

**CITY OF SACRAMENTO**  
1231 I Street, Sacramento, CA 95814

**Permit No: 0304918**

**Insp Area: 4**

**Thos Bros: 258 A7**

**Site Address: 5005 RALEY BL SAC**

**Parcel No: 215-0260-040**

**Sub-Type: NCOM**

**Housing (Y/N): N**

**CONTRACTOR**

ZAKSKORN CONST DBA ZCON BLDRS  
780 WEST GRAND AVE  
OAKLAND CA 94612-1052

**OWNER**

RALEY SANTA ANA LLC  
465 CALIFORNIA ST #1010  
SAN FRANCISCO CA 94104

**ARCHITECT**

COMSTOCK JOHNSON ARCHITECT, INC  
10304 PLACER LN  
SACRAMENTO, CA 95827

**Nature of Work: CONSTRUCT COMMERCIAL SHELL**

**CONSTRUCTION LENDING AGENCY:** I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name \_\_\_\_\_ Lender's Address \_\_\_\_\_

**LICENSED CONTRACTORS DECLARATION:** I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

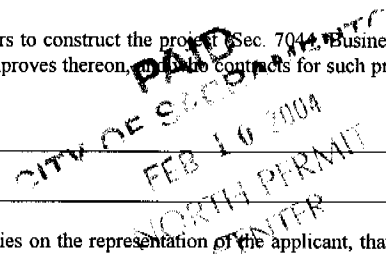
License Class B License Number 727712 Date \_\_\_\_\_ Contractor Signature [Signature]

**OWNER-BUILDER DECLARATION:** I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I am exempt under Sec. \_\_\_\_\_ B & PC for this reason: \_\_\_\_\_  
Date \_\_\_\_\_ Owner Signature \_\_\_\_\_



**IN ISSUING THIS BUILDING PERMIT,** the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 2.10.04 Applicant/Agent Signature [Signature]

**WORKER'S COMPENSATION DECLARATION:** I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier STATE FUND Policy Number 46934803 Exp Date 01/01/2004

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 2.10.04 Applicant Signature [Signature]

**WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.**

**THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.**

CITY OF SACRAMENTO

**CERTIFICATE OF COMPLIANCE**

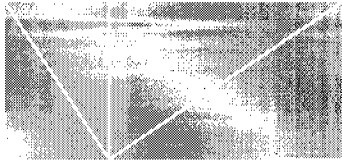
For Information Contact (916) 808-5716

Building Address: 5005 RALEY BL., SAC Permit No.: 0304918  
Building Use: NEW SHELL Occupancy: B/S1  
Building Owner: RALEY SANTA ANA LLC Construction Type: III-N  
Owner Address: SAN FRANCISCO, CA Sprinkled?  Yes  No  
Portion of Building Occupied: ENTIRE Area: 95,794 Sq. Ft.  
Date: 12/7/05 By: *Cashlyn Cooper* Sign: RON BEEHLER  
(Print) Sign CHIEF BUILDING OFFICIAL

[ Finaled By:JR, CHM,GRS, MCM,RSB,RLB]

*This Certificate, issued pursuant to the requirements of Section 109 of the Uniform Building Code, certifies that at time of issuance the described portion of the building has been inspected for compliance with the Uniform Building Code, as adopted per Title 15 of the Sacramento City Code for the group and division of occupancy and use for which the proposed occupancy is classified. Issuance of this certificate shall not be construed as an approval of a violation of any Codes, or Federal, State and City Laws or Ordinances. Certificates presuming to give authority to such violation shall not be valid. This certificate shall be posted in a conspicuous place on the premises and shall not be removed except by the Chief Building Official. No changes shall be made in the character of occupancy or use without approval of the Chief Building Official.*

