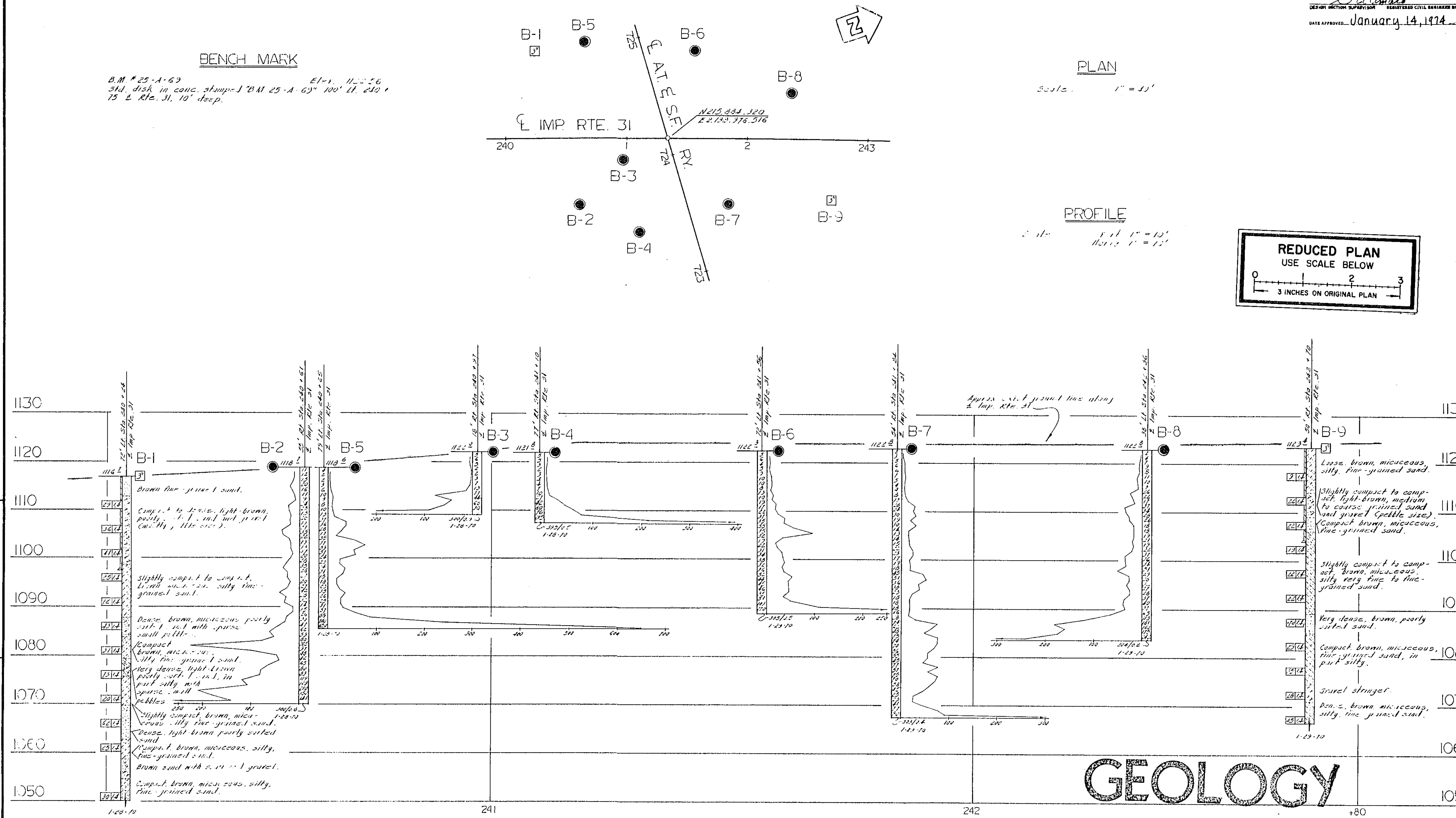
APPENDIX A
AS-BUILT LOTB SHEETS

Rochester Overhead

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	31	3.4/5.5	104	136

DESIGN SECTION SUPERVISOR — REGISTERED CIVIL ENGINEER

DATE APPROVED January 14, 1974



REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

LEGEND OF BORING OPERATIONS

PENETRATION BORING — ROTARY BORING — 1" SOIL TUBE

Penetrometer; 2½" Cone Penetrometer; Sampler boring (dry); Rotary boring (wet); Auger boring (dry); Jet boring; Core boring; Test pit

LEGEND OF EARTH MATERIALS

Gravel; Sand; Silt; Clay; Sandy Clay or Clayey Sand; Sandy Silt or Silty Sand; Silty Clay or Clayey Silt; Peat and/or Organic Matter; Fill Material; Igneous Rock; Sedimentary Rock; Metamorphic Rock

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

FIELD STUDY	
DRAWN	
CHECKED	
Approval Recommended	Engineering Geologist

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

104

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ROCHESTER OVERHEAD

LOG OF TEST BORINGS

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-919R/L	4.1		10	10

WO 171801
CU 08201

Disregard prints bearing earlier revision dates

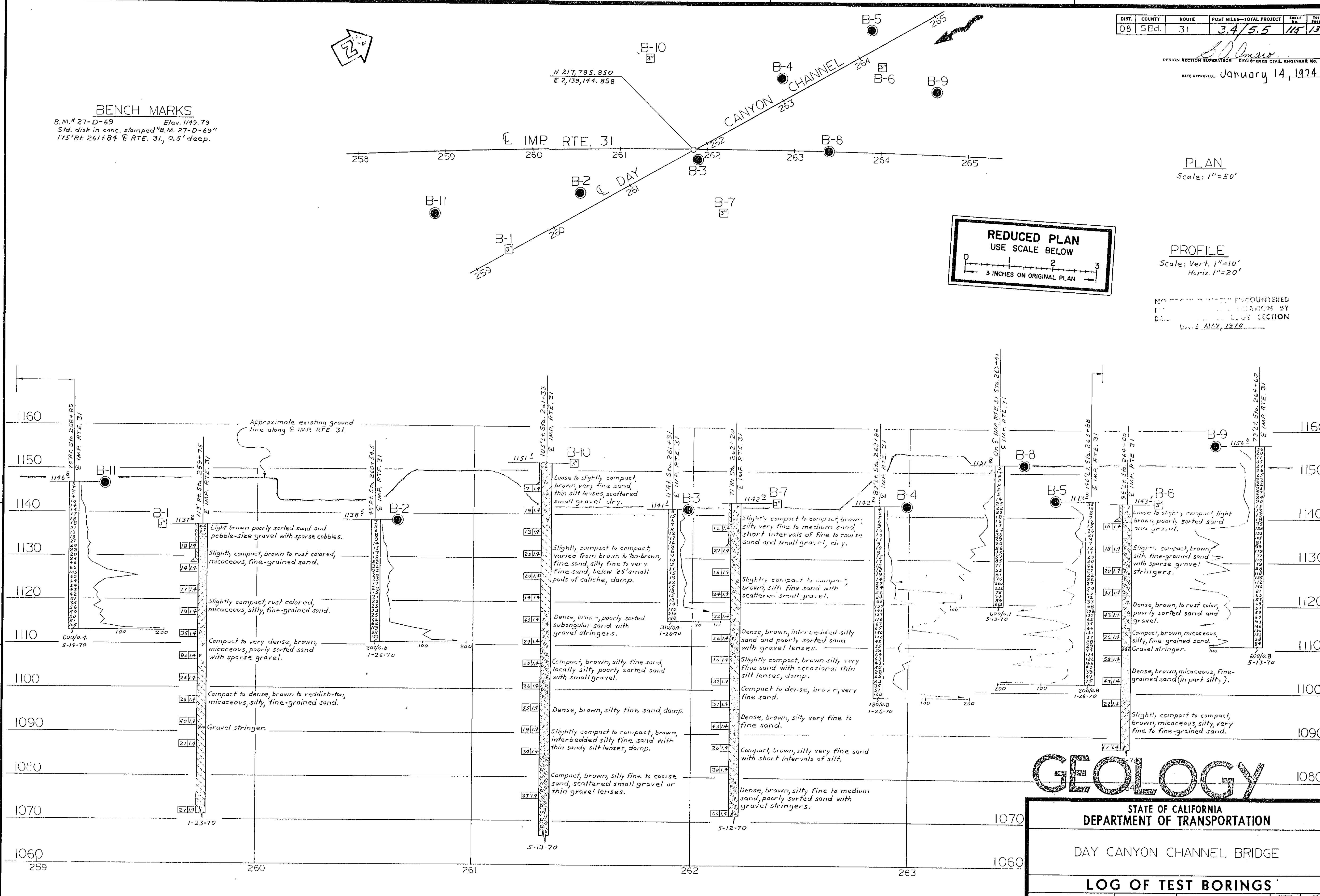
REVISION DATES (PRELIMINARY STAGE ONLY)

Arrow Route UC /Day Canyon Channel

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd.	31	3.4/5.5	115	136

DESIGN SECTION SUPERVISOR — REGISTERED CIVIL ENGINEER

DATE APPROVED January 14, 1974



BENCH MARKS
B.M.# 27-D-69 Elev. 1149.79
Std. disk in conc. stamped "B.M. 27-D-69"
175' Rt 261+84 ℄ RTE. 31, 0.5' deep.
N 217,785.850
E 2,139,144.898
℄ IMP. RTE. 31
℄ DAY CANYON CHANNEL
PLAN
Scale: 1"=50'
REDUCED PLAN
USE SCALE BELOW
3 INCHES ON ORIGINAL PLAN
PROFILE
Scale: Vert. 1"=10'
Horiz. 1"=20'
Approximate existing ground line along ℄ IMP. RTE. 31.
B-1
B-2
B-3
B-4
B-5
B-6
B-7
B-8
B-9
B-10
B-11
Light brown poorly sorted sand and pebble-size gravel with sparse cobbles.
Slightly compact, brown to rust colored, micaceous, fine-grained sand.
Slightly compact, rust colored, micaceous, silty, fine-grained sand.
Compact to very dense, brown, micaceous, poorly sorted sand with sparse gravel.
Compact to dense, brown to reddish-tan, micaceous, silty, fine-grained sand.
Gravel stringer.
Loose to slightly compact, brown, very fine sand, thin silt lenses, scattered small gravel, dry.
Slightly compact to compact, varies from brown to tan-brown, fine sand, silty fine to very fine sand, below 25' small pods of caliche, damp.
Dense, brown, poorly sorted subangular sand with gravel stringers.
Compact, brown, silty fine sand, locally silty, poorly sorted sand with small gravel.
Dense, brown, silty fine sand, damp.
Slightly compact to compact, brown, interbedded silty fine sand with thin sandy silt lenses, damp.
Compact, brown, silty fine to coarse sand, scattered small gravel or thin gravel lenses.
Slightly compact to compact, brown, silty very fine to medium sand, short intervals of fine to coarse sand and small gravel, dry.
Slightly compact to compact, brown, silty fine sand with scattered small gravel.
Dense, brown, interbedded silty sand and poorly sorted sand with gravel lenses.
Slightly compact, brown, silty very fine sand with occasional thin silt lenses, damp.
Compact to dense, brown, very fine sand.
Dense, brown, silty very fine to fine sand.
Compact, brown, silty very fine sand with short intervals of silt.
Dense, brown, silty fine to medium sand, poorly sorted sand with gravel stringers.
Loose to slightly compact, light brown, poorly sorted sand and gravel.
Slightly compact, brown, silty fine-grained sand with sparse gravel stringers.
Dense, brown, to rust color, poorly sorted sand and gravel.
Compact, brown, micaceous, silty, fine-grained sand.
Gravel stringer.
Dense, brown, micaceous, fine-grained sand (in part silty).
Slightly compact to compact, brown, micaceous, silty, very fine to fine-grained sand.
1160
1150
1140
1130
1120
1110
1100
1090
1080
1070
1060
259
260
261
262
263
GEOLOGY

LEGEND OF BORING OPERATIONS

LEGEND OF EARTH MATERIALS

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	
DRAWN	
CHECKED	

Approval Recommended by

115

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DAY CANYON CHANNEL BRIDGE

LOG OF TEST BORINGS

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-920 R/L	4.5		11	11

WO 171802
CU 08201

Disregard prints bearing earlier revision dates

REVISION DATES (PRELIMINARY STAGE ONLY)

Rte 66 / I-15 Separation

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	15,66	5.0/5.5, 9.6/10.0	92	92

James J. Weaver
GEOTECHNICAL PROFESSIONAL
8-26-96
PLANS APPROVAL DATE

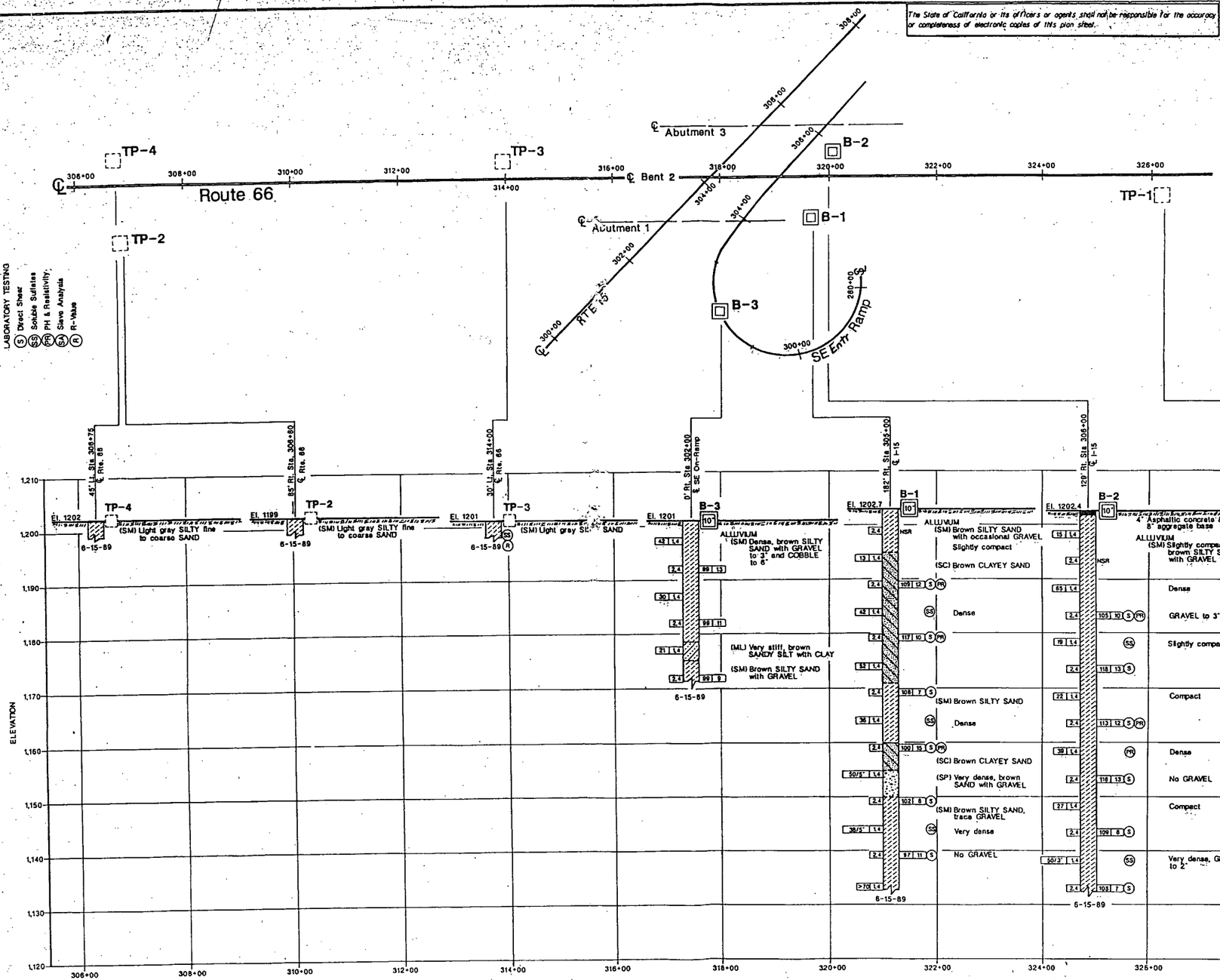
REGISTERED PROFESSIONAL ENGINEER — JAMES J. WEAVER — No. 884 — Exp. 12-31-97 — GEOTECHNICAL — STATE OF CALIFORNIA

Schaefer Dixon Associates, Inc.
22 Mauchly
Irvine, California 92718

REGISTERED PROFESSIONAL ENGINEER — HUGH A. MARLEY — 30 Sept 95 — Exp. Date — GEOTECHNICAL — STATE OF CALIFORNIA

CERTIFIED TRUE COPY.
H. A. Marley
(Hugh A. Marley, Ph.D, CE, GE)
Geotechnical Professional
GE 2034
Vice President - Engg
Schaefer Dixon Assoc. Inc
14 March 1995

LABORATORY TESTING
(W) Direct Shear (SS) Soluble Sulfates (PI) PH & Resistivity; (SA) Sieve Analysis (R) R-Value



Horizontal Scale: 0 100 200

-Plan-

REFERENCE:
Station Numbers are Based on CALTRANS Geometric Approval Drawing.

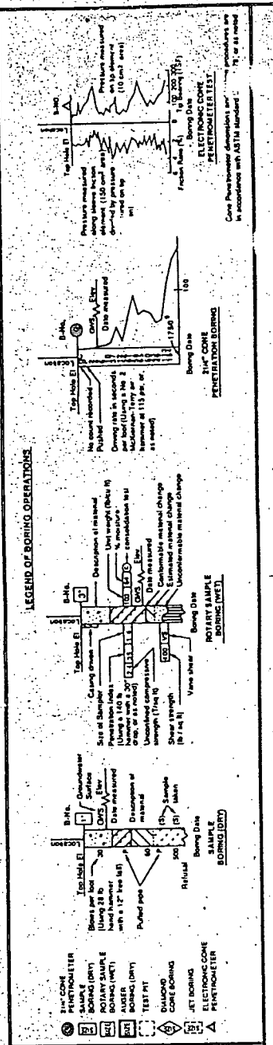
BENCHMARK:
One-inch Round Head Bolt in Curb, on Foothill Blvd. Under Fwy. I-15 Overpass on Northerly Curb of Center Divider. North of Westerly Most Bridge Support

ELEVATION: 1203.774

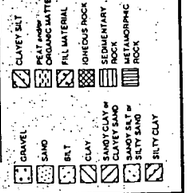
No Groundwater Encountered.

-Profile-
Vertical Scale: 1" = 10'

LEGEND OF ROBING OPERATIONS



LEGEND OF EARTH MATERIALS



CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

Penetration Index (Blows/Ft)	Granular	Cohesive
0-4	Very loose	Very soft
5-9	Loose	Soft
10-19	Slightly compact	Slightly stiff
20-34	Compact	Stiff
35-69	Dense	Hard
>70	Very dense	Very hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

DESIGN OVERSIGHT	DRAWN BY	WS	Dimon I. Lee	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	Wei Te Koo	BRIDGE NO. 54-922 R/L	ROUTE 15/66 SEPARATION (RETAINING WALLS)	
SIGN OFF DATE	CHECKED BY		FIELD INVESTIGATION		PROJECT ENGINEER	POST MILE 5.3	LOG OF TEST BORINGS	
			DATE 2-1991		CU 08206 EA 281800	DISREGARD PRINTS BEARING EARLIER REVISION DATES →	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET 9 OF 9

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

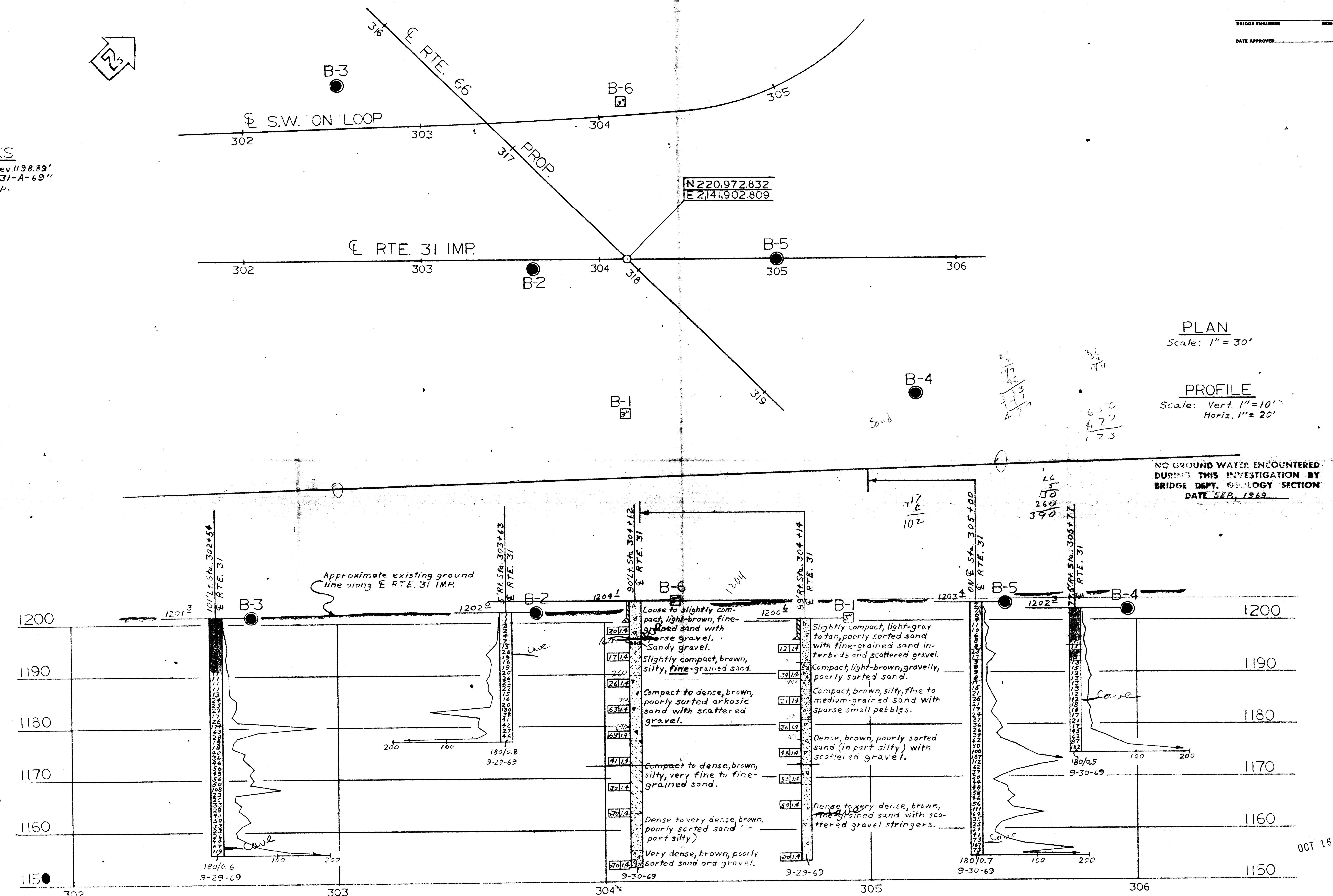
Project No.: 90-014

OCT 2 9 1992

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT
08	SBd.	31	

BENCH MARKS

B.M. # 31-A-69 Elev. 1198.89'
Std. disk in conc. stamped "B.M. 31-A-69"
75' Rt. 315+00 ℄ Foothill 1.0' deep.



℄ RTE. 66
℄ S.W. ON LOOP
PROP.
N 220,972.832
E 2,141,902.809
℄ RTE. 31 IMP.
B-1
B-2
B-3
B-4
B-5
B-6
PLAN
Scale: 1" = 30'
PROFILE
Scale: Vert. 1" = 10'
Horiz. 1" = 20'
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE SEP., 1969
Approximate existing ground line along ℄ RTE. 31 IMP.
1200
1190
1180
1170
1160
1150
302
303
304
305
306
Loose to slightly compact, light-brown, fine-grained sand with sparse gravel.
Sandy gravel.
Slightly compact, brown, silty, fine-grained sand.
Compact to dense, brown, poorly sorted arkosic sand with scattered gravel.
Compact to dense, brown, silty, very fine to fine-grained sand.
Dense to very dense, brown, poorly sorted sand (in part silty).
Very dense, brown, poorly sorted sand and gravel.
Slightly compact, light-gray to tan, poorly sorted sand with fine-grained sand interbeds and scattered gravel.
Compact, light-brown, gravelly, poorly sorted sand.
Compact, brown, silty, fine to medium-grained sand with sparse small pebbles.
Dense, brown, poorly sorted sand (in part silty) with scattered gravel.
Dense to very dense, brown, fine-grained sand with scattered gravel stringers.
9-29-69
9-30-69
OCT 16 1969

LEGEND OF BORING OPERATIONS

LEGEND OF EARTH MATERIALS

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

FIELD STUDY	By O.B. CRAWFORD 9-30-69
DRAWN	By E.S. JIMENEZ 10-8-69
CHECKED	
Approval Recommended by	Engineering Geologist

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

ROUTE. 31/66 SEPARATION

LOG OF TEST BORINGS

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-922 RL	5.3			

WO 059031
CU 08201

Disregard prints bearing earlier revision dates

REVISION DATES (PRELIMINARY STAGE ONLY)

Etiwanda Avenue

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	31			


B-9
B-7
B-1
B-8
B-10
B-5
B-2
B-6
B-11
B-4
B-3
340 + 72.44 ℄ Rte. 31 =
340 + 72.44 ℄ Etiwanda Ave =
340 + 72.44 ℄ Miller
To Corona
To Devore
℄ Imp Rte. 31
Etiwanda Ave
Miller Ave
BM 34-A-71
Brass disc in conc buried 0.7'
143' Rt Sta. 338+03 ℄ Imp
Elev. 1242.73
PLAN
Scale: 1" = 50'
LEGEND OF BORING OPERATIONS
PENETRATION BORING
ROTARY BORING
1" SOIL TUBE
LEGEND OF EARTH MATERIALS
CONSISTENCY CLASSIFICATION FOR SOILS
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
Slightly compact dark brown ORGANIC SANDY SILT with some GRAVEL
Dense tan SILTY, GRAVELLY fine to coarse SAND.
Dense light brown SANDY SILT
Very dense grayish tan SILTY, GRAVELLY fine to coarse SAND.
Dense brown SANDY SILT
Very dense brown fine grained SAND
Very dense medium & coarse grained SAND with small PEBBLE GRAVEL.
Slightly compact brown SILT.
Compact brown SANDY SILT
Very dense brown SANDY SILT with fine & coarse PEBBLE GRAVEL.
Very dense brown SANDY SILT.
Very dense light brown fine & coarse SAND with small PEBBLE GRAVEL.
Brown SANDY SILT.
Slightly compact light brown SANDY SILT with small PEBBLE GRAVEL.
Dense light brown SANDY SILT with fine & coarse GRANITE PEBBLES.
Very dense brown SANDY SILT.
Very dense brown fine grained SILTY SAND
Very loose dark brown SANDY SILT.
Compact brown SANDY SILT
Compact tan slightly SANDY SILT.
Compact tan SILT.
Dense brownish-tan SILTY fine SAND.
Compact tan SILT
Very dense gray fine to coarse SAND.
Dense brown SANDY SILT.
Loose brown SILT with small PEBBLE GRAVEL.
Slightly compact brown SANDY SILT with small GRANITE fragments.
Slightly compact light brown SANDY SILT.
Dense light brown SANDY SILT.
Dense brown medium & coarse grained SAND with small PEBBLE GRAVEL.
Dense brown medium & coarse grained SAND.
Dense brown fine-grained SILTY SAND
Very dense light brown fine & medium-grained SAND.
2-10-72
2-15-72
2-9-72
1250
1240
1230
1220
1210
1200
1190
338
339
340
341
342
343

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE 2-72

PROFILE
Scale: Horz. 1" = 20'
Vert. 1" = 10'

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by R. Fox	2-72
DRAWN	by S. Kanamura	3-10-72
CHECKED	by R. Fox	4-3-72

Approval Recommended by ______ Engineering Geologist
Certified Engineering Geologist No. ______

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
MAY 25 1972

ETIWANDA AVENUE UNDERCROSSING

LOG OF TEST BORINGS

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-973R/L	6.0			

WO 053081
CU 08101

Disregard prints bearing earlier revision dates
REVISION DATES (PRELIMINARY STAGE ONLY)

Baseline Rd

DIST.	COUNTY	ROUTE	POST MILES--TOTAL PROJECT	SHEET NO	TOTAL SHEETS
08	SBd	31			

BRIDGE ENGINEER ________ REGISTERED CIVIL ENGINEER NO 55- 65

DATE APPROVED ________

FOR PLAN SEE SHEET NO. 1 OF 2

LEGEND OF BORING OPERATIONS

LEGEND OF EARTH MATERIALS

- ▨ GRAVEL
- ▨ SAND
- ▨ SILT
- ▨ CLAY
- ▨ SANDY CLAY or CLAYEY SAND
- ▨ SANDY SILT or SILTY SAND
- ▨ SILTY CLAY or CLAYEY SILT
- ▨ PEAT and/or ORGANIC MATTER
- ▨ FILL MATERIAL
- ▨ IGNEOUS ROCK
- ▨ SEDIMENTARY ROCK
- ▨ METAMORPHIC ROCK

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

No. of blows	Granular	Cohesive
0-5	Very loose	Very soft
5-10	Loose	Soft
10-20	Slightly compact	Stiff
20-35	Compact	Very stiff
35-70	Dense	Hard
>70	Very dense	Very hard

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

Diagram showing the basis for estimates of grade size distribution used in determination of class names. If GRAVEL is present in appreciable amounts the term GRAVELLY may be added to the class name, viz. GRAVELLY SAND. The terms coarse, medium, and fine when used to describe SAND, SILT, and GRAVEL refer to standard grade size limits.

PROFILE

Scale: Horz. 1" = 20'
Vert. 1" = 10'

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE 2-72

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by R. Fox 2-72
DRAWN	by S. Kawamura 3-17-72
CHECKED	by R. Fox 4-3-72

Approval Recommended by ________
Engineering Geologist

Certified Engineering Geologist No. ________

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

BASELINE ROAD UNDERCROSSING

LOG OF TEST BORINGS (2 of 2)

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-974 R/L	6.8			

WO 059081
CU 08101

Disregard prints bearing earlier revision dates →

REVISION DATES (PRELIMINARY STAGE ONLY)

DIST.	COUNTY	ROUTE	POST MILES--TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	31			

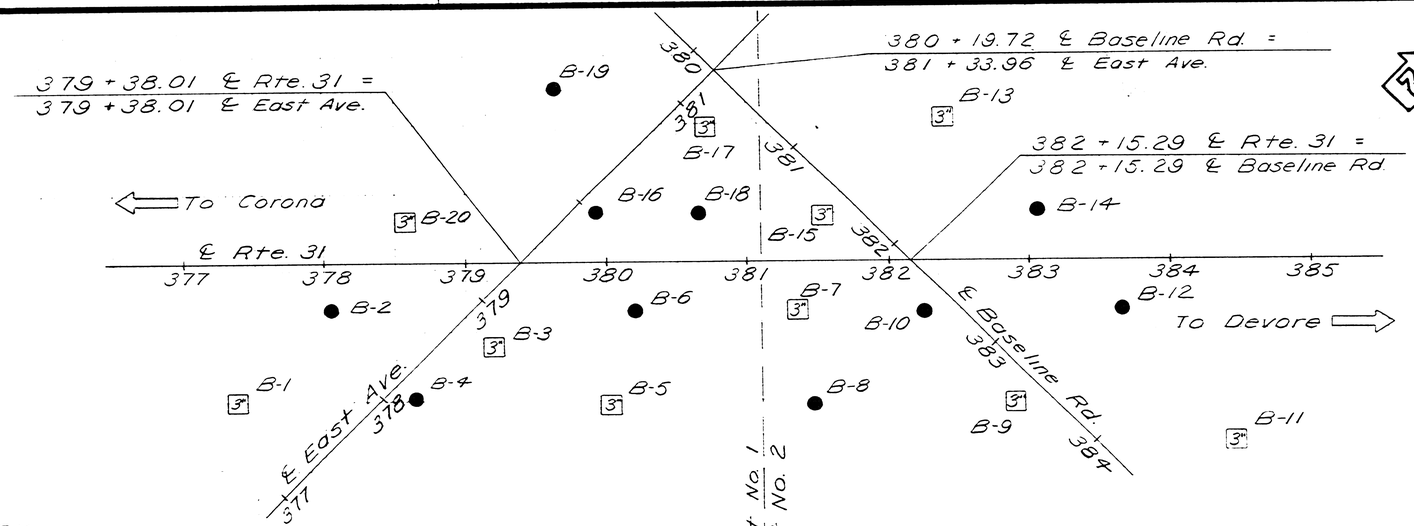
BRIDGE ENGINEER ..... REGISTERED CIVIL ENGINEER NO. 5865

DATE APPROVED .....

379 + 38.01 ℄ Rte. 31 =
379 + 38.01 ℄ East Ave.

380 + 19.72 ℄ Baseline Rd. =
381 + 33.96 ℄ East Ave.

382 + 15.29 ℄ Rte. 31 =
382 + 15.29 ℄ Baseline Rd.



Sheet No. 1
Sheet No. 2

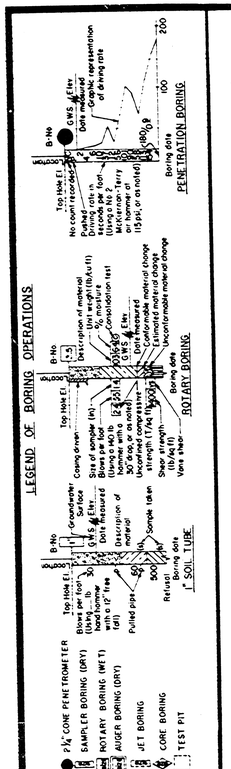
BENCH MARK

Spot elevation taken from foundation plan dated 5-71
63' Lt. "℄ Rte. 31" 381 + 59
Elev. 95.4

PLAN

Scale : 1" = 50'

LEGEND OF BORING OPERATIONS



LEGEND OF EARTH MATERIALS

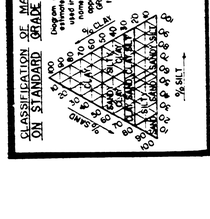
GRAVEL · SAND · SILT · CLAY · SILTY CLAY or CLAYEY SILT · PEAT and/or ORGANIC MATTER · FILL MATERIAL · IGNEOUS ROCK · SEDIMENTARY ROCK · METAMORPHIC ROCK · SANDY CLAY or CLAYEY SAND · SANDY SILT or SILTY SAND

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test		Cohesive
No of blows	Granular	
0-5	Very loose	Very soft
5-10	Loose	Soft
10-30	Slightly compact	Stiff
20-35	Compact	Very stiff
35-70	Dense	Hard
>70	Very dense	Very hard

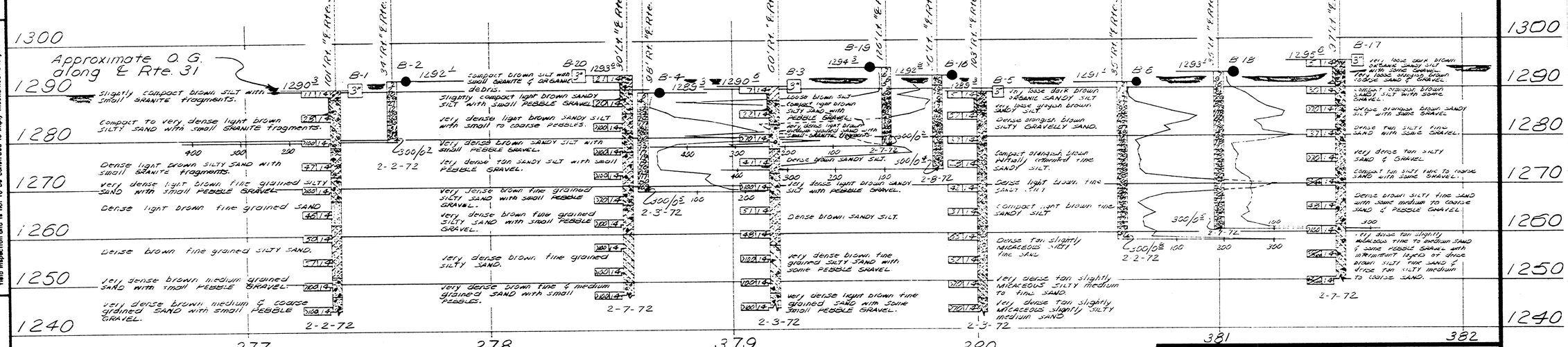
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS



PROFILE

Scale : Horz. 1" = 20'
Vert. 1" = 10'



NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE 2-72

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by R. FOX 2-72
DRAWN	by S. KAWAMURA 3-17-72
CHECKED	by R. FOX 4-3-72

Approval Recommended by _____ Engineering Geologist
Certified Engineering Geologist No. _____

BASELINE ROAD UNDERCROSSING

LOG OF TEST BORINGS (1 of 2)

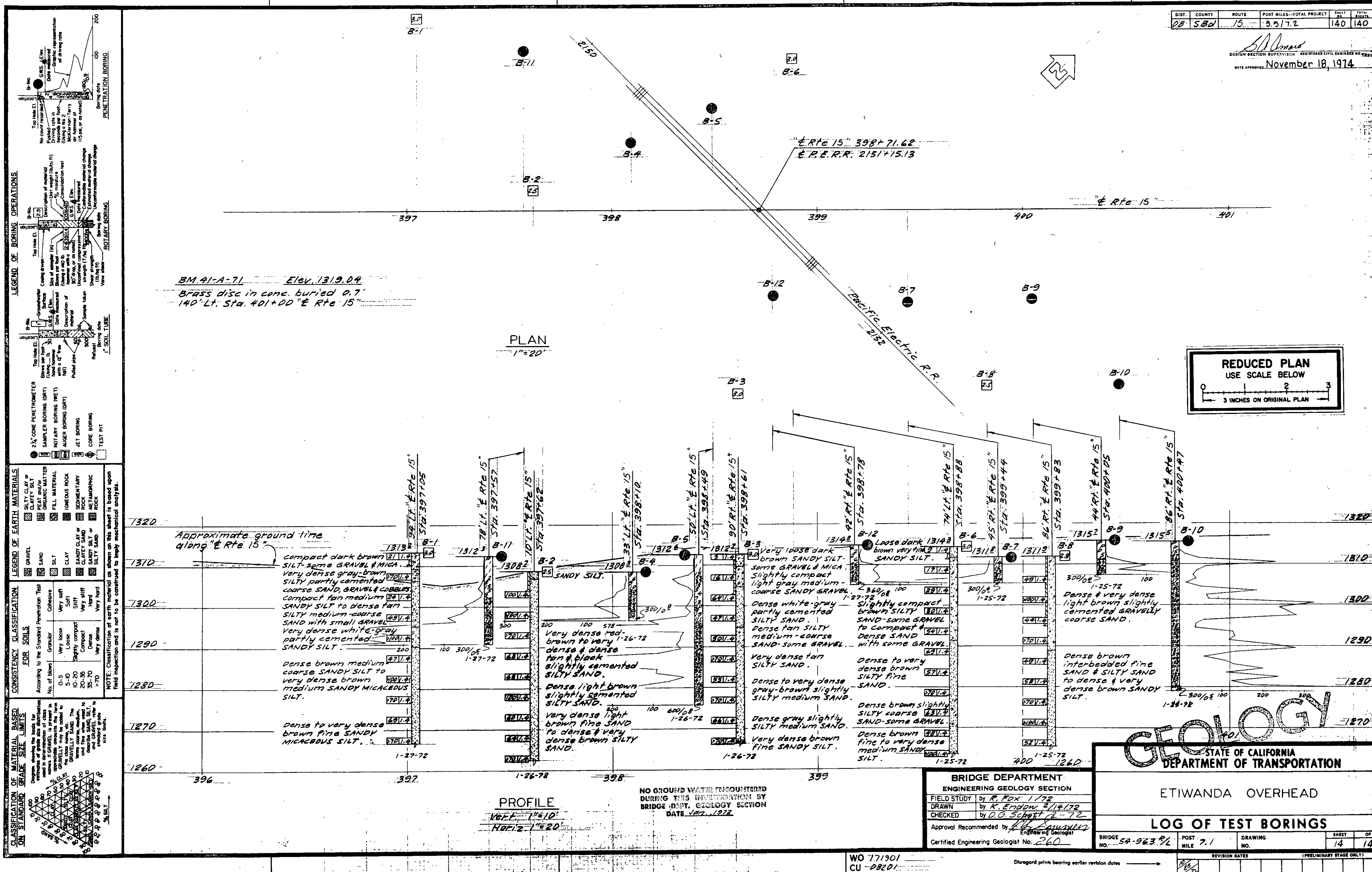
BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-974 R/L	6.8			

REVISION DATES (PRELIMINARY STAGE ONLY)

WO 059081
CU 08101

Disregard prints bearing earlier revision dates →

Etiwanda Overhead

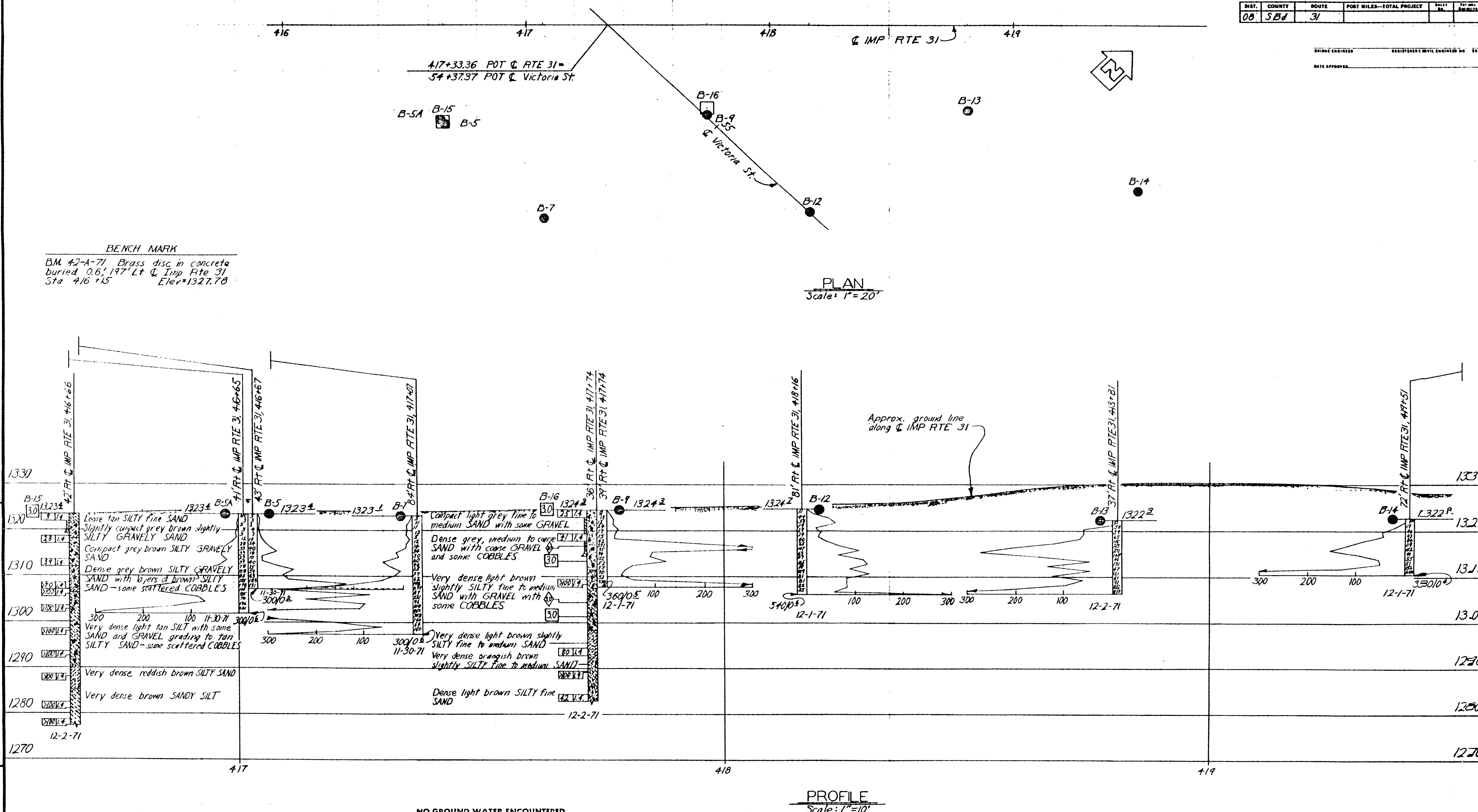


DIST. 08 | COUNTY SBd | ROUTE 15 | POST MILES—TOTAL PROJECT 5.5/7.2 | SHEET NO. 140 | TOTAL SHEETS 140
DESIGN SECTION SUPERVISOR
DATE APPROVED November 18, 1974
B-1
B-11
B-6
B-5
B-4
B-2
B-12
B-7
B-9
B-3
B-8
B-10
"℄ Rte 15" 398+71.62
℄ P.E.R.R. 2151+15.13
"℄ Rte 15"
397
398
399
400
401
2150
2152
Pacific Electric R.R.
BM 41-A-71 Elev. 1319.04
Brass disc in conc. buried 0.7'
140' Lt. Sta. 401+00 "℄ Rte 15"
PLAN
1"=20'
REDUCED PLAN
USE SCALE BELOW
3 INCHES ON ORIGINAL PLAN
Approximate ground line along "℄ Rte 15"
compact dark brown SILT-some GRAVEL & MICA.
Very dense gray-brown SILTY partly cemented coarse SAND, GRAVEL & COBBLES.
compact tan medium SANDY SILT to dense tan SILTY medium-coarse SAND with small GRAVEL.
Very dense white-gray partly cemented SANDY SILT.
Dense brown medium coarse SANDY SILT to very dense brown medium SANDY MICACEOUS SILT.
Dense to very dense brown fine SANDY MICACEOUS SILT.
SANDY SILT.
Very dense red-brown to very dense & dense tan & black slightly cemented SILTY SAND.
Dense light brown slightly cemented SILTY SAND.
Very dense light brown fine SAND to dense & very dense brown SILTY SAND.
Very loose dark brown SANDY SILT-some GRAVEL & MICA.
Slightly compact light gray medium-coarse SANDY GRAVEL.
Dense white-gray partly cemented SILTY SAND.
Dense tan SILTY medium-coarse SAND-some GRAVEL.
Very dense tan SILTY SAND.
Dense to very dense gray-brown slightly SILTY medium SAND.
Dense gray slightly SILTY medium SAND.
Very dense brown fine SANDY SILT.
Loose dark brown very fine SANDY SILT.
Slightly compact brown SILTY SAND-some GRAVEL to compact & dense SAND with some GRAVEL.
Dense to very dense brown SILTY fine SAND.
Dense brown slightly SILTY coarse SAND-some GRAVEL.
Dense brown fine to very dense medium SANDY SILT.
Dense & very dense light brown slightly cemented GRAVELLY coarse SAND.
Dense brown interbedded fine SAND & SILTY SAND to dense & very dense brown SANDY SILT.
PROFILE
Vert. 1"=10'
Horiz. 1"=20'
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE Jan. 1972
GEOLOGY
BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION
FIELD STUDY by R. Fox 1/72
DRAWN by K. Endow 2/14/72
CHECKED by D.G. Schott 2-72
Approval Recommended by Engineering Geologist
Certified Engineering Geologist No. 260
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ETIWANDA OVERHEAD
LOG OF TEST BORINGS
BRIDGE NO. 54-963 R/L
POST MILE 7.1
DRAWING NO.
SHEET 14 OF 14
WO 771901
CU 08201
Disregard prints bearing earlier revision dates
REVISION DATES
(PRELIMINARY STAGE ONLY)
LEGEND OF BORING OPERATIONS
PENETRATION BORING
ROTARY BORING
1" SOIL TUBE
LEGEND OF EARTH MATERIALS
CONSISTENCY CLASSIFICATION FOR SOILS
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

140

Victoria Street Undercrossing

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	31			



NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE FOUNDATION GEOLOGY SECTION DATE 12-6-71

DIST.	COUNTY	ROUTE	POST MILES - TOTAL PROJECT	Sheet No.	Total Sheets
08	SBD	015			

ENGINEERING GEOLOGY BRANCH - TRANSPORTATION MATERIALS & RESEARCH

W. C. Cain
CERTIFIED ENGINEERING GEOLOGIST - PROJECT GEOLOGIST

VICTORIA STREET UNDERCROSSING

LOG OF TEST BORINGS 1 OF 2

NOTE: THIS LOG OF TEST BORINGS IS AVAILABLE ON MICROFILM AT OFFICE OF STRUCTURES DESIGN SACRAMENTO CALIFORNIA.

