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GEOTECHNICAL ENGINEERING INSPECTION REPORT

Oak Walk Redevelopment Site
Emeryville, California

for

Bay Rock Oaks, LLC

February 2009

Project No.: 0004.084

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PROFESSIONAL CERTIFICATION AND LIMITATIONS

This report was prepared under the direction of the engineer whose seal and signature appear below. The work was performed in accordance with generally accepted standards of engineering practice based on information available to us at the time of its preparation and within the limits of the scope of work directed by the client. No other representation, express or implied, and no warranty or guarantee is included or intended as to professional opinions, recommendations, or field or laboratory data provided.

02/27/09

D. J. Watkins, Ph.D., P.E.
Geotechnical Engineer
The San Joaquin Company Inc.

1.0 INTRODUCTION

This report documents geotechnical engineering services performed by The San Joaquin Company, Inc. (**SJC**) during site grading, foundation construction and paving for the mixed residential and commercial redevelopment project known as Oak Walk in Emeryville, California. The results of SJC's geotechnical investigation for the project were presented in the *Geotechnical Engineering Report, Oak Walk Project Site, Emeryville, California,* issued on August 19, 2004 (The San Joaquin Company Inc. 2004).

Additional mass soil excavation and backfilling that were required for environmental remediation of the site were specified in the *Corrective Action Plan, Oak Walk Redevelopment Site, Emeryville, California* (The San Joaquin Company Inc. 2006a, 2006b).

1.1 Buildings on the Oak Walk Site

There are a total of eight buildings on the redeveloped Oak Walk site. Their locations are shown on Figure 1. Two are mixed use residential and residential Buildings. These are:

Building 1 is located at the southwestern corner of the site at the intersection of 40th Street and San Pablo Avenue. It has commercial units on the ground floor and one bedroom and two bedroom residential condominium units on an upper floor. The commercial spaces on the ground floor have the addresses 4000 and 4010 San Pablo Avenue. The residences on the upper floor have the addresses 4002 and 4008 San Pablo Avenue.

Building 2, which has three stories, is located at the northwestern corner of the site at the intersection of 41st Street and San Pablo Avenue. The ground floor of that structure includes a retail space, two two-bedroom town homes and one three-bedroom town home. The upper floors of that building feature two one-bedroom condominiums and two two-bedroom condominiums. The commercial space on the ground floor of Building 2 has the address 4098 San Pablo Avenue. The residences on the ground floor have the addresses 1087, 1089 and 1091 41st Street. The four units on the upper floors of that building have the addresses 1093, 1095, 1097 and 1099 41st Street.

Building 3 is a four-story residential building, which is comprised of a total of 44 one-, two- and three-bedroom condominium and townhome units with a 62 car garage that occupies a portion of the ground floor. This garage is accessible from 40th Street. A new restroom facility for Alameda Contra Costa Transit is constructed on the ground floor. The residential units in Building 3 have the address 1122 40th Street, Unit Nos.1 through 44.

Single Family Residences. There are five rehabilitated single family residences on the site that front onto 40th Street. They have the addresses 1077, 1079, 1081, 1083 and 1085 40th Street.

1.2 Scope of Services

During construction, SJC performed the following services on an on-call basis, as requested by the project's general contractor:

- Observing site stripping, environmental remedial excavation, site grading and building pad preparation.
- Performing reactivity, corrosivity, ignitability tests on soil.
- Performing laboratory compaction tests to determine the maximum dry density and optimum moisture content of fill and base rock materials.
- Performing R-Value test and recommending paving design.
- Testing the compaction of fill and base rock materials placed beneath buildings, parking areas, driveways, sidewalks and curb areas.
- Observing foundation excavations and slab bases for the new buildings.
- Consulting with the project team regarding geotechnical issues during construction

2.0 SITE OBSERVATIONS AND TESTING

In July and August 2007, the site demolition contractor (Inner City Demolition, Inc.) demolished existing buildings on the site that were not to be rehabilitated, removed existing building foundations, stripped bituminous macadam and concrete paving and trees and surface vegetation from the site. The demolished building materials, bituminous macadam and concrete were recycled in beneficial reuse.

In August 2007, the environmental remediation contractor (Dietz Engineering and Construction, Inc) opened remedial excavations having a total volume of approximately 7,000 cubic yards as measured in situ and exported 3,041.95 tons of soil affected by petroleum hydrocarbons to permitted off-site disposal facilities at Keller Canyon in Pittsburg, California and the Forward Landfill in Manteca, California. The locations of the remedial excavations are shown on Figure 1. Remedial Excavation No. 1 had a depth of 7 ft. and Remedial Excavation No. 2 had a depth of 6 ft. The remaining clean soil removed from the remedial excavations was stockpiled on site for use as backfill.

In September, October and November 2007, the grading sub-contractor (Fremont Paving Company, Inc) performed rough grading of the site. The environmental Corrective Action Plan called for all excavated areas to be backfilled with suitable low-permeability compacted soil. Fremont Paving's work included backfilling of the remedial excavations with engineered fill compacted to a relative compaction of 90%, mass excavation of the area beneath Building 3 to a depth of 6 ft. and replacing and re-compacting the excavated

material to 90% relative compaction, mass excavation in the areas beneath Building 2 and the residential structures fronting on to 41st Street to a depth of 4 ft. and re-compacting the excavated material to 90% relative compaction and replacing it. (**Note:** Building 1 is located over Remedial Excavation No. 1, which was backfilled with soil compacted to 90% relative compaction.) The parking lot area was excavated to a depth of 3 ft. and the excavated soil was re-compacted as engineered fill with a relative compaction of 90% to the elevation of the sub-grade beneath the parking lot paving base material (except in the upper 8 in. where the relative compaction achieved was 95%). The floor of the remedial excavations and over-excavated areas were scarified and proof rolled before backfill material was placed.

All of the compacted backfill material met the low permeability requirements of the environmental corrective action plan for the redevelopment project.

Over the period December 2007 through October 2008, building pads, parking lots, sidewalks and open areas on the site were final-graded as required to accommodate the schedule of the construction work. Although soil affected by petroleum hydrocarbons was exported from the site, when soil excavated into the engineered backfill for foundations and other infrastructure was accounted for, the cut and fill on the site was nearly balanced with only a small volume of imported fill being required.

Storm water and sanitary sewer pipes were placed in trenches over a minimum of 9 in. of bedding material (1/2 in. crushed rock), and the pipes were then covered with a minimum of 12 inches of the crushed rock. Other utilities were placed in trenches over a minimum of 9 in. of sand and covered by 18 in. of the same material. Except under street paving, native materials were used to complete backfilling of the trenches and were compacted to restore the grade to the desired elevation. Sewer and utility trenches excavated in public rights of way above the crushed rock or sand that was placed around the pipes and conduits was backfilled with lean concrete up to the underside of the paving sub-grade material, which was overlain by either bituminous macadam or concrete paving.

The parking lot was final graded and the paving base material and bituminous macadam laid in September and October 2008. Prior to placing the paving base material, the parking lot was scarified and proof rolled so that the upper 8 in. of soil in the sub-grade was at 95% relative compaction. The 10 in. thick base material was also compacted to 95% relative compaction before the 3 in. thick bituminous macadam paving was laid.

Final grading and compaction of public sidewalks and miscellaneous open areas was completed in February 2009. Base material beneath sidewalks was compacted to 90% relative compaction and base material beneath curbs was compacted to 95% relative compaction.

2.1 Soil Reactivity, Corrosivity and Ignitability

On August 8, 2006 a representative sample of soil was recovered from the Oak Walk site and submitted to Severn Trent Laboratories Inc. for analysis for reactivity, corrosivity

(pH) and ignitability. A copy of the Certificate of Analysis issued by the laboratory is included in Appendix A.

The soil was found to be not reactive with respect to either cyanide or sulfide. It had a pH of 6.35 and was not corrosive. It was not ignitable.

2.2 Fill Placement and Compaction Testing

Fill placement and compaction were observed intermittently by SJC's field technician. Our technician performed field density tests using a nuclear gauge to evaluate the in-place density and moisture content of compacted fill and pavement sub-grade and base-rock materials. The nuclear gauge tests were conducted in compliance with American Society for Testing and Materials Test Method D2992-01 (American Society for Testing and Materials 2001). Field density test locations are shown on the Figure 1. Table 1 presents the results of the field density tests.

Laboratory compaction curves were performed on bulk soil samples by Fugro West Inc. to establish the optimum moisture content and maximum dry density of the fill and base rock materials. The compaction tests were performed in accordance with the American Society for Testing and Materials D1557-00 test procedure. (American Society for Testing and Materials 2000) The laboratory compaction test reports are reproduced in Appendix B.

2.3 Foundations and Building Pads

SJC's geotechnical engineer in responsible charge observed the condition of foundation excavations for the new buildings to confirm footing depths and to check the excavations for suitable bearing materials and cleanout. The bottoms of the footing excavations were probed with a metal rod to check for soft spots. Some water that had accumulated in the bottoms of some excavations was removed prior to the concrete pour, and the bottoms were again checked for soft spots. Similar inspections were made prior to placement of concrete on building pads and before laying sidewalk and parking lot sub-base material and paving.

A required by the City of Emeryville, SJC's geotechnical engineer issued certificates of suitability of foundation excavations and building pad sub-bases for placement of concrete in foundations and in building slabs prior to the concrete being poured. Copies of the certifications are included in Appendix C

2.4 Pavement Design

On October 7, 2007, SJC recovered a bulk sample of the compacted sub-grade soil in the parking area and submitted it to Fugro West Inc's laboratory for R-Value Testing. The test report is included in Appendix B.

BKF Engineers, the project civil engineers, recommended that a Traffic Index of 4.5 should be used for pavement design for the parking lot parking stalls and a Traffic Index of 5.5 for the drive aisles (BKF Engineers 2007).

Concluding that, in the confined Oak Walk parking lot, heavy vehicles might pass over any part of the Parking Lot, SJC elected, conservatively, to use a Traffic Index of 5.5 and an R-value of 15 for pavement design and to use the same grade material and bituminous macadam thicknesses over the whole lot. The recommend design was for 10 in. of base material and 3 in. of bituminous macadam. As was noted above those thicknesses were laid over the parking lot sub-grade.

3.0 CONCLUSIONS

Based on SJC's observations, it is our opinion that grading for the building pads, parking and driveway areas and open areas at the Oak Walk site was completed in accordance with SJC's recommendations and project plans, as were the sanitary and storm water sewer and utility trench backfills. The field density tests indicate that the building pads and pavement sub-bases and base materials were compacted to at least 90 percent relative compaction. Sub-grade soils and base rock materials in parking areas and rock material beneath curbs were compacted to at least 95 percent relative compaction.

Based on our observations of foundation excavations, building pads and paved areas, it is SJC's opinion that:

- The footing excavations and building pads were constructed in accordance with the project plans

- The soil encountered by the foundation excavations and beneath building slabs are capable of developing the geotechnical design parameters recommended in SJC's geotechnical engineering report.

