

INFORMATION HANDOUT

For Contract No. 11-080234
At 11-Imp-98-31.6/32.1

Identified by
Project ID 1100020357

RAILROAD RELATIONS

Railroad Relations and Insurance Requirements

[Right of Way Agreement No. 11R089, dated May 23, 2016](#)

MATERIALS INFORMATION

[Structural Section Recommendations dated June 25, 2015](#)

[Initial Site Assessment dated June 26, 2015](#)

[Hazardous Materials Review of SR-98 West Widening Phase 1B dated August 9, 2016](#)

[Aerially Deposited Lead Survey Report dated June 29, 2015](#)

[Water Availability Letter dated January 5, 2015](#)

1. [Application for Temporary Water Use](#)
2. [Schedule No. 7 with Water Rates](#)

ELECTRONIC INFORMATION

The horizontal, vertical geometric alignments, and ground surface files in XML format

Cross sections in PDF format

State Agreement 11R089
UPRR Folder No. 2843-01

State Agreement 11R089
UPRR Folder No.: 2843-01

UPRR Audit No.: _____
11-IMP-98 PM 32.0 EA 080234
Birch St. At Grade Crossing
U.S. D.O.T. No. 760900M
CUPC No.: ~~001DN-707.71~~
Railroad Mile Post 707.71
Calexico Subdivision

**RIGHT OF WAY AGREEMENT
RAILROAD COORDINATION**

AT-GRADE CROSSING

THIS AGREEMENT ("Agreement") is made and entered into as of the 25th day of May, 2016 ("Effective Date"), by and between **UNION PACIFIC RAILROAD COMPANY**, a Delaware corporation, ("**Railroad**") and the **STATE OF CALIFORNIA** acting by and through its **DEPARTMENT OF TRANSPORTATION**, ("**State**").

RECITALS:

- A. State, acting by and through its then Department of Public Works, Division of Highways, entered into an Agreement on March 30, 1964, with Southern Pacific Company, a former corporation to construct, reconstruct, maintain and use an at-grade public road crossing over the location now known as the intersection of State Route 98 and Railroad's MP 707.71 (DOT No. 760900M) on Railroad's Calexico Subdivision at or near the City of Calexico, Imperial County, California (the "Existing Crossing"). The Existing Crossing is generally depicted on the Railroad Location Print marked **Exhibit A-1**, attached hereto and made a part hereof.

The Railroad named herein is successor in interest to Southern Pacific Company. The Department of Public Works is now the Department of Transportation.

- B. The Existing Crossing is a two-lane state route running in an east-west direction with a left turn lane in the westbound direction. The State now desires to undertake as its project the reconstruction and widening of the Existing Crossing that was constructed under the Original Agreement, the installation of sidewalks for public pedestrian and bicycle use, and the installation of upgraded grade crossing protection devices and other materials required to interconnect and coordinate said railroad grade crossing protection devices with the operation of highway traffic control signals (the "Project").
- C. The State desires to now increase the number of lanes from two to four lanes with two left turn lanes, update preemption measures, improve shoulders and drainage, and

ADA ("Americans with Disabilities Act")-compliant pedestrian crossing and sidewalks herein described as "The Project"

The Existing Crossing, as reconstructed, widened and improved pursuant to the State's Project (including the right of way area covered under the Original Agreement or in a separate document) is hereinafter the "Roadway" and the portion of the Railroad's property where the Roadway crosses the Railroad's property is the "Crossing Area." The Roadway is shown on the Survey Print marked **Exhibit A-3**, attached hereto and made a part hereof.

- D. The right of way and terms granted to the State under the terms of the Original Agreement or a separate document are not sufficient to allow for the State's Project. Therefore, under this Agreement, the Railroad will be granting additional rights to the State. The additional portion of Railroad's property that State needs to use in connection with the Project is described in the Legal Description(s) marked **Exhibit A-2**, attached hereto and made a part hereof. To facilitate State's Project, the State desires to have the Railroad execute an easement on, along, and across Parcels 35022-1 and 35023-1, as such parcels are shown in **Exhibit A-2**. As part of the Caltrans Right of Entry, Railroad will also grant State access to its property in order to remove fencing and landscaping from the area designated in **Exhibit F**.
- E. The Railroad and the State, severally and collectively, desire to interconnect and coordinate the operation of said highway traffic control signals.
- F. List of exhibits. The following attached exhibits are hereby made a part of this Agreement:

Exhibit A-1	Railroad Location Print
Exhibit A-2	Legal Descriptions for State Parcels 35022 and 35023
Exhibit A-3	Survey Print
Exhibit B-1	Railroad Relations and Insurance Requirements
Exhibit B-2	Railroad's Minimum Requirements
Exhibit C	Caltrans Right of Entry Agreement
Exhibit D	Form of Non-Exclusive Permanent Easement Deed
Exhibit E	Railroad Material and Force Account Estimate
Exhibit E-1	Stock Material Form
Exhibit F	Design Schematic and Crossing Gate Location

- G. The Parties now desire to set forth their understanding and agreement relating to the Project, the easement parcels, and the construction, use, maintenance and repair of the crossing facilities as well as provide for payment of just compensation for the easement parcels.

AGREEMENT:

NOW, THEREFORE, it is mutually agreed by and between the parties hereto as follows:

ARTICLE 1. CONSIDERATION TO BE PAID BY STATE FOR PROJECT PARCELS

For and in consideration of **THIRTEEN THOUSAND ONE HUNDRED SIXTY DOLLARS (\$13,160.00)** to be paid by the State to the Railroad for two permanent easements for highway purposes identified as State Parcels 35022-1 and 35023-1 consisting of 5,000 s.f. and 1,949 s.f., respectively, and described and shown on Exhibit A-2. Upon the execution of this Agreement, the Railroad shall execute and deliver to State, and State shall accept, a Non-Exclusive Permanent Easement Deed in the form marked **Exhibit D**, attached hereto and hereby made a part hereof, within 30 days of Railroad's receipt of payment from the State. The State's use of the easement shall be subject to the terms and conditions of this Agreement and the obligation of the State and its Contractor (as defined in Article 3 of this Agreement) to comply with such provisions, including, without limitation, the provisions of the Caltrans Right of Entry Agreement referenced in Article 4.

ARTICLE 2. RESPONSIBILITIES OF PARTIES, INDIVIDUALLY AND JOINTLY

Individual and joint responsibility of the Parties related to the Project is identified by the specific work set forth hereafter.

ARTICLE 3. DEFINITION OF CONTRACTOR

For purposes of this Agreement the term "Contractor" shall mean the contractor or contractors hired by the State, and/or its successors and assigns, to perform any Project work on any portion of the Railroad's property. The Contractor shall be responsible for the Contractor's subcontractors and the Contractor's and subcontractor's respective employees, officers and agents, and others acting under its or their authority and shall ensure their full compliance with all terms and conditions of this Agreement. Nothing in this section is intended to create rights in third parties or third party beneficiaries.

ARTICLE 4. RESTRICTIONS ON COMMENCEMENT OF PROJECT WORK

A. Neither State nor any Contractor shall commence any Project work on any Railroad property until:

(i) State has obtained all necessary governmental permits, zoning clearances and approvals including, without limitation, those from the California Public Utilities Commission.

(ii) State has received approval of the Plans (defined below) from the Railroad, which approval shall not be unreasonably withheld.

(iii) State has received all necessary approvals associated with the Design Schematic and traffic signal preemption including, without limitation, those from Railroad.

(iv) Railroad and State have executed the **Caltrans Right of Entry Agreement** marked **Exhibit C**, attached hereto, the terms of which are hereby made a part hereof.

(v) Each Contractor hired by State has executed the Contractor's Endorsement that is part of the Caltrans Right of Entry Agreement.

(vi) Railroad has received the insurance policies, binders, certificates and/or endorsements set forth in the Caltrans Right of Entry Agreement.

B. The insurance coverage set forth in the Caltrans Right of Entry Agreement shall remain in full force and effect by each Contractor during the performance of said work upon and adjacent to Railroad's property and thereafter until the Contractor removes all tools, equipment and materials from Railroad's property and cleans up the premises to a presentable condition satisfactory to Railroad, in its sole discretion.

C. State and each Contractor shall give the advance notice described in the Caltrans Right of Entry Agreement to Railroad's authorized representative before commencing any Project work on Railroad's property, and shall observe Railroad's rules and regulations with respect thereto. All work on Railroad's property shall be done at such times and in such manner so as not to interfere with or endanger the operations of Railroad.

**ARTICLE 5. RAILROAD'S SPECIAL PROVISIONS
AND RAILROAD'S MINIMUM REQUIREMENTS**

A. In the event any of the work upon property of Railroad, as herein contemplated, will be advertised for bids by State, the awarded contract shall include:

(i) State's "**Railroad Relations and Insurance Requirements**," marked **Exhibit B-1**,

(ii) Railroad's "**Minimum Requirements**," marked **Exhibit B-2** with each exhibit being attached hereto and hereby made a part hereof.

B. If the State's own employees will be performing any of the Project work, the State is self-insured in respects to the Railroad Relations and Insurance Requirements and Minimum Requirements.

C. Upon written notice to State and its Contractor, Railroad shall have the right to amend its Insurance Requirements and Minimum Requirements from time to time to conform to its standard provisions.

**ARTICLE 6. SCOPE OF WORK TO BE PERFORMED BY RAILROAD;
BILLING SENT TO STATE; STATE'S PAYMENT OF BILLS**

A. The labor, material, equipment and supervision of the work performed by the Railroad for the State's Project, at the State's sole cost and expense, is collectively referred to

herein as the "Railroad Work." The Railroad Work is described in the Railroad's Material and Force Account Estimate for the signal work marked **Exhibit E** (the "Estimate"), and the Material and Force Account Estimate for surface and track work marked **Exhibit E-1**, both exhibits attached hereto and hereby made a part hereof. As set forth in the Estimate, the Railroad's estimated cost for Railroad's Work is Seven Hundred Sixty Eight Thousand Five Hundred Dollars (\$768,500.00).

B. Railroad and State, severally and collectively, agree to interconnect and coordinate the operation of the railroad grade crossing protection devices with the operation of the highway traffic control signals at the Crossing Area. The Railroad Work includes, but is not limited to:

- (i) Modification of the current railroad warning devices installed within Railroad's right of way at the Roadway, including installation in accordance with the design schematic marked **Exhibit F**, hereto attached and hereby made a part hereof (the "Design Schematic");
- (ii) Installation of the necessary relays and other materials required to interconnect and coordinate the operation of the railroad grade crossing protection devices with the operation of the highway traffic control signals to be installed by State in accordance with the Design Schematic;

E. The Railroad, if it so elects, may recalculate and update the Estimate submitted to the State in the event the State does not commence construction on the portion of the Project located on the Railroad's property within six (6) months from the date of the Estimate.

F. The Railroad shall send progressive billing to the State during the Project and final billing to the State within one hundred eighty (180) days after receiving written notice from the State that all Project work affecting the Railroad's property has been completed.

G. The State agrees to reimburse the Railroad within forty-five (45) days of its receipt of undisputed billing from the Railroad for actual costs and expenses incurred under this Agreement by the Railroad in performance of required activities in connection with the Project including but not limited to, all actual costs of engineering review, construction, inspection, flagging, procurement of materials, equipment rental, manpower and deliveries to the job site and all direct, indirect and overhead labor/construction costs. If actual costs are projected to exceed the Railroad Material and Force Account Estimate, the State shall initiate and pursue the process for budgeting, authorizing and appropriating the additional amounts required, and the Parties shall enter into a supplement to this Agreement. The Railroad shall have no obligation to perform work unless and until State authorizes and appropriates additional funding. State recognizes that it can elect under 23 CFR 140.907 to reimburse Railroad for all direct, indirect, and overhead labor/construction costs using Federal additive rates and agrees to do so.

H. All work to be done hereunder by Railroad shall be done by Railroad's employees or Railroad's contractor(s) on a force account basis, the cost hereof to be paid to Railroad by State in the manner herein set forth.

**ARTICLE 7. CONSTRUCTION AND MAINTENANCE OF
HIGHWAY TRAFFIC CONTROL SIGNALS**

A. State, at its expense, shall furnish all labor, material, equipment and supervision for the installation and maintenance of highway traffic control signals at the Crossing Area.

B. Railroad hereby grants permission and authority to State and/or its contractor to install the conduit with the necessary wiring on Railroad right of way on the condition that prior to performing any work on Railroad's property, State enter into or cause its contractor to enter into, as applicable, a Right of Entry Agreement with Railroad.

ARTICLE 8. SIGNAL FAILURE/INTERFERENCE

A. Each party shall take all suitable precautions to prevent any interference (by induction, leakage of electricity or otherwise) with the operation of the other party's signals or communications lines, or those of its tenants; and if, at any time, the operation or maintenance of its signals results in any electrostatic effects, the party whose signals are causing the interference shall, at its expense, immediately take such action as may be necessary to eliminate such interference.

B. Except as set forth in this Article 8, State shall not be liable to Railroad as a result of any failure of Railroad's warning devices to operate properly, nor shall Railroad have or be entitled to maintain any action against State arising from any failure from Railroad's warning devices to operate properly. Similarly, Railroad shall not be liable to State as a result of any failure of State's traffic signal to operate properly, nor shall State have or be entitled to maintain any action against Railroad arising from any failure of State's traffic signal to operate properly.

ARTICLE 9. SIGNAL SYSTEM MAINTENANCE COSTS

The State and the Railroad agree to split equally the cost of maintenance of the automatic grade-crossing protection.

ARTICLE 10. REARRANGEMENT OF WARNING DEVICES

If the change or rearrangement of any warning device installed hereunder is necessitated for public or Railroad convenience or on account of improvements for Railroad, highway or both, the parties will apportion the expense incidental thereto between themselves by negotiation, agreement or by the order of a competent authority before the change or rearrangement is undertaken.

ARTICLE 11. INTERIM WARNING DEVICES

If at any time it is determined by a competent authority, by the State, or by agreement between the parties, that new or improved train activated warning devices should be installed at the Crossing Area, the State shall install adequate temporary warning devices or signs and

impose appropriate vehicular control measures to protect the motoring public until the new or improved devices have been installed.

ARTICLE 12. MAINTENANCE AND REPAIRS

Railroad will be responsible for maintaining the Crossing Area between lines two (2) feet outside of the rails of each track. The State will be responsible for maintaining the street and highway approaches and those portions of the Crossing Area not included under Railroad's responsibility. The surface of the highway shall be installed to conform substantially to the plane of the rails for the entire area between the rails and between tracks and to lines two (2) feet outside the rails. The alignment and profile of each grade crossing shall be substantially maintained as constructed.

ARTICLE 13. PLANS

A. The State, at its expense, shall prepare, or cause to be prepared by others, the detailed plans and specifications for the Project and submit such plans and specifications to the Railroad's Assistant Vice President Engineering-Design, or his authorized representative, for prior review and approval which shall not be unreasonably withheld. The plans and specifications shall include all Roadway layout specifications, cross sections and elevations, associated drainage, and other appurtenances.

B. The final one hundred percent (100%) completed plans that are approved in writing by the Railroad's Assistant Vice President Engineering-Design, or his authorized representative, are hereinafter referred to as the "Plans". The Plans are hereby made a part of this Agreement by reference.

C. No material changes in the Plans shall be made unless the Railroad has consented to such changes in writing. Railroad shall not unreasonably withhold its consent.

D. The Railroad's review and approval of the Plans will in no way relieve the State or the Contractor from their responsibilities, obligations and/or liabilities under this Agreement, and will be given with the understanding that the Railroad makes no representations or warranty as to the validity, accuracy, legal compliance or completeness of the Plans and that any reliance by the State or Contractor on the Plans is at the risk of the State and Contractor.

ARTICLE 14. NON-RAILROAD IMPROVEMENTS

A. Submittal of plans and specifications for protecting, encasing, reinforcing, relocation, replacing, removing and abandoning in place all non-railroad owned facilities (the "Non Railroad Facilities") affected by the Project including, without limitation, utilities, fiber optics, pipelines, wirelines, communication lines and fences is required under Article 13. The Non Railroad Facilities plans and specifications shall comply with Railroad's standard specifications and requirements, including, without limitation, American Railway Engineering and Maintenance-of-Way Association ("AREMA") standards and guidelines. Railroad has no obligation to supply additional land for any Non Railroad Facilities and does not waive its right

to assert preemption defenses, challenge the right-to-take, or pursue compensation in any condemnation action, regardless if the submitted Non Railroad Facilities plans and specifications comply with Railroad's standard specifications and requirements. Railroad has no obligation to permit any Non Railroad Facilities to be abandoned in place and cannot reasonably deny the relocation of existing Non Railroad Facilities on Railroad's property without due cause.

B. Upon Railroad's approval of submitted Non Railroad Facilities plans and specifications, Railroad will attempt to incorporate them into new agreements or supplements of existing agreements with Non Railroad Facilities owners or operators. Railroad may use its standard terms and conditions, including, without limitation, its standard license fee and administrative charges when requiring supplements or new agreements for Non Railroad Facilities. Non Railroad Facilities work shall not commence before a supplement or new agreement has been fully executed by Railroad and the Non Railroad Facilities owner or operator, or before Railroad and State mutually agree in writing to:

- (i) approve Non Railroad Facilities plans and specifications to the Plans pursuant to Article 13B,
- (ii) deem the Non Railroad Facilities part of the Crossing Area, and
- (iii) supplement this Agreement with terms and conditions covering the Non Railroad Facilities.

ARTICLE 15. FEDERAL AID POLICY GUIDE

The current rules, regulations and provisions of the Federal Aid Policy Guide, as contained in 23 CFR 140, subpart I and 23 CFR 646, subparts A and B are incorporated into this Agreement by reference.

ARTICLE 16. NO PROJECT EXPENSES TO BE BORNE BY RAILROAD

Except as may be otherwise provided herein, the State, at its expense, will furnish all necessary labor, material and equipment and shall construct and complete the Roadway and all appurtenances thereof in accordance with the Plans and this Agreement. The State agrees that no Project costs and expenses are to be borne by the Railroad, and further agrees that the Railroad is not required to contribute any funding for the Project.

ARTICLE 17. EFFECTIVE DATE; TERM; TERMINATION

A. This Agreement is effective as of the date this Agreement is fully signed and executed by all Railroad and State authorized signatories.

B. The Railroad, if it so elects, may terminate this Agreement effective upon delivery of written notice to the State in the event the State does not commence construction on the portion of the Project located on the Railroad's property within six (6) months from the Effective Date.

C. If the Agreement is terminated as provided above, or for any other reason, the State shall pay to the Railroad all actual costs and expenses incurred by the Railroad in connection with the Project up to the date of termination, including, without limitation, all actual costs incurred by the Railroad in connection with reviewing any preliminary or final Project Plans.

ARTICLE 18. AGREEMENT AS A SUPPLEMENT

The Original Agreement shall be supplemented by this Agreement. In the event of any conflict between the Original Agreement and this Agreement, the terms and provisions of this Agreement shall control.

ARTICLE 19. FUTURE PROJECTS

In future projects after initial completion of construction of the at-grade crossing, State may, at State's sole expense, alter or reconstruct the at-grade crossing if necessary or desirable ("Future Projects"), provided, however, that State shall have no right (i) to widen the at-grade crossing beyond the rights of way acquired under this agreement or (ii) to erect falsework or other structures, temporary or permanent, or make any other use of the surface of Railroad's right-of-way other than for inspection or maintenance of the at-grade crossing as originally constructed, without obtaining Railroad's prior written consent and the execution of a supplement to this Agreement, or the completion of a separate construction and maintenance agreement. Future Projects may require additional compensation to Railroad.

ARTICLE 20. ASSIGNMENT; SUCCESSORS AND ASSIGNS

A. State shall not assign this Agreement without the prior written consent of Railroad.

B. Subject to the provisions of Paragraph A above, this Agreement shall inure to the benefit of and be binding upon the successors and assigns of Railroad and State.

ARTICLE 21. NO CLAIMS BY STATE

Notwithstanding any other provisions of this Agreement, State shall not make any claim against Railroad for any damages related to any and all work delays which arise in whole or in part from accommodating or performing railroad train operations, including, without limitation, train schedule changes, and/or increased railroad train operations by Railroad.

ARTICLE 22. BOOKS AND RECORDS

The books, papers, records and accounts of Railroad, so far as they relate to the items of expense for the materials to be provided by Railroad under this Project, or are associated with the work to be performed by Railroad under this Project, shall be open to inspection and audit at Railroad's offices in Omaha, Nebraska, during normal business hours by the agents and

authorized representatives of State and the Federal Highway Administration for a period of three (3) years following the date of Railroad's final billing to the State.

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed as of the Effective Date first herein written.

UNION PACIFIC RAILROAD COMPANY
(Federal Tax ID #94-6001323)

Approved as to form:

CBK/ep
Attorney

By: *Daniel A. Leis*
DANIEL A. LEIS
General Director-Real Estate

ATTEST:

By: *[Signature]*

(SEAL)
fe

**CALIFORNIA DEPARTMENT OF
TRANSPORTATION**

By: *[Signature]*

Printed Name: BENJAMIN D. MARTIN, Ed. D

Title: CHIEF, OFFICE OF RAILROAD
AND UTILITY RELOCATIONS

EXHIBIT A-1

To Public Highway At-Grade Crossing
Agreement

Cover Sheet for the
Railroad Location Print

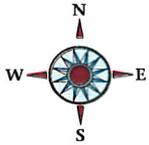
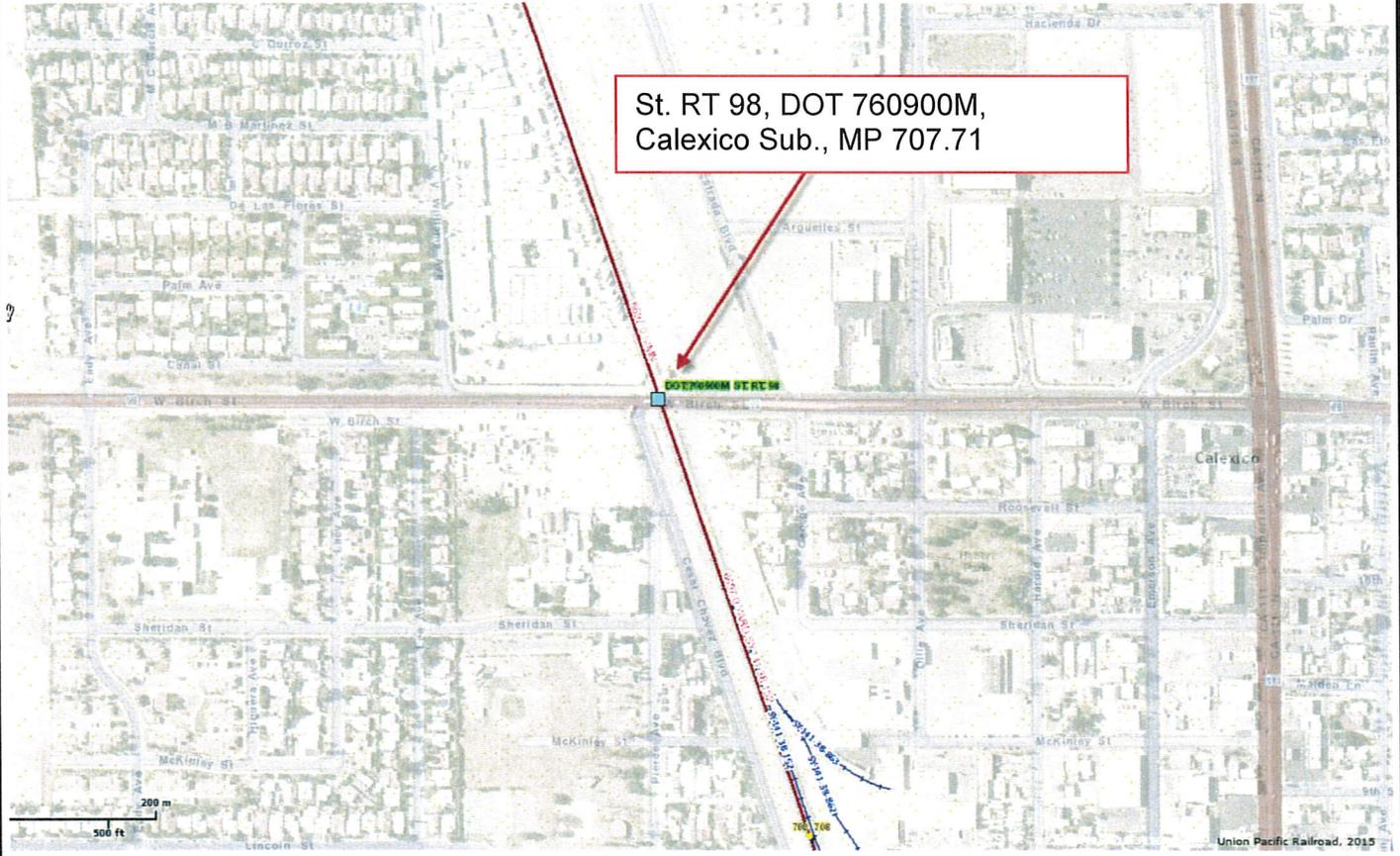


EXHIBIT "A"
RAILROAD LOCATION PRINT
ACCOMPANYING A
CONSTRUCTION & MAINTENANCE AGREEMENT/CONTRACTOR'S
RIGHT OF ENTRY AGREEMENT



UNION PACIFIC RAILROAD COMPANY
CALEXICO SUBDIVISION
RAILROAD MILE POST 707.71
CALEXICO, IMPERIAL COUNTY, CA
To accompany an agreement with
**CALIFORNIA DEPT. OF TRANSPORTATION and its
CONTRACTORS**

UPRR Folder No. 2843-01 Date: April 27, 2016

WARNING

IN ALL OCCASIONS, U.P. COMMUNICATIONS DEPARTMENT MUST BE CONTACTED IN ADVANCE OF ANY WORK TO DETERMINE EXISTENCE AND LOCATION OF FIBER OPTIC CABLE.

PHONE: 1-(800) 336-9193

EXHIBIT A-2

To Public Highway At-Grade Crossing
Agreement

Cover Sheet for the
Legal Description(s)

EXHIBIT "A"

35023-1

AN EASEMENT FOR PUBLIC ROAD PURPOSES, to the State of California, upon, under, over and across that certain piece or parcel of land situate in the Northeast quarter of Section 14, Township 17 South, Range 14 East, San Bernardino Base and Meridian, in the City of Calexico, County of Imperial, State of California, as described in deed to Southern Pacific Corporation, (now Union Pacific Railroad) recorded November 16, 1903 in Book 332, Page 439 of records, in said County, more particularly described as follows:

COMMENCING at the Southwest corner of Parcel B of Parcel Map 12-54, filed on December 15, 2004 in the office of the Imperial County Recorder as Document No. 04-42698, said point also being on the Easterly Right of Way of the Union Pacific Railroad as described in Grant Deed to the Southern Pacific Company, recorded November 16, 1903 at Book 332, Page 436, and also recorded on November 16, 1903 at Book 332, Page 439, in said Recorder's Office, thence along said Easterly Right of Way, S.19°13'53"E., 130.66 feet to the TRUE POINT OF BEGINNING, thence (1) leaving said Easterly Railroad Right of Way N.89°13'35"W., 24.13 feet, thence (2) S.70°25'28"W., 55.42 feet, thence (3) S.07°45'21"W., 48.25 feet to the Westerly Right of Way of said Railroad, thence (4) along said Right of Way N.19°13'53"W., 74.06 feet to the Southerly Right of Way of State Highway 98 as described in Easement Deed to the State of California recorded April 30, 1964 in Book 1182, Page 731 in the Office of the County Recorder of said County, State of California, thence (5) along said Highway Right of Way N.89°35'56"E., 105.65 feet, to the Easterly line of said Railroad Right of Way as described in said Deed, thence (6) along said Right of Way S.19°13'53"E., 4.88 feet to the TRUE POINT OF BEGINNING.

The Bearings and Distances used in the above descriptions are based on the California Coordinate System of 1983 (Epoch 1991.35), HPGN, Zone 6. Divide distances by 1.0000242 to obtain ground level distances.

Signature: _____

Date: _____

AU: _____

CK: _____



EXHIBIT "A"

35022-1

AN EASEMENT FOR PUBLIC ROAD PURPOSES, to the State of California, upon, under, over and across that certain piece or parcel of land situate in the Southeast quarter of Section 11, Township 17 South, Range 14 East, San Bernardino Base and Meridian, in the City of Calexico, County of Imperial, State of California as described in Grant Deed to Southern Pacific Corporation, (now Union Pacific Railroad) recorded November 16, 1903 in Book 332, Page 436 of records, in said County, more particularly described as follows:

BEGINNING at the Southwest corner of Parcel B of Parcel Map 12-54, filed on December 15, 2004 in the office of the County Recorder of said County as Document No. 04-42698, said point also being on the Easterly Right of Way of Union Pacific Railroad as described in said Grant Deed to the Southern Pacific Corporation, thence (1) along said Easterly Right of Way, N.19°13'53"W., 34.96 feet, thence (2) leaving said Right of Way S.70°56'06"W., 82.21 feet, thence (3) S.89°05'45"W., 18.74 feet to the Westerly Right of Way of said Railroad, thence (4) continuing S.89°05'45"W., 42.14' to the Westerly edge of a Vacated Road, 40 feet wide, per Map LS 3-40, filed on March 14, 1922 in the office of the County Recorder of said County, thence (5) along said Westerly Right of Way, S.19°13'53"E., 26.41 feet to the Southerly line of Section 11, thence (6) along said section line, and Northerly Highway Right of Way, S.89°53'36"E., 42.39 feet to the Westerly line of said Railroad Right of Way, said point also being the Northwesterly corner of that Easement Deed to the State of California recorded April 30, 1964 in Book 1182, Page 731 in the Office of the County Recorder of said County, State of California, thence (7) continuing along said section line and Northerly Highway Right of Way, S.89°53'36"E 105.97 feet to the Easterly line of said Railroad Right of Way, thence (8) Northwesterly along said Railroad Right of Way line, N.19°13'53"W., 21.20 feet to the POINT OF BEGINNING.

The Bearings and Distances used in the above descriptions are based on the California Coordinate System of 1983 (Epoch 1991.35), HPGN, Zone 6. Divide distances by 1.0000242 to obtain ground level distances.

