AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		7

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0004	09/01/2011	4200385257	EDM-1703

6. ISSUED BY	CODE	7. ADMINISTERED BY *(If other than Item 6)*	CODE
NASA DRYDEN FLIGHT RESEARCH CENTER P.O. BOX 273 M/S D-1442 RKB EDWARDS, CA 93523-0273			

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*	(X)	9A. AMENDMENT OF SOLICITATION NO.
	☒	NND11385257E
		9B. DATED *(SEE ITEM 11)* 07/02/2010
	☐	10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED *(SEE ITEM 13)*
CODE / FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
☐	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
☐	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
☐	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
☐	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (*Organized by UCF section headings, including solicitation/contract subject matter where feasible.*)

1. Section J, pages 49 – 54 are deleted and replaced with the attached revised Section J, pages 49-54 (Attachment 1 hereto).

2. Delete Attachment 1 General Wage Decision # CA100031, Modification #26 dated 08/05/2011 and replace with General Wage Decision # CA100031, Modification #28 dated 08/26/2011. (Attachment 2 hereto).

3. Report of Geotechnical Investigation is incorporated as Attachment 5 to the RFP (attachment 3 hereto).

4. Addendum 2 dated 9/1/2011 is incorporated into the RFP (attachment 4 hereto)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*

15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

5. Delete provision F.3 on page 10 of the solicitation and replace with provision F.3 below.

F.3 52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

APPLIES to CLINS 0005-0007 if awarded.
If CLINS 0005 – 0007 are awarded the Notice to Proceed for CLINS 0005-0007 will be issued eight (8) months after the completion of CLIN 0001 and CLINS 00002 – 0004 and CLIN 0008.

The Contractor shall be required to (a) commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 180 calendar days, following receipt of a Notice To Proceed (NTP). The time stated for completion shall include final cleanup of the premises.

6. QUESTION & ANSWERS

a) **QUESTION**: Do you have a list of Prospective Primes I could contact about this solicitation?

ANSWER: The only lists we have are on the website below. See the tab for "Interested Vendors List" and the site visit attendance list. The site visit was not mandatory and it is not mandatory to put your name on the "Interested Vendors List" so these lists are not complete.

https://www.fbo.gov/index?s=opportunity&mode=form&id=2099ef3caf91a6a21a1d7e99f667d6b6&tab=core&tabmode=list&=

b) **QUESTION:** Will a Geotechnical Report be provided? Many of the subcontractors bidding have stated that they will not be able to provide an accurate quote without one.

ANSWER: The Geotechnical Report has been added as an attachment to the solicitation by Amendment 4.

c) **QUESTION:** Is there a Survey Report and will it be made available?

ANSWER: There is no survey report. The survey control information is present on C-1.1

d) **QUESTION:** Are Auto Cad Drawings available?

ANSWER: No CAD files will be made available during bid phase. Appropriate CAD backgrounds shall be provided after award.

e) **QUESTION:** Sheet C-2.1: General Note identifies drawing C-1 for demolition legend but there is no Sheet C-1?

ANSWER: In the general notes on C-2.1 there is no mention of a drawing C-1. Demolition legend is on C-1.1.

f) **QUESTION:** Sheet C-2.1: Will the gate at south end be accessible for demolition access?

ANSWER: Yes, the gate at south end will be accessible for demolition access.

g) **QUESTION:** Sheet C-2.1: Will a debris wall be required adjacent to flight line?

ANSWER: No, a debris wall will not be required adjacent to flight line.

h) **QUESTION:** Sheet C-2.1: What is finish floor elevation as there are two different elevations identified?

ANSWER: The FF elevation is not shown on C-2.1. The FF elevation is only shown on C-5.1. FF = 2304.05.

i) **QUESTION:** Sheet C-3.1: Notes 1, 2, 3, 5, 6, 7, 8 identify white concrete, Please describe white concrete?

ANSWER: The contractor shall use as much "white portland cement" as required to guarantee that a minimum measurable post construction SRI value of 29 can be achieved. This is required to achieve LEED point.

j) **QUESTION:** Sheet C-3.1: There is no curb at loading dock to sidewalk is this correct?

ANSWER: There is no "loading dock" at the new FSC building.

k) **QUESTION:** Architectural Notes: There are numerous notes that metal studs are 20 gauge Please clarify gauge of studs and weight, do notes apply or does schedule in structural apply?

ANSWER: The metal stud properties table on S2.2 applies to load-bearing stud-framed walls and exterior walls (wall type E-1). Interior non-load-bearing partition walls and composite masonry/framed walls are per architectural wall type details.

l) **QUESTION:** Architectural Building sections have no notes but notes are referenced on the sheets, what are notes?

ANSWER: Architectural building sections have keynotes on all sheets A6.0-A6.7. Please clarify question.

m) **QUESTION:** What will keep irrigation lines from freezing if left at grade?

ANSWER: Above ground irrigation system freeze protection is not required. However the contractor will be responsible for maintaining and repairing above ground temporary irrigation system for the duration of the contract.

n) **QUESTION:** Schedule F Deliveries or Performance note F.3 needs clarification, with regard to CLIN 7?

ANSWER: Provision F.3 has been revised as follows:

F.3 52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

APPLIES to CLINS 0005-0007 if awarded.
If CLINS 0005 – 0007 are awarded the Notice to Proceed for CLINS 0005-0007 will be issued eight (8) months after the completion of CLIN 0001 and CLINS 00002 – 0004 and CLIN 0008.

The Contractor shall be required to (a) commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 180 calendar days, following receipt of a Notice To Proceed (NTP). The time stated for completion shall include final cleanup of the premises.

o) **QUESTION:** Civil drawings appear to have drainage back towards building, is this correct?

ANSWER: Both the C-5.1 and C-5.2 show positive drainage away from the new building to new catch basins and / or earthen swales.

p) **QUESTION:** Initial indications for entrance mats have their value at $150,000.00 +/- is this correct?

ANSWER: The entrance flooring mats are an available commercial item. There is not a requirement for a custom manufactured item.

q) **QUESTION:** On page six (6) of section 09 30 00 –Paragraph 2.4.5 of the specs- Furan Resin Grout is listed under Mortar, Grout, and Adhesive. This product is rarely used anymore according to one of the subcontractors bidding; thin set mortar has taken its place. Might this be changed?

ANSWER: 09 30 00 2.4.5 indicates furan resin grout is "prohibited unless specifically indicated otherwise." Use appropriate grout and mortar as indicated in section 2.4.

r) **QUESTION:** The Reflected Ceiling Plan Pages A3.0 - A3.3, Legend, calls for curved 2' x 6' suspended ceiling grid with acoustical panels. Spec. 09 51 00, 2.1.4, calls for Curved Grid System, a. Type: perforated painted aluminum. Are these acoustical panels or aluminum panels? Can you please provide the manufacturer and product that this ceiling type is based on?

ANSWER: See finish schedule on A7.3 for additional information

s) **QUESTION:** The Reflected Ceiling Plan Pages A3.0 - A3.3, Legend, calls for suspended ceiling grid with acoustical tiles & trigular edge. Can you please provide more information and clarification on " trigular edge". Please advise.

ANSWER: See Addendum 2

t) **QUESTION:** In spec section 09 51 00, paragraph 2.1.1, b. lists a web address for tile supplier database. We have not been able to access this web address. Can you please provide the manufacturer and product that this ceiling is based on?

ANSWER: See Addendum 2

u) QUESTION: Are if *mentoring agreements* are permissible?

ANSWER: **This is what 13CFR Part 126 says about mentoring.**

§ 126.618 How does a HUBZone SBC's participation in a Mentor-Protégé relationship affect its participation in the HUBZone Program?

(a) Qualified HUBZone SBCs may enter into Mentor-Protégé relationships in connection with other Federal programs, provided that such relationships do not conflict with the underlying HUBZone requirements.
(b) For purposes of determining whether an applicant to the HUBZone Program or a HUBZone SBC qualifies as small under part 121 of this chapter, SBA will not find affiliation between the applicant or qualified HUBZone SBC and the firm that is its mentor in a Federally-approved mentor-Protégé relationship (including a mentor that is other than small) on the basis of the mentor-Protégé agreement.

(c)(1) A qualified HUBZone SBC that is a prime contractor on a HUBZone contract may team with and subcontract work to its mentor.

The HUBZone SBC must meet the applicable performance of work requirement set forth in §125.6(b) of this chapter.

SBA may find affiliation between a prime HUBZone contractor and its mentor subcontractor where the mentor will perform primary and vital requirements of the contract. *See* §121.103(f)(4) of this chapter.

(2) A qualified HUBZone SBC may not joint venture with its mentor on a HUBZone contract unless the mentor is also a qualified HUBZone SBC.

v) QUESTION: The civil drawings reference WHITE Concrete with a SRI of 29. Regular Grey Concrete has an SRI of 35. White concrete has an SRI of approx. 80. Why is White required when grey meets the SRI requirement? The cost per cy. is up to 8x's the cost of regular concrete. If WHITE is required please provide a specification for this. The specifications do not address the WHITE. Do you want the aggregate white as well as the cement? What shade of White? Please clarify as it is a major cost impact.

ANSWER: Testing results for regular grey concrete have shown the average SRI values is 35. However individual site testing results can vary considerably depending on the supplier. Not all grey concrete suppliers will guarantee that their product will have an actual measured post-construction SRI value of 29 or above. We want more assurance that a minimum SRI 29 requirement will be met. This is a LEED platinum building and we cannot afford to lose this point if actual measured SRI values of grey concrete is below 29 after construction.

w) QUESTION: If WHITE is required please provide a specification for this. The specifications do not address the WHITE. Do you want the aggregate white as well as the cement. What shade of White? Please clarify as it is a major cost impact.

ANSWER: The contractor will need to use as much "white portland cement" as required to guarantee that the measurable post construction SRI value of the concrete will be a minimum of 29 to achieve the LEED point. White aggregate is not a requirement unless it is needed to achieve a guaranteed minimum measurable SRI value of 29.

x) QUESTION: Will a visit request be required to access Edwards Air Force Base and drop off a bid.

ANSWER: Yes, that is the best way to ensure that you will get through the gate. A copy of the visit request may be found on the web site below.

https://www.fbo.gov/?s=opportunity&mode=form&id=2099ef3caf91a6a21a1d7e99f667d6b6&tab=core&_cview=0

y) QUESTION: Are hand delivered proposals permissible? If so, would it be to the same address specified for deliveries (ie, Lilly Ave.) and are there any security requirements in being able to deliver in person?

ANSWER: Hand delivered bids are permissible. The bid opening will be held in the auditorium behind the NASA Security Office. Submitting a visit request is the best way to ensure that you get through the gate.

z) QUESTION: I am a minority owned contractor and wanted to know if this job has any minority goals. Also where can I view more info on this job,

ANSWER: The acquisition is a 100% HUBZone set-aside.

The solicitation may be found at the web site shown below.

https://www.fbo.gov/index?s=opportunity&mode=form&id=2099ef3caf91a6a21a1d7e99f667d6b6&tab=core&tabmode=list&=

PART III – LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

SECTION J - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

J.1 LIST OF ATTACHMENTS

The following documents are attached hereto and made a part of this contract:

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

ATTACHMENT NO.	NO. OF PAGES	TITLE
1	**26**	General Wage Decision # CA100031, Modification #28 dated 08/26/2011
2	**4**	Personal Identity Verification of Contractor Personnel Card Issuance Procedures (NOV 2006)
3	**1402**	Specifications for Facility Support Center at Edwards AFB, CA dated 03/14/2011
4	**193**	**Facility Support Center Drawings**
	T1.0	**TITLE AND INDEX SHEET**
	T2.0	GENERAL NOTES
	C-1.1	CIVIL LEGEND & ABBREVIATIONS
	C-1.2	SOIL BORINGS
	C-1.3	SOIL BORINGS
	C-2.1	DEMOLITION PLAN #1
	C-2.1	DEMOLITION PLAN #2
	C-3.1	PAVEMENT PLAN #1
	C-3.2	PAVEMENT PLAN #2
	C-3.3	PAVEMENT PLAN #3
	C-4.1	UTILITY PLAN
	C-5.1	GRADING PLAN A
	C-5.2	GRADING PLAN B
	C-6.1	LAYOUT PLAN

C-7.1	STRIPING PLAN
C-8.1	CIVIL DETAILS
C-8.2	CIVIL DETAILS
C-8.3	CIVIL DETAILS
C-8.4	CIVIL DETAILS
C-8.5	CIVIL DETAILS
C-8.6	CIVIL DETAILS
C-8.7	CIVIL DETAILS
C-8.8	STORM WATER PIPE PROFILE
C-8.9	PAVEMENT JOINT PLAN
C-8.10	CIVIL DETAILS
C-9.1	EROSION CONTROL PLAN
C-9.2	EROSION CONTROL NOTES
C-9.3	EROSION CONTROL DETAILS
L-1	LANDSCAPE IRRIGATION PLAN
L-2	LANDSCAPE IRRIGATION DETAILS
L-3	LANDSCAPE PLANTING PLAN
L-4	LANDSCAPE PLANTING DETAILS
A0.0	DEMOLITION SITE PLAN
A0.1	SITE PHOTOS
A0.2	SITE PHOTOS
A1.0	SITE PLAN
A2.0	BUILDING FLOOR PLAN
A2.1	NORTH SEGMENT SLAB PLAN
A2.2	SOUTH SEGMENT SLAB PLAN
A2.3	NORTH SEGMENT FLOOR PLAN
A2.4	SOUTH SEGMENT FLOOR PLAN
A2.5	MEZZANINE FLOOR PLAN
A2.6	ENLARGED PARTIAL FLOOR PLAN
A3.0	OVERALL REFLECTED CEILING PLAN
A3.1	NORTH SEGMENT REFLECTED CEILING PLAN
A3.2	SOUTH SEGMENT REFLECTED CEILING PLAN
A3.3	MEZZANINE RCP & TYPICAL CURVED CEILING LAYOUT
A4.0	ROOF PLAN
A4.1	NORTH SEGMENT ROOF PLAN AT LOW ROOFS
A4.2	SOUTH SEGMENT ROOF PLAN AT LOW ROOFS
A5.0	EXTERIOR ELEVATIONS

A5.1	EXTERIOR ELEVATIONS
A6.0	BUILDING SECTIONS
A6.1	BUILDING SECTIONS
A6.2	BUILDING SECTIONS
A6.3	BUILDING SECTIONS
A6.4	BUILDING SECTIONS
A6.5	PARTIAL & BUILDING SECTIONS
A6.6	WALL SECTIONS
A6.7	WALL SECTIONS
A6.8	WALL TYPES
A6.9	WALL TYPES
A7.0	DOOR SCHEDULE
A7.1	FIRST AND FLAT ROOF LEVEL WINDOW SCHEDULE
A7.2	MEZZANINE LEVEL WINDOW SCHEDULE
A7.3	FINISH SCHEDULE
A8.0	ENLARGED RESTROOM PLANS
A8.1	RESTROOM INTERIOR ELEVATIONS
A8.2	INTERIOR ELEVATIONS
A8.3	INTERIOR ELEVATIONS
A9.0	ENLARGED STAIR #1 PLAN AND SECTION
A9.1	ENLARGED STAIR #2 PLAN AND SECTION
A9.2	ENLARGED LIFT PLAN AND SECTION
A10.0	DOOR DETAILS
A10.1	DOOR DETAILS
A10.2	WINDOW DETAILS
A10.3	STAIR DETAILS
A10.4	STAIR DETAILS
A11.0	ROOF DETAILS
A11.1	ROOF DETAILS
A11.2	CEILING DETAILS
A11.3	TOILET ROOM ACCESSIBILITY DETAILS
A11.4	MILLWORK DETAILS
A12.0	EXTERIOR DETAILS
A12.1	EXTERIOR DETAILS
A12.2	WALL/ COLUMN DETAILS
A12.3	WALL/ COLUMN DETAILS
A13.0	MISC. DETAILS
S1.0	GENERAL NOTES
S1.1	GENERAL NOTES

S1.2	GENERAL NOTES
S2.0	TYPICAL DETAILS
S2.1	TYPICAL DETAILS
S2.2	TYPICAL DETAILS
S2.3	TYPICAL DETAILS
S2.4	TYPICAL DETAILS
S2.5	TYPICAL DETAILS
S3.0	NORTH - FOUNDATION PLAN
S3.1	SOUTH - FOUNDATION PLAN
S3.2	NORTH - LOW ROOF FRAMING PLAN
S3.3	SOUTH - LOW ROOF FRAMING PLAN AND MEZZANINE FRAMING PLAN
S3.4	NORTH - HIGH ROOF FRAMING PLAN
S3.5	SOUTH - HIGH ROOF FRAMING PLAN
S4.0	LATERAL LOAD RESISTING BRACED FRAME AND ROOF DRAG ELEVATIONS
S4.1	FRAME DETAILS
S6.0	FOUNDATION DETAILS
S7.0	FRAMING DETAILS
S7.1	FRAMING DETAILS
S7.2	FRAMING DETAILS
S7.3	FRAMING DETAILS
S7.4	FRAMING DETAILS
S7.5	FRAMING DETAILS
M.01	MECHANICAL GENERAL NOTES, LEGEND, AND SYMBOLS LIST
M.02	MECHANICAL SCHEDULES
M.03	MECHANICAL SCHEDULES
M2.1	MECHANICAL PLAN - NORTH SEGMENT
M2.2	MECHANICAL PLAN - SOUTH SEGMENT
M2.3	MECHANICAL MEZZANINE
M3.1	MECHANICAL PIPING PLAN - NORTH SEGMENT
M3.2	MECHANICAL PIPING PLAN - SOUTH SEGMENT
M3.3	MECHANICAL PIPING PLAN - MEZZANINE
M4.0	MECHANICAL ROOF PLAN - NORTH SEGMENT
M4.1	MECHANICAL ROOF PLAN - SOUTH SEGMENT
M5.0	MECHANICAL ENLARGED PLAN
M6.0	MECHANICAL DETAILS
M6.1	MECHANICAL DETAILS
M6.2	MECHANICAL DETAILS
M6.3	MECHANICAL DETAILS

M6.4	MECHANICAL DETAILS
M6.5	MECHANICAL DETAILS
M6.6	MECHANICAL DETAILS
M6.7	MECHANICAL DETAILS
M7.0	MECHANICAL SECTIONS
M8.0	MECHANICAL VARIABLE REFRIGERANT FLOW CONTROL
M8.1	MECHANICAL CONTROLS
M8.2	MECHANICAL CONTROLS
M8.3	MECHANICAL CONTROLS
P.01	PLUMBING NOTES, LEGEND AND ABBREVIATIONS
P.02	SCHEDULES
P1.0	PLUMBING SITE PLAN
P2.0	PLUMBING OVERALL PLAN
P2.1	WATER, GAS & COMPRESSED AIR PIPING PLAN - NORTH SEGMENT
P2.2	WATER, GAS & COMPRESSED AIR PIPING PLAN - SOUTH SEGMENT
P2.3	WASTE, VENT & STORM DRAIN PIPING PLAN - NORTH SEGMENT
P2.4	WASTE, VENT & STORM DRAIN PIPING PLAN - SOUTH SEGMENT
P2.5	CONDENSATE DRAIN PIPING PLAN - NORTH SEGMENT
P2.6	CONDENSATE DRAIN PIPING PLAN - SOUTH SEGMENT
P2.7	PLUMBING MEZZANINE
P2.8	PARTIAL MEZZANINIE PLAN - BOILER ROOM
P3.0	PLUMBING ROOF PLAN
P4.0	PLUMBING ENLARGED PLANS
P4.1	PLUMBING ENLARGED PLANS
P5.0	PLUMBING PIPING DIAGRAMS
P6.0	PLUMBING DETAILS
E.01	ELECTRICAL NOTES, LEGEND AND ABBREVIATIONS
E.02	ELECTRICAL SCHEDULES
E.03	ELECTRICAL SCHEDULES
E.04	ELECTRICAL SCHEDULES
E.05	ELECTRICAL SCHEDULES
E.06	ELECTRICAL SINGLE LINE DIAGRAM
E.07	ELECTRICAL SINGLE LINE DIAGRAM (CONT)
E1.0	ELECTRICAL SITE PLAN
E2.1	POWER AND SIGNAL - NORTH SEGMENT