**POST IN A CONSPICUOUS PLACE**



December 7, 2005

Z-Con  
Attention: Pete Zakskorn  
660 Commerce Drive  
Roseville, CA 95678

**MICROFILM AT FINAL**

**FINAL REPORT  
CONSTRUCTION OBSERVATION AND TESTING SERVICES  
RALEY AND SANTA ANA BUILDING**

5005 Raley Boulevard  
Sacramento, California  
Reference No. 2264-001.01  
Permit No. 0304918

In accordance with your request, our firm has completed construction observation and testing services for the subject project. During construction of the project, our firm performed *Special Inspection and Testing* in accordance with Sections 106 and 1701 of the Uniform Building Code. Our construction observations and testing were performed between March 16, 2004 and April 6, 2005. Our firm prepared a Foundation Investigation Report for the project dated July 22, 2002.<sup>1</sup>

Our observation and test results indicate that the following items for the referenced building were constructed, to the best of our knowledge, in accordance with the project plans, specifications, and our referenced report.

- Earthwork: Observed and tested:
- 1) Building pad
  - 2) Foundation excavations
- Reinforcing Steel: Verified placement of reinforcing steel for:
- 1) Foundations
  - 2) Slab-on-grade
  - 3) Wall panels
- Concrete: Observed placement and sampled concrete for:
- 1) Foundations
  - 2) Slab-on-grade
  - 3) Tilt-up wall panels
  - 4) Loading dock slabs and walls

<sup>1</sup> Raney Geotechnical Inc.; "Foundation Investigation, Raley and Santa Ana Building, Raley Boulevard and Santa Ana Avenue, Sacramento, California"; File No. 2264-001.01; July 22, 2002.

Performed slump tests and laboratory compressive strength testing - We understand that the Structural Engineer for the project has reviewed and accepted test results for concrete test specimens that did not meet the specified 28-day compressive strength and that no further testing is required. A Summary of compressive strength test results is attached

Structural Steel: Observed welding for:

- 1) Shop welding - Embeds, columns, and canopies
- 2) Field welding - Panel and roof connections

Other:

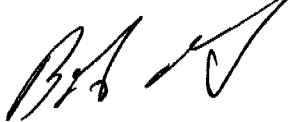
- Observed nailing for:
- 1) Roof sheeting

Horizontal and vertical limits of the described work were determined by others. We cannot guarantee construction, nor should our work or this letter be construed as relieving the contractors from their primary responsibility to conform to contractual agreements and sound engineering practice.

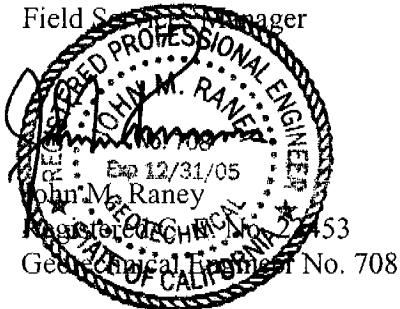
Should you have any questions regarding this letter or require any further information, please contact our office.

Very truly yours,

**RANEY GEOTECHNICAL INC.**



Bob McCormick  
Field Supervisor



Attachments: Compressive Strength Test Summary

(2) Addressee

BM/JMR/JB

## Concrete Compressive Strength Summary

**PROJECT: 2264-001.02 Raley & Santa Ana Avenue**

Z-Con

c/o: Raley Santa Ana LLC

Attention: Ron Goldsmith

465 California Street, Suite 1040

San Francisco, CA 94104

SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4.5
4/13/2004	04-00742	Footings, Line D @ 3				MIX DESIGN:	58
		I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr NET STR. RESULT
		A	7	4/20/2004	61030	2160	2160
		B	28	5/11/2004	95840	3390	3390 PASS
		C	28	5/11/2004	101270	3580	3580 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4.25
4/14/2004	04-00749	Footings, N/E Corner of Building				MIX DESIGN:	58
		I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr NET STR. RESULT
		A	7	4/21/2004	78080	2760	2760
		B	28	5/12/2004	103960	3680	3680 PASS
		C	28	5/12/2004	110020	3890	3890 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	3.5
4/22/2004	04-00791	Footings, Line A @ 6.25				MIX DESIGN:	58
		I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr NET STR. RESULT
		A	7	4/29/2004	70220	2480	2480
		B	28	5/20/2004	97520	3450	3450 PASS
		C	28	5/20/2004	102040	3610	3610 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4
4/28/2004	04-00844	Slab on Grade, Line F @ 1				MIX DESIGN:	58
		I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr NET STR. RESULT
		A	7	5/5/2004	66130	2340	2340
		B	28	5/26/2004	95610	3380	3380 PASS
		C	28	5/26/2004	99720	3530	3530 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	3.75
4/28/2004	04-00845	Slab on Grade, Line D @ 3				MIX DESIGN:	58
		I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr NET STR. RESULT
		A	7	5/5/2004	83360	2950	2950
		B	28	5/26/2004	108250	3830	3830 PASS
		C	28	5/26/2004	112290	3970	3970 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4
4/28/2004	04-00846	Slab on Grade, Line E @ 5				MIX DESIGN:	58
		I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr NET STR. RESULT
		A	7	5/5/2004	73210	2590	2590
		B	28	5/26/2004	104350	3690	3690 PASS
		C	28	5/26/2004	103040	3640	3640 PASS