Signature: _____

Date: _____

AU: _____

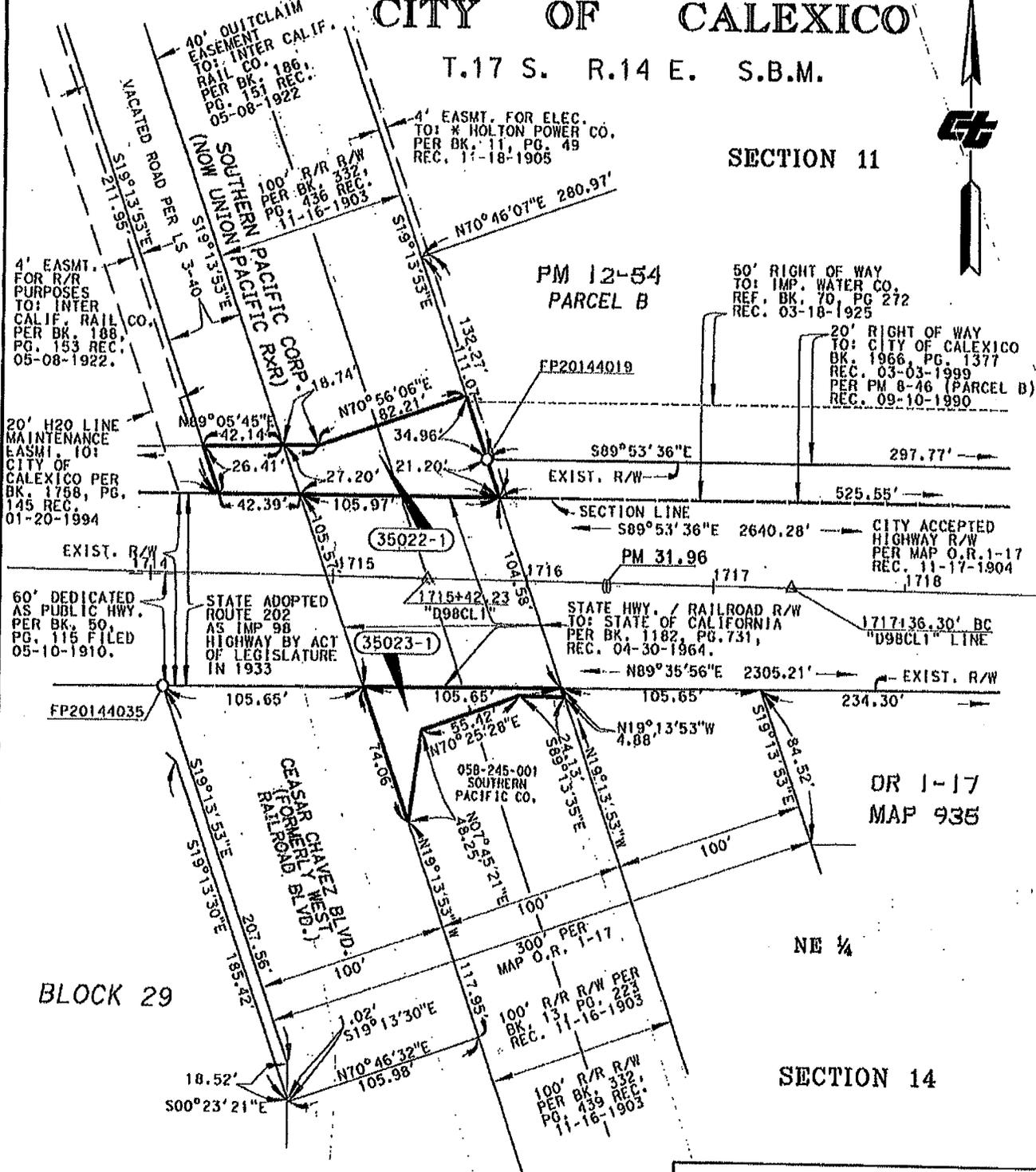
CK: _____



CITY OF CALEXICO

T.17 S. R.14 E. S.B.M.

SECTION 11



BLANKET UTILITY ESMT.
IN ALL ROADS & ALLEYS
PER OR 1-17,
REC. 11-17-1904

MONUMENT DESCRIPTIONS AND COORDINATES OF
POINTS ARE AVAILABLE FROM THE CALIFORNIA
DEPARTMENT OF TRANSPORTATION 4050 TAYLOR
ST., SAN DIEGO, CALIFORNIA 92110

NOTES

Coordinates and bearings are on CCGS
1983(1991.35) Zone . Distances and
stationing are grid distances.
Divide by 1.000242 to obtain
ground distances.
All distances are in feet unless
otherwise noted.

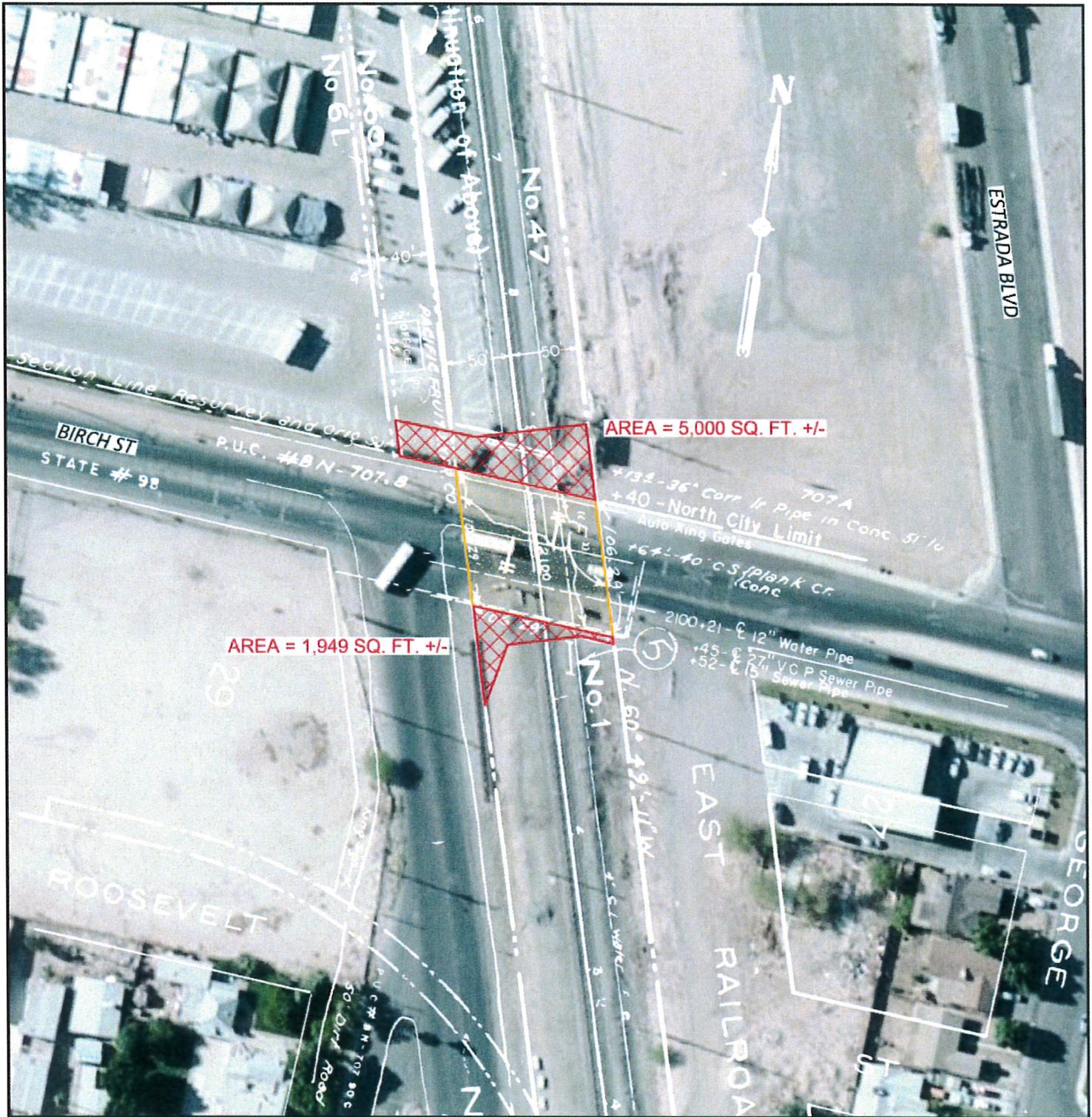
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DISTRICT II

EXHIBIT "B"			
RIGHT OF WAY MAP NO.		Por. 83617	
COUNTY	ROUTE	POST MILE	SCALE
IMP	98	31.96	NONE
			SHEET 1 OF 1

EXHIBIT A-3

To Public Highway At-Grade Crossing
Agreement

Cover Sheet for the
Survey Print



AREA = 5,000 SQ. FT. +/-

AREA = 1,949 SQ. FT. +/-

LEGEND:

- NEW CROSSING AREA 
 - EXISTING CROSSING AREA 
 - UPRRCO. R/W OUTLINED 
- TOTAL NEW CROSSING AREA = 6,949 SQ. FT. +/-

NOTE: BEFORE YOU BEGIN ANY WORK, SEE AGREEMENT FOR FIBER OPTIC PROVISIONS.

EXHIBIT "A"

UNION PACIFIC RAILROAD COMPANY

CALEXICO, IMPERIAL COUNTY, CALIFORNIA
M.P. 707.71 - CALEXICO SUB.

TO ACCOMPANY AGREEMENT WITH CALIFORNIA DOT
MAP SP V-18 / S-11A
SCALE: 1" = 100'

OFFICE OF REAL ESTATE
OMAHA, NEBRASKA DATE: 4-29-2015

PJB FILE: 0284301

CADD FILENAME	0284301
SCAN FILENAME	CA1811AS-284301.TIF

EXHIBIT B-1

To Public Highway At-Grade Crossing
Agreement

Railroad Relations and Insurance Requirements

Information Handout Document:

"RAILROAD RELATIONS AND INSURANCE REQUIREMENTS"

AT GRADE CROSSING PROJECTS

1.01 GENERAL

The term "Railroad" shall mean the Union Pacific Railroad Company.

It is expected that the Railroad will cooperate with the Contractor to the end that the work may be handled in an efficient manner. However, except for the additional compensation provided for hereinafter for delays in completion of specific unit of work to be performed by the Railroad, and except as provided in Public Contracts Code Section 7102, the Contractor shall have no claim for damages, extension of time, or extra compensation in the event his work is held up by railroad train operations or other work performed by the Railroad.

The Contractor must understand the Contractor's right to enter the Railroad's property is subject to the absolute right of the Railroad to cause the Contractor's work on the Railroad's property to cease if, in the opinion of the Railroad, the Contractor's activities create a hazard to the Railroad's property, employees, and operations.

The Contractor acknowledges its receipt from the State of a copy of the Caltrans Right of Entry Agreement that has been executed by the Railroad and the State. The Contractor agrees to execute and deliver to the Railroad the Contractor's Endorsement that is attached thereto as **Addendum E** and to provide to the State and/or the Railroad all insurance policies, binders, certificates or endorsements that are set forth in **Exhibits B and C** of the Caltrans Right of Entry Agreement.

1.02 RAILROAD REQUIREMENTS

The Contractor shall provide to Chris Keckeisen, Railroad's Senior Manager, Industry and Public Projects, 2015 South Willow Avenue, Bloomington, California 92316, and the Engineer, in writing, the advance notice requirements set forth in Section 1 of **Exhibit B** of the Caltrans Right of Entry Agreement before performing any work on, or adjacent to the property or tracks of the Railroad.

The Contractor shall cooperate with the Railroad where work is over or under the tracks, or within the limits of the Railroad property to expedite the work and avoid interference with the operation of railroad equipment.

The Contractor shall comply with the rules and regulations of the Railroad or the instructions of its representatives in relation to protecting the tracks and property of the Railroad and the traffic moving on such tracks, as well as the wires, signals and other property of the Railroad, its tenants or licensees, at and in the vicinity of the work during the period of construction. The responsibility of the Contractor for safe conduct and adequate policing and supervision of its

work at the job site shall not be lessened or otherwise affected by the presence at the work site of the Railroad representatives, or by the Contractor's compliance with any requests or recommendations made by the Railroad representatives.

The Contractor shall perform work so as not to endanger or interfere with the safe operation of the tracks and property of the Railroad and traffic moving on such tracks, as well as wires, signals and other property of the Railroad, its tenants or licensees, at or in the vicinity of the work.

The Contractor shall take protective measures to keep the Railroad facilities, including track ballast, free of sand or debris resulting from his operations. Damage to the Railroad facilities resulting from the Contractor's operations will be repaired or replaced by the Railroad and the cost of such repairs or replacement shall be deducted from the Contractor's progress and final pay estimates.

The Contractor shall contact the Railroad's "Call Before You Dig" at least forty-eight (48) hours prior to commencing work, at 1-800-336-9193 during normal business hours (7:00 a.m. to 9:00 p.m. Central Time, Monday through Friday, except holidays – also a 24-hour, 7-day number for emergency calls) to determine location of fiber optics. If a telecommunications system is buried anywhere on or near the Railroad property, the Contractor will coordinate with the Railroad and the Telecommunication Company(ies) to arrange for relocation or other protection of the system prior to beginning any work on or near Railroad property.

The Contractor shall not pile or store any materials nor park any equipment closer than 25'-0" to the centerline of the nearest track, unless directed by the Railroad's representative.

The Contractor shall also abide by the following temporary clearances during the course of construction:

- 3.66 meter (12'-0") horizontally from centerline of track

If applicable*, Walkways with railing shall be constructed by the Contractor over open excavation areas when in close proximity of tracks, and railings shall not be closer than 2.60-meter (8'-6") horizontally from centerline of the nearest track, if tangent, or 2.90-meter (9'-6") if curved.

Infringement on the above temporary construction clearances by the Contractor's operations shall be submitted to the Railroad by the Engineer, and shall not be undertaken until approved by the Railroad, and until the Engineer has obtained any necessary authorization from any governmental body or bodies having jurisdiction thereover. No extension of time or extra compensation will be allowed in the event the Contractor's work is delayed pending Railroad approval and governmental authorization.

Four (4) sets of plans, in 279mm x 432mm (11" x 17") format, and two (2) sets of calculations showing details of construction affecting the Railroad's tracks and property not included in the contract plans, including but not limited to shoring and falsework, shall be

submitted to the Engineer for review prior to submittal to the Railroad for final approval. Falsework shall comply with the Railroad guidelines. Demolition of existing structures shall comply with the Railroad guidelines. Shoring shall be designed in accordance with the Railroad's shoring requirement of Drawing No. 106613 and guidelines for shoring and falsework, latest edition, issued by the Railroad's Office of Chief Engineer. Shoring and falsework plans and calculations shall be prepared and signed by a professional engineer registered in California. This work shall not be undertaken until such time as the Railroad has given such approval; review by the Railroad may take up to six (6) weeks after receipt of necessary information. *

The Contractor shall notify the Engineer in writing, at least twenty-five (25) calendar days but not more than forty (40) days in advance of the starting date of installing temporary work with less than permanent clearance at each structure site. The Contractor shall not be permitted to proceed with work across railroad tracks until this requirement has been met. No extension of time or extra compensation will be allowed if the Contractor's work is delayed due to failure to comply with the requirements in this paragraph. *

Blasting will be permitted only when approved by the Railroad. *

The Contractor shall, upon completion of the work covered by this Contract to be performed by the Contractor upon the premises or over or beneath the tracks of the Railroad, promptly remove from the premises of the Railroad, the Contractor's tools, implements and other materials, whether brought upon said premises and cause said premises to be left in a clean and presentable condition.

Under track pipeline installations shall be constructed in accordance with the Railroad's current standards which may be obtained from the Railroad. The general guidelines are as follows:

- Edges of jacking or boring pit excavations shall be a minimum of 9.144-meter (30 feet) from the centerline of the nearest track.
- If the pipe to be installed under the track is 100mm (4 inches) in diameter or less, the top of the pipe shall be at least 42 inches below base of rail.
- If the pipe diameter is greater than 100-meter (4 inches) in diameter, it shall be encased and the top of the steel pipe casing shall be at least 1.60-meter (66 inches) below base of rail.
- Installation of pipe or conduit under the Railroad's tracks shall be done by dry bore and jack method.
- Hydraulic jacking or boring will not be permitted.

Safety of personnel, property, rail operations and the public is of paramount importance. As reinforcement and in furtherance of overall safety measures to be observed by the Contractor (and not by way of limitation), the following special safety rules shall be followed:

(a) The Contractor 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. The Contractor shall have proper first aid supplies available on the job site so that prompt first aid services can be provided to any person that may be injured on the job site. The Contractor shall promptly notify the Railroad of any U.S. Occupational Safety and Health Administration reportable injuries occurring to any person that may arise during the work performed on the job site. The Contractor shall have a non-delegable duty to control its employees while they are on the job site or any other property of the Railroad to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage, drug, narcotic or other substance that may inhibit the safe performance of work by the employee.

(b) The employees of the Contractor shall 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. Only waist length shirts with sleeves and trousers that cover the entire leg are to be worn. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching. The employees should wear sturdy and protective work boots and at least the following protective equipment:

- (1) Protective head gear that meets American National Standard-Z89.1-latest revision. It is suggested that all hardhats be affixed with the Contractor's or the subcontractor's company logo or name.
- (2) Eye protection that meets American National Standard 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, burning, etc.; and
- (3) Hearing protection which affords enough attenuation to give protection from noise levels that will be occurring on the job site.

(c) All heavy equipment provided or leased by the Contractor shall be equipped with audible back-up warning devices. If in the opinion of the Railroad Representative any of the Contractor's or the subcontractor's equipment is unsafe for use on the Railroad's right-of-way, the Contractor, at the request of the Railroad representative, shall remove such equipment from the Railroad's right-of-way.

1.03 PROTECTION OF RAILROAD FACILITIES

Upon the advance notification provided to the Railroad as set forth in Section 1 of **Addendum B** of the Caltrans Right of Entry Agreement, the Railroad representatives, conductors, flagmen or watchmen will be provided by the Railroad to protect its facilities, property and movements of its trains or engines. Notice shall be made to the Railroad's Manager of Track Maintenance at **(402) 618-3923**. At the time of notification, the Contractor shall provide the Railroad with a schedule of dates that flagging services will be needed, as well as times, if outside normal working hours. Subsequent deviation from the schedule shall require ten (10)

working days' advance notice from the first affected date. The Railroad will furnish such personnel or other protective devices:

- (a) When equipment is standing or being operated within 25 feet, measured horizontally, from centerline of any track on which trains may operate, or when any erection or construction activities are in progress within such limits, regardless of elevation above or below track.
- (b) For any excavation below elevation of track sub-grade if, in the opinion of the Railroad's representative, track or other Railroad facilities may be subject to settlement or movement.
- (c) During any clearing, grubbing, grading or blasting in proximity to the Railroad which, in the opinion of the Railroad's representative, may endanger the Railroad facilities or operations.
- (d) During any of the Contractor's operations when, in the opinion of the Railroad's representatives, the Railroad facilities, including, but not limited to, tracks, buildings, signals, wire lines or pipe lines, may be endangered.

The cost of flagging and inspection provided by the Railroad during the period of constructing that portion of the project located on or near the Railroad property, as deemed necessary for the protection of the Railroad's facilities and trains, will be borne by the State. The Railroad has indicated that its estimated flagging rate will be around One Thousand Six Hundred Dollars (\$1,600.00) per day, per person, and that the State has estimated a total of thirty (30) days of flagging. The State shall pay the Railroad for all actual flagging costs incurred by the Railroad under this Project.

1.04 WORK BY RAILROAD

The following work by the Railroad, if applicable, will be performed by Railroad forces and is not a part of the work under this Contract.

- (a) The Railroad will perform preliminary engineering and inspection (if any) and flagging as specified in Section 1.03 "Protection of Railroad Facilities," of these special provisions.
- (b) Relocate underground Railroad communication line in vicinity of proposed project.
- (c) Remove advertising signboards and signboard appurtenances.
- (d) Temporary crossings at grade over tracks of Railroad for the purpose of hauling earth, rock, paving or other materials will not be permitted.

1.05 DELAYS DUE TO WORK BY RAILROAD

If delays due to work by the Railroad occur, and the Contractor sustains loss which, in the opinion of the Engineer, could not have been avoided by the judicious handling of forces, equipment and plant, the amount of said loss shall be determined as provided in Section 8-1.07, "Delays," of the 2010 Standard Specifications.

If a delay due to work by the Railroad occurs, an extension of time determined pursuant to the provisions in Section 8-1.10, "Liquidated Damages," of the 2010 Standard Specifications will be granted.

1.06 LEGAL RELATIONS

The provisions of Section 1, "Relations with Railroad Company," and the provisions of Section 2, "Railroad Protective Insurance," of these special provisions shall inure directly to the benefit of the Railroad.

2.0 RAILROAD PROTECTIVE INSURANCE

In addition to any other form of insurance or bonds required under the terms of the contract and specifications, the Contractor will be required to carry insurance of the kinds and in the amounts hereinafter specified.

Such insurance shall be approved by the Railroad before any work is performed on the Railroad's property and shall be carried until all work required to be performed on or adjacent to the Railroad's property under the terms of the contract is satisfactorily completed as determined by the Engineer, and thereafter until all tools, equipment and materials have been removed from the Railroad's property and such property is left in a clean and presentable condition.

Full compensation for all premiums which the Contractor is required to pay on all the insurance described hereinafter shall be considered as included in the prices paid for the various items of work to be performed under the contract, and no additional allowance will be made thereof or for additional premiums which may be required by extensions of the policies of insurance.

The following insurance coverage will be required:

- A. **Commercial General Liability Insurance** Commercial general liability (CGL) with a limit of not less than \$25,000,000 each occurrence and an aggregate limit of not less than \$25,000,000. 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.
- Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage) showing the project on the form schedule.

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 \$25,000,000 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.

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 \$10,000,000 per occurrence and an aggregate of \$20,000,000. 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 provided if the scope of the work as defined in the Agreement includes installation, temporary storage, or disposal of any "hazardous" material that is injurious in or upon land, the atmosphere, or any watercourses; or may cause bodily injury at any time.

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 \$5,000,000 per loss, and an annual aggregate of \$10,000,000.

Other Requirements

- G.** All policy(ies) required above (except, business automobile, worker's compensation and employers liability) must include Railroad as "Additional Insured" using ISO Additional Insured Endorsement CG 20 26 (or substitute form(s) providing equivalent coverage). The coverage provided to Railroad as additional insured shall not be limited by Contractor's liability under the indemnity provisions of this Agreement. BOTH CONTRACTOR AND RAILROAD EXPECT THAT UNION PACIFIC RAILROAD COMPANY WILL BE PROVIDED WITH THE BROADEST POSSIBLE COVERAGE AVAILABLE BY OPERATION OF LAW UNDER ISO ADDITIONAL INSURED FORM CG 20 26.
- H.** 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 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 for Connection with Railroads" ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) for the job site.
- I.** 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.
- J.** 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.

- K.** 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.

- L.** 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.

- M.** 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 B-2

To Public Highway At-Grade Crossing
Agreement

Railroad Minimum Requirements

Information Handout Document:
EXHIBIT B-2

UNION PACIFIC RAILROAD
MINIMUM REQUIREMENTS

AT GRADE CROSSING PROJECTS

PART 1 – GENERAL

1.01 DESCRIPTION

This project includes construction work within the Right -of-Way and/or properties of the Union Pacific Railroad Company ("UPRR") and adjacent to tracks, wire lines and other facilities. This section describes the special requirements for coordination with UPRR when work by the Contractor will be performed upon, over or under the UPRR Right-of-Way or may impact current or future UPRR operations. The Contractor will coordinate with UPRR while performing the work outlined in this Contract, and shall afford the same cooperation with UPRR as it does with the Agency. All submittals and work shall be completed in accordance with UPRR Guidelines and AREMA recommendations as modified by these minimum special requirements or as directed in writing by the UPRR Designated Representative.

For purposes of this project, the UPRR Designated Representative shall be the person or persons designated by the UPRR Manager of Industry and Public Projects to handle specific tasks related to the project.

1.02 DEFINITION OF AGENCY AND CONTRACTOR

As used in these UPRR requirements, the term "Agency" shall mean the State of California, by and through its Department of Transportation.

As used in these UPRR requirements, the term "Contractor" shall mean the contractor or contractors hired by the Agency to perform any project work on any portion of UPRR's property. The Contractor shall be responsible for the Contractor's subcontractors and the Contractor's and subcontractor's respective officers, agents and employees, and others acting under its or their authority. Nothing in this section is intended to create rights in third parties or third party beneficiaries.

1.03 UPRR CONTACTS

The primary UPRR point of contact for this project is:

Chris Keckeisen
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
Email: ctkecke@up.com

For UPRR flagging services and track work, contact:

Silvio Molina
Manager of Track Maintenance
Union Pacific Railroad Company
11406 S Los Nietos Rd
Santa Fe Springs, CA 90670
Phone: (402) 618-3923

1.04 REQUEST FOR INFORMATION/CLARIFICATION

All requests for Information ("RFI") involving work within any Railroad Right-of-Way shall be in accordance with the procedures listed elsewhere in these bid documents. All RFI's shall be submitted to the Engineer of Record. The Engineer of Record will submit the RFI to the Railroad Designated Representatives for review and approval for corresponding work within the Railroad's Right-of-Way. The Contractor shall allow four (4) weeks for the review and approval process by the Railroad.

1.05 PLANS / SPECIFICATIONS

The plans and specifications for this project, affecting the Railroad, are subject to the written approval by the Railroad and changes in the plans may be required after award of the Contract. Such changes are subject to the approval of the Agency and the Railroad.

2.01 UTILITIES AND FIBER OPTIC

All installations shall be constructed in accordance with current AREMA recommendations and Railroad specifications and requirements. Railroad general guidelines and the required application forms for utility installations can be found on the UPRR website at www.UPRR.com.

3.01 GENERAL

- A. Contractor shall perform all work in compliance with all applicable Railroad and FRA rules and regulations. Contractor shall arrange and conduct all work in such manner and at such times as shall not endanger or interfere with the safe operation of the tracks and property of Railroad, its tenants or licensees, at or in the vicinity of the work. Railroad shall be reimbursed by Contractor or Agency for train delay costs and lost revenue claims due to any delays or interruption of train operations resulting from Contractor's construction work or other activities.
- B. Construction activities will be permitted within 12 feet of the centerline of operational tracks only if absolutely necessary and the Railroad's Designated Representatives grant approval. Construction activities within 12 feet of the operational track(s) must allow the tracks to stay operational.
- C. Track protection is required for all work equipment (including rubber tired equipment) operating within 25 feet from nearest rail.

- D. The Contractor is also advised that new railroad facilities within the project may be built by the Railroad and that certain Contractor's activities cannot proceed until that work is completed. The Contractor shall be aware of the limits of responsibilities and allow sufficient time in the schedule for that work to be accomplished and shall coordinate its efforts with the Railroad.

3.02 RAILROAD OPERATIONS

- A. The Contractor shall be advised that trains and/or equipment are expected on any track, at any time, in either direction. Contractor shall become familiar with the train schedules in this location and structure its bid assuming intermittent track windows in this period, as defined in Paragraph B below.
- B. All railroad tracks within and adjacent to the Contract Site are active, and rail traffic over these facilities shall be maintained throughout the Project. Activities may include both through moves and switching moves to local customers. Railroad traffic and operations will occur continuously throughout the day and night on these tracks and shall be maintained at all times as defined herein. The Contractor shall coordinate and schedule the work so that construction activities do not interfere with railroad operations.
- C. Work windows for this Contract shall be coordinated with the Agency's and the UPRR's Designated Representatives. Types of work windows include Conditional Work Windows and Absolute Work Windows, as defined below:
1. Conditional Work Window: A Conditional Work Window is a period of time that railroad operations have priority over construction activities. When construction activities may occur on and adjacent to the railroad tracks within 25 feet of the nearest track, a UPRR flag person will be required. At the direction of the UPRR flag person, upon approach of a train, and when trains are present on the tracks, the tracks must be cleared (i.e., no construction equipment, materials or personnel within 25 feet, or as directed by the UPRR Designated Representative, from the tracks). Conditional Work Windows are available for the Project.
 2. Absolute Work Window: An Absolute Work Window is a period of time that construction activities are given priority over railroad operations. During this time frame the designated railroad track(s) will be inactive for train movements and may be fouled by the Contractor. At the end of an Absolute Work Window the railroad tracks and/or signals must be completely operational for train operations and all UPRR, Public Utilities Commission (PUC) and Federal Railroad Administration (FRA) requirements, codes and regulations for operational tracks must be complied with. In the situation where the operating tracks and/or signals have been affected, the UPRR will perform inspections of the work prior to placing that track back into service. UPRR flag persons will be required for construction activities requiring an Absolute Work Window. Absolute Work Windows will not generally be granted. Any request will require a detailed explanation for UPRR review.

3.03 RIGHT OF ENTRY, ADVANCE NOTICE AND WORK STOPPAGES

- A. Prior to beginning any work on or over the property of, or affecting the facilities of, the UPRR, the Contractor shall execute the Contractor's Endorsement that is a part of the Caltrans Right of Entry Agreement. There is a fee for processing of the agreement. This cost shall be borne by the Contractor. Contractor shall submit a copy of the executed agreement and the insurance policies, binders, certificates and endorsements set forth therein to the Agency prior to commencing work on UPRR property. The Caltrans Right of Entry Agreement shall specify working time frames, flagging and inspection requirements, and any other items specified by the UPRR.
- B. The Contractor shall give the advance notice to the UPRR as required in the Caltrans Right of Entry Agreement before commencing work in connection with construction upon or over UPRR's Right-of-Way and shall observe UPRR's rules and regulations with respect thereto.
- C. All work upon UPRR's Right-of-Way shall be done at such times and in such manner so as not to interfere with or endanger the operations of UPRR. Whenever work may affect the operations or safety of trains, the method of doing such work shall first be submitted to UPRR's Designated Representative for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor, which requires flagging and/or inspection service, shall be deferred until the flagging protection required by UPRR is available at the job site. See Section 3.18 for railroad flagging requirements.
- D. The Contractor shall make requests in writing for both Absolute and Conditional Work Windows, at least two weeks in advance of any work. The written request must include:
 - 1. Exactly what the work entails.
 - 2. The days and hours that work will be performed.
 - 3. The exact location of work, and proximity to the tracks.
 - 4. The type of window requested and the amount of time requested.
 - 5. The designated contact person.

The Contractor shall provide a written confirmation notice to the UPRR at least 48 hours before commencing work in connection with approved work windows when work will be performed within **25 feet of any track center line**. All work shall be performed in accordance with previously approved work plans.

- E. Should a condition arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of UPRR, the Contractor shall make such provisions. If in the judgment of UPRR's Designated Representative such provisions are insufficient, the UPRR's Designated Representative may require or provide such provisions as deemed necessary. In any event, such provisions shall be at the Contractor's expense and without cost to the UPRR. UPRR or the Agency shall have the right to order Contractor to temporarily cease operations in the event of an emergency or, if in the opinion of the UPRR's Designated Representative, the Contractor's operations could endanger UPRR's operations. In the event such an order is given, Contractor shall immediately notify the Agency of the order.

3.04 INSURANCE

Contractor shall not begin work upon or over UPRR's Right-of-Way until UPRR has been furnished the insurance policies, binders, certificates and endorsements required by the Right-of-Entry Agreement and UPRR's Designated Representative has advised the Agency that such insurance is in accordance with the Agreement. The required insurance shall be kept in full force and effect during the performance of work and thereafter until Contractor removes all tools, equipment, and material from UPRR's property and cleans the premises in a manner reasonably satisfactory to UPRR.

3.05 RAILROAD SAFETY ORIENTATION

All personnel employed by the Contractor and all subcontractors must complete the UPRR course "Orientation for Contractor's Safety", and be registered prior to working on UPRR property. This orientation is available at www.contractororientation.com. This course is required to be completed annually.

3.06 COOPERATION

UPRR will cooperate with Contractor so that work may be conducted in an efficient manner, and will cooperate with Contractor in enabling use of UPRR's right-of-way in performing the work.

3.07 MINIMUM CONSTRUCTION CLEARANCES FOR FALSEWORK AND OTHER TEMPORARY STRUCTURES (IF APPLICABLE – FOR STRUCTURES ONLY)

The Contractor shall abide by the following minimum temporary clearances during the course of construction:

- 12' – 0" horizontal from centerline of track
- 21' – 6" vertically above top of rail.

For construction clearance less than listed above, local Operating Unit review and approval is required.

