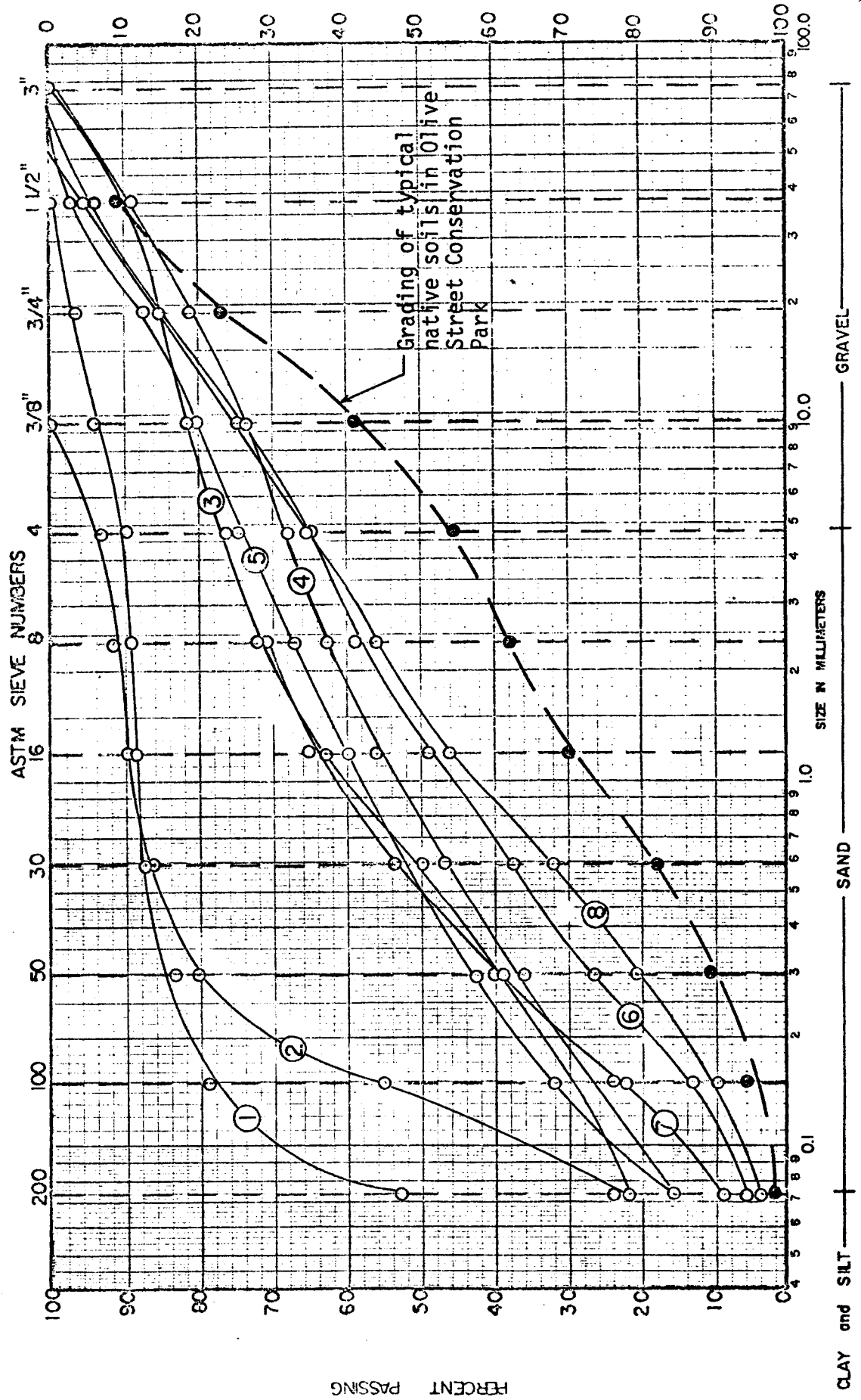
Depth Ranges: 0'-11.5'

