

FOR CONTRACT NO.: 07-2159C4

# INFORMATION HANDOUT

FOUNDATION REPORT ON RETAINING WALL NO. 13

RIGHT OF ENTRY AGREEMENT WITH UNION PACIFIC RAILROAD COMPANY

**ROUTE: 07-LA-5-2.9/4.9**

**ADDED PER ADDENDUM NO. 1 DATED APRIL 21, 2011**

# Addendum

**To:** MR. RAMIN RASHEDI  
Branch Chief  
Bridge Design Branch 11

**Date:** March 14, 2011

**File No.** 07-LA-005, KP 2.9  
07-2159C1  
Retaining Wall No. 13

Attn: Mr. Daniel Texler

**From:** DEPARTMENT OF TRANSPORTATION  
DIVISION OF ENGINEERING SERVICES  
Geotechnical Services  
Office of Geotechnical Design South-1

**Subject:** Foundation Report - Retaining Wall No. 13

## Introduction

This addendum presents the revised wall type, analysis, and design of the proposed Retaining Wall no. 13 (RW 13). Originally, Type I retaining wall with a footing cap supported by batter piles was recommended to support the proposed roadway embankment (Caltrans, May 24, 2010, reference 1). Due to right of way issue, a revised retaining wall type, geosynthetic reinforced embankment wall, is considered to be suitable to support the proposed roadway embankment from Sta. 10+00 to 11+21.92. Type I wall with a footing cap supported by batter piles still considered feasible to support the embankment from Sta. 11+21.92 to 11+30.32. The proposed retaining wall is measured approximately 130 meters in length and 10.3 meters in height (exposed wall height). The wall face will be consisted of cast-in-place (CIP) concrete panel and shotcrete, and supported by a concrete pad, tie rods, and concrete anchors. This addendum only addressed geosynthetic reinforced embankment wall. For any other information relevant to the proposed walls including Type I retaining wall can be found in reference 1 report.

## Subsurface Exploration

One borehole and one CPT were advanced to a maximum depth of approximately 26 meters below existing grade (Caltrans 2008) near the proposed retaining wall locations. Based on LOTBs, on-site foundation soils consisted of interbedded sand/silty sand and silt. Table 1 summarized soil parameters used in wall analysis:

**Table 1 Soil Engineering Properties**

Soil Type	Depth (meter)	Density (kN/m <sup>2</sup> )	Friction Angle (degree)
Reinforced Soil	--	18.9	34
Retained Soil	--	18.9	34
Foundation Soil	0 - 4	18.9	32
	4 - 5.5	17.6	31
	5.5 - 7.5	18.0	31

## Engineering Analysis and Recommendations

### Geosynthetic Reinforced Embankment Wall

Based on the provided structural plans, the maximum exposed wall height of the geosynthetic reinforced embankment wall is approximately 8.3 meters.

Wrap-around faced geosynthetic reinforced wall with a cast-in-place (CIP) concrete wall face may be used to support the proposed embankment.

Table 2 summarized the minimum factor of safety required of external and internal analysis of geosynthetic reinforced embankment wall:

**Table 2 Minimum Factor of Safety**

Condition	Static	Seismic
Pullout	1.5	1.13
Direct Sliding Failure	1.3	1.0
Compound and Deep-Seated (Overall Stability) Failure	1.3	1.1

The design of geosynthetic reinforced embankment wall is shown in Table 3:

**Table 3 Summary of Geosynthetic Reinforced Embankment Wall**

Station	Maximum Exposed Wall Height (m)	Height Relative to Toe* (m)	Reinforced Type (Geogrid/Geotextile)	Long Tem Design Strength (kg/m)	Vertical Reinforcement Spacing (m)	Reinforcement Length (m)	Return Embedment Length (m)
10+00.000 to 10+49.000	H<4	0 to 3	I	4,260	0.67	4.0	1.2
		0 to -0.67	I	4,260	0.33	4.0	1.2
10+49.000 to 11+09.700	4<H<8.5	Above 4	I	4,260	0.67	8.0	1.2
		0 to 4	I	4,260	0.33	8.0	1.2
		0 to -0.67	I	4,260	0.33	8.0	1.2

Note: 1. Toe elevations are original grade or design finish grade

The sketch of the geosynthetic reinforced embankment wall is attached.

Geotextile should be used to contain fill soils at the wall surface.

**Construction Consideration**

- Earthwork and engineering fabric should be performed in accordance with Section 19 and 88 of the Caltrans Standard Specifications (May 2006), respectively.
- Geosynthetic reinforcement should be performed in accordance with Caltrans Standard Special Provision (SSP) 19-750 (June 2009).
- Corrosion requirements for tie rod of anchor should be performed in accordance with Caltrans SSP 19-600 (June 2009).
- Geosynthetic reinforced embankment wall should be constructed before the construction of CIP wall face. Geocomposite drain should be placed between the wall face and reinforced embankment.

Mr. Daniel Texler

March 14, 2011

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If you have any questions or comments, please contact Hung Po Yang (916) 227-4534.