3.08 APPROVAL OF REDUCED CLEARANCES

- A. The minimum track clearances to be maintained by the Contractor during construction are specified in Section 3.07 herein.
- B. Any proposed infringement on the specified minimum clearances due to the Contractor's operations shall be submitted to UPRR's Designated Representative through the Agency at least 30 days in advance of the work and shall not be undertaken until approved in writing by the UPRR's Designated Representative.
- C. No work shall commence until the Contractor receives in writing assurance from UPRR's Designated Representative that arrangements have been made for flagging service, as

may be necessary and receives permission from UPRR's Designated Representative to proceed with the work.

3.09 CONSTRUCTION AND AS-BUILT SUBMITTALS (IF APPLICABLE – FOR STRUCTURES ONLY)

- A. Submittals are required for construction materials and procedures as outlined below. The submittals shall include all review comments from the Agency and the Engineer of Record. All design submittals shall be stamped and signed by a Professional Engineer registered in the State of California.
- B. The tables below provide UPRR's minimum submittal requirements for the construction items noted. Submittal requirements are in addition to those specified elsewhere in these bid documents. The minimum review times indicated below represent UPRR's requirements only. The Contractor shall allow additional time for the Agency's review time as stated elsewhere in these bid documents.
- C. Submittals shall be made by the Agency to the UPRR Manager of Industry and Public Projects unless otherwise directed by the Railroad. Items in Table 1 shall be submitted for both railroad overpass and underpass projects, as applicable. Items in Table 2 shall be submitted for railroad underpass projects only.

TABLE 1

ITEM	DESCRIPTION	SETS REQD.	UPRR's Minimum Review Time
1	Shoring design and details	4	4 weeks
2	Falsework design and details	4	4 weeks
3	Drainage design provisions	4	4 weeks
4	Erection diagrams and sequence	4	4 weeks
5	Demolition diagram and sequence	4	4 weeks

Prior to or during construction of railroad underpass structures, the UPRR requires the review of drawings, reports, test data and material data sheets to determine compliance with the specifications. Product information for items noted in Table 2 must be submitted to UPRR's Designated Representative through the Agency for their own review and approval of the material. The signed submittal and the Agency's review comments will be reviewed by UPRR or its consultant. If a consultant performs the reviews, the consultant may reply directly to the Agency or its Designated Representative after consultation with UPRR. Review of the submittals will not be conducted until after review by the Agency or its Designated Representative. Review of the submittal items will require a minimum of four (4) weeks after receipt from the Agency.

TABLE 2

ITEM	DESCRIPTION	SETS REQD.	NOTES
1	Shop drawings	4	Steel and Concrete members
2	Bearings	4	For entire structures
3	Concrete Mix Designs	4	For entire structures
4	Rebar & Strand certifications	4	For superstructure only
5	28 day concrete strength	4	For superstructure only
6	Waterproofing material certifications and installation procedure	4	Waterproofing & protective boards
7	Structural steel certifications	4	All fracture critical members & other members requiring improved notch toughness
8	Fabrication and Test reports	4	All fracture critical members & other members requiring improved notch toughness
9	Welding Procedures and Welder Certification	4	AWS requirements
10	Foundation Construction Reports	4	Pile driving, drilled shaft construction, bearing pressure test reports for spread footings
11	Compaction testing reports for backfill at abutments	4	Must meet 95% maximum dry density, Modified Proctor ASTM D1557

D. As-Built Records shall be submitted to the UPRR within 60 days of completion of the structures. These records shall consist of the following items:

Overpass Projects

1. Electronic files of all structure design drawings with as-constructed modifications shown, in Microstation J or Acrobat .PDF format.
2. Hard copies of all structure design drawings with as-constructed modifications shown.

Underpass Projects

3. Electronic files of all structure design drawings with as-constructed modifications shown, in Microstation J or Acrobat .PDF format.

E. Hard copies of all structure design drawings with as-constructed modifications shown.

F. Final approved copies of shop drawings for concrete and steel members.

G. Foundation Construction Reports.

H. Compaction testing reports for backfill at abutments.

3.10 APPROVAL OF DETAILS

The details of the construction affecting the UPRR tracks and property not already included in the Contract Plans shall be submitted to UPRR's Designated Representative through the Agency for UPRR's review and written approval before such work is undertaken. Review and approval of these submittals will require a minimum of four (4) weeks in addition to the Agency's review time as stated elsewhere in these bid documents.

3.11 MAINTENANCE OF RAILROAD FACILITIES

- A. The Contractor shall be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from Contractor's operations; to promptly repair eroded areas within UPRR's right of way and to repair any other damage to the property of UPRR, or its tenants or licensees.
- B. All such maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.
- C. The Contractor must submit a proposed method of erosion control and have the method reviewed by the UPRR prior to beginning any grading on the Project Site. Erosion control methods must comply with all applicable local, state and federal regulations.

3.12 SITE INSPECTIONS BY UPRR's DESIGNATED REPRESENTATIVE

- A. In addition to the office reviews of construction submittals, site inspections may be performed by UPRR's Designated Representative at significant points during construction, including but not limited to the following:
 - 1. Preconstruction meetings.
 - 2. Completion of the at grade crossing.
- B. Site inspection is not limited to the milestone events listed above. Site visits to check progress of the work may be performed at any time throughout the construction as deemed necessary by UPRR.
- C. A detailed construction schedule, including the proposed temporary horizontal and vertical clearances and construction sequence for all work to be performed, shall be provided to the Agency for submittal to UPRR's Designated Representative for review prior to commencement of work. This schedule shall also include the anticipated dates when the above listed events will occur. This schedule shall be updated for the above listed events as necessary, but at least monthly so that site visits may be scheduled.

3.13 UPRR REPRESENTATIVES

UPRR representatives, conductors, flag person or watch person will be provided by UPRR at expense of the Agency or Contractor (as stated elsewhere in these bid documents) to protect UPRR facilities, property and movements of its trains or engines. In general, UPRR will furnish such personnel or other protective services as follows:

1. When any part of any equipment is standing or being operated within 25 feet, measured horizontally, from centerline of any track on which trains may operate, or when any object is off the ground and any dimension thereof could extend inside the 25 foot limit, or when any erection or construction activities are in progress within such limits, regardless of elevation above or below track.
2. For any excavation below elevation of track subgrade if, in the opinion of UPRR's Designated Representative, track or other UPRR facilities may be subject to settlement or movement.
3. During any clearing, grubbing, excavation or grading in proximity to UPRR facilities, which, in the opinion of UPRR's Designated Representative, may endanger UPRR facilities or operations.
4. During any contractor's operations when, in the opinion of UPRR's Designated Representative, UPRR facilities, including, but not limited to, tracks, buildings, signals, wire lines, or pipe lines, may be endangered.
5. The Contractor shall arrange with the UPRR Designated Representative to provide the adequate number of flag persons to accomplish the work.

3.14 WALKWAYS REQUIRED

Along the outer side of each exterior track of multiple operated track, and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending to a line not less than twelve feet (12') from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while UPRR's flagman service is provided shall be removed before the close of each work day. Walkways with railings shall be constructed by Contractor over open excavation areas when in close proximity of track, and railings shall not be closer than 8' – 6" horizontally from center line of tangent track or 9' – 6" horizontally from centerline of curved track.

3.15 COMMUNICATIONS AND SIGNAL LINES

If required, UPRR will rearrange its communications and signal lines, its grade crossing warning devices, train signals and tracks, and facilities that are in use and maintained by UPRR's forces in connection with its operation at expense of the Agency. This work by UPRR will be done by its own forces and it is not a part of the Work under this Contract.

3.16 TRAFFIC CONTROL AND YARD SECURITY

Contractor's operations that control traffic access to, across or around UPRR facilities shall be coordinated with and approved by the UPRR's Designated Representative. Contractor shall keep the access to UPRR facilities secured at all times. Contractor shall provide manned security at the access point to East Washington Boulevard.

3.17 CONSTRUCTION EXCAVATIONS

- A. The Contractor shall be required to take special precaution and care in connection with excavating and shoring. Excavations for construction of footings, piers, columns, walls or other facilities that require shoring shall comply with requirements of OSHA, AREMA and UPRR "Guidelines for Temporary Shoring".
- B. The Contractor shall contact UPRR's "Call Before Your Dig" at least 48 hours prior to commencing work at 1-800-336-9193 during normal business hours (6:30 a.m. to 8:00 p.m. central time, Monday through Friday, except holidays - also a 24 hour, 7 day a week number for emergency calls) to determine location of fiber optics. If a telecommunications system is buried anywhere on or near UPRR property, the Contractor will co-ordinate with UPRR and the Telecommunication Company(ies) to arrange for relocation or other protection of the system prior to beginning any work on or near UPRR property.

3.18 RAILROAD FLAGGING

Performance of any work by the Contractor in which person(s) 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 within twenty-five (25) feet of any track, may require railroad flagging services or other protective measures. Contractor shall give the advance notice to the UPRR as required in the "Caltrans Right of Entry Agreement" before commencing any such work, so that the UPRR may determine the need for flagging or other protective measures to ensure the safety of the railroad's operations. Contractor shall comply with all other requirements regarding flagging services covered by the "Caltrans Right of Entry Agreement". Any costs associated with failure to abide by these requirements will be borne by the Contractor.

3.19 CLEANING OF RIGHT-OF-WAY

Contractor shall, upon completion of the work to be performed by Contractor upon the premises, over or beneath the tracks of UPRR, promptly remove from the Right-of-Way of UPRR all of Contractor's tools, implements, and other materials whether brought upon the Right-of-Way by Contractor or any subcontractors, employee or agent of Contractor or of any subcontractor, and leave the Right-of-Way in a clean and presentable condition to satisfaction of UPRR.

EXHIBIT C

Public Highway At-Grade Crossing Agreement

Cover Sheet for the
Railroad's Form of
Caltrans Right of Entry Agreement

**RIGHT OF ENTRY
AGREEMENT**

THIS AGREEMENT is made and entered into as of the ___ day of _____, 2015, 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 Mile Post 707.71(DOT 760900M), on Railroad's Calexico Subdivision located at or near Calexico, Imperial County, California, for the purpose of performing work relating to the reconstruction and realignment of St. Rt. 98 at-grade public road crossing (the "Work"), which includes (description) in the general location shown on the Railroad Location 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 herein, or designated by the Railroad representative named in Article 4.

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

The General Terms and Conditions contained in **Exhibit B**, the Insurance Requirements contained in **Exhibit C**, the Minimum Safety Requirements contained in **Exhibit D** and the Contractor's Endorsement marked **Exhibit E**, each attached hereto, are hereby made a part of this Agreement.

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 representatives or his or her duly authorized representatives (the "Railroad Representative"):

Odell Loveland
Mgr Track Mntce
2441 E. Gila Ridge, Bldg B
Yuma, Az 85365
928-343-4525

- C. Licensee, at its own expense, shall adequately monitor that its contractors are performing all Work to be performed under construction contracts for the Work. Licensee shall require that such Work is performed in a safe manner as set forth in Section 7 of Exhibit B. The responsibility of Licensee's obligation for requiring safe conduct and adequate monitoring and supervision of Contractor's performance of contract work on the Project 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 on the date of this Agreement, and continue until _____, unless sooner
(Expiration Date)
terminated as herein provided, or at such time as Licensee has completed its Work on Railroad's property, whichever is earlier. Licensee agrees to notify the Railroad Representative in writing when it has completed its Work on Railroad's property.
- 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.

ARTICLE 6 - INSURANCE - CONTRACTOR ENDORSEMENT

- A. The State of California ("State") is self-insured. State shall provide Railroad defense and indemnification at least equal to the defense, indemnification and insurance provisions

(including the endorsements) contained in **Exhibit C**. 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**.
- C. All insurance correspondence, certificates, endorsements, binders or originals shall be sent to:

*Union Pacific Railroad Company
Real Estate Department
1400 Douglas Street, Mail Stop 1690
Omaha, Nebraska 68179-1690
Attn: Senior Manager Contracts
Folder No.: 2843-01*

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

ARTICLE 9 - ADMINISTRATIVE FEE

Upon the execution and delivery of this Agreement, Licensee shall pay to Railroad **ONE THOUSAND DOLLARS (\$1,000.00)** 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.

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

UNION PACIFIC RAILROAD COMPANY
(Federal Tax ID #94-6001323)

By: _____
DAVID C. LAPLANTE
Senior Manager - Contracts

**STATE OF CALIFORNIA,
DEPARTMENT OF TRANSPORTATION**

By: _____

Printed
Name: _____

Title: _____

**EXHIBIT A
TO
STATE'S RIGHT OF ENTRY AGREEMENT**

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

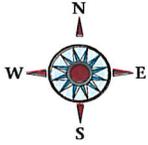
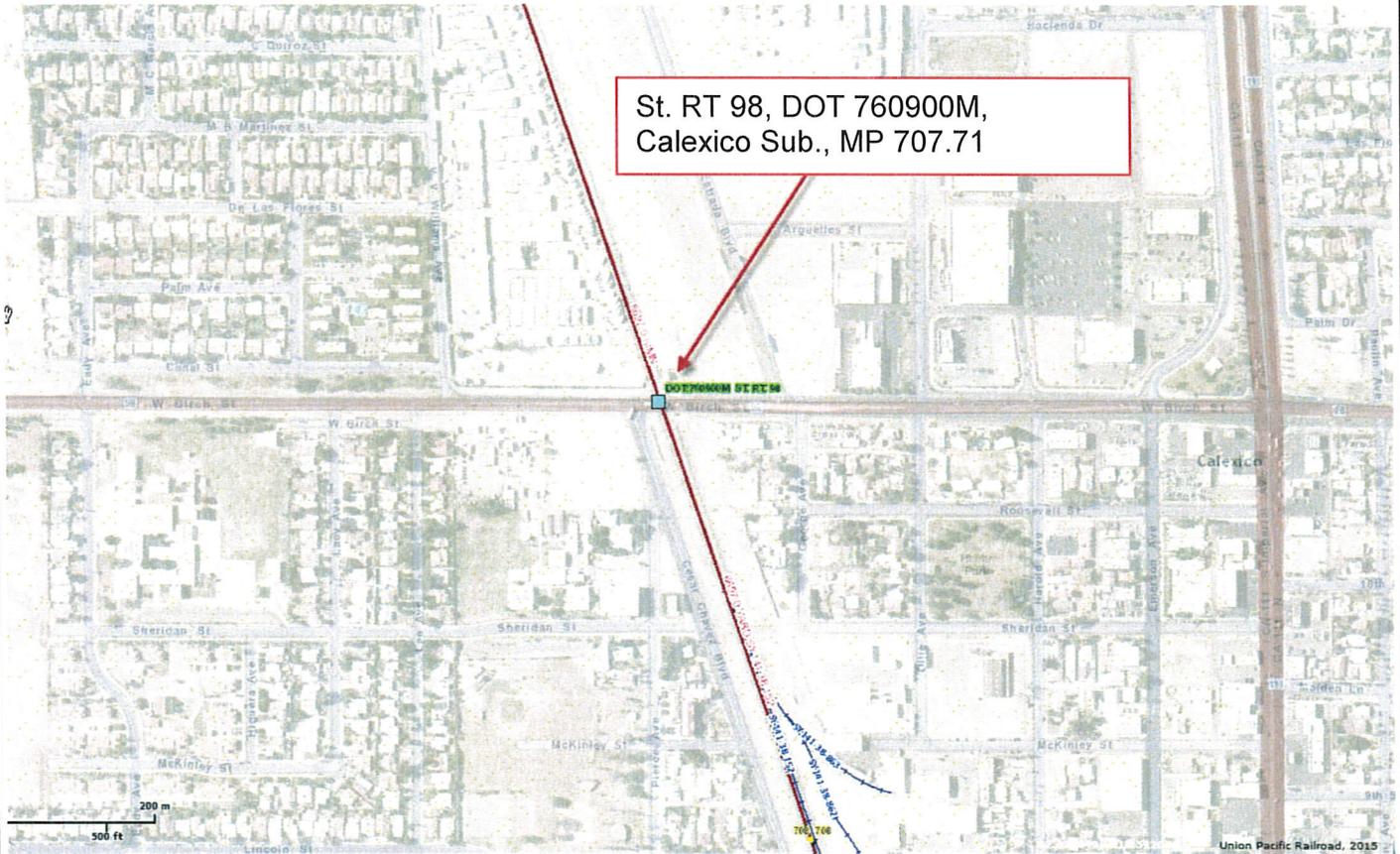


EXHIBIT "A"
RAILROAD LOCATION PRINT
ACCOMPANYING A
CONSTRUCTION & MAINTENANCE AGREEMENT/CONTRACTOR'S
RIGHT OF ENTRY AGREEMENT



UNION PACIFIC RAILROAD COMPANY
CALEXICO SUBDIVISION
RAILROAD MILE POST 707.71
CALEXICO, IMPERIAL COUNTY, CA
To accompany an agreement with
**CALIFORNIA DEPT. OF TRANSPORTATION and its
CONTRACTORS**

UPRR Folder No. 2843-01 Date: April 27, 2016

WARNING

IN ALL OCCASIONS, U.P. COMMUNICATIONS DEPARTMENT MUST BE CONTACTED IN ADVANCE OF ANY WORK TO DETERMINE EXISTENCE AND LOCATION OF FIBER OPTIC CABLE.

PHONE: 1-(800) 336-9193

**EXHIBIT B
TO
STATE'S 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 45 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, 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 permitted by Cal. Gov. Code §14662.5, Licensee hereby agrees to indemnify 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 under this Agreement, or (ii) any act or omission of Licensee, its officers, agents or employees in connection with this Agreement, or (iii) any breach of this Agreement by Licensee.

b. To the extent permitted 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. Licensee expressly and specifically assumes potential liability under this Section

8 for claims or actions brought by Licensee's own employees. To the extent permitted by applicable law, 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. 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. 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.

**EXHIBIT C
TO
STATE'S
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.
- Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage) showing the project on the form schedule.

- 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
STATE'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 – 49 CFR 214, Subpart C and Railroad's On-Track Safety Rules. Under 49 CFR 214, 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 49 CFR 213.
- 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 if 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
STATE'S 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. _____ (_____) covering work in Calexico, Imperial County, 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), 8.a) 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 2 of the Contract Information Handout 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 2 of the Contract Information Handout , "Railroad Relations and Insurance Requirements", document.

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

Union Pacific Railroad Company
Senior Manager Contracts
1400 Douglas Street, MS 1690
Omaha, NE 68179-1690
Folder No. 2843-01

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 **[Insert phone number]** the advance notice required in Section 1 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: _____

Date: _____

EXHIBIT D

To Public Highway At-Grade Crossing
Agreement

Form of Easement Deed

RECORDING REQUESTED BY:
STATE OF CALIFORNIA

When Recorded, Mail To:

Department of Transportation
District 11
4050 Taylor Street MS 310
San Diego, CA 92110

(Space above this line for Recorder's Use)

District	County	^S ^D ^a Route	Postmile	Number
11	IMP	^c ^e 98	707.71	35022-1 & 35023-1

UNION PACIFIC RAILROAD COMPANY, a Delaware corporation, (hereinafter, "GRANTOR"), for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, hereby grants unto the **STATE OF CALIFORNIA**, Department of Transportation, a public agency, its successors and assigns (hereinafter, "STATE"), a non-exclusive easement in, to, over, along, upon and across that certain real property (the "Property") at State Route 98 (Birch Street) in or near Calexico, Imperial County, State of California, more particularly described in **Exhibit A** attached hereto and hereby made a part hereof, to be used by the STATE for the construction, maintenance, operation, repair, renewal, reconstruction and use of a public roadway and public pedestrian and bicycle sidewalks only, along with all necessary supporting appurtenances thereon (herein collectively the "Crossing Area").

The easement herein granted is for surface roadway purposes only. Without limitation of the foregoing, this grant does not include the right to install utilities of any nature, including, without limitation, fiber optic, cable television, electrical, gas or liquid distribution, and telephone lines.

GRANTOR acknowledges that the Crossing Area and its use as a public crossing in accordance with this Easement Deed and the Agreement (as defined below) are compatible with railroad operations, within the meaning of California Code of Civil Procedure section 1240.510, so long as they do not impede railroad operations, create an undue safety risk, or interfere with GRANTOR's common carrier obligations as regulated by the Surface Transportation Board or by any successor agency.

GRANTOR further grants to STATE the non-exclusive right of ingress to and egress from the Property for the purpose of exercising the rights herein granted, subject to advance notification and coordination with GRANTOR to ensure safety and the compatibility of GRANTOR's other property for such ingress and egress (which coordination by GRANTOR shall not be unreasonably withheld), and provided further that such right of ingress and egress shall be in accordance with the terms and provisions of the parties' separate Right of Way Agreement – Railroad Coordination dated _____ 2016, and as thereafter amended by mutual agreement, and known in GRANTOR's records as Real Estate Folder Number 2843-01 (the "Agreement").

RESERVING unto GRANTOR, its successors and assigns all rights in and to the Property and all uses of the Property that are not inconsistent with STATE's use and enjoyment of the Easement, including, but not limited to the following:

- (1) The right to construct, reconstruct, upgrade, place, replace, remove, inspect, maintain, repair, alter, renew, improve and operate pipelines, utility lines, track, railroad facilities and communication lines above, below and on the surface of the Property, and to grant such rights to third parties, but in such a way as to not unreasonably interfere with Grantee's use of the Property for the purposes specified in this Easement Deed. Communication lines shall include, without limitation, transmission by conduit, fiber optics, cable, wire or other means of electricity, voice data, video, digitized information, or other materials or information.
- (2) All rights as may be required to investigate and remediate environmental contamination and hazards affecting the Property.
- (3) All oil, oil rights, minerals, mineral rights, natural gas, natural gas rights, and other hydrocarbons by whatsoever name known that may be within the Property together with the perpetual right of drilling, mining, exploring and operating therefore and removing the same from the Property, including the right to whip-stock or directionally drill and mine from lands other than the Property hereinbefore described, oil or gas wells, tunnels and shafts into, through or across the subsurface of the Property, and to bottom such whip-stocked or directionally drilled wells, tunnels and shafts under and beneath or beyond the exterior limits thereof, and to re-drill, re-tunnel, equip, maintain, repair, deepen and operate any such wells, or mines, without, however, the right to drill, mine, explore and operate through the surface or the upper one hundred (100) feet of the subsurface of the Property or otherwise in such manner as to endanger the safety of any improvements that may be constructed on the Property.

This Easement is SUBJECT and SUBORDINATE to the following:

- (1) The terms and conditions of the Agreement.
- (2) All outstanding leases, licenses and other outstanding rights, including, but not limited to, those for pipe, telephone, electric and fiber optic lines and the right of renewals and extensions of the same, and subject also to all conditions, limitations, restrictions, encumbrances, reservations or interests of any person which may affect the Property, whether recorded or unrecorded.
- (3) The continuing right and obligation of GRANTOR, its successors and assigns, to use the Property in the performance of its duties as a common carrier, including, but not limited to, the right to construct, reconstruct, maintain and operate existing or any additional railroad tracks, facilities and appurtenances thereto in, upon, over, along and across the Property in such manner as may be consistent with STATE's use and enjoyment of the easement herein granted; ***provided, further that in the event the Property is transferred to a non-transportation entity, such transferee's use of the Property shall be subject to the following limitations and conditions:***
 - (a) No use may be made of the Property which would impair the full use and safety of the Crossing Area, or would otherwise interfere with the free flow of traffic thereon or would unreasonably impair the maintenance thereof.

- (b) No use may be made of the Property for the manufacture or storage of flammable, volatile, explosive or corrosive substances, and such substances shall not be brought onto said land except in such quantities as are normally required for the maintenance operations of occupants of said land and except as may be transported by rail or pipelines. Installation of any pipelines by a non-railroad or other non-transportation entity, or pipelines not otherwise subject to Federal and/or State regulations and safety standards, carrying volatile substances shall have the written approval of the STATE as to the safety and compatibility with the Easement and such discretion shall not be exercised in a capricious or arbitrary manner. The use of any such substances shall be in conformance with all applicable code requirements.
- (c) No hazardous or unreasonably objectionable smoke, fumes, vapors, dust or odors shall be permitted, which would adversely affect the use or maintenance of said Crossing Area or the traveling public thereon.
- (d) No building of combustible construction shall hereafter be constructed on the Property. The STATE shall be given the opportunity to review and approve plans for any construction within the Property sixty (60) days prior to said construction. No buildings, no permanent structures, and no advertising displays, may be constructed within fifteen (15) feet (measured horizontally) of the edge of the Easement without the express written approval of the STATE. The STATE shall have the discretion to determine whether such proposed construction will be inimical to or incompatible with the full enjoyment of the public rights in the Easement or against the public interest, but such discretion shall not be exercised in a capricious or arbitrary manner.

If the Easement, or any portion thereof, shall cease to be needed for public crossing purposes, then the STATE shall vacate such portion(s) of the Easement in accordance with any and all applicable State and Federal laws. In addition, STATE, at STATE's sole expense, shall demolish and remove any improvements in accordance with the then current standards of GRANTOR, including, but not limited to engineering, land use and railroad operating standards, and with the terms and provisions of the Agreement.

Consideration for this grant includes compensation for damages to the value of the remainder of GRANTOR's property, if any, caused by the existence of the Easement herein granted and/or by the construction or maintenance of the Crossing Area. GRANTOR hereby waives any additional claim for such damages to the value of the remainder, if any. This waiver shall not apply to compensation for any physical damages to GRANTOR's remaining property, if any, caused by STATE.

In WITNESS WHEREOF, GRANTOR has caused its corporate name to be hereunder subscribed and its corporate seal to be affixed hereto, this ____ day of _____, 20 ____.

ATTEST:

UNION PACIFIC RAILROAD COMPANY

By _____
 BEVERLY J. KUBAT
 Assistant Secretary

By _____
 DANIEL A. LEIS
 General Director Real Estate

EXHIBIT A

TO EASEMENT DEED

LEGAL DESCRIPTION and SURVEY PRINT

EXHIBIT "A"

35023-1

AN EASEMENT FOR PUBLIC ROAD PURPOSES, to the State of California, upon, under, over and across that certain piece or parcel of land situate in the Northeast quarter of Section 14, Township 17 South, Range 14 East, San Bernardino Base and Meridian, in the City of Calexico, County of Imperial, State of California, as described in deed to Southern Pacific Corporation, (now Union Pacific Railroad) recorded November 16, 1903 in Book 332, Page 439 of records, in said County, more particularly described as follows:

COMMENCING at the Southwest corner of Parcel B of Parcel Map 12-54, filed on December 15, 2004 in the office of the Imperial County Recorder as Document No. 04-42698, said point also being on the Easterly Right of Way of the Union Pacific Railroad as described in Grant Deed to the Southern Pacific Company, recorded November 16, 1903 at Book 332, Page 436, and also recorded on November 16, 1903 at Book 332, Page 439, in said Recorder's Office, thence along said Easterly Right of Way, S.19°13'53"E., 130.66 feet to the TRUE POINT OF BEGINNING, thence (1) leaving said Easterly Railroad Right of Way N.89°13'35"W., 24.13 feet, thence (2) S.70°25'28"W., 55.42 feet, thence (3) S.07°45'21"W., 48.25 feet to the Westerly Right of Way of said Railroad, thence (4) along said Right of Way N.19°13'53"W., 74.06 feet to the Southerly Right of Way of State Highway 98 as described in Easement Deed to the State of California recorded April 30, 1964 in Book 1182, Page 731 in the Office of the County Recorder of said County, State of California, thence (5) along said Highway Right of Way N.89°35'56"E., 105.65 feet, to the Easterly line of said Railroad Right of Way as described in said Deed, thence (6) along said Right of Way S.19°13'53"E., 4.88 feet to the TRUE POINT OF BEGINNING.

The Bearings and Distances used in the above descriptions are based on the California Coordinate System of 1983 (Epoch 1991.35), HPGN, Zone 6. Divide distances by 1.0000242 to obtain ground level distances.

Signature: _____

Date: _____

AU: _____

CK: _____



EXHIBIT "A"

35022-1

AN EASEMENT FOR PUBLIC ROAD PURPOSES, to the State of California, upon, under, over and across that certain piece or parcel of land situate in the Southeast quarter of Section 11, Township 17 South, Range 14 East, San Bernardino Base and Meridian, in the City of Calexico, County of Imperial, State of California as described in Grant Deed to Southern Pacific Corporation, (now Union Pacific Railroad) recorded November 16, 1903 in Book 332, Page 436 of records, in said County, more particularly described as follows:

BEGINNING at the Southwest corner of Parcel B of Parcel Map 12-54, filed on December 15, 2004 in the office of the County Recorder of said County as Document No. 04-42698, said point also being on the Easterly Right of Way of Union Pacific Railroad as described in said Grant Deed to the Southern Pacific Corporation, thence (1) along said Easterly Right of Way, N.19°13'53"W., 34.96 feet, thence (2) leaving said Right of Way S.70°56'06"W., 82.21 feet, thence (3) S.89°05'45"W., 18.74 feet to the Westerly Right of Way of said Railroad, thence (4) continuing S.89°05'45"W., 42.14' to the Westerly edge of a Vacated Road, 40 feet wide, per Map LS 3-40, filed on March 14, 1922 in the office of the County Recorder of said County, thence (5) along said Westerly Right of Way, S.19°13'53"E., 26.41 feet to the Southerly line of Section 11, thence (6) along said section line, and Northerly Highway Right of Way, S.89°53'36"E., 42.39 feet to the Westerly line of said Railroad Right of Way, said point also being the Northwesterly corner of that Easement Deed to the State of California recorded April 30, 1964 in Book 1182, Page 731 in the Office of the County Recorder of said County, State of California, thence (7) continuing along said section line and Northerly Highway Right of Way, S.89°53'36"E 105.97 feet to the Easterly line of said Railroad Right of Way, thence (8) Northwesterly along said Railroad Right of Way line, N.19°13'53"W., 21.20 feet to the POINT OF BEGINNING.

The Bearings and Distances used in the above descriptions are based on the California Coordinate System of 1983 (Epoch 1991.35), HPGN, Zone 6. Divide distances by 1.0000242 to obtain ground level distances.

