LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Materials Engineering Division

MECHANICAL ANALYSIS

Project DEBRIS QUALITY STUDY

Source Big Dalton Debris Basin

Depth Ranges: 0'-9'

Sampled by FD Date 10/4-5/73

Remarks Composite of Borings
Gradation of Soil Deposits
Each Boring Represents 16 2/3% of Reservoir Deposits

FIGURE 14

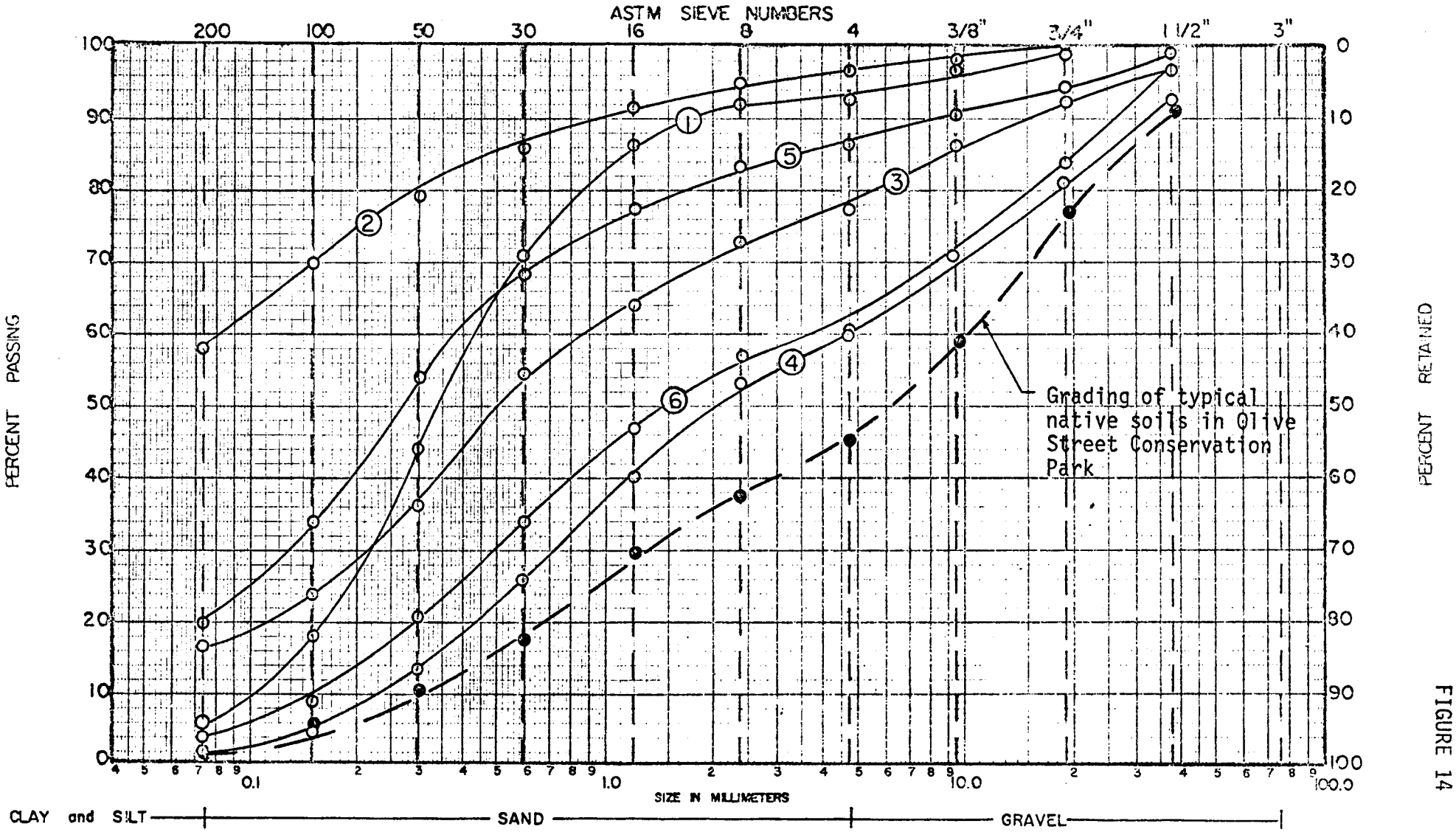
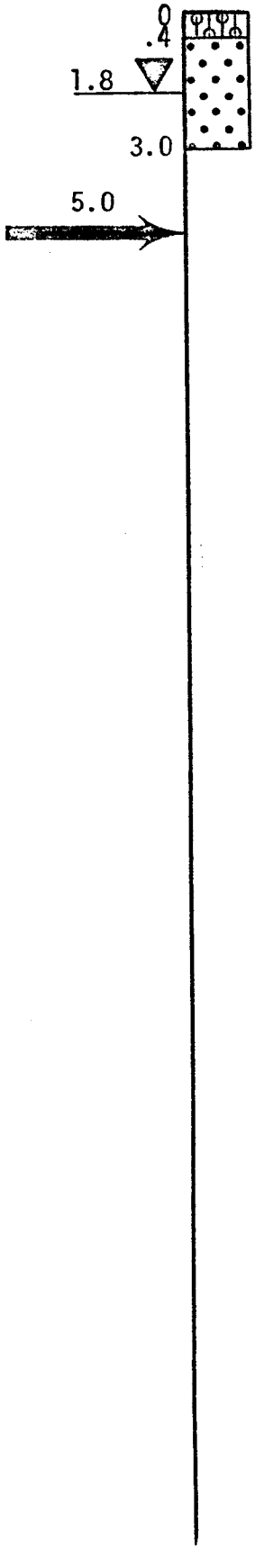