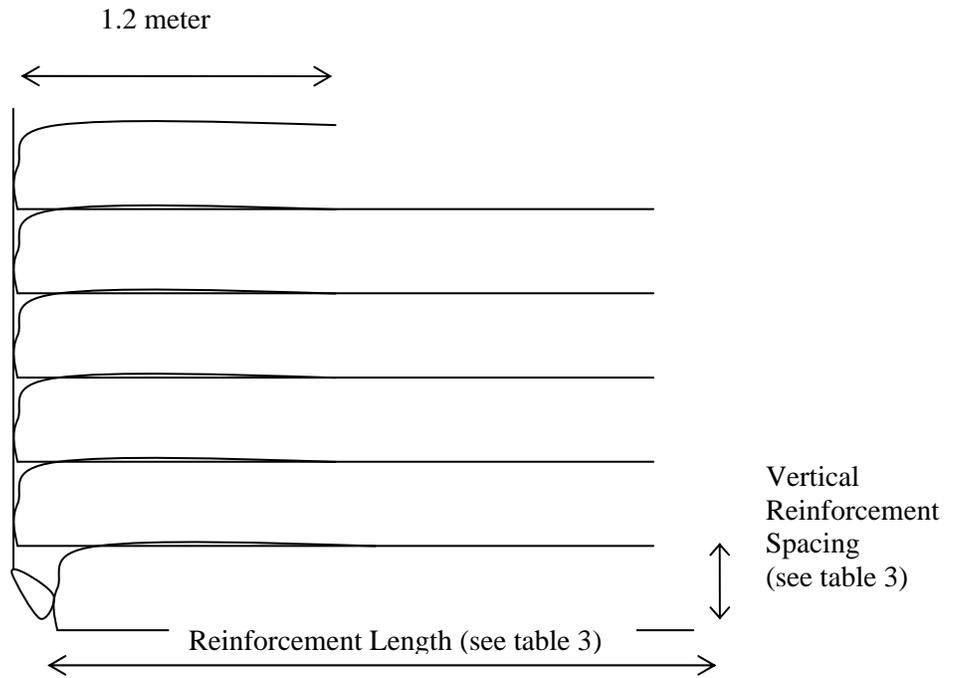
Hung Po Yang, P.E.  
Transportation Engineer–Civil  
Branch A

Attachment: Figure 1: Geosynthetic Reinforcement Embankment Wall

Cc: Nancy Pe

#### References

1. "Geotechnical Design Recommendations for Type I Retaining Walls at Carmenita Ave and I-5 Interchange" prepared by Caltrans dated May 24, 2010.



**Figure 1.** Geosynthetic Reinforced Embankment Wall

State Agreement No. 07R262  
UPRR Folder No. 2561-42  
07-LA-5-KP 2.9/3.9  
PUC No. 001BK-501 20-A  
DOT No. 924334L  
State Agreement No. 11R079  
UPRR Folder No. 2561-42  
11-imp-78.111-R19.5/R24.5.37.6/38.5  
PUC No. 001 BN 685.00

**EXHIBIT F**

**CALTRANS**  
**RIGHT OF ENTRY AGREEMENT**

THIS AGREEMENT is made and entered into as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between UNION PACIFIC RAILROAD COMPANY, a Delaware corporation (hereinafter "Railroad") and STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (hereinafter "Licensee").

IT IS MUTUALLY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

**ARTICLE 1 - DEFINITION OF LICENSEE**

For purposes of this Agreement, all references in this Agreement to Licensee shall include Licensee's contractors, subcontractors, officers, agents and employees, and others acting under its or their authority.

**ARTICLE 2 - RIGHT GRANTED; PURPOSE**

Railroad hereby grants to Licensee the right, during the term hereinafter stated and upon and subject to each and all of the terms, provisions and conditions herein contained, to enter upon and have ingress to and egress from the portion of Railroad's property located at or near Milepost 501.17501.20-A, DOT No. 924-334924334L, on Railroad's Santa Ana Subdivision located in the City of Santa Fe Springs, Los Angeles County, California, for the purpose of performing work relating to construction, use, maintenance and repair of a grade separation overpass structure (the "Structure") that will carry vehicular traffic traversing on Carmenita Road over Railroad's track(s) and property, Licensee's Project No. 5-LA-PM 1.8/3.1 (the "Work") as such location is also shown on the print, marked Exhibit A, attached hereto and hereby made a part hereof. The right herein granted to Licensee is limited to those portions of Railroad's property specifically described in Exhibit A-1 attached hereto and hereby made a part hereof, or designated by the Railroad representative named in Article 4. This Agreement is subject to the terms and conditions of the Construction and Maintenance Agreement (Carmenita Avenue Overhead) entered into as of the \_\_\_\_\_ day of \_\_\_\_\_, 2011, by and between Railroad and State.

**ARTICLE 3 - TERMS AND CONDITIONS CONTAINED IN EXHIBITS B, C AND D**

State Agreement No. 07R262

UPRR Folder No. 2561-42

07-LA-5-KP 2/9/4/9

PUC No. 001BK-501.20-A

DOT No. 924334L

State Agreement No. 11R079

UPRR Folder No. 2561-42

11-imp-78,111-R19.5/R24.5, 37.6/38.5

PUC No. 001-BN-685.00

The terms and conditions contained in **Exhibit B**, **Exhibit C** and **Exhibit D**, attached hereto, are hereby made a part of this Agreement.

State Agreement No. 07R262  
UPRR Folder No. 2561-42  
07-LA-5-KP 2 9/4 9  
PUC No. 001BK-501 20-A  
DOT No. 9243341  
State Agreement No. 11R079  
UPRR Folder No. 2561-42  
11-imp-78,111-R19-5/R24-5, 37-6-38-5  
PUC No. 001-BN-685-00

**ARTICLE 4 - ALL EXPENSES TO BE BORNE BY  
LICENSEE; RAILROAD REPRESENTATIVE**

A. Licensee shall bear any and all costs and expenses associated with any work performed by Licensee, or any costs or expenses incurred by Railroad relating to this Agreement.

B. Licensee shall coordinate all of its work with the following Railroad representative or his or her duly authorized representative (the "Railroad Representative"):

Senior Manager, Industry and Public Projects  
Union Pacific Railroad Company  
2015 South Willow Avenue  
Bloomington, California 92316  
Phone (909) 685-2264  
Fax (909) 685-2289

C. Licensee, at its own expense, shall adequately police and supervise all Work to be performed by Licensee and shall ensure that such Work is performed in a safe manner as set forth in Section 7 of **Exhibit B**. The responsibility of Licensee for safe conduct and adequate policing and supervision of Licensee's work shall not be lessened or otherwise affected by Railroad's approval of the plans and specifications involving the Work, or by Railroad's collaboration in performance of any of the Work, or by the presence at the work site of a Railroad Representative, or by compliance by Licensee with any requests or recommendations made by the Railroad Representative.