Signature: _____

Date: _____

AU: _____

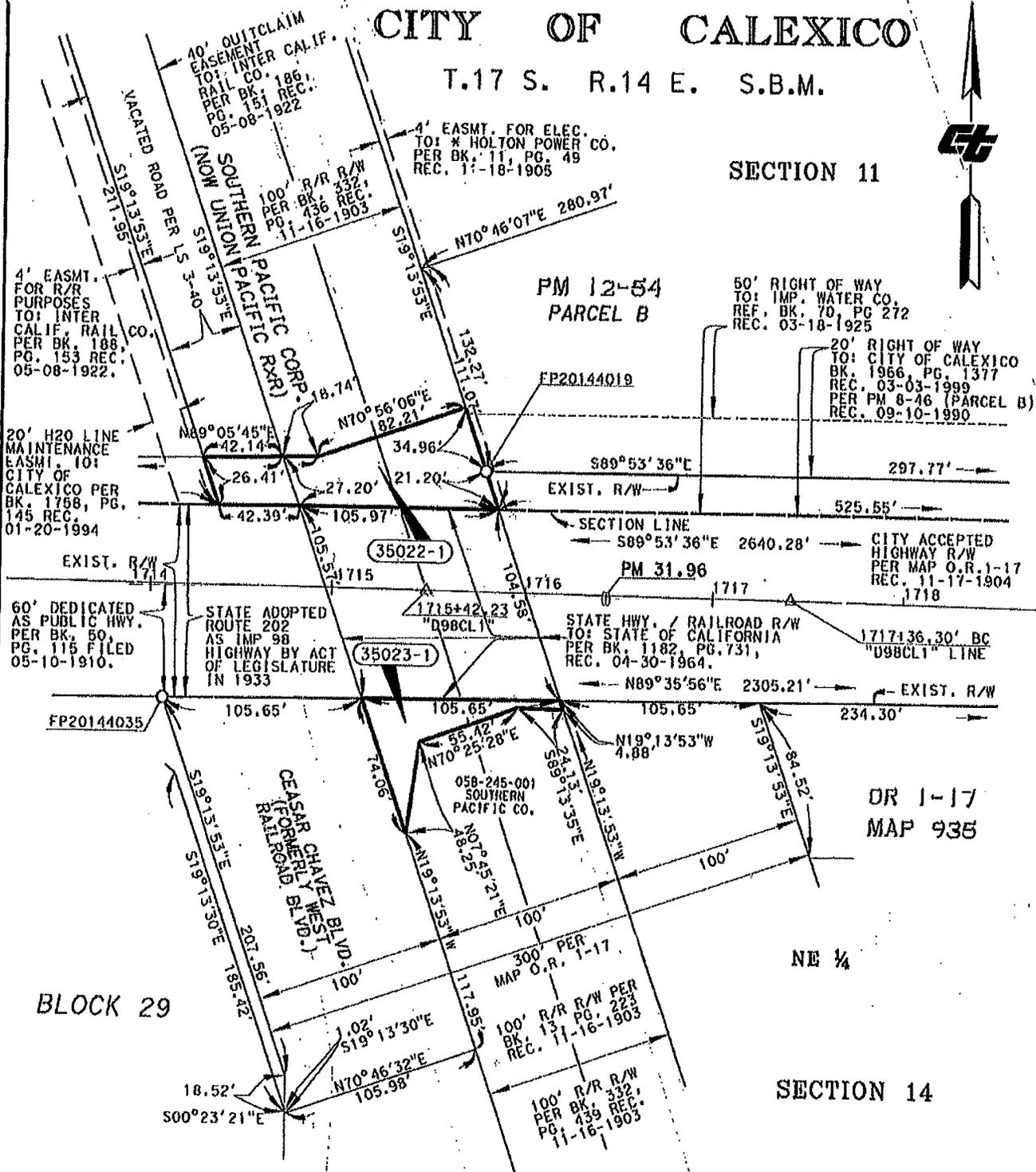
CK: _____



CITY OF CALEXICO

T.17 S. R.14 E. S.B.M.

SECTION 11



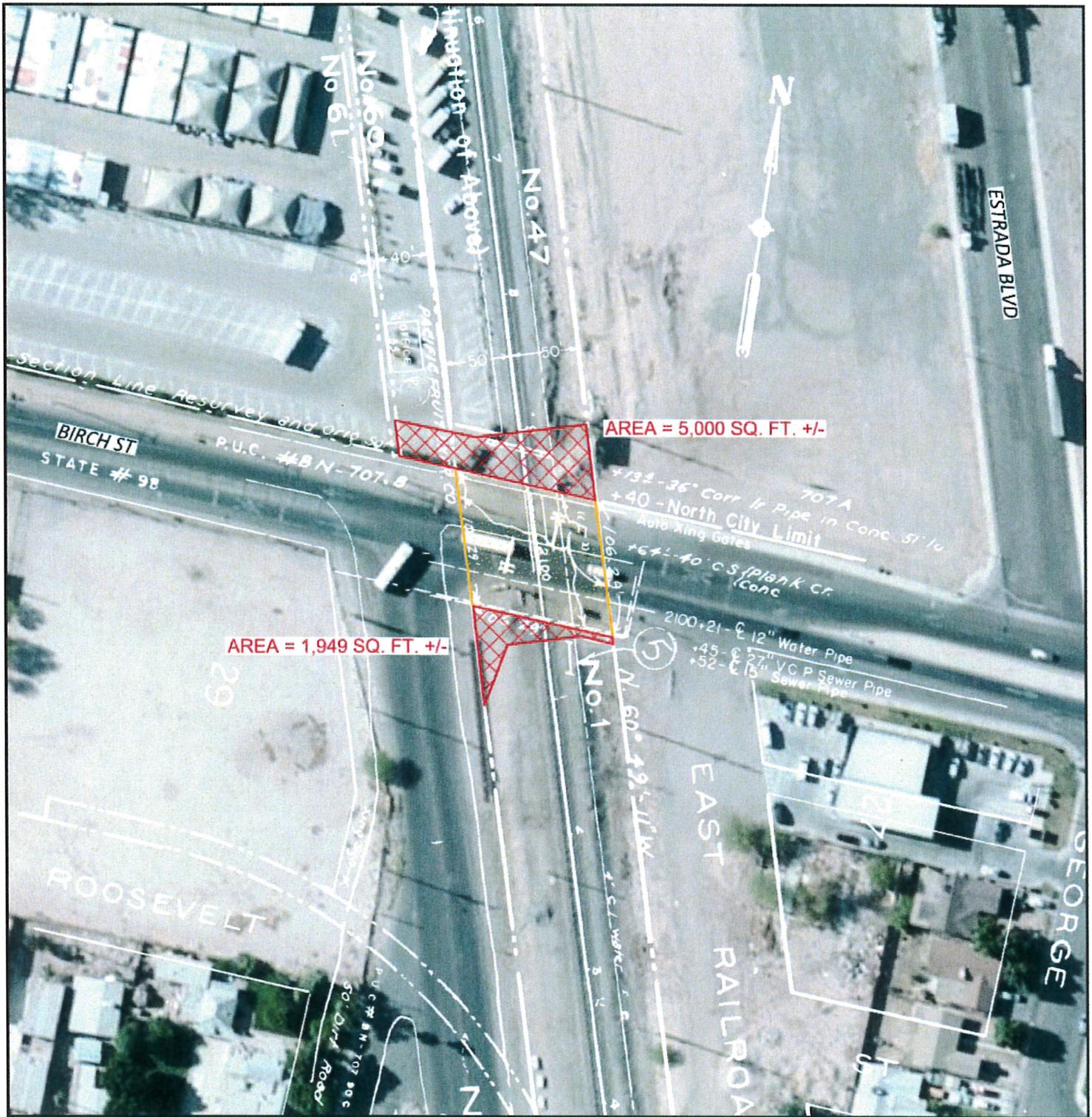
BLANKET UTILITY ESMT.
IN ALL ROADS & ALLEYS
PER OR 1-17
REC. 11-17-1904

MONUMENT DESCRIPTIONS AND COORDINATES OF
POINTS ARE AVAILABLE FROM THE CALIFORNIA
DEPARTMENT OF TRANSPORTATION, 4050 TAYLOR
ST., SAN DIEGO, CALIFORNIA 92110

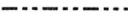
NOTES

Coordinates and bearings are on CCS
1983(1991,35) Zone. Distances and
stationing are grid distances.
Divide by 1,000,242 to obtain
ground distances.
All distances are in feet unless
otherwise noted.

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DISTRICT II			
EXHIBIT "B"			
RIGHT OF WAY MAP NO.		Por. 83617	
COUNTY	ROUTE	POST MILE	SCALE
IMP	98	31.96	NONE
			SHEET 1 OF 1



LEGEND:

- NEW CROSSING AREA 
- EXISTING CROSSING AREA 
- UPRRCO. R/W OUTLINED 
- TOTAL NEW CROSSING AREA = 6,949 SQ. FT. +/-

NOTE: BEFORE YOU BEGIN ANY WORK, SEE AGREEMENT FOR FIBER OPTIC PROVISIONS.
EXHIBIT "A"

UNION PACIFIC RAILROAD COMPANY

CALEXICO, IMPERIAL COUNTY, CALIFORNIA
M.P. 707.71 - CALEXICO SUB.

TO ACCOMPANY AGREEMENT WITH
CALIFORNIA DOT
MAP SP V-18 / S-11A
SCALE: 1" = 100'

OFFICE OF REAL ESTATE
OMAHA, NEBRASKA DATE: 4-29-2015
PJB FILE: 0284301

CADD FILENAME	0284301
SCAN FILENAME	CA1811AS-284301.TIF

EXHIBIT E

To Public Highway At-Grade Crossing
Agreement

Railroad Material and Force Account Estimate

DATE: 2016-04-29

ESTIMATE OF MATERIAL AND FORCE ACCOUNT WORK
 BY THE
 UNION PACIFIC RAILROAD

THIS ESTIMATE GOOD FOR 6 MONTHS EXPIRATION DATE IS :2016-10-28

DESCRIPTION OF WORK:
 INSTALL AUTOMATIC FLASHING LIGHT CROSSING SIGNALS
 WITH GATES AND CANTILEVER AT CALEXICO, CA. ST.RT. 98
 M.P. 707.71 ON THE CALEXICO SUB. DOT #760900M
 WORK TO BE PERFORMED BY RAILROAD WITH EXPENSE AS BELOW:
 SIGNAL - CALTRANS - 100%
 ESTIMATED USING FEDERAL LABOR ADDITIVES WITH INDIRECT AND
 OVERHEAD CONSTRUCTION COST'S - 190.39%

PID: 91050 AWO: 30020 MP,SUBDIV: 707.71, CALEXICO
 SERVICE UNIT: 20 CITY: HEBER STATE: CA

DESCRIPTION	QTY	UNIT	LABOR	MATERIAL	RECOLL	UPRR	TOTAL
ENGINEERING WORK							
ENGINEERING			5574		5574		5574
LABOR ADDITIVE 190.39%			19750		19750		19750
SIG-HWY XNG			4821		4821		4821
TOTAL ENGINEERING			30145		30145		30145
SIGNAL WORK							
BILL PREP			900		900		900
CANTILEVER				37600	37600		37600
CONTRACT				8028	8028		8028
LABOR ADDITIVE 190.39%			178037		178037		178037
MATL STORE EXPENSE				19	19		19
METER SERVICE				15000	15000		15000
PERSONAL EXPENSES				42000	42000		42000
RCLW CONTRACT				6141	6141		6141
ROCK/GRAVEL/FILL				2000	2000		2000
SALES TAX				3215	3215		3215
SIGNAL			92612	80382	172994		172994
TRANSP/IB/OB/RCLW				5837	5837		5837
ENVIRONMENTAL PERMIT				10	10		10
TOTAL SIGNAL			271549	200232	471781		471781
LABOR/MATERIAL EXPENSE			301694	200232			
RECOLLECTIBLE/UPRR EXPENSE					501926	0	
ESTIMATED PROJECT COST							501926

THE ABOVE FIGURES ARE ESTIMATES ONLY AND SUBJECT TO FLUCTUATION. IN THE EVENT OF AN INCREASE OR DECREASE IN THE COST OR QUANTITY OF MATERIAL OR LABOR REQUIRED, UPRR WILL BILL FOR ACTUAL CONSTRUCTION COSTS AT THE CURRENT EFFECTIVE RATE.

**AREMA UNIT STATEMENT OF RAILROAD HIGHWAY GRADE CROSSING SIGNALS
ESTIMATED MAINTENANCE COSTS**



BUILDING AMERICA®

FOR

PID #91050

BY THE **UNION PACIFIC RAILROAD**

STREET ST. RT. 98
TOWN CALEXICO, CA.
MILEPOST 707.71
SUBDIVISION CALEXICO
AAR/DOT NO. 760900M
WORK ORDER# 30020

DESCRIPTION	UNIT VALUE	QUANTITY	UNITS
NON-CODED TRK. CIRCUIT, (Standalone AFTAC or Ring 10)	2	0	0
SUPERIMPOSED CIRCUIT(AFTAC) / DETECTION LOOP	2	0	0
HIGHWAY GRADE CROSSING SIGNAL (ONE PAIR OF FLASHING LIGHTS)	2	6	12
ADDITIONAL PAIR OF LIGHTS	1	4	4
GATE MECHANISM, AUTOMATIC WITH ARM UP TO 26 FT	8	1	8
GATE MECHANISM, AUTOMATIC WITH ARM OVER 26 FT	10	3	30
GCP/HXP (Constant warning device, per track circuit)	15	1	15
EXIT GATE MANAGEMENT SYSTEM RACK*	10	0	0
MOVEMENT DETECTOR (PMD)	6	0	0
MOVEMENT DETECTOR (STANDBY UNIT)	3	0	0
RADIO DATA LINK, PER UNIT	1	0	0
PREEMPTION CIRCUIT	2	1	2
DATA RECORDER	1	0	0
REMOTE MONITORING DEVICE*	2	1	2
BONDED RAIL JOINTS (per mile, each rail, single bonded)	1	0	0
BATTERY AND CHARGER (per set)	1	2	2
TOTAL UNIT COUNT			75
PAVEMENT RESTORATION COSTS			(Actual)
		Annual Maintenance Cost at \$170/Unit	\$12,750

*UP supplied Unit Value

April 29, 2016

DATE: 2015-12-30

ESTIMATE OF MATERIAL AND FORCE ACCOUNT WORK
 BY THE
 UNION PACIFIC RAILROAD

THIS ESTIMATE GOOD FOR 6 MONTHS EXPIRATION DATE IS :2016-06-29

DESCRIPTION OF WORK:

2016 CROSSING PROGRAM, CALEXICO, CA / ST. RT. 98 / DOT #760900M / MP707.71
 CALEXICO SUB.
 INSTALL 152 FT. CONCRETE XING WITH 136# RAIL, 10' WOOD TIES.
 CORRESPONDING SIGNAL WORK IN PID #E91050, AWO 30022.

PID: 91053 AWO: 30022 MP, SUBDIV: 707.70, CALEXICO
 SERVICE UNIT: 20 CITY: CALEXICO STATE: CA

DESCRIPTION	QTY	UNIT	LABOR	MATERIAL	RECOLL	UPRR	TOTAL
ENGINEERING WORK							
ENGINEERING			3094		3094		3094
FLAGGING			3094		3094		3094
TRACK SUPERVISORS			3094		3094		3094
LABOR ADDITIVE 234.24%			21718		21718		21718
TOTAL ENGINEERING			31000		31000		31000
TRACK & SURFACE WORK							
BALAST, SURFACE & LINE	3.00	CL	3344	2750	6094		6094
BILL PREPARATION FEE				900	900		900
CONTRACTOR PAVE, RD CLOSURE, EQUIPMT				70000	70000		70000
ENVIRONMENTAL PERMIT				20	20		20
FOREIGN LINE FREIGHT				1360	1360		1360
HOME LINE FREIGHT				900	900		900
OTM			3525	7289	10814		10814
RAIL	400.00	LF	10250	6988	17238		17238
RDXING	152.00	TF	3474	35266	38740		38740
WELD			6375	630	7005		7005
XTIE	106.00	EA	12714	11548	24262		24262
MATL STORE EXPENSE				879	879		879
SALES TAX				2576	2576		2576
LABOR ADDITIVE 234.24%			54786		54786		54786
TOTAL TRACK & SURFACE			94468	141106	235574		235574
LABOR/MATERIAL EXPENSE			125468	141106			
RECOLLECTIBLE/UPRR EXPENSE					266574	0	
ESTIMATED PROJECT COST							266574
EXISTING REUSEABLE MATERIAL CREDIT					0		
SALVAGE NONUSEABLE MATERIAL CREDIT					0		
RECOLLECTIBLE LESS CREDITS					266574		

THE ABOVE FIGURES ARE ESTIMATES ONLY AND SUBJECT TO FLUCTUATION. IN THE EVENT OF AN INCREASE OR DECREASE IN THE COST OR QUANTITY OF MATERIAL OR LABOR REQUIRED, UPRR WILL BILL FOR ACTUAL CONSTRUCTION COSTS AT THE CURRENT EFFECTIVE RATE.

FILE: EENG205.TSO.EPM.ESTIMATE(P091053A)

EXHIBIT F

To Public Highway At-Grade Crossing
Agreement

Design Schematic and Gate Crossing Location

Memorandum

To : DIMITAR PEEV (MS 255)
Project Engineer
Design

Date: June 25, 2015

File: 11-IMP-98
PM 31.6/32.1
EA 11-080231
EFIS 1100020357

From : DEPARTMENT OF TRANSPORTATION - DISTRICT 11
ROADBED ENGINEERING SECTION

Subject: STRUCTURAL SECTION RECOMMENDATIONS (addendum)

To comply with the HQ Memorandum, "Crumb Rubber Usage in Hot Mix Asphalt (HMA) Pavements", dated February 10, 2015, an RHMA (Type G) alternate is provided.

Mainlines (Outside)

TI = 11.5 (20yr.)
Rv = 5

Alternative 1

0.20' RHMA-G
0.50' HMA
2.00' AB-Class II

Alternative 2

0.70' HMA
2.00' AB-Class II

Mainlines (Inside)

TI = 9.5 (20yr.)
Rv = 5

Alternative 1

0.20' RHMA-G
0.30' HMA
1.80' AB-Class II

Alternative 2

0.50' HMA
1.80' AB-Class II

Shoulders (Outside)

TI = 7.0 (20yr.)

Rv = 5

Alternative 1

0.15' RHMA-G
0.20' HMA
1.25' AB-Class II

Alternative 2

0.35' HMA
1.25' AB-Class II

Shoulders (Inside)

TI = 6.0 (20yr.)

Rv = 5

Alternative 1

0.20' RHMA-G
1.15' AB-Class II

Alternative 2

0.25' HMA
1.15' AB-Class II

Design Notes

1. According to the Highway Design Manual, Section 600, when shoulders are 5' or less in width, the structural section of the adjacent ramp traveled way will be extended to the outer edge of shoulder.
2. For HMA-A and RHMA-G lifts between 0.15 ft. and 0.20 ft., the recommended aggregate grading for HMA-A and RHMA-G is 1/2 in. maximum graduation.
3. For HMA-A and RHMA-G lifts greater than 0.20 ft., the recommended aggregate grading for HMA-A and RHMA-G is 3/4 in. maximum graduation.
4. PG 70-10 binder should be used in this climate region.

If you have questions with regards to this memorandum, contact J. Scandore at 858-467-4069 or D. Evans at 858-467-4056.

John Scandore
M & R Eng. Assoc.
Roadbed/Corrosion Section

David Evans
Assoc. Trans. Engineer (Reg.)
Pavement Section



Cc: A.Padilla

Memorandum

*Serious drought.
Help Save Water!*

To: RUSSELL SIMPSON
Environmental Analyst

Date: June 26, 2015

File: 11-IMP-98
1100020357
31.6/32.1
080231

From: DIANE VERMEULEN
Environmental Engineering



Subject: Results from Aerially Deposited Lead (ADL) Study and ISA Review Results.

Initial Site Assessment (ISA)

The project is located in Imperial County on Route 98 from Eady Avenue to the Ollie Avenue. This project proposes to widen State Route 98 (SR-98) from two to four lanes from V.V. Williams Avenue to Ollie Avenue, enhance bicycle and pedestrian safety, and improve drainage performance. Field investigation for Aerially Deposited Lead has been completed on this project. Following is a discussion regarding typical hazardous waste issues that could affect this project.

Aerially deposited lead (ADL) – An Aerially Deposited Lead (ADL) Study is completed for this project. The results show non-hazardous levels of ADL along the unpaved shoulders of the road. Therefore, there are no expected ADL hazardous waste impacts associated with this project. Since soil is being disturbed, include SSP 7-1.02K(6)(j)(iii) Earth Material Containing Lead. A bid item will still need to be included for a lead compliance plan.

Naturally occurring asbestos (NOA) - NOA will not be an issue on this project since NOA does not occur in the project area.

Asbestos containing materials (ACM), lead containing paint (LCP) - The project does not impact any structures or facilities that would warrant an asbestos containing material or lead containing paint inspection so ACM and LCP will not be issues for this project.

Treated wood waste (TWW) – Treated wood waste is wood that has been treated with a chemical preservative, such as the wood guardrail posts and wood signposts. These must be managed as a non-hazardous designated waste by being disposed at a composite-lined solid waste landfill facility permitted to accept such wastes. Use SSP 14-11.09 if any signs or guard rail will be removed.

Yellow thermoplastic or traffic stripe – If yellow stripe or thermoplastic is going to be removed it will need to be managed differently depending on its age and the way it will be removed. Some of the yellow traffic stripe in this segment of highway 98 may be newer yellow stripe that does not contain lead. If it cannot be determined if lead free yellow stripe was used or if some of the alignment has older yellow paint that the lead content cannot be determined then SSP 14-11.07 must be included to collect the residue and determine if it needs to be disposed of as a hazardous

waste. If the stripe is going to be removed as part of a cold plane or grinding operation where the stripe is being removed with the asphalt concrete, then use SSP 15-1.03B. Regardless of which SSP is included, a bid item will need to be included for a lead compliance plan. Only one lead compliance plan is required for this project. SSP 15-2.02C(2) is the appropriate to use for all other colors of paint stripe removal. All paint stripe removal SSP's require preparation of a lead compliance plan (LCP) but not all require the stripe debris to be disposed of as a hazardous waste, only SSP 14-11.07.

The issues identified in this document are not considered as mitigation under CEQA. These issues are routine construction issues that are handled in the construction contract through inclusion of standard special provisions. This project can proceed with very little risk of impacts due to unanticipated hazardous waste or other contamination related issues.

This determination is based on the information provided in the request. Please submit a supplemental request for a hazardous waste assessment to cover the changes in the project if there is a change in the nature or scope of the project.

If you have any questions or comments, please contact Diane Vermeulen at 619-688-3146.

c:

Jayne Dowda - Environmental Engineering (by email only)

Memorandum

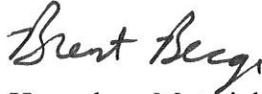
*Serious drought.
Help save water!*

To: RUSSELL SIMPSON
Environmental Planner
Project Analysis, Branch B

Date: August 9, 2016

File: 11-08023
11-0002-0357
11-IMP-98
PM 31.6-32.1

From: BRENT BERGE
Transportation Engineer
Environmental Engineering: Hazardous Materials



Subject: HAZARDOUS MATERIALS REVIEW OF SR-98 WEST WIDENING PHASE 1B

This project is located in Imperial County on State Route 98 (SR-98) from Eady Avenue to Ollie Avenue. The project proposes to widen SR-98 from two to four lanes from V.V. Williams Avenue to Ollie Avenue, enhance bicycle and pedestrian safety, and improve drainage performance. An ADL survey has been completed for this project.

The following is a discussion regarding typical hazardous materials issues that could affect this project:

Aerially deposited lead (ADL) – An ADL survey titled "Aerially Deposited Lead Survey Report for State Route 98, Post Mile 31.6 to 32.1, Imperial County, California" was done by Kleinfelder, Inc. and dated June 29, 2015. The results show that all locations and all depths (maximum 3.0 feet below ground surface) tested less than 80 mg/kg total lead using a 95% UCL. Since the soil is at a non-regulated level it may be used for any purpose. *SSP 7-1.02K(6)(j)(iii) Earth Material Containing Lead* shall be followed. A bid item for a Lead Compliance Plan is still required.

Asbestos NESHAP (National Emission Standards for Hazardous Air Pollutants) Notification – If the project involves any demolition activity (concrete, wood, etc.) then written notification to the San Diego Air Pollution Control District (SD-APCD) is required and *SSP 14-9.02A Air Pollution Control* shall be followed.

Treated wood waste (TWW) – If any wooden signposts or wooden guardrail posts require removal then *SSP 14-11.09 Treated Wood Waste* shall be followed.

Yellow thermoplastic, yellow painted traffic stripe, and yellow pavement marking – If yellow stripe or thermoplastic is going to be removed, it will need to be managed differently on its age and the way it will be removed. Some of the yellow traffic stripe in this segment of SR-98 may be newer yellow stripe that does not contain lead. If it cannot be determined if lead-free yellow stripe was used or if some of the alignment has older yellow paint that the lead content cannot be determined then *SSP 14-11.07* must be included to collect the residue and determine if it needs to be disposed of as a hazardous waste. If the stripe is going to be removed as part of a cold plane or grinding operation where the stripe is being removed with the asphalt concrete, then use *SSP 15-*

RUSSELL SIMPSON, et al.

August 9, 2016

Page 2 of 2

1.03B. Regardless of which SSP is included, a bid item will need to be included for a lead compliance plan. Only one lead compliance plan is required for this project. *SSP 15-2.02C(2)* is appropriate to use for all the other colors of paint stripe removal. All paint stripe removal SSP's require preparation of a lead compliance plan (LCP) but not all require the stripe debris to be disposed of as a hazardous waste, only *SSP 14-11.07*.

A single Lead Compliance Plan shall be prepared for the workers performing construction activities dealing with ADL soil and traffic stripe/marking removal.

The issues identified in this document are not considered as mitigation under CEQA. These issues are routine construction issues that are handled in the construction contract through inclusion of standard special provisions. This project can proceed with very little risk of impacts due to unanticipated hazardous materials or other contamination related issues.

This determination is based on the information provided in the request. Please submit a supplemental request for a hazardous materials assessment to cover any changes in the nature or scope of the project.

We do not anticipate any other hazardous materials concerns on this project. If you have any questions or comments, please contact Brent Berge (619) 688-3146.

c: Ken Johansson – Environmental Engineering (by email only)

**AERIALY DEPOSITED LEAD SURVEY REPORT
FOR STATE ROUTE 98
POST MILE 31.6 TO 32.1
IMPERIAL COUNTY, CALIFORNIA
CALTRANS DISTRICT 11, EA 080231, PI 1100020357
CONTRACT NO. 11A1996
TASK ORDER 30**

Project: 20160433.001A

June 29, 2015

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**Only the client or its designated representatives may use this document and
only for the specific project for which this report was prepared.**

A Report Prepared for:

Ms. Diane Vermeulen, P.E.
State of California Department of Transportation
Environmental Division, MS 242
4050 Taylor Street
San Diego, California 92110

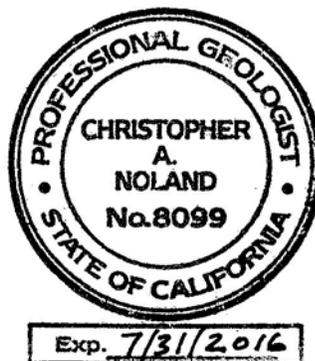
**AERIALLY DEPOSITED LEAD SURVEY REPORT
FOR STATE ROUTE 98, POST MILE 31.6 TO 32.1
IMPERIAL COUNTY, CALIFORNIA
CALTRANS DISTRICT 11, EA 080231, PI 1100020357
CONTRACT NO. 11A1996
TASK ORDER 30**

Kleinfelder Project No. 20160433.001A

Prepared by:



Chris Noland, P.G. 8099
Project Geologist



Peer Reviewed by:



Lizanne Simmons, P.G. 7431
Principal Geologist



KLEINFELDER, INC.
550 West C Street Suite 1200
San Diego, California 92101
(619) 831-4600

June 29, 2015

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PLATES

Plate 1	Site Location Map
Plates 2a and 2b	Sample Locations
Plate 3	ADL-Impacted Soils Management Flow Chart

TABLE

Table 1	Soil Analytical Results
---------	-------------------------

APPENDICES

Appendix A	Sample Location Coordinates (Table A-1)
Appendix B	Laboratory Analytical Reports and Chain-of-Custody Documentation
Appendix C	Statistical Data Evaluation (The Bodhi Group, June 25, 2015)

1 INTRODUCTION

1.1 PROJECT DESCRIPTION

This report has been prepared to summarize procedures and results of an Aerially Deposited Lead (ADL) survey conducted along State Route 98 (SR-98) from Ollie Avenue to Eady Avenue on SR-98, from Post Mile (PM) 32.6 to 32.1, Calexico, Imperial County, California (Site or Project)(Plate 1). The State of California Department of Transportation (Caltrans) is proposing the widening of SR-98 from V.V. Williams Avenue to George Avenue from an existing 2 lane facility to a 4 lane facility, widening from George Avenue to Ollie Avenue from an existing 4 lane facility to a 5 lane facility (2 lanes on the Westbound direction and 3 lane on the Eastbound direction), add a drop lane, cold plane and overlay the existing roadway, and construct two retention/infiltration basins. This work was performed for Caltrans, consistent with Contract No. 11A1996, Task Order No. 30 (TO30). This report summarizes soil sampling for ADL conducted during May 2015 at specific locations in the unpaved shoulders, median, and retention areas at the Site (Plates 2a and 2b).

1.2 PROJECT OBJECTIVES AND SCOPE OF WORK

Based on historical Site use (freeway), there is the potential that ADL is present within soil adjacent to the existing traveled ways; therefore, Caltrans needs to evaluate the presence, concentration, and distribution of lead in soil in anticipation of future grading/construction activities. The data will be used to evaluate soil within the proposed construction area to assess the potential for reuse on Site. It will also be used to evaluate disposal options for potentially lead-impacted soil, and to evaluate health and safety issues for future on-Site workers.

Based on the age of highway, there is a potential that ADL may be present within shallow exposed soil (i.e., upper 3 feet) adjacent to the existing traveled ways.

The objective of the ADL study was to provide data for evaluation to allow for management of ADL-impacted soils associated with a Caltrans project based on project design information known at this time. Samples were collected to provide information about lead containing soils along the unpaved shoulders (Caltrans right-of-way) within the Project boundaries, and evaluated relative to the variance granted to Caltrans by the Department of Toxic Substance Control (DTSC) (DTSC, 2009).

This report describes the procedures, results, and recommendations from the ADL study performed within the Project limits. The scope of work was provided to Kleinfelder by Caltrans in the Task Order description. Consistent with the Task Order, and as described in the *Aerially Deposited Lead Survey Work Plan* (Kleinfelder, 2015a), Kleinfelder performed the tasks listed below:

- Provided project management and coordination.
- Prepared a Site-specific work plan and prepared a Site-specific health and safety plan (SSHSP) (Kleinfelder, 2015b).
- Coordinated traffic control, as necessary.
- Advanced 15 borings using hand auger methods to a depth of approximately 3 feet below ground surface (bgs). Three soil samples (excluding duplicates) were collected from each hand auger boring.
- Obtained global positioning system (GPS) location readings at each boring location.
- Submitted 50 soil samples, including 5 field duplicate samples, to Agricultural and Priority Pollutants Laboratories, Inc. (APPL) of Clovis, a state-certified laboratory, for analysis of total lead by United States Environmental Protection Agency (USEPA) Method 6010B.
- Analyzed 50 soil samples, including 5 duplicate samples, for Soluble Threshold Limit Concentration (STLC), or leachable lead, by the California waste extraction test (CA-WET) method using a citrate buffer.
- Analyzed 3 soil samples for STLC by the CA-WET method using deionized water as an extractant (DI-WET).
- Analyzed 1 soil sample for the Toxicity Characteristics Leaching Procedure (TCLP) by USEPA Method 6010B using an acetate buffer.
- Analyzed 5 soil samples for hydrogen ion index (pH) by USEPA Method 9045C.
- Collected and analyzed 1 equipment blank for total lead by USEPA Method 6010B. One equipment blank was collected at the end of each day of sampling.
- Prepared this report, including a summary of the assessment methods and field observations, data evaluation and discussion, findings, conclusions and recommendations.

1.3 REPORT ORGANIZATION

This report is organized into the following sections and appendices. Tables are located behind a tab at the end of the report.

- Section 1 describes the Site, discusses the Project objectives and the purpose of the report, presents the scope of work, and discusses the organization of the report;
- Section 2 discusses pertinent Site background information;
- Section 3 describes sampling activities;
- Section 4 describes field observations and the investigation results, including laboratory analytical data;
- Section 5 presents the statistical analysis of the data;
- Section 6 presents the conclusions and recommendations;
- Section 7 presents the limitations of the report;
- Section 8 lists references;
- Plates;
- Tables;
- Appendix A includes a table with the coordinates of the samples;
- Appendix B includes the analytical reports from the laboratory; and,
- Appendix C presents the evaluation and results of the statistical analysis complete with tables.