CU: 08203 EA: 204301 — BRIDGE No. 54-0965R

REGISTERED GEOLOGIST — W.C. CAIN No. 732 Exp. 6-30-94 CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by W. T. NELSON 12-71
DRAWN	by D. G. SCHOTT 12-30-71
CHECKED	by W. T. NELSON 1-71

Approval Recommended by ________ Engineering Geologist
Certified Engineering Geologist No. ________

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

VICTORIA STREET UNDERCROSSING

NOV 1993

LOG OF TEST BORINGS

BRIDGE NO. 54-965 R/L — POST MILE 7.5 — DRAWING NO. — SHEET 1 OF 2

WO ~~134200~~ 132900
CU 08201

Disregard prints bearing earlier revision dates

REVISION DATES (PRELIMINARY STAGE ONLY)

LEGEND OF BORING OPERATIONS — PENETRATION BORING — ROTARY BORING — 1" SOIL TUBE

LEGEND OF EARTH MATERIALS — GRAVEL, SAND, SILT, CLAY, SILTY CLAY or CLAYEY SILT, PEAT and/or ORGANIC MATTER, FILL MATERIAL, IGNEOUS ROCK, SEDIMENTARY ROCK, METAMORPHIC ROCK, SANDY CLAY or CLAYEY SAND, SANDY SILT or SILTY SAND

CONSISTENCY CLASSIFICATION FOR SOILS — According to the Standard Penetration Test

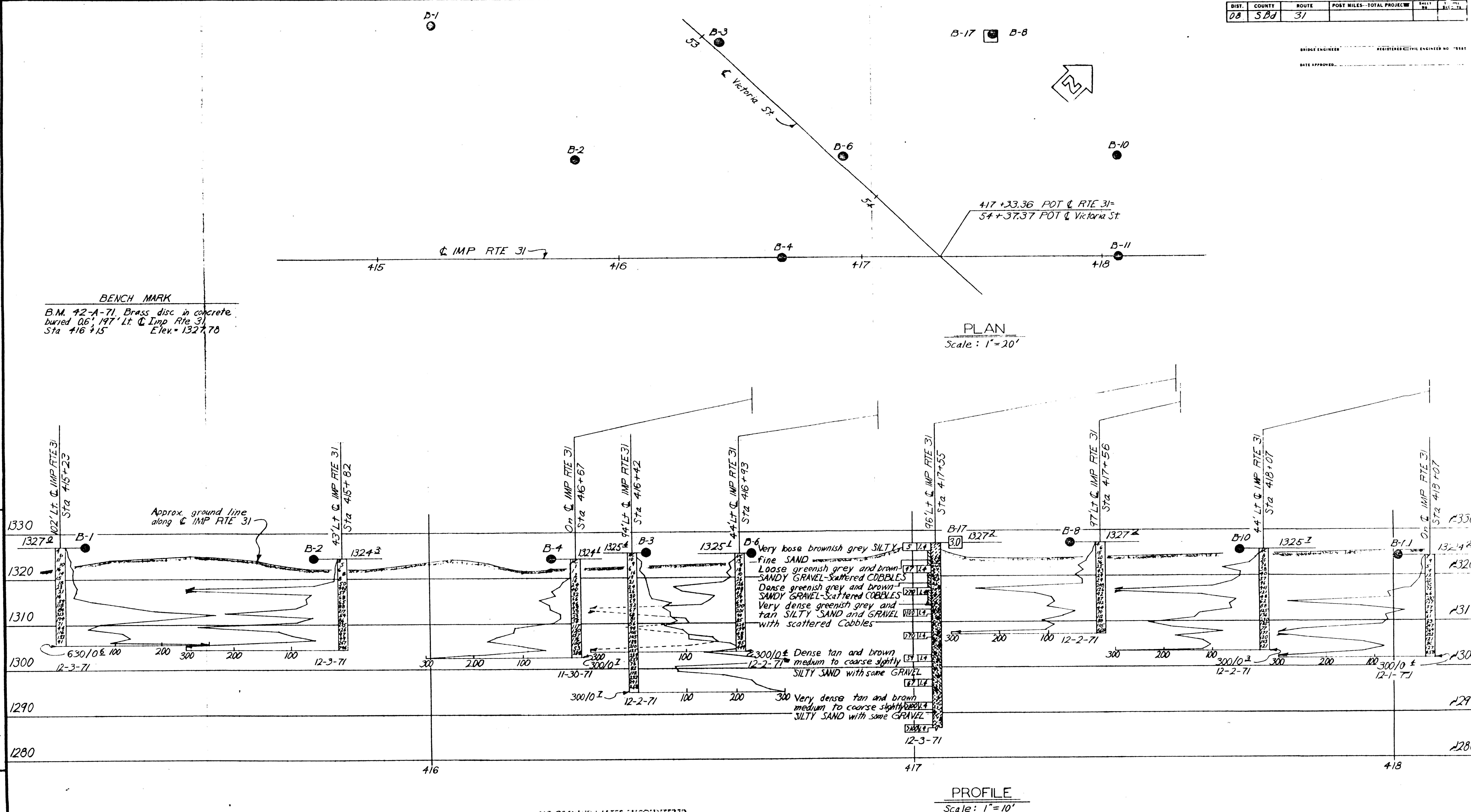
No. of blows	Granular	Cohesive
0-5	Very loose	Very soft
5-10	Loose	Soft
10-20	Slightly compact	Stiff
20-35	Compact	Very stiff
35-70	Dense	Hard
>70	Very dense	Very hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

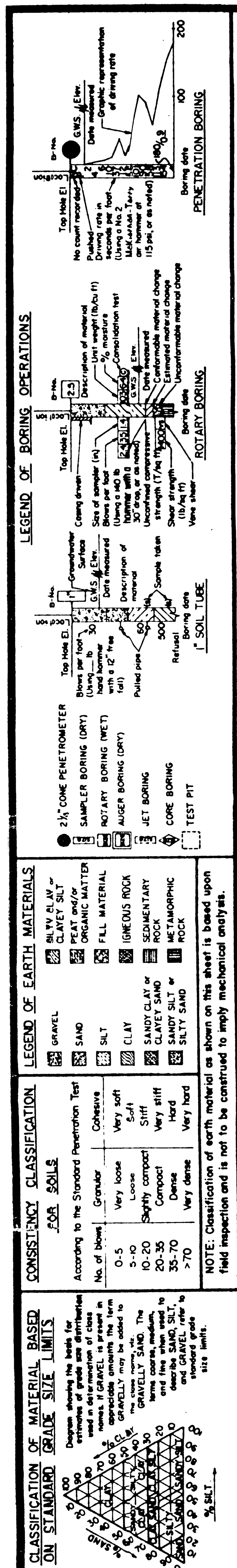
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

East Etiwanda Creek

DIST.	COUNTY	ROUTE	POST MILES--TOTAL PROJECT
08	SBd	31	



B-1
B-3
B-17
B-8
C Victoria St.
B-2
B-6
B-10
417+33.36 POT C RTE 31=
54+37.37 POT C Victoria St
C IMP RTE 31
B-4
B-11
415
416
417
418
BENCH MARK
B.M. 42-A-71 Brass disc in concrete buried 0.6' 197' Lt. C Imp Rte 31 Sta 416+15 Elev.= 1327.78
PLAN
Scale: 1"=20'
Approx. ground line along C IMP RTE 31
102' Lt. C IMP RTE 31 Sta 415+23
43' Lt C IMP RTE 31 Sta 415+82
On C IMP RTE 31 Sta 416+67
94' Lt C IMP RTE 31 Sta 416+42
44' Lt C IMP RTE 31 Sta 416+93
96' Lt C IMP RTE 31 Sta 417+55
97' Lt C IMP RTE 31 Sta 417+56
44' Lt C IMP RTE 31 Sta 418+07
On C IMP RTE 31 Sta 418+07
1330
1320
1310
1300
1290
1280
Very loose brownish grey SILTY fine SAND
Loose greenish grey and brown SANDY GRAVEL-Scattered COBBLES
Dense greenish grey and brown SANDY GRAVEL-Scattered COBBLES
Very dense greenish grey and tan SILTY SAND and GRAVEL with scattered Cobbles
Dense tan and brown medium to coarse slightly SILTY SAND with some GRAVEL
Very dense tan and brown medium to coarse slightly SILTY SAND with some GRAVEL
12-3-71
11-30-71
12-2-71
12-1-71
PROFILE
Scale: 1"=10'



LEGEND OF BORING OPERATIONS
LEGEND OF EARTH MATERIALS
CONSISTENCY CLASSIFICATION FOR SOILS
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
PENETRATION BORING
ROTARY BORING
1" SOIL TUBE
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

NO GROUND WATER ENCOUNTERED
DATE 12-6-71

DIST.	COUNTY	ROUTE	POST MILES - TOTAL PROJECT	Sheet No.	Total Sheets
08	SBD	015			

ENGINEERING GEOLOGY BRANCH - TRANSPORTATION MATERIALS & RESEARCH

CERTIFIED ENGINEERING GEOLOGIST - PROJECT GEOLOGIST

VICTORIA STREET UNDERCROSSING

LOG OF TEST BORINGS 2 OF 2

NOTE: THIS LOG OF TEST BORINGS IS AVAILABLE ON MICROFILM AT OFFICE OF STRUCTURES DESIGN SACRAMENTO CALIFORNIA. CU: 08203 EA: 204301 BRIDGE No. 54-0965R

REGISTERED GEOLOGIST W.C. CAIN No. 732 Exp. 6-30-94 CERTIFIED ENGINEERING GEOLOGIST STATE OF CALIFORNIA

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by	W. T. NELSON 12-71
DRAWN	by	D. G. SCHOTT 12-28-71
CHECKED	by	W. T. NELSON 1-72

Approval Recommended by ________ Engineering Geologist

Certified Engineering Geologist No. ________

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

VICTORIA STREET UNDERCROSSING

LOG OF TEST BORINGS

BRIDGE NO. 54-965 R/L | POST MILE 7.5 | DRAWING NO. | SHEET 2 OF 2

WO 139200 132900
CU 08201

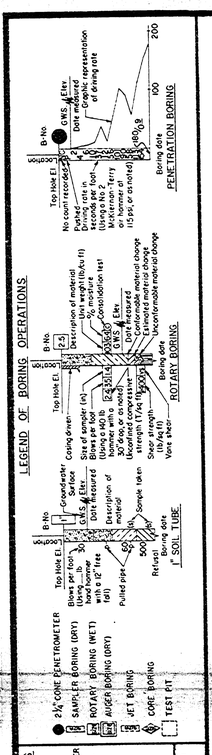
Disregard prints bearing earlier revision dates

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	31			

BRIDGE ENGINEER _____ REGISTERED CIVIL ENGINEER NO. 5565

DATE APPROVED _____

LEGEND OF BORING OPERATIONS



- ● 2½" CONE PENETROMETER
- SAMPLER BORING (DRY)
- ROTARY BORING (WET)
- AUGER BORING (DRY)
- JET BORING
- CORE BORING
- TEST PIT

LEGEND OF EARTH MATERIALS

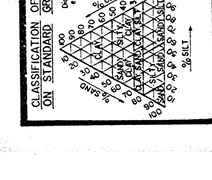
- GRAVEL
- SAND
- SILT
- CLAY
- SILTY CLAY or CLAYEY SILT
- PEAT and/or HIGHLY ORGANIC MATTER
- FILL MATERIAL
- IGNEOUS ROCK
- SANDY CLAY or CLAYEY SAND
- SANDY SILT or SILTY SAND
- SEDIMENTARY ROCK
- METAMORPHIC ROCK

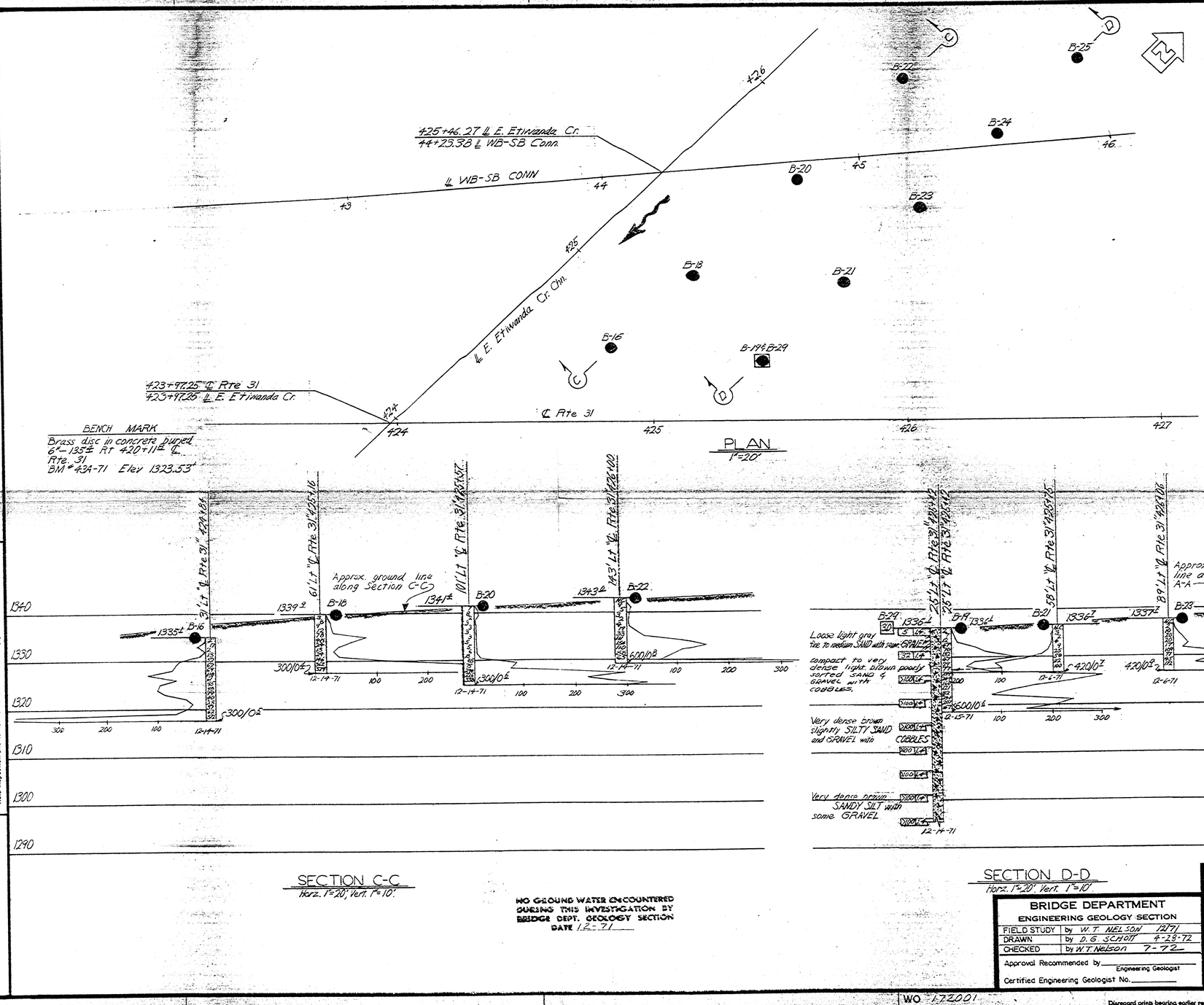
CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test		
No. of blows	Granular	Cohesive
0-5	Very loose	Very soft
5-10	Loose	Soft
10-20	Slightly compact	Stiff
20-35	Compact	Very stiff
35-70	Dense	Hard
>70	Very dense	Very hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

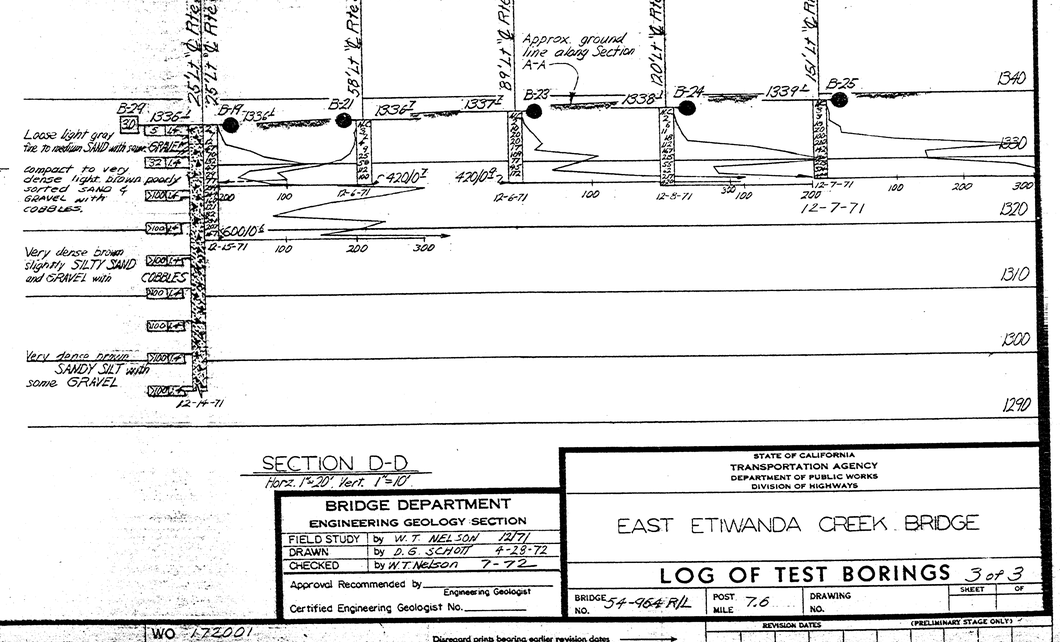
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS





SECTION C-C
Horz. 1"=20', Vert. 1"=10'

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE 12-71



SECTION D-D
Horz. 1"=20', Vert. 1"=10'

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by W.T. NELSON 12/71
DRAWN	by D.G. SCHOTT 4-28-72
CHECKED	by W.T. Nelson 7-72

Approval Recommended by _____ Engineering Geologist

Certified Engineering Geologist No. _____

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

EAST ETIWANDA CREEK BRIDGE

LOG OF TEST BORINGS 3 of 3

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-964 R/L	7.6			

REVISION DATES (PRELIMINARY STAGE ONLY)

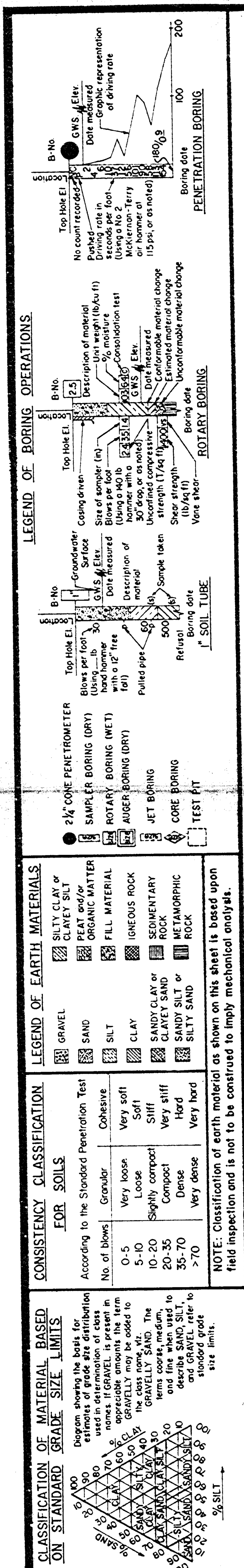
WO 172001
CU 08201

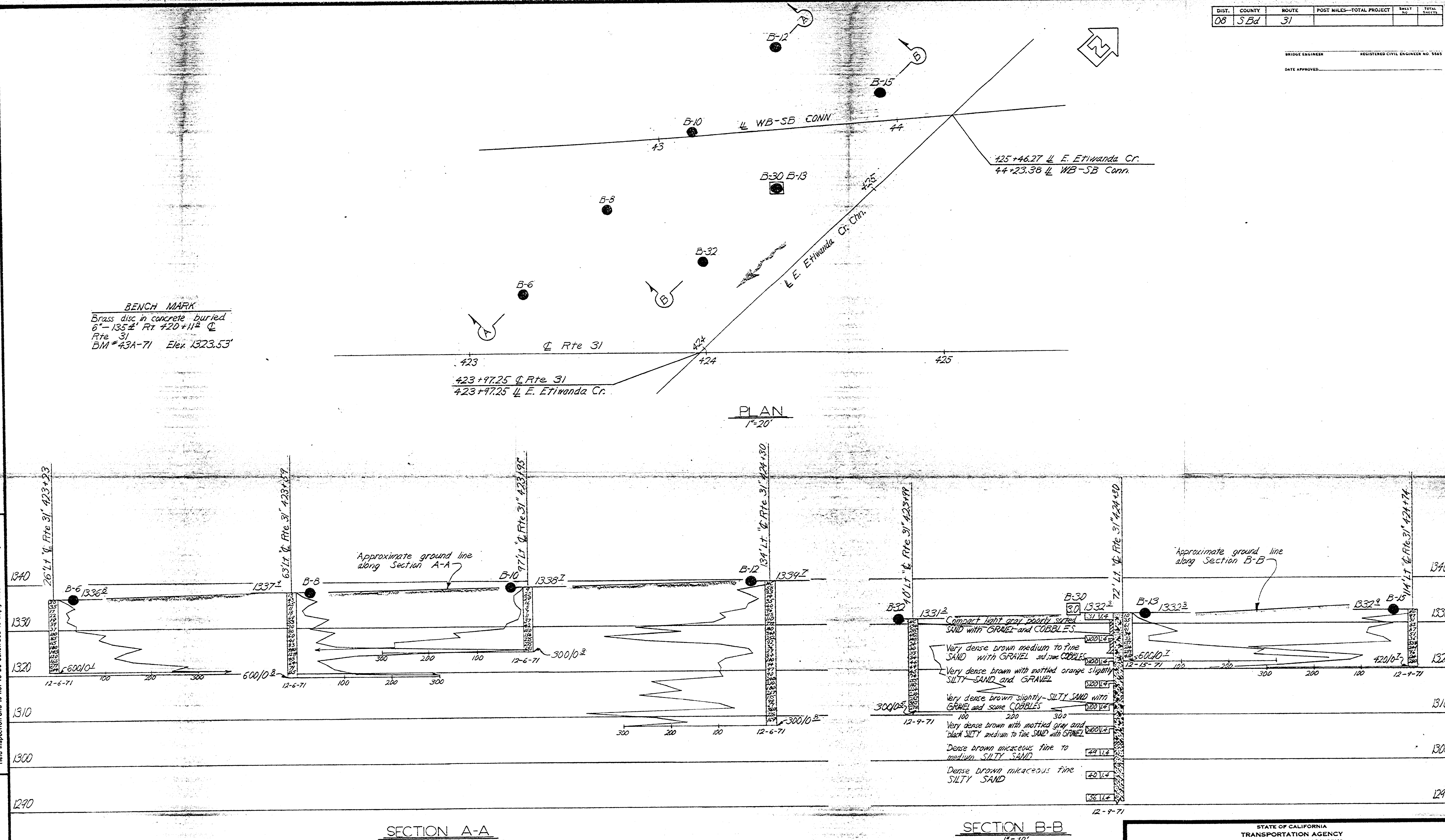
Disregard prints bearing earlier revision dates →

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	31			

BRIDGE ENGINEER — REGISTERED CIVIL ENGINEER NO.

DATE APPROVED


LEGEND OF BORING OPERATIONS
PENETRATION BORING
ROTARY BORING
1" SOIL TUBE
LEGEND OF EARTH MATERIALS
CONSISTENCY CLASSIFICATION FOR SOILS
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.


BENCH MARK
Brass disc in concrete buried 6"-135± Rt. 420+11± ℄ Rte 31
BM #43A-71 Elev. 1323.53'
℄ WB-SB CONN
℄ Rte 31
℄ E. Etiwanda Cr. Chn.
425+46.27 ℄ E. Etiwanda Cr.
44+23.38 ℄ WB-SB Conn.
423+97.25 ℄ Rte 31
423+97.25 ℄ E. Etiwanda Cr.
PLAN
1"=20'
Approximate ground line along Section A-A
Approximate ground line along Section B-B
Compact light gray poorly sorted SAND with GRAVEL and COBBLES
Very dense brown medium to fine SAND with GRAVEL and some COBBLES
Very dense brown with mottled orange slightly SILTY SAND and GRAVEL
Very dense brown slightly SILTY SAND with GRAVEL and some COBBLES
Very dense brown with mottled gray and black SILTY medium to fine SAND with GRAVEL
Dense brown micaceous fine to medium SILTY SAND
Dense brown micaceous fine SILTY SAND
SECTION A-A
1"=20'
SECTION B-B
1"=10'

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION / BRIDGE DEPT. GEOLOGY SECTION DATE 12-71

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by W.T. NELSON	12/71
DRAWN	by D.G. SCHOTT	4/72
CHECKED	by W.T Nelson	7-72

Approval Recommended by ________ Engineering Geologist

Certified Engineering Geologist No. ________

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

EAST ETIWANDA CREEK BRIDGE

LOG OF TEST BORINGS 2 of 3

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-964 R/L	7.6			

WO 172001

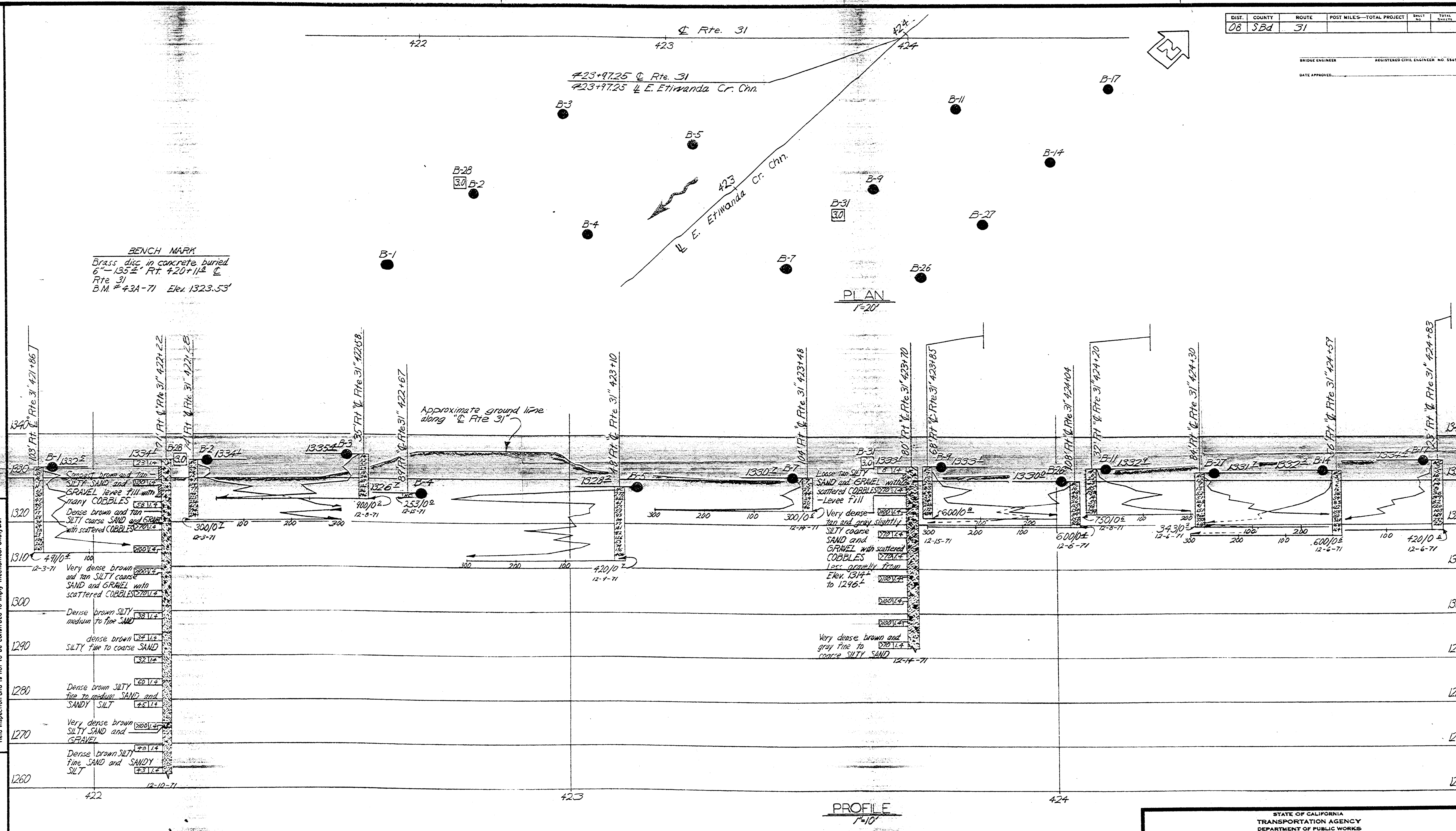
Disregard prints bearing earlier revision dates →

REVISION DATES (PRELIMINARY STAGE ONLY)

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	31			

BRIDGE ENGINEER — REGISTERED CIVIL ENGINEER NO. 5865

DATE APPROVED



NO GROUND WATER ENCOUNTERED

DATE 12-71

BRIDGE DEPARTMENT		
ENGINEERING GEOLOGY SECTION		
FIELD STUDY	by W. T. NELSON	12/71
DRAWN	by D. G. SCHOTT	3/72
CHECKED	by W. T. Nelson	7-72

Approval Recommended by ____ Engineering Geologist

Certified Engineering Geologist No. ____

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

EAST ETIWANDA CREEK BRIDGE

LOG OF TEST BORINGS 1 of 3

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-964 R/L	7.6			

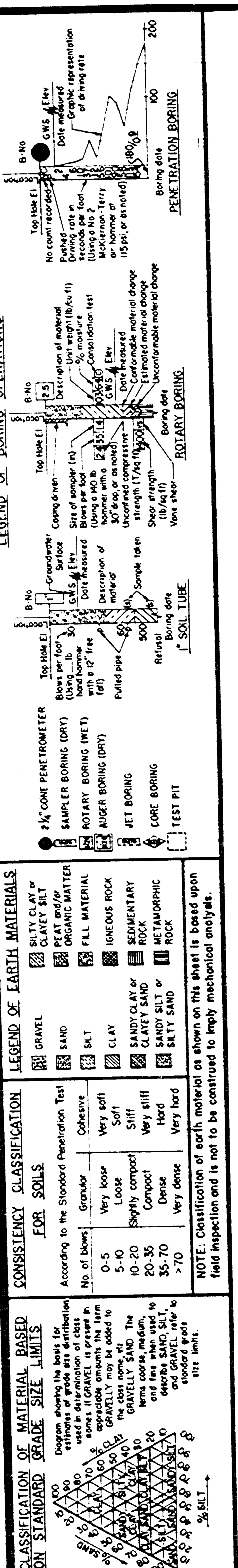
WO 172001
CU 08201

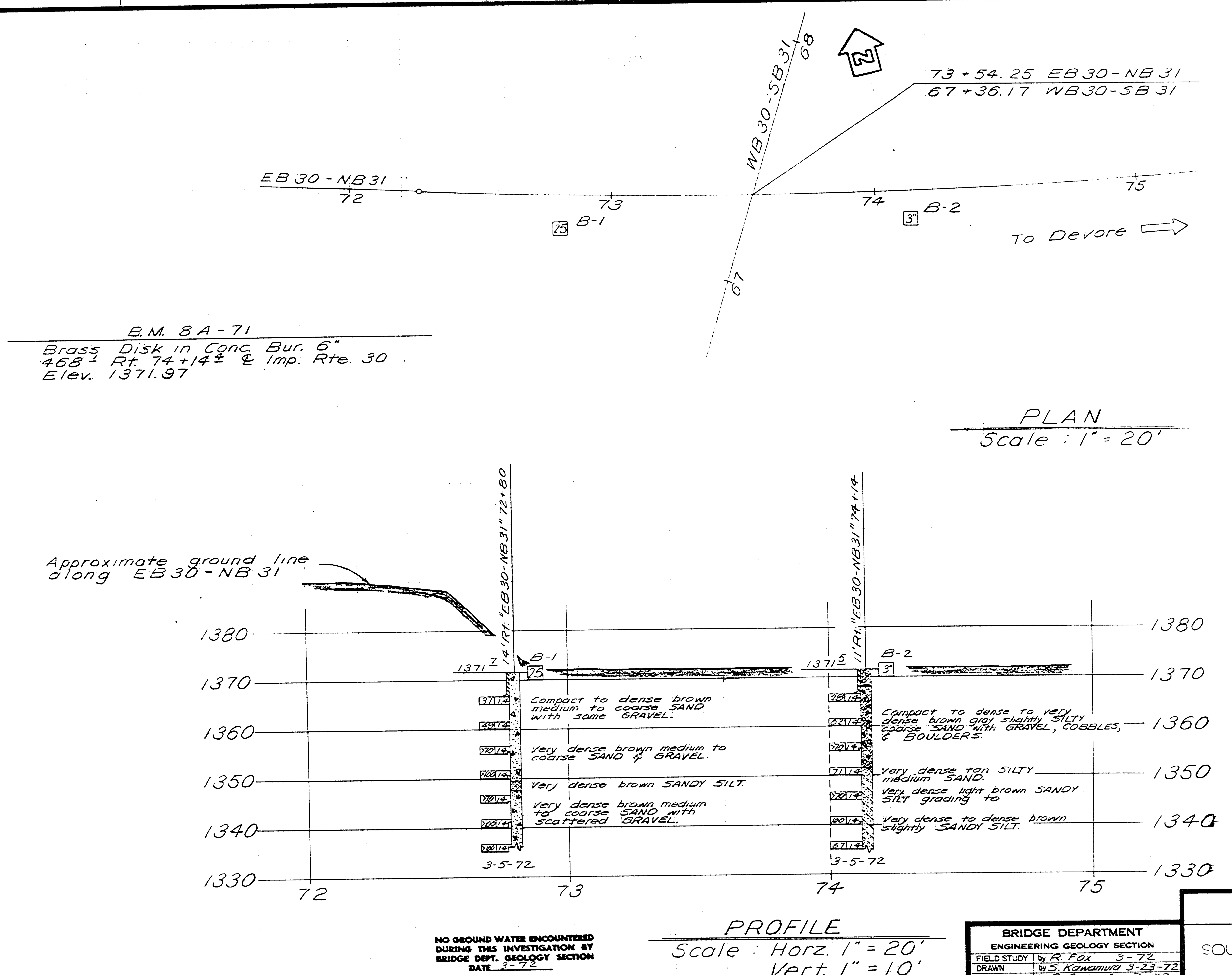
Disregard prints bearing earlier revision dates

REVISION DATES — (PRELIMINARY STAGE ONLY)

E210-N15 Connector / I-15 Separation

DIST	COUNTY	ROUTE	POST MILES	TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	30				


LEGEND OF BORING OPERATIONS
PENETRATION BORING
ROTARY BORING
1" SOIL TUBE
LEGEND OF EARTH MATERIALS
CONSISTENCY CLASSIFICATION FOR SOILS
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.


73 + 54.25 EB30-NB31
67 + 36.17 WB30-SB31
WB30-SB31
68
67
EB30-NB31
72
73
74
75
B-1
B-2
To Devore
B.M. 8A-71
Brass Disk in Conc. Bur. 6"
468± Rt. 74+14± ℄ Imp. Rte. 30
Elev. 1371.97
PLAN
Scale : 1" = 20'
Approximate ground line along EB30-NB31
14' Rt. "EB30-NB31" 72+80
11' Rt. "EB30-NB31" 74+14
1371.7
1371.5
B-1
B-2
1380
1370
1360
1350
1340
1330
Compact to dense brown medium to coarse SAND with some GRAVEL.
Very dense brown medium to coarse SAND & GRAVEL.
Very dense brown SANDY SILT.
Very dense brown medium to coarse SAND with scattered GRAVEL.
Compact to dense to very dense brown gray slightly SILTY coarse SAND with GRAVEL, COBBLES, & BOULDERS.
Very dense tan SILTY medium SAND.
Very dense light brown SANDY SILT grading to
Very dense to dense brown slightly SANDY SILT.
3-5-72
3-5-72
72
73
74
75
PROFILE
Scale : Horz. 1" = 20'
Vert. 1" = 10'

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE 3-72

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by R. Fox 3-72
DRAWN	by S. Kawamura 3-23-72
CHECKED	by R. Fox 4-7-72

Approval Recommended by ____________ Engineering Geologist
Certified Engineering Geologist No. ________

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

SOUTHWEST CONNECTOR SEPARATION

LOG OF TEST BORINGS

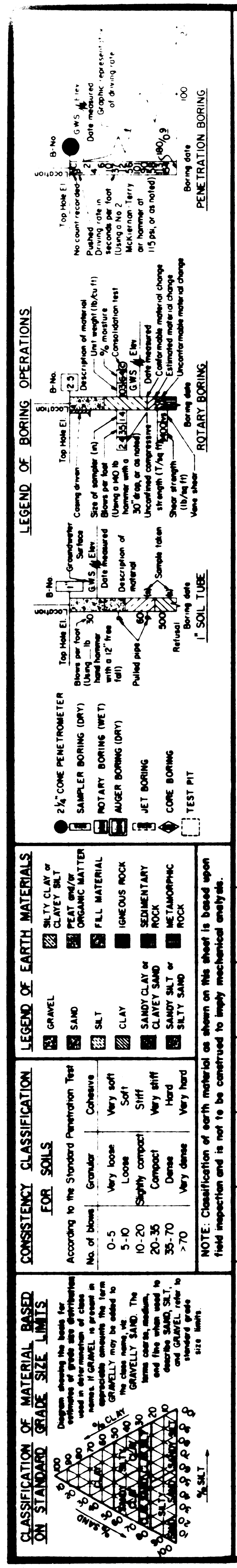
BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-958	11.6			

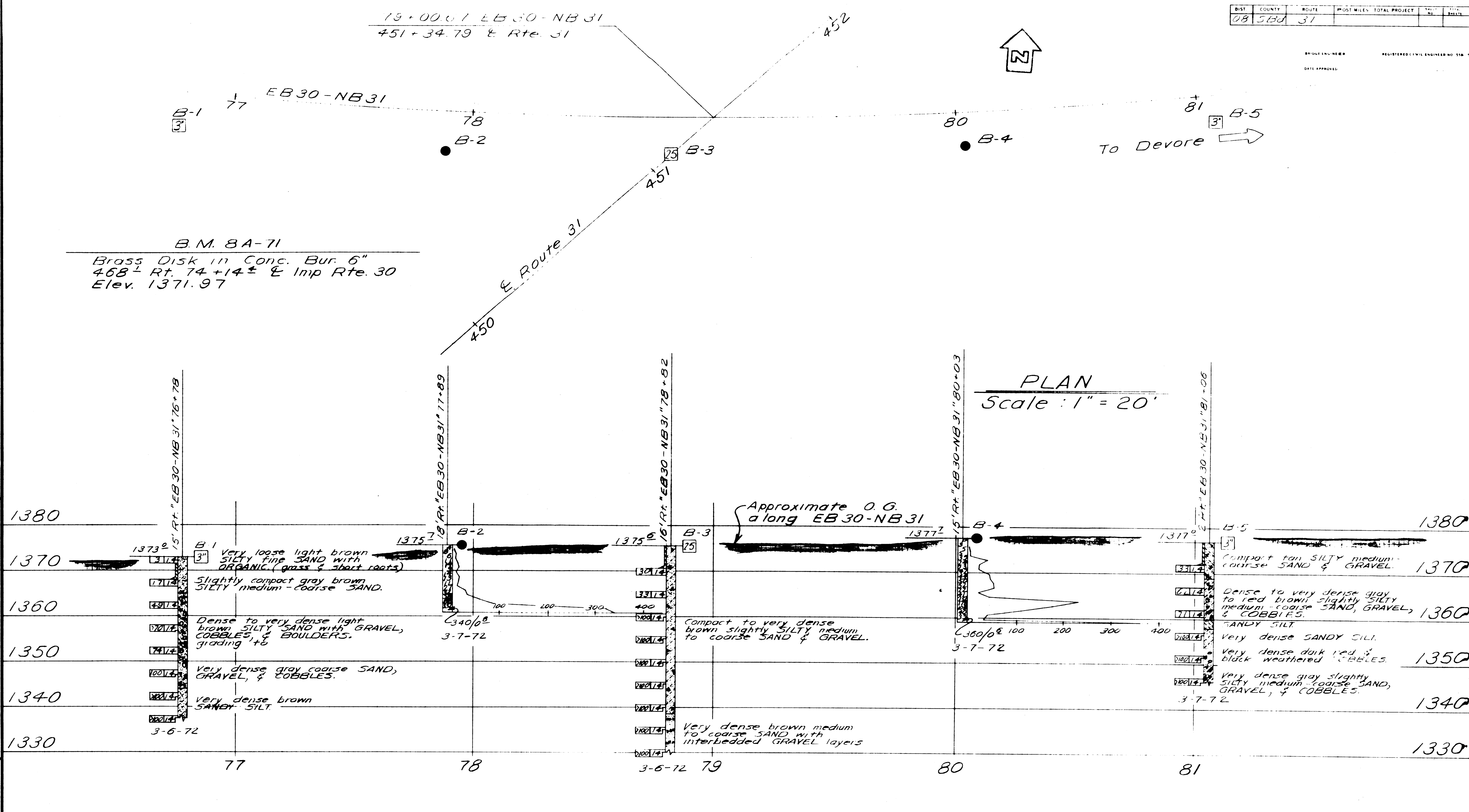
WO 132900
CU 08201

Disregard prints bearing earlier revision dates →

REVISION DATES (PRELIMINARY STAGE ONLY)

DIST	COUNTY	ROUTE	POST MILES	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	31				





19+00.67 EB 30 - NB 31
451+34.79 ℄ Rte. 31
EB 30 - NB 31
B-1
B-2
B-3
B-4
B-5
To Devore
B.M. 8A-71
Brass Disk in Conc. Bur. 6"
468± Rt. 74+14± ℄ Imp Rte. 30
Elev. 1371.97
℄ Route 31
PLAN
Scale : 1" = 20'
Approximate O.G. along EB 30-NB 31
Very loose light brown SILTY fine SAND with ORGANIC (grass & short roots)
Slightly compact gray brown SILTY medium - coarse SAND.
Dense to very dense light brown SILTY SAND with GRAVEL, COBBLES, & BOULDERS, grading to
Very dense gray coarse SAND, GRAVEL, & COBBLES.
Very dense brown SANDY SILT.
3-6-72
3-7-72
Compact to very dense brown slightly SILTY medium to coarse SAND & GRAVEL.
Very dense brown medium to coarse SAND with interbedded GRAVEL layers
Compact tan SILTY medium-coarse SAND & GRAVEL.
Dense to very dense gray to red brown slightly SILTY medium-coarse SAND, GRAVEL, & COBBLES.
SANDY SILT.
Very dense SANDY SILT.
Very dense dark red & black weathered COBBLES.
Very dense gray slightly SILTY medium-coarse SAND, GRAVEL, & COBBLES.
1380
1370
1360
1350
1340
1330
77
78
79
80
81

PROFILE
Scale : Horz. 1" = 20'
Vert. 1" = 10'

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE 3-72

BRIDGE DEPARTMENT	
ENGINEERING GEOLOGY SECTION	
FIELD STUDY	by R. Fox 3-72
DRAWN	by S. Kawamura 3-22-72
CHECKED	by R. Fox 3-72
Approval Recommended by ________ Engineering Geologist	
Certified Engineering Geologist No. ________	

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

SOUTHWEST CONNECTOR OVERCROSSING

LOG OF TEST BORINGS

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-966	8.1			

REVISION DATES (PRELIMINARY STAGE ONLY)

Disregard prints bearing earlier revision dates →

WO 132900
CU 08201

SR 210 / I-15 Separation


DIST. COUNTY ROUTE POST MILES—TOTAL PROJECT SHEET NO. TOTAL SHEETS
08 SBd 30/31
460 + 25.02 ℄ Rte. 31 =
478 + 44.89 ℄ NB-WB Loop
℄ Rte. 31
461
℄ NB-WB
462
B-7
B-3
℄ NB-WB Loop
480
479
478
477
476
475
474
B-6
B-8
To Los Angeles
84 + 00.00 ℄ Rte. 30 =
458 + 99.83 ℄ Rte. 31
℄ Rte. 30
79 80 81 82 83 85 86 87 88 89
B-2
B-5
B-9
To San Bernadino
457
458
℄ Collector Rd.
℄ SB-EB Loop
444
443
B-1
B-4
B-10
℄ SB-EB Loop
456
455
B.M. -9B-71
Brass Disk in conc. bur. 6"
150± Lt. 81+44± ℄ Imp. Rte. 30
Elev. 1387.47
82 + 85.51 ℄ Collector Rd. =
457 + 37.04 ℄ Rte. 31
PLAN
Scale : 1" = 50'
108' Rt. "℄ Rte. 30" 79+82
40' Rt. "℄ Rte. 30" 81+12
100' Rt. "℄ Rte. 30" 82+55
94' Lt. "℄ Rte. 30" 82+62
41' Rt. "℄ Rte. 30" 83+59
12' Lt. "℄ Rte. 30" 84+73
159' Rt. "℄ Rte. 30" 84+74
44' Rt. "℄ Rte. 30" 85+81
9' Lt. "℄ Rte. 30" 86+91
122' Lt. "℄ Rte. 30" 87+75
1400 1390 1380 1370 1360 1350 1340
B-1 Light brown SANDY SILT with fine & coarse PEBBLE GRAVEL & BOULDERS
Compact brown SILTY SAND with fine & coarse PEBBLE GRAVEL & BOULDERS.
Dense to very dense brown SANDY SILT with scattered small PEBBLE GRAVEL.
Very dense brown SANDY SILT with fine & coarse PEBBLE GRAVEL.
Very dense brown SILTY fine to coarse grained SAND with small PEBBLE GRAVEL.
Very dense light brown SANDY SILT with small PEBBLE GRAVEL.
Very dense light brown SANDY SILT with fine & coarse PEBBLE GRAVEL.
3-17-72
B-2
300/0 100 200 300 3-16-72
B-4
300/0 3-16-72
3-16-72
B-3
Dense gray brown slightly SILTY medium & coarse SAND & GRAVEL.
Very dense gray medium to coarse SANDY GRAVEL (partially cemented)
Very dense gray brown slightly SILTY medium & coarse SAND with scattered GRAVEL.
3-17-72
B-5
Slightly compact brown fine SANDY SILT with scattered GRAVEL.
Compact light brown SANDY SILT medium to coarse SAND & GRAVEL
Very dense gray brown SILTY SAND with partially cemented GRAVEL & scattered COBBLES.
Very dense gray medium-coarse SAND with partially cemented GRAVEL & scattered COBBLES.
Very dense gray brown SILTY coarse SAND with partially cemented GRAVEL.
3-18-72
B-6 Brown SANDY SILT with scattered GRAVEL & COBBLES
Compact gray brown SILTY SAND with GRAVEL.
Very dense gray brown SILTY SAND with GRAVEL & scattered COBBLES.
Very dense gray brown slightly SILTY medium-coarse SAND & GRAVEL (partially cemented)
3-18-72
B-10
Light brown SANDY SILT with scattered fine & coarse PEBBLE GRAVEL grading to BOULDERS.
Compact to dense light brown SANDY SILT with scattered fine & coarse PEBBLE GRAVEL.
300 200 100 300/0 3-1-72
Very dense light brown medium & coarse grained SANDY SILT with scattered fine & coarse PEBBLE GRAVEL & BOULDERS.
3-19-72
B-8
B-9
Approx. O.G. along ℄ Rte. 30
Dense to very dense brown SANDY SILT with scattered fine & coarse PEBBLE GRAVEL & BOULDERS.
300/0 100 200 300
3-16-72
B-7
80 81 82 83 84 85 86 87 88
LEGEND OF BORING OPERATIONS
PENETRATION BORING
ROTARY BORING
1" SOIL TUBE
CONE PENETROMETER
SAMPLER BORING (DRY)
ROTARY BORING (WET)
AUGER BORING (DRY)
JET BORING
CORE BORING
TEST PIT
LEGEND OF EARTH MATERIALS
GRAVEL
SAND
SILT
CLAY
SANDY CLAY or CLAYEY SAND
SANDY SILT or SILTY SAND
SILTY CLAY or CLAYEY SILT
PEAT and/or ORGANIC MATTER
FILL MATERIAL
IGNEOUS ROCK
SEDIMENTARY ROCK
METAMORPHIC ROCK
CONSISTENCY CLASSIFICATION FOR SOILS
According to the Standard Penetration Test
No. of blows | Granular | Cohesive
0-5 | Very loose | Very soft
5-10 | Loose | Soft
10-20 | Slightly compact | Stiff
20-35 | Compact | Very stiff
35-70 | Dense | Hard
>70 | Very dense |
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE 3-72
PROFILE
Scale : Horz. 1" = 30'
Vert. 1" = 10'

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by R. Fox	3-72
DRAWN	by S. Kawamura	4-24-72
CHECKED	by R. Fox	5-30-72

Approval Recommended by ________ Engineering Geologist

Certified Engineering Geologist No. ________

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

ROUTE 30/31 SEPARATION

LOG OF TEST BORINGS

BRIDGE NO. 54-361 R/L | POST MILE 11.8 | DRAWING NO. | SHEET | OF

WO 172001
CU 08201

Disregard prints bearing earlier revision dates

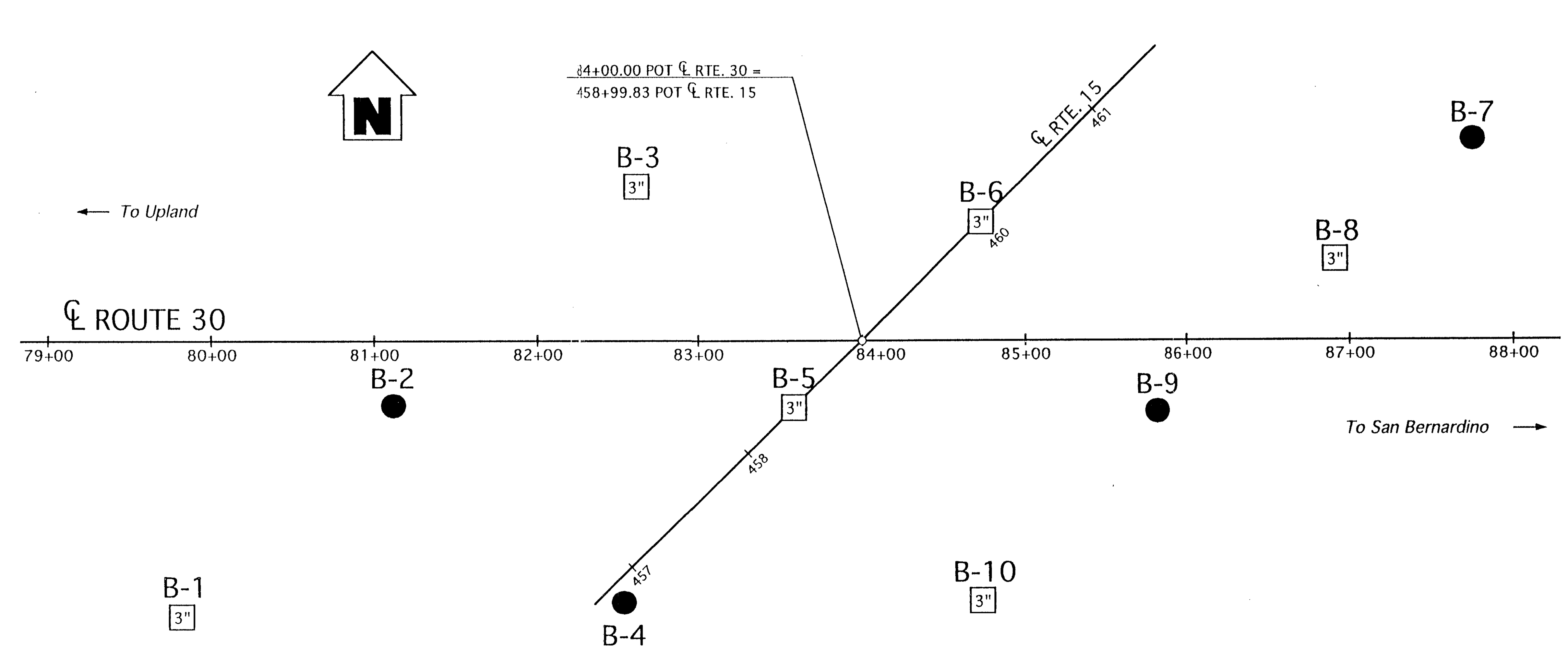
REVISION DATES (PRELIMINARY STAGE ONLY)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	30			

REGISTERED PROFESSIONAL ENGINEER M. DESALVATORE No. 39499 Exp. 12-31-97 CIVIL STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

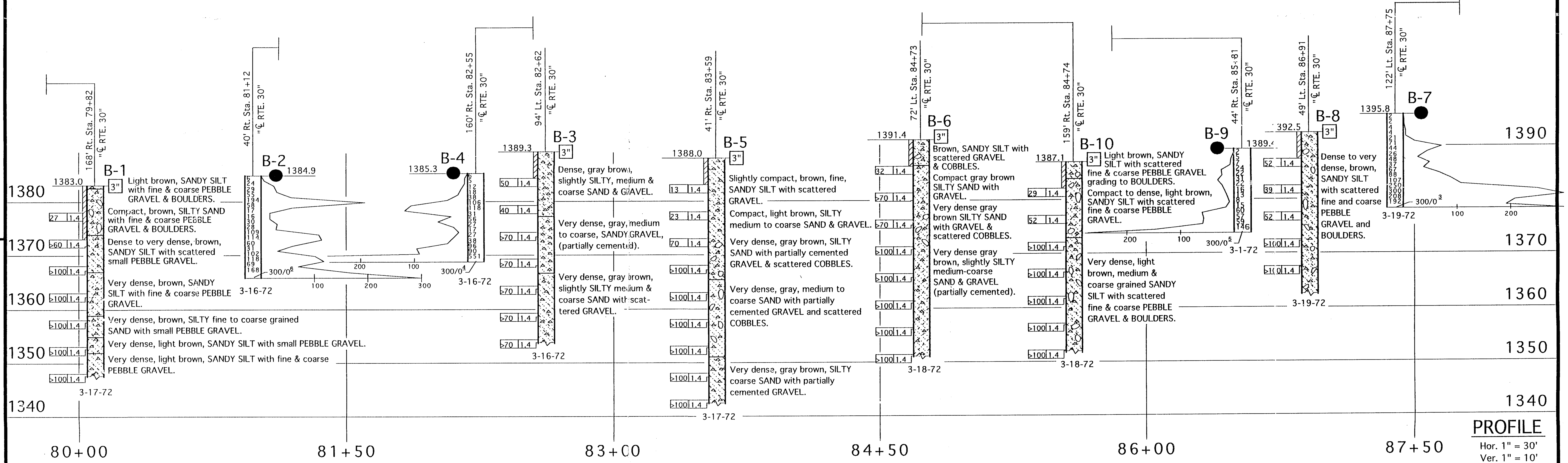


PLAN
1" = 60'

BENCH MARK

BRASS DISK IN CONC. BUR. 6" 150± LT.
81+44.5 C/L IMP. RTE. 30.
ELEV. 1387.47

NOTE: NO GROUND WATER ENCOUNTERED DURING FIELD INVESTIGATION.