- Sub-grade materials and base materials beneath pavements have been properly prepared and compacted and the paving materials have been properly laid.

In summary, it is SJC's opinion that all mass soil excavation and backfilling, site grading, building pad preparation and foundation excavations observed and tested by SJC, as described herein, were completed in accordance with the approved set of project engineering plans, the environmental corrective action plan and the intent of SJC's geotechnical engineering recommendations.

4.0 REFERENCES

American Society for Testing and Materials (2001), *Test Method for Density of Soil and Soil-Aggregate In-Place by Nuclear Methods (Shallow Depth),* ASTM Standard D2992-01, American Society for Testing and Materials, Philadelphia, Pennsylvania, 2001.

American Society for Testing and Materials (2000), *Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lb/ft^3 (2,700 kN-m/m^3)),* ASTM Standard D1557-00, American Society for Testing and Materials, West Conshohocken, Pennsylvania, 2000.

BKF Engineers (2007), e-mail from Brian Scott PE – BKF Engineers to Noe Valenzula – Bay Rock Oaks, LLC. Subject: Oak Walk - Traffic Indices. Sent September 24, 2007.

The San Joaquin Company Inc. (2006a), *Addendum to Corrective Action Plan Oak Walk Redevelopment Site Emeryville, California.* November 2006.

The San Joaquin Company Inc. (2006b), *Corrective Action Plan, Oak Walk Redevelopment Site, Emeryville, California*. (*Vols. I and II.)* July 2006.

The San Joaquin Company Inc. (2004), *Geotechnical Engineering Report, Oak Walk Project Site, Emeryville, California*. August 2004

TABLE 1

OAK WALK
Field Compaction Test Results

Test No.	Date	Test Location	Depth *in ft.* [1]	Soil Type [6]	Moisture Content (percent)	Dry Density (pfc)	Max. Dry Density (pcf)	Relative Compaction Percent	Relative Compaction Req. %
1	09/10/07	Excavation #2	-7.0	Bulk 1 [7]	21.0	102.9	114.0	90.3	90
2	09/10/07	Excavation #2	-7.0	Bulk 1	18.8	106.1	114.0	93.0	90
3	09/10/07	Excavation #2	-7.0	Bulk 1	21.2	103.6	114.0	94.9	90
4	09/10/07	Excavation #2	-5.5	Bulk 1	17.2	109.2	115.0	95.0	90
5	09/10/07	Excavation #2	-5.5	Bulk 1	19.5	104.3	114.0	91.5	90
6	09/10/07	Excavation #2	-5.0	Bulk 1	19.0	103.0	114.0	90.4	90
7	09/10/07	Excavation #2	-5.0	Bulk 2	17.6	107.8	115.0	93.7	90
8	09/10/07	Excavation #1	-5.0	Bulk 1	22.2	103.6	114.0	90.9	90
9	09/10/07	Excavation #1	-5.0	Bulk 1	19.4	106.1	114.0	93.1	90
10	09/10/07	Excavation #1	-6.0	Bulk 2	15.7	108.2	115.0	94.1	90
11	09/10/07	S.E Corner of Site	-4.5	Bulk 1	20.0	104.4	114.0	91.6	90
12	9//11/07	Excavation #1	-5.0	Bulk 1	23.2	103.8	114.0	90.8	90
13	9//11/07	Excavation #1	-5.0	Bulk 1	21.3	102.4	114.0	90.0	90
14	9//11/07	Excavation #1	-4.0	Bulk 3	20.0	100.8	108.0	93.3	90
15	9//11/07	Excavation #1	-4.0	Bulk 1	19.9	105.7	114.0	92.7	90
16	9//11/07	Excavation #1	-4.0	Bulk 1	16.4	108.9	114.0	95.5	90
17	9//11/07	Excavation #1	-4.0	Bulk 2	18.5	104.7	115.0	91.8	90
18	9//11/07	Excavation #1	-3.5	Bulk 2	16.2	111.9	115.0	97.3	90
19	9//11/07	Excavation #1	-4.0	Bulk 2	19.3	106.5	115.0	92.6	90
20	9//11/07	Excavation #1	-4.5	Bulk 2	17.8	105.9	115.0	92.1	90
21	9//11/07	S.E Corner of Site	-4.0	Bulk 2	17.7	106.2	115.0	92.4	90
22	9//11/07	S.E Corner of Site	-3.0	Bulk 2	18.8	108.8	115.0	93.9	90
23	9//11/07	Excavation #1	-3.0	Bulk 2	20.8	105.3	115.0	91.6	90

SJC

Test No.	Date	Test Location	Depth *in ft.* [1]	Soil Type [6]	Moisture Content (percent)	Dry Density (pfc)	Max. Dry Density (pcf)	Relative Compaction Percent	Relative Compaction Req. %
24	9//11/07	Excavation #1	-2.5	Bulk 2	20.2	107.5	115.0	93.5	90
25	9//11/07	Excavation #1	-3.0	Bulk 2	14.6	109.3	115.0	95.1	90
26	9//11/07	Excavation #1	-3.0	Bulk 2	18.8	110.4	115.0	96.0	90
27	9//11/07	Excavation #1	-3.0	Bulk 2	17.1	112.3	115.0	97.7	90
28	9//11/07	Excavation #1	-3.0	Bulk 2	22.0	103.8	115.0	90.3	90
29	9//11/07	Excavation #1	-3.5	Bulk 2	19.8	104.8	115.0	91.1	90
30	9//11/07	Excavation #1	-3.0	Bulk 2	14.5	107.7	115.0	93.7	90
31	9//11/07	Excavation #1	-3.0	Bulk 2	21.1	105.0	115.0	91.3	90
32	9//11/07	Excavation #1	-3.5	Bulk 2	20.6	104.0	115.0	90.4	90
33	9//11/07	Parking Lot	-3.0	Bulk 3	25.2	98.4	108.0	91.1	90
34	9//11/07	Parking Lot	-3.0	Bulk 3	25.3	98.4	108.0	91.1	90
35	9//11/07	Parking Lot	-3.0	Bulk 3	20.0	99.2	108.0	91.8	90
36	09/12/07	S.E Corner of Site	-3.0	Bulk 2	18.7	109.5	115.0	95.2	90
37	09/12/07	Excavation #1	-3.0	Bulk 1	20.5	102.9	114.0	90.2	90
38	09/12/07	Excavation #2	-4.0	Bulk 2	17.2	111.3	115.0	96.8	90
39	09/12/07	Excavation #2	-4.0	Bulk 2	17.1	106.4	115.0	92.6	90
40	09/12/07	Excavation #2	-4.0	Bulk 2	17.0	107.1	115.0	93.2	90
41	09/12/07	Excavation #2	-3.0	Bulk 2	14.4	111.8	115.0	97.2	90
42	09/12/07	Excavation #2	-3.0	Bulk 1	17.4	102.6	114.0	90.0	90
43	09/12/07	Excavation #2	-3.0	Bulk 2	16.5	109.5	115.0	95.2	90
44	09/12/07	Excavation #2	-4.0	Bulk 2	16.2	108.6	115.0	94.5	90
45	09/12/07	Excavation #2	-3.0	Bulk 2	15.2	108.7	115.0	94.6	90
46	09/17/07	Excavation #1	-2.0	Bulk 2	19.8	104.3	115.0	90.7	90
47	09/17/07	Excavation #1	-1.0	Bulk 2	14.1	111.2	115.0	96.7	95
48	09/17/07	Excavation #1	-1.0	Bulk 2	14.5	109.1	115.0	95.0	95
49	09/17/07	Excavation #1	-1.0	Bulk 2	12.3	114.0	115.0	99.1	95
50	09/17/07	Excavation #1	-1.0	Bulk 2	14.6	109.2	115.0	95.0	95
51	09/17/07	Excavation #1	-1.0	Bulk 2	14.2	109.5	115.0	95.2	95
52	09/17/07	Excavation #1	-1.0	Bulk 1	14.6	107.7	114.0	95.0	95
53	09/17/07	Excavation #1	-1.0	Bulk 2	12.9	112.8	115.0	98.1	95

Test No.	Date	Test Location	Depth *in ft.* [1]	Soil Type [6]	Moisture Content (percent)	Dry Density (pfc)	Max. Dry Density (pcf)	Relative Compaction Percent	Relative Compaction Req. %
54	09/17/07	Excavation #1	-1.0	Bulk 1	15.7	107.9	114.0	95.0	95
55	09/17/07	Excavation #1	-1.0	Bulk 2	13.9	112.7	115.0	98.0	95
56	09/17/07	Parking Lot	-1.0	Bulk 1	15.0	108.0	114.0	95.0	95
57	09/17/07	Parking Lot	-1.0	Bulk 1	13.9	107.8	114.0	95.0	95
58	09/17/07	Parking Lot	-1.0	Bulk 2	13.1	112.7	115.0	98.0	95
59	10/11/07	Parking Garage	-4.0	Bulk 2	18.1	103.2	115.0	90.0	90
60	10/11/07	Parking Garage	-4.0	Bulk 3	24.0	98.0	108.0	90.7	90
61	10/11/07	Parking Garage	-4.0	Bulk 3	19.4	97.0	108.0	90.0	90
62	10/11/07	Parking Garage	-4.0	Bulk 3	19.8	97.6	108.0	90.4	90
63	10/11/07	Parking Garage	-4.0	Bulk 3	21.7	98.2	108.0	90.9	90
64	10/11/07	Building 3	-4.0	Bulk 3	21.4	97.4	108.0	90.2	90
65	10/11/07	Parking Lot	-4.0	Bulk 3	26.2	97.1	108.0	90.0	90
66	10/11/07	Elect. Trnsfrmr Encl.	-2.0	Bulk 2	20.7	103.2	115.0	90.0	90
67	10/11/07	Parking Lot	-1.0	Bulk 1	21.7	102.2	114.0	90.0	90
68	10/11/07	Elect. Trnsfrmr Encl.	-1.0	Bulk 1	21.9	103.7	114.0	91.0	90
69	10/11/07	Parking Garage	-4.0	Bulk 3	15.4	97.3	108.0	90.1	90
70	10/11/07	Building 3	-4.0	Bulk 3	17.9	98.0	108.0	90.7	90
71	10/11/07	Parking Garage	-4.0	Bulk 3	14.8	99.1	108.0	91.8	90
72	10/11/07	Parking Garage	-2.0	Bulk 3	20.9	97.3	108.0	90.7	90
73	10/11/07	Parking Garage	-2.0	Bulk 2	17.6	103.9	115.0	90.4	90
74	10/11/07	Parking Garage	-2.0	Bulk 1	19.2	103.2	114.0	90.5	90
75	10/11/07	Building 3	-2.0	Bulk 3	21.6	98.2	108.0	90.9	90
76	10/11/07	Parking Lot	-2.0	Bulk 3	20.3	99.3	108.0	91.9	90
77	10/11/07	Building 2	-4.0	Bulk 2	18.2	107.8	115.0	93.7	90
78	10/24/07	Parking Lot	-4.0	Bulk 2	18.2	104.3	115.0	90.7	90
79	10/24/07	Building 2	-3.5	Bulk 3	17.5	98.5	108.0	91.2	90
80	10/24/07	41st St. Residences	-3.5	Bulk 3	20.7	97.4	108.0	90.2	90
81	10/24/07	41st St. Residences	-3.5	Bulk 3	18.3	97.9	108.0	90.7	90
82	10/24/07	41st St. Residences	-4.0	Bulk 3	18.4	96.9	108.0	90.0	90
83	10/24/07	41st St. Residences	-3.5	Bulk 3	20.5	97.0	108.0	90.0	90