2 BACKGROUND

2.1 SITE IMPROVEMENTS

Caltrans improvements include widening of SR-98 from V.V. Williams Avenue to George Avenue from an existing 2 lane facility to a 4 lane facility, widening from George Avenue to Ollie Avenue from an existing 4 lane facility to a 5 lane facility (2 lanes on the Westbound direction and 3 lane on the Eastbound direction), the addition of a drop lane, cold plane and overlay the existing roadway, and construction of two retention/infiltration basins.

2.2 WASTE CLASSIFICATION, ADL VARIANCE, AND SOIL REUSE CRITERIA

Due to the historic use of lead in gasoline formulations, lead contamination is common in surface soils found along roadways. ADL-impacted soils are regulated at both the federal and state levels for the following reasons:

- They may be classified as hazardous waste.
- They are subject to state regulations when not classified as hazardous waste.
- They may represent an occupational safety and health risk.

According to Title 22, California Code of Regulations (CCR), solid wastes with total lead concentrations equal to or exceeding 1,000 milligrams per kilogram (mg/kg), the Total Threshold Limit Concentration (TTLC), are classified as California hazardous waste. Assembly Bill 2784 (AB 2784), effective January 1, 1999, amended California Health and Safety Code (HSC) Section 25157.8 (a) and Title 22 CCR by reducing the practical disposal limit for non-hazardous solid waste to 350 mg/kg total lead until the California Regional Water Quality Control Board (RWQCB) amends a disposal facility's waste discharge requirements.

Solid wastes with soluble lead concentrations (assessed using CA-WET procedures) equal to or exceeding 5.0 milligrams per liter (mg/L), the STLC, are classified as California hazardous under California law. California hazardous materials must be transported under a hazardous waste manifest and disposed of at an appropriately permitted facility. Wastes with lead concentrations less than both the TTLC and the STLC are not a California hazardous waste, and may be disposed of at a Class II or III facility, provided that site-specific disposal facility requirements are satisfied. Furthermore, according to federal law, as stipulated in the Resource Conservation and Recovery Act (RCRA), wastes that exceed 5.0 mg/L soluble lead, extracted

using the federal TCLP, are classified as RCRA hazardous waste. This material must be disposed of as RCRA hazardous waste if transported off Site.

In September 2000, the DTSC issued a 5-year variance to Caltrans specifying that ADL-impacted soil within a highway right-of-way could be used as fill material within the right-of-way during earth moving and road construction activities provided that the waste met specific criteria (DTSC, 2000). The DTSC modified the variance for the second time in September 2003; which replaced and superseded the first modification. The variance, originally scheduled to expire on September 22, 2005, was granted extensions by DTSC that allowed Caltrans to keep working under the variance and its modifications until June 30, 2009 (DTSC, 2008). This extension was granted by the DTSC with the expectation that a good faith effort is shown by Caltrans to proceed with the variance renewal. In July 2009, the DTSC issued the current 5-year variance (DTSC, 2009). On June 26, 2014, the DTSC issued a letter to Caltrans extending the expiration date of the variance to December 31, 2014. A second extension of the variance until June 30, 2015 was issued on December 16, 2014 in a letter from DTSC to Caltrans. The following are the current DTSC variance conditions:

- For Variance Condition 9.c, “lead-contaminated” soil containing 1.5 mg/L or less soluble lead (using a modified CA-WET with DI [DI-WET] water as the extractant rather than an acidic, buffered sodium citrate solution) and 1,411 mg/kg or less total lead may be reused in a Caltrans right-of-way provided this soil is placed a minimum of five (5) feet above the maximum water table elevation and is covered by 1 foot of clean soil.
- For Variance Condition 9.d, “lead-contaminated” soil containing less than 150 mg/L soluble lead (DI-WET) and 3,397 mg/kg or less total lead may be reused as fill soil in a Caltrans right-of-way provided that it is placed a minimum of 5 feet above the maximum water table elevation and is covered by a pavement structure which will be maintained by Caltrans.
- For Variance Condition 9.e, “lead-contaminated” soil with a pH less than 5.5, but greater than 5.0 can only be used as fill material under the paved portion of the roadway. “Lead-contaminated” soil with a pH at or less than 5.0 shall be managed as hazardous waste.

Other reuse conditions, soil handling procedures, and notifications are specified in the variance. Soil that exceeds 3,397 mg/kg total lead or 150 mg/L soluble lead (DI-WET) cannot be reused within a Caltrans right-of-way and must be properly disposed of off at an approved facility. Solid wastes with lead concentrations less than both the TTLC and the STLC may be disposed of at a Class II or III facility provided that site-specific disposal facility requirements are satisfied.

Similarly, solid waste that exceeds 5.0 mg/L soluble lead by TCLP is considered to be a federal or RCRA-hazardous waste and cannot be reused within a Caltrans right-of-way.

The information described above is summarized in a soils management flow chart (Plate 3) to evaluate the applicability of the DTSC variance. The flow chart is an updated version of Figure 1 from the *2007 Caltrans ADL Guidance Document* (Caltrans, 2007). Based on information on the flow chart (Plate 3), soils with a 95 percent upper confidence limit (UCL) on the mean for total lead less than 1,000 mg/kg and with a 95 percent UCL for soluble lead by DI-WET less than 1.5 mg/L are considered non-hazardous and can be released to the contractor for use in accordance with project specifications.

Please note that, based on discussions with DTSC personnel, when a new Variance is issued that is anticipated to be in effect starting July 1, 2015, total lead and soluble lead limit concentrations will be modified from those existing. Therefore, depending on implementation schedule, Variance concentrations listed herein may change.

3 SAMPLING ACTIVITIES

3.1 PRE-FIELD ACTIVITIES

An encroachment permit was prepared by Kleinfelder and submitted on May 5, 2015. The permit (11-15-NSV-0307) was approved May 7, 2015. Prior to the start of work, Caltrans was notified of the planned work on the unpaved shoulders, median and proposed retention areas at the Site.

Kleinfelder prepared and submitted a work plan (Kleinfelder, 2015a) and a SSHSP (Kleinfelder, 2015b). The health and safety plan was reviewed daily with field personnel for potential hazards, emergency contact information, and hospital routes.

Prior to ground-disturbance activities, Kleinfelder visited each sample point to mark excavation locations with 3-foot lathes and flagging material. Underground utilities were visually checked when marking sampling locations; sample locations with potential utility conflicts were modified. Underground Services Alert of Southern California (DigAlert) was notified at least 48 hours prior to ground-disturbance activities and Kleinfelder was issued unique ticket numbers for each boring location at the Site. Conflicts with potential utilities were not reported from any of the utilities notified.

3.2 ADL SAMPLING LOCATIONS AND GPS SURVEY

Fifteen sampling locations were selected and placed at widening locations and retention/infiltration basin locations. Three soil samples (excluding duplicates) were collected from each boring location at depths of approximately 0 to 0.5 foot bgs, 1.5 to 2 feet bgs, and 2.5 to 3.0 feet bgs. Site conditions were favorable enough to collect the samples as required from the work plan.

Sample locations were recorded during utility identification using a Trimble GPS unit, capable of providing accuracy to approximately 3 feet. The sample location names, along with their respective latitude and longitude coordinates (x and y coordinates) are included in Table A-1 (Appendix A). The approximate locations of these borings are shown on Plates 2a and 2b.

3.2.1 Hand Auger Drilling and Soil Sampling Methods

Hand auger borings were advanced May 21, 2015 at locations shown on Plates 2a and 2b. Borings were advanced using a manually operated, pre-cleaned, stainless steel hand auger. A traffic control subcontractor was used for shoulder closure during the work. Work was performed in the unpaved shoulder areas from 8:00 AM to 4:00 PM, as stipulated in the encroachment permit.

Soil samples were collected from the hand auger and placed into laboratory-supplied, 16-ounce jars with Teflon lids. The sample jars were labeled with a sample identification number and Z (depth) value, along with the date and time of the sample location, and placed in a secured, chilled ice chest. Standard chain-of-custody (COC) procedures were used during sampling and transportation to APPL (via FedEx), the State-certified laboratory subcontracted by Kleinfelder.

3.3 EQUIPMENT BLANKS

An equipment blank, consisting of distilled water poured over the sampling equipment that had been cleaned, was collected at the end of the day. The equipment blank was collected to document the condition of the sampling equipment following decontamination. The equipment blank sample was collected in a laboratory-supplied, nitric acid-preserved bottle. The sample bottle was labeled with a unique sample identifier, date, time, project number and samplers' initials. The equipment blank sample was placed in the chilled cooler along with the soil samples and transported to APPL (via FedEx) for analysis.

3.4 ANALYTICAL METHODS

A total of 50 soil samples, including 5 duplicate samples, were analyzed for total lead by USEPA Method 6010B. A total of 50 soil samples, including 5 duplicate samples, were also analyzed for soluble lead by the CA-WET method (STLC). Soluble lead analyzed by the DI-WET method was analyzed in three samples with concentrations exceeding 50 mg/kg. Soluble lead was analyzed by TCLP in one sample (IMP-15-1.5) which contained a total lead concentration of 149 mg/kg. Additionally, 5 samples were measured for pH using USEPA Method 9045C.

3.5 DECONTAMINATION AND BORING ABANDONMENT

Sampling equipment (i.e., hand auger cutter head, soil sampler, etc.) was washed with a solution of Liquinox® detergent and rinsed with tap water and DI water, in buckets, prior to each use. Generation of wash water was minimized. Wash water was contained in 5-gallon pails for disposal. At the end of the day, wash water was disposed at the surface in Caltrans right-of-way, in an area that did not cause runoff of fluid or sediment into receptors (i.e., storm drain, creek, or other surface water bodies), consistent with the work plan. Soil cuttings originating from each boring were placed back within the original borehole as described in the work plan (Kleinfelder, 2015a).

4 FIELD OBSERVATIONS AND INVESTIGATIVE RESULTS

This section includes a summary of the Site conditions observed during the field work, a summary of the analytical results, and a discussion of the data quality assessment. The summary of analytical results for the soil samples collected is presented in Table 1. Certified Level II laboratory reports from APPL are included in Appendix B.

4.1 SITE CONDITIONS

Site conditions were favorable enough to collect the number of samples required from the work plan. Soil encountered was generally silty sand and gravel.

4.2 SOIL SAMPLE RESULTS

4.2.1 Total Lead

Total lead (TOTAL) was detected in each of the 50 soil samples analyzed, including 5 duplicate samples (Table 1 and Plates 2a and 2b) ranging in concentration from 4.6 to 149 mg/kg. The maximum total lead concentration was 149 mg/kg, reported in the sample IMP-15-1.5. This sample was further analyzed for TCLP. In general, near surface samples generally contained higher concentrations of total lead compared to the deeper samples; however, there were samples that were higher than the surface sample collected at the same location.

4.2.2 California WET Method Soluble Lead Results

CA-WET method soluble lead (citrate extraction) was reported at concentrations above 5.0 mg/L (the STLC action level) in 3 of the 50 samples analyzed. The maximum CA-WET method soluble lead concentration was 18.8 mg/L, reported in the sample collected at IMP-15-1.5 (Table 1 and Plates 2a and 2b). These samples were further analyzed for DI-WET.

4.2.3 California DI-WET Method Soluble Lead Results

California DI-WET method soluble lead was detected above the laboratory reporting limit in two of three samples analyzed (IMP-04-0.5 and IMP-15-1.5) at concentrations of 0.0043 J and 0.0232 J mg/L, respectively (Table 1 and Plates 2a and 2b). A "J" flag indicates an estimated value.

4.2.4 TCLP Soluble Lead

Soluble lead was analyzed by TCLP using USEPA Method 6010B and leached by USEPA Method 1311 in one sample (IMP-15-01.5). The reported concentration was 0.097 J mg/L (Table 1 and Plate 2b).

4.2.5 Hydrogen Ion Concentration

The pH of the 5 soil samples analyzed ranged from 8.01 to 8.78 (Table 1 and Plates 2a and 2b). All of the samples collected had reported pH concentrations greater than the criterion of 5.5 listed in the DTSC variance; therefore, soil in these locations is not limited to reuse in covered areas (DTSC, 2009).

4.3 DATA QUALITY ASSESSMENT

The following section summarizes the quality assurance (QA) and quality control (QC) program and data quality assessment. The data quality assessment process consisted of a review, verification, validation, and evaluation of the analytical data generated during the project. The limited data quality assessment was performed using the U.S. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (USEPA, 2010) as a reference.

A total of 50 primary soil samples, 5 duplicate soil samples, and one equipment rinsate blank were collected and submitted to APPL for one or more of the following analyses:

- Total lead by USEPA Method 6010B (TTLC)
- pH by USEPA Method 9045C
- CA-WET Method by USEPA Method 6010B
- DI-WET Method by USEPA Method 6010B
- TCLP by USEPA Method 6010B

One hundred percent of the data generated for this Project underwent a limited data quality review by a Kleinfelder project chemist, independent of Project activities. One Level II data deliverable report (Work Order) was evaluated during the data quality assessment, which consisted of evaluating the following parameters:

- Technical holding times and temperature
- COCs
- Sample results and analytical methods selected
- Field and laboratory blanks
- Laboratory control sample (LCS) spike results
- Matrix spike (MS) and matrix spike duplicate (MSD) results.

Field and laboratory personnel implemented QA/QC procedures consistent with the QA criteria specified in the *Aerially-Deposited Lead Survey Work Plan* (Kleinfelder, 2015a) during the soil sampling event. Lead was not reported above the laboratory reporting limit in the equipment rinsate blank. Laboratory QC samples were also analyzed consistent with the analytical method requirements.

During the data quality assessment, no quality discrepancies were observed. Based on the data quality assessment, data that have been qualified as estimated (“J” or “UJ” qualified) were retained. Based on the results of the data quality assessment, the Project data achieved a sample and analytical completeness goal of 100%. The ADL data are acceptable for the intended use of the Project.

5 STATISTICAL EVALUATION

The data were analyzed to identify the appropriate handling of soil affected by ADL under the terms of the variance granted by DTSC to Caltrans District 11 for highway construction projects. During the course of construction, this soil is likely to be excavated, stockpiled, and relocated using methods that tend to homogenize soil constituent concentrations.

Caltrans has prepared an ADL guidance document to support the implementation of the DTSC variance (Caltrans, 2007). Kleinfelder has modified this table based upon the current DTSC ADL variance (DTSC, 2009), which is included in this report as Plate 3. The guidance document provides a flow chart/decision diagram to address DTSC variance applicability based on the various analyses. The decision points for evaluation of the lead data were as follows: If the 95 percent upper confidence limit (UCL) on mean total lead is less than 1,000 mg/kg, and if the 95 percent UCL on mean soluble lead (DI-WET) is less than 1.5 mg/L, then the soil is considered non-hazardous and can be released to the contractor for reuse on Site in accordance with Project specifications.

The USEPA statistical analysis package, ProUCL was used to complete the statistical evaluation (U.S. EPA, 2007). ProUCL allows the computation of a reliable, stable, and conservative 95 percent UCL of the mean concentration in an environmental data set and offers 15 different methods of computing a 95 percent UCL depending on the distribution of a given data set.

Appendix C Section 3.1 provides a summary of the 95 percent UCLs calculated for total lead and soluble lead concentrations reported for soil samples from the subject Site. Based on a comparison of the 95 percent UCL value generated by ProUCL, the data set for total lead passes the first criterion established in the Caltrans ADL guidance: “Is the 95 percent UCL for total lead less than 1,000 mg/kg?”

A statistical analysis of soluble lead calculated using the results of the DI-WET procedure was not performed since only three samples were analyzed using the procedure.

Under the DTSC variance and federal and state hazardous waste classifications, soil can be placed into specific ADL Soil Management Types. Based on the results of the analysis, the represented soil units for the Project can be placed into one ADL Soil Management Type. Soil classified as “X” is not restricted for on-Site use, but requires a lead compliance plan for worker safety. Surplus soil classified as “X” can be disposed of as non-hazardous waste at a Class III

facility. The ADL Soil Management Types for the soil to be used on the Project is classified as “X”.

In conclusion, based on Caltrans ADL guidance criteria (Caltrans Variance), the soil addressed in this analysis is classified as non-hazardous, which does not have restrictions for on-Site use. The basis for this conclusion is as follows:

- For these soils, the 95 percent UCL for total lead is less than 1,000 mg/kg for all depths (31.6 mg/kg, Appendix C).
- The 95 percent UCL for CA-WET citrate procedure is less than 5.0 mg/L for all depths (2.2 mg/L, Appendix C).
- DI-WET concentrations were all below 1.5 mg/L.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 VARIANCE CONCLUSIONS

Based on statistical analysis of the analytical results of this ADL Survey, soil tested within the Caltrans right-of-way is classified with an X designation, contains concentrations of lead that if removed, would be considered non-hazardous waste (Appendix C), and can be used on-Site without restriction.

The five soil samples analyzed had reported pH values above the variance criterion of 5.5; therefore, soil tested within the Caltrans right-of-way does not contain a pH value below that which would apply to the DTSC Variance conditions (Appendix C).

If off-Site disposal is required, the soil should be handled based on the criteria described in Section 6.2.

6.2 WASTE CHARACTERIZATION CONCLUSIONS

Based on the analytical results of this ADL Survey, soil samples collected along the unpaved shoulders did not contain total lead in excess of the California TTLC of 1,000 mg/kg. The standard CA-WET soluble lead test results indicate that soil concentrations are in excess of the California STLC of 5 mg/L in one of the 50 samples analyzed for soluble lead by California WET at various locations along the Site (IMP-15-1.5).

Based on the results of soil sampling (95% UCL for all locations), soils from this area are considered California non-hazardous in comparison to California STLC limits for all depths sampled.

6.3 RECOMMENDATIONS

Based on the results of the soil sampling activities conducted, the soil can be reused without restrictions.

Please note that, based on discussions with DTSC, when a new Variance is issued that is anticipated to be in effect starting July 1, 2015, total lead and soluble lead limit concentrations will be modified from those existing. Therefore, depending on implementation schedule, Variance concentrations listed herein may change.

7 LIMITATIONS

This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

This report may be used only by the Client and the registered design professional in responsible charge and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than two (2) years from the date of the report.

The work performed was based on project information provided by Client. If the Client does not retain Kleinfelder to review any plans and specifications, including any revisions or modifications to the plans and specifications, Kleinfelder assumes no responsibility for the suitability of our recommendations. In addition, if there are any changes in the field to the plans and specifications, the Client must obtain written approval from Kleinfelder's engineer that such changes do not affect our recommendations. Failure to do so will vitiate Kleinfelder's recommendations.

Kleinfelder offers various levels of investigative and engineering services to suit the varying needs of different clients. It should be recognized that definition and evaluation of geologic and environmental conditions are a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions present due to the limitations of data from field studies. Although risk can never be eliminated, more-detailed and extensive studies yield more information, which may help understand and manage the level of risk. Since detailed study and analysis involves greater expense, our clients participate in determining levels of service that provide adequate information for their purposes at acceptable levels of risk. More extensive studies, including subsurface studies or field tests, should be performed to reduce uncertainties. Acceptance of this report will indicate that the Client has reviewed the document and determined that it does not need or want a greater level of service than provided.

During the course of the performance of Kleinfelder's services, hazardous materials may have been discovered. Kleinfelder assumes no responsibility or liability whatsoever for any claim,

loss of property value, damage, or injury that results from pre-existing hazardous materials being encountered or present on the project site, or from the discovery of such hazardous materials. Nothing contained in this report should be construed or interpreted as requiring Kleinfelder to assume the status of an owner, operator, or generator, or person who arranges for disposal, transport, storage or treatment of hazardous materials within the meaning of any governmental statute, regulation or order. The Client is solely responsible for directing notification of all governmental agencies, and the public at large, of the existence, release, treatment or disposal of any hazardous materials observed at the project site, either before or during performance of Kleinfelder's services. The Client is responsible for directing all arrangements to lawfully store, treat, recycle, dispose, or otherwise handle hazardous materials, including cuttings and samples resulting from Kleinfelder's services.

8 REFERENCES

California Department of Transportation (Caltrans), 2007. Caltrans Aerially Deposited Lead Guidance, June.

Department of Toxic Substances Control (DTSC), 2000. Variance No. 00-H-VAR-06. Granted to State of California Department of Transportation, District 11. September 22.

DTSC, 2008. Lead Contaminated Soil Variance Modification, Variance Number 00-H-VAR-07, Caltrans District 11, June 17.

DTSC, 2009. Lead Contaminated Soil Variance Modification, Variance Number V09HQSCD006, Caltrans District 11, July 1.

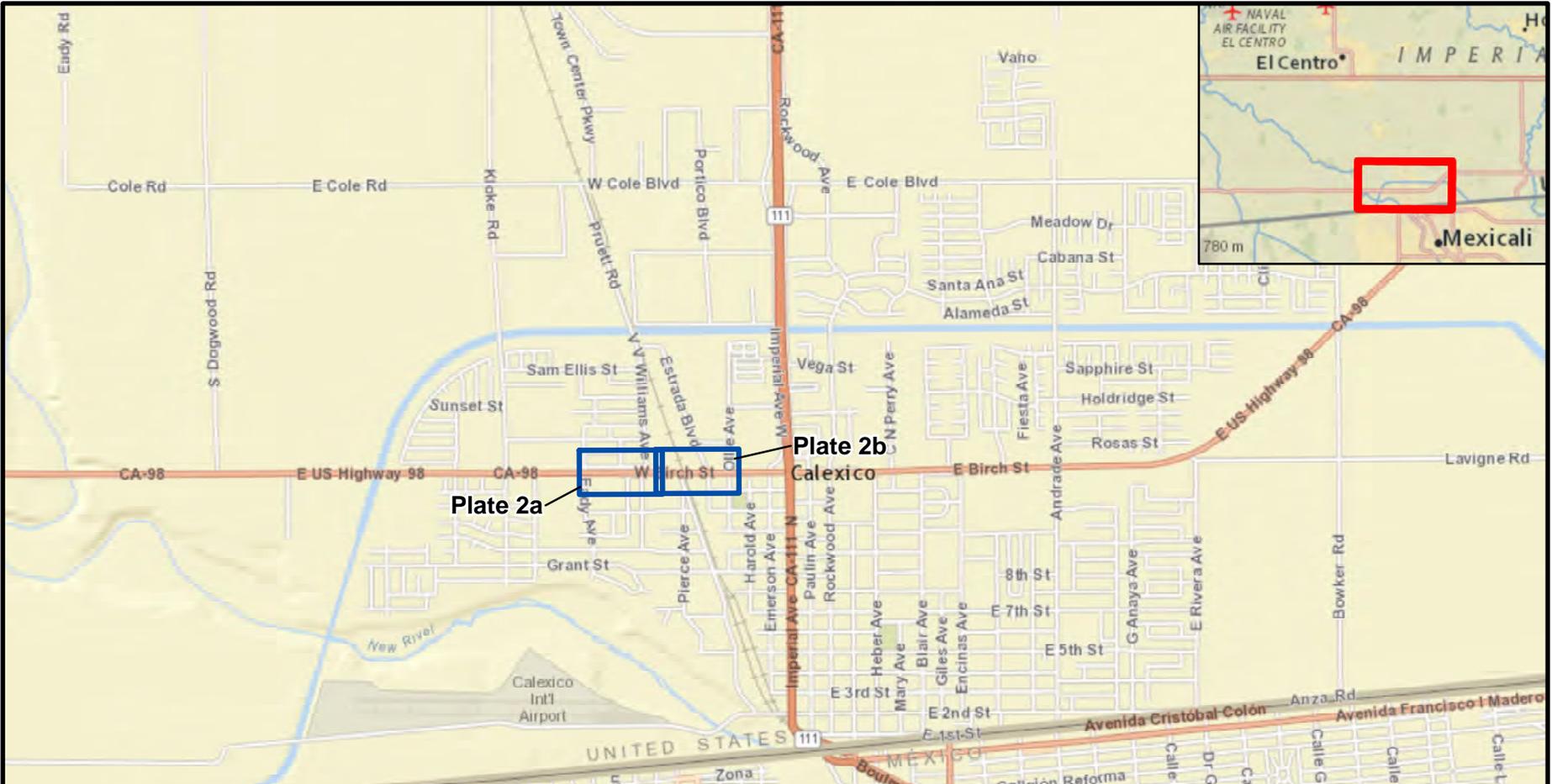
Kleinfelder, Inc. (Kleinfelder), 2015a. Aerially Deposited Lead Survey Work Plan For State Route 98, Caltrans District 11, EA 080231, PI 1100020357, Imperial County, CA. May 13.

Kleinfelder, 2015b. Site-Specific Safety and Accident Prevention Plan, Aerially Deposited Lead Survey For State Route 98, Caltrans District 11, EA 080231, PI 1100020357, Imperial County, CA. May 13.

USEPA, 2010. National Functional Guidelines for Inorganic Data Review, January.

USEPA, 2011. ProUCL version 4.1. July.

PLATES

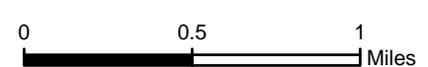


Basemap image: Esri Online Services, 2014

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LEGEND

 PLATE BOUNDARY



	PROJECT NO: 20160433 DRAWN BY: E D GOFF CHECKED BY: C NOLAND DATE: JUNE 2015
	

<p>SITE LOCATION MAP</p> <p>Aerially Deposited Lead Survey Report For State Route 98 Imperial County, California Caltrans 11 EA 080231, PI 1100020357 Contract No. 11A1996, Task Order 30</p>	PLATE 1
--	-----------------------



IMP-01					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP	pH
0.5	16.7	0.068 J	--	--	--
1.5	8.6	0.033 J	--	--	--
3	8.8	0.041 J	--	--	--

IMP-03					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	21.5	0.60	--	--	--
1.5	14.1	0.11 J	--	--	8.01
3	5.8	0.051 J	--	--	--

IMP-05					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	9.6	0.26 J	--	--	--
1.5	9.2	0.61	--	--	--
1.5 FD	10.4	0.22 J	--	--	8.78
3	10.7	0.18 J	--	--	--

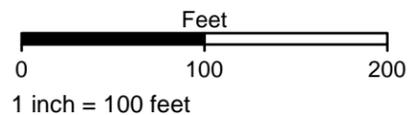
IMP-02					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	17.8	0.22 J	--	--	--
1.5	10.5	0.034 J	--	--	--
3	10.1	0.045 J	--	--	--

IMP-04					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	66.8	1.4	0.0043 J	--	--
1.5	19.8	0.23 J	--	--	--
3	11.0	0.033 J	--	--	--

NOTES:
 mg/kg = milligrams per kilogram
 mg/L = milligrams per liter
 DI-WET = CA-WET using deionized water as extractant
 CA-WET = California Title 22 Waste Extraction Test citric acid extractant
 TCLP = toxicity characteristics leaching procedure
 TLC = total threshold limit concentration
 pH = hydrogen ion potential
 U = concentration below laboratory reporting limit
 J = estimated value
 FD = field duplicate sample

LEGEND

● SAMPLE LOCATION



PROJECT NO: 20160433
 DRAWN BY: E D GOFF
 CHECKED BY: C NOLAND
 DATE: JUNE 2015



SAMPLE LOCATIONS

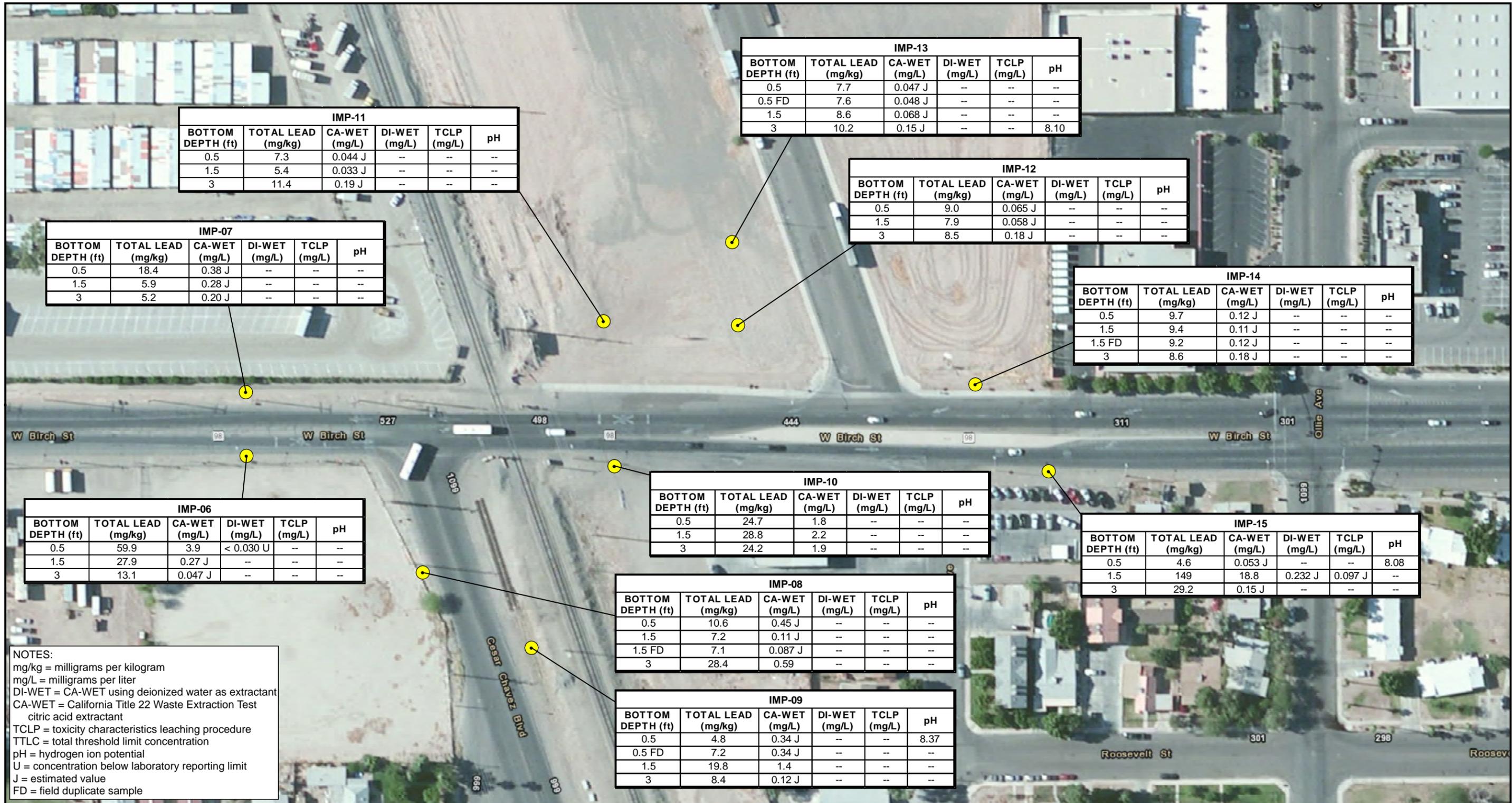
Aerially Deposited Lead Survey Report
 For State Route 98
 Imperial County, California
 Caltrans 11 EA 080231, PI 1100020357
 Contract No. 11A1996, Task Order 30

PLATE
 2a

All locations are approximate

Imagery: Esri Online Imagery Services, 2014

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IMP-11					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	7.3	0.044 J	--	--	--
1.5	5.4	0.033 J	--	--	--
3	11.4	0.19 J	--	--	--

IMP-13					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	7.7	0.047 J	--	--	--
0.5 FD	7.6	0.048 J	--	--	--
1.5	8.6	0.068 J	--	--	--
3	10.2	0.15 J	--	--	8.10