	E2.2	POWER AND SIGNAL - SOUTH SEGMENT
	E2.3	POWER AND SIGNAL MEZZANINE
	E3.1	LIGHTING PLAN - NORTH SEGMENT
	E3.2	LIGHTING PLAN - SOUTH SEGMENT
	E3.3	LIGHTING MEZZANINE
	E4.0	POWER ROOF PLAN
	E6.0	ELECTRICAL DETAILS
	E7.0	BLDG 4810, BLDG 4827, WELD SHOP DEMOLITION
	E8.0	LIGHTING CONTROL PANEL AND NOTES
	FA0.1	FIRE ALARM PLAN
	FA0.2	DRAWING SHEET LIST, NOTES, LEGENDS, FIRE ALARM SYSTEM OPERATIONS MATRIX
	FA1.1	FIRE ALARM FLOOR PLAN FIRST FLOOR - NORTH
	FA1.2	FIRE ALARM FLOOR PLAN FIRST FLOOR - SOUTH
	FA1.3	FIRE ALARM FLOOR PLAN -SECOND FLOOR
	FA2.1	FIRE ALARM RISER DIAGRAM CABINET #1
	FA2.2	FIRE ALARM RISER DIAGRAM CABINET #2
	FA3.1	FACP WIRING DIAGRAM CABINET #1
	FA3.2	FACP WIRING DIAGRAM CABINET # 2
	FA3.3	LOC PANEL WIRING DIAGRAM
	FA3.4	FIRE ALARM POWER SUPPLY WIRING DIAGRAMS
	FA3.5	MASS NOTIFICATION POWER SUPPLY WIRING DIAGRAMS
	FA4.1	DEVICE WIRING DETAILS
	FA4.2	DEVICE WIRING DETAILS
	FS1.0	FIRE PROTECTION PLAN
	FS1.1	FIRE PROTECTION SITE PLAN
	FS2.1	FIRE SPRINKLER PLAN FIRST FLOOR - SOUTH
	FS2.2	FIRE SPRINKLER PLAN FIRST FLOOR - NORTH
	FS2.3	FIRE SPRINKLER PLAN SECOND FLOOR
	FS3.0	FIRE SPRINKLER PLAN BUILDING SECTIONS
	FS4.0	FIRE SPRINKLER DETAILS
5	**36**	Report of Geotechnical Investigation

[END OF SECTION]

General Decision Number: CA100031 08/26/2011 CA31

Superseded General Decision Number: CA20080031

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

Counties: Inyo, Kern and Mono Counties in California.

BUILDING CONSTRUCTION PROJECTS; DREDGING PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS.

Modification Number	Publication Date
0	03/12/2010
1	03/26/2010
2	04/02/2010
3	04/16/2010
4	06/25/2010
5	07/02/2010
6	07/09/2010
7	07/23/2010
8	08/13/2010
9	08/27/2010
10	09/03/2010
11	09/10/2010
12	12/03/2010
13	01/21/2011
14	02/18/2011
15	03/18/2011
16	04/08/2011
17	04/15/2011
18	04/29/2011
19	05/06/2011
20	05/20/2011
21	05/27/2011
22	06/03/2011
23	06/10/2011
24	07/22/2011
25	07/29/2011
26	08/05/2011
27	08/19/2011
28	08/26/2011

ASBE0005-001 06/28/2010

INYO AND KERN

	Rates	Fringes

Fire Stop Technician (Application of Firestopping Materials for wall openings and penetrations in walls, floors, ceilings and curtain walls)	$ 24.21	13.76
Insulator/asbestos worker (Includes the application of all insulating materials, protective coverings, coatings & finishes to all types of mechanical systems)	$ 32.78	16.31

ASBE0005-005 06/28/2010

INYO AND KERN

	Rates	Fringes
Asbestos Removal worker/hazardous material handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not)	$ 18.70	8.65

ASBE0016-003 04/01/2011

MONO

	Rates	Fringes
Asbestos Workers/Insulator (Includes the application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems)	$ 40.65	16.75

BOIL0092-005 05/01/2011

INYO AND KERN

	Rates	Fringes
BOILERMAKER	$ 41.26	25.27

BOIL0549-003 01/01/2009

MONO COUNTY

	Rates	Fringes
BOILERMAKER	$ 37.01	22.25

BRCA0004-005 05/01/2011

	Rates	Fringes
BRICKLAYER; MARBLE SETTER	$ 35.05	11.40

BRCA0018-010 09/01/2009

	Rates	Fringes
TERRAZZO FINISHER	$ 26.59	9.62
TERRAZZO WORKER/SETTER	$ 33.63	10.46

BRCA0018-011 08/01/2009

	Rates	Fringes
TILE LAYER	$ 30.04	10.84

BRCA0018-012 06/01/2008

KERN

	Rates	Fringes
MARBLE FINISHER	$ 25.52	9.08
TILE FINISHER	$ 21.07	7.88

CARP0409-002 07/01/2008

	Rates	Fringes
Diver		
(1) Wet	$ 663.68	9.82
(2) Standby	$ 331.84	9.82
(3) Tender	$ 323.84	9.82
(4) Assistant Tender	$ 299.84	9.82

Amounts in "Rates' column are per day

CARP0409-005 07/01/2010

	Rates	Fringes
Drywall		
DRYWALL INSTALLER/LATHER	$ 37.35	11.08
STOCKER/SCRAPPER	$ 10.00	6.67

CARP0409-006 07/01/2008

	Rates	Fringes
CARPENTER		
(01) Carpenter, cabinet installer, insulation installer, floor worker and acoustical installer	$ 36.78	9.82
(02) Millwright	$ 37.85	9.82
(03) Pile driver; Derrick barge; Bridge or Dock Carpenter; Heavy framer; Rockslinger; Rock Bargeman; Scowman	$ 37.48	9.82
(04) Shingler (Commercial)	$ 36.91	9.82
(05) Table Power Saw Operator	$ 36.88	9.82
(06) Pneumatic Nailer or Power Stapler	$ 37.03	9.82
(07) Roof Loader of Shingles (Commercial)	$ 25.84	9.82
(08) Saw Filer	$ 36.87	9.82
(09) Scaffold Builder	$ 28.55	9.82

FOOTNOTE: Work of forming in the construction of open cut sewers or storm drains, on operations in which horizontal lagging is used in conjunction with steel H-Beams driven or placed in pre-drilled holes, for that portion of a lagged trench against which concrete is poured, namely, as a substitute for back forms (which work is performed by piledrivers): $0.13 per hour additional.

ELEC0011-002 07/25/2011

COMMUNICATIONS AND SYSTEMS WORK

	Rates	Fringes
Communications System		
Installer	$ 27.25	11.35
Technician	$ 30.23	8.85+3%

SCOPE OF WORK:
Installation, testing, service and maintenance of systems utilizing the transmission and/or transference of voice, sound, vision and digital for commercial, educational, security and entertainment purposes for the following: TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call systems, radio page, school intercom and sound, burglar alarms, fire alarm (see last paragraph below) and low voltage master clock systems in commercial buildings. Communication Systems that transmit or receive information

and/or control systems that are intrinsic to the above listed systems; inclusion or exclusion of terminations and testings of conductors determined by their function; excluding all other data systems or multiple systems which include control function or power supply; excluding installation of raceway systems, conduit systems, line voltage work, and energy management systems. Does not cover work performed at China Lake Naval Ordnance Test Station. Fire alarm work shall be performed at the current inside wireman total cost package.

ELEC0428-001 05/01/2011

	Rates	Fringes
CABLE SPLICER		
China Lake Naval Weaons Center, Edwards AFB	$ 42.10	3%+16.54
Remainder of Kern County	$ 36.47	3%+16.54
ELECTRICIAN		
China Lake Naval Weapons Center, Edwards AFB	$ 38.78	3%+16.54
Remainder of Kern County	$ 33.15	3%+16.54

ELEC0477-001 01/31/2011

INYO AND MONO

	Rates	Fringes
ELECTRICIAN	$ 34.85	3%+15.90

CABLE SPLICER: $1.00 above Electrician.
TUNNEL WORK: 10% above Electrician.

ELEC1245-001 06/01/2010

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer	$ 46.14	13.41
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment)	$ 36.85	12.36
(3) Groundman	$ 28.19	12.10
(4) Powderman	$ 41.20	12.53

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day

and day after Thanksgiving, Christmas Day

ELEV0018-001 01/01/2011

	Rates	Fringes
ELEVATOR MECHANIC	$ 46.58	21.785

FOOTNOTE:
PAID VACATION: Employer contributes 8% of regular hourly rate as vacation pay credit for employees with more than 5 years of service, and 6% for 6 months to 5 years of service.
PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

ENGI0012-003 07/01/2011

	Rates	Fringes
OPERATOR: Power Equipment (All Other Work)		
GROUP 1	$ 36.13	20.77
GROUP 2	$ 36.91	20.77
GROUP 3	$ 37.20	20.77
GROUP 4	$ 38.69	20.77
GROUP 5	$ 40.49	20.77
GROUP 6	$ 38.91	20.77
GROUP 8	$ 39.02	20.77
GROUP 9	$ 40.82	20.77
GROUP 10	$ 30.14	20.77
GROUP 11	$ 40.94	20.77
GROUP 12	$ 39.31	20.77
GROUP 13	$ 39.41	20.77
GROUP 14	$ 39.44	20.77
GROUP 15	$ 39.52	20.77
GROUP 16	$ 39.64	20.77
GROUP 17	$ 39.81	20.77
GROUP 18	$ 39.91	20.77
GROUP 19	$ 40.02	20.77
GROUP 20	$ 40.14	20.77
GROUP 21	$ 40.31	20.77
GROUP 22	$ 40.41	20.77
GROUP 23	$ 40.52	20.77
GROUP 24	$ 40.64	20.77
GROUP 25	$ 40.81	20.77
OPERATOR: Power Equipment (Cranes, Piledriving & Hoisting)		
GROUP 1	$ 37.48	20.77
GROUP 2	$ 38.26	20.77
GROUP 3	$ 38.55	20.77
GROUP 4	$ 38.69	20.77
GROUP 5	$ 38.91	20.77

GROUP 6	$ 39.02	20.77
GROUP 7	$ 39.14	20.77
GROUP 8	$ 39.31	20.77
GROUP 9	$ 39.48	20.77
GROUP 10	$ 40.48	20.77
GROUP 11	$ 41.48	20.77
GROUP 12	$ 42.48	20.77
GROUP 13	$ 43.48	20.77
OPERATOR: Power Equipment (Tunnel Work)		
GROUP 1	$ 37.98	20.77
GROUP 2	$ 38.76	20.77
GROUP 3	$ 39.05	20.77
GROUP 4	$ 39.19	20.77
GROUP 5	$ 39.41	20.77
GROUP 6	$ 39.52	20.77
GROUP 7	$ 39.64	20.77

PREMIUM PAY:
$3.75 per hour shall be paid on all Power Equipment Operator work on the followng Military Bases: China Lake Naval Reserve, Vandenberg AFB, Point Arguello, Seely Naval Base, Fort Irwin, Nebo Annex Marine Base, Marine Corp Logistics Base Yermo, Edwards AFB, 29 Palms Marine Base and Camp Pendleton

Workers required to suit up and work in a hazardous material environment: $2.00 per hour additional. Combination mixer and compressor operator on gunite work shall be classified as a concrete mobile mixer operator.

SEE ZONE DEFINITIONS AFTER CLASSIFICATIONS

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Bargeman; Brakeman; Compressor operator; Ditch Witch, with seat or similar type equipment; Elevator operator-inside; Engineer Oiler; Forklift operator (includes loed, lull or similar types under 5 tons; Generator operator; Generator, pump or compressor plant operator; Pump operator; Signalman; Switchman

GROUP 2: Asphalt-rubber plant operator (nurse tank operator); Concrete mixer operator-skip type; Conveyor operator; Fireman; Forklift operator (includes loed, lull or similar types over 5 tons; Hydrostatic pump operator; oiler crusher (asphalt or concrete plant); Petromat laydown machine; PJU side dum jack; Screening and conveyor machine operator (or similar types); Skiploader (wheel type up to 3/4 yd. without attachment); Tar pot fireman; Temporary heating plant operator; Trenching machine oiler

GROUP 3: Asphalt-rubber blend operator; Bobcat or similar type (Skid steer); Equipment greaser (rack); Ford Ferguson

(with dragtype attachments); Helicopter radioman (ground); Stationary pipe wrapping and cleaning machine operator

GROUP 4: Asphalt plant fireman; Backhoe operator (mini-max or similar type); Boring machine operator; Boxman or mixerman (asphalt or concrete); Chip spreading machine operator; Concrete cleaning decontamination machine operator; Concrete Pump Operator (small portable); Drilling machine operator, small auger types (Texoma super economatic or similar types - Hughes 100 or 200 or similar types - drilling depth of 30' maximum); Equipment greaser (grease truck); Guard rail post driver operator; Highline cableway signalman; Horizontal Directional Drilling Machine; Hydra-hammer-aero stomper; Micro Tunneling (above ground tunnel); Power concrete curing machine operator; Power concrete saw operator; Power-driven jumbo form setter operator; Power sweeper operator; Rock Wheel Saw/Trencher; Roller operator (compacting); Screed operator (asphalt or concrete); Trenching machine operator (up to 6 ft.); Vacuum or much truck

GROUP 5: Equipment Greaser (Grease Truck/Multi Shift).

GROUP 6: Articulating material hauler; Asphalt plant engineer; Batch plant operator; Bit sharpener; Concrete joint machine operator (canal and similar type); Concrete planer operator; Dandy digger; Deck engine operator; Derrickman (oilfield type); Drilling machine operator, bucket or auger types (Calweld 100 bucket or similar types - Watson 1000 auger or similar types - Texoma 330, 500 or 600 auger or similar types - drilling depth of 45' maximum); Drilling machine operator; Hydrographic seeder machine operator (straw, pulp or seed), Jackson track maintainer, or similar type; Kalamazoo Switch tamper, or similar type; Machine tool operator; Maginnis internal full slab vibrator, Mechanical berm, curb or gutter(concrete or asphalt); Mechanical finisher operator (concrete, Clary-Johnson-Bidwell or similar); Micro tunnel system (below ground); Pavement breaker operator (truck mounted); Road oil mixing machine operator; Roller operator (asphalt or finish), rubber-tired earth moving equipment (single engine, up to and including 25 yds. struck); Self-propelled tar pipelining machine operator; Skiploader operator (crawler and wheel type, over 3/4 yd. and up to and including 1-1/2 yds.); Slip form pump operator (power driven hydraulic lifting device for concrete forms); Tractor operator-bulldozer, tamper-scraper (single engine, up to 100 h.p. flywheel and similar types, up to and including D-5 and similar types); Tugger hoist operator (1 drum); Ultra high pressure waterjet cutting tool system operator; Vacuum blasting machine operator

GROUP 8: Asphalt or concrete spreading operator (tamping or finishing); Asphalt paving machine operator (Barber Greene

or similar type); Asphalt-rubber distribution operator; Backhoe operator (up to and including 3/4 yd.), small ford, Case or similar; Cast-in-place pipe laying machine operator; Combination mixer and compressor operator (gunite work); Compactor operator (self-propelled); Concrete mixer operator (paving); Crushing plant operator; Drill Doctor; Drilling machine operator, Bucket or auger types (Calweld 150 bucket or similar types - Watson 1500, 2000 2500 auger or similar types - Texoma 700, 800 auger or similar types - drilling depth of 60' maximum); Elevating grader operator; Grade checker; Gradall operator; Grouting machine operator; Heavy-duty repairman; Heavy equipment robotics operator; Kalamazoo balliste regulator or similar type; Kolman belt loader and similar type; Le Tourneau blob compactor or similar type; Loader operator (Athey, Euclid, Sierra and similar types); Mobark Chipper or similar; Ozzie padder or similar types; P.C. slot saw; Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pumpcrete gun operator; Rock Drill or similar types; Rotary drill operator (excluding caisson type); Rubber-tired earth-moving equipment operator (single engine, caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator (multiple engine up to and including 25 yds. struck); Rubber-tired scraper operator (self-loading paddle wheel type-John Deere, 1040 and similar single unit); Self-propelled curb and gutter machine operator; Shuttle buggy; Skiploader operator (crawler and wheel type over 1-1/2 yds. up to and including 6-1/2 yds.); Soil remediation plant operator; Surface heaters and planer operator; Tractor compressor drill combination operator; Tractor operator (any type larger than D-5 - 100 flywheel h.p. and over, or similar-bulldozer, tamper, scraper and push tractor single engine); Tractor operator (boom attachments), Traveling pipe wrapping, cleaning and bendng machine operator; Trenching machine operator (over 6 ft. depth capacity, manufacturer's rating); trenching Machine with Road Miner attachment (over 6 ft depth capacity): Ultra high pressure waterjet cutting tool system mechanic; Water pull (compaction) operator

GROUP 9: Heavy Duty Repairman

GROUP 10: Drilling machine operator, Bucket or auger types (Calweld 200 B bucket or similar types-Watson 3000 or 5000 auger or similar types-Texoma 900 auger or similar types-drilling depth of 105' maximum); Dual drum mixer, dynamic compactor LDC350 (or similar types); Monorail locomotive operator (diesel, gas or electric); Motor patrol-blade operator (single engine); Multiple engine tractor operator (Euclid and similar type-except Quad 9 cat.); Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Pneumatic pipe ramming tool

and similar types; Prestressed wrapping machine operator; Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Rubber tired earth moving equipment operator (multiple engine, Euclid, caterpillar and similar over 25 yds. and up to 50 yds. struck), Tower crane repairman; Tractor loader operator (crawler and wheel type over 6-1/2 yds.); Woods mixer operator (and similar Pugmill equipment)

GROUP 11: Heavy Duty Repairman - Welder Combination, Welder - Certified.