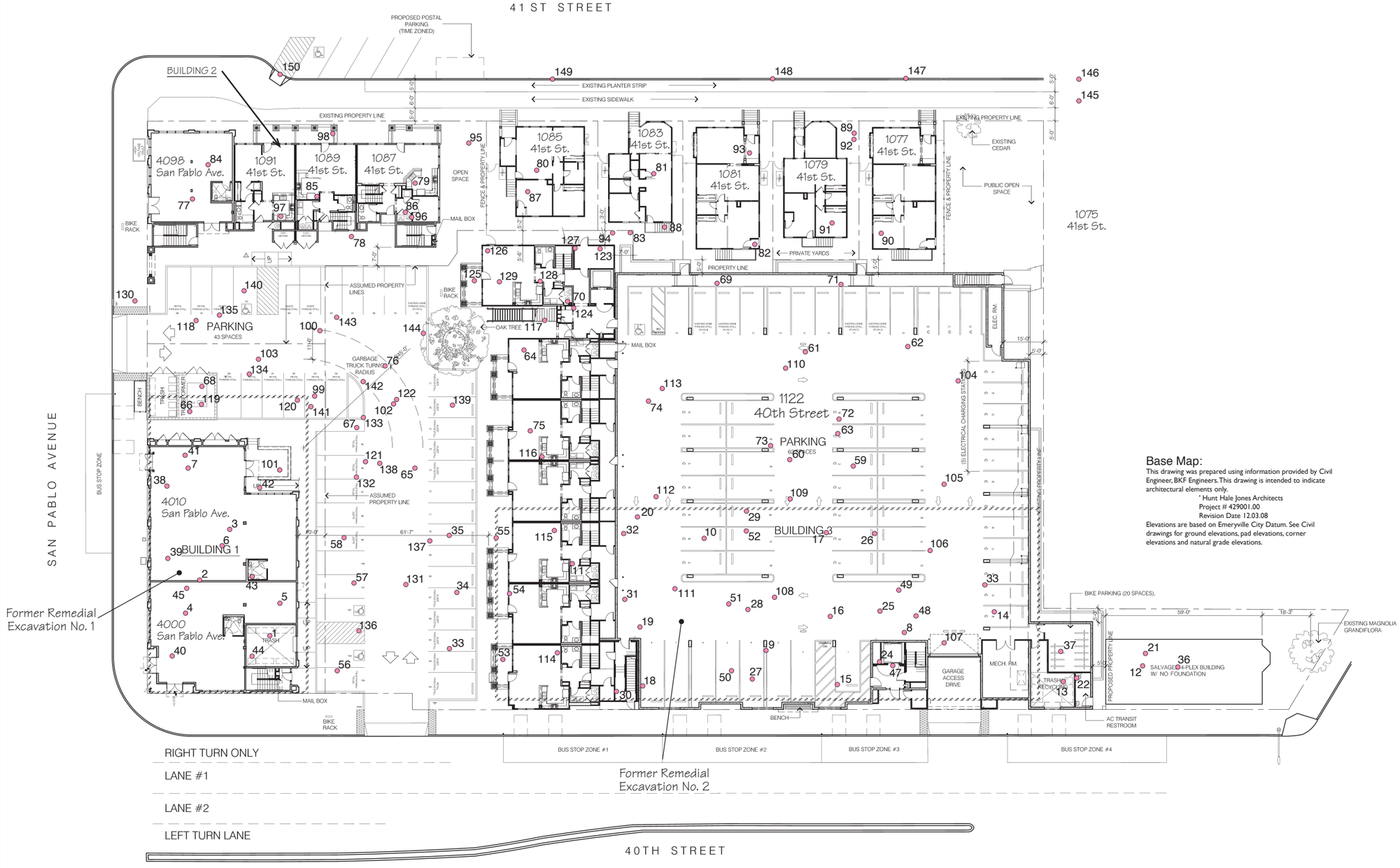
Test No.	Date	Test Location	Depth *in ft.* [1]	Soil Type [6]	Moisture Content (percent)	Dry Density (pfc)	Max. Dry Density (pcf)	Relative Compaction Percent	Relative Compaction Req. %
84	10/24/07	Building 2	-2.5	Bulk 3	20.5	100.0	108.0	92.9	90
85	10/24/07	Building 2	-2.5	Bulk 1	18.8	103.0	114.0	90.4	90
86	10/24/07	Building 2	-2.0	Bulk 3	19.5	97.2	108.0	90.0	90
87	10/24/07	41st St. Residences	-2.0	Bulk 3	19.3	99.0	108.0	91.6	90
88	10/24/07	41st St. Residences	-2.0	Bulk 1	18.5	102.7	114.0	90.1	90
89	10/24/07	41st St. Residences	2.5	Bulk 3	19.3	102.3	108.0	94.7	90
90	10/26/07	41st St. Residences	FSG	Bulk 3	19.9	97.8	108.0	90.6	90
91	10/26/07	41st St. Residences	FSG	Bulk 1	20.0	103.3	114.0	90.6	90
92	10/26/07	41st St. Residences	FSG	Bulk 3	17.6	100.2	108.0	92.8	90
93	10/26/07	41st St. Residences	FSG	Bulk 3	15.3	101.8	108.0	94.3	90
94	10/26/07	41st St. Residences	FSG	Bulk 3	19.0	100.6	108.0	93.2	90
95	10/26/07	Parking Lot	FSG	Bulk 3	15.9	101.3	108.0	93.8	90
96	10/26/07	Building 2	FSG	Bulk 3	20.5	98.6	108.0	91.3	90
97	10/26/07	Building 2	FSG	Bulk 1	18.7	103.0	114.0	90.4	90
98	10/26/07	Building 2	FSG	Bulk 3	15.8	100.4	108.0	93.0	90
99	10/30/07	Parking Lot	-4.0	Bulk 2	19.5	105.8	115.0	92.0	90
100	10/30/07	Parking Lot	-3.5	Bulk 2	18.0	107.4	115.0	93.4	90
101	10/30/07	Excavation #1	-3.5	Bulk 2	16.9	108.6	115.0	94.4	90
102	10/30/07	Parking Lot	-3.0	Bulk 1	16.7	104.3	114.0	91.5	90
103	10/30/07	Parking Lot	-2.5	Bulk 1	21.2	104.5	114.0	91.7	90
104	10/31/07	Parking Garage	FSG [4]	Bulk 3	19.7	102.7	108.0	95.1	90
105	10/31/07	Parking Garage	FSG	Bulk 2	16.0	108.9	115.0	95.0	95
106	10/31/07	Parking Garage	FSG	Bulk 2	17.3	114.3	115.0	99.4	95
107	10/31/07	Parking Garage	FSG	Bulk 2	15.7	111.8	115.0	97.2	95
108	10/31/07	Parking Garage	FSG	Bulk 3	20.3	102.7	108.0	95.1	95
109	10/31/07	Parking Garage	FSG	Bulk 1	18.2	107.3	114.0	95.0	95
110	10/31/07	Parking Garage	FSG	Bulk 3	20.6	102.4	108.0	95.0	95
111	10/31/07	Parking Garage	FSG	Bulk 1	17.8	107.8	114.0	95.0	95
112	10/31/07	Parking Garage	FSG	Bulk 1	21.2	107.7	114.0	95.0	95
113	10/31/07	Parking Garage	FSG	Bulk 3	20.7	103.0	108.0	95.5	95

Test No.	Date	Test Location	Depth *in ft.* [1]	Soil Type [6]	Moisture Content (percent)	Dry Density (pfc)	Max. Dry Density (pcf)	Relative Compaction Percent	Relative Compaction Req. %
114	11/01/07	Building 3	FSG	Bulk 2	18.0	105.3	115.0	91.6	90
115	11/01/07	Building 3	FSG	Bulk 2	17.6	104.8	115.0	91.1	90
116	11/01/07	Building 3	FSG	Bulk 2	18.3	105.0	115.0	91.3	90
117	11/01/07	Building 3	FSG	Bulk 2	17.6	104.9	115.0	91.2	90
118	11/02/07	Parking Lot	-2.0	Bulk 2	17.9	108.4	115.0	94.3	90
119	11/02/07	Building 3	-2.0	Bulk 2	15.6	107.3	115.0	93.3	90
120	11/02/07	Parking Lot	-2.0	Bulk 2	15.9	108.6	115.0	94.4	90
121	11/02/07	Parking Lot	-2.0	Bulk 1	16.8	104.9	114.0	92.1	90
122	11/02/07	Parking Lot	-2.0	Bulk 3	18.0	103.8	108.0	96.2	90
123	11/12/07	Building 3	-2.0	SG Subgrade Soil [8]	15.5	110.9	123.0	90.0	90
124	11/12/07	Building 3	-2.0	SG Subgrade Soil	14.3	111.1	123.0	90.1	90
125	11/12/07	Building 3	-2.0	SG Subgrade Soil	13.7	111.6	123.0	90.4	90
126	11/12/07	Building 3	-2.0	SG Subgrade Soil	13.9	110.7	123.0	90.0	90
127	11/13/07	Building 3	-0.5	SG Subgrade Soil	12.8	113.8	123.0	92.1	90
128	11/13/07	Building 3	-0.5	SG Subgrade Soil	13.5	112.4	123.0	91.0	90
129	11/13/07	Building 3	-0.5	SG Subgrade Soil	13.0	110.9	123.0	90.0	90
130	07/02/08	San Pablo Ave. Sidewalk	-0.7	B-1 Paving Base	12.8	118.6	126.0	94.1	90
131	09/29/08	Parking Lot	FSG	Bulk 1	14.1	110.0	114.0	95.7	95
132	09/29/08	Parking Lot	FSG	Bulk 1	15.4	109.2	114.0	95.8	95
133	09/29/08	Parking Lot	FSG	Bulk 3	17.1	104.8	108.0	95.1	95
134	09/29/08	Parking Lot	FSG	Bulk 2	18.3	108.9	115.0	95.1	95
135	09/29/08	Parking Lot	FSG	Bulk 2	15.2	109.7	115.0	95.4	95
136	10/13/08	Parking Lot	FG [5]	RB paving base	10.3	121.5	128.0	95.0	95
137	10/13/08	Parking Lot	FG	RB paving base	10.4	122.0	128.0	95.3	95
138	10/13/08	Parking Lot	FG	RB paving base	11.4	121.6	128.0	95.0	95
139	10/13/08	Parking Lot	FG	RB paving base	11.0	122.2	128.0	95.5	95
140	10/13/08	Parking Lot	FG	RB paving base	11.5	121.7	128.0	95.1	95
141	10/13/08	Parking Lot	FG	RB paving base	12.0	121.8	128.0	95.2	95
142	10/13/08	Parking Lot	FG	RB paving base	11.4	124.1	128.0	97.0	95
143	10/13/08	Parking Lot	FG	RB paving base	10.7	122.6	128.0	95.8	95