IMP-12					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	9.0	0.065 J	--	--	--
1.5	7.9	0.058 J	--	--	--
3	8.5	0.18 J	--	--	--

IMP-07					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	18.4	0.38 J	--	--	--
1.5	5.9	0.28 J	--	--	--
3	5.2	0.20 J	--	--	--

IMP-14					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	9.7	0.12 J	--	--	--
1.5	9.4	0.11 J	--	--	--
1.5 FD	9.2	0.12 J	--	--	--
3	8.6	0.18 J	--	--	--

IMP-06					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	59.9	3.9	< 0.030 U	--	--
1.5	27.9	0.27 J	--	--	--
3	13.1	0.047 J	--	--	--

IMP-10					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	24.7	1.8	--	--	--
1.5	28.8	2.2	--	--	--
3	24.2	1.9	--	--	--

IMP-15					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	4.6	0.053 J	--	--	8.08
1.5	149	18.8	0.232 J	0.097 J	--
3	29.2	0.15 J	--	--	--

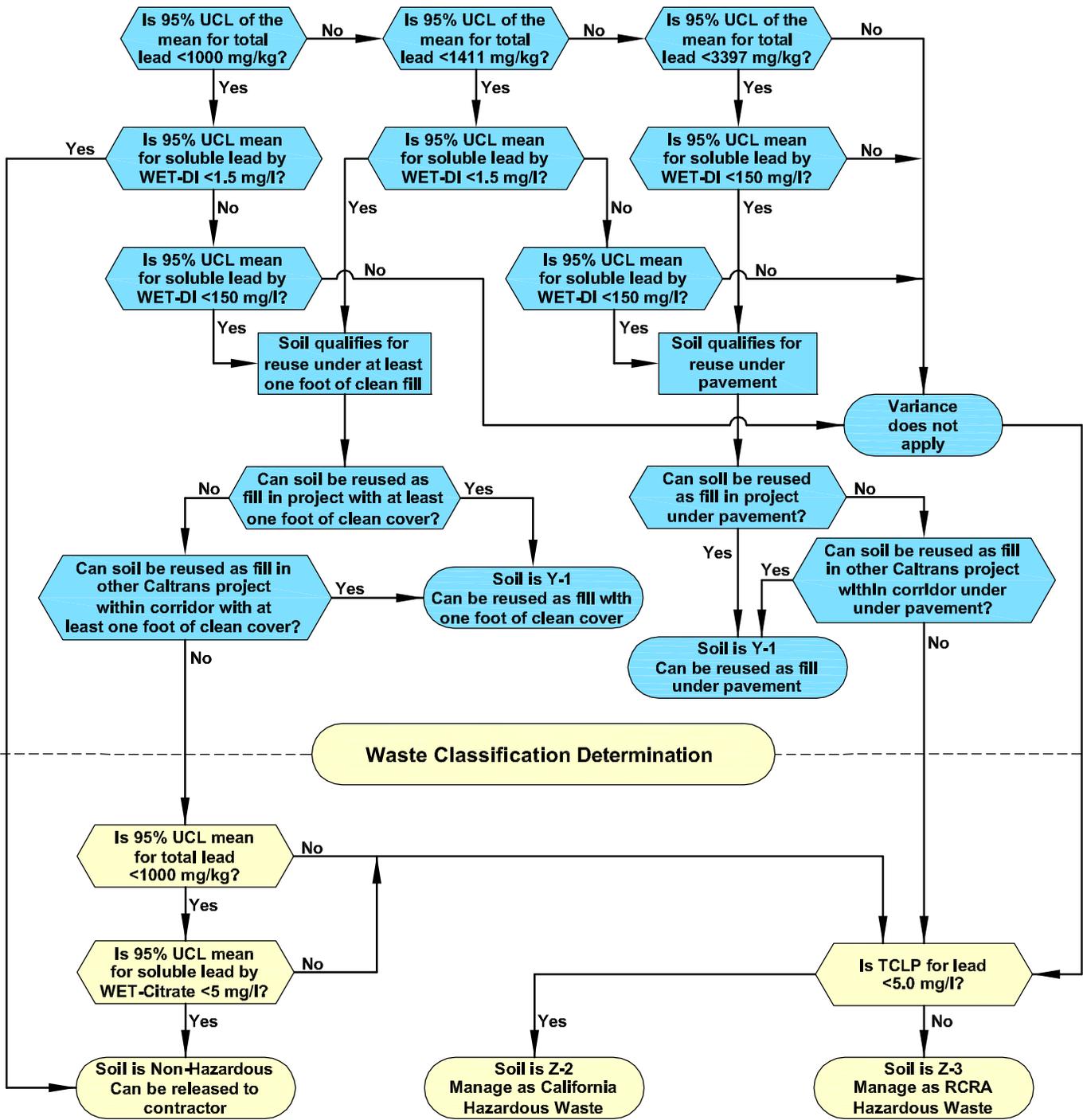
IMP-08					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	10.6	0.45 J	--	--	--
1.5	7.2	0.11 J	--	--	--
1.5 FD	7.1	0.087 J	--	--	--
3	28.4	0.59	--	--	--

IMP-09					
BOTTOM DEPTH (ft)	TOTAL LEAD (mg/kg)	CA-WET (mg/L)	DI-WET (mg/L)	TCLP (mg/L)	pH
0.5	4.8	0.34 J	--	--	8.37
0.5 FD	7.2	0.34 J	--	--	--
1.5	19.8	1.4	--	--	--
3	8.4	0.12 J	--	--	--

NOTES:
 mg/kg = milligrams per kilogram
 mg/L = milligrams per liter
 DI-WET = CA-WET using deionized water as extractant
 CA-WET = California Title 22 Waste Extraction Test citric acid extractant
 TCLP = toxicity characteristics leaching procedure
 TLCL = total threshold limit concentration
 pH = hydrogen ion potential
 U = concentration below laboratory reporting limit
 J = estimated value
 FD = field duplicate sample

<p>LEGEND</p> <p>● SAMPLE LOCATION</p> <p>All locations are approximate</p>		<p>PROJECT NO: 20160433 DRAWN BY: E D GOFF CHECKED BY: C NOLAND DATE: JUNE 2015</p>	<p>SAMPLE LOCATIONS</p> <p>Aerially Deposited Lead Survey Report For State Route 98 Imperial County, California Caltrans 11 EA 080231, PI 1100020357 Contract No. 11A1996, Task Order 30</p>	<p>PLATE 2b</p>
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DTSC Variance Applicability Determination



Waste Classification Determination

CAD FILE: J:_clients\CalTrans\20160433\ LAYOUT: Layout1

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SOURCE:

CALTRANS AERIALLY DEPOSITED LEAD GUIDANCE, JUNE 2007. UPDATE BASED ON VARIANCE NUMBER V09HQSCD006 (DTSC, JULY 2009)

ATTACHED IMAGES:
ATTACHED XREFS:

PROJECT NO.	20160433
DRAWN:	6/5/15
DRAWN BY:	JP
CHECKED BY:	CN
FILE NAME:	20160433_flow.dwg

ADL-IMPACTED SOILS MANAGEMENT FLOW CHART

ADL SURVEY REPORT FOR STATE ROUTE 98
CALTRANS D11, EA 080231, PI 1100020357
IMPERIAL COUNTY, CALIFORNIA

PLATE
3

TABLE

Table 1
Soil Analytical Results
CALTRANS Task Order 30

Location Name	Sample Name	Sample Type	Date	Depth	Chemical Method	Lead SW6010B	Lead SW6010B	Lead SW6010B	Lead SW6010B	pH
					Leachate Method Units	TTLC mg/kg	CA-WET mg/L	DI-WET mg/L	TCLP mg/L	SW9045C NONE pH units
IMP-01	IMP-01-0.5	N	05/21/2015	0.5		16.7	0.068 J	--	--	--
	IMP-01-1.5	N	05/21/2015	1.5		8.6	0.033 J	--	--	--
	IMP-01-3.0	N	05/21/2015	3		8.8	0.041 J	--	--	--
IMP-02	IMP-02-0.5	N	05/21/2015	0.5		17.8	0.22 J	--	--	--
	IMP-02-1.5	N	05/21/2015	1.5		10.5	0.034 J	--	--	--
	IMP-02-3.0	N	05/21/2015	3		10.1	0.045 J	--	--	--
IMP-03	IMP-03-0.5	N	05/21/2015	0.5		21.5	0.60	--	--	--
	IMP-03-1.5	N	05/21/2015	1.5		14.1	0.11 J	--	--	8.01
	IMP-03-3.0	N	05/21/2015	3		5.8	0.051 J	--	--	--
IMP-04	IMP-04-0.5	N	05/21/2015	0.5		66.8	1.4	0.0043 J	--	--
	IMP-04-1.5	N	05/21/2015	1.5		19.8	0.23 J	--	--	--
	IMP-04-3.0	N	05/21/2015	3		11.0	0.033 J	--	--	--
IMP-05	IMP-05-0.5	N	05/21/2015	0.5		9.6	0.26 J	--	--	--
	IMP-05-1.5	N	05/21/2015	1.5		9.2	0.61	--	--	--
	IMP-102	FD	05/21/2015	1.5		10.4	0.22 J	--	--	8.78
IMP-06	IMP-05-3.0	N	05/21/2015	3		10.7	0.18 J	--	--	--
	IMP-06-0.5	N	05/21/2015	0.5		59.9	3.9	< 0.030 U	--	--
	IMP-06-1.5	N	05/21/2015	1.5		27.9	0.27 J	--	--	--
IMP-07	IMP-06-3.0	N	05/21/2015	3		13.1	0.047 J	--	--	--
	IMP-07-0.5	N	05/21/2015	0.5		18.4	0.38 J	--	--	--
	IMP-07-1.5	N	05/21/2015	1.5		5.9	0.28 J	--	--	--
IMP-08	IMP-07-3.0	N	05/21/2015	3		5.2	0.20 J	--	--	--
	IMP-08-0.5	N	05/21/2015	0.5		10.6	0.45 J	--	--	--
	IMP-08-1.5	N	05/21/2015	1.5		7.2	0.11 J	--	--	--
IMP-09	IMP-104	FD	05/21/2015	1.5		7.1	0.087 J	--	--	--
	IMP-08-3.0	N	05/21/2015	3		28.4	0.59	--	--	--
	IMP-09-0.5	N	05/21/2015	0.5		4.8	0.34 J	--	--	8.37
IMP-10	IMP-103	FD	05/21/2015	0.5		7.2	0.34 J	--	--	--
	IMP-09-1.5	N	05/21/2015	1.5		19.8	1.4	--	--	--
	IMP-09-3.0	N	05/21/2015	3		8.4	0.12 J	--	--	--
IMP-10	IMP-10-0.5	N	05/21/2015	0.5		24.7	1.8	--	--	--
	IMP-10-1.5	N	05/21/2015	1.5		28.8	2.2	--	--	--
	IMP-10-3.0	N	05/21/2015	3		24.2	1.9	--	--	--

Table 1
Soil Analytical Results
CALTRANS Task Order 30

					Chemical Method Leachate Method Units	Lead SW6010B TTLIC mg/kg	Lead SW6010B CA-WET mg/L	Lead SW6010B DI-WET mg/L	Lead SW6010B TCLP mg/L	pH SW9045C NONE pH units
Location Name	Sample Name	Sample Type	Date	Depth						
IMP-11	IMP-11-0.5	N	05/21/2015	0.5	7.3	0.044 J	--	--	--	--
	IMP-11-1.5	N	05/21/2015	1.5	5.4	0.033 J	--	--	--	--
	IMP-11-3.0	N	05/21/2015	3	11.4	0.19 J	--	--	--	--
IMP-12	IMP-12-0.5	N	05/21/2015	0.5	9.0	0.065 J	--	--	--	--
	IMP-12-1.5	N	05/21/2015	1.5	7.9	0.058 J	--	--	--	--
	IMP-12-3.0	N	05/21/2015	3	8.5	0.18 J	--	--	--	--
IMP-13	IMP-13-0.5	N	05/21/2015	0.5	7.7	0.047 J	--	--	--	--
	IMP-101	FD	05/21/2015	0.5	7.6	0.048 J	--	--	--	--
	IMP-13-1.5	N	05/21/2015	1.5	8.6	0.068 J	--	--	--	--
	IMP-13-3.0	N	05/21/2015	3	10.2	0.15 J	--	--	--	8.10
IMP-14	IMP-14-0.5	N	05/21/2015	0.5	9.7	0.12 J	--	--	--	--
	IMP-14-1.5	N	05/21/2015	1.5	9.4	0.11 J	--	--	--	--
	IMP-100	FD	05/21/2015	1.5	9.2	0.12 J	--	--	--	--
	IMP-14-3.0	N	05/21/2015	3	8.6	0.18 J	--	--	--	--
IMP-15	IMP-15-0.5	N	05/21/2015	0.5	4.6	0.053 J	--	--	--	8.08
	IMP-15-1.5	N	05/21/2015	1.5	149	18.8	0.0232 J	0.097 J	--	--
	IMP-15-3.0	N	05/21/2015	3	29.2	0.15 J	--	--	--	--

J = Estimated value
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
pH = hydrogen ion potential
CA-WET = California Title 22 Waste Extraction Test citric acid extractant

DI-WET = CA-WET using deionized water as extractant
TCLP = toxicity characteristics leaching procedure
TTLIC = total threshold limit concentration
U = concentration below laboratory reporting limit
BOLD indicates STLC concentrations exceeding 5.0 mg/L

APPENDIX A

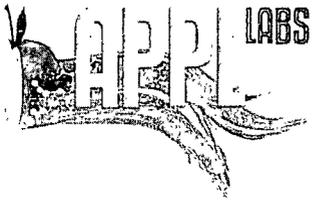
Sample Location Coordinates (Table A-1)

TABLE A-1
SAMPLE LOCATION COORDINATES

Boring Identification	Longitude	Latitude
IMP-01	-115.510813784	32.679042461
IMP-02	-115.510213184	32.679038426
IMP-03	-115.507835785	32.679220331
IMP-04	-115.506960629	32.679044231
IMP-05	-115.506967485	32.679232728
IMP-06	-115.505982291	32.679044030
IMP-07	-115.505988415	32.679216036
IMP-08	-115.505168444	32.678764261
IMP-09	-115.505084474	32.678514247
IMP-10	-115.504711254	32.678999090
IMP-11	-115.504754213	32.679427929
IMP-12	-115.504262547	32.679362975
IMP-13	-115.504220044	32.679612124
IMP-14	-115.503554262	32.679256289
IMP-15	-115.503400163	32.678969035

APPENDIX B

Laboratory Analytical Reports and Chain-of-Custody Documentation



908 North Temperance Ave. ▽ Clovis, CA 93611 ▽ Phone 559-275-2175 ▽ Fax 559-275-4422

NELAP Certification Number: CA00046 (HW)

June 5, 2015

Kleinfelder
550 West C Street, Suite 1200
San Diego, California 92101

Attn: Chris Noland

Subject: Report of Data: Case 76501

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Dear Mr. Noland:

Thirty-three soil samples for project "20160433.001A Caltrans TO30" were received May 22, 2015, in good condition. There was a sampling time discrepancy for sample IMP-10-3.0 between the COC and sample bottle. The sampling time on the COC was used. Written results are being provided on this June 5, 2015, for the requested analyses.

For the EPA 6010B analysis, the soil samples were digested according to EPA method 3050B.

For the EPA 6010B STLC analysis, the samples were leached according to California Title 22 guidelines, and the leachates were digested according to EPA method 3010A.

For the EPA 9045C analysis, the samples were prepared according to the method. The samples were analyzed for pH as soon as possible.

No unusual problem or complication was encountered with this sample set.

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.


For Sharon Dehmlow, Laboratory Director
APPL, Inc.

SD/ab
Enclosure
cc: File

Number of pages: _____

Metals Results

Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101

ARF: 76501

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Chris Noland

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AZ16670		-Client Sample ID: IMP-01-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	16.7	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.068 J	0.50	0.002	mg/L	1	06/02/15	06/02/15
APPL ID: AZ16671		-Client Sample ID: IMP-01-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	8.6	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.033 J	0.50	0.002	mg/L	1	06/02/15	06/02/15
APPL ID: AZ16672		-Client Sample ID: IMP-01-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	8.8	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.041 J	0.50	0.002	mg/L	1	06/02/15	06/02/15
APPL ID: AZ16673		-Client Sample ID: IMP-02-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	17.8	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.22 J	0.50	0.002	mg/L	1	06/02/15	06/02/15
APPL ID: AZ16674		-Client Sample ID: IMP-02-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	10.5	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.034 J	0.50	0.002	mg/L	1	06/02/15	06/02/15
APPL ID: AZ16675		-Client Sample ID: IMP-02-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	10.1	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.045 J	0.50	0.002	mg/L	1	06/02/15	06/02/15
APPL ID: AZ16676		-Client Sample ID: IMP-03-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	21.5	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.60	0.50	0.002	mg/L	1	06/02/15	06/02/15
APPL ID: AZ16677		-Client Sample ID: IMP-03-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	14.1	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.11 J	0.50	0.002	mg/L	1	06/02/15	06/02/15

J = Estimated value.

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APPL-F1-SC-NoMC-REG MDLs

Metals Results

Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101

ARF: 76501

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Chris Noland

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AZ16678		-Client Sample ID: IMP-03-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	5.8	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.051 J	0.50	0.002	mg/L	1	06/02/15	06/02/15
APPL ID: AZ16679		-Client Sample ID: IMP-04-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	66.8	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	1.4	0.50	0.002	mg/L	1	06/02/15	06/02/15
APPL ID: AZ16680		-Client Sample ID: IMP-04-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	19.8	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.23 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16681		-Client Sample ID: IMP-04-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	11.0	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.033 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16682		-Client Sample ID: IMP-05-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	9.6	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.26 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16683		-Client Sample ID: IMP-05-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	9.2	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.61	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16684		-Client Sample ID: IMP-102		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	10.4	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.22 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16685		-Client Sample ID: IMP-05-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	10.7	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.18 J	0.50	0.002	mg/L	1	06/02/15	06/03/15

J = Estimated value.

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Metals Results

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550 West C Street, Suite 1200
San Diego, CA 92101

ARF: 76501

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Chris Noland

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AZ16686		-Client Sample ID: IMP-06-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	59.9	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	3.9	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16687		-Client Sample ID: IMP-06-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	27.9	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.27 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16688		-Client Sample ID: IMP-06-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	13.1	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.047 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16689		-Client Sample ID: IMP-07-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	18.4	0.5	0.09	mg/kg	1	05/29/15	05/29/15
6010B/STLC	LEAD (PB)	0.38 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16690		-Client Sample ID: IMP-07-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	5.9	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.28 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16691		-Client Sample ID: IMP-07-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	5.2	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.20 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16692		-Client Sample ID: IMP-08-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	10.6	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.45 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16693		-Client Sample ID: IMP-08-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	7.2	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.11 J	0.50	0.002	mg/L	1	06/02/15	06/03/15

J = Estimated value.

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San Diego, CA 92101

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APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Chris Noland

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AZ16694 -Client Sample ID: IMP-104					-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans	
6010B	LEAD (PB)	7.1	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.087 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16695 -Client Sample ID: IMP-08-3.0					-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans	
6010B	LEAD (PB)	28.4	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.59	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16696 -Client Sample ID: IMP-09-0.5					-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans	
6010B	LEAD (PB)	4.8	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.34 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16697 -Client Sample ID: IMP-103					-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans	
6010B	LEAD (PB)	7.2	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.34 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16698 -Client Sample ID: IMP-09-1.5					-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans	
6010B	LEAD (PB)	19.8	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	1.4	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16699 -Client Sample ID: IMP-09-3.0					-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans	
6010B	LEAD (PB)	8.4	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.12 J	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16700 -Client Sample ID: IMP-10-0.5					-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans	
6010B	LEAD (PB)	24.7	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	1.8	0.50	0.002	mg/L	1	06/02/15	06/03/15
APPL ID: AZ16701 -Client Sample ID: IMP-10-1.5					-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans	
6010B	LEAD (PB)	28.8	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	2.2	0.50	0.002	mg/L	1	06/02/15	06/03/15

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APPL-F1-SC-NoMC-REG MDLs

Metals Results

Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101

ARF: 76501

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Chris Noland

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AZ16702		-Client Sample ID: IMP-10-3.0					-Sample Collection Date: 05/21/15	Project: 20160433.001A Caltrans
6010B	LEAD (PB)	24.2	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	1.9	0.50	0.002	mg/L	1	06/02/15	06/03/15

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APPL-F1-SC-NoMC-REG MDLs

Wetlab Results

ARF: 76501

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101

Attn: Chris Noland

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date
APPL ID: AZ16677 -Client Sample ID: IMP-03-1.5 -Sample Collection Date: 05/21/15 Project: 20160433.001A Caltrans							
EPA 9045C	PH	8.01@22.9C		NA	pH Units	05/22/15	05/22/15
APPL ID: AZ16684 -Client Sample ID: IMP-102 -Sample Collection Date: 05/21/15 Project: 20160433.001A Caltrans							
EPA 9045C	PH	8.78@22.8C		NA	pH Units	05/22/15	05/22/15
APPL ID: AZ16696 -Client Sample ID: IMP-09-0.5 -Sample Collection Date: 05/21/15 Project: 20160433.001A Caltrans							
EPA 9045C	PH	8.37@23C		NA	pH Units	05/22/15	05/22/15

METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date	QC Group
6010B	LEAD (PB)	0.15 J	0.5	0.09	mg/kg	05/29/15	05/29/15	#MTL3-150529A-AZ16670
6010B	LEAD (PB)	Not detected	0.50	0.002	mg/L	06/02/15	06/02/15	#MTL5-150602A-AZ16670
6010B	LEAD (PB)	Not detected	0.5	0.09	mg/kg	05/29/15	06/01/15	#MTL3-150529B-AZ16690
6010B	LEAD (PB)	Not detected	0.50	0.002	mg/L	06/02/15	06/02/15	#MTL5-150602B-AZ16690

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010B	LEAD (PB)	25.0	23.6	94.4	80-120	05/29/15	05/29/15	#MTL3-150529A-AZ16670

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010B	LEAD (PB)	25.0	23.5	94.0	80-120	05/29/15	06/01/15	#MTL3-150529B-AZ16690

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/L	SPK Result mg/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010B	LEAD (PB)	2.50	2.7	108	75-125	06/02/15	06/02/15	#MTL5-150602A-AZ16670

Comments: _____

Laboratory Control Spike Recovery
METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/L	SPK Result mg/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010B	LEAD (PB)	2.50	2.6	104	75-125	06/02/15	06/02/15	#MTL5-150602B-AZ16690

Comments: _____

Renee Patterson

From: Chris Noland [CNoland@kleinfelder.com]
Sent: Friday, May 22, 2015 9:55 AM
To: Renee Patterson; 'Cynthia Clark'; 'Wetlab Supervisor'; Jerry Kellar
Cc: 'Sharon Dehmlow'
Subject: RE: TO30 Samples - COCs attached

Yes – those strange marks in the wrong columns should be in the pH section. There should be one pH per page.

From: Renee Patterson [<mailto:rpatterson@applinc.com>]
Sent: Friday, May 22, 2015 8:46 AM
To: 'Cynthia Clark'; 'Wetlab Supervisor'; Chris Noland; Jerry Kellar
Cc: 'Sharon Dehmlow'
Subject: RE: TO30 Samples - COCs attached

Chris,

I am pre-logging in the 50+ soils for Caltrans TO 30 (COCs attached). I was curious about the pH request(s). There is only one sample with pH requested. Is that correct? There are some other "X" marks in matrix columns which don't seem to belong. Are these meant to be "X" marks to request pH?

thank you for your help,

Renée

From: Cynthia Clark [<mailto:cclark@applinc.com>]
Sent: Thursday, May 21, 2015 3:52 PM
To: 'APPL - Receiving'; 'Renée Patterson'
Cc: 'Sharon Dehmlow'
Subject: FW: TO30 Samples - COCs attached

51 samples arriving tomorrow for Kleinfelder Caltrans - total Lead and CA-WET Lead

Sincerely,

Cynthia Clark
Project Manager



Agriculture & Priority Pollutants Laboratories, Inc.
WOSB. NELAP Accredited.

t. 559.275-2175 f. 559.275-4422
a. 908 N. Temperance Ave., Clovis, CA 93611

[Website](#) • [Email](#)

DoD accredited for ISM, Dioxins and PCB congeners.

This is a PRIVATE and CONFIDENTIAL message. If you are not the intended



APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

CHAIN OF CUSTODY RECORD
Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. 48272 Pg 2 of 5

Report to: PLEASE PRINT
Company Name: Kleinfelder Phone: 619-831-4600
Address: 550 West C Street Suite 1200
San Diego, CA 92101
Attn: Chris Noland

Invoice to: PLEASE PRINT
Company Name: _____ Phone: _____
Address: SAME Fax: _____
Attn: _____

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number					Date Shipped:									
		No. of Containers	Aq	Sed.	Soil											
CAITRANS T03D	Chris Noland						5/21/15									
Purchase Order Number	Sampler (Signature)						Carrier: 8065 16010324									
20160433.001A	[Signature]						Waybill No.: FedEx									
Sample Identification	Location	Date Collected	Time Collected	Time Zone			Comments:									
IMP-08-0.5	IMP-08	5-21-15	1004	P			* RUN DI-WET IF CA-WET > 5mg/L and/or if TOTAL LEAD IS BETWEEN 50 AND 1,000 mg/kg									
IMP-08-1.5			1006													
IMP-104			1006													
IMP-08-3.0			1008													
IMP-09-0.5	IMP-09		0955													
IMP-103			0955													
IMP-09-1.5			0957													
IMP-09-3.0			0959													
IMP-10-0.5	IMP-10		1017													
IMP-10-1.5			1020													
IMP-10-3.0			1038				* RUN TCLP IF TOTAL LEAD IS BETWEEN 100 AND 1,000 mg/kg									
Shuttle Temperature:	Turnaround Requested: Check one <input checked="" type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other				Sample Disposal: <input type="checkbox"/> Return to client <input type="checkbox"/> Disposal by Lab (30-day retention)											
Relinquished by sampler:	Date	Time	Received by:		Relinquished by:	Date	Time	Received by:								
[Signature]	5/21/15	1530	FedEx													
Relinquished by:	Date	Time	Received by:		Relinquished by:	Date	Time	Received at lab by:								

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler
See reverse side for Container Preservation and Sampling Information



APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. 48270

3.0

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: <u>Kleinfelder</u> Phone: <u>619-831-4600</u>	Company Name: _____ Phone: _____
Address: <u>550 West C Street Suite 1200</u>	Address: <u>SAME</u>
<u>San Diego, CA 92101</u>	
Attn: <u>Chris Noland</u>	Attn: _____

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number				Date Shipped:	
		Matrix					Carrier:
Purchase Order Number	Sampler (Signature)	No. of Containers	Aq	Sed.	Soil	Waybill No.:	
Sample Identification	Location						Date Collected
CALTRANS TO30	Chris Noland					5/21/15	
20160433.001A	<i>[Signature]</i>					8065-16010324	
						FedEx	
IMP-01-0.5	IMP-01	1			X	X	*RUN DI-WET
IMP-01-1.5	↓	1			X	X	IF CA-WET 75mg/L
IMP-01-3.0	↓	1			X	X	and/or if TOTAL
IMP-02-0.5	IMP-02	1			X	X	LEAD IS BETWEEN
IMP-02-1.5	↓	1			X	X	50 and 1,000 mg/kg
IMP-02-3.0	↓	1			X	X	
IMP-03-0.5	IMP-03	1			X	X	*RUN TCLP IF
IMP-03-1.5	↓	1			X	X	TOTAL LEAD IS
IMP-03-3.0	↓	1			X	X	BETWEEN 100
IMP-04-0.5	IMP-04	1			X	X	AND 1,000 mg/kg
IMP-04-1.5	↓	1			X	X	

Shuttle Temperature:	Turnaround Requested: Check one <input checked="" type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other	Sample Disposal: <input type="checkbox"/> Return to client <input type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <i>[Signature]</i>	Date: <u>5/21/15</u> Time: <u>1530</u>	Received by: <u>FedEx</u>
Relinquished by:	Date: _____ Time: _____	Received by:
	Date: <u>05/22/15</u> Time: <u>1006</u>	Received at lab by: <i>[Signature]</i>

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler
See reverse side for Container Preservative and Sampling Information



APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

2.0

C.O.C. 48271

Report to: PLEASE PRINT
Company Name: Kleinfelder Phone: 619-831-4600
Address: 550 West C Street Suite 1200
San Diego, CA 92101 Fax: _____
Attn: Chris Noland

Invoice to: PLEASE PRINT
Company Name: _____ Phone: _____
Address: SAME Fax: _____
Attn: _____

Project Name/Number CALTRANS T030	Sampler (Print) Chris Noland	Analysis Requested/Method Number										Date Shipped: <u>5/21/15</u>				
Purchase Order Number 20160433.001A	Sampler (Signature) <i>[Signature]</i>	No. of Containers	Matrix			LEAD 6010B	PH 9045C	CA-WET 6010B								Carrier: <u>806516016324</u>
Sample Identification	Location		Date Collected	Time Collected	Time Zone				Aq	Sed.	Soil					

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Aq	Sed.	Soil	LEAD 6010B	PH 9045C	CA-WET 6010B								Comments
IMP-04-3.0	IMP-04	5-21-15	0940	P	1			X	X	X									*RUN DI-WET
IMP-05-0.5	IMP-05		0855		1			X	X	X									IF CA-WET 75mg/L
IMP-05-1.5	↓		0857		1			X	X	X									and/or if TOTAL
IMP-102	↓		0857		1			X	X	X									LEAD IS BETWEEN
IMP-05-3.0	↓		0900		1			X	X	X									50 and 1,000 mg/kg
IMP-06-0.5	IMP-06		0942		1			X	X	X									
IMP-06-1.5	↓		0944		1			X	X	X									* RUN TCLP IF
IMP-06-3.0	↓		0947		1			X	X	X									TOTAL LEAD IS
IMP-07-0.5	IMP-07		0848		1			X	X	X									BETWEEN 100
IMP-07-1.5	↓		0850		1			X	X	X									AND 1,000 mg/kg
IMP-07-3.0	↓		0853		1			X	X	X									

Shuttle Temperature:	Turnaround Requested: Check one <input checked="" type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other	Sample Disposal: <input type="checkbox"/> Return to client <input type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <i>[Signature]</i>	Date: <u>5/21/15</u> Time: <u>1530</u> Received by: <u>FedEx</u>	Relinquished by: _____ Date: _____ Time: _____ Received by: _____
Relinquished by: _____	Date: _____ Time: _____ Received by: _____	Relinquished by: _____ Date: <u>05/22/15</u> Time: <u>600</u> Received at lab by: <u>[Signature]</u>



APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

20

C.O.C. 48272

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: <u>Kleinfelder</u> Phone: <u>619-831-4600</u>	Company Name: _____ Phone: _____
Address: <u>550 West C Street Suite 1200</u> <u>San Diego, CA 92101</u> Fax: _____	Address: <u>SAME</u> Fax: _____
Attn: <u>Chris Noland</u>	Attn: _____

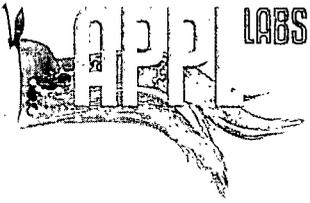
Project Name/Number	Sampler (Print)	Analysis Requested/Method Number					Date Shipped: <u>5/21/15</u>	
		No. of Containers	Matrix	LEAD 6000	PA 9045C	CA-WET 6000		Carrier: <u>8065 1601 0324</u>
Purchase Order Number	Sampler (Signature)	Aq	Sed.	Soil			Waybill No.: <u>FedEx</u>	
Sample Identification	Location	Date Collected	Time Collected	Time Zone			Comments:	
Project Name: <u>CALTRANS T03D</u>	Sampler: <u>Chris Noland</u>							
Purchase Order: <u>20160433.001A</u>	Signature: <u>[Signature]</u>							
<u>IMP-08-0.5</u>	<u>IMP-08</u>	<u>5-21-15</u>	<u>1004</u>	<u>P</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>* RUN DI-WET</u>
<u>FMP-08-1.5</u>	<u>↓</u>		<u>1006</u>		<u>1</u>	<u>X</u>	<u>X</u>	<u>IF CA-WET > 5mg/L</u>
<u>IMP-104</u>	<u>↓</u>		<u>1006</u>		<u>1</u>	<u>X</u>	<u>X</u>	<u>and/or if TOTAL</u>
<u>IMP-08-3.0</u>	<u>↓</u>		<u>1008</u>		<u>1</u>	<u>X</u>	<u>X</u>	<u>LEAD IS BETWEEN</u>
<u>IMP-09-0.5</u>	<u>IMP-09</u>		<u>0955</u>		<u>1</u>	<u>X</u>	<u>X</u>	<u>50 AND 1,000 mg/kg</u>
<u>FMP-103</u>	<u>↓</u>		<u>0955</u>		<u>1</u>	<u>X</u>	<u>X</u>	
<u>IMP-09-1.5</u>	<u>↓</u>		<u>0957</u>		<u>1</u>	<u>X</u>	<u>X</u>	
<u>FMP-09-3.0</u>	<u>↓</u>		<u>0959</u>		<u>1</u>	<u>X</u>	<u>X</u>	<u>* RUN TCLP IF</u>
<u>IMP-10-0.5</u>	<u>IMP-10</u>		<u>1017</u>		<u>1</u>	<u>X</u>	<u>X</u>	<u>TOTAL LEAD IS</u>
<u>IMP-10-1.5</u>	<u>↓</u>		<u>1020</u>		<u>1</u>	<u>X</u>	<u>X</u>	<u>BETWEEN 100</u>
<u>IMP-10-3.0</u>	<u>↓</u>		<u>1030</u>		<u>1</u>	<u>X</u>	<u>X</u>	<u>AND 1,000 mg/kg</u>
Shuttle Temperature:	Turnaround Requested: Check one <input checked="" type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other	Sample Disposal: <input type="checkbox"/> Return to client <input type="checkbox"/> Disposal by Lab (30-day retention)						
Relinquished by sampler: <u>[Signature]</u>	Date: <u>5/21/15</u> Time: <u>1530</u>	Received by: <u>FedEx</u>	Relinquished by:		Date:	Time:	Received by:	
Relinquished by:	Date:	Time:	Received by:	Relinquished by:		Date: <u>05/22/15</u>	Time: <u>1000</u>	Received at lab by: <u>[Signature]</u>

White: Return to client with report

Yellow: Laboratory Copy

Pink: Sampler

See reverse side for Container Preservative and Sampling Information



908 North Temperance Ave. ▽ Clovis, CA 93611 ▽ Phone 559-275-2175 ▽ Fax 559-275-4422

NELAP Certification Number: CA00046 (HW)

June 8, 2015

Kleinfelder
550 West C Street, Suite 1200
San Diego, California 92101

Attn: Chris Noland

Subject: Report of Data: Case 76503

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Dear Mr. Noland:

Seventeen soil samples and one water sample for project "20160433.001A Caltrans TO30" were received May 22, 2015, in good condition. A revised COC was received which designated samples to be analyzed for pH. Written results are being provided on this June 8, 2015, for the requested analyses.