## Concrete Compressive Strength Summary

**PROJECT: 2264-001.02 Raley & Santa Ana Avenue**

Z-Con

c/o: Raley Santa Ana LLC

Attention: Ron Goldsmith

465 California Street, Suite 1040

San Francisco, CA 94104

SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4
4/28/2004	04-00847	Slab on Grade, Line F @ 6		MIX DESIGN: 58			
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	5/5/2004	77600	2740		2740
	B	28	5/26/2004	98170	3470		3470 PASS
	C	28	5/26/2004	102030	3610		3610 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4
4/28/2004	04-00848	Slab on Grade, Line D @ 7		MIX DESIGN: 58			
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	5/5/2004	75430	2670		2670
	B	28	5/26/2004	107320	3800		3800 PASS
	C	28	5/26/2004	93360	3300		3300 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4.5
4/28/2004	04-00849	Slab on Grade, Line D @ 8		MIX DESIGN: 58			
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	5/5/2004	74450	2630		2630
	B	28	5/26/2004	97230	3440		3440 PASS
	C	28	5/26/2004	94110	3330		3330 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4.75
4/30/2004	04-00852	Slab on Grade - N.W. Corner		MIX DESIGN: 58			
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	5/7/2004	78150	2760		2760
	B	28	5/28/2004	105010	3710		3710 PASS
	C	28	5/28/2004	103620	3670		3670 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	5
4/30/2004	04-00853	Slab on Grade - N.E. Side		MIX DESIGN: 58			
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	5/7/2004	76520	2710		2710
	B	28	5/28/2004	108830	3850		3850 PASS
	C	28	5/28/2004	110250	3900		3900 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4.75
4/30/2004	04-00854	Slab on Grade - West - Center		MIX DESIGN: 58			
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	5/7/2004	80850	2860		2860
	B	28	5/28/2004	104300	3690		3690 PASS
	C	28	5/28/2004	105220	3720		3720 PASS

## Concrete Compressive Strength Summary

**PROJECT: 2264-001.02 Raley & Santa Ana Avenue**

Z-Con

c/o: Raley Santa Ana LLC

Attention: Ron Goldsmith

465 California Street, Suite 1040

San Francisco, CA 94104

SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	5.25
4/30/2004	04-00855	Slab on Grade - S.W. Side				MIX DESIGN: 58	
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	5/7/2004	78530	2780		2780
	B	28	5/28/2004	103270	3650		3650 PASS
	C	28	5/28/2004	100050	3540		3540 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	5
4/30/2004	04-00856	Slab on Grade - S.E. Corner				MIX DESIGN: 58	
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	5/7/2004	77820	2750		2750
	B	28	5/28/2004	102300	3620		3620 PASS
	C	28	5/28/2004	100550	3560		3560 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4.5
4/30/2004	04-00857	Slab on Grade - S.W. Corner				MIX DESIGN: 58	
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	5/7/2004	79430	2810		2810
	B	28	5/28/2004	102930	3640		3640 PASS
	C	28	5/28/2004	111020	3930		3930 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4
5/4/2004	04-00889	Footings, Line A @ 5 & 6, 4 & 5				MIX DESIGN: 58	
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	5/11/2004	73480	2600		2600
	B	28	6/1/2004	96920	3430		3430 PASS
	C	28	6/1/2004	93860	3320		3320 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	5000	SLUMP:	5
6/3/2004	04-01065	Panel 49 North				MIX DESIGN: 178	
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	6/10/2004	135640	4800		4800
	B	28	7/1/2004	154410	5460		5460 PASS
	C	28	7/1/2004	154720	5470		5470 PASS
SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	5000	SLUMP:	5
6/3/2004	04-01066	Panel 8, South				MIX DESIGN: 178	
	I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
	A	7	6/10/2004	131880	4670		4670
	B	28	7/1/2004	163700	5790		5790 PASS
	C	28	7/1/2004	154700	5470		5470 PASS