PROFILE
Hor. 1" = 30'
Ver. 1" = 10'

LEGEND OF BORING OPERATIONS

LEGEND OF EARTH MATERIALS: GRAVEL, SAND, SILT, CLAY, SANDY CLAY or CLAYEY SAND, SANDY SILT or SILTY SAND, SILTY CLAY, CLAYEY SILT, PEAT and/or ORGANIC MATTER, FILL MATERIAL, IGNEOUS ROCK, SEDIMENTARY ROCK, METAMORPHIC

CONSISTENCY CLASSIFICATION FOR SOILS
According to the Standard Penetration Test

Penetration Index (Blows / Ft)	Granular	Cohesive
0-4	Very Loose	Very Soft
5-9	Loose	Soft
10-19	Slightly compact	Very Stiff
20-34	Compact	Stiff
35-69	Dense	Hard
>70	Very Dense	Very Hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

ENGINEERING SERVICE CENTER	STRUCTURE FOUNDATIONS	FIELD INVESTIGATION BY: R.W. FOX	State of CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF STRUCTURES STRUCTURE DESIGN	BRIDGE NO. 54-0961 POST MILE R11.6	ROUTE 15/30 SEPARATION LOG OF TEST BORINGS
DRAWN BY	5/96					
CHECKED BY						

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU: 08236
EA: 204301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY) SHEET OF

TI 6052 REV. 5/95

S15-E210 Connector Separation

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	30/31			

REGISTERED ENGINEERING GEOLOGIST

REGISTERED PROFESSIONAL ENGINEER — R. MAHALLATI — No. 49374 — Exp. 9-30-96 — CIVIL — STATE OF CALIFORNIA

PLANS APPROVAL DATE

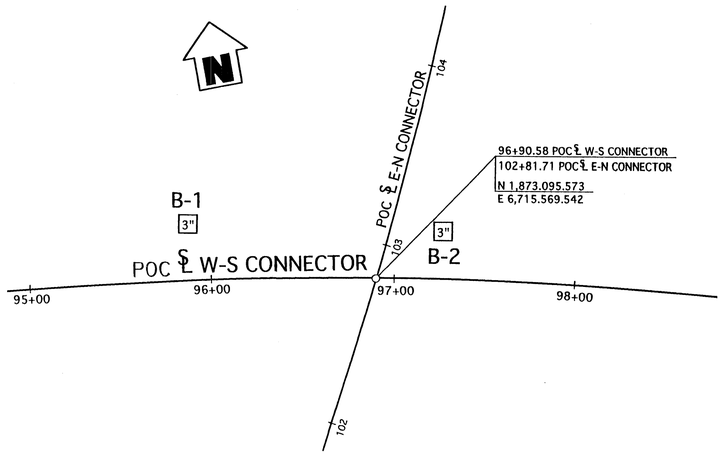
BENCH MARK

BM #1-11-86 Elev. 1410.54'

AERIAL TARGET LOCATED ON RIGHT SHOULDER APPROX. 90± RIGHT OF STATION 469+30± C/L ROUTE 15.

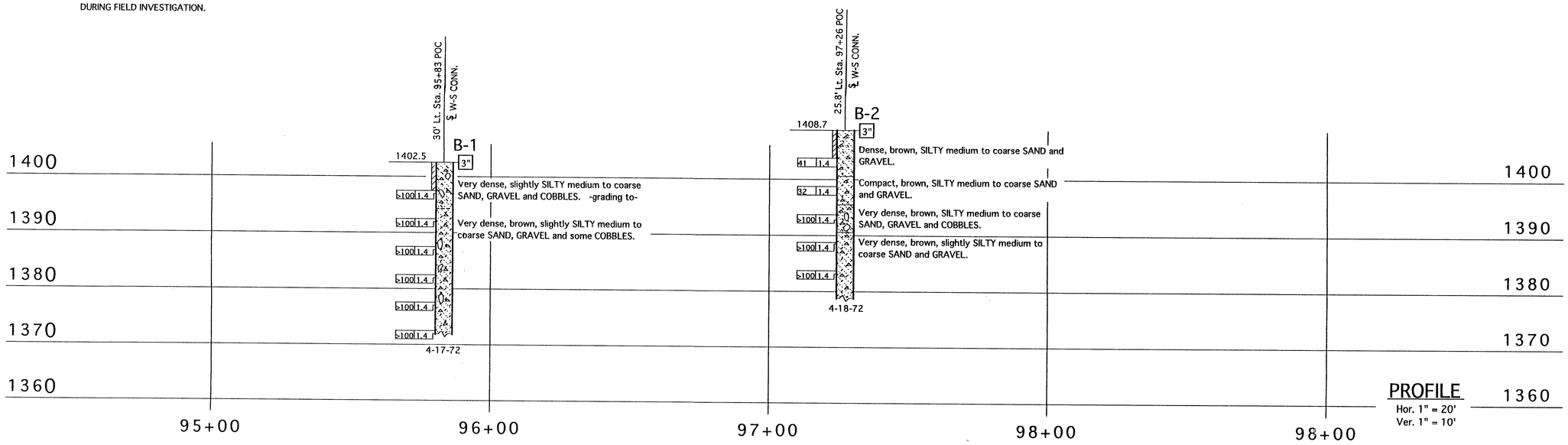
BM #1-12-86 Elev. 1421.12

AERIAL TARGET LOCATED ON RIGHT SHOULDER APPROX. 95± RIGHT OF STATION 474+15± C/L ROUTE 15.



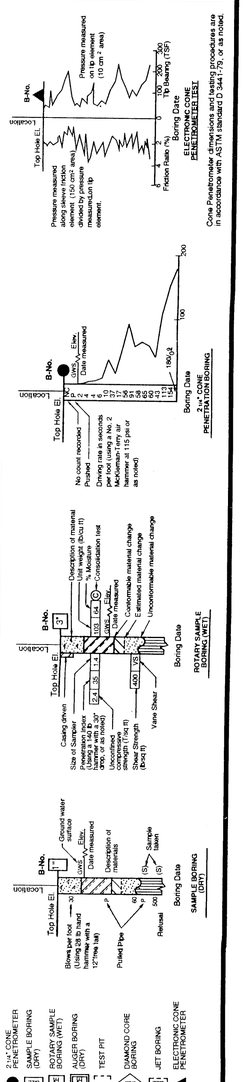
PLAN
1" = 40'

NOTE: NO GROUND WATER ENCOUNTERED DURING FIELD INVESTIGATION.



PROFILE
Hor. 1" = 20'
Ver. 1" = 10'

LEGEND OF BORING OPERATIONS



LEGEND OF EARTH MATERIALS

CLAYEY SILT; PEAT and/or ORGANIC MATTER; FILL MATERIAL; IGNEOUS ROCK; SEDIMENTARY ROCK; METAMORPHIC ROCK; GRAVEL; SAND; SILT; CLAY; SANDY CLAY or CLAYEY SAND; SILTY SAND or SANDY SILT; SILTY CLAY

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

Penetration Index (Blows / Ft)	Granular	Cohesive
0-4	Very Loose	Very Soft
5-9	Loose	Soft
10-19	Slightly compact	Stiff
20-34	Compact	Very Stiff
35-69	Dense	Hard
>70	Very Dense	Very Hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

ENGINEERING SERVICE CENTER	STRUCTURE FOUNDATIONS
DRAWN BY	Irma Yermana 3/96
CHECKED BY	

FIELD INVESTIGATION BY: R.W. FOX 4/72

State of CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN

CU: 08236
EA: 204301

BRIDGE NO.	WESTSOUTH CONNECTOR SEPARATION
54-0959F	LOG OF TEST BORINGS
POST MILE	
R11.9-Fna	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS → 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

TL 6052 REV. 5/95

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	15,30	7.1/10.1, R10.0/R13.1	987	1184

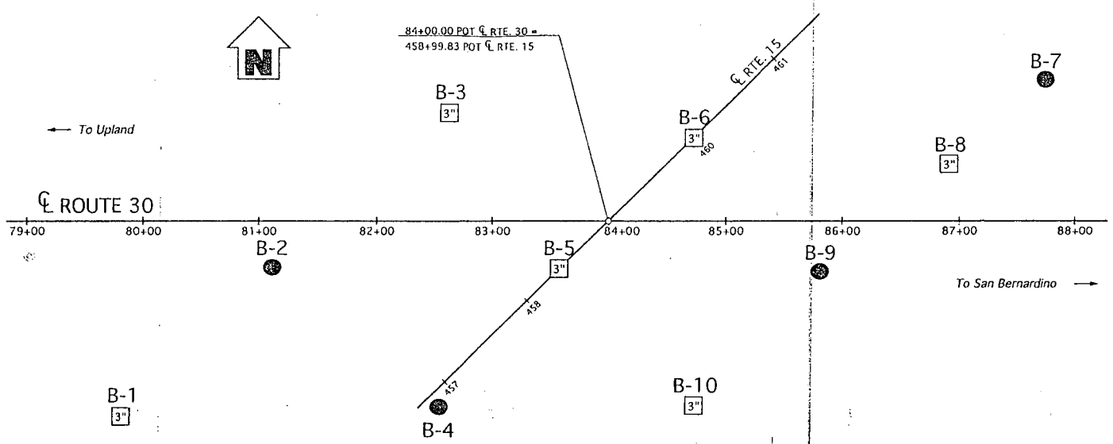
REGISTERED PROFESSIONAL ENGINEER
M. DESALVATORE
No. 39499
Exp. 12-31-97
CIVIL
STATE OF CALIFORNIA

8-4-97
PLANS APPROVAL DATE

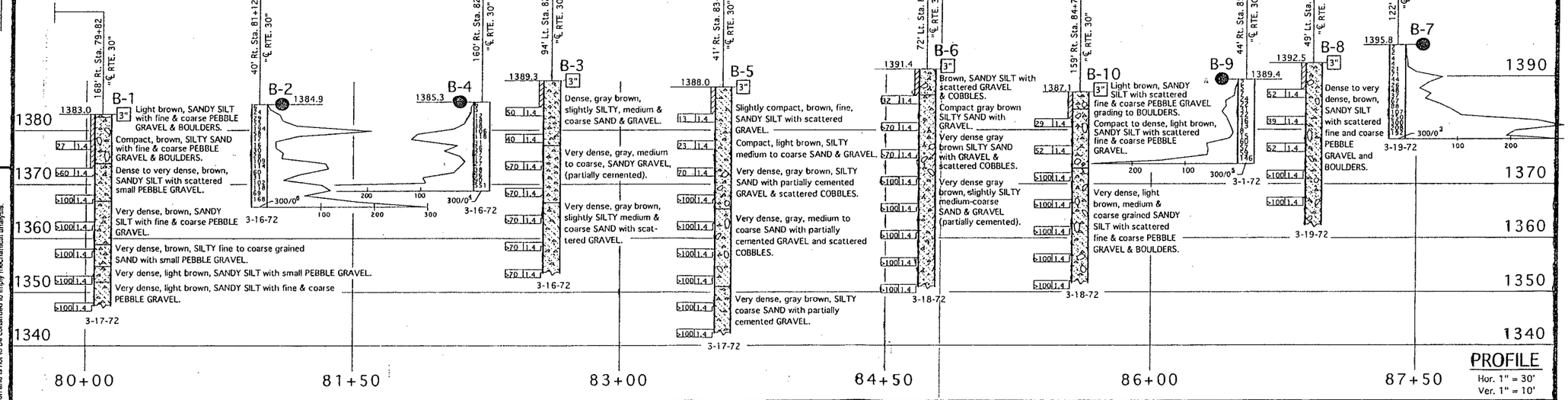
BENCH MARK

BRASS DISK IN CONC. BUR. 6" 150± LT.
81+44.5 C/L IMP. RTE. 30.
ELEV. 1387.47

NOTE: NO GROUND WATER ENCOUNTERED DURING FIELD INVESTIGATION.

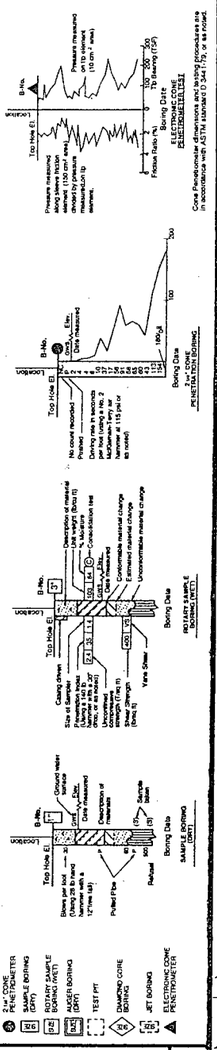


PLAN
1" = 60'

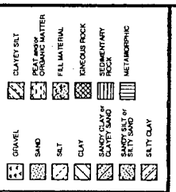


PROFILE
Hor. 1" = 30'
Ver. 1" = 10'

LEGEND OF BORING OPERATIONS



LEGEND OF EARTH MATERIALS



CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

Penetration Index (Blows / Ft)	Granular	Cohesive
0-4	Very Loose	Very Soft
5-9	Loose	Soft
10-19	Slightly compact	Stiff
20-34	Compact	Very Stiff
35-69	Dense	Hard
>70	Very Dense	Very Hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

ENGINEERING SERVICE CENTER	STRUCTURE FOUNDATIONS
DRAWN BY	5/96
CHECKED BY	

FIELD INVESTIGATION BY: R.W. FOX

State of CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF STRUCTURES
STRUCTURE DESIGN

BRIDGE NO.	54-0961
POST MILE	R11.6

ROUTE 15/30 SEPARATION
LOG OF TEST BORINGS

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS → 0 1 2 3

CU: 08236
EA: 204301

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)

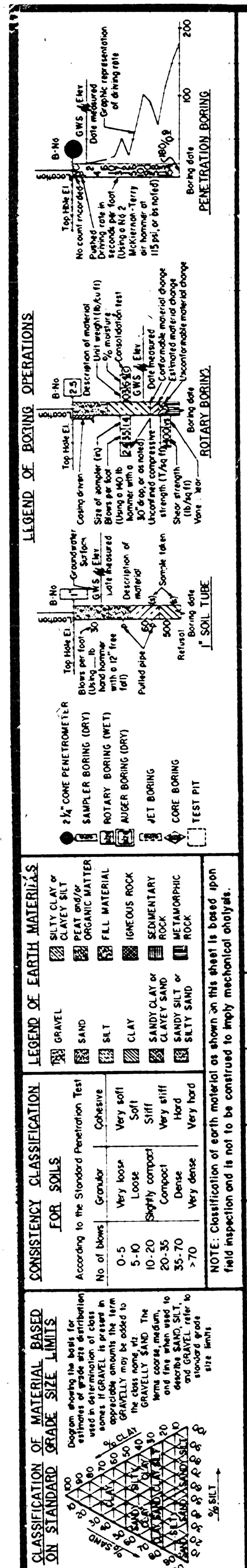
SHEET 33 OF 33

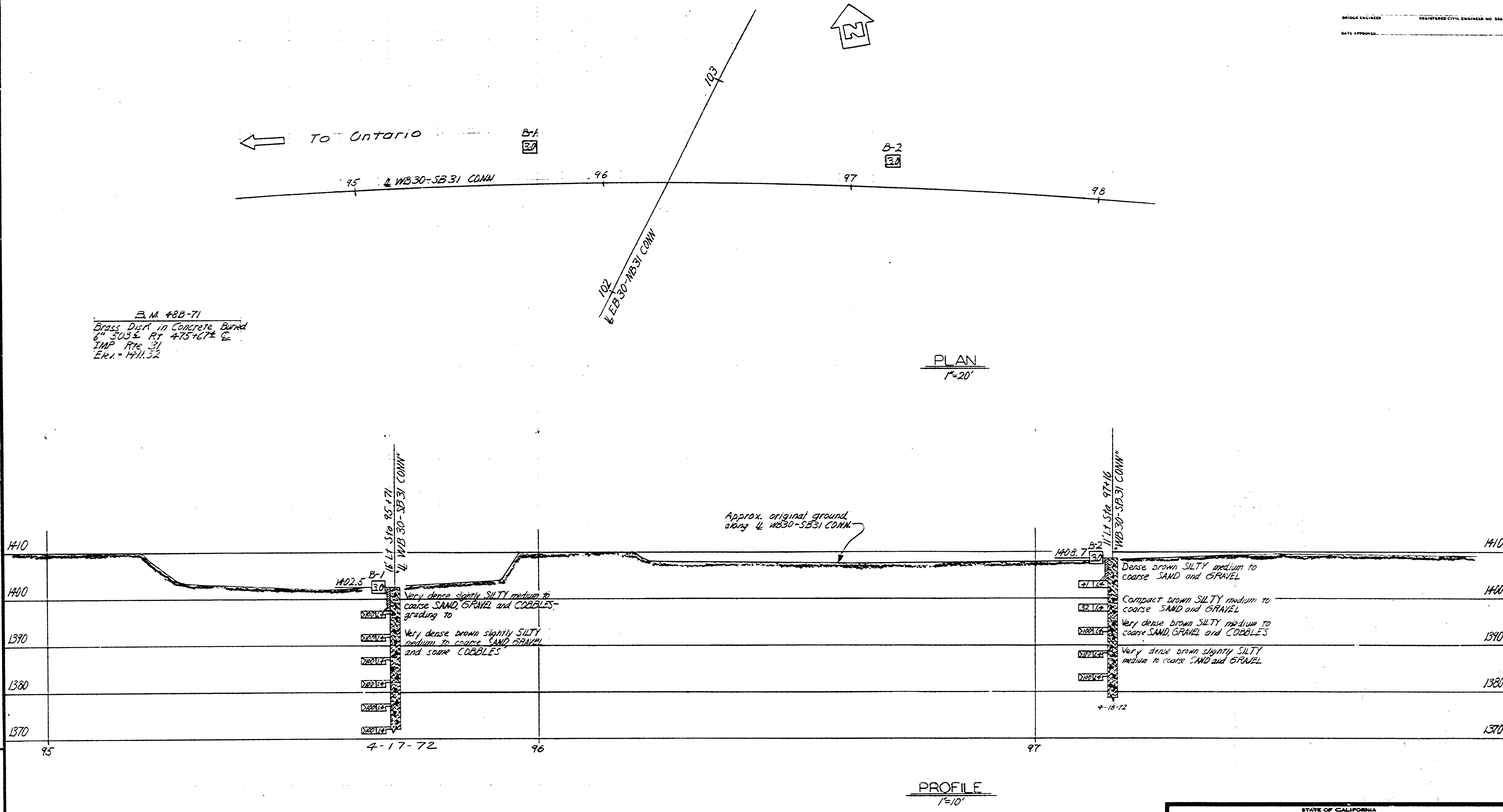
TL 6052 REV. 5/95

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	30/31 I.C.			

BRIDGE ENGINEER ______ REGISTERED CIVIL ENGINEER NO. 5565

DATE APPROVED ______





To Ontario
B-1
3.0
B-2
3.0
95
℄ WB30-SB31 CONN
96
97
98
103
102
℄ EB30-NB31 CONN
B.M. 48B-71
Brass Disk in Concrete Buried
6" 503± Rt 475+67± ℄
IMP Rte 31
Elev.= 1411.32
PLAN
1"=20'
Approx. original ground
along ℄ WB30-SB31 CONN.
1410
1400
1390
1380
1370
1402.5
16' Lt Sta 95+71
℄ WB 30-SB31 CONN
Very dense slightly SILTY medium to coarse SAND, GRAVEL and COBBLES-grading to
Very dense brown slightly SILTY medium to coarse SAND, GRAVEL and some COBBLES
4-17-72
1408.7
11' Lt Sta 97+16
℄ WB 30-SB31 CONN
Dense brown SILTY medium to coarse SAND and GRAVEL
Compact brown SILTY medium to coarse SAND and GRAVEL
Very dense brown SILTY medium to coarse SAND, GRAVEL and COBBLES
Very dense brown slightly SILTY medium to coarse SAND and GRAVEL
4-18-72
PROFILE
1"=10'

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE 4-18-72

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by R. FOX	4-72
DRAWN	by D.G. SCHOTT	5-72
CHECKED	by R. FOX	5-30-72

Approval Recommended by ______ Engineering Geologist

Certified Engineering Geologist No. ______

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

NORTHEAST CONNECTOR SEPARATION

LOG OF TEST BORINGS

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-959	R 12.0			

WO 173001
CU 08201

Disregard prints bearing earlier revision dates → REVISION DATES (PRELIMINARY STAGE ONLY)

W210-S15 Connector / I-15 Separation

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	30/31			

REGISTERED ENGINEERING GEOLOGIST

REGISTERED PROFESSIONAL ENGINEER — R. MAHALLATI — No. 49374 — Exp. 9-30-96 — CIVIL — STATE OF CALIFORNIA

PLANS APPROVAL DATE

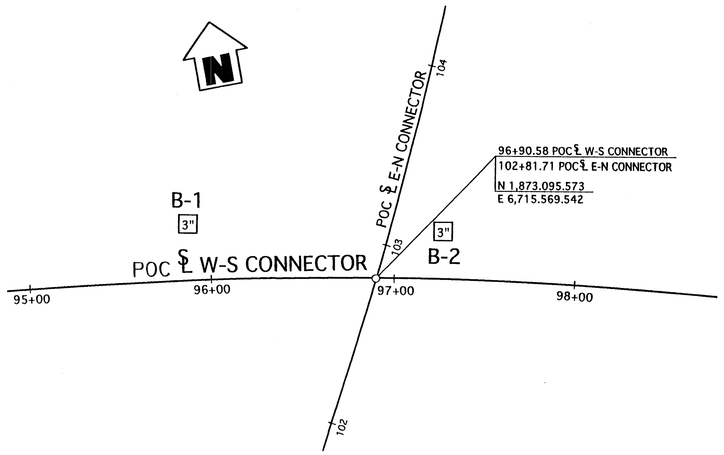
BENCH MARK

BM #1-11-86 Elev. 1410.54'

AERIAL TARGET LOCATED ON RIGHT SHOULDER APPROX. 90± RIGHT OF STATION 469+30± C/L ROUTE 15.

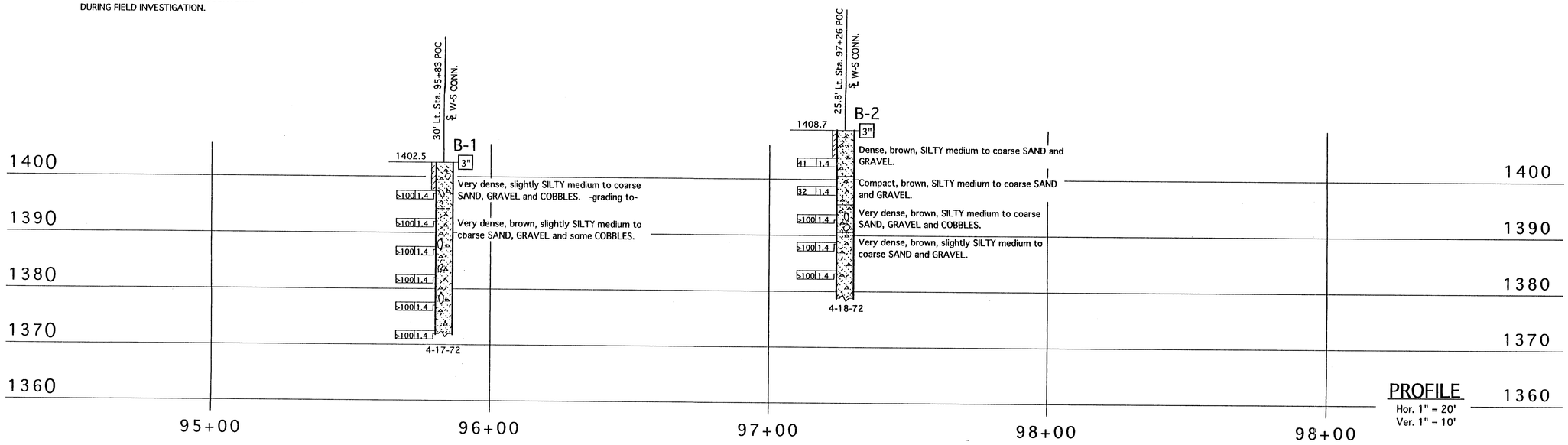
BM #1-12-86 Elev. 1421.12

AERIAL TARGET LOCATED ON RIGHT SHOULDER APPROX. 95± RIGHT OF STATION 474+15± C/L ROUTE 15.



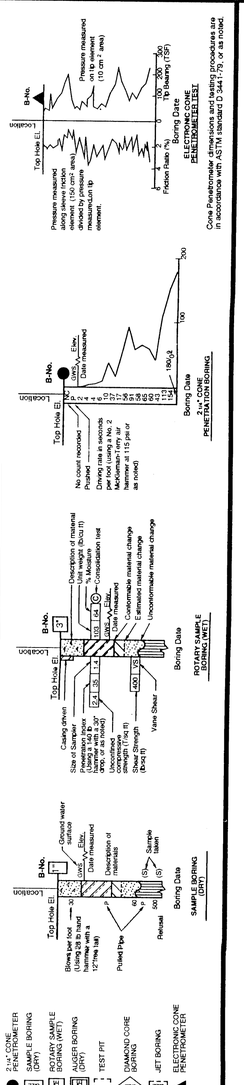
PLAN
1" = 40'

NOTE: NO GROUND WATER ENCOUNTERED DURING FIELD INVESTIGATION.



PROFILE
Hor. 1" = 20'
Ver. 1" = 10'

LEGEND OF BORING OPERATIONS



LEGEND OF EARTH MATERIALS

GRAVEL · SAND · SILT · CLAY · SANDY CLAY or CLAYEY SAND · SILTY SAND or SANDY SILT · SILTY CLAY · CLAYEY SILT · PEAT and/or ORGANIC MATTER · FILL MATERIAL · IGNEOUS ROCK · SEDIMENTARY ROCK · METAMORPHIC ROCK

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

Penetration Index (Blows / Ft)	Granular	Cohesive
0-4	Very Loose	Very Soft
5-9	Loose	Soft
10-19	Slightly compact	Stiff
20-34	Compact	Very Stiff
35-69	Dense	Hard
>70	Very Dense	Very Hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

ENGINEERING SERVICE CENTER	STRUCTURE FOUNDATIONS
DRAWN BY	Irma Yermana 3/96
CHECKED BY	

FIELD INVESTIGATION BY:
R.W. FOX 4/72

State of CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN

CU: 08236
EA: 204301

BRIDGE NO.	WESTSOUTH CONNECTOR SEPARATION
54-0959F	
POST MILE	LOG OF TEST BORINGS
R11.9-Fna	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS → 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

TL 6052 REV. 5/95

Cherry Avenue UC

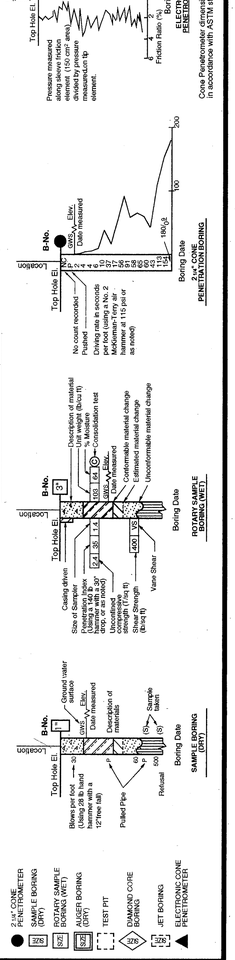
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	15			

REGISTERED PROFESSIONAL ENGINEER
R. MAHALLATI
No. 49374
Exp. 9-30-96
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS 1 OF 3"

LEGEND OF BORING OPERATIONS



LEGEND OF EARTH MATERIALS

GRAVEL · SAND · SILT · CLAY · SANDY CLAY or CLAYEY SAND · SANDY SILT or SILTY SAND · SILTY CLAY · CLAYEY SILT · PEAT and/or ORGANIC MATTER · FILL MATERIAL · IGNEOUS ROCK · SEDIMENTARY ROCK · METAMORPHIC ROCK

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

Penetration Index (Blows / Ft)	Granular	Cohesive
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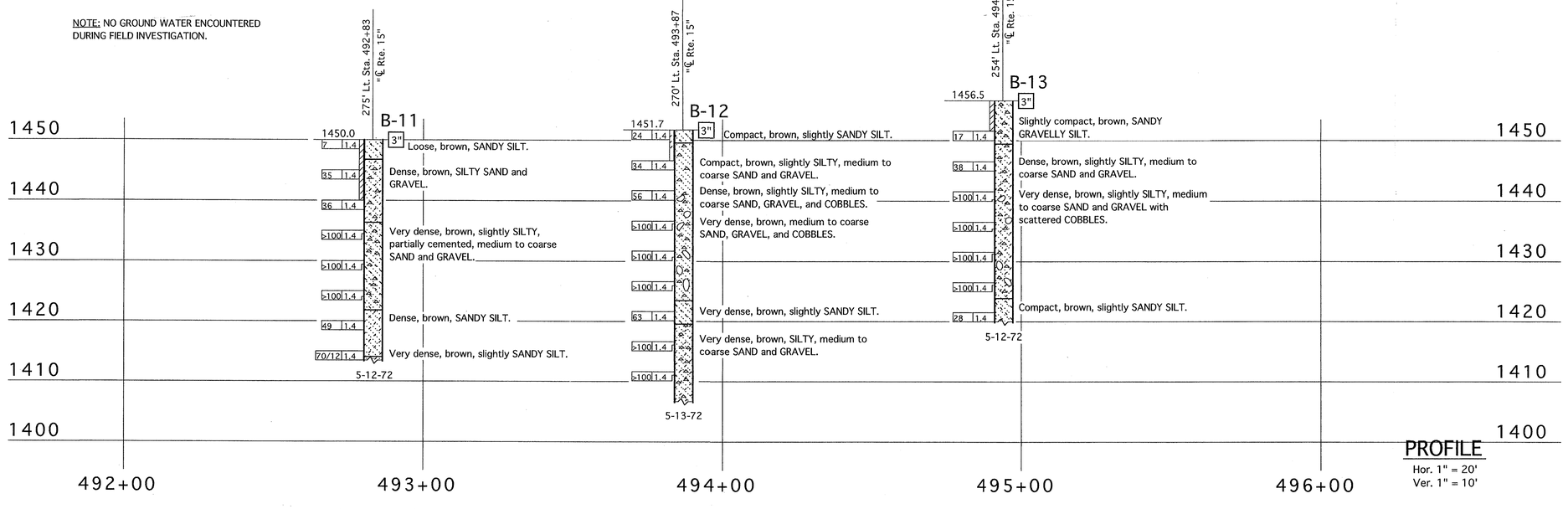
10-19	Slightly compact	Stiff
20-34	Compact	Very Stiff
35-69	Dense	Hard
>70	Very Dense	Very Hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

NOTE: NO GROUND WATER ENCOUNTERED DURING FIELD INVESTIGATION.



PROFILE
Hor. 1" = 20'
Ver. 1" = 10'

ENGINEERING SERVICE CENTER	STRUCTURE FOUNDATIONS	FIELD INVESTIGATION BY:	State of CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF STRUCTURES STRUCTURE DESIGN	BRIDGE NO. 54-0970 L/R	CHERRY AVE. UNDERCROSSING (WIDEN)
DRAWN BY Irma Gamana 5/96		R. W. FOX			POST MILE 8.83RCUc	LOG OF TEST BORINGS 2 OF 3
CHECKED BY				CU: 08236 EA: 204301		

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS → 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
	18	19

TL 6052 REV. 5/95


LEGEND OF BORING OPERATIONS
PENETRATION BORING
ROTARY BORING
1" SOIL TUBE
1 3/8" CONE PENETROMETER
SAMPLER BORING (DRY)
ROTARY BORING (WET)
AUGER BORING (DRY)
JET BORING
CORE BORING
TEST PIT
LEGEND OF EARTH MATERIALS
GRAVEL
SAND
SILT
CLAY
SANDY CLAY or CLAYEY SAND
SANDY SILT or SILTY SAND
SILTY CLAY or CLAYEY SILT
PEAT and/or ORGANIC MATTER
FILL MATERIAL
IGNEOUS ROCK
SEDIMENTARY ROCK
METAMORPHIC ROCK
CONSISTENCY CLASSIFICATION FOR SOILS
According to the Standard Penetration Test
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
B-8
B-9
B-10
B-6
B-7
E Cherry Ave.
225
223
224
E Rte. 31
489
490
491
492
493
To Ontario
To Devore
491 + 15.12 E Rte. 31 P.O.T. =
224 + 04.33 E Cherry Ave. P.O.T
PLAN
Scale : 1" = 20'
B.M. 50A-71
Brass Disk in Conc.
Bur. 6" 235± Rt.
490 + 63± E Imp Rte. 31
Elev. 1443.20
Approximate O.G. along E Rte. 31.
75' Rt. "E Rte. 31" 489 + 30
75' Lt. "E Rte. 31" 490 + 81
10' Rt. "E Rte. 31" 491 + 05
84' Rt. "E Rte. 31" 491 + 42
02' Lt. "E Rte. 31" 492 + 88
1450
1440
1430
1420
1410
1400
1390
1441.0
1444.7
1446.2
1446.8
1448.9
Compact brown medium to coarse SAND, GRAVEL.
Very dense to dense to very dense brown partially cemented medium to coarse SAND, GRAVEL, & COBBLES.
Dense brown SANDY SILT grading to
Very dense brown slightly SILTY medium to coarse SAND
5-9-72
Slightly compact brown SANDY SILT.
Dense brown slightly SILTY medium to coarse SAND & GRAVEL.
Very dense brown medium to coarse SAND, GRAVEL, & scattered COBBLES.
Dense brown SILTY medium to coarse SAND.
5-10-72
Loose brown slightly SANDY SILT.
Dense to very dense brown SILTY medium to coarse SAND & GRAVEL with scattered COBBLES.
Very dense brown SILTY medium to coarse SAND grading to
Dense brown slightly SANDY SILT.
5-11-72
Slightly compact brown SANDY SILT.
Dense brown slightly SILTY medium to coarse SAND, GRAVEL & scattered COBBLES.
Very dense brown partially cemented medium to coarse SAND, GRAVEL, & COBBLES.
Compact brown SANDY SILT.
5-9-72
Compact brown slightly SANDY SILT.
Very dense brown SILTY medium to coarse SAND & GRAVEL.
Very dense brown SILTY medium to coarse SAND, GRAVEL, & scattered COBBLES.
Slightly compact brown SANDY SILT.
Very dense brown SILTY medium to coarse SAND.
5-10-72
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE 5-72
PROFILE
Scale : Horz. 1" = 20'
Vert. 1" = 10'
DIST. 08 COUNTY SBd ROUTE 31
BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION
FIELD STUDY by R. Fox 5-72
DRAWN by S. Kawamura 5-30-72
CHECKED by R. Fox 6-20-72
Approval Recommended by
Engineering Geologist
Certified Engineering Geologist No.
STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
CHERRY AVENUE UNDERCROSSING
LOG OF TEST BORINGS
BRIDGE NO. 54-970 R/L
POST MILE 8.9
DRAWING NO.
SHEET OF
WO 172001
CU 08201
Disregard prints bearing earlier revision dates
REVISION DATES
(PRELIMINARY STAGE ONLY)


DIST. 08 | COUNTY SBd | ROUTE 31
To Los Angeles
B-11 SB31-WB30 B-12 B-13
492 493 494 495
228
493 + 73.87 SB 31 - WB 30
227 + 78.42 ℄ Cherry Ave.
B.M. 50A-71
Brass Disk in Conc
Bur. 6" 235± Rt.
490 + 63± ℄ Imp Rte. 31
Elev. 1443.20
PLAN
Scale : 1" = 20'
Approximate O.G. along SB31 - WB30
On Line "SB31-WB30" 492+74
4' Lt. "SB31-WB30" 493+77
On Line "SB31-WB30" 494+86
1460 1450 1440 1430 1420 1410 1400
1450.0 1451.7 1456.5
Loose brown SANDY SILT.
Dense brown SILTY SAND & GRAVEL.
Very dense brown slightly SILTY partially cemented medium to coarse SAND & GRAVEL.
Dense brown SANDY SILT.
Very dense brown slightly SANDY SILT
5-12-72
Compact brown slightly SANDY SILT.
Compact brown slightly SILTY medium to coarse SAND & GRAVEL.
Dense brown slightly SILTY SAND, GRAVEL, & COBBLES.
Very dense brown medium to coarse SAND, GRAVEL, & COBBLES.
Very dense brown slightly SANDY SILT.
Very dense brown SILTY medium to coarse SAND & GRAVEL.
5-13-72
Slightly compact brown SANDY GRAVELLY SILT.
Dense brown slightly SILTY medium to coarse SAND & GRAVEL.
Very dense brown slightly SILTY medium to coarse SAND & GRAVEL with scattered COBBLES.
Compact brown slightly SANDY SILT.
5-12-72
LEGEND OF BORING OPERATIONS
LEGEND OF EARTH MATERIALS
CONSISTENCY CLASSIFICATION FOR SOILS
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION
DRAWN
CHECKED
Approval Recommended by ______ Engineering Geologist
Certified Engineering Geologist No. ______
STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
CHERRY AVENUE UNDERCROSSING
LOG OF TEST BORINGS
BRIDGE NO. 54 970QL
POST MILE 8.9
DRAWING NO.
SHEET OF
WO 172001
CU 08201
Disregard prints bearing earlier revision dates
REVISION DATES
(PRELIMINARY STAGE ONLY)

08 | SBd | 31
℄ SW Off Ramp
485
486
487
488
118 + 94.25 EB30-NB31
221 + 88.51 ℄ Cherry Ave.
116 + 14.63 EB30-NB31
486 + 92.12 SW Off Ramp
℄ EB30-NB31
114
115
116
117
118
119
120
121
222
B-1
℄ WB30-NB31
B-2
91
90
B-3
B-4
B-5
To Devore
℄ Cherry Ave.
221
220
488 + 58.63 SW Off Ramp
219 + 86.00 ℄ Cherry Ave.
B.M. 50A-71
Brass Disk in Conc.
Bur. 6" 235± Rt.
490 + 63± ℄ Imp Rte. 31
Elev. 1443.20
PLAN
Scale : 1" = 30'
20' Rt "EB30-NB31" 114+00
21' Rt "EB30-NB31" 115+30
20' Rt "EB30-NB31" 117+10
20' Rt "EB30-NB31" 118+59
20' Rt "EB30-NB31" 120+00
1450
1440
1430
1420
1410
1400
1390
Approx. O.G. along ℄ EB30-NB31
1430.5
1433±
1437.8
1441.6
1444.0
Compact to dense brown SILTY medium to coarse SAND & GRAVEL.
Very dense brown slightly SILTY medium to coarse SAND, GRAVEL, & COBBLES.
Dense brown SILTY medium to coarse SAND.
5-1-72
300/0.8
5-2-72
100
200
300
Light brown SILT with fine to coarse PEBBLE GRAVEL.
Slightly compact brown fine-grained SANDY SILT with fine PEBBLE GRAVEL.
Dense to very dense brown SILTY SAND with fine & coarse PEBBLE GRAVEL & some large COBBLES.
Very dense light brown SANDY SILT with fine & coarse PEBBLE GRAVEL & some large COBBLES.
5-2-72
300/0.6
brown SANDY SILT
Very dense brown SILTY medium to coarse SAND, GRAVEL, & scattered COBBLES.
Dense brown SANDY SILT.
Compact to very dense brown SANDY MICACEOUS SILT interbedded with SILTY medium to coarse SAND.
5-2-72
PROFILE
Scale : Horz. 1" = 30'
Vert. 1" = 10'
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE 5-72
BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION
FIELD STUDY by R. Fox 5-72
DRAWN by S. Kawamura 5-31-72
CHECKED by R. Fox 6-20-72
Approval Recommended by
Engineering Geologist
Certified Engineering Geologist No.
STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
CHERRY AVENUE UNDERCROSSING
LOG OF TEST BORINGS
BRIDGE NO. 54-970QR
POST MILE 8.9
DRAWING NO.
SHEET OF
WO 172001
CU 08201
Disregard prints bearing earlier revision dates
REVISION DATES
(PRELIMINARY STAGE ONLY)
LEGEND OF BORING OPERATIONS
PENETRATION BORING
ROTARY BORING
1" SOIL TUBE
2½" CONE PENETROMETER
SAMPLER BORING (DRY)
ROTARY BORING (WET)
AUGER BORING (DRY)
JET BORING
CORE BORING
TEST PIT
LEGEND OF EARTH MATERIALS
GRAVEL
SAND
SILT
CLAY
SANDY CLAY or CLAYEY SAND
SANDY SILT or SILTY SAND
SILTY CLAY or CLAYEY SILT
PEAT and/or ORGANIC MATTER
FILL MATERIAL
IGNEOUS ROCK
SEDIMENTARY ROCK
METAMORPHIC ROCK
CONSISTENCY CLASSIFICATION FOR SOILS
According to the Standard Penetration Test
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

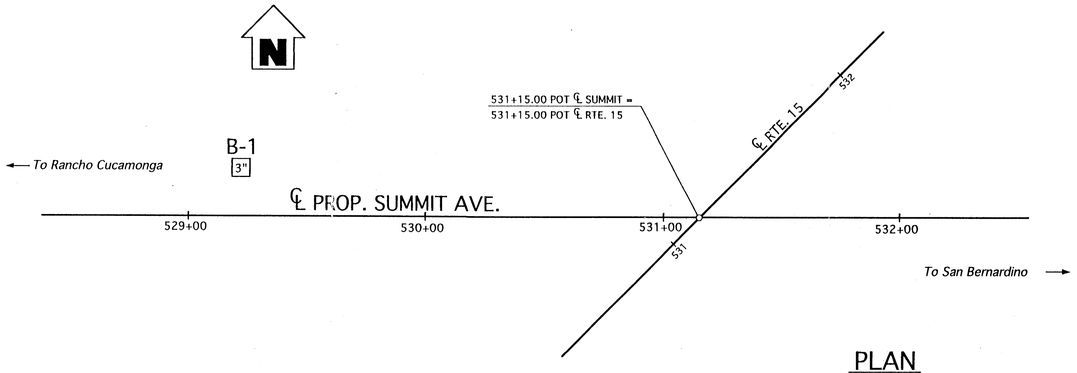
T/RW_Summit Ave OC (Beech Ave)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	30			

REGISTERED PROFESSIONAL ENGINEER
M. DESALVATORE
No. 39499
Exp. 12-31-97
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.



PLAN
1" = 30'

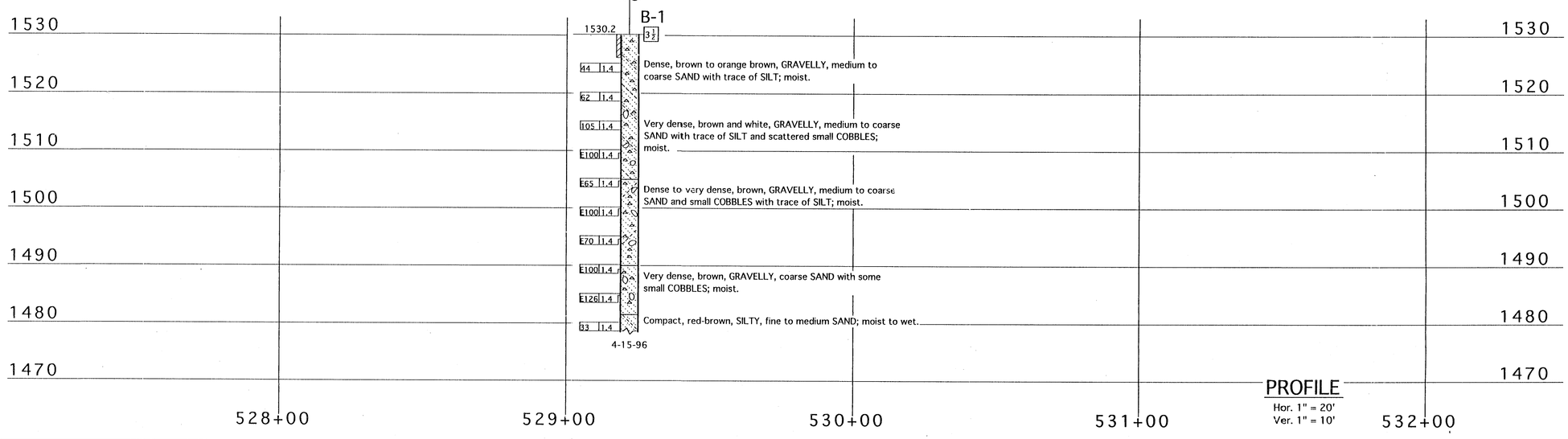
BENCH MARK

BM #15-4-90 Elev. 1539.03'

FD. AERIAL TARGET 89.02' RT. ℄ RTE. 15, STA. 533+86.47.

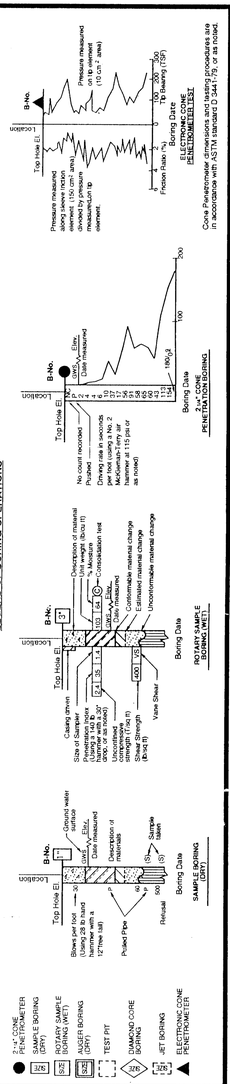
NOTES

1. NO GROUND WATER ENCOUNTERED DURING FIELD INVESTIGATION.
2. E= BLOW COUNT FOR ONE FOOT PENETRATION EXTRAPOLATED FROM BLOW COUNT FOR LESS THAN ONE FOOT (DUE TO CHANGE IN MATERIAL OR HARD DRIVING)



PROFILE
Hor. 1" = 20'
Ver. 1" = 10'

LEGEND OF BORING OPERATIONS



LEGEND OF EARTH MATERIALS

GRAVEL · SAND · SILT · CLAY · SANDY CLAY or CLAYEY SAND · SANDY SILT or SILTY SAND · SILTY CLAY · CLAYEY SILT · PEAT and/or ORGANIC MATTER · FILL MATERIAL · IGNEOUS ROCK · SEDIMENTARY ROCK · METAMORPHIC ROCK

CONSISTENCY CLASSIFICATION FOR SOILS
According to the Standard Penetration Test

Penetration Index (Blows / Ft)	Granular	Cohesive
0-4	Very Loose	Very Soft
5-9	Loose	Soft
10-19	Slightly compact	Stiff
20-34	Compact	Very Stiff
35-69	Dense	Hard
>70	Very Dense	Very Hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

ENGINEERING SERVICE CENTER	STRUCTURE FOUNDATIONS	FIELD INVESTIGATION BY:	State of CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF STRUCTURES STRUCTURE DESIGN	BRIDGE NO. 54-0978	SUMMIT AVENUE OVERCROSSING
DRAWN BY Irene Yamana 5/96		T. ALDERMAN			POST MILE 9.6	LOG OF TEST BORINGS
CHECKED BY						

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS → 0 1 2 3

CU: 08
EA: 204301

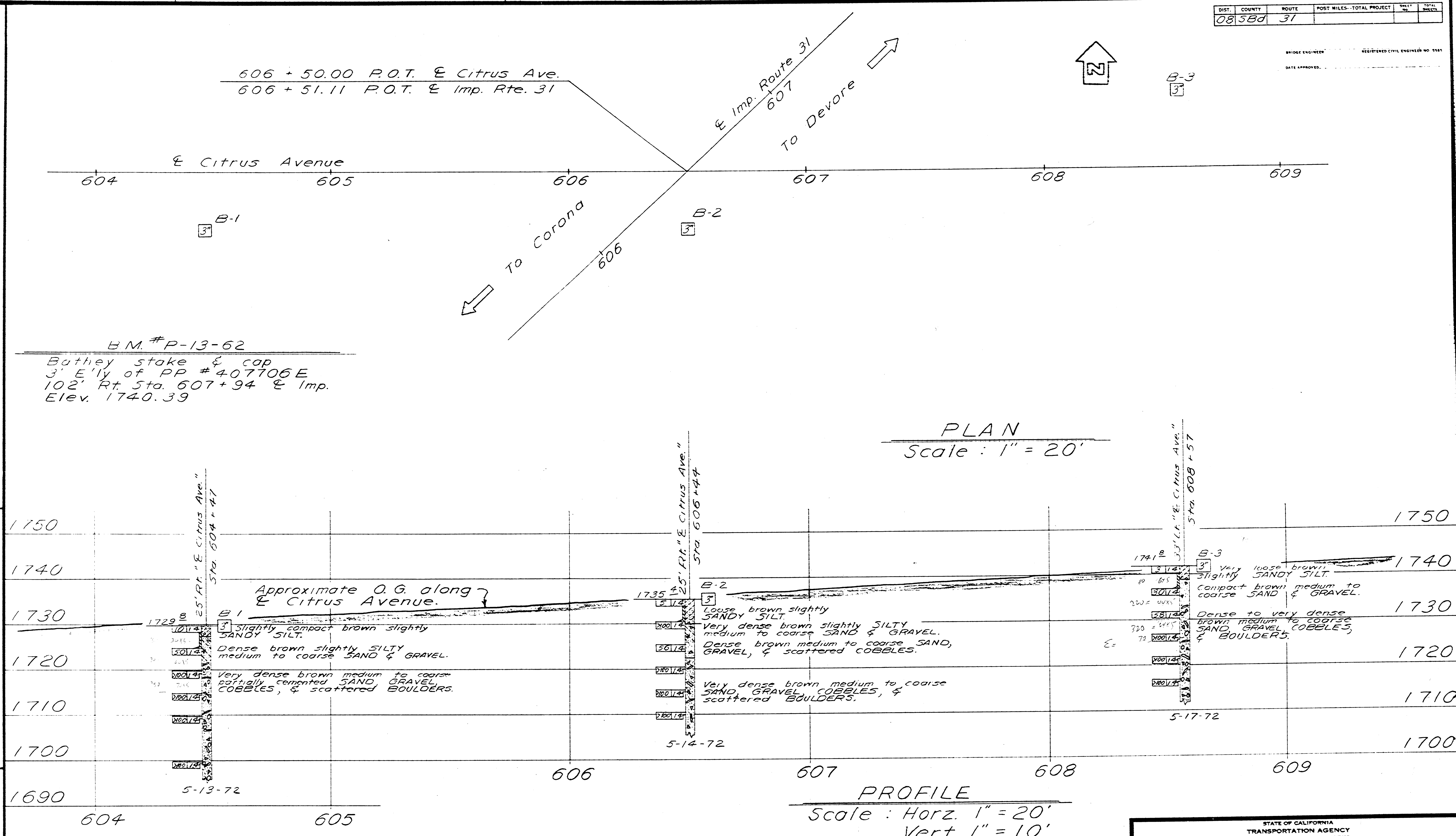
DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

TL 6052 REV. 5/95

Duncan Canyon Road OC

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	31			



NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE 5-72

LEGEND OF BORING OPERATIONS

- 2¼" CONE PENETROMETER
- SAMPLER BORING (DRY)
- ROTARY BORING (WET)
- AUGER BORING (DRY)
- JET BORING
- CORE BORING
- TEST PIT

LEGEND OF EARTH MATERIALS

GRAVEL · SAND · SILT · CLAY · SANDY CLAY or CLAYEY SAND · SANDY SILT or SILTY SAND · SILTY CLAY or CLAYEY SILT · PEAT and/or ORGANIC MATTER · FILL MATERIAL · IGNEOUS ROCK · SEDIMENTARY ROCK · METAMORPHIC ROCK

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

No. of blows	Granular	Cohesive
0-5	Very loose	Very soft
5-10	Loose	Soft
10-20	Slightly compact	Stiff
20-35	Compact	Very stiff
35-70	Dense	Hard
>70	Very dense	Very hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

Diagram showing the basis for estimates of grade size distribution used in determination of class names. If GRAVEL is present in appreciable amounts the term GRAVELLY may be added to the class name, viz GRAVELLY SAND. The terms coarse, medium and fine when used to describe SAND, SILT, and GRAVEL refer to standard grade size limits.