Test No.	Date	Test Location	Depth *in ft.* [1]	Soil Type [6]	Moisture Content (percent)	Dry Density (pfc)	Max. Dry Density (pcf)	Relative Compaction Percent	Relative Compaction Req. %
144	10/13/08	Parking Lot	FG	RB paving base	10.3	120.9	128.0	95.0	95
145	10/22/08	41st St. Sidewalk	FG	RB paving base	16.4	121.3	128.0	95.0	90
146	10/22/08	41st St. Curb	FG	RB paving base	16.7	121.0	128.0	95.0	95
147	10/22/08	41st St. Curb	FG	RB paving base	17.1	122.1	128.0	95.0	95
148	10/22/08	41st St. Curb	FG	RB paving base	15.4	122.5	128.0	96.0	95
149	10/22/08	41st St. Curb	FG	RB paving base	14.9	122.3	128.0	96.0	95
150	10/22/08	41st St. Curb	FG	RB paving base	17.4	121.4	128.0	95.0	95

Notes:

1. Exc. #2 = Remedial Excavation #2
2. Exc. #1 = Remedial Excavation #1
3. FSG = Final Subgrade elevation
4. FG = Final Grade elevation
5. Each Soil Type correlates with its source location, the compaction test results for which are in Appendix A
6. Bulks 1, 2 and 3 refer to on-site stockpiles, the compaction test results of which are in Appendix A
7. SG Subgade Soil was imported.



0 20 40

SCALE IN FEET

EXPLANATION

75 Field Density Test Location

Former Remedial Excavation

Base Map:

This drawing was prepared using information provided by Civil Engineer, BKF Engineers. This drawing is intended to indicate architectural elements only.

' Hunt Hale Jones Architects
Project # 429001.00
Revision Date 12.03.08

Elevations are based on Emeryville City Datum. See Civil drawings for ground elevations, pad elevations, corner elevations and natural grade elevations.

SOIL COMPACTION TEST LOCATIONS
Oak Walk Redevelopment Project
Emeryville, California

FIG 1	**The San Joaquin Company Inc.**	Project Number: 0004.084
		Drawn by: GNM | Date: 02/26/09

Appendix A

Reactivity, Corrosivity and Ignitability Test Results

ANALYTICAL REPORT

Job Number: 720-5317-1

Job Description: Bay Rock Oak Walk Emeryville

For:
San Joaquin Company Inc
1120 Hollywood Ave Suite 3
Oakland, CA 94602-1459

Attention: Mr. Dai Watkins

Surinder Sidhu
Project Manager I
ssidhu@stl-inc.com
09/06/2006

Project Manager: Surinder Sidhu

EXECUTIVE SUMMARY - Detections

Client: San Joaquin Company Inc Job Number: 720-5317-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-5317-1	**RCI-1.5**				
pH		6.35	0.200	SU	9045C
Flashpoint		>200	40	Fahrenheit	D92

METHOD SUMMARY

Client: San Joaquin Company Inc Job Number: 720-5317-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Reactive Cyanide Analysis using method 9014	STL CHI	SW846 9014	
Cyanide Distillation	STL CHI		SW846 9010B
Titrimetric Procedure for Acid-Soluble and Acid-Insoluble Sulfides	STL CHI	SW846 9034	
Sulfide, Reactive (SW7.3.4)	STL CHI		SW846 7.3.4
Soil and Waste pH	STL CHI	SW846 9045C	
ASTM/D92 Cleveland Open Cup Flashpoint	STL CHI	ASTM D92	

LAB REFERENCES:

STL CHI = STL Chicago

METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: San Joaquin Company Inc

Job Number: 720-5317-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-5317-1	RCI-1.5	Solid	08/31/2006 1200	08/31/2006 1303

General Chemistry

Client Sample ID: RCI-1.5

Lab Sample ID: 720-5317-1 Date Sampled: 08/31/2006 1200
Client Matrix: Solid Date Received: 08/31/2006 1303

Analyte	Result	Qual	Units	RL	Dil	Method
Cyanide, Reactive	ND		mg/Kg	0.47	1.0	9014
	Anly Batch: 500-4977	Date Analyzed	09/05/2006 1225			DryWt Corrected: N
	Prep Batch: 500-4974	Date Prepared:	09/05/2006 0815			
Sulfide, Reactive	ND		mg/Kg	50	1.0	9034
	Anly Batch: 500-5020	Date Analyzed	09/06/2006 1130			DryWt Corrected: N
	Prep Batch: 500-5018	Date Prepared:	09/06/2006 1040			
pH	6.35		SU	0.200	1.0	9045C
	Anly Batch: 500-5023	Date Analyzed	09/06/2006 1230			DryWt Corrected: N
Flashpoint	>200		Fahrenheit	40	1.0	D92
	Anly Batch: 500-5025	Date Analyzed (Start)	09/06/2006 1515	(End) 09/06/2006 1535		DryWt Corrected: N

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: San Joaquin Company Inc Job Number: 720-5317-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 500-4974					
HLCS 500-4974/4-A	High Level Control Sample	T	Solid	9010B	
LCS 500-4974/2-A	Lab Control Spike	T	Solid	9010B	
LLCS 500-4974/3-A	Low Level Control Sample	T	Solid	9010B	
MB 500-4974/1-A	Method Blank	T	Solid	9010B	
720-5317-1	RCI-1.5	T	Solid	9010B	
Analysis Batch:500-4977					
HLCS 500-4974/4-A	High Level Control Sample	T	Solid	9014	500-4974
LCS 500-4974/2-A	Lab Control Spike	T	Solid	9014	500-4974
LLCS 500-4974/3-A	Low Level Control Sample	T	Solid	9014	500-4974
MB 500-4974/1-A	Method Blank	T	Solid	9014	500-4974
720-5317-1	RCI-1.5	T	Solid	9014	500-4974
Prep Batch: 500-5018					
LCS 500-5018/2-A	Lab Control Spike	T	Solid	7.3.4	
MB 500-5018/1-A	Method Blank	T	Solid	7.3.4	
720-5317-1	RCI-1.5	T	Solid	7.3.4	
Analysis Batch:500-5020					
LCS 500-5018/2-A	Lab Control Spike	T	Solid	9034	500-5018
MB 500-5018/1-A	Method Blank	T	Solid	9034	500-5018
720-5317-1	RCI-1.5	T	Solid	9034	500-5018
Analysis Batch:500-5023					
720-5317-1	RCI-1.5	T	Solid	9045C	
Analysis Batch:500-5025					
720-5317-1	RCI-1.5	T	Solid	D92	

Report Basis
T = Total

Client: San Joaquin Company Inc

Job Number: 720-5317-1

Method Blank - Batch: 500-4974

Method: 9014
Preparation: 9010B

Lab Sample ID: MB 500-4974/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 09/05/2006 1225
Date Prepared: 09/05/2006 0815

Analysis Batch: 500-4977
Prep Batch: 500-4974
Units: mg/Kg

Instrument ID: Shimadzu UV mini 1240V
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Cyanide, Reactive	ND		0.010

Lab Control Spike - Batch: 500-4974

Method: 9014
Preparation: 9010B

Lab Sample ID: LCS 500-4974/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 09/05/2006 1225
Date Prepared: 09/05/2006 0815

Analysis Batch: 500-4977
Prep Batch: 500-4974
Units: mg/Kg

Instrument ID: Shimadzu UV mini 1240V
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Reactive	0.100	0.0996	100	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: San Joaquin Company Inc

Job Number: 720-5317-1

Method Blank - Batch: 500-5018

Method: 9034
Preparation: 7.3.4

Lab Sample ID: MB 500-5018/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 09/06/2006 1130
Date Prepared: 09/06/2006 1040

Analysis Batch: 500-5020
Prep Batch: 500-5018
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 g
Final Weight/Volume:

Analyte	Result	Qual	RL
Sulfide, Reactive	ND		50

Lab Control Spike - Batch: 500-5018

Method: 9034
Preparation: 7.3.4

Lab Sample ID: LCS 500-5018/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 09/06/2006 1130
Date Prepared: 09/06/2006 1040

Analysis Batch: 500-5020
Prep Batch: 500-5018
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 g
Final Weight/Volume:

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfide, Reactive	193	190	98	25 - 116	

Calculations are performed before rounding to avoid round-off errors in calculated results.

THE SAN JOAQUIN COMPANY INC.

RC1613

Transmit results to office checked below:

☐ 33233 South Koster Road, Tracy, CA 95304
Voice: (209) 832-2910 Fax: (209) 833-1288

☑ 1120 Hollywood Ave. No. 3, Oakland, CA 94602
Voice (510) 336-9118 Fax: (510) 336-9119

CHAIN OF CUSTODY / REQUEST FOR ANALYSIS RECORD

Project: **Bay Rock - Oak Walk Emeryville**
Project No.: **0004.082** Project Mgr.: **DJW**
Sampling Team: **DJW/AP**
Site Global I.D. No.: n/a

Laboratory: **STL San Francisco**
Carrier: The San Joaquin Company Inc.

Waybill No.: n/a

Sample Number	Type	Field Point	Depth to GW in ft.	Casing Elev. in ft.	Date Sampled	Time Sampled	Analyses Requested	Lab. No.
RCI-1.5	Soil	RCI	NA	NA	08/31/06	1200		

RCI
24 Hr. TAT

RUSH

Sample Hazards: Low to high concentrations of fuel hydrocarbons and solvents

Notes: 24 Hr. TAT.