**ARTICLE 5 - TERM; TERMINATION**

A. The grant of right herein made to Licensee shall commence upon the Contractor's execution of the Contractor's endorsement marked **Exhibit D**, attached hereto, and also upon Railroad's acceptance of the Contractor's insurance in accordance with UNION PACIFIC RAILROAD MINIMUM REQUIREMENTS, Part 3, Section 3.04 of the Construction and Maintenance Agreement and Article 6 of this Agreement. The grant of right herein made to Licensee shall, as to the Easement described in Exhibit A-2, commence on September 1, 2011 and continue until completion of construction of the Structure, unless sooner terminated as herein provided, or at such time as Licensee has completed its Work on Railroad's property, whichever is earlier terminate on the earlier of (i) October 1, 2013, or (ii) upon completion by Licensee of the initial construction of the Structure. Licensee agrees to notify the Railroad Representative in writing when it has completed its Work on Railroad's property.

State Agreement No. 07R262  
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DOT No. 924334L  
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UPRR Folder No. 2561-42  
Imp-78,111-R1P 5/R24.5, 37.6/38.5  
PUC No. 001-BN-685.00

B. Railroad may terminate this Agreement if it reasonably determines in good faith that Licensee has failed to comply with any of the material terms and conditions of this Agreement and has not cured such failure within ten (10) days after receiving notice (oral or written) from Railroad describing such failure in reasonable detail.

State Agreement No. 07R262  
UPRR Folder No. 2561-42  
07-LA-5-KP 2/9/49  
PUC No. 001BK-501 20-A  
DOT No. 9243341  
State Agreement No. 11R079  
UPRR Folder No. 2561-42  
Imp-78,111-R19.5/R24.5, 37-6-38-5  
PUC No. 001 BN-685.00

#### **ARTICLE 6 - INSURANCE; CONTRACTOR'S ENDORSEMENT.**

A. Licensee is self-insured. Licensee shall provide Railroad defense and indemnification at least equal to the defense, indemnification and insurance provisions (including the endorsements) contained in **Exhibit B**. Nothing herein shall be deemed to insure Railroad against its sole negligence or willful misconduct.

B. In the event any of the Work to be done upon the property of Railroad is to be done by a contractor or subcontractor of Licensee, said contractor or subcontractor may have the benefit of the license herein granted, while performing work for Licensee, provided such contractor or subcontractor agrees to be subject to and bound by the terms and conditions of this Agreement by: (1) executing an endorsement to this Agreement in the form set forth in Contractor's Endorsement marked **Exhibit E**, attached hereto, and (2) providing to Railroad the insurance policies, certificates, binders, and/or endorsements described in **Exhibit C**, and (3) providing to Railroad the insurance endorsements required under Section 12 of Exhibit B of this Agreement.

C. All insurance correspondence, certificates, binders or originals shall be sent to:

Union Pacific Railroad Company  
1400 Douglas St., Mail Stop 1690  
Omaha, NE 68179-1690  
Attn: Senior Manager, Contracts  
Folder No.:2561-42

#### **ARTICLE 7 - CHOICE OF FORUM**

Unless otherwise preempted by applicable federal laws, rules or regulations, this Agreement shall be governed, construed and enforced in accordance with the laws of the State of California. Litigation arising out of or connected with this Agreement may be instituted and maintained in the courts of the State of California only, and the parties consent to jurisdiction over their person and over the subject matter of any such litigation, in those courts, and consent to service of process issued by such courts.

#### **ARTICLE 8 - REMOVAL OF CONTRACTOR/SUBCONTRACTOR EMPLOYEE**

At the request of Railroad, Licensee shall remove from Railroad property any contractor, subcontractor, officer, agent and/or employee of Licensee who fails to conform to the instructions of the Railroad Representative in connection with the Work on Railroad's property, and any right of Licensee shall be suspended until such removal has occurred. Licensee shall

State Agreement No. 07R262  
UPRR Folder No. 2561-42  
07-1 A-5-KP 2 9/4 9  
PUC No. 001BK-S01 20-A  
DOI No. 924334L  
State Agreement No. 11R079  
UPRR Folder No. 2561-42  
Imp-78-111-R19-5/R24.5-37 6-38-5  
PUC No. 001 BN-685-00

indemnify Railroad against any claims arising from the removal of any such contractor, subcontractor, officer, agent and/or employee from Railroad property.

State Agreement No. 07R262  
UPRR Folder No. 2561-42  
07-LA-S-KP 2.9/4.9  
PUC No. 001BK-501 20-A  
DOT No. 924334L  
State Agreement No. 11R079  
UPRR Folder No. 2561-42  
11-Imp-78-111-R19-5/R24.5-37-638-5  
PUC No. 001-BN-685-00

**ARTICLE 9 - ADMINISTRATIVE FEE**

Upon the execution and delivery of this Agreement, Licensee shall pay to Railroad Five Hundred Dollars (\$500.00) as reimbursement for clerical, administrative and handling expenses in connection with the processing of this Agreement.

**ARTICLE 10 - SPECIAL PROVISIONS**

A. No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Railroad's trackage shall be installed or used by Licensee without the prior written permission of Railroad.

B. Explosives or other highly flammable substances shall not be stored on Railroad property without the prior written approval of the Railroad Representative.

C. The parties agree that this agreement is not, and is not intended to be, a construction contract for purposes of Cal. Civ. Code § 2782(a). Accordingly, to the maximum extent permitted by law, the provisions of Cal. Civ. Code § 2782(a), as interpreted by the California courts in Southern Pacific Transportation Co. v. Sandyland Protective Association, 224 Cal.App.3d 1494, 274 Cal.Rptr. 626 (1990), and in other past and future cases, shall not apply to this Agreement.

**IN WITNESS WHEREOF**, the parties hereto have executed this Agreement in duplicate as of the date first herein written.