GROUP 12: Auto grader operator; Automatic slip form operator; Drilling machine operator, bucket or auger types (Calweld, auger 200 CA or similar types - Watson, auger 6000 or similar types - Hughes Super Duty, auger 200 or similar types - drilling depth of 175' maximum); Hoe ram or similar with compressor; Mass excavator operator less tha 750 cu. yards; Mechanical finishing machine operator; Mobile form traveler operator; Motor patrol operator (multi-engine); Pipe mobile machine operator; Rubber-tired earth- moving equipment operator (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck); Rubber-tired self- loading scraper operator (paddle-wheel-auger type self-loading - two (2) or more units)

GROUP 13: Rubber-tired earth-moving equipment operator operating equipment with push-pull system (single engine, up to and including 25 yds. struck)

GROUP 14: Canal liner operator; Canal trimmer operator; Remote- control earth-moving equipment operator (operating a second piece of equipment: $1.00 per hour additional); Wheel excavator operator (over 750 cu. yds.)

GROUP 15: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine-up to and including 25 yds. struck)

GROUP 16: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 17: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 50 cu. yds. struck); Tandem tractor operator (operating crawler type tractors in

tandem - Quad 9 and similar type)

GROUP 18: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, up to and including 25 yds. struck)

GROUP 19: Rotex concrete belt operator (or similar types); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds.and up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, up to and including 25 yds. struck)

GROUP 20: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 21: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

GROUP 22: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, up to and including 25 yds. struck)

GROUP 23: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating with the tandem push-pull system (multiple engine, up to and including 25 yds. struck)

GROUP 24: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 25: Concrete pump operator-truck mounted; Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

CRANES, PILEDRIVING AND HOISTING EQUIPMENT CLASSIFICATIONS

GROUP 1: Engineer oiler; Fork lift operator (includes loed, lull or similar types)

GROUP 2: Truck crane oiler

GROUP 3: A-frame or winch truck operator; Ross carrier operator (jobsite)

GROUP 4: Bridge-type unloader and turntable operator; Helicopter hoist operator

GROUP 5: Hydraulic boom truck; Stinger crane (Austin-Western or similar type); Tugger hoist operator (1 drum)

GROUP 6: Bridge crane operator; Cretor crane operator; Hoist operator (Chicago boom and similar type); Lift mobile operator; Lift slab machine operator (Vagtborg and similar types); Material hoist and/or manlift operator; Polar gantry crane operator; Self Climbing scaffold (or similar type); Shovel, backhoe, dragline, clamshell operator (over 3/4 yd. and up to 5 cu. yds. mrc); Tugger hoist operator

GROUP 7: Pedestal crane operator; Shovel, backhoe, dragline, clamshell operator (over 5 cu. yds. mrc); Tower crane repair; Tugger hoist operator (3 drum)

GROUP 8: Crane operator (up to and including 25 ton capacity); Crawler transporter operator; Derrick barge operator (up to and including 25 ton capacity); Hoist operator, stiff legs, Guy derrick or similar type (up to and including 25 ton capacity); Shovel, backhoe, dragline, clamshell operator (over 7 cu. yds., M.R.C.)

GROUP 9: Crane operator (over 25 tons and up to and including 50 tons mrc); Derrick barge operator (over 25 tons up to and including 50 tons mrc); Highline cableway operator; Hoist operator, stiff legs, Guy derrick or similar type (over 25 tons up to and including 50 tons mrc); K-crane operator; Polar crane operator; Self erecting tower crane operator maximum lifting capacity ten tons

GROUP 10: Crane operator (over 50 tons and up to and including 100 tons mrc); Derrick barge operator (over 50 tons up to and including 100 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 50 tons up to and including 100 tons mrc), Mobile tower crane operator

(over 50 tons, up to and including 100 tons M.R.C.); Tower crane operator and tower gantry

GROUP 11: Crane operator (over 100 tons and up to and including 200 tons mrc); Derrick barge operator (over 100 tons up to and including 200 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 100 tons up to and including 200 tons mrc); Mobile tower crane operator (over 100 tons up to and including 200 tons mrc)

GROUP 12: Crane operator (over 200 tons up to and including 300 tons mrc); Derrick barge operator (over 200 tons up to and including 300 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 200 tons, up to and including 300 tons mrc); Mobile tower crane operator (over 200 tons, up to and including 300 tons mrc)

GROUP 13: Crane operator (over 300 tons); Derrick barge operator (over 300 tons); Helicopter pilot; Hoist operator, stiff legs, Guy derrick or similar type (over 300 tons); Mobile tower crane operator (over 300 tons)

TUNNEL CLASSIFICATIONS

GROUP 1: Skiploader (wheel type up to 3/4 yd. without attachment)

GROUP 2: Power-driven jumbo form setter operator

GROUP 3: Dinkey locomotive or motorperson (up to and including 10 tons)

GROUP 4: Bit sharpener; Equipment greaser (grease truck); Slip form pump operator (power-driven hydraulic lifting device for concrete forms); Tugger hoist operator (1 drum); Tunnel locomotive operator (over 10 and up to and including 30 tons)

GROUP 5: Backhoe operator (up to and including 3/4 yd.); Small Ford, Case or similar; Drill doctor; Grouting machine operator; Heading shield operator; Heavy-duty repairperson; Loader operator (Athey, Euclid, Sierra and similar types); Mucking machine operator (1/4 yd., rubber-tired, rail or track type); Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pneumatic heading shield (tunnel); Pumpcrete gun operator; Tractor compressor drill combination operator; Tugger hoist operator (2 drum); Tunnel locomotive operator (over 30 tons)

GROUP 6: Heavy Duty Repairman

GROUP 7: Tunnel mole boring machine operator

ENGINEERS ZONES

$1.00 additional per hour for all of IMPERIAL County and the portions of KERN, RIVERSIDE & SAN BERNARDINO Counties as defined below:

That area within the following Boundary: Begin in San Bernardino County, approximately 3 miles NE of the intersection of I-15 and the California State line at that point which is the NW corner of Section 1, T17N,m R14E, San Bernardino Meridian. Continue W in a straight line to that point which is the SW corner of the northwest quarter of Section 6, T27S, R42E, Mt. Diablo Meridian. Continue North to the intersection with the Inyo County Boundary at that point which is the NE corner of the western half of the northern quarter of Section 6, T25S, R42E, MDM. Continue W along the Inyo and San Bernardino County boundary until the intersection with Kern County, as that point which is the SE corner of Section 34, T24S, R40E, MDM. Continue W along the Inyo and Kern County boundary until the intersection with Tulare County, at that point which is the SW corner of the SE quarter of Section 32, T24S, R37E, MDM. Continue W along the Kern and Tulare County boundary, until that point which is the NW corner of T25S, R32E, MDM. Continue S following R32E lines to the NW corner of T31S, R32E, MDM. Continue W to the NW corner of T31S, R31E, MDM. Continue S to the SW corner of T32S, R31E, MDM. Continue W to SW corner of SE quarter of Section 34, T32S, R30E, MDM. Continue S to SW corner of T11N, R17W, SBM. Continue E along south boundary of T11N, SBM to SW corner of T11N, R7W, SBM. Continue S to SW corner of T9N, R7W, SBM. Continue E along south boundary of T9N, SBM to SW corner of T9N, R1E, SBM. Continue S along west boundary of R1E, SMB to Riverside County line at the SW corner of T1S, R1E, SBM. Continue E along south boundary of T1s, SBM (Riverside County Line) to SW corner of T1S, R10E, SBM. Continue S along west boundary of R10E, SBM to Imperial County line at the SW corner of T8S, R10E, SBM. Continue W along Imperial and Riverside county line to NW corner of T9S, R9E, SBM. Continue S along the boundary between Imperial and San Diego Counties, along the west edge of R9E, SBM to the south boundary of Imperial County/California state line. Follow the California state line west to Arizona state line, then north to Nevada state line, then continuing NW back to start at the point which is the NW corner of Section 1, T17N, R14E, SBM

$1.00 additional per hour for portions of SAN LUIS OBISPO, KERN, SANTA BARBARA & VENTURA as defined below:

That area within the following Boundary: Begin approximately 5 miles north of the community of Cholame, on the Monterey County and San Luis Obispo County boundary at the NW corner of T25S, R16E, Mt. Diablo Meridian. Continue south along the west side of R16E to the SW corner of T30S, R16E, MDM. Continue E to SW corner of T30S, R17E, MDM. Continue S to SW corner of T31S, R17E, MDM. Continue E to SW corner of T31S, R18E, MDM.

Continue S along West side of R18E, MDM as it crosses into San Bernardino Meridian numbering area and becomes R30W. Follow the west side of R30W, SBM to the SW corner of T9N, R30W, SBM. Continue E along the south edge of T9N, SBM to the Santa Barbara County and Ventura County boundary at that point whch is the SW corner of Section 34.T9N, R24W, SBM, continue S along the Ventura County line to that point which is the SW corner of the SE quarter of Section 32, T7N, R24W, SBM. Continue E along the south edge of T7N, SBM to the SE corner to T7N, R21W, SBM. Continue N along East side of R21W, SBM to Ventura County and Kern County boundary at the NE corner of T8N, R21W. Continue W along the Ventura County and Kern County boundary to the SE corner of T9N, R21W. Continue North along the East edge of R21W, SBM to the NE corner of T12N, R21W, SBM. Continue West along the north edge of T12N, SBM to the SE corner of T32S, R21E, MDM. [T12N SBM is a think strip between T11N SBM and T32S MDM]. Continue North along the East side of R21E, MDM to the Kings County and Kern County border at the NE corner of T25S, R21E, MDM, continue West along the Kings County and Kern County Boundary until the intersection of San Luis Obispo County. Continue west along the Kings County and San Luis Obispo County boundary until the intersection with Monterey County. Continue West along the Monterey County and San Luis Obispo County boundary to the beginning point at the NW corner of T25S, R16E, MDM.

$2.00 additional per hour for INYO and MONO Counties and the Northern portion of SAN BERNARDINO County as defined below:

That area within the following Boundary: Begin at the intersection of the northern boundary of Mono County and the California state line at the point which is the center of Section 17, T10N, R22E, Mt. Diablo Meridian. Continue S then SE along the entire western boundary of Mono County, until it reaches Inyo County at the point which is the NE corner of the Western half of the NW quarter of Section 2, T8S, R29E, MDM. Continue SSE along the entire western boundary of Inyo County, until the intersection with Kern County at the point which is the SW corner of the SE Â¼ of Section 32, T24S, R37E, MDM. Continue E along the Inyo and Kern County boundary until the intersection with San Bernardino County at that point which is the SE corner of section 34, T24S, R40E, MDM. Continue E along the Inyo and San Bernardino County boundary until the point which is the NE corner of the Western half of the NW quarter of Section 6, T25S, R42E, MDM. Continue S to that point which is the SW corner of the NW quarter of Section 6, T27S, R42E, MDM. Continue E in a straight line to the California and Nevada state border at the point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Then continue NW along the state line to the starting point, which is the center of Section 18, T10N, R22E, MDM.

REMAINING AREA NOT DEFINED ABOVE RECIEVES BASE RATE

ENGI0012-004 08/01/2009

	Rates	Fringes
OPERATOR: Power Equipment (DREDGING)		
(1) Leverman	$ 44.83	17.22
(2) Dredge dozer	$ 40.36	17.22
(3) Deckmate	$ 40.25	17.22
(4) Winch operator (stern winch on dredge)	$ 39.70	17.22
(5) Fireman-Oiler, Deckhand, Bargeman, Leveehand	$ 39.16	17.22
(6) Barge Mate	$ 39.77	17.22

IRON0002-004 07/01/2010

	Rates	Fringes
Ironworkers:		
Fence Erector	$ 26.58	15.26
Ornamental, Reinforcing and Structural	$ 33.00	23.73

PREMIUM PAY:

$6.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland,
Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0300-001 07/01/2011

	Rates	Fringes
Brick Tender	$ 27.17	16.71

LABO0300-003 07/01/2011

	Rates	Fringes
LABORER (GUNITE)		
GROUP 1	$ 30.04	14.20
GROUP 2	$ 29.09	14.20
GROUP 3	$ 25.55	14.20
LABORER (TUNNEL)		
GROUP 1	$ 32.20	15.98
GROUP 2	$ 32.52	15.98
GROUP 3	$ 32.98	15.98
GROUP 4	$ 33.67	15.98
LABORER		
GROUP 1	$ 26.33	16.00
GROUP 2	$ 26.88	16.00
GROUP 3	$ 27.43	16.00
GROUP 4	$ 28.98	16.00
GROUP 5	$ 29.33	16.00

FOOTNOTE: GUNITE PREMIUM PAY: Workers working from a Bosn'n's Chair or suspended from a rope or cable shall receive 40 cents per hour above the foregoing applicable classification rates. Workers doing gunite and/or shotcrete work in a tunnel shall receive 35 cents per hour above the foregoing applicable classification rates, paid on a portal-to-portal basis. Any work performed on, in or above any smoke stack, silo, storage elevator or similar type of structure, when such structure is in excess of 75'-0" above base level and which work must be performed in whole or in part more than 75'-0" above base level, that work performed above the 75'-0" level shall be compensated for at 35 cents per hour above the applicable classification wage rate.

LABORER CLASSIFICATIONS

GROUP 1: Cleaning and handling of panel forms; Concrete screeding for rough strike-off; Concrete, water curing; Demolition laborer, the cleaning of brick if performed by a worker performing any other phase of demolition work, and the cleaning of lumber; Fire watcher, limber, brush loader, piler and debris handler; Flag person; Gas, oil and/or water pipeline laborer; Laborer, asphalt-rubber material loader; Laborer, general or construction; Laborer, general clean-up; Laborer, landscaping; Laborer, jetting; Laborer, temporary water and air lines; Material hose operator (walls, slabs, floors and decks); Plugging, filling of shee bolt holes; Dry packing of concrete; Railroad maintenance, repair track person and road beds; Streetcar and railroad construction track laborers; Rigging and signaling; Scaler; Slip form raiser; Tar and mortar; Tool crib or tool house laborer; Traffic control by any method; Window cleaner;

Wire mesh pulling - all concrete pouring operations

GROUP 2: Asphalt shoveler; Cement dumper (on 1 yd. or larger mixer and handling bulk cement); Cesspool digger and installer; Chucktender; Chute handler, pouring concrete, the handling of the chute from readymix trucks, such as walls, slabs, decks, floors, foundation, footings, curbs, gutters and sidewalks; Concrete curer, impervious membrane and form oiler; Cutting torch operator (demolition); Fine grader, highways and street paving, airport, runways and similar type heavy construction; Gas, oil and/or water pipeline wrapper - pot tender and form person; Guinea chaser; Headerboard person - asphalt; Laborer, packing rod steel and pans; Membrane vapor barrier installer; Power broom sweeper (small); Riprap stonepaver, placing stone or wet sacked concrete; Roto scraper and tiller; Sandblaster (pot tender); Septic tank digger and installer(lead); Tank scaler and cleaner; Tree climber, faller, chain saw operator, Pittsburgh chipper and similar type brush shredder; Underground laborer, including caisson bellower

GROUP 3: Buggymobile person; Concrete cutting torch; Concrete pile cutter; Driller, jackhammer, 2-1/2 ft. drill steel or longer; Dri-pak-it machine; Gas, oil and/or water pipeline wrapper, 6-in. pipe and over, by any method, inside and out; High scaler (including drilling of same); Hydro seeder and similar type; Impact wrench multi-plate; Kettle person, pot person and workers applying asphalt, lay-kold, creosote, lime caustic and similar type materials ("applying" means applying, dipping, brushing or handling of such materials for pipe wrapping and waterproofing); Operator of pneumatic, gas, electric tools, vibrating machine, pavement breaker, air blasting, come-alongs, and similar mechanical tools not separately classified herein; Pipelayer's backup person, coating, grouting, making of joints, sealing, caulking, diapering and including rubber gasket joints, pointing and any and all other services; Rock slinger; Rotary scarifier or multiple head concrete chipping scarifier; Steel headerboard and guideline setter; Tamper, Barko, Wacker and similar type; Trenching machine, hand-propelled

GROUP 4: Asphalt raker, lute person, ironer, asphalt dump person, and asphalt spreader boxes (all types); Concrete core cutter (walls, floors or ceilings), grinder or sander; Concrete saw person, cutting walls or flat work, scoring old or new concrete; Cribber, shorer, lagging, sheeting and trench bracing, hand-guided lagging hammer; Head rock slinger; Laborer, asphalt- rubber distributor boot person; Laser beam in connection with laborers' work; Oversize concrete vibrator operator, 70 lbs. and over; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of

tubular material, whether pipe, metallic or non-metallic, conduit and any other stationary type of tubular device used for the conveying of any substance or element, whether water, sewage, solid gas, air, or other product whatsoever and without regard to the nature of material from which the tubular material is fabricated; No-joint pipe and stripping of same; Prefabricated manhole installer; Sandblaster (nozzle person), water blasting, Porta Shot-Blast

GROUP 5: Blaster powder, all work of loading holes, placing and blasting of all powder and explosives of whatever type, regardless of method used for such loading and placing; Driller: All power drills, excluding jackhammer, whether core, diamond, wagon, track, multiple unit, and any and all other types of mechanical drills without regard to the form of motive power; Toxic waste removal

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Batch plant laborer; Bull gang mucker, track person; Changehouse person; Concrete crew, including rodder and spreader; Dump person; Dump person (outside); Swamper (brake person and switch person on tunnel work); Tunnel materials handling person

GROUP 2: Chucktender, cabletender; Loading and unloading agitator cars; Nipper; Pot tender, using mastic or other materials (for example, but not by way of limitation, shotcrete, etc.); Vibrator person, jack hammer, pneumatic tools (except driller)

GROUP 3: Blaster, driller, powder person; Chemical grout jet person; Cherry picker person; Grout gun person; Grout mixer person; Grout pump person; Jackleg miner; Jumbo person; Kemper and other pneumatic concrete placer operator; Miner, tunnel (hand or machine); Nozzle person; Operating of troweling and/or grouting machines; Powder person (primer house); Primer person; Sandblaster; Shotcrete person; Steel form raiser and setter; Timber person, retimber person, wood or steel; Tunnel Concrete finisher

GROUP 4: Diamond driller; Sandblaster; Shaft and raise work

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Rodmen, Nozzlemen

GROUP 2: Gunmen

GROUP 3: Reboundmen

LABO0882-002 01/01/2010

	Rates	Fringes
Asbestos Removal Laborer.....	$ 26.15	11.65

SCOPE OF WORK: Includes site mobilization, initial site cleanup, site preparation, removal of asbestos-containing material and toxic waste, encapsulation, enclosure and disposal of asbestos- containing materials and toxic waste by hand or with equipment or machinery; scaffolding, fabrication of temporary wooden barriers and assembly of decontamination stations.