For the EPA 6010B analysis, the soil samples were digested according to EPA method 3050B and the water sample was digested according to EPA method 3010A.

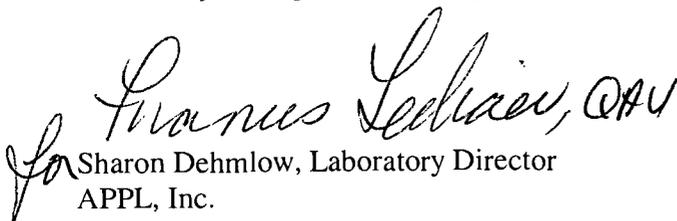
For the EPA 6010B STLC analysis, the samples were leached according to California Title 22 guidelines, and the leachates were digested according to EPA method 3010A.

For the EPA 9045C analysis, the samples were prepared according to the method. The samples were analyzed for pH as soon as possible.

No unusual problem or complication was encountered with this sample set.

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.


Sharon Dehmlow, Laboratory Director
APPL, Inc.

SD/ab
Enclosure
cc: File

Number of pages: _____

Metals Results

ARF: 76503

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101

Attn: Chris Noland

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AZ16703		-Client Sample ID: IMP-11-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	7.3	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.044 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16704		-Client Sample ID: IMP-11-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	5.4	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.033 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16705		-Client Sample ID: IMP-11-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	11.4	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.19 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16706		-Client Sample ID: IMP-12-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	9.0	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.065 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16707		-Client Sample ID: IMP-12-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	7.9	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.058 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16708		-Client Sample ID: IMP-12-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	8.5	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.18 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16709		-Client Sample ID: IMP-13-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	7.7	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.047 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16710		-Client Sample ID: IMP-101		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	7.6	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.048 J	0.50	0.002	mg/L	1	06/03/15	06/04/15

J = Estimated value.

Printed: 06/08/15 9:45:25 AM

APPL-F1-SC-NoMC-REG MDLs

Metals Results

Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101

ARF: 76503

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Chris Noland

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AZ16711		-Client Sample ID: IMP-13-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	8.6	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.068 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16712		-Client Sample ID: IMP-13-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	10.2	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.15 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16713		-Client Sample ID: IMP-14-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	9.7	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.12 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16714		-Client Sample ID: IMP-14-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	9.4	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.11 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16715		-Client Sample ID: IMP-100		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	9.2	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.12 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16716		-Client Sample ID: IMP-14-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	8.6	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.18 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16717		-Client Sample ID: IMP-15-0.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	4.6	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.053 J	0.50	0.002	mg/L	1	06/03/15	06/04/15
APPL ID: AZ16718		-Client Sample ID: IMP-15-1.5		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	149	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	18.8	0.50	0.002	mg/L	1	06/03/15	06/04/15

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APPL-F1-SC-NoMC-REG MDLs

Metals Results

Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101

ARF: 76503

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Chris Noland

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AZ16719		-Client Sample ID: IMP-15-3.0		-Sample Collection Date: 05/21/15		Project: 20160433.001A Caltrans		
6010B	LEAD (PB)	29.2	0.5	0.09	mg/kg	1	05/29/15	06/01/15
6010B/STLC	LEAD (PB)	0.15 J	0.50	0.002	mg/L	1	06/03/15	06/04/15

J = Estimated value.

Printed: 06/08/15 9:45:25 AM

APPL-F1-SC-NoMC-REG MDLs

Metals Results

Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101

ARF: 76503

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Chris Noland

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AZ16720 -Client Sample ID: QCEB052115 -Sample Collection Date: 05/21/15 Project: 20160433.001A Caltrans								
6010B	LEAD (PB)	Not detected	5.0	1.58	ug/L	1	05/29/15	06/02/15

Wetlab Results

ARF: 76503

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101

Attn: Chris Noland

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date
APPL ID: AZ16712		-Client Sample ID: IMP-13-3.0				-Sample Collection Date: 05/21/15	Project: 20160433.001A Caltrans
EPA 9045C	PH	8.1@23C		NA	pH Units	05/22/15	05/22/15
APPL ID: AZ16717		-Client Sample ID: IMP-15-0.5				-Sample Collection Date: 05/21/15	Project: 20160433.001A Caltrans
EPA 9045C	PH	8.08@23.3C		NA	pH Units	05/22/15	05/22/15

METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date	QC Group
6010B	LEAD (PB)	Not detected	0.5	0.09	mg/kg	05/29/15	06/01/15	#MTL3-150529C-AZ16703
6010B	LEAD (PB)	0.013 J	0.50	0.002	mg/L	06/03/15	06/04/15	#MTL5-150603A-AZ16703

J = Estimated value.

METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date	QC Group
6010B	LEAD (PB)	Not detected	5.0	1.58	ug/L	05/29/15	06/02/15	#MTL1-150529A-AZ16720

Laboratory Control Spike Recovery
METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010B	LEAD (PB)	25.0	23.8	95.2	80-120	05/29/15	06/01/15	#MTL3-150529C-AZ16703

Comments: _____

Laboratory Control Spike Recovery
METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/L	SPK Result mg/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010B	LEAD (PB)	2.50	2.6	104	75-125	06/03/15	06/04/15	#MTL5-150603A-AZ16703

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010B	LEAD (PB)	250	260	104	80-120	05/29/15	06/02/15	#MTL1-150529A-AZ16720

Comments: _____



APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. 48412 pg 1 of 5

Report to: PLEASE PRINT
 Company Name: Kleinfelder Phone: 619-831-4600
 Address: 550 West C Street Suite 1200
San Diego, CA 92101 Fax: _____
 Attn: Chris Noland

Invoice to: PLEASE PRINT
 Company Name: SAME Phone: _____
 Address: _____ Fax: _____
 Attn: _____

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number					Date Shipped: <u>5/21/15</u>					
		Ag	Sed.	Soil	LEAD 6010B	PH 9095C		CA-WET 6010B				
<u>CALTRANS T030</u>	<u>Chris Noland</u>							Carrier: <u>FedEx</u>				
<u>20160433.0D1A</u>	<u>[Signature]</u>							Waybill No.: <u>8065160103</u>				
Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Ag	Sed.	Soil	LEAD 6010B	PH 9095C	CA-WET 6010B	Comments
<u>IMP-11-0.5</u>	<u>IMP-11</u>	<u>5-21-15</u>	<u>0838</u>	<u>P</u>	<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>*RUN PI-WET</u>
<u>IMP-11-1.5</u>	↓		<u>0840</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>IF CA-WET > 5mg/l</u>
<u>IMP-11-3.0</u>	↓		<u>0842</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>and/or IF TOTAL</u>
<u>IMP-12-0.5</u>	<u>IMP-12</u>		<u>0830</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>LEAD BETWEEN</u>
<u>IMP-12-1.5</u>	↓		<u>0832</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>50 and 1,000 mg/kg</u>
<u>IMP-12-3.0</u>	↓		<u>0835</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		
<u>IMP-13-0.5</u>	<u>IMP-13</u>		<u>0815</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>*RUN TCLP IF</u>
<u>IMP-101</u>	↓		<u>0815</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>TOTAL LEAD IS</u>
<u>IMP-13-1.5</u>	↓		<u>0817</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>BETWEEN 100 and</u>
<u>IMP-13-3.0</u>	↓		<u>0823</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>	<u>PK</u>	<u>1,000 mg/kg</u>
<u>IMP-14-0.5</u>	<u>IMP-14</u>		<u>0750</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		

Shuttle Temperature: _____ Turnaround Requested: Check one
 Standard 2-3 wk One week 24/48 Hrs. Other
 Relinquished by sampler: [Signature] Date: 5/21/15 Time: 1530 Received by: FedEx
 Relinquished by: _____ Date: _____ Time: _____ Received by: _____
 Relinquished by: _____ Date: _____ Time: _____ Received at lab by: _____



APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

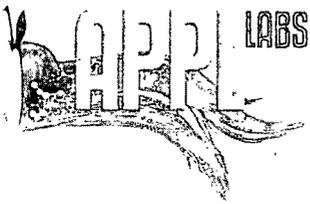
C.O.C. 48415

pg. 5 of 5

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: <u>Kleinfelder</u> Phone: <u>619-831-4600</u>	Company Name: _____ Phone: _____
Address: <u>550 West C Street Suite 1200</u> <u>San Diego, CA 92101</u> Fax: _____	Address: <u>SAME</u> Fax: _____
Attn: <u>Chris Noland</u>	Attn: _____

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number					Date Shipped: <u>5/21/15</u>		
		Matrix			Analysis Requested/Method Number				
Purchase Order Number	Sampler (Signature)	No. of Containers	Aq	Sed.	Soil	LEAD 6010B	PH 9045C	CA-WET 6000B	Carrier: <u>8065 16010324</u>
Sample Identification	Location								Date Collected
<u>IMP-14-1.5</u>	<u>IMP-14</u>	<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>*RUN DI-WET</u>
<u>FMP-100</u>	<u>↓</u>	<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>IF CA-WET > 5mg/l</u>
<u>IMP-14-3.0</u>	<u>↓</u>	<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>and/or if TOTAL</u>
<u>IMP-15-0.5</u>	<u>IMP-15</u>	<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>	<u>JK</u>	<u>LEAD is between</u>
<u>FMP-15-1.5</u>	<u>↓</u>	<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		<u>50 and 1,000 mg/kg</u>
<u>FMP-15-3.0</u>	<u>↓</u>	<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>		
<u>QCEB052115</u>	<u>↓</u>	<u>1</u>	<u>X</u>			<u>X</u>			<u>*RUN TCLP IF</u>
									<u>TOTAL LEAD IS</u>
									<u>BETWEEN 100</u>
									<u>AND 1,000 mg/kg</u>

Shuttle Temperature: _____	Turnaround Requested: Check one <input checked="" type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other	Sample Disposal: <input type="checkbox"/> Return to client <input type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by Sampler: <u>[Signature]</u>	Date: <u>5/21/15</u> Time: <u>1530</u>	Received by: <u>FedEx</u>
Relinquished by: _____	Date: _____ Time: _____	Received at lab by: _____



June 15, 2015

Kleinfelder
550 West C Street, Suite 1200
San Diego, California 92101

Attn: Chris Noland

Subject: Report of Data: Case 76501 **Addendum**

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Dear Mr. Noland:

Thirty-three soil samples for project "20160433.001A Caltrans TO30" were received May 22, 2015, in good condition. There was a sampling time discrepancy for sample IMP-10-3.0 between the COC and sample bottle. The sampling time on the COC was used. Written results are being provided on this June 15, 2015, for the added analysis.

ADDENDUM: STLC DI-WET analysis was added to two samples IMP-04-0.5 and IMP-06-0.5, as requested on June 9, 2015. For the EPA 6010B STLC DI-WET analysis, the samples were leached according to California Title 22 guidelines using DI water, and the leachates were digested according to EPA method 3010A.

No unusual problem or complication was encountered with this sample set.

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

Sharon Dehmlow, Laboratory Director
APPL, Inc.

SD/rp
Enclosure
cc: File

Number of pages: _____

Metals Results

Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101

ARF: 76501

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Chris Noland

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AZ16679 -Client Sample ID: IMP-04-0.5 -Sample Collection Date: 05/21/15 Project: 20160433.001A Caltrans								
6010B	LEAD (PB)	4.3 J	30.0	1.85	ug/L	1	06/12/15	06/12/15
APPL ID: AZ16686 -Client Sample ID: IMP-06-0.5 -Sample Collection Date: 05/21/15 Project: 20160433.001A Caltrans								
6010B	LEAD (PB)	Not detected	30.0	1.85	ug/L	1	06/12/15	06/12/15

METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date	QC Group
6010B	LEAD (PB)	Not detected	30.0	1.85	ug/L	06/12/15	06/12/15	#MTL6-150612A-AZ16679

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010B	LEAD (PB)	2500	2520	101	80-120	06/12/15	06/12/15	#MTL6-150612A-AZ16679

Comments: _____

Renee Patterson

From: Cynthia Clark [cclark@applinc.com]
Sent: Tuesday, June 09, 2015 8:50 AM
To: 'Renee Patterson'; 'APPL - Metals'; 'Sharon Dehmlow'
Cc: 'Chue Moua'; 'Jeremy Hale'
Subject: DI-wet and TCLP added to ARFs 76501 & 76503 - report and EDD due to client 6/15
Attachments: 76501-rev3 KLEIN-SD.pdf; 76503-rev1 KLEIN-SD.pdf

Per client request, I added DI-Wet Lead to three samples:

AZ16679	IMP-04-0.5	(ARF 76501)
AZ16686	IMP-06-0.5	(ARF 76501)
AZ16718	IMP-15-1.5	(ARF 76503)

and I added TCLP- Lead to one sample:

AZ16718	IMP-15-1.5	(ARF 76503)
---------	------------	-------------

We will submit the Leachate results as an addendum report.

The final report and EQUIS EDD are due no later than COB Monday, June 15th

Revised ARFs are attached and in the T drive

Sincerely,

Cynthia Clark
Project Manager



Agriculture & Priority Pollutants Laboratories, Inc.
WOSB. NELAP Accredited.

t. 559.275-2175 f. 559.275-4422
a. 908 N. Temperance Ave., Clovis, CA 93611

[Website](#) • [Email](#)

DoD accredited for ISM, Dioxins and PCB congeners.

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Renee Patterson

From: Chris Noland [CNoland@kleinfelder.com]
Sent: Friday, May 22, 2015 9:55 AM
To: Renee Patterson; 'Cynthia Clark'; 'Wetlab Supervisor'; Jerry Kellar
Cc: 'Sharon Dehmlow'
Subject: RE: TO30 Samples - COCs attached

Yes – those strange marks in the wrong columns should be in the pH section. There should be one pH per page.

From: Renee Patterson [mailto:rpatterson@applinc.com]
Sent: Friday, May 22, 2015 8:46 AM
To: 'Cynthia Clark'; 'Wetlab Supervisor'; Chris Noland; Jerry Kellar
Cc: 'Sharon Dehmlow'
Subject: RE: TO30 Samples - COCs attached

Chris,

I am pre-logging in the 50+ soils for Caltrans TO 30 (COCs attached). I was curious about the pH request(s). There is only one sample with pH requested. Is that correct? There are some other "X" marks in matrix columns which don't seem to belong. Are these meant to be "X" marks to request pH?

thank you for your help,

Renée

From: Cynthia Clark [mailto:cclark@applinc.com]
Sent: Thursday, May 21, 2015 3:52 PM
To: 'APPL - Receiving'; 'Renée Patterson'
Cc: 'Sharon Dehmlow'
Subject: FW: TO30 Samples - COCs attached

51 samples arriving tomorrow for Kleinfelder Caltrans - total Lead and CA-WET Lead

Sincerely,

Cynthia Clark
Project Manager



Agriculture & Priority Pollutants Laboratories, Inc.
WOSB. NELAP Accredited.

t. 559.275-2175 f. 559.275-4422
a. 908 N. Temperance Ave., Clovis, CA 93611

Website • Email

DoD accredited for ISM, Dioxins and PCB congeners.

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APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. 48270 *pg. 3 of 5*

Report to: PLEASE PRINT Company Name: <u>Kleinfelder</u> Phone: <u>619-831-4600</u> Address: <u>550 West C Street Suite 1200</u> <u>San Diego, CA 92101</u> Fax: _____ Attn: <u>Chris Noland</u>	Invoice to: PLEASE PRINT Company Name: _____ Phone: _____ Address: <u>SAME</u> Fax: _____ Attn: _____
--	--

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number					Date Shipped: <u>5/21/15</u>											
		No. of Containers	Aq	Sed.	Soil			Carrier: <u>8065 16010324</u>										
Project Name/Number: <u>CALTRANS TO30</u>	Sampler (Print): <u>Chris Noland</u>						Waybill No.: <u>FedEx</u>											
Purchase Order Number: <u>20160433.001A</u>	Sampler (Signature): <u>[Signature]</u>						Comments:											
Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Aq	Sed.	Soil										
<u>IMP-01-0.5</u>	<u>IMP-01</u>	<u>5-21-15</u>	<u>0919</u>	<u>P</u>	<u>1</u>			X	X	X								<u>*RUN DI-WET</u>
<u>IMP-01-1.5</u>	↓		<u>0921</u>		<u>1</u>			X	X	X								<u>IF CA-WET 75mg/L</u>
<u>IMP-01-3.0</u>	↓		<u>0923</u>		<u>1</u>			X	X	X								<u>and/or if TOTAL</u>
<u>IMP-02-0.5</u>	<u>IMP-02</u>		<u>0927</u>		<u>1</u>			X	X	X								<u>LEAD IS BETWEEN</u>
<u>IMP-02-1.5</u>	↓		<u>0929</u>		<u>1</u>			X	X	X								<u>50 and 1,000mg</u>
<u>IMP-02-3.0</u>	↓		<u>0932</u>		<u>1</u>			X	X	X								
<u>IMP-03-0.5</u>	<u>IMP-03</u>		<u>0905</u>		<u>1</u>			X	X	X								<u>*RUN TCLP IF</u>
<u>IMP-03-1.5</u>	↓		<u>0907</u>		<u>1</u>			X	X	X								<u>TOTAL LEAD IS</u>
<u>IMP-03-3.0</u>	↓		<u>0910</u>		<u>1</u>			X	X	X								<u>BETWEEN 100</u>
<u>IMP-04-0.5</u>	<u>IMP-04</u>		<u>0935</u>		<u>1</u>			X	X	X								<u>AND 1,000mg/kg</u>
<u>IMP-04-1.5</u>	↓		<u>0937</u>		<u>1</u>			X	X	X								

Shuttle Temperature: _____	Turnaround Requested: Check one <input checked="" type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other	Sample Disposal: <input type="checkbox"/> Return to client <input type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <u>[Signature]</u>	Date: <u>5/21/15</u> Time: <u>1530</u>	Received by: <u>FedEx</u>
Relinquished by:	Date: _____ Time: _____	Received by:
Relinquished by:	Date: _____ Time: _____	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler
 See reverse side for Container Preservative and Sampling Information



APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. 48271

pg 4 of 5

Report to: PLEASE PRINT
Company Name: Kleinfelder Phone: 619-831-4600
Address: 550 West C Street Suite 1200
San Diego, CA 92101
Attn: Chris Noland

Invoice to: PLEASE PRINT
Company Name: _____ Phone: _____
Address: SAME Fax: _____
Attn: _____

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number					Date Shipped: <u>5/21/15</u>		
		Matrix			Date Shipped: <u>5/21/15</u>				
Purchase Order Number	Sampler (Signature)	No. of Containers	Ag	Sed.	Soil	LEAD 600B	Pb 9045C	CA-WET 600B	Carrier: <u>806516016324</u>
Sample Identification	Location								Date Collected
CA/TRANS TD3D	Chris Noland								
20160433.001A	<i>[Signature]</i>								
IMP-04-3.0	IMP-04					X	X	X	* RUN DI-WET
IMP-05-0.5	IMP-05					X	X	X	IF CA-WET > 5mg/kg
IMP-05-1.5						X	X	X	and/or if TOTAL
IMP-102						X	X	X	LEAD IS BETWEEN
IMP-05-3.0	↓					X	X	X	50 and 1,000 mg/kg
IMP-06-0.5	IMP-06					X	X	X	
IMP-06-1.5	↓					X	X	X	* RUN TCLP IF
IMP-06-3.0	↓					X	X	X	TOTAL LEAD IS
IMP-07-0.5	IMP-07					X	X	X	BETWEEN 100
IMP-07-1.5	↓					X	X	X	AND 1,000 mg/kg
IMP-07-3.0	↓					X	X	X	
Shuttle Temperature:	Turnaround Requested: Check one <input checked="" type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other					Sample Disposal: <input type="checkbox"/> Return to client <input type="checkbox"/> Disposal by Lab (30-day retention)			
Relinquished by: <i>[Signature]</i>	Date: <u>5/21/15</u>	Time: <u>1530</u>	Received by: <u>FedEx</u>			Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:			Relinquished by:	Date:	Time:	Received at lab by:

White: Return to client with report

Yellow: Laboratory Copy

Pink: Sampler

See reverse side for Container Preservative and Sampling Information



APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

CHAIN OF CUSTODY RECORD
Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. 48272 *Pg 2 of 5*

Report to: PLEASE PRINT
Company Name: Kleinfelder Phone: 619-831-4600
Address: 550 West C Street Suite 1200
San Diego, CA 92101
Attn: Chris Noland

Invoice to: PLEASE PRINT
Company Name: _____ Phone: _____
Address: SAME
Attn: _____

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number					Date Shipped:
		Matrix					
Purchase Order Number	Sampler (Signature)	Aq	Sed.	Soil	Other	Other	Waybill No.:
Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix	Comments:
CAITRANS T03D	Chris Noland						5/21/15
20160433.001A	<i>[Signature]</i>						8065 16010324
							FedEx
IMP-08-0.5	IMP-08	5-21-15	1004	P	1	X	*RUN DI-WET
FMP-08-1.5			1006		1	X	IF CA-WET > 5mg/L
IMP-104			1006		1	X	and/or if TOTAL
IMP-08-3.0			1008		1	X	LEAD IS BETWEEN
IMP-09-0.5	IMP-09		0955		1	X X	50 AND 1,000 mg/kg
FMP-103			0955		1	X	
IMP-09-1.5			0957		1	X	
FMP-09-3.0			0959		1	X	*RUN TCLP IF
IMP-10-0.5	IMP-10		1017		1	X	TOTAL LEAD IS
IMP-10-1.5			1020		1	X	BETWEEN 100
IMP-10-3.0			1038		1	X	AND 1,000 mg/kg

Shuttle Temperature: _____ Turnaround Requested: Check one
 Standard 2-3 wk One week 24/48 Hrs. Other
 Sample Disposal: Return to client Disposal by Lab (30-day retention)

Relinquished by sampler: *[Signature]* Date: 5/21/15 Time: 1530 Received by: FedEx
 Relinquished by: _____ Date: _____ Time: _____ Received by: _____

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler
See reverse side for Container Preservative and Sampling Information



APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. 48270

30

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: <u>Kleinfelder</u> Phone: <u>619-831-4600</u>	Company Name: _____ Phone: _____
Address: <u>550 West C Street Suite 1200</u>	Address: <u>SAME</u>
<u>San Diego, CA 92101</u> Fax: _____	Fax: _____
Attn: <u>Chris Noland</u>	Attn: _____

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number					Date Shipped: <u>5/21/15</u>														
		Carrier: <u>8065-1601-0324</u>																			
Purchase Order Number	Sampler (Signature)	Waybill No.: <u>FedEx</u>					Comments:														
Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix															
						Aq	Sed.	Soil													
IMP-01-0.5	Chris Noland	5-21-15	0919	P	1			X													*RUN DI-WET
IMP-01-1.5			0921		1			X													IF CA-WET 75mg/L
IMP-01-3.0			0923		1			X													and/or if TOTAL
IMP-02-0.5	IMP-02		0927		1			X													LEAD IS BETWEEN
IMP-02-1.5			0929		1			X													50 and 1,000 mg/kg
IMP-02-3.0			0932		1			X													
IMP-03-0.5	IMP-03		0905		1			X													*RUN TCLP IF
IMP-03-1.5			0907		1			X													TOTAL LEAD IS
IMP-03-3.0			0910		1			X													BETWEEN 100
IMP-04-0.5	IMP-04		0935		1			X													AND 1,000 mg/kg
IMP-04-1.5			0937		1			X													

Shuttle Temperature: _____ Turnaround Requested: Check one Standard 2-3 wk One week 24/48 Hrs. Other _____ Sample Disposal: Return to client Disposal by Lab (30-day retention)

Relinquished by sampler: Chris Noland Date: 5/21/15 Time: 1530 Received by: FedEx Relinquished by: _____ Date: _____ Time: _____ Received by: _____

Relinquished by: _____ Date: _____ Time: _____ Received by: _____ Relinquished by: _____ Date: 05/22/15 Time: 1006 Received at lab by: _____

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

See reverse side for Container Preservative and Sampling Information



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Clovis, CA 93611

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

2.0

C.O.C. 48271

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: <u>Kleinfelder</u> Phone: <u>619 831-4600</u>	Company Name: _____ Phone: _____
Address: <u>550 West C Street Suite 1200</u> <u>San Diego, CA 92101</u> Fax: _____	Address: <u>SAME</u> Fax: _____
Attn: <u>Chris Noland</u>	Attn: _____

Project Name/Number	Sampler (Print)	Date/Time/Zone			No. of Containers	Matrix			Analysis Requested/Method Number										Date Shipped: <u>5/21/15</u>										
		Date Collected	Time Collected	Time Zone		Aq	Sed.	Soil	1	2	3	4	5	6	7	8	9	10		11	12								
<u>CALTRANS T030</u>	<u>Chris Noland</u>																							Carrier: <u>806516018324</u>					
<u>Purchase Order Number</u>	<u>Sampler (Signature)</u>																							Waybill No.: <u>FedEx</u>					
<u>20160433.001A</u>	<u>[Signature]</u>																							Comments:					
Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Aq	Sed.	Soil	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
<u>IMP-04-3.0</u>	<u>IMP-04</u>	<u>5-21-15</u>	<u>0940</u>	<u>P</u>	<u>1</u>			<u>X</u>	<u>X</u>																				<u>* RUN DI-WET</u>
<u>IMP-05-0.5</u>	<u>IMP-05</u>		<u>0855</u>		<u>1</u>			<u>X</u>	<u>X</u>																				<u>IF CA-WET 75mg/L</u>
<u>IMP-05-1.5</u>	<u>↓</u>		<u>0857</u>		<u>1</u>			<u>X</u>	<u>X</u>																				<u>and/or if TOTAL</u>
<u>IMP-102</u>	<u>↓</u>		<u>0857</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>																			<u>LEAD IS BETWEEN</u>
<u>IMP-05-3.0</u>	<u>↓</u>		<u>0900</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>																			<u>50 and 1,000 mg/kg</u>
<u>IMP-06-0.5</u>	<u>IMP-06</u>		<u>0942</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>																			
<u>IMP-06-1.5</u>	<u>↓</u>		<u>0944</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>																			<u>* RUN TCLP IF</u>
<u>IMP-06-3.0</u>	<u>↓</u>		<u>0947</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>																			<u>TOTAL LEAD IS</u>
<u>IMP-07-0.5</u>	<u>IMP-07</u>		<u>0848</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>																			<u>BETWEEN 100</u>
<u>IMP-07-1.5</u>	<u>↓</u>		<u>0850</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>																			<u>AND 1,000 mg/kg</u>
<u>IMP-07-3.0</u>	<u>↓</u>		<u>0853</u>		<u>1</u>			<u>X</u>	<u>X</u>	<u>X</u>																			

Shuttle Temperature: _____	Turnaround Requested: Check one <input checked="" type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other	Sample Disposal: <input type="checkbox"/> Return to client <input type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <u>[Signature]</u>	Date: <u>5/21/15</u> Time: <u>1530</u>	Received by: <u>FedEx</u>
Relinquished by: _____	Date: _____ Time: _____	Received by: _____
Relinquished by: _____	Date: <u>05/22/15</u> Time: <u>1000</u>	Received at lab by: <u>[Signature]</u>

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler
 See reverse side for Container Preservative and Sampling Information



June 15, 2015

Kleinfelder
550 West C Street, Suite 1200
San Diego, California 92101

Attn: Chris Noland

Subject: Report of Data: Case 76503 **Addendum**

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Dear Mr. Noland:

Seventeen soil samples and one water sample for project "20160433.001A Caltrans TO30" were received May 22, 2015, in good condition. A revised COC was received which designated samples to be analyzed for pH. Written results are being provided on this June 15, 2015, for the added analyses.

ADDENDUM: STLC DI-WET and TCLP analyses were added to sample IMP-15-1.5, as requested on June 9, 2015. For the EPA 6010B STLC DI-WET analysis, the sample was leached according to California Title 22 guidelines using DI water; for the EPA 6010B analysis, the sample was leached according to EPA method 1311; the leachates were digested according to EPA method 3010A.