**UNION PACIFIC RAILROAD COMPANY**

By: \_\_\_\_\_  
Title: \_\_\_\_\_

**STATE OF CALIFORNIA,  
DEPARTMENT OF TRANSPORTATION**

By: \_\_\_\_\_  
Title: \_\_\_\_\_

State Agreement No. 07R262  
UPRR Folder No. 2561-42  
07-1.A-5-KP 2.9/4.9  
PUC No. 001BK-501 20-A  
DOI No. 9243341  
State Agreement No. 11R079  
UPRR Folder No. 2561-42  
11-imp-78.111-R19.5/R24.5.37.6.38.5  
PUC No. 001 BN 685-00

**EXHIBIT A**

Exhibit A will be a print showing the general location of the right of entry area.

State Agreement No. 07R262  
UPRR Folder No. 2561-42  
07-LA-5-KP 2 9/4.9  
PUC No. 001BK-501.20-A  
DOT No. 924334L  
State Agreement No. 11R079  
UPRR Folder No. 2561-42  
11-imp-78.111-R19.5/R24.5.37.6/38.5  
PUC No. 001-BN-685.00

**EXHIBIT A-1**

Exhibit A-1 is the Easement Deed (Exhibit A-2 to the C&M Agreement).

**EXHIBIT B**  
**TO**  
**CALTRANS RIGHT OF ENTRY AGREEMENT**

**Section 1. NOTICE OF COMMENCEMENT OF WORK - FLAGGING.**

a. Licensee agrees to notify the Railroad Representative at least ten (10) working days in advance of Licensee commencing its Work and at least ten (10) working days in advance of proposed performance of any Work by Licensee in which any person or equipment will be within twenty-five (25) feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within twenty-five (25) feet of any track. No Work of any kind shall be performed, and no person, equipment, machinery, tool(s), material(s), vehicle(s), or thing(s) shall be located, operated, placed, or stored within twenty-five (25) feet of any of Railroad's track(s) at any time, for any reason, unless and until a Railroad flagman is provided to watch for trains. Upon receipt of such 10-day notice, the Railroad Representative will determine and inform Licensee whether a flagman need be present and whether Licensee need implement any special protective or safety measures. If flagging or other special protective or safety measures are performed by Railroad, such services will be provided at Licensee's expense with the understanding that if Railroad provides any flagging or other services, Licensee shall not be relieved of any of its responsibilities or liabilities set forth herein. Licensee shall promptly pay to Railroad all charges connected with such services within 30 days after presentation of a bill therefor.

b. The rate of pay per hour for each flagman will be the prevailing hourly rate in effect for an eight hour day for the class of persons used during regularly assigned hours and overtime in accordance with Labor Agreements and Schedules in effect at the time the Work is performed. In addition to the cost of such labor, a composite charge for vacation, holiday, health & welfare, supplemental sickness, Railroad Retirement & UC, supplemental pension, Employee's Liability & Property Damage and Administration will be included, computed on actual payroll. The composite charge will be the prevailing composite charge in effect at the time the work is performed. One and one-half times the current hourly rate is paid for overtime, Saturdays and Sundays and two and one-half times current hourly rate for holidays. Wage rates are subject to change, at any time, by law or by agreement between Railroad and its employees, and may be retroactive as a result of negotiations or a ruling of an authorized governmental agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, Licensee shall pay on the basis of the new rates and charges.

c. Reimbursement to Railroad will be required covering the full eight hour day during which any flagman is furnished, unless the flagman can be assigned to other Railroad work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other Railroad work. Reimbursement will also be required for any day not actually worked by the flagman following the flagman's assignment to work on the project for which Railroad is required to pay the flagman and which could not reasonably be avoided by Railroad by assignment of such flagman to other work, even though the Licensee may not be working during such time. When it becomes necessary for

Railroad to bulletin and assign an employee to a flagging position in compliance with union collective bargaining agreements, Licensee must provide Railroad a minimum of five (5) days notice prior to the cessation of the need for a flagman. If five (5) days notice of cessation is not given, Licensee will still be required to pay flagging charges for the five (5) day notice period required by union agreement to be given to the employee, even though flagging is not required for that period. An additional ten (10) days-notice must then be given to Railroad if flagging services are needed again after such five (5) day cessation notice has been given to Railroad.

**Section 2. LIMITATION AND SUBORDINATION OF RIGHTS GRANTED**

a. The foregoing grant of right is subject and subordinate to the prior and continuing right and obligation of Railroad to use and maintain its entire property including the right and power of Railroad to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, roadways, signal, communication, fiber optics, or other wirelines, pipelines and other facilities upon, along or across any or all parts of its property, all or any of which may be reasonably done at any time or times by Railroad without liability to Licensee or to any other party for compensation or damages.

b. The foregoing grant is also subject to all outstanding superior rights (including those in favor of licensees and lessees of Railroad's property, and others) and the right of Railroad to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

**Section 3. NO INTERFERENCE WITH OPERATION OF RAILROAD AND ITS TENANTS**

a. Licensee shall conduct its operations so as not to interfere with the continuous and uninterrupted use and operation of the railroad tracks and property of Railroad, including, without limitation, the operations of Railroad's lessees, licensees or others, unless specifically authorized in advance by the Railroad Representative. Nothing shall be done or permitted to be done by Licensee at any time that would in any manner impair the safety of such operations. When not in use, Licensee's machinery and materials shall be kept at least fifty (50) feet from the centerline of Railroad's nearest track, and there shall be no vehicular crossings of Railroad's tracks except at existing open public crossings.

b. Operations of Railroad and work performed by Railroad personnel and delays in the work to be performed by Licensee caused by such railroad operations and work are expected by Licensee, and Licensee agrees that Railroad shall have no liability to Licensee, or any other person or entity for any such delays. Licensee shall coordinate its activities with those of Railroad and third parties so as to avoid interference with railroad operations. The safe operation of Railroad train movements and other activities by Railroad takes precedence over any work to be performed by Licensee.