BRIDGE DEPARTMENT	
ENGINEERING GEOLOGY SECTION	
FIELD STUDY	by R. Fox 5-72
DRAWN	by S. Kawamura 6-2-72
CHECKED	by R. Fox 6-19-72
Approval Recommended by ______ Engineering Geologist	
Certified Engineering Geologist No. ______	

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

CITRUS AVENUE OVERCROSSING

LOG OF TEST BORINGS

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-980	11.0			

WO 172101
CU 08203

Disregard prints bearing earlier revision dates →

REVISION DATES (PRELIMINARY STAGE ONLY)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15	10.32/11.44		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

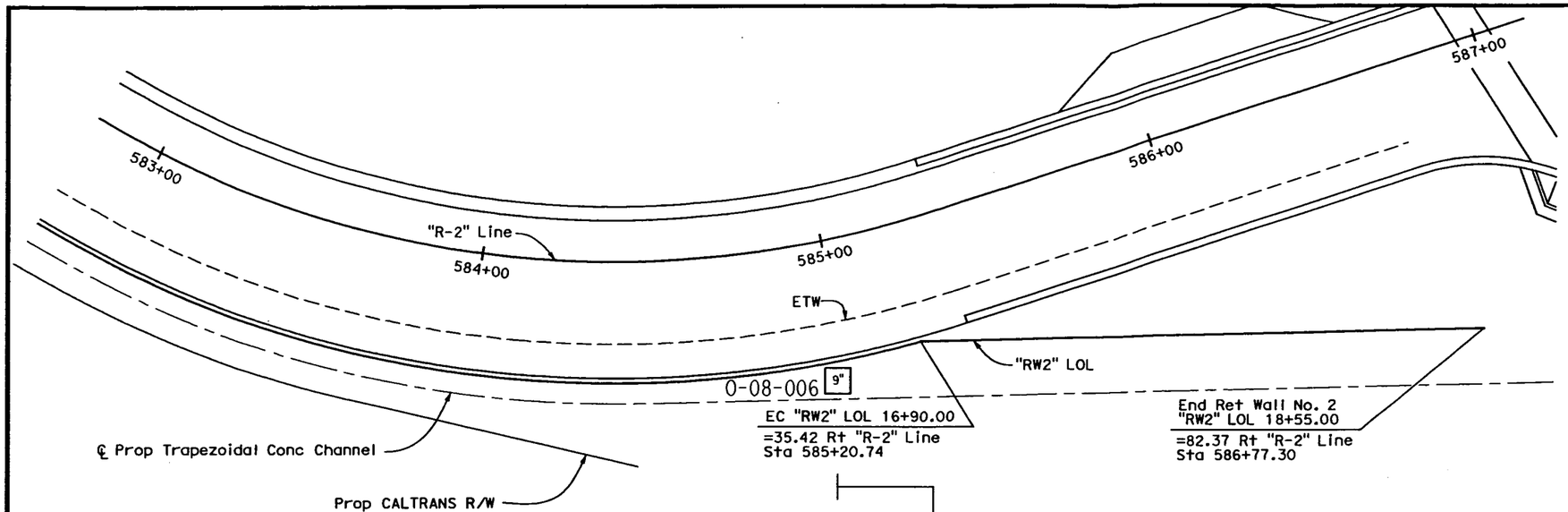
REGISTERED GEOTECHNICAL ENGINEER — CARLOS V. AMANTE — No. GE2724 — Exp. 06/30/10 — STATE OFCAL IFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

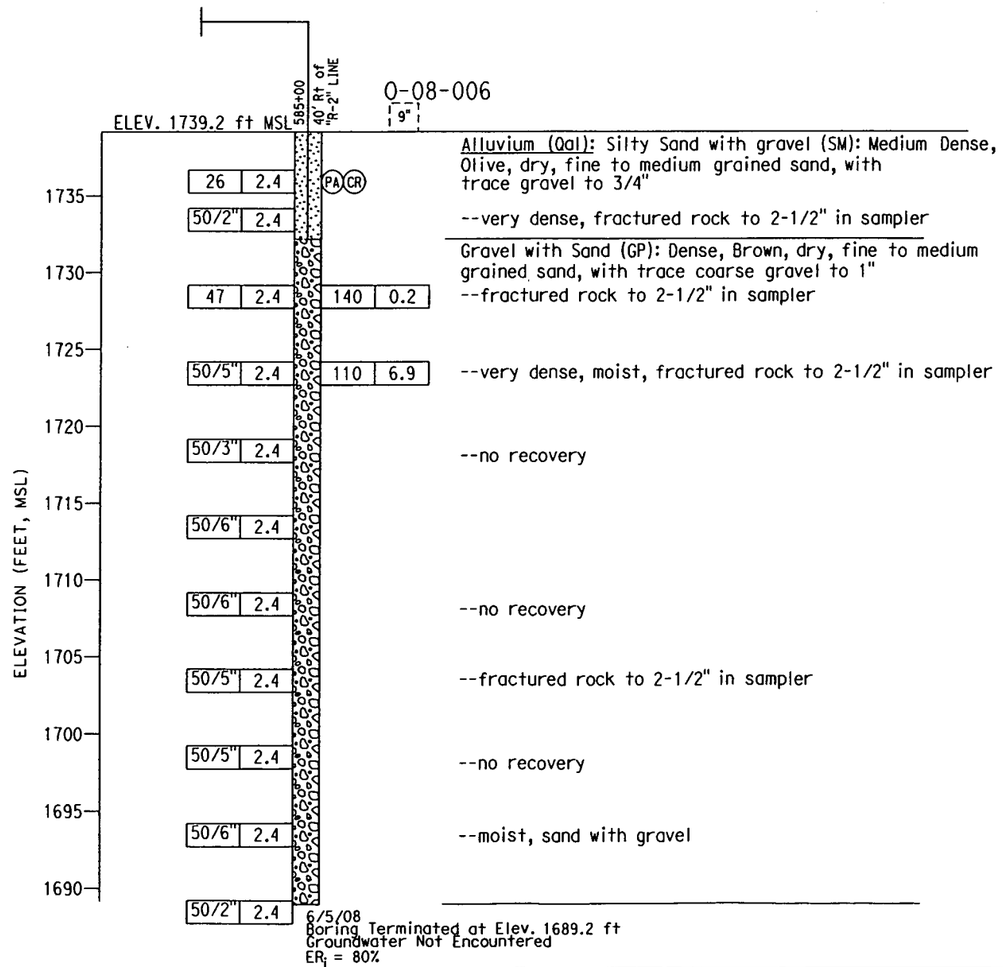
CITY OF FONTANA
1170 WEST 3RD STREET
SAN BERNARDINO, CA 92410

LIM & NASCIMENTO ENGINEERING
1887 BUSINESS CENTER DRIVE, SUITE 6
SAN BERNARDINO, CALIFORNIA 92408

KLEINFELDER WEST INC.
1220 RESEARCH DRIVE, SUITE B
REDLANDS, CALIFORNIA 92374



PLAN
1" = 20'



PROFILE
VERTICAL 1" = 5'

NOTES:

1. BORING DRILLED USING AP 1000 PERCUSSION HAMMER (BECKER HAMMER).

2. 1.4-INCH DIAMETER SAMPLES WERE TAKEN USING A STANDARD PENETRATION TEST (SPT) SPLIT BARREL SAMPLER WITH AN INSIDE DIAMETER (ID) OF 1.4 INCHES AND AN OUTSIDE DIAMETER (OD) OF 2.0 INCHES.

3. 2.4-INCH DIAMETER RING SAMPLES WERE TAKEN USING A CALIFORNIA SPLIT BARREL SAMPLER WITH AN ID OF 2.4 INCHES AND AN OD OF 3.3 INCHES.

4. ALL SAMPLES WERE DRIVEN WITH 140 LB HAMMER WITH A FALLING HEIGHT OF 30 INCHES.

5. THIS LOTB SHEET WAS PREPARED IN ACCORDANCE WITH THE CALTRANS SOIL AND ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (JUNE 2007).

BENCHMARK:

STATE PLANE ZONE: 5
HORIZONTAL DATUM: NAD 83, EPOCH 1992.88
VERTICAL DATUM: NGVD 29
GLOBAL ORIGIN: 6616251.6352, 1757251.6352, -214748.364

C. AMANTE DESIGN OVERSIGHT	DRAWN BY	D. FAHRNEY	J. SIPE (STAFF ENGINEER) FIELD INVESTIGATION BY:	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	C. AMANTE PROJECT ENGINEER	BRIDGE NO. TBD
SIGN OFF DATE	CHECKED BY	M. CHIRUMALLA	DATE: 06/05/08			POST MILES

RETAINING WALL NO. 2
LOG OF TEST BORINGS NO. 2

GS LOTB ROCK LEGEND

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 08224
EA 0H1301

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES

SHEET 17 OF 17

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USERNAME => LAN Engineering PLOTTED => 4/29/2009 TIME PLOTTED => 12:19:53 PM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	15	10.32/11.44		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

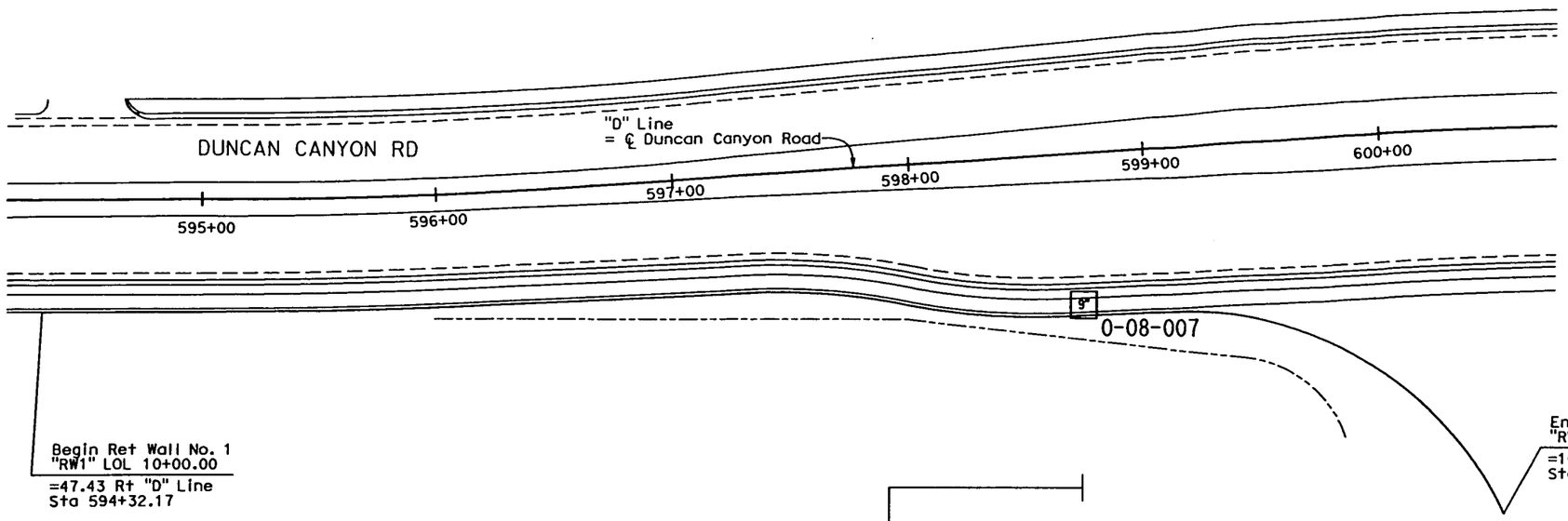
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED GEOTECHNICAL ENGINEER — CARLOS V. AMANTE — No. GE2724 — Exp. 06/30/10 — STATE OF CALIFORNIA

CITY OF FONTANA
1170 WEST 3RD STREET
SAN BERNARDINO, CA 92410

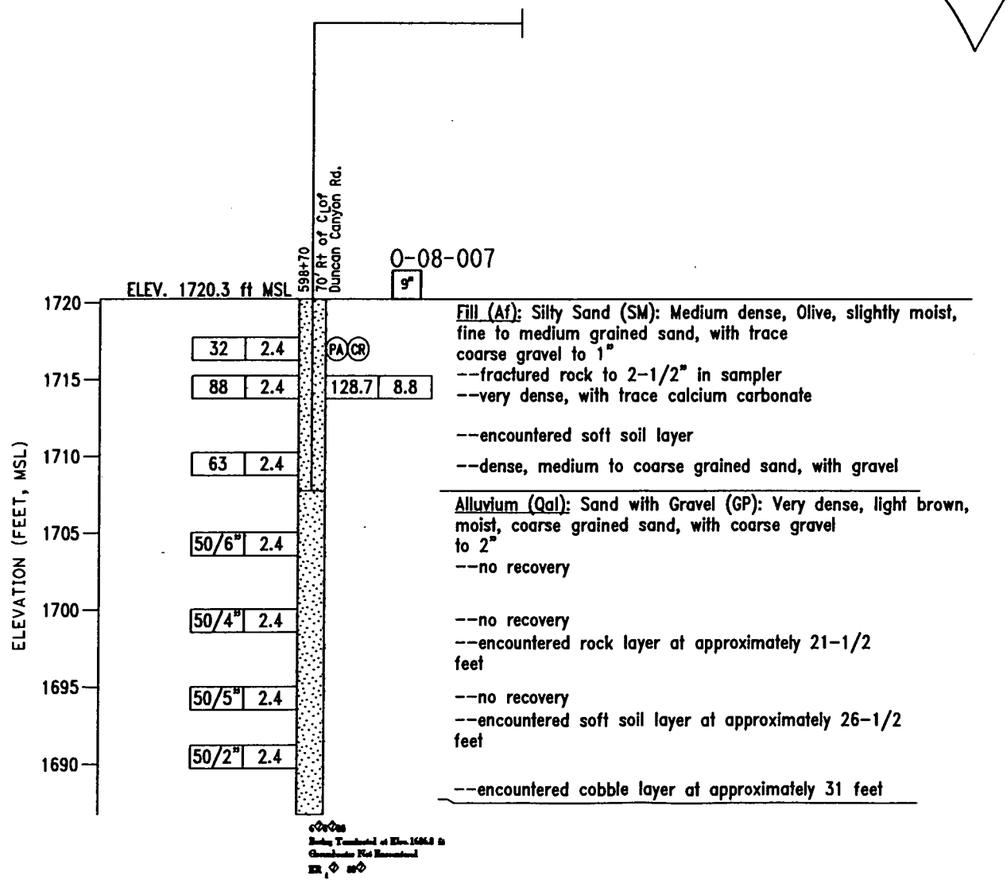
LIM & NASCIMENTO ENGINEERING
1887 BUSINESS CENTER DRIVE, SUITE 6
SAN BERNARDINO, CALIFORNIA 92408

KLEINFELDER WEST INC.
1220 RESEARCH DRIVE, SUITE B
REDLANDS, CALIFORNIA 92374



N

PLAN
1" = 30'



PROFILE
VERTICAL 1" = 5'

NOTES:

1. BORING DRILLED USING AP 1000 PERCUSSION HAMMER (BECKER HAMMER).

2. 1.4-INCH DIAMETER SAMPLES WERE TAKEN USING A STANDARD PENETRATION TEST (SPT) SPLIT BARREL SAMPLER WITH AN INSIDE DIAMETER (ID) OF 1.4 INCHES AND AN OUTSIDE DIAMETER (OD) OF 2.0 INCHES.

3. 2.4-INCH DIAMETER RING SAMPLES WERE TAKEN USING A CALIFORNIA SPLIT BARREL SAMPLER WITH AN ID OF 2.4 INCHES AND AN OD OF 3.3 INCHES.

4. ALL SAMPLES WERE DRIVEN WITH 140 LB HAMMER WITH A FALLING HEIGHT OF 30 INCHES.

5. THIS LOTB SHEET WAS PREPARED IN ACCORDANCE WITH THE CALTRANS SOIL AND ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (JUNE 2007).

BENCHMARK:

STATE PLANE ZONE: 5
HORIZONTAL DATUM: NAD 83, EPOCH 1992.88
VERTICAL DATUM: NGVD 29
GLOBAL ORIGIN: 6616251.6352, 1757251.6352, -214748.364

C. AMANTE DESIGN OVERSIGHT	DRAWN BY	D. FAHRNEY	J. SIPE (STAFF ENGINEER) FIELD INVESTIGATION BY:	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	C. AMANTE PROJECT ENGINEER	BRIDGE NO. TBD	RETAINING WALL NO. 1
SIGN OFF DATE	CHECKED BY	M. CHIRUMALLA	DATE: 06/05/08			POST MILES	LOG OF TEST BORINGS NO. 1

GS LOTB ROCK LEGEND

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 08224
EA 0H1301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 4/24/09

SHEET 15 OF 15

FILE => mse1-z-1tb04.dgn

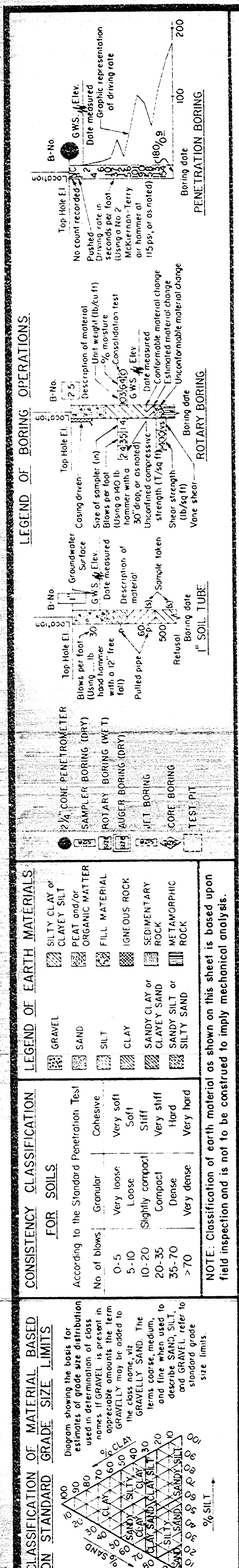
USERNAME => LAN Engineering\PLOTTED => 4/29/2009 TIME PLOTTED => 12:07:11 PM

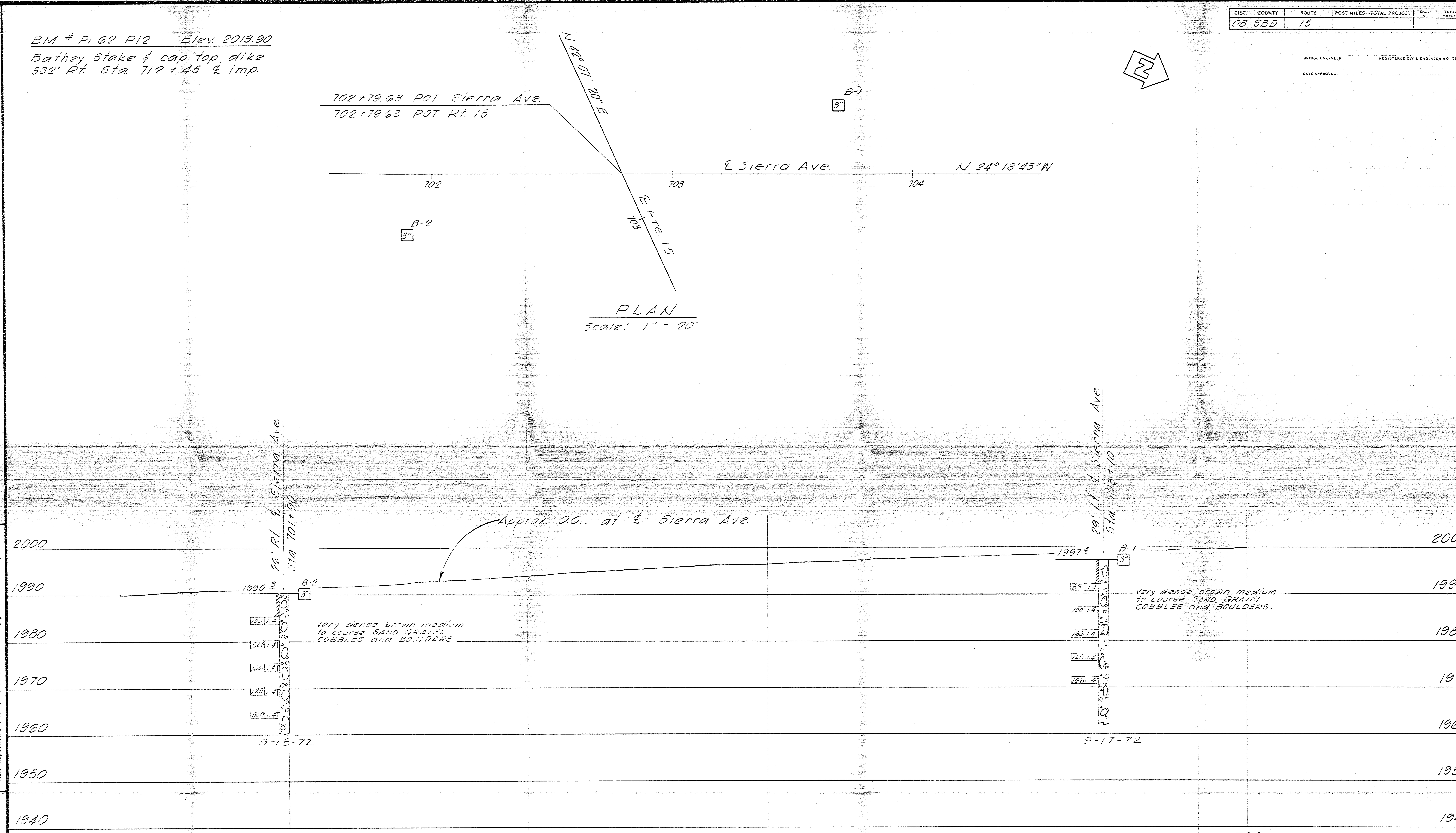
Sierra Avenue UC

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBD	15			

BRIDGE ENGINEER REGISTERED CIVIL ENGINEER NO. 556–5

DATE APPROVED





NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE 9-72

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by R. FOX 9-72
DRAWN	by OKABAYASHI 10/17/72
CHECKED	by R. FOX 10-18-72

Approval Recommended by ______ Engineering Geologist

Certified Engineering Geologist No. ______

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

SIERRA AVENUE UNDERCROSSING

LOG OF TEST BORINGS

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-981 R/L	12.9			

WO 172101
CU 08203

Disregard prints bearing earlier revision dates →

REVISION DATES (PRELIMINARY STAGE ONLY)

Lytle Creek Bridge


DIST. 08 COUNTY SBd ROUTE 31 POST MILES—TOTAL PROJECT SHEET NO. TOTAL SHEETS
BRIDGE ENGINEER
REGISTERED CIVIL ENGINEER NO.
DATE APPROVED
B-9 3"
B-10 3"
B-11 3"
B-12 3"
B-13 3"
B-14 3"
B-15 3"
℄ Imp. Rte. 15
726 727 728 729 730 731 732 733 734
733 + 78.78 P.O.C. ℄ Imp. Rte 15 =
9 + 95.33 P.O.T. ℄ North Dike
℄ North Dike
℄ Service Road
BENCH MARK
Refer to Sheet No. 1 of 2
PLAN
Scale : 1" = 30'
221 Rt. "℄ Imp. Rte. 31" 725+61
94' Lt. "℄ Imp. Rte. 31" 726+60
46' Rt. "℄ Imp. Rte. 31" 727+92
81' Lt. "℄ Imp. Rte. 31" 729+38
"℄ Imp. Rte. 31" 730+75
57' Lt. "℄ Imp. Rte. 31" 732+01
37' Rt. "℄ Imp. Rte. 31" 733+36
2020
2010
2000
1990
1980
1970
1960
Approx. O.G. along ℄ Imp. Rte 31.
B-9 2004± Slightly compact light grayish brown SANDY COBBLE GRAVEL. Very dense light brown SANDY GRAVEL with large COBBLES & small BOULDER. Very dense GRANITIC BOULDER. Very dense light gray SANDY GRAVEL with abundant COBBLES & small BOULDERS. 5-22-72
B-10 2006 Slightly compact to very dense light grayish brown SANDY GRAVEL to large COBBLES & small BOULDERS. Very dense black GRANITIC BOULDER. Very dense large COBBLES. GRANITIC & SCHIST COBBLES with SAND layers from Elev. 1982± to 1981±. Very dense light grayish brown SANDY GRAVEL with a few COBBLES. 6-24-72
B-11 2006 Slightly compact to very dense light grayish brown SANDY GRAVEL, large COBBLES, & small BOULDERS. Refusal. Very dense black GNEISSIC BOULDER. Dense light grayish brown slightly SANDY GRAVELS with COBBLES & BOULDERS. Very dense light brown SANDY GRAVEL with small BOULDERS (12" to 16" dia.). Mostly GRAVEL & small COBBLES with distinct GRAVELLY SAND layers. Very dense light brown SANDY GRAVEL with distinct SAND layers. 6-26-72
B-12 2011 Slightly compact light grayish SANDY GRAVEL & COBBLES. Very dense SANDY GRAVEL layers with small BOULDERS. Very dense light grayish SILTY SAND medium to coarse GRAVEL, COBBLES & small BOULDERS. Very dense GRANITIC & SCHIST COBBLES. 7-6-72
B-13 2006 Very dense tan SILTY fine, medium to coarse SAND with PEBBLES & COBBLES. Very dense light gray to tan SILTY GRAVELLY SAND with PEBBLES & COBBLES. 7-6-72
B-14 2004 Slightly compact tan SANDY GRAVEL with PEBBLES & COBBLES. Very dense tan to light gray SILTY SANDY GRAVEL with PEBBLES & COBBLES. 7-7-72
B-15 2007 Slightly compact light grayish SAND fine to medium COBBLES, GRAVEL to small BOULDERS (12" to 15" dia). Very dense grayish brown SANDY GRAVEL, & COBBLES with slightly SILT binder. Very dense GRAVEL & small BOULDERS with distinct GRAVELLY SAND layers. Very dense black GNEISSIC and GRANITE BOULDER. Very dense GRANITIC BOULDER and COBBLES. 7-8-72
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE 7-72
PROFILE
Scale : Horiz. 1" = 30'
Vert. 1" = 10'
Revised : Moved ℄ Imp. Rte. 15 1-9-73 S. Kawamura
LEGEND OF BORING OPERATIONS
PENETRATION BORING
ROTARY BORING
1" SOIL TUBE
LEGEND OF EARTH MATERIALS
GRAVEL SAND SILT CLAY SANDY CLAY or CLAYEY SAND SANDY SILT or SILTY SAND SILTY CLAY or CLAYEY SILT PEAT and/or ORGANIC MATTER FILL MATERIAL IGNEOUS ROCK SEDIMENTARY ROCK METAMORPHIC ROCK
2½" CONE PENETROMETER
SAMPLER BORING (DRY)
ROTARY BORING (WET)
AUGER BORING (DRY)
JET BORING
CORE BORING
TEST PIT
CONSISTENCY CLASSIFICATION FOR SOILS
According to the Standard Penetration Test
No. of blows | Granular | Cohesive
0-5 | Very loose | Very soft
5-10 | Loose | Soft
10-20 | Slightly compact | Stiff
20-35 | Compact | Very stiff
35-70 | Dense | Hard
>70 | Very dense | Very hard
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION
FIELD STUDY by R. Fox 7-72
DRAWN by S. T. Kawamura 8-23-72
CHECKED by R. Fox 9-6-72
Approval Recommended by: Engineering Geologist
Certified Engineering Geologist No. 105
STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
LYTLE CREEK BRIDGE
LOG OF TEST BORINGS (2 of 2)
BRIDGE NO. 54-982 R/L
POST MILE R13.6
DRAWING NO.
SHEET OF
WO 172201
CU 08203
Disregard prints bearing earlier revision dates
1/9/73
REVISION DATES
(PRELIMINARY STAGE ONLY)

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	31			

BRIDGE ENGINEER .... REGISTERED CIVIL ENGINEER NO. 556 ....

DATE APPROVED ....

JAN 31 1973

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE 7-72

Revised: Moved ℄ Imp. Rte. 15
1-9-73 S. Kawamura

LEGEND OF BORING OPERATIONS

2¼" CONE PENETROMETER
SAMPLER BORING (DRY)
ROTARY BORING (WET)
AUGER BORING (DRY)
JET BORING
CORE BORING
TEST PIT

1" SOIL TUBE

ROTARY BORING

PENETRATION BORING

LEGEND OF EARTH MATERIALS

GRAVEL
SAND
SILT
CLAY
SANDY CLAY or CLAYEY SAND
SANDY SILT or SILTY SAND
SILTY CLAY or CLAYEY SILT
PEAT and/or ORGANIC MATTER
FILL MATERIAL
IGNEOUS ROCK
SEDIMENTARY ROCK
METAMORPHIC ROCK

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

No. of blows	Granular	Cohesive
0-5	Very loose	Very soft
5-10	Loose	Soft
10-20	Slightly compact	Stiff
20-35	Compact	Very stiff
35-70	Dense	Hard
>70	Very dense	Very hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

Diagram showing the basis for estimates of grade size distribution used in determination of class names. If GRAVEL is present in appreciable amounts the term GRAVELLY may be added to the class name, viz. GRAVELLY SAND. The terms coarse, medium, and fine when used to describe SAND, SILT, and GRAVEL refer to standard grade size limits.

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

FIELD STUDY	by R. FOX 7-72
DRAWN	by S. T. Kawamura 8-22-72
CHECKED	by R. FOX 9-6-72

Approval Recommended by ________
Engineering Geologist

Certified Engineering Geologist No. ________

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

LYTLE CREEK BRIDGE

LOG OF TEST BORINGS (1 of 2)

BRIDGE NO.	POST MILE	DRAWING NO.	SHEET	OF
54-982 R/L	R13.6			

WO 172201
CU 08203

Disregard prints bearing earlier revision dates →

REVISION DATES (PRELIMINARY STAGE ONLY)
1/9/73

Glen Helen Parkway UC

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	15			

CERTIFIED ENGINEERING GEOLOGIST

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

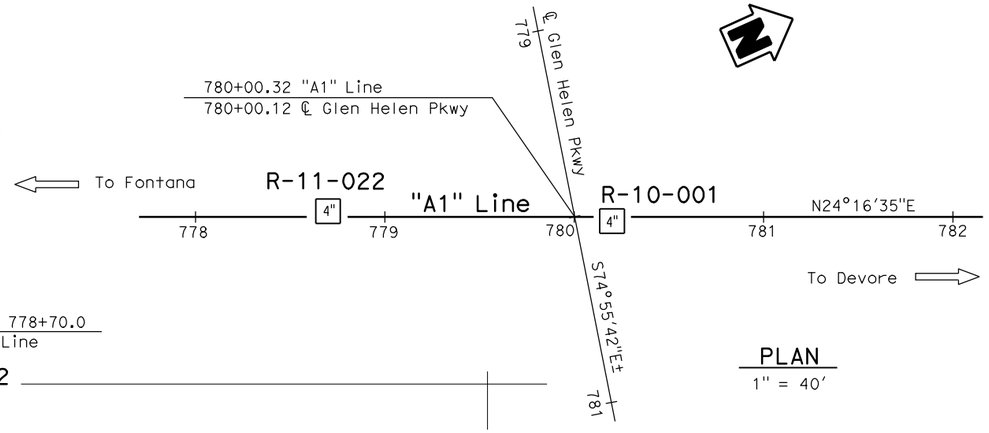
PROFESSIONAL GEOLOGIST — K. Douglas Cook — No. 1391 — Exp. 12-31-11 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

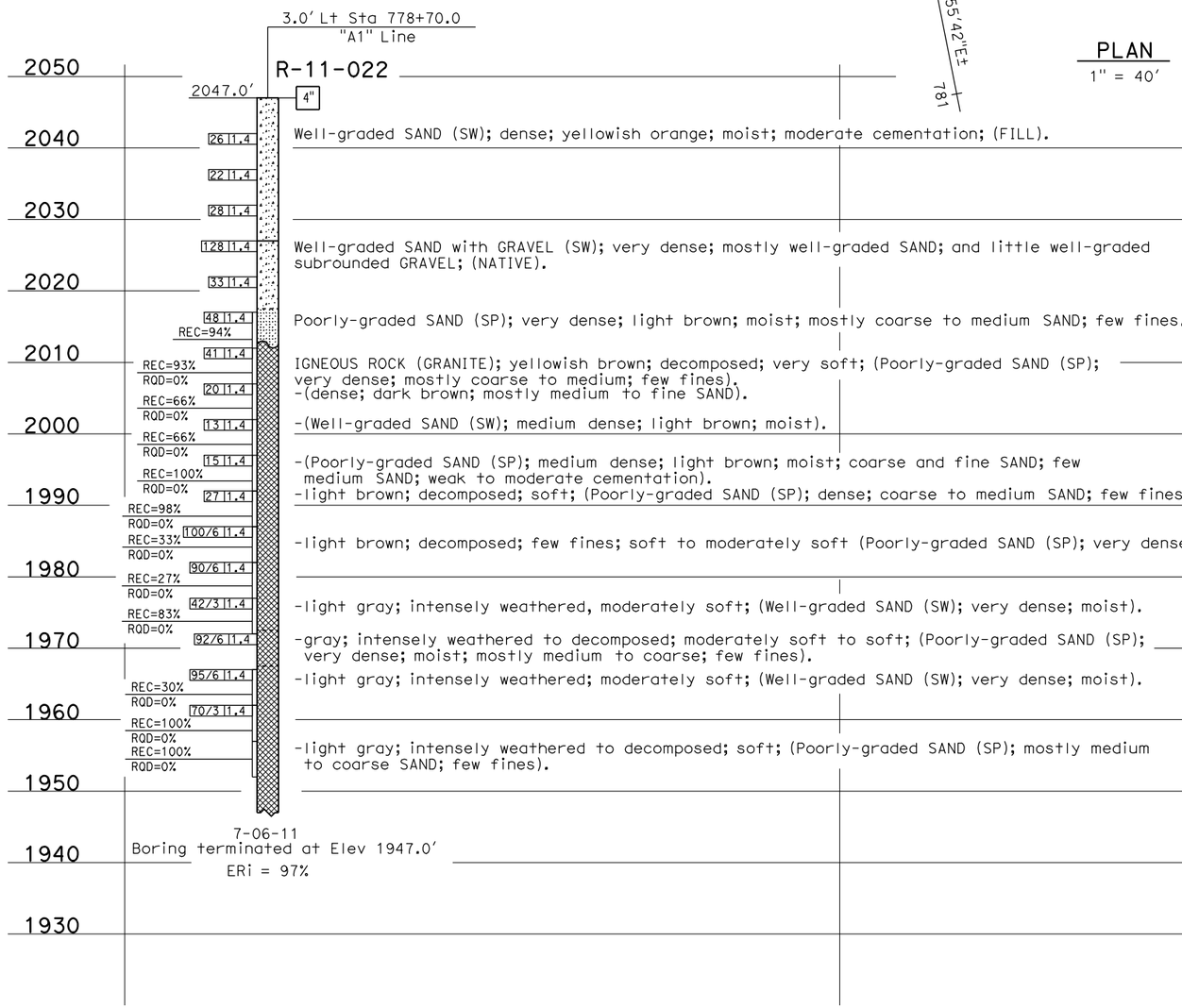
BENCH MARK

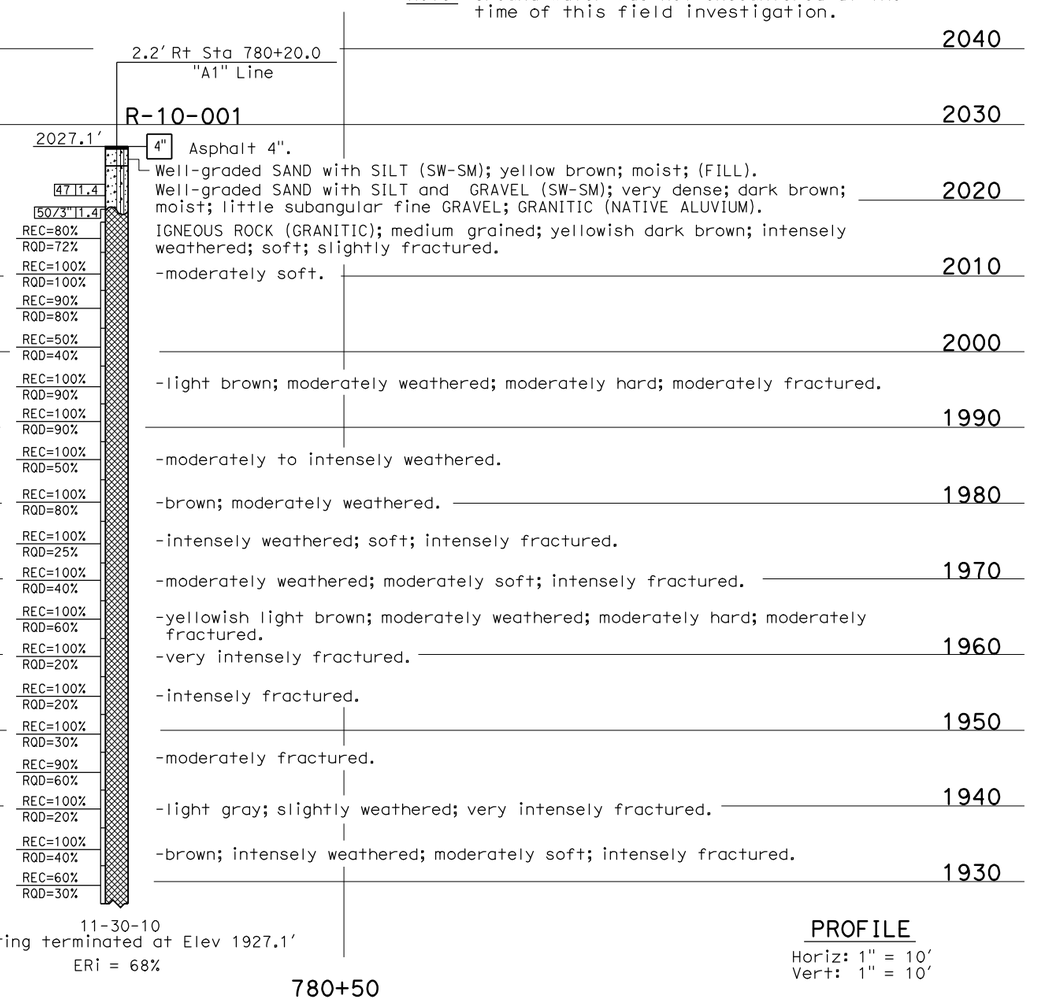
PNO 173 2120.910
FD STD Brass disk in concrete stamped "SBD-215-173 1988" 40' Ely of EOD Devore Rd Bridge at Nly end bridge; 70' Nly of EP NB SBD 215 at PM 17.3 at top of slope.

PNO 2010 2179.090
FD STD Brass disk in concrete stamped "D8 SCN SBD-15 PM 16.3 08.04.08" At top of slope SOUTH of Connector Bridge from NB SBD 15 to NB SBD 215.



PLAN
1" = 40'





Note: Ground water was not encountered at the time of this field investigation.

PROFILE
Horiz: 1" = 10'
Vert: 1" = 10'

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	GLEN HELEN PARKWAY UC (WIDEN)
FUNCTIONAL SUPERVISOR	DRAWN BY: F. Nguyen 5/11		DESIGN BRANCH X	54-0779L/R	
NAME: A. Perez-Cobo	CHECKED BY: B. Levine/S. Logeswaran	FIELD INVESTIGATION BY: A. Wardak, D. Cook		POST MILE 14.77	LOG OF TEST BORINGS 1 OF 5

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

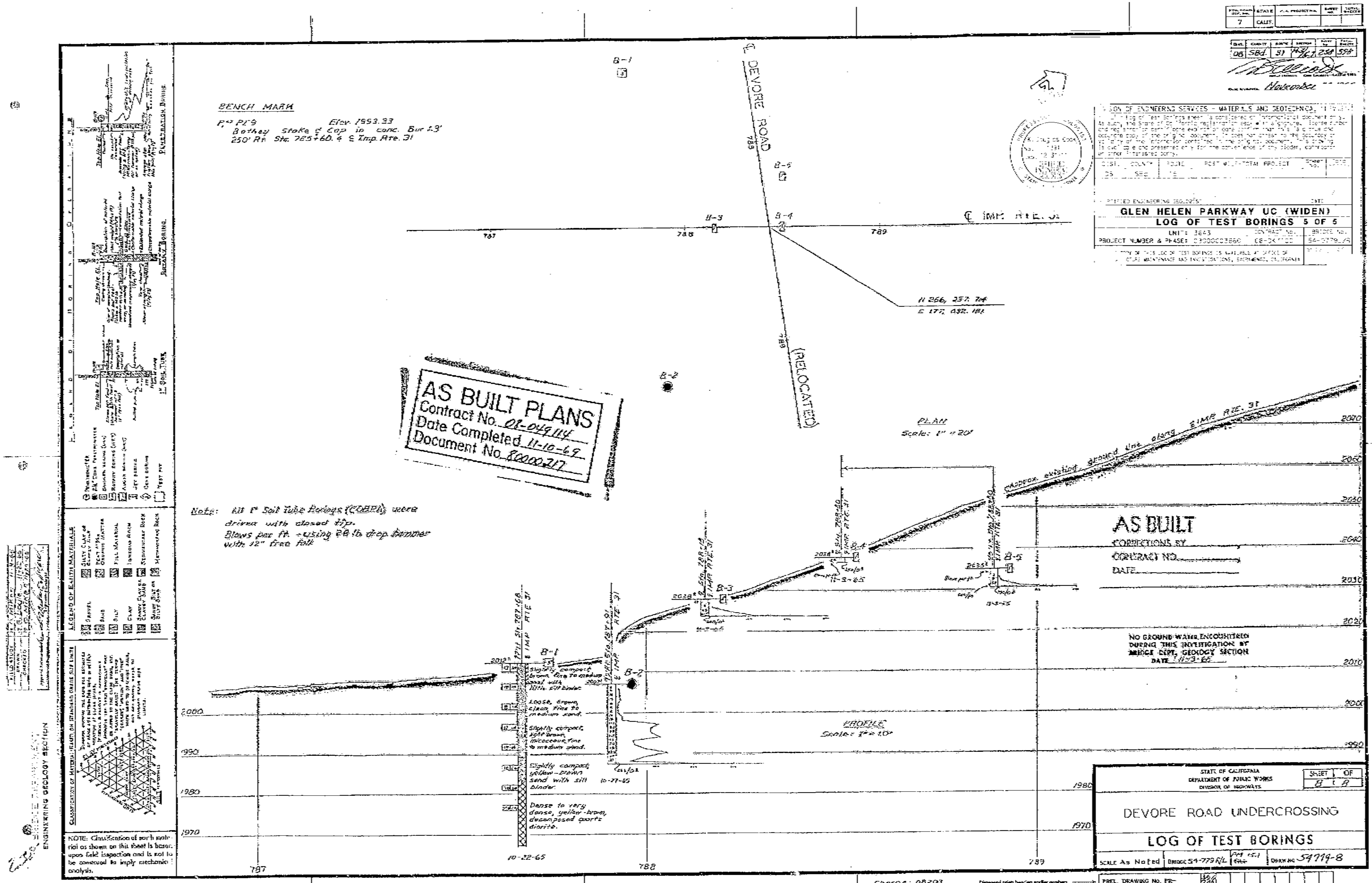
UNIT: 3643
PROJECT NUMBER & PHASE: 08000003660 CONTRACT NO.: 08-0K7100

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
08-30-11	09-23-11	10-19-11	10-24-11	X	X

FILE => glenhelen-pkwy1of5.dgn

USERNAME => s128198 DATE PLOTTED => 25-OCT-2011 TIME PLOTTED => 08:01

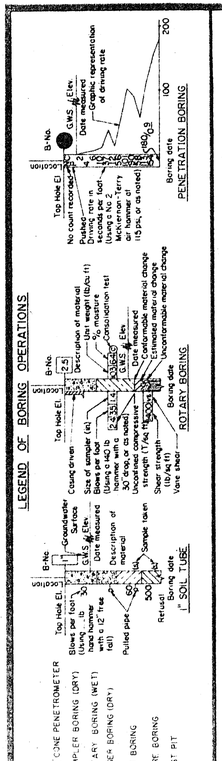

BENCH MARK
Elev. 1953.33
250' Rt. Sta. 765+60.4 Imp. Rte. 31
DEVORE ROAD
(RELOCATED)
IMP. RTE. 31
B-1
B-2
B-3
B-4
B-5
787
788
789
N 266, 237.74
E 177, 092.181
PLAN
Scale: 1" = 20'
AS BUILT PLANS
Contract No. 08-049114
Date Completed 11-10-69
Document No. 80000217
Note: All 1" Soil Tube Borings (COBPR) were driven with closed tip.
Blows per ft. using 28 lb drop hammer with 12" free fall
Approx. existing ground line along E IMP. RTE. 31
AS BUILT
CORRECTIONS BY
CONTRACT NO.
DATE
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
PROFILE
Scale: 1" = 10'
Slightly compact, brown, fine to medium sand with little silt binder.
Loose, brown, clean, fine to medium sand.
Slightly compact, light brown, micaceous, fine to medium sand.
Slightly compact, yellow-brown sand with silt binder.
Dense to very dense, yellow-brown, decomposed quartz diorite.
10-22-65
LEGEND OF EARTH MATERIALS
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
ENGINEERING GEOLOGY SECTION
GLEN HELEN PARKWAY UC (WIDEN)
LOG OF TEST BORINGS 5 OF 5
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
DEVORE ROAD UNDERCROSSING
LOG OF TEST BORINGS
SCALE As Noted
DRAWING 54779-8
2000
1990
1980
1970
2010
2020
2030
2040
2050
2060
2070

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	15			

BRIDGE ENGINEER _____ REGISTERED CIVIL ENGINEER NO. 5982

DATE APPROVED _____

LEGEND OF BORING OPERATIONS



2½" CONE PENETROMETER
SAMPLER BORING (DRY)
ROTARY BORING (WET)
AUGER BORING (DRY)
JET BORING
CORE BORING
TEST PIT

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

CONSISTENCY CLASSIFICATION FOR SOILS

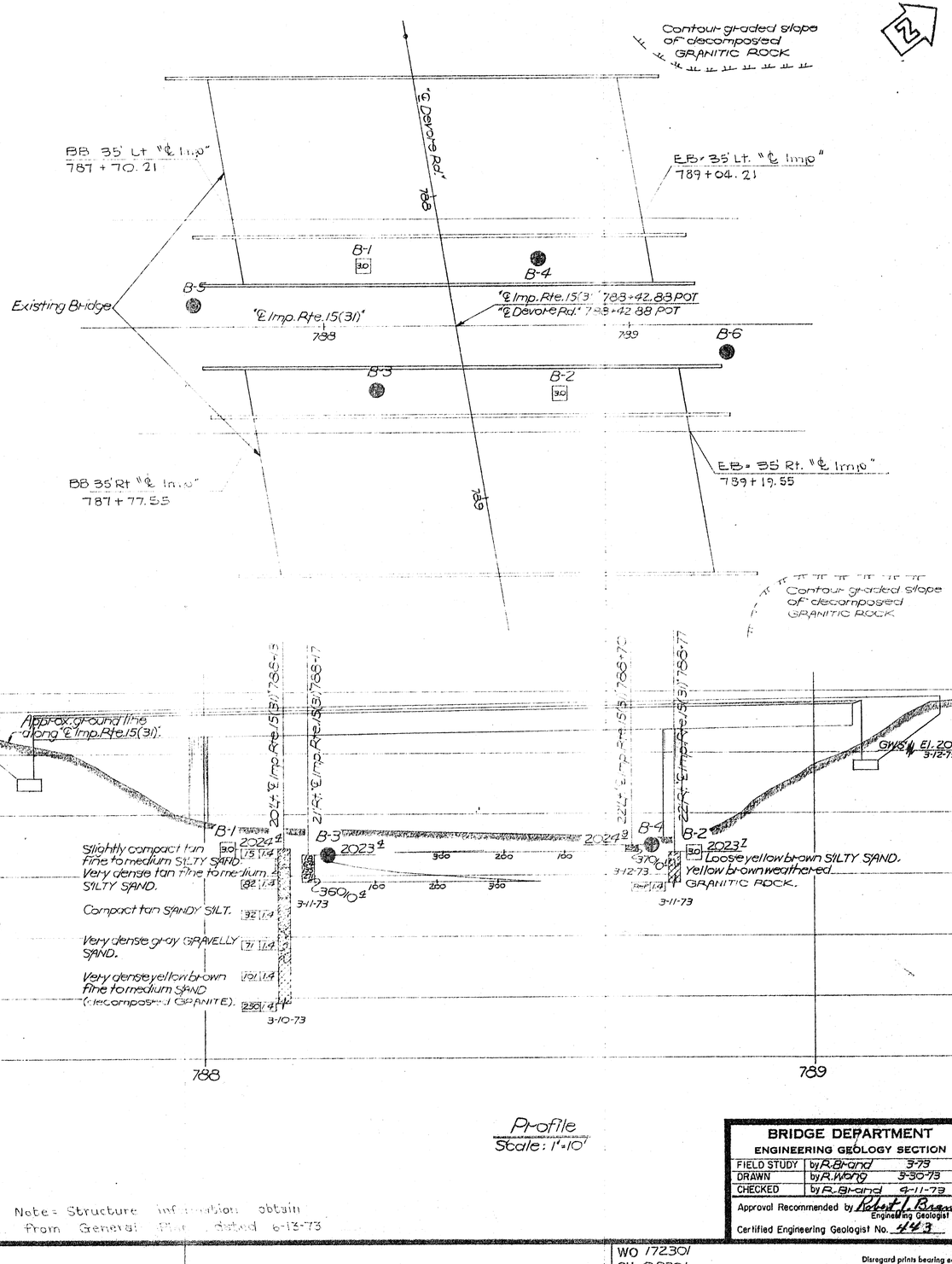
According to the Standard Penetration Test		
No. of Blows	Granular	Cohesive
0-5	Very loose	Very soft
5-10	Loose	Soft
10-20	Slightly compact	Stiff
20-35	Compact	Very stiff
35-70	Dense	Hard
>70	Very dense	Very hard

LEGEND OF EARTH MATERIALS

GRAVEL; SAND; SILT; CLAY; IGNEOUS ROCK; SILTY, CLAY or CLAYEY SILT; PEAT and/or ORGANIC MATTER; FILL MATERIAL; SEDIMENTARY ROCK; METAMORPHIC ROCK; SANDY CLAY or CLAYEY SAND; GRAVELLY SILT or SILTY SAND

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analyses.

USGS BM "2018"
Achis... in large rock
±295 ft. ℄ Imp. Rte. 15(31) 789+00
Elev. 2013.305



Plan
Scale: 1"=20'

Profile
Scale: 1"=10'

Note: Structure information obtained from General Plan dated 6-13-73

BRIDGE DEPARTMENT ENGINEERING GEOLOGY SECTION		
FIELD STUDY	by R. Bryand	3-73
DRAWN	by R. Wong	5-30-73
CHECKED	by R. Bryand	9-11-73

Approval Recommended by Robert J. Bryand
Engineering Geologist
Certified Engineering Geologist No. 443

STATE OF CALIFORNIA
TRANSPORTATION AGENCY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

DEVORE ROAD UNDERCROSSING (WIDEN)

LOG OF TEST BORINGS

BRIDGE NO.	POST MILE	DRAWING NO:	SHEET	OF
54-779 P/L	15.4			

REVISION DATES (PRELIMINARY STAGE ONLY)

7/1/13									

Disregard prints bearing earlier revision dates →

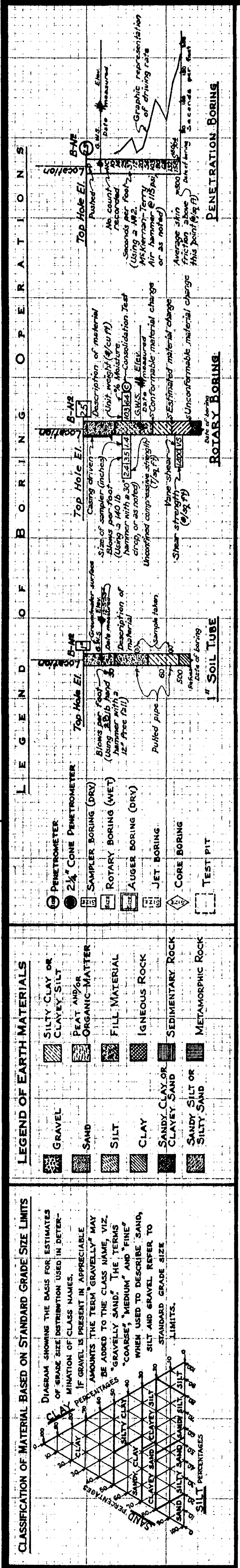
WO 172301
CU 08201

FED. ROAD DIV. No.	STATE	F. A. PROJECT No.	SHEET No.	TOTAL SHEETS
7	CALIF.			