No unusual problem or complication was encountered with this sample set.

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

Sharon Dehmlow, Laboratory Director
APPL, Inc.

SD/rp
Enclosure
cc: File

Number of pages: _____

Metals Results

ARF: 76503

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101

Attn: Chris Noland

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: AZ16718 -Client Sample ID: IMP-15-1.5 -Sample Collection Date: 05/21/15 Project: 20160433.001A Caltrans								
6010B	LEAD (PB)	23.2 J	30.0	1.85	ug/L	1	06/12/15	06/12/15
6010B/TCLP	LEAD (PB)	0.097 J	0.100	0.0016	mg/L	1	06/10/15	06/11/15

J = Estimated value.

Printed: 06/15/15 11:17:02 AM

APPL-F1-SC-NoMC-REG MDLs

METALS BLANK

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Clovis, CA 93611

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date	QC Group
6010B	LEAD (PB)	Not detected	0.100	0.0016	mg/L	06/10/15	06/11/15	#61BTC-150610A-AZ16718
6010B	LEAD (PB)	Not detected	30.0	1.85	ug/L	06/12/15	06/12/15	#MTL6-150612A-AZ16679

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/L	SPK Result mg/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010B	LEAD (PB)	0.250	0.24	96.0	80-120	06/10/15	06/11/15	#61BTC-150610A-AZ16718

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010B	LEAD (PB)	2500	2520	101	80-120	06/12/15	06/12/15	#MTL6-150612A-AZ16679

Comments: _____

Renee Patterson

From: Cynthia Clark [cclark@applinc.com]
Sent: Tuesday, June 09, 2015 8:50 AM
To: 'Renee Patterson'; 'APPL - Metals'; 'Sharon Dehmlow'
Cc: 'Chue Moua'; 'Jeremy Hale'
Subject: DI-wet and TCLP added to ARFs 76501 & 76503 - report and EDD due to client 6/15
Attachments: 76501-rev3 KLEIN-SD.pdf; 76503-rev1 KLEIN-SD.pdf

Per client request, I added DI-Wet Lead to three samples:

AZ16679	IMP-04-0.5	(ARF 76501)
AZ16686	IMP-06-0.5	(ARF 76501)
AZ16718	IMP-15-1.5	(ARF 76503)

and I added TCLP- Lead to one sample:

AZ16718	IMP-15-1.5	(ARF 76503)
---------	------------	-------------

We will submit the Leachate results as an addendum report.

The final report and EQUIS EDD are due no later than COB Monday, June 15th

Revised ARFs are attached and in the T drive

Sincerely,

Cynthia Clark
Project Manager



Agriculture & Priority Pollutants Laboratories, Inc.
WOSB. NELAP Accredited.

t. 559.275-2175 f. 559.275-4422
a. 908 N. Temperance Ave., Clovis, CA 93611

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DoD accredited for ISM, Dioxins and PCB congeners.

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Renee Patterson

From: Chris Noland [CNoland@kleinfelder.com]
Sent: Friday, May 22, 2015 9:55 AM
To: Renee Patterson; 'Cynthia Clark'; 'Wetlab Supervisor'; Jerry Kellar
Cc: 'Sharon Dehmlow'
Subject: RE: TO30 Samples - COCs attached

Yes – those strange marks in the wrong columns should be in the pH section. There should be one pH per page.

From: Renee Patterson [<mailto:rpatterson@applinc.com>]
Sent: Friday, May 22, 2015 8:46 AM
To: 'Cynthia Clark'; 'Wetlab Supervisor'; Chris Noland; Jerry Kellar
Cc: 'Sharon Dehmlow'
Subject: RE: TO30 Samples - COCs attached

Chris,

I am pre-logging in the 50+ soils for Caltrans TO 30 (COCs attached). I was curious about the pH request(s). There is only one sample with pH requested. Is that correct? There are some other "X" marks in matrix columns which don't seem to belong. Are these meant to be "X" marks to request pH?

thank you for your help,

Renée

From: Cynthia Clark [<mailto:cclark@applinc.com>]
Sent: Thursday, May 21, 2015 3:52 PM
To: 'APPL - Receiving'; 'Renée Patterson'
Cc: 'Sharon Dehmlow'
Subject: FW: TO30 Samples - COCs attached

51 samples arriving tomorrow for Kleinfelder Caltrans - total Lead and CA-WET Lead

Sincerely,

Cynthia Clark
Project Manager



Agriculture & Priority Pollutants Laboratories, Inc.
WOSB. NELAP Accredited.

t. 559.275-2175 f. 559.275-4422
a. 908 N. Temperance Ave., Clovis, CA 93611

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Clovis, CA 93611

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Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

C.O.C. 48412 pg 1 of 5

Report to: PLEASE PRINT
Company Name: Kleinfelder Phone: 619-831-4600
Address: 550 West C Street Suite 1200
San Diego, CA 92101
Attn: Chris Noland

Invoice to: PLEASE PRINT
Company Name: SAME Phone: _____
Address: _____
Attn: _____

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number					Date Shipped: <u>5/21/15</u>	
		Matrix			LEAD 6010B	PH 9045C		CA-WET 6003
Purchase Order Number	Sampler (Signature)	No. of Containers	Aq	Sed.			Soil	
Sample Identification	Location	Date Collected	Time Collected	Time Zone		Waybill No.: <u>8065160103</u>		
IMP-11-0.5	IMP-11	5-21-15	0838	P	1	X	X	*RUN PI-WET
IMP-11-1.5	↓		0840		1	X	X	IF CA-WET 75 mg/l
IMP-11-3.0	↓		0842		1	X	X	and/or IF TOTAL
IMP-12-0.5	IMP-12		0830		1	X	X	LEAD BETWEEN
IMP-12-1.5	↓		0832		1	X	X	50 and 1,000 mg/kg
IMP-12-3.0	↓		0835		1	X	X	
IMP-13-0.5	IMP-13		0815		1	X	X	*RUN TCLP IF
IMP-101	↓		0815		1	X	X	TOTAL LEAD IS
IMP-13-1.5	↓		0817		1	X	X	BETWEEN 100 and
IMP-13-3.0	↓		0823		1	X	X	1,000 mg/kg
IMP-14-0.5	IMP-14		0750		1	X	X	

Shuttle Temperature: _____ Turnaround Requested: Check one
 Standard 2-3 wk One week 24/48 Hrs. Other
 Sample Disposal:
 Return to client Disposal by Lab (30-day retention)

Relinquished by sampler: [Signature] Date: 5/21/15 Time: 1530 Received by: FedEx
 Relinquished by: _____ Date: _____ Time: _____ Received by: _____

Relinquished by: _____ Date: _____ Time: _____ Received at lab by: _____

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler
 See reverse side for Container Preservation and Sampling Information



APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

CHAIN OF CUSTODY RECORD
Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. 48415 *pg. 5 of 5*

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: <u>Kleinfelder</u> Phone: <u>619-831-4600</u>	Company Name: _____ Phone: _____
Address: <u>550 West C Street Suite 1200</u> <u>San Diego, CA 92101</u> Fax: _____	Address: <u>SAME</u> Fax: _____
Attn: <u>Chris Noland</u>	Attn: _____

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number					Date Shipped:		
		Matrix			Date Shipped:				
Purchase Order Number	Sampler (Signature)	Aq	Sed.	Soil	Date Shipped:		Carrier:		
Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Date Shipped:		Waybill No.:	
CALTRANS T030	Chris Noland						5/21/15	806516010324	
20160433.001A	<i>Chris Noland</i>							FedEx	
IMP-14-1.5	IMP-14	5-21-15	0806	P	1	X	X	X	*RUN DI-WET
IMP-14-1.00	↓		0806		1		X	X	IF CA-WET > 5mg/l
IMP-14-3.0	↓		0810		1		X	X	and/or if TOTAL
IMP-15-0.5	IMP-15		1042		1	X	X	X	LEAD is between
IMP-15-1.5	↓		1044		1		X	X	50 and 1,000 mg/kg
IMP-15-3.0	↓		1048		1		X	X	
QCEB052115			1300		1	X	X	X	*RUN TCLP IF
CAN									TOTAL LEAD IS
5-21-15									BETWEEN 100
AND 1,000 mg/kg									

Shuttle Temperature:	Turnaround Requested: Check one <input checked="" type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other	Sample Disposal: <input type="checkbox"/> Return to client <input type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by: <i>Chris Noland</i>	Date: <u>5/21/15</u> Time: <u>1530</u>	Received by: <u>FedEx</u>
Relinquished by:	Date:	Time:
Relinquished by:	Date:	Time:

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler
See reverse side for Container Preserving and Sampling Information



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CHAIN OF CUSTODY RECORD

C.O.C. 48412 ^{3.0}

Report to: PLEASE PRINT Company Name: <u>Kleinfelder</u> Phone: <u>619-831-4600</u> Address: <u>550 West C Street Suite 1200</u> <u>San Diego, CA 92101</u> Fax: _____ Attn: <u>Chris Noland</u>	Invoice to: PLEASE PRINT Company Name: <u>SAME</u> Phone: _____ Address: _____ Fax: _____ Attn: _____
---	---

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number										Date Shipped: <u>5/21/15</u>			
		No. of Containers	Matrix			LEAD 6010B	pH 9045C	CA-WET 6010B					Carrier: <u>FedEx</u>		
			Aq	Sed.	Soil								Waybill No.: <u>806516010324</u>		
Purchase Order Number	Sampler (Signature)	Sample Identification	Location	Date Collected	Time Collected	Time Zone					Comments:				
<u>CALTRANS T030</u>	<u>Chris Noland</u>														
<u>20160433.001A</u>	<u>Ch Noland</u>														
<u>IMP-11-0.5</u>	<u>IMP-11</u>	<u>IMP-11-0.5</u>	<u>IMP-11</u>	<u>5-21-15</u>	<u>0838</u>	<u>P</u>	<u>1</u>			<u>X</u>	<u>X</u>				<u>*RUN PI-WET</u>
<u>IMP-11-1.5</u>	<u>↓</u>	<u>IMP-11-1.5</u>	<u>↓</u>		<u>0840</u>		<u>1</u>			<u>X</u>	<u>X</u>				<u>IF CA-WET 75mg/L</u>
<u>IMP-11-3.0</u>	<u>↓</u>	<u>IMP-11-3.0</u>	<u>↓</u>		<u>0842</u>		<u>1</u>			<u>X</u>	<u>X</u>				<u>and/or IF TOTAL</u>
<u>IMP-12-0.5</u>	<u>IMP-12</u>	<u>IMP-12-0.5</u>	<u>IMP-12</u>		<u>0830</u>		<u>1</u>			<u>X</u>	<u>X</u>				<u>LEAD BETWEEN</u>
<u>IMP-12-1.5</u>	<u>↓</u>	<u>IMP-12-1.5</u>	<u>↓</u>		<u>0832</u>		<u>1</u>			<u>X</u>	<u>X</u>				<u>50 and 1,000 mg/kg</u>
<u>IMP-12-3.0</u>	<u>↓</u>	<u>IMP-12-3.0</u>	<u>↓</u>		<u>0835</u>		<u>1</u>			<u>X</u>	<u>X</u>				
<u>IMP-13-0.5</u>	<u>IMP-13</u>	<u>IMP-13-0.5</u>	<u>IMP-13</u>		<u>0815</u>		<u>1</u>			<u>X</u>	<u>X</u>				<u>*RUN TCLP IF</u>
<u>IMP-101</u>	<u>↓</u>	<u>IMP-101</u>	<u>↓</u>		<u>0815</u>		<u>1</u>			<u>X</u>	<u>X</u>				<u>TOTAL LEAD IS</u>
<u>IMP-13-1.5</u>	<u>↓</u>	<u>IMP-13-1.5</u>	<u>↓</u>		<u>0817</u>		<u>1</u>			<u>X</u>	<u>X</u>				<u>BETWEEN 100 and</u>
<u>IMP-13-3.0</u>	<u>↓</u>	<u>IMP-13-3.0</u>	<u>↓</u>		<u>0823</u>		<u>1</u>			<u>X</u>	<u>X</u>				<u>1,000 mg/kg</u>
<u>IMP-14-0.5</u>	<u>IMP-14</u>	<u>IMP-14-0.5</u>	<u>IMP-14</u>		<u>0750</u>	<u>↓</u>	<u>1</u>			<u>X</u>	<u>X</u>				

Shuttle Temperature: _____	Turnaround Requested: Check one <input checked="" type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <u>Chris Noland</u>	Date: <u>5/21/15</u> Time: <u>1530</u>	Received by: <u>FedEx</u>
Relinquished by: _____	Date: _____ Time: _____	Received by: _____
Relinquished by: _____	Date: <u>05/22/15</u> Time: <u>1000</u>	Received at lab by: _____

White: Return to client with report

Yellow: Laboratory Copy

Pink: Sampler

See reverse side for Container Preservation and Sampling Information



APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

Phone: (559) 275-2175
Fax: (559) 275-4422

CHAIN OF CUSTODY RECORD

76503
2.0

C.O.C. 48415

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: <u>Kleinfelder</u> Phone: <u>619-831-4600</u>	Company Name: _____ Phone: _____
Address: <u>550 West C Street Suite 1200</u> <u>San Diego, CA 92101</u> Fax: _____	Address: <u>SAME</u> Fax: _____
Attn: <u>Chris Noland</u>	Attn: _____

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number				Date Shipped: <u>5/21/15</u>														
		Carrier: <u>8065 16010324</u>																		
Purchase Order Number	Sampler (Signature)	Waybill No.: <u>FedEx</u>				Comments:														
Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers		Matrix													
					Aq	Sed.	Soil													
<u>IMP-14-1.5</u>	<u>IMP-14</u>	<u>5-21-15</u>	<u>0806</u>	<u>P</u>	<u>1</u>				<u>X</u>	<u>X</u>										<u>*RUN DI-WET</u>
<u>IMP-100</u>			<u>0806</u>		<u>1</u>					<u>X</u>										<u>IF CA-WET 75mg/L</u>
<u>IMP-14-3.0</u>			<u>0810</u>		<u>1</u>					<u>X</u>										<u>and/or if TOTAL</u>
<u>IMP-15-0.5</u>	<u>IMP-15</u>		<u>1042</u>		<u>1</u>				<u>X</u>	<u>X</u>										<u>LEAD is between</u>
<u>IMP-15-1.5</u>			<u>1044</u>		<u>1</u>					<u>X</u>										<u>50 and 1,000mg/kg</u>
<u>IMP-15-3.0</u>			<u>1048</u>		<u>1</u>					<u>X</u>										
<u>QCEB052115</u>			<u>1300</u>	<u>↓</u>	<u>1</u>	<u>X</u>														<u>*RUN TCLP IF</u>
<u>CAN</u>																				
<u>5-21-15</u>																				

Shuttle Temperature:	Turnaround Requested: Check one <input checked="" type="checkbox"/> Standard 2-3 wk <input type="checkbox"/> One week <input type="checkbox"/> 24/48 Hrs. <input type="checkbox"/> Other	Sample Disposal: <input type="checkbox"/> Return to client <input type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler: <u>[Signature]</u>	Date: <u>5/21/15</u> Time: <u>1530</u>	Received by: <u>FedEx</u>
Relinquished by:	Date:	Time:
Relinquished by:	Date: <u>05/22/15</u>	Time: <u>1800</u>
	Received at lab by: <u>[Signature]</u>	

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler
See reverse side for Container Preservative and Sampling Information

APPENDIX C

**Statistical Data Evaluation
(The Bodhi Group, June 25, 2015)**



June 25, 2015
Project No. 9061019

Mr. Mark Peabody
Project Manager
Kleinfelder, Inc.
550 West C Street, Suite 1200
San Diego, California 92101

Subject: Statistical Analysis of Lead Concentrations in Soil
Interstate 8, Calexico, Imperial County
Caltrans D11 TO30, Kleinfelder Project No. 20160433.001A

Dear Mr. Peabody:

This technical memorandum summarizes the results of our statistical analysis of lead concentrations in soil reported by Kleinfelder from the project ADL survey. The data were provided in Microsoft Excel format.

For questions pertaining to this analysis, please contact the undersigned at 858.513.1469 or by email at sree@thebodhigroup.com.

Sincerely,
The Bodhi Group, Inc.

Sree Gopinath, P.E.
Principal Engineer



1. INTRODUCTION

The California Department of Transportation (Caltrans) is proposing to improve Interstate 8 (I-8) near Calexico (Project) in Imperial County (Figure 1).

Project construction will result in soil disturbance, excavation, and reuse of excavated soil. Along well-traveled highway corridors, shallow soil can be typically contaminated with aurally-deposited lead (ADL) caused by historic emissions from vehicle exhausts. The lead concentrations in shallow soil may exceed State and Federal hazardous waste criteria or may be at concentrations that require special handling and placement.

The California Department of Toxic Substances Control (DTSC) issued a variance to Caltrans (Variance, No. V09HQSCD006) for the management of soil contaminated with ADL. The Variance requires the comparison of representative concentrations of lead (soluble and total) and pH with hazardous waste and other criteria for proper classification of soil.

Kleinfelder collected and analyzed shallow soil samples for lead from the proposed Project Site to classify the ADL soil type and evaluate criteria for reuse of soil excavated during Project construction. Based on the classification, soil could be managed for reuse within the Project or removed for disposal at an off-site in-State permitted facility.

2. OBJECTIVE

Determine representative concentrations of lead and pH in soil that will be co-excavated during Project construction. For co-excavated soil with sufficient data, representative concentrations will be evaluated using statistical methods. Co-excavated soil refers to soil that is excavated and managed as one stockpile distinct from soil in other stockpiles. Representative concentrations of each co-excavated soil is compared with Variance criteria for proper ADL soil type classification to determine reuse or proper disposal.

3. ANALYSIS

A total of forty-five soil samples were collected from fifteen soil boring locations (not including field duplicates) from the Project Site (Figure 1). Three soil samples were collected from each soil boring at discrete depth intervals of 0.5, 1.5, and 3 feet below ground surface (bgs). The samples were analyzed for concentrations of total lead (Total) and soluble lead extracted and analyzed by the waste extraction test (WET). Five soil samples were analyzed for soil pH. One sample was analyzed for soluble lead by the toxicity characteristic leaching procedure (TCLP). Three soil samples were analyzed for soluble lead extracted with a modified WET using de-ionized water (WET-DI). Five field duplicates (FD) were also collected and analyzed for lead by one or more of the following: Total; WET; and pH as a Quality Assurance measure. Any uncertainty in the difference between the primary and FD sample results was biased toward protecting the environment and human health by selecting the higher concentration.

For each co-excavated soil unit with sufficient data for statistical analysis, parametric procedures were used to evaluate if the true mean concentrations were below the criteria specified in the Variance. That is, the null hypothesis states that the mean concentration is less than the Variance criterion for a false positive rate (α) of 0.05 and a false negative rate (β) of 0.20.

Since the true mean concentration is not known, a value that would not be exceeded 95 percent of the time (95 percent upper confidence limit of the mean, or 95 UCL) was calculated for the selected α and β values. Non-detect concentrations were not observed in the data sets that were statistically analyzed.

3.1. All Depths

The table below summarizes the results of the statistical analyses.

Total Concentrations in milligrams per kilogram (mg/kg)								
Depth (ft)	Number of Samples	% of Non Detect	Min. value	Max. value	Mean	Median	Standard Deviation	95% UCL
0.5-3.0	45	0%	4.6	149	18.2	10.4	23.6	31.6

WET Concentrations in milligrams per liter (mg/L)								
Depth (ft)	Number of Samples	% of Non Detect	Min. value	Max. value	Mean	Median	Standard Deviation	95% UCL
0.5-3.0	45	0%	0.03	18.8	0.8	0.2	2.8	2.2

Soil pH								
Depth (ft)	Number of Samples	% of Non Detect	Min. value	Max. value	Mean	Median	Standard Deviation	95% UCL
0.5-3.0	5	0%	8.0	8.8	8.3	8.1	0.3	8.6

Lead was detected in two of the three samples analyzed by WET-DI at concentrations of 0.004 and 0.02 mg/L, well below the Variance limit of 1.5 mg/L. The results indicate that WET-DI lead concentrations would not change the ADL soil classification for the Project data set.

Only one sample (IMP-15 at 1.5 feet bgs) reported a total concentration of 149 mg/kg that could theoretically leach soluble lead at concentrations exceeding the TCLP limit of 5 mg/L. However, when analyzed by TCLP, the soluble lead concentration was reported at 0.097 mg/L, well below the TCLP limit. The total lead data set and the singular TCLP analysis result indicate that the soil would not be considered hazardous waste based on toxicity criteria under 40 CFR 261. Accordingly, further analysis of lead by TCLP was not performed.

The statistically-derived representative values of TOTAL and WET lead concentrations and soil pH (95 UCL) were compared with Variance criteria to evaluate soil classification. The resulting soil classification is “X”, or non-hazardous. Soil with X classification can be used without restriction at the Project Site.

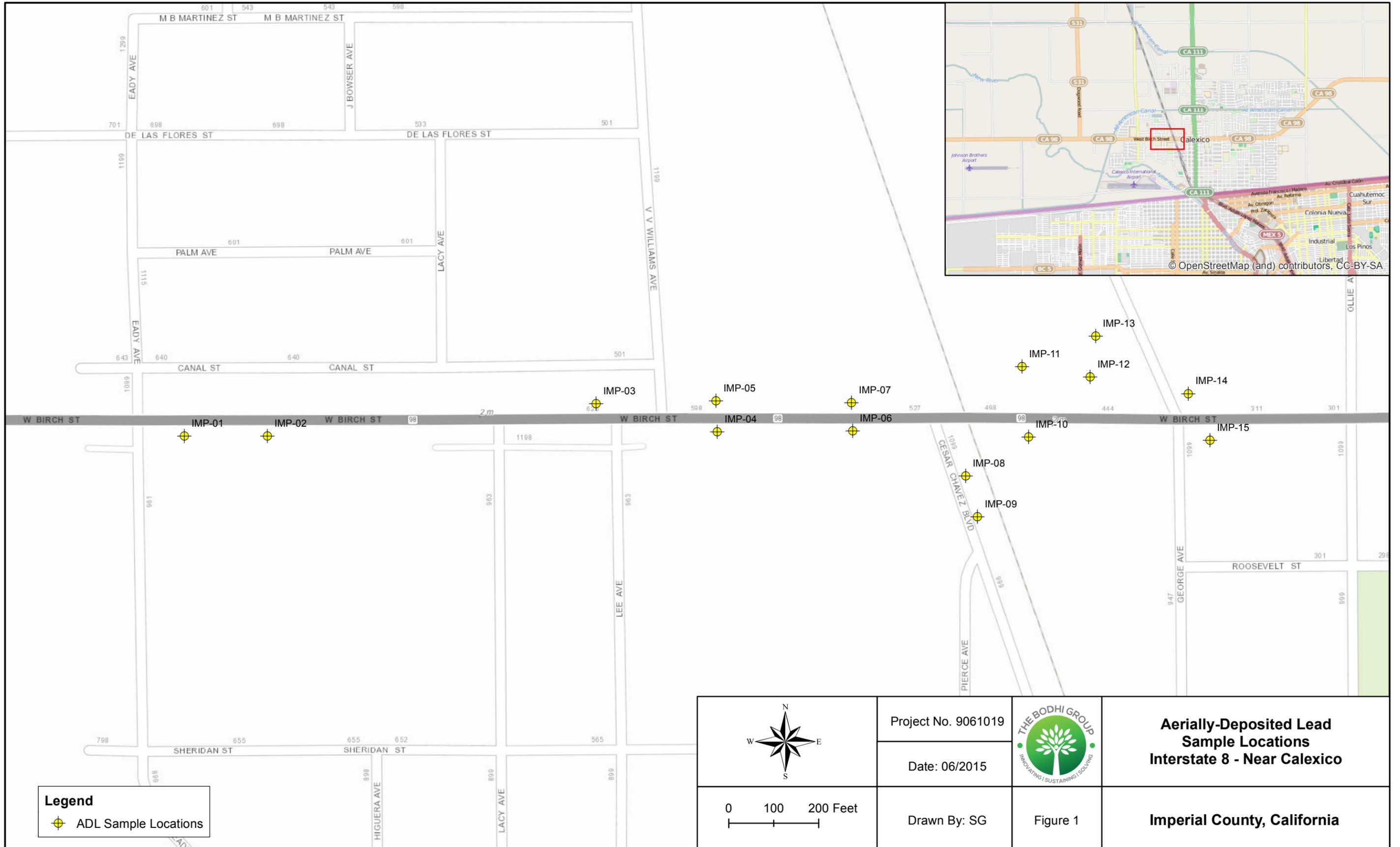
3.2. Data Sets Categorized by Depth

The lead data set was further categorized by depth to determine if different depth horizons correspond to statistically distinct populations and Variance soil type. Since the soil pH varied between 8 and 8.8 and the distribution is representative of soil at the Project Site, further analysis of soil pH would not result in a change of soil classification.

Depth (ft)	Total (mg/kg)			WET (mg/L)			ADL Soil Type
	Mean	Maximum	95% UCL	Mean	Maximum	95% UCL	
0.5	19.4	66.8	30.3	0.6	3.9	1.4	X
1.5	22.2	149	34.1	1.6	18.8	4.1	X
3.0	12.9	29.2	17.2	0.3	1.9	1.0	X

The statistically-derived representative values of TOTAL and WET lead concentrations (95 UCL) were compared with Variance criteria to evaluate soil classification. The resulting soil classification is “X”, or non-hazardous. Soil with X classification can be used without restriction on the Project Site.

Figures



Legend
 ADL Sample Locations


 0 100 200 Feet


Project No. 9061019
 Date: 06/2015
 Drawn By: SG


 Figure 1

**Aerially-Deposited Lead
 Sample Locations
 Interstate 8 - Near Calexico**
Imperial County, California



IID

www.iid.com

A century of service.

January 5, 2015

Mr. Kazim Mamdani
Caltrans District 11 – Design
4050 Taylor Street
M.S. 120
San Diego, CA 92110

Dear Mr. Mamdani:

Subject: Construction Water Availability for the SR-98 Highway Widening Project (Postmile 31.6 to 32.1; Eady Avenue to Ollie Avenue)

This letter is to acknowledge that water is available for the construction of the SR98 project at the post mile limits mentioned above. Per your letter dated December 3, 2014, an estimated amount of 300,000 gallons at an approximate daily rate of 5,000 gallons will be required for the construction of the project beginning January 2016 and lasting approximately one year.

The procedure for obtaining temporary water for construction purposes is as follows:

1. The applicant will need to complete an application (copy attached) for temporary water use at the Southend Division office. The temporary water use permit will not be issued until the application is approved by the Water Department.

Southend Division Office
2151 Adams Avenue
El Centro, CA 92243
(760) 482-9800

2. The application must state the intended locations from where water will be drawn. Please note that due to possible limited capacities and outages water availability cannot be guaranteed at all locations at all times. It will be necessary to plan for multiple locations. Additionally, it is important to note that outages frequently affect entire canal systems, as opposed to individual canals. Coordination with the Southend Division Office will be warranted.

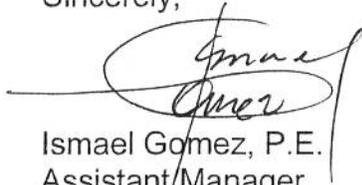
3. Caltrans will be responsible for pump installation.
4. Meters must be installed on the pumps to allow IID staff to obtain readings and charge accordingly.
5. Caltrans will be charged at the industrial water rate (Schedule No.7) attached.
6. The pumps and all appurtenances must not block access to any IID facility (you must provide enough clearance for IID vehicles to drive through or around).
7. Additionally, IID encroachment permits will be required for all proposed pumps and appurtenances that will encroach upon existing and proposed IID rights-of-way. A copy of the encroachment permit application is included in the attached IID Water Department Developer Project Guide accessed at:

<http://www.iid.com/Modules/ShowDocument.aspx?documentid=2328>

Please contact IID's Real Estate Section at (760) 339-9239 for additional information regarding encroachment permits.

Once all permits are approved, temporary water will be available for the contractors to use for the construction of SR-98 Project. Please contact Mr. Henry Dollente, Assistant Manager, Southend Division at (760) 339-9239 if you have any questions.

Sincerely,



Ismael Gomez, P.E.
Assistant/Manager
Chief Civil Engineer
Water Department

OA:sm

Attachments

cc: Shane Ferber, Asst. Supervisor, Real Estate
Henry Dollente, Asst. Mgr., Southend Water
Francisco Pena, Superintendent, Construction Resources
Olivia Alcaraz, Engineer, Water Engineering
Autumn Plourd, Asst. Engineering, Water Dept.

APPLICATION FOR TEMPORARY WATER USE

This application is used in conjunction with IID-901A Application for Encroachment Permit and subject to its General Provisions.

NAME: _____

ADDRESS: _____

TELEPHONE: _____

LOCATION OF SERVICE: CANAL _____ GATE _____

LENGTH OF TIME: FROM _____ TO _____

VOLUME OF WATER: _____ GALLONS

_____ ACRE FEET

METER ID #: _____

SERIAL #: _____

INITIAL READING: _____

DIVISION: _____

ACCOUNT NO: _____

The undersigned applicant hereby certifies that he has read, understands, and agrees to abide by the regulations governing the sales of temporary water.

Applicant Signature

Approved for delivery on the dates as shown above.

Superintendent _____

Date _____

APPLICATION FOR TEMPORARY WATER USE

1. Application for service is to be made in the appropriate Division office based jurisdiction.
2. The location of the pump is to be approved by the Division Superintendent.
3. User must sign application for and receive a permit to take temporary water before any water can be ordered. He must agree to pay the Industrial Rate (per Schedule No. 7) for all water removed from the District system.
4. Determination of the amount of water required to make the delivery to the pump site will be made by gate measurement, pump meter readings, or any other reasonable method acceptable to the District. Charges will be made on the amount of water required to make delivery.
5. It will be the responsibility of the user to order water based on existing Rules and Regulations.
6. IID reserves the right to deny service if it will adversely effect the operation and maintenance of the canal system or if an individual is observed taking water without a permit.
7. Pump sites must be maintained in such a condition to allow unrestricted traffic flow on roadway.
8. Routine cutouts for three to six day periods may be scheduled during temporary service. Visit <http://www.iid.com/index.aspx?page=166> to view the canal cutout schedule.
9. The Division Office must be notified when pump is removed.
10. An IID Encroachment Permit, Industrial Water Supply Agreement, and a customer supplied meter, will be required on all accounts requesting 5 acre-feet or more, and/or in excess of 30 days duration.

Imperial Irrigation District
Imperial, California

WATER RATES

SCHEDULE NO. 7

General Industrial Service

Applicable to water service to all industrial users who divert water from the District's canal system within the Imperial Unit.

Exception: Where there is a signed contract between water user and IID Board of Directors.

Water Rate

For all water delivered \$85.00 per acre-foot

Temporary Water Service

Minimum water charge \$425.00 per year

Drainage Limits- For Industrial Users as defined above

For drainage limits, see Regulation No. 46 of the "Rules and Regulations Governing Distribution and Use of Water."

Assessment for Excess Drainage

An assessment of \$258.00 per acre-foot will be charged for excess water discharged into the District drain.

Special Conditions

Equitable Distribution Plan - In a year where a supply demand imbalance (SDI) has been declared, this rate schedule shall be adjusted as defined by the "Regulations for Equitable Distribution Plan."

The horizontal, vertical geometric alignments, and ground surface:

EA_08023_CAICE_HA_VA_SURF.XML

Cross sections:

BASIN_1

BASIN-2

Cesar chaves

MAIN Line 10-23-15