LABO1184-001 07/01/2011

	Rates	Fringes
Laborers: (HORIZONTAL DIRECTIONAL DRILLING)		
(1) Drilling Crew Laborer...	$ 28.01	11.48
(2) Vehicle Operator/Hauler.	$ 28.18	11.48
(3) Horizontal Directional Drill Operator.....	$ 30.03	11.48
(4) Electronic Tracking Locator.....	$ 32.03	11.48
Laborers: (STRIPING/SLURRY SEAL)		
GROUP 1.....	$ 28.50	14.56
GROUP 2.....	$ 29.80	14.56
GROUP 3.....	$ 31.81	14.56
GROUP 4.....	$ 33.55	14.56

LABORERS - STRIPING CLASSIFICATIONS

GROUP 1: Protective coating, pavement sealing, including repair and filling of cracks by any method on any surface in parking lots, game courts and playgrounds; carstops; operation of all related machinery and equipment; equipment repair technician

GROUP 2: Traffic surface abrasive blaster; pot tender - removal of all traffic lines and markings by any method (sandblasting, waterblasting, grinding, etc.) and preparation of surface for coatings. Traffic control person: controlling and directing traffic through both conventional and moving lane closures; operation of all related machinery and equipment

GROUP 3: Traffic delineating device applicator: Layout and application of pavement markers, delineating signs, rumble and traffic bars, adhesives, guide markers, other traffic delineating devices including traffic control. This category includes all traffic related surface preparation (sandblasting, waterblasting, grinding) as part of the application process. Traffic protective delineating system

installer: removes, relocates, installs, permanently affixed roadside and parking delineation barricades, fencing, cable anchor, guard rail, reference signs, monument markers; operation of all related machinery and equipment; power broom sweeper

GROUP 4: Striper: layout and application of traffic stripes and markings; hot thermo plastic; tape traffic stripes and markings, including traffic control; operation of all related machinery and equipment

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PAIN0036-009 01/05/2011

	Rates	Fringes
DRYWALL FINISHER/TAPER	$ 33.22	12.94

PAIN0036-021 01/01/2011

	Rates	Fringes
Painters: (Including Lead Abatement)		
(1) Journeyman Painter	$ 25.20	10.08
(2) Repaint	$ 23.10	10.08
(3) High Iron & Steel - Kern County only	$ 27.20	10.08
(4) All other work	$ 29.32	10.08
(5) Industrial	$ 29.32	10.08

REPAINT of any previously painted structure. Exceptions: work involving the aerospace industry, breweries, commercial recreational facilities, hotels which operate commercial establishments as part of hotel service, and sports facilities.
HIGH IRON & STEEL:

Aerial towers, towers, radio towers, smoke stacks, flag poles (any flag poles that can be finished from the ground with a ladder excluded), elevated water towers, steeples and domes in their entirety and any other extremely high and hazardous work, cooning steel, bos'n chair, or other similar devices, painting in other high hazardous work shall be classified as high iron & steel

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* PAIN0169-002 07/01/2011

	Rates	Fringes
GLAZIER	$ 27.07	9.98

PAIN1247-001 09/01/2009

	Rates	Fringes

SOFT FLOOR LAYER.....$ 20.27 8.79

PLAS0200-007 08/01/2011

	Rates	Fringes
PLASTERER	$ 35.29	12.05

U.S. MARINE CORPS-PICKLE MEADOW & MOUNTAIN WARFARE TRAINING CENTER:
$3.00 additinal per hour.

PLAS0500-002 07/16/2011

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 30.75	11.45

PLUM0345-001 07/01/2011

	Rates	Fringes
PLUMBER		
Landscape/Irrigation Fitter	$ 27.35	16.34
Sewer & Storm Drain Work	$ 26.82	18.18

PLUM0460-002 07/01/2011

	Rates	Fringes
PLUMBER (Plumber, Pipefitter, Steamfitter, Refrigeration)		
0 to 40 miles radius from 6718 Meany Avenue in Bakersfield	$ 35.47	19.35
0 to 50 miles radius from 6718 Meany Avenue in Bakersfield	$ 34.98	17.64
40 to 75 miles radius	$ 39.97	19.35
50 to 75 miles radius	$ 39.39	17.64
75 miles radius or more	$ 41.89	17.64
75 miles to 100 miles radium	$ 42.47	19.35
over 100 miles radium	$ 45.97	19.35

FOOTNOTE: Work from a swinging scaffold, swinging basket, spider or from a bosun chair: 10% above the regular rate of pay for that day.

ROOF0027-001 09/01/2010

	Rates	Fringes

ROOFER.....$ 27.65 8.07

FOOTNOTE: Work with pitch, pitch base of pitch impregnated products or any material containing coal tar pitch, on any building old or new, where both asphalt and pitchers are used in the application of a built-up roof or tear off: $2.00 per hour additional.

SFCA0669-007 04/01/2011

	Rates	Fringes
SPRINKLER FITTER	$ 33.35	17.75

SHEE0105-003 07/01/2011

LOS ANGELES (South of a straight line drawn between Gorman and Big Pines)and Catalina Island, INYO, KERN (Northeast part, East of Hwy 395), MONO ORANGE, RIVERSIDE, AND SAN BERNARDINO COUNTIES

	Rates	Fringes
SHEET METAL WORKER		
(1) Commercial - New Construction and Remodel work	$ 42.05	19.01
(2) Industrial work including air pollution control systems, noise abatement, hand rails, guard rails, excluding aritechtural sheet metal work, excluding A-C, heating, ventilating systems for human comfort	$ 36.16	25.20

SHEE0105-004 07/01/2011

KERN (Excluding portion East of Hwy 395) & LOS ANGELES (North of a straight line drawn between Gorman and Big Pines including Cities of Lancaster and Palmdale) COUNTIES

	Rates	Fringes
SHEET METAL WORKER	$ 36.16	25.20

TEAM0011-002 07/01/2008

	Rates	Fringes
TRUCK DRIVER		
GROUP 1	$ 26.44	18.24

GROUP 2	$ 26.59	18.24
GROUP 3	$ 26.72	18.24
GROUP 4	$ 26.91	18.24
GROUP 5	$ 26.94	18.24
GROUP 6	$ 26.97	18.24
GROUP 7	$ 27.22	18.24
GROUP 8	$ 27.47	18.24
GROUP 9	$ 27.67	18.24
GROUP 10	$ 27.97	18.24
GROUP 11	$ 28.47	18.24
GROUP 12	$ 28.90	18.24

WORK ON ALL MILITARY BASES:
PREMIUM PAY: $3.00 per hour additional.
[29 palms Marine Base, Camp Roberts, China Lake, Edwards AFB, El Centro Naval Facility, Fort Irwin, Marine Corps Logistics Base at Nebo & Yermo, Mountain Warfare Training Center, Bridgeport, Point Arguello, Point Conception, Vandenberg AFB]

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Truck driver

GROUP 2: Driver of vehicle or combination of vehicles - 2 axles; Traffic control pilot car excluding moving heavy equipment permit load; Truck mounted broom

GROUP 3: Driver of vehicle or combination of vehicles - 3 axles; Boot person; Cement mason distribution truck; Fuel truck driver; Water truck - 2 axle; Dump truck, less than 16 yds. water level; Erosion control driver

GROUP 4: Driver of transit mix truck, under 3 yds.; Dumpcrete truck, less than 6-1/2 yds. water level

GROUP 5: Water truck, 3 or more axles; Truck greaser and tire person ($0.50 additional for tire person); Pipeline and utility working truck driver, including winch truck and plastic fusion, limited to pipeline and utility work; Slurry truck driver

GROUP 6: Transit mix truck, 3 yds. or more; Dumpcrete truck, 6-1/2 yds. water level and over; Vehicle or combination of vehicles - 4 or more axles; Oil spreader truck; Dump truck, 16 yds. to 25 yds. water level

GROUP 7: A Frame, Swedish crane or similar; Forklift driver; Ross carrier driver

GROUP 8: Dump truck, 25 yds. to 49 yds. water level; Truck repair person; Water pull - single engine; Welder

GROUP 9: Truck repair person/welder; Low bed driver, 9 axles or over

GROUP 10: Dump truck - 50 yds. or more water level; Water pull - single engine with attachment

GROUP 11: Water pull - twin engine; Water pull - twin engine with attachments; Winch truck driver - $1.25 additional when operating winch or similar special attachments

GROUP 12: Boom Truck 17K and above

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the

Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

REPORT OF GEOTECHNICAL INVESTIGATION

DRYDEN FLIGHT RESEARCH CENTER
FACILITIES SUPPORT CENTER
EDWARDS AFB

December 1, 2009

TABLE OF CONTENTS

APPENDIX

REPORT OF GEOTECHNICAL INVESTIGATION
DRYDEN FLIGHT RESEARCH CENTER
FACILITIES SUPPORT CENTER
EDWARDS AFB

Introduction

At your request, we have performed a geotechnical investigation at the property located at Edwards AFB as described in this report. The following is a detailed report of our findings, results of laboratory testing and recommendations for foundation design.

Purpose

The purpose of the investigation was to determine the depth of soil and the condition of the subsoils on the property and to provide recommendations for a foundation for the new one-story steel-framed and masonry structure. The test results were used to determine the thickness and strength of the soil and the depth to competent material in order to support the foundation safely.

The new structure will have conventional spread footings resting on weathered granite bedrock or compacted fill. The structure is proposed to have a reinforced concrete slab-on-grade floor.

Scope

The scope of the investigation was as follows:

1. Perform five truck-mounted hollow stem auger borings to a maximum depth of 20 feet. The boring locations are shown on Figure 2. During excavation procedures, samples of the subsurface materials were obtained for laboratory testing. The borings met refusal in hard granite bedrock.

2. Perform laboratory testing to determine the moisture content, density, shear strength, maximum density, consolidation, expansion potential, corrosivity relative compaction of the subsurface soils.

3. Provide a report of findings, results of laboratory testing, and foundation design recommendations for the site.

The boring locations, laboratory test data and related information are included in the Appendix to this report.

Field Investigation

Five hollow stem auger borings were performed to a maximum depth of 20 feet. The boring locations are shown on Figure 2. The hollow stem auger was a two-axle truck-mounted model rig, which would be classified as a light duty auger rig.

Samples were retrieved during excavation and logging using a 2.5-inch I.D. California ring sampler. Both undisturbed and bulk samples were obtained. Fill material ranges to a depth of one to three feet. Samples were collected using a 140-pound hammer dropping 30 inches. Groundwater was not encountered during our investigation. No groundwater is expected.

Laboratory Investigation

The ring samples obtained from the borings were preserved in a relatively undisturbed condition. Both the ring samples and bulk samples were transported to our laboratory in Irvine for testing. Tests were performed for moisture content, density, shear strength, maximum density, consolidation, expansion potential, corrosivity and relative compaction. The samples reflect the subsurface soils encountered in the borings. Results of laboratory test are included in the Appendix. All tests were performed according to the latest ASTM Standards and Kern County procedures. Our soils laboratory is a City of Los Angeles certified laboratory.

Site Description

The site is a gently sloping pad with a small slope on the southeast and southwest sides. The southeast descending slope is approximately 15 feet tall at approximately 3:1 (horizontal to vertical). There is some slope to the site since it is previously graded. The site is inside the NASA/Dryden Facility on Edwards Air Force Base north of Palmdale, California. There is a roadway and fire line crossing the site. The slope is very stable.

Subsurface Soil Conditions

The soils conditions consist of medium dense sand and silty sand in the upper two to three feet underlain by decomposed granite which gets harder with depth. In most areas, the rock is hard at four to five feet and the drill met refusal at 16 to 20 feet. Refusal would indicate very hard, unweathered rock. Drilling could get deeper if a very large powerful drill such as a Soilmec flight auger were used.

The upper two to three feet has have some fill.

The site is near the edge of dry lake deposits but no clay or silt was found. The site is in Kern County.

The site geology is granitic basement rock which has weathered to a silty sand at the surface with weathering getting less with depth.

Grading Considerations

The upper two to three feet of soil will not support foundations. The entire building pad extending five feet outside the structure should have the top 30 inches removed, the base of excavation scarified and re-compacted, then compacted fill placed to finished grade. Existing soil can be used for compacted fill. Temporary cut slopes of ½:1 (horizontal to vertical) up to five feet deep should

be stable in these materials. Cuts over five feet should be done at 1:1. However, if the soils are found to differ significantly during construction, a re-evaluation of the conditions should be made. The cuts should be performed in the dry season or sloughing could occur. Any permanent slopes should be at a slope of 2:1 (horizontal to vertical). The footing excavations less than four feet deep can be made vertical but minor sloughing may occur.

Seismic Considerations

No evidence of faulting was observed in the explorations and there are no mapped local faults. An EQFault search was performed and is included in the Appendix.

The site does not lie in a "Special Studies Zone;" therefore, the hazard of surface rupture is not a concern. The site is not in a mapped liquefaction zone, so no liquefaction study was performed. Liquefaction cannot occur in dense bedrock.

Active faults in the region are tabulated below. Earthquakes on these faults and other active faults in the southern California region can cause damage due to ground shaking during a strong earthquake but proper design and construction should largely prevent this.

Fault	**Distance**	**Maximum Credible Magnitude**
Lenwood – Lockhart (Old Woman Srpgs)	19.3 mi. N	7.5
Garlock (West)	20.9 mi. N	7.3

The preliminary bearing capacities are attached. The recommended seismic design parameters are as follows:

2007 California Building Code

Soil Profile	= S_C—Very dense rock under soft rock
Seismic Zone	= 4
Z Factor	= .4
Maximum Ground Motion S_s	= .9
Maximum Ground Motion S_1	= .42
Site Coefficient F_{va}	= 1.4
Seismic Coefficient F_{aa}	= 1.05
Distance to Nearest Type B Fault	=19.4 mi or 31.0 km

Foundation Conditions

We recommend that the structure be founded on continuous or spread footings founded entirely on weathered bedrock or compacted fill. There should be no mixing of foundations in natural material, fill or re-compacted fill. The can be accomplished by the following:

1. Removal of all soil underlying the structure to the compacted fill and (dense bedrock) then placing footings.

Extending footing excavation to dense rock may be required if soft pockets are encountered or lower areas of structures such as sumps or pits are created..

CONCLUSIONS AND RECOMMENDATIONS

Foundation Design

We have evaluated the proposed foundation design. The intent is to have the calculated settlements at less than one-half inch differential and one inch overall. It is our opinion that the shallow footing system is most applicable and will balance the overall settlement. For the foundations, we recommend that they be a minimum 2.0 feet below the lowest the lowest adjacent finish grade. All foundations should be reinforced with a minimum of four #4 bars, two top and two bottom. A safe allowable bearing pressure is as follows:

Allowable Bearing Capacity (psf)
(Spread or Continuous Footings on Compacted Fill or Terrace)

Footing Depth Below Finished Grade (feet)	Footing Width (feet) 1.5	2.0	3.0	4.0	6.0+
2.0	1900	2150	2650	3150	4000
3.0	2700	2950	3450	3950	4000
4.0	3500	3750	4000	4000	4000

Footings on bedrock can use 4000 p.s.f. end bearing

Footings should be setback from the face of any slope a minimum 10 feet. All other setbacks should be per the 2007 CBC.

Allowable Lateral Bearing

	Equivalent Fluid Pressure
Active: K_a = 0.4	35 pcf
Passive: K_p = 3.65	600 pcf – Bedrock 400 pcf – Fill (compacted) and weathered rock

Soil
ϕ = 30°
γm = 120 p.c.f.

Friction between soil and concrete = 0.5
Allowable Skin Friction – Bedrock = 600 p.s.f.

If deep pier structures are used, caissons may be required. The following values can be used in the design for drilled caisson-type foundations that have large lateral load or uplift loads. Drilling caissons over 10 feet deep will be difficult and may require coring and large drill rigs.

1. Ultimate vertical bearing capacity at surface = 2,000 psf
2. Increase per foot of depth = 1,000 psf
3. Not to exceed = 10,000 psf
4. Ultimate lateral capacity (in granite) = 1,000 psf/ft
5. Ultimate lateral not to exceed at 10 feet = 10,000 psf
6. Ultimate skin friction @ 10 feet = 850 psf
7. Ultimate uplift skin friction @ 10 feet = 400 psf

No groundwater was observed

A minimum factor of safety of 1.5 must be used when doing ultimate load design.

This bearing value is applicable for either square or continuous footings. All compaction should be 90% of the maximum density obtained in accordance with ASTM D1557-00.

It will be necessary to inspect the footing excavations prior to performing any work to assure uniform conditions. In case of non-uniform conditions, it will be necessary to compact these areas with a hand-held vibratory compactor. All compaction should be a minimum of 90% of the maximum dry density per the ASTM Standard D1557-00. Any continuous foundations should have a minimum four #4 bars as reinforcement (two top and two bottom).

Seismic Design

The site does not lie in any mapped seismic special study zone. Seismic design should meet all the requirements of the standard specifications for public works construction, the United States Government codes, and/or the Kern County Code, whichever is the most stringent. The Active Fault Near-Source Zone Map and Seismic Hazard Map are included in the Appendix.

Shrinkage and Subsidence

It is estimated that up to 10% shrinkage will occur upon compaction of the existing fill. Additionally, subsidence of .1 foot can be expected.

Concrete Slabs-on-Grade

All floor slabs, sidewalks or patios should be a minimum four inches thick and should have a minimum of #4 bars at 18 inches in each direction (no mesh substitution). The soil beneath the slabs must be cleaned of all debris, scarified and re-compacted to a minimum of 24 inches deep. This can be done by removing one foot, scarifying, re-compacting then placing the compacted fill to the desired grade. Areas of uncertified fill should be entirely removed and re-compacted. Selective grading will be required to choose the most granular material to place beneath the slabs. Outside slabs should be expected to move and be fitted with expansion joints at a minimum, 12-foot spacing. If the rock is too hard, a six inch re-compacted zone is acceptable. Interior slabs should be underlain by a minimum 10 mil PVC or visqueen moisture barrier with a minimum one-inch sand blanket on both sides.

Site re-compaction will prepare all of the floor slabs subgrade adequately.

Soluble Sulfate

One soil sulfate test was performed. The soil sulfate is below the action level so normal Type II cement is acceptable.

Pavement Design

In areas with light traffic, such as driveways, the pavement should be designed after final grade is reached and samples of the subgrade soils can be assessed for R-Value. Either asphalt concrete or Portland Cement concrete can be used. However, the slabs and pavement should be founded on 12 inches of re-compacted soil (minimum 95% ASTM Standard D1557-00). A reasonable pavement design would consist of six inches aggregate base overlain by three inches of asphaltic concrete or five inches of concrete reinforced with #4 bars at 16 inches each way. Areas for heavy truck traffic may require a deeper concrete or asphaltic concrete section.

309 Statement

The proposed construction is based on either spread or continuous footings into re-compacted fill or dense bedrock. The affected area will not disturb any adjacent properties. If the construction and design is performed according to the requirements in this report, there will be no danger of landslide, slippage or settlement exceeding one inch on this or adjacent properties.

General Site Grading

1. Clearing & Grubbing: The site, as it exists, has structures and landscaping covering most of the area. Re-compaction of the disturbed area is required. All material over six inches in diameter must be removed from the site.

2. Subgrade Preparation of Slab & Pavement Areas: Subgrade for interior slabs, exterior concrete slab and asphalt concrete paved areas should be re-compacted to a depth of 24 inches.

3. Placement of Compacted Fill: Compacted fill is defined as that material which will be replaced in the areas of removal due to the placement of footings and paving, and also where the grade is to be raised. All fill should be compacted to a minimum of 90% based on the maximum density obtained in accordance with ASTM Standard D1557-00. All compacted fill shall be placed with a sheepsfoot or wacker-type compactor.

4. Removal of Oversize Material: All cobbles and boulders over six-inch diameter should be removed from site or used elsewhere for rip-rap or landscape purposes.