**Section 4. LIENS.**

Licensee shall pay in full all persons who perform labor or provide materials for the work to be performed by Licensee. Licensee shall not create, permit or suffer any mechanic's or materialmen's liens of any kind or nature to be created or enforced against any property of

Railroad for any such work performed. Licensee shall indemnify and hold harmless Railroad from and against any and all liens, claims, demands, costs or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished.

**Section 5. PROTECTION OF FIBER OPTIC CABLE SYSTEMS.**

a. Fiber optic cable systems may be buried on Railroad's property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. Licensee shall telephone Railroad during normal business hours (7:00 a.m. to 9:00 p.m. Central Time, Monday through Friday, except holidays) at 1-800-336-9193 (also a 24-hour, 7-day number for emergency calls) to determine if fiber optic cable is buried anywhere on Railroad's property to be used by Licensee. If it is, Licensee shall telephone the telecommunications company(ies) involved, arrange for a cable locator, make arrangements for relocation or other protection of the fiber optic cable, and shall commence no work on the right of way until all such protection or relocation has been accomplished.

b. In addition to other indemnity provisions in this Agreement, Licensee shall, pursuant to Cal. Gov. Code §14662.5, indemnify and hold Railroad harmless from and against all costs, liability and expense whatsoever (including, without limitation, attorneys' fees, court costs and expenses) arising out of any act or omission of Licensee and its contractor, agents and/or employees that proximately causes or contributes to (1) any damage to or destruction of any telecommunications system on Railroad's property, and/or (2) any injury to or death of any person employed by or on behalf of any telecommunications company, and/or its contractors, agents and/or employees, on Railroad's property. Licensee shall not have or seek recourse against Railroad for any claim or cause of action for alleged loss of profits or revenue or loss of service or other consequential damage to a telecommunication company using Railroad's property or a customer or user of services of the fiber optic cable on Railroad's property.

**Section 6. PERMITS - COMPLIANCE WITH LAWS.**

In the prosecution of the work covered by this Agreement, Licensee shall secure any and all necessary permits and shall comply with all applicable federal, state and local laws, regulations and enactments affecting the work, including, without limitation, all applicable Federal Railroad Administration regulations.

**Section 7. SAFETY.**

a. Safety of personnel, property, rail operations and the public is of paramount importance in the prosecution of the work performed by Licensee. Licensee shall be responsible for initiating, maintaining and supervising all safety, operations and programs in connection with the work. Licensee shall at a minimum comply with Railroad's safety standards listed in **Exhibit D**, hereto attached, to ensure uniformity with the safety standards followed by Railroad's own forces. As a part of Licensee's safety responsibilities, Licensee shall notify Railroad if Licensee determines that any of Railroad's safety standards are contrary to good safety practices. Licensee shall furnish copies of **Exhibit D** to each of its employees before they enter the job site.

b. Without limitation of the provisions of paragraph A above, Licensee shall keep the job site free from safety and health hazards and ensure that its employees are competent and adequately trained in all safety and health aspects of the job.

c. Licensee shall have proper first aid supplies available on the job site so that prompt first aid services may be provided to any person injured on the job site. Licensee shall promptly notify Railroad of any U.S. Occupational Safety and Health Administration reportable injuries. Licensee shall have a nondelegable duty to control its employees while they are on the job site or any other property of Railroad, and to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage, drug or other substance that may inhibit the safe performance of any work.

d. If and when requested by Railroad, Licensee shall deliver to Railroad a copy of Railroad's safety plan for conducting the work (the "Safety Plan"). Railroad shall have the right, but not the obligation, to require Licensee to correct any deficiencies in the Safety Plan. The terms of this Agreement shall control if there are any inconsistencies between this Agreement and the Safety Plan.

#### **Section 8. INDEMNITY.**

a. To the extent not prohibited by Cal. Gov. Code §14662.5, Licensee shall indemnify, defend and hold harmless Railroad, its affiliates, and its and their officers, agents and employees ("Indemnified Parties") from and against any and all loss, damage, injury, liability, claim, demand, cost or expense (including, without limitation, attorney's, consultant's and expert's fees, and court costs), fine or penalty (collectively, "Loss") incurred by any person (including, without limitation, any Indemnified Party, Licensee, or any employee of Licensee or of any Indemnified Party) arising out of or in any manner connected with (i) any Work performed by Licensee, or (ii) any act or omission of Licensee, its officers, agents or employees, or (iii) any breach of this agreement by Licensee.

b. To the extent not prohibited by Cal. Gov. Code §14662.5, the right to indemnity under this Section 8 shall accrue upon occurrence of the event giving rise to the Loss, and shall apply regardless of any negligence or strict liability of any Indemnified Party, except where the Loss is caused by the sole active negligence or willful misconduct of an Indemnified Party as established by the final judgment of a court of competent jurisdiction. The sole active negligence or willful misconduct of any Indemnified Party shall not bar the recovery of any other Indemnified Party.

c. To the extent not prohibited by Cal. Gov. Code §14662.5, Licensee expressly and specifically assumes potential liability under this Section 8 for claims or actions brought by Licensee's own employees. Licensee waives any immunity it may have under worker's compensation or industrial insurance acts to indemnify Railroad under this Section 8. Licensee acknowledges that this waiver was mutually negotiated by the parties hereto.

d. To the extent not prohibited by Cal. Gov. Code §14662.5, no court or jury findings in any employee's suit pursuant to any worker's compensation act or the Federal Employer's Liability Act against a party to this Agreement may be relied upon or used by Licensee in any attempt to assert liability against Railroad.

e. The provisions of this Section 8 shall survive the completion of any Work performed by Licensee or the termination or expiration of this Agreement. To the extent not prohibited by Cal. Gov. Code §14662.5, in no event shall this Section 8 or any other provision of this Agreement be deemed to limit any liability Licensee may have to any Indemnified Party by statute or under common law.