Sampled by FD Date 10/9-11/73

Remarks Composite of Borings

Gradation of Soil Deposits
Each Boring Represents 12 1/2%
of Reservoir Deposits

FIGURE 13



BORING NO. 1A

LOCATION : N 4,170,105
E 4,336,580
ELEVATION 1142
DATE DRILLED 10/3/73

0.4 70
2.0



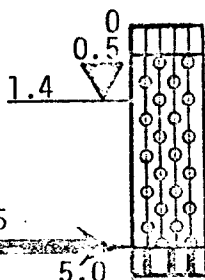
SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		% ORGANIC
	NO 4	NO 200	
SILT (MH), soft, saturated, yellow brown.	100	98.5	2.7
FAT CLAY (CH), very soft, saturated, olive green with gray streaks.	100	87.6	2.1

BORING NO. 1B

LOCATION : N 4,170,280
E 4,336,655

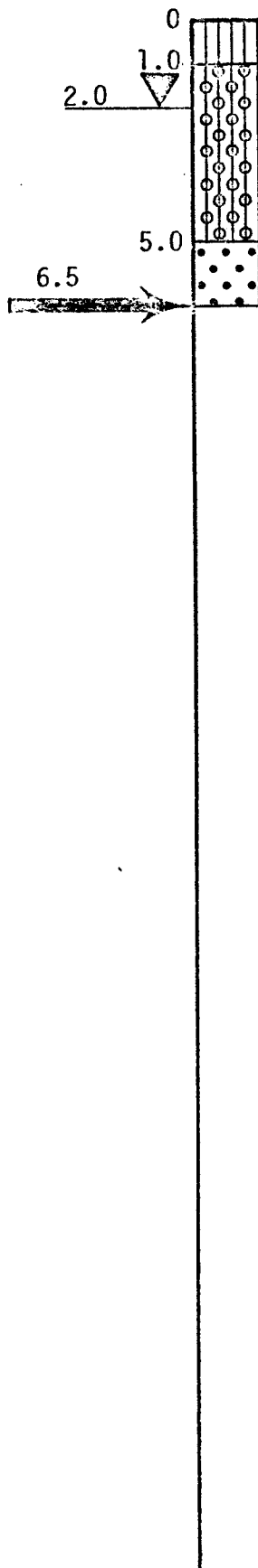
ELEVATION 1147

DATE DRILLED 10/11/73



SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		% ORGANIC
	NO 4	NO 200	
SILT (ML), soft, saturated, brown, decomposed twigs, leaves, etc.	100	96.8	2.0
SILTY SAND (SM), fine, moderately dense, saturated, brown to gray-brown	79.9	14.4	0.2
	100	47.8	1.0
SILT (MH), soft, saturated, light olive-gray.	100	97.2	2.3

BORING NO. 2
 LOCATION : N 4,170,415
 E 4,336,675
 ELEVATION 1152
 DATE DRILLED 10/11/73



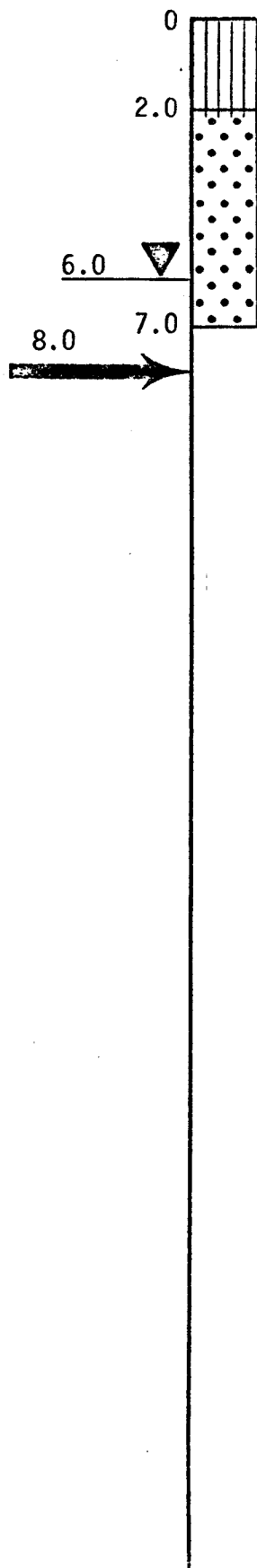
SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		% ORGANIC
	NO 4	NO 200	
SILT (ML), soft, saturated, brown to very dark gray, septic odor.	100 100	90.9 55.1	1.7 1.6
SILTY SAND (SM), fine, moderately dense, saturated, brown.	100	16.1	0.2 1.7
GRAVELLY POORLY-GRADED SAND (SP), clean, dense, saturated.	72.3	3.5	0.1