Priority: Routine Expedited ✠ Special

CUSTODY RECORD

	Print Name	Company	Date Received	Time Received	Date Relinquished	Time Relinquished	Signature
Originator:	Ashley Paterson	San Joaquin Co	—	—			
Received/Relinquished by:	[illegible]	STL SF	8-31-06	1303	8-31-06	1303	[signature]
Received/ Relinquished by:							
Received/ Relinquished by:							
Received at Laboratory by:					—	—	

Rev. 11/03

LOGIN SAMPLE RECEIPT CHECK LIST

Client: San Joaquin Company Inc

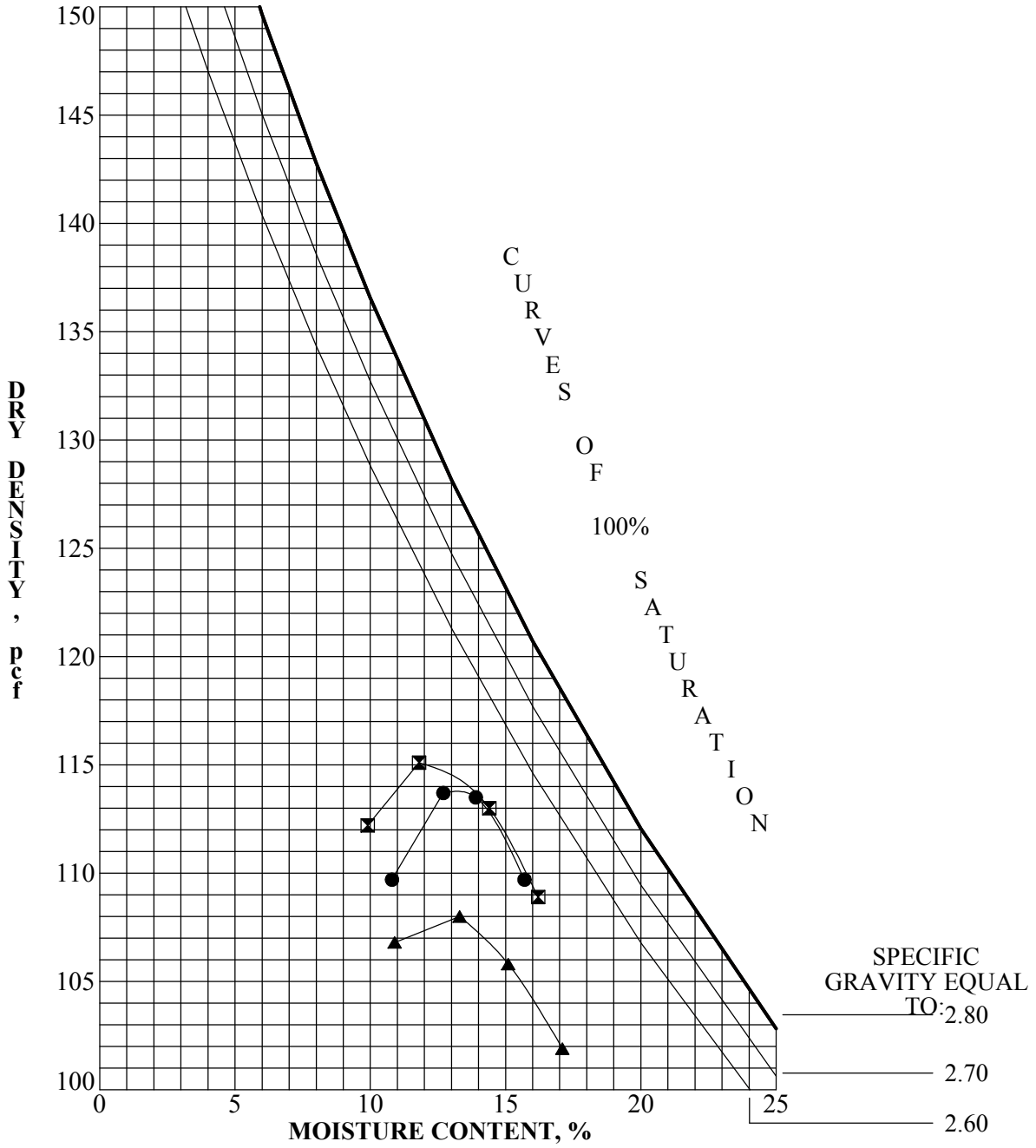
Job Number: 720-5317-1

Login Number: 5317

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Appendix B

Compaction Curves and R-Values



Key Symbol	Location	Depth (Feet)	Sample Description (USCS)	Maximum Dry Density (pcf)	Optimum Water Content (%)	Test Designation
●	Bulk 1	0.5	Dark gray sandy CLAY (CL-CH)	114	13	1557B
⊠	Bulk 2	0.5	Dark gray sandy CLAY (CL-CH)	115	13	1557B
▲	Bulk 3	0.5	Black fat CLAY (CH)	108	14	1557B

FUGRO

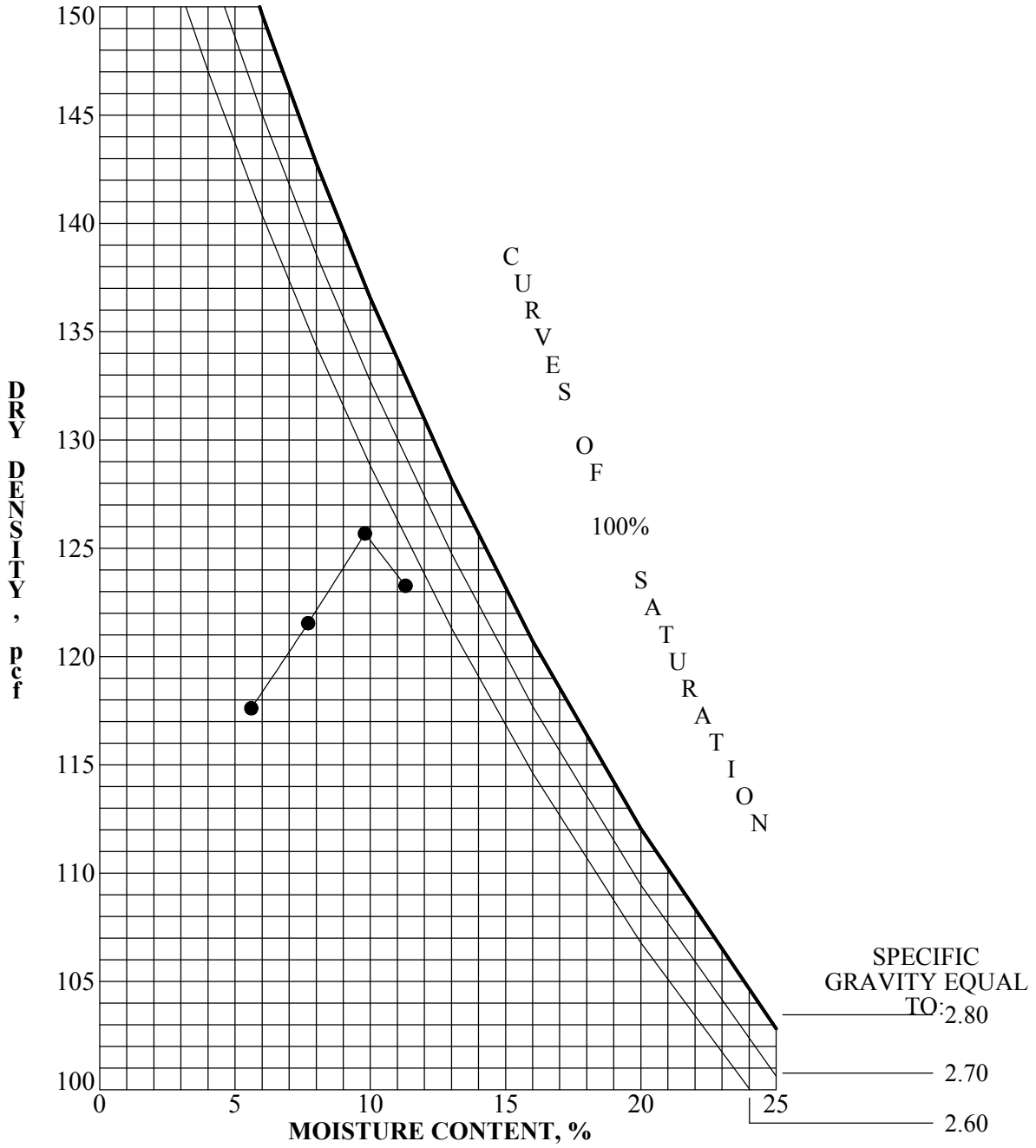
PREP'D BY:
APP'D BY:
DATE: 9/5/07
DWG FILE:

COMPACTION TEST RESULTS

OAK WALK
Emeryville, California

FIGURE
B-1
PROJECT No.
04.085

COMPACTION (100 - 150 PCF) 04-085_V012505.GPJ STD.GDT 9/5/07



Key Symbol	Location	Depth (Feet)	Sample Description (USCS)	Maximum Dry Density (pcf)	Optimum Water Content (%)	Test Designation
●	B-1	0.0	Gray poorly-graded SAND with gravel (SP)	126	10	1557C

FUGRO

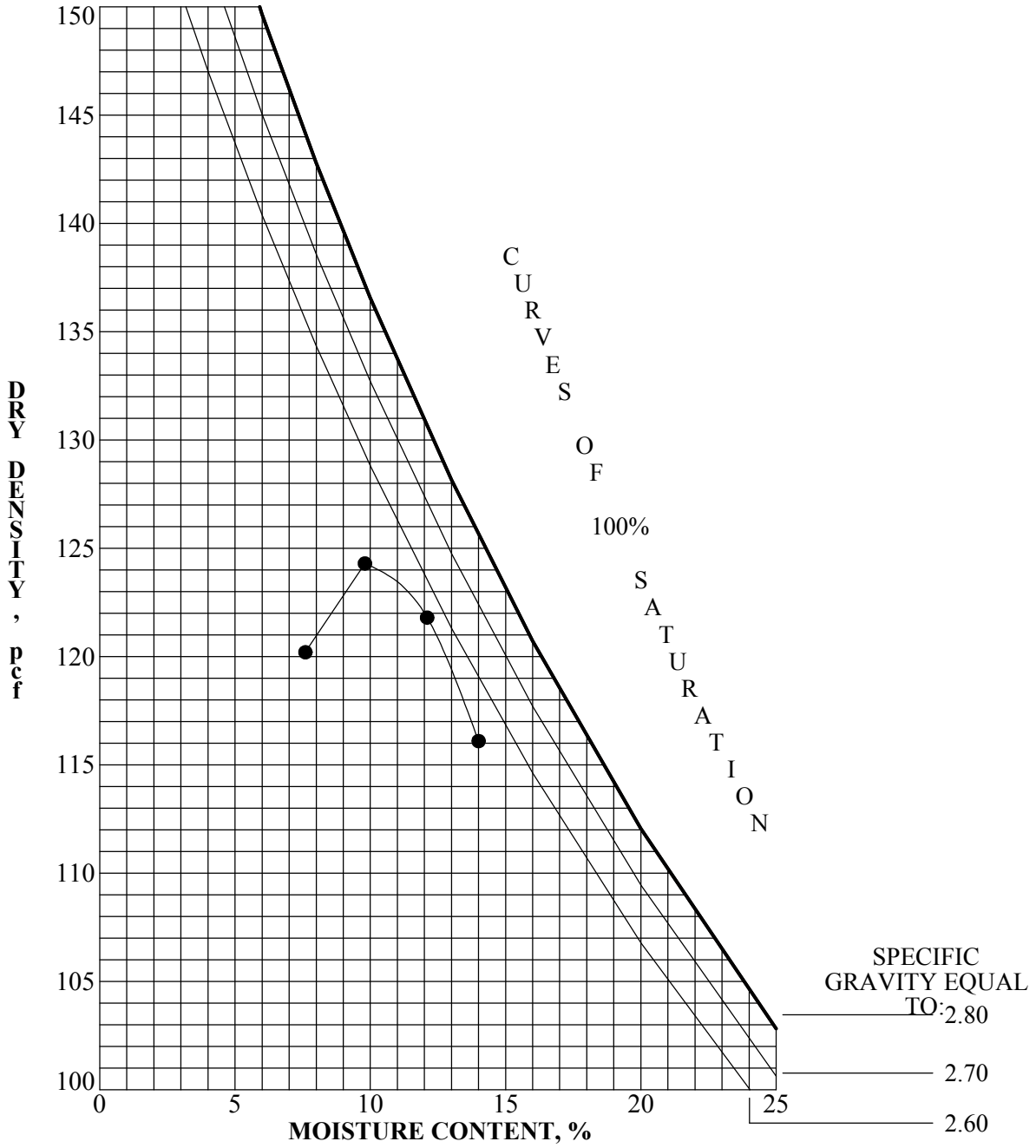
PREP'D BY:	
APP'D BY:	
DATE:	7/1/08
DWG FILE:	