FIGURE 14

Big Dalton
Debris Basin

BORING NO. 1

LOCATION : N 4,169,620
E 4,338,575
ELEVATION 1110
DATE DRILLED 10/4/73

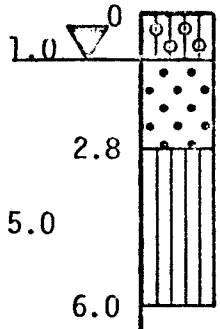


SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		%
	NO 4	NO 200	ORGANIC
SILTY SAND (SM), fine, moderately dense, very moist, brown to gray.	100	33.3	0.6
POORLY-GRADED SAND (SP), clean, fine to medium, moderately dense, moist, becoming saturated below 1.8 feet, brown to gray	91.8	2.0	0.3

Big Dalton
Debris Basin

BORING NO. 2

LOCATION : N 4,169,700
E 4,338,645
ELEVATION 1112
DATE DRILLED 10/4/73

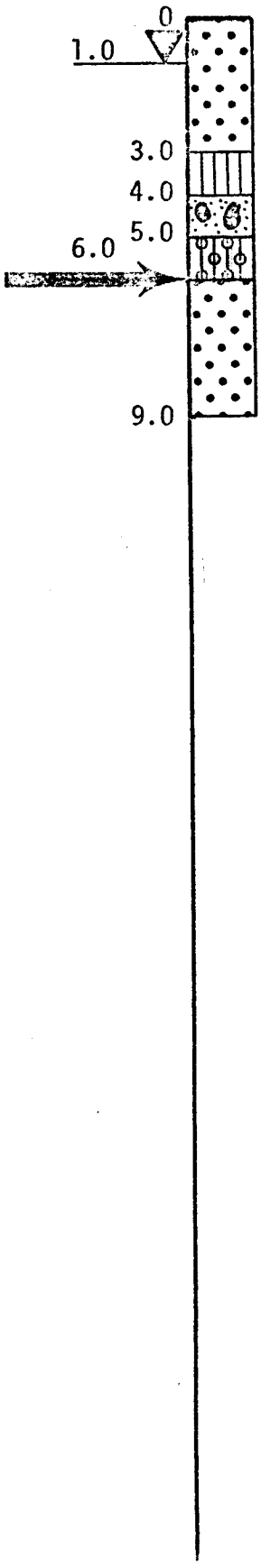


SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		%
	NO 4	NO 200	ORGANIC
SILTY SAND (SM), fine, very moist, gray, roots, leaves, twigs etc.	100	38.4	1.0
GRAVELLY POORLY-GRADED SAND (SP), fine to medium, clean, moderately dense, saturated, gray.	88.3	3.2	0.1
SILT (ML), soft, saturated, olive brown, lense of organic matter.	100	95.0	0.5