## Concrete Compressive Strength Summary

**PROJECT: 2264-001.02 Raley & Santa Ana Avenue**

Z-Con

c/o: Raley Santa Ana LLC

Attention: Ron Goldsmith

465 California Street, Suite 1040

San Francisco, CA 94104

SAMPLE DATE / NUMBER/LOCATION		TYPE:	Concrete	SPECIFICATION	5000	SLUMP:	5
6/3/2004	04-01067	Panel 14, North				MIX DESIGN: 178	
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR.	RESULT
A	7	6/10/2004	119650	4230		4230	
B	28	7/1/2004	145170	5140		5140	PASS
C	28	7/1/2004	142640	5050		5050	PASS
6/3/2004	04-01068	Panel 23, East				MIX DESIGN: 178	
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR.	RESULT
A	7	6/10/2004	121760	4310		4310	
B	28	7/1/2004	152740	5400		5400	PASS
C	28	7/1/2004	146370	5180		5180	PASS
6/7/2004	04-01075	Panel 43				MIX DESIGN: 178	
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR.	RESULT
A	7	6/14/2004	124850	4420		4420	
B	28	7/5/2004	149550	5290		5290	PASS
C	28	7/5/2004	152670	5400		5400	PASS
6/7/2004	04-01076	Panel 54				MIX DESIGN: 178	
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR.	RESULT
A	7	6/14/2004	132540	4690		4690	
B	28	7/5/2004	148040	5240		5240	PASS
C	28	7/5/2004	150200	5310		5310	PASS
6/7/2004	04-01077	Panel 34				MIX DESIGN: 178	
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR.	RESULT
A	7	6/14/2004	114950	4070		4070	
B	28	7/5/2004	148710	5260		5260	PASS
C	28	7/5/2004	137890	4880		4880	PASS
6/7/2004	04-01078	Panel 26				MIX DESIGN: 178	
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR.	RESULT
A	7	6/14/2004	104070	3680		3680	FAIL
B	28	7/5/2004	110330	3900		3900	FAIL
C	28	7/5/2004	117380	4150		4150	FAIL
D	56	8/2/2004	122160	4320		4320	FAIL



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San Francisco, CA 94104

SAMPLE DATE / NUMBER/LOCATION	TYPE:	Concrete	SPECIFICATION	3000	SLUMP:	4
6/22/2004 04-01177	Footings, Line B @ 5.75				MIX DESIGN:	58
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
A	7	6/29/2004	82130	2910		2910
B	28	7/20/2004	118640	4200		4200 PASS
C	28	7/20/2004	117830	4170		4170 PASS
7/20/2004 04-01428	Pour Strip, Line 9 @ B				MIX DESIGN:	58
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
A	7	7/27/2004	67440	2390		2390
B	28	8/17/2004	97240	3440		3440 PASS
C	28	8/17/2004	0			PASS
7/22/2004 04-01446	Pour Strip, Line B @ 4				MIX DESIGN:	58
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
A	7	7/29/2004	75020	2650		2650
B	28	8/19/2004	96980	3430		3430 PASS
C	28	8/19/2004	94220	3330		3330 PASS
7/23/2004 04-01453	Pourstrip, Lines A @ 1				MIX DESIGN:	58
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
A	7	7/30/2004	68260	2410		2410
B	28	8/20/2004	92260	3260		3260 PASS
C	28	8/20/2004	95410	3370		3370 PASS
9/29/2004 04-01982	Loading Dock Approach Ramp, Line 8 @ A				MIX DESIGN:	58
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
A	7	10/6/2004	72330	2560		2560
B	28	10/27/2004	93590	3310		3310 PASS
C	28	10/27/2004	103910	3680		3680 PASS
9/29/2004 04-01983	Loading Dock Approach, Slab on Grade, Line 4 @ A				MIX DESIGN:	58
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR. RESULT
A	7	10/6/2004	69950	2470		2470
B	28	10/27/2004	99480	3520		3520 PASS
C	28	10/27/2004	92260	3260		3260 PASS