COMPACTION TEST RESULTS

BAY ROCK- OAKWALK
Emeryville, CA

FIGURE
B-1
PROJECT No.
0004.04

COMPACTION (100 - 150 PCF) 0004.04_V012505.GPJ STD.GDT 7/1/08



Key Symbol	Location	Depth (Feet)	Sample Description (USCS)	Maximum Dry Density (pcf)	Optimum Water Content (%)	Test Designation
●	Depot	0.0	Dark brown sandy CLAY w/ gravel (CL)	124	10	1557B

FUGRO

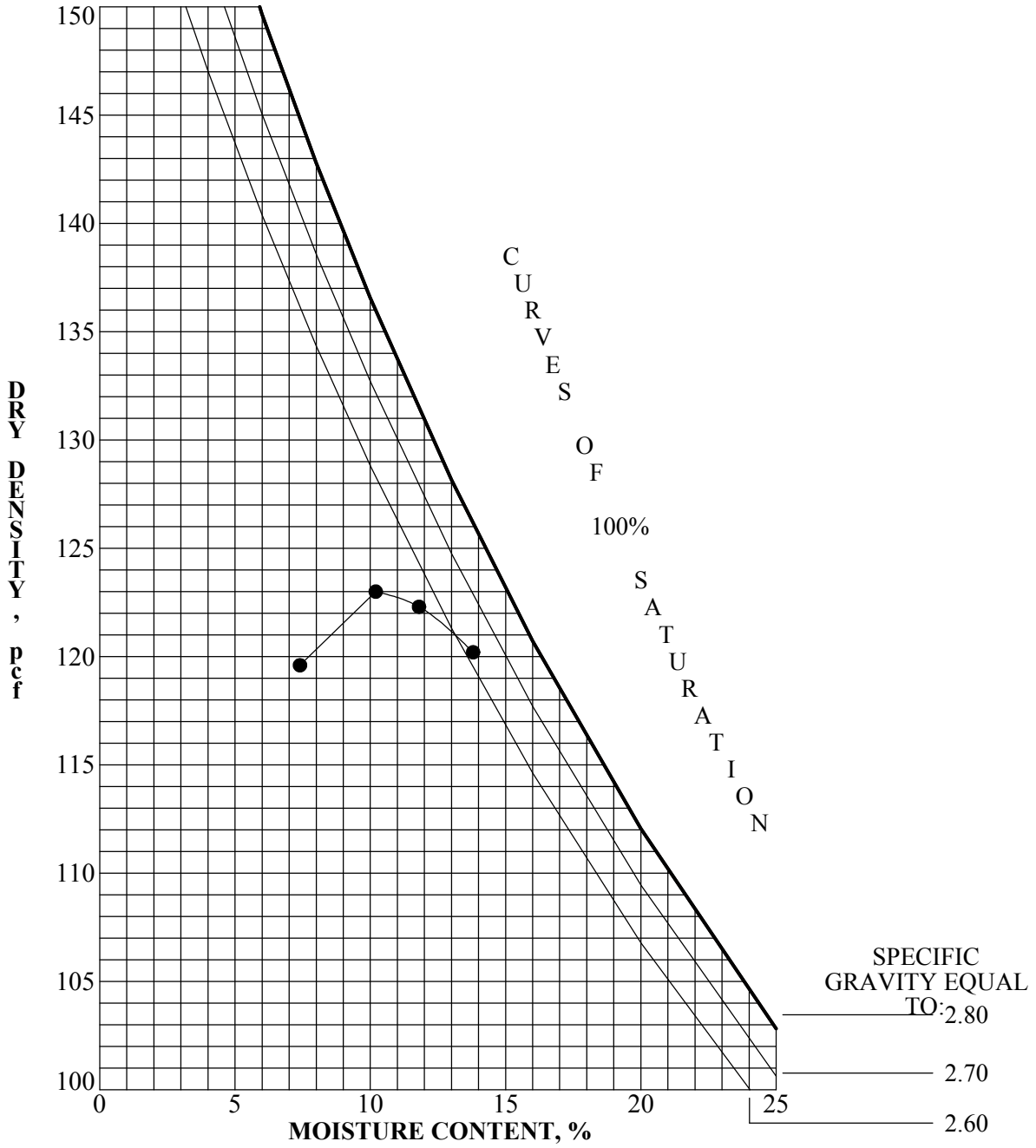
PREP'D BY:	
APP'D BY:	
DATE:	9/13/07
DWG FILE:	

COMPACTION TEST RESULTS

OAK WALK
Emeryville, California

FIGURE
B-1
PROJECT No.
04.085

COMPACTION (100 - 150 PCF) 04-085_V012505.GPJ STD.GDT 9/13/07



Key Symbol	Location	Depth (Feet)	Sample Description (USCS)	Maximum Dry Density (pcf)	Optimum Water Content (%)	Test Designation
●	Mowry	0.0	Brown sandy CLAY (CL)	123	11	1557B

FUGRO

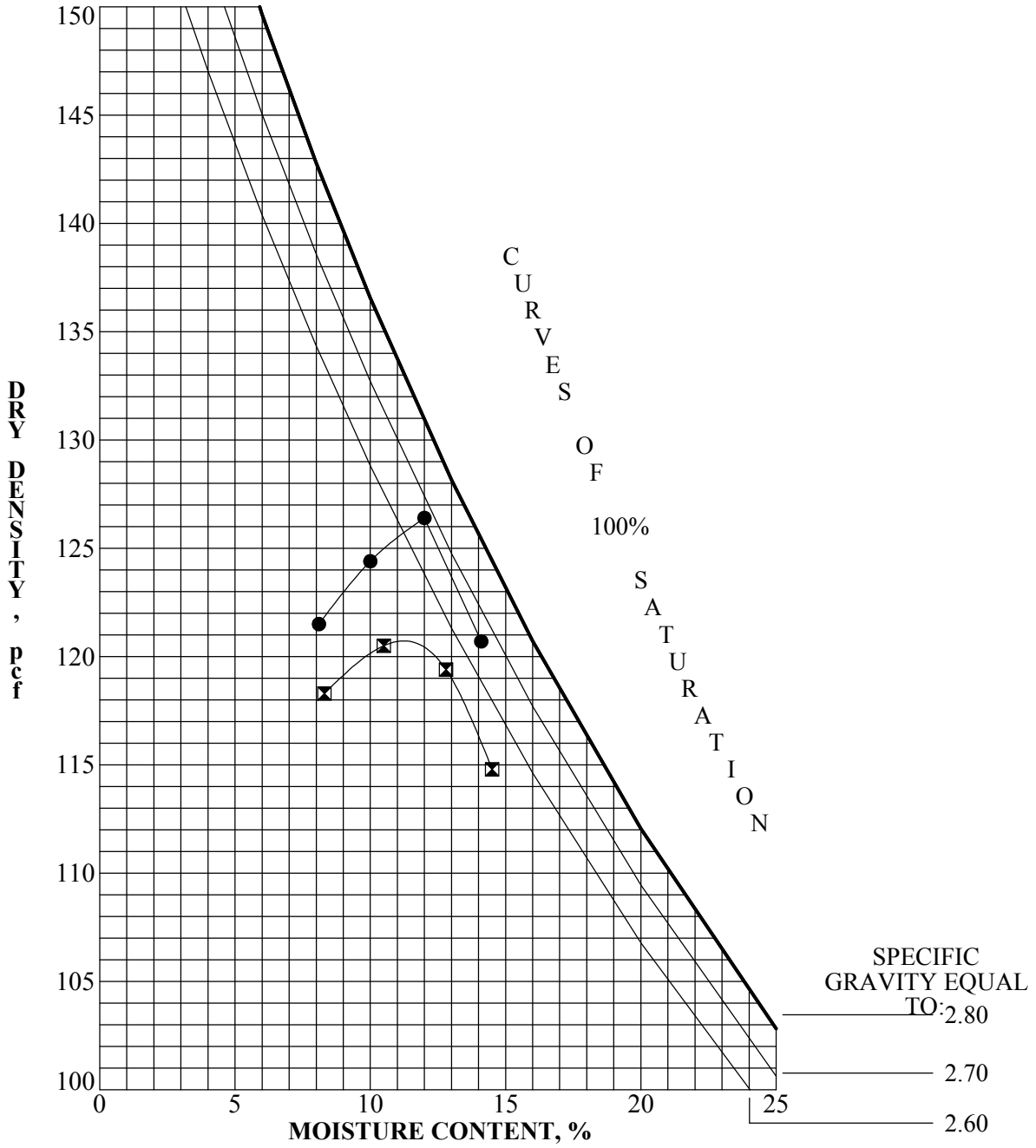
PREP'D BY:	
APP'D BY:	
DATE:	9/11/07
DWG FILE:	

COMPACTION TEST RESULTS

OAK WALK
Emeryville, California

FIGURE
B-1
PROJECT No.
04.085

COMPACTION (100 - 150 PCF) 04-085_V012505.GPJ STD.GDT 9/11/07



Key Symbol	Location	Depth (Feet)	Sample Description (USCS)	Maximum Dry Density (pcf)	Optimum Water Content (%)	Test Designation
●	Los Altos	0.0	Brown lean CLAY with sand and gravel (CL)	127	12	1557B
⧓	Milpitas	0.0	Brown lean CLAY with sand and gravel (CL)	121	12	1557B

