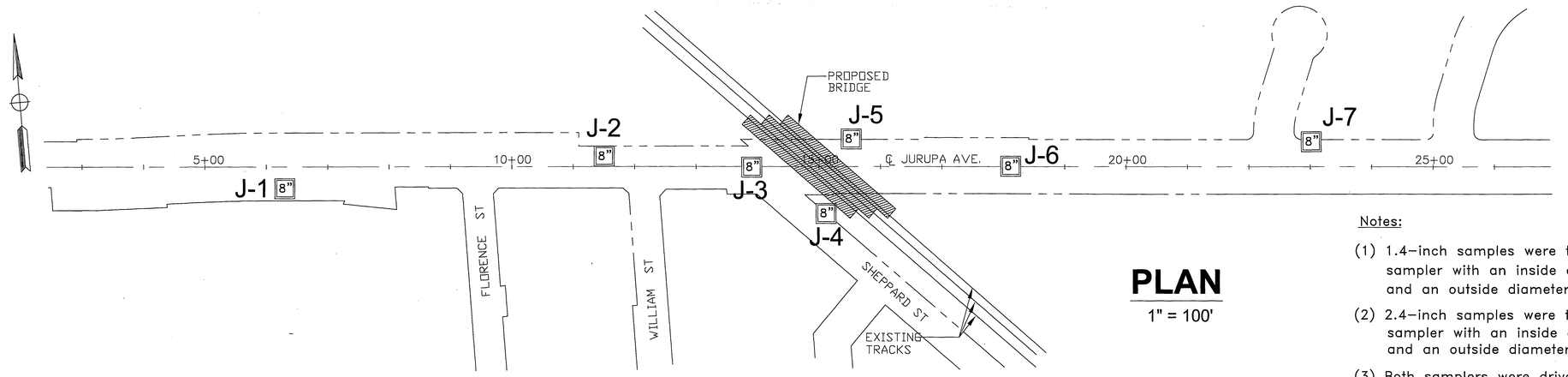


PLAN

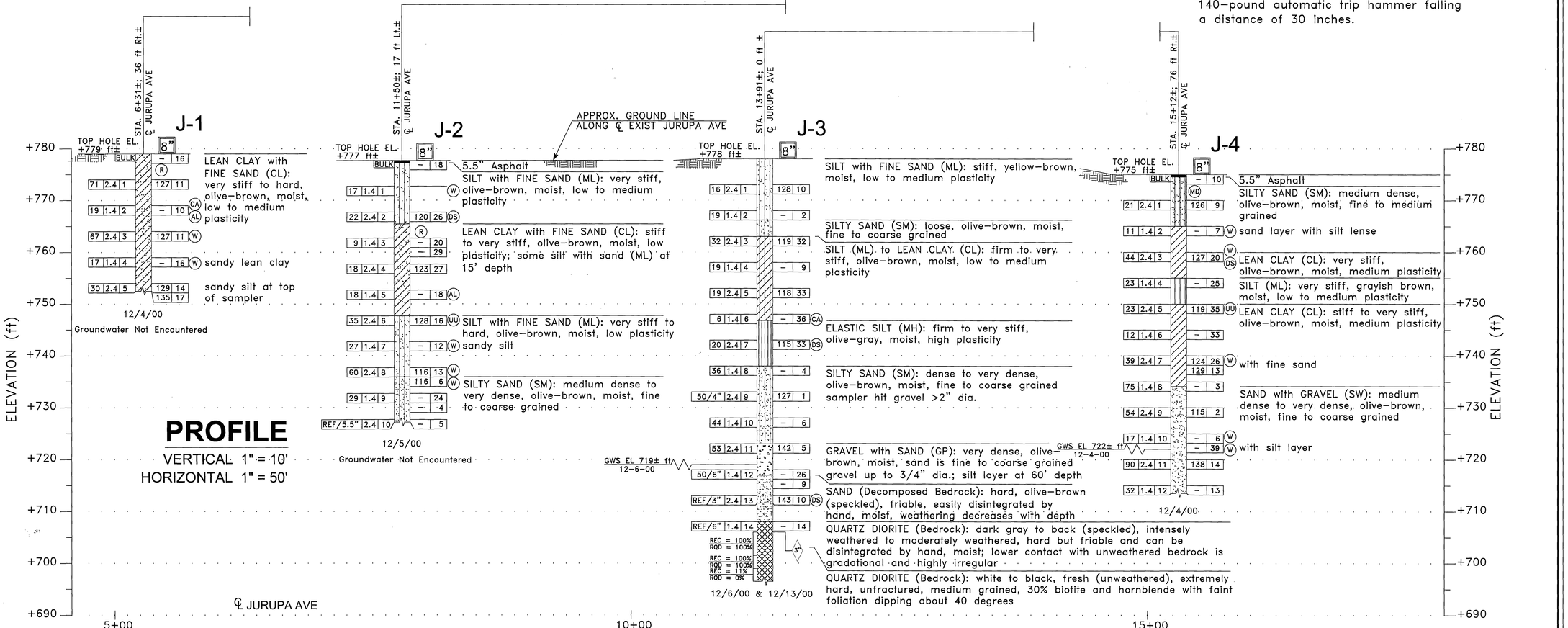
1" = 100'

Notes:

(1) 1.4–inch samples were taken using a SPT sampler with an inside diameter (I.D.) of 1.4" and an outside diameter (O.D.) of 2".