DIST.	COUNTY	ROUTE	SECTION	SHEET No.	TOTAL SHEETS
08	SBd.	31	143/167	238	398

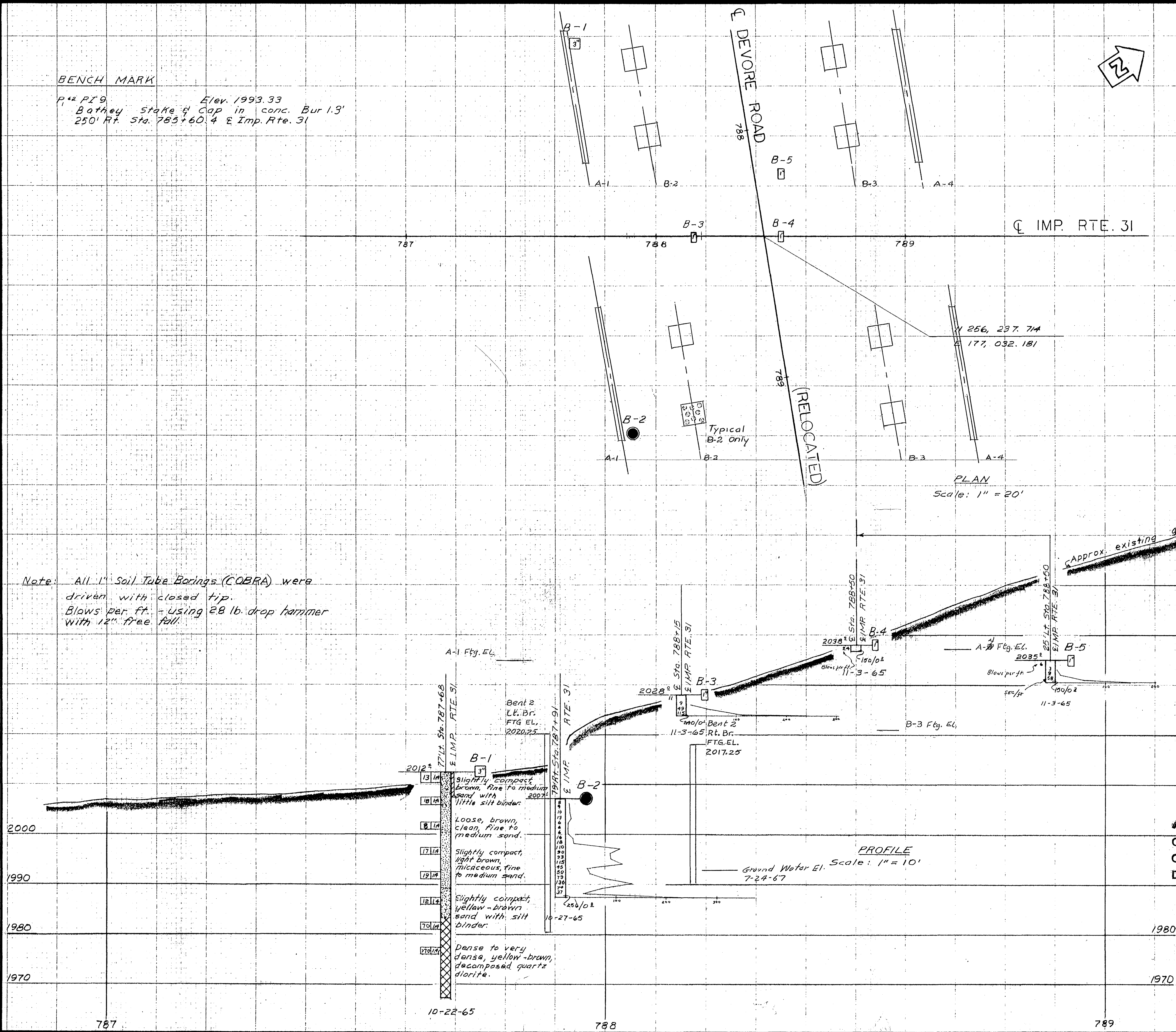
BRIDGE ENGINEER — CIVIL ENGINEER—LICENSE 5585

DATE APPROVED November 28, 1966


LEGEND OF BORING OPERATIONS
Penetrometer
2½" Cone Penetrometer
Sampler Boring (Dry)
Rotary Boring (Wet)
Auger Boring (Dry)
Jet Boring
Core Boring
Test Pit
1" Soil Tube
Rotary Boring
Penetration Boring
LEGEND OF EARTH MATERIALS
Gravel
Sand
Silt
Clay
Sandy Clay or Clayey Sand
Sandy Silt or Silty Sand
Silty-Clay or Clayey Silt
Peat and Organic Matter
Fill Material
Igneous Rock
Sedimentary Rock
Metamorphic Rock
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
FIELD STUDY By O. Mikes 11-3-65
DRAWN By G. Boulé 11-22-65
CHECKED By O. Mikes 11-29-65

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION


BENCH MARK
P.I. 42 PI 9 Elev. 1993.33
Bathey Stake & Cap in conc. Bur 1.3'
250' Rt. Sta. 785+60.4 ℄ Imp. Rte. 31
℄ DEVORE ROAD
(RELOCATED)
℄ IMP. RTE. 31
B-1
B-2
B-3
B-4
B-5
A-1
A-4
Typical B-2 only
N 256, 237.714
E 177, 032.181
PLAN
Scale: 1" = 20'
Note: All 1" Soil Tube Borings (COBRA) were driven with closed tip.
Blows per ft. - using 28 lb. drop hammer with 12" free fall.
Approx. existing ground line along ℄ IMP. RTE. 31
A-1 Ftg. El.
Bent 2 Lt. Br. FTG. EL. 2020.75
Bent 2 Rt. Br. FTG. EL. 2017.25
B-3 Ftg. El.
A-4 Ftg. El.
Slightly compact, brown, fine to medium sand with little silt binder.
Loose, brown, clean, fine to medium sand.
Slightly compact, light brown, micaceous, fine to medium sand.
Slightly compact, yellow-brown sand with silt binder.
Dense to very dense, yellow-brown, decomposed quartz diorite.
10-22-65
10-27-65
11-3-65
Ground Water El. 7-24-67
PROFILE
Scale: 1" = 10'
787
788
789
2070
2060
2050
2040
2030
2020
2010
2000
1990
1980
1970

LOCATION: R/L Bent # 2 only
PILE TYPE: C.I.D.H.
DIAMETER: 16 inch
TOTAL NO. PILES: 32
LINEAL FT. PILES, PLANS: 1028
LINEAL FT. PILES, "AS BUILT": 1030

REMARKS:
All footings constructed to plan elev.

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE 11-3-65

AS BUILT
CORRECTIONS BY
CONTRACT NO. 08-049114
DATE 8-20-68

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

SHEET 8 OF 8

DEVORE ROAD UNDERCROSSING

LOG OF TEST BORINGS

SCALE As Noted | BRIDGE 54-779R/L | PM 15.1 | DRAWING 54779-8

Charge: 08203

Disregard prints bearing earlier numbers → PREL. DRAWING No. PR-

238

Glen Helen Road UC

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	15			

K. Douglas Cook 10-12-11
CERTIFIED ENGINEERING GEOLOGIST

PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — K. Douglas Cook — No. 1391 — Exp. 12-31-11 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

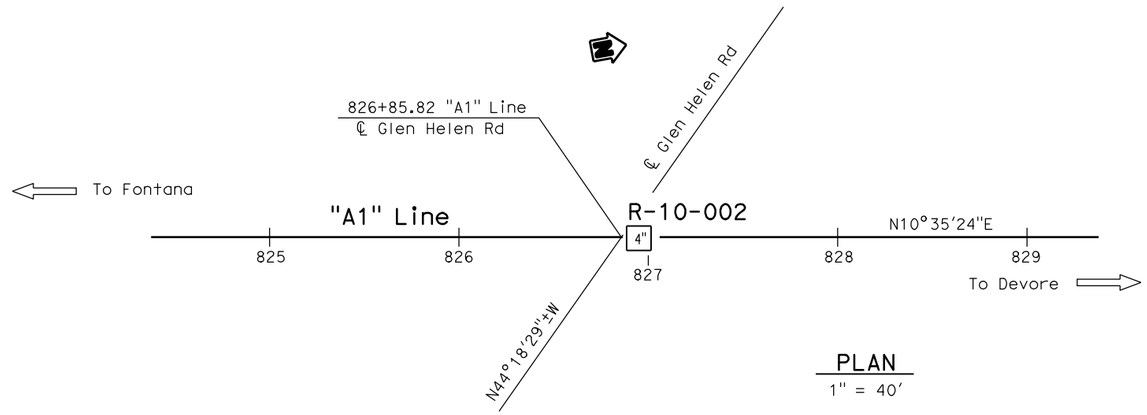
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

BENCH MARK

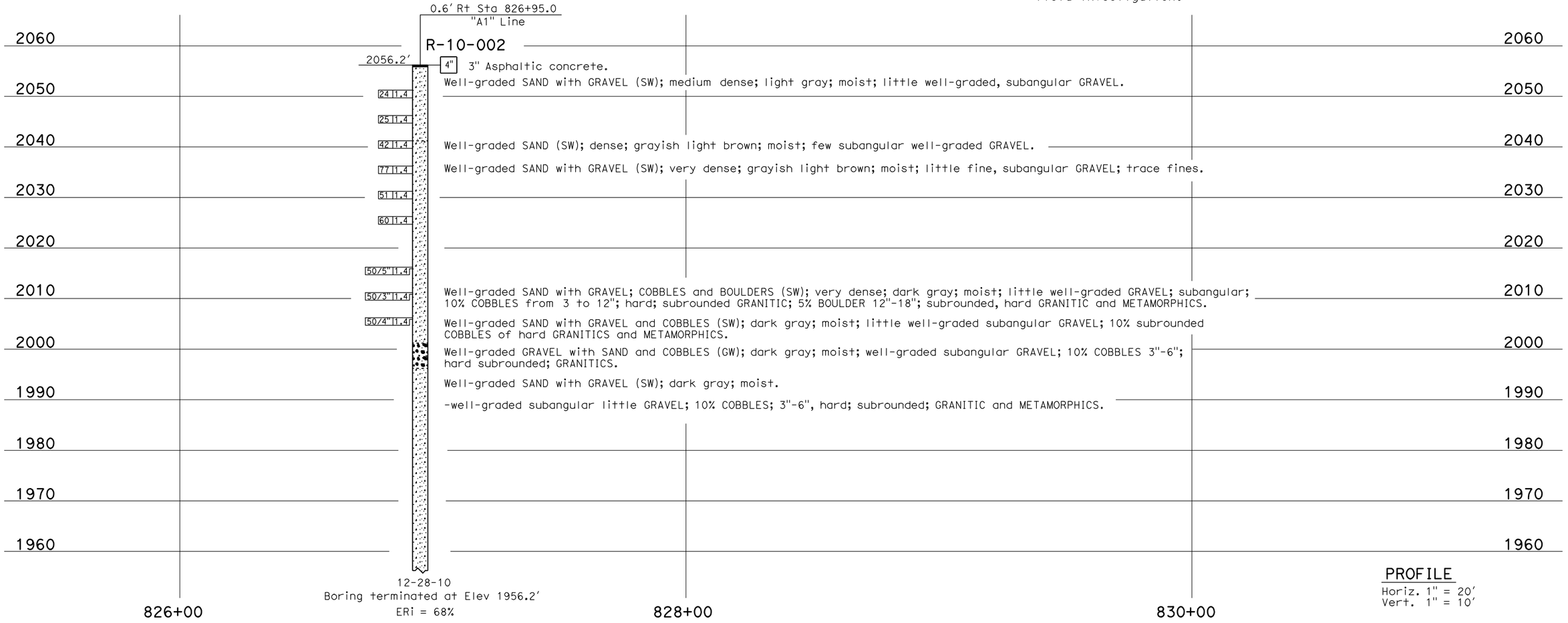
PNO 173 2120.910
FD STD Brass disk in concrete stamped "SBD-215-173 1988" 40' Ely of EOD Devore Rd Bridge at Nly end bridge; 70' Nly of EP NB SBD 215 at PM 17.3 at top of slope.

PNO 2010 2179.090
FD STD Brass disk in concrete stamped "D8 SCN SBD-15 PM 16.3 08.04.08" At top of slope SOUTH of Connector Bridge from NB SBD 15 to NB SBD 215.



PLAN
1" = 40'

Note: No ground water encountered during field investigation.



PROFILE
Horiz. 1" = 20'
Vert. 1" = 10'

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	GLEN HELEN RD UC (WIDEN)
FUNCTIONAL SUPERVISOR	DRAWN BY: F. Nguyen 5/11		DESIGN BRANCH X	54-0780L/R	LOG OF TEST BORINGS 1 OF 4
NAME: A. Perez-Cobo	CHECKED BY: B. Levine/S. Logeswaran	FIELD INVESTIGATION BY: C. Hoadley, F. Qmehr		POST MILE 15.66	

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 08000003660 CONTRACT NO.: 08-0K7100

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
08-26-11	10-03-11			X	X

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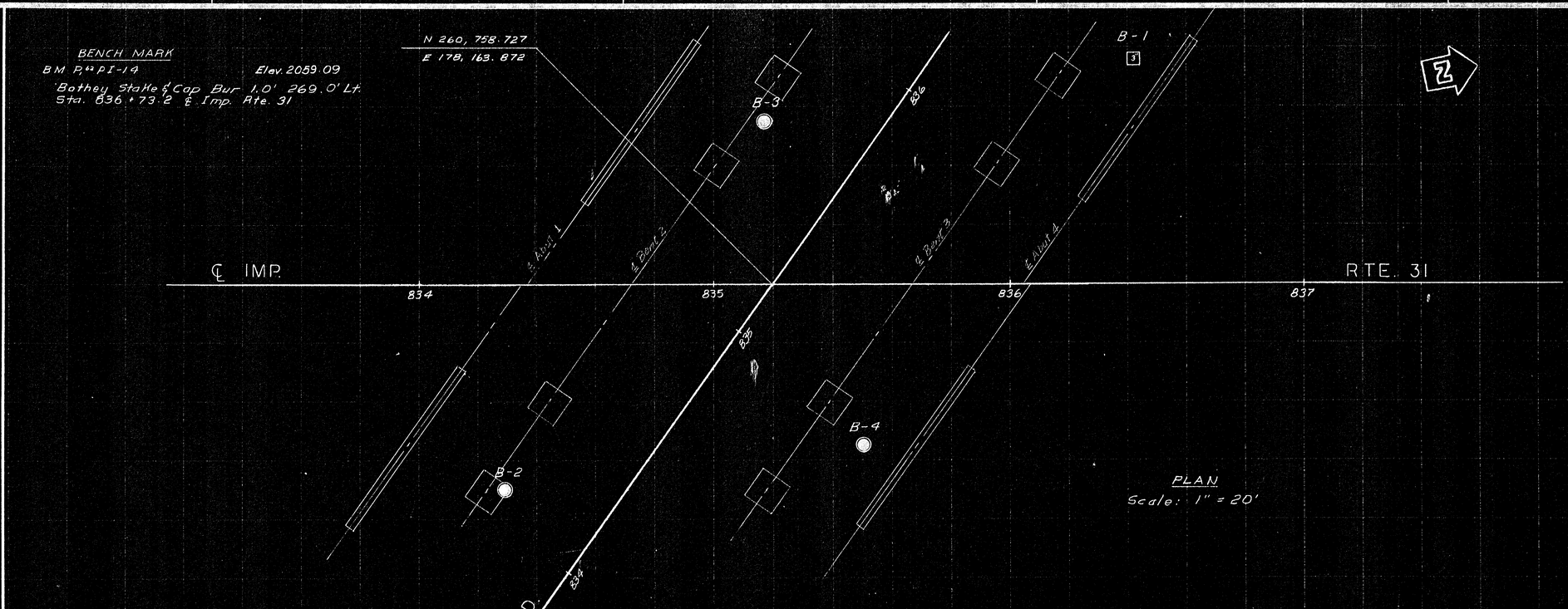
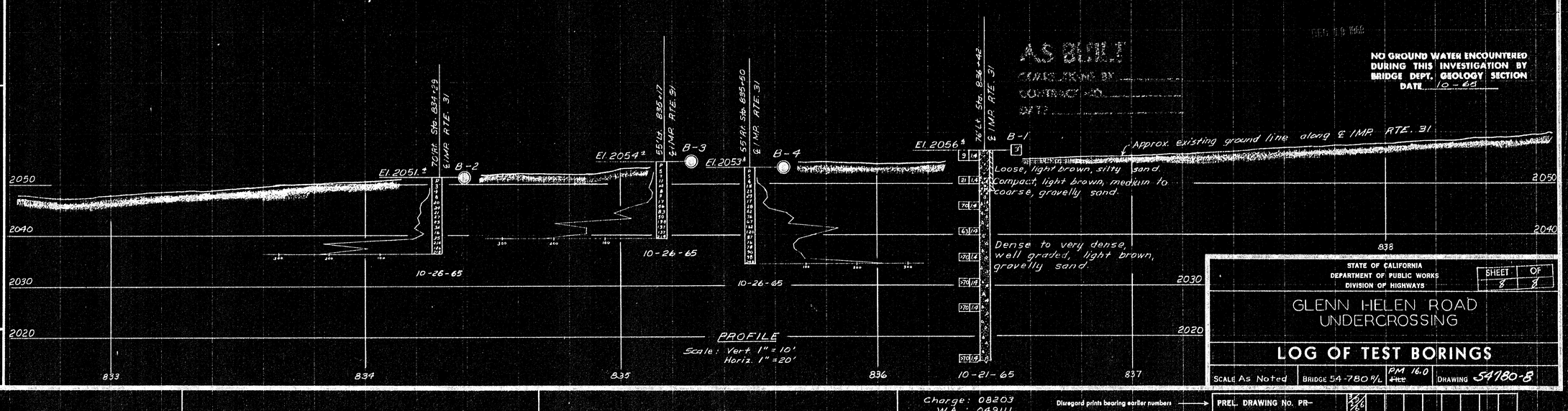
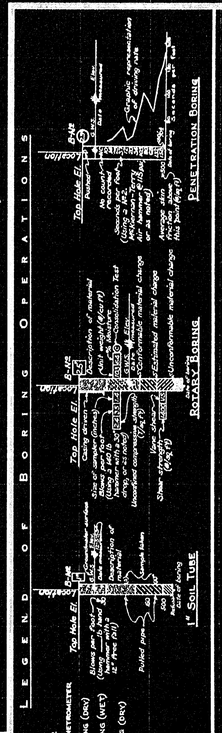
USERNAME => s128198 DATE PLOTTED => 21-OCT-2011 TIME PLOTTED => 12:28







FED. ROAD DIV. No.	STATE	F. A. PROJECT No.	SHEET No.	TOTAL SHEETS
7	CALIF.			

DIST.	COUNTY	ROUTE	SECTION	SHEET No.	TOTAL SHEETS
08	SBd.	31	14.8/16.7	246	398

BRIDGE ENGINEER CIVIL ENGINEER - LICENSE 5585

DATE APPROVED November 28, 1966

PLAN
Scale: 1" = 20'

AS BUILT
CORRECTIONS BY
CONTRACT NO. 08-049114
DATE 9-23-68

PROFILE
Scale: Vert. 1" = 10'
Horiz. 1" = 20'

AS BUILT
CORRECTIONS BY
CONTRACT NO.
DATE

DEC 19 1968

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE 10-65

LEGEND OF BORING OPERATIONS

- ⊖ PENETROMETER
- ● 2¼" CONE PENETROMETER
- ▨ SAMPLER BORING (DRY)
- ▨ ROTARY BORING (WET)
- ▨ AUGER BORING (DRY)
- ▨ JET BORING
- ◇ CORE BORING
- ☐ TEST PIT

1" SOIL TUBE: Top Hole El. – Location – B-No. – Groundwater surface – G.W.S. Elev. Date measured – Blows per foot (Using ___ lb hand hammer with a 12" free fall) – Description of material – Sample taken – Pulled pipe – Refusal – Date of boring

ROTARY BORING: Top Hole El. – Location – B-No. – Casing driven – Size of sampler (inches) – Blows per foot (Using a 140 lb hammer with a 30" drop, or as noted) – Unconfined compressive strength (T/sq ft) – Description of material – Unit weight (#/cu ft) – % Moisture – Consolidation Test – G.W.S. Elev. Date measured – Conformable material change – Estimated material change – Vane shear – Shear strength (#/sq ft) – Unconformable material change – Date of boring

PENETRATION BORING: Top Hole El. – Location – B-No. – Pushed – No count recorded – G.W.S. Elev. Date measured – Seconds per foot (Using a No. 2 McKiernan-Terry Air hammer @ 115 psi or as noted) – Graphic representation of driving rate – Average skin friction above this point (#/sq ft) – Date of boring – Seconds per foot

LEGEND OF EARTH MATERIALS

▨	GRAVEL	▨	SILTY CLAY OR CLAYEY SILT
▨	SAND	▨	PEAT AND/OR ORGANIC MATTER
▨	SILT	▨	FILL MATERIAL
▨	CLAY	▨	IGNEOUS ROCK
▨	SANDY CLAY OR CLAYEY SAND	▨	SEDIMENTARY ROCK
▨	SANDY SILT OR SILTY SAND	▨	METAMORPHIC ROCK

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

DIAGRAM SHOWING THE BASIS FOR ESTIMATES OF GRADE SIZE DISTRIBUTION USED IN DETERMINATION OF CLASS NAMES.

IF GRAVEL IS PRESENT IN APPRECIABLE AMOUNTS THE TERM "GRAVELLY" MAY BE ADDED TO THE CLASS NAME, VIZ. "GRAVELLY SAND." THE TERMS "COARSE", "MEDIUM" AND "FINE" WHEN USED TO DESCRIBE SAND, SILT AND GRAVEL REFER TO STANDARD GRADE SIZE LIMITS.

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

FIELD STUDY	By O. Mikes 10-26-65
DRAWN	By G. Boyle 11-23-65
CHECKED	By O. Mikes 11-24-65
Approval Recommended by	Engineering Geologist

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

246

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

SHEET	OF
8	8

GLENN HELEN ROAD UNDERCROSSING

LOG OF TEST BORINGS

SCALE	BRIDGE		DRAWING
As Noted	54-780 R/L	PM 16.0 ~~FILE~~	54780-8

Charge: 08203
WA : 049111

Disregard prints bearing earlier numbers → PREL. DRAWING NO. PR- 3/25/66

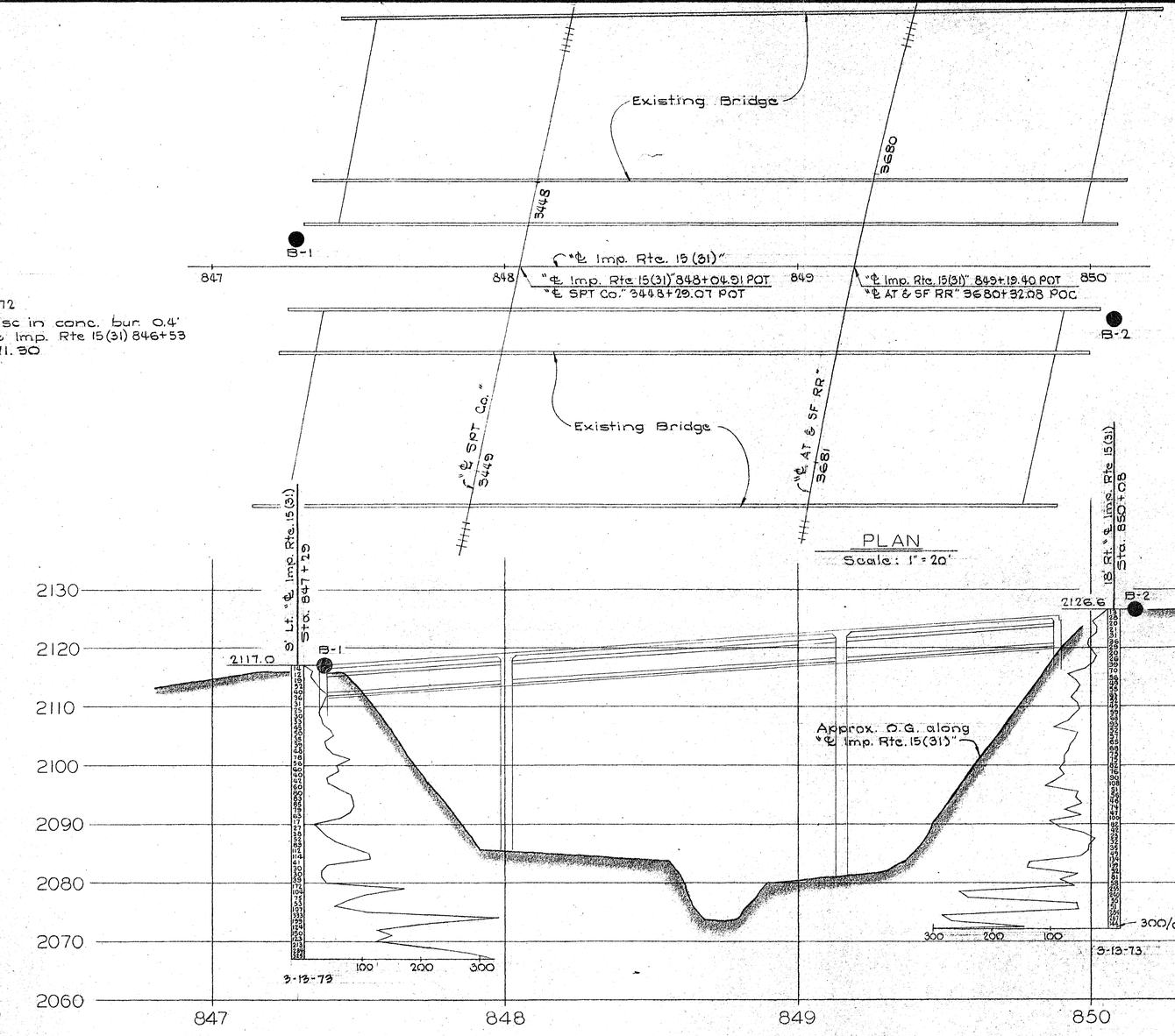
Devore Overhead

DIST.	COUNTY	ROUTE	POST MILES—TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	15(31)			

BRIDGE ENGINEERING GEOLOGIST — CHIEF ENGINEERING GEOLOGIST NO.

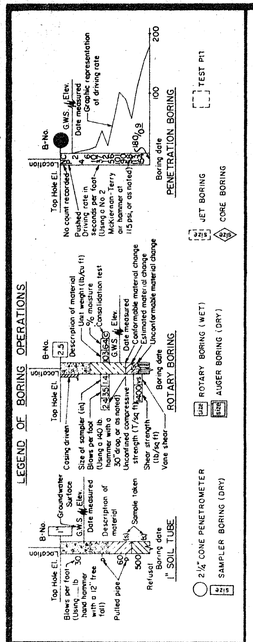
DATE APPROVED

BM 85-A-72
Std. br. disc in conc. bur. 0.4'
214' Rt. "℄ Imp. Rte 15(31) 846+53
Elev. 2071.30



Note = Structure information obtained from General Plan dated 1-17-73

LEGEND OF BORING OPERATIONS



LEGEND OF EARTH MATERIALS

- GRAVEL
- SAND
- SILT
- CLAY
- SILTY CLAY or CLAYEY SILT
- PEAT and/or ORGANIC MATTER
- FILL MATERIAL
- IGNEOUS ROCK
- SEDIMENTARY ROCK
- METAMORPHIC ROCK
- SANDY CLAY or CLAYEY SAND
- SANDY SILT or SILTY SAND

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

Penetration Index (Blows/ft)	Granular	Cohesive
0-5	Very loose	Very soft
5-10	Loose	Soft
10-20	Slightly compact	Stiff
20-35	Compact	Very stiff
35-70	Dense	Hard
70	Very dense	Very hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions	Group Symbols	Typical Names	Group Symbols	Typical Names
Coarse-grained Soils: Gravels: Clean gravels (Little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	GM	Silty gravels, gravel-sand-silt mixtures
Coarse-grained Soils: Gravels: Clean gravels (Little or no fines)	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines	GC	Clayey gravels, gravel-sand-clay mixtures
Coarse-grained Soils: Gravels: Gravels with fines (Appreciable amount of fines)	SW	Well-graded sands, gravelly sands, little or no fines	SM	Silty sands, sand-silt mixtures
Coarse-grained Soils: Gravels: Gravels with fines (Appreciable amount of fines)	SP	Poorly graded sands, gravelly sands, little or no fines	SC	Clayey sands, sand-clay mixtures
Fine-grained Soils: Silts and Clays (Liquid limit less than 50)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity		
Fine-grained Soils: Silts and Clays (Liquid limit less than 50)	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays		
Fine-grained Soils: Silts and Clays (Liquid limit less than 50)	OL	Organic silts and organic silty clays of low plasticity		
Fine-grained Soils: Silts and Clays (Liquid limit greater than 50)	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts		
Fine-grained Soils: Silts and Clays (Liquid limit greater than 50)	CH	Inorganic clays of high plasticity, fat clays		
Fine-grained Soils: Silts and Clays (Liquid limit greater than 50)	OH	Organic clays of medium to high plasticity, organic silts		
Highly Organic Soils	Pt	Peat and other highly organic soils		

ENGINEERING GEOLOGY SECTION		
FIELD STUDY	By R Brand 3-13-73	Approval Recommended By
DRAWN	By KEN JOHNSON	ENGINEERING GEOLOGIST
CHECKED	By R Brand 10-28-75	CERTIFIED ENGINEERING GEOLOGIST NUMBER 447

State of CALIFORNIA
DEPARTMENT OF TRANSPORTATION

OFFICE OF STRUCTURES
DESIGN GROUP
PROJECT ENGINEER

BRIDGE NO. 54-818 R/L
POST MILE 16.6

DEVORE OVERHEAD (WIDEN)
LOG OF TEST BORINGS

DH-05 2146

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 08201
WO 172311

Disregard prints bearing earlier revision dates →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

FED. ROAD DIV. No.	STATE	F. A. PROJECT No.	SHEET No.	TOTAL SHEETS
7	CALIF.			

DIST.	COUNTY	ROUTE	SECTION	SHEET No.	TOTAL SHEETS
08	SBd	31	14.1/16.7	256	398

BRIDGE ENGINEER · CIVIL ENGINEER—LICENSE 5865

DATE APPROVED November 28, 1966

BENCH MARKS

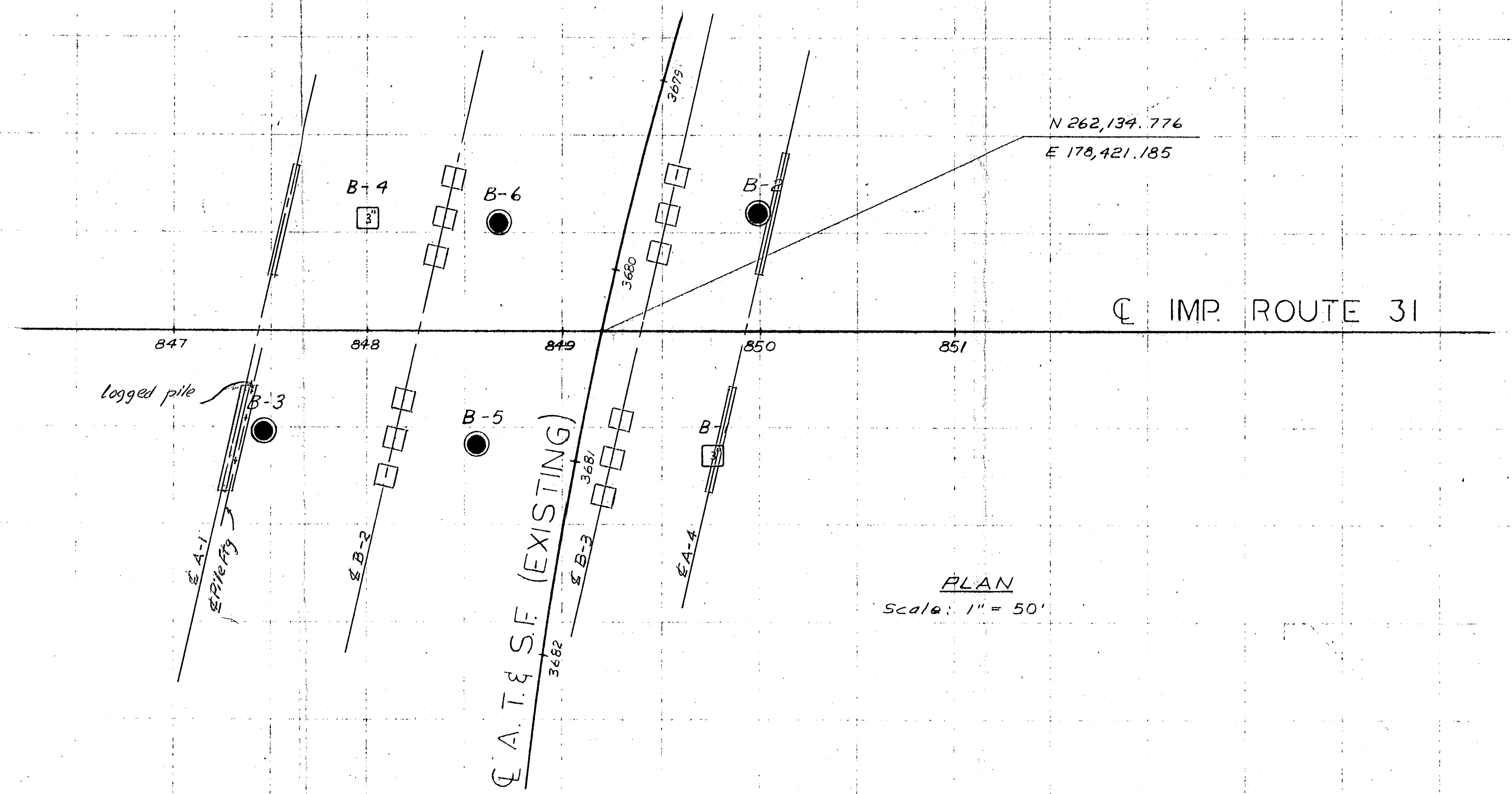
B.M. # P. 62 P. I. 15
Bathey Stake & Cap Bur. 1½'
560.8' Lt. 850 + 88.83 POT ℄ IMP. RTE. 31
Elev. 2093.33

B.M. # P62 P. I. 16
Bathey Stake & Cap Bur. 1½'
445.4 Lt. 865 + 17.85 POC ℄ W-S CONN
Elev. 2104.82

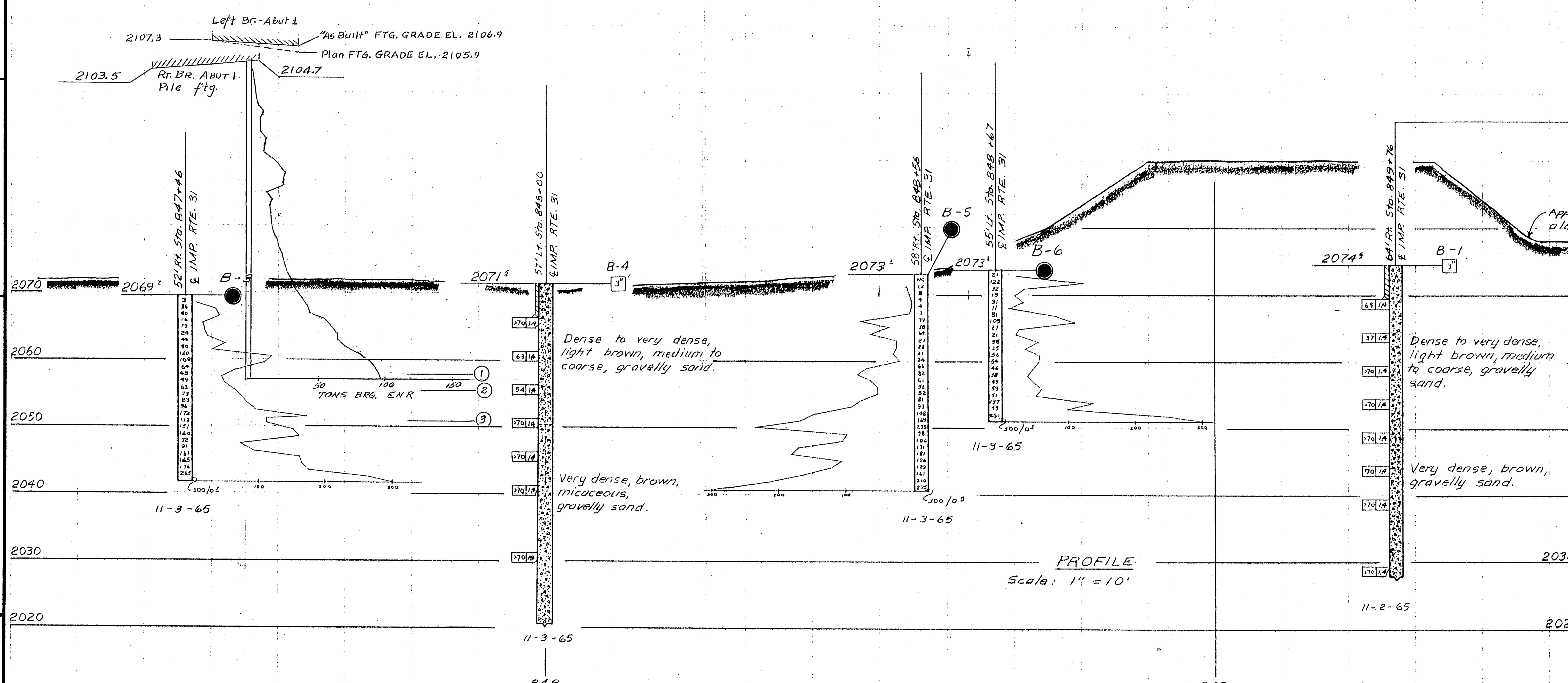
DESIGN PILE LOADING: 60T
PILE TYPE: 10BP57
TOTAL NO. PILES: 8
LINEAL FT. PILES, PLANS: 396.8
LINEAL FT. PILES, "AS BUILT": 394.1
HAMMER: 06 VULCAN

REMARKS:
Piles at Rt. Br. Abut 1 pile ftg. only.
① Minimum Penetration
② Average ✓
③ Maximum ✓

NOTE: All other ftgs. constructed to plan elevation, except as shown.
Spread ftg. @ Abut 1, Rt. Br. abandoned after washout. Pile foundation constructed N. of existing Abut. by CCO # 117.



AS BUILT
CORRECTIONS BY J. Wheeler
CONTRACT NO. 08-049114
DATE 9-24-68
& 3-26-69



NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE 11-3-65

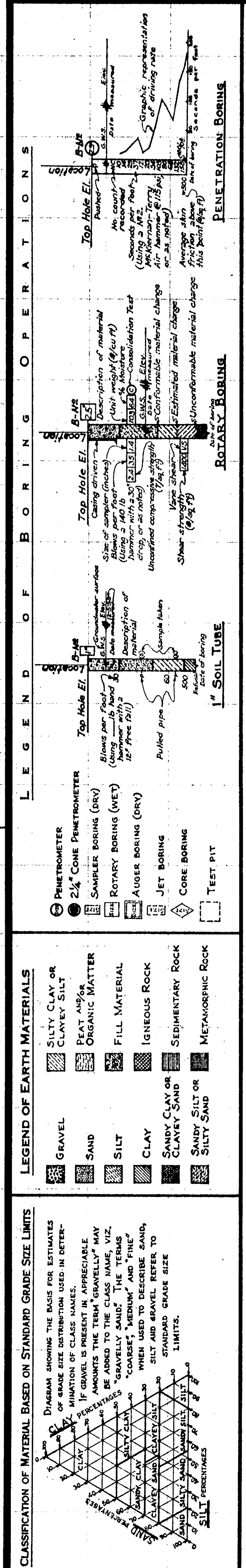
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

SHEET 10 OF 10

DEVORE OVERHEAD

LOG OF TEST BORINGS

SCALE As Noted | BRIDGE 54-818R/L | PM 16.3 | DRAWING 54818-11



NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

FIELD STUDY	By O. Mikes 11-3-65
DRAWN	By G. Boyle 12-3-65
CHECKED	By O. Mikes 12-6-65

Approval Recommended by: Engineering Geologist

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

256

Charge: 08203
WA: 049111

Disregard prints bearing earlier numbers → PREL. DRAWING NO. PR-

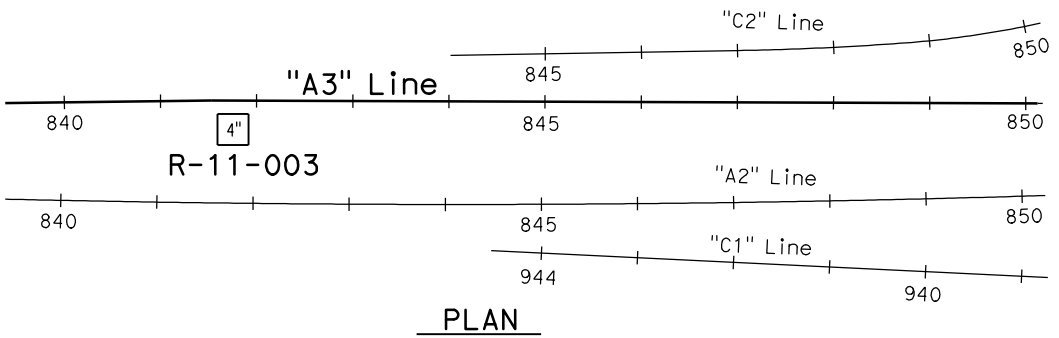
PRINTED ON 1025 PAPERCLOTH

BENCH MARK

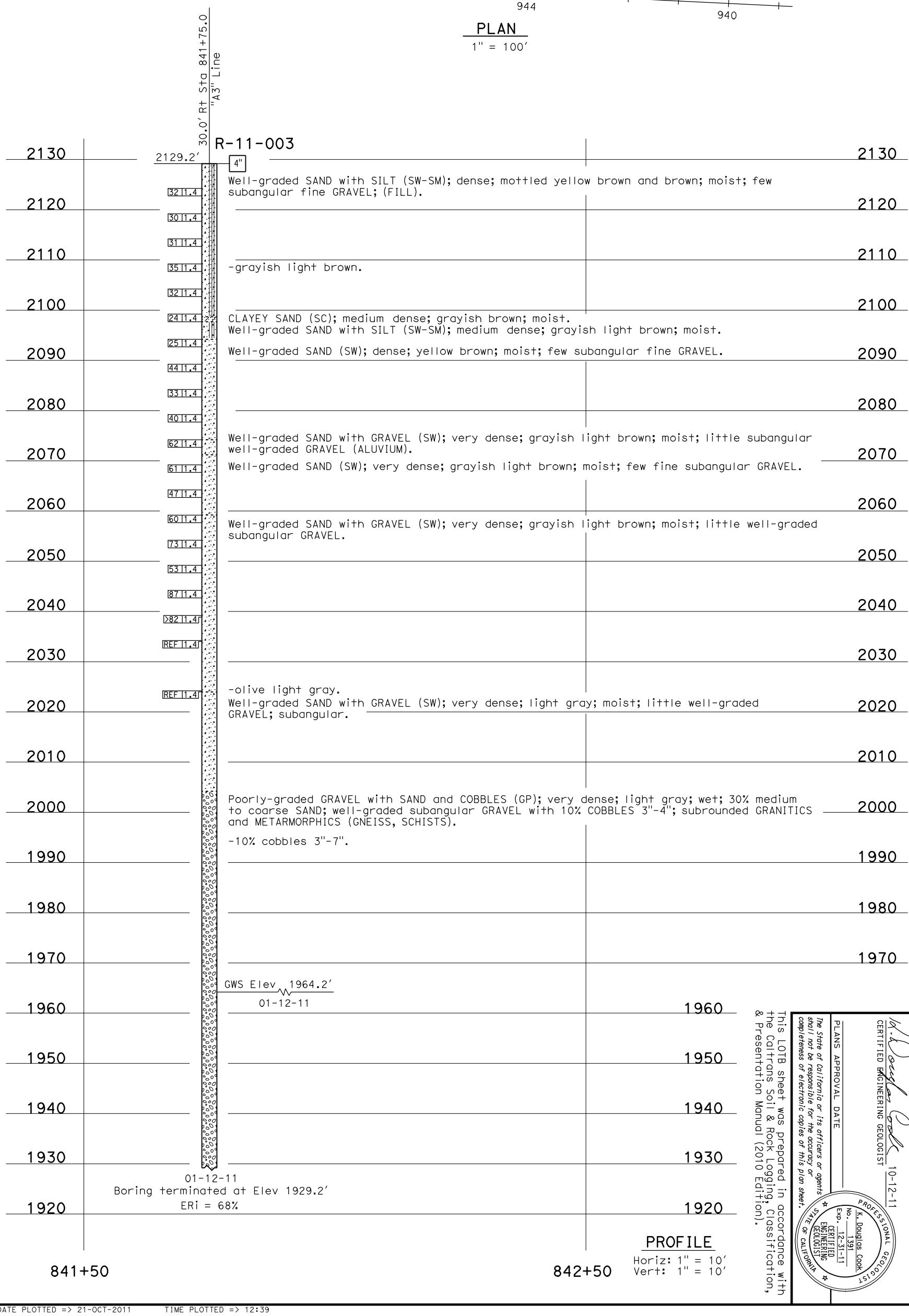
PNO 173 2120.910
FD STD Brass disk in concrete stamped "SBD-215-173 1988" 40' Ely of EOD Devore Rd Bridge at Nly end bridge; 70' Nly of EP NB SBD 215 at PM 17.3 at top of slope.

PNO 2010 2179.090
FD STD Brass disk in concrete stamped "D8 SCN SBD-15 PM 16.3 08.04.08" At top of slope SOUTH of Connector Bridge from NB SBD 15 to NB SBD 215.

CHECK PRINT
by _____



PLAN
1" = 100'



841+50 842+50

PROFILE
Horiz: 1" = 10'
Vert: 1" = 10'

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROFESSIONAL GEOLOGIST
K. Douglas Cook
No. 1391
Exp. 12-31-11
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

PLANS APPROVAL DATE

K. Douglas Cook 10-12-11
CERTIFIED ENGINEERING GEOLOGIST

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	15			

ENGINEERING SERVICES
MATERIALS AND GEOTECHNICAL SERVICES
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH X

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DEVORE OH (WIDEN)
LOG OF TEST BORINGS 1 OF 4

BRIDGE NO. 54-0818L/R
POST MILE 15.90

FUNCTIONAL SUPERVISOR
NAME: A. Perez-Cobo

DRAWN BY: F. Nguyen 6/11
CHECKED BY: B. Levine/S. Logeswaran

FIELD INVESTIGATION BY:
D. Cook, C. Hoadley

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
08-26-11	X	X
10-03-11		

UNIT: 3643
PROJECT NUMBER & PHASE: 0800000366O
CONTRACT NO.: 08-0K7100
FILE => devore-ohtof4.dgn

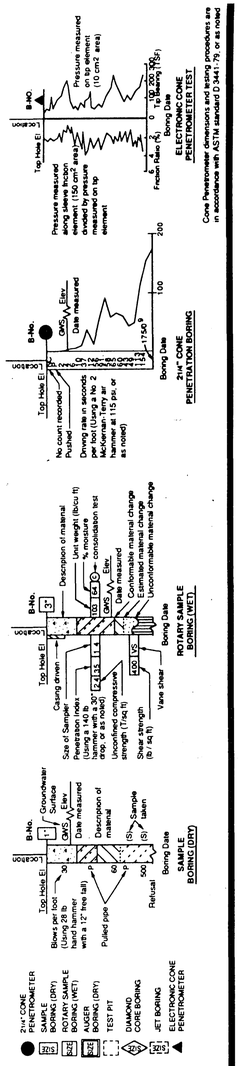
USERNAME => s128198 DATE PLOTTED => 21-OCT-2011 TIME PLOTTED => 12:39

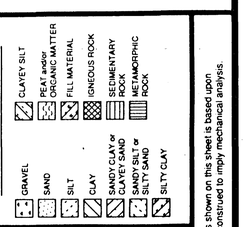
Cajon Creek

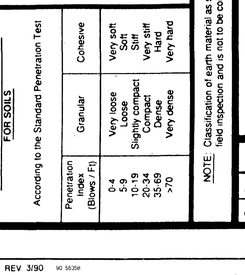

SEISMIC RETROFIT PROJECT NO. 438
DIST. 08 COUNTY SBd ROUTE 15 POST MILES - TOTAL PROJECT 16.07
STRUCTURAL FOUNDATIONS BRANCH, ENGINEERING SERVICE CENTER
REGISTERED ENGINEER-CIVIL
CAJON CREEK BRIDGE
LOG OF TEST BORINGS 4 OF 4
NOTE: THIS LOG OF TEST BORINGS IS AVAILABLE ON MICROFILM AT OFFICE OF STRUCTURES DESIGN SACRAMENTO, CALIFORNIA
CU: 08109
EA: 413901
BRIDGE No. 54-0781
REGISTERED PROFESSIONAL ENGINEER
S. AMIRI
No. 49996
Exp. 6-30-97
CIVIL
STATE OF CALIFORNIA
AS BUILT PLANS
Contract No. 08-049114
Date Completed 11-10-69
Document No. 86000317
B-6
B-7
B-4
B-5
B-1
B-3
B-2
W.S. CONN.
E.S. CONN.
NE CONN.
℄ IMP. RTE. 31
℄ CAJON CREEK
N263,098.663
E178,601.427
November 28, 1966
PLAN
Scale: 1" = 50'
AS BUILT
CORRECTIONS BY
CONTRACT NO.
DATE
LEGEND OF BORING OPERATIONS
Penetrometer
2½" Cone Penetrometer
Sampler Boring (Dry)
Rotary Boring (Wet)
Auger Boring (Dry)
Jet Boring
Core Boring
Test Pit
1" SOIL TUBE
ROTARY BORING
PENETRATION BORING
LEGEND OF EARTH MATERIALS
Gravel
Sand
Silt
Clay
Sandy Clay or Clayey Sand
Sandy Silt or Silty Sand
Silty Clay or Clayey Silt
Peat and/or Organic Matter
Fill Material
Igneous Rock
Sedimentary Rock
Metamorphic Rock
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION
2080
2070
2060
2050
2040
2030
2020
Dense to very dense, light brown, gravelly sand with scattered cobbles.
Dense to very dense, brown, interbedded, fine to medium sand and gravelly sand
10-26-65
Very dense, light brown gravelly sand with scattered cobbles.
Dense, brown, medium to coarse sand with little silt binder.
Dense to very dense brown, gravelly sand with little silt binder.
Very dense, brown-gray, micaceous, gravelly sand.
Very dense, brown gravelly sand with little silt binder.
10-28-65
11-1-65
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE
PROFILE
DIST. 08 COUNTY SBd ROUTE 15
ENGINEERING GEOLOGY BRANCH, TRANSPORTATION MATERIALS & RESEARCH
CERTIFIED ENGINEERING GEOLOGIST - PROJECT GEOLOGIST
CAJON CREEK BRIDGE
LOG OF TEST BORINGS 4 OF 4
NOTE: THIS LOG OF TEST BORINGS IS AVAILABLE ON MICROFILM AT OFFICE OF STRUCTURES DESIGN SACRAMENTO, CALIFORNIA
CU: 08203
EA: 325801
BRIDGE No. 54-781R/L
REGISTERED GEOLOGIST
L.E. RAND
No. 751
Exp. 6-30-92
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
CAJON CREEK BRIDGE
JUN 2 5 1996
LOG OF TEST BORINGS
856
857
858
859
860
861
862
863

FOR PLAN VIEW, SEE LOG OF TEST BORINGS SHEET 1 OF 4

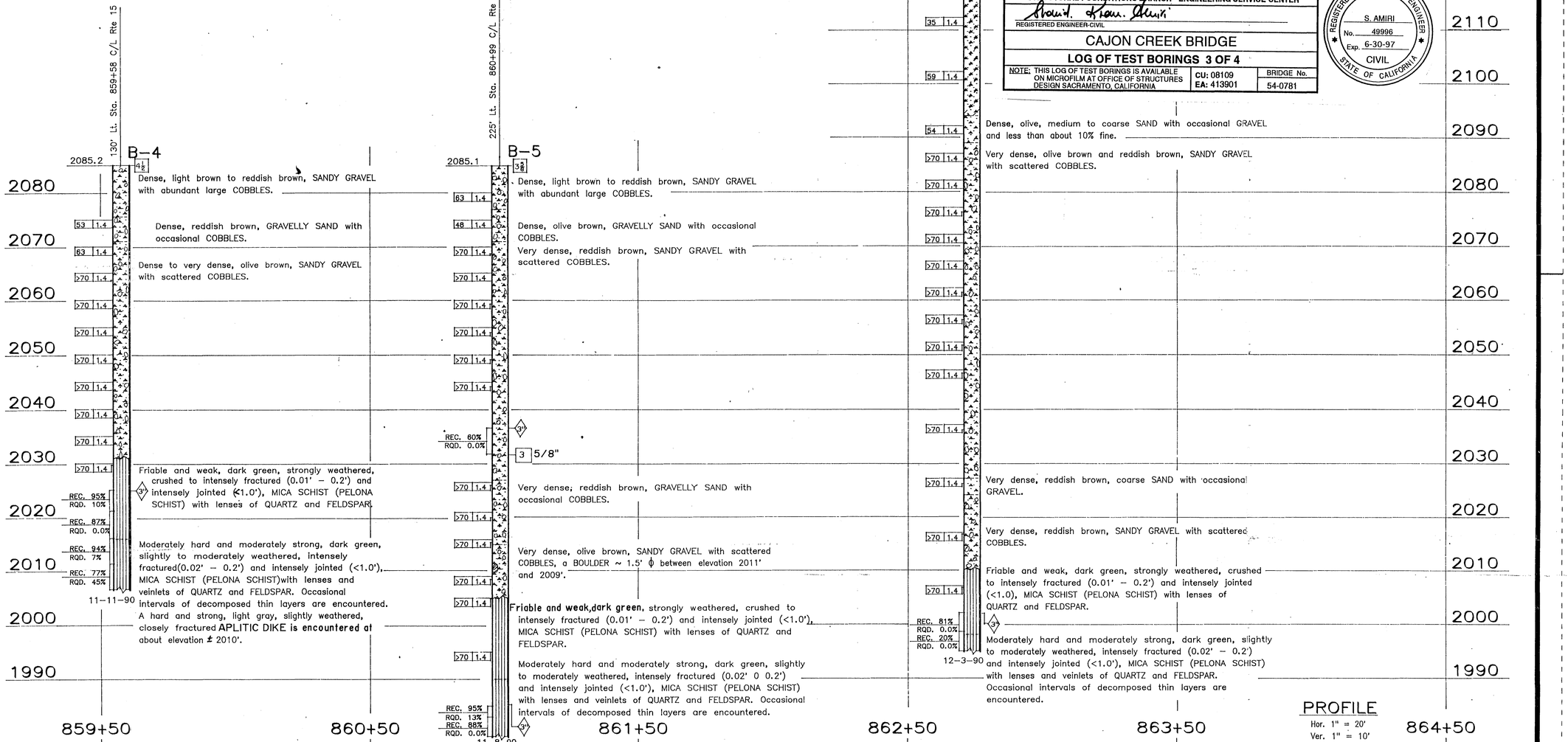
NOTES :
1. For Bench Marks and Notes see Sheet 1 of 4.