## Concrete Compressive Strength Summary

PROJECT: 2264-001.02 Raley & Santa Ana Avenue

Z-Con

c/o: Raley Santa Ana LLC

Attention: Ron Goldsmith

465 California Street, Suite 1040

San Francisco, CA 94104

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SAMPLE DATE / NUMBER/LOCATION	TYPE: Concrete	SPECIFICATION	3000	SLUMP: 4			
10/11/2004 04-02093	Retaining Wall, North End, Line 2 @ A.5			MIX DESIGN: 58			
I.D.	AGE	BREAK DATE	LOAD	STRENGTH	Corr	NET STR.	RESULT
A	7	10/18/2004	72240	2560		2560	
B	28	11/8/2004	98870	3500		3500	PASS
C	28	11/8/2004	108110	3820		3820	PASS

Permit # 0304918

REPORT  
ON THE  
GROUND SYSTEM  
CERTIFICATION  
PERFORMED  
AT  
5005 RALEY BLVD.

FOR

CMSH

BY

APPARATUS TESTING AND ENGINEERING  
P.O. BOX 984  
FOLSOM, CA 95763-0984  
(916) 853-6280

Submitted by:  
Dan Vassey  
NETA Certification #: 03-3-4326  
November 6, 2004

Certified by:  
Jim Lawler  
NETA Certification #: 98-4-1599  
A.T.E. Reference: S-7135

## PROJECT REPORT

### I. PURPOSE

The purpose of the Ground System Certification is to ensure that the components within the system and the system as a whole are installed in accordance with "National Electric Code 230-95" and are fully operational. Through such tests, the contractor is assured that this installation is correct and will provide protection against arcing ground faults.

### II. SUMMARY

Apparatus Testing and Engineering, Inc. was contracted by CMSH to perform a Ground System Certification at 5005 Raley Blvd. The test was conducted on November 2, 2004, by Dan Vassey, NETA Certification # 03-3-4326, of Apparatus Testing and Engineering, Inc.

### III. TEST PROCEDURES

- A. Neutral-ground connection inspected to verify connection ahead of ground fault sensor and neutral disconnect link.
- B. Neutral-ground conductor checked for correct size and clearance from exposed, energized conductors.
- C. Polarity of neutral current sensors checked to verify correct connection in relation to phase current sensors.
- D. Minimum ground fault current required to operate protective device determined; current recorded as ground fault pickup current.
- E. Ground Fault current applied to system at minimum of two values in excess of pickup current to verify ground fault time operation is within parameters of manufacturer's time-current curves.
- F. Neutral insulation resistance checked to verify that no additional ground paths exist in system.

### IV. RESULTS AND RECOMMENDATIONS:

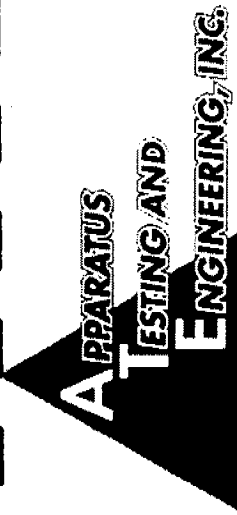
- A. The ground fault system tested satisfactorily as installed and is operational and acceptable for service.

- B. In the absence of engineered settings, pickup current and time delay settings were temporarily made for service energization. Apparatus Testing & Engineering, Inc. accepts no liability for these settings. The as left settings are 300 amps pickup, 0.4 seconds time delay. The design engineer should be contacted for final settings.
- C. The ground fault relay neutral sensor polarity was found incorrect. Polarity has been corrected by Apparatus Testing and Engineering by switching the sensor secondary connections. Proper polarity was then verified.