(2) 2.4–inch samples were taken using a California sampler with an inside diameter (I.D.) of 2.4" and an outside diameter (O.D.) of 3".

(3) Both samplers were driven using a 140–pound automatic trip hammer falling a distance of 30 inches.



PROFILE

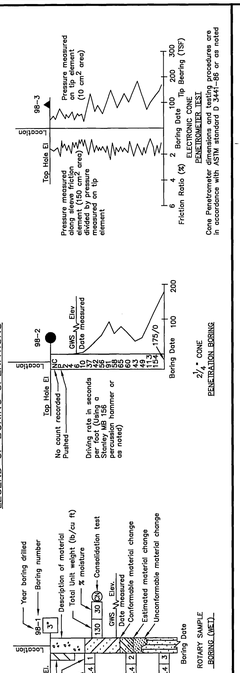
VERTICAL 1" = 10'
HORIZONTAL 1" = 50'

BENCHMARK

POINT	ELEVATION	DESCRIPTION
H4–C3	790.277	P.K. NAIL AND CITY ENGINEER TAG IN THE BASE OF A TRAFFIC SIGNAL AT THE NORTHWEST CURB RETURN OF JURUPA AVENUE AND FREMONT STREET (THE RETURN BETWEEN FREMONT STREET AND COLUMBUS STREET).
H5–G4	787.253	P.K. NAIL AND CITY ENGINEER TAG IN SOUTHERLY CORNER OF A CATCH BASIN ALONG THE NORTHERLY CURB OF GRAND AVENUE, 90 FEET NORTH–EASTERLY OF THE INTERSECTION OF GRAND AVENUE AND STREETER AVENUE.
GPS–0059	769.940	IN THE SOUTH SIDE OF JURUPA AVENUE OPPOSITE ANZA PARK AND 0.5 MILES EAST OF VAN BUREN.

AS BUILT 1-20-10

LEGEND OF BORING OPERATIONS



TYPE OF BORINGS

- ● 2½" CONE PENETRATION
- ROTARY WASH
- ELECTRONIC CONE PENETROMETER
- AUGER BORING (DRY)
- TEST PIT
- DIAMOND CORE BORING
- SOIL TUBE

LEGEND OF EARTH MATERIALS (USCS) BASED ON ASTM D2487, D2488

- FILL MATERIAL
- CLAY (CL or CH)
- SILT (ML or MH)
- PEAT and/or HIGHLY ORGANIC MATTER
- POORLY–GRADED SAND (SP)
- WELL–GRADED SAND (SW)
- SILTY SAND (SM) or SANDY SILT
- CLAYEY SAND (SC) or SANDY CLAY
- COBBLES/BOULDERS
- POORLY–GRADED GRAVEL (GP)
- WELL–GRADED GRAVEL (GW)
- SILTY GRAVEL (GM)
- CLAYEY GRAVEL (GC)
- IGNEOUS ROCK
- SEDIMENTARY ROCK
- METAMORPHIC ROCK

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test (ASTM D–1586)

SPT N–value (blows/ft)	Granular	SPT N–value (blows/ft)	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
		> 31	Hard

Note: Visual classification of earth materials are based on field inspection and are confirmed or revised with laboratory test results as necessary.

IN–SITU, LAB & FIELD TEST DESIGNATIONS

- (AL) ATTERBERG LIMITS
- (CA) CHEMICAL ANALYSIS
- (CN) CONSOLIDATION
- (CU) CONSOLIDATED UNDRAINED TRIAXIAL
- (DS) DIRECT SHEAR
- (MD) MAX. DRY DENSITY
- (PP) POCKET PENETROMETER
- (SA) SIEVE ANALYSIS
- (SE) SAND EQUIVALENT
- (R) R–VALUE
- (UU) UNCONSOLIDATED UNDRAINED TRIAXIAL
- (W) WASH #200

Earth Mechanics, Inc.
Geotechnical and Earthquake Engineering

DMJM HARRIS | AECOM

999 Town & Country Road
Orange, CA 92868
T 714.567.2501 F 714.567.2441

REGISTERED PROFESSIONAL ENGINEER
LINO C. CHEANG
NO. GE 2345
EXP. 9/30/07
GEOTECHNICAL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY X.X. DRAWN BY X.X CHECKED BY L.C.C.