BORING NO. 3

LOCATION : N 4,170,480
E 4,336,565

ELEVATION 1158

DATE DRILLED 10/9/73



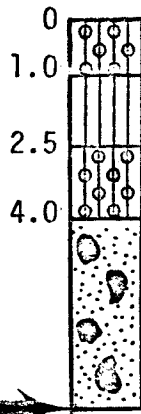
SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		% ORGANIC
	NO 4	NO 200	
SANDY SILT (ML), soft, moist, light brown to gray.	100	77.3	1.3
GRAVELLY POORLY-GRADED SAND (SP), clean, medium to fine, dense, moist becoming saturated at 6 feet. Occasional subangular rocks to 6-inch size.	67.0	2.3	0.1

BORING NO. 4

LOCATION : N 4,170,590
E 4,336,635

ELEVATION 1163

DATE DRILLED 10/9/73



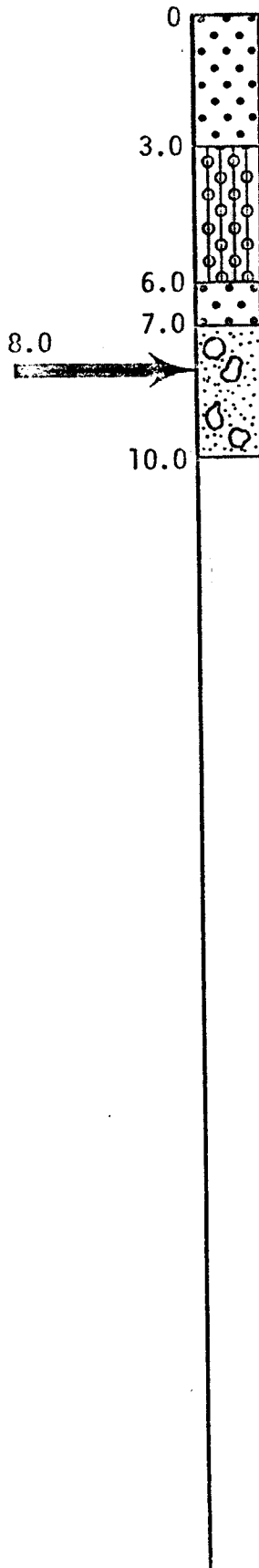
SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		% ORGANIC
	NO 4	NO 200	
SAND (SP-SM), poorly-graded, slightly silty, loose, dry.	94.5	6.1	0.1
SANDY SILT (ML), moderately dense, moist, light brown to gray.	100	66.7	1.2
SAND (SP-SM), poorly-graded, slightly silty, moderately dense, moist.	94.0	6.3	0.1
SANDY POORLY-GRADED GRAVEL (GP), coarse, clean, dense, damp, brown, subangular rocks to 10-inch size (20%).	38.9	2.5	<0.1

BORING NO. 5

LOCATION : N 4,170,620
E 4,336,505

ELEVATION 1168

DATE DRILLED 10/9/73



SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		% ORGANIC
	NO 4	NO 200	
GRAVELLY POORLY-GRADED SAND (SP), clean, loose, dry.	86.9	2.8	0.1
SILTY SAND (SM), fine, moderately dense, moist, light brown layered with gray, decomposed leaves, twigs, etc.	100	46.2	0.6
POORLY-GRADED SAND (SP), clean, dense, moist, light brown.	94.1	4.5	0.1
SANDY-WELL GRADED GRAVEL (GW), clean, dense, saturated, subangular rock to 10-inch size (20%).	30.7	2.2	<0.1

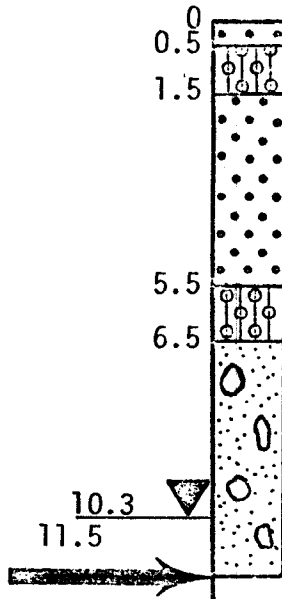
BORING NO. 6

LOCATION : N 4,170,710

E 4,336,595

ELEVATION 1174

DATE DRILLED 10/10/73



SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		% ORGANIC
	NO 4	NO 200	
GRAVELLY POORLY-GRADED SAND (SP), fine clean, loose, dry.	88.3	2.0	0.3
SILTY SAND (SM), fine, dense, dry, light brown.	100	34.8	0.2
GRAVELLY POORLY-GRADED SAND (SP), clean, dry, damp.	66.9	1.6	0.9
SAND (SP-SM), poorly graded, slightly silty, dense, damp, light brown.	99.4	7.5	0.2
SANDY WELL-GRADED GRAVEL (GW), clean, dense, moist, brown, saturated below 7.7 feet. Subangular and subrounded rocks to 10-inch size (10%).	48.3	2.9	0.1