NOTE Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.



DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	15			

CERTIFIED ENGINEERING GEOLOGIST

REGISTERED GEOLOGIST — L.E.RAND — No. 751 — Exp. 6-30-92 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

PLANS APPROVAL DATE

SEISMIC RETROFIT PROJECT NO. 438

DIST.	COUNTY	ROUTE	POST MILES - TOTAL PROJECT	Sheet No.	Total Sheets
08	SBd	15	16.07		

STRUCTURAL FOUNDATIONS BRANCH - ENGINEERING SERVICE CENTER

REGISTERED ENGINEER-CIVIL

REGISTERED PROFESSIONAL ENGINEER — S. AMIRI — No. 49996 — Exp. 6-30-97 — CIVIL — STATE OF CALIFORNIA

CAJON CREEK BRIDGE

LOG OF TEST BORINGS 3 OF 4

NOTE: THIS LOG OF TEST BORINGS IS AVAILABLE ON MICROFILM AT OFFICE OF STRUCTURES DESIGN SACRAMENTO, CALIFORNIA

CU: 08109
EA: 413901

BRIDGE No. 54-0781

OFFICE OF TRANSPORTATION MATERIALS & RESEARCH — ENGINEERING GEOLOGY BRANCH

DRAWN BY K. WAHL 2-91 & VICTOR SESTOKAS 2/91

CHECKED BY Faramarz Gharemi 3/91

State of CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN

BRIDGE NO. 54-0781RL
POST MILE 16.07

CAJON CREEK BRIDGE

LOG OF TEST BORINGS 3 OF 4

JUN 25 1996

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 08203
EA 325801

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

TL 6051 REV. 3/90 90 56358

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	15			

CERTIFIED ENGINEERING GEOLOGIST

REGISTERED GEOLOGIST — L.E.RAND — No. 751 — Exp. 6-30-92 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

PLANS APPROVAL DATE

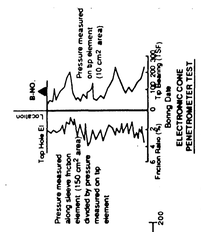
FOR PLAN VIEW, SEE LOG OF TEST BORINGS SHEET 1 OF 4

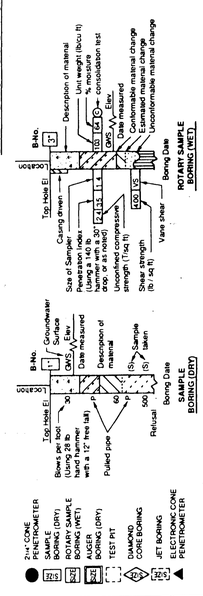
NOTE :
For Bench Marks and Notes
see Sheet 1 of 4.

NOTES :
1. A Seismic Refraction Investigation was conducted during November,1990 by Joe Egan,District II Engineering Geologist.The investigation consisted of eight Seismic Traverses.Only one line Traverses the bridge site.Data from the Seismic study is available at our LA office.
2. No goundwater encountered during field investigation.
3. COBBLES consist mainly of hard granitic rock fragments and soft SCHIST fragments. Sizes range between 3" to 10". GRAVELS are mostly subangular and range in size between 0.1" – 2.5"(0.5" – 2.0" average).

SEISMIC RETROFIT PROJECT NO. 438					
DIST.	COUNTY	ROUTE	POST MILES - TOTAL PROJECT	Sheet No.	Total Sheets
08	SBd	15	16.07		
STRUCTURAL FOUNDATIONS BRANCH - ENGINEERING SERVICE CENTER					
Khalid Khan Amiri — REGISTERED ENGINEER-CIVIL					
CAJON CREEK BRIDGE					
LOG OF TEST BORINGS 2 OF 4					
NOTE: THIS LOG OF TEST BORINGS IS AVAILABLE ON MICROFILM AT OFFICE OF STRUCTURES DESIGN SACRAMENTO, CALIFORNIA		CU: 08109 EA: 413901		BRIDGE No. 54-0781	

REGISTERED PROFESSIONAL ENGINEER — S. AMIRI — No. 49996 — Exp. 6-30-97 — CIVIL — STATE OF CALIFORNIA



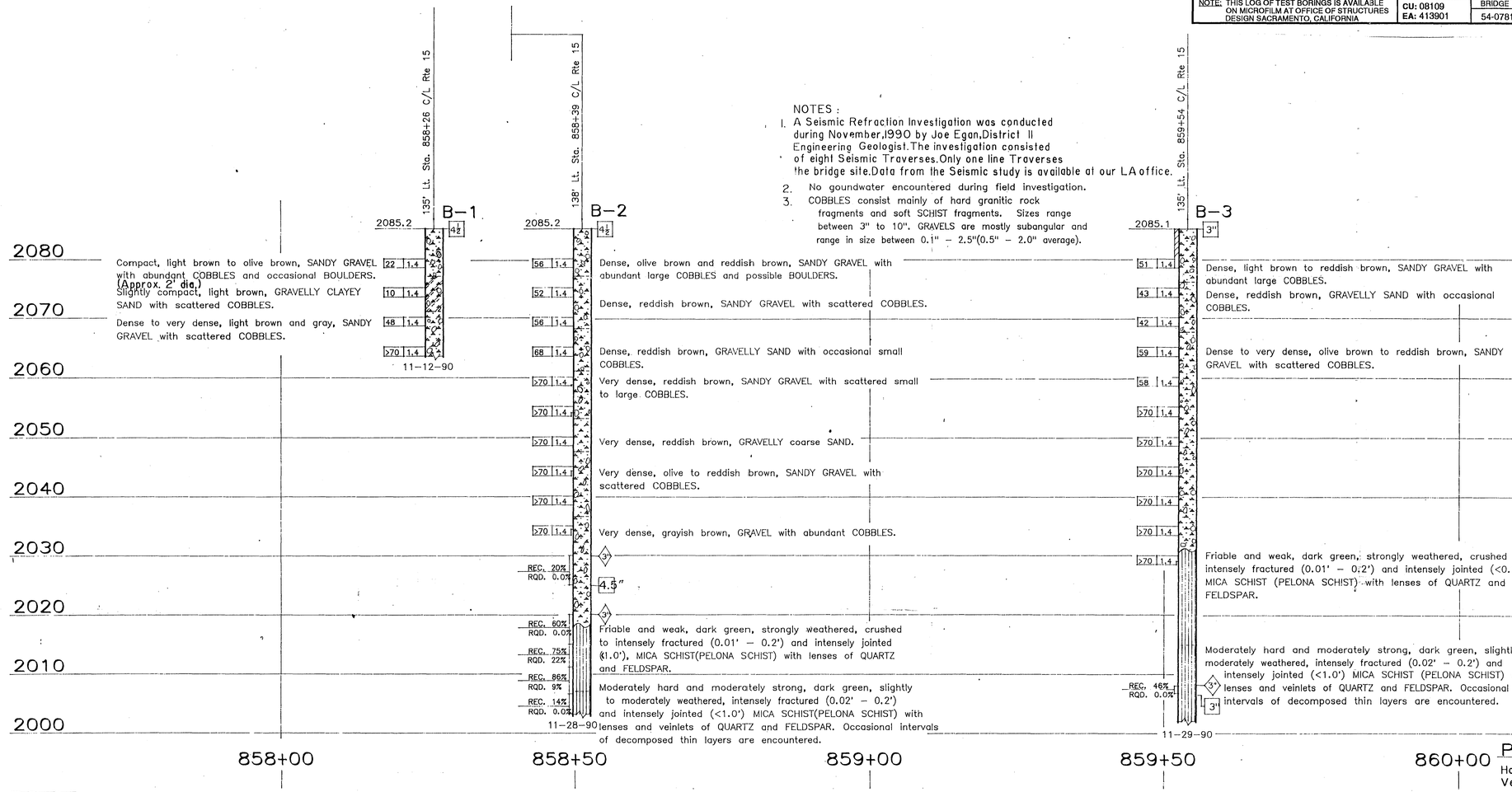


CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

Penetration Index (Blows / Ft)	Granular	Cohesive
0-4	Very loose	Very soft
5-9	Loose	Soft
10-19	Slightly compact	Stiff
20-34	Compact	Very stiff
35-69	Dense	Hard
>70	Very dense	Very hard

NOTE Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.



OFFICE OF TRANSPORTATION MATERIALS & RESEARCH	ENGINEERING GEOLOGY BRANCH
DRAWN BY	K. WAHL 2-91 & VICTOR SESTOKAS 2/91
CHECKED BY	3/11

State of CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN

BRIDGE NO.	54-0781RL
POST MILE	16.07

JUN 25 1996
~~MAR 29 1991~~

CAJON CREEK BRIDGE

LOG OF TEST BORINGS 2 OF 4

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 08203
EA 325801

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

TL 6051 REV 3/90

TRANSLAB FILE

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	15			

CERTIFIED ENGINEERING GEOLOGIST

REGISTERED GEOLOGIST — L.E.RAND — No. 751 — Exp. 6-30-92 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

PLANS APPROVAL DATE

BENCH MARKS

BM 87-A-72 ELEV.2088.10
Std. br.disk in conc.stamped "BM 85-A-72"
270' Rt.Sta.860+57 ℄ Rte. 15 bur.0.7'
As per Reference 253529 26II59

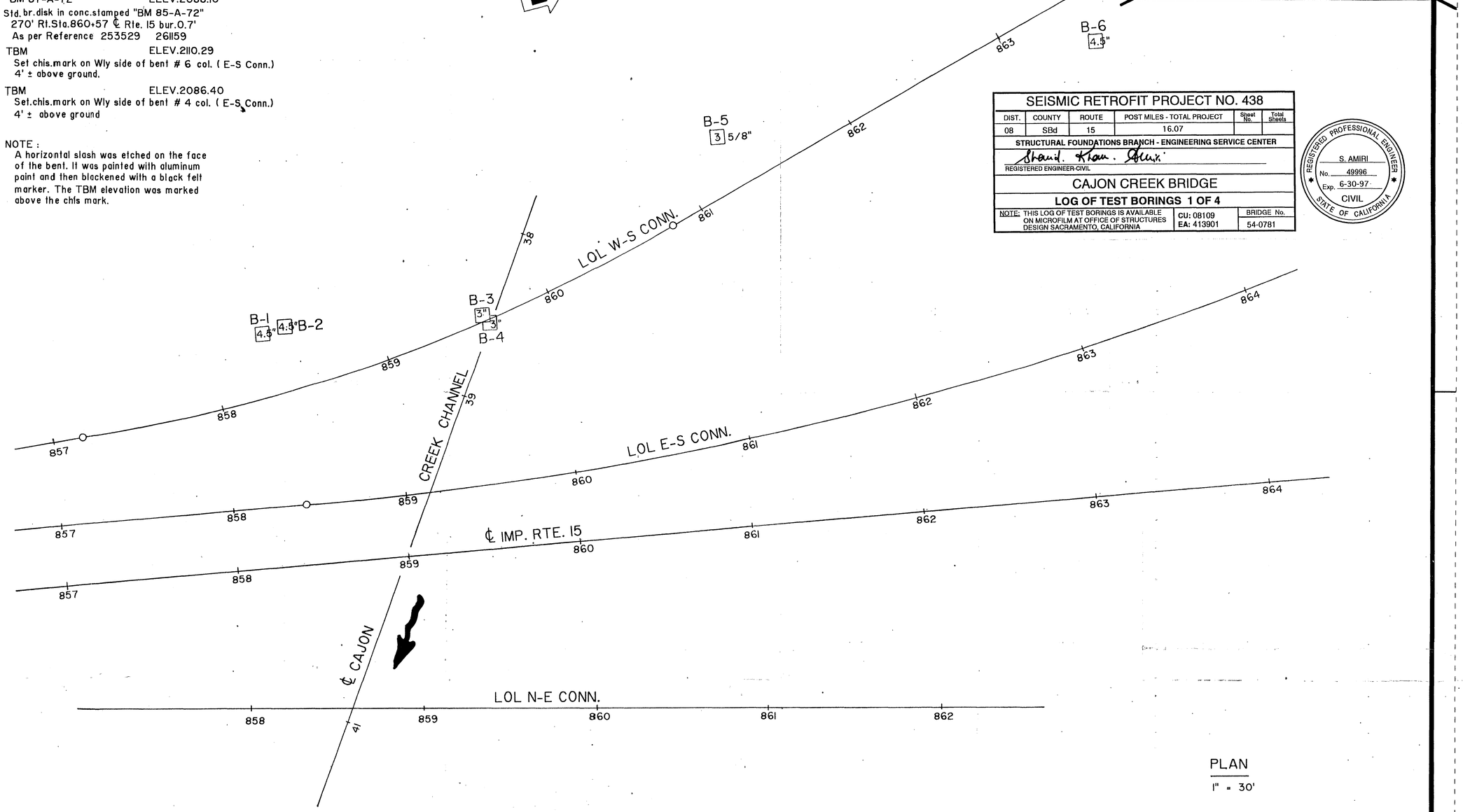
TBM ELEV.2110.29
Set chis.mark on Wly side of bent # 6 col. (E-S Conn.)
4' ± above ground.

TBM ELEV.2086.40
Set.chis.mark on Wly side of bent # 4 col. (E-S Conn.)
4' ± above ground

NOTE :
A horizontal slash was etched on the face of the bent. It was painted with aluminum paint and then blackened with a black felt marker. The TBM elevation was marked above the chis mark.

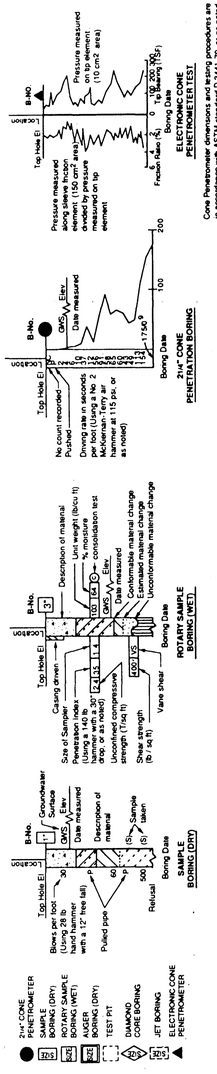
SEISMIC RETROFIT PROJECT NO. 438					
DIST.	COUNTY	ROUTE	POST MILES - TOTAL PROJECT	Sheet No.	Total Sheets
08	SBd	15	16.07		
STRUCTURAL FOUNDATIONS BRANCH - ENGINEERING SERVICE CENTER					
Shamil. Khan. Amiri — REGISTERED ENGINEER-CIVIL					
CAJON CREEK BRIDGE					
LOG OF TEST BORINGS 1 OF 4					
NOTE: THIS LOG OF TEST BORINGS IS AVAILABLE ON MICROFILM AT OFFICE OF STRUCTURES DESIGN SACRAMENTO, CALIFORNIA		CU: 08109 EA: 413901		BRIDGE No. 54-0781	

REGISTERED PROFESSIONAL ENGINEER — S. AMIRI — No. 49996 — Exp. 6-30-97 — CIVIL — STATE OF CALIFORNIA



PLAN
1" = 30'

LEGEND OF BORING OPERATIONS:



LEGEND OF EARTH MATERIALS

GRAVEL · SAND · SILT · CLAY · CLAYEY SILT · PEAT and/or ORGANIC MATTER · FILL MATERIAL · IGNEOUS ROCK · SEDIMENTARY ROCK · METAMORPHIC ROCK · SANDY CLAY or CLAYEY SAND · SANDY SILT or SILTY SAND · SILTY CLAY

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

Penetration Index (Blows / Ft)	Granular	Cohesive
0-4	Very loose	Very soft
5-9	Loose	Soft
10-19	Slightly compact	Stiff
20-34	Compact	Very stiff
35-69	Dense	Hard
>70	Very dense	Very hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

OFFICE OF TRANSPORTATION MATERIALS & RESEARCH	ENGINEERING GEOLOGY BRANCH	
DRAWN BY	VICTOR SESTOKAS	2/91
CHECKED BY	Faramarz Gerami	3/91

State of CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN

BRIDGE NO.	CAJON CREEK BRIDGE
54-078IRL	
POST MILE	LOG OF TEST BORINGS 1 OF 4
16.07	

JUN 2 5 1996

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 08203
EA 325801

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

TI 6061 REV. 3/90 90 5638

N15 / S215 Separation

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	215			

K. Douglas Cook 10-12-11
CERTIFIED ENGINEERING GEOLOGIST

PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — K. Douglas Cook — No. 1391 — Exp. 12-31-11 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

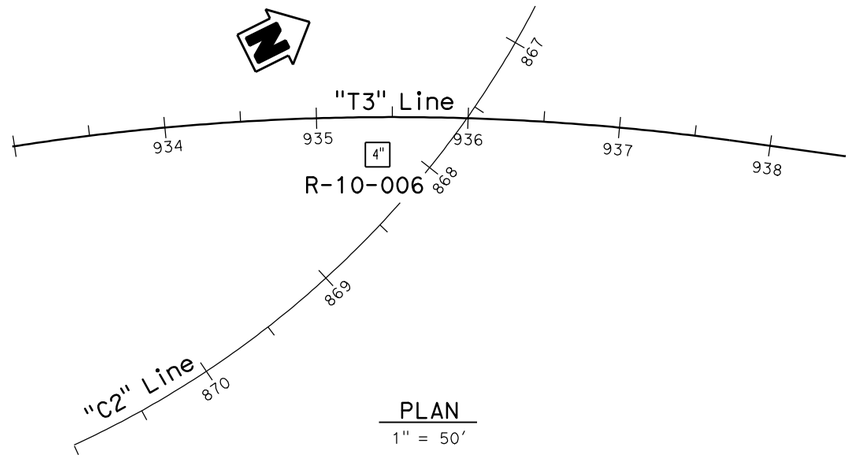
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

BENCH MARK

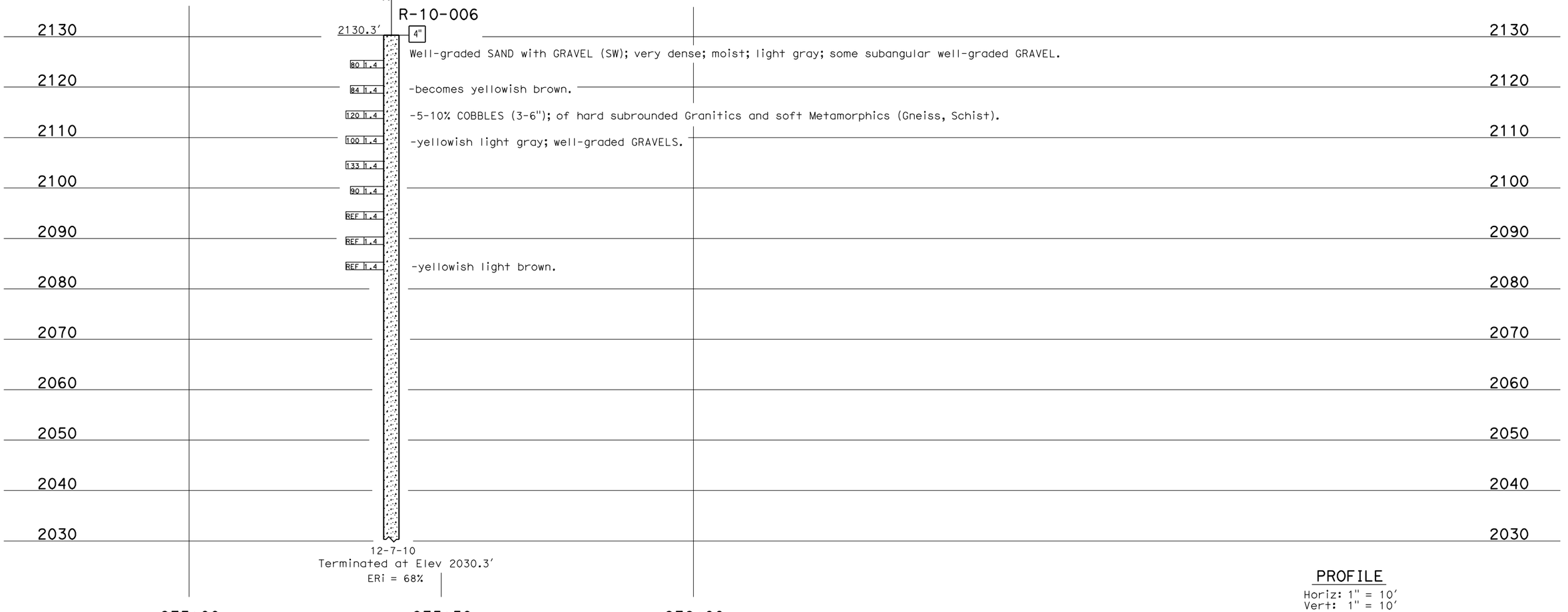
PNO 173 2120.910
FD STD Brass disk in concrete stamped "SBD-215-173 1988" 40′ Ely of EOD Devore Rd Bridge at NIy end bridge; 70′ NIy of EP NB SBD 215 at PM 17.3 at top of slope.

PNO 2010 2179.090
FD STD Brass disk in concrete stamped "D8 SCN SBD-15 PM 16.3 08.04.08" At top of slope SOUTH of Connector Bridge from NB SBD 15 to NB SBD 215.



PLAN
1" = 50′

Note: No ground water encountered during field investigation.



PROFILE
Horiz: 1" = 10′
Vert: 1" = 10′

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	W-S CONNECTOR UC (WIDEN)
FUNCTIONAL SUPERVISOR	DRAWN BY: W. Tang 06/11	FIELD INVESTIGATION BY:	DESIGN BRANCH X	NEW	LOG OF TEST BORINGS 1 OF 5
NAME: A. Perez-Cobo	CHECKED BY: B. Levine/S. Logeswaran	D. Cook		POST MILE 17.18	

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 080000003661 CONTRACT NO.: 08-0K7100

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
09-07-11				X	X

FILE => wsconn-uc-widen1of 5.dgn

USERNAME => s128198 DATE PLOTTED => 21-OCT-2011 TIME PLOTTED => 12:55

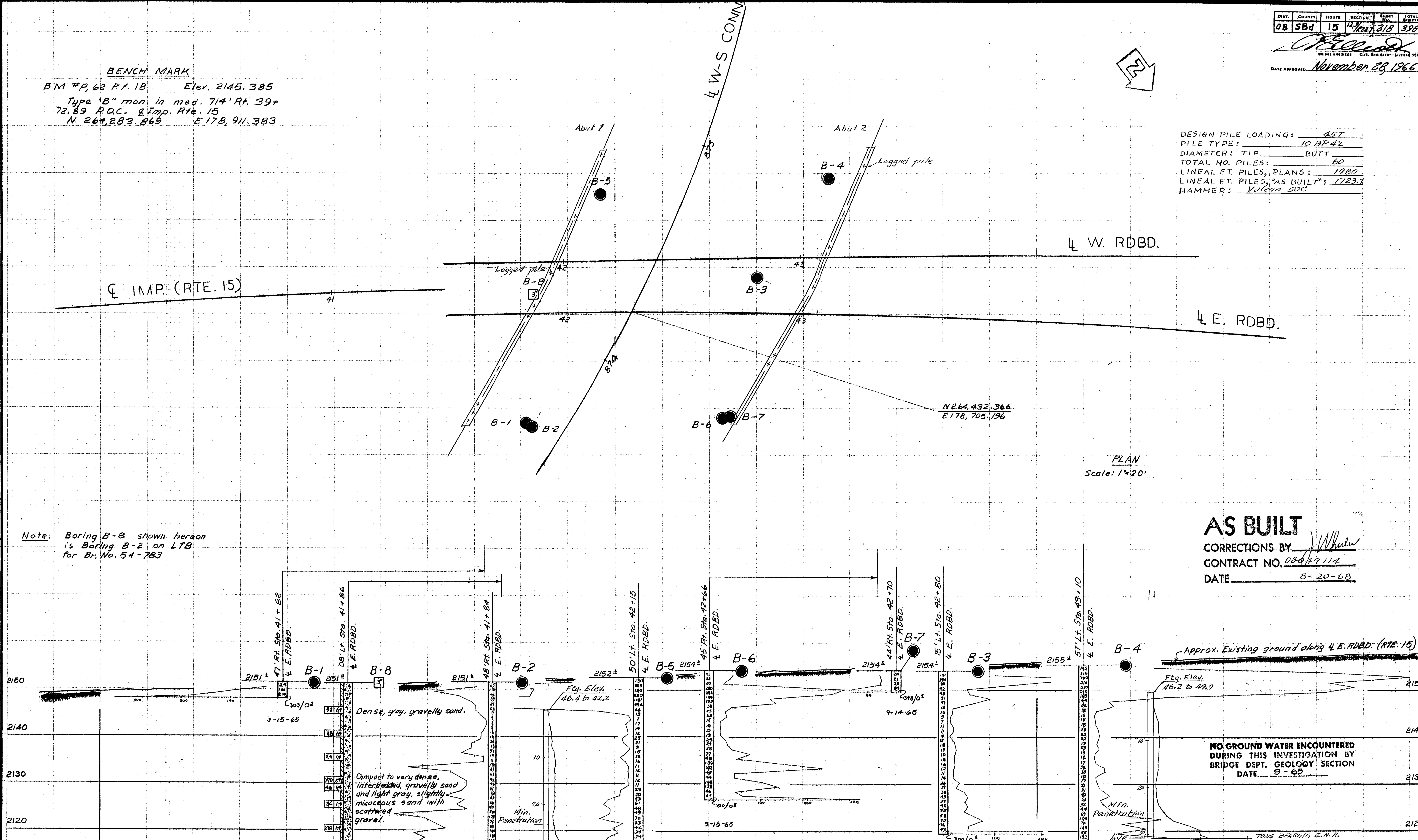
PRINTED ON 1025 PAPERCLOTH

FED. ROAD DIV. No.	STATE	F. A. PROJECT No.	SHEET No.	TOTAL SHEETS
7	CALIF.			

DIST.	COUNTY	ROUTE	SECTION	SHEET No.	TOTAL SHEETS
08	SBd	15	13.3/14.2	318	398

BRIDGE ENGINEER — CIVIL ENGINEER—LICENSE 5565

DATE APPROVED November 28, 1966



BENCH MARK
BM #P. 62 P.I. 18 Elev. 2145.385
Type "B" mon. in med. 714' Rt. 39+72.89 P.O.C. ℄ Imp. Rte. 15
N. 264,283.869 E 178,911.383
℄ W-S CONN
Abut 1
Abut 2
Logged pile
B-1
B-2
B-3
B-4
B-5
B-6
B-7
B-8
℄ W. RDBD.
℄ E. RDBD.
℄ IMP. (RTE. 15)
N 264,432.366
E 178,705.196
DESIGN PILE LOADING: 45T
PILE TYPE: 10 BP 42
DIAMETER: TIP BUTT
TOTAL NO. PILES: 60
LINEAL FT. PILES, PLANS: 1980
LINEAL FT. PILES, "AS BUILT": 1723.7
HAMMER: Vulcan 50C
PLAN
Scale: 1"=20'
Note: Boring B-8 shown hereon is Boring B-2 on LTB for Br. No. 54-783
AS BUILT
CORRECTIONS BY
CONTRACT NO. 08-019114
DATE 8-20-68
47' Rt. Sta. 41+82 ℄ E. RDBD.
08' Lt. Sta. 41+86 ℄ E. RDBD.
48' Rt. Sta. 41+84 ℄ E. RDBD.
50' Lt. Sta. 42+15 ℄ RDBD.
45' Rt. Sta. 42+66 ℄ E. RDBD.
44' Rt. Sta. 42+70 ℄ E. RDBD.
15' Lt. Sta. 42+80 ℄ E. RDBD.
51' Lt. Sta. 43+10 ℄ E. RDBD.
Approx. Existing ground along ℄ E. RDBD. (RTE. 15)
Dense, gray, gravelly sand.
Compact to very dense, interbedded, gravelly sand and light gray, slightly micaceous sand with scattered gravel.
Very dense, gray, gravelly sand with little silt binder.
Ftg. Elev. 46.4 to 42.2
Ftg. Elev. 46.2 to 49.9
Min. Penetration
Ave.
Max.
TONS BEARING E.N.R.
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE 9-65
9-15-65
9-14-65
9-21-65
9-16-65
PROFILE
Scale: 1" = 10'
2150
2140
2130
2120
41
42
43

STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS DIVISION OF HIGHWAYS	SHEET 6 OF 6

CENTER CONNECTOR UNDERCROSSING

LOG OF TEST BORINGS

SCALE As Noted | BRIDGE 54-771 R/L | PM 13.8 | DRAWING 54771-6

LEGEND OF BORING OPERATIONS

PENETROMETER; 2¼" CONE PENETROMETER; SAMPLER BORING (DRY); ROTARY BORING (WET); ROTARY BORING (DRY); AUGER BORING (DRY); JET BORING; CORE BORING; TEST PIT

1" SOIL TUBE — ROTARY BORING — PENETRATION BORING

LEGEND OF EARTH MATERIALS

GRAVEL; SAND; SILT; CLAY; SANDY CLAY OR CLAYEY SAND; SANDY SILT OR SILTY SAND; SILTY CLAY OR CLAYEY SILT; PEAT AND ORGANIC MATTER; FILL MATERIAL; IGNEOUS ROCK; SEDIMENTARY ROCK; METAMORPHIC ROCK

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

FIELD STUDY	By O. MIKES	9-21-65
DRAWN	By G. BOYLE	11-4-65
CHECKED	By O. MIKES	11-15-65
Approval Recommended	Engineering Geologist	

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

318

Charge: 08203
WA: 049111

Disregard prints bearing earlier numbers → PREL. DRAWING NO. PR-

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	15			

K. Douglas Cook 10-12-11
CERTIFIED ENGINEERING GEOLOGIST

PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — K. Douglas Cook — No. 1391 — Exp. 12-31-11 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

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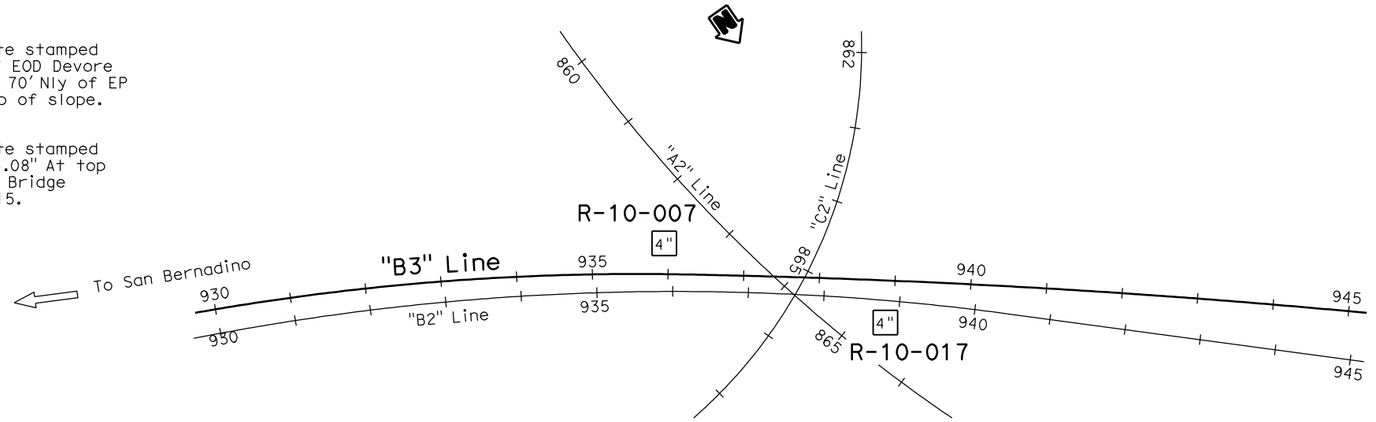
This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

BENCH MARK

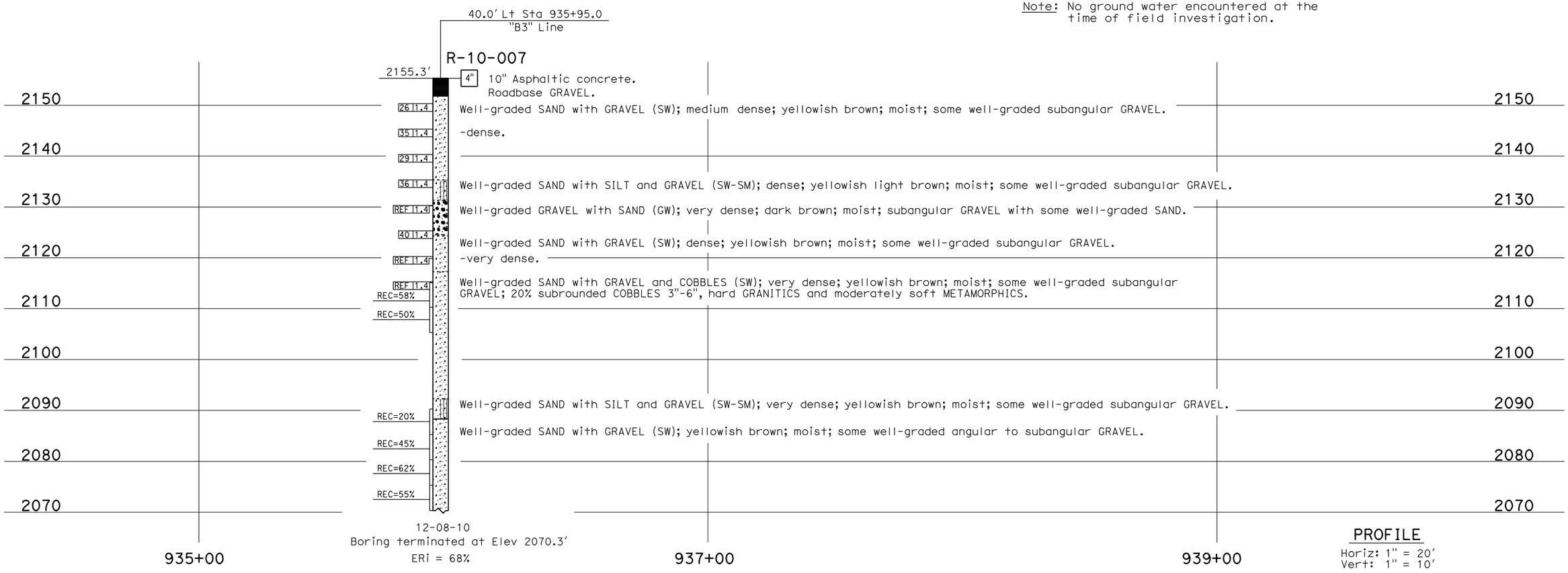
PNO 173 2120.910
FD STD Brass disk in concrete stamped "SBD-215-173 1988" 40′ Ely of EOD Devore Rd Bridge at Nly end bridge; 70′ Nly of EP NB SBD 215 at PM 17.3 at top of slope.

PNO 2010 2179.090
FD STD Brass disk in concrete stamped "D8 SCN SBD-15 PM 16.3 08.04.08" At top of slope SOUTH of Connector Bridge from NB SBD 15 to NB SBD 215.



PLAN
1" = 100′

Note: No ground water encountered at the time of field investigation.



PROFILE
Horiz: 1" = 20′
Vert: 1" = 10′

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	15/215 SEPARATION (WIDEN)
FUNCTIONAL SUPERVISOR	DRAWN BY: F. Nguyen 6/11		DESIGN BRANCH X	54-0783R	
NAME: A. Perez-Cobo	CHECKED BY: B. Levine/S. Logeswaran	FIELD INVESTIGATION BY: D. Cook		POST MILE 17.32	LOG OF TEST BORINGS 1 OF 6

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 08000003660 CONTRACT NO.: 08-0K7100

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
09-21-11	10-03-11			X	X

FILE => 15-215sep1of6.dgn

USERNAME => s128198 DATE PLOTTED => 21-OCT-2011 TIME PLOTTED => 12:36

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	15			

K. Douglas Cook 10-12-11
CERTIFIED ENGINEERING GEOLOGIST

PLANS APPROVAL DATE

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PROFESSIONAL GEOLOGIST — K. Douglas Cook — No. 1391 — Exp. 12-31-11 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

56.0' Rt Sta 938+90.0
"B3" Line

R-10-017

2161.6'

FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS 1 OF 6"

Note: No ground water encountered at the time of field investigation.

PROFILE
Horiz: 1" = 20'
Vert: 1" = 10'

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	15/215 SEPARATION (WIDEN)
FUNCTIONAL SUPERVISOR	DRAWN BY: F. Nguyen 6/11	FIELD INVESTIGATION BY:	DESIGN BRANCH X	54-0783R	LOG OF TEST BORINGS 2 OF 6
NAME: A. Perez-Cobo	CHECKED BY: B. Levine/S. Logeswaran	D. Cook		POST MILE 17.32	

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 08000003660 CONTRACT NO.: 08-0K7100

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

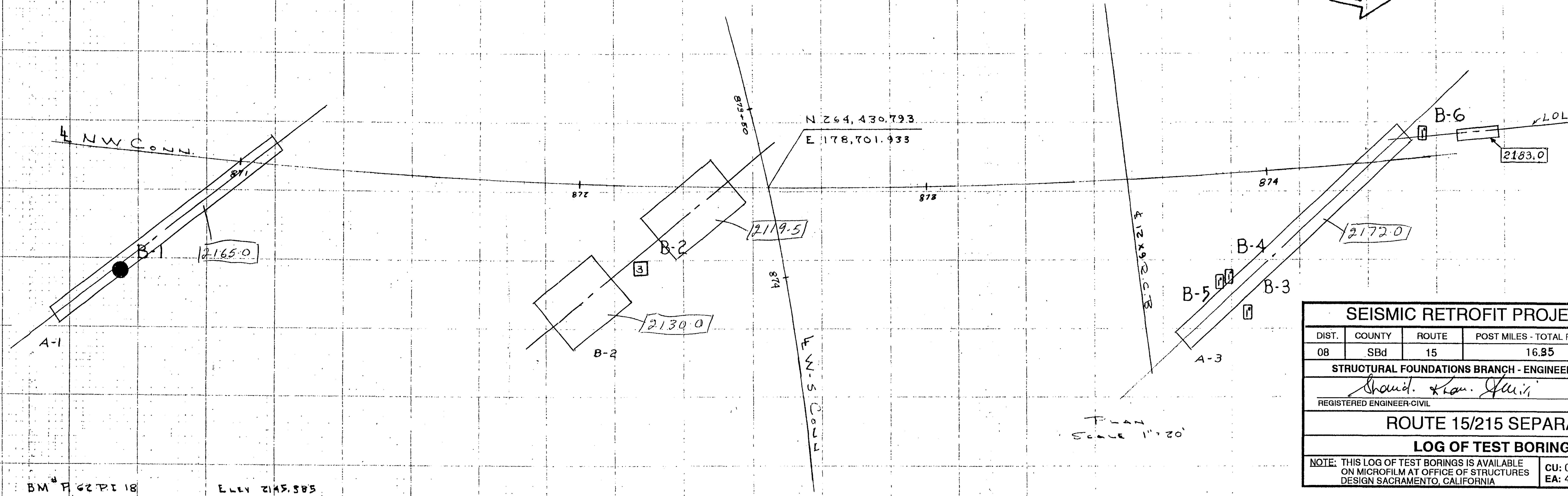
REVISION DATES				SHEET	OF
09-21-11	10-03-11			X	X

FILE => 15-215sep2of6.dgn

USERNAME => s128198 DATE PLOTTED => 21-OCT-2011 TIME PLOTTED => 12:36

DIST.	COUNTY	ROUTE	SECTION	SHEET No.	TOTAL SHEETS
08	SBd	31		303	398

DATE APPROVED November 28, 1966



SEISMIC RETROFIT PROJECT NO. 438

DIST.	COUNTY	ROUTE	POST MILES - TOTAL PROJECT	Sheet No.	Total Sheets
08	SBd	15	16.35		

STRUCTURAL FOUNDATIONS BRANCH - ENGINEERING SERVICE CENTER

REGISTERED ENGINEER-CIVIL

ROUTE 15/215 SEPARATION

LOG OF TEST BORINGS

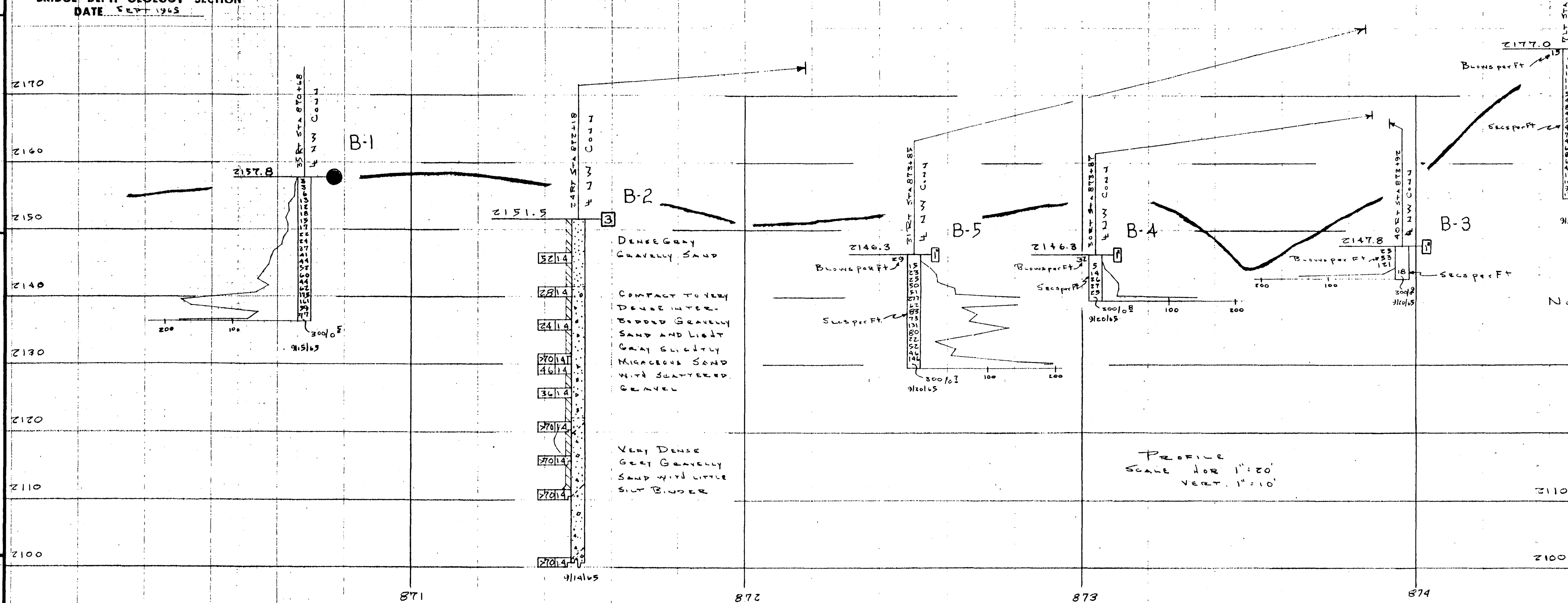
NOTE: THIS LOG OF TEST BORINGS IS AVAILABLE ON MICROFILM AT OFFICE OF STRUCTURES DESIGN SACRAMENTO, CALIFORNIA — CU: 08109, EA: 413901 — BRIDGE No. 54-0783

REGISTERED PROFESSIONAL ENGINEER — S. AMIRI — No. 49996 — Exp. 6-30-97 — CIVIL — STATE OF CALIFORNIA

All Ftgs constructed at Plan elev.