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
CONST. CONTRACT ADMIN.		
PRINCIPAL ENGINEER		
STREET SERVICES		
SURVEYOR		
TRAFFIC DIVISION		
PARKS DEPARTMENT		

APPROVED BY
CITY ENGINEER
DATE 12/8/06

JURUPA AVENUE UNDERPASS
PHASE II CONSTRUCTION

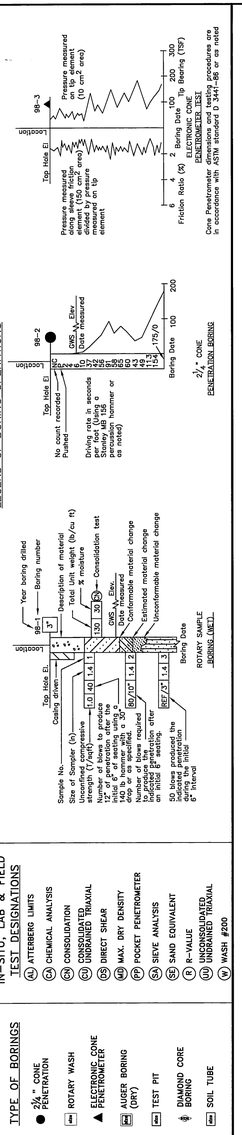
LOG OF TEST BORINGS
NO. 1 OF 2

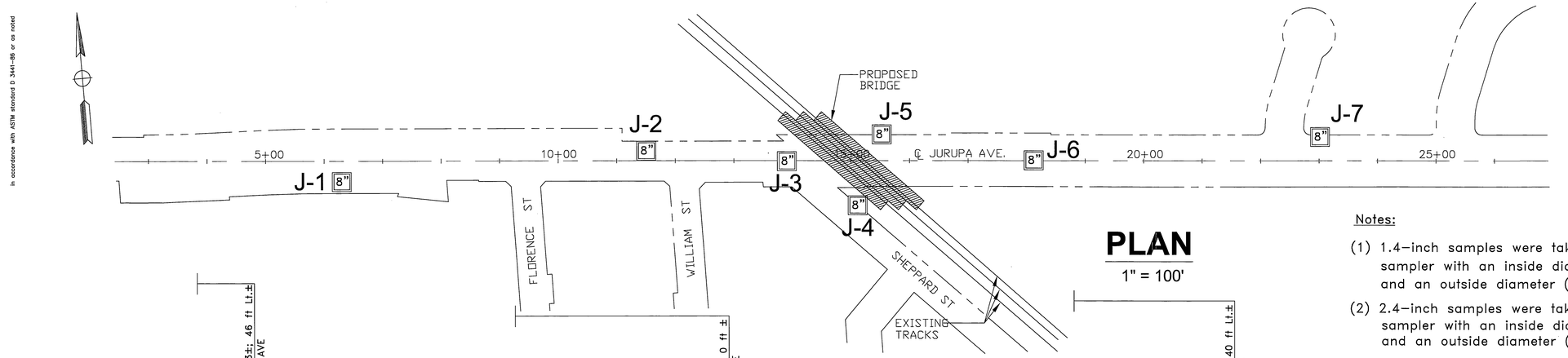
HORIZ. SCALE: AS SHOWN VERT. SCALE: AS SHOWN

R–3634
B–01

SHEET ____ OF ____

October 2, 2006





PLAN
1" = 100'

Notes:

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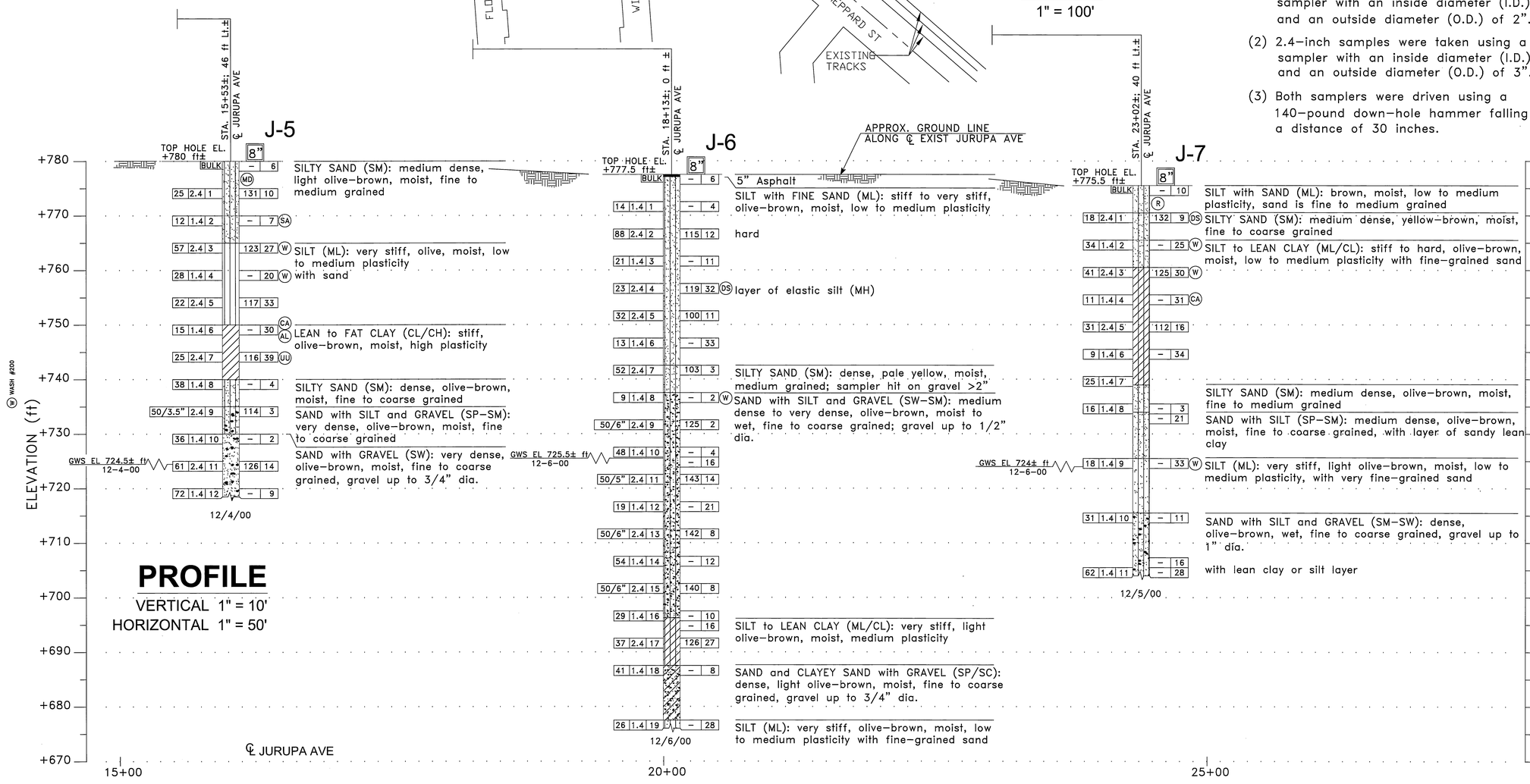
(3) Both samplers were driven using a 140-pound down-hole hammer falling a distance of 30 inches.



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(DS) DIRECT SHEAR
(MD) MAX. DRY DENSITY
(PP) POCKET PENETROMETER
(SA) SIEVE ANALYSIS
(SE) SAND EQUIVALENT
(R) R-VALUE
(UU) UNCONSOLIDATED UNDRAINED TRIAXIAL
(W) WASH #200

TYPE OF BORINGS
● 2½" CONE PENETRATION
RW ROTARY WASH
ET ELECTRONIC CONE PENETROMETER
AB AUGER BORING (DRY)
TP TEST PIT
DB DIAMOND CORE BORING
ST SOIL TUBE

LEGEND OF EARTH MATERIALS (USCS) BASED ON ASTM D2487, D2488
FILL MATERIAL
CLAY (CL or CH)
SILT (ML or MH)
PEAT and/or ORGANIC MATTER
WELL-GRADED GRAVEL (GW)
POORLY-GRADED GRAVEL (GP)
SILTY GRAVEL (GM)
CLAYEY GRAVEL (GC)
POORLY-GRADED SAND (SP)
WELL-GRADED SAND (SW)
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AS BUILT 1-20-10

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REGISTERED PROFESSIONAL ENGINEER
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GEOTECHNICAL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY X.X. DRAWN BY X.X. CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
CONST. CONTRACT ADMIN.	DEV	10/26/06
PRINCIPAL ENGINEER	BM	10/26/06
STREET SERVICES	DD	11/6/06
SURVEYOR		
TRAFFIC DIVISION	EH	11-5-06
PARKS DEPARTMENT		

APPROVED BY
CITY ENGINEER
DATE 12/8/06

JURUPA AVENUE UNDERPASS
PHASE II CONSTRUCTION

LOG OF TEST BORINGS
NO. 2 OF 2

HORIZ. SCALE: AS SHOWN VERT. SCALE: AS SHOWN

R-3634
B-02

SHEET ____ OF ____

October 6, 2006

DWG: P:\163903\003 Final Design\Geotech\Sheet\LOTB-2.dwg
TIME: 10-05-06 - 11:08am User: seorlesm XRef Files: ..\xref\xbdr_civil.dwg