5. Review of Grading Plan & Specifications: We are recommending that the soil engineer have the opportunity to review the grading plan, construction procedures and specifications to assure that they include the items of the soil report for the benefit of the owner and the contractor.

6. Pre-Job Conference: Prior to the commencement of grading, a pre-job conference should be held with representatives of the owner, developer, contractor, architect and/or engineer and soil engineer in attendance. The purpose of this meeting shall be to clarify any questions relating to the intent of the grading recommendations and to verify that the project specifications comply with the recommendations of this report.

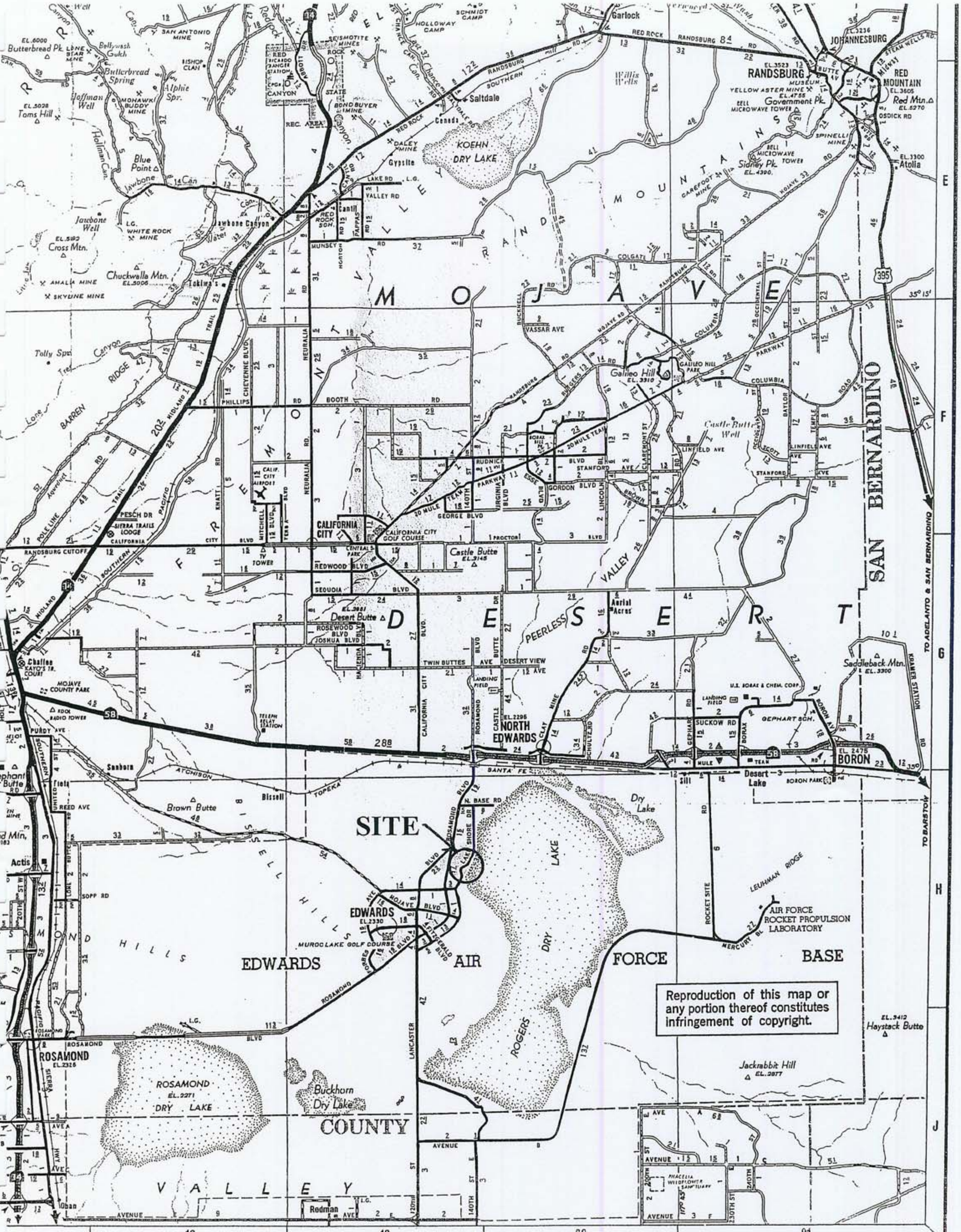
7. Testing & Inspection: During grading, frequent density testing should be performed by a representative of the soil engineer in order to determine the degree of compaction being obtained. Where testing indicates insufficient density, additional compactive effort shall be applied with the adjustment of moisture content where necessary until 90% relative compaction is obtained. The maximum dry density shall be determined in accordance with ASTM Standard D1557-00.

General

The recommendations of this report are based on the assumption that all foundations will be founded in re-compacted fill or weathered or unweathered granite bedrock. All footing excavations should be inspected prior to the placement of concrete in order to verify that footings are founded on satisfactory soils and are free of loose and disturbed materials. All grading and fill placement should be performed under the testing and inspection of a representative of the soil engineer.

The findings and recommendations of this report were prepared in accordance with contemporary engineering principles and practice. We make no other warranty, either expressed or implied. Our recommendations are based upon an interpolation of soil conditions between test pit locations. Should conditions encountered during grading appear to be different than those indicated by this report, this office should be notified.

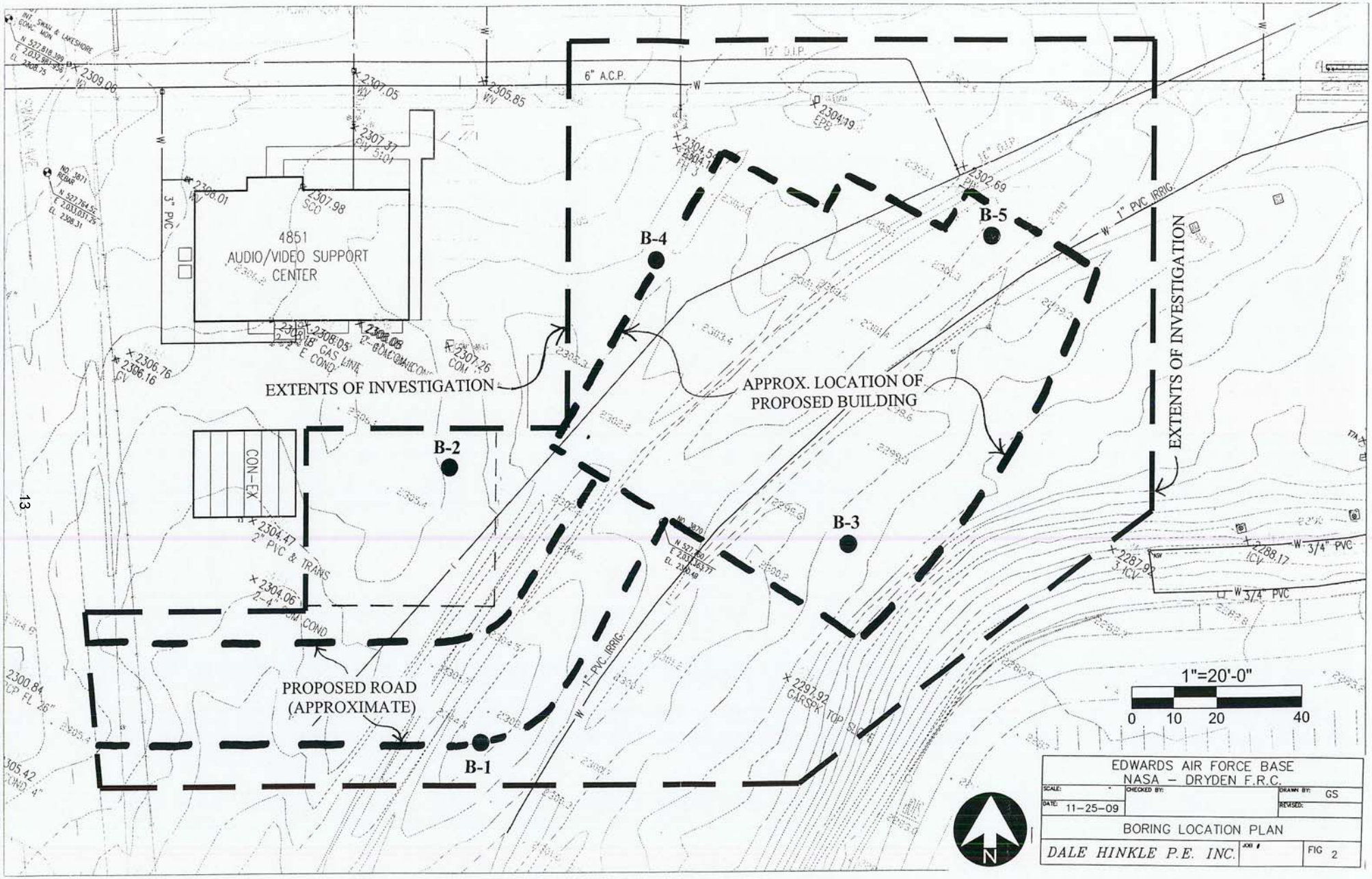
APPENDIX

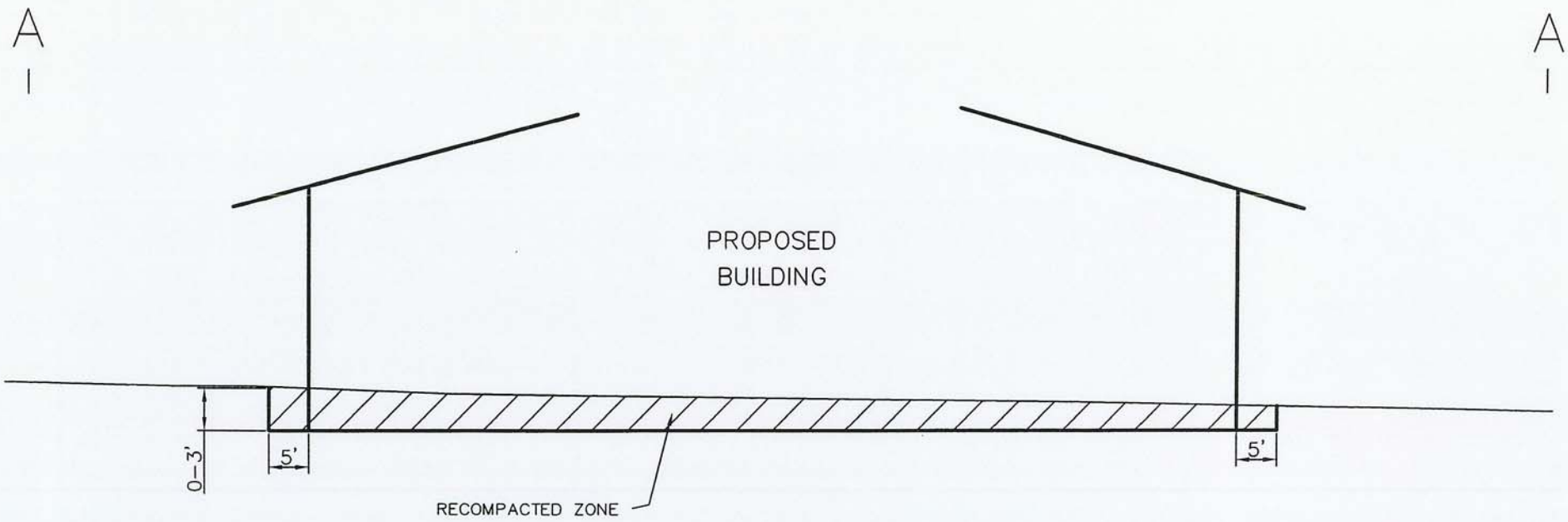


VICINITY MAP
DRYDEN R.F.- NASA

FIG 1

DALE HINKLE P.E. INC.

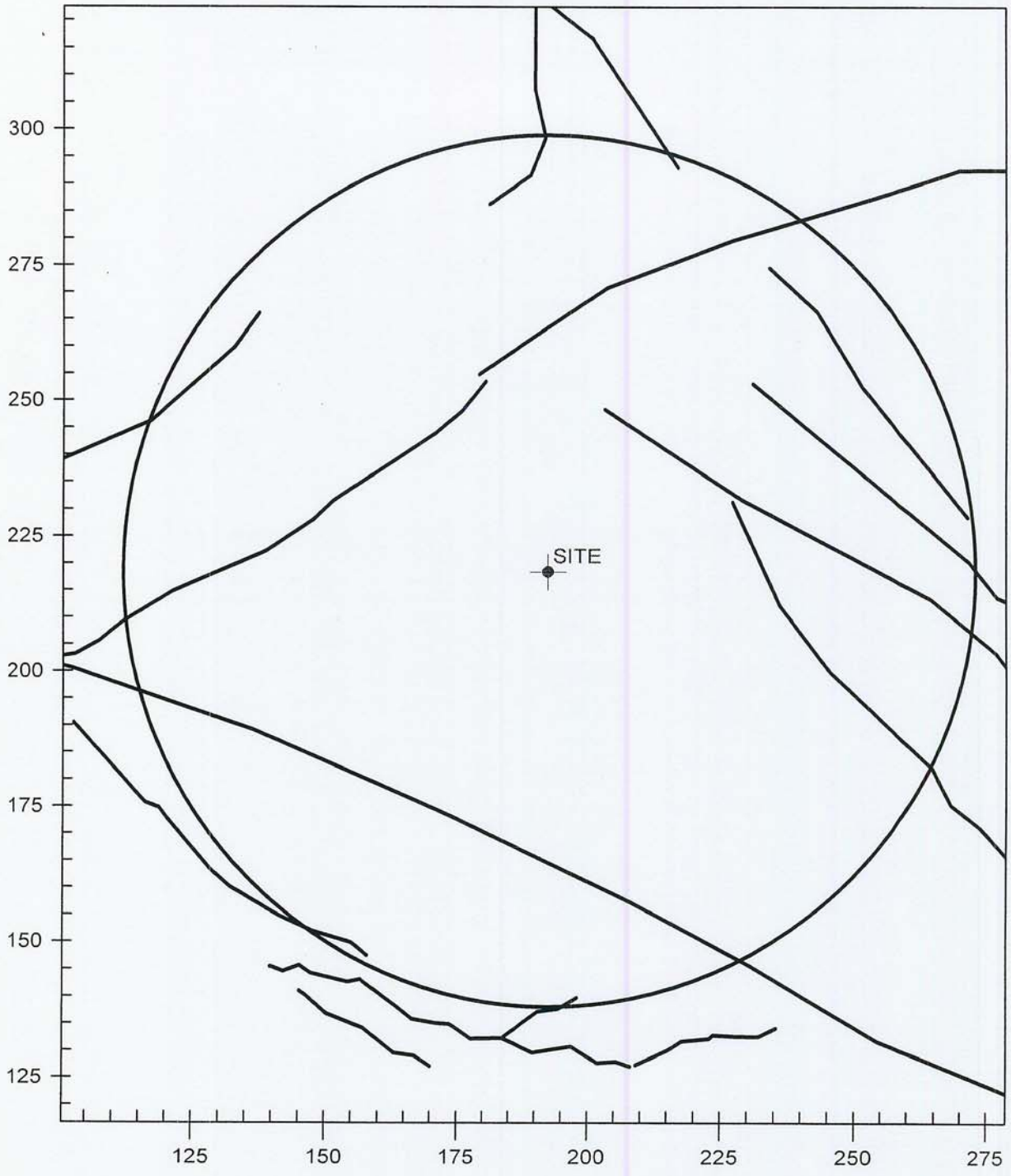

4851
AUDIO/VIDEO SUPPORT
CENTER
B-1
B-2
B-3
B-4
B-5
EXTENTS OF INVESTIGATION
APPROX. LOCATION OF
PROPOSED BUILDING
EXTENTS OF INVESTIGATION
PROPOSED ROAD
(APPROXIMATE)
CON-EX
6" A.C.P.
12" D.I.P.
1" PVC IRRIG.
3/4" PVC
1"=20'-0"
0 10 20 40
N
EDWARDS AIR FORCE BASE
NASA – DRYDEN F.R.C.
SCALE:
CHECKED BY:
DRAWN BY: GS
DATE: 11-25-09
REVISED:
BORING LOCATION PLAN
DALE HINKLE P.E. INC.
JOB #
FIG 2



DRYDEN FLIGHT SUPPORT CENTER			
SCALE: NONE	CHECKED BY:	DRAWN BY: GS	
DATE: 11-30-09		REVISED:	
TYPICAL SECTION			
DALE HINKLE P.E. INC.	JOB # 09-056	FIG 3	

CALIFORNIA FAULT MAP

EAFB Dryden F Supp Center



```
**********************
*                    *
*    E Q F A U L T   *
*                    *
*    Version 3.00    *
*                    *
**********************
```

DETERMINISTIC ESTIMATION OF
PEAK ACCELERATION FROM DIGITIZED FAULTS

JOB NUMBER: 09 056

DATE: 12-02-2009

JOB NAME: EAFB Dryden F Supp Center

CALCULATION NAME: Test Run Analysis

FAULT-DATA-FILE NAME: CGSFLTE.DAT

SITE COORDINATES:
SITE LATITUDE: 34.9519
SITE LONGITUDE: 117.8863

SEARCH RADIUS: 50 mi

ATTENUATION RELATION: 13) Bozorgnia Campbell Niazi (1999) Hor.-Hard Rock-Cor.
UNCERTAINTY (M=Median, S=Sigma): M Number of Sigmas: 0.0
DISTANCE MEASURE: cdist
SCOND: 0
Basement Depth: 5.00 km Campbell SSR: 0 Campbell SHR: 1
COMPUTE PEAK HORIZONTAL ACCELERATION

FAULT-DATA FILE USED: CGSFLTE.DAT

MINIMUM DEPTH VALUE (km): 3.0

EABDryFSCenter.OUT

EQFAULT SUMMARY

DETERMINISTIC SITE PARAMETERS

Page 1

ABBREVIATED FAULT NAME	APPROXIMATE DISTANCE mi (km)	ESTIMATED MAX. EARTHQUAKE EVENT: MAXIMUM EARTHQUAKE MAG.(Mw)	ESTIMATED MAX. EARTHQUAKE EVENT: PEAK SITE ACCEL. g	ESTIMATED MAX. EARTHQUAKE EVENT: EST. SITE INTENSITY MOD.MERC.
LENWOOD-LOCKHART-OLD WOMAN SPRGS	19.4(31.2)	7.5	0.153	VIII
GARLOCK (West)	21.0(33.8)	7.3	0.123	VII
HELENDALE - S. LOCKHARDT	23.2(37.3)	7.3	0.111	VII
GARLOCK (East)	24.3(39.1)	7.5	0.122	VII
SAN ANDREAS - Whole M-1a	30.6(49.2)	8.0	0.139	VIII
SAN ANDREAS - Mojave M-1c-3	30.6(49.2)	7.4	0.089	VII
SAN ANDREAS - 1857 Rupture M-2a	30.6(49.2)	7.8	0.120	VII
SAN ANDREAS - Cho-Moj M-1b-1	30.6(49.2)	7.8	0.120	VII
GRAVEL HILLS - HARPER LAKE	32.3(52.0)	7.1	0.068	VI
SAN ANDREAS - Carrizo M-1c-2	39.4(63.4)	7.4	0.069	VI
So. SIERRA NEVADA	39.6(63.8)	7.3	0.089	VII
WHITE WOLF	40.4(65.0)	7.3	0.088	VII
BLACKWATER	42.4(68.3)	7.1	0.051	VI
CLAMSHELL-SAWPIT	43.0(69.2)	6.5	0.047	VI
SIERRA MADRE	44.9(72.2)	7.2	0.073	VII
SIERRA MADRE (San Fernando)	45.5(73.3)	6.7	0.051	VI
CUCAMONGA	48.7(78.4)	6.9	0.054	VI
SAN GABRIEL	48.7(78.4)	7.2	0.048	VI
VERDUGO	49.1(79.0)	6.9	0.054	VI
LITTLE LAKE	49.1(79.0)	6.9	0.038	V

-END OF SEARCH- 20 FAULTS FOUND WITHIN THE SPECIFIED SEARCH RADIUS.