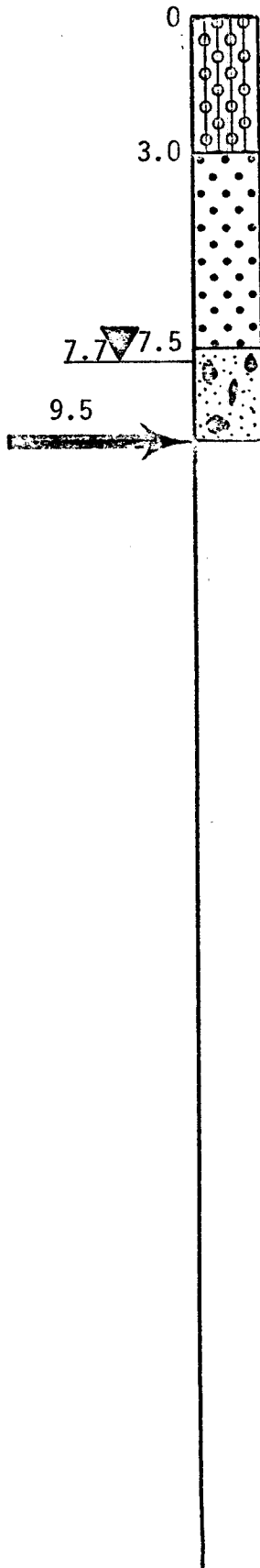
BORING NO. 7

LOCATION : N 4,170,740

E 4,336,470

ELEVATION 1175

DATE DRILLED 10/10/73



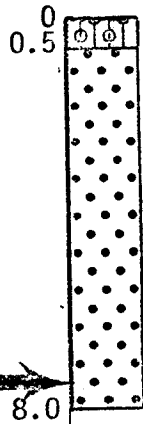
SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		% ORGANIC
	NO 4	NO 200	
SILTY SAND (SM), fine, moderately dense, damp, brown, occasional roots.	96.9	21.6	0.4
GRAVELLY POORLY-GRADED SAND (SP), clean, fine, dense, damp, subangular and subrounded cobbles to 6 inch size (5%) roots.	62.7	3.0	0.1
	89.8	2.3	0.1
SANDY POORLY-GRADED GRAVEL (GP), clean, dense, saturated, subangular and subrounded rocks to 10-inch size (20%).	46.5	3.0	<0.1

BORING NO. 8

LOCATION : N 4,170,940
E 4,336,550

ELEVATION 1185

DATE DRILLED 10/10/73



SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		% ORGANIC
	NO 4	NO 200	
SILTY SAND (SM), fine, moderately dense, damp, light brown, roots.	100	35.4	0.5
GRAVELLY POORLY-GRADED SAND (SP), clean, medium, moderately dense, dry, brown.	70.2	1.6	0.1
Cobbles (20% to 50%).	58.6	2.1	0.1
Below 7.5 feet becomes saturated.			

TABLE 7

SUMMARY SHEET**LITTLE DALTON
DEBRIS DAM**

BORING NO.	BORING DEPTH (ft)	CLASSIFICATION RANGE	COMPOSITE CLASSIFICATION	COMPOSITE O.M. (%)	COMPOSITE PERMEABILITY (ft/day)
1A	2	MH to CH	CH	1.9	<1
1B	5	SM to MH	SM	0.6	<1
2	6.5	SP to ML	SM	0.4	<1
3	7	SP to ML	SM	0.5	<1
4	8	GP to ML	SM	0.3	5
5	10	GW to SM	SM	0.2	3
6	11.5	GP to SM	SW-SM	0.4	22
7	9.5	GP to SM	SP-SM	0.1	11
8	8	SP to SM	SP	0.1	62