FUGRO

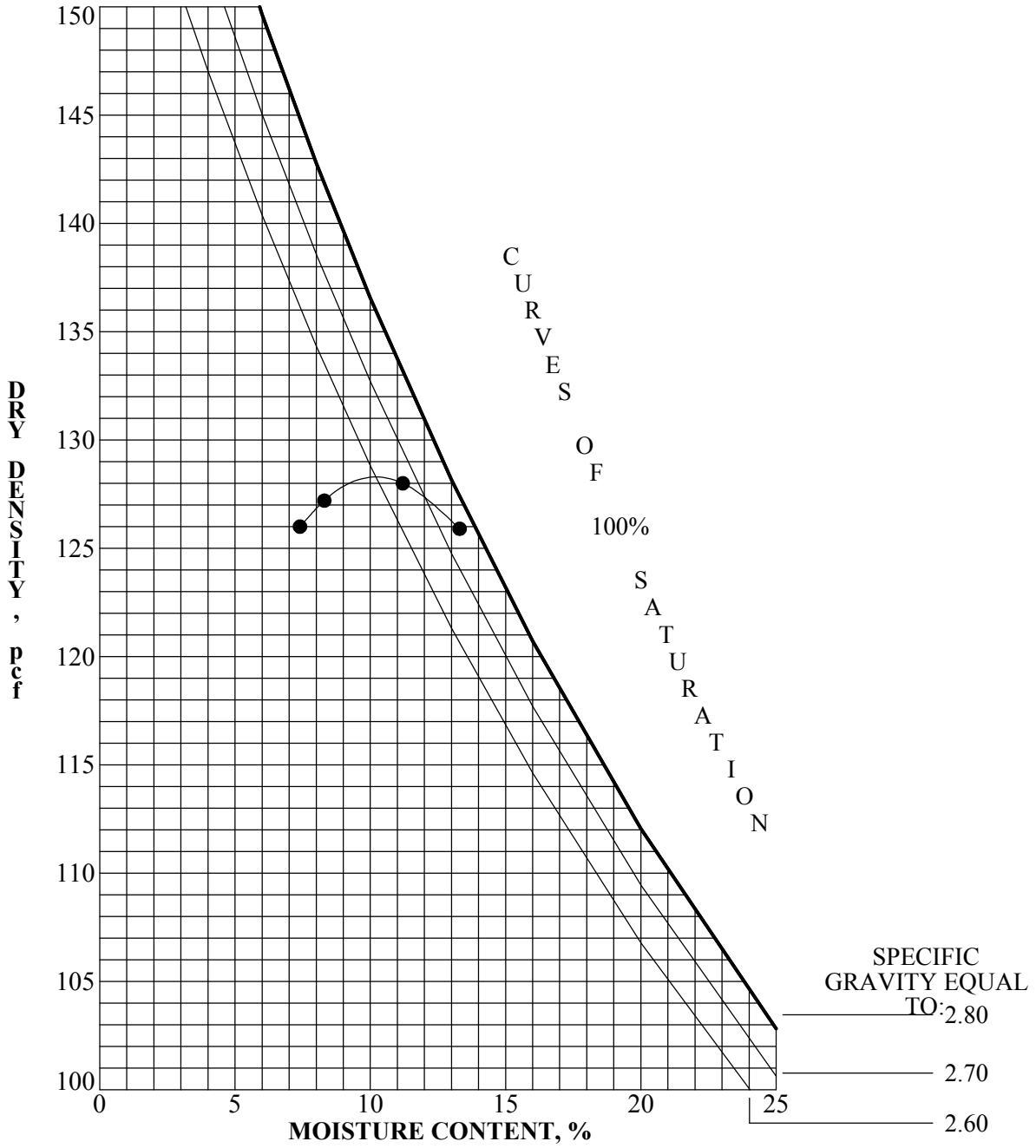
PREP'D BY:
APP'D BY:
DATE: 9/4/07
DWG FILE:

COMPACTION TEST RESULTS

OAK WALK
Emeryville, California

FIGURE
B-1
PROJECT No.
04.085

COMPACTION (100 - 150 PCF) 04-085_V012505.GPJ STD.GDT 9/4/07



Key Symbol	Location	Depth (Feet)	Sample Description (USCS)	Maximum Dry Density (pcf)	Optimum Water Content (%)	Test Designation
●	Los Altos #2	0.0	Brown sandy CLAY w/ gravel (CL)	128	11	1557B

FUGRO

PREP'D BY:
APP'D BY:
DATE: 9/18/07
DWG FILE:

COMPACTION TEST RESULTS

OAK WALK
Emeryville, California

FIGURE
B-1
PROJECT No.
04.085

COMPACTION (100 - 150 PCF) 04-085_V012505.GPJ STD.GDT 9/18/07

-R- VALUE TEST RESULT

PROJECT NO: 1655.001

PROJECT NAME: Oak Walk - Emeryville

SAMPLE NO. 2 SOURCE: Import - Los Altos II

DESCRIPTION: Brown sandy CLAY (CL)

TESTED BY: K & J DATE: 10-9-07

ATTENTION: Mr. Dai Watkins

COPY TO: NA

* * * * * * RESISTANCE VALUE DATA SUMMARY * * * * * *

INITIAL MOISTURE CONTENT: 12 %

DRY DENSITY (pcf)	WATER CONTENT (%)	EXUDATION PRESSURE (psi)	EXPANSION PRESSURE (psf)	* R * VALUE
116.2	16.3	215	0	11
119.5	15.3	302	0	16
120.7	14.3	414	52	34
AT EXUDATION PRESSURE OF 300 PSI:				
118.6	15.4	300	0	16

Appendix C

Foundation Excavation and Building Pad Certifications

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

November 02, 2007

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection - Residential Structure at 4001 Adeline Street - City of Emeryville Building Department Permit No. 0709-397 B

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath the residential structure at 4001 Adeline Street, Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's, *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

On November 02, 2007, I inspected the excavations that have been opened for pouring the concrete hold-down elements of the aseismic shoring system designed for the subject structure. The excavations were in good condition and ready for concrete to be poured.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

November 16, 2007

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection – Building 3
City of Emeryville Building Department Permit No. 0701-044 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath Building 3 at the Oak Walk Redevelopment Project site in Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

On November 16, 2007, I inspected all of the excavations for construction of the exterior walls of Building 3 that are located to the east of Line 6 on the south side of that building and to east of Line 5 on the north side of that building. The Line numbers are as defined on Hunt Hale Jones Drawing No. A 3.1.1.1 that has been approved by the City of Emeryville. The excavations were in good condition and ready for concrete to be poured.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

REGISTERED PROFESSIONAL ENGINEER
D. J. WATKINS
No. 882
Exp. 3/31/08
GEOTECHNICAL
STATE OF CALIFORNIA

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1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

November 29, 2007

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection - Residential Structure at 1081 41st Street - City of Emeryville Building Department Permit No. 0701-027 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath the residential structure at 1081 41st Street, Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's, *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

On November 28, 2007, I inspected the excavations that have been opened for the foundations of the subject structure. The excavations were in good condition and ready for concrete to be poured.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

REGISTERED PROFESSIONAL ENGINEER
D. J. WATKINS
No. 882
Exp. 3/31/10
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1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

November 29, 2007

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection – Building 3
City of Emeryville Building Department Permit No. 0701-044 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath Building 3 at the Oak Walk Redevelopment Project site in Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

On November 28, 2007, I inspected the excavations for the bases of the columns located at C3 through C6, at F3, at H3 and H4, and at J3 through J5. I also inspected the perimeter footing excavations on Line K from 2.2 through 7.2 and on Line B through Line J between 2 and 2.2. Those locations are shown on Hunt Hale Jones Drawing No. A 3.1.1.1 that has been approved by the City of Emeryville. The excavations were in good condition and ready for concrete to be poured.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

December 26, 2007

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection - Residential Structure at 1079 41st Street - City of Emeryville Building Department Permit No. 0701-028 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath the residential structure at 1079 41st Street, Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's, *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

On December 26, 2007, I inspected the excavations that have been opened for the foundations of the subject structure. The excavations were in good condition and ready for concrete to be poured.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

REGISTERED PROFESSIONAL ENGINEER
D. J. WATKINS
No. 882
Exp. 3/31/10
GEOTECHNICAL
STATE OF CALIFORNIA

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

December 26, 2007

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection - Residential Structure at 1077 41st Street - City of Emeryville Building Department Permit No. 0701-029 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath the residential structure at 1077 41st Street, Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's, *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

On December 26, 2007, I inspected the excavations that have been opened for the foundations of the subject structure. The excavations were in good condition and ready for concrete to be poured.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

REGISTERED PROFESSIONAL ENGINEER
D. J. WATKINS
No. 882
Exp. 3/31/10
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STATE OF CALIFORNIA

TELEPHONE: OAKLAND, CALIFORNIA (510) 336-9118 TRACY, CALIFORNIA (209) 832-2910

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

December 27, 2007

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection – Building 1 at 4000, 4002, 4008 and 4010 San Pablo Avenue Emeryville, California.
City of Emeryville Building Department Permit No. 0701-042 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath Building 1 at the Oak Walk Redevelopment Project site in Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

On December 27, 2007, I inspected the excavations for the perimeter footings, the column bases and elevator pit of Building 1 at the subject site. Those structural features are shown on Hunt Hale Jones Drawing No. 1S 2.01 that has been approved by the City of Emeryville.

As I had previously directed in anticipation of wet weather, to ensure good foundation bearing conditions a 2 in. thickness of concrete was placed on the bottom of the perimeter foundation, column base and elevator pit excavations. The top of the concrete was at the elevation of the bottom of those structural elements. That concrete has been successfull in maintaining the excavation bottoms in good condition during the rain storms that have occurred since the excavations were opened. However the rain has caused mud to adhere to some of the reinforcing bars that has been placed in the excavations and at some

locations muddy soil has accumulated on the concrete that was placed in the floors of the excavations. If that material were to be cleared from the reinforcing bars and the trench floors prior to any additional rain failing on the site, I expect that muddy soil might again adhere to the reinforcing bars and accumulate on the trench bottoms. However, any such material can be managed by power washing the affected reinforcing bars or areas of the trench floor, or removed by any other suitable method of cleaning of the contactor's choosing, just prior pouring the foundation concrete.

I can be available with a minimum four hours notice to re-inspect the condition of the foundation excavations immediately prior to the concrete being poured and, if the foundation excavations are adequately cleaned and in an acceptable condition, I can provide a final certification to that effect at that time.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

January 02, 2008

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection – Building 1 at 4000, 4002, 4008 and 4010 San Pablo Avenue Emeryville, California.
City of Emeryville Building Department Permit No. 0701-042 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project, on December 27, 2007, I inspected the foundation excavations and the foundation reinforcing steel for Building 1 at the Oak Walk Redevelopment Project site in Emeryville, California and certified that the soil beneath that building had been properly compacted in compliance with the requirements of The San Joaquin Company's *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.

On December 27, 2007 I also preliminarily approved the foundation excavation for pouring of concrete subject to clearing of fallen soil and cleaning of reinforcing bars immediately prior to concrete placement. A final inspection immediately prior to concrete placement was necessary because repeated heavy rainfall had caused some soil to accumulate on the 2 in. thick concrete that had been placed in the floor of the excavations to prevent water damage to the soil beneath the foundations while the excavations remained open for construction. Clearing fallen soil from the floor of the foundations and cleaning the reinforcing bars on December 27 would have been futile because the same conditions would be generated by storms passing through the area before the concrete could be placed. The final inspection was also intended to ensure that the reinforcing bars were free of dirt and mud at the time the concrete was placed.