**Section 9. RESTORATION OF PROPERTY.**

In the event Railroad authorizes Licensee to take down any fence of Railroad or in any manner move or disturb any of the other property of Railroad in connection with the Work to be performed by Licensee, then in that event Licensee shall, as soon as possible and at Licensee's sole expense, restore such fence and other property to the same condition as the same were in before such fence was taken down or such other property was moved or disturbed. Licensee shall remove all of Licensee's tools, equipment and materials from Railroad's property promptly upon completion of the Work, restoring Railroad's property to the same state and condition as when Licensee entered thereon.

**Section 10. WAIVER OF DEFAULT.**

Waiver by Railroad of any breach or default of any condition, covenant or agreement herein contained to be kept, observed and performed by Licensee shall in no way impair the right of Railroad to avail itself of any remedy for any subsequent breach or default.

**Section 11. MODIFICATION - ENTIRE AGREEMENT.**

No modification of this Agreement shall be effective unless made in writing and signed by Licensee and Railroad. This Agreement and the exhibits attached hereto and made a part hereof constitute the entire understanding between Licensee and Railroad and cancel and supersede any prior negotiations, understandings or agreements, whether written or oral, with respect to the work to be performed by Licensee.

**Section 12. ASSIGNMENT - SUBCONTRACTING.**

Contractor shall not assign or subcontract this Agreement, or any interest therein, without the written consent of the Railroad. Contractor shall be responsible for the acts and omissions of all subcontractors. Before Contractor commences any work, the Contractor shall, except to the extent prohibited by law; (1) require each of its subcontractors to include the Contractor as "Additional Insured" in the subcontractor's Commercial General Liability policy and Business Automobile policies with respect to all liabilities arising out of the subcontractor's performance of work on behalf of the Contractor by endorsing these policies with ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage; (2) require each of its subcontractors to endorse their Commercial General Liability Policy with "Contractual Liability Railroads" ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) for the job site; and (3) require each of its subcontractors to endorse their Business Automobile Policy with "Coverage For Certain Operations In Connection With Railroads" ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) for the job site.

State Agreement No. 07R262  
UPRR Folder No. 2561-42  
07-LA-5-KP 2 9/4 9  
PUC No. 001BK-501 20-A  
DOT No. 924334L  
State Agreement No. 11R079  
UPRR Folder No. 2561-42  
11-imp-78,111-R19-5/R24-5, 37-6-38-5  
PUC No. 001BN-685-00

**Exhibit C  
TO  
CALTRANS  
RIGHT OF ENTRY AGREEMENT**

**INSURANCE PROVISIONS**

Contractor shall, at its sole cost and expense, procure and maintain during the course of the Project and until all Project work on Railroad's property has been completed and Contractor has removed all equipment and materials from Railroad's property and has cleaned and restored Railroad's property to Railroad's satisfaction, the following insurance coverage:

- A. **Commercial General Liability** insurance. Commercial general liability (CGL) with a limit of not less than \$5,000,000 each occurrence and an aggregate limit of not less than \$10,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy must also contain the following endorsement, which must be stated on the certificate of insurance:

- Contractual Liability Railroads ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Railroad Company Property" as the Designated Job Site.

- B. **Business Automobile Coverage** insurance. Business auto coverage written on ISO form CA 00 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less \$5,000,000 for each accident.

The policy must contain the following endorsements, which must be stated on the certificate of insurance:

- Coverage For Certain Operations In Connection With Railroads ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Property" as the Designated Job Site.
- Motor Carrier Act Endorsement - Hazardous materials clean up (MCS-90) if required by law.

- C. **Workers' Compensation and Employers' Liability** insurance. Coverage must include but not be limited to:

- Contractor's statutory liability under the workers' compensation laws of the State

of California.

- Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit \$500,000 each employee.

If Contractor is self-insured, evidence of state approval and excess workers compensation coverage must be provided. Coverage must include liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

The policy must contain the following endorsement, which must be stated on the certificate of insurance:

- Alternate Employer endorsement ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing Railroad in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

- D. **Railroad Protective Liability** insurance. Contractor must maintain Railroad Protective Liability insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of Railroad as named insured, with a limit of not less than \$2,000,000 per occurrence and an aggregate of \$6,000,000. A binder stating the policy is in place must be submitted to Railroad before the work may be commenced and until the original policy is forwarded to Railroad.
- E. **Umbrella or Excess** insurance. If Contractor utilizes umbrella or excess policies, these policies must "follow form" and afford no less coverage than the primary policy.
- F. **Pollution Liability** insurance. Pollution liability coverage must be written on ISO form Pollution Liability Coverage Form Designated Sites CG 00 39 12 04 (or a substitute form providing equivalent liability coverage), with limits of at least \$5,000,000 per occurrence and an aggregate limit of \$10,000,000.

If the scope of work as defined in this Agreement includes the disposal of any hazardous or non-hazardous materials from the job site, Contractor must furnish to Railroad evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting the materials, with coverage in minimum amounts of \$1,000,000 per loss, and an annual aggregate of \$2,000,000.

#### ***Other Requirements***

- G. All policy(ies) required above (except worker's compensation and employers liability) must include Railroad as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage). The coverage provided to Railroad as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for Railroad's negligence whether sole or partial, active or passive, and shall not be limited by Contractor's liability under the indemnity provisions of this Agreement.

- H. Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless the law governing this Agreement prohibits all punitive damages that might arise under this Agreement.
- I. Contractor waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against Railroad and its agents, officers, directors and employees. This waiver must be stated on the certificate of insurance.
- J. Prior to commencing the work, Contractor shall furnish Railroad with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements in this Agreement.
- K. All insurance policies must be written by a reputable insurance company acceptable to Railroad or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the State of California.
- L. The fact that insurance is obtained by Contractor or by Railroad on behalf of Contractor will not be deemed to release or diminish the liability of Contractor, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad from Contractor or any third party will not be limited by the amount of the required insurance coverage.

**EXHIBIT D**  
**TO**  
**CALTRAN'S RIGHT OF ENTRY AGREEMENT**

**MINIMUM SAFETY REQUIREMENTS**

The term "employees" as used herein refer to all employees of Licensee as well as all employees of any subcontractor or agent of Licensee.