AS BUILT
CORRECTIONS BY
CONTRACT NO. 08-049114
DATE 10-14-68

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE Sept 1965



LEGEND OF BORING OPERATIONS — PENETRATION BORING — ROTARY BORING — 1" SOIL TUBE

LEGEND OF EARTH MATERIALS: Gravel, Sand, Silt, Clay, Sandy Clay or Clayey Sand, Sandy Silt or Silty Sand, Silty Clay or Clayey Silt, Peat and/or Organic Matter, Fill Material, Igneous Rock, Sedimentary Rock, Metamorphic Rock

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

SHEET 7 OF 7

ROUTE 31/15 SEPARATION

JUN 25 1996

LOG OF TEST BORINGS

SCALE As Noted — BRIDGE 54-783 — PM 16.7 — DRAWING 54783-7

Disregard prints bearing earlier numbers → PREL. DRAWING No. PR-

Kenwood Avenue

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	15			

REGISTERED CIVIL ENGINEER 7-5-05

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER * Hassan Ibrahim No. C59016 Exp. 6-30-07 CIVIL * STATE OF CALIFORNIA

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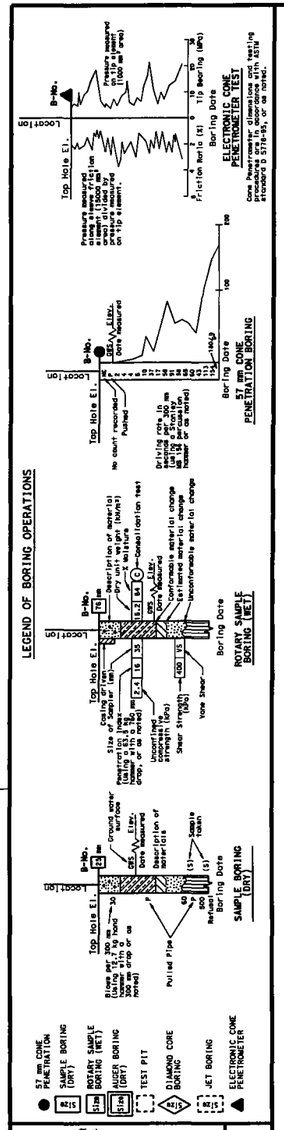
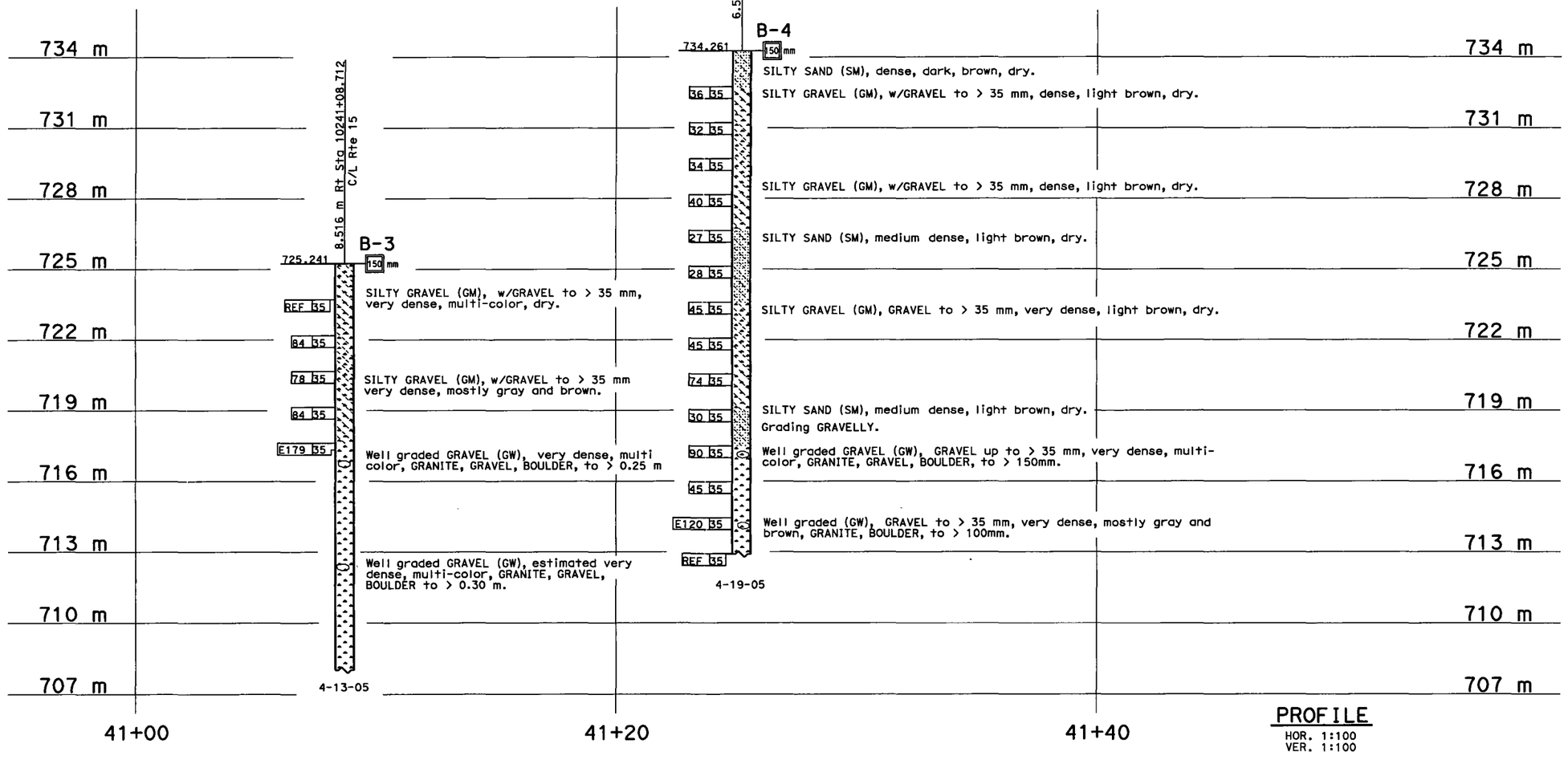
FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 2





PROFILE
HOR. 1:100
VER. 1:100

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ENGINEERING SERVICES	GEOTECHNICAL SERVICES
DRAWN BY	W. Tang 05/05
CHECKED BY	H. Ibrahim

FIELD INVESTIGATION BY: H. Ibrahim

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF STRUCTURES
STRUCTURE DESIGN

BRIDGE NO.	54-0772
KILOMETER POST	24.08

KENWOOD AVENUE UC
LOG OF TEST BORINGS 2 OF 2

CU 08
EA 0A4231

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY): 7-5-05

SHEET OF

OGS CIVIL LOG OF TEST BORINGS SHEET (METRIC) (REV. 4/04)

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100

FILE => kenwood-uc.dgn

USERNAME => lgamarra DATE PLOTTED => 06-JUL-2005 TIME PLOTTED => 10:32

PRINTED ON 1025 PAPERCLOTH
FED. ROAD DIV. No. 7 STATE CALIF. F. A. PROJECT No. SHEET No. TOTAL SHEETS
DIST. 08 COUNTY SBd ROUTE 15 SECTION SHEET No. 326 TOTAL SHEETS 398
BRIDGE ENGINEER CIVIL ENGINEER—LICENSE
DATE APPROVED November 28, 1966
BENCH MARK
K-2-64 Elev. 2377.59
2×2 Hub & Sp Hd Nail Bur 0.4'
50' Rt. 7+00 Trav Pt 1-2
N 268,586.655
E 174,017.294
KENWOOD AVE.
℄ IMP RTE. 15
104
105
106
A-1
B-2
B-3
A-4
B-1
B-2
B-3
B-4
B-5
B-6
B-7
B-8
B-9
PLAN
Scale: 1" = 20'
AS BUILT
CORRECTIONS BY
CONTRACT NO. 08-049114
DATE 9-20-68
Ftgs. constructed @ Plan elev.
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE 9-65
Dense, brown, silty sand with scattered gravel.
Dense to very dense, light brown, gravelly sand.
Very dense, light gray, gravelly sand.
Dense, brown, gravelly sand.
Very dense, light gray, gravelly sand.
Very dense, light gray, sandy gravel.
Approx. existing ground line along ℄ IMP. RTE. 15
PROFILE
Scale: 1" = 10'
63' Lt. Sta. 104+02 ℄ IMP. RTE. 15
80' Lt. Sta. 104+03 ℄ IMP. RTE. 15
42' Rt. Sta. 104+24 ℄ IMP. RTE. 15
42' Rt. Sta. 104+27 ℄ IMP. RTE. 15
39' Rt. Sta. 104+41 ℄ IMP. RTE. 15
86' Lt. Sta. 105+38 ℄ IMP. RTE. 15
36' Lt. Sta. 105+53 ℄ IMP. RTE. 15
22' Rt. Sta. 105+73 ℄ IMP. RTE. 15
39' Rt. Sta. 105+92 ℄ IMP. RTE. 15
9-22-65
9-21-65
9-23-65
2380
2370
2360
2350
2340
2330
2320
LEGEND OF BORING OPERATIONS
PENETRATION BORING
ROTARY BORING
1" SOIL TUBE
LEGEND OF EARTH MATERIALS
GRAVEL
SAND
SILT
CLAY
SANDY CLAY OR CLAYEY SAND
SANDY SILT OR SILTY SAND
SILTY CLAY OR CLAYEY SILT
PEAT AND/OR ORGANIC MATTER
FILL MATERIAL
IGNEOUS ROCK
SEDIMENTARY ROCK
METAMORPHIC ROCK
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
FIELD STUDY By O. Mikes 9-23-65
DRAWN By G. Boyle 11-8-65
CHECKED By O. Mikes 11-16-65
Approval Recommended — Engineering Geologist
BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION
326
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
SHEET 8 OF 8
KENWOOD AVE. UNDERCROSSING
LOG OF TEST BORINGS
SCALE As Noted
BRIDGE 54-772 R/L
PM 15.0
DRAWING 54772-8
Charge: 08203
WA: 049111
Disregard prints bearing earlier numbers
PREL. DRAWING No. PR-

OSS CIVIL LOG OF TEST BORINGS SHEET (METRIC) (REV. 4/04)

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

SPT N-Value (Blows/0.3m)	Granular	SPT N-Value (Blows/0.3m)	Cohesive
0-4	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-30	Medium Dense	5-8	Firm
31-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very stiff
		>30	Hard

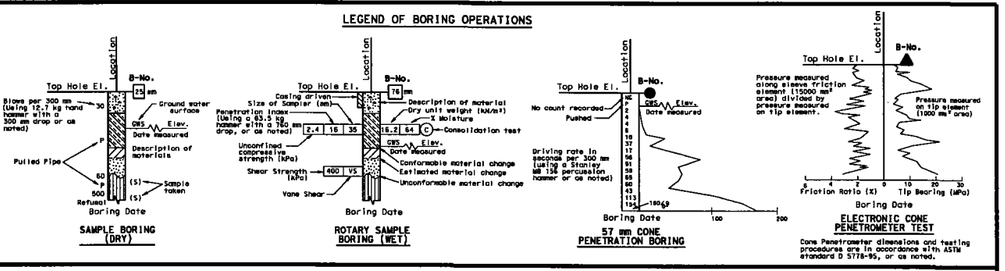
LEGEND OF EARTH MATERIALS

GRAVEL, SAND, SILT, CLAY, SANDY CLAY or CLAYEY SAND, SANDY SILT or SILTY SAND, SILTY CLAY, CLAYEY SILT, PEAT and/or ORGANIC MATTER, COBBLES and/or BOULDERS, IGNEOUS ROCK, SEDIMENTARY ROCK, METAMORPHIC

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

LEGEND OF BORING OPERATIONS

57 mm CONE PENETRATION, SAMPLE BORING (DRY), ROTARY SAMPLE BORING (WET), AUGER BORING (DRY), TEST PIT, DIAMOND CORE BORING, JET BORING, ELECTRONIC CONE PENETROMETER



Cone Penetrometer dimensions and testing procedures are in accordance with ASTM standard D 5778-95, or as noted.

ENGINEERING SERVICES | GEOTECHNICAL SERVICES

DRAWN BY: W. Tang 05/05
CHECKED BY: H. Ibrahim

FIELD INVESTIGATION BY: H. Ibrahim

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF STRUCTURES
STRUCTURE DESIGN

CU 08
EA 0A4231
IFILE => kenwood-uc.dan

BRIDGE NO. 54-0772
ALIGNMENT POST 24.08

DISREGARD PRINTS BEARING EARLIER REVISION DATES

7-5-05

REVISION DATES (PRELIMINARY STAGE ONLY)

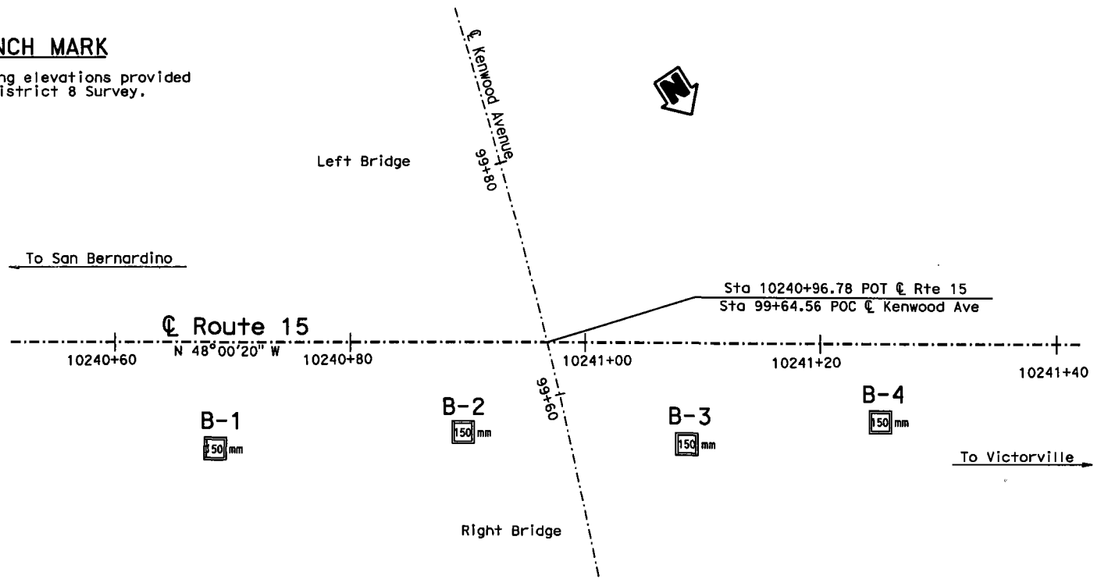
SHEET OF

KENWOOD AVENUE UC

LOG OF TEST BORINGS 1 OF 2

BENCH MARK

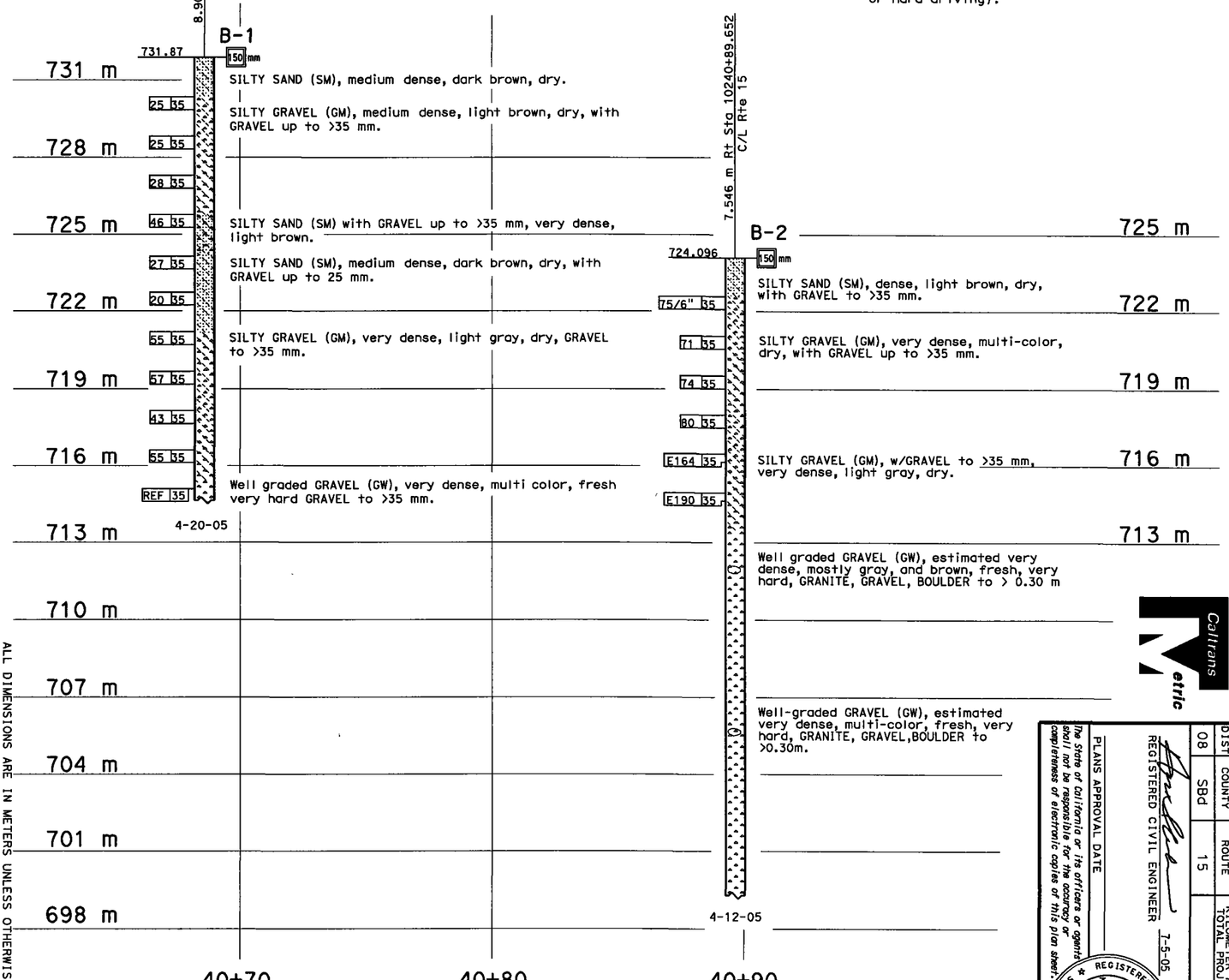
Boring elevations provided by District 8 Survey.



PLAN

1:250

NOTE: E=Blow count for 0.3 m penetration extrapolated from blow count for less than 0.3 m (due to change in material or hard driving).



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

PROFILE

HOR. 1:100
VER. 1:100

Caltrans Metric

REGISTERED CIVIL ENGINEER 7-5-05

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER * STATE OF CALIFORNIA * Hassan Ibrahim No. C59016 Exp. 6-30-07 CIVIL

DIST	COUNTY	ROUTE	KILOMETER POST / TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	15			

54-B

54-0772

USERNAME => jgamarra DATE PLOTTED => 06-JUL-2005 TIME PLOTTED => 10:31

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	15			

K. Douglas Cook 10-24-11
CERTIFIED ENGINEERING GEOLOGIST

PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — K. Douglas Cook — No. 1391 — Exp. 12-31-11 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

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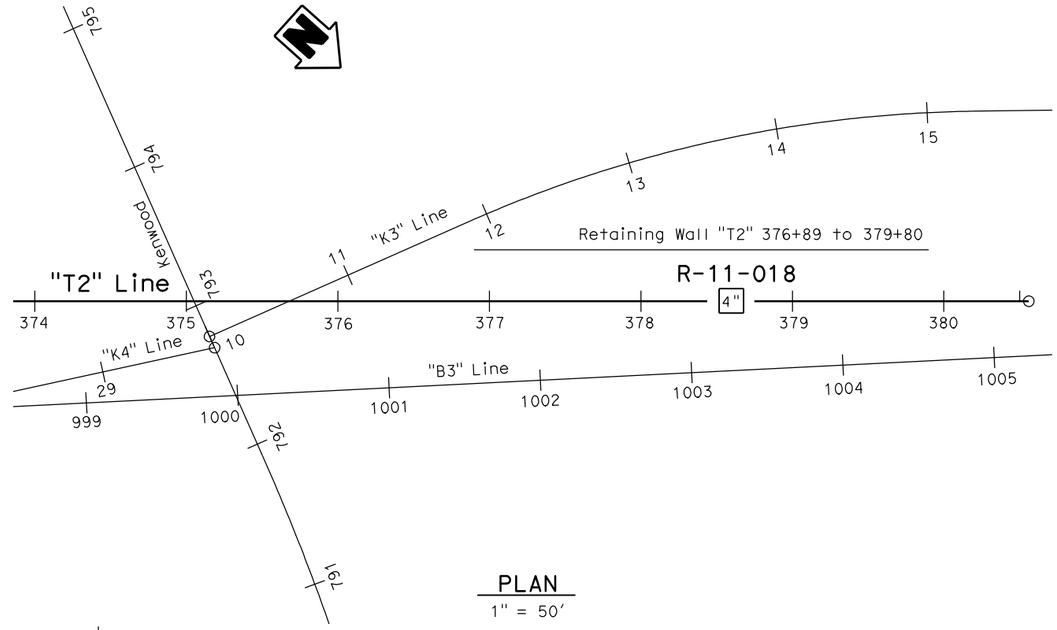
This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

BENCH MARK

Set TBM ℄ Kenwood at ℄ SB 15 Off-Ramp
located at B3 1000+00 and K3 10+00
on Kenwood Line 792+74.
Assumed Elev 2354.0′ (Topo)
NAVD 1988.

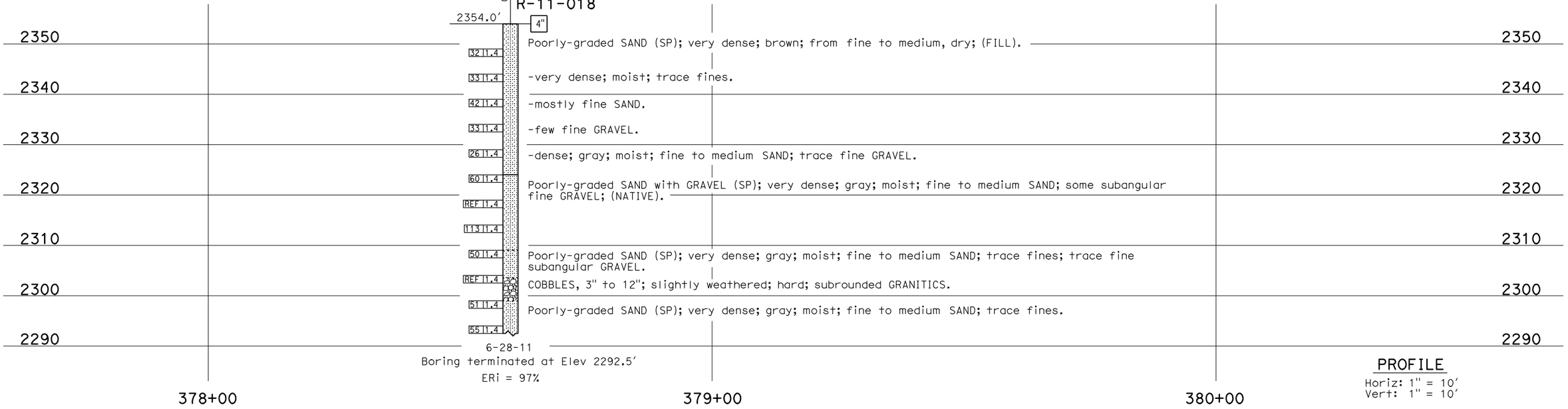


PLAN
1" = 50′

On Sta 378+60.0
"T2" Line

R-11-018
2354.0′ 4"

Note: Ground water was not encountered at the time of this field investigation.



Poorly-graded SAND (SP); very dense; brown; from fine to medium, dry; (FILL).

-very dense; moist; trace fines.

-mostly fine SAND.

-few fine GRAVEL.

-dense; gray; moist; fine to medium SAND; trace fine GRAVEL.

Poorly-graded SAND with GRAVEL (SP); very dense; gray; moist; fine to medium SAND; some subangular fine GRAVEL; (NATIVE).

Poorly-graded SAND (SP); very dense; gray; moist; fine to medium SAND; trace fines; trace fine subangular GRAVEL.

COBBLES, 3" to 12"; slightly weathered; hard; subrounded GRANITICS.

Poorly-graded SAND (SP); very dense; gray; moist; fine to medium SAND; trace fines.

6-28-11
Boring terminated at Elev 2292.5′
ERi = 97%

378+00 379+00 380+00

PROFILE
Horiz: 1" = 10′
Vert: 1" = 10′

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	RETAINING WALL "T2" 376+89 TO 379+80 LF
FUNCTIONAL SUPERVISOR	DRAWN BY: F. Nguyen 9/11		DESIGN BRANCH X	NEW	
NAME: A. Perez-Cobo	CHECKED BY: B. Levine	FIELD INVESTIGATION BY: S. Logeswaran		POST MILE R15.04	LOG OF TEST BORINGS 1 OF 3

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 08000003660 CONTRACT NO.: 08-0K7100

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
09-26-11	10-20-11			X	X

FILE => rwt2-1of3.dgn

USERNAME => s128198 DATE PLOTTED => 25-OCT-2011 TIME PLOTTED => 08:17

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	15			

K. Douglas Cook 10-12-11
CERTIFIED ENGINEERING GEOLOGIST

PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — K. Douglas Cook — No. 1391 — Exp. 12-31-11 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

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218.0' Lt Sta 788+35
"A4" Line

R-11-015

2352.2'

4" ASPHALT CONCRETE (6"); Base GRAVEL (12").

Well-graded SAND with GRAVEL (SW); medium dense; gray; moist; little subangular fine GRAVEL; (FILL).

Well-graded SAND with GRAVEL (SW); very dense; brown; moist; some well-graded subangular GRAVEL; (ALLUVIUM).

-dense; yellowish brown.

-very dense.

Well-graded GRAVEL with SAND (GW); very dense; grayish light brown; moist; mostly subangular GRAVEL; some well-graded SAND.

-10% COBBLES, 3-6"; hard; subangular; GRANITICS.

Well-graded SAND with GRAVEL (SW); yellowish brown; moist; some well-graded subangular GRAVEL.

Well-graded GRAVEL with SAND (GW); yellowish brown; moist; subangular GRAVEL; some well-graded SAND.

Well-graded SAND with GRAVEL and COBBLES (SW); yellowish brown; moist; some well-graded subangular GRAVEL; 10% COBBLES, 3-8", hard, subrounded GRANITICS.

23 ft.#
80/8 ft.#
43 ft.#
56 ft.#
REF ft.#
REF ft.#

2350
2340
2330
2320
2310
2300
2290
2280
2270
2260
2250
2240
2230
2220
2210
2200

1-5-11
Terminated at Elev 2202.2'
ERi = 68%

788+00 788+50 789+00

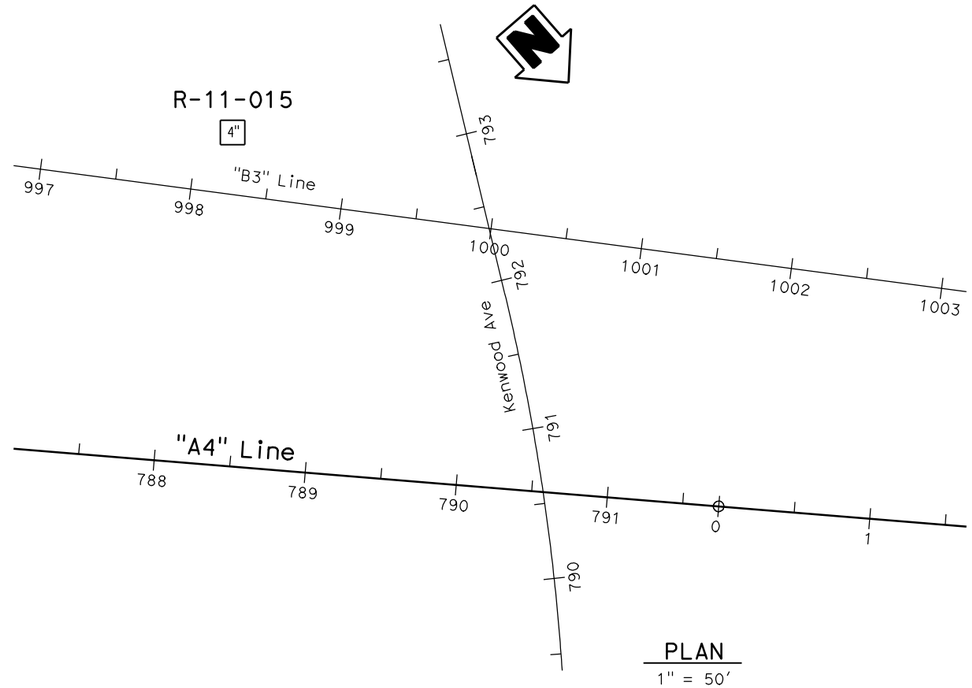
PROFILE
Horiz: 1" = 10'
Vert: 1" = 10'

Note: No ground water encountered during field investigation.

BENCH MARK

PNO 173 2120.910
FD STD Brass disk in concrete stamped "SBD-215-173 1988" 40' Ely of EOD Devore Rd Bridge at Nly end bridge; 70' Nly of EP NB SBD 215 at PM 17.3 at top of slope.

PNO 2010 2179.090
FD STD Brass disk in concrete stamped "D8 SCN SBD-15 PM 16.3 08.04.08" At top of slope SOUTH of Connector Bridge from NB SBD 15 to NB SBD 215.



PLAN
1" = 50'

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	SB TRUCK BYPASS/SB 215 MAINLINE
FUNCTIONAL SUPERVISOR	DRAWN BY: W. Tang 06/11		DESIGN BRANCH X	54-NEW	LOG OF TEST BORINGS 1 OF 3
NAME: A. Perez-Cobo	CHECKED BY: B. Levine/S. Logeswaran	FIELD INVESTIGATION BY: D. Cook		POST MILE R14.94	

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 08000003661 CONTRACT NO.: 08-0K7100

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
09-06-11	10-06-11			X	X

FILE => sb-truck-bypass1of3.dgn

USERNAME => s128198 DATE PLOTTED => 21-OCT-2011 TIME PLOTTED => 12:52

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	15			

K. Douglas Cook 10-12-11
CERTIFIED ENGINEERING GEOLOGIST

PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — K. Douglas Cook — No. 1391 — Exp. 12-31-11 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

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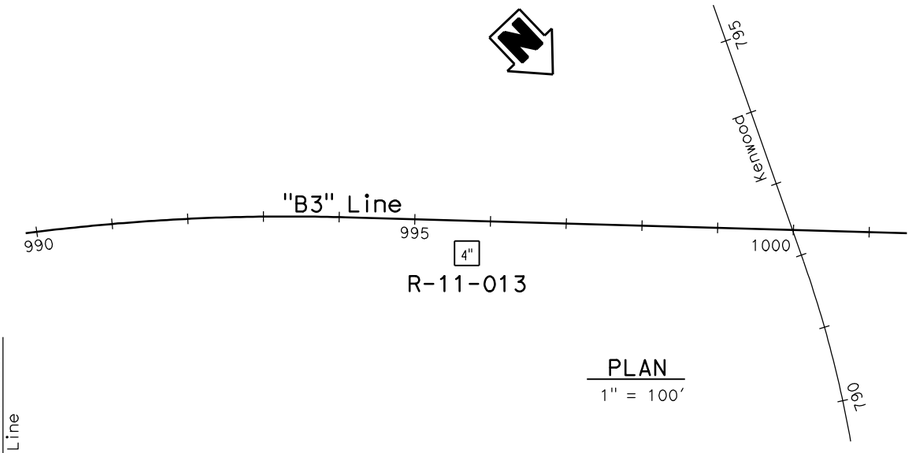
This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

BENCH MARK

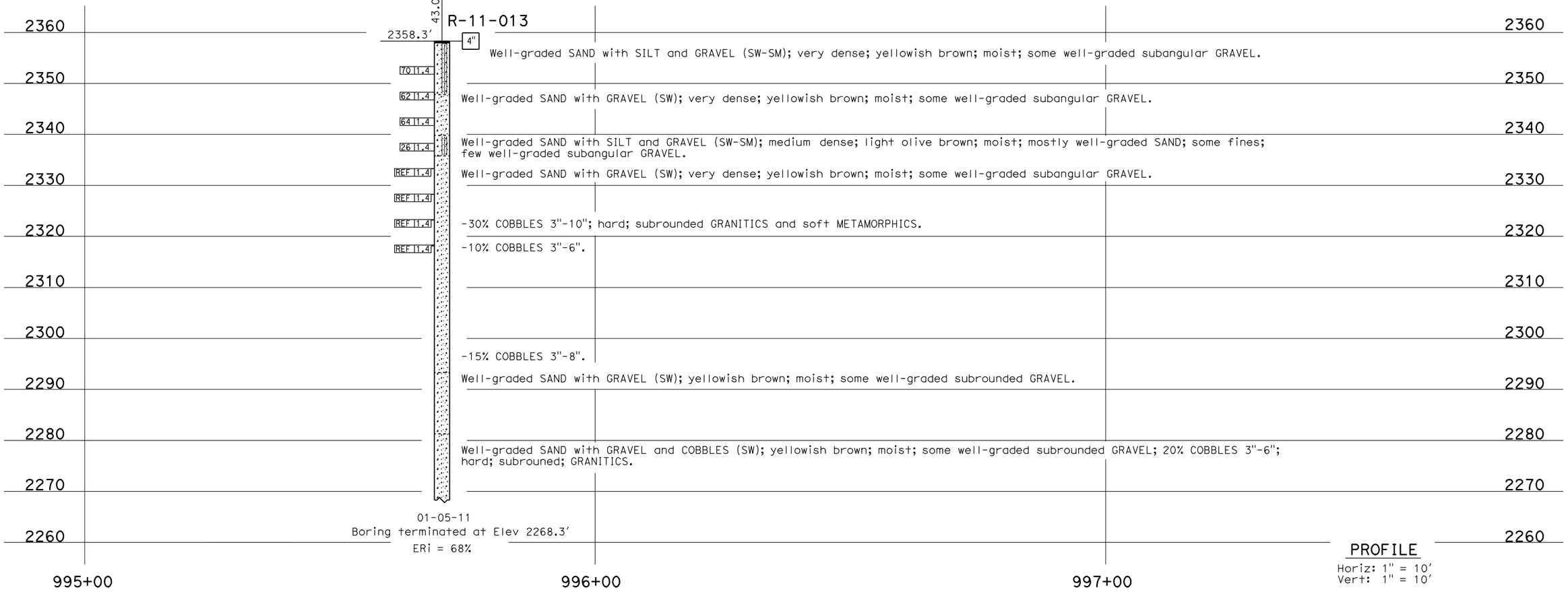
PNO 173 2120.910
FD STD Brass disk in concrete stamped "SBD-215-173 1988" 40′ Ely of EOD Devore Rd Bridge at Nly end bridge; 70′ Nly of EP NB SBD 215 at PM 17.3 at top of slope.

PNO 2010 2179.090
FD STD Brass disk in concrete stamped "D8 SCN SBD-15 PM 16.3 08.04.08" At top of slope SOUTH of Connector Bridge from NB SBD 15 to NB SBD 215.



PLAN
1" = 100′

Note: Ground water was not encountered at the time of this field investigation.



PROFILE
Horiz: 1" = 10′
Vert: 1" = 10′

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	SB 215 MAINLINE OVER KENWOOD
FUNCTIONAL SUPERVISOR	DRAWN BY: F. Nguyen 6/11	FIELD INVESTIGATION BY:		DESIGN BRANCH X	NEW	LOG OF TEST BORINGS 1 OF 3
NAME: A. Perez-Cobo	CHECKED BY: B. Levine/S. Logeswaran	M. Wilson			POST MILE R14.95	

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 08000003660 CONTRACT NO.: 08-0K7100

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
08-25-11	10-04-11			X	X

FILE => sb215mln-knwd1of3.dgn

USERNAME => s128198 DATE PLOTTED => 21-OCT-2011 TIME PLOTTED => 12:51

DGS CIVIL LOG OF TEST BORINGS SHEET

ENGINEERING SERVICES

MATERIALS AND GEOTECHNICAL SERVICES

FUNCTIONAL SUPERVISOR
NAME: A. Perez-Cobo

DRAWN BY: F. Nguyen 6/11
CHECKED BY: B. Levine/S. Logeswaran

FIELD INVESTIGATION BY:
D. Cook

ORIGINAL SCALE IN INCHES
FOR REDUCED PLANS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH X

UNIT: 3643
PROJECT NUMBER & PHASE: 0800000366O

BRIDGE NO.: NEW
POST MILE: R14.64

CONTRACT NO.: 08-0K7100

SB I-215 CONNECTOR
LOG OF TEST BORINGS 1 OF 4

DISREGARD PRINTS BEARING EARLIER REVISION DATES

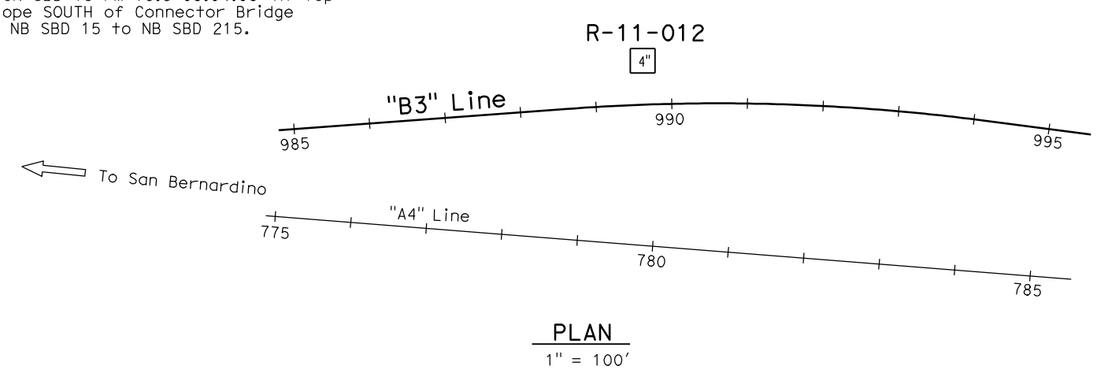
REVISION DATES	SHEET	OF
09-26-11 10-04-11	X	X

FILE => sb215conn1of4.dgn

BENCH MARK

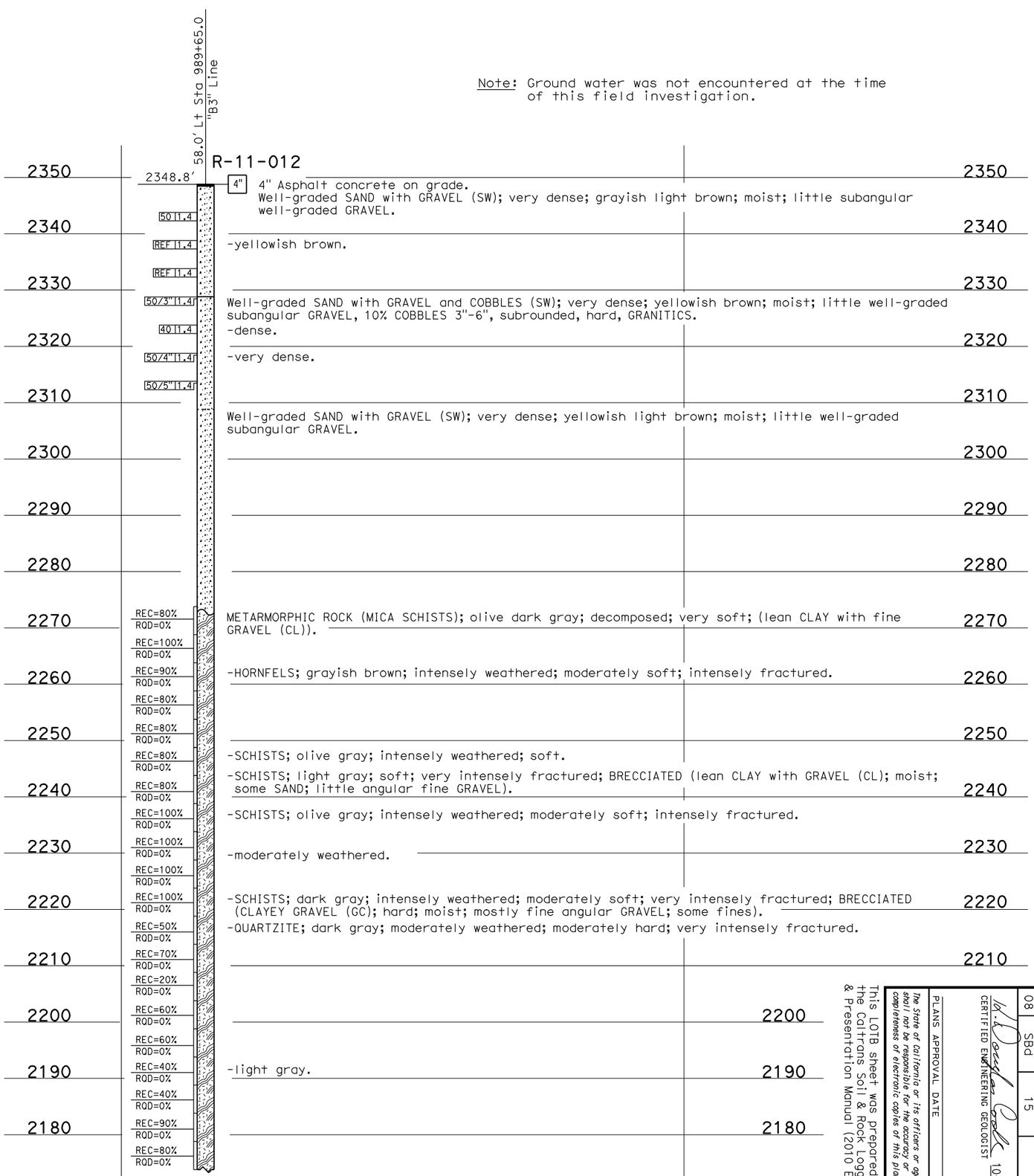
PNO 173 2120.910
FD STD Brass disk in concrete stamped "SBD-215-173 1988" 40' Ely of EOD Devore Rd Bridge at Nly end bridge; 70' Nly of EP NB SBD 215 at PM 17.3 at top of slope.

PNO 2010 2179.090
FD STD Brass disk in concrete stamped "D8 SCN SBD-15 PM 16.3 08.04.08" At top of slope SOUTH of Connector Bridge from NB SBD 15 to NB SBD 215.



PLAN
1" = 100'

Note: Ground water was not encountered at the time of this field investigation.



PROFILE
Horiz: 1" = 20'
Vert: 1" = 10'

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CERTIFIED ENGINEERING GEOLOGIST
10-12-11

PLANS APPROVAL DATE

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PROFESSIONAL GEOLOGIST
No. 1391
Exp. 12-31-11
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	15	

SHEET NO	TOTAL SHEETS

Page A-80

USERNAME => s128198 DATE PLOTTED => 21-OCT-2011 TIME PLOTTED => 12:48

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	15			

K. Douglas Cook 10-12-11
CERTIFIED ENGINEERING GEOLOGIST

PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — K. Douglas Cook — No. 1391 — Exp. 12-31-11 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

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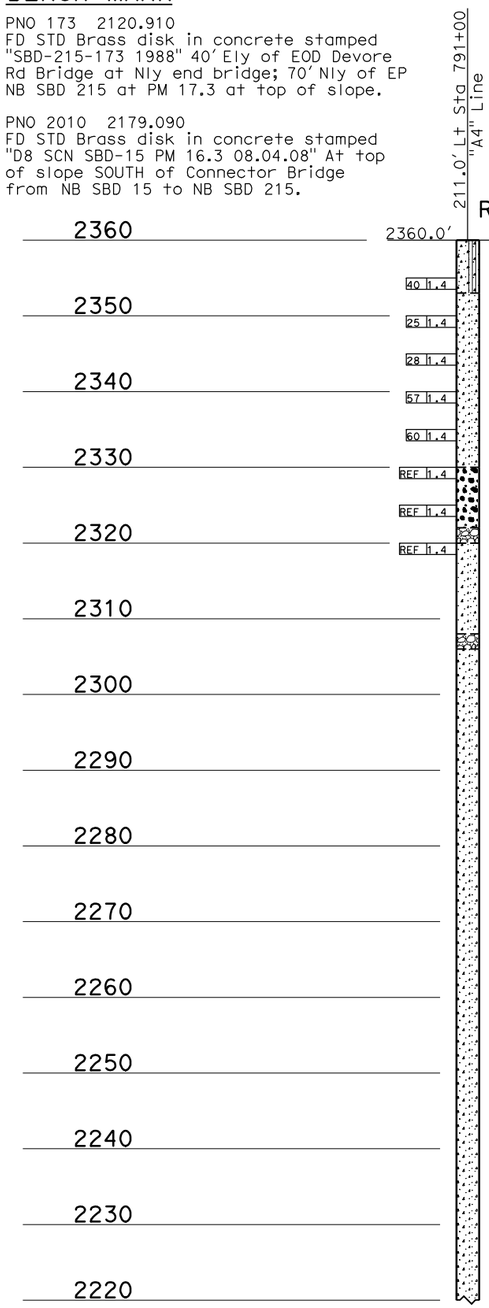
BENCH MARK

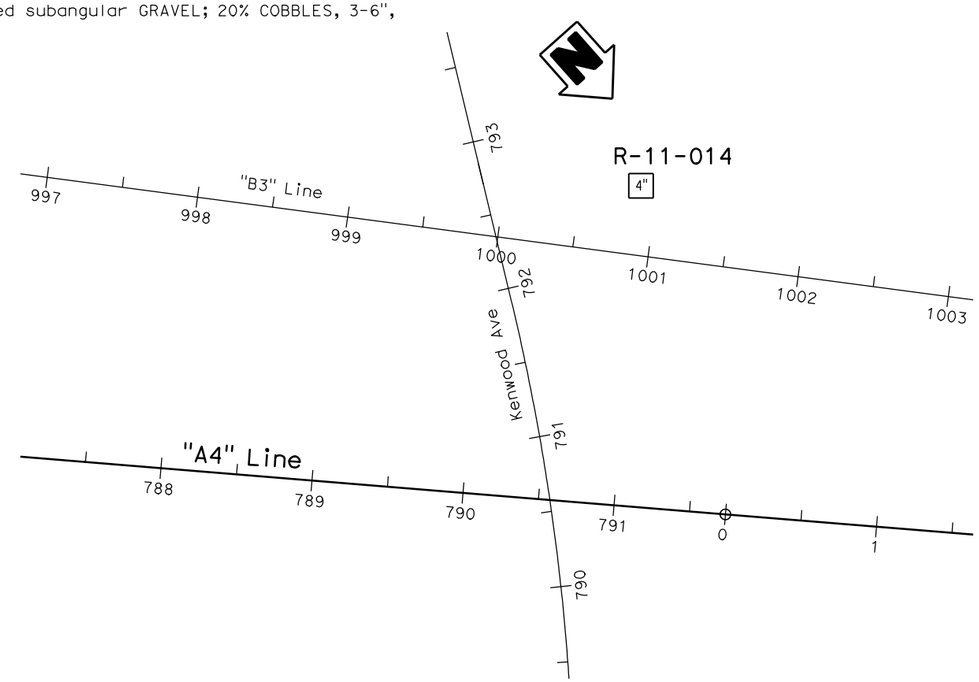
PNO 173 2120.910
FD STD Brass disk in concrete stamped "SBD-215-173 1988" 40' Ely of EOD Devore Rd Bridge at NIy end bridge; 70' NIy of EP NB SBD 215 at PM 17.3 at top of slope.

PNO 2010 2179.090
FD STD Brass disk in concrete stamped "D8 SCN SBD-15 PM 16.3 08.04.08" At top of slope SOUTH of Connector Bridge from NB SBD 15 to NB SBD 215.

Note: No ground water encountered during field investigation.



PROFILE
Horiz: 1" = 10'
Vert: 1" = 10'



PLAN
1" = 50'

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	SB 215 MAINLINE AND SB 15
FUNCTIONAL SUPERVISOR: A. Perez-Cobo	DRAWN BY: W. Tang 06/11	FIELD INVESTIGATION BY: D. Cook	DESIGN BRANCH X	NEW	LOG OF TEST BORINGS 1 OF 3
	CHECKED BY: B. Levine/S. Logeswaran			POST MILE R15.00	

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 08000003660 CONTRACT NO.: 08-0K7100

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
09-06-11	10-06-11			X	X

FILE => sb215mainline1of3.dgn

USERNAME => s128198 DATE PLOTTED => 21-OCT-2011 TIME PLOTTED => 12:50

Oakie Flats

No As-Builts nor any LOTBs for the Oakie Flats Road Undercrossing, Caltrans Bridge No. 54-0916 can be located within the online Caltrans GEODog database https://geodog.dot.ca.gov/.

Cleghorn Creek

FED. ROAD DIV. No. 7 STATE CALIF. F.A. PROJECT No. SHEET No. TOTAL SHEETS
DIST. 08 COUNTY SBd ROUTE 15 SHEET No. 336 TOTAL SHEETS 398
DATE APPROVED November 28, 1966
B.M. P.63 B-40
Spike & Flasher in Shldr. Painted "X" & P.63 B-40
470± Lt. Sta. 291+78± & Imp. Rte 15
Elev. 2801.21
N 283,694.825
E 165,943.644
SEISMIC RETROFIT PROJECT NO. 434
DIST. 08 COUNTY SBD ROUTE 15 POST MILES - TOTAL PROJECT R18.5
STRUCTURAL FOUNDATIONS BRANCH - ENGINEERING SERVICE CENTER
R.C. Doria
REGISTERED ENGINEER-CIVIL
CLEGHORN CREEK BRIDGE
LOG OF TEST BORINGS 2 OF 2
NOTE: THIS LOG OF TEST BORINGS IS AVAILABLE ON MICROFILM AT OFFICE OF STRUCTURES DESIGN SACRAMENTO, CALIFORNIA
CU: 08109 EA: 413501 BRIDGE No. 54-0773
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.
REGISTERED PROFESSIONAL ENGINEER R.C. DORIA No. 050821 Exp. 9-30-97 CIVIL STATE OF CALIFORNIA
B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-8
℄ IMP. RTE. 15
290 291 292 293
℄ CLEGHORN CREEK
PLAN
Scale: 1"=20'
LEGEND OF BORING OPERATIONS
1" SOIL TUBE
ROTARY BORING
PENETRATION BORING
Penetrometer
2½" Cone Penetrometer
Sampler Boring (Dry)
Rotary Boring (Wet)
Auger Boring (Dry)
Jet Boring
Core Boring
Test Pit
LEGEND OF EARTH MATERIALS
Gravel
Sand
Silt
Clay
Sandy Clay or Clayey Sand
Sandy Silt or Silty Sand
Silty Clay or Clayey Silt
Peat and Organic Matter
Fill Material
Igneous Rock
Sedimentary Rock
Metamorphic Rock
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
FIELD STUDY O. Mikes 10-7-65
DRAWN G. Boulo 12-20-65
CHECKED O. MIKES 12-21-65
BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION
NOTE: Borings Numbered B6, B7 & B8 were driving 1" closed tip (COBRA)
AS BUILT PLANS
Contract No. 08-049114
Date Completed 11-10-69
Document No. 80000217
AS BUILT
CORRECTIONS BY
CONTRACT NO.
DATE
Approx. existing ground line along ℄ IMP. RTE. 15
Slightly compact, light brown sand with scattered gravel.
Very dense, light gray, medium to coarse, gravelly sand.
Very dense, reddish-brown, coarse breccia.
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE Sept. & Oct. 1965
PROFILE
Scale: Vert. 1"=10' Horiz. 1"=20'
2860 2850 2840 2830 2820 2810 2800
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
SHEET 10 OF 10
CLEGHORN CREEK BRIDGE
LOG OF TEST BORINGS MAR 25 1996
SCALE As Noted BRIDGE 54-773 R/L DRAWING 54773-10
Charge: 06203
W.A.: 04911
prints bearing earlier numbers
PREL. DRAWING No. FR-
336

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	15			

R.C. Doria
REGISTERED ENGINEER

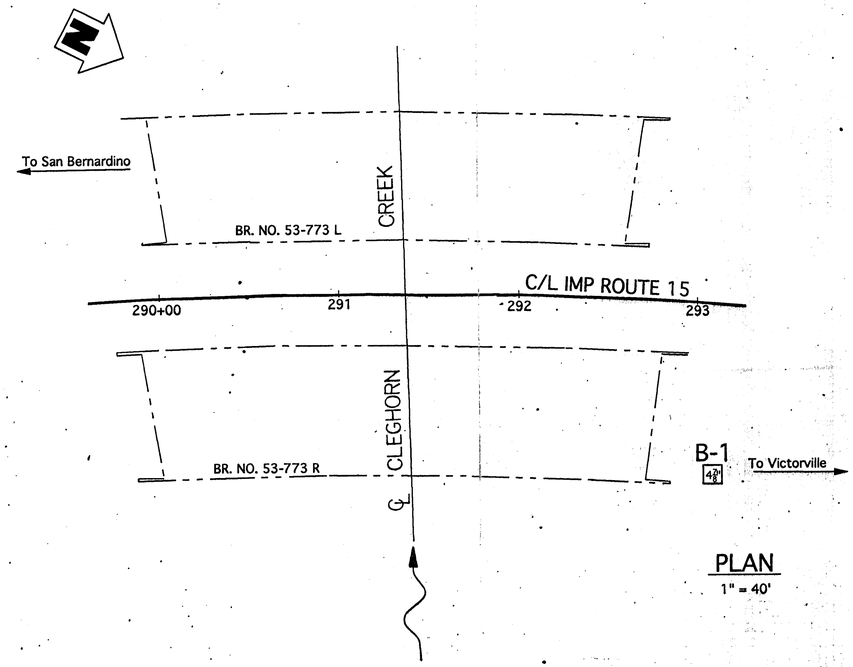
REGISTERED PROFESSIONAL ENGINEER
R. C. DORIA
No. 50821
Exp. 9-30-97
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

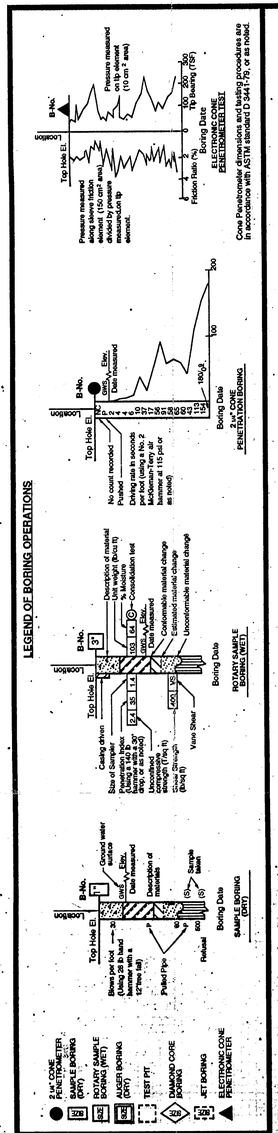
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