Big Dalton
Debris Basin

BORING NO. 3

LOCATION : N 4,169,900
E 4,338,660
ELEVATION 1116
DATE DRILLED 10/4/73

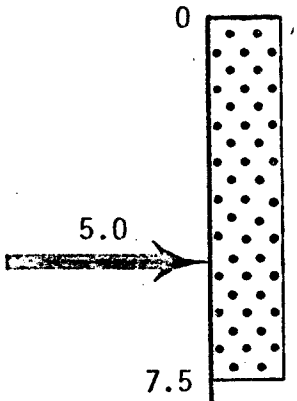


SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		%
	NO 4	NO 200	ORGANIC
GRAVELLY POORLY-GRADED SAND (SP), clean, fine to medium, moderately dense, saturated, brown.	81.6	2.5	0.6
SILT (ML), soft, saturated, olive brown, decomposed vegetation.	100	90.2	3.8
SANDY POORLY-GRADED GRAVEL (GP), clean, saturated.	42.0	0.6	<0.1
SILTY SAND (SM), moderately dense, moist, green-gray marbled with dark brown.	96.2	42.0	3.2
GRAVELLY POORLY-GRADED SAND (SP), fine to medium, clean, dense, brown.	71.5	3.1	0.2

Big Dalton
Debris Basin

BORING NO. 4

LOCATION : N 4,169,920
E 4,339,090
ELEVATION 1151
DATE DRILLED 10/5/73

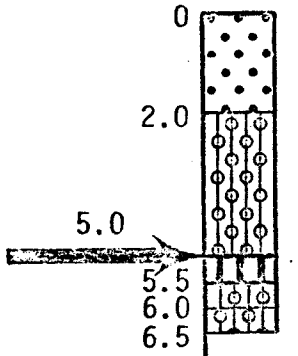


SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		%
	NO 4	NO 200	ORGANIC
GRAVELLY POORLY-GRADED SAND (SP), clean, medium, moderately dense to dense, damp, light brown to brown, subangular rocks to 8 inch size (5% - 20%).	57.5	1.8	0.2
	63.6	3.1	0.1
At 7.5 feet encountered weathered bedrock.			

Big Dalton
Debris Basin

BORING NO. 5

LOCATION : N 4,170,055
E 4,339,145
ELEVATION 1158
DATE DRILLED 10/5/73

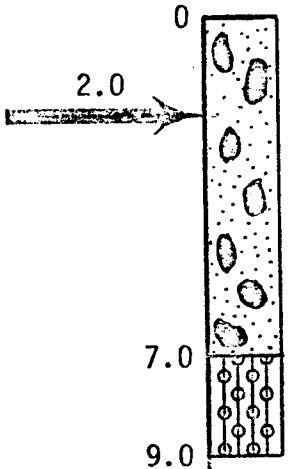


SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		%
	NO 4	NO 200	ORGANIC
GRAVELLY POORLY-GRADED SAND (SP), clean, dense, dry.	63.3	3.0	0.1
SILTY SAND (SM), fine, dense, damp to moist, light brown.	100	21.2	1.0
SILT (MH), firm, moist, brown.	100	94.0	3.6
SILTY SAND (SM), medium, moderately dense, moist, dark brown.	77.6	15.0	2.3
GRAVELLY WELL-GRADED SAND (SP-SM), well-graded, slightly silty, dense, moist, brown.	91.6	6.6	0.2

Big Dalton
Debris Basin

BORING NO. 6

LOCATION : N 4,170,110
E 4,339,435
ELEVATION 1165
DATE DRILLED 10/5/73



SOIL CLASSIFICATION TYPICAL NAME, (Symbol), Description	% PASSING		%
	NO 4	NO 200	ORGANIC
SANDY POORLY-GRADED GRAVEL (GP), clean, fine, dense, damp, cobbles to 10 inch size (10%)	50.1	1.6	0.1
SILTY SAND (SM), fine, dense, damp, brown, numerous cobbles to 10 inch size and boulders to 2 foot size.	97.0	13.5	1.0

At 9 feet encountered hard surface - native soil

TABLE 8

SUMMARY SHEET

BIG DALTON
DEBRIS BASIN

BORING NO.	BORING DEPTH (ft)	CLASSIFICATION RANGE	COMPOSITE CLASSIFICATION	COMPOSITE O.M. (%)	COMPOSITE PERMEABILITY (ft/day)
1	3	SP to SM	SP	0.2	14
2	6	SP to ML	ML	0.5	< 1
3	9	GP to ML	SM	1.1	6
4	7.5	SP	SP	0.1	127
5	6.5	SP to MH	SM	1.0	2
6	9	GP to SM	SP	0.2	60