**I. Clothing**

- A. All employees of Licensee will be suitably dressed to perform their duties safely and in a manner that will not interfere with their vision, hearing, or free use of their hands or feet.

Specifically, Licensee's employees must wear:

- (i) Waist-length shirts with sleeves.
- (ii) Trousers that cover the entire leg. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching.
- (iii) Footwear that covers their ankles and has a defined heel. Employees working on bridges are required to wear safety-toed footwear that conforms to the American National Standards Institute (ANSI) and FRA footwear requirements.

- B. Employees shall not wear boots (other than work boots), sandals, canvas-type shoes, or other shoes that have thin soles or heels that are higher than normal.

- C. Employees must not wear loose or ragged clothing, neckties, finger rings, or other loose jewelry while operating or working on machinery.

**II. Personal Protective Equipment**

Licensee shall require its employees to wear personal protective equipment as specified by Railroad rules, regulations, or recommended or requested by the Railroad Representative.

- (i) Hard hat that meets the American National Standard (ANSI) Z89.1 – latest revision. Hard hats should be affixed with Licensee's company logo or name.
- (ii) Eye protection that meets American National Standard (ANSI) for occupational and educational eye and face protection, Z87.1 – latest revision. Additional eye protection must be provided to meet specific job situations such as welding, grinding, etc.

(iii)Hearing protection, which affords enough attenuation to give protection from noise levels that will be occurring on the job site. Hearing protection, in the form of plugs or muffs, must be worn when employees are within:

- 100 feet of a locomotive or roadway/work equipment
- 15 feet of power operated tools
- 150 feet of jet blowers or pile drivers
- 150 feet of retarders in use (when within 10 feet, employees must wear dual ear protection – plugs and muffs)
- 

(iv) Other types of personal protective equipment, such as respirators, fall protection equipment, and face shields, must be worn as recommended or requested by the Railroad Representative.

### III. On Track Safety

Licensee is responsible for compliance with the Federal Railroad Administration's Roadway Worker Protection regulations – 49CFR214, Subpart C and Railroad's On-Track Safety rules. Under 49CFR214, Subpart C, railroad contractors are responsible for the training of their employees on such regulations. In addition to the instructions contained in Roadway Worker Protection regulations, all employees must:

- (i) Maintain a distance of twenty-five (25) feet to any track unless the Railroad Representative is present to authorize movements.
- (ii) Wear an orange, reflectorized workwear approved by the Railroad Representative.
- (iii) Participate in a job briefing that will specify the type of On-Track Safety for the type of work being performed. Licensee must take special note of limits of track authority, which tracks may or may not be fouled, and clearing the track. Licensee will also receive special instructions relating to the work zone around machines and minimum distances between machines while working or traveling.

### IV. Equipment

A. It is the responsibility of Licensee to ensure that all equipment is in a safe condition to operate. If, in the opinion of the Railroad Representative, any of Licensee's equipment is unsafe for use, Licensee shall remove such equipment from the Railroad's property. In addition, Licensee must ensure that the operators of all equipment are properly trained and competent in the safe operation of the equipment. In addition, operators must be:

- Familiar and comply with Railroad's rules on lockout/tagout of equipment.
- Trained in and comply with the applicable operating rules if operating any hy-rail equipment on-track.
- Trained in and comply with the applicable air brake rules if operating any equipment that moves rail cars or any other railbound equipment.

- B. All self-propelled equipment must be equipped with a first-aid kit, fire extinguisher, and audible back-up warning device.
- C. Unless otherwise authorized by the Railroad Representative, all equipment must be parked a minimum of twenty-five (25) feet from any track. Before leaving any equipment unattended, the operator must stop the engine and properly secure the equipment against movement.
- D. Cranes must be equipped with three orange cones that will be used to mark the working area of the crane and the minimum clearances to overhead powerlines.

**V. General Safety Requirements**

- A. Licensee shall ensure that all waste is properly disposed of in accordance with applicable federal and state regulations.
- B. Licensee shall ensure that all employees participate in and comply with a job briefing conducted by the Railroad Representative, if applicable. During this briefing, the Railroad Representative will specify safe work procedures, (including On-Track Safety) and the potential hazards of the job. If any employee has any questions or concerns about the work, the employee must voice them during the job briefing. Additional job briefings will be conducted during the work as conditions, work procedures, or personnel change.
- C. All track work performed by Licensee meets the minimum safety requirements established by the Federal Railroad Administration's Track Safety Standards 49CFR213.
- D. All employees comply with the following safety procedures when working around any railroad track:
  - (i) Always be on the alert for moving equipment. Employees must always expect movement on any track, at any time, in either direction.
  - (ii) Do not step or walk on the top of the rail, frog, switches, guard rails, or other track components.
  - (iii) In passing around the ends of standing cars, engines, roadway machines or work equipment, leave at least 20 feet between yourself and the end of the equipment. Do not go between pieces of equipment of the opening is less than one car length (50 feet).
  - (iv) Avoid walking or standing on a track unless so authorized by the employee in charge.
  - (v) Before stepping over or crossing tracks, look in both directions first.
  - (vi) Do not sit on, lie under, or cross between cars except as required in the performance of your duties and only when track and equipment have been protected against movement.
- E. All employees must comply with all federal and state regulations concerning workplace safety.