THE LENWOOD-LOCKHART-OLD WOMAN SPRGS FAULT IS CLOSEST TO THE SITE.
IT IS ABOUT 19.4 MILES (31.2 km) AWAY.

LARGEST MAXIMUM-EARTHQUAKE SITE ACCELERATION: 0.1533 g

Page 2

PROJECT:
NASA, Dryden Flight Research, Facilities Support Center

SUMMARY OF TEST RESULTS

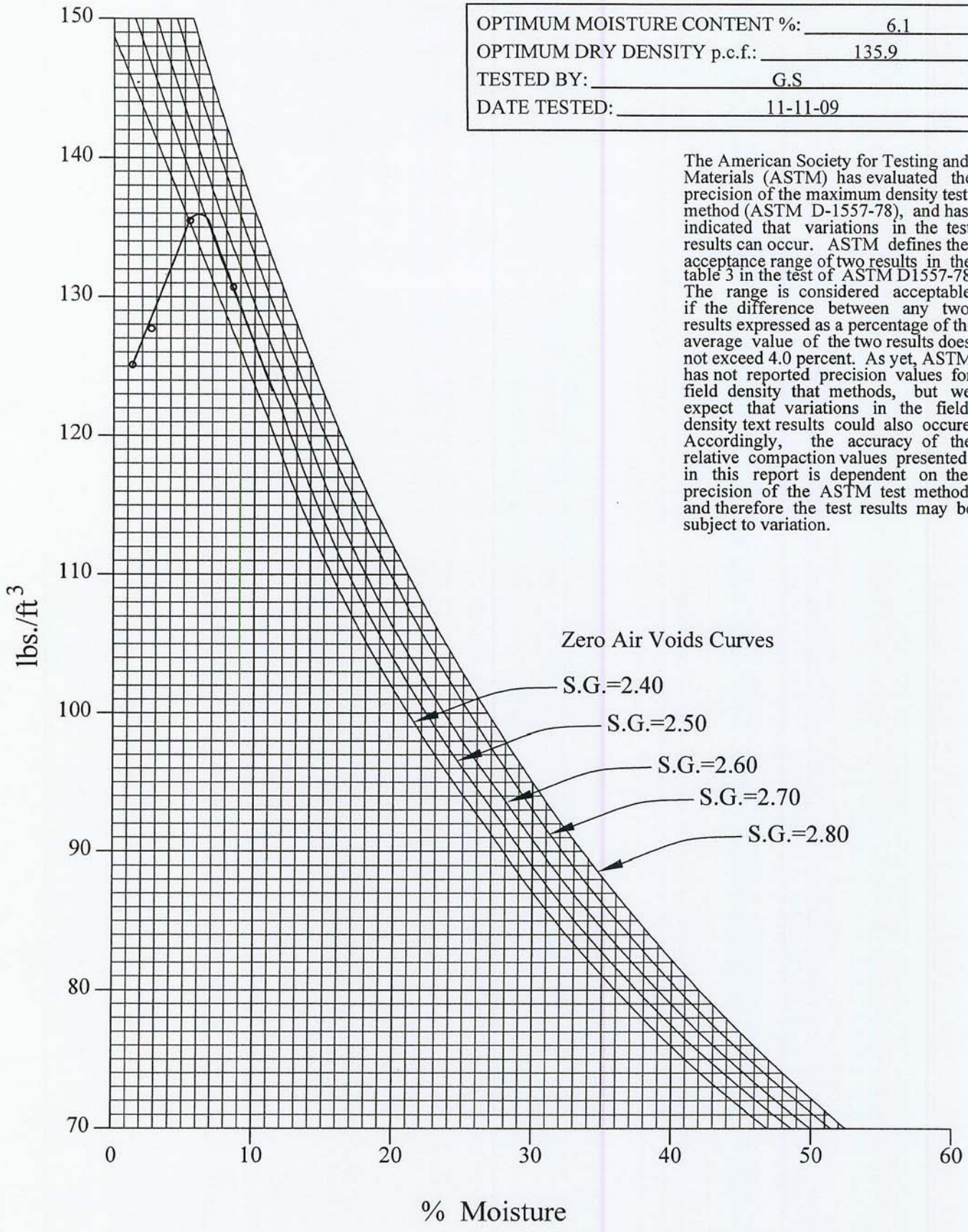
TABLE 1

Hole No.	Depth ft.	Sample Type	Field Moisture %	Field Dry Density lbs/cu ft	Gravel %	Sand %	Fines %	% Consolidation					Deg. Φ	Cohesion PSF	Maximum Density	Optimum Moisture	% Relative Compaction	Atterberg Limits
								2.5 PSI	5.0 PSI	10.0 PSI	20.0 PSI	40.0 PSI			PCF	%W	LL	PL
B-1	2	Ring	2.6	114.4									33	86.7				
B-1	5	Ring	2.3	125.0									30	168.5				
B-1	10	Ring	2.1	117.9														
B-2	2	Ring	2.8	114.6														
B-2	5	Ring	8.2	119.8									30	125.8				
B-2	10	Ring	3.6	105.8														
B-2	15	Ring	4.0	114.6														
B-2	18.5	Ring	6.2	89.3														
B-3	2	Ring	5.9	107.5														
B-3	5	Ring	2.5	132.0														
B-3	10	Ring	1.4	117.5														
B-4	2	Ring	14.6	109.6														
B-4	5	Ring	7.5	112.4														
B-4	10	Ring	2.7	105.6														
B-5	2	Ring	1.3	126.0									38	0				
B-5	5	Ring	9.6	120.3														
B-5	10	Ring	5.4	97.8														
B-5	15	Ring	6.0	120.3														
B-2	0-2	Bag													135.9	6.1		
B-4	5-6	Bag													132.6	7.6		

Dale Hinkle P.E., Inc.
15510 Rockfield, Ste. B
Irvine, CA. 92618
(949) 458-0498 (office)
(949) 458-1918 (fax)

OPTIMUM MOISTURE CONTENT %:	6.1
OPTIMUM DRY DENSITY p.c.f.:	135.9
TESTED BY:	G.S
DATE TESTED:	11-11-09

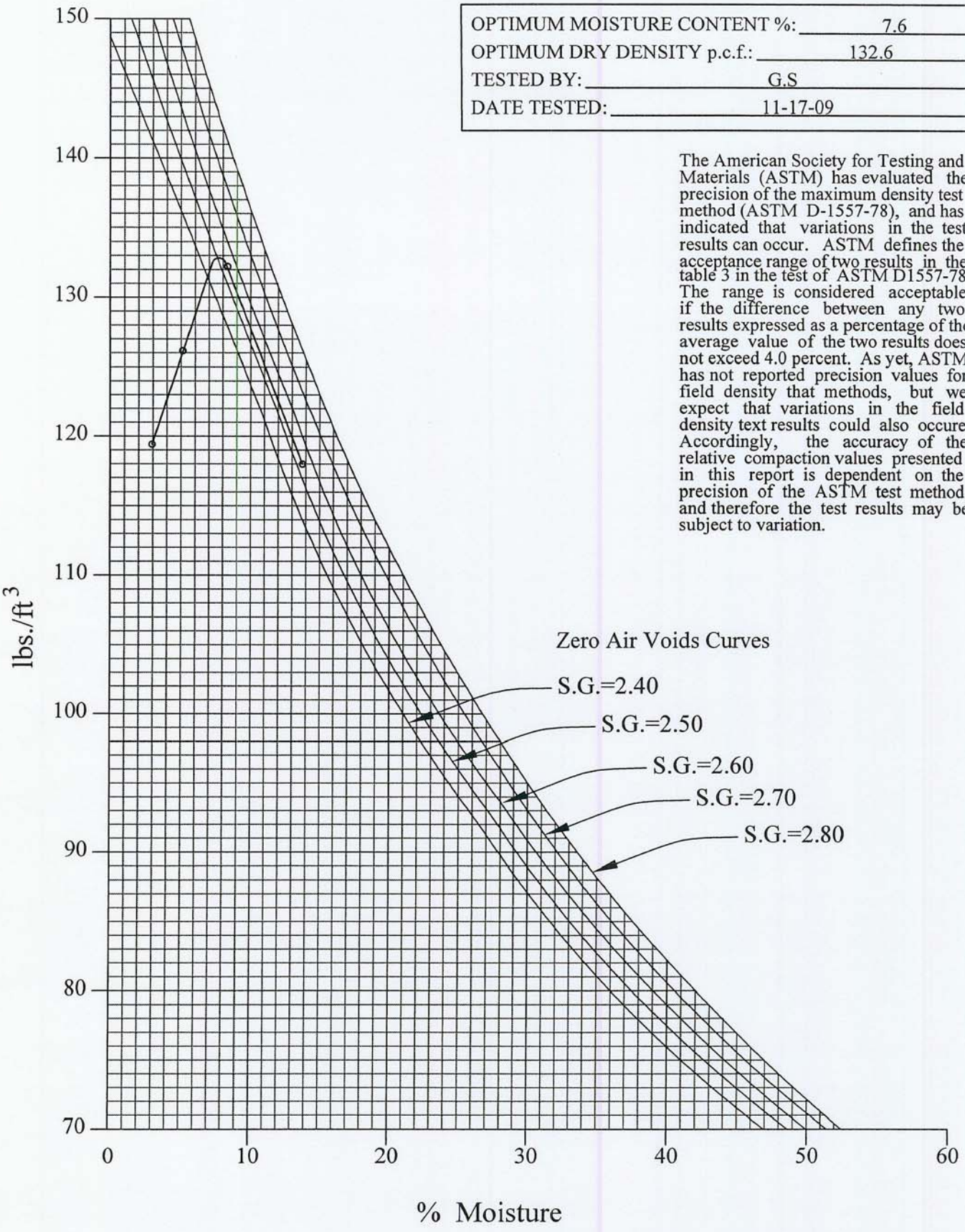
The American Society for Testing and Materials (ASTM) has evaluated the precision of the maximum density test method (ASTM D-1557-78), and has indicated that variations in the test results can occur. ASTM defines the acceptance range of two results in the table 3 in the test of ASTM D1557-78. The range is considered acceptable if the difference between any two results expressed as a percentage of the average value of the two results does not exceed 4.0 percent. As yet, ASTM has not reported precision values for field density that methods, but we expect that variations in the field density text results could also occure. Accordingly, the accuracy of the relative compaction values presented in this report is dependent on the precision of the ASTM test method, and therefore the test results may be subject to variation.



PROJECT: AFB Facilities Support Center	MAXIMUM DRY DENSITY		
HOLE NO: B-2	SCALE:	CHECKED BY:	DRAWN BY: A.T
DEPTH ft: 0-2	DATE: 11-19-09		JOB NO.: ---
SAMPLE NO: Bag	DALE HINKLE P.E., INC.		

OPTIMUM MOISTURE CONTENT %:	7.6
OPTIMUM DRY DENSITY p.c.f.:	132.6
TESTED BY:	G.S
DATE TESTED:	11-17-09

The American Society for Testing and Materials (ASTM) has evaluated the precision of the maximum density test method (ASTM D-1557-78), and has indicated that variations in the test results can occur. ASTM defines the acceptance range of two results in the table 3 in the test of ASTM D1557-78. The range is considered acceptable if the difference between any two results expressed as a percentage of the average value of the two results does not exceed 4.0 percent. As yet, ASTM has not reported precision values for field density that methods, but we expect that variations in the field density text results could also occure. Accordingly, the accuracy of the relative compaction values presented in this report is dependent on the precision of the ASTM test method, and therefore the test results may be subject to variation.

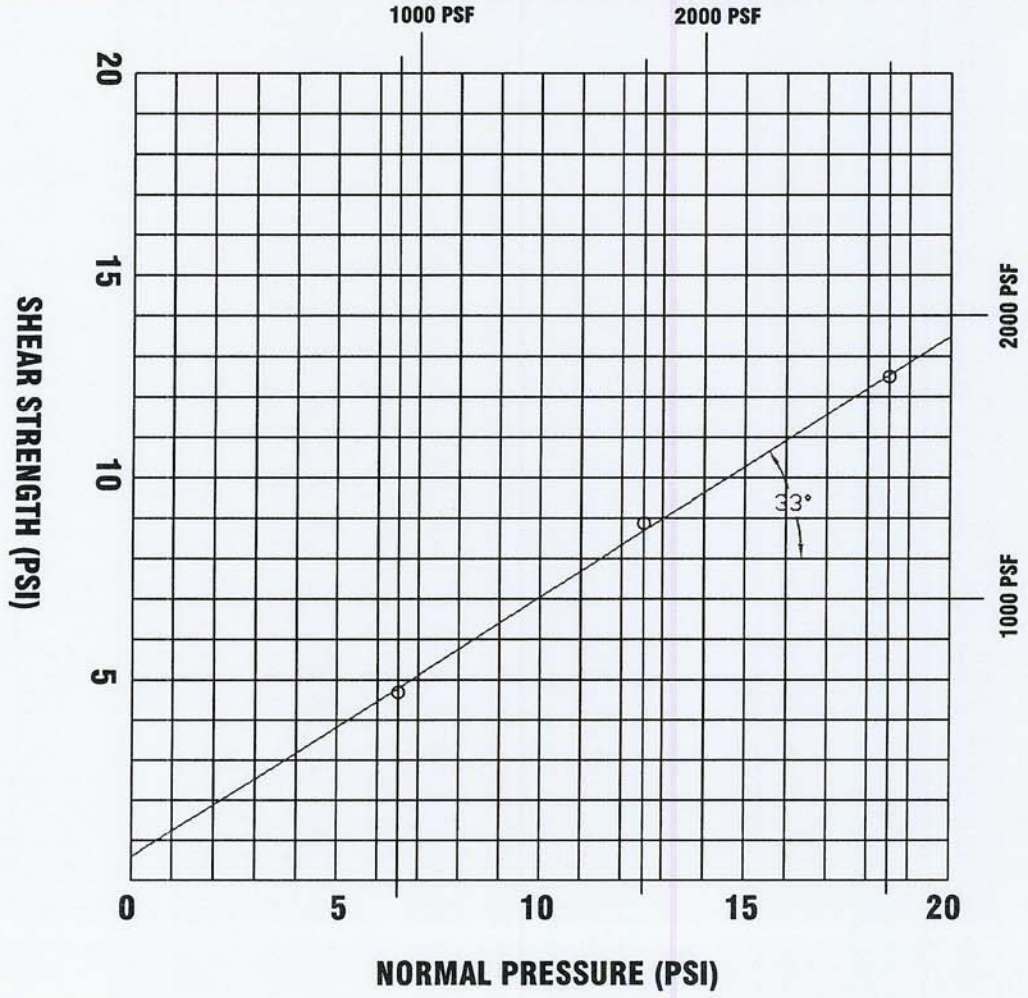


PROJECT: AFB Facilities Support Center	MAXIMUM DRY DENSITY		
HOLE NO: B-4	SCALE:	CHECKED BY:	DRAWN BY: A.T
DEPTH ft: 5-6	DATE: 11-20-09		JOB NO.: ---
SAMPLE NO: Bag	*DALE HINKLE P.E., INC.*		

DALE HINKLE P.E. INC.
15510 ROCKFIELD BLVD., SUITE B
IRVINE, CALIFORNIA 92618

Direct Shear Test Data

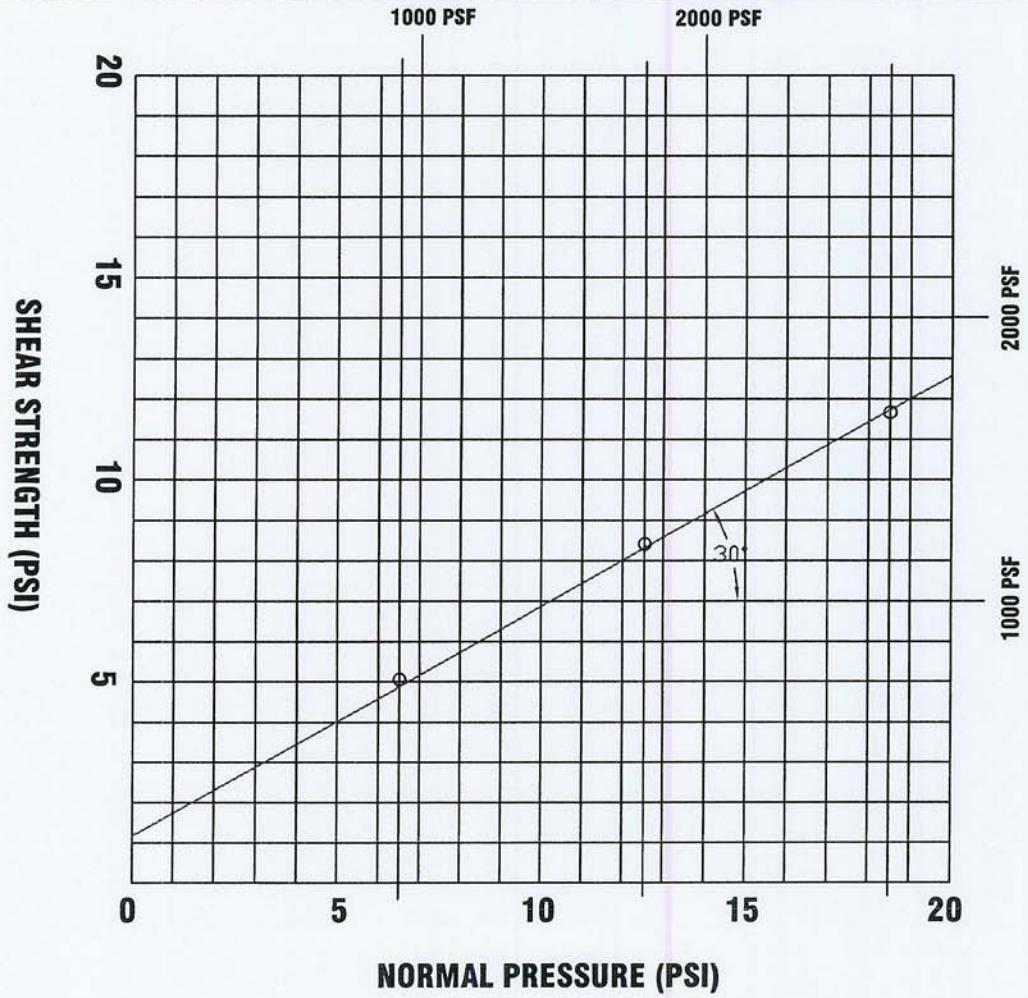
LOCATION AFB Facilities Support Center	**SATURATED % W** -
JOB NAME --	**ANGLE OF INTERNAL FRICTION** 33 DEG
HOLE NUMBER B-1	**COHESION** 86.8 P.S.F.
HOLE DEPTH 2'	**DRY DENSITY** 114.4 P.C.F.
SAMPLE TYPE: Undisturbed	**INITIAL FIELD MOISTURE** 2.6 %
DATE: 11-11-09	**SATURATED DENSITY**