**DATA**

**TEST**

**SHEETS**

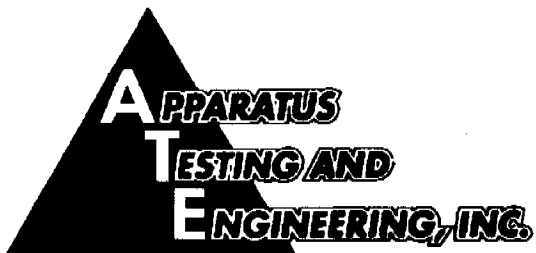


SACRAMENTO (916) 853-6280 • LIVERMORE (925) 454-1363

FULL MEMBER

## GROUND FAULT SYSTEM TEST REPORT-1

CUSTOMER:		LOCATION:		JOB NO.:	S-7135
C/MSH		5005 RALEY BLVD.		DATE:	1/102/04
SWGR. PNL. IDENTIFICATION: MSB		TEST EQUIPMENT USED: MULTI-AMP MS-2, AVO MEGGER			
TESTED BY: DV					
ELECTRICAL TEST DATA					
GROUND FAULT INFORMATION					
MFR. SIEMENS	TYPE LIG	RELAY PICKUP	302 AMPS		
CAT. NO. M201		RELAY TEST AT 150%	0.55 SECONDS/CYCLES		
RANGE 200-700	AMPS 0.1-0.4	RELAY TEST AT 300%	0.42 SECONDS/CYCLES		
SYSTEM CONFIGURATION					
X RESIDUAL	ZERO SEQ.	RELAY TRIP AT 57% CONTROL VOLTS	ACCEPTABLE	NOT ACCEPTABLE	X NOT APPLICABLE
BREAKER/SWITCH INFORMATION		NEUTRAL INSULATION RESISTANCE	X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
MFR. SIEMENS	TYPE SND6	MONITOR PANEL OPERATION	ACCEPTABLE	NOT ACCEPTABLE	X NOT APPLICABLE
STYLE NO. SND69100AG		NEUTRAL SENSOR POLARITY	(2) ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
VISUAL INSPECTION					
RATING 1000	AMPS 600	NEUTRAL GROUND LOCATION	X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
GROUND FAULT SYSTEM SETTINGS (1)		NEUTRAL LINK ACCESSIBILITY	X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
CURRENT	300 AMPS	SENSOR MOUNTING	X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
TIME DELAY/TIME BAND	0.3 SECONDS				
I <sup>2</sup> T	IN X OUT	N/A			
REMARKS: (1) SETTINGS ARE FOR TESTING PURPOSES ONLY. PROJECT ENGINEER SHOULD DETERMINE FINAL SETTINGS.					
(2) NEUTRAL SENSOR POLARITY FOUND TO BE REVERSED. THIS WAS CORRECTED BY APPARATUS TESTING AND ENGINEERING.					
1					



FULL MEMBER

Sacramento • Livermore

November 6, 2004

CMSH  
4331 Auburn Blvd.  
Sacramento, CA 95841

Attention: Ed Daponte  
Subject: Ground Fault System Testing at CMSH  
A.T.E. Reference: S-7135

We wish to thank you for giving Apparatus Testing & Engineering, Inc. the opportunity to serve your testing needs on the above project. This letter and the attached Field Test Report constitute the Report for the Project.

**Please review the Results and Recommendations section of this report for items, if any, requiring further action.**

We appreciate your business and look forward to meeting your testing needs again in the future. Please do not hesitate to contact us if you require further information.

Very truly yours,

APPARATUS TESTING & ENGINEERING, INC.

A handwritten signature in black ink, appearing to read "Dan Vassey", is written over a horizontal line.

Dan Vassey  
Field Engineer  
NETA Certification #: 03-3-4326

DV:dkm

Attachment

*People Doing Business With People®*

**PO Box 984, Folsom, CA 95763-0984 • PHONE (916) 853-6280 • FAX (916) 853-6258**