**EXHIBIT E**  
**TO**  
**CALTRANS RIGHT OF ENTRY AGREEMENT**

***CONTRACTOR'S ENDORSEMENT***

A. As a condition to entering upon the Railroad's right-of-way to perform Work pursuant to this agreement, State's contractor, \_\_\_\_\_,  
*(Name of Contractor)*

whose address is \_\_\_\_\_  
*(Contractor's Mailing Address)*

(hereinafter "Contractor"), agrees to comply with and be bound by all the terms and provisions of the attached Caltrans Right of Entry Agreement that was signed by Union Pacific Railroad Company ("Railroad") and the State of California, Department of Transportation ("State") relating to the Work to be performed in connection with State's Project No. 5-LA-PM 1.8/3.1 covering work in Santa Fe Springs, California, and the insurance requirements set forth in Exhibit C of the Right of Entry Agreement. The Contractor further acknowledges and agrees that the reference to Cal. Gov. Code §14662.5 in Sections 5.b) and 8.b) of Exhibit B to the Right of Entry Agreement does not apply to the Contractor and in no way limits the indemnities set forth in those provisions, to which the Contractor agrees to be bound.

B. Before the Contractor commences any Work, the Contractor will provide the Railroad with (i) a binder of insurance for the Railroad Protective Liability Insurance described in Section 13-2 of the Contract Special Provisions, hereto attached, and the original policy, or a certified duplicate original policy when available, and (ii) a certificate issued by its insurance carrier providing the other insurance coverage and endorsements required pursuant to Section 13-2 of the Contract Special Provisions.

C. All insurance correspondence, binders or originals shall be directed to:

Union Pacific Railroad Company  
Attn: Real Estate Department  
1400 Douglas Street, MS 1690  
Omaha, Nebraska 68179-1690  
Attn.: Senior Manager, Contracts  
Folder No. 2561-42

D. Please note that fiber optic cable may be buried on the Railroad's property. **Prior to commencing any work, the Contractor agrees to contact the Railroad's Telecommunications Operation Center as provided in Section 5 of Exhibit B of the Right of Entry Agreement to determine if any fiber optic cable is located on the Railroad's property on or near the location where the work is to be performed.** If there is, the Contractor must comply with the terms and conditions of Section 5 of Exhibit B before commencing any work on the Railroad's property.

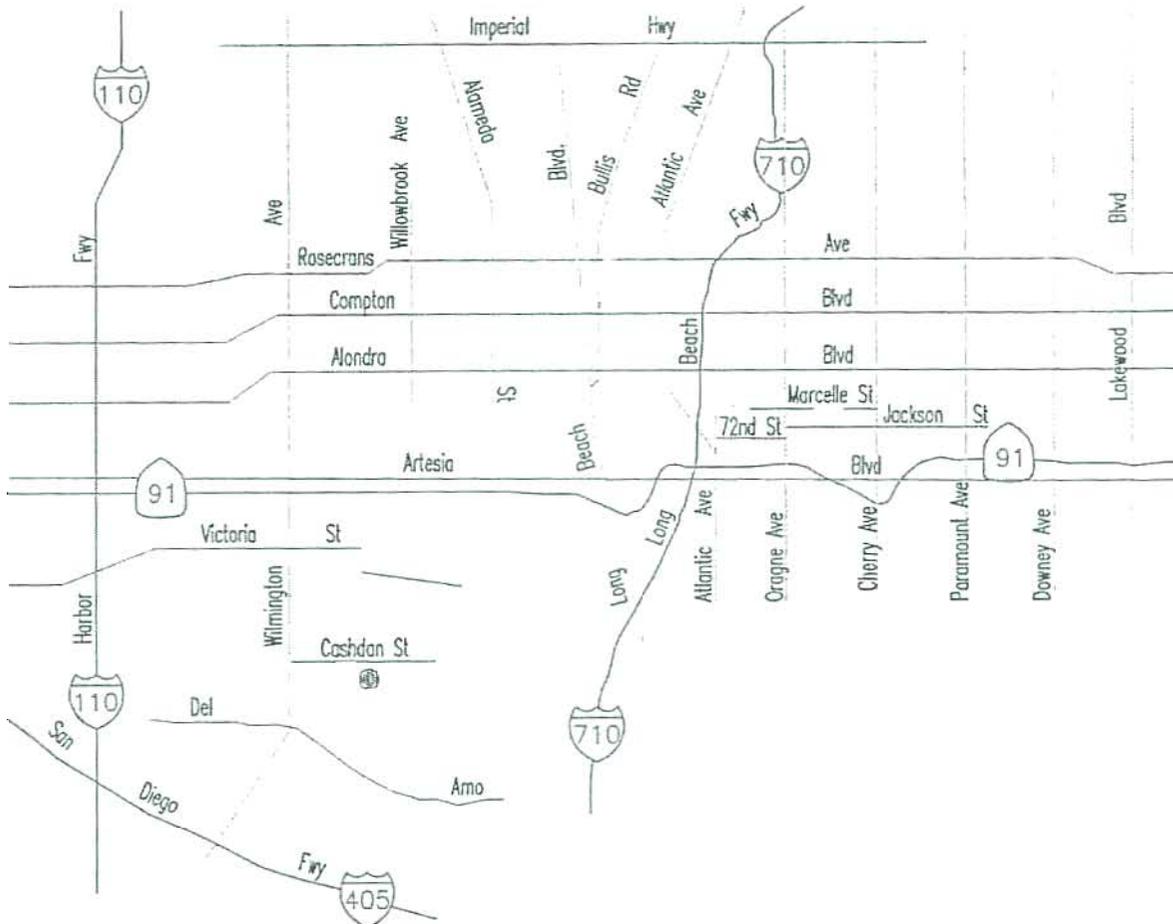
E. The Contractor agrees to also provide to the Railroad's Manager-Track Maintenance at 200 South Adams Street, Anaheim, CA 92802, (909) 685-2469, the advance notice required in Section I of Exhibit B of the Right of Entry Agreement prior to working on the Railroad's property in order for the Railroad to coordinate the Contractor's work with the Railroad's operations and to make arrangements for flagging protection (if applicable).

This endorsement shall be completed and sent to the person named in Paragraph C above.

\_\_\_\_\_  
(Name of Contractor)

By \_\_\_\_\_

Title: \_\_\_\_\_



LEGEND	
	Service Center

Dominguez Hills Service Center  
 1924 Cashdan St.  
 Compton, CA 90220  
 TG Page # LA 764 H-3



# COMPTON