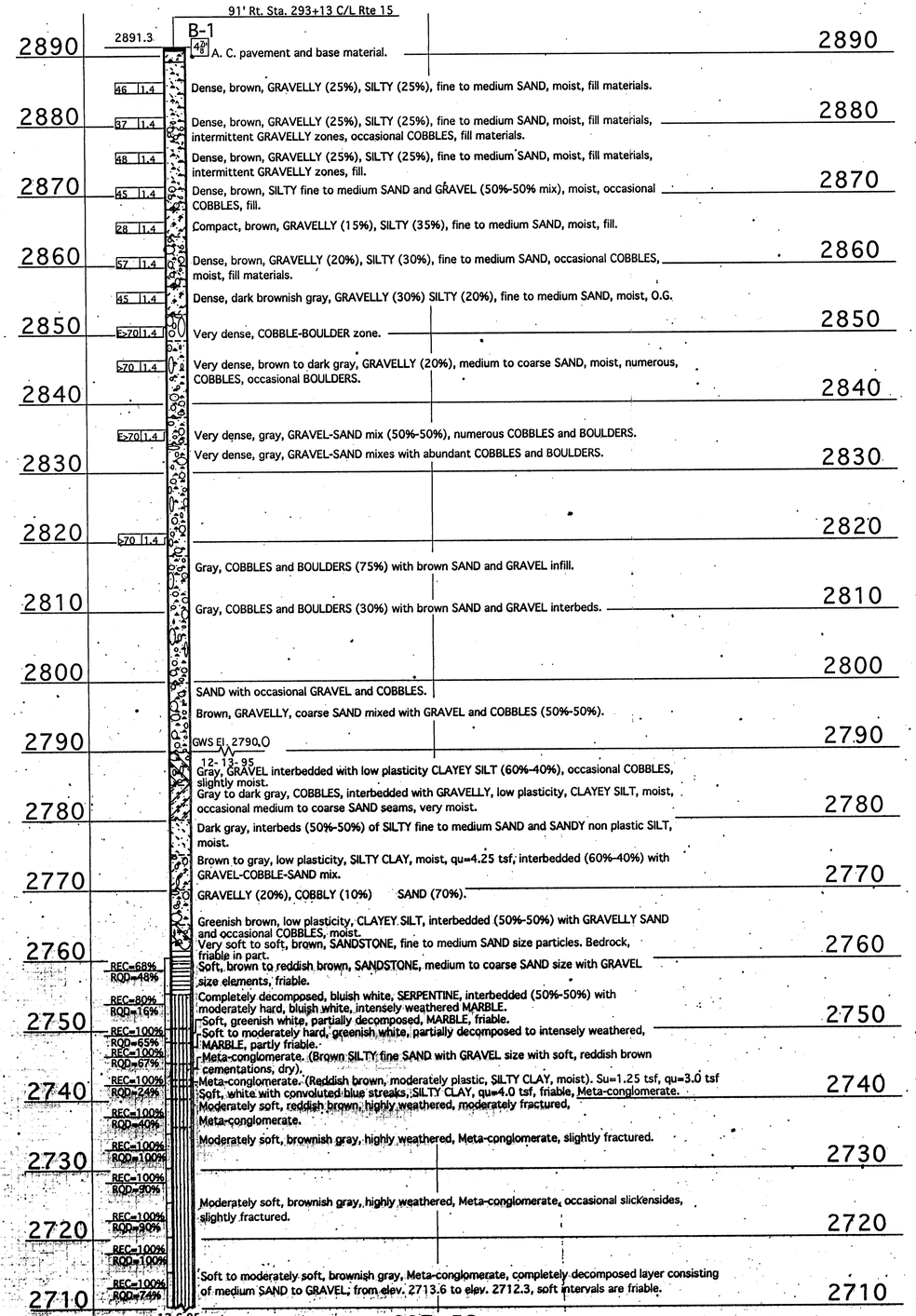
BENCH MARK

TBM ELEV. 2890.54'
FD. POINT ON A.C. SHOULDER LOCATED ±96' RT. 292+90 C/L RTE 15. BASED ON GRID GRADE ELEVATION SHOWN ON "AS BUILT" GENERAL PLAN, APPROVED 11-28-66



PLAN
1" = 40'





PROFILE
1" = 10'

LEGEND OF EARTH MATERIALS
GRAVEL, SAND, SILT, CLAY, SANDY CLAY or CLAYEY SAND, SANDY SILT or SILTY SAND, SILTY CLAY, CLAYEY SILT, PEAT and/or ORGANIC MATTER, FILL MATERIAL, IGNEOUS ROCK, SEDIMENTARY ROCK, METAMORPHIC

CONSISTENCY CLASSIFICATION FOR SOILS
According to the Standard Penetration Test

Penetration Index (Blows / Ft)	Granular	Cohesive
0-4	Very Loose	Very Soft
5-9	Loose	Soft
10-19	Slightly compact	Stiff
20-34	Compact	Very Stiff
35-69	Dense	Hard
>70	Very Dense	Very Hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

ENGINEERING SERVICE CENTER	STRUCTURE FOUNDATIONS
DRAWN BY	Ken Wall 2/96
CHECKED BY	

FIELD INVESTIGATION BY:
R. DORIA

State of CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN

BRIDGE NO. 54-0773
POST MILE R.18.5

SEISMIC RETROFIT PROJECT NO. 434

CLEGHORN CREEK BRIDGE

MAR 2 5 1996

LOG OF TEST BORINGS 1 OF 2

CU: 08109
EA: 413501

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS → 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF

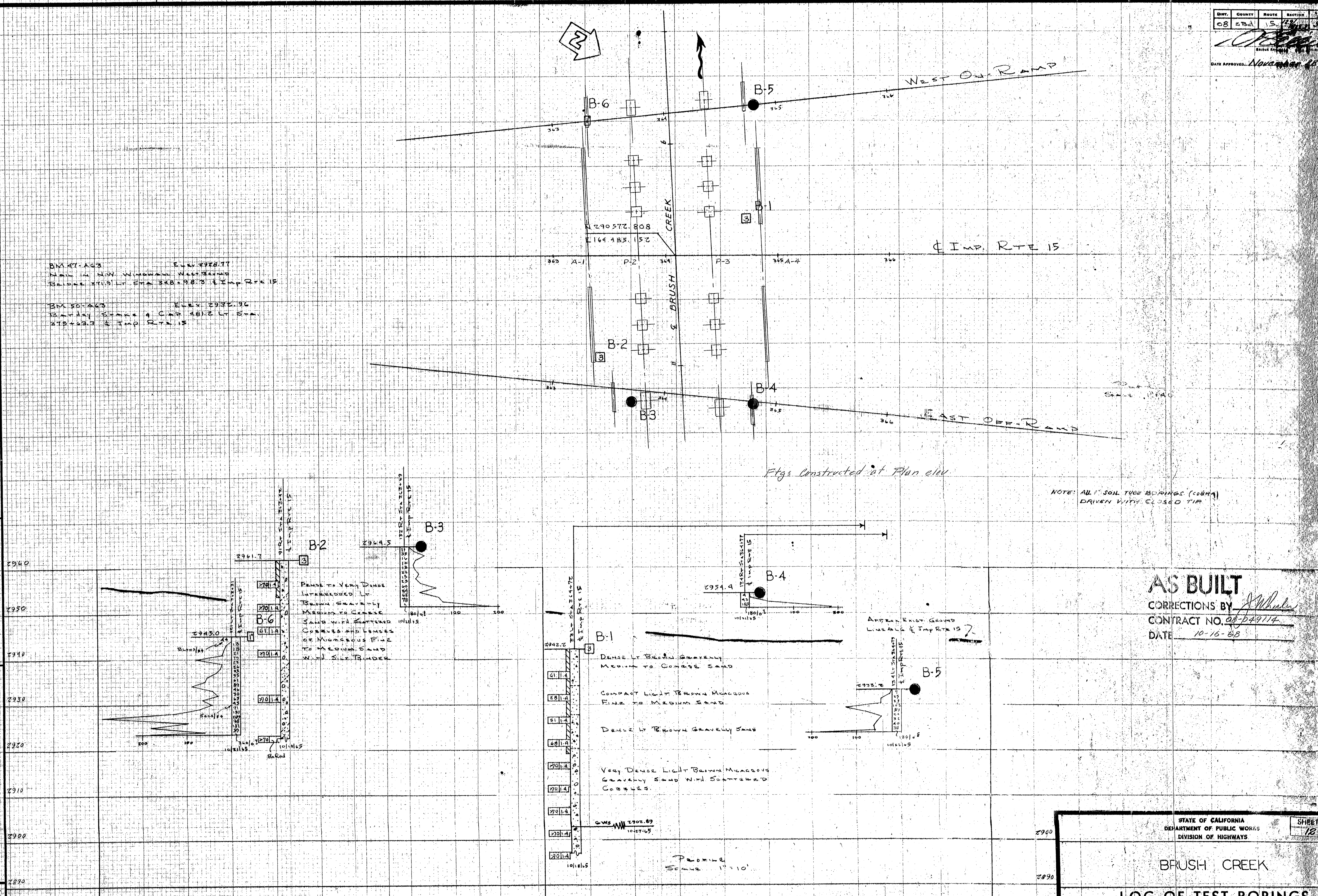
TL 6052 REV. 5/95

Debris Cone Creek

FED. ROAD DIV. No. 7 STATE CALIF.
DIST. 08 COUNTY SBd ROUTE 15 SHEET No. 348 TOTAL SHEETS 398
DATE APPROVED November 28, 1966
B-1
B-2
B-3
B-4
B-5
N 287 887.193
E 163 863.169
℄ Imp Rte 15
℄ DEBRIS CONE CREEK
A-1
A-2
Ftgs. constructed at Plan Elev.
Plan
Scale 1"=20'
AS BUILT
CORRECTIONS BY
CONTRACT NO. 08-049114
DATE 10-16-68
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE OCT 1965
Note: All 1" soil tube borings (COBRA) driven with closed tip
Approx Exist Ground Line Along ℄ Imp Rte 15
2960
2950
2940
2930
332
333
334
Profile
Scale Hor 1"=20'
Vert 1"=10'
LEGEND OF BORING OPERATIONS
PENETROMETER
2½" CONE PENETROMETER
SAMPLER BORING (DRY)
ROTARY BORING (WET)
AUGER BORING (DRY)
JET BORING
CORE BORING
TEST PIT
1" SOIL TUBE
ROTARY BORING
PENETRATION BORING
LEGEND OF EARTH MATERIALS
GRAVEL
SAND
SILT
CLAY
SANDY CLAY OR CLAYEY SAND
SANDY SILT OR SILTY SAND
SILTY CLAY OR CLAYEY SILT
PEAT AND/OR ORGANIC MATTER
FILL MATERIAL
IGNEOUS ROCK
SEDIMENTARY ROCK
METAMORPHIC ROCK
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION
FIELD STUDY
DRAWN
CHECKED
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
SHEET 12 OF 12
DEBRIS CONE CREEK
LOG OF TEST BORINGS
SCALE As Noted
BRIDGE 54-774R/L
DRAWING 54774-10
Disregard prints bearing earlier numbers
PREL. DRAWING NO. PR-
348

Brush Creek

FED. ROAD DIST. 7 | STATE CALIF.
DIST. 08 | COUNTY SBd | ROUTE 15
DATE APPROVED November 18, 1965



AS BUILT
CORRECTIONS BY J. Whaler
CONTRACT NO. 08-049714
DATE 10-16-68

LEGEND OF BORING OPERATIONS

- Penetrometer
- 2½" Cone Penetrometer
- Sampler Boring (Dry)
- Rotary Boring (Wet)
- Auger Boring (Dry)
- Jet Boring
- Core Boring
- Test Pit

1" SOIL TUBE | ROTARY BORING | PENETRATION BORING

LEGEND OF EARTH MATERIALS

Gravel; Sand; Silt; Clay; Sandy Clay or Clayey Sand; Sandy Silt or Silty Sand; Silty Clay or Clayey Silt; Peat and/or Organic Matter; Fill Material; Igneous Rock; Sedimentary Rock; Metamorphic Rock

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

Diagram showing the basis for estimates of grade size distribution used in determination of class names. If gravel is present in appreciable amounts the term "gravelly" may be added to the class name, viz. "gravelly sandy loam". The terms "coarse", "medium", and "fine" when used to describe sand, refer to the standard grade size limits.

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

DRAWN | CHECKED By O. Mikes 11-15-65
Approval Recommended: Engineering Geologist

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

SHEET 12 OF 12

BRUSH CREEK

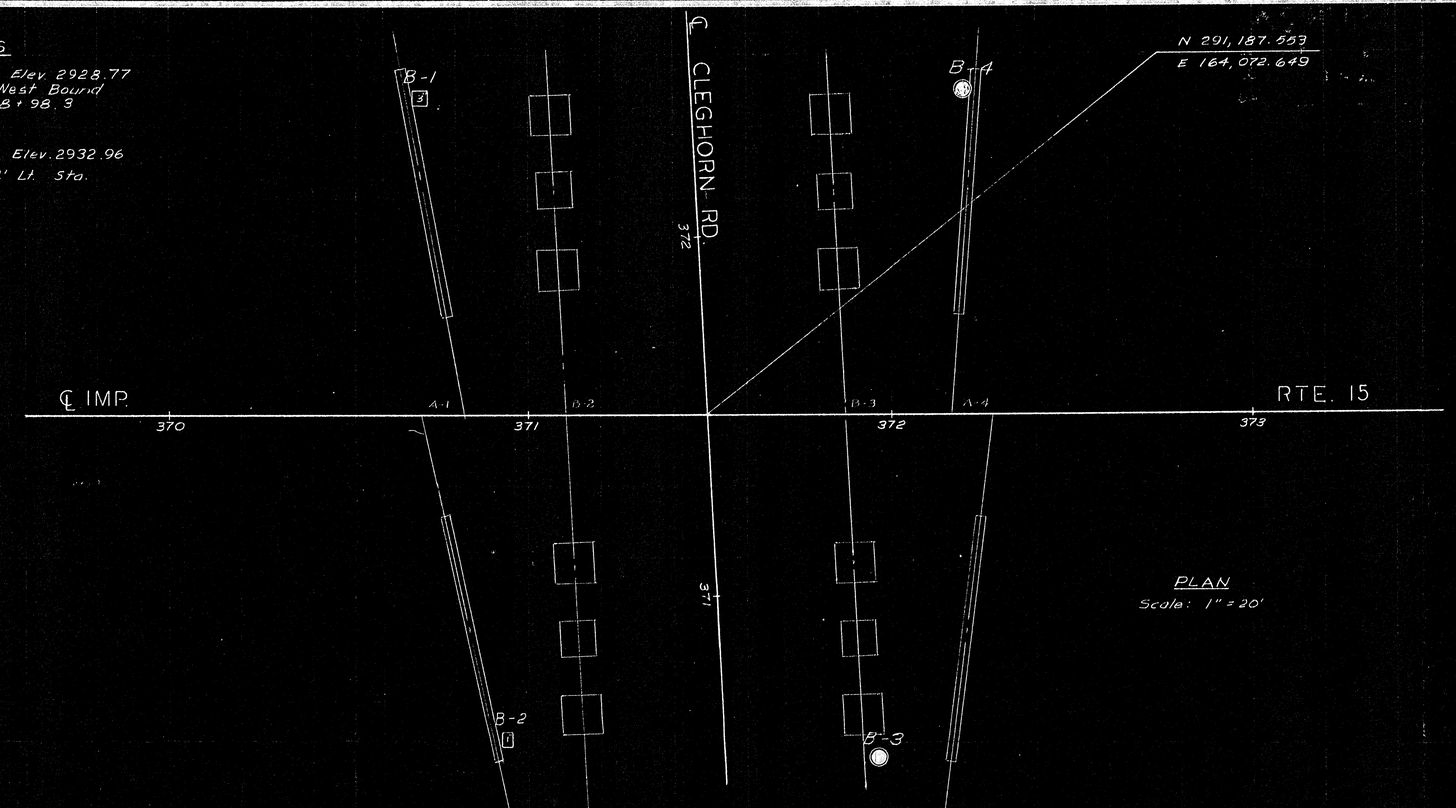
LOG OF TEST BORINGS

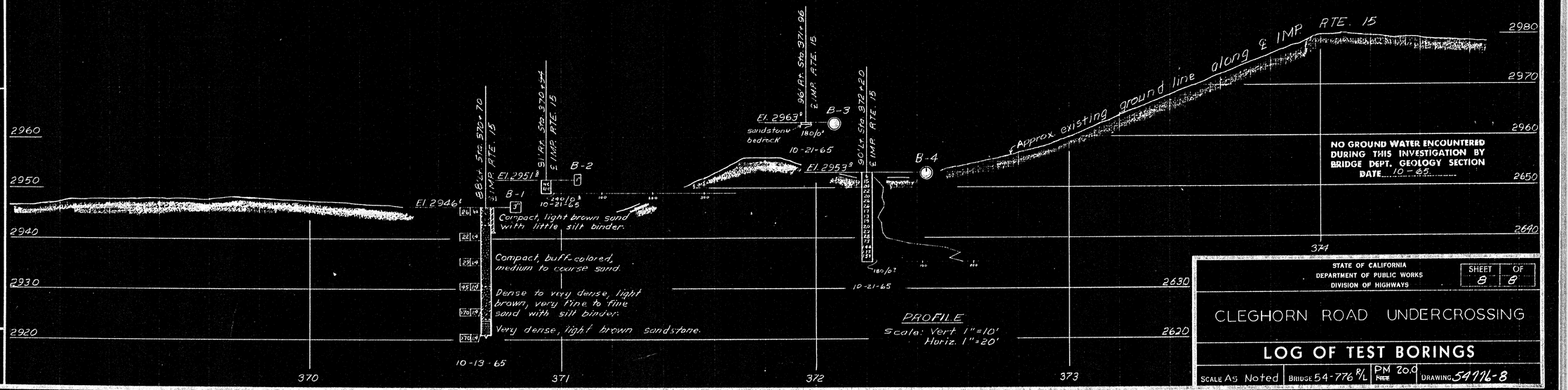
SCALE As Noted | BRIDGE 54-775 | PM 19.9 | DRAWING

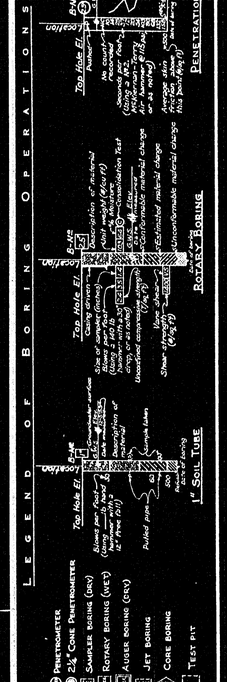
PRELL DRAWING NO. PR-

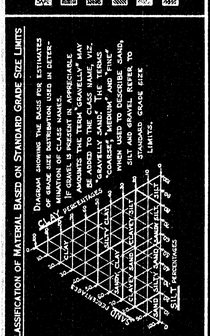
Change 08803

Cleghorn Canyon Road UC









FED. ROAD DIV. No.	STATE	F. A. PROJECT No.	SHEET No.	TOTAL SHEETS
7	CALIF.			

DIST.	COUNTY	ROUTE	SECTION	SHEET No.	TOTAL SHEETS
08	SBd.	15	12.9/R22.7	368	398

BRIDGE ENGINEER CIVIL ENGINEER LICENSE 5506

DATE APPROVED November 28, 1966

BENCH MARKS

47-A-63 Elev. 2928.77
Nail in N/W Wing Wall West Bound
Bridge 371.9' Lt. Sta. 348 + 98.3
℄ Imp. Rte. 15

50-A-63 Elev. 2932.96
Bathey Stake & Cap. 481.2' Lt. Sta.
375 + 63.3 ℄ Imp Rte. 15

PLAN
Scale: 1" = 20'

Piles constructed at Plan shown

AS BUILT
CORRECTIONS BY
CONTRACT NO.
DATE 10-17-68

B-1:
Compact, light brown sand with little silt binder.
Compact, buff-colored, medium to course sand.
Dense to very dense, light brown, very fine to fine sand with silt binder.
Very dense, light brown sandstone.

PROFILE
Scale: Vert. 1" = 10'
Horiz. 1" = 20'

NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION
DATE 10-65

LEGEND OF BORING OPERATIONS

- Ⓟ PENETROMETER
- ● 2¼" CONE PENETROMETER
- ▭ SAMPLER BORING (DRY)
- ▭ ROTARY BORING (WET)
- ▭ AUGER BORING (DRY)
- ▭ JET BORING
- ◇ CORE BORING
- ⬚ TEST PIT

LEGEND OF EARTH MATERIALS

▨	GRAVEL	▨	SILTY CLAY OR CLAYEY SILT
▨	SAND	▨	PEAT AND/OR ORGANIC MATTER
▨	SILT	▨	FILL MATERIAL
▨	CLAY	▨	IGNEOUS ROCK
▨	SANDY CLAY OR CLAYEY SAND	▨	SEDIMENTARY ROCK
▨	SANDY SILT OR SILTY SAND	▨	METAMORPHIC ROCK

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

DIAGRAM SHOWING THE BASIS FOR ESTIMATES OF GRADE SIZE DISTRIBUTION USED IN DETERMINATION OF CLASS NAMES.

IF GRAVEL IS PRESENT IN APPRECIABLE AMOUNTS THE TERM "GRAVELLY" MAY BE ADDED TO THE CLASS NAME, VIZ. "GRAVELLY SAND". THE TERMS "COARSE", "MEDIUM" AND "FINE" WHEN USED TO DESCRIBE SAND, SILT AND GRAVEL REFER TO STANDARD GRADE SIZE LIMITS.

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

FIELD STUDY	By O. Mikes	10-21-65
DRAWN	By G. Boyle	11-22-65
CHECKED	By O. MIKES	11-24-65

Approval Recommended by Charles Smith
Engineering Geologist

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

368

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

SHEET	OF
8	8

CLEGHORN ROAD UNDERCROSSING

LOG OF TEST BORINGS

SCALE As Noted | BRIDGE 54-776 R/L | PM 20.0 ~~FREE~~ | DRAWING 54776-8

Charge: 08203
WA: 049111

Disregard prints bearing earlier numbers → PREL. DRAWING No. PR- 7/5/66

East Fork Cajon Creek

FED. ROAD DIV. No.	STATE	F. A. PROJECT No.	SHEET No.	TOTAL SHEETS
7	CALIF.			

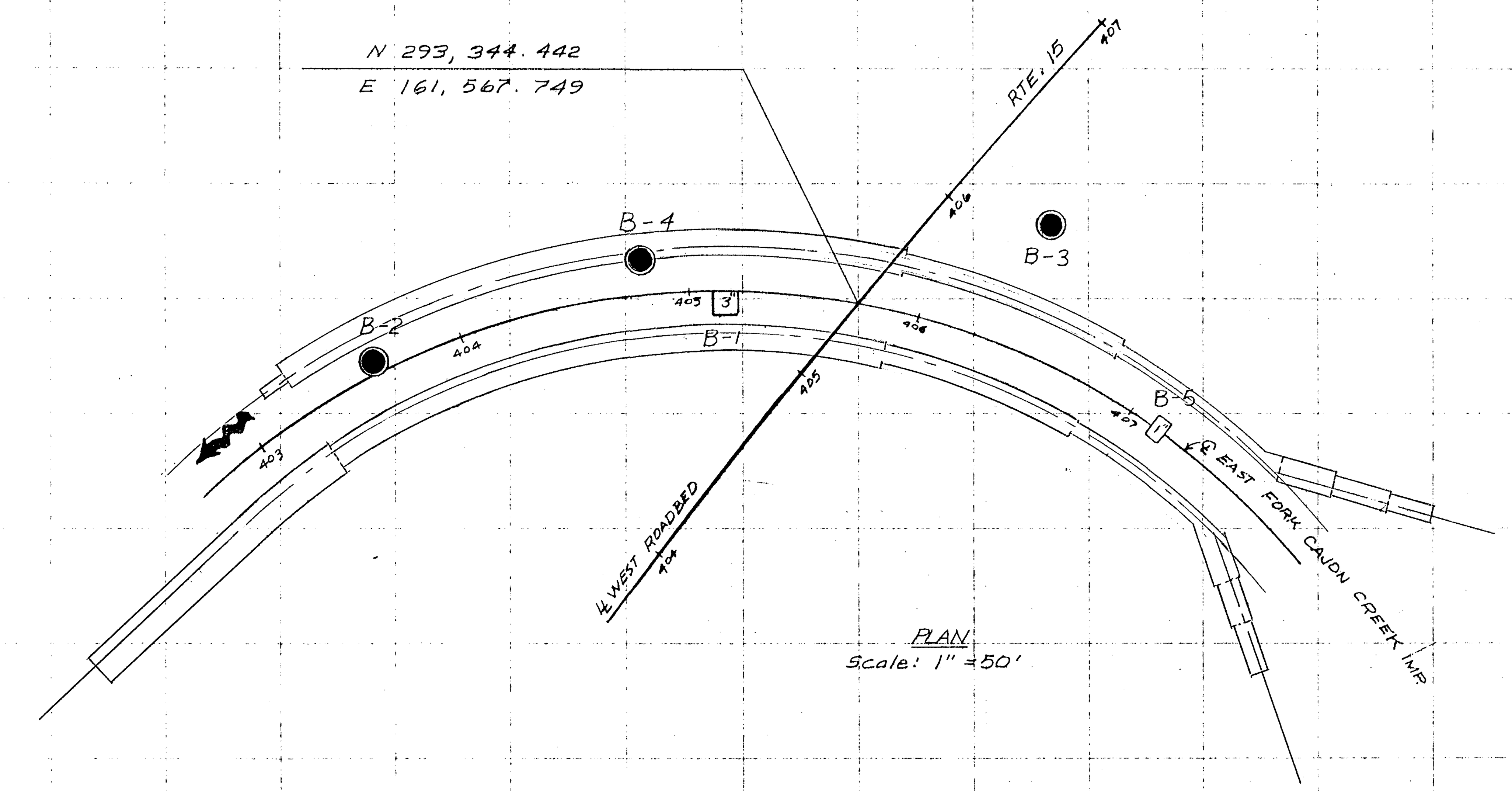
DIST.	COUNTY	ROUTE	SECTION	SHEET No.	TOTAL SHEETS
08	SBd.	15	12.9 R22.7	375	398

BRIDGE ENGINEER — CIVIL ENGINEER — LICENSE 5585

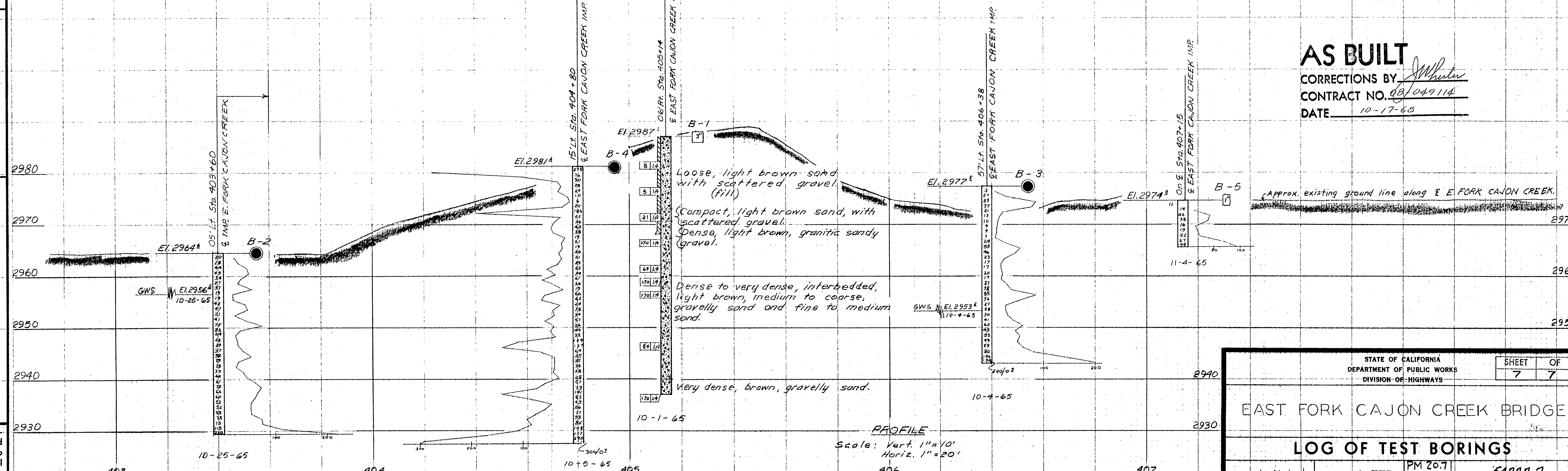
DATE APPROVED November 28 1966

BENCH MARK

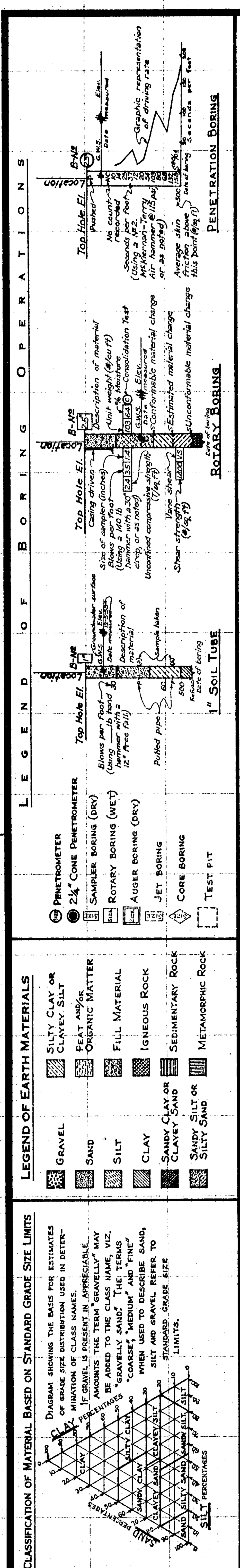
BM. 47-B-49
Nail in lead in Bridge wheel guard
77± Rt. Sta. 406+52± ℄ East Rd.Bd. RTE. 15
Elev. 2996.86



Ftgs constructed at Plan elevation



AS BUILT
CORRECTIONS BY
CONTRACT NO. 08-049114
DATE 10-17-68



NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

FIELD STUDY	By O. MiKes 11-4-65
DRAWN	By G. Boyle 11-24-65
CHECKED	By O. MiKes 12-5-65
Approval Recommended	Engineering Geologist

BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION

375

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

SHEET	OF
7	7

EAST FORK CAJON CREEK BRIDGE

LOG OF TEST BORINGS

SCALE As Noted | BRIDGE 54-777 | PM 20.7 | DRAWING 54777-7

Charge: 08203
W.A.: 049111

Disregard prints bearing earlier numbers → PREL. DRAWING No. PR-

SR-138 / I-15 Separation


FED. ROAD DIV. No. 7 STATE CALIF. F. A. PROJECT No. SHEET No. TOTAL SHEETS
DIST. 08 COUNTY SBd ROUTE 138 SECTION SHEET No. 391 TOTAL SHEETS 398
DATE APPROVED November 28, 1966
PLAN Scale 1"=20'
Ftgs constructed at Plan elev.
B-1
B-2
B-3
B-4
B-5
B-6
A-1
A-3
℄ Imp Rte 138
N 295 841.954
E 158 845.805
NO GROUND WATER ENCOUNTERED DURING THIS INVESTIGATION BY BRIDGE DEPT. GEOLOGY SECTION DATE Oct 1965
3104.0
3107.2
3108.7
3109.0
3113.0
3113.5
Slightly Compact to Compact Light Tan Very Fine to Fine Sand
Dense Light Tan Sand
Compact to Dense Light Tan Very Fine to Fine Sand
Dense to Very Dense Light Tan Sand with Scattered Gravel
9-29-65
9-30-65
10-1-65
Profile Scale Hor 1"=20' Vert 1"=10'
AS BUILT
CORRECTIONS BY
CONTRACT NO. 08-049114
DATE 10-18-68
LEGEND OF BORING OPERATIONS
PENETRATION BORING
ROTARY BORING
1" SOIL TUBE
Penetrometer
2½" Cone Penetrometer
Sampler Boring (Dry)
Rotary Boring (Wet)
Auger Boring (Dry)
Jet Boring
Core Boring
Test Pit
LEGEND OF EARTH MATERIALS
Gravel
Sand
Silt
Clay
Sandy Clay or Clayey Sand
Sandy Silt or Silty Sand
Silty Clay or Clayey Silt
Peat and Organic Matter
Fill Material
Igneous Rock
Sedimentary Rock
Metamorphic Rock
CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS
NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.
FIELD STUDY
DRAWN
CHECKED
Approval Recommended
Engineering Geologist
BRIDGE DEPARTMENT
ENGINEERING GEOLOGY SECTION
391
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
SHEET 16 OF 16
ROUTE 138/15 SEPARATION
LOG OF TEST BORINGS
SCALE As Noted
BRIDGE 54-778
PM 21.4
DRAWING 54778-16
Disregard prints bearing earlier numbers
PREL. DRAWING No. PR-
Change 08703
W.O. 049111

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	138			

Chris Hoadley 12-27-12
CERTIFIED ENGINEERING GEOLOGIST DATE

PROFESSIONAL GEOLOGIST — Chris Hoadley — No. 2309 — Exp. 11-29-13 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

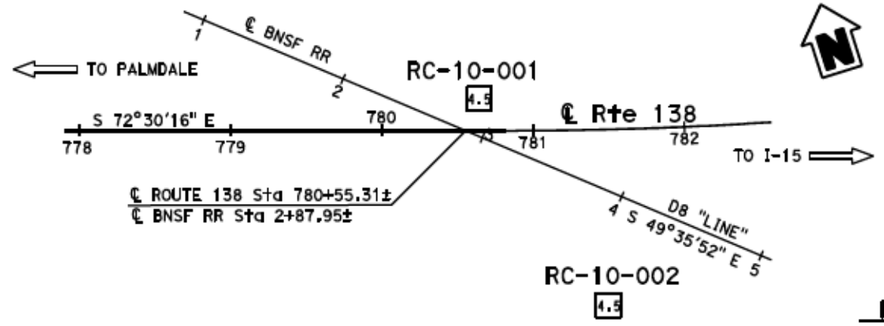
PLANS APPROVAL DATE

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

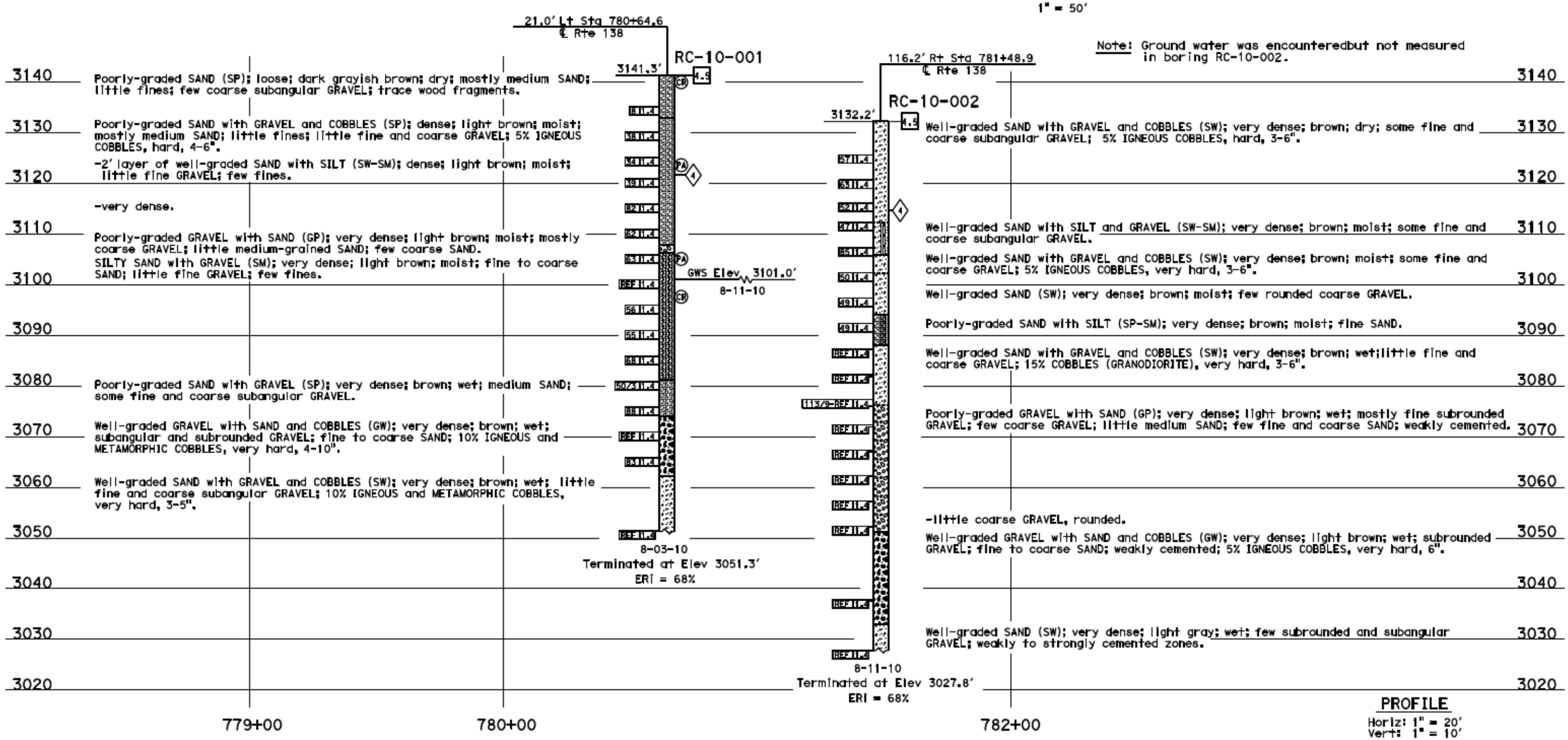
See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

BENCH MARK

541057A, 120PRHV
N1936423.713
E6718204.417
Elev 3139.68
NAVD29
1" IP/ALCAP Stmd SBS138541057A
130.95 Ft Lt ℄ Rte 138
Sta 780+93.67



PLAN
1" = 50'



Note: Ground water was encountered but not measured in boring RC-10-002.

PROFILE
Horiz: 1" = 20'
Vert: 1" = 10'

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	RETAINING WALL NO. 782
FUNCTIONAL SUPERVISOR	DRAWN BY: F. Nguyen	DEPARTMENT OF TRANSPORTATION	DESIGN BRANCH X	RW 780	LOG OF TEST BORINGS
NAME: S. Wei	CHECKED BY: M. Wilson	FIELD INVESTIGATION BY: J. Klimecki		POST MILE 14.7	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 08000006091
CONTRACT NO.: 08-3401U1

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES				SHEET	OF
11-26-12	12-19-12			X	X

FILE => rw782.dgn

DGN: CIVIL LOG OF TEST BORINGS SHEET

USERNAME => e128198 DATE PLOTTED => 27-DEC-2012 TIME PLOTTED => 15:01

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	138			

Chris Hoadley 12-27-12
CERTIFIED ENGINEERING GEOLOGIST

PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — Chris Hoadley No. 2309 Exp. 11-23-13 CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

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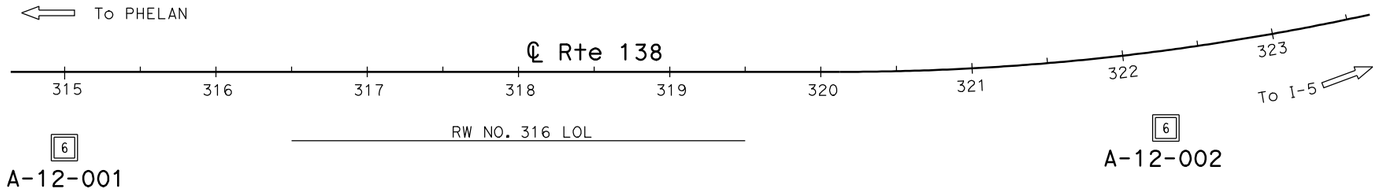
This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).
See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

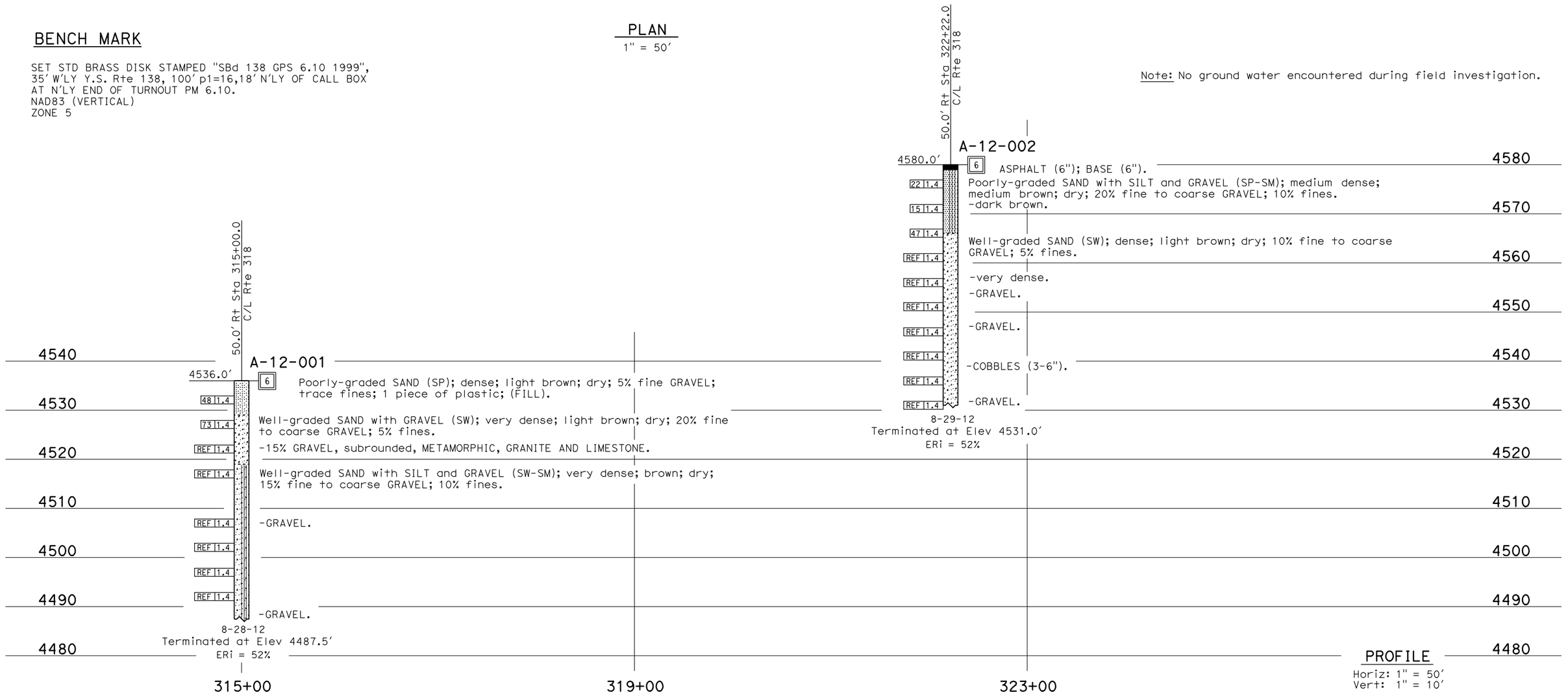


BENCH MARK

SET STD BRASS DISK STAMPED "SBd 138 GPS 6.10 1999",
35′ W′LY Y.S. Rte 138, 100′ p1=16,18′ N′LY OF CALL BOX
AT N′LY END OF TURNOUT PM 6.10.
NAD83 (VERTICAL)
ZONE 5

PLAN

1" = 50′



Note: No ground water encountered during field investigation.

PROFILE

Horiz: 1" = 50′
Vert: 1" = 10′

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	RETAINING WALL NO. 316
FUNCTIONAL SUPERVISOR	DRAWN BY: W. Tang 10/12	FIELD INVESTIGATION BY:	DESIGN BRANCH X	RW316	LOG OF TEST BORINGS
NAME: S. Wei	CHECKED BY: M. Wilson	C. Hoadley		POST MILE 6.0/6.1	

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 08000006091 CONTRACT NO.: 08-3401U1

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
10-15-12	11-14-12	12-07-12	12-14-12	X	X

FILE => rw316.dgn

USERNAME => s128444 DATE PLOTTED => 28-DEC-2012 TIME PLOTTED => 13:41

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	138			

Chris Hoadley 12-27-12
CERTIFIED ENGINEERING GEOLOGIST

PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — Chris Hoadley No. 2309 Exp. 11-23-13 CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

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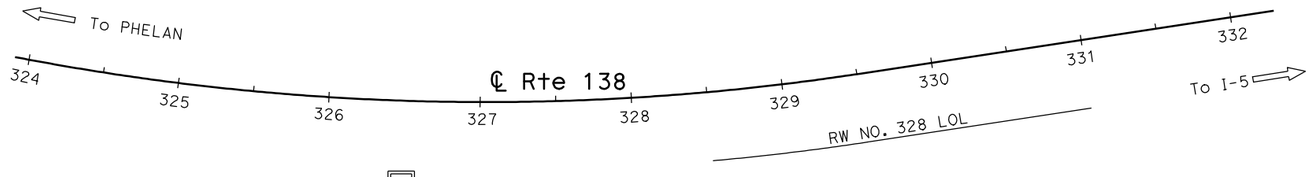
This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).
See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

BENCH MARK

SET STD DISK IN CONC DN 1" STAMPED "P1-71 P1-16",
3' FROM E.O. IN AC TURNOUT ON RT AT PM 6.2
NAD83 (VERTICAL)
ZONE 5



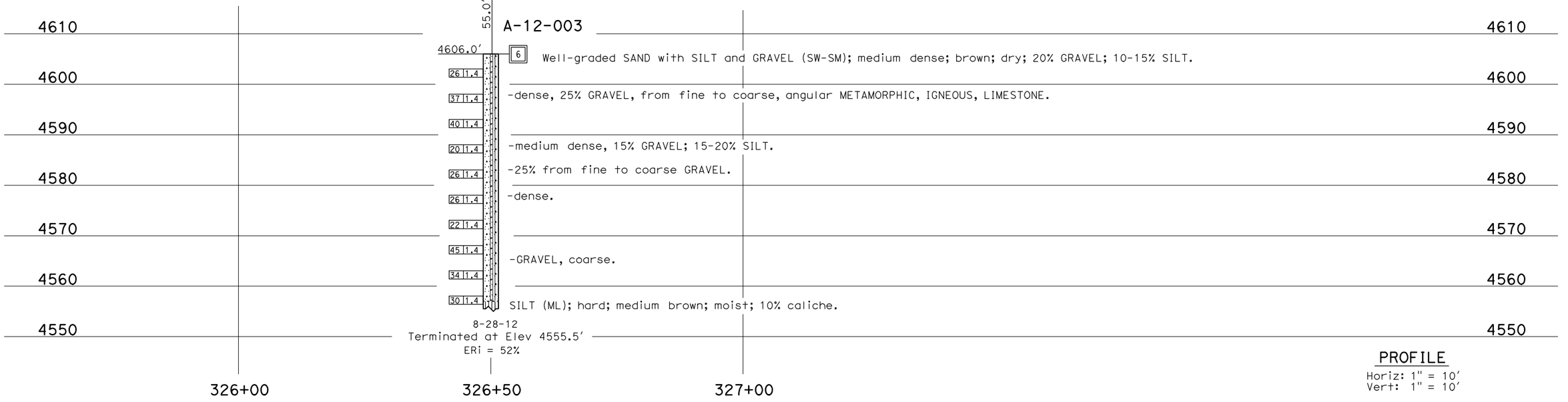
PLAN

1" = 50'

Note: No ground water encountered during field investigation.

PROFILE

Horiz: 1" = 10'
Vert: 1" = 10'



ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	RETAINING WALL NO. 328
FUNCTIONAL SUPERVISOR	DRAWN BY: W. Tang 10/12	FIELD INVESTIGATION BY:	DESIGN BRANCH X	POST MILE 6.2	LOG OF TEST BORINGS
NAME: S. Wei	CHECKED BY: M. Wilson	C. Hoadley			

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 08000006091 CONTRACT NO.: 08-3401U1

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
10-15-12	11-09-12	12-18-12	12-14-12	X	X

FILE => rw328.dgn

USERNAME => s128444 DATE PLOTTED => 28-DEC-2012 TIME PLOTTED => 13:41

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	138			

Chris Hoadley 12-27-12
CERTIFIED ENGINEERING GEOLOGIST DATE

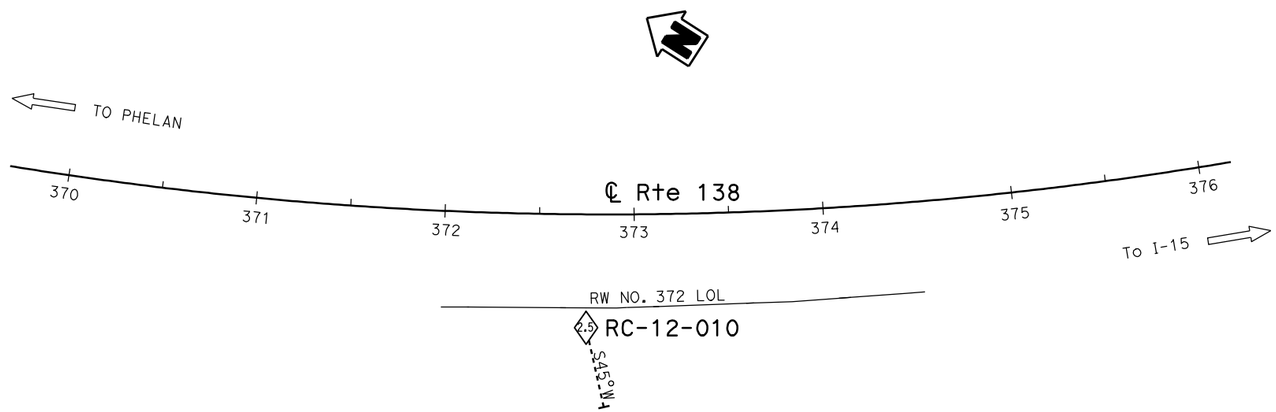
PROFESSIONAL GEOLOGIST
Chris Hoadley
No. 2309
Exp. 11-23-13
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

BENCH MARK

Set STD brass stamped "SBd 138 GPS 7.00 1999", 50′ W'ly Y.S. Rte 138 at top of cut in saddle area, at PM 7.0
NAD 83 (Vertical)
Zone 5.

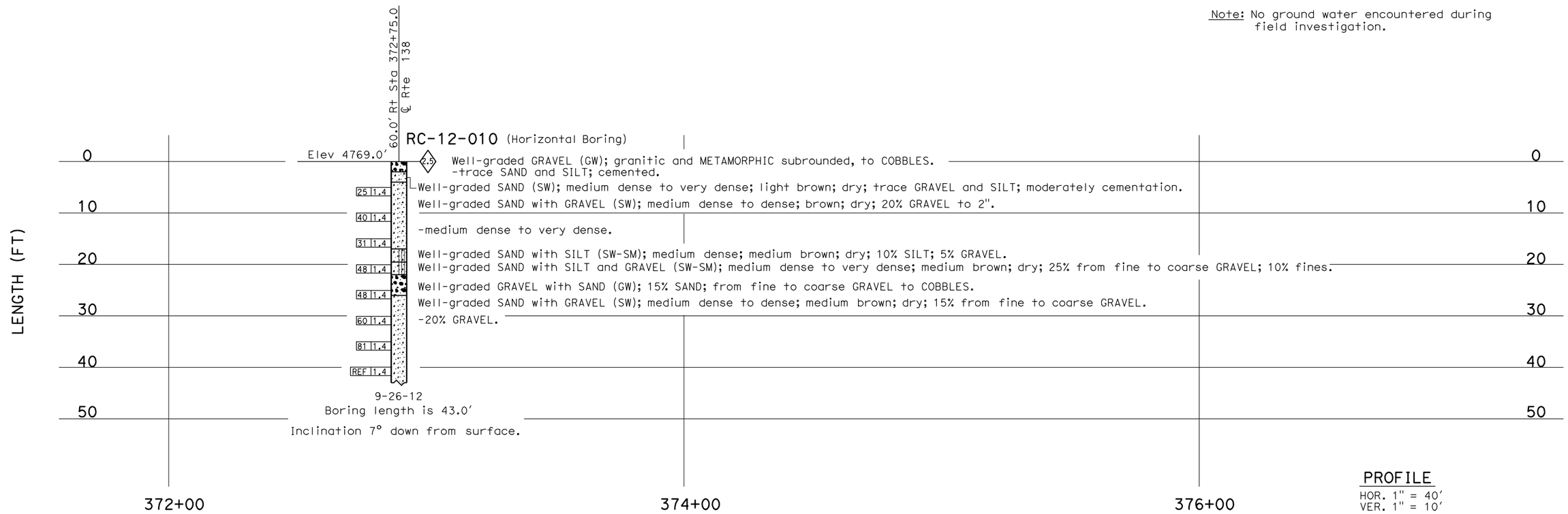


PLAN
1" = 40′

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

Note: No ground water encountered during field investigation.



PROFILE
HOR. 1" = 40′
VER. 1" = 10′

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	RETAINING WALL NO. 372
FUNCTIONAL SUPERVISOR	DRAWN BY: F. Nguyen		DESIGN BRANCH X	RW 372	LOG OF TEST BORINGS
NAME: S. Wei	CHECKED BY: M. Wilson	FIELD INVESTIGATION BY: C. Hoadley		POST MILE 7.0	

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 08000006091 CONTRACT NO.: 08-3401U1

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
10-16-12	10-30-12	12-07-12	12-14-12	X	X

FILE => rw372.dgn

USERNAME => s128444 DATE PLOTTED => 28-DEC-2012 TIME PLOTTED => 13:41