On January 02, 2008, I observed the placement of concrete in all of the column base excavations and perimeter foundation excavations, except for the perimeter foundation along Grid Line 1 on the west side of the building. The latter footing will be poured at a later date. The foundation structures described are shown on Hunt Hale Jones Drawing No. 1S 2.01 that has been approved by the City of Emeryville.

Prior to concrete being placed in the foundation excavations I noted that the reinforcing

bars were clean and that some minor accumulations of fallen earth had been cleared from the floors of the excavations. Accordingly I gave my final approval of the condition of the foundation excavations immediately prior to concrete being placed into them.

Sincerely,

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

January 10, 2008

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Grading and Soil Compaction - Residential Structure at 4001 Adeline Street - City of Emeryville Building Department Permit No. 0709-397 B

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath the residential structure at 4001 Adeline Street, Emeryville, California has been graded and compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's, *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

To comply with the permit requirements of the City of Emeryville's Building Division it will be necessary for the Geotechnical Engineer of Record to inspect and certify that when the excavations for the foundations of the structure have been opened that they are in a condition that will permit concrete to be placed into them.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company Inc.

REGISTERED PROFESSIONAL ENGINEER
D. J. WATKINS
No. 882
Exp. 3/31/10
GEOTECHNICAL
STATE OF CALIFORNIA

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1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

January 14, 2008

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection - Residential Structure at 1085 41st Street - City of Emeryville Building Department Permit No. 0701-026 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath the residential structure at 1085 41st Street, Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's, *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

On January 14, 2008, I inspected the excavations that have been opened for the foundations of the subject structure. The excavations were in good condition and ready for concrete to be poured.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

REGISTERED PROFESSIONAL ENGINEER
D. J. WATKINS
No. 882
Exp. 3/31/10
GEOTECHNICAL
STATE OF CALIFORNIA

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

January 18, 2008

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Parking Garage Floor Base – Building 3
City of Emeryville Building Department Permit No. 0701-044 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath Building 3 at the Oak Walk Redevelopment Project site in Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* (Geotechnical Engineering Report) that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

Over the period January 14 through January 18, 2008, I observed the preparation of the soil beneath the floor of the ground-floor parking garage of the subject building prior to placement of the reinforced concrete floor. All soft and loose soil that had been generated by the rain that had fallen since the building pad was originally graded and that had accumulated following excavation of trenches for plumbing and electrical lines was scraped away and transported off site. In addition any remaining local areas of soft soil were, at my direction, excavated by hand and backfilled with compacted 3/4 in. sieve-size crushed rock with no fines.

After the repairs described above were complete, the area was restored to grade by placement and compaction of plus or minus 2 in., of CalTrans Class II Aggregate Base. Following that work, a 4 in. thickness of 3/4 in. sieve-size crushed rock with no fines was

placed over the area of the floor and compacted by a vibratory roller. A 10-mil plastic vapor barrier was laid over the crushed rock and that material was overlain by 2 in. of clean sand before the floor slab reinforcement was installed. All of that work was performed in compliance with the specifications called for in the Geotechnical Engineering Report.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

February 14, 2008

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection – Building 1 at 4000, 4002, 4008 and 4010 San Pablo Avenue Emeryville, California.
City of Emeryville Building Department Permit No. 0701-042 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project, on December 27, 2007, I inspected the foundation excavations and the foundation reinforcing steel for Building 1 at the Oak Walk Redevelopment Project site in Emeryville, California and certified that the soil beneath that building had been properly compacted in compliance with the requirements of The San Joaquin Company's *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.

On December 27, 2007 I also preliminarily approved the foundation excavation for pouring of concrete subject to clearing of any fallen soil that might be present and any necessary cleaning of reinforcing bars immediately prior to concrete placement. A final inspection immediately prior to concrete placement was necessary because repeated heavy rainfall had caused some soil to accumulate on the 2 in. thick concrete that had been placed in the floor of the excavations to prevent water damage to the soil beneath the foundations while the excavations remained open for construction. Clearing fallen soil from the floor of the foundations and cleaning the reinforcing bars on December 27 would have been futile because the same conditions would be generated by storms passing through the area before the concrete could be placed. The final inspection was also intended to ensure that the reinforcing bars were free of dirt and mud at the time the concrete was placed.

On February 14, 2008, I observed the placement of concrete for the perimeter foundation along Grid Line 1 from Line A to Line F on the west side of the building. The foundation component described is shown on Hunt Hale Jones Drawing No. 1S 2.01 that has been approved by the City of Emeryville.

Prior to concrete being placed in the foundation excavations I noted that the reinforcing

bars were clean and the floor of the excavation was free of fallen earth or soft material. Accordingly I gave my final approval of the condition of the foundation excavations immediately prior to concrete being placed into them.

Sincerely,

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

REGISTERED PROFESSIONAL ENGINEER
D. J. WATKINS
No. 882
Exp. 3/31/10
GEOTECHNICAL
STATE OF CALIFORNIA

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

March 10, 2008

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Preparation of Floor Base – Building 1
City of Emeryville Building Department Permit No. 0701-042 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project, I herby certify that:

> The soil beneath Building 1 at the Oak Walk Redevelopment Project site in Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* (Geotechnical Engineering Report) that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)*.

On 29, February 2008, I inspected the gravel placed over the building floor pad that serves as a substrate for the Liquid Boot® vapor proof barrier that is specified in The San Joaquin Company's *Corrective Action Plan - Oak Walk Redevelopment Site, Emeryville, California* (Corrective Action Report) that was issued in July 2006. That vapor barrier was completed on March 05, 2008.

The area of the Building 1 floor slab is now ready for concrete to be poured.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

March 12, 2008

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection – Building 3
City of Emeryville Building Department Permit No. 0701-044 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath Building 3 at the Oak Walk Redevelopment Project site in Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

On March 12, 2008, I inspected the perimeter and interior footing excavations and the column base excavations for Building 3 at locations A through K along Lines 1 to 2.2. Those locations are shown on Hunt Hale Jones Drawing No. A 3.1.1.1 that has been approved by the City of Emeryville. The excavations were in good condition and ready for concrete to be poured.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

March 18, 2008

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Ground Floor Residential Unit Base – Building 3
City of Emeryville Building Department Permit No. 0701-044 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath Building 3 at the Oak Walk Redevelopment Project site in Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* (Geotechnical Engineering Report) that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

On March 17, 2008, I inspected the ground floor pad for Building 3 between Lines 1 to 2.2. Those lines are shown on Hunt Hale Jones Drawing No. A 3.1.1.1 that has been approved by the City of Emeryville. The soil surface of the pad was in good condition. I also observed placement of crushed rock over the area of the pad. That material was placed properly and will serves as a substrate for the Liquid Boot® vapor proof barrier that is specified in The San Joaquin Company's *Corrective Action Plan - Oak Walk Redevelopment Site, Emeryville, California* (Corrective Action Report) that was issued in July 2006. The pad is ready for application of Liquid Boot®.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

REGISTERED PROFESSIONAL ENGINEER
D. J. WATKINS
No. 882
Exp. 3/31/10
GEOTECHNICAL
STATE OF CALIFORNIA

TELEPHONE: OAKLAND, CALIFORNIA (510) 336-9118 TRACY, CALIFORNIA (209) 832-2910

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

April 04, 2008

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Foundation Excavation Inspection – Building 2 at 4098 San Pablo Avenue, 1087, 1089 1091, 1093, 1095, 1097 and 1099 41st Street Emeryville, California.
City of Emeryville Building Department Permit No. 0701-043 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project, I herby certify that:

> The soil beneath Building 2 at the Oak Walk Redevelopment Project site in Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* (Geotechnical Engineering Report) that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

On April 03, 2008, I inspected the excavations that have been opened for the foundations and the condition of the building pad of the subject structure. Those structural features are shown on Hunt Hale Jones Drawing No. 2S 2.01 that has been approved by the City of Emeryville.

The foundation excavations and pad were in good condition and ready for concrete to be poured for the foundations and gravel to be spread over the pad

Sincerely,

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc

REGISTERED PROFESSIONAL ENGINEER
D. J. WATKINS
No. 882
Exp. 3/31/10
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1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

BayRock Oaks, LLC
300 Clay Street
Suite 620
Oakland, CA 94612-1427

June 10, 2008

Attn.: Mr. Noe Valenzuela

Our Reference: 0004.084

Subject: Oak Walk Redevelopment Project, Emeryville, California: Soil Compaction and Trench Excavations for CMU Walls of Infiltration Troughs – Building 3
City of Emeryville Building Department Permit No. 0701-044 BPEM

Dear Mr. Valenzuela

As the Geotechnical Engineer in responsible charge for the Oak Walk Redevelopment Project I herby certify that:

> The soil beneath Building 3 at the Oak Walk Redevelopment Project site in Emeryville, California has been compacted to a minimum of 90% relative compaction, as that relative compaction is defined by the American Society of Testing and Materials (ASTM) *Standard D1557-02e1 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort* (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)). That relative compaction is specified in the San Joaquin Company's *Geotechnical Engineering Report - Oak Walk Project Site, Emeryville, California* (Geotechnical Engineering Report) that was issued in August 2004.
>
> The relative compaction of the soil was confirmed by field testing with a nuclear soil density gauge in compliance with *ASTM D6938-07b - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).*

1. The 4-in. x 4-in. timber struts that have been installed by J. R. Roberts/Deacon, Inc. on 6-ft centers between the eastern concrete wall of Building 3 and the footing of the Ennis structure will provide appropriate temporary support of the footing while the infiltration troughs are being constructed. However, it should be noted that the vertical wall of the excavation that is immediately adjacent to the footing is susceptible to breakdown with time and that breakdown will accelerate during precipitation. For that reason, it is essential that the footing of the CMU wall on that side of the infiltration trough be completed with minimal delay.

2. The CMU wall of the trough will be under its greatest lateral loading when the trough is empty prior to its backfilling with the filter material. To prevent lateral earth pressure with added building superload from potentially pushing the CMU wall into the empty trough, the top of the concrete footing of the CMU wall should be raised 12 inches above

its currently-designed height over the whole length of the Ennis building that has its footing along the edge of the infiltration trough excavation.

3. Because the CMU wall is not designed as a retaining wall, care must be taken throughout construction and backfilling of the infiltration trench to avoid significant - particularly sudden - lateral loading of that wall. To avoid such unsupported loading, the space between the back of the wall and the vertical face of the excavation should be backfilled with lean concrete, cement mortar or, if preferred, with concrete as soon as possible after the CMU blocks are laid. Under no circumstances should the infiltration trough be backfilled until the CMU walls have been supported in that manner.

NOTE: that requirement (No. 3) applies to construction of the infiltration troughs throughout their length on all sides of Building 3, not only where the CMU wall is located against the footing of the Ennis building.On June 10, 2008, I inspected the excavations for the footings of the concrete masonry unit (CMU) walls that form the outer walls of the storm water infiltration troughs that will abut the north, east and a small length of the south walls of Building 3. The excavations were in good condition and ready for concrete to be poured.

Sincerely

D. J. Watkins, Ph.D., PE
Geotechnical Engineer
The San Joaquin Company, Inc