DALE HINKLE P.E. INC.
15510 ROCKFIELD BLVD., SUITE B
IRVINE, CALIFORNIA 92618

Direct Shear Test Data

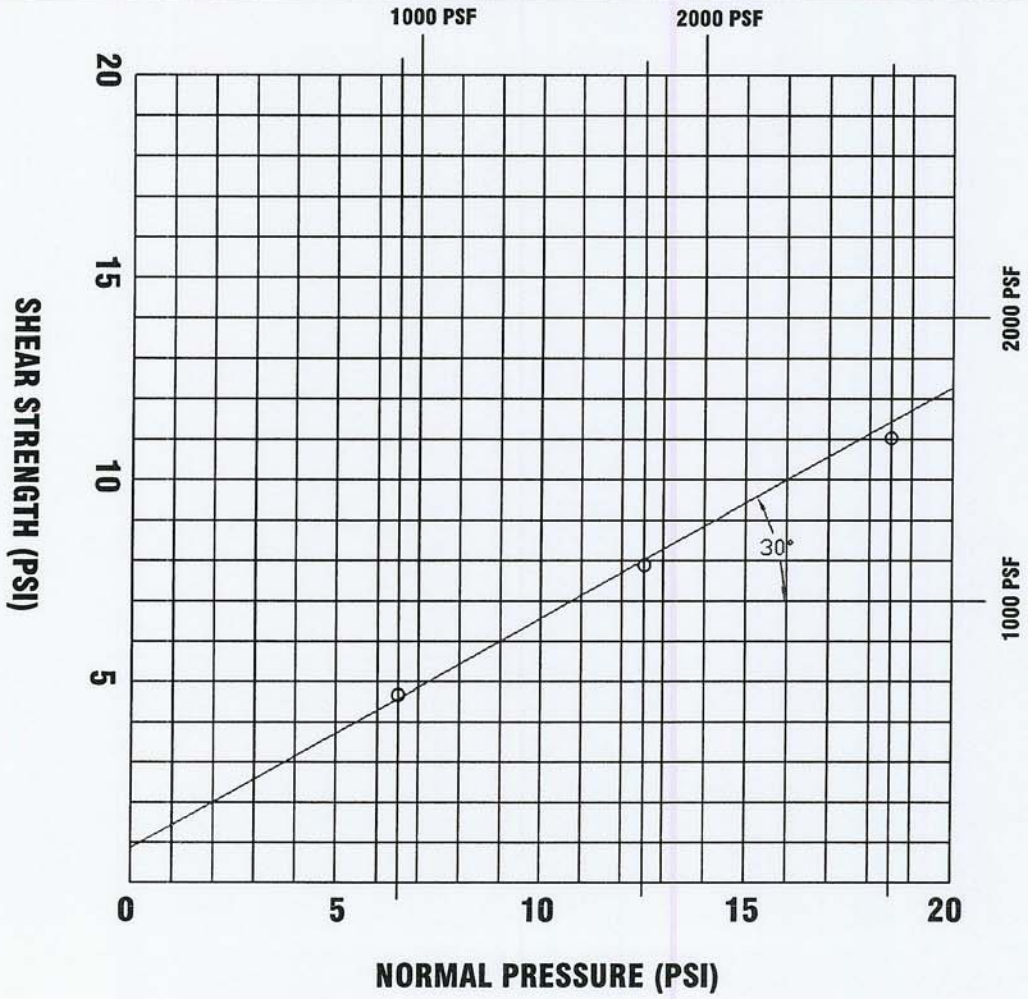
LOCATION AFB Facilities Support Center	**SATURATED % W** -
JOB NAME --	**ANGLE OF INTERNAL FRICTION** 30 DEG
HOLE NUMBER B-1	**COHESION** 168.5 P.S.F.
HOLE DEPTH 5'	**DRY DENSITY** 125.0 P.C.F.
SAMPLE TYPE: Undisturbed	**INITIAL FIELD MOISTURE** 2.3 %
DATE: 11-11-09	**SATURATED DENSITY**



DALE HINKLE P.E. INC.
15510 ROCKFIELD BLVD., SUITE B
IRVINE, CALIFORNIA 92618

Direct Shear Test Data

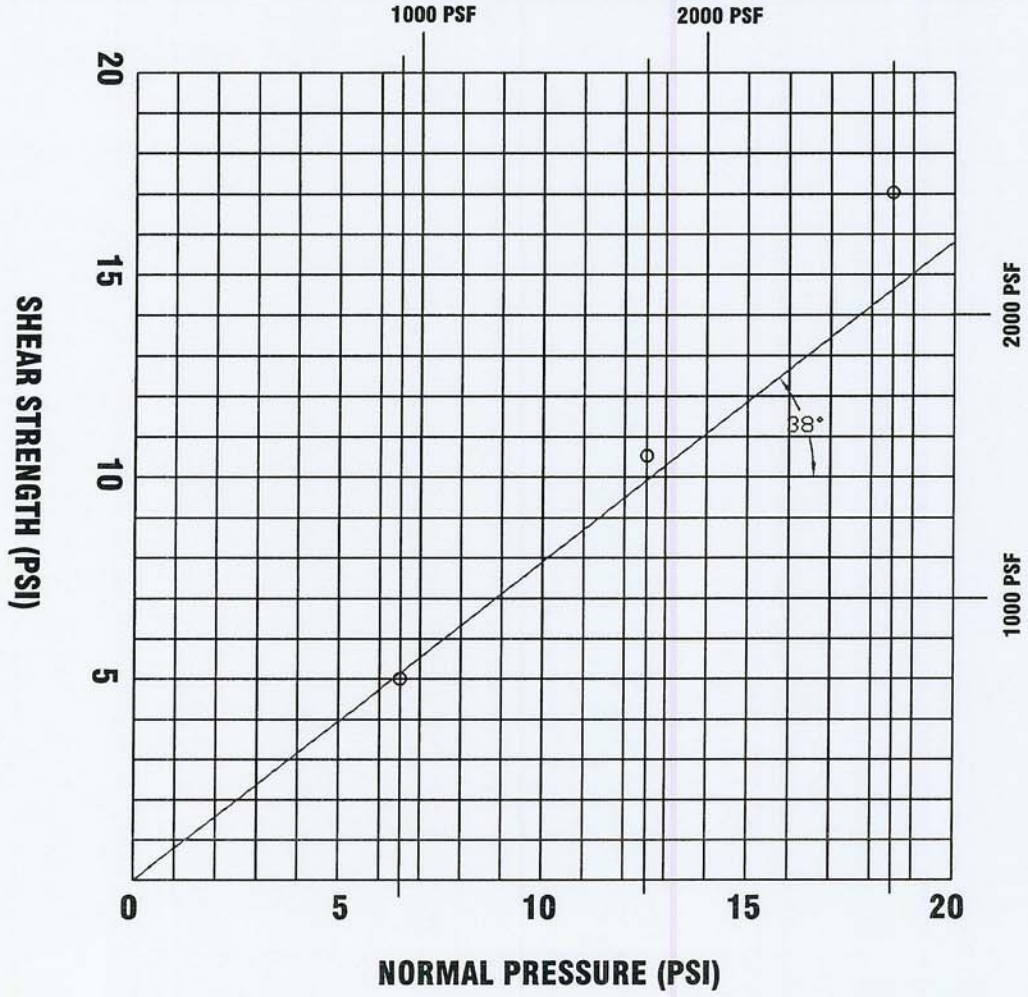
LOCATION AFB Facilities Support Center	**SATURATED % W** -
JOB NAME --	**ANGLE OF INTERNAL FRICTION** 30 DEG
HOLE NUMBER B-2	**COHESION** 125.8 P.S.F.
HOLE DEPTH 5'	**DRY DENSITY** 119.8 P.C.F.
SAMPLE TYPE: Undisturbed	**INITIAL FIELD MOISTURE** 8.2 %
DATE: 11-11-09	**SATURATED DENSITY**

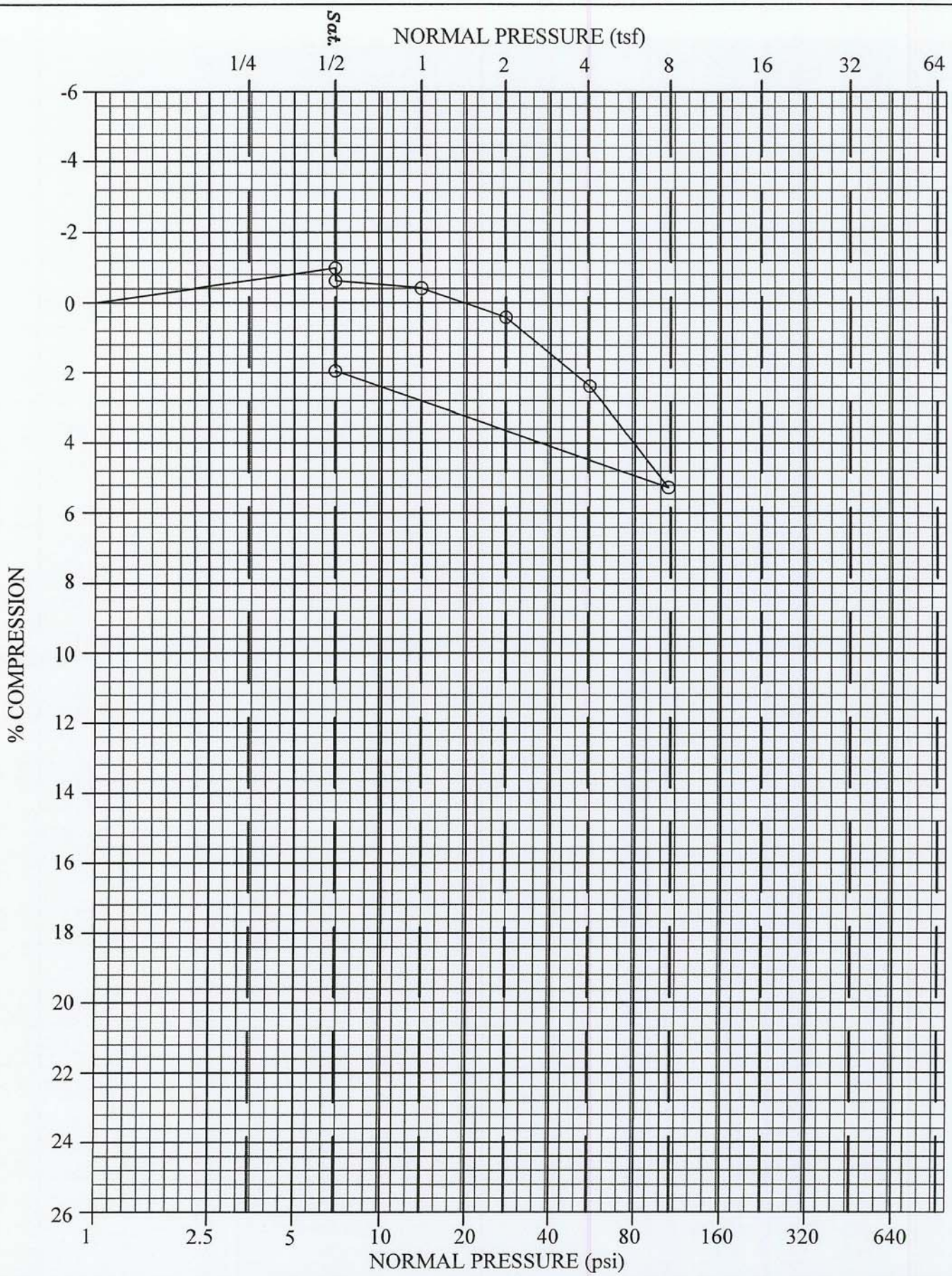


DALE HINKLE P.E. INC.
15510 ROCKFIELD BLVD., SUITE B
IRVINE, CALIFORNIA 92618

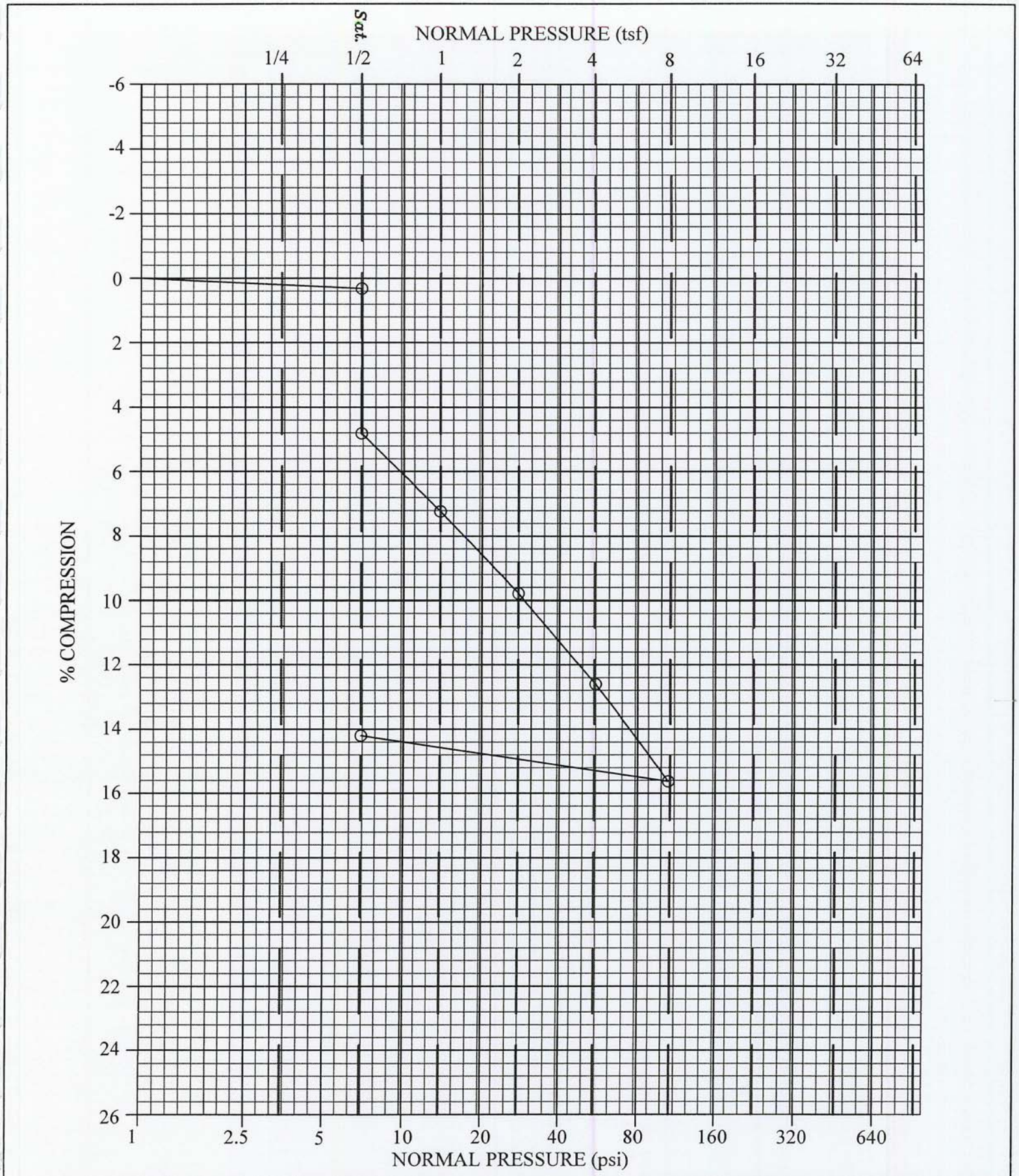
Direct Shear Test Data

LOCATION AFB Facilities Support Center	**SATURATED % W** -
JOB NAME --	**ANGLE OF INTERNAL FRICTION** 38 DEG
HOLE NUMBER B-5	**COHESION** 0 P.S.F.
HOLE DEPTH 2'	**DRY DENSITY** 126.0 P.C.F.
SAMPLE TYPE: **Undisturbed**	**INITIAL FIELD MOISTURE** 1.3 %
DATE: 11-11-09	**SATURATED DENSITY**





INITIAL DENSITY (pcf): 125.7	**SOIL CONSOLIDATION TEST RESULTS**
	PROJECT: Edwards AFB Support Center TESTED BY: G.S
FINAL % WATER: 14.4	HOLE #: B-2 DEPTH: 4' DATE: 11-11-09
	DALE HINKLE P.E., INC. FIG



INITIAL DENSITY (pcf): 103.7	**SOIL CONSOLIDATION TEST RESULTS**
	PROJECT: Edwards AFB Support Center TESTED BY: G.S
FINAL % WATER: 14.3	HOLE #: B-3 DEPTH: 2' DATE: 11-11-09
	DALE HINKLE P.E., INC. FIG

AP Engineering & Testing, Inc.

CORROSION TEST RESULTS

Client Name: Dale Hinkle PE, Inc
Project Name: NASA Dryden Flight
Location: Research Facility Support Center

AP Job No.: 29-1142
Date 11/24/09

Boring No.	Sample No.	Depth (ft)	Soil Type	Minimum Resistivity (ohm-cm)	pH	Sulfate Content (ppm)	Chloride Content (ppm)
B-2	-	0-2	SM	960	7.1	80	301

NOTES: Resistivity Test and pH: California Test Methods 532 and 643
Sulfate Content : California Test Method 417
Chloride Content : California Test Method 422
ND = Not Detectable
NA = Not Sufficient Sample
NR = Not Requested

2607 Pomona Boulevard, Pomona, CA 91768
Tel. (909) 869-6316 Fax. (909)869-6318

RESULTS OF EXPANSION TEST NASA, Dryden Flight Research Facilities Support Center	
SAMPLE LOCATION	B-2
DEPTH (ft.)	0-2
INITIAL MOISTURE (%)	2.6
INITIAL DRY DENSITY (pcf)	117.5
CLASSIFICATION SYMBOL	SM
RELATIVE COMPACTION (%)	86.4
FINAL MOISTURE (%)	9.9
PERCENT EXPANSION (%)	0
EXPANSION INDEX	0
POTENTIAL EXPANSION	NONE

DALE HINKLE P.E., INC.
15510 Rockfield, Suite B
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(949) 458-0498 Fax (949) 458-1918

• ANALYSIS
• DESIGN

LaBelle • Marvin

PROFESSIONAL PAVEMENT ENGINEERING

A CALIFORNIA CORPORATION

• SOILS, ASPHALT TECHNOLOGY

November 20, 2009

Mr. Dale Hinkle
Dale Hinkle, Inc.
15510 Rockfield, No. B
Irvine, California 92718

Project No. 36637

Dear Mr. Hinkle:

Testing of the bulk soil sample delivered to our laboratory on11/19/2009 has been completed.

Reference: NASA FSCS
Sample: B-2 @ 2'

R-Value data sheets are attached for your use and file. The opportunity to be of service is sincerely appreciated and should you have any questions, kindly call.

Respectfully Submitted,

REGISTERED PROFESSIONAL ENGINEER
STEVEN R. MARVIN
NO. 30659
EXP. 3/31/10
CIVIL
STATE OF CALIFORNIA

Steven R. Marvin
RCE 30659

SRM:tw

2700 S. GRAND AVENUE • SANTA ANA, CA 92705-5404 • (714) 546-3468 • FAX (714) 546-5841
INFO@LABELLEMARVIN.COM

R - VALUE DATA SHEET

NASA-FSCS
NASA, Dryden FRC

PROJECT NUMBER 36637 BORING NUMBER: B-2 @ 2'

SAMPLE DESCRIPTION: Brown Clayey Sand

Item	SPECIMEN		
	a	b	c
Mold Number	10	11	12
Water added, grams	35	15	22
Initial Test Water, %	8.4	6.7	7.3
Compact Gage Pressure,psi	135	350	315
Exudation Pressure, psi	120	593	403
Height Sample, Inches	2.60	2.63	2.57
Gross Weight Mold, grams	3179	3175	3176
Tare Weight Mold, grams	1959	1965	1963
Sample Wet Weight, grams	1220	1210	1213
Expansion, Inches x 10exp-4	0	3	1
Stability 2,000 lbs (160psi)	22 / 42	12 / 21	15 / 28
Turns Displacement	4.38	4.28	4.33
R-Value Uncorrected	62	79	73
R-Value Corrected	64	80	74
Dry Density, pcf	131.1	130.7	133.3
DESIGN CALCULATION DATA			
Traffic Index Assumed:	4.0	4.0	4.0
G.E. by Stability	0.37	0.20	0.27
G. E. by Expansion	0.00	0.10	0.03

Equilibrium R-Value **71** by EXUDATION

Examined & Checked: 11 /20/ 09

REMARKS:
Gf = 1.25
0.0% Retained on 3/4" Sieve.

REGISTERED PROFESSIONAL ENGINEER STEVEN R MARVIN 30659 EXP 3/31/10 STATE OF CALIFORNIA

Steven R. Marvin, RCE 30659

The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.

LaBelle • Marvin

R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 36637 NASA-FSCS

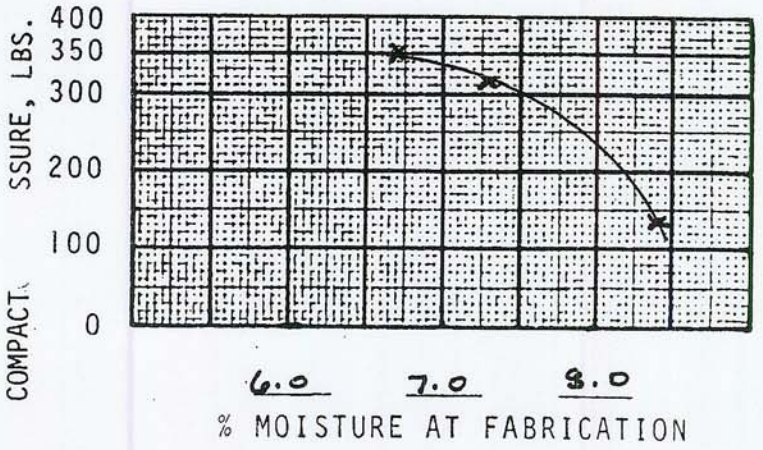
BORING NO. B-2@2' Nasa Dryden Flight Research Center

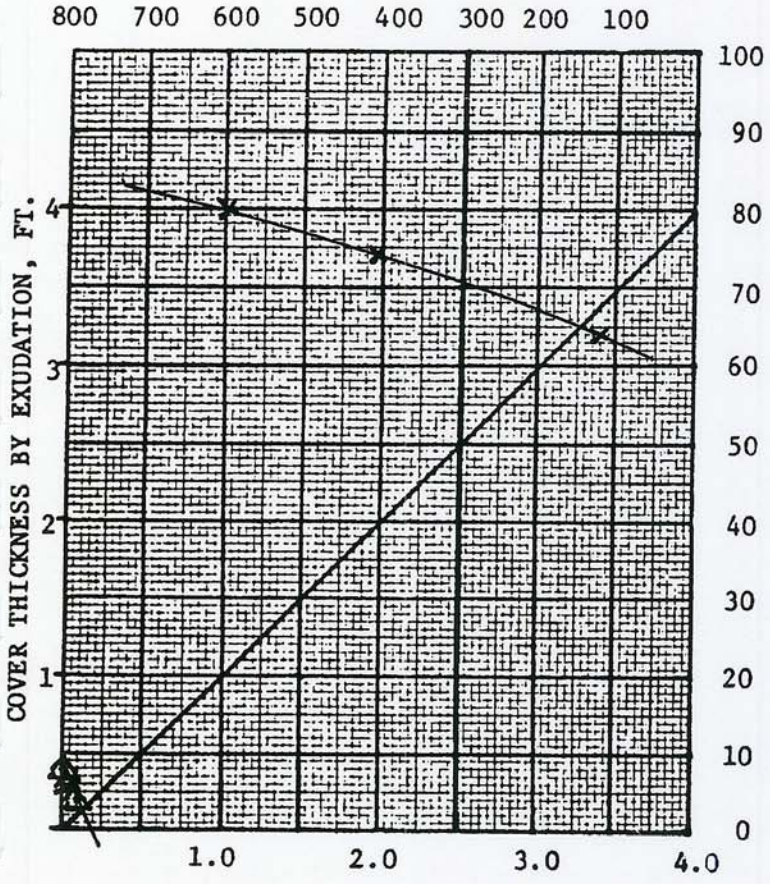
DATE 11-20-09

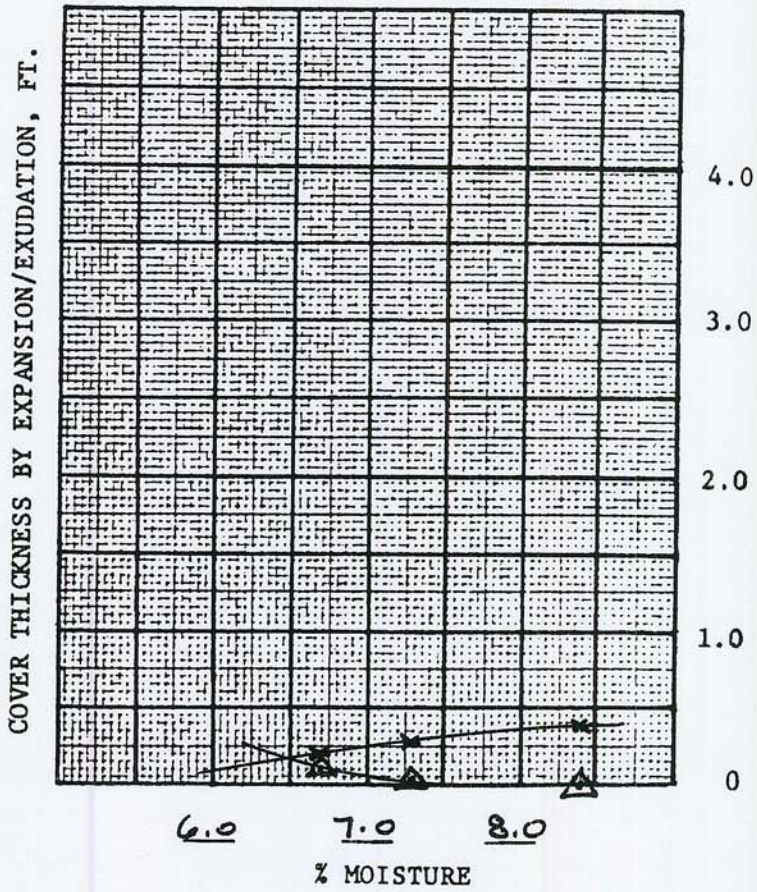
TRAFFIC INDEX Assume 4.0

R-VALUE BY EXUDATION 71

R-VALUE BY EXPANSION







R-VALUE vs. EXUD. PRES.

T by EXUDATION

EXUD. T vs. EXPAN. T

T by EXPANSION

REMARKS _____

LaBelle • Marvin
PROFESSIONAL PAVEMENT ENGINEERING

LOG OF BORING

HOLE NO.: B-1 **DATE DRILLED: 11/6/09** **SHEET: 1 OF 1**

PROJECT:	NASA / DRYDEN	**EXPLORATION METHOD:**	HOLLOW STEM
LOCATION:	FACILITIES SUPPORT CENTER	**SIZE OF HOLE:**	6"
GROUND ELEVATION:	2303	**CONTRACTOR:**	DHPE
DEPTH OF WATER TABLE:	NE	**DRILLER:**	SC DRILLING
DEPTH TO SOLID ROCK:		**INSPECTOR:**	DEVELOP. ONE

DRY DENSITY (PCF)	UNDISTURBED SAMPLES WEIGHT LBS	DROP INCHES	INCHES DRIVEN	BLOW COUNT	UNDIS	BAG	%W	DEPTH FEET	FIELD DESCRIPTION
								-0-	
									SAND (SC/SM) TOP PROBABLY
								-1-	DISTURBED DUE TO ROAD REMOVAL
								-2-	
114.4	140	30	12	5/7			2.6		SAME MATERIAL, TAN, ALLUVIAL SOILS.
								-3-	INGEOUS MINERALS, TYPICAL GRANITE
									MINERALS FLOATING IN A HIGHLY
								-4-	DECOMPOSED GRANITE SAND.
									DENSE AFTER ALLUVIUM.
								-5-	WEATHERED ROCK PROGRESSIVLY
				20/50					
125.0	140	30	12	FOR 5"			2.3		GETS MORE WELDED, LESS WHETHERED
								-6-	
								-7-	
								-8-	
								-9-	
				32/50					
117.9	140	30	12	FOR 5"			2.1	-10-	ROCK IS MORE DENSE
									ALMOST SOLID ROCK
								-11-	NOT VERY WEATHERED
								-12-	HARD TO DRILL. SAMPLE LOST WAS
									BATTERED ROCK SMASHED INTO SAMPLER
								-13-	TIP
								-14-	
								-15-	
				50					
				FOR 5"				-16-	
									END OF BORING
								-17-	
								-18-	
								-19-	
								-20-	

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LOG OF BORING

HOLE NO.: B-2 **DATE DRILLED: 11/6/09** **SHEET: 1 OF 1**

PROJECT:	NASA / DRYDEN	**EXPLORATION METHOD:**	HOLLOW STEM
LOCATION:	FACILITIES SUPPORT CENTER	**SIZE OF HOLE:**	6"
GROUND ELEVATION:	2305	**CONTRACTOR:**	DHPE
DEPTH OF WATER TABLE:	NE	**DRILLER:**	SC DRILLING
DEPTH TO SOLID ROCK:		**INSPECTOR:**	DEVELOP. ONE

DRY DENSITY (PCF)	UNDISTURBED SAMPLES WEIGHT LBS	DROP INCHES	INCHES DRIVEN	BLOW COUNT	UNDIS	BAG	%W	DEPTH FEET	FIELD DESCRIPTION
								-0-	SILTY SAND (SC/SM) POORLY SORTED
								-1-	FINES WITH 1CM ROCKS (UP TO)
								-2-	REDDISH TAN COLOR, ANGULAR
114.6	140	30	12	28/10			2.8	-3-	
								-4-	
								-5-	
119.8	140	30	12	11/21			8.2	-6-	
								-7-	
								-8-	
								-9-	WHETHERED GRANITE, ROCK IS BREAKING DOWN AT SEAMS OF MINERAL CONTACTS
105.8	140	30	12	33/50 FOR 2"			3.6	-10-	MINERALS REMAIN INTACT, FELDSPAR HORNBLEND, BIOTITE, ORTHOCLASE FELDSPAR, EPIDOTE, PYRITE
								-11-	
								-12-	
								-13-	
								-14-	GRANITE ROCK - ORTHOCLASE QUARTZ AND BIOTITE/HORNBLEND 1CM TO 1/2 INCH MINERALS
								-15-	VERY HARD/DENSE
114.6	140	30	12	24/50 FOR 1"			4.0	-16-	
								-17-	
								-18-	
89.3	140	30	12	50 FOR 4"			6.2	-19-	END OF BORING UNABLE TO DIG DEEPER
								-20-	

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LOG OF BORING

HOLE NO.: B-3 **DATE DRILLED: 11/6/09** **SHEET: 1 OF 1**

PROJECT:	NASA / DRYDEN	**EXPLORATION METHOD:**	HOLLOW STEM
LOCATION:	FACILITIES SUPPORT CENTER	**SIZE OF HOLE:**	6"
GROUND ELEVATION:	2298	**CONTRACTOR:**	DHPE
DEPTH OF WATER TABLE:	NE	**DRILLER:**	SC DRILLING
DEPTH TO SOLID ROCK:		**INSPECTOR:**	DEVELOP. ONE

DRY DENSITY (PCF)	UNDISTURBED SAMPLES WEIGHT LBS	DROP INCHES	INCHES DRIVEN	BLOW COUNT	UNDIS	BAG	%W	DEPTH FEET	FIELD DESCRIPTION
								-0-	SILTY SAND (SM/SC) VERY POORLY SORTED. ALLUVIUM TOP 1-2 FEET
								-1-	GRAINS ARE ANGULAR AND FINES TO 1CM STONES, DENSE, MOIST A FEW
								-2-	FEET DOWN
107.5	140	30	12	5/6			5.9		TAN/CREAM COLOR WITH TYPICAL GRANITE
								-3-	MINERALS
								-4-	
								-5-	
132	140	30	12	10/50			2.5		
								-6-	
								-7-	DENSE SANDY/BROKEN DOWN WEATHERED GRANITE
								-8-	
								-9-	
								-10-	
				27/50					
117.5	140	30	12	FOR 2"			1.4		DENSE ROCK STARTING
								-11-	SAMPLES ARE BATTERED DUE TO BLOWS
								-12-	
								-13-	
								-14-	
								-15-	
				50					
				FOR 5"				-16-	
								-17-	
									END OF BORING
								-18-	
								-19-	
								-20-	

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LOG OF BORING

HOLE NO.: B-4 **DATE DRILLED: 11/6/09** **SHEET: 1 OF 1**

PROJECT:	NASA / DRYDEN	**EXPLORATION METHOD:**	HOLLOW STEM
LOCATION:	FACILITIES SUPPORT CENTER	**SIZE OF HOLE:**	6"
GROUND ELEVATION:	2304	**CONTRACTOR:**	DHPE
DEPTH OF WATER TABLE:	NE	**DRILLER:**	SC DRILLING
DEPTH TO SOLID ROCK:		**INSPECTOR:**	DEVELOP. ONE

DRY DENSITY (PCF)	UNDISTURBED SAMPLES				UNDIS	BAG	%W	DEPTH FEET	FIELD DESCRIPTION
	WEIGHT LBS	DROP INCHES	INCHES DRIVEN	BLOW COUNT					
								-0-	SILTY SAND (SM/SC) VERY POORLY SORTED. ANGULAR GRAINS, VERY DENSE
								-1-	DRY TO MOIST AFTER A FEW FEET
								-2-	ALLUVIUM TOP 1-2 FEET
109.6		30	12	9/17			14.6	-3-	
								-4-	
								-5-	
112.4		30	12	13/34			7.5	-6-	WEATHERED ZONE, GRANITE/PEGMATITE ROCK, LARGE MINERALS, EPIDOTE, FELDSPAR, BIOTITE AND HORNBLEND
								-7-	
								-8-	
								-9-	
								-10-	
105.6		30	12	22/50 FOR 2"			27	-11-	ROCK STARTING, MORE SOLID, VERY HARD
								-12-	
								-13-	
								-14-	
								-15-	END OF BORING, UNABLE TO AUGER
								-16-	
								-17-	
								-18-	
								-19-	
								-20-	

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LOG OF BORING

HOLE NO.: B-5 **DATE DRILLED: 11/6/09** **SHEET: 1 OF 1**

PROJECT:	NASA / DRYDEN	**EXPLORATION METHOD:**	HOLLOW STEM
LOCATION:	FACILITIES SUPPORT CENTER	**SIZE OF HOLE:**	6"
GROUND ELEVATION:	2302	**CONTRACTOR:**	DHPE
DEPTH OF WATER TABLE:	NE	**DRILLER:**	SC DRILLING
DEPTH TO SOLID ROCK:		**INSPECTOR:**	DEVELOP. ONE

DRY DENSITY (PCF)	UNDISTURBED SAMPLES WEIGHT LBS	DROP INCHES	INCHES DRIVEN	BLOW COUNT	UNDIS	BAG	%W	DEPTH FEET	FIELD DESCRIPTION
								-0-	SILTY SAND (SM/SC) VERY POORLY SORTED, TAN/BROWN, DRY AT SURFACE
								-1-	MOIST A FEW FEET DOWN
								-2-	BROKEN DOWN ROCK AT 2 FEET, ALLUVIUM TOP 1-2 FEET. LARGE MINERALS
126.0		30	12	15/18			1.3	-3-	ON TOP. (POSSIBLE ROAD DEMO TOP FEW FT)
								-4-	
								-5-	
120.3		30	12	14/17			9.6	-6-	DENSE SILTY SAND, TAN/BROWN MINERALS APPROXIMATELY 1MM TO 1CM, FAIRLY DRY, DENSE
								-7-	
								-8-	
								-9-	
								-10-	DENSE SILTY SAND
97.8		30	6	50 FOR 6"			5.4	-11-	WEATHERED ROCK/LARGE MINERALS IN GRANITE ROCK (PEGMATITIC ALMOST) SEAMS ARE BRITTLE, MINERALS ARE HARD
								-12-	
								-13-	
								-14-	
								-15-	
120.3		30	12	22/32			6.0	-16-	
								-17-	ROCK GETS HARDER AND WELDED BETTER
								-18-	
								-19-	
				50 FOR 5"				-20-	END OF BORING

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NND11385257E
Construct Facilities Support Center
Addendum 2
9/1/2011

1. In accordance with Specification Section 09 51 00 Paragraph 2.1.3(g) revises the 3rd Legend note on drawings A3.0 through A3.3

FROM:
2x2 suspended ceiling grid with acoustical tiles and triangular edge. See Detail 7/A11.2

TO:
2x2 suspended ceiling grid with acoustical tiles and square edge. See Detail 7/A11.2

2 Revise Specification Section 09 51 00, paragraph 2.1.1(b) as follows:

FROM

b. For informational purposes, a list of known sources for acoustical ceiling tiles using recycled material is provided in the EPA/CPG Supplier database at:

http://www.ergweb2.com/cpg4review/user/cpg_search.cfm

TO:

b. For informational purposes, a list of known sources for acoustical ceiling tiles using recycled material is provided in the EPA/CPG Supplier database at:

http://www.epa.gov/osw/conserve/tools/